

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: Camera
Manufacturer: Bose
Firmware Version: Software: 0.14.11_4994ebc
Camera: 23.1
Model(s): VB1

Tested on the Following Software and Firmware Versions

IP Link Pro Control Processor Firmware	Global Scriptor Version
3.16.0000-b013	2.16.1

Version History

Module Version	Date	Notes
1_4_0_1	9/8/2022	Added property and setter functions for devicePassword.
1_4_0_0	8/31/2022	Added commands: <ul style="list-style-type: none">• Building• Camera State• Ethernet MAC Address• Ethernet State• Ethernet Static IP Address• Floor• GPI Mute• HDMI Enable• Reboot• Room• System Firmware Version

**Global Scriptor Module
Communication Sheet**

		<ul style="list-style-type: none">• System Name• System Serial Number• USB Call Status• USB Connection• WiFi MAC Address• WiFi State WiFi Static IP Address
1_2_0_0	8/4/2022	Added Bluetooth, Bluetooth Button, Bluetooth Connection, Bluetooth Pairing, and Bluetooth Stream.
1_0_1_0	5/12/2022	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`
- If login credentials are required, devicePassword must be set accordingly. Default value is Bose123!. Please note that some commands may require admin access and admin credentials will need to be used.
Example: `InterfaceName.devicePassword = 'extron'`
- A command pacing of 0.5 seconds is recommended for this module between all commands.

Supported Class and Example

EthernetClass
<code>InterfaceName = ModuleName.EthernetClass('192.168.254.254', 443, Model='VB1')</code>

Control Commands

Format with Qualifier:

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

Format without Qualifier:

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

Command	Value	Value	
Autoframing	'On'	'Off'	
# Autoframing example InterfaceName.Set('Autoframing', 'On')			
Command	Value	Value	Value
AutoframingBorderSize	'Small'	'Normal'	'Large'
# AutoframingBorderSize example InterfaceName.Set('AutoframingBorderSize', 'Small')			
Command	Value	Value	
AutoframingHeadroomAdjustment	'Sitting'	'Standing'	
# AutoframingHeadroomAdjustment example InterfaceName.Set('AutoframingHeadroomAdjustment', 'Sitting')			
Command	Value	Value	Value
AutoframingPanTiltSpeed	'Slow'	'Normal'	'Fast'
# AutoframingPanTiltSpeed example InterfaceName.Set('AutoframingPanTiltSpeed', 'Slow')			
Command	Value	Value	Value
AutoframingZoomSpeed	'Slow'	'Normal'	'Fast'
# AutoframingZoomSpeed example InterfaceName.Set('AutoframingZoomSpeed', 'Slow')			
Command	Value	Value	
Bluetooth	'On'	'Off'	
# Bluetooth example InterfaceName.Set('Bluetooth', 'On')			
Command	Value	Value	
BluetoothButton	'On'	'Off'	
# BluetoothButton example InterfaceName.Set('BluetoothButton', 'On')			
Command	Value	Value	
BluetoothPairing	'On'	'Off'	
# BluetoothPairing example InterfaceName.Set('BluetoothPairing', 'On')			
Command	Value	Value	
HDMIEnable	'On'	'Off'	
# HDMIEnable example InterfaceName.Set('HDMIEnable', 'On')			
Command	Value	Value	
LoudspeakerMute	'On'	'Off'	
# LoudspeakerMute example InterfaceName.Set('LoudspeakerMute', 'On')			
Command	Value		
LoudspeakerVolume	0 to 100 in steps of 1		
# LoudspeakerVolume example InterfaceName.Set('LoudspeakerVolume', 100)			

