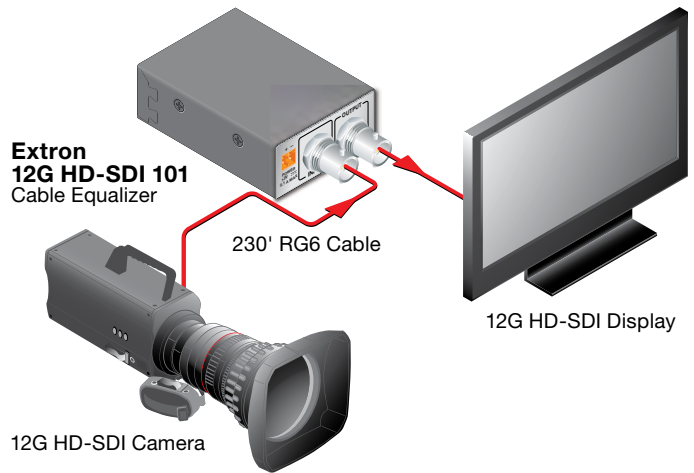


## 12G HD-SDI 101 • Setup Guide

### Introduction

This guide provides instructions for an experienced installer to set up and operate the Extron 12G HD-SDI 101, a cable equalizer for SDI, HD-SDI, 3G-SDI, 6G-SDI, and 12G-SDI digital video.

The Extron 12G HD-SDI 101 is a 1 input, 1 output HD-SDI signal equalizer that can recondition and equalize digital video signals up to 12G-SDI due to losses incurred from long cable runs. The equalizer is typically placed at the end of a long cable run.



### Installation

#### Mounting the Unit

Mounting instructions can be found in [Mounting the Equalizer](#) on page 3. Compatible optional hardware is listed on the Extron website ([www.extron.com](http://www.extron.com)).

#### ATTENTION:

- Installation and service must be performed by authorized personnel only.
- L'installation et l'entretien doivent être effectués par le personnel autorisé uniquement.

#### Connections and Indicator

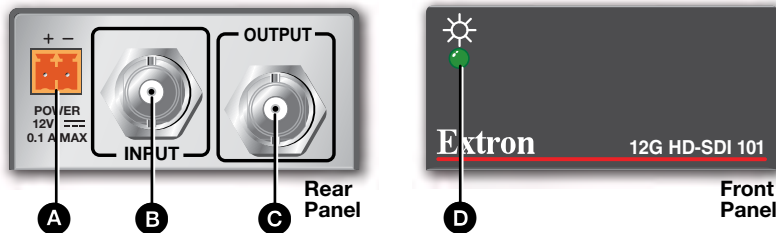


Figure 1. 12G HD-SDI 101 Rear and Front Panels

#### Rear Panel

- A Power connector** — Connect the provided external 12 VDC, 6 watt power supply to this 2-pole, orange, 3.5 mm captive screw connector. See [Power Connector Wiring](#) on the next page.
- B HD-SDI input** — This female BNC connector accepts an HD-SDI input.

The maximum length from the signal source to the 12G HD-SDI 101 input varies, dependent on the input:

| Format  | Max. length      | Format | Max. length      |
|---------|------------------|--------|------------------|
| 12G SDI | 230 feet (70 m)  | HD-SDI | 787 feet (240 m) |
| 6G SDI  | 295 feet (90 m)  | SDI    | 984 feet (300 m) |
| 3G SDI  | 590 feet (180 m) |        |                  |

**NOTE:** The maximum signal transmission distance depends on signal resolution, the source, the display, and the quality of the cable.

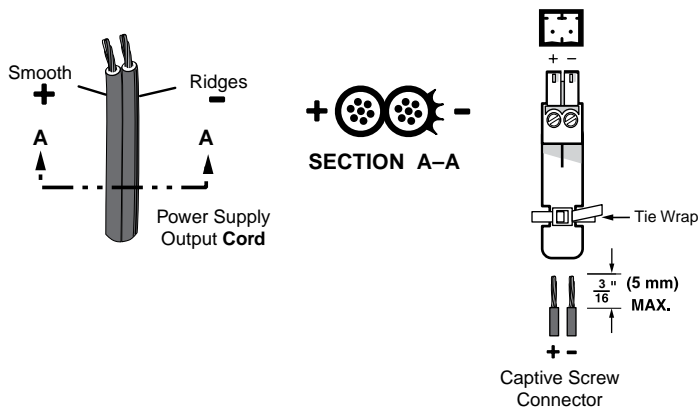
- C HD-SDI output** — This female BNC connector provides an equalized and reclocked HD-SDI output.

#### Front Panel

- D Power LED** — The LED lights green when the unit is receiving power.

## Power Connector Wiring

Figure 2 shows how to wire the connector. Use the supplied tie-wrap to strap the power cord to the extended tail of the connector.



