HD 4K 101 Plus • Setup Guide



Overview

The Extron HD 4K 101 Plus is a cable equalizer that actively conditions incoming HDMI signals to compensate for signal loss when long HDMI cables, low quality HDMI cables, or source devices with poor HDMI signal output are used. It extends Ultra High Definition (UHD) and 4K signals up to 50 feet (15 meters).

Front Panel

- ♠ Power and signal status LED This LED lights amber when the unit is receiving power from the HDMI source or an external power supply. It lights green when there is an active HDMI signal.
- **B HDMI input** Connect the source device to this input.



Rear Panel

♠ Power input — Connect the (optional) 12 VDC, 0.5 A power supply to this power input.

Alternatively, the HD 4K 101 Plus can draw power from the source device over the HDMI cable but this reduces the maximum cable length (see **Maximum Cable Distances** on page 2).

B HDMI output — Connect the display to this output. This cable should be a maximum of 15 feet (5 meters).



Installation

 Mount the HD 4K 101 Plus in a suitable location. The unit should be at the end of a long cable run from the source device and close to the output device.

The unit can be placed on a table top or, with the appropriate kit, mounted on a rack, or mounted under or through furniture. Follow the instructions provided with the kit.

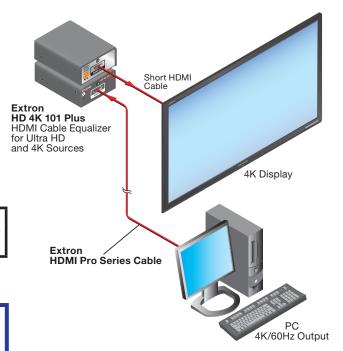
- Connect the source device to the input of the equalizer (see
 Maximum Cable Distances for the maximum cable distances).
- Connect the display device to the output of the equalizer. This cable should be a maximum of 15 feet (5 meters).

NOTE: Use the provided LockIt[™] HDMI lacing brackets to secure the HDMI connectors (see the *HD 4K 101 Plus User Guide* at www.extron.com).

If required, connect a power supply (optional) to the 2-pole captive screw connector.

ATTENTION:

- Do not power on the input and output devices until you have read the Attention in the Power Supply section of the HD 4K 101 Plus User Guide.
- Ne branchez pas les appareils d'entrée et de sortie avant d'avoir lu la mise en garde dans la section « sources d'alimentation » du Guide de l'utilisateur HD 4K 101 Plus.



Maximum Cable Distances

The maximum cable distance depends on resolution, frequency, and, for PC resolutions, the power of the graphics card (when powered by the source). When the source is a PC, Extron recommends the HD 4K 101 Plus be powered by an external power supply.

Resolution	Refresh (Hz)	Maximum Distance	Resolution	Refresh (Hz) Maximum Distance	
720p	60	150 feet (45.7 meters)	3840x2160 (UHD)	24/30	75 feet (22.9 meters)
1080i	30/60	150 feet (45.7 meters)	4096x2160 (4K)	24/30	75 feet (22.9 meters)
1080p	24/30	150 feet (45.7 meters)	3840x2160 (UHD)	60	50 feet (15.2 meters)
1080p (8 bit or deep color)	60	125 feet (38.1 meters)	4096x2160 (4K)	60	35 feet (10.7 meters)

For additional resolutions refer to the HD 4K 101 Plus User Guide (available at www.extron.com) or the product label.

Internal Settings

ATTENTION:

- Use electrostatic discharge (ESD) precautions (be electrically grounded) when making connections.
- Prenez des précautions contre les décharges électrostatiques (soyez électriquement relié à la terre) lorsque vous effectuez des connexions.

Under most conditions, the HD 4K 101 Plus works without adjustments. However, the quality of the image displayed may be affected by a combination of the source, display, and cable length. If so, use the two sets of internal jumper switches to adjust Equalization (EQ), and Pre-emphasis.

- 1. Remove the cover of the unit, as described in the HD 4K 101 Plus User Guide.
- 2. Position the HD 4K 101 Plus with the front panel (status LED) furthest from you and the rear panel (power input) closest to you. In that orientation, the Pre-emphasis jumpers are furthest from you and the EQ jumpers are closest to you.
- 3. Set the jumper switches as shown in the table below and replace the cover to the unit.

Jumper	Function	Jumper Pins 2 and 3	Jumper Pins 1 and 2	No Jumper
J3 (DDC CLK Buffer) J4 (DDC DATA Buffer)	Some applications require that the DDC be buffered for proper operation. Adjusting this jumper can clean up the signal to allow it to extend further.	Off 3	On Default	NA
	NOTE: Jumpers J3 and J4 must be configured together, either both on or both off.			
J5 (EQ)	Adjusting this jumper can improve the image for some applications with longer cable runs, image artifacts, or both. Setting for J5 (EQ), based on resolutions and the input HDMI cable lengths used:	Low 3	Mid 3	High Default
	 High: 1080p @ 60 Hz with input cables 100-125 feet. 4k/30 with input cables 50-75 feet. 4k/60 with input cables 25-35 feet. 			
	 Mid: 1080p @ 60 Hz with input cables 50-100 feet. 4k/30 with input cables 25-50 feet. 4k/60 with input cables 15-25 feet. 			
	 Low: 1080p @ 60 Hz with input cables 15-50 feet. 4k/30 with input cables 15-25 feet. 4k/60 with input cables less than 15 feet. 			
J6 (Pre-emphasis)	Adjusting this jumper can compensate for signal degradation in applications with higher data rate, higher resolution, or both. This adjustment is recommended for resolutions of 2560x1600 @ 60 Hz or higher.	On 3	Off Default	Not used 3

For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the **Extron Safety and Regulatory Compliance Guide** on the Extron website.