Global Scripter Module Communication Sheet

Command MicrophoneMute	Value 'On'	Value 'Off'	
# MicrophoneMute example InterfaceName.Set('MicrophoneMute', 'On')			
Command Pan	Value -10 to 10 in steps of 1		
# Pan example InterfaceName.Set('Pan', 10)			
Command PresetRecall	Value 'Home'	Value 'Preset 1'	Value 'Preset 2'
# PresetRecall example InterfaceName.Set('PresetRecall', 'Home')			
Command PresetSave	Value 'Home'	Value 'Preset 1'	Value 'Preset 2'
# PresetSave example InterfaceName.Set('PresetSave', 'Home')			
Command Reboot	Value None		
# Reboot example InterfaceName.Set('Reboot', None)			
Command Tilt	Value -10 to 10 in steps of 1		
# Tilt example InterfaceName.Set('Tilt', 10)			
Command UltrasoundCommand	Value None		
# UltrasoundCommand example InterfaceName.Set('UltrasoundCommand', None)			
Command Zoom	Value 1 to 10 in steps of 1		
# Zoom example InterfaceName.Set('Zoom', 10)			

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	Value
Autoframing	'On'	'Off'	
# Autoframing example InterfaceName.Update('Autoframing') Value = InterfaceName.ReadStatus('Autoframing') InterfaceName.SubscribeStatus('Autoframing', None, FeedbackHandler)			
Command	Value	Value	Value
AutoframingBorderSize	'Small'	'Normal'	'Large'
# AutoframingBorderSize example InterfaceName.Update('AutoframingBorderSize') Value = InterfaceName.ReadStatus('AutoframingBorderSize') InterfaceName.SubscribeStatus('AutoframingBorderSize', None, FeedbackHandler)			
Command	Value	Value	
AutoframingHeadroomAdjustment	'Sitting'	'Standing'	
# AutoframingHeadroomAdjustment example InterfaceName.Update('AutoframingHeadroomAdjustment') Value = InterfaceName.ReadStatus('AutoframingHeadroomAdjustment') InterfaceName.SubscribeStatus('AutoframingHeadroomAdjustment', None, FeedbackHandler)			
Command	Value	Value	Value
AutoframingPanTiltSpeed	'Slow'	'Normal'	'Fast'
# AutoframingPanTiltSpeed example InterfaceName.Update('AutoframingPanTiltSpeed') Value = InterfaceName.ReadStatus('AutoframingPanTiltSpeed') InterfaceName.SubscribeStatus('AutoframingPanTiltSpeed', None, FeedbackHandler)			
Command	Value	Value	Value
AutoframingZoomSpeed	'Slow'	'Normal'	'Fast'
# AutoframingZoomSpeed example InterfaceName.Update('AutoframingZoomSpeed') Value = InterfaceName.ReadStatus('AutoframingZoomSpeed') InterfaceName.SubscribeStatus('AutoframingZoomSpeed', None, FeedbackHandler)			
Command	Value	Value	
Bluetooth	'On'	'Off'	
# Bluetooth example InterfaceName.Update('Bluetooth') Value = InterfaceName.ReadStatus('Bluetooth') InterfaceName.SubscribeStatus('Bluetooth', None, FeedbackHandler)			

