

Labview Manual

© 2014 Phidgets Inc.



Labview Manual

© 2014 Phidgets Inc.

All rights reserved. No parts of this work may be reproduced in any form or by any means - graphic, electronic, or mechanical, including photocopying, recording, taping, or information storage and retrieval systems - without the written permission of the publisher.

Products that are referred to in this document may be either trademarks and/or registered trademarks of the respective owners. The publisher and the author make no claim to these trademarks.

While every precaution has been taken in the preparation of this document, the publisher and the author assume no responsibility for errors or omissions, or for damages resulting from the use of information contained in this document or from the use of programs and source code that may accompany it. In no event shall the publisher and the author be liable for any loss of profit or any other commercial damage caused or alleged to have been caused directly or indirectly by this document.

Printed: July 2014 in Canada

3

Table of Contents

	Foreword	0
Part I	Welcome to Phidgets	13
Part II	Introduciton	14
1	Understanding Phidgets	
2	Platform Support	15
Part III	Programming Concept	17
1	Getting Started	17
2	Event Handler	21
3	Multiple Devices	
Part IV	Phidgets Common	26
1	ErrorHandler.vi	
2	PhidgetClose.vi	27
3	PhidgetDelete.vi	
4	PhidgetEventCloseOnError.vi	29
5	PhidgetEventCreateOnError.vi	30
6	PhidgetEventExeOnError.vi	31
7	PhidgetGetDeviceClass.vi	33
8	PhidgetGetDeviceID.vi	
9	PhidgetGetDeviceLabel.vi	
10	PhidgetGetDeviceName.vi	37
11	PhidgetGetDeviceType.vi	38
12	PhidgetGetDeviceVersion.vi	39
13	PhidgetGetServerAddress.vi	41
14	PhidgetGetServerStatus.vi	42
15	PhidgetGetServiceID.vi	43
16	PhidgetLibraryVersion.vi	45
17	PhidgetOpen.vi	46
18	PhidgetOpenRemote.vi	47
19	PhidgetOpenRemoteIP.vi	49
20	PhidgetSetDeviceLabel.vi	51
21	Subvi	52
	_AttachCHK.vi	52
	_ChkError.vi Close vi	
	_0.000111	

	_Open.vi	
	_OpenRemote.vi	
	_OpenRemoteIP.vi	59
	_SerialReturn.vi	
	_WaitAttach.vi	
	EventCloseIntDouble.vi	
	EventCloseIntInt.vi	
	EventExeIntDouble.vi	
	EventExeIntInt.vi	
Part V	Specific Modules	70
1	Accelerometer	
	AcceAxisCount.vi	
	AcceCreate.vi	
	AcceEventClose.vi	
	AcceEventCreate.vi	
	AcceEventExe.vi	
	AcceGetData.vi	
	AcceGetMax.vi	
	AcceGetMin.vi	
	AcceGetTrigger.vi	
	AcceOpen.vi	
	AcceSetTrigger.vi	
2	AdvancedServo	
-		
	AdvServoCount.vi	
	AdvServoCreate.vi	
	AdvServoEventCrose.vi	
	AdvServoEventCreateCrtChange.vi	
	AdvServoEventCreatePosChange.vl	
	AdvServoEventCreatevelCnange.vi	
	AdvServoEventExe.vi	
	AdvServoGetAcceMax.vi	
	AdvServoGetAcceMin.vi	
	AdvServoGetCurrent.vi	
	AdvServoGetEngaged.vi	
	AdvServoGetPos.vi	
	AdvServoGetPosMax.vi	
	AdvServoGetPosMin.vi	
	AdvServoGetRampingState.vi	
	AdvServoGetServoType.vi	
	AdvServoGetVel.vi	
	AdvServoGetVelLmt.vi	110
	AdvServoGetVelMax.vi	
	AdvServoGetVelMin.vi	113
	AdvServoOpen.vi	115
	AdvServoSetAcce.vi	116
	AdvServoSetEngaged.vi	117
	AdvServoSetPos.vi	119
	AdvServoSetPosMax.vi	
	AdvServoSetPosMin.vi	
	AdvServoSetRampingState.vi	
	AdvServoSetServoParameters.vi	

© 2014 Phidgets Inc.

Contents

5

	AdvServoSetServoType.vi	126
	AdvServoSetVelLmt.vi	128
	AdvServoStoppedState.vi	129
3	Analog	131
	AnalogCreate vi	131
	Analog CotEnabled vi	
	Analog GetUlabled.vi	
	Analog Get Voltage Max vi	
	Analog Get Voltage Min vi	
	AnalogOpen.vi	
	AnalogSetVoltage.vi	
4	Bridge	144
	BridgeCreate.vi	
	BridgeEventClose.vi	145
	BridgeEventCreate.vi	146
	Bridge EventExe.vi	147
	Bridge GetDataRate.vi	149
	Bridge GetDataRate Max.vi	150
	Bridge GetDataRate Min.vi	151
	Bridge GetEnabled.vi	
	Bridge GetGain.vi	
	Bridge GetValue.vi	
	Bridge GetValueMax.vi	
	Bridge GetValue Min.vi	
	Bridge Input Count vi	
	Bridge Open vi	
	Bridge SetDataBate.vi	
	Bridge SetEnabled vi	164
	Bridge Set Gain vi	166
5	Encodor	167
5	Encouer	
	EncoderCreate.vi	167
	EncoderEventCloseInput.vi	168
	EncoderEventClosePosition.vi	169
	EncoderEventCreateInput.vi	171
	EncoderEventCreatePosition.vi	172
	EncoderEventExeInput.vi	173
	EncoderEventExePosition.vi	175
	EncoderGetCount.vi	177
	EncoderGetEnabledState.vi	178
	EncoderGetIndexPosition.vi	180
	EncoderGetInputCount.vi	181
	EncoderGetInputState.vi	182
	EncoderGetPosition.vi	
	EncoderOpen.vi	
	EncoderSetEnabled.vi	187
	EncoderSetPosition.vi	188
6	Frequency	
	Frequreate.vi	
	FreqEventClose.vi	
	FreqEventCreate.vi	
	rreq⊑vent⊑xe.vi	193

	FreqGetCount.vi	195
	FreqGetCount71.vi	197
	FreqGetEnabled.vi	
	FreqGetFilter.vi	200
	FreqGetTime.vi	201
	FregGetTime71.vi	202
	FregGetTimeout.vi	
	FregGetValue.vi	
	FregInputCount.vi	
	FreqOpen.vi	
	FreqReset.vi	
	FreqSetEnabled.vi	
	FreqSetEilter.vi	
	FreqSetTimeout vi	214
7	CPS	215
'		
	GPSCreate.vi	215
	GPSEventCloseFixStatus.vi	216
	GPSEventClosePosition.vi	218
	GPSEventCreateFixStatus.vi	219
	GPSEventCreatePosition.vi	220
	GPSEventExeFixStatus.vi	221
	GPSEventExePosition.vi	223
	GPSGetAltitude.vi	225
	GPSGetDate.vi	226
	GPSGetFixStatus.vi	228
	GPSGetHeading.vi	229
	GPSGetLatitude.vi	231
	GPSGetLongitude.vi	232
	GPSGetTime.vi	233
	GPSGetVelocity.vi	235
	GPSOpen.vi	236
8	InterfaceKit	238
-	IECroate vi	
	IFEVENTUIOSE.VI	
	IFEventoreateinput.vi	
	IFEventGreateSensor.vi	
	IFGetDataRate.vi	
	IFGetDataRateMax.vi	
	IFGetDataRateMin.vi	
	IFGetInputCount.vi	250
	IFGetInputState.vi	251
	IFGetOutputCount.vi	253
	IFGetOutputState.vi	
	IFGetRatio.vi	256
	IFGetSensorCount.vi	257
	IFGetSensorValue.vi	259
	IFGetSensorValueRaw.vi	
	IFGetTrig.vi	261
	IFOpen.vi	263
	IFSetDataRate.vi	
	IFSetOutputState.vi	266

Contents 7	

		IFSetRatio.vi	267
		IFSetTrig.vi	269
9	IR	-	270
		IRCreate vi	270
		IREventCloseOnCode vi	270 271
		IREventCloseOnLearn vi	271
		IREventCloseOnRawData vi	274
		IREventCroateOnCode vi	275
		IREventCreateOnLearn vi	276
		IREventCreateOnRaw Data vi	278
		IREventEveOnCode vi	279
		IREventExeOnLearn vi	281
		IREventExeOnRaw Data vi	284
		IRGetI astCode vi	286
		IRGetLastLearnedCode vi	287
		IRGet Raw Data vi	291
		IROnen vi	292
		IBTransmit vi	
		IBT ransmit Raw.vi	
		IRTransmitRepeat.vi	299
10	I FI	ר	301
		I EDCountui	204
			301 202
			302 202
		LEDGetCurrentlimit vi	303
		LEDGetCurrentLimitIndexed vi	304
		LEDGetCollage vi	300 307
			307 200
		LEDOpen.vi I EDSatBrightness vi	303 310
		LEDGetBirghthess.vi	310 311
		LEDGetGurrentlimitIndexed vi	313
		I EDSetVoltage vi	
11	Mo	torControl	216
	WIO		310
		MCCreate.vi	316
		MCEventCloseCurrent.vi	317
		MCEventCloseEMF.vi	318
		MCEventCloseInput.vi	319
		MCEventClosePositionChange.vi	320
		MCEventClosePositionUpdate.vi	322
		MCEventCloseSensorUpdate.vi	323
		MCEventCloseVelocity.vi	324
		MCEventCreateCurrentChange.vi	325
		MCEventCreateCurrentUpdate.vi	326
		MCEventCreateEMF.vi	328
		MCEventCreateInput.vi	329
		MCEventCreatePositionChange.vi	330
		MCEventCreatePositionUpdate.vi	331
		MCEventCreateSensorUpdate.vi	333
		MCEventCreateVelocity.vi	334
		MCEVENTEXECUTENT.VI	335
			337
			339
		MCEventExePositionChange.vi	340

	MCEventExePositionUpdate.vi	
	MCEventExeSensorUpdate.vi	
	MCEventExeVelocity.vi	
	MCGetAcceleration.vi	
	MCGetAccelerationMax.vi	
	MCGetAccelerationMin.vi	
	MCGetBackEMFValue.vi	
	MCGetBraking.vi	
	MCGetCurrent.vi	
	MCGetEMFState.vi	
	MCGetEncoderCount.vi	
	MCGetEncoderPosition.vi	
	MCGetInputCount.vi	
	MCGetInputState.vi	
	MCGetMotorCount.vi	363
	MCGetRatiometricState vi	364
	MCGetSenorCount vi	365
	MCGetSensorValue vi	367
	MCGetSensorValueRAW vi	368
	MCGetSunnlyVoltage vi	370
	MCGetVelocity vi	
	MCOpen vi	
	MCSotAccoloration vi	374
	MCSetProking vi	
	MCSetEncederBosition vi	
	MCSetBetiem etvieState vi	۵/۵ مەرد
	MCSetKatiometricState.vi	
12	PHSensor	
	PHCreate.vi	
	PHEventClose.vi	
	PHEventCreate.vi	
	PHEventExe.vi	
	PHGetPH.vi	
	PHGetPHMax.vi	
	PHGetPHM in.vi	
	PHGetPHTrigger.vi	
	PHGetPotential.vi	
	PHGetPotentialMax.vi	
	PHGetPotentialMin.vi	
	PHOpen.vi	
	PHSetTemperature.vi	
	PHSetTrig.vi	
13	RFID	
-	PEIDC reate vi	404
	RFIDGreate.vi	
	RFIDEventClose2vi	
	RFIDEventClose Qutnut v ²	
	REIDEventCloseOutput.vi	
	Krijjeventureateoutput.vi	
	RFIDEventCreate I ag2.vi	
	KFIDEventCreate I agLost.vi	410
	RFIDEventCreateTagLost2.vi	411

8

Contents	9

	RFIDEventExe.vi	. 412
	RFIDEventExe2.vi	. 414
	RFIDEventExeOutput.vi	. 416
	RFIDGetAntennaState.vi	. 417
	RFIDGetLastTag.vi	. 419
	RFIDGetLastTag2.vi	. 420
	RFIDGetLEDState.vi	. 422
	RFIDGetOutputCount.vi	. 423
	REIDGetOutputState vi	. 424
	RFIDGetTagState.vi	. 426
	RFIDOpen.vi	. 427
	RFIDSetAntennaState.vi	. 429
	RFIDSetLEDState.vi	. 430
	RFIDSetOutputState.vi	. 432
	RFIDWrite Tag. vi	. 433
Se	rvo	435
00		
	ServoLount.vi	. 435
		. 436
	Servertorestorestori	. 437
	ServoEventureate.vi	. 438
	ServeCotExectly	. 440
	ServoGetEngage0.VI	. 441
	ServeCatDaaMax vi	. 443
	JERVUGELFOSMIAX.VI	. 444
	JervoGetServeType vi	. 446
	ServoOnan vi	441. ممم
	ServoDetl.vi	. 440 150
	ServoSetDos vi	. 400 154
	ServoSatSarvoBaramatare vi	. 401 451
	ServoSatSarvoTvna vi	. 433 // /
e~	oervooetoervorype.vi	. 404 Aer
sp	aual	430
	SpatialCreate.vi	. 456
	SpatialEventClose.vi	. 457
	SpatialEventCreate.vi	. 458
	SpatialEventExe.vi	. 460
	SpatialGetAcce.vi	. 462
	SpatialGetAcceAxisCount.vi	. 463
	SpatialGetAcceMax.vi	. 465
	SpatialGetAcceMin.vi	. 466
	SpatialGetAngRate.vi	. 468
	SpatialGetAngRateMax.vi	. 469
	SpatialGetAngRateMin.vi	. 471
	SpatialGetCompassAxisCount.vi	. 472
	SpatialGetDataRate.vi	. 473
	SpatialGetDataRateMax.vi	. 475
	SpatialGetDataRateMin.vi	. 476
	SpatialGetGyroAxisCount.vi	. 477
	SpatialGetMagField.vi	. 479
	SpatialGetMagFieldMax.vi	. 480
	SpatialGetMagFieldMin.vi	. 482
	SpatialOpen.vi	. 483
	SpatialResetCompassCorrectionParameters.vi	. 485
	Se	RFIDEventExe U RFIDEventExeOutput V RFIDEventExeOutput V RFIDEventExeOutput V RFIDEventExeOutput V RFIDEventExeOutput V RFIDEventExeOutputCount V RFIDEventExeV ServoCount M ServoCount Exe V

	SpatialSetCompassCorrectionParameters.vi	86
	SpatialSetDataRate.vi	88
	SpatialZeroGyro.vi	89
16	Stepper	Э 0
	StepperCreate vi	90
	StepperEventCloseCurrentVelocity vi	91
	StepperEventCloseInput vi	93
	StepperEventClosePosition vi	94
	StepperEventClosePosition71 vi	95
	StepperEventCreateCurrent vi	96
	Stepper EventCreateInput vi	98
	StepperEventCreatePosition vi	99
	StepperEventCreatePosition71 vi	00
	StepperEventCreateVelocity vi	01
	StepperEventEveCurrentVelocity vi	03
	Stepper Event Exel pout vi	04
	StepperEventExemptition vi	06
	StepperEventExePosition71 vi	00 08
	Stepper EventExer estion / 1.1	00 09
	StannerGetAccelerationMax vi	11
	StannerGetAccelerationMin vi	11 12
	StannarGatCurrent vi	1 <u>7</u>
	StannarGatCurrentl imit vi	15
	StannerGetCurrentMax vi	16
	StannarGatCurrentMin vi	18
	StepperGetCurrentPosition vi	19
	StepperGetCurrentPosition71 vi	21
	StepperGetEngaged vi	22
	Stepper GetPositionMax vi	24
	Stepper Get PositionMax71 vi	25
	Stepper Get Position Min vi	27
	StepperGetPositionMin71 vi	 28
	StepperGetTargetPosition vi	30
	StepperGetTargetPosition71 vi 55	31
	StepperGetVelocity vi	32
	StepperGetVelocityl imit vi	34
	StepperGetVelocityMax vi	35
	StepperGetVelocityMin vi	37
	Stepper Court vi	38
	StepperInputState vi	40
	StepperMotorCount vi	41
	Stepper Motor Count. Vi	42
	StepperSetAcceleration vi	<u>4</u> 2
	StepperSetCurrentLimit vi	45
	StepperSetCurrentPosition vi	40
	StannerSetCurrentPosition71 vi	41 48
	StepperSetEngaged vi	50
	StepperSetTargetPosition vi	51
	StepperSetTargetPosition71 vi	53
	Stepper Set Velocityl imit vi	54
	StepperStoppedState vi	55
17	Tamparature Sensor	57
.,		
	TempCreate.vi	57

© 2014 Phidgets Inc.

Contents	11

/	Phidgets Constants	616
	TextSetScreenSize.vi	
	TextSetScreenIndex.vi	
	TextSetDisplayString.vi	
	TextSetDisplayChar.vi	
	TextSetCursorState.vi	
	TextSetCursorBlinkState.vi	
	TextSetContrast.vi	
	TextSetCharacter.vi	
	TextSetBrightness.vi	
	TextSetBacklightState.vi	
	TextReset.vi	
	TextOpen.vi	
	TextGetScreenSize.vi	
	TextGetScreenIndex.vi	
	TextGetScreenCount.vi	
	TextGetRow Count.vi	
	TextGetCursorState.vi	
	TextGetCursorBlinkState.vi	
	TextGetContrast.vi	
	TextGetColumnCount.vi	
	TextGetBrightness.vi	
	TextGetBacklightState.vi	
	TextCreate.vi	
18	TextLCD	
	lempSetTrigger.vi	
	I empSetThermocoupleType.vi	
	lempOpen.vi	
	TempInputCount.vi	
	TempGetTrigger.vi	
	TempGetThermocoupleType.vi	
	TempGetTemperatureMin.vi	
	TempGetTemperatureMax.vi	
	TempGetTemperature.vi	
	TempGetPotentialMin.vi	
	TempGetPotentialMax.vi	
	TempGetPotential.vi	
	TempGetAmbientMin.vi	
	TempGetAmbientMax.vi	
	TempGetAmbient.vi	
	Tem pEventExe.vi	
	TempEventCreate.vi	
	TempEventClose.vi	558

Part VI Phidgets Constants

1	CodeInfo	616
2	Frequency Filter Mode	616
3	IREncoding	616
4	IRLength	617
5	ServoType	617
6	ThermocoupleType	618

Index

0

1 Welcome to Phidgets



July 2014, Version 2.1.8

This help system includes information about LabVIEW programming for each Phidget device. It contains programming concepts, step-by-step instructions, and reference information about VIs, functions and palettes.

To navigate this help system, use the **Contents** and **Search** tabs to the left of this window.

Phidgets are an easy to use set of building blocks for low cost sensing and control from your PC. Using the Universal Serial Bus (USB) as the basis for all Phidgets, the complexity is managed behind this easy to use and robust Application Program Interface (API) library.

This help system may link to Portable Document Format (PDF) versions of documents. You must have Adobe Reader installed to view or search the PDF versions of these manuals.



Note: (Mac OS X) Phidgets recommends that you use Safari 1.3.2 or later or Firefox 1.0.2 or later to view the *Help*. (Linux) Phidgets recommends that you use Mozilla 1.2 or later or Firefox 1.0.2 or later to view the *Help*.

2 Introduciton

Phidgets are an easy to use set of building blocks for low cost sensing and control from your PC. Using the Universal Serial Bus (USB) as the basis for all Phidgets, the complexity is managed behind this easy to use and robust Application Program Interface (API) library.

This manual documents the Phidgets software programming model in National Instruments Labview language. The <u>Programming Concept</u> should be the first section to be read for someone beginning to use Phidgets. After the concepts described are understood, users can read <u>Phidgets Common</u> and <u>Specific Modules</u> for function reference and device documentation in general. Note that these sections are light on function documentation - generally only containing specific reference information and basic function information.

For a more detailed introduction, please refer to Understanding Phidgets and Platform Support.

2.1 Understanding Phidgets

Hardware Model

All Phidgets are connected to the computer using USB. Most computers support up to 127 USB devices (or more), so it is easy to connect as many Phidgets as are required for almost any project. Phidgets can be connected either directly to a computer or through Hubs, but there are some limitations.

The maximum cable length for USB is 15 feet. This is a maximum distance between device and computer, even if there are one or more Hubs in between. There are cable extenders available on the market, but these can be unreliable and are not endorsed by Phidgets Inc. Users should never try to run USB over anything other then a certified USB cable, and should never try to run it longer than the spec.

Phidgets run as USB 1.1 low speed or full speed devices, and are supported by both USB 1.1 and USB 2.0 hosts.

Software Model

The Phidgets Labview library is written under the C library - phidget21, which implements the low-level protocols necessary to communicate with the Phidgets, and exports a unified interface to the software programmer. This also makes the Phidgets Labview library cross-platform.

The Phidget Labview library contains only glue logic for interfacing with the C library, thus making maintenance much easier. It should be noted the library employs threading and events extensively. (See Programming Concept for more information.)

2.2 Platform Support

Operating System Support

Windows

Microsoft Windows 2000 and later are supported, including 64-bit editions. The Windows libraries are installed using an MSI installer that can be found on the Phidgets web site. This installs the C library, the .NET library, the COM library, the Java library, the Phidget Web Service and the Phidget Control Panel.

The Phidget Control Panel is represented by a "Ph" icon that runs in the system tray (usually on the right end of the Windows task bar). This program can be used to list and control any Phidgets attached to the system, and to control the Web Service.

Mac OS X

Mac OS X 10.3.9 and newer on Intel and PPC are supported. The Mac libraries are distributed in a .dmg and are installed using a standard Mac package installer. This installs the C library, the Kernel driver, the Java library, the Phidget Web Service and the Phidget Preference Pane.

The Phidget Preference Pane is a preference pane which resides in System Preferences. This program can be used to list and control any Phidgets attached to the system, and to control the Web Service.

Linux

Linux version 2.4 is supported, including 64-bit editions, but 2.6.7 or newer is recommended. The Linux libraries are distributed as source. The source for the C library, with optional JNI (Java support) extensions and the source for the Phidget Web Service are available as a .tar.gz. The included Makefile makes it easy to build and install the libraries on most Linux distribution.

Other

Other Operating System support is not currently available.

Labview Version Support

The Phidgets Labview library supports 32-bit Labview version 7.1.1 or higher. It also supports 64-bit Labview version 2009 or higher.



Note: If you use Labview 64-bit, you need to install the Phidgets Labview 64-bit

library.

3 Programming Concept

This manual is designed such that both novice and expert users can quickly reference the various Phidget LabVIEW functions.

The manual is subdivided into 6 sections: <u>Getting Started</u>, <u>Event Handler</u>, <u>Multiple Devices</u>, <u>Phidgets</u> <u>Common</u>, <u>Specific Modules</u> and <u>Phidgets Constants</u>.

Each section is defined as follow:

Getting Started: tells users how to communicate with phidgets and perform some basic functions. Use the <u>Getting Started</u> manual as a tutorial to familiarize yourself with Phidget LabVIEW functions and basic features you use to build data acquisition and instrument control applications.

Event Handler: needs only be used in applications that need to receive events. Use the Event Handler manual as a tutorial to learn how to construct the event and use the handler.

Multiple Devices: needs only be used in applications that involve multiple phidgets. Use the <u>Multiple</u> <u>Devices</u> manual as a tutorial to configure and control many phidgets in one VI.

Phidgets Common: contains the common functions for all phidgets.

Specific Modules: contains all the functions for specific phidgets.

Phidgets Constants: explains all Phidgets pre-defined constants.



Note: It is important for user to upgrade the Phidgets21 library to the most recent version. Click here to check and download the latest version library.

3.1 Getting Started

Phidgets are an easy to use set of building blocks for low cost sensing and control from your PC. Using the Universal Serial Bus (USB) as the basis for all Phidgets, the complexity is managed behind this easy to use and robust Application Program Interface (API) library.

As such, the Phidgets Labview VI features a very simple and easy-to-use set of VIs. At the simplest level, all you have to do to control a Phidget is explained in this section.

For illustration purposes, Phidget Accelerometer will be used.



Note: For a more specific illustration on different phidgets, users can refer to different examples accordingly.

Open the diagram of the "Single control example.vi" under the "Accelerometer" folder.



Phidgets can be programmed into 3 steps:

Step1 Initialize the Phidget. This includes opening a Phidget hardware, creating a Phidget handler or setting up parameters of a Phidget.



