

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: Vaddio
Firmware Version: N/A
Model(s): RoboSHOT 12 HDMI, RoboSHOT 30 HDMI, RoboSHOT 20 UHD, RoboSHOT 40 UHD

Tested on the Following Software and Firmware Versions

IP Link Pro Control Processor Firmware	Global Scripter Version
3.16.0000-b013	2.17.0

Version History

Module Version	Date	Notes
1_1_2_1	12/1/2022	Fixed Device ID parameter for Serial control.
1_1_2_0	3/24/2021	Updates to Ethernet module: <ul style="list-style-type: none">○ Added status to Power○ Removed Firmware Status○ Fixed authentication Added Auto Focus status.
1_0_5_0	10/7/2019	Added model RoboSHOT 40 UHD.
1_0_4_0	3/6/2019	Added Iris command and Auto Iris status to Ethernet
1_0_2_0	11/16/2017	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. devicePassword and deviceUsername default values are password and admin respectively.
Example: InterfaceName.devicePassword = 'extron'
- DeviceID variable must be set accordingly. Default value is '1'. DeviceID ranges from 1' to '7.
Example: InterfaceName.DeviceID = '1'
 - For Serial protocol only, if there is no option to set the camera ID in the camera's settings menu, then according to Vaddio it should be set to 1 within the module

Supported Classes and Examples

SerialClass

```
InterfaceName = ModuleName.SerialClass(ProcessorName, 'COM1', Model='RoboSHOT 12 HDMI')
```

SerialOverEthernetClass

```
InterfaceName = ModuleName.SerialOverEthernetClass('192.168.254.254', 2001, Model='RoboSHOT 12 HDMI')
```

EthernetClass

```
InterfaceName = ModuleName.EthernetClass('192.168.254.254', 23, Model='RoboSHOT 12 HDMI')
```

Control Commands (Serial)

Format with Qualifier:

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

Format without Qualifier:

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

Command AutoFocus	Value 'On'	Value 'Off'	
# AutoFocus example InterfaceName.Set('AutoFocus', 'On')			
Command Backlight	Value 'On'	Value 'Off'	
# Backlight example InterfaceName.Set('Backlight', 'On')			
Command Focus	Value 'Near'	Value 'Far'	Value 'Stop'
Qualifier Key 'Speed'	Qualifier Value '0' – '7'		
# Focus example InterfaceName.Set('Focus', 'Near', {'Speed': '0'})			
Command Freeze	Value 'On'	Value 'Off'	
# Freeze example InterfaceName.Set('Freeze', 'On')			
Command Iris	Value 'Reset'	Value 'Up'	Value 'Down'
# Iris example InterfaceName.Set('Iris', 'Reset')			
Command Mute	Value 'On'	Value 'Off'	
# Mute example InterfaceName.Set('Mute', 'On')			
Command PanTiltZoom	Value 'Up' 'Right' 'Stop'	Value 'Down' 'In'	Value 'Left' 'Out'
Qualifier Key 'Pan Speed'	Qualifier Value '1' – '24'		
Qualifier Key 'Tilt Speed'	Qualifier Value '1' – '20'		
Qualifier Key 'Zoom Speed'	Qualifier Value '0' – '7'		
# PanTiltZoom example InterfaceName.Set('PanTiltZoom', 'Up', {'Pan Speed': '1', 'Tilt Speed': '1', 'Zoom Speed': '0'})			
Command Power	Value 'On'	Value 'Off'	
# Power example InterfaceName.Set('Power', 'On')			

