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 Scripter Modules, refer to the "Guide to Using Scripter Modules" document.

Device Specifications

Device Type: Camera
Manufacturer: Panasonic
Firmware Version: N/A
Model(s):   AW-HE100, AW-HE120, AW-HE38H, AW-HE38HK, AW-HE38HW, AW-HE40HKE, AW-HE40HKP, AW-HE40HWE, AW-HE40HWP, AW-HE40SKE, AW-HE40SKP, AW-HE40SWE, AW-HE40SWP, AW-HE50, AW-HE50H, AW-HE50S, AW-HE60, AW-HE60SE, AW-HE65HKMC, AW-HE65HWMC, AW-HE65SKMC, AW-HE65SWMC, AW-HE70HK, AW-HE70HW, AW-HE70SK, AW-HE70SW, AW-UE70, AW-UE70KE, AW-UE70KP, AW-UE70WE, AW-UE70WP, AW-HE40HWPJ9, AW-HE40SWPJ9, AW-HE40HWEJ9, AW-HE40SWEJ9, AW-HE40HKPJ9, AW-HE40SKPJ9, AW-HE40HKEJ9, AW-HE40SKEJ9, AW-UE150WP, AW-UE150KP, AW-UE150WE, AW-UE150KE

Tested on the Following Software and Firmware Versions

IP Link Pro Control Processor Firmware	Global Scripter Version
3.04.0001-b002	2.3.1

Version History

Module Version	Date	Notes
1_6_1_1	1/30/2020	Fixed authentication.
1_6_1_0	4/22/2019	Added Scene File Control command for Ethernet control, for all models starting with: AW-HE38, AW-HE40, AW-HE50, AW-HE60, AW-HE-65, AW-HE70 or AW-UE70.
1_5_1_0	2/13/2019	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
```
InterfaceName = ModuleName.SerialClass(ProcessorName, 'COM1', Model='AW-HE100')
```
SerialOverEthernetClass
```
InterfaceName = ModuleName.SerialOverEthernetClass('192.168.254.254', 2001, Model='AW-HE100')
```
HTTPClass
```
InterfaceName = ModuleName.HTTPClass('192.168.254.254', 80, 'admin', 'password', Model='AW-HE100')
```

Control Commands (Serial)

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

Format with Qualifier:
```
InterfaceName.Set(Command, Value)
```

Command	Value	Value	Value
AutoFocus	'On'	'Off'	

# AutoFocus example 	
InterfaceName.Set('AutoFocus', 'On')			

ExtenderAFControl	'On'	'Off'	

# ExtenderAFControl example 	
InterfaceName.Set('ExtenderAFControl', 'On')			

Focus	'Far'	'Near'	'Stop'
Qualifier Key 'Focus Speed'	Qualifier Value 1 to 49 in steps of 1		

# Focus example 	
InterfaceName.Set('Focus', 'Far', {'Focus Speed': 49})			

Iris	1 to 99 in steps of 1		

# Iris example 	
InterfaceName.Set('Iris', 99)			

IrisMode	'Manual'	'Auto'	

# IrisMode example 	
InterfaceName.Set('IrisMode', 'Manual')			

Pan	'Left'	'Right'	'Stop'
Qualifier Key 'Pan Speed'	Qualifier Value 1 to 49 in steps of 1		

# Pan example 	
InterfaceName.Set('Pan', 'Left', {'Pan Speed': 49})			

Power	'On'	'Off'	

# Power example 	
InterfaceName.Set('Power', 'On')			

Preset	'1' – '100'		
Qualifier Key 'Type'	Qualifier Value 'Save'	Qualifier Value 'Recall'	

# Preset example 	
InterfaceName.Set('Preset', '1', {'Type': 'Save'})			

Tally	'On'	'Off'	

# Tally example 	
InterfaceName.Set('Tally', 'On')			

TallyEnable	'On'	'Off'	

# TallyEnable example 	
InterfaceName.Set('TallyEnable', 'On')			

**Global Scripter Module
Communication Sheet**

Command	Value	Value	Value
Tilt	'Up'	'Down'	'Stop'
Qualifier Key	Qualifier Value		
'Tilt Speed'	1 to 49 in steps of 1		
`# Tilt example` `InterfaceName.Set('Tilt', 'Up', {'Tilt Speed': 49})`			
Command	Value	Value	Value
Zoom	'Tele'	'Wide'	'Stop'
Qualifier Key	Qualifier Value		
'Zoom Speed'	1 to 49 in steps of 1		
`# Zoom example` `InterfaceName.Set('Zoom', 'Tele', {'Zoom Speed': 49})`			

Status Available (Serial)

