

FEATURES

- ▷ 2 × 12G/6G/3G/HD-SDI Inputs With Integrated 16 Channel De-embedder
- ▷ Dante, AES67, and ST 2110-30 (C16-AM-12G-IP only) network audio support
- ▷ 2 × SFP slots:
 - 1 × 12G/6G/3G/HD-SDI Video SFP
 - 1 × 1GbE Network SFP
- ▷ 8 balanced analog input channels, DB25 TASCAM compatible connector
- ▷ Reclocked SDI Outputs
- ▷ HDMI output for SDI video monitoring
- ▷ 82dB@1kHz Internal speakers loudness
- ▷ Onboard 5.1 Surround Sound Lt/Rt Downmixer
- ▷ Redundant Power Supply Option
- ▷ 3.5mm jack and dedicated USB power for Bluetooth transmitter dongle
- ▷ Easy Audio Source and Mode Selection
- ▷ Ethernet Connection to Web GUI, Dashboard, and REST API Control System For Monitoring, Control and Software Upgrades

APPLICATIONS

- ▷ Broadcast
- ▷ Mobile Production Trucks
- ▷ Master Control/CER
- ▷ Confidence Monitoring



C16-AM-12G Front

The CRESCENDO C16-AM-12G is a compact and lightweight 1 RU 16 Channel SDI embedded audio monitoring system that provides visual and aural monitoring of all 16 channels of audio from 12G/6G/3G/HD-SDI signal. Optional hardware upgrades include Dante, AES67, and ST 2110-30 network audio support.

Two LCD color displays on the front panel display the audio levels on 16 bar graph VU/PPM meters and simultaneously provide average level measurements.

With simplicity in mind the C16-AM-12G has been designed with an intuitive user interface to allow for easy access to the signals you need to monitor. Twelve illuminated pushbuttons provide intuitive audio channel source selection and L/R Solo, SUM, and Lt/Rt Downmix modes directly from the front panel.

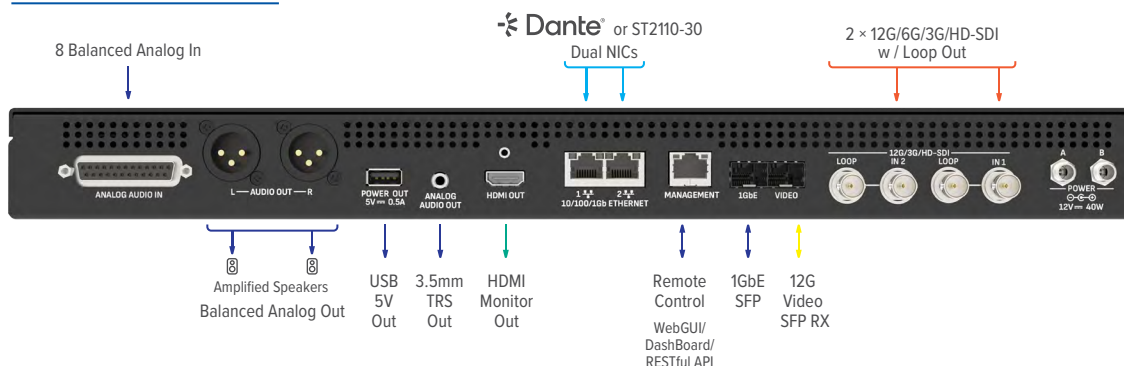
A rotary shaft encoder is used to provide volume control with a unique push to mute speaker function. Also located on the front panel is a 1/4" jack for use when headphones are required. The C16-AM-12G internal speakers are muted once a headset has been plugged in.

The rear panel allows for two 12G/6G/3G/HD-SDI inputs and provides two reclocked SDI outputs. An optional video SFP receiver provides fiber input support. Two balanced stereo analog XLR audio outputs can be used to drive a set of studio grade powered speakers, and a 3.5 mm stereo jack and 500 mA USB port to power a wireless Bluetooth adapter are also provided.

Two RJ45 connectors provide Ethernet connectivity as well as 1G bE network SFP support to enable Dante, ST2110-30 and AES67 network audio standards. Additional dedicated RJ45 management port allows WebGUI, openGear DashBoard software and RESTful API remote access to monitoring, mix setting and firmware updates.