Command PresetRecall	Value '1' – '16'		
# PresetRecall example InterfaceName.Set('PresetRecall', '1')			
Command PresetSave	Value '1' – '16'		
# PresetSave example InterfaceName.Set('PresetSave', '1')			
Command RecallTriSync	Value '0' – '15'		
# RecallTriSync example InterfaceName.Set('RecallTriSync', '0')			
Command SetTriSync	Value '0' – '15'		
Qualifier Key 'Speed'	Qualifier Value 1 to 26 in steps of 1		
# SetTriSync example InterfaceName.Set('SetTriSync', '0', {'Speed': 26})			
Command WhiteBalance	Value 'Auto' 'One Push White Balance' 'One Push Trigger' 'Sodium Lamp'	Value 'Indoor' 'ATW' 'Outdoor Auto' 'Sodium Lamp Outdoor Auto'	Value 'Outdoor' 'Manual' 'Sodium Lamp Auto'
# WhiteBalance example InterfaceName.Set('WhiteBalance', 'Auto')			

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
AutoFocus	'On'	'Off'
# AutoFocus example InterfaceName.Update('AutoFocus') Value = InterfaceName.ReadStatus('AutoFocus') InterfaceName.SubscribeStatus('AutoFocus', None, FeedbackHandler)		
Backlight	'On'	'Off'
# Backlight example InterfaceName.Update('Backlight') Value = InterfaceName.ReadStatus('Backlight') InterfaceName.SubscribeStatus('Backlight', None, FeedbackHandler)		
ConnectionStatus	'Connected'	'Disconnected'
# ConnectionStatus example Value = InterfaceName.ReadStatus('ConnectionStatus') InterfaceName.SubscribeStatus('ConnectionStatus', None, FeedbackHandler)		
Freeze	'On'	'Off'
# Freeze example InterfaceName.Update('Freeze') Value = InterfaceName.ReadStatus('Freeze') InterfaceName.SubscribeStatus('Freeze', None, FeedbackHandler)		
Mute	'On'	'Off'
# Mute example InterfaceName.Update('Mute') Value = InterfaceName.ReadStatus('Mute') InterfaceName.SubscribeStatus('Mute', None, FeedbackHandler)		
Power	'On'	'Off'
# Power example InterfaceName.Update('Power') Value = InterfaceName.ReadStatus('Power') InterfaceName.SubscribeStatus('Power', None, FeedbackHandler)		

Command	Value	Value	Value
WhiteBalance	'Auto'	'Indoor'	'Outdoor'
	'One Push White Balance'	'ATW'	'Manual'
	'One Push Trigger'	'Outdoor Auto'	'Sodium Lamp Auto'
	'Sodium Lamp'	'Sodium Lamp Outdoor Auto'	

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

Control Commands (Ethernet)

Format with Qualifier:

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

Format without Qualifier:

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

Command	Value	Value
AutoFocus	'On'	'Off'
# AutoFocus example InterfaceName.Set('AutoFocus', 'On')		
AutoIris	'On'	'Off'
# AutoIris example InterfaceName.Set('AutoIris', 'On')		
Focus	Value 'Near'	Value 'Far'
Qualifier Key	Qualifier Value	Value 'Stop'
'Speed'	'0' – '7'	
# Focus example InterfaceName.Set('Focus', 'Near', {'Speed': '0'})		
Iris	Value 0 to 13 in steps of 1	
# Iris example InterfaceName.Set('Iris', 13)		
Pan	Value 'Left'	Value 'Right'
Qualifier Key	Qualifier Value	Qualifier Value
'Speed'	'1' – '24'	'Default'
# Pan example InterfaceName.Set('Pan', 'Left', {'Speed': '1'})		
Power	Value 'On'	Value 'Off'
# Power example InterfaceName.Set('Power', 'On')		
PresetRecall	Value '1' – '16'	
# PresetRecall example InterfaceName.Set('PresetRecall', '1')		
PresetSave	Value '1' – '16'	
# PresetSave example InterfaceName.Set('PresetSave', '1')		
Tilt	Value 'Up'	Value 'Down'
Qualifier Key	Qualifier Value	Qualifier Value
'Speed'	'1' – '20'	'Default'
# Tilt example InterfaceName.Set('Tilt', 'Up', {'Speed': '1'})		

Command Zoom	Value 'In'	Value 'Out'	Value 'Stop'
Qualifier Key 'Speed'	Qualifier Value '1' – '7'	Qualifier Value 'Default'	
# Zoom example InterfaceName.Set('Zoom', 'In', {'Speed': '1'})			

