

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: Audio Processor
Manufacturer: Yamaha
Firmware Version: V5.10
Model(s): QL5, QL1

Tested on the Following Software and Firmware Versions

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

Version History

Module Version	Date	Notes
1_1_1_0	8/13/2019	Added commands: DCA Group Level and DCA Group Mute.
1_1_0_0	2/18/2019	Removed Firmware Version status. Added Device Status. Added status support for Recall Preset command. The following command names or parameters were updated: <ul style="list-style-type: none">Input Level<ul style="list-style-type: none">Channel parameter: 0—63 → 1—64 For model QL1, 0—31 → 1—32Value: -32768 to 1000, step size 1 → -138 to 10, step size 0.05 dBInput Mute

		<ul style="list-style-type: none"> ○ Channel parameter: 0—63 → 1—64 For model QL1, 0—31 → 1—32 • Matrix Level <ul style="list-style-type: none"> ○ Channel: 0—7 → 1—8 ○ Value: -32768 to 1000, step size 1 → -138 to 10, step size 0.05 dB • Matrix Mute <ul style="list-style-type: none"> ○ Channel: 0—7 → 1—8 • Mix Level <ul style="list-style-type: none"> ○ Channel: 0—15 → 1—16 ○ Value: -32768 to 1000, step size 1 → -138 to 10, step size 0.05 dB • Mix Mute <ul style="list-style-type: none"> ○ Channel: 0—15 → 1—16 • Recall Preset → Preset Recall • Store Preset → Preset Save • Stereo Level Value: -32768 to 1000, step size 1 → -138 to 10, step size 0.05 dB
1_0_0_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`
- Due to the device's level step sizing, the Update command is needed for proper functionality.

Supported Class and Example

EthernetClass

```
InterfaceName = ModuleName.EthernetClass('192.168.254.254', 49280, Model='QL5')
```

Level Step Sizing

The QL5 and QL1 devices have different step sizing for each range of the levels. Refer to the table below for the proper step size of each level range. This driver has already been optimized to support these step sizes.

Level Range	Step Size
-138.00 to -96.00	3 dB
-96.00 to -78.00	1 dB
-78 to -40	0.2 dB
-40 to -20	0.1 dB
-20 to 10	0.05 dB

Control Commands

Format with Qualifier:

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

Format without Qualifier:

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

Command DCAGroupLevel	Value -138 to 10 in steps of 0.05	
Qualifier Key 'Channel'	Qualifier Value '1' – '16'	
# InputLevel example InterfaceName.Set('DCAGroupLevel', 10, {'Channel': '1'})		
Command DCAGroupMute	Value 'On'	Value 'Off'
Qualifier Key 'Channel'	Qualifier Value '1' – '16'	
# InputLevel example InterfaceName.Set('DCAGroupLevel', 10, {'Channel': '1'})		
Command InputLevel²	Value -138 to 10 in steps of 0.05	
Qualifier Key 'Channel'	Qualifier Value '1' – '32'	Qualifier Value '1' – '64' ¹
# InputLevel example InterfaceName.Set('InputLevel', 10, {'Channel': '1'})		
Command InputMute	Value 'On'	Value 'Off'
Qualifier Key 'Channel'	Qualifier Value '1' – '32'	Qualifier Value '1' – '64' ¹
# InputMute example InterfaceName.Set('InputMute', 'On', {'Channel': '1'})		
Command MatrixLevel²	Value -138 to 10 in steps of 0.05	
Qualifier Key 'Channel'	Qualifier Value '1' – '8'	
# MatrixLevel example InterfaceName.Set('MatrixLevel', 10, {'Channel': '1'})		
Command MatrixMute	Value 'On'	Value 'Off'
Qualifier Key 'Channel'	Qualifier Value '1' – '8'	

# MatrixMute example InterfaceName.Set('MatrixMute', 'On', {'Channel': '1'})			
Command MixLevel	Value -138 to 10 in steps of 0.05		
Qualifier Key 'Channel'	Qualifier Value '1' – '16'		
# MixLevel example InterfaceName.Set('MixLevel', 10, {'Channel': '1'})			
Command MixMute	Value 'On'	Value 'Off'	
Qualifier Key 'Channel'	Qualifier Value '1' – '16'		
# MixMute example InterfaceName.Set('MixMute', 'On', {'Channel': '1'})			
Command PresetRecall	Value '0' – '300'		
# PresetRecall example InterfaceName.Set('PresetRecall', '0')			
Command PresetSave	Value '1' – '300'		
# PresetSave example InterfaceName.Set('PresetSave', '1')			
Command StereoLevel	Value -138 to 10 in steps of 0.05		
Qualifier Key 'Channel'	Qualifier Value 'Stereo L'	Qualifier Value 'Stereo R'	Qualifier Value 'Mono(C)'
# StereoLevel example InterfaceName.Set('StereoLevel', 10, {'Channel': 'Stereo L'})			
Command StereoMute	Value 'On'	Value 'Off'	
Qualifier Key 'Channel'	Qualifier Value 'Stereo L'	Qualifier Value 'Stereo R'	Qualifier Value 'Mono(C)'
# StereoMute example InterfaceName.Set('StereoMute', 'On', {'Channel': 'Stereo L'})			