Users can also acquire other information in this step. For more details, please refer to the example called "Remote Example.vi" under "TemperatureSensor" folder.

If users want to open Phidgets over the network, a PhidgetOpenRemote and AcceCreate functions will be called instead of AcceOpen.



Step2> Perform any execution related with the Phidget. This includes data acquisition, device control, event execution etc.



Step3 Close the Phidget. This may include closing the device, releasing all the resources or freeing a Phidget handle and an error handler.



3.2 Event Handler

This demonstrates how to call a Phidgets event and how to use them.

For illustration purposes, Phidget Spatial will be used.



 $\overline{\mathbb{N}}$

Note: For a more specific illustration on different phidgets, users can refer to different examples accordingly.

Open the diagram of the "Spatial event example.vi" under the "Spatial" folder.



Phidgets Event can be programmed into 3 steps:

Step1 Create an event handler.



Step2> Perform any event execution related with the Phidget.



<Step3 Close the related event.





Note: When execute an event, please make sure "create", "execute" and "close" the same event. For example, user wants to run an Event called A. He has to place "CreateEventA.vi", "ExeEventA.vi" and "CloseEventA.vi" on the block diagram. He cannot place "CloseEventB.vi" instead of "CloseEventA.vi". However, for some Phidgets event, they share same VIs. (For more details, please refer to specific Phidgets.)

Phidget Error Event:

Another useful example will be "Temp On Error.vi" under "TemperatureSensor" folder.

In this example, the error event is actually located in "Common Functions" folder. It will detect asynchronous errors from Phidgets.





Note: Phidgets can also support multiple events. For an example, please refer to "Event handler example.vi" under the "InterfaceK it" folder.

3.3 Multiple Devices

Phidgets Labview can control multiple phidgets. As long as the handlers are different, different phidgets can run in parallel.

For a more detailed illustration, please refer to the example of "Multiple control example (Parallel).vi" and "Multiple control example (Advanced).vi" under the "Accelerometer" folder.



 $\overline{\mathbb{Z}}$

Note: Another example will be "TemperatureDisplay.vi" under "TextLCD" folder. This example shows how to combined use different phidgets.

4 Phidgets Common

This section describes the VI functions used by all Phidgets. The SubVI folder contains advanced LabVIEW VIs

4.1 ErrorHandler.vi

ErrorHandler.vi

Create a Phidget Error handler

error in error out	
	error in
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abel	source
	source string describes the origin of the error or warning.
TF	error?
	TRUE if error occurs
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

132

abc

4.2 PhidgetClose.vi

Device In ----

PhidgetClose.vi

Close a Phidget device

_

error in	
[132]	Device In
	Device # Identification. error in
TF	error out passes error or warning information out of a VI to be used by other VIs. status
132)	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
abcl	code is the error or warning code. source
	source string describes the origin of the error or warning.
	error out
) TF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or

code

source

or warning.

code is the error or warning code.

source string describes the origin of the error

132

abc

FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source string describes the origin of the error or warning.

PhidgetDelete.vi 4.3

PhidgetDelete.vi

Delete a Phidget device handle

error in ANDELETE error out	
[132]	Device In
	Device # Identification. error in
TF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
labcl	code is the error or warning code. source
	source string describes the origin of the error or warning.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.

▶TF	status
[TTP]	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe.	source
	source string describes the origin of the error

or warning.

4.4 PhidgetEventCloseOnError.vi

PhidgetEventCloseOnError.vi

Close a Phidget error event handle

Device In Device Out Event Registration Refnum In error out error in (no error)		
1321	Device In	
	Device # Identification.	
	error in (no error)	
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.	
TF	status	
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.	
[132]	code	
abel	code is the error or warning code. source	
	source describes the origin of the error or	

	warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.

4.5 PhidgetEventCreateOnError.vi

PhidgetEventCreateOnError.vi

Create a Phidget error event handle



© 2014 Phidgets Inc.

	VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc)	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
ETF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Fabc	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

4.6 PhidgetEventExeOnError.vi

PhidgetEventExeOnError.vi

This is called when an asynchronous error occurs.

	Event?
Device In	Device Out
error in (no error)	ErrorCode
	error out
	ErrorString
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	ErrorCode
) [32]	The error code to get the description of. Device Out
	Same as Device In
	error out
FI	error out passes error or warning information out of a VI to be used by other VIs. status

)132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.code
Jabc	code is the error or warning code. source
	source string describes the origin of the error or warning.
FTF	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
	Event Registration Refnum Out
L abc	Same as the Event Registration Refnum In. ErrorString
	Contain the error description string.

4.7 PhidgetGetDeviceClass.vi





Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

1321	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	code is the error or warning code.
<u>labc</u>	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Lab c	source
	source describes the origin of the error or warning.
132	DeviceClass
	Returns the device class constant

4.8 PhidgetGetDeviceID.vi

PhidgetGetDeviceID.vi

Get the device ID of a Phidget

Device In Device Out	
error in (no error)	
[132]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
1 32	Device Out
	Same as Device In
	error out
▶ T F	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
<u>132</u>	code

abc

132

code is the error or warning code.sourcesource describes the origin of the error or warning.

DeviceID

Returns the device ID constant

4.9 PhidgetGetDeviceLabel.vi

PhidgetGetDeviceLabel.vi

Device Out

Get the label of a Phidget

Device In ----

error in	
	error in
TF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abc	code is the error or warning code. source
	source string describes the origin of the error or warning.
[132]	Device In
	Device # Identification. error out
	error out passes error or warning information out of a VI to be used by other VIs.

© 2014 Phidgets Inc.
) TF	status
NT32	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	code
	code is the error or warning code.
Jabe	source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In
Labc	DeviceLabel
	Returns the device label

4.10 PhidgetGetDeviceName.vi

PhidgetGetDeviceName.vi

Get the specific name of a Phidget



	or warning.
[132]	Device In
	Device # Identification.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In
Mabe	DeviceName
	Returns the device name

4.11 PhidgetGetDeviceType.vi

PhidgetGetDeviceType.vi

Get the type (class) of a Phidget



error in

error out passes error or warning information out of a VI to be used by other VIs.

TFI

status

132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code.
abc	source
	source string describes the origin of the error or warning.
132)	Device In
	Device # Identification.
Jabc	DeviceType
	Returns the device type
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
JI32	code
Jabc	code is the error or warning code. source
	source string describes the origin of the error or warning.
) [32]	Device Out
	Same as Device In

4.12 PhidgetGetDeviceVersion.vi

PhidgetGetDeviceVersion.vi

Get the firmware version of a Phidget

Device In Device Out	
error in error out	
	error in
	error out passes error or warning information out of a VI to be used by other VIs.
TFH	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
abc	code is the error or warning code. source
	source string describes the origin of the error or warning.
[]]]	Device In
	Device # Identification.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>Pabc</u>	source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

132

Version

Returns the device version

4.13 PhidgetGetServerAddress.vi

PhidgetGetServerAddress.vi

Get the address and port of a remotely opened Phidget. This will fail if the Phidget was opened locally

Device In Device Out error inAddress port error out	
	error in
TF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abcl	source
	source string describes the origin of the error or warning.
1321	Device In
	Device # Identification.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

42 Labview Manual	
-------------------	--

132	code
	code is the error or warning code.
Jabc	source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In
Fabe	ServerAddress
	Returns the address
132	port
	Returns the port number

4.14 PhidgetGetServerStatus.vi

PhidgetGetServerStatus.vi

Get the connected to server status of a remotely opened Phidget. This will fail if the Phidget was opened locally



1321	code
abc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Nabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	ServerStatus
NTE	Returns the server status. Possible values are 0 for unattached, 1 for attached and others for undefined
	Auzcheu:
	Returns TRUE is the device successfully attached, or FALSE otherwise.

4.15 PhidgetGetServiceID.vi

PhidgetGetServiceID.vi

Device In Device Out	
error in service ServiceID	
error out	
	error in
	error out passes error or warning information out of a VI to be used by other VIs.
TE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source string describes the origin of the error or warning.
1321	Device In
	Device # Identification.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
)132	code
	code is the error or warning code.
Dabc	source
	source string describes the origin of the error or warning.
132	Device Out

Get the server ID of a remotely opened Phidget. This will fail if the Phidget was opened locally

Same as Device In ServiceID Returns the server ID

4.16 PhidgetLibraryVersion.vi

PhidgetLibraryVersion.vi

Get the library version. This contains a version number and a build date

error in	
	error in
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abel	source
	source string describes the origin of the error or warning.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
JI32	code
	code is the error or warning code.

abc

	46	Labview Manual	
L			
		Abc	source
			source string describes the origin of the error or warning.
		Jabe	LibraryVersion
			Returns the library version
4	4.17	PhidgetOpen.vi	

PhidgetOpen.vi

Open a Phidget locally



132	a new device identification. This function will create a new device identification if it's 0 Serial Number Return
T F	Serial Number of the opened phidget Attached?
	Returns TRUE is the device successfully attached, or FALSE otherwise. error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Tabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
) [32]	Device Out
	Same as Device In

4.18 PhidgetOpenRemote.vi

PhidgetOpenRemote.vi

Open a Phidget remotely by ServerID. Note that this requires Bonjour (mDNS) to be running on both the host and the server



1321	milliseconds
132)	Time to wait for the attachment. Specify 0 to wait forever. (Default is 5000) Serial Number
	Serial Number. Specify -1 to open any.
	error in
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
abet	code is the error or warning code. source
	source string describes the origin of the error or warning.
1321	Device In
abel	Device # identification. This function will create a new device identification if it's 0 or invalid serverID
	Server ID. Specify NULL to open any
abc	password
	Password. Can be NULL if the server is running without password
132	Serial Number Return
	Serial Number of the opened phidget
FTF	Attached?
	Returns TRUE is the device successfully attached, or FALSE otherwise.
	VIIVI VUL

	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>Pabe</u>	source
	source string describes the origin of the error or warning.
) []32	Device Out
	Same as Device In

4.19 PhidgetOpenRemotelP.vi

PhidgetOpenRemoteIP.vi

Open a Phidget remotely by address and port



TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abel	source
	source string describes the origin of the error or warning.
132	Device In
	Device # identification. This function will create a new device identification if it's 0 or invalid.
(abc)	address
	Address. This can be a hostname or IP address
abci	password
	Password. Can be NULL if the server is running without password
132	port
	Port number. Default is 5001
132	Serial Number Return
	Serial Number of the opened phidget
) TF	Attached?
	Returns TRUE is the device successfully attached, or FALSE otherwise.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
DTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

132	code
Labc	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

4.20 PhidgetSetDeviceLabel.vi

PhidgetSetDeviceLabel.vi

Set the label of a Phidget. Note that this is not supported on very old Phidgets, and not yet supported in Windows

Device In DeviceLabel	- Device Out error out	
		error in
[]]		error out passes error or warning information out of a VI to be used by other VIs. status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)		code
<u>abc</u>		code is the error or warning code. source
		source string describes the origin of the error or warning.
1321		Device In
		Device # Identification.
abc		DeviceLabel

	The label to be set error out
F TF	error out passes error or warning information out of a VI to be used by other VIs. status
1132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
Pabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

- 4.21 Subvi
- 4.21.1 _AttachCHK.vi

_AttachCHK.vi

Get the attach state of a Phidget



error in

error out passes error or warning information out of a VI to be used by other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

	code is the error or warning code.
abc	source
	source string describes the origin of the error or warning.
132	Device In
	Device # Identification.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
T F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.
1132	Device Out
	Same as Device In
FIE	Attached?
	Returns TRUE is the device successfully attached, or FALSE otherwise.

4.21.2 _ChkError.vi

_ChkError.vi

Check the error of a Phidget

error in (no error)

TF	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
1321	Return Code
	The error code to get the description of.
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
FI32	code
	code is the error or warning code.
Jabc	source
	source describes the origin of the error or warning.

4.21.3 _Close.vi

_Close.vi	
Close a Phidget device	
Device In Device Out error in Clare error out	
132)	Device In
	Device # Identification.
	error in
	error out passes error or warning information out of a VI to be used by other VIs.
	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.

abc

source

source string describes the origin of the error or warning.

4.21.4 _Delete.vi

_Delete.vi

Delete a Phidget handler	
error in Poloto	
132	Device In
	Device # Identification. error in
	error out passes error or warning information out of a VI to be used by other VIs.
TFI	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source string describes the origin of the error or warning.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code

code is the error or warning code.

source

source string describes the origin of the error or warning.

4.21.5 _Open.vi

abc

_Open.vi

Open a Phidget device

Device In Device Out Serial Number OPEN error in	
	error in
TF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abc	code is the error or warning code. source
	source string describes the origin of the error or warning.
[132]	Device In
	Device # Identification.
[132]	Serial Number
	Serial Number. Specify -1 to open any.
	error out
ित्तन	error out passes error or warning information out of a VI to be used by other VIs.
	status

132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
Fabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

4.21.6 _OpenRemote.vi

_OpenRemote.vi

Open a Phidget remotely by ServerID. Note that this requires Bonjour (mDNS) to be running on both the host and the server



132)	Device In
132)	Device # Identification. Serial Number
(abc)	Serial Number. Specify -1 to open any. serverID
abel	Server ID. Specify NULL to open any password
	Password. Can be NULL if the server is running without password
	error out
NTE	error out passes error or warning information out of a VI to be used by other VIs.
	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

4.21.7 _OpenRemotelP.vi

_OpenRemoteIP.vi

Open a Phidget remotely by address and port



) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>babc</u>	source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

4.21.8 _SerialReturn.vi

_SerialReturn.vi

Return the serial number of a Phidget

error in Beturn Beturn Serial Number Return	
	error in
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
(abc)	code is the error or warning code. source
	source string describes the origin of the error or warning.
1321	Device In

	Device # Identification. error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>Pabe</u>	source
	source string describes the origin of the error or warning.
) []32	Device Out
	Same as Device In
132	Serial Number Return
	Serial Number of the opened phidget

4.21.9 _WaitAttach.vi

_WaitAttach.vi

Wait until a Phidget attached



error in

error out passes error or warning information out of a VI to be used by other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

[<u>132</u>]	that no error occurred. code
abet	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device In
1321	Device # Identification. milliseconds
	Time to wait for the attachment. Specify 0 to wait forever. (Default is 5000)
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

4.21.10 EventCloseIntDouble.vi

EventCloseIntDouble.vi

Close the event handler which contains an integer and a double event variables. This should not be directly accessed by users

Device In ————— Device Out Event Registration Refnum In ———————————————————————————————————	
	Device # Identification.
200	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abet	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
) [32]	Device Out
	Same as Device In
	error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
1132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code

code is the error or warning code.

source

source string describes the origin of the error or warning.

4.21.11 EventCloseIntInt.vi

EventCloseIntInt.vi

Close the event handler which contains an integer and an integer event variables. This should not be directly accessed by users

Device In Device	te Out
error in (no error)	out
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
abcl	code is the error or warning code. source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out

abc

	Same as Device In error out
TF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source string describes the origin of the error or warning.

4.21.12 EventExeIntDouble.vi

EventExeIntDouble.vi

Call the event handler which contains an integer and a double event variables. This should not be directly accessed by users



1321	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	code is the error or warning code.
	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
DBL	acceleration
	The double
132	index
	The integer
) [32]	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
)132	code
	code is the error or warning code.
Dabe	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

TF

Event?

Returns TRUE if the event has executed, or FALSE otherwise.

4.21.13 EventExeIntInt.vi

EventExeIntInt.vi

Call the event handler which contains an integer and an integer event variables. This should not be directly accessed by users



132	a
	The 1st integer
132	Device Out
	Same as Device In
	error out
TTE	error out passes error or warning information out of a VI to be used by other VIs.
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.
	Event Registration Refnum
	Event # Identification
) [32]	b
	The 2nd integer
FIE	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.

5 Specific Modules

This section describes each of the VI function used by different Phidgets. All the VI functions are located in its dll folder correspondingly.



Note: Refer to the Product manual for your Phidget and the C Programming Manual for more detailed, language unspecific API documentation.

Please select a specified module accordingly.

5.1 Accelerometer

5.1.1 AcceAxisCount.vi

AcceAxisCount.vi

Get the number of acceleration axes supported by this accelerometer.



) []32	Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
N TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Mbc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	count
	The number of axes

5.1.2 AcceCreate.vi

AcceCreate.vi

Create a Phidget Accelerometer handle.



error in

error out passes error or warning information out of a VI to be used by other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

[132]	that no error occurred. code
abc	code is the error or warning code. source
	source string describes the origin of the error or warning.
	error out
NTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
<u>)132</u>	code
Fabc	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	The created Device # ID

5.1.3 AcceEventClose.vi

AcceEventClose.vi

Close the acceleration change event handle.



Device In Device # Identification. error in (no error)

132
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
(abc)	code is the error or warning code. source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
<u>¥132</u>	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Abc	source
	source string describes the origin of the error or warning.

5.1.4 AcceEventCreate.vi

AcceEventCreate.vi

Set up an acceleration change event handle.

Device In Device Out	tration Refnum Out
error out	
132	Device In
	Device # Identification.
[533]	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
I TF I	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
NTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

132	code
Mabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.1.5 AcceEventExe.vi

AcceEventExe.vi

This is called when the acceleration changes by more then the change trigger.



Event Registration Refnum In Event # Identification DBL acceleration The acceleration 132 index The acceleration index. 132 **Device Out** Same as Device In error out error out passes error or warning information out of a VI to be used by other VIs. TF status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. 132 code code is the error or warning code. abc source source string describes the origin of the error or warning. **Event Registration Refnum Out** Same as the Event Registration Refnum In. TF Event? Returns TRUE if the event has executed, or FALSE otherwise AcceGetData.vi

warning.

AcceGetData.vi

5.1.6

Get the current acceleration data of an axis.

Device In GovDate Channel acceleration error in (no error) -	
[]32]	Device In
	Device # Identification.
	Channel
	Channel of the device to open
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
1321	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
DBL	acceleration
	The acceleration
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

	VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Jabc	source
	source describes the origin of the error or warning.

5.1.7 AcceGetMax.vi

AcceGetMax.vi

Get the maximum acceleration supported by an axis.

Device In
Device # Identification.
Channel
The acceleration index. (x, y, z)
error in (no error)
error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
status
status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code

abc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
DBL	acce_max
	The maximum acceleration.
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source describes the origin of the error or warning.

5.1.8 AcceGetMin.vi

AcceGetMin.vi

Get the minimum acceleration supported by an axis.



	Device # Identification.
	Channel
	The acceleration index. (x, y, z)
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[132]	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
FI32	Device Out
	Same as Device In
DBL	acce_min
	The minimum acceleration.
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FIE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

132

abc

5.1.9 AcceGetTrigger.vi

AcceGetTrigger.vi

Get the change trigger for an axis.

Device In Device Out	
error in (no error)	
[]]]]	Device In
	Device # Identification.
	Channel
	The acceleration index. (x, y, z)
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF I	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abel	source
	source describes the origin of the error or warning.
132	Device Out

code

source

warning.

code is the error or warning code.

source describes the origin of the error or

DBL	Same as Device In Trigger Out
	The change trigger. error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
J132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.

5.1.10 AcceOpen.vi

AcceOpen.vi

Open a Phidget Accelerometer.



	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
<u>132</u>	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code.
<u>abc</u>	source
	source string describes the origin of the error or warning.
I32	Device In
	Device # Identification.
132	Serial Number Return
FTF	Serial Number of the opened phidget Attached?
	Returns TRUE is the device successfully attached, or FALSE otherwise.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TT	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.
132	Device Out

Same as Device In

5.1.11 AcceSetTrigger.vi

AcceSetTrigger.vi

Set the change trigger for an axis.

Device In Device Out	
Channel –	
error in (no error)	
1321	Device In
	Device # Identification.
	Channel
	Channel of the device to open
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>abc</u>	code is the error or warning code.
	source describes the origin of the error or warning.
DBL	Trigger In
	The change trigger.
132	Device Out

	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabc	code is the error or warning code. source
	source describes the origin of the error or warning.

- 5.2 AdvancedServo
- 5.2.1 AdvServoCount.vi

AdvServoCount.vi

Gets the number of motors supported by this controller.



132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.code
	code is the error or warning code
abc)	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
132	count
	The motor count.

5.2.2 AdvServoCreate.vi

AdvServoCreate.vi

Create a Phidget Advanced Servo handle.

Croato	- Device Out	
error in 🚥 🦉 💷	error out	
		error in
117		error out passes error or warning information out of a VI to be used by other VIs. status
132		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
		code is the error or warning code.
abci		source
		source string describes the origin of the error or warning.
		error out
		error out passes error or warning information out of a VI to be used by other VIs.
TF		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132		code
Pabe		code is the error or warning code. source
		source string describes the origin of the error or warning.
132		Device Out
		Device # identification.

5.2.3 AdvServoEventClose.vi

AdvServoEventClose.vi

Device In Device	Out
Event Registration Refnum In	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abci	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

Close the Phidget Advanced Servo event handle.

132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error
	or warning.

5.2.4 AdvServoEventCreateCrtChange.vi

AdvServoEventCreateCrtChange.vi

Set up a current change event handle.

Device In Device Out error in (no error) Event Registration Refnum Out error out	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out

F TF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.2.5 AdvServoEventCreatePosChange.vi

AdvServoEventCreatePosChange.vi

Set up a postion change event handle.



[<u>132</u>]	code
abel	code is the error or warning code. source
	source describes the origin of the error or warning.
) [32]	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
PTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>Pabe</u>	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.2.6 AdvServoEventCreateVelChange.vi

AdvServoEventCreateVelChange.vi



	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abet	code is the error or warning code. source
	source describes the origin of the error or warning.
NI32	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Labe	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.2.7 AdvServoEventExe.vi

AdvServoEventExe.vi

This is called when the Phidget Advanced Servo event changes.



) [32]	The motor index. Device Out
	Same as Device In error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
Labc	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Same as the Event Registration Refnum In.
FTF	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.

5.2.8 AdvServoGetAcce.vi

AdvServoGetAcce.vi

Get the last set acceleration of a motor



Device In Device # Identification. error in (no error)

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

index

The motor index

Device Out

Same as Device In

error out

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

TFI

132

abc

132

132

TF

132

abc

DBL

acce_out

The acceleration

5.2.9 AdvServoGetAcceMax.vi

AdvServoGetAcceMax.vi

Get the maximum acceleration supported by a motor.

Device In Device Out index accemax_out error in (no error) error out	
132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
132	index
	The motor index
P132	Device Out
	Same as Device In
	error out

	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	accemax_out
	The maximum acceleration

5.2.10 AdvServoGetAcceMin.vi

AdvServoGetAcceMin.vi

Get the minimum acceleration supported by a motor.



	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
1321	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
JI32	code
	code is the error or warning code.
Dabc	source
	source describes the origin of the error or warning.
DBL	accemin_out
	The minimum acceleration

5.2.11 AdvServoGetCurrent.vi

AdvServoGetCurrent.vi

Get the current current draw for a motor.

Device In Current Device Out index error in (no error)	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

F TF	VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) []32	code
labc	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	current_out
	The current

5.2.12 AdvServoGetEngaged.vi

AdvServoGetEngaged.vi

Get the engaged state of a motor. This is whether the motor is powered or not



132)	code
abc)	code is the error or warning code. source
	source describes the origin of the error or warning.
[]]]	index
132	The motor index Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
) [32]	EngagedState_out
	The engaged state. Possible values are 0 for False, 1 for True and others for undefined
TF	Engaged?
	The engaged state. Possible values are True for Engaged and False for Not Engaged

5.2.13 AdvServoGetPos.vi

AdvServoGetPos.vi

Get the current position of a motor.

Device In Device Out index pos_out error in (no error) error out	
132	Device In
	Device # Identification. error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TFF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
132	index
	The motor index
<u>132</u>	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

	VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
[abc]	code is the error or warning code.
rau.	source
	source describes the origin of the error or warning.
DBL	pos_out
	The position.