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
AutoFocus	'On'	'Off'
# 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)		
ConnectionStatus	'Connected'	'Disconnected'
# ConnectionStatus example Value = InterfaceName.ReadStatus('ConnectionStatus') InterfaceName.SubscribeStatus('ConnectionStatus', None, FeedbackHandler)		
Iris	0 to 13 in steps of 1	
# Iris example InterfaceName.Update('Iris') Value = InterfaceName.ReadStatus('Iris') InterfaceName.SubscribeStatus('Iris', None, FeedbackHandler)		
Power	'On'	'Off'
# Power example InterfaceName.Update('Power') Value = InterfaceName.ReadStatus('Power') InterfaceName.SubscribeStatus('Power', None, FeedbackHandler)		

Cable and Adapter Requirements

Captive Screw to Male RJ45 connector.

Notes for the Device

Device Baud Rate can be controlled by DIP Switches depending on the models. DIP switches can be located on the back of the camera or in the web interface on the System Page (DIP Switches tab).

Serial communication

Port Type: RS-232

Parity: None

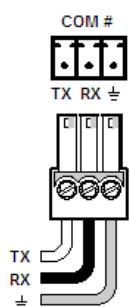
Baud Rate: 9600

Stop Bits: One

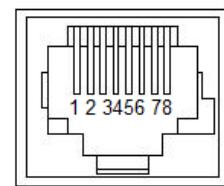
Data Bits: 8

Flow Control: None

Pin Assignments Diagram



Signal	Main Cable	Pin	Signal
RxD	←	8	TxD
TxD	→	7	RxD
GND	—	6	GND



RJ-45 Camera

Network communication

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

Port Type: Ethernet (TCP)

Default Port: 23

Logon Credentials Yes

Supported:

Default Username: admin

Default Password: password

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

The Vaddio RoboSHOT camera system contains the physical camera and a 'OneLink' receiver. Both units receive unique IP addresses. When trying to control the camera via Ethernet, use the [IP address of the camera](#), rather than the receiver.

Appendix A. Set Commands(Serial)