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
ConnectionStatus	'Connected'	'Disconnected'	
Value = InterfaceName.ReadStatus('ConnectionStatus') InterfaceName.SubscribeStatus('ConnectionStatus', None, FeedbackHandler)			
ExtenderAFControl	'On'	'Off'	

# ExtenderAFControl example 	
InterfaceName.Update('ExtenderAFControl')
Value = InterfaceName.ReadStatus('ExtenderAFControl')
InterfaceName.SubscribeStatus('ExtenderAFControl', None, FeedbackHandler)			

Iris	1 to 99 in steps of 1		

# Iris example 	
InterfaceName.Update('Iris')
Value = InterfaceName.ReadStatus('Iris')
InterfaceName.SubscribeStatus('Iris', None, FeedbackHandler)			

IrisMode	'Manual'	'Auto'	

# IrisMode example 	
InterfaceName.Update('IrisMode')
Value = InterfaceName.ReadStatus('IrisMode')
InterfaceName.SubscribeStatus('IrisMode', None, FeedbackHandler)			

Power	'On'	'Off'	'Starting'

# Power example 	
InterfaceName.Update('Power')
Value = InterfaceName.ReadStatus('Power')
InterfaceName.SubscribeStatus('Power', None, FeedbackHandler)			

Tally	'On'	'Off'	

# Tally example 	
InterfaceName.Update('Tally')
Value = InterfaceName.ReadStatus('Tally')
InterfaceName.SubscribeStatus('Tally', None, FeedbackHandler)			

TallyEnable	'On'	'Off'	

# TallyEnable example 	
InterfaceName.Update('TallyEnable')
Value = InterfaceName.ReadStatus('TallyEnable')
InterfaceName.SubscribeStatus('TallyEnable', None, FeedbackHandler)			

**Global Scripter Module
Communication Sheet**

Control Commands (Ethernet)

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

Format with Qualifier:
```
InterfaceName.Set(Command, Value)
```

Command	Value	Value	Value
AutoFocus	'Auto'	'Manual'	

# AutoFocus example 	
InterfaceName.Set('AutoFocus', 'Auto')			

AutoIris	'On'	'Off'	

# AutoIris example 	
InterfaceName.Set('AutoIris', 'On')			

ColorBar	'On'	'Off'	

# ColorBar example 	
InterfaceName.Set('ColorBar', 'On')			

Detail	'On'	'Off'	'Low'
	'High'		

# Detail example 	
InterfaceName.Set('Detail', 'On')			

Focus	'Far'	'Near'	'Stop'
'Speed' *(Qualifier Key)*	1 to 49 in steps of 1 *(Qualifier Value)*		

# Focus example 	
InterfaceName.Set('Focus', 'Far', {'Speed': 49})			

Installation	'Desktop'	'Hanging'	

# Installation example 	
InterfaceName.Set('Installation', 'Desktop')			

IrisPosition	0 to 20 in steps of 1		

# IrisPosition example 	
InterfaceName.Set('IrisPosition', 20)			

PanTilt	'Left'	'Right'	'Up'
	'Down'	'Stop'	
'Speed' *(Qualifier Key)*	1 to 49 in steps of 1 *(Qualifier Value)*		

# PanTilt example 	
InterfaceName.Set('PanTilt', 'Left', {'Speed': 49})			

Power	'On'	'Standby'	

# Power example 	
InterfaceName.Set('Power', 'On')			

Preset	'1' – '100'		
Qualifier Key	Qualifier Value	Qualifier Value	

**Global Scripter Module
Communication Sheet**

'Type'	'Save'	'Recall'	

# Preset example 	
InterfaceName.Set('Preset', '1', {'Type': 'Save'})			

Command **ResetPanTiltPosition**	Value 'None'		

# ResetPanTiltPosition example 	
InterfaceName.Set('ResetPanTiltPosition', None)			

Command **ResetZoom**	Value 'None'		

# ResetZoom example 	
InterfaceName.Set('ResetZoom', None)			

Command **SceneFileControl**	Value 'Manual 1' 'Full Auto'	Value 'Manual 2'	Value 'Manual 3'

# SceneFileControl example 	
InterfaceName.Set('SceneFileControl', 'Manual 1')			

Command **Tally**	Value 'On'	Value 'Off'	

# Tally example 	
InterfaceName.Set('Tally', 'On')			

Command **TallyInput**	Value 'Enable'	Value 'Disable'	

# TallyInput example 	
InterfaceName.Set('TallyInput', 'Enable')			

Command **Zoom**	Value 'Wide'	Value 'Tele'	Value 'Stop'
Qualifier Key **'Speed'**	Qualifier Value 1 to 49 in steps of 1		

# Zoom example 	
InterfaceName.Set('Zoom', 'Wide', {'Speed': 49})			

Status Available (Ethernet)

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
AutoFocus	'Auto'	'Manual'	

# AutoFocus example 	
InterfaceName.Update('AutoFocus')
Value = InterfaceName.ReadStatus('AutoFocus')
InterfaceName.SubscribeStatus('AutoFocus', None, FeedbackHandler)			

AutoIris	'On'	'Off'	

# AutoIris example 	
InterfaceName.Update('AutoIris')
Value = InterfaceName.ReadStatus('AutoIris')
InterfaceName.SubscribeStatus('AutoIris', None, FeedbackHandler)			

ColorBar	'On'	'Off'	

# ColorBar example 	
InterfaceName.Update('ColorBar')
Value = InterfaceName.ReadStatus('ColorBar')
InterfaceName.SubscribeStatus('ColorBar', None, FeedbackHandler)			

ConnectionStatus	'Connected'	'Disconnected'	
Value = InterfaceName.ReadStatus('ConnectionStatus') InterfaceName.SubscribeStatus('ConnectionStatus', None, FeedbackHandler)			
Detail	'On' 'High'	'Off'	'Low'

# Detail example 	
InterfaceName.Update('Detail')
Value = InterfaceName.ReadStatus('Detail')
InterfaceName.SubscribeStatus('Detail', None, FeedbackHandler)			

Power	'On'	'Standby'	'Starting'

# Power example 	
InterfaceName.Update('Power')
Value = InterfaceName.ReadStatus('Power')
InterfaceName.SubscribeStatus('Power', None, FeedbackHandler)			

PresetRecallStatus	$1 - 100$		

# PresetRecallStatus example 	
InterfaceName.Update('PresetRecallStatus')			

**Global Scripter Module
Communication Sheet**

```
Value = InterfaceName.ReadStatus('PresetRecallStatus')
InterfaceName.SubscribeStatus('PresetRecallStatus', None, FeedbackHandler)
```

Command	Value	Value	Value
SceneFileControl	'Manual 1'	'Manual 2'	'Manual 3'
	'Full Auto'		

```
# SceneFileControl example
InterfaceName.Update('SceneFileControl')
Value = InterfaceName.ReadStatus('SceneFileControl')
InterfaceName.SubscribeStatus('SceneFileControl', None, FeedbackHandler)
```

Command	Value	Value
Tally	'On'	'Off'

```
# Tally example
InterfaceName.Update('Tally')
Value = InterfaceName.ReadStatus('Tally')
InterfaceName.SubscribeStatus('Tally', None, FeedbackHandler)
```

Command	Value	Value
TallyInput	'Enable'	'Disable'

```
# TallyInput example
InterfaceName.Update('TallyInput')
Value = InterfaceName.ReadStatus('TallyInput')
InterfaceName.SubscribeStatus('TallyInput', None, FeedbackHandler)
```

Rev. B1

Cable and Adapter Requirements

Captive Screw to RJ-45 jack cable. (Panasonic AWCA20T6G)
Captive Screw to Male Mini 8-Pin Din RS232 cable.

Notes for the Device

If applicable for the configured model, please set the dip switches according to the diagram below to choose between RS232 and RS422 control.
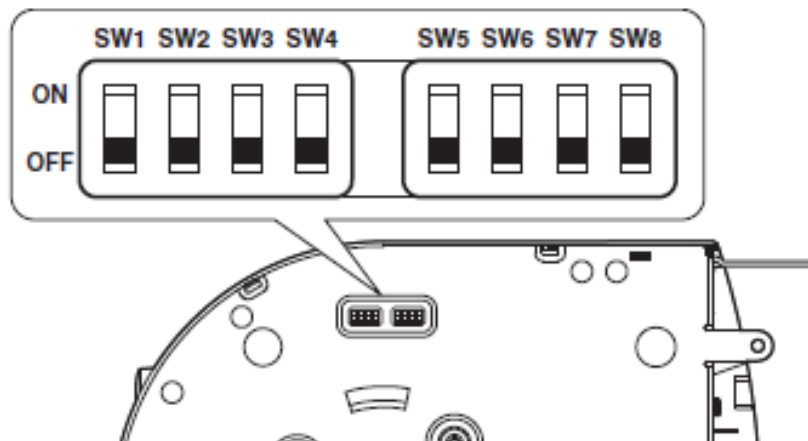
	Function	OFF	ON	Factory settings
SW1	Camera address setting (standard serial communication)	See descriptions for SW1 to SW3		OFF
SW2				OFF
SW3				OFF
SW4	Communication format	Panasonic proprietary serial communication	Standard serial communication	OFF
SW5	Always leave at OFF (used for factory adjustments)			OFF
SW6	Infrared output	Disable	Enable	OFF
SW7	Communication baud rate	9600 bps	38400 bps	OFF
SW8	Communication connector	RS-422	RS-232C	OFF