5.2.14 AdvServoGetPosMax.vi

AdvServoGetPosMax.vi

Get the maximum position that a motor can go to.



	code is the error or warning code.
abet	source
	source describes the origin of the error or warning.
1321	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
T TATI	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	code
	code is the error or warning code.
labe	source
	source describes the origin of the error or warning.
DBL	posmax_out
	The maximum position

5.2.15 AdvServoGetPosMin.vi

AdvServoGetPosMin.vi

The minimum position

Device In Per Min Device Out	
error in (no error)	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[132]	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
1321	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

132	that no error occurred. code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	posmin_out
	The minimum position

5.2.16 AdvServoGetRampingState.vi

AdvServoGetRampingState.vi

Get the speed ramping state for a motor. This is whether or not velocity and acceleration are used

Device In index error in (no error)	Ramping Device Out RampingState_out RampingState? error out	
132		Device In
		Device # Identification.
		error in (no error)
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132		code
abel		code is the error or warning code. source

source describes the origin of the error or

	warning.
132)	index
132	The motor index Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	RampingState_out
	The speed ramping state. Possible values are 0 for False, 1 for True and others for undefined.
FTF	RampingState?
	The speed ramping state (Boolean type).

5.2.17 AdvServoGetServoType.vi

AdvServoGetServoType.vi

Get the servo type of a motor

Device In Devi	ce Out
index - 📮 📪 GetS	ervoType
error in (no error) and error	tut
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
[]]]	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or


5.2.18 AdvServoGetVel.vi

AdvServoGetVel.vi

Get the current velocity of a motor.

[Device In 600 index 6	Device Out	
error in (no error) 🚥	error out	
132			Device In
			Device # Identification.
			error in (no error)
			error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF			status
			status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132			code
			code is the error or warning code.
abc			source

	source describes the origin of the error or warning.
1321	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	vel_out
	The current velocity

5.2.19 AdvServoGetVelLmt.vi

AdvServoGetVelLmt.vi

Get the last set velocity limit of a motor.



Device In

	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abci	source
	source describes the origin of the error or warning.
132)	index
	The motor index
132	Device Out
	Same as Device In
	Same as Device In error out
	Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
NET	Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
₽ ₩₩	Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
ETT TTT	Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code

112	Labview Manual	
L	Fabe	SOURCE
		source
		source describes the origin of the error or
		warning.
	DBL	vellim_out
		The velocity limit
5.2.20	AdvServoGetVelMax.vi	

AdvServoGetVelMax.vi

Get the maximum velocity that can be set for a motor

Device In Device Out	
error in (no error)	
132	Device In
	Device # Identification.
200	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
[132]	index
	The motor index

132	Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	velmax_out
	The maximum velocity

5.2.21 AdvServoGetVelMin.vi

AdvServoGetVelMin.vi

Get the minimum velocity that can be set for a motor



	be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
<u>[132]</u>	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FIE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
)abc	source
	source describes the origin of the error or warning.
DBL	velmin_out
	The minimum velocity

5.2.22 AdvServoOpen.vi

AdvServoOpen.vi	
Device In Device Out Serial Number Serial Number Return milliseconds Attached? error in error out	
1321	Serial Number
1321	Serial Number. Specify -1 to open any. millise conds
	Time to wait for the attachment. Specify 0 to wait forever. (Default is 5000)
251	error in
	error out passes error or warning information out of a VI to be used by other VIs.
TFI	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abe	source
	source string describes the origin of the error or warning.
1321	Device In
	Device # identification. This function will create a new device identification if it's 0 or invalid.
F132	Serial Number Return
	Serial Number of the opened phidget
NTF	Attached?
	Returns TRUE is the device successfully attached, or FALSE otherwise.

116	Labview Manual	
		error out
	NTE	error out passes error or warning information out of a VI to be used by other VIs.
		status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	132	code
	Jabc	code is the error or warning code. source
		source string describes the origin of the error or warning.
)132	Device Out
		Same as Device In

5.2.23 AdvServoSetAcce.vi

Г

AdvServoSetAcce.vi

Set the acceleration for a motor



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or

()	FALSE (checkmark) to indicate a warning or that no error occurred.
	code
	code is the error or warning code.
abet	source
	source describes the origin of the error or warning.
DBL	acce_in
	The acceleration
132	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.

5.2.24 AdvServoSetEngaged.vi

AdvServoSetEngaged.vi

Device In Device Out index Based SetEngaged error out error in (no error)	
132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
1321	index
	The motor index
TF	SetEngaged
	Set the engage state.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

Set the engaged state of a motor. This is whether the motor is powered or not.

	VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Jabc	source
	source describes the origin of the error or warning.

5.2.25 AdvServoSetPos.vi

AdvServoSetPos.vi

Set the position of a motor



	source describes the origin of the error or warning.
DBL	pos_in
	The position
132)	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe .	source
	source describes the origin of the error or warning.

5.2.26 AdvServoSetPosMax.vi

AdvServoSetPosMax.vi

Set the maximum position that a motor can go to.



	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF)	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abc	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	posmax_in
132)	The maximum position index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

Image: source describes the origin of the error or warning.Image: source describes the origin of the error or warning.

5.2.27 AdvServoSetPosMin.vi

AdvServoSetPosMin.vi

Set the minimum position that a motor can go to.

Device In index posmin_in error in (no error)	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
DBL	posmin_in
	The minimum position

1321	index
132	The motor index Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
) abc	code is the error or warning code. source
	source describes the origin of the error or warning.

5.2.28 AdvServoSetRampingState.vi

AdvServoSetRampingState.vi

Set the speed ramping state for a motor. This is whether or not velocity and acceleration are used



	be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abcl	source
	source describes the origin of the error or warning.
1321	index
	The motor index
TF	SetRampingState
	The speed ramping state. ($0 = False 1 = True$)
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
<u>)132</u>	code
	code is the error or warning code.
labc	source
	source describes the origin of the error or

warning.

5.2.29 AdvServoSetServoParameters.vi

AdvServoSetServoParameters.vi

Set the servo parameters of a motor.



DBL	max_us
DBL	The maximum supported PCM in microseconds degrees
	The degrees of rotation defined by the given PCM range
	velocity_max
) 132	The maximum velocity in degrees/second Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Labc	source
	source describes the origin of the error or warning.

5.2.30 AdvServoSetServoType.vi

AdvServoSetServoType.vi

Set the servo type of a motor



[132]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132)	index
	The motor index
[132]	setServoType
	The servo type. This is an enum. Please refer to <u>Phidgets Constants</u> -> <u>ServoType</u>
<u>1132</u>	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

132

abc

that no error occurred. code code is the error or warning code. source

source describes the origin of the error or warning.

5.2.31 AdvServoSetVelLmt.vi

AdvServoSetVelLmt.vi

Set the velocity limit for a motor



132	The velocity limit index
132	The motor index Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Mbc	code is the error or warning code. source
	source describes the origin of the error or warning.

5.2.32 AdvServoStoppedState.vi

AdvServoStoppedState.vi

Get the stopped state of a motor. This is true when the motor is not moving and there are no outstanding commands



	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc)	source
	source describes the origin of the error or warning.
<u>132</u>	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
babc	source
	source describes the origin of the error or warning.

The stopped state. Possible values are 0 for False, 1 for True and others for undefined

The stopped state (Boolean type). Possible values are True for Stopped and False for Not

StoppedState

Stopped?

Stopped

132

TF

5.3 Analog

5.3.1 AnalogCreate.vi

AnalogCreate.vi

Create a Phidget Analog device



1132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.code
Mabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	The created device # ID

5.3.2 AnalogGetEnabled.vi

AnalogGetEnabled.vi

Get the enabled state of the device



label	source
	source describes the origin of the error or warning.
132	index
) [32]	The analog output index Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
)132	EnabledState
NTE	The enabled state. Possible values are 0 for False, 1 for True and others for undefined
	Enaplea:
	The enabled state. Possible values are True for Enabled and False for Not Enabled

5.3.3 AnalogGetVoltage.vi

AnalogGetVoltage.vi

Get the measured voltage

Device In Get Device Out	
error in (no error) and the error out	
[]]]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
[132]	index
	The analog output index
J 32	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
) TF	status

132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
l abc	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	voltage
	The voltage

5.3.4 AnalogGetVoltageMax.vi

AnalogGetVoltageMax.vi

Gets the maximum voltage that can be output

Device In Get MAX Device Out index Veltage Max error in (no error)	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
I I I	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abc	code is the error or warning code. source

	source describes the origin of the error or warning.
132)	index
	The analog output index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	VoltageMax
	The maximum voltage

5.3.5 AnalogGetVoltageMin.vi

AnalogGetVoltageMin.vi

Gets the minimum votlage that can be output

Device In index	Get MIN Valtage VoltageMin
error in (no error)	error out

Device In

	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF)	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
[132]	index
	The analog output index
132	The analog output index Device Out
132	The analog output index Device Out Same as Device In
▶ 132	The analog output index Device Out Same as Device In error out
▶ ■	The analog output index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
	The analog output index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
TE	The analog output index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
EIII IIII	The analog output index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code

138	Labview Manual	
	Pabc	source
		source describes the origin of the error or warning.
	DBL	VoltageMin
		The minimum voltage
5.3.6	AnalogOpen.vi	
	AnalogOpen.vi	
	Opens a Phidget Analog device	
	Device In Serial Number milliseconds error in (no error)	eturn
	[132]	Serial Number
		Serial Number. Specify -1 to open any.
	132	milliseconds
		Time to wait for the attachment. Specify 0 to wait forever. (Default is 5000)
		error in (no error)
		error out passes error or warning information out of a VI to be used by other VIs.
	TF	status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	132	code
		code is the error or warning code.
	label	source
		source string describes the origin of the error or warning.
	[]32]	Device In

E

)132	Device # identification. This function will create a new device identification if it's 0 or invalid. Serial Number Return
FIE	Serial Number of the opened phidget Attached ?
	Returns TRUE is the device successfully attached, or FALSE otherwise. error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
L abc	code is the error or warning code. source
	source string describes the origin of the error or warning.
I 32	Device Out
	Same as Device In

5.3.7 AnalogOutputCount.vi

AnalogOutputCount.vi

Gets the number of analog outputs on the device



132

Device In

Device # Identification.

	error in (no error)
TF	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
) []32	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
PTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>Pabc</u>	source
	source describes the origin of the error or warning.
) []32	Count

The number of analog outputs on the device

5.3.8 AnalogSetEnabled.vi

AnalogSetEnabled.vi

Set the enabled state of the device



	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Mabe	code is the error or warning code. source
	source describes the origin of the error or warning.

Device In

VIs.

status

Device # Identification.

error in can accept error information wired

information to decide if any functionality should be bypassed in the event of errors from other

from VIs previously called. Use this

error in (no error)

5.3.9 AnalogSetVoltage.vi

AnalogSetVoltage.vi

Sets the voltage to output



1321	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	couc
	code is the error or warning code.
abe	source
	source describes the origin of the error or warning.
DBL	voltage
	The voltage to output
1321	index
	The analog output index
JI32	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Fabe	source
	source describes the origin of the error or warning.

5.4 Bridge

5.4.1 BridgeCreate.vi

BridgeCreate.vi

Create a phidget bridge device.

Croate Device Out	
error in 🚥 🧖 🛲 error out	
	error in
TF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abc)	code is the error or warning code. source
	source string describes the origin of the error or warning.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
	code is the error or warning code.
Pabc	source
	source string describes the origin of the error or warning.
132

Device Out

The created Device # ID

5.4.2 BridgeEventClose.vi

BridgeEventClose.vi

Close a Phidget Bridge event handle.

Device In	- Device Out	
error in (no error)	error out	
[<u>132</u>]	Device In	
	Device # Identification.	
	error in (no error)	
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.	
TF	status	
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.	
132	code	
	code is the error or warning code.	
abc	source	
	source describes the origin of the error or warning.	
	Event Registration Refnum In	
	Event # Identification	
132	Device Out	
	Same as Device In	
	error out	

	error out passes error or warning information out of a VI to be used by other VIs.
FIE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.

5.4.3 BridgeEventCreate.vi

BridgeEventCreate.vi

Create a Phidget Bridge event handle



abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.4.4 BridgeEventExe.vi

BridgeEventExe.vi

Returns the value of the selected input



Device # Identification.

	error in (no error)
TTF	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abe	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
DBL	Value
FI32	The value of the selected input (mV/V) index
	The bridge input index
) [32]	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
<u><u></u>TF</u>	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
	code is the error or warning code.

Pabe	source
	source string describes the origin of the error or warning.
F	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
	Event Registration Refnum Out
	Same as Event # Registration Refnum In

5.4.5 BridgeGetDataRate.vi

BridgeGetDataRate.vi

Device In Get Device Out PataBate DataRate error in (no error) DataRate error out	
132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
<u>132</u>	Device Out

	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>Pabc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
132	DataRate

5.4.6 BridgeGetDataRateMax.vi

BridgeGetDataRateMax.vi

Gets the maximum supported data rate, in ms.



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

TFI	status
1321	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
132	DataRateMax
	Maximum data rate

5.4.7 BridgeGetDataRateMin.vi

BridgeGetDataRateMin.vi

Device In Device Out PataRate DataRateMin	
error out	
132)	Device In
	Device # Identification.
E33	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TFI	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
NTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

Gets the minimum supported data rate, in ms.

132	code
	couc
	code is the error or warning code.
babe	source
	source describes the origin of the error or
	warning.
5732	DataData Min
	DataKatewini

Minimum data rate

5.4.8 BridgeGetEnabled.vi

BridgeGetEnabled.vi

Get the enabled state of a bridge input.

Device In index Index Enabled error in (no error)	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
ТЕ	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.

[132]	index
132	The bridge input index Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
L abe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	EnabledState
FTF	The enabled state. Possible values are 0 for False, 1 for True and others for undefined Enabled?
	The enabled state. Possible values are True for Enabled and False for Not Enabled

5.4.9 BridgeGetGain.vi

BridgeGetGain.vi

Gets the gain setting of the bridge input



1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF)	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abci	source
	source describes the origin of the error or warning.
132)	index
	The buildes investinder
	The bridge input index
132	Device Out
1 132	Device Out Same as Device In
▶ 132	Device Out Same as Device In error out
	 The ordge input index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TE	 The ordge input index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
EII III	 The bridge input index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
EIII IIII	 The bridge input index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code

156	Labview Manual	
	1	
	labc	source
		source describes the origin of the error or warning.
	132	Gain
		The gain setting

5.4.10 BridgeGetValue.vi

BridgeGetValue.vi

Gets the value of the selected bridge input

Device In Device Out index Value error in (no error) error out	
[132]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
1321	index
	The bridge input index

132	Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
NTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u><u>l</u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	value
	The value on the bridge input

5.4.11 BridgeGetValueMax.vi

BridgeGetValueMax.vi

The maximum measureable bridge value



	be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
[132]	index
	The bridge input index
)132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source describes the origin of the error or warning.
DBL	ValueMax
	The maximum value

5.4.12 BridgeGetValueMin.vi

BridgeGetValueMin.vi

The minimum measurable bridge value.

Device InGet Min Device Out indexValue error in (no error)	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	index
	The bridge input index
<u>)132</u>	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

FTF	VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
FDBL	ValueMin
	The minimum value

5.4.13 BridgeInputCount.vi

BridgeInputCount.vi

Gets the number of bridge inputs on the device



abet	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
T TAT	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
FI32	Count
	The number of bridge inputs on the device

5.4.14 BridgeOpen.vi

BridgeOpen.vi



	Serial Number. Specify -1 to open any.
[132]	milliseconds
	Time to wait for the attachment. Specify 0 to wait forever. (Default is 5000)
	error in (no error)
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abci	source
	source string describes the origin of the error or warning.
[]32]	Device In
	Device # Identification. This function will create a new device identification if it's 0
132	Serial Number Return
	Serial Number of the opened phidget
N TF	Attached?
	Returns TRUE is the device successfully attached, or FALSE otherwise.
251	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that us arrange accurred

132	code
Pabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out

Same as Device In

5.4.15 BridgeSetDataRate.vi

BridgeSetDataRate.vi

Sets the data rate for the bridge input. (ms)

Device InSet DataRate	— Device Out •• error out	
132		Device In
		Device # Identification.
		error in (no error)
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132		code
		code is the error or warning code.
abc		source
		source describes the origin of the error or warning.

132)	DataRate
132	The data rate Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
l abc	code is the error or warning code. source
	source describes the origin of the error or warning.

5.4.16 BridgeSetEnabled.vi

BridgeSetEnabled.vi

Sets the enabled state of the bridge input



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this

	information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
[]]]]	index
	The bridge input index
TF	SetEnabled
	The enabled state
)[32]	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
PTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>Pabc</u>	source
	source describes the origin of the error or

5.4.17 BridgeSetGain.vi

BridgeSetGain.vi

Sets the bridge gain



warning.

	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabc	code is the error or warning code. source
	source describes the origin of the error or warning.

- 5.5 Encoder
- 5.5.1 EncoderCreate.vi

EncoderCreate.vi

Create a Phidget Encoder handle



error in

error out passes error or warning information out of a VI to be used by other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

<u>abc</u>)	code is the error or warning code. source
	source string describes the origin of the error or warning.
	error out
T F	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
Pabc	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Teh created device # ID

5.5.2 EncoderEventCloseInput.vi

EncoderEventCloseInput.vi

Close the input change event handle



	information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
<u>132</u>	code
abet	code is the error or warning code. source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
JI32	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.

5.5.3 EncoderEventClosePosition.vi

EncoderEventClosePosition.vi

Close the encoder position change event handle		
	Device Out	
error in (no error)	error out	
132)	Device In	
	Device # Identification.	
	error in (no error)	
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.	
TF	status	
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.	
132	code	
	code is the error or warning code.	
abc	source	
	source describes the origin of the error or warning.	
	Event Registration Refnum In	
	Event # Identification	
132	Device Out	
	Same as Device In	
	error out	
	error out passes error or warning information out of a VI to be used by other VIs.	
F TF	status	
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.	

)132	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error
	or warning.

5.5.4 EncoderEventCreateInput.vi

EncoderEventCreateInput.vi Set up an input change event handle Device In -Device Out Event Registration Refnum Out ∦ Evon! error in (no error) ----error out 132 **Device In** Device # Identification. error in (no error) error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. TFI status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. 132 code code is the error or warning code. abc source source describes the origin of the error or warning. 132 **Device Out** Same as Device In error out

F TF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.5.5 EncoderEventCreatePosition.vi

EncoderEventCreatePosition.vi

Set up an encoder position change event handle



[<u>132</u>]	code
abel	code is the error or warning code. source
	source describes the origin of the error or warning.
) [32]	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>Pabe</u>	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.5.6 EncoderEventExeInput.vi

EncoderEventExeInput.vi

Thos occurs on a Phidget Encoder Input event



	error in (no error)
TF	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
	status is TRUE (X) if an error occurred or
	FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device In
	Device # Identification.
JI32	index
	The encoder index
FI32	Value
	The input state value. Possible values are 0 for False, 1 for True and others for undefined error out
	error out passes error or warning information
	out of a VI to be used by other VIs.
F TF	status
NI32	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code

Jabc	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
132	Same as the Event Registration Refnum In Device Out
NTF	Same as Device In Event?
	Returns TRUE if the event has executed, or FALSE otherwise

5.5.7 EncoderEventExePosition.vi

EncoderEventExePosition.vi

This is called when an encoder position changes.



	code is the error or warning code.
(abc)	source
	source describes the origin of the error or warning.
1321	Device In
	Device # Identification.
	Event Registration Refnum In
	Event # Identification
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In
T F	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
	Event Registration Refnum Out
	Same as the Event Registration Refnum In
132	index
	The encoder index
132	time

The time in ms since the last position change event

position

The current position of the encoder. (This is a relative not absolute position.)

5.5.8 EncoderGetCount.vi

EncoderGetCount.vi

Get the number of encoders supported by this board

Device In EncoderCount error in (no error) EncoderCount error out	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
	code is the error or warning code.
abel	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out

132

TF	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
Fabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	EncoderCount
	The encoder input count

5.5.9 EncoderGetEnabledState.vi

EncoderGetEnabledState.vi

Get the enabled state of an encoder. This is whether the encoder is powered or not. Please note that 1057 doesn't support this function



error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

<u>[]</u>	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abcl	source
	source describes the origin of the error or warning.
[]]]	index
	The encoder index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
) abc	source
	source describes the origin of the error or warning.
132	EncoderState
FTF	The enabled state. Possible values are 0 for False, 1 for True and others for undefined Enabled?

The enabled state. Possible values are True for Enabled and False for Not Enabled

5.5.10 EncoderGetIndexPosition.vi

EncoderGetIndexPosition.vi

Get the position of the last index pulse, as referenced to Phidget Encoder -> EncoderGetPosition. The function will return an error (EPHIDGET_UNKNOWN) if there hasn't been an index event, or if the encoder doesn't support index


	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	IndexPosition
	The index position

5.5.11 EncoderGetInputCount.vi

EncoderGetInputCount.vi

Get the number of encoders supported by this board

Device In Device Out error in (no error) Device Out error in (no error) error out	
[]]]	Device In
	Device # Identification. error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status

[]32]	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.code
	code is the error or warning code.
abcl	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
) [32]	InputCount
	The input count

5.5.12 EncoderGetInputState.vi

EncoderGetInputState.vi

Get the state of a digital input

Device In Device Out	
index - 💦 🖓 👘 input_state	
error in (no error) 🚥 🦾 InputState	
error out	
[<u>132</u>]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	index
	The encoder index
132	Dovice Out
	Device out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

132	that no error occurred. code
kbc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	input_state
	The input state. Possible values are 0 for False, 1 for True and others for undefined
▶ T F]	InputState
	The input state (Boolean type). Possible values are True for Engaged and False for Not Engaged

5.5.13 EncoderGetPosition.vi

EncoderGetPosition.vi

Get the current position of an encoder



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

132)	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
132	index
	The encoder index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Position
	The current position

5.5.14 EncoderOpen.vi

EncoderOpen.vi

Open a PhidgetEncoder

Device In Device Out	
Serial Number - Serial Number Re	turn
error in (no error)	
132)	Serial Number
	Serial Number, Specify -1 to open any
1201	willing can de
	miniseconds
	Time to wait for the attachment. Specify 0 to wait forever. (Default is 5000)
	error in (no error)
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
	code is the error or warning code.
abc	source
	source string describes the origin of the error or warning.
132)	Device In
	Device # Identification. This function will create a new device identification if it's 0
132	Serial Number Return
	Serial Number of the opened phidget
NTF	Attached?
	Returns TRUE is the device successfully attached, or FALSE otherwise.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.

FIE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
I 132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

5.5.15 EncoderSetEnabled.vi

EncoderSetEnabled.vi

Set the enabled state of an encoder. This is whether the encoder is powered or not. Please note that 1057 doesn't support this function



abel	code is the error or warning code.
	source describes the origin of the error or
	warning.
1321	index
	The encoder index
TF	SetEnable
	The encoder state.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Jabc	source
	source describes the origin of the error or warning.

5.5.16 EncoderSetPosition.vi

EncoderSetPosition.vi

Set the position of an encoder

Device In Set Device Out	
index - 42 error out	
error in (no error)	
1923	Davias In
132	Device in
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
[132]	index
	The encoder index
132	setPosition
	The new position
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

DTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or

warning.

5.6 Frequency

5.6.1 FreqCreate.vi

FreqCreate.vi

Create a Phidget Frequency input handle



) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Fabc	source
	source string describes the origin of the error or warning.
132	Device Out
	The created Device # ID

5.6.2 FreqEventClose.vi

FreqEventClose.vi

Close a Phidget Frequency input event handle

Device In Device Out Event Registration Refnum In error out error in (no error)	
1321	Device In
	Device # Identification. error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TFH	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code.

abel	source
	warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.

5.6.3 FreqEventCreate.vi

FreqEventCreate.vi

Create a Phidget Frequency input event handle



	information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
FI32	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.6.4 FreqEventExe.vi

FreqEventExe.vi

Event? Device In Device Out Even Event Registration Refnum In 🚽 Event Registration Refnum Out error in (no error) 🛁 index time error out counts error in (no error) error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. TFI status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. 132 code code is the error or warning code. abc source source describes the origin of the error or warning. 132 **Device In** Device # Identification. **Event Registration Refnum In** error out error out passes error or warning information out of a VI to be used by other VIs. TF status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. 132 code

Executes whenever some counts have been detected

Pabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In
FTF	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
132	index
	The encoder index
1132	time
	Time in microseconds over which the pulses have been measured
132	counts
	Then number of counts that occured
	Event Registration Refnum Out

5.6.5 FreqGetCount.vi

FreqGetCount.vi

Gets the total number of pulses detected on the specified channel since the Phidget was opened, or since the last reset



	be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
(abc)	source
	source describes the origin of the error or warning.
[] <u>]</u>	index
	The input index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
) []32	Count
	The total number of pulses

5.6.6 FreqGetCount71.vi

FreqGetCount71.vi

Gets the total number of pulses detected on the specified channel since the Phidget was opened, or since the last reset



	be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source describes the origin of the error or warning.
132	Count
	The number of pulses

FreqGetEnabled.vi 5.6.7

FreqGetEnabled.vi

Get the enabled state of the device



Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

1321	that no error occurred. code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
[132]	index
▶132	The input index Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
PTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	EnabledState
FTF	The enabled state. Possible values are 0 for False, 1 for True and others for undefined Enabled?
	The enabled state. Possible values are True for Enabled and False for Not Enabled

5.6.8 FreqGetFilter.vi

FreqGetFilter.vi

Get the channel filter mode.