The C16-AM-12G is powered by an external power supply included with the unit. A secondary power supply connector is provided for those applications where an optional redundant power supply may be desired.

SUPPORTED SIGNALS



C16-AM-12G Rear

TECHNICAL SPECIFICATIONS

Interfaces

Parameter	Specification
SDI Inputs	2 × BNC, 1 × 12G Video SFP slot
SDI Formats	HD-SDI, 3G-SDI, 6G-SDI, 12G-SDI
SDI Outputs	2 × BNC loop outputs with cable drivers
Network Interfaces	3 × RJ45 Ethernet, 1 × 1 GbE network SFP slot
Network Audio Standards (C16-AM-12G-IP only)	Dante, AES67, ST 2110-30
SFP Interface	2 SFP slots for optional 12G SDI or network module
Video Output	HDMI 2.0, Type A, feedback of selected BNC1/BNC2/SFP SDI input
USB Interface (front panel)	USB 2.0 USB-C (firmware update only)
Display Type / Resolution	2 × 2" LCD Transflective 320 × 240 px display, 160° viewing angle
Remote control	Web GUI RESTful API ROSS DashBoard

Mechanical and power

Parameter	Specification
Form Factor	1 RU standard 19" with mounting brackets
Dimensions	- Width 48.3 cm with mounting brackets - Depth 21 cm (24.3 cm with front panel encoders and back panel connectors)
Weight	2kg (without PSU)
Power Input	12 VDC, 35 W (Use only with original MultiDyne MDS050-P120 PSU) - Second power input for redundancy

Audio

Parameter	Specification
DB25 Analog In	Input clip level 24 dBu
	32-bit ADC
	Frequency response +/- 0.2 dB (20 Hz – 20 kHz)
	THD+N < 0.05% (20 Hz – 20 kHz)
	Dynamic range > 90 dB
	SNR > 95 dB
XLR Outputs	24 dBu signal level at max volume (clip@24 dBu)
	Passband gain +/- 0.5 dB (20 Hz – 20 kHz)
	Frequency response +/- 0.2 dB (20 Hz – 20 kHz)
	THD+N < 0.05% (20 Hz – 20 kHz)
	SMPTE / DIN 45403 IMD < 0.04%
	Dynamic range > 90 dB
	SNR > 95 dB
1/4-inch headphone jack	20dBu signal level at max volume
	Passband gain +/- 0.5 dB (20 Hz – 20 kHz)
	Frequency response +/- 0.2 dB (20 Hz – 20 kHz)
	THD+N < 0.05% (20 Hz – 20 kHz)
	SMPTE / DIN 45403 IMD < 0.04%
	Dynamic range > 90 dB
	SNR > 95 dB
3.5 mm Output	4 dBu signal level at max volume
	Passband gain +/- 0.5 dB (20 Hz – 20 kHz)
	Frequency response +/- 0.2 dB (20 Hz – 20 kHz)
	THD+N < 0.05% (20 Hz – 20 kHz)
	SMPTE / DIN 45403 IMD < 0.04%
	Dynamic range > 85 dB
	SNR > 85 dB
Internal speakers	2 × Stereo speakers (2 W rated, 4 W maximum, 220Hz-20 kHz)
	1 × MID+LF central speaker (limited to max 5 W output, 75 Hz – 16 kHz)
	Speakers crossover at 800 Hz
	82 dBA @ 1 kHz max volume
Audio channels	16
Mixing modes	Left only
	Right only
	Lt/Rt 5:1 to stereo downmix
	Sum

ORDERING INFORMATION

Part #	DESCRIPTION
C16-AM-12G	12G-SDI 16 Channel Embedded Audio Monitor. 1 RU; Includes External Power Supply.
C16-AM-12G-IP	12G-SDI 16 Channel Embedded Audio Monitor with Dante, AES67, and ST 2110-30 Options. 1 RU; Includes External Power Supply.
C16-PSU	Redundant Power Supply

DS-C16-AM-12G-2607-01