Auto Focus Off	\x81\x01\x048\x03\xFF
Auto Focus On	\x81\x01\x048\x02\xFF
Backlight Off	\x81\x01\x043\x03\xFF
Backlight On	\x81\x01\x043\x02\xFF
Focus Far Speed 0	\x81\x01\x04\x08 \xFF
Focus Far Speed 7	\x81\x01\x04\x08 '\xFF
Focus Near Speed 0	\x81\x01\x04\x080\xFF
Focus Near Speed 7	\x81\x01\x04\x087\xFF
Focus Stop Speed 0	\x81\x01\x04\x08\x00\xFF
Focus Stop Speed 7	\x81\x01\x04\x08\x00\xFF
Freeze Off	\x81\x01\x04b\x03\xFF
Freeze On	\x81\x01\x04b\x02\xFF
Iris Down	\x81\x01\x04\x0B\x03\xFF
Iris Reset	\x81\x01\x04\x0B\x00\xFF
Iris Up	\x81\x01\x04\x0B\x02\xFF
Mute Off	\x81\x01\x04u\x03\xFF
Mute On	\x81\x01\x04u\x02\xFF
Pan Tilt Zoom Down Pan Speed 1 Tilt Speed 1 Zoom Speed 0	\x81\x01\x06\x0A\x01\x01\x00\x03\x02\x03\xFF
Pan Tilt Zoom Down Pan Speed 1 Tilt Speed 1 Zoom Speed 7	\x81\x01\x06\x0A\x01\x01\x07\x03\x02\x03\xFF
Pan Tilt Zoom Down Pan Speed 1 Tilt Speed 20 Zoom Speed 0	\x81\x01\x06\x0A\x01\x14\x00\x03\x02\x03\xFF
Pan Tilt Zoom Down Pan Speed 1 Tilt Speed 20 Zoom Speed 7	\x81\x01\x06\x0A\x01\x14\x07\x03\x02\x03\xFF
Pan Tilt Zoom Down Pan Speed 24 Tilt Speed 1 Zoom Speed 0	\x81\x01\x06\x0A\x18\x01\x00\x03\x02\x03\xFF
Pan Tilt Zoom Down Pan Speed 24 Tilt Speed 1 Zoom Speed 7	\x81\x01\x06\x0A\x18\x01\x07\x03\x02\x03\xFF
Pan Tilt Zoom Down Pan Speed 24 Tilt Speed 20 Zoom Speed 0	\x81\x01\x06\x0A\x18\x14\x00\x03\x02\x03\xFF
Pan Tilt Zoom Down Pan Speed 24 Tilt Speed 20 Zoom Speed 7	\x81\x01\x06\x0A\x18\x14\x07\x03\x02\x03\xFF
Pan Tilt Zoom In Pan Speed 1 Tilt Speed 1 Zoom Speed 0	\x81\x01\x06\x0A\x01\x01\x00\x03\x03\x01\xFF
Pan Tilt Zoom In Pan Speed 1 Tilt Speed 1 Zoom Speed 7	\x81\x01\x06\x0A\x01\x01\x07\x03\x03\x01\xFF
Pan Tilt Zoom In Pan Speed 1 Tilt Speed 20 Zoom Speed 0	\x81\x01\x06\x0A\x01\x14\x00\x03\x03\x01\xFF
Pan Tilt Zoom In Pan Speed 1 Tilt Speed 20 Zoom Speed 7	\x81\x01\x06\x0A\x01\x14\x07\x03\x03\x01\xFF
Pan Tilt Zoom In Pan Speed 24 Tilt Speed 1 Zoom Speed 0	\x81\x01\x06\x0A\x18\x01\x00\x03\x03\x01\xFF
Pan Tilt Zoom In Pan Speed 24 Tilt Speed 1 Zoom	\x81\x01\x06\x0A\x18\x01\x07\x03\x03\x01\xFF