Device In Device Out index Filter Type error in (no error) ==	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
<u>132</u>	index
	The input index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

	VIs.
PTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
) []32	Filter Type
	The filter type. This is an enum. Please refer to Phidgets Constants -> Frequency Filter Mode

5.6.9 FreqGetTime.vi

FreqGetTime.vi

Gets the total elapsed time since Phidget was opened, or since the last reset, in microseconds.



[132]	code
abel	code is the error or warning code. source
	source describes the origin of the error or warning.
[132]	index
132	The input index Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1 32	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Time
	The elapsed times

5.6.10 FreqGetTime71.vi

FreqGetTime71.vi

Gets the total elapsed time since Phidget was opened, or since the last reset, in microseconds.

Device In Get Device Out	
index Time	
132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	index
	The input index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

)132	that no error occurred. code
Labc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Time
	The elapsed time

5.6.11 FreqGetTimeout.vi

FreqGetTimeout.vi

Gets or set the Timeout value, in microseconds

Device In Get Device Out Imegat Timegat Timeout Timeout error in (no error) ===	
132	Device In
	Device # Identification.
TF -	error in (no error) error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
1321	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or

	warning.
132)	index
132	The input index Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
Nabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Timeout
	The timeout value

Device In

5.6.12 FreqGetValue.vi

FreqGetValue.vi

Get the frequency measured by the device.



	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abet	code is the error or warning code. source
	source describes the origin of the error or warning.
1921	index
1921	index The input index
1921 132	index The input index Device Out
132 132	 index The input index Device Out Same as Device In
132 132	index The input index Device Out Same as Device In error out
1321	<pre>index Index The input index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.</pre>
IS22 IS22 IS22 IS22	<pre>index Index The input index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status</pre>
	<pre>index Interinput index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.</pre>
	<pre>index Ihe input index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code</pre>

 Image: Source source describes the origin of the error or warning.

 Image: Source describes the origin of the error or warning.

 Image: Source describes the origin of the error or warning.

 Image: Source describes the origin of the error or warning.

 Image: Source describes the origin of the error or warning.

 Image: Source describes the origin of the error or warning.

 Image: Source describes the origin of the error or warning.

5.6.13 FreqInputCount.vi

FreqInputCount.vi

The number of frequency inputs on the device

Device In Device Out error in (no error) 123 Count error out	
[132]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In

	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Fabc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Count
	The number of inputs

5.6.14 FreqOpen.vi

FreqOpen.vi



	out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>abc</u>	source
	source string describes the origin of the error or warning.
[]32]	Device In
	Device # Identification. This function will create a new device identification if it's 0
132	Serial Number Return
NTF	Serial Number of the opened phidget Attached?
	Returns TRUE is the device successfully attached, or FALSE otherwise.
	error out
NTF	error out passes error or warning information out of a VI to be used by other VIs. status
	FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe.	source
	source string describes the origin of the error or warning.
132	Device Out

Same as Device In

5.6.15 FreqReset.vi

FreqReset.vi

Resets the TotalCount and TotalTime counters to 0 for the specified channel.

Device In Barrot Device Out	
error in (no error) =	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
1321	index
	The input index
132	Device Out
	Same as Device In
	error out

error in can accept error information wired	
from VIs previously called. Use this	
information to decide if any functionality should	
be bypassed in the event of errors from other	
VIs.	

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

5.6.16 FreqSetEnabled.vi

TF

132

abc

FreqSetEnabled.vi

Sets the enabled state of the channel.



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

[] <u>]</u>	code
<u>abel</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
[<u>132</u>]	index
TFI	The input index SetEnabled
132	The enabled state of the channel Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Mabe	code is the error or warning code. source
	source describes the origin of the error or warning.

5.6.17 FreqSetFilter.vi

FreqSetFilter.vi

Set the channel filter mode. This controls the type of signal that the frequency counter will respond to - either a zero-centered signal, or a logic level signal.

Device InSot	
Filter	
error in (no error)	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
[132]	Filter
	The filter type. This is an enum. Please refer to Phidgets Constants -> Frequency Filter Mode
132	index
132	Device Out
	Same as Device In
	error out
T F	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status

132

abc

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

5.6.18 FreqSetTimeout.vi

FreqSetTimeout.vi

Sets the timeout value in microsesonds.



© 2014 Phidgets Inc.

I32	timeout
<u>[]32</u>]	The timeout value. index
) [32]	The input index Device Out
	Same as Device In error out
FTF	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
)132	code
Dabe	code is the error or warning code. source
	source describes the origin of the error or warning.

5.7 GPS

5.7.1 GPSCreate.vi

GPSCreate.vi

Create a Phidget GPS device



error in

error out passes error or warning information out of a VI to be used by other VIs.

TF	status
[132]	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
abci	code is the error or warning code. source
	source string describes the origin of the error or warning.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Fabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
) [32]	Device Out
	Device # ID

5.7.2 GPSEventCloseFixStatus.vi

GPSEventCloseFixStatus.vi

Close a Phidget GPS Fix Status event handler Device In Event Registration Refnum In error in (no error)



Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Dabe	source
	source string describes the origin of the error or warning.

5.7.3 GPSEventClosePosition.vi

GPSEventClosePosition.vi

Close a Phidget GPS Position event handler

Device In I	Device Out
Event Registration Refnum In et	error out
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF)	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
J 32	Device Out
	Same as Device In error out
NTF	error out passes error or warning information out of a VI to be used by other VIs. status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source string describes the origin of the error or warning.

5.7.4 GPSEventCreateFixStatus.vi

GPSEventCreateFixStatus.vi

Create a Phidget GPS Fix Status event handler



132

abc

132	Device Out
	Same as Device In error out
F TF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
J abc	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.7.5 GPSEventCreatePosition.vi

GPSEventCreatePosition.vi

Create a Phidget GPS Position event handler Device In Device Out Event Registration Refnum Out error in (no error) error out 132 **Device In** Device # Identification. **1** error in (no error) error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

TF	status
1321	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
FI32	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.7.6 GPSEventExeFixStatus.vi

GPSEventExeFixStatus.vi

Executes when a position fix is obtained or lost.

Event	?
Device In Devic	e Out
Event Registration Refnum In -	Registration Refnum Out
error in (no error) 🚥 👘 Statu	5
error Statu	out = (T2F)
Statu	5 (111)
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
T F	error out passes error or warning information out of a VI to be used by other VIs.
	U UUU UUUU
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

132	code
Naber	code is the error or warning code.
	source
	source string describes the origin of the error or warning.
F	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
	Event Registration Refnum Out
	Same as Event Registration Refnum In
132	Status
	The fix status. Possible values are 0 for False, 1 for True and others for undefined
TF	Status (T?F)
	The fix status. Possible values are True for Fixed and False for Not Fixed

5.7.7 GPSEventExePosition.vi

GPSEventExePosition.vi

Executes when position changes.



	be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abe	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FIE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.
FIE	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
	Event Registration Refnum Out

PDBL	Event # Identification Latitude
DBL	The latitude Longitude
DBL	The longitude Altitude
	The altitude

5.7.8 GPSGetAltitude.vi

GPSGetAltitude.vi

Gets the altitude.



132	Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Mabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	Altitude
	The altitude

5.7.9 GPSGetDate.vi

GPSGetDate.vi

Gets the date of the last recieved position.



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this

	information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
	Date
	The date in UTC.
▶ <u>116</u>	tm_mday

The day of the month
116
116
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
117
<

5.7.10 GPSGetFixStatus.vi

GPSGetFixStatus.vi

Gets the GPS fix status.



	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
132	FixStatus
	The fis status. Possible values are 0 for False, 1 for True and others for undefined
FTF	FixStatus (T?F)
	The fix status. Possible values are True for Fixed and False for Not Fixed

5.7.11 GPSGetHeading.vi

GPSGetHeading.vi

Returns the current true course over ground of the active antenna in degrees (000.0 - 359.9).



132

Device In

Device # Identification.

	error in (no error)
TF₽	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FIE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>labc</u>	source
	source describes the origin of the error or warning.
DBL	Heading

The current course

5.7.12 GPSGetLatitude.vi

GPSGetLatitude.vi

Gets the lattitude of the antenna.

Device In Device Out error in (no error) Device Out	
132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should

	be bypassed in the event of errors from other VIs.
F TE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Mabe	source
	source describes the origin of the error or warning.
DBL	Latitude
	The lattitude

5.7.13 GPSGetLongitude.vi

GPSGetLongitude.vi

Gets the longitude of the antenna.



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

[132]	code
abc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FIE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1 32	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	Longitude
	The longitude

5.7.14 GPSGetTime.vi

GPSGetTime.vi

Gets the current time as transmitted by the GPS receiver.

Device In _____ Device Out error in (no error) _____ Time error out

1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	Same as Device In error out
	Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
FIF	Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
FITE IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
EEC EEC	Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code code is the error or warning code. source

	warning.
	Time
II 16	Current time in UTC format tm_ms
I 16	Current ms tm_sec
NII6	Current second tm_min
II6	Current minute tm_hour
	Current hour

5.7.15 GPSGetVelocity.vi

GPSGetVelocity.vi

Get the velocity of the antenna.



© 2014 Phidgets Inc.

abel	code is the error or warning code.
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
N132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
Pabe	source
	source describes the origin of the error or warning.
DBL	Velocity
	The velocity.

5.7.16 GPSOpen.vi

GPSOpen.vi

Open a PhidgetGPS device.

Device In Device Out Serial Number Serial Number Return milliseconds error in error out

132)	Serial Number
[]]]	Serial Number. Specify -1 to open any. millise conds
	Time to wait for the attachment. Specify 0 to wait forever. (Default is 5000) error in
TT I	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source string describes the origin of the error or warning.
132)	Device In
	Device # Identification.
1132	Serial Number Return
) TF	Serial Number of the opened phidget Attached?
	Returns TRUE is the device successfully attached, or FALSE otherwise.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
DIF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

	238	Labview Manual	
I		-	
		132	code
			code is the error or warning code.
		<u>Pabc</u>	source
			source string describes the origin of the error or warning.
		<u>132</u>	Device Out
			Same as Device In

5.8 InterfaceKit

5.8.1 IFCreate.vi

IFCreate.vi

Create a Phidget InterfaceKit handle



)132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.code
Jabc	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Device # identification

5.8.2 IFEventClose.vi

IFEventClose.vi

Close an IF Kit event handle		
Device In Device Out Event Registration Refnum In error out error in (no error)		
[<u>132</u>]	Device In	
	Device # Identification.	
	error in (no error)	
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.	
TF	status	
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.	
1321	code	
	code is the error or warning code.	
<u>abc</u>	source	

	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
) abc	source
	source string describes the origin of the error or warning.

5.8.3 IFEventCreateInput.vi

IFEventCreateInput.vi

Create an IF Kit Input event handle.



	be bypassed in the event of errors from other VIs.
TF	status
1321	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>Pabc</u>	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.8.4 IFEventCreateOutput.vi

IFEventCreateOutput.vi

Device In Device Out error in (no error) Event Registration error out	Refnum Out
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
abet	code is the error or warning code. source
	source describes the origin of the error or warning.
1132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
1700	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
<u>P132</u>	code
	code is the error or warning code.

Create an IF kit Output event handle

	Labe	source
		source string describes the origin of the error or warning.
		Event Registration Refnum Out
		Event # Identification
5.8.5	IFEventCreateSensor.vi	
	IFEventCreateSensor.vi	
	Create an IF kit sensor event.	
	Device In ———————————————————————————————————	n Refnum Out
	<u>132</u>	Device In
		Device # Identification.
		error in (no error)
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
	TF	status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	132	code
	<u>abe</u>	code is the error or warning code. source
		source describes the origin of the error or warning.
	132	Device Out
		Same as Device In

244	Labview Manual
-----	----------------

	error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
FI32	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
Jabc	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.8.6 IFEventExe.vi

IFEventExe.vi

Executes when an IF kit event occurs.



TFI

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

132	code
abc	code is the error or warning code. source
	source describes the origin of the error or warning.
	Event Registration Refnum In
[132]	Event # Identification Device In
132	Device # Identification. index
132	The input index Value
	The value returned by the event error out
	error out passes error or warning information out of a VI to be used by other VIs.
	status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	code
Pabe	source
	source string describes the origin of the error or warning.
D	Event Registration Refnum Out
132	Event # Identification Device Out
FTF	Same as Device In Event?

Returns TRUE if the event has executed, or FALSE otherwise.

5.8.7 IFGetDataRate.vi

IFGetDataRate.vi

Get the data rate for an analog input

Device In Device Out index DataRate	
error in (no error)	
[]32]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
[]]]	index
	The input index
132	Device Out
	Same as Device In
	CIIVI Vul

error in can accept error information wired
from VIs previously called. Use this
information to decide if any functionality should
be bypassed in the event of errors from other
VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

DataRate

The data rate

5.8.8 IFGetDataRateMax.vi

TF

132

abc

132

IFGetDataRateMax.vi

Get the maximum supported data rate for an analog input



	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	index
	The input index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
132	DataRateMax
	The maximum data rate

5.8.9 IFGetDataRateMin.vi

IFGetDataRateMin.vi

Get the minimum supported data rate for an analog input.

Device In Patanate Device Out DataRateMin	
error in (no error)	
[]32]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF)	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
1321	index
	The input index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

FTF	VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
Jabc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	DataRateMin
	The minimum data rate

5.8.10 IFGetInputCount.vi

IFGetInputCount.vi

Get the number of digital inputs supported by this board



abet	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1 32	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Input Count
	the number of digital inputs

5.8.11 IFGetInputState.vi

IFGetInputState.vi

The state of the indexed digital input.

Device In index Input State (0,1) error in (no error) Input State

[132]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TFH	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
[132]	index
1321	index The input index
132	index The input index Device Out
132))132	 index The input index Device Out Same as Device In
132) 132	<pre>index The input index Device Out Same as Device In error out</pre>
IIII	<pre>index Index The input index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.</pre>
	<pre>index Intering index The input index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status</pre>
	<pre>index Inte input index The input index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.</pre>
	<pre>index Inte input index The input index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code</pre>
Labc	source
-------------	--
	source describes the origin of the error or warning.
132	Input State (0,1)
	The input state. Possible values are 0 for False 1 for True and others for undefined
FLE	Input State
	The input state (Boolean type)

5.8.12 IFGetOutputCount.vi

IFGetOutputCount.vi

Get the number of digital outputs supported by this board

Device InFOutput Device Out error in (no error) Output count error out	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.

132	Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Mabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Output count
	The ditial output count

5.8.13 IFGetOutputState.vi

IFGetOutputState.vi

Get the state of a digital output



	from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132)	inde x
	The input index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
) abc	source
	source describes the origin of the error or warning.

132	Output State (0,1)
	The output state. Possible values are 0 for False, 1 for True and others for undefined
FIE	Output State
	The output state (Boolean type).

5.8.14 IFGetRatio.vi

IFGetRatio.vi

Get the ratiometric state for this board

error in (no error)	
132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[132]	code
abcl	code is the error or warning code. source
	source describes the origin of the error or warning.
F132	Device Out

	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
132	Ratiometric
T F	The ratio metric state. Possible values are 0 for False, 1 for True and others for undefined Ratiometric State
	The ratio metric state (Boolean type).

5.8.15 IFGetSensorCount.vi

IFGetSensorCount.vi

Get the number of sensor (analog) inputs supported by this board



	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
	code is the error or warning code.
abc)	source
	source describes the origin of the error or warning.
) [32]	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) []32	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
1 32	Sensor Count
	The sensor input count

5.8.16 IFGetSensorValue.vi

IFGetSensorValue.vi

Get a sensor value (0-1000).

Device In Device Out index Sensor Value error in (no error)	
132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abci	source
	source describes the origin of the error or warning.
132	index
	The input index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

F TF	VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Mabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Sensor Value
	The sensor value

5.8.17 IFGetSensorValueRaw.vi

IFGetSensorValueRaw.vi

Get a sensor raw value (12-bit).



	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
1321	index
	The input index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
1 32	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	code is the error or warning code.
Pabe .	source
	source describes the origin of the error or warning.
132	Sensor Value (Raw)
	The sensor value

5.8.18 IFGetTrig.vi

IFGetTrig.vi

Get a sensor change trigger

Device In Device Out	
error in (no error)	
	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abel	source
	source describes the origin of the error or warning.
[]]]	index
	The input index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or



5.8.19 IFOpen.vi

IFOpen.vi

Open a PhidgetInterfaceKit

turn
Serial Number
Serial Number. Specify -1 to open any.
milliseconds
Time to wait for the attachment. Specify 0 to wait forever. (Default is 5000)
error in (no error)
error out passes error or warning information out of a VI to be used by other VIs.
status
status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
·····
code is the error or warning code.
source

	source string describes the origin of the error or warning.
132	Device In
	Device # Identification. This function will create a new device identification if it's 0
<u>132</u>	Serial Number Return
F TF	Serial Number of the opened phidget Attached?
	Returns TRUE is the device successfully attached, or FALSE otherwise.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>Pabe</u>	source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

5.8.20 IFSetDataRate.vi

IFSetDataRate.vi

Set the data rate for an analog input

Device In Device Out	
indexerror out	
error in (no error)	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
[132]	index
	The input index
132	DataRate
	The data rate.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

266	Labview Manual	
[T F	status
Γ	142	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[habe.	code is the error or warning code. source
		source describes the origin of the error or

warning.

5.8.21 IFSetOutputState.vi

IFSetOutputState.vi

The Set the state of a digital output



	warning.
1321	index
TF	The input index OutputState
132	The output state. (0 = False 1 = True) Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Labc	code is the error or warning code. source
	source describes the origin of the error or warning.

5.8.22 IFSetRatio.vi

IFSetRatio.vi

Set the ratio metric state for this board.





Device In Device # Identification.

	error in (no error)
TE	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abe	source
	source describes the origin of the error or warning.
TFI	Ratiometric
	The ratiometric state. ($0 = False 1 = True$)
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or

warning.

5.8.23 IFSetTrig.vi

IFSetTrig.vi

Set a sensor change trigger

Device In Device Out index Set Tria error out Trig Set Tria error out error in (no error)	
[132]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abel	source
	source describes the origin of the error or warning.
1321	index
	The input index
1321	Trig
	The change trigger
132	Device Out

	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabc	code is the error or warning code. source
	source describes the origin of the error or warning.

- 5.9 IR
- 5.9.1 IRCreate.vi

IRCreate.vi

Create a Phidget IR handle



error in

error out passes error or warning information out of a VI to be used by other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

abel	code is the error or warning code. source
	source string describes the origin of the error or warning.
	error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabc	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Device # identification

5.9.2 IREventCloseOnCode.vi

IREventCloseOnCode.vi

Close the Phidget IR OnCode event handle



	information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
(abc)	code is the error or warning code. source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FI	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Jabc	source
	source string describes the origin of the error or warning.

5.9.3 IREventCloseOnLearn.vi

IREventCloseOnLearn.vi

Close the Phidget IR OnLearn event handle	
Device In Device Out Event Registration Refnum In	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
NTE I	error out passes error or warning information out of a VI to be used by other VIs.
PTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

274	Labview Manual	
)132	code
	Jabe	code is the error or warning code. source
		source string describes the origin of the error or warning.
5.9.4	IREventCloseOnRawData.vi	
	IREventCloseOnRawData.vi	
	Close the Phidget IR OnRawData event handle	
	Device In Device Event Registration Refnum In error in (no error)	e Out out
	<u>132</u>	Device In
		Device # Identification.
		error in (no error)
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
	TF	status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	132	code
	abc	code is the error or warning code.

source

132

source describes the origin of the error or warning.

Event Registration Refnum In

Event # Identification

Device Out

	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
) abc	code is the error or warning code. source
	source string describes the origin of the error or warning.

5.9.5 IREventCreateOnCode.vi

IREventCreateOnCode.vi

Set up a Phidget IR OnCode event handle



132)	code
abet	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabc	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.9.6 IREventCreateOnLearn.vi

IREventCreateOnLearn.vi

Set up a Phidget IR OnLearn event handle.

Device In _____ Device Out error in (no error) ______ Event Registration Refnum Out

132

Device In

Device # Identification.

	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) []32	code
	code is the error or warning code.
Dabe	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.9.7 IREventCreateOnRawData.vi

IREventCreateOnRawData.vi

Set up a Phidget IR OnRawData event handle.

Device In Device Out error in (no error) Event Registratio	n Refnum Out
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

JI32	code
Jabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.9.8 IREventExeOnCode.vi

IREventExeOnCode.vi

This is called when a code has been received that could be automatically decoded. Data is return as an array with MSB in index 0. Bit count and a repeat flag are also returned. Repeats are detected as either the same code repeated in < 100ms or as a special repeat code.



abc	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
<u>)[32</u>	code
	code is the error or warning code.
Dabc	source
	source string describes the origin of the error or warning.
F	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
132	BitCount
	The bit count of the code
) [32]	Repeat
	Returns the repeats
[8]	Data
	A user array to store the code data in
U 8	Data
	Event Registration Refnum Out

Same as the Event Registration Refnum In

5.9.9 IREventExeOnLearn.vi

IREventExeOnLearn.vi

This is called when a code has been received for long enough to be learned. The returned CodeInfo structure can be used to retransmit the same code.



	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
FI32	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.
FTF	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
	CodeInfo
	This contains all information needed to transmit a code. Please refer to <u>Phidgets Constants</u> -> <u>CodeInfo</u>
) [32]	BitCount
132	Encoding
132	Length
132	Gap
132	Trail
132	Header 1
132	Header 2
132	One 1
132	One 2
132	Zero 1
J132	Zero 2
132	Repeat 1

132	Repeat 2
132	Repeat 3
132	Repeat 4
132	Repeat 5
132	Repeat 6
132	Repeat 7
132	Repeat 8
132	Repeat 9
132	Repeat 10
132	Repeat 11
132	Repeat 12
132	Repeat 13
132	Repeat 14
132	Repeat 15
132	Repeat 16
132	Repeat 17
132	Repeat 18
132	Repeat 19
132	Repeat 20
132	Repeat 21
132	Repeat 22
132	Repeat 23
132	Repeat 24
132	Repeat 25
132	Repeat 26
132	min_repeat
80	toggle_mask 1
80	toggle_mask 2
80	toggle_mask 3
08	toggle_mask 4
08	toggle_mask 5
80	toggle_mask 6
80	toggle_mask 7
80	toggle_mask 8

284	Labview Manual
-----	----------------

▶ U8	toggle_mask 9
▶ U8	toggle_mask 10
U 8	toggle_mask 11
U 8	toggle_mask 12
▶U8	toggle_mask 13
U 8	toggle_mask 14
▶U8	toggle_mask 15
▶U8	toggle_mask 16
132	CarrierFrequency
<u>)[32</u>	DutyCycle
[u8]	Data
	A user array to store the code data in.
	Data
	Event Registration Refnum Out
	Same as the Event Registration Refnum In

5.9.10 IREventExeOnRawData.vi

IREventExeOnRawData.vi

This is called when raw data has been read from the device. Raw data always starts with a space and ends with a pulse



	VIs.
TF)	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[132]	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information
	out of a vi to be used by other vis.
F TF	status
▶TF	status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
TF	status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
TF X32 Lbc	 status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code code is the error or warning code. source
TTF 132 Jabe	 status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code code is the error or warning code. source source string describes the origin of the error or warning.
TTE NISSE NIE	 status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code code is the error or warning code. source source string describes the origin of the error or warning. Event?
TF TTF	 status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code code is the error or warning code. source source string describes the origin of the error or warning. Event? Returns TRUE if the event has executed, or FALSE otherwise.
►TE ►132 ►1bc ►TE €132	 status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code code is the error or warning code. source source string describes the origin of the error or warning. Event? Returns TRUE if the event has executed, or FALSE otherwise. Data

) 132	data
	Event Registration Refnum Out
	Same as the Event Registration Refnum In

5.9.11 IRGetLastCode.vi

IRGetLastCode.vi

Get the last code that was received.



