

This document provides additional assistance with wiring your Extron IP Link enabled product 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 Extron IP Link enabled product or the controlled device manufacturer supplied documentation.

Device Specifications:

Device Type: Switcher
Manufacturer: Kramer
Firmware Version: 1.09
Model(s): VP-728, VP-729

Version History:

Driver Version	Date	IP Link Compiler	GC Version	Notes
3	9/29/2009	1.4.0	3.0.1	Extron Certified version. Tested on VP-729 firmware version 1.09. Added Executive Mode, Menu Navigation, Picture in Picture Swap, Preset Save, Preset Recall, and Volume (Steps). Updated Aspect Ratio.
2	5/4/2009	1.3.11.1	2.5.1	Updated driver to use manufacture latest protocol.
1	4/23/2009	1.3.11.1	2.5.1	Initial version.

Driver Notes:

IP Link® Device Interface Communication Sheet

Control Commands & States:

Aspect Ratio	Best Fit	Letterbox	Output
	Wide	Native	Custom
Audio Mute	On	Off	
Auto Image	Execute		
Executive Mode	On	Off	
Freeze	On	Off	
Input	Input 1	Input 2	Input 3
	Input 4	VGA 1	VGA 2
	HDMI1	HDMI2	USB Port
Menu Navigation	Menu	Up	Down
	Left	Right	Enter
Picture In Picture	On	Off	
Picture In Picture Swap	Execute		
PIP Input	Input 1	Input 2	Input 3
	Input 4	VGA 1	VGA 2
	HDMI1	HDMI2	USB Port
PIP Settings	PIP	Side by Side	Split
PIP Size	1/4	1/9	1/16
	1/25	Custom	
Power Control	On	Off	
Preset Recall	1 – 8		
Preset Save	1 – 8		
Scaled Volume	0 to 100 in steps of 1		
Video Mute	On	Off	
Volume (Discrete)	-100 to 24 in steps of 1		
Volume (Step)	Up	Down	

IP Link® Device Interface Communication Sheet

Status Available:

Aspect Ratio	Best Fit	Letterbox	Output
	Wide	Native	Custom
Audio Mute	On	Off	
Connection Status	Connected	Disconnected	
Executive Mode	On	Off	
Freeze	On	Off	
Input	Input 1	Input 2	Input 3
	Input 4	VGA 1	VGA 2
	HDMI1	HDMI2	USB Port
Picture In Picture	On	Off	
PIP Input	Input 1	Input 2	Input 3
	Input 4	VGA 1	VGA 2
	HDMI1	HDMI2	USB Port
PIP Settings	PIP	Side by Side	Split
PIP Size	1/4	1/9	1/16
	1/25	Custom	
Power Control	On	Off	
Scaled Volume	0 to 100 in steps of 1		
Video Mute	On	Off	
Volume (Discrete)	-100 to 24 in steps of 1		

IP Link® Device Interface Communication Sheet

MLC62 Supported Commands:

Aspect Ratio	Best Fit Wide	Letterbox Native	Output Custom
Audio Mute	On	Off	
Auto Image	Execute		
Executive Mode	On	Off	
Freeze	On	Off	
Input	Input 1 Input 4 HDMI1	Input 2 VGA 1 HDMI2	Input 3 VGA 2 USB Port
Menu Navigation	Menu Left	Up Right	Down Enter
Picture In Picture	On	Off	
Picture In Picture Swap	Execute		
PIP Input	Input 1 Input 4 HDMI1	Input 2 VGA 1 HDMI2	Input 3 VGA 2 USB Port
PIP Settings	PIP	Side by Side	Split
PIP Size	1/4 1/25	1/9 Custom	1/16
Power Control	On	Off	
Preset Recall	1 – 8		
Preset Save	1 – 8		
Scaled Volume	0 to 100 in steps of 1		
Video Mute	On	Off	
Volume (Discrete)	-100 to 24 in steps of 1		
Volume (Step)	Up	Down	

Cable and Adapter Requirements:

M/F RS-232 Null Modem Serial Cable

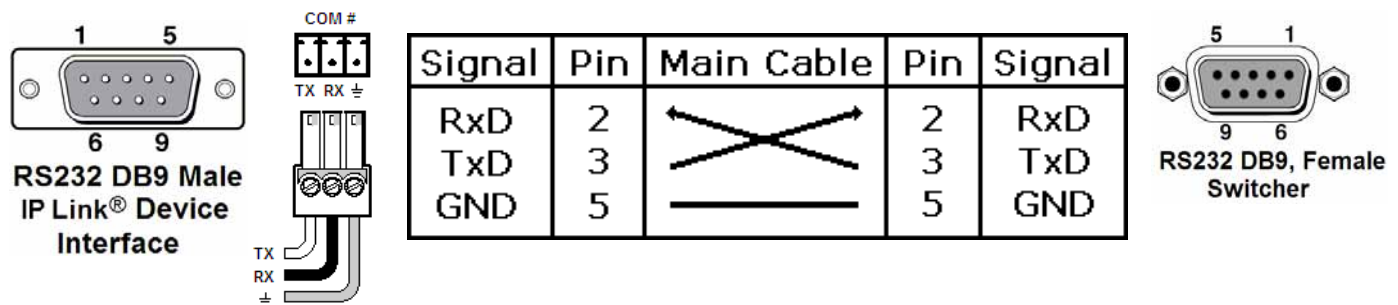
Notes for the Device:

There was a noticeable issue with Kramer switchers running firmware version 1.04 or 1.05. The device use to lock up its RS232 port when the device is powering On and Off using the hard power switch. However after testing this issue with the VP-728 with firmware version 1.09, it looks like Kramer fixed this problem of locking up. We advise the user to update the Kramer firmware version to 1.09 or later

Serial communication:

Port Type: RS-232
Baud Rate: 9600
Data Bits: 8

Parity: None
Stop Bits: 1
Flow Control: None

Pin Assignments Diagram:

Note: Captive screw connector may also be used as a serial connection.

General Notes: