

This document provides additional assistance with wiring your Extron IP Link Pro Control Processor to your device. Different components may require a different wiring scheme than those listed below.

For complete operating instructions, refer to the user's manual for the specific IP Link Pro Control Processor or the documentation supplied by the manufacturer of the controlled device.

For more information on using Global Scriptor Modules, refer to the "[Guide to Using Scriptor Modules](#)" document.

Device Specifications

Device Type: Lighting Control
Manufacturer: Lutron
Firmware Version: N/A
Model(s): GRX-RS232, GRX-CI-RS232, GRX-IA-CI-RS232, GRX-CI-NWK-E, GRX-IA-CI-NWK-E, GRX-3106

Tested on the Following Software and Firmware Versions

IP Link Pro Control Processor Firmware	Global Scriptor Version
2.08.0002-b001	1.4.2

Version History

Module Version	Date	Notes
1_1_1_0	7/10/2018	Fixed Scene Status. Added state 'Missing' to Scene Status. Added Firmware Version. Renamed Zone Lower/Raise and Zone Lower/Raise Stop to Zone Lower Raise and Zone Lower Raise Stop
1_0_1_0	1/5/2017	Initial Version

Module Notes

- Unidirectional variable must be set to 'True' if status is not required. Default value is 'False'.
Example: `InterfaceName.Unidirectional = 'True'`
- connectionCounter variable must be set to the number of queries that will be sent to the device before displaying 'Disconnected' if no response is received. Default value is 15.
Example: `InterfaceName.connectionCounter = 5`
- If login credentials are required, devicePassword and deviceUsername must be set accordingly.
deviceUsername default value is nwk respectively.
Example: `InterfaceName.deviceUsername = 'nwk'`
- Models with "RS-232" in its name support serial control only. Models with "E" in its name support Ethernet control only. GRX-3106 supports both serial and Ethernet.

Supported Classes and Examples

SerialClass
<code>InterfaceName = ModuleName.SerialClass(ProcessorName, 'COM1', Model='GRX-RS232')</code>
SerialOverEthernetClass
<code>InterfaceName = ModuleName.SerialOverEthernetClass('192.168.254.254', 2001, Model='GRX-RS232')</code>
EthernetClass
<code>InterfaceName = ModuleName.EthernetClass('192.168.254.254', 23, Model='GRX-RS232')</code>

Control Commands

Format with Qualifier:

```
InterfaceName.Set(Command, Value, {'Qualifier Key': 'Qualifier Value'})
```

Format without Qualifier:

```
InterfaceName.Set(Command, Value)
```

Command SceneLock	Value 'Add'	Value 'Remove'
Qualifier Key 'Control Unit'	Qualifier Value '1' – '8'	
# SceneLock example InterfaceName.Set('SceneLock', 'Add', {'Control Unit': '1'})		
Command SelectScene	Value '0' – '16'	
Qualifier Key 'Control Unit'	Qualifier Value '1' – '8'	
# SelectScene example InterfaceName.Set('SelectScene', '0', {'Control Unit': '1'})		
Command Sequence	Value 'Add'	Value 'Remove'
Qualifier Key 'Control Unit'	Qualifier Value '1' – '8'	
# Sequence example InterfaceName.Set('Sequence', 'Add', {'Control Unit': '1'})		
Command SetControlUnitZoneIntensities	Value 0 to 99 in steps of 1	
Qualifier Key 'Control Unit'	Qualifier Value '1' – '8'	
Qualifier Key 'Fade Time Duration'	Qualifier Value '0' – '60'	
Qualifier Key 'Fade Time Units'	Qualifier Value 'Seconds'	Qualifier Value 'Minutes'
Qualifier Key 'Zone'	Qualifier Value '1' – '8'	
# SetControlUnitZoneIntensities example InterfaceName.Set('SetControlUnitZoneIntensities', 99, {'Control Unit': '1', 'Fade Time Duration': '0', 'Fade Time Units': 'Seconds', 'Zone': '1'})		
Command ZoneLock	Value 'Add'	Value 'Remove'