¹ Only supported for model QL5.² Refer to the level table on Page 2 for details regarding the step sizing of the value.

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	Value	Value
DeviceStatus	'Normal'	'Emergency'	'Booting'
	'Update'	'Diagnostics'	
# DeviceStatus examples InterfaceName.Update('DeviceStatus') Value = InterfaceName.ReadStatus('DeviceStatus') InterfaceName.SubscribeStatus('DeviceStatus', None, FeedbackHandler)			
Command	Value		
DCAGroupLevel	-138 to 10 in steps of 0.05		
Qualifier Key	Qualifier Value		
'Channel'	'1' – '16'		
# DCAGroupLevel examples InterfaceName.Update('DCAGroupLevel', {'Channel': '1'}) Value = InterfaceName.ReadStatus('DCAGroupLevel', {'Channel': '1'}) InterfaceName.SubscribeStatus('DCAGroupLevel', None, FeedbackHandler)			
Command	Value	Value	
DCAGroupMute	'On'	'Off'	
Qualifier Key	Qualifier Value		
'Channel'	'1' – '16'		
# DCAGroupMute examples InterfaceName.Update('DCAGroupMute', {'Channel': '1'}) Value = InterfaceName.ReadStatus('DCAGroupMute', {'Channel': '1'}) InterfaceName.SubscribeStatus('DCAGroupMute', None, FeedbackHandler)			

Command InputLevel ²	Value -138 to 10 in steps of 0.05	
Qualifier Key 'Channel'	Qualifier Value '1' – '32'	Qualifier Value '1' – '64' ¹
<pre># InputLevel examples InterfaceName.Update('InputLevel', {'Channel': '1'}) Value = InterfaceName.ReadStatus('InputLevel', {'Channel': '1'}) InterfaceName.SubscribeStatus('InputLevel', None, FeedbackHandler)</pre>		
Command InputMute	Value 'On' 'Off'	
Qualifier Key 'Channel'	Qualifier Value '1' – '32'	Qualifier Value '1' – '64' ¹
<pre># InputMute examples InterfaceName.Update('InputMute', {'Channel': '1'}) Value = InterfaceName.ReadStatus('InputMute', {'Channel': '1'}) InterfaceName.SubscribeStatus('InputMute', None, FeedbackHandler)</pre>		
Command MatrixLevel ²	Value -138 to 10 in steps of 0.05	
Qualifier Key 'Channel'	Qualifier Value '1' – '8'	
<pre># MatrixLevel examples InterfaceName.Update('MatrixLevel', {'Channel': '1'}) Value = InterfaceName.ReadStatus('MatrixLevel', {'Channel': '1'}) InterfaceName.SubscribeStatus('MatrixLevel', None, FeedbackHandler)</pre>		
Command MatrixMute	Value 'On' 'Off'	
Qualifier Key 'Channel'	Qualifier Value '1' – '8'	
<pre># MatrixMute examples InterfaceName.Update('MatrixMute', {'Channel': '1'}) Value = InterfaceName.ReadStatus('MatrixMute', {'Channel': '1'}) InterfaceName.SubscribeStatus('MatrixMute', None, FeedbackHandler)</pre>		
Command MixLevel	Value -138 to 10 in steps of 0.05	
Qualifier Key 'Channel'	Qualifier Value '1' – '16'	
<pre># MixLevel examples InterfaceName.Update('MixLevel', {'Channel': '1'}) Value = InterfaceName.ReadStatus('MixLevel', {'Channel': '1'}) InterfaceName.SubscribeStatus('MixLevel', None, FeedbackHandler)</pre>		
Command MixMute	Value 'On' 'Off'	
Qualifier Key 'Channel'	Qualifier Value '1' – '16'	