132	written to the array Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Dabe	source
	source describes the origin of the error or warning.
132	dataLength
	Length of the user array.
132	bitCount
	Set to the bit count of the code
[08]	data
	A user array to store the code
<u>V8</u>	

5.9.12 IRGetLastLearnedCode.vi

IRGetLastLearnedCode.vi

Get the last code that was learned.

Device In CodeInfo Device Out DataLength In (16) error in (no error)	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
[132]	DataLength In (16)
	Length of the user array - should be at least 16. This is set to the amount of data actually written to the array.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T F	status
---------------	--
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
J 32	code
	code is the error or warning code.
Labc	source
	source describes the origin of the error or warning.
132	dataLength
	Length of the user array
	CodeInfo
	The CodeInfo structure for the learned code. Please refer to <u>Phidgets Constants</u> -> <u>CodeInfo</u>
132	BitCount
) [32]	Encoding
132	Length
132	Gap
132	Trail
132	Header 1
132	Header 2
132	One 1
) [32]	One 2
) [32]	Zero 1
) [32]	Zero 2
) [32]	Repeat 1
) [32]	Repeat 2
132	Repeat 3
132	Repeat 4
132	Repeat 5
132	Repeat 6
132	Repeat 7

132	Repeat 8
132	Repeat 9
132	Repeat 10
132	Repeat 11
132	Repeat 12
132	Repeat 13
132	Repeat 14
132	Repeat 15
132	Repeat 16
132	Repeat 17
132	Repeat 18
132	Repeat 19
132	Repeat 20
132	Repeat 21
132	Repeat 22
132	Repeat 23
132	Repeat 24
132	Repeat 25
132	Repeat 26
132	min_repeat
U 8	toggle_mask 1
U 8	toggle_mask 2
	toggle_mask 3
	toggle_mask 4
►U8	toggle_mask 5
U 8	toggle_mask 6
►U8	toggle_mask 7
►U8	toggle_mask 8
►U8	toggle_mask 9
U 8	toggle_mask 10
U 8	toggle_mask 11
■ U8	toggle_mask 12
U 8	toggle_mask 13
U 8	toggle_mask 14

V 8	toggle_mask 15
U8	toggle_mask 16
132	CarrierFrequency
132	DutyCycle
[us]	data
	A user array to store the code data in.
U 8	

5.9.13 IRGetRawData.vi

IRGetRawData.vi

Read any available raw data. This should be polled continuously (every 20ms) to avoid missing data. Read data always starts with a space and ends with a pulse



	132)	DataLength In
		The maximum amount of data to read. This is set to the actual amount of data read
	132	Device Out
		Same as Device In
		error out
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
	F TF	status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	132	code
		code is the error or warning code.
	L abc	source
		source describes the origin of the error or warning.
	132	dataLength
		The amount of data to read
	[132]	data
		A user array for raw data to be written into
	132	
5.9.14	IROpen.vi	

IROpen.vi

Open a PhidgetIR.



294	Labview Manual	
	TF	status
	<u>1132</u>	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	Mabe	code is the error or warning code. source
		source string describes the origin of the error or warning.
	132	Device Out
		Same as Device In

5.9.15 IRTransmit.vi

IRTransmit.vi

Transmit a code according to the settings in a CodeInfo structure.



code is the error or warning code.

source

source describes the origin of the error or warning.

CodeInfo

The CodeInfo structure specifying to to send the code. Anything left as null to select default is filled in for the user. Please refer to <u>Phidgets</u> Constants -> CodeInfo

BitCount Encoding Length Gap Trail Header 1 Header 2 One 1 One 2 Zero 1 Zero 2 Repeat 1 Repeat 2 Repeat 3 **Repeat 4 Repeat 5** Repeat 6 Repeat 7 Repeat 8 Repeat 9 Repeat 10 Repeat 11 Repeat 12 Repeat 13

abc



132

132

132

132

1321 1321 1321 1321 1321	Repeat 14 Repeat 15 Repeat 16 Repeat 17 Repeat 18 Repeat 19
1321 1321 1321 1321	Repeat 15 Repeat 16 Repeat 17 Repeat 18 Repeat 19
1321 1321	Repeat 16 Repeat 17 Repeat 18 Repeat 19
<u>132</u>	Repeat 17 Repeat 18 Repeat 19
132	Repeat 18 Repeat 19
	Repeat 19
132	
1321	Repeat 20
1321	Repeat 21
1321	Repeat 22
1321	Repeat 23
1321	Repeat 24
1321	Repeat 25
1321	Repeat 26
[]32]	min_repeat
	toggle_mask 1
	toggle_mask 2
	toggle_mask 3
	toggle_mask 4
	toggle_mask 5
	toggle_mask 6
	toggle_mask 7
USI	toggle_mask 8
USI	toggle_mask 9
USI	toggle_mask 10
USI	toggle_mask 11
USI	toggle_mask 12
USI	toggle_mask 13
USI	toggle_mask 14
USI	toggle_mask 15
	toggle_mask 16
132	CarrierFrequency
132	DutyCycle
[U8]	Data

The code to send. Data is transmitted MSBit

	first. MSByte is in array index 0. LSBit is right justified, so MSBit may be in bit positions 0-7 in array index 0 depending on the bit count.
U8 I	Data
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source describes the origin of the error or warning.

5.9.16 IRTransmitRaw.vi

IRTransmitRaw.vi

Transmit RAW data as a series of pulses and spaces.



132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abet	source
	source describes the origin of the error or warning.
1321	length
1321	length The length of the data array. Maximum length is 1024, but streams should be kept much shorter, ie. < 100ms between gaps
<u>132</u>)	length The length of the data array. Maximum length is 1024, but streams should be kept much shorter, ie. < 100ms between gaps carrierFrequency
132)	 length The length of the data array. Maximum length is 1024, but streams should be kept much shorter, ie. < 100ms between gaps carrierFrequency The Carrier Frequency in Hz. leave as 0 for default
132) 132)	 length The length of the data array. Maximum length is 1024, but streams should be kept much shorter, ie. < 100ms between gaps carrierFrequency The Carrier Frequency in Hz. leave as 0 for default dutyCycle
132) 132]	 length The length of the data array. Maximum length is 1024, but streams should be kept much shorter, ie. < 100ms between gaps carrierFrequency The Carrier Frequency in Hz. leave as 0 for default dutyCycle The Duty Cycle (10-50). Leave as 0 for default
132) 132]	 length The length of the data array. Maximum length is 1024, but streams should be kept much shorter, ie. < 100ms between gaps carrierFrequency The Carrier Frequency in Hz. leave as 0 for default dutyCycle The Duty Cycle (10-50). Leave as 0 for default gap
	 length The length of the data array. Maximum length is 1024, but streams should be kept much shorter, ie. < 100ms between gaps carrierFrequency The Carrier Frequency in Hz. leave as 0 for default dutyCycle The Duty Cycle (10-50). Leave as 0 for default gap The gap time in us. This guarantees a gap time (no transmitting) after the data is sent, but can be set to 0.
	 length The length of the data array. Maximum length is 1024, but streams should be kept much shorter, ie. < 100ms between gaps carrierFrequency The Carrier Frequency in Hz. leave as 0 for default dutyCycle The Duty Cycle (10-50). Leave as 0 for default gap The gap time in us. This guarantees a gap time (no transmitting) after the data is sent, but can be set to 0. Data

[<u>132</u>]	with a pulse and each element is a positive time in us. data
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.

5.9.17 IRTransmitRepeat.vi

IRTransmitRepeat.vi

Transmits a repeat of the last transmitted code. Depending of the CodeInfo structure, this may be a retransmission of the code itself, or there may be a special repeat code



	from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FIE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Jabc	source
	source describes the origin of the error or warning.

5.10 LED

5.10.1 LEDCount.vi

LEDCount.vi

Get the number of LEDs supported by this board.

Device In Device Out	
error in (no error)	
132	Device In
	Device # Identification.
5	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abel	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabc.	source
	source describes the origin of the error or warning.
JI32	Count
	The LED count

5.10.2 LEDCreate.vi

LEDCreate.vi

Create a Phidget LED handle Device Out Create Ø error in ---error out error in error out passes error or warning information out of a VI to be used by other VIs. TFI status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. 132 code code is the error or warning code. abc source source string describes the origin of the error or warning. error out

	error out passes error or warning information out of a VI to be used by other VIs.
<u>ETF</u>	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
)132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
132	Device Out
	Device # identification.

5.10.3 LEDGetBrightness.vi

LEDGetBrightness.vi

Get the brightness of an LED



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

[<u>132</u>]	that no error occurred. code
abc	code is the error or warning code. source
	source describes the origin of the error or warning.
[132]	index
) [32]	The input index Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FL	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Fabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	brightness
	The LED brightness (0-100).

5.10.4 LEDGetCurrentLimit.vi

LEDGetCurrentLimit.vi

Get the current limit. This is for all outputs	
Device In Get Device Out CurrentLimit error in (no error) CurrentLimit	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

.1

306	Labview Manual	
	1	
	132	code
		code is the error or warning code.
	abc	source
		source describes the origin of the error or warning.
)]32	CurrentLimit
		The current limit

5.10.5 LEDGetCurrentLimitIndexed.vi

LEDGetCurrentLimitIndexed.vi

Gets an indexed current limit.

Device In Get Device Out index Current Limit error in (no error) ==	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abel	code is the error or warning code. source
	source describes the origin of the error or warning.

132	index
	The LED index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	Current Limit
	The current limit

5.10.6 LEDGetVoltage.vi

LEDGetVoltage.vi

Get the output voltage. This is for all outputs.



Device In Device # Identification.

error in (no error)

	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc)	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
132	Voltage
	The output voltage

5.10.7 LEDOpen.vi

LEDOpen.vi

Open a Phidget LED.	
Device In OPEN Device Out Serial Number Serial Number Ret milliseconds Attached? error in (no error)	urn
[]32]	Serial Number
132)	Serial Number. Specify -1 to open any. millise conds
	Time to wait for the attachment. Specify 0 to wait forever. (Default is 5000) error in (no error)
TF I	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abcl	code is the error or warning code. source
	source string describes the origin of the error or warning.
[]32]	Device In
	Device # identification. This function will create a new device identification if it's 0 or invalid
<u>1132</u>	Serial Number Return
T F	Serial Number of the opened phidget Attached?
	Returns TRUE is the device successfully

	attached, or FALSE otherwise. error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
Pabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

5.10.8 LEDSetBrightness.vi

LEDSetBrightness.vi

Set the brightness of an LED



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

1321	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
132	index
	The LED index
DBL	brightness
	The LED brightness (0-100).
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
ETF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>babc</u>	source
	source describes the origin of the error or warning.

5.10.9 LEDSetCurrentLimit.vi

LEDSetCurrentLimit.vi

CurrentLimit	- Device Out	
error in (no error) -	error out	
1321		Device In
		Device # Identification.
		error in (no error)
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132		code
		code is the error or warning code.
abc		source
		source describes the origin of the error or warning.
1321		CurrentLimit
		The current limit
132		Device Out
		Same as Device In
		error out
NTE		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
		status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

5.10.10 LEDSetCurrentLimitIndexed.vi

LEDSetCurrentLimitIndexed.vi

Sets the indexed current limit.



abc

132

[]]]	index
	The LED index
[DBL]	Current Limit
	The current limit
<u>}132</u>	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Labe	source
	source describes the origin of the error or warning.

Device In

Device # Identification.

error in (no error)

5.10.11 LEDSetVoltage.vi

LEDSetVoltage.vi

Set the output voltage. This is for all outputs.



	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
HIT	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Voltage
	The output voltage
1 32	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
	code is the error or warning code.
<u>Pabc</u>	source
	source describes the origin of the error or warning.

5.11 MotorControl

5.11.1 MCCreate.vi

MCCreate.vi

Create a Phidget Motor Control handle

Croate Device Out	
error in 🥓 error out	
	error in
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>Abc</u>	source
	source string describes the origin of the error or warning.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Jabc	source
	source string describes the origin of the error or warning.

132

Device Out

Device # identification.

5.11.2 MCEventCloseCurrent.vi

MCEventCloseCurrent.vi

Close the Phidget Motor Control current change event handle

Device In Device Out vent Registration Refnum In error out error in (no error)	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>Abc</u>	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
) [32]	Device Out
	Same as Device In error out

© 2014 Phidgets Inc.

FTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source string describes the origin of the error or warning.

5.11.3 MCEventCloseEMF.vi

MCEventCloseEMF.vi

Close the Phidget Motor Control EMF change event handle

Device In Device Event Registration Refnum In error	ce Out out
error in (no error)	
132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
1321	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code.

<u>abc</u>	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
132	Event # Identification Device Out
	Same as Device In error out
TF	error out passes error or warning information out of a VI to be used by other VIs. status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	code is the error or warning code
<u>Dabc</u>	source
	source string describes the origin of the error or warning.

5.11.4 MCEventCloseInput.vi

MCEventCloseInput.vi

Close the Phidget Motor Control input change event handle



	VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
132	Device Out
	error out
<u>م</u>	error out passes error or warning information out of a VI to be used by other VIs.
	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Dabe	source
	source string describes the origin of the error or warning.

5.11.5 MCEventClosePositionChange.vi

MCEventClosePositionChange.vi

Close the Phidget motor controller position change event handler

Device In _____ Device Out Event Registration Refnum In ______ error out error in (no error)

132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
1321	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code
abcl	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event Registration Refnum In Event # Identification
D . 132	Event Registration Refnum In Event # Identification Device Out
D 132	Event Registration Refnum In Event # Identification Device Out Same as Device In
	Event Registration Refnum In Event # Identification Device Out Same as Device In error out
	Event Registration Refnum InEvent # IdentificationDevice OutSame as Device Inerror outerror out passes error or warning information out of a VI to be used by other VIs.
	Event Registration Refnum In Event # Identification Device Out Same as Device In error out error out passes error or warning information out of a VI to be used by other VIs. status
	Event Registration Refnum InEvent # IdentificationDevice OutSame as Device Inerror outerror outstatus is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
Image: select	Event Registration Refnum InEvent # IdentificationDevice OutSame as Device Inerror outerror out passes error or warning information out of a VI to be used by other VIs.statusstatus is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.code
	Event Registration Refnum InEvent # IdentificationDevice OutSame as Device Inerror outerror outout of a VI to be used by other VIs.statusstatus is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.codecode is the error or warning code.source

or warning.

5.11.6 MCEventClosePositionUpdate.vi

MCEventClosePositionUpdate.vi

Close the phidget motor controller position update event handle

Device In Device	Out
error in (no error)	ut
	.
132	Device In
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
) [32]	Device Out
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

Pabe	source
	code is the error or warning code.
132	code
	that no error occurred.

source string describes the origin of the error or warning.

5.11.7 MCEventCloseSensorUpdate.vi

MCEventCloseSensorUpdate.vi

Close the Phidget Motor controller Sensor update event handle

Device In Device	e Out
error in (no error)	but
[132]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[132]	code
abel	code is the error or warning code. source
	source describes the origin of the error or warning.
	Event Registration Refnum In

132	Event # Identification Device Out
	Same as Device In error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source string describes the origin of the error or warning.

5.11.8 MCEventCloseVelocity.vi

MCEventCloseVelocity.vi

Close the Phidget Motor Control velocity change event handle


132	status is TRUE (X) if an error occurred orFALSE (checkmark) to indicate a warning orthat no error occurred.code
	code is the error or warning code
abc	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
TF	error out passes error or warning information out of a VI to be used by other VIs.
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.

5.11.9 MCEventCreateCurrentChange.vi



	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abci	source
	source describes the origin of the error or warning.
132	Device Out
	Device Out error out
	Device Out error out error out passes error or warning information out of a VI to be used by other VIs.
FTE	Device Out error out error out passes error or warning information out of a VI to be used by other VIs. status
TE	 Device Out error out error out passes error or warning information out of a VI to be used by other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
▶II2 ▶IIF ▶II32	 Device Out error out error out passes error or warning information out of a VI to be used by other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
FTTE FTTE	 Device Out error out error out passes error or warning information out of a VI to be used by other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code code is the error or warning code.
FI32 FTF F132 F132	 Device Out error out error out passes error or warning information out of a VI to be used by other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code code is the error or warning code. source
FI32 FTF F132 F132	 Device Out error out error out passes error or warning information out of a VI to be used by other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code code is the error or warning code. source source string describes the origin of the error or warning.

5.11.10 MCEventCreateCurrentUpdate.vi

MCEventCreateCurrentUpdate.vi

Device In	<mark>⊮_{Evont} Device Out</mark>	
error in (no error)	Event Registratio	on Refnum Out
132		Device In
		error in (no error)
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132		code
		code is the error or warning code.
abci		source
		source describes the origin of the error or warning.
132		Device Out
		error out
		error out passes error or warning information out of a VI to be used by other VIs.
) TF		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132		code
		code is the error or warning code.
Pabe		source
		source string describes the origin of the error or warning.
		Event Registration Refnum Out

5.11.11 MCEventCreateEMF.vi

MCEventCreateEMF.vi

Create the Phidget Motor Control EMF change event handle

Device In Device Out	a Refaum Out
error in (no error)	n Kemum Out
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
	code is the error or warning code.
abc)	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

132	code
Fabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out

Event # Identification

5.11.12 MCEventCreateInput.vi

MCEventCreateInput.vi

Create the Phidget Motor Control input change event handle



132	Device Out
	Same as Device In error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Mabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.11.13 MCEventCreatePositionChange.vi

MCEventCreatePositionChange.vi

Create the Phidget motor controller position change event handler



[III]	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
<u>132</u>	code
labc	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.11.14 MCEventCreatePositionUpdate.vi

MCEventCreatePositionUpdate.vi

Create the phidget motor controller position update event handle

Device In Device Out	
error in (no error)	Refnum Out
<u>1321</u>	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TFI	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc.	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
FTF	error out passes error or warning information out of a VI to be used by other VIs.
	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
Mabe	code is the error or warning code. source

source string describes the origin of the error or warning.

Event Registration Refnum Out

Event # Identification

5.11.15 MCEventCreateSensorUpdate.vi

MCEventCreateSensorUpdate.vi

Create the Phidget Motor controller Sensor update event handle

Device In Device Out	
error in (no error)	on Refnum Out
error out	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
(abc)	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out

334	Labview Manual
-----	----------------

FIE	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
)132	code
Jabc	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.11.16 MCEventCreateVelocity.vi

MCEventCreateVelocity.vi

Create the Phidget Motor Control velocity change event handle



[<u>132</u>]	code
abci	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Labc	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.11.17 MCEventExeCurrent.vi

MCEventExeCurrent.vi

Ececutes on an MC Current change event

Event Registration Refnum In error in (no error)

132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
DBL	Current
	The current
132	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

) [32]	code
Pabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
FTF	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
	Event Registration Refnum Out
	Event # Identification

5.11.18 MCEventExeEMF.vi

MCEventExeEMF.vi

Executes on an EMF event



abc	code is the error or warning code. source
	source describes the origin of the error or warning.
	Event Registration Refnum In
DBL	Event # Identification Voltage
132	The votlage index
) [32]	The motor index Device Out
	Same as Device In error out
F TF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
labc	code is the error or warning code. source
	source string describes the origin of the error or warning.
TF	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
	Event Registration Refnum Out
	Event # Identification

5.11.19 MCEventExeInput.vi

MCEventExeInput.vi

Executes when the state of a digital input changes.



	error out
F TF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
FI32	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.
J132	Device Out
FTF	Same as Device In Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
	Event Registration Refnum Out
	Event # Identification

5.11.20 MCEventExePositionChange.vi

MCEventExePositionChange.vi

Executes if the motor's position changes.



error in (no error)

error in can accept error information wired from VIs previously called. Use this

	information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abcl	source
	source describes the origin of the error or warning.
[]]]	Device In
	Device # Identification.
	Event Registration Refnum In
	Event # Identification
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
DIF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Dabc	source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In
FTF	Event?

	Returns TRUE if the event has executed, or FALSE otherwise. Event Registration Refnum Out
1 32	Event # Identification index
1 32	The encoder index time
)132	The amount of time in which PositionChange counts occurred in 1/3 ms position
	The change in encoder position

5.11.21 MCEventExePositionUpdate.vi

MCEventExePositionUpdate.vi

Executes every 8ms regardless of is the position changed or not.



<u>abc</u>	source
	source describes the origin of the error or warning.
[]]]]	Device In
	Device # Identification. Event Registration Refnum In
132	Event # Identification index
) [32]	The motor index position
	The change in posiiton error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
Mabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
) TF	Same as Device In Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
	Event Registration Refnum Out
	Event # Identification

5.11.22 MCEventExeSensorUpdate.vi

MCEventExeSensorUpdate.vi

An event containing sensor value information for sensors plugged into the Analog Inputs.



	error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In
TF	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
	Event Registration Refnum Out
	Event # Identification

5.11.23 MCEventExeVelocity.vi

MCEventExeVelocity.vi

Executes when the velocity a motor is being driven at changes



	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
DBL	Velocity
	The velocity
132	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source

source string describes the origin of the error or warning.

Event?

Returns TRUE if the event has executed, or FALSE otherwise.

Event Registration Refnum Out

Event # Identification

5.11.24 MCGetAcceleration.vi

TF

MCGetAcceleration.vi

Gets the motor's acceleration

Device In Bevice Out index Acceleration error in (no error)	
[132]	Device In
	Device # Identification. error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.

[132]	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
Jabc	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	Acceleration
	The acceleration

5.11.25 MCGetAccelerationMax.vi

MCGetAccelerationMax.vi

Gets the maximum settable acceleraiton.



error in can accept error information wired
from VIs previously called. Use this
information to decide if any functionality should
be bypassed in the event of errors from other
VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

inde x

Device Out

Same as Device In

error out

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

Acceleration Max

TFI

132

abc

132

132

TF

132

abc

DBL

Maximum acceleration

5.11.26 MCGetAccelerationMin.vi

MCGetAccelerationMin.vi

Gets the minimum settable acceleraiton.

Device In
Device # Identification.
error in (no error)
error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
status
status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
code
code is the error or warning code.
source
source describes the origin of the error or warning.
index
The motor index
Device Out
Same as Device In
error out

error in can accept error information wired
from VIs previously called. Use this
information to decide if any functionality should
be bypassed in the event of errors from other
VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

Acceleration Min

Minumum acceration.

5.11.27 MCGetBackEMFValue.vi

TF

132

abc

DBL

MCGetBackEMFValue.vi

Gets the back EMF voltage

Device In
index
Voltage
error in (no error)

T322

TTT

Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source describes the origin of the error or warning.
DBL	Voltage
	The back EMF votlage

5.11.28 MCGetBraking.vi

MCGetBraking.vi

Gets the braking amount for the motor at rest.

Device In Get Device Out index Braking error in (no error) error out	
132	Device In
	Device # Identification. error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abcl	source
	source describes the origin of the error or warning.
132	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

F TF	VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Mabe	source
	source describes the origin of the error or warning.
DBL	Braking
	The braking percentage (0-100%)

5.11.29 MCGetCurrent.vi

MCGetCurrent.vi

Get the current flowing through the motor.



error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

	code is the error or warning code.
label	source
	source describes the origin of the error or warning.
[]]]	index
	The motor index
<u>)132</u>	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
State	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	code
Jabc	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	Current
	The current

5.11.30 MCGetEMFState.vi

MCGetEMFState.vi

Get the EMF sensing state. When back-EMF sensing is enabled, the motor will coast (freewheel) 5% of the time while the back EMF measurement is taken.

Device In Device Out	
index - EMFState (0,1)	
error in (no error) error out	
[132]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
[132]	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

) [32]	that no error occurred. code
Labc	code is the error or warning code. source
	source describes the origin of the error or warning.
JI32	EMFState (0,1)
F TF	The EMF sensing state. Possible values are 0 for False, 1 for True and others for undefined EMFState
	The EMF sensing state. Possible values are True for Enabled and False for Not Enabled

5.11.31 MCGetEncoderCount.vi

MCGetEncoderCount.vi

Returns the number of encoder inputs



abel	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
NT COL	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
<u>132</u>	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
FI32	EncoderCount
	The number of encoder inputs

5.11.32 MCGetEncoderPosition.vi

MCGetEncoderPosition.vi

Gets the encoder position.



Device In

	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
(abc)	source
	source describes the origin of the error or warning.
132)	index
	The encoder index
132	Device Out
	Sama ag Daviaa In
	Same as Device in
	error out
	error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FEE	error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
FTT	error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
FTT TTT	error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code

360	Labview Manual	
	Apr	source
		source describes the origin of the error or warning.
	132	Position
		Encoder posiiton

5.11.33 MCGetInputCount.vi

MCGetInputCount.vi

Get the number of digital inputs on the motor controller.

error in (no error)	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
------------	--
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Abc	source
	source describes the origin of the error or warning.
132	InputCount
	The number of digital inputs.