Global Scripter Module Communication Sheet

Qualifier Key 'Control Unit'	Qualifier Value '1' – '8'	
# ZoneLock example InterfaceName.Set('ZoneLock', 'Add', {'Control Unit': '1'})		
Command ZoneLowerRaise	Value 'Lower'	Value 'Raise'
Qualifier Key 'Control Unit'	Qualifier Value '1' – '8'	
Qualifier Key 'Zone'	Qualifier Value '0' – '8'	Qualifier Value 'All'
# ZoneLowerRaise example InterfaceName.Set('ZoneLowerRaise', 'Lower', {'Control Unit': '1', 'Zone': '0'})		
Command ZoneLowerRaiseStop	Value 'Lower Stop'	Value 'Raise Stop'
# ZoneLowerRaiseStop example InterfaceName.Set('ZoneLowerRaiseStop', 'Lower Stop')		

Status Available

For all commands, call Update to receive the latest status. ConnectionStatus does not support the Update function and is triggered by the device providing a successful response to other Update function calls.

Format with Qualifier:

```
InterfaceName.Update(Command, {'Qualifier Key': 'Qualifier Value'})
Value = InterfaceName.ReadStatus(Command, {'Qualifier Key': 'Qualifier Value'})
InterfaceName.SubscribeStatus(Command, {'Qualifier Key': 'Qualifier Value'}, FeedbackHandler)
FeedbackHandler will be called only when the specified qualifier gets a new status.
```

Format without Qualifier:

```
InterfaceName.Update(Command)
Value = InterfaceName.ReadStatus(Command)
InterfaceName.SubscribeStatus(Command, None, FeedbackHandler)
FeedbackHandler will be called when any qualifier gets a new status.
```

Command	Value	Value
ConnectionStatus	'Connected'	'Disconnected'
# ConnectionStatus examples Value = InterfaceName.ReadStatus('ConnectionStatus') InterfaceName.SubscribeStatus('ConnectionStatus', None, FeedbackHandler)		
Command	Value	
FirmwareVersion	'String'	
# FirmwareVersion examples InterfaceName.Update('FirmwareVersion') Value = InterfaceName.ReadStatus('FirmwareVersion') InterfaceName.SubscribeStatus('FirmwareVersion', None, FeedbackHandler)		
Command	Value	
ReadControlUnitZoneIntensities	0 – 99	
Qualifier Key	Qualifier Value	
'Control Unit'	'1' – '8'	
Qualifier Key	Qualifier Value	
'Zone'	'1' – '8'	
# ReadControlUnitZoneIntensities examples InterfaceName.Update('ReadControlUnitZoneIntensities', {'Control Unit': '1'}) Value = InterfaceName.ReadStatus('ReadControlUnitZoneIntensities', {'Control Unit': '1', 'Zone': '1'}) InterfaceName.SubscribeStatus('ReadControlUnitZoneIntensities', None, FeedbackHandler)		
Command	Value	Value
SceneStatus	'0' – '16'	'Missing'
Qualifier Key	Qualifier Value	
'Control Unit'	'1' – '8'	
# SceneStatus examples		

```
InterfaceName.Update('SceneStatus', {'Control Unit': '1'})  
Value = InterfaceName.ReadStatus('SceneStatus', {'Control Unit': '1'})  
InterfaceName.SubscribeStatus('SceneStatus', None, FeedbackHandler)
```

Cable and Adapter Requirements

Captive Screw to Male DB9 RS-232 Serial Cable

Notes for the Device

Serial communication

Port Type: RS-232

Baud Rate: 9600

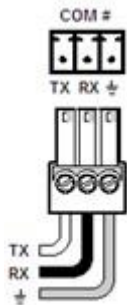
Data Bits: 8

Parity: None

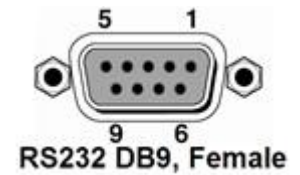
Stop Bits: One

Flow Control: None

Pin Assignments Diagram



Signal	Main Cable	Pin	Signal
TxD		2	TxD
RxD		3	RxD
GND		5	GND



Network communication

When configuring the Ethernet module, be sure device settings match those of the Global Scripter ethernet interface

Port Type:	Ethernet
Default Port:	23
Logon Credentials Supported:	No
Default Username:	nwk
Multi-Connection	Undetermined
Capabilities:	
Port Changeability:	Yes

Ethernet Module Configuration Description

Please refer to user manual for settings and changes to the network communication