<pre># MixMute examples InterfaceName.Update('MixMute', {'Channel': '1'}) Value = InterfaceName.ReadStatus('MixMute', {'Channel': '1'}) InterfaceName.SubscribeStatus('MixMute', None, FeedbackHandler)</pre>			
Command PresetRecall	Value '0' – '300'		
<pre># PresetRecall examples InterfaceName.Update('PresetRecall') Value = InterfaceName.ReadStatus('PresetRecall') InterfaceName.SubscribeStatus('PresetRecall', None, FeedbackHandler)</pre>			
Command StereoLevel	Value -138 to 10 in steps of 0.05		
Qualifier Key 'Channel'	Qualifier Value 'Stereo L'	Qualifier Value 'Stereo R'	Qualifier Value 'Mono(C)'
<pre># StereoLevel examples InterfaceName.Update('StereoLevel', {'Channel': 'Stereo L'}) Value = InterfaceName.ReadStatus('StereoLevel', {'Channel': 'Stereo L'}) InterfaceName.SubscribeStatus('StereoLevel', None, FeedbackHandler)</pre>			
Command StereoMute	Value 'On'	Value 'Off'	
Qualifier Key 'Channel'	Qualifier Value 'Stereo L'	Qualifier Value 'Stereo R'	Qualifier Value 'Mono(C)'
<pre># StereoMute examples InterfaceName.Update('StereoMute', {'Channel': 'Stereo L'}) Value = InterfaceName.ReadStatus('StereoMute', {'Channel': 'Stereo L'}) InterfaceName.SubscribeStatus('StereoMute', None, FeedbackHandler)</pre>			

¹ Only supported for model QL5² Refer to the level table on Page 2 for details regarding the step sizing of the value.

Network communication

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

Port Type:	Ethernet
Default Port:	49280
Logon Credentials Supported:	No
Multi-Connection	Yes
Capabilities:	
Port Changeability:	No

Ethernet Module Configuration Description

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

Notes for the Device

Appendix A. Set Commands

Input Level 10 Channel 1	set MIXER:Current/InCh/Fader/Level 0 0 1000\x0A
Input Level 10 Channel 32	set MIXER:Current/InCh/Fader/Level 31 0 1000\x0A
Input Level 10 Channel 64	set MIXER:Current/InCh/Fader/Level 63 0 1000\x0A
Input Level -138 Channel 1	set MIXER:Current/InCh/Fader/Level 0 0 -13800\x0A
Input Level -138 Channel 32	set MIXER:Current/InCh/Fader/Level 31 0 -13800\x0A
Input Level -138 Channel 64	set MIXER:Current/InCh/Fader/Level 63 0 -13800\x0A
Input Mute Off Channel 1	set MIXER:Current/InCh/Fader/On 0 0 0\x0A
Input Mute Off Channel 32	set MIXER:Current/InCh/Fader/On 31 0 0\x0A
Input Mute Off Channel 64	set MIXER:Current/InCh/Fader/On 63 0 0\x0A
Input Mute On Channel 1	set MIXER:Current/InCh/Fader/On 0 0 1\x0A
Input Mute On Channel 32	set MIXER:Current/InCh/Fader/On 31 0 1\x0A
Input Mute On Channel 64	set MIXER:Current/InCh/Fader/On 63 0 1\x0A
Matrix Level 10 Channel 1	set MIXER:Current/Mtrx/Fader/Level 0 0 1000\x0A
Matrix Level 10 Channel 8	set MIXER:Current/Mtrx/Fader/Level 7 0 1000\x0A
Matrix Level -138 Channel 1	set MIXER:Current/Mtrx/Fader/Level 0 0 -13800\x0A
Matrix Level -138 Channel 8	set MIXER:Current/Mtrx/Fader/Level 7 0 -13800\x0A
Matrix Mute Off Channel 1	set MIXER:Current/Mtrx/Fader/On 0 0 0\x0A
Matrix Mute Off Channel 8	set MIXER:Current/Mtrx/Fader/On 7 0 0\x0A
Matrix Mute On Channel 1	set MIXER:Current/Mtrx/Fader/On 0 0 1\x0A
Matrix Mute On Channel 8	set MIXER:Current/Mtrx/Fader/On 7 0 1\x0A
Mix Level 10 Channel 1	set MIXER:Current/Mix/Fader/Level 0 0 1000\x0A
Mix Level 10 Channel 16	set MIXER:Current/Mix/Fader/Level 15 0 1000\x0A
Mix Level -138 Channel 1	set MIXER:Current/Mix/Fader/Level 0 0 -13800\x0A
Mix Level -138 Channel 16	set MIXER:Current/Mix/Fader/Level 15 0 -13800\x0A
Mix Mute Off Channel 1	set MIXER:Current/Mix/Fader/On 0 0 0\x0A
Mix Mute Off Channel 16	set MIXER:Current/Mix/Fader/On 15 0 0\x0A
Mix Mute On Channel 1	set MIXER:Current/Mix/Fader/On 0 0 1\x0A
Mix Mute On Channel 16	set MIXER:Current/Mix/Fader/On 15 0 1\x0A
Preset Recall 0	ssrecall_ex MIXER:Lib/Scene 0\x0A
Preset Recall 300	ssrecall_ex MIXER:Lib/Scene 300\x0A
Preset Save 1	ssupdate_ex MIXER:Lib/Scene 1\x0A
Preset Save 300	ssupdate_ex MIXER:Lib/Scene 300\x0A
Stereo Level 10 Channel Mono(C)	set MIXER:Current/St/Fader/Level 2 0 1000\x0A
Stereo Level 10 Channel Stereo L	set MIXER:Current/St/Fader/Level 0 0 1000\x0A
Stereo Level 10 Channel Stereo R	set MIXER:Current/St/Fader/Level 1 0 1000\x0A