Global Scripter Module Communication Sheet

Command BluetoothButton	Value 'On'	Value 'Off'	
# BluetoothButton example InterfaceName.Update('BluetoothButton') Value = InterfaceName.ReadStatus('BluetoothButton') InterfaceName.SubscribeStatus('BluetoothButton', None, FeedbackHandler)			
Command BluetoothConnection	Value 'Connected'	Value 'Disconnected'	
# BluetoothConnection example InterfaceName.Update('BluetoothConnection') Value = InterfaceName.ReadStatus('BluetoothConnection') InterfaceName.SubscribeStatus('BluetoothConnection', None, FeedbackHandler)			
Command BluetoothPairing	Value 'On'	Value 'Off'	
# BluetoothPairing example InterfaceName.Update('BluetoothPairing') Value = InterfaceName.ReadStatus('BluetoothPairing') InterfaceName.SubscribeStatus('BluetoothPairing', None, FeedbackHandler)			
Command BluetoothStream	Value 'Active'	Value 'Inactive'	
# BluetoothStream example InterfaceName.Update('BluetoothStream') Value = InterfaceName.ReadStatus('BluetoothStream') InterfaceName.SubscribeStatus('BluetoothStream', None, FeedbackHandler)			
Command Building	Value 'String'		
# Building example InterfaceName.Update('Building') Value = InterfaceName.ReadStatus('Building') InterfaceName.SubscribeStatus('Building', None, FeedbackHandler)			
Command CameraState	Value 'Active'	Value 'Inactive'	Value 'Upgrading'
# CameraState example InterfaceName.Update('CameraState') Value = InterfaceName.ReadStatus('CameraState') InterfaceName.SubscribeStatus('CameraState', None, FeedbackHandler)			
Command ConnectionStatus	Value 'Connected'	Value 'Disconnected'	
# ConnectionStatus example Value = InterfaceName.ReadStatus('ConnectionStatus') InterfaceName.SubscribeStatus('ConnectionStatus', None, FeedbackHandler)			
Command EthernetMACAddress	Value 'String'		
# EthernetMACAddress example InterfaceName.Update('EthernetMACAddress') Value = InterfaceName.ReadStatus('EthernetMACAddress') InterfaceName.SubscribeStatus('EthernetMACAddress', None, FeedbackHandler)			
Command EthernetState	Value 'Idle' 'Configuration' 'Online'	Value 'Failure' 'Ready'	Value 'Association' 'Disconnect'
# EthernetState example InterfaceName.Update('EthernetState') Value = InterfaceName.ReadStatus('EthernetState') InterfaceName.SubscribeStatus('EthernetState', None, FeedbackHandler)			

Global Scriptor Module Communication Sheet

Command	Value	
EthernetStaticIPAddress	'String'	
# EthernetStaticIPAddress example InterfaceName.Update('EthernetStaticIPAddress') Value = InterfaceName.ReadStatus('EthernetStaticIPAddress') InterfaceName.SubscribeStatus('EthernetStaticIPAddress', None, FeedbackHandler)		
Command	Value	
Floor	'String'	
# Floor example InterfaceName.Update('Floor') Value = InterfaceName.ReadStatus('Floor') InterfaceName.SubscribeStatus('Floor', None, FeedbackHandler)		
Command	Value	Value
GPIMute	'On'	'Off'
# GPIMute example InterfaceName.Update('GPIMute') Value = InterfaceName.ReadStatus('GPIMute') InterfaceName.SubscribeStatus('GPIMute', None, FeedbackHandler)		
Command	Value	Value
HDMIEnable	'On'	'Off'
# HDMIEnable example InterfaceName.Update('HDMIEnable') Value = InterfaceName.ReadStatus('HDMIEnable') InterfaceName.SubscribeStatus('HDMIEnable', None, FeedbackHandler)		
Command	Value	
LoudspeakerLevel	0 – 100	
# LoudspeakerLevel example InterfaceName.Update('LoudspeakerLevel') Value = InterfaceName.ReadStatus('LoudspeakerLevel') InterfaceName.SubscribeStatus('LoudspeakerLevel', None, FeedbackHandler)		
Command	Value	Value
LoudspeakerMute	'On'	'Off'
# LoudspeakerMute example InterfaceName.Update('LoudspeakerMute') Value = InterfaceName.ReadStatus('LoudspeakerMute') InterfaceName.SubscribeStatus('LoudspeakerMute', None, FeedbackHandler)		
Command	Value	
LoudspeakerVolume	0 to 100 in steps of 1	
# LoudspeakerVolume example InterfaceName.Update('LoudspeakerVolume') Value = InterfaceName.ReadStatus('LoudspeakerVolume') InterfaceName.SubscribeStatus('LoudspeakerVolume', None, FeedbackHandler)		
Command	Value	
MicrophoneLevel	0 – 100	
# MicrophoneLevel example InterfaceName.Update('MicrophoneLevel') Value = InterfaceName.ReadStatus('MicrophoneLevel') InterfaceName.SubscribeStatus('MicrophoneLevel', None, FeedbackHandler)		
Command	Value	Value
MicrophoneMute	'On'	'Off'
# MicrophoneMute example InterfaceName.Update('MicrophoneMute') Value = InterfaceName.ReadStatus('MicrophoneMute') InterfaceName.SubscribeStatus('MicrophoneMute', None, FeedbackHandler)		

