

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:	Video Projector
Manufacturer:	Epson
Firmware Version:	Main: 12011273HUWWP500 Video2: 12L2HPMP500 Sub: 0ZB4HPP100 Sub2: 11C1HPP410 HDMI: 11.55.25.51 HDMI2: 11.55.25.51 HDBaseT: V13090C00 AC Monitor: 20
Model(s):	EB-PU2010W, CB-PU2010W, CB-PU2010B, EB-PU2010B, EB-PU1006W, CB-PU1006W, EB-PU1007B, CB-PU1007B, EB-PU1007W, CB-PU1007W, EB-PU1008B, CB-PU1008B, EB- PU1008W, CB-PU1008W

Tested on the Following Software and Firmware Versions

IP Link Pro Control Processor Firmware	Global Scriptor Version
3.15.0000-b004	2.14.0

Version History

Module Version	Date	Notes
1_0_2_0	1/24/2022	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`

Supported Classes and Examples

SerialClass
<code>InterfaceName = ModuleName.SerialClass(ProcessorName, 'COM1', Model='EB-PU2010W')</code>
SerialOverEthernetClass
<code>InterfaceName = ModuleName.SerialOverEthernetClass('192.168.254.254', 2001, Model='EB-PU2010W')</code>
EthernetClass
<code>InterfaceName = ModuleName.EthernetClass('192.168.254.254', 3629, Model='EB-PU2010W')</code>

Control Commands

Format with Qualifier:

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

Format without Qualifier:

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

Command AspectRatio ¹	Value 'Normal' 'Auto' 'Native'	Value '4:3' 'Full' 'V-Zoom'	Value '16:9' 'H-Zoom'
# AspectRatio example InterfaceName.Set('AspectRatio', 'Normal')			
Command AutoImage	Value None		
# AutoImage example InterfaceName.Set('AutoImage', None)			
Command AVMute	Value 'On'	Value 'Off'	
# AVMute example InterfaceName.Set('AVMute', 'On')			
Command Freeze	Value 'On'	Value 'Off'	
# Freeze example InterfaceName.Set('Freeze', 'On')			
Command Input	Value 'Computer' 'LAN' 'DVI-D'	Value 'HDMI' 'SDI' ³	Value 'USB' ² 'HDBaseT'
# Input example InterfaceName.Set('Input', 'Computer')			
Command LampMode	Value 'Normal' 'Extended'	Value 'Medium' 'Custom'	Value 'Quiet'
# LampMode example InterfaceName.Set('LampMode', 'Normal')			
Command MenuNavigation	Value 'Up' 'Right' 'ESC'	Value 'Down' 'Menu'	Value 'Left' 'Enter'
# MenuNavigation example InterfaceName.Set('MenuNavigation', 'Up')			
Command Power	Value 'On'	Value 'Off'	
# Power example InterfaceName.Set('Power', 'On')			
Command Volume	Value 0 to 20 in steps of 1		
# Volume example InterfaceName.Set('Volume', 20)			

¹ Availability of states depends on the current Input and Menu → Extended → Display → Screen → Screen Type. Note, this setting is not present when Menu → Settings → Content Playback is set to On.

² Available when Menu → Settings → Content Playback is set to On.

³ Only supported for PU2010 models

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 AspectRatio ¹	Value 'Normal' 'Auto' 'Native'	Value '4:3' 'Full' 'V-Zoom'	Value '16:9' 'H-Zoom'
# AspectRatio example InterfaceName.Update('AspectRatio') Value = InterfaceName.ReadStatus('AspectRatio') InterfaceName.SubscribeStatus('AspectRatio', None, FeedbackHandler)			
Command AVMute	Value 'On'	Value 'Off'	
# AVMute example InterfaceName.Update('AVMute') Value = InterfaceName.ReadStatus('AVMute') InterfaceName.SubscribeStatus('AVMute', None, FeedbackHandler)			
Command ConnectionStatus	Value 'Connected'	Value 'Disconnected'	
# ConnectionStatus example Value = InterfaceName.ReadStatus('ConnectionStatus') InterfaceName.SubscribeStatus('ConnectionStatus', None, FeedbackHandler)			
Command DeviceStatus	Value 'Normal' 'High Internal Temperature Error' 'Cinema Filter Error' 'Subsystem Error' 'Power Supply Unit Error (Ballast)' 'Cooling System Error (Pump)' 'Exhaust Shutter Error'	Value 'Fan Error' 'Lamp Error' 'Electric Dual-Layered Capacitor is Disconnected' 'Low Air Flow Error' 'Shutter Error' 'Static Iris Error' 'Obstacle Detection Error'	Value 'Lamp Failure at Power On' 'Open Lamp Cover Door Error' 'Auto Iris Error' 'Air Filter Air Flow Sensor Error' 'Cooling System Error (Peltiert Element)' 'Power Supply Unit Error (Disagreement of Ballast)' 'IF Board Discernment Error'