Global Scripter Module Communication Sheet

Stereo Level -138 Channel Mono(C)	set MIXER:Current/St/Fader/Level 2 0 -13800\x0A
Stereo Level -138 Channel Stereo L	set MIXER:Current/St/Fader/Level 0 0 -13800\x0A
Stereo Level -138 Channel Stereo R	set MIXER:Current/St/Fader/Level 1 0 -13800\x0A
Stereo Mute Off Channel Mono(C)	set MIXER:Current/St/Fader/On 2 0 0\x0A
Stereo Mute Off Channel Stereo L	set MIXER:Current/St/Fader/On 0 0 0\x0A
Stereo Mute Off Channel Stereo R	set MIXER:Current/St/Fader/On 1 0 0\x0A
Stereo Mute On Channel Mono(C)	set MIXER:Current/St/Fader/On 2 0 1\x0A
Stereo Mute On Channel Stereo L	set MIXER:Current/St/Fader/On 0 0 1\x0A
Stereo Mute On Channel Stereo R	set MIXER:Current/St/Fader/On 1 0 1\x0A

Appendix B. Update Commands

Device Status	devstatus runmode\x0A
Input Level Channel 1	get MIXER:Current/InCh/Fader/Level 0 0\x0A
Input Level Channel 32	get MIXER:Current/InCh/Fader/Level 31 0\x0A
Input Level Channel 64	get MIXER:Current/InCh/Fader/Level 63 0\x0A
Input Mute Channel 1	get MIXER:Current/InCh/Fader/On 0 0\x0A
Input Mute Channel 32	get MIXER:Current/InCh/Fader/On 31 0\x0A
Input Mute Channel 64	get MIXER:Current/InCh/Fader/On 63 0\x0A
Matrix Level Channel 1	get MIXER:Current/Mtrx/Fader/Level 0 0\x0A
Matrix Level Channel 8	get MIXER:Current/Mtrx/Fader/Level 7 0\x0A
Matrix Mute Channel 1	get MIXER:Current/Mtrx/Fader/On 0 0\x0A
Matrix Mute Channel 8	get MIXER:Current/Mtrx/Fader/On 7 0\x0A
Mix Level Channel 1	get MIXER:Current/Mix/Fader/Level 0 0\x0A
Mix Level Channel 16	get MIXER:Current/Mix/Fader/Level 15 0\x0A
Mix Mute Channel 1	get MIXER:Current/Mix/Fader/On 0 0\x0A
Mix Mute Channel 16	get MIXER:Current/Mix/Fader/On 15 0\x0A
Preset Recall	sscurrent_ex MIXER:Lib/Scene\x0A
Stereo Level Channel Mono(C)	get MIXER:Current/St/Fader/Level 2 0\x0A
Stereo Level Channel Stereo L	get MIXER:Current/St/Fader/Level 0 0\x0A
Stereo Level Channel Stereo R	get MIXER:Current/St/Fader/Level 1 0\x0A
Stereo Mute Channel Mono(C)	get MIXER:Current/St/Fader/On 2 0\x0A
Stereo Mute Channel Stereo L	get MIXER:Current/St/Fader/On 0 0\x0A
Stereo Mute Channel Stereo R	get MIXER:Current/St/Fader/On 1 0\x0A