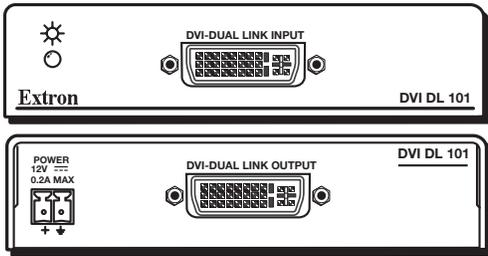


DVI DL 101 Setup Guide



IMPORTANT:
Refer to www.extron.com for the user manual and installation instructions before connecting the product to the power supply.

The Extron® DVI DL 101 is a dual link cable equalizer that extends DVI signals beyond the specified cable limits of 15 feet (5 m). It attaches to the end of a long cable run of up to 275 feet (84 m) for dual link and up to 200 feet (61 m) for single link. The DVI DL supports all dual link DVI signals up to 330 MHz, including 2560x1600 or 1080p at 60 Hz. It is backwards compatible with single link, therefore supporting all single link rates up to 165 MHz, including 1920x1200 and 1080p at 60 Hz.

This guide provides basic instructions for an experienced installer to set up and operate this cable equalizer.

Installation Procedure

1. Turn off and disconnect all equipment from the power source.
2. (Optional) If desired, mount the DVI DL on a 9.5, 6, or 3.5 inch deep rack shelf; a projector mounting pole; or furniture.
3. Connect a DVI source device to the DVI-Dual Link Input DVI-I connector on the front panel.
4. Connect a DVI output device to the DVI-Dual Link Output DVI-I connector on the rear panel.

NOTE: Dual link DVI cables must be used for dual link DVI signals. If a single link DVI cable is used, only single link DVI signals are possible.

5. Wire the provided power supply as illustrated below and connect it to the 2-pole, 3.5 mm captive screw connector on the rear panel.

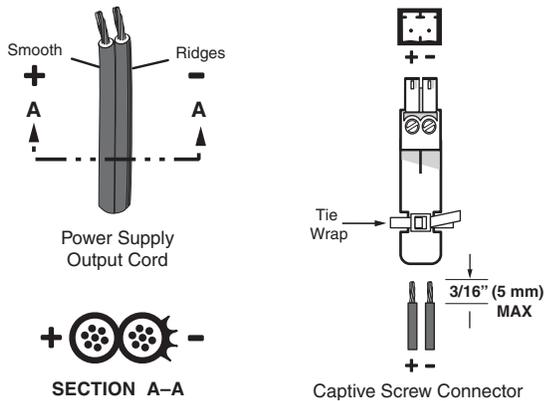
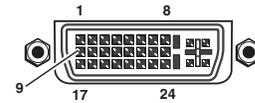


Figure 1. Wiring the Power Connector



Pin	Signal	Pin	Signal	Pin	Signal
1	TMDS data 2-	9	TMDS data 1-	17	TMDS data 0-
2	TMDS data 2+	10	TMDS data 1+	18	TMDS data 0+
3	TMDS data 2/4 shield	11	TMDS data 1 shield	19	TMDS data 0/5 shield
4	TMDS data 4-	12	TMDS data 3-	20	TMDS data 5-
5	TMDS data 4+	13	TMDS data 3+	21	TMDS data 5+
6	DDC clock	14	+5 V power	22	TMDS clock shield
7	DDC data	15	Ground (+5 V)	23	TMDS clock+
8	CEC control*	16	Hot plug detector	24	TMDS clock-

*CEC control on pin 8 is a proprietary usage, and is not the industry standard.

Table 1. DVI Connector Pin Assignments

CAUTION: The power supply must not be permanently fixed to the building structure or similar structures. The power supply must not be located within environmental air handling spaces or the wall cavity. The installation must be in accordance with the applicable provisions of the National Electrical Code ANSI/NFPA 70, Article 725 and the Canadian Electrical Code, Part 1, Section 16. The power supply must be located within the same vicinity as the Extron A/V processing equipment in an ordinary location, Pollution Degree 2, secured to a podium, a desk, or an equipment rack within a dedicated closet.

