

12G HD-SDI 101

CABLE EQUALIZER FOR 12G-SDI



4K UHD

The 12G HD-SDI 101 is a one-input, one-output cable equalizer for multi-rate SDI digital video signals which enables 3G-SDI, 6G-SDI, or 12G-SDI digital video to be sent long distances on coaxial cable when used at the destination end of the cable run. This cable equalizer supports all common serial digital video data rates up to 11.88 Gbps, while passing HDR, embedded audio, and other ancillary data. It is housed in a one-eighth rack width, metal enclosure and provides integration-friendly mounting options into both new and existing AV systems.

- ▶ Automatically adapts to SMPTE and ITU digital video standards for SDI signals up to a 12G-SDI data rate
- ▶ Supports data rates from 270 Mbps to 11.88 Gbps
- ▶ Support for HDR – High Dynamic Range video
- ▶ Automatic input equalization
- ▶ Automatic output reclocking
- ▶ Passes ancillary data including HDR, embedded audio, closed caption, and time code

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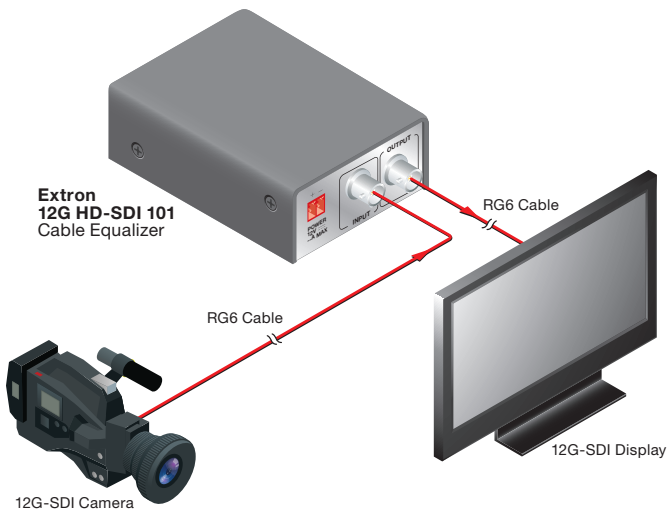
DESCRIPTION

The **12G HD-SDI 101** is a one-input, one-output cable equalizer for multi-rate SDI digital video signals. It offers a convenient, economical solution for sending multi-rate SDI digital video signals over long coaxial cable runs. The 12G HD-SDI 101 supports all common serial digital video data rates up to 11.88 Gbps, while passing HDR, embedded audio, and other ancillary data allowed by the SMPTE and ITU specifications. Automatic input equalization adds up to 984 feet (300 m) for SDI, up to 787 feet (240 m) for HD-SDI, up to 590 feet (180 m) for 3G-SDI, up to 295 feet (90 m) for 6G-SDI, and up to 230 feet (70 m) for 12G-SDI digital video, when using Extron RG6 cable. The 12G HD-SDI 101 is housed in a one-eighth rack width, metal enclosure, providing integration-friendly mounting options into both new and existing AV systems.

KEY FEATURES

- ▶ Automatically adapts to SMPTE and ITU digital video standards for SDI signals up to a 12G-SDI data rate
- ▶ Supports data rates from 270 Mbps to 11.88 Gbps
- ▶ Support for HDR – High Dynamic Range video
- ▶ Automatic input equalization
- ▶ Automatic output reclocking
- ▶ Passes ancillary data including HDR, embedded audio, closed caption, and time code
- ▶ Power and Signal Presence LED
- ▶ One-eighth rack width metal enclosure
- ▶ External Extron Everlast power supply included, replacement part #70-1175-01

APPLICATION DIAGRAM



SPECIFICATIONS

TRUE 4K SPECIFICATION

Max 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max Bit Depth per Color
4096 x 2160 at 30 Hz 3840 x 2160 at 30 Hz	4:4:4	8 bit
4096 x 2160 at 60 Hz 3840 x 2160 at 60 Hz	4:2:2	10 bit

Frame rate ¹	24, 25, 30, 50, or 60 fps
Chroma sampling ¹	4:4:4, 4:2:2, and 4:2:0
Color bit depth ¹	8 or 10 bits per color
Signal type	6G-SDI, 12G-SDI
Max. video data rate	11.88 Gbps per 12G-SDI connection
NOTE: ¹ Subject to the maximum data rate limit. Use our calculator (http://www.extron.com/product/videotools.aspx) to determine video parameters supported by this data rate.	

VIDEO

Signal type	SDI, HD-SDI, 3G-SDI, 6G-SDI, and 12G-SDI digital video
Resolution	8 or 10 bits, automatic
Operation standards	SMPTE 259M-C, SMPTE 292M, SMPTE 424M, SMPTE 372M, SMPTE ST-2081, SMPTE 2082, ITU-RBT.601, ITU-RBT.1120
Auto data rate lock	Yes

VIDEO INPUT

Number/signal type	1 single link SDI, HD-SDI, 3G/6G/12G-SDI digital component video
Input cable equalization	Automatic for up to -30 dB of cable loss
12G-SDI	70 m (230') using Extron RG6 cable
6G-SDI	90 m (295') using Extron RG6 cable
3G-SDI	180 m (590') using Extron RG6 cable
NOTE: Transmission distance varies depending on the signal resolution and on the type of cable, source, and display used in the system.	

VIDEO OUTPUT

Number/signal type	1 single link SDI, HD-SDI, 3G/6G/12G-SDI digital component video
Re-clocking	Automatic for 270 Mbps, 1.485 Gbps, 2.97 Gbps, 5.94 Gbps, and 11.88 Gbps (bypassed for all other rates)

GENERAL

Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 0.5 A, 6 watts
Power input requirements	12 VDC, 0.2 A, 2.4 watts
Enclosure dimensions	1.0" H x 2.2" W x 3.0" D (quarter rack wide) (2.5 cm H x 5.6 cm W x 7.6 cm D) (Depth excludes connectors.)
Product weight	0.2 lbs (0.1 kg)
Regulatory compliance	Safety: c-UL, UL EM/EMC: CE, FCC Class A, VCCI, AS/NZS, ICES
Warranty	3 years parts and labor
NOTE: All nominal levels are at ±10%.	

Model	Version Description	Part number
12G HD-SDI 101	12G-SDI Cable Equalizer	60-1673-01

For complete specifications, please go to www.extron.com
Specifications are subject to change without notice.

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