

HAE 100

HDMI AUDIO DE-EMBEDDER

- HDMI audio de-embedding with analog stereo and digital S/PDIF audio outputs
- HDMI 1.3 compatible
- HDCP compliant
- De-embeds audio with or without HDMI output connected
- EDID Minder®
- Automatic input cable equalization
- Comprehensive, real-time status LED indicators for troubleshooting and monitoring
- Front panel USB configuration port



The Extron HAE 100 provides a simple, convenient solution for extracting the audio from an HDMI signal. It offers analog stereo and digital S/PDIF audio outputs as well as several integrator-friendly features, including EDID Minder, input cable equalization, and front-panel status LED indicators. The HAE 100 includes full HDMI signal pass-through and is compatible with HDMI 1.3 Deep Color.



Extron® Electronics
INTERFACING, SWITCHING AND CONTROL

DESCRIPTION

The Extron **HAE 100** is an audio de-embedder that extracts the audio from the HDMI signal and provides outputs for analog stereo and digital S/PDIF audio. The HAE 100 supports data rates up to 6.75 Gbps for compatibility with HDMI 1.3 Deep Color. It is HDCP compliant and compatible with HDTV 1080p/60 or computer-video resolutions up to 1920x1200. The HAE 100 is equipped with several integrator-friendly features, including a buffered HDMI video output with EDID Minder® for simplified EDID management between the input source and the display, plus input cable equalization and comprehensive LED status display.

EDID Minder automatically manages EDID communication between the input source and the display, ensuring the source powers up properly and reliably delivers content to the display. Input cable equalization compensates for weak source signals or signal loss when using long input cable assemblies.

LEDs on the front panel offer comprehensive, real-time device status monitoring, including HDMI input / output and audio output signal presence, HDCP authentication, and whether the extracted audio is two-channel PCM or encoded bitstream audio for Dolby® Digital or DTS® Digital Surround. A mini USB port on the front panel provides convenient access for device configuration. The HAE 100 is housed in a compact 1U, quarter rack width metal enclosure.

FEATURES

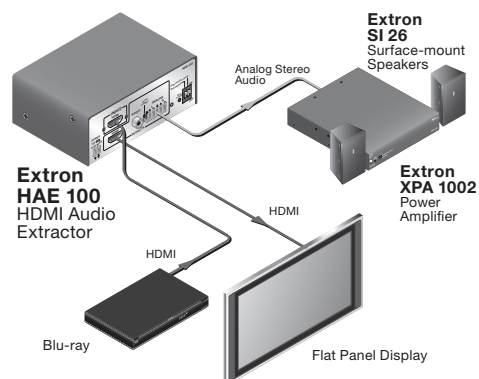
- **HDMI audio de-embedding with analog stereo and digital S/PDIF audio outputs** – The HAE 100 offers the flexibility to support analog stereo, PCM audio, or Dolby or DTS multi-channel surround sound in systems with HDMI.
- **HDMI 1.3 compatible** – Supports HDMI 1.3 specification features, including data rates up to 6.75 Gbps and Deep Color.
- **HDCP compliant**
- **De-embeds audio with or without HDMI output connected**
- **Simultaneous analog stereo and digital S/PDIF outputs when de-embedding two-channel PCM audio**
- **Selectable HDMI audio pass-through** – The user can control whether the HDMI output passes audio by setting a DIP switch on the rear panel.
- **EDID Minder** – A selectable feature that enables automatic and continuous EDID management between the input source and the display. EDID Minder ensures that the source powers up properly and reliably outputs content to the display.
- **Automatic input cable equalization**
- **Comprehensive, real-time status LED indicators for troubleshooting and monitoring** – Front panel LEDs verify the presence of HDMI input / output and audio output signals, HDCP authentication, and the de-embedded audio format.
- **Front panel USB configuration port**

SPECIFICATIONS

VIDEO		
Maximum data rate	6.75 Gbps (2.25 Gbps per color)	
Maximum pixel clock	225 MHz	
Resolution range	Up to 1920x1200 or 1080p @ 60 Hz, 12-bit color	
VIDEO INPUT		
Number/signal type	1 single link HDMI	
Equalization	Automatic for up to -12 dB of cable loss	
Input cable length	Up to 25' (7.6 m)	
VIDEO OUTPUT		
Number/signal type	1 single link HDMI	
Output cable length	Up to 15' (5 m)	
AUDIO INPUT		
Number/signal type	1, combined with HDMI video input	
Source formats	PCM, Dolby Digital 2/0, Dolby Digital 2/0 Surround, Dolby Digital 5.1, Dolby Digital EX, DTS Digital Surround 5.1, DTS-ES Matrix 6.1, DTS-ES Discrete 6.1	
AUDIO OUTPUT		
Number/signal type	1 combined with HDMI video output and either 1 stereo balanced/unbalanced or 1 S/PDIF	
Connectors	(1) 3.5 mm captive screw connector, 5 pole 1 female RCA jack (tip, ring)	
CONTROL/REMOTE		
USB control ports	1 front panel female mini USB B	
USB standards	USB 2.0, low speed	
GENERAL		
External power supply	100 VAC to 240 VAC, 50-60 Hz, external; to 12 VDC, 1 A, regulated	
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	
Thermal dissipation 115 VAC, 60 Hz	4.0 BTU/hr	
Regulatory compliance		
Safety	CE, c-UL, UL	
EMI/EMC	CE, C-tick, FCC Class A, ICES, VCCI	
NOTE: All nominal levels are at ±10%.		
Model	Version Description	Part number
HAE 100	HDMI Audio De-Embedder	60-1075-01

Specifications are subject to change without notice.

APPLICATION DIAGRAM



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