5.11.34 MCGetInputState.vi

MCGetInputState.vi

Gets the state of the digital input.



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
[132]	index
	The input index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
132	InputState (0,1)
	The input state. Possible values are 0 for False, 1 for True and others for undefined
▶ TF	InputState

The input state. (boolean)

5.11.35 MCGetMotorCount.vi

MCGetMotorCount.vi

Gets the number of motors the controller can handle.

Device In <u>Mater</u> Device Out error in (no error)	
192)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

FTF	VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Motor Count
	The number of motors

5.11.36 MCGetRatiometricState.vi

MCGetRatiometricState.vi

Gets the ratiometric state for the analog inputs.



[]32]	code
abci	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Ratiometeric (0,1)
	The ratiometric state. Possible values are 0 for False, 1 for True and others for undefined
DTF	Ratiometric
	The ratiometric state of the input (boolean)

5.11.37 MCGetSenorCount.vi

MCGetSenorCount.vi

The number of analog sensors the MC can accomodate.

Device In Device Out	
error in (no error)	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abcl	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
D TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code

code is the error or warning code.

source

source describes the origin of the error or warning.

SensorCount

The number of sensors

5.11.38 MCGetSensorValue.vi

MCGetSensorValue.vi

Gets the current value for a sensor input. Range is 0-1000



132

abc

© 2014 Phidgets Inc.

132	The sensor index Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Value
	The sensor value

5.11.39 MCGetSensorValueRAW.vi

MCGetSensorValueRAW.vi

Gets the raw 12-bit value for a sensor input. Range is 0-4096



error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
status
status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
code
code is the error or warning code. source
source describes the origin of the error or warning.
index
The sensor index
Device Out
Same as Device In
error out
error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
status
status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
code

code is the error or warning code.

source

source describes the origin of the error or warning.

TF

132

abc

132

132

TF

132

abc



	information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	code
	code is the error or warning code.
PADE	source
	source describes the origin of the error or warning.
DBL	Voltage
	The voltage

5.11.41 MCGetVelocity.vi

MCGetVelocity.vi

Velocity is the percentage of time the motor is being powered for, from -100% to 100%



	that no error occurred.
132	code
	code is the error or warning code.
abci	source
	source describes the origin of the error or warning.
[]]]	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
DBL	Velocity
	The velcoity
5.11.42 MCOpen.vi	

MCOpen.vi

Open a Phidget Motor controller



FTF	out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Mabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

5.11.43 MCSetAcceleration.vi

MCSetAcceleration.vi

Set the motor's acceleration (in % duty cycle/second)



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

[132]	code
<u>abe</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
[132]	index
	The motor index
DBL	Acceleration
	The acceleration.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.

5.11.44 MCSetBraking.vi

MCSetBraking.vi

Set the braking amount for a motor at rest.



) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Mabe	code is the error or warning code. source
	source describes the origin of the error or

warning.

5.11.45 MCSetEMFState.vi

MCSetEMFState.vi

Set the EMF Sensing State



	warning.
TF	Set EMF
[<u>132</u>]	The EMF Sensing State index
JI32	The motor index Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
L abc	code is the error or warning code.
	source describes the origin of the error or warning.

5.11.46 MCSetEncoderPosition.vi

MCSetEncoderPosition.vi

Set the encoder position



Device In

	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
abc)	code is the error or warning code. source
	source describes the origin of the error or warning.
132)	index
[]]]	The encoder index Position
	The position
132	Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

380	Labview Manual	
	<u>}132</u>	code
		code is the error or warning code.
	Jabc	source
		source describes the origin of the error or warning.
5.11.47	MCSetRatiometricState.vi	
	MCSetRatiometricState.vi	
	Set the ratiometric state for the device.	
	Device In Device Out Ratiometric Rationetric error out error in (no error) =	
	1321	Device In
		Device # Identification.
		error in (no error)
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
	TF	status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	1321	code
		code is the error or warning code.
	abc	source
		source describes the origin of the error or warning.
	TF	Ratiometric
		The ratiometric state
	132	Device Out

	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FIE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Mabe	code is the error or warning code. source
	source describes the origin of the error or warning.

5.11.48 MCSetVelocity.vi

MCSetVelocity.vi

Set the Motor controller velocity in % duty cycle from -100% to 100%



132	that no error occurred. code
abet	code is the error or warning code. source
	source describes the origin of the error or warning.
132	index
DBL	Velocity
132	Device Out
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>babc</u>	source
	source describes the origin of the error or warning.

- 5.12 PHSensor
- 5.12.1 PHCreate.vi

PHCreate.vi

Create a Phidget PH Sensor handle.

error in ------ Device Out

	error in
TF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
<u>abc</u>	code is the error or warning code. source
	source string describes the origin of the error or warning.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Fabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Device # identification

5.12.2 PHEventClose.vi

PHEventClose.vi

Close the Phidget PH Sensor change event handle

Device In Device Out		
error in (no error)		
[132]	Device In	
	Device # Identification.	
	error in (no error)	
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.	
TF	status	
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.	
[]]]	code	
	code is the error or warning code.	
abc	source	
	source describes the origin of the error or warning.	
	Event Registration Refnum In	
	Event # Identification	
132	Device Out	
	Same as Device In	
	error out	
FTF	error out passes error or warning information out of a VI to be used by other VIs. status	
) [32]	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code	

code is the error or warning code.

source

source string describes the origin of the error or warning.

5.12.3 PHEventCreate.vi

abc

PHEventCreate.vi

Set up a PH change event handle

Device In Device Out	
error in (no error)	n Refnum Out
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
JI32	Device Out
	Same as Device In
	error out

386	Labview Manual
-----	----------------

FTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
EI32	code
Mabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.12.4 PHEventExe.vi

PHEventExe.vi

This is called when the PH changes by more then the change trigger



<u>132</u>	FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code.
abel	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
DBL	РН
	The PH
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
ETF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Fabc	code is the error or warning code. source
	source string describes the origin of the error or warning.
FTF	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
	Event Registration Refnum Out
	Same as the Event Registration Refnum In

5.12.5 PHGetPH.vi

PHGetPH.vi

Get the measured PH	
Device In Device Out	
error in (no error)	
[132]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TFM	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
F TF	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status

¥132]	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
Eabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	РН
	The PH

5.12.6 PHGetPHMax.vi

PHGetPHMax.vi

Get the maximum PH that the sensor could report

Device In Get PH Device Out error in (no error) Device Out	
[132]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[132]	code
(abc)	code is the error or warning code. source

	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	PH Max
	The maximum PH

Device In

Device # Identification.

error in (no error)

5.12.7 PHGetPHMin.vi

PHGetPHMin.vi

Get the minimum PH that the sensor could report



error in can accept error information wired
from VIs previously called. Use this
information to decide if any functionality should
be bypassed in the event of errors from other
VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

Device Out

Same as Device In

error out

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

PH Min

The minimum PH

TFI

132

abc

132

TF

132

abc

DBL

5.12.8 PHGetPHTrigger.vi

PHGetPHTrigger.vi

Get the PH change trigger

Device In Ger PH Device Out error in (no error) Device Out error in (no error) Device Out PH Trigger error out	
1321	Device In
	Device # Identification. error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
<u>abet</u>	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T F	status

132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.code
labe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	PH Trigger

The change trigger

5.12.9 PHGetPotential.vi

PHGetPotential.vi

Get the sensed potential

Device In <u>Pressua</u> Device Out error in (no error) Error in (no error) error out	
1321	Device In
	Device # Identification. error in (no error)
TFI	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
1321	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
<u>abc</u>	code is the error or warning code. source

	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
J abc	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	Potential
	The potential

5.12.10 PHGetPotentialMax.vi

PHGetPotentialMax.vi

Get the maximum potential that can be sensed



error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
status
status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
code

code is the error or warning code.

source

source describes the origin of the error or warning.

Device Out

Same as Device In

error out

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

Potential Max

The maximum potential

TFI

132

abc

132

TF

132

abc

DBL

5.12.11 PHGetPotentialMin.vi

PHGetPotentialMin.vi

Get the minimum potential that can be sensed

Device In Presential Device Out error in (no error) Bat Potential Min error out	
[132]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
-------------	---
<u>Pabe</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	Potential Min
	The minimum potential

5.12.12 PHOpen.vi

PHOpen.vi

Open a Phidget PH Sensor



	code is the error or warning code.
(abc)	source
	source string describes the origin of the error or warning.
[132]	Device In
	Device # identification. This function will create a new device identification if it's 0 or invalid
132	Serial Number Return
FIE	Serial Number of the opened phidget Attached?
	Returns TRUE is the device successfully attached, or FALSE otherwise.
	error out
NTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

5.12.13 PHSetTemperature.vi

PHSetTemperature.vi

Set the temperature to be used for PH calculations

Device In	— Device Out	
Temperature - 42	error out	
1321		Device In
		Device # Identification.
		error in (no error)
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[132]		code
		code is the error or warning code.
abc		source
		source describes the origin of the error or warning.
DBL		Temperature
		The temperature (degrees celcius). By default this is 20.
132		Device Out
		Same as Device In
		error out
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF		status
		status is TRUE (X) if an error occurred or

132

abc

FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

5.12.14 PHSetTrig.vi

PHSetTrig.vi

Set the PH change trigger.

Device In Device Out	
error in (no error)	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
<u>132</u>	code
abc	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	Trigger

<u>¥132</u>	The change trigger Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
	source
	source describes the origin of the error or warning.

5.13 RFID

5.13.1 RFIDCreate.vi

RFIDCreate.vi

Create a Phidget RFID handle



error in

error out passes error or warning information out of a VI to be used by other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

132)	that no error occurred. code
abc	code is the error or warning code. source
	source string describes the origin of the error or warning.
	error out
NTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe .	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Device # identification

5.13.2 RFIDEventClose.vi

RFIDEventClose.vi

Close the Phidget RFID Tag or TagLost event handle



Device In Device # Identification. error in (no error)



132

	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TT	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[132]	code
abc	code is the error or warning code. source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
I 132	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.

5.13.3 RFIDEventClose2.vi

RFIDEventClose2.vi

Close the Phidget RFID Tag or TagLost event handle (2)

Device In XEvent	Device Out
Event Registration Refnum In 🖬 👘 error in (no error) 🛁	error out
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[132]	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In error out
F TF	error out passes error or warning information out of a VI to be used by other VIs. status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source string describes the origin of the error or warning.

5.13.4 RFIDEventCloseOutput.vi

RFIDEventCloseOutput.vi

Close the Phidget RFID output change event handle



1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abci	code is the error or warning code. source
	source describes the origin of the error or warning.

132

abc

	Event Registration Refnum In
132	Event # Identification Device Out
	Same as Device In error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>labc</u>	source
	source string describes the origin of the error or warning.

5.13.5 RFIDEventCreateOutput.vi

RFIDEventCreateOutput.vi

Set up an output change event handle.



	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[132]	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>Babc</u>	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.13.6 RFIDEventCreateTag.vi

RFIDEventCreateTag.vi

Set up a tag change event handle

Device In ______ Device Out error in (no error) ______ Event Registration Refnum Out

132	Device In
	Device # Identification.
E	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
N 32	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
JI32	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out

Event # Identification

5.13.7 RFIDEventCreateTag2.vi

RFIDEventCreateTag2.vi

Set up a tag change event handle (2)		
Device In Device Out error in (no error) Event Registration Refnum Out		
[132]	Device In	
	Device # Identification.	
	error in (no error)	
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.	
TF	status	
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.	
1321	code	
<u>abc</u>	code is the error or warning code. source	
	source describes the origin of the error or warning.	
132	Device Out	
	Same as Device In error out	
F TF	error out passes error or warning information out of a VI to be used by other VIs. status	

132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
Mabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.13.8 RFIDEventCreateTagLost.vi



	source describes the origin of the error or warning.
132	Device Out
	Same as Device In error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
Pabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.13.9 RFIDEventCreateTagLost2.vi

RFIDEventCreateTagLost2.vi



	information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abcl	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
DIF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification
5.13.10 RFIDEventExe.vi	

RFIDEventExe.vi

This is called when the Phidget RFID Tag or TagLost event changes. Tag Event is called when a tag is first detected by the reader. TagLost Event is called when a tag is no longer detected by the reader



	FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
F TF	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
[U8]	Tag
	The tag.
▶ U8	a
	Event Registration Refnum Out
	Same as the Event Registration Refnum In

5.13.11 RFIDEventExe2.vi

RFIDEventExe2.vi

This is called when the Phidget RFID Tag or TagLost event changes. (2)



	be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abel	code is the error or warning code. source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
ETE	status
ET RO]	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
<u>[132</u>]	code
	code is the error or warning code.
Labe	source
	source string describes the origin of the error or warning.
FIE	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
labc	Tag

	The tag.
132	Protocol
	The protocol being used.
	Event Registration Refnum Out
	Event # Identification

5.13.12 RFIDEventExeOutput.vi

RFIDEventExeOutput.vi

This is called when an output changes



[]]]	Device In
132	Device # Identification. index
132	The output index OutputState
	The output state. Possible values are 0 for False, 1 for True and others for undefined
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe .	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification
132	Device Out
	Same as Device In
F	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.

5.13.13 RFIDGetAntennaState.vi

RFIDGetAntennaState.vi

Get the state of the antenna



Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Antenna State
	The antenna state. Possible values are 0 for False, 1 for True and others for undefine
) TF	Antenna On?
	The antenna state

5.13.14 RFIDGetLastTag.vi

RFIDGetLastTag.vi

Get the last tag read by the reader. This tag may or may not still be on the reader

Device In Get Device Out error in (no error) Get Tag error out	
132)	Device In
	Device # Identification. error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
(abc)	source

	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabc	code is the error or warning code. source
	source describes the origin of the error or warning.
[us]	Tag
	The tag. This must be an unsigned char array of size 5.
U 8	

5.13.15 RFIDGetLastTag2.vi

RFIDGetLastTag2.vi

Get the last tag read by the reader. This tag may or may not still be on the reader. (2)



	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source string describes the origin of the error or warning.
132	Device In
	Device # Identification.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe .	source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In
Pabe.	Tag String
	The tag string
F132	Tag Protocol

The tag protocol

5.13.16 RFIDGetLEDState.vi

RFIDGetLEDState.vi

Get the state of the onboard LED

Device In LED State error in (no error) LED State LED On? error out	
[132]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should

	be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Dabe	source
	source describes the origin of the error or warning.
132	LED State
NTE 1	The LED state. Possible values are 0 for False 1 for True and others for undefined
	LED ON?
	The LED state

5.13.17 RFIDGetOutputCount.vi

RFIDGetOutputCount.vi

Get the number of outputs supported by this board.



1321	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	and a is the error or warning code
label	
	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FIE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
F132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
132	count
	The number of outputs.

5.13.18 RFIDGetOutputState.vi

RFIDGetOutputState.vi

Get the state of an output

Device InOutput	Device Out	
index 🚽 🛄 🧊	- OutputState	
error in (no error) 🔜	····· Output?	
	error out	
132		Device In
		Device # Identification.
		error in (no error)
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132		code
		code is the error or warning code.
abc		source
		source describes the origin of the error or warning.
[]32]		index
		The output index
132		Device Out
		Same as Device In
		error out
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FL		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

132	that no error occurred. code
Mabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	OutputState
FTF	The output state. Possible values are 0 for False, 1 for True and others for undefined Output?
	The output state.

5.13.19 RFIDGetTagState.vi

RFIDGetTagState.vi

Get the tag present status. This is whether or not a tag is being read by the reader.



	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
	code is the error or warning code.
Fabc	source
	source describes the origin of the error or warning.
132	Tag State
	The tag state. Possible values are 0 for False, 1 for True and others for undefined.
) TF	Tag On?
	The tag state

5.13.20 RFIDOpen.vi

RFIDOpen.vi

Open a Phidget RFID

Device In Device Out	
Serial Number - Serial Number Re	turn
error in (no error) error out	
132	Serial Number
	Serial Number Specify -1 to open any
132	milliseconds
	minist conds
	Time to wait for the attachment. Specify 0 to wait forever. (Default is 5000)
	error in (no error)
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source string describes the origin of the error or warning.
1321	Device In
	Device # identification. This function will create a new device identification if it's 0 or invalid
132	Serial Number Return
	Serial Number of the opened phidget
TF	Attached?
	Returns TRUE is the device successfully attached, or FALSE otherwise.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.

TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Mbc	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

5.13.21 RFIDSetAntennaState.vi

RFIDSetAntennaState.vi

Set the state of the antenna. Note that the antenna must be enabled before tags will be read

Device In Device Out AntennaState Antenna State error in (no error)	
[<u>132</u>]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code.

abel	source
	source describes the origin of the error or warning.
TF	AntennaState
	The antenna state
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FL	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source describes the origin of the error or warning.

5.13.22 RFIDSetLEDState.vi

RFIDSetLEDState.vi

Set the state of the onboard LED



Device # Identification. error in (no error)

Device In

error in can accept error information wired
from VIs previously called. Use this
information to decide if any functionality should
be bypassed in the event of errors from other
VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

LEDState

Set the LED state

Device Out

Same as Device In

error out

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

TFI

132

abc

TFI

132

TF

132

abc

5.13.23 RFIDSetOutputState.vi

RFIDSetOutputState.vi

Set the state of an output


error in can accept error information wired
from VIs previously called. Use this
information to decide if any functionality should
be bypassed in the event of errors from other
VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

5.13.24 RFIDWriteTag.vi

TF

132

abc

RFIDWriteTag.vi

Write an RFID Tag



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

1321	that no error occurred. code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
abc)	string
	The data to send
132)	protocol
	The protocol to use
TF	Lock
	Locks the tag from further writes.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.

5.14 Servo

5.14.1 ServoCount.vi

ServoCount.vi

Gets the number of motors supported by this controller.

Device In Device Out error in (no error) Count error out	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abel	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

) TF	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
Mabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Count
	The motor count.

5.14.2 ServoCreate.vi

ServoCreate.vi

Create a Phidget Servo handle.

Greate	- Device Out	
error in 🚥 🦉 🚛	🕶 error out	
		error in
TF		error out passes error or warning information out of a VI to be used by other VIs. status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321		code
		code is the error or warning code.
abc		source
		source string describes the origin of the error or warning.
)555		error out

	error out passes error or warning information out of a VI to be used by other VIs.
NTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
I 32	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.
132	Device Out
	Device # identification

5.14.3 ServoEventClose.vi

ServoEventClose.vi

Close the Phidget Servo event handle



[132]	that no error occurred. code
(abc)	code is the error or warning code. source
	source describes the origin of the error or warning.
	Event Registration Refnum In
132	Event # Identification Device Out
	Same as Device In error out
FTF	error out passes error or warning information out of a VI to be used by other VIs.
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe .	code is the error or warning code. source
	source string describes the origin of the error or warning.

5.14.4 ServoEventCreate.vi

ServoEventCreate.vi

Set up a postion change event handle



	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abci	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
DTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out

Event # Identification

5.14.5 ServoEventExe.vi

ServoEventExe.vi

This is called when the Phidget Advanced Servo event occurs



132	index
	The servo index
) [32]	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Same as the Event Registration Refnum In
FTF	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.

5.14.6 ServoGetEngaged.vi

ServoGetEngaged.vi

Get the engaged state of a motor. This is whether the motor is powered or not



132

Device In

Device # Identification.

	error in (no error)
TF)	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132)	index
	The servo index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source describes the origin of the error or

warning.

EngagedState_out

The engaged state. Possible values are 0 for False, 1 for True and others for undefined

Engaged?

The engaged state (Boolean type). Possible values are True for Engaged and False for Not Engaged.

5.14.7 ServoGetPos.vi

ServoGetPos.vi

Get the current position of a motor



132

TF

© 2014 Phidgets Inc.

[]]]	index
	The servo index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
} abc	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	pos_out
	The position

5.14.8 ServoGetPosMax.vi

ServoGetPosMax.vi

Get the maximum position that a motor can go to



Device In

Device # Identification. error in (no error)

	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	index
	The servo index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Jabe	source
	source describes the origin of the error or warning.

DBL

posmax out

The maximum position

5.14.9 ServoGetPosMin.vi

ServoGetPosMin.vi

Get the minimum position that a motor can go to



error in can accept error information wired
from VIs previously called. Use this
information to decide if any functionality should
be bypassed in the event of errors from other
VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

posmin_out

Device In

VIs.

status

Device # Identification.

error in can accept error information wired

information to decide if any functionality should be bypassed in the event of errors from other

from VIs previously called. Use this

error in (no error)

The minimum position

5.14.10 ServoGetServoType.vi

TF

132

abc

DBL

ServoGetServoType.vi

Get the servo type of a motor



© 2014 Phidgets Inc.

	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abci	source
	source describes the origin of the error or warning.
1321	index
<u>)[32</u>	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
132	GetServoType
	Returns the servo type. This is an enum. Please refer to <u>Phidgets Constants</u> -> <u>ServoType</u>

5.14.11 ServoOpen.vi

ServoOpen.vi

Open a PhidgetServo.



FTF	out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

5.14.12 ServoSetEngaged.vi

ServoSetEngaged.vi

Set the engaged state of a motor. This is whether the motor is powered or not



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

[132]	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
[132]	index
ТЕ	The servo index SetEngaged
132	The engaged state of the servo. Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>Pabe</u>	code is the error or warning code. source
	source describes the origin of the error or warning.

5.14.13 ServoSetPos.vi

ServoSetPos.vi

Set the position of a motor.



) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or

warning.

5.14.14 ServoSetServoParameters.vi

ServoSetServoParameters.vi

Set the servo parameters of a motor



source describes the origin of the error or warning.
index
The servo index min_us
The minimum supported PCM in microseconds max_us
The maximum supported PCM in microseconds degrees
The degrees of rotation defined by the given PCM range
Device Out
Same as Device In
error out
error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
status
status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
code
code is the error or warning code. source
source describes the origin of the error or warning.

5.14.15 ServoSetServoType.vi

ServoSetServoType.vi

Set the servo type of a motor

Device In	- Device Out
index - 42	error out
error in (no error)	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc)	source
	source describes the origin of the error or warning.
1321	index
	The servo index
132	setServoType
	The servo type. This is an enum. Please refer to <u>Phidgets Constants</u> -> <u>ServoType</u>
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should

T F	be bypassed in the event of errors from other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
Mabe	code is the error or warning code. source
	source describes the origin of the error or warning.

- 5.15 Spatial
- 5.15.1 SpatialCreate.vi

SpatialCreate.vi

Create a Phidget Spatial handle Device Out Create Ø error in • error out error in error out passes error or warning information out of a VI to be used by other VIs. TFI status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. 132 code code is the error or warning code. abc source **source** string describes the origin of the error or warning.

	error out
	error out passes error or warning information out of a VI to be used by other VIs.
) TF	status
N132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
132	Device Out
	Device # identification

5.15.2 SpatialEventClose.vi

SpatialEventClose.vi

Close the Phidget Spatial event handle Device In -Device Out Evont Event Registration Refnum In R error out error in (no error) -132 **Device In** Device # Identification. error in (no error) error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. TFI status status is TRUE (X) if an error occurred or

	FALSE (checkmark) to indicate a warning or that no error occurred.
	code
	code is the error or warning code.
abe	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>Mabe</u>	source
	source string describes the origin of the error or warning.

5.15.3 SpatialEventCreate.vi



Device In

	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abci	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out

Event # Identification

5.15.4 SpatialEventExe.vi

SpatialEventExe.vi

This is called when data come. It is called at SpatialGetDataRate, up to 8ms. For the rate faster than 8ms, multiple sets of data are supplied in a single event.



	out of a VI to be used by other VIs.
F TF	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	coue
	code is the error or warning code.
<u>Pabe</u>	source
	source string describes the origin of the error or warning.
)132	Device Out
	Same as Device In
FTF	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
	Event Registration Refnum Out
	Event # Identification
	Output
	The Output Data
DBL	acc0
	Acceleration X.
DBL	acc1
	Acceleration Y.
DBL	acc2
	Acceleration Z
DBL	ang0
	Angular rate X
DBL	ang1
	Angular rate Y
DBL	ang2

DBL	Angular rate Z mag0
DBL	Magnetic field X mag1
DBL	Magnetic field Y mag2
132	Magnetic field Z sec
132	Timestamp in s micsec
	Timestamp in ms

5.15.5 SpatialGetAcce.vi

SpatialGetAcce.vi

Get the current acceleration data of an axis



<u>abc)</u>	code is the error or warning code.
	source describes the origin of the error or warning.
[132]	index
) []32	The acceleration index. (x, y, z) Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	Acce
	The acceleration in gs

5.15.6 SpatialGetAcceAxisCount.vi

SpatialGetAcceAxisCount.vi

Get the number of acceleration axes supplied by this board

	Device In ——	Sp Acco Count	- Device Out	
error ir	n (no error)		error out	
132				Device In
				Device # Identification.
				error in (no error)
				error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF				status
				status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132				code
				code is the error or warning code.
abc				source
				source describes the origin of the error or warning.
132				Device Out
				Same as Device In
				error out
				error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF				status
				status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132				code

code is the error or warning code.

source

source describes the origin of the error or warning.