CAUTION: Applying power with incorrect voltage polarity can damage the power supply and equalizer. Identify the negative lead by the ridges on the side of the cord. (See the illustration above.)

CAUTION: Always use a power supply by Extron for the DVI DL 101. Use of an unauthorized power supply voids all regulatory compliance certification and may cause damage to the supply and the DVI DL.

DVI DL 101 Setup Guide (Continued)

Input cable lengths

For the highest transmission rate of 330 MHz (for dual link) or 165 MHz (for single link), the maximum cable length should be 200 feet (61 m). Longer cables can be used at lower rates.

The DVI DL can operate in dual link mode or single link mode. The table below shows the maximum cable lengths recommended for each resolution in both modes.

Video Resolution	Single Link Mode	Dual Link Mode
1280x1024 1024x768 720p 1080i	250' (76 m)	275' (84 m)
1920x1200 1600x1200 1080p	200' (61 m)	250' (76 m)
2560x1600	N/A	200' (61 m)

NOTE: Avoid using couplers and adapters between cables because this can result in signal degradation.

Table 2. Maximum Cable Lengths for Single Mode and Dual Mode DVI

Enabling the DDC Buffer

The DDC clock and data lines by default are routed straight through to the output, bypassing the DDC buffer. However, if you experience any image problems, changing this setting to engage the DDC buffer should correct them.

To enable the buffer:

1. Remove the seven screws that hold the top cover onto the unit and the two jack screws on either side of the front panel DVI input connector.
2. Slide the top cover forward until it clears the input connector, then lift it off the unit.
3. With the DVI DL rear panel toward you, locate the two DDC jumpers (J5 and J4) on the two sets of three pins in the lower-right corner of the internal board. By default these jumpers are on the middle and outside pins, which lets the DDC lines pass straight through without buffering.
4. Lift each jumper off its pins and slide it down onto the inside and middle pins. (See figure 2 at right.)
5. Replace the top cover onto the unit and slide the cover back until the DVI input connector protrudes through its slot in the front panel.
6. Replace the two jack screws and the seven Philips screws that you removed in step 1.

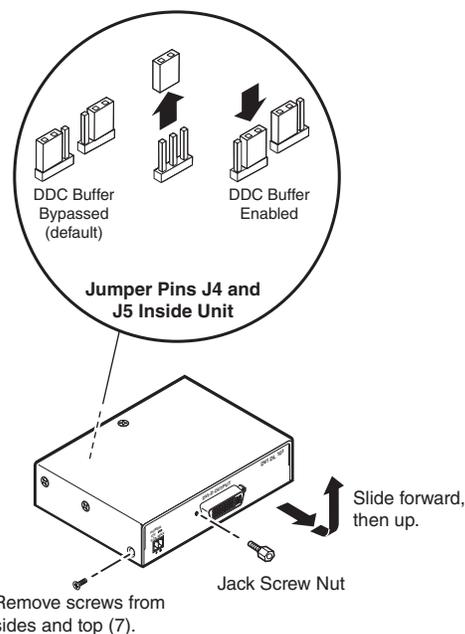
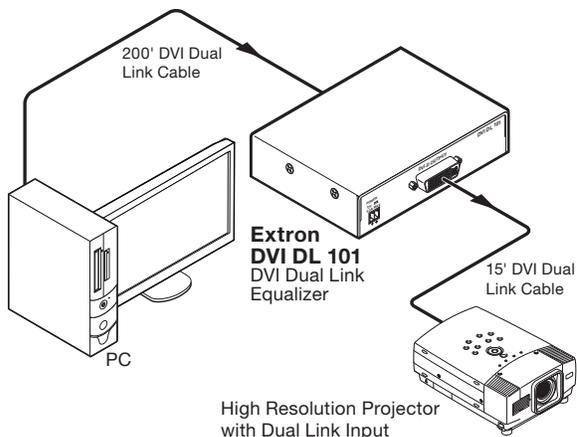


Figure 2. Enabling the DDC Buffer

Application Diagram

The illustration at right shows an example of how the DVI DL 101 can be connected.



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