Speed 7	
Pan Tilt Zoom In Pan Speed 24 Tilt Speed 20 Zoom Speed 0	\x81\x01\x06\x0A\x18\x14\x00\x03\x03\x01\xFF
Pan Tilt Zoom In Pan Speed 24 Tilt Speed 20 Zoom Speed 7	\x81\x01\x06\x0A\x18\x14\x07\x03\x03\x01\xFF
Pan Tilt Zoom Left Pan Speed 1 Tilt Speed 1 Zoom Speed 0	\x81\x01\x06\x0A\x01\x01\x00\x01\x03\x03\xFF
Pan Tilt Zoom Left Pan Speed 1 Tilt Speed 1 Zoom Speed 7	\x81\x01\x06\x0A\x01\x01\x07\x01\x03\x03\xFF
Pan Tilt Zoom Left Pan Speed 1 Tilt Speed 20 Zoom Speed 0	\x81\x01\x06\x0A\x01\x14\x00\x01\x03\x03\xFF
Pan Tilt Zoom Left Pan Speed 1 Tilt Speed 20 Zoom Speed 7	\x81\x01\x06\x0A\x01\x14\x07\x01\x03\x03\xFF
Pan Tilt Zoom Left Pan Speed 24 Tilt Speed 1 Zoom Speed 0	\x81\x01\x06\x0A\x18\x01\x00\x01\x03\x03\xFF
Pan Tilt Zoom Left Pan Speed 24 Tilt Speed 1 Zoom Speed 7	\x81\x01\x06\x0A\x18\x01\x07\x01\x03\x03\xFF
Pan Tilt Zoom Left Pan Speed 24 Tilt Speed 20 Zoom Speed 0	\x81\x01\x06\x0A\x18\x14\x00\x01\x03\x03\xFF
Pan Tilt Zoom Left Pan Speed 24 Tilt Speed 20 Zoom Speed 7	\x81\x01\x06\x0A\x18\x14\x07\x01\x03\x03\xFF
Pan Tilt Zoom Out Pan Speed 1 Tilt Speed 1 Zoom Speed 0	\x81\x01\x06\x0A\x01\x01\x00\x03\x03\x02\xFF
Pan Tilt Zoom Out Pan Speed 1 Tilt Speed 1 Zoom Speed 7	\x81\x01\x06\x0A\x01\x01\x07\x03\x03\x02\xFF
Pan Tilt Zoom Out Pan Speed 1 Tilt Speed 20 Zoom Speed 0	\x81\x01\x06\x0A\x01\x14\x00\x03\x03\x02\xFF
Pan Tilt Zoom Out Pan Speed 1 Tilt Speed 20 Zoom Speed 7	\x81\x01\x06\x0A\x01\x14\x07\x03\x03\x02\xFF
Pan Tilt Zoom Out Pan Speed 24 Tilt Speed 1 Zoom Speed 0	\x81\x01\x06\x0A\x18\x01\x00\x03\x03\x02\xFF
Pan Tilt Zoom Out Pan Speed 24 Tilt Speed 1 Zoom Speed 7	\x81\x01\x06\x0A\x18\x01\x07\x03\x03\x02\xFF
Pan Tilt Zoom Out Pan Speed 24 Tilt Speed 20 Zoom Speed 0	\x81\x01\x06\x0A\x18\x14\x00\x03\x03\x02\xFF
Pan Tilt Zoom Out Pan Speed 24 Tilt Speed 20 Zoom Speed 7	\x81\x01\x06\x0A\x18\x14\x07\x03\x03\x02\xFF
Pan Tilt Zoom Right Pan Speed 1 Tilt Speed 1 Zoom Speed 0	\x81\x01\x06\x0A\x01\x01\x00\x02\x03\x03\xFF
Pan Tilt Zoom Right Pan Speed 1 Tilt Speed 1 Zoom Speed 7	\x81\x01\x06\x0A\x01\x01\x07\x02\x03\x03\xFF
Pan Tilt Zoom Right Pan Speed 1 Tilt Speed 20 Zoom Speed 0	\x81\x01\x06\x0A\x01\x14\x00\x02\x03\x03\xFF
Pan Tilt Zoom Right Pan Speed 1 Tilt Speed 20 Zoom Speed 7	\x81\x01\x06\x0A\x01\x14\x07\x02\x03\x03\xFF
Pan Tilt Zoom Right Pan Speed 24 Tilt Speed 1 Zoom Speed 0	\x81\x01\x06\x0A\x18\x01\x00\x02\x03\x03\xFF