Notes for the Device

Only Usernames are supported for logon credentials

Appendix A. Set Commands

Scene Lock Add Control Unit 1	:SL+1\x0D\x0A
Scene Lock Remove Control Unit 1	:SL-1\x0D\x0A
Scene Lock Add Control Unit 8	:SL+8\x0D\x0A
Scene Lock Remove Control Unit 8	:SL-8\x0D\x0A
Select Scene 0 Control Unit 1	:A01\x0D\x0A
Select Scene 16 Control Unit 1	:AG1\x0D\x0A
Select Scene 0 Control Unit 8	:A08\x0D\x0A
Select Scene 16 Control Unit 8	:AG8\x0D\x0A
Sequence Add Control Unit 1	:SL+1\x0D\x0A
Sequence Remove Control Unit 1	:SL-1\x0D\x0A
Sequence Add Control Unit 8	:SL+8\x0D\x0A
Sequence Remove Control Unit 8	:SL-8\x0D\x0A
Set Control Unit Zone Intensities 99 Control Unit 1 Fade Time Duration 0 Fade Time Units Seconds Zone 8	: szi 1 0 * * * * * 7F\x0D\x0A
Set Control Unit Zone Intensities 99 Control Unit 1 Fade Time Duration 60 Fade Time Units Minutes Zone 8	: szi 1 77 * * * * * 7F\x0D\x0A
Set Control Unit Zone Intensities 99 Control Unit 1 Fade Time Duration 60 Fade Time Units Seconds Zone 8	: szi 1 60 * * * * * 7F\x0D\x0A
Set Control Unit Zone Intensities 99 Control Unit 8 Fade Time Duration 0 Fade Time Units Seconds Zone 8	: szi 8 0 * * * * * 7F\x0D\x0A
Set Control Unit Zone Intensities 99 Control Unit 8 Fade Time Duration 60 Fade Time Units Minutes Zone 8	: szi 8 77 * * * * * 7F\x0D\x0A
Set Control Unit Zone Intensities 99 Control Unit 8 Fade Time Duration 60 Fade Time Units Seconds Zone 8	: szi 8 60 * * * * * 7F\x0D\x0A
Zone Lock Add Control Unit 1	:ZL+1\x0D\x0A
Zone Lock Remove Control Unit 1	:ZL-1\x0D\x0A
Zone Lock Add Control Unit 8	:ZL+8\x0D\x0A
Zone Lock Remove Control Unit 8	:ZL-8\x0D\x0A
Zone Lower Raise Lower Control Unit 1 Zone 0	:D10\x0D\x0A
Zone Lower Raise Raise Control Unit 1 Zone 0	:B10\x0D\x0A
Zone Lower Raise Lower Control Unit 1 Zone 8	:D18\x0D\x0A
Zone Lower Raise Raise Control Unit 1 Zone 8	:B18\x0D\x0A

Global Scripter Module Communication Sheet

Revision: 7/10/2018

Zone Lower Raise Lower Control Unit 1 Zone All	:D1\x0D\x0A
Zone Lower Raise Raise Control Unit 1 Zone All	:B1\x0D\x0A
Zone Lower Raise Lower Control Unit 8 Zone 0	:D80\x0D\x0A
Zone Lower Raise Raise Control Unit 8 Zone 0	:B80\x0D\x0A
Zone Lower Raise Lower Control Unit 8 Zone 8	:D88\x0D\x0A
Zone Lower Raise Raise Control Unit 8 Zone 8	:B88\x0D\x0A
Zone Lower Raise Lower Control Unit 8 Zone All	:D8\x0D\x0A
Zone Lower Raise Raise Control Unit 8 Zone All	:B8\x0D\x0A
Zone Lower Raise Stop Lower Stop	:E\x0D\x0A

Appendix B. Update Commands

Firmware Version	:V\x0D\x0A
Read Control Unit Zone Intensities Control Unit 1 Zone 1	:rzi 1\x0D\x0A
Read Control Unit Zone Intensities Control Unit 1 Zone 8	:rzi 1\x0D\x0A
Read Control Unit Zone Intensities Control Unit 8 Zone 1	:rzi 8\x0D\x0A
Read Control Unit Zone Intensities Control Unit 8 Zone 8	:rzi 8\x0D\x0A
Scene Status Control Unit 8	:G\x0D\x0A