

3G-AE 100

EIGHT-CHANNEL AUDIO EXTRACTOR FOR 3G-SDI

- ▶ De-embeds up to eight channels of digital audio from a 3G-SDI, HD-SDI, or SDI digital video signal
- ▶ Eight line level, balanced/unbalanced analog audio outputs
- ▶ Automatically adapts to SMPTE and ITU digital video standards for 3G-SDI, HD-SDI, and SDI
- ▶ Supports data rates from 270 Mbps to 2.97 Gbps
- ▶ Supports SDI groups 1/2 or 3/4
- ▶ Buffered SDI loop-through connector
- ▶ Two units can be cascaded to support up to 16 channels of embedded audio
- ▶ Automatic input cable equalization



The Extron 3G-AE 100 is a high performance audio extractor for 3G-SDI, HD-SDI, and SDI digital video signals. It de-embeds up to eight channels of digital audio from two SDI audio groups, and outputs it as line level, analog audio. The 3G-AE 100 includes a buffered SDI loop-through, which enables two units to be cascaded to support up to 16 channels of embedded audio. The 3G-AE 100 is ideal for use in applications where digital audio must be extracted from a 3G-SDI, HD-SDI, or SDI signal and converted to line level, analog audio.



Extron Electronics
INTERFACING, SWITCHING AND CONTROL

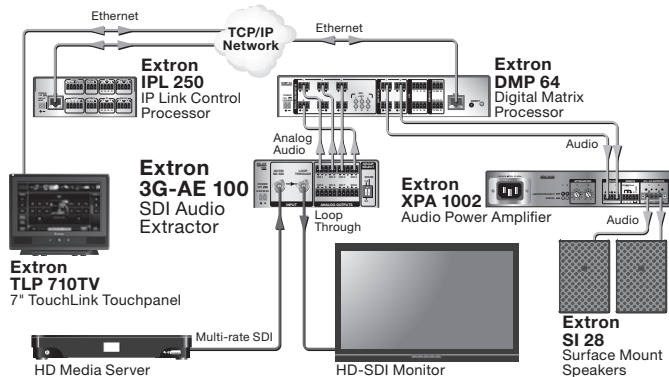
DESCRIPTION

The Extron **3G-AE 100** is a high performance audio extractor for 3G-SDI, HD-SDI, and SDI digital video signals. It automatically detects the incoming SDI data rate, de-embeds up to eight channels of digital audio, and then converts it to line level, analog audio. The 3G-AE 100 features an equalized SDI input and eight analog audio outputs that are switch-selectable to support audio groups 1 through 4. A buffered and reclocked SDI loop-through allows two 3G-AE 100 units to be cascaded to support up to 16 channels of embedded audio. The 3G-AE 100 is ideal for use in applications where digital audio must be extracted from a 3G-SDI, HD-SDI, or SDI signal and converted to line level, analog audio.

FEATURES

- ▶ De-embeds up to eight channels of digital audio from a 3G-SDI, HD-SDI, or SDI digital video signal
- ▶ Eight line level, balanced/unbalanced analog audio outputs
- ▶ Automatically adapts to SMPTE and ITU digital video standards for 3G-SDI, HD-SDI, and SDI
- ▶ Supports data rates from 270 Mbps to 2.97 Gbps
- ▶ Supports SDI groups 1/2 or 3/4 – The 3G-AE 100 enables SDI group selection to de-embed eight channels of audio from SDI groups 1/2 or 3/4.
- ▶ Buffered SDI loop-through – A buffered and reclocked SDI loop-through allows two 3G-AE 100 units to be cascaded to support up to 16 channels of embedded audio.
- ▶ Automatic input cable equalization improves signal transmission distances up to 600 feet (185 m) for HD-SDI and SDI, and up to 500 feet (150 m) for 3G-SDI with Extron RG6

APPLICATION DIAGRAM



SPECIFICATIONS

VIDEO		
Signal type	SDI, HD-SDI, and 3G-SDI digital video	
Gain	Unity	
Resolution	8 or 10 bits, automatic	
VIDEO INPUT		
Number/signal type	1 single link SDI, HD-SDI, or 3G-SDI digital component video	
Nominal levels	0.8 Vp-p	
Minimum/maximum levels	0.5 Vp-p to 1 Vp-p with no offset	
Impedance	75 ohms	
Return loss	<-15 dB @ 5 MHz to 2.97 GHz <-10 dB @ 1.5 GHz to 2.97 GHz	
DC offset (max. allowable)	5 V	
Input coupling	AC	
Equalization	Automatic for up to -30 dB of cable loss	
VIDEO OUTPUT		
Number/signal type	1 single link SDI, HD-SDI, or 3G-SDI digital component video	
Re-clocking	Automatic for 270 Mbps, 1.485 Gbps, and 2.97 Gbps (bypassed for all other rates)	
Nominal level	0.8 Vp-p	
Minimum/maximum level	0.5 Vp-p to 1 Vp-p	
Impedance	75 ohms	
Return loss	<-25 dB @ 100 MHz	
DC offset	+/-5 mV with input at 0 offset	
AUDIO INPUT		
Number/signal type	1 SDI embedded audio (SMPTE 272M, SMPTE 299M)	
Connector	1 female BNC connector	
AUDIO OUTPUT		
Number/signal type	(4) stereo balanced/unbalanced	
Connector	(4) 5-pole, 3.5mm captive screw connector	
GENERAL		
Power	External Input: 100-240 VAC, 50/60 Hz Output: 12 VDC, 1.0 A, 12 watts	
Power consumption	5.8 watts	
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing	
Enclosure dimensions	1.7" H x 4.3" W x 3.0" D (1/4 rack width) (4.2 cm H x 11.0 cm W x 7.6 cm D) (Depth excludes connectors.)	
Product weight	0.5 lbs (0.3 kg)	
Shipping weight	3 lbs (2 kg)	
Listings	UL, c-UL	
Compliances	CE, FCC Class A, VCCI, AS/NZS, ICES	
NOTE: All nominal levels are at ±10%.		
Model	Version Description	Part number
3G-AE 100	3G-SDI Audio Extractor	60-1353-01

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

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