**Figure 2. Power Connector Wiring**

### CAUTION:

### ATTENTION :

- The wires must be kept separate while the power supply is plugged in. Remove power before wiring.
- Les deux cordons d'alimentation doivent être tenus à l'écart l'un de l'autre quand l'alimentation est branchée.
- The length of exposed wires is important. The ideal length is 3/16 inch (5 mm).
  - Any longer and the exposed wires may touch, causing a short circuit between them.
  - Any shorter and the wires can be easily pulled out even if tightly fastened by the captive screws.
- La longueur des câbles exposés est importante. La longueur idéale est de 5 mm (3/16 inches).
  - S'ils sont un peu plus longs, les câbles exposés pourraient se toucher et provoquer un court circuit.
  - S'ils sont un peu plus courts, ils pourraient sortir, même s'ils sont attachés par les vis captives.
- Do not tin the power supply leads before installing them in the connector. Tinned wires are not as secure in the connector and could be pulled out.
- Ne pas étamer les conducteurs avant de les insérer dans le connecteur. Les câbles étamés ne sont pas aussi bien fixés dans le connecteur et pourraient être retirés.

### ATTENTION:

- This product is intended to be supplied by a UL Listed power source marked "Class 2" or "LPS," rated 12 VDC, 0.5 A minimum. Always use a power supply supplied by or specified by Extron. Use of an unauthorized power supply voids all regulatory compliance certification and may cause damage to the supply and the end product.
- Ce produit est destiné à une utilisation avec une source d'alimentation listée UL avec l'appellation « Classe 2 » ou « LPS » et normée 12 Vcc, 0.5 A minimum. Utilisez toujours une source d'alimentation fournie ou recommandée par Extron. L'utilisation d'une source d'alimentation non autorisée annule toute conformité réglementaire et peut endommager la source d'alimentation ainsi que le produit final.
- Unless otherwise stated, the AC/DC adapters are not suitable for use in air handling spaces or in wall cavities.
- Sauf mention contraire, les adaptateurs AC/DC ne sont pas appropriés pour une utilisation dans les espaces d'aération ou dans les cavités murales.
- The installation must always be in accordance with the applicable provisions of National Electrical Code ANSI/NFPA 70, article 725 and the Canadian Electrical Code part 1, section 16. The power supply shall not be permanently fixed to a building structure or similar structure.
- Cette installation doit toujours être en accord avec les mesures qui s'applique au National Electrical Code ANSI/NFPA 70, article 725, et au Canadian Electrical Code, partie 1, section 16. La source d'alimentation ne devra pas être fixée de façon permanente à une structure de bâtiment ou à une structure similaire.

**ATTENTION:**

- Power supply voltage polarity is critical. Incorrect voltage polarity can damage the power supply and the unit. The ridges on the side of the cord (see [figure 2](#) on the previous page) identify the power cord negative lead.
- La polarité de la source d'alimentation est primordiale. Une polarité incorrecte pourrait endommager la source d'alimentation et l'unité. Les stries sur le côté du cordon (voir [l'illustration 2](#) sur la page 2) permettent de repérer le pôle négatif du cordon d'alimentation.

To verify the polarity before connection, plug in the power supply with no load and check the output with a voltmeter.

## Mounting the Equalizer

**ATTENTION:**

- Installation and service must be performed by authorized personnel only.
- L'installation et l'entretien doivent être effectués par le personnel autorisé uniquement.

The 1-inch high, eighth-rack width 12G HD-SDI 101 cable equalizer can be placed on a table, mounted in a rack, or mounted under a desk or table.

### Tabletop Use

Affix the included rubber feet to the bottom of the unit and place it in any convenient location.

### Mounting Kits

Mount the unit using any optional compatible mounting kit listed on the 12G HD-SDI 101 product page at [www.extron.com](http://www.extron.com), in accordance with the directions included with the kit. For rack mounting, see "UL rack-mounting guidelines" below.

#### UL rack-mounting guidelines

The following Underwriters Laboratories (UL) requirements pertain to the installation of the unit into a rack.

- **Elevated operating ambient temperature** — If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consider installing the equipment in an environment compatible with the maximum ambient temperature (TMA = +122 °F, +50 °C) specified by Extron.
- **Reduced air flow** — Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.
- **Mechanical loading** — Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
- **Circuit overloading** — Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- **Reliable earthing (grounding)** — Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (such as use of power strips).

## Troubleshooting

If no image appears:

- Ensure that all devices are plugged in and powered on. The equalizer is receiving power if its power LED is lit.
- Ensure an active input is applied to the equalizer.
- Ensure that the proper signal format is supplied.
- Check the cabling and make corrections as necessary.
- Call the Extron S3 Sales & Technical Support Hotline if necessary. See the Extron [website](#) for the Extron office nearest you.