Global Scriptor Module Communication Sheet

Command Pan	Value -10 to 10 in steps of 1	
# Pan example InterfaceName.Update('Pan') Value = InterfaceName.ReadStatus('Pan') InterfaceName.SubscribeStatus('Pan', None, FeedbackHandler)		
Command Room	Value 'String'	
# Room example InterfaceName.Update('Room') Value = InterfaceName.ReadStatus('Room') InterfaceName.SubscribeStatus('Room', None, FeedbackHandler)		
Command SystemFirmwareVersion	Value 'String'	
# SystemFirmwareVersion example InterfaceName.Update('SystemFirmwareVersion') Value = InterfaceName.ReadStatus('SystemFirmwareVersion') InterfaceName.SubscribeStatus('SystemFirmwareVersion', None, FeedbackHandler)		
Command SystemName	Value 'String'	
# SystemName example InterfaceName.Update('SystemName') Value = InterfaceName.ReadStatus('SystemName') InterfaceName.SubscribeStatus('SystemName', None, FeedbackHandler)		
Command SystemReady	Value 'Ready'	Value 'Not Ready'
# SystemReady example InterfaceName.Update('SystemReady') Value = InterfaceName.ReadStatus('SystemReady') InterfaceName.SubscribeStatus('SystemReady', None, FeedbackHandler)		
Command SystemSerialNumber	Value 'String'	
# SystemSerialNumber example InterfaceName.Update('SystemSerialNumber') Value = InterfaceName.ReadStatus('SystemSerialNumber') InterfaceName.SubscribeStatus('SystemSerialNumber', None, FeedbackHandler)		
Command Tilt	Value -10 to 10 in steps of 1	
# Tilt example InterfaceName.Update('Tilt') Value = InterfaceName.ReadStatus('Tilt') InterfaceName.SubscribeStatus('Tilt', None, FeedbackHandler)		
Command USBCallStatus	Value 'Active'	Value 'Inactive'
# USBCallStatus example InterfaceName.Update('USBCallStatus') Value = InterfaceName.ReadStatus('USBCallStatus') InterfaceName.SubscribeStatus('USBCallStatus', None, FeedbackHandler)		
Command USBConnection	Value 'Connected'	Value 'Disconnected'
# USBConnection example InterfaceName.Update('USBConnection') Value = InterfaceName.ReadStatus('USBConnection') InterfaceName.SubscribeStatus('USBConnection', None, FeedbackHandler)		

Global Scriptor Module Communication Sheet

Command WiFiMACAddress	Value 'String'		
# WiFiMACAddress example InterfaceName.Update('WiFiMACAddress') Value = InterfaceName.ReadStatus('WiFiMACAddress') InterfaceName.SubscribeStatus('WiFiMACAddress', None, FeedbackHandler)			
Command WiFiState	Value 'Idle' 'Configuration' 'Online'	Value 'Failure' 'Ready'	Value 'Association' 'Disconnect'
# WiFiState example InterfaceName.Update('WiFiState') Value = InterfaceName.ReadStatus('WiFiState') InterfaceName.SubscribeStatus('WiFiState', None, FeedbackHandler)			
Command WiFiStaticIPAddress	Value 'String'		
# WiFiStaticIPAddress example InterfaceName.Update('WiFiStaticIPAddress') Value = InterfaceName.ReadStatus('WiFiStaticIPAddress') InterfaceName.SubscribeStatus('WiFiStaticIPAddress', None, FeedbackHandler)			
Command Zoom	Value 1 to 10 in steps of 1		
# Zoom example InterfaceName.Update('Zoom') Value = InterfaceName.ReadStatus('Zoom') InterfaceName.SubscribeStatus('Zoom', None, FeedbackHandler)			

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: 443

Logon Credentials Supported: Yes

Default Password: Bose123!

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