AcceAxisCount

The axis count

5.15.7 SpatialGetAcceMax.vi

SpatialGetAcceMax.vi

Get the maximum acceleration supported by an axis

Device In Acco Device Out	
error in (no error) and error out	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abet	code is the error or warning code. source
	source describes the origin of the error or warning.
132)	index

132

abc

© 2014 Phidgets Inc.

)132	The acceleration index. (x, y, z) Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T E	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	AcceMax
	The maximum acceleration

5.15.8 SpatialGetAcceMin.vi

SpatialGetAcceMin.vi

Get the minimum acceleration supported by an axis



	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abci	source
	source describes the origin of the error or warning.
132	index
	The axis index (x, y, z)
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>Pabe</u>	source
	source describes the origin of the error or warning.

DBL

AcceMin

The minimum acceleration

5.15.9 SpatialGetAngRate.vi

SpatialGetAngRate.vi

Get the current angular rate of an axis

Device In AngRate Device Out index Rate error in (no error)	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[<u>132</u>]	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
[132]	index
	The axis index (x, y, z)
132	Device Out
	Same as Device In error out
error in can accept error information wired	

from VIs previously called. Use this	
information to decide if any functionality should	
be bypassed in the event of errors from other	
VIs.	

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

AngRate

The angular rate in degrees/second

5.15.10 SpatialGetAngRateMax.vi

TF

132

abc

DBL

SpatialGetAngRateMax.vi

Get the maximum angular rate supported by an axis



	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	index
	The axis index (x, y, z)
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Mabc	source
	source describes the origin of the error or warning.
DBL	AngRateMax
	The maximum angular rate

5.15.11 SpatialGetAngRateMin.vi

SpatialGetAngRateMin.vi

Get the minimum angular rate supported by an axis

Device In Device Out index AngRateMin error in (no error)	
[132]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
1321	index
	The axis index (x, y, z)
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

TF	VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source describes the origin of the error or warning.
DBL	AngRateMin
	The minimum angular rate

5.15.12 SpatialGetCompassAxisCount.vi

SpatialGetCompassAxisCount.vi

Get the number of compass axes supplied by this board

Device In Compare Device Out	
error in (no error)	nt
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code

abc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Mabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	CompassAxisCount

5.15.13 SpatialGetDataRate.vi



The number of compass axes

	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Mabe	source
	source describes the origin of the error or warning.

DataRate

The data rate in milliseconds

5.15.14 SpatialGetDataRateMax.vi

SpatialGetDataRateMax.vi Get the maximum supported data rate Device In Device Out DataRa Max └ DataRateMax error in (no error) 🚥 error out 132 **Device In** Device # Identification. error in (no error) error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. TFI status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. 132 code code is the error or warning code. abc source source describes the origin of the error or warning. 132 **Device Out** Same as Device In error out error in can accept error information wired from VIs previously called. Use this

FTF	information to decide if any functionality should be bypassed in the event of errors from other VIs. status
FI32	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
Jabc	code is the error or warning code. source
	source describes the origin of the error or warning.
FI32	DataRateMax

The data rate in milliseconds

5.15.15 SpatialGetDataRateMin.vi

SpatialGetDataRateMin.vi

Get the minimum supported data rate



<u>132</u>	that no error occurred. code
abc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	DataRateMin
	The data rate in milliseconds

5.15.16 SpatialGetGyroAxisCount.vi

SpatialGetGyroAxisCount.vi

Get the number of gyroscope axes supplied by this board

Device In -	Sp Gyra Device Out	
error in (no error) •	error out	
1321		Device In
		Device # Identification.
		error in (no error)
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132		code
		code is the error or warning code.
abcl		source
		source describes the origin of the error or warning.
132		Device Out
		Same as Device In
		error out
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
) TF		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132		code

code is the error or warning code.

source

source describes the origin of the error or warning.

GyroAxisCount

The number of gyro axes.

5.15.17 SpatialGetMagField.vi

SpatialGetMagField.vi

Get the current magnetic field strength of an axis

Device In MagField Device Out index Rational MagField error in (no error) and Rational MagField	
1321	Device In
	Device # Identification. error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abc	code is the error or warning code. source
	source describes the origin of the error or warning.
I32	index

abc

132

) [32]	The axis index (x, y, z) Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
FDBL	MagField
	The magnetic field strength in Gauss

5.15.18 SpatialGetMagFieldMax.vi

SpatialGetMagFieldMax.vi

Get the maximum magnetic field strength supported by an axis.



	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	index
	The axis index (x, y, z)
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labe	source
	source describes the origin of the error or warning.

DBL

MagFieldMax

The maximum magnetic field strength in Gauss

5.15.19 SpatialGetMagFieldMin.vi

SpatialGetMagFieldMin.vi

Get the minimum magnetic field strength supported by an axis

Device In Mag index Min Device Out index MagFieldMin error in (no error) and the error out	
132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
(abc)	source
	source describes the origin of the error or warning.
1321	index
	The axis index (x, y, z)
132	Device Out
	Same as Device In
	error out

error in can accept error information wired
from VIs previously called. Use this
information to decide if any functionality should
be bypassed in the event of errors from other
VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

MagFieldMin

The minimum magnetic field strength in Gauss

5.15.20 SpatialOpen.vi

TF

132

abc

DBL

SpatialOpen.vi



TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[132]	code
	code is the error or warning code.
abc	source
	source string describes the origin of the error or warning.
1321	Device In
	Device # identification. This function will create a new device identification if it's 0 or invalid
132	Serial Number Return
	Serial Number of the opened phidget
F	Attached?
	Returns TRUE is the device successfully attached, or FALSE otherwise.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Fabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

5.15.21 SpatialResetCompassCorrectionParameters.vi

SpatialResetCompassCorrectionParameters.vi

Reset the compass correction factors. Magnetic field data will be presented directly as reported by the sensor

	Device In	Rorot param	- Device Out	
error i	n (no error)	. 🗶	error out	
132				Device In
				Device # Identification.
				error in (no error)
				error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF				status
				status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132				code
				code is the error or warning code.
abc				source
				source describes the origin of the error or warning.
132				Device Out
				Same as Device In
				error out
NTE				error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
				status

486	Labview Manual	
L	-	
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
		code is the error or warning code.
	<u>Pabc</u>	source
		source describes the origin of the error or

5.15.22 SpatialSetCompassCorrectionParameters.vi

SpatialSetCompassCorrectionParameters.vi

Set the compass correction factors. This can be used to correcting any sensor errors, including hard and soft iron offsets and sensor error factors.

warning.



	Settings
	The correction parameters.
	magField
	offset0
DBL	offset1
DBL	offset2
	gain0
DBL	gain1
DBL	gain2
DBL	TO
DBL	T1
DBL	T2
DBL	Τ3
DBL	T4
DBL	Τ5
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
<u>P132</u>	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.

5.15.23 SpatialSetDataRate.vi

SpatialSetDataRate.vi

Set the data rate. Note that data at rates faster then 8ms will be delivered to events as an array of data

Device In DataRate D	evice Out
error in (no error)	rror out
132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abel	source
	source describes the origin of the error or warning.
1321	DateRate
	The data rate
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should

	be bypassed in the event of errors from other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Jabc	source
	source describes the origin of the error or warning.

5.15.24 SpatialZeroGyro.vi

SpatialZeroGyro.vi

Zero the gyroscope. This takes about two seconds and the gyro axes will report 0 during the process. This should only be called when the board is not moving

Device In Device Out error in (no error)	
132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TT	status
Track	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.

490	Labview Manual
-----	----------------

abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.

5.16 Stepper

5.16.1 StepperCreate.vi

StepperCreate.vi

Create a Phidget Stepper handle.



error in

error out passes error or warning information out of a VI to be used by other VIs.

status

132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.code
	code is the error or warning code.
abc)	source
	source string describes the origin of the error or warning.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Labc	source
	source string describes the origin of the error or warning.
132	Device Out
	Device # identification

5.16.2 StepperEventCloseCurrentVelocity.vi

StepperEventCloseCurrentVelocity.vi

Close the Phidget Stepper current change event handle





Device In

	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
F	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	and a is the error or warming and
Dabe	source
	source string describes the origin of the error or warning.

5.16.3 StepperEventCloseInput.vi

StepperEventCloseInput.vi

Close the Phidget Stepper input change event handle

Device In	- Device Out
error in (no error)	error out
[132]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	code
	code is the error or warning code.
abel	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
T F	error out passes error or warning information out of a VI to be used by other VIs. status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
code
code is the error or warning code.
source
source string describes the origin of the error
or warning.

5.16.4 StepperEventClosePosition.vi

StepperEventClosePosition.vi

Close the Phidget Stepper position change event handle



1321	Device In
	Device # Identification. error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
abcl	code is the error or warning code. source
	source describes the origin of the error or warning.

132

abc

	Event Registration Refnum In
132	Event # Identification Device Out
	Same as Device In error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
labc	source
	source string describes the origin of the error or warning.

5.16.5 StepperEventClosePosition71.vi

StepperEventClosePosition71.vi

Close the Phidget Stepper position change event handle for Labview version 7.1 only

Device In — Device Out Event Registration Refnum In error in (no error)	
[132]	Device In
	Device # Identification. error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status

1321	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.code
<u>abe</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
	Event Registration Refnum In
132	Event # Identification Device Out
	Same as Device In error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status
11 32	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	code is the error or warning and
Jabe	source
	source string describes the origin of the error or warning.

5.16.6 StepperEventCreateCurrent.vi

StepperEventCreateCurrent.vi

Set up a current change event handle

Device In ______ Device Out error in (no error) ______ Event Registration Refnum Out

[]]]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abci	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
NTE 1	error out passes error or warning information out of a VI to be used by other VIs.
	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out

Event # Identification

5.16.7 StepperEventCreateInput.vi

StepperEventCreateInput.vi

Set up an input change event handle

Device In Device Out error in (no error) Event Registration Refnum Out	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In error out
FTF	error out passes error or warning information out of a VI to be used by other VIs. status

132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
Mbc	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.16.8 StepperEventCreatePosition.vi

StepperEventCreatePosition.vi

Set up a position change event handle



	source describes the origin of the error or warning.
132	Device Out
	Same as Device In error out
F	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>Pabe</u>	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.16.9 StepperEventCreatePosition71.vi

StepperEventCreatePosition71.vi

Set up a position change event handle for Labview version 7.1 only



	information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>abci</u>	code is the error or warning code.
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FL	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.16.10 StepperEventCreateVelocity.vi

StepperEventCreateVelocity.vi

Set up a velocity change event handle		
Device In Device Out error in (no error) Event Registration Refnum Out		
<u>132</u>	Device In	
	Device # Identification.	
	error in (no error)	
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.	
TF	status	
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.	
132	code	
Tabel	code is the error or warning code.	
	source describes the origin of the error or warning.	
132	Device Out	
	Same as Device In	
	error out	
NTE	error out passes error or warning information out of a VI to be used by other VIs.	
	status	
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.	
132	code	
	code is the error or warning code.	

Pabe	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Event # Identification

5.16.11 StepperEventExeCurrentVelocity.vi

StepperEventExeCurrentVelocity.vi

This is called when the Phidget Stepper Current/Velocity event changes



DBL	Event # Identification Value
132	The return value of related event. (E.g. for velocity change event, this value is velocity.) index
132	The motor index Device Out
	Same as Device In error out
F TF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
P TF	Same as the Event Registration Refnum In Event?
	Returns TRUE if the event has executed, or FALSE otherwise.

5.16.12 StepperEventExeInput.vi

StepperEventExeInput.vi

This is called when the Phidget Stepper Input event changes.
Event?	
Device In Devic	e Out
Event Registration Refnum In a Lindow	Registration Refnum Out
	out
Value	
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device In
	Device # Identification.
132	index
	The motor index
I 32	Value
	The input
	error out
FTF	error out passes error or warning information out of a VI to be used by other VIs.

) []32]	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
Fabc	code is the error or warning code. source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
132	Same as the Event Registration Refium In Device Out
) TF	Same as Device In Event?
	Returns TRUE if the event has executed, or FALSE otherwise.

5.16.13 StepperEventExePosition.vi

StepperEventExePosition.vi

This is called when the Phidget Stepper Position event changes



TFI	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abc	code is the error or warning code. source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
) [32]	index
	The motor index
) [32]	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
F TF	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
Pabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Value
	The position
FTF	Event?
	Returns TRUE if the event has executed, or

FALSE otherwise. Event Registration Refnum Out

Same as the Event Registration Refnum In

5.16.14 StepperEventExePosition71.vi

StepperEventExePosition71.vi

This is called when the Phidget Stepper Position event changes. This function is for Labview version 7.1 only



132	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
FTF	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.
	Event Registration Refnum Out
	Same as the Event Registration Refnum In
132	value
	The position

Device In

5.16.15 StepperGetAcceleration.vi

StepperGetAcceleration.vi

Get the last set acceleration for a motor



© 2014 Phidgets Inc.

	Device # Identification.
200	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abet	code is the error or warning code. source
	source describes the origin of the error or warning.
132)	index
1321	index The motor index
132) 132	index The motor index Device Out
132))132	 index The motor index Device Out Same as Device In
<u>132</u> <u>▶</u>	index The motor index Device Out Same as Device In error out
I321	<pre>index Intermediate in the motor index The motor index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.</pre>
	<pre>index Intermediate in the motor index The motor index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status</pre>
	<pre>index Intermotor index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.</pre>
	<pre>index Ihe motor index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code</pre>

Abc	source
	source describes the origin of the error or warning.
DBL	Acce
	The acceleration

5.16.16 StepperGetAccelerationMax.vi

StepperGetAccelerationMax.vi

Get the maximum acceleration supported by a motor

Device In Acco index Device Out	
error in (no error) 🚥 🔤 error out	
1321	Device In
	Device # Identification.
E33	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abc	code is the error or warning code. source
	source describes the origin of the error or warning.
132)	index
	The motor index

132	Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
JI32	code
Fabc	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	AcceMax
	The maximum acceleration

5.16.17 StepperGetAccelerationMin.vi

StepperGetAccelerationMin.vi

Get the minimum acceleration supported by a motor



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should

	be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
<u>132</u>	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
babc	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	AcceMin
	The minimum acceleration

5.16.18 StepperGetCurrent.vi

StepperGetCurrent.vi

Get the current current draw for a motor

Device In Device Out index Current error in (no error) error out	
1321	Device In
	Device # Identification. error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abel	source
	source describes the origin of the error or warning.
1321	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

	VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe.	source
	source describes the origin of the error or warning.
DBL	Current
	The current

5.16.19 StepperGetCurrentLimit.vi

StepperGetCurrentLimit.vi

Get the current limit for a motor



	code is the error or warning code.
(abc)	source
	source describes the origin of the error or warning.
132)	index
	The motor index
<u>}132</u>	Device Out
	Same as Device In
1551	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe.	source
	source describes the origin of the error or warning.
DBL	Current Limit
	The current limit

5.16.20 StepperGetCurrentMax.vi

StepperGetCurrentMax.vi

Get the maximum current limit

Device In Device Out	
index – 🗾 ᢇ CurrentMax	
error in (no error) 🚥 🔤 error out	
132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
1321	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

132	that no error occurred. code
Labc	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	CurrentMax

The maximum current limit

5.16.21 StepperGetCurrentMin.vi

StepperGetCurrentMin.vi

Get the minimum current limit

Device In Device Out index Index CurrentMin error in (no error) ===	
[]]]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or

	warning.
[132]	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
PTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	CurrentMin
	The minimum current limit.

Device In

5.16.22 StepperGetCurrentPosition.vi



Get the current position of a motor



	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TT	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
1921	index
1321	index The motor index
132 132	index The motor index Device Out
132 F132	 index The motor index Device Out Same as Device In
192 192	index The motor index Device Out Same as Device In error out
132	<pre>index Intermediate in the motor index The motor index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.</pre>
IS22 IS22 IS22	<pre>index Intermediate in the motor index The motor index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status</pre>
	<pre>index Intermotor index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. accele</pre>
ISI2 ISI2 ITIE ITIE	<pre>index Ihe motor index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code</pre>

Jabc	source
	source describes the origin of the error or warning.
132	Position
	The position

5.16.23 StepperGetCurrentPosition71.vi

StepperGetCurrentPosition71.vi

Get the current position of a motor. This function is for Labview version 7.1 only

Device In Device Out	
error in (no error)	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
[132]	index
	The motor index

132	Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
NTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Fabc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Position
	The position

5.16.24 StepperGetEngaged.vi

StepperGetEngaged.vi

Get the engaged state of a motor. This is whether the motor is powered or not



	information to decide if any functionality should be bypassed in the event of errors from other VIs.
	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
[]]]]	index
	The motor index
) [32]	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
PTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
132	EngagedState

TF

The engaged state. Possible values are 0 for False, 1 for True and others for undefined **Engaged?**

The engaged state (Boolean type). Possible values are True for Engaged and False for Not Engaged

5.16.25 StepperGetPositionMax.vi

StepperGetPositionMax.vi

Get the maximum position that a motor can go to

Device In index S3 error in (no error) ===	Device Out PositionMax error out	
[132]		Device In
		Device # Identification. error in (no error)
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TFI		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132		code
abc		code is the error or warning code. source
		source describes the origin of the error or warning.
1321		index

)	The motor index Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	PositionMax
	The maximum position

5.16.26 StepperGetPositionMax71.vi

StepperGetPositionMax71.vi

Get the maximum position that a motor can go to. This function is for Labview version 7.1 only



	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
Abc	source
	source describes the origin of the error or warning.
[132]	index
	The motor index
F132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
ETF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source describes the origin of the error or warning.

PositionMax

Maximum position

5.16.27 StepperGetPositionMin.vi

StepperGetPositionMin.vi

Get the minimum position that a motor can go to.

Device In PerMin Device Out index Bay PositionMin	
error in (no error) 🚥 😽 error out	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
I32	index
	The motor index
132	Device Out
	Same as Device In
	error out

132

	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
)132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
132	PositionMin
	The minimum position

5.16.28 StepperGetPositionMin71.vi

StepperGetPositionMin71.vi

Get the minimum position that a motor can go to. This function is for Labview version 7.1 only



	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	index
	The motor index
JI32	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
JI32	code
	code is the error or warning code.
Jabc	source
	source describes the origin of the error or warning.
132	PositionMin
	The minimum position

5.16.29 StepperGetTargetPosition.vi

StepperGetTargetPosition.vi

Get the last set target position of a motor

Device In Device Out index Position error in (no error)	
132	Device In
	Device # Identification. error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
1 TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abci	source
	source describes the origin of the error or warning.
132	index
	The motor index
<u>)132</u>	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

	VIs.
PTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
132	Position
	The position

5.16.30 StepperGetTargetPosition71.vi

StepperGetTargetPosition71.vi

Get the last set target position of a motor. This function is for Labview version 7.1 only



	code is the error or warning code.
abet	source
	source describes the origin of the error or warning.
1321	index
	The motor index
<u>)132</u>	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T F	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Position
	The position

5.16.31 StepperGetVelocity.vi

StepperGetVelocity.vi

Get the current velocity of a motor

Device In	Get yet Device Out	
index –	Velocity	
error in (no error) 🚥	error out	
132		Device In
		Device # Identification.
		error in (no error)
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321		code
		and in the error or warring and
		code is the error or warning code.
abel		source
		source describes the origin of the error or warning.
1321		index
		The motor index
132		Device Out
		Same as Device In
		error out
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

132	that no error occurred. code
Jabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	Velocity
	The velocity

5.16.32 StepperGetVelocityLimit.vi

StepperGetVelocityLimit.vi

Get the last set velocity limit for a motor



	warning.
I32	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	VelocityLimit
	The velocity limit

5.16.33 StepperGetVelocityMax.vi

StepperGetVelocityMax.vi

Get the maximum velocity that can be set for a motor



	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF1	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
1321	
	index
	The motor index
132	The motor index Device Out
132	Index The motor index Device Out Same as Device In
	Index The motor index Device Out Same as Device In error out
	Index The motor index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
	Index The motor index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status
	Index The motor index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	Index The motor index Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code

 Image: Source source describes the origin of the error or warning.

 Image: Source describes the origin of the error or warning.

 Image: Source describes the origin of the error or warning.

 Image: Source describes the origin of the error or warning.

 Image: Source describes the origin of the error or warning.

 Image: Source describes the origin of the error or warning.

 Image: Source describes the origin of the error or warning.

 Image: Source describes the origin of the error or warning.

5.16.34 StepperGetVelocityMin.vi

StepperGetVelocityMin.vi

Get the minimum velocity that can be set for a motor

Device In index VelocityMin error in (no error)	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abch	code is the error or warning code. source
	source describes the origin of the error or warning.
1321	index
	The motor index

538	Labview	Manual
-----	---------	--------

132	Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabc	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	VelocityMin
	The minimum velocity

5.16.35 StepperInputCount.vi

StepperInputCount.vi

Get the number of digital inputs supported by this board



	be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
) [32]	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FIE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
EI32	count
	The digital input count

5.16.36 StepperInputState.vi

StepperInputState.vi

Get the state of a digital input

Device In index Device Out index Input State (0,1) error in (no error) Input State error out	
<u>132</u>	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
<u>132</u>	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should
	be bypassed in the event of errors from other VIs.
--------	--
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe .	source
	source describes the origin of the error or warning.
132	Input State (0,1)
	The input state. Possible values are 0 for False, 1 for True and others for undefined
FTF	Input State
	The input state (Boolean type).

5.16.37 StepperMotorCount.vi

StepperMotorCount.vi

Get the number of motors supported by this controller



	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	code
	code is the error or warning code.
abc)	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code
Fabe	source
	source describes the origin of the error or warning.
132	count
	The motor count
9 StopperOpen wi	

5.16.38 StepperOpen.vi

StepperOpen.vi



544	Labview Manual	
L		status
		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	132	code
		code is the error or warning code.
	Pabe	source
		source string describes the origin of the error or warning.
	<u>1132</u>	Device Out
		Same as Device In

5.16.39 StepperSetAcceleration.vi

244

TFI

132

٦.

Г



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

abci	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	acce_in
	The acceleration
1321	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
DIF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>Pabe</u>	source
	source describes the origin of the error or warning.

5.16.40 StepperSetCurrentLimit.vi

StepperSetCurrentLimit.vi

Set the current limit for a motor



FIE	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.

5.16.41 StepperSetCurrentPosition.vi

StepperSetCurrentPosition.vi

Set the current position of a motor. It will not move the motor, just update the position value



	warning.
1321	position
	The position
1321	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Dabe	source
	source describes the origin of the error or warning.

5.16.42 StepperSetCurrentPosition71.vi

StepperSetCurrentPosition71.vi

Set the current position of a motor. It will not move the motor, just update the position value. This function is for Labview version 7.1 only.



	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
(TF)	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
132	index
[]]]	The motor index position
	The position
) [32]	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

550	Labview Manual	
	F132	code
	Pabe	code is the error or warning code. source
		source describes the origin of the error or warning.

5.16.43 StepperSetEngaged.vi

StepperSetEngaged.vi

Set the engaged state of a motor. This is whether the motor is powered or not

Device In Device Out index error out SetEngaged error out error in (no error)	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abet	code is the error or warning code. source
	source describes the origin of the error or warning.
132	index
	The motor index

TFI	SetEngaged
132	Set the engage state Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
P TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>Fabe</u>	code is the error or warning code. source
	source describes the origin of the error or warning.

5.16.44 StepperSetTargetPosition.vi



StepperSetTargetPosition.vi

Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should

	be bypassed in the event of errors from other VIs.
TFI	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
1321	position
	The position
1321	index
	The motor index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source describes the origin of the error or warning.