<NOTE>
• Perform switch settings before turning the unit on.
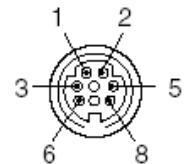
Serial communication

Port Type:	RS-232	**Parity:**	None
Baud Rate:	9600	**Stop Bits:**	One
Data Bits:	8	**Flow Control:**	None

Pin Assignments Diagram
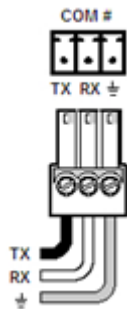
Signal	Main Cable	Pin	Signal
TxD	→	5	RxD
RxD	←	3	TxD
GND	——	4	GND

Mini 8 Pin DIN, Female
Camera

Serial communication

Port Type:	RS-422	**Parity:**	None
Baud Rate:	9600	**Stop Bits:**	One
Data Bits:	8	**Flow Control:**	None

Pin Assignments Diagram
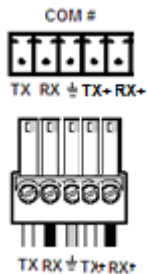
Signal	Main Cable	Pin	Signal
RXD-	←	4	TXD-
TXD-	→	3	RXD-
GND	——	1	GND
RXD+	←	5	TXD+
TXD+	→	6	RXD+

RJ-45

87654321
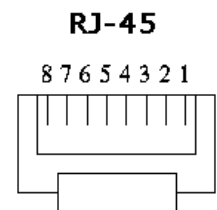
Network communication

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

Port Type:	Ethernet
Default Port:	80
Logon Credentials Supported:	Yes
Multi-Connection Capabilities:	No
Port Changeability:	Yes

Ethernet Module Configuration Description

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

Notes for the Device

If using authentication, ensure that Authentication setting is set to Basic on the device.
For the AW-HE40 models, Host and User Authentication settings cannot be set to **On** simultaneously.

Appendix A. Set Commands (Serial)

Auto Focus Off	\x02OAF:0\x03
Auto Focus On	\x02OAF:1\x03
Extender AF Control Off	#D10\x0D
Extender AF Control On	#D11\x0D
Focus Far Focus Speed 1	#F51\x0D
Focus Far Focus Speed 49	#F99\x0D
Focus Near Focus Speed 1	#F49\x0D
Focus Near Focus Speed 49	#F01\x0D
Focus Stop Focus Speed 1	#F50\x0D
Focus Stop Focus Speed 49	#F50\x0D
Iris 1	#I01\x0D
Iris 99	#I99\x0D
Iris Mode Auto	#D31\x0D
Iris Mode Manual	#D30\x0D
Pan Left Pan Speed 1	#P49\x0D
Pan Left Pan Speed 49	#P01\x0D
Pan Right Pan Speed 1	#P51\x0D
Pan Right Pan Speed 49	#P99\x0D
Pan Stop Pan Speed 1	#P50\x0D
Pan Stop Pan Speed 49	#P50\x0D
Power Off	#O0\x0D
Power On	#O1\x0D
Preset 1 Type Recall	#R00\x0D
Preset 1 Type Save	#M00\x0D
Preset 100 Type Recall	#R99\x0D
Preset 100 Type Save	#M99\x0D
Tally Enable Off	#TAE0\x0D
Tally Enable On	#TAE1\x0D
Tally Off	#DA0\x0D
Tally On	#DA1\x0D
Tilt Down Tilt Speed 1	#T49\x0D
Tilt Down Tilt Speed 49	#T01\x0D
Tilt Stop Tilt Speed 1	#T50\x0D
Tilt Stop Tilt Speed 49	#T50\x0D
Tilt Up Tilt Speed 1	#T51\x0D
Tilt Up Tilt Speed 49	#T99\x0D
Zoom Stop Zoom Speed 1	#Z50\x0D
Zoom Stop Zoom Speed 49	#Z50\x0D
Zoom Tele Zoom Speed 1	#Z51\x0D
Zoom Tele Zoom Speed 49	#Z99\x0D
Zoom Wide Zoom Speed 1	#Z49\x0D
Zoom Wide Zoom Speed 49	#Z01\x0D

Appendix B. Update Commands (Serial)

Extender AF Control	`#D1\x0D`
Iris	`#I\x0D`
Iris Mode	`#D3\x0D`
Power	`#O\x0D`
Tally	`#DA\x0D`
Tally Enable	`#TAE\x0D`