Pan Tilt Zoom Right Pan Speed 24 Tilt Speed 1 Zoom Speed 7	\x81\x01\x06\x0A\x18\x01\x07\x02\x03\x03\xFF
Pan Tilt Zoom Right Pan Speed 24 Tilt Speed 20 Zoom Speed 0	\x81\x01\x06\x0A\x18\x14\x00\x02\x03\x03\xFF
Pan Tilt Zoom Right Pan Speed 24 Tilt Speed 20 Zoom Speed 7	\x81\x01\x06\x0A\x18\x14\x07\x02\x03\x03\xFF
Pan Tilt Zoom Stop Pan Speed 1 Tilt Speed 1 Zoom Speed 0	\x81\x01\x06\x0A\x01\x01\x00\x03\x03\x03\xFF
Pan Tilt Zoom Stop Pan Speed 1 Tilt Speed 1 Zoom Speed 7	\x81\x01\x06\x0A\x01\x01\x07\x03\x03\x03\xFF
Pan Tilt Zoom Stop Pan Speed 1 Tilt Speed 20 Zoom Speed 0	\x81\x01\x06\x0A\x01\x14\x00\x03\x03\x03\xFF
Pan Tilt Zoom Stop Pan Speed 1 Tilt Speed 20 Zoom Speed 7	\x81\x01\x06\x0A\x01\x14\x07\x03\x03\x03\xFF
Pan Tilt Zoom Stop Pan Speed 24 Tilt Speed 1 Zoom Speed 0	\x81\x01\x06\x0A\x18\x01\x00\x03\x03\x03\xFF
Pan Tilt Zoom Stop Pan Speed 24 Tilt Speed 1 Zoom Speed 7	\x81\x01\x06\x0A\x18\x01\x07\x03\x03\x03\xFF
Pan Tilt Zoom Stop Pan Speed 24 Tilt Speed 20 Zoom Speed 0	\x81\x01\x06\x0A\x18\x14\x00\x03\x03\x03\xFF
Pan Tilt Zoom Stop Pan Speed 24 Tilt Speed 20 Zoom Speed 7	\x81\x01\x06\x0A\x18\x14\x07\x03\x03\x03\xFF
Pan Tilt Zoom Up Pan Speed 1 Tilt Speed 1 Zoom Speed 0	\x81\x01\x06\x0A\x01\x01\x00\x03\x01\x03\xFF
Pan Tilt Zoom Up Pan Speed 1 Tilt Speed 1 Zoom Speed 7	\x81\x01\x06\x0A\x01\x01\x07\x03\x01\x03\xFF
Pan Tilt Zoom Up Pan Speed 1 Tilt Speed 20 Zoom Speed 0	\x81\x01\x06\x0A\x01\x14\x00\x03\x01\x03\xFF
Pan Tilt Zoom Up Pan Speed 1 Tilt Speed 20 Zoom Speed 7	\x81\x01\x06\x0A\x01\x14\x07\x03\x01\x03\xFF
Pan Tilt Zoom Up Pan Speed 24 Tilt Speed 1 Zoom Speed 0	\x81\x01\x06\x0A\x18\x01\x00\x03\x01\x03\xFF
Pan Tilt Zoom Up Pan Speed 24 Tilt Speed 1 Zoom Speed 7	\x81\x01\x06\x0A\x18\x01\x07\x03\x01\x03\xFF
Pan Tilt Zoom Up Pan Speed 24 Tilt Speed 20 Zoom Speed 0	\x81\x01\x06\x0A\x18\x14\x00\x03\x01\x03\xFF
Pan Tilt Zoom Up Pan Speed 24 Tilt Speed 20 Zoom Speed 7	\x81\x01\x06\x0A\x18\x14\x07\x03\x01\x03\xFF
Power Off	\x81\x01\x04\x00\x03\xFF
Power On	\x81\x01\x04\x00\x02\xFF
Preset Recall 1	\x81\x01\x04?\x02\x00\xFF
Preset Recall 16	\x81\x01\x04?\x02\x0F\xFF
Preset Save 1	\x81\x01\x04?\x01\x00\xFF
Preset Save 16	\x81\x01\x04?\x01\x0F\xFF
Recall Tri-Sync 0	\x81\x01\x04?\x12\x00\xFF
Recall Tri-Sync 15	\x81\x01\x04?\x12\x0F\xFF

Set Tri-Sync 0 Speed 1	\x81\x01\x04?1\x00\x00\x01\xFF
Set Tri-Sync 0 Speed 26	\x81\x01\x04?1\x00\x01\x0A\xFF
Set Tri-Sync 15 Speed 1	\x81\x01\x04?1\x0F\x00\x01\xFF
Set Tri-Sync 15 Speed 26	\x81\x01\x04?1\x0F\x01\x0A\xFF
White Balance ATW	\x81\x01\x045\x04\xFF
White Balance Auto	\x81\x01\x045\x00\xFF
White Balance Indoor	\x81\x01\x045\x01\xFF
White Balance Manual	\x81\x01\x045\x05\xFF
White Balance One Push Trigger	\x81\x01\x04\x10\x05\xFF
White Balance One Push White Balance	\x81\x01\x045\x03\xFF
White Balance Outdoor	\x81\x01\x045\x02\xFF
White Balance Outdoor Auto	\x81\x01\x045\x06\xFF
White Balance Sodium Lamp	\x81\x01\x045\x08\xFF
White Balance Sodium Lamp Auto	\x81\x01\x045\x07\xFF
White Balance Sodium Lamp Outdoor Auto	\x81\x01\x045\x09\xFF

