

3G HD-SDI 101

ONE INPUT, ONE OUTPUT CABLE EQUALIZER
FOR MULTI-RATE SDI

- Automatically adapts to SMPTE and ITU digital video standards for SDI and HD-SDI
- Supports data rates up to 3G-SDI video
- Automatic input equalization
- Automatic output reclocking
- Passes embedded audio, ancillary ID, and metadata information
- LED power indicator
- One-eighth rack width metal enclosure
- External universal power supply included



The 3G HD-SDI 101 is a cable equalizer for multi-rate SDI signals, which enables SDI, HD-SDI, or 3G-SDI digital video to be sent long distances on coaxial cable. This broadcast quality equalizer accepts all common serial digital video data rates including SMPTE 259M, SMPTE 292M, and SMPTE 424M, as well as embedded audio, ancillary ID, and metadata information. The 3G HD-SDI 101 is ideal for applications that require high resolution signal equalization due to long cable runs in a variety of applications.



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DESCRIPTION

The **3G 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 3G HD-SDI 101 supports all common serial digital video data rates up to 2.97 Gbps, and also passes embedded audio and other ancillary data allowed by the SMPTE and ITU specifications. It is housed in a one-eighth rack width, metal enclosure, providing integration-friendly mounting options into both new and existing A/V systems, including broadcast and production facilities, command and control centers, and medical imaging facilities.

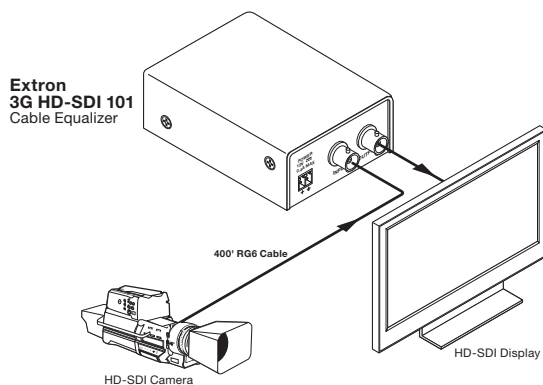
The 3G HD-SDI 101 features automatic input equalization, which compensates for attenuation and distortion on the incoming signal. Cables can vary in length up to the maximum of 500 feet (150 m) without requiring a change to the equalizer.

The 3G HD-SDI 101 also features output reclocking, which reshapes and restores timing of digital video signals at the output, eliminating high frequency jitter and providing A/V system designers with additional headroom when connecting multiple devices.

FEATURES

- Automatically adapts to SMPTE and ITU digital video standards
- Supports data rates up to 3G-SDI video
- Automatic Input equalization
- Automatic output reclocking
- Passes embedded audio, ancillary ID, and metadata information
- LED power indicator
- One-eighth rack width metal enclosure is compact enough to be placed behind a display
- External universal power supply included

APPLICATION DIAGRAM



SPECIFICATIONS

VIDEO		
Gain	Unity	
Resolution	8 or 10 bits, automatic	
Operation standards	SMPTE 259M, SMPTE 292M, SMPTE 424M, ITU-R BT.601, ITU-R BT.1120	
Auto data rate lock.....	Yes	
VIDEO INPUT		
Number/signal type.....	1 single link SDI, HD-SDI, or 3G-SDI digital component video	
Connectors	1 BNC female	
Data rates	19 Mbps to 2.97 Gbps	
Input cable equalization	Automatic for up to -30 dB of cable loss	
HD-SDI, 3G-SDI.....	120 m (400') using Extron RG6 cable 60 m (200') using Extron RG59 cable	
SDI.....	150 m (500') using Extron RG6 cable 120 m (400') using Extron RG59 cable	
NOTE: Transmission distance varies depending on the signal resolution and on the type of cable, source, and display used in the system.		
Nominal level.....	0.8 Vp-p	
Minimum/maximum levels	0.5 V to 1 Vp-p with no offset	
Impedance.....	75 ohms	
Return loss	<-15 dB @ 5 MHz to 2.97 GHz	
DC offset (max. allowable).....	5 V	
Input coupling	AC	
VIDEO OUTPUT		
Number/signal type.....	1 single link SDI, HD-SDI, or 3G-SDI digital component video	
Connectors	1 BNC female	
Re-clocking	Automatic for 270 Mbps, 1.485 Gbps, 2.97 Gbps, or bypassed for other rates	
Nominal level.....	0.8 Vp-p	
Minimum/maximum levels	0.5 V to 1.0 Vp-p	
Impedance.....	75 ohms	
Return loss	<-25 dB @ 100 MHz	
DC offset.....	±5 mV with input at 0 offset	
GENERAL		
External power supply.....	100 VAC to 240 VAC, 50/60 Hz, external; to 12 VDC, 2 A, regulated	
Power input requirements.....	12 VDC, 0.2 A	
Cooling.....	Convection, no vents	
Mounting		
Rack mount	Yes, with optional 1U, 9.5" deep rack shelf, part #60-190-01 (RSU 129) or 60-604-01 (RSB 129); or with VersaTools® 1U, 3.5" deep rack shelf, part #60-190-20 (RSF 123) or 60-604-20 (RSB 123); or with Back of the Rack mounting kit, part #70-367-01 (MBB 100)	
Furniture mount.....	Yes, with optional VersaTools Under Desk Mounting Kit, part #70-212-01 (MBU 123)	
Enclosure type	Metal	
Enclosure dimensions.....	1.0" H x 2.2" W x 3.0" D (<1U high, one eighth rack wide) (2.5 cm H x 5.6 cm W x 7.6 cm D) (Depth excludes connectors.)	
Product weight	0.4 lbs (0.2 kg)	
Shipping weight	2 lbs (1 kg)	
Vibration	ISTA 1A in carton (International Safe Transit Association)	
Listings	UL, CUL	
Compliances	CE, FCC Class A, VCCI, AS/NZS, ICES	
NOTE: All nominal levels are at ±10%.		
Model	Version Description	Part Number
3G HD-SDI 101	Multi-rate Cable Equalizer	60-963-01

Specifications are subject to change without notice.



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