5.16.45 StepperSetTargetPosition71.vi

StepperSetTargetPosition71.vi

Set the target position of a motor. This function is for Labview version 7.1 only.

Device In D	evice Out
index - 42	ror out
error in (no error)	
<u>132</u>	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	index
	The motor index
132	position
	The position
132	Device Out
	Same as Device In
	error out

	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabc	code is the error or warning code. source
	source describes the origin of the error or warning.

5.16.46 StepperSetVelocityLimit.vi

StepperSetVelocityLimit.vi

Set the velocity limit for a motor



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

[132]	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	velocity
	The velocity limit
[132]	index
	The motor index
) <u>132</u>	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
)132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.

5.16.47 StepperStoppedState.vi

StepperStoppedState.vi

Get the stopped state of a motor. This is true when the motor is not moving and there are no outstanding commands



) [32]	that no error occurred. code
Labc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	StoppedState
NTF	The stopped state. Possible values are 0 for False, 1 for True and others for undefined. Stopped?
	The stopped state (Boolean type). Possible values are True for Stopped and False for Not Stopped

5.17 TemperatureSensor

5.17.1 TempCreate.vi

TempCreate.vi

Create a Phidget Temperature Sensor handle



	source string describes the origin of the error or warning.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>Pabc</u>	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Device # identification

5.17.2 TempEventClose.vi

TempEventClose.vi

Close the Phidget Temperature Sensor event handle.

Device In Device Out Event Registration Refnum In error out error in (no error)	
[<u>132</u>]	Device In
	Device # Identification. error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

E T T	status
<u>132</u>	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code
abc	source
	source describes the origin of the error or warning.
	Event Registration Refnum In
	Event # Identification
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FIE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.

5.17.3 TempEventCreate.vi

TempEventCreate.vi

Set up a temperature change event handle

Device In _____ Device Out error in (no error) ______ Event Registration Refnum Out

132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[132]	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out

Event # identification

5.17.4 TempEventExe.vi

TempEventExe.vi

This is called when the temperature changes by more then the change trigger



▶132	index
	The input index
▶132	Device Out
	Same as Device In
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>Pabc</u>	source
	source string describes the origin of the error or warning.
	Event Registration Refnum Out
	Same as the Event Registration Refnum In
FIE	Event?
	Returns TRUE if the event has executed, or FALSE otherwise.

5.17.5 TempGetAmbient.vi

TempGetAmbient.vi

Get the ambient (board) temperature



Device In

Device # Identification. error in (no error)

error in can accept error information wired
from VIs previously called. Use this
information to decide if any functionality should
be bypassed in the event of errors from other
VIs.
status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

Device Out

Same as Device In

error out

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

Ambient

The ambient (board) temperature

TFI

132

abc

132

TF

132

abc

DBL

5.17.6 TempGetAmbientMax.vi

TempGetAmbientMax.vi

Get the maximum temperature that the ambient onboard temperature sensor can measure

Device In Device Out	
error in (no error)	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TFH	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
abc	code is the error or warning code. source
	source describes the origin of the error or warning.
▶132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TE	status

) []32	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
Jabc	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	Ambient Max
	The maximum temperature

5.17.7 TempGetAmbientMin.vi

TempGetAmbientMin.vi

Get the minimum temperature that the ambient onboard temperature sensor can measure

Device In Ambient Min error in (no error) III Ambient Min error out	
1321	Device In
[1 23]	Device # Identification.
	error in (no error) error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
	status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>abc</u>	code is the error or warning code. source

	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Fabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	Ambient Min
	The minimum temperature

5.17.8 TempGetPotential.vi

TempGetPotential.vi

Get the currently sensed potential for a thermocouple input



error	in can accept error information wired
from V	/Is previously called. Use this
inform	ation to decide if any functionality should
be byp	bassed in the event of errors from other
VIs.	
status	
status	is TRUE (X) if an error occurred or

FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

inde x

The input index

Device Out

Same as Device In

error out

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

TFI

132

abc

132

132

TF

132

abc

DBL

potential

The potential

5.17.9 TempGetPotentialMax.vi

TempGetPotentialMax.vi

Get the maximum potential that a thermocouple input can measure

Device In Petential Device Out index Max error in (no error) ===	
[]32]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
(abc)	source
	source describes the origin of the error or warning.
132)	index
	The input index
132	Device Out
	Same as Device In
	error out

error in can accept error information wired	
from VIs previously called. Use this	
information to decide if any functionality shou	ıld
be bypassed in the event of errors from other	ſ
VIs.	

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

code

code is the error or warning code.

source

source describes the origin of the error or warning.

PotentialMax

The maximum potential

5.17.10 TempGetPotentialMin.vi

TF

132

abc

DBL

TempGetPotentialMin.vi

Get the minimum potential that a thermocouple input can measure



	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	index
	The input index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FL	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
DBL	PotentialMin
	The minimum potential

5.17.11 TempGetTemperature.vi

TempGetTemperature.vi

Get the temperature measured by a thermocouple input

Device In index Index I temperature error in (no error)	
132)	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[132]	code
	code is the error or warning code.
abel	source
	source describes the origin of the error or warning.
132	index
	The input index
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

FI	VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Mabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	te mpe rature
	The temperature

5.17.12 TempGetTemperatureMax.vi

TempGetTemperatureMax.vi

Get the maximum temperature that can be measured by a thermocouple input. This depends on the type of thermocouple attached, as well as the ambient temperature



[<u>132</u>]	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
I32	index
132	The input index Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	Temp Max
	The maximum temperature

5.17.13 TempGetTemperatureMin.vi

TempGetTemperatureMin.vi

Get the minimum temperature that can be measured by a thermocouple input. This depends on the type of thermocouple attached, as well as the ambient temperature

Device In Device Out	
index - Temp Min	
error in (no error) and a see error out	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code
	cour is the error of warning courc.
ADC	source
	source describes the origin of the error or warning.
[132]	index
	The input index
¥132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

132	that no error occurred. code
L abc	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	Temp Min
	The minimum temperature

5.17.14 TempGetThermocoupleType.vi

TempGetThermocoupleType.vi

Get the type of thermocouple set to be at a thermocouple input. By default this is K-Type (1).

Device In GetType index S3 error in (no error) ==	Device Out ThermocoupleTyp	e
132		Device In
		Device # Identification.
		error in (no error)
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321		code
abc		code is the error or warning code. source
		source describes the origin of the error or

	warning.
[132]	index
	The input index
)132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Fabe	source
	source describes the origin of the error or warning.
132	The rmocouple Type
	The thermocouple type. This is an enum. Please refer to <u>Phidgets Constants</u> -> <u>ThermocoupleType</u>

5.17.15 TempGetTrigger.vi

TempGetTrigger.vi

Get the change trigger for a thermocouple input

Device In	Temp	Device Out
index 🚽		trigger
error in (no error) 🔜		error out
[]32]	Device In	
---------	--	
	Device # Identification.	
	error in (no error)	
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.	
TF	status	
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.	
132	code	
	code is the error or warning code.	
abci	source	
	source describes the origin of the error or warning.	
[]]]	index	
	The input index	
132	Device Out	
	Same as Device In	
	error out	
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.	
) TF	status	
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.	
132	code	
	code is the error or warning code.	

578	Labview Manual	
	PADC	source
		source describes the origin of the error or warning.
	DBL	trigger
		The change trigger

5.17.16 TempInputCount.vi

TempInputCount.vi

Get the number of thermocouple inputs supported by this board

Device In Device Out	
error in (no error)	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In

	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
NTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	count
	The thermocouple input count

5.17.17 TempOpen.vi

TempOpen.vi



	out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
abc	source
	source string describes the origin of the error or warning.
132	Device In
	Device # Identification.
132	Serial Number Return
	Serial Number of the opened phidget
T F	Attached?
	Returns TRUE is the device successfully attached, or FALSE otherwise.
	error out
	error out passes error or warning information out of a VI to be used by other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

5.17.18 TempSetThermocoupleType.vi

TempSetThermocoupleType.vi

Set the type of thermocouple plugged into a thermocouple input. By default this is K-Type

Device In Set Type Device Out	t
index - 42 error out	
ThermocoupleType —	
error in (no error)	
1321	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	index
	The input index
132	ThermocoupleType
	The thermocouple type. This is an enum. Please refer to <u>Phidgets Constants</u> -> <u>ThermocoupleType</u>
132	Device Out
	Same as Device In

	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
NTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.

5.17.19 TempSetTrigger.vi

TempSetTrigger.vi

Set the change trigger for a thermocouple input



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or

[]]]	that no error occurred. code
abel	code is the error or warning code. source
	source describes the origin of the error or warning.
DBL	trigger
[]]]	The change trigger index
<u>▶132</u>	The input index Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
DIF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.

5.18 TextLCD

5.18.1 TextCreate.vi

TextCreate.vi

Create a Phidget TextL	CD handle	
Greate	Device Out	
error in 🚥 🥒 💷	error out	
		error in
		error out passes error or warning information out of a VI to be used by other VIs.
TF		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321		code
		code is the error or warning code.
abc		source
		source string describes the origin of the error or warning.
		error out
		error out passes error or warning information out of a VI to be used by other VIs.
FTF		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132		code
		code is the error or warning code.
Pabe		source
		source string describes the origin of the error or warning.
132		Device Out
		Device # identification

5.18.2 TextGetBacklightState.vi

TextGetBacklightState.vi

Get the state of the backlight

Device In Backlight State error in (no error) Backlight? Backlight? error out	
[]]]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abcl	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

586	Labview Manual	
	FTF	status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	132	code
		code is the error or warning code.
	Jabc	source
		source describes the origin of the error or warning.
	132	Backlight State
		The backlight state. Possible values are 0 for False, 1 for True and others for undefined
	FTF	Backlight?
		The backlight state (Boolean type).

5.18.3 TextGetBrightness.vi

TextGetBrightness.vi

Get the brightness of the backlight. Not supported on all TextLCDs



<u>132</u>	that no error occurred. code
abc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
labc	source
	source describes the origin of the error or warning.
132	Brightness
	The backlight brightness (0-255)

5.18.4 TextGetColumnCount.vi

TextGetColumnCount.vi

Get the number of columns per supported by this display

Device In Device Out	
error in (no error)	
<u>132</u>	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abet	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
<u>r</u>	Coue

code is the error or warning code.

source

source describes the origin of the error or warning.

count

The column count

5.18.5 TextGetContrast.vi

TextGetContrast.vi

Get the last set contrast value



abc

132

	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
T F	status
NI32	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code
Pabe	source
	source describes the origin of the error or warning.
132	Contrast
	The contrast (0-255)

5.18.6 TextGetCursorBlinkState.vi



Get the cursor blink state



Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this

	information to decide if any functionality should be bypassed in the event of errors from other VIs.
	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Jabc	source
	source describes the origin of the error or warning.
132	CursorBlink State
	The cursor blink state. Possible values are 0 for False, 1 for True and others for undefined

TF

Blink?

The cursor blink state (Boolean type)

5.18.7 TextGetCursorState.vi

TextGetCursorState.vi

Get the cursor visible state



The state of the cursor (Boolean type)

	information to decide if any functionality should be bypassed in the event of errors from other VIs.
ETF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Fabe	source
	source describes the origin of the error or warning.
132	Cursor State
	The state of the cursor. Possible values are 0 for False, 1 for True and others for undefined
FIE	Cursor?

5.18.8 TextGetRowCount.vi

TextGetRowCount.vi

Get the number of rows supported by this display



T	status
132	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code
<u>abc</u>	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
F TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.
132	count
	The row count

5.18.9 TextGetScreenCount.vi

TextGetScreenCount.vi

Gets the number of screens supported by the TextLCD

Device In Device Out	
error in (no error)	
[132]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
[132]	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.

596	Labview Manual	
	1	
	132	code
		code is the error or warning code.
	Jabc	source
		source describes the origin of the error or warning.
	132	ScreenCount
		The number of screens

5.18.10 TextGetScreenIndex.vi

TextGetScreenIndex.vi

Device In _____ Device Out

Gets the screen index

error in (no error)	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.

) []32	Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
N TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Jabc	code is the error or warning code. source
	source describes the origin of the error or warning.
132	ScreenIndex
	The screen index

5.18.11 TextGetScreenSize.vi

TextGetScreenSize.vi

Gets the screen size for the active TextLCD display.



	information to decide if any functionality should be bypassed in the event of errors from other VIs.
	status
1321	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code
	code is the error or warning code
abel	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
)132	code
	code is the error or warning code.
Jabc	source
	source describes the origin of the error or warning.
▶I32	Screen Size
	The screen size

5.18.12 TextOpen.vi

TextOpen.vi

Open a Phidget TextLCD	
Device In OPEN Device Out Serial Number Serial Number Ret milliseconds Attached? error in (no error) error out	urn
1321	Serial Number
1321	Serial Number. Specify -1 to open any. millise conds
	Time to wait for the attachment. Specify 0 to wait forever. (Default is 5000) error in (no error)
TF	error out passes error or warning information out of a VI to be used by other VIs. status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
abel	code is the error or warning code. source
	source string describes the origin of the error or warning.
1321	Device In
132	Device # identification. This function will create a new device identification if it's 0 or invalid Serial Number Return
F TF	Serial Number of the opened phidget Attached?
	Returns TRUE is the device successfully

	attached, or FALSE otherwise. error out
	error out passes error or warning information out of a VI to be used by other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source string describes the origin of the error or warning.
132	Device Out
	Same as Device In

5.18.13 TextReset.vi

TextReset.vi

Re-initializes the LCD Display, clearing it, etc.
Device In
error in (no error)

Device In

Device # Identification.

error in (no error)

error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

status

	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc)	source
	source describes the origin of the error or warning.
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
J132	code
	code is the error or warning code.
L abc	source
	source describes the origin of the error or

warning.

5.18.14 TextSetBacklightState.vi

TextSetBacklightState.vi

Set the state of the backlight

Device In ______ Beek Device Out Turn Backlight ______ error out error in (no error) -

[]]]	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
	code is the error or warning code.
(abc)	source
	source describes the origin of the error or warning.
TF	Turn Backlight
TF	Turn Backlight Set the backlight state
TF)	Turn Backlight Set the backlight state Device Out
TF.)132	Turn Backlight Set the backlight state Device Out Same as Device In
	Turn Backlight Set the backlight state Device Out Same as Device In error out
	Turn BacklightSet the backlight stateDevice OutSame as Device Inerror outerror in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF.	Turn BacklightSet the backlight stateDevice OutSame as Device Inerror outerror in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.status
TE MIII MIII	 Turn Backlight Set the backlight state Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
	<pre>Turn Backlight Set the backlight state Device Out Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. code</pre>

abc

source

source describes the origin of the error or warning.

5.18.15 TextSetBrightness.vi

TextSetBrightness.vi

Set the brightness of the backlight. Not supported on all TextLCDs



604	Labview	Manual

	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FIE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Abc	source
	source describes the origin of the error or warning.

5.18.16 TextSetCharacter.vi

TextSetCharacter.vi

Set a custom character. See the product manual for more information



1321	that no error occurred. code
<u>abc</u>	code is the error or warning code. source
	source describes the origin of the error or warning.
132	index
1321	The custom character index (8-15) var1
[]]]	The first part of the custom character var2
) []32	The second part of the custom character Device Out
	Same as Device In error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.

5.18.17 TextSetContrast.vi

TextSetContrast.vi

Set the last set contrast value

Device In <u>Construct</u> Device Out Contrast 5 contrast contrast 5 contrast 5 contrast 6 co	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
1321	code
	code is the error or warning code.
<u>abc</u>	source
	source describes the origin of the error or warning.
[132]	Contrast
	The contrast (0-255).
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

© 2014 Phidgets Inc.

	VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Pabe	source
	source describes the origin of the error or warning.

5.18.18 TextSetCursorBlinkState.vi

TextSetCursorBlinkState.vi

Set the cursor blink state

Device In Curror Device C Cursor Blink error in (no error)	Dut
1321	Device In
	Device # Identification. error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred
1321	code
abch	code is the error or warning code. source

	source describes the origin of the error or warning.
TF	Cursor Blink
	Set the cursor blink state
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FIE	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
Mabe	source
	source describes the origin of the error or

warning.

Device In

Device # Identification.

error in (no error)

5.18.19 TextSetCursorState.vi

TextSetCursorState.vi

Set the cursor visible state



	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
ITT	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
TF	Turn Cursor ON
	Set the state of the cursor
<u>)132</u>	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
FTF	status
N 202	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
FT3	code
	code is the error or warning code.
<u>babc</u>	source
	source describes the origin of the error or warning.

5.18.20 TextSetDisplayChar.vi

TextSetDisplayChar.vi

Set a single character on the display

Character — Device Out	
row - row error out	
error in (no error)	
132	Device In
	Device # Identification.
	error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abci	source
	source describes the origin of the error or warning.
132	row
	The row index
132	column
	The column index
abci	character
	The character to display
132	Device Out

	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
) [32]	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or

warning.

Device In

VIs.

status

Device # Identification.

error in can accept error information wired

information to decide if any functionality should be bypassed in the event of errors from other

from VIs previously called. Use this

error in (no error)

5.18.21 TextSetDisplayString.vi

TextSetDisplayString.vi

Set a row on the display



© 2014 Phidgets Inc.

	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
abc	source
	source describes the origin of the error or warning.
[]32]	row
	The row index
abc	string
	The string to display. Make sure this is not longer then TextGetColumnCount
132	Device Out
	Same as Device In
	error out
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
) TF	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
	code is the error or warning code.
<u>labc</u>	source
	source describes the origin of the error or warning.
5.18.22 TextSetScreenIndex.vi

TextSetScreenIndex.vi

Choose the screen to modify

Device In Screen	 Device Out 	
ScreenIndex - 45	error out	
132)		Device In
		Device # Identification.
		error in (no error)
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TF		status
		status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132		code
		code is the error or warning code.
abc		source
		source describes the origin of the error or warning.
132		ScreenIndex
		The index of the screen being selected
132		Device Out
		Same as Device In
		error out
		error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other

	VIs.
F	status
	status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132	code
Pabe	code is the error or warning code. source
	source describes the origin of the error or warning.

5.18.23 TextSetScreenSize.vi

TextSetScreenSize.vi

Set the size of the screen

Device In Size ScreenSize Give error ou error in (no error)	Out It
132)	Device In
	Device # Identification. error in (no error)
	error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.
TFI	status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred.
132)	code
abc	code is the error or warning code. source

source describes the origin of the error or warning.

132 ScreenSize The screen size 132 **Device Out** Same as Device In error out error in can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs. TF status status is TRUE (X) if an error occurred or FALSE (checkmark) to indicate a warning or that no error occurred. 132 code code is the error or warning code. abc source source describes the origin of the error or warning.

6 Phidgets Constants

This section describes each of the Phidgets constants used by different Phidgets.

6.1 CodeInfo

The PhidgetIR CodeInfo structure contains all information needed to transmit a code, apart from the actual code data. Some values can be set to null to select defaults. See the product manual for more information.

Data Type	ltem	Comments
132	bitCount	Number of bits in the code.
1321	encoding	Encoding used to encode the data. This is an enum. Please refer to Phigets Constant -> IREncoding
132)	length	Constant or Variable length encoding. This is an enum. Please refer to Phigets Constant -> IRLength
132	gap	Gap time in us.
132	trail	Trail time in us - can be 0 for none.
132	header [2]	Header pulse and space - can be 0 for none.
132	one [2]	Pulse and Space times to represent a '1' bit, in us.
132	zero [2]	Pulse and Space times to represent a '0' bit, in us.
132)	repeat [26]	A series or pulse and space times to represent the repeat code. Start and end with pulses and null terminate. Set to 0 for none.
132	min_repeat	Minimum number of times to repeat a code on transmit.
[U8]	toggle_mas k [16]	Bit toggles, which are applied to the code after each transmit.
1321	carrierFrequ ency	Carrier frequency in Hz - defaults to 38kHz.
132	dutyCycle	Duty Cycle in percent (10-50). Defaults to 33.

6.2 Frequency Filter Mode

An enum value with the following definition:

Value	Comments
ZERO $CROSSING = 1$	Phidget responds to Zero Crossing
LOGIC LEVEL = 2	Phiget responds to logic levels

6.3 IREncoding

The PhidgetIR supports these data encodings:

Value	Comments
PHIDGET_IR_ENCODING_UNKNOWN	Unknown - the default value
= 1,	
PHIDGET IR ENCODING $SPACE = 2$,	Space encoding, or Pulse Distance Modulation
PHIDGET IR ENCODING PULSE $= 3$,	Pulse encoding, or Pulse Width Modulation
PHIDGET IR ENCODING BIPHASE = 4,	Bi-Phase, or Manchester encoding
PHIDGET IR ENCODING $RC5 = 5$,	RC5 - a type of Bi-Phase encoding
PHIDGET IR ENCODING $RC6 = 6$,	RC6 - a type of Bi-Phase encoding
Others	Undefined

6.4 IRLength

The PhidgetIR supports these encoding lengths:

Value	Comments
PHIDGET_IR_LENGTH_UNKNOWN = 1,	Unknown - the default value
PHIDGET_IR_LENGTH_CONSTANT = 2,	Constant - the bitstream + gap length is constant
PHIDGET_IR_LENGTH_VARIABLE = 3,	Variable - the bitstream has a variable length with a
	constant gap
Others	Undefined

6.5 ServoType

An enum value with the following definition:

Value	Comments
PHIDGET_SERVO_DEFAULT = 1,	Default - This is what the servo API been
	historically used, originally based on the Futaba FP-
	S148
PHIDGET_SERVO_RAW_us_MODE = 2,	Raw us mode - all position, velocity, acceleration
	functions are specified in microseconds rather then
	degrees
PHIDGET SERVO HITEC HS322HD = 3.	HiTec HS-322HD Standard Servo
PHIDGET_SERVO_HITEC_HS5245MG =	HiTec HS-5245MG Digital Mini Servo
4,	
PHIDGET SERVO HITEC 805BB = 5,	HiTec HS-805BB Mega Quarter Scale Servo
PHIDGET SERVO HITEC HS422 = 6,	HiTec HS-422 Standard Servo

PHIDGET_SERVO_TOWERPRO_MG90 =	Tower Pro MG90 Micro Servo
7,	
PHIDGET_SERVO_HITEC_HSR1425CR	HiTec HSR-1425CR Continuous Rotation Servo
= 8,	
PHIDGET SERVO HITEC HS785HB = 9,	HiTec HS-785HB Sail Winch Servo
PHIDGET_SERVO_HITEC_HS485HB =	HiTec HS-485HB Deluxe Servo
10,	
PHIDGET_SERVO_HITEC_HS645MG =	HiTec HS-645MG Ultra Torque Servo
11,	
PHIDGET SERVO HITEC 815BB = 12,	HiTec HS-815BB Mega Sail Servo
PHIDGET_SERVO_FIRGELLI_L12_30_50	Firgelli L12 Linear Actuator 30mm 50:1
06 R = 13,	
PHIDGET_SERVO_FIRGELLI_L12_50_10	Firgelli L12 Linear Actuator 50mm 100:1
$0 \ 06 \ R = 14,$	
PHIDGET_SERVO_FIRGELLI_L12_50_21	Firgelli L12 Linear Actuator 50mm 210:1
$0 \ 06 \ R = 15,$	
PHIDGET_SERVO_FIRGELLI_L12_100_5	Firgelli L12 Linear Actuator 100mm 50:1
$0 \ 06 \ R = 16,$	
PHIDGET_SERVO_FIRGELLI_L12_100_1	Firgelli L12 Linear Actuator 100mm 100:1
00 06 R = 17,	
PHIDGET_SERVO_USER_DEFINED =	Undefined
others	

6.6 ThermocoupleType

An enum value with the following definition:

Value	Comments
PHIDGET_TEMPERATURE_SENSOR_K_	K-Type thermocouple
TYPE = 1,	
PHIDGET_TEMPERATURE_SENSOR_J_	J-Type thermocouple
TYPE = 2,	
PHIDGET_TEMPERATURE_SENSOR_E_	E-Type thermocouple
TYPE = 3,	
PHIDGET_TEMPERATURE_SENSOR_T_	T-Type thermocouple

TYPE = 4,	
PHIDGET_SERVO_USER_DEFINED =	Undefined
others	

Phidgets Inc.

Unit 1, 6115 4th Street S.E. Calgary, AB Canada T2H 2H9 Telephone: 1-403-282-7335 Facsimile: 1-403-282-7332 E-mail: support@phidgets.com Web site: www.phidgets.com