Global Scriptor Module Communication Sheet

Revision: 1/24/2022

	'Communication Error of "Stack Projection Function"'		
# DeviceStatus example InterfaceName.Update('DeviceStatus') Value = InterfaceName.ReadStatus('DeviceStatus') InterfaceName.SubscribeStatus('DeviceStatus', None, FeedbackHandler)			
Command Freeze	Value 'On'	Value 'Off'	
# Freeze example InterfaceName.Update('Freeze') Value = InterfaceName.ReadStatus('Freeze') InterfaceName.SubscribeStatus('Freeze', None, FeedbackHandler)			
Command Input	Value 'Computer' 'LAN' 'DVI-D'	Value 'HDMI' 'SDI' ³	Value 'USB' ² 'HDBaseT'
# Input example InterfaceName.Update('Input') Value = InterfaceName.ReadStatus('Input') InterfaceName.SubscribeStatus('Input', None, FeedbackHandler)			
Command LampMode	Value 'Normal' 'Extended'	Value 'Medium' 'Custom'	Value 'Quiet'
# LampMode example InterfaceName.Update('LampMode') Value = InterfaceName.ReadStatus('LampMode') InterfaceName.SubscribeStatus('LampMode', None, FeedbackHandler)			
Command LampUsage	Value Hours		
# LampUsage example InterfaceName.Update('LampUsage') Value = InterfaceName.ReadStatus('LampUsage') InterfaceName.SubscribeStatus('LampUsage', None, FeedbackHandler)			
Command OperationHours	Value Hours		
# OperationHours example InterfaceName.Update('OperationHours') Value = InterfaceName.ReadStatus('OperationHours') InterfaceName.SubscribeStatus('OperationHours', None, FeedbackHandler)			
Command Power	Value 'On' 'Cooling Down'	Value 'Off'	Value 'Warming Up'
# Power example InterfaceName.Update('Power') Value = InterfaceName.ReadStatus('Power') InterfaceName.SubscribeStatus('Power', None, FeedbackHandler)			
Command Volume	Value 0 to 20 in steps of 1		
# Volume example InterfaceName.Update('Volume') Value = InterfaceName.ReadStatus('Volume') InterfaceName.SubscribeStatus('Volume', None, FeedbackHandler)			

¹ Availability of states depends on the current Input and Menu → Extended → Display → Screen → Screen Type. Note, this setting is not present when Menu → Settings → Content Playback is set to On.

² Available when Menu → Settings → Content Playback is set to On.

³ Only supported for PU2010 models

Cable and Adapter Requirements

Captive Screw to Female DB9 RS-232 Serial Cable

Notes for the Device

To ensure the functionality of the module, please set the following menu options and restart the projector:

- Menu → Extended → HDBaseT → Control Communications → Off
- Menu → Extended → HDBaseT → Extron XTP → Off

For HDBaseT control, please ensure that “A/V Settings” needs to be set to “Always On” within the Extended Menu.

Serial communication

Port Type: RS-232

Baud Rate: 9600

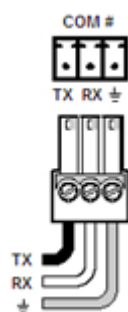
Data Bits: 8

Parity: None

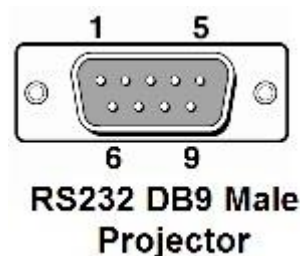
Stop Bits: One

Flow Control: None

Pin Assignments Diagram



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



Network communication

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

Port Type: Ethernet (TCP)

Default Port: 3629

Logon Credentials Supported: No

Multi-Connection Capabilities: Yes

Port Changeability: No

Ethernet Module Configuration Description

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

Notes for the Device

To ensure the functionality of the module, please set the following menu options and restart the projector:

- Menu → Extended → HDBaseT → Control Communications → Off
- Menu → Extended → HDBaseT → Extron XTP → Off
- Under Menu → Extended, if A/V Settings → A/V Output is set to **While Projecting**, set **Standby Mode to Communication On**
- Menu → Network → Network Configuration → Others → Command Communication → Compatible

Appendix A. Set Commands

Aspect Ratio 16:9	ASPECT 20\x0D
Aspect Ratio 4:3	ASPECT 10\x0D
Aspect Ratio Auto	ASPECT 30\x0D
Aspect Ratio Full	ASPECT 40\x0D
Aspect Ratio H-Zoom	ASPECT 50\x0D
Aspect Ratio Native	ASPECT 60\x0D
Aspect Ratio Normal	ASPECT 00\x0D
Aspect Ratio V-Zoom	ASPECT A0\x0D
Auto Image None	KEY 4A\x0D
AV Mute Off	MUTE OFF\x0D
AV Mute On	MUTE ON\x0D
Freeze Off	FREEZE OFF\x0D
Freeze On	FREEZE ON\x0D
Input Computer	SOURCE 10\x0D
Input DVI-D	SOURCE A0\x0D
Input HDBaseT	SOURCE 80\x0D
Input HDMI	SOURCE 30\x0D
Input LAN	SOURCE 53\x0D
Input SDI	SOURCE 60\x0D
Input USB	SOURCE 52\x0D
Lamp Mode Custom	LUMINANCE 05\x0D
Lamp Mode Extended	LUMINANCE 04\x0D
Lamp Mode Medium	LUMINANCE 02\x0D
Lamp Mode Normal	LUMINANCE 00\x0D
Lamp Mode Quiet	LUMINANCE 01\x0D
Menu Navigation Down	KEY 36\x0D
Menu Navigation Enter	KEY 16\x0D
Menu Navigation ESC	KEY 05\x0D
Menu Navigation Left	KEY 37\x0D
Menu Navigation Menu	KEY 03\x0D
Menu Navigation Right	KEY 38\x0D
Menu Navigation Up	KEY 35\x0D
Power Off	PWR OFF\x0D
Power On	PWR ON\x0D
Volume 0	VOL 0\x0D
Volume 20	VOL 243\x0D

Appendix B. Update Commands

Aspect Ratio	ASPECT?\x0D
AV Mute	MUTE?\x0D
Device Status	ERR?\x0D
Freeze	FREEZE?\x0D
Input	SOURCE?\x0D
Lamp Mode	LUMINANCE?\x0D
Lamp Usage	LAMP?\x0D
Operation Hours	ONTIME?\x0D
Power	PWR?\x0D
Volume	VOL?\x0D