Appendix B. Update Commands(Serial)

Auto Focus	\x81\x09\x048\xFF
Backlight	\x81\x09\x043\xFF
Freeze	\x81\x09\x04b\xFF
Mute	\x81\x09\x04u\xFF
Power	\x81\x09\x04\x00\xFF
White Balance	\x81\x09\x045\xFF

Appendix C. Set Commands(Ethernet)

Auto Focus Off	camera focus mode manual\x0D\x0A
Auto Focus On	camera focus mode auto\x0D\x0A
Auto Iris Off	camera ccu set auto_iris off\x0D\x0A
Auto Iris On	camera ccu set auto_iris on\x0D\x0A
Focus Far Speed 0	camera focus far 1\x0D\x0A
Focus Far Speed 7	camera focus far 8\x0D\x0A
Focus Near Speed 0	camera focus near 1\x0D\x0A
Focus Near Speed 7	camera focus near 8\x0D\x0A
Focus Stop Speed 0	camera focus stop\x0D\x0A
Focus Stop Speed 7	camera focus stop\x0D\x0A
Iris 0	camera ccu set iris 0\x0D\x0A
Iris 13	camera ccu set iris 13\x0D\x0A
Iris Down	camera ccu set iris Down\x0D\x0A
Iris Reset	camera ccu set iris Reset\x0D\x0A
Iris Up	camera ccu set iris Up\x0D\x0A
Pan Left Speed 1	camera pan left 1\x0D\x0A
Pan Left Speed 24	camera pan left 24\x0D\x0A
Pan Left Speed Default	camera pan left\x0D\x0A
Pan Right Speed 1	camera pan right 1\x0D\x0A
Pan Right Speed 24	camera pan right 24\x0D\x0A
Pan Right Speed Default	camera pan right\x0D\x0A
Pan Stop Speed 1	camera pan stop\x0D\x0A
Pan Stop Speed 24	camera pan stop\x0D\x0A
Pan Stop Speed Default	camera pan stop\x0D\x0A
Power Off	camera standby on\x0D\x0A
Power On	camera standby off\x0D\x0A
Preset Recall 1	camera preset recall 1\x0D\x0A
Preset Recall 16	camera preset recall 16\x0D\x0A
Preset Save 1	camera preset store 1\x0D\x0A
Preset Save 16	camera preset store 16\x0D\x0A
Tilt Down Speed 1	camera tilt down 1\x0D\x0A
Tilt Down Speed 20	camera tilt down 20\x0D\x0A
Tilt Down Speed Default	camera tilt down\x0D\x0A
Tilt Stop Speed 1	camera tilt stop\x0D\x0A
Tilt Stop Speed 20	camera tilt stop\x0D\x0A
Tilt Stop Speed Default	camera tilt stop\x0D\x0A
Tilt Up Speed 1	camera tilt up 1\x0D\x0A
Tilt Up Speed 20	camera tilt up 20\x0D\x0A
Tilt Up Speed Default	camera tilt up\x0D\x0A
Zoom In Speed 1	camera zoom in 1\x0D\x0A
Zoom In Speed 7	camera zoom in 7\x0D\x0A
Zoom In Speed Default	camera zoom in\x0D\x0A

Zoom Out Speed 1	camera zoom out 1\x0D\x0A
Zoom Out Speed 7	camera zoom out 7\x0D\x0A
Zoom Out Speed Default	camera zoom out\x0D\x0A
Zoom Stop Speed 1	camera zoom stop\x0D\x0A
Zoom Stop Speed 7	camera zoom stop\x0D\x0A
Zoom Stop Speed Default	camera zoom stop\x0D\x0A

Appendix D. Update Commands(Ethernet)

Auto Focus	camera focus mode get\x0D\x0A
Auto Iris	camera ccu get auto_iris\x0D\x0A
Iris	camera ccu get iris\x0D\x0A
Power	camera standby get\x0D\x0A