



GN-GAIN-A1443

Specification Sheet

120W Stereo/Mono Mixer Amplifier



Description

The GN-GAIN-A1443 is a mixer amplifier designed for low or high impedance education and commercial applications. A mode selector switch allows delivery of two channels of 60 watts each into 4 or 8 ohms, or a single channel of 120 watts at 70 or 100 volts. Four analog inputs are individually configurable as microphone (with Phantom power) or line level, supporting both mono and stereo configurations.

The on-board mixer provides gain, ducking, delay, high/low pass filters, 5-band parametric EQ, and independent output attenuation for both the amplifier and line outputs. LAN and RS-232 interfaces enable control from Velocity or third-party systems. The rack-mountable 1RU half-rack-width enclosure ships with short rack ear, long rack ear, and dual mounting plate for side-by-side rack installation of two units. An optional GN-GAIN-Y1511 Dante/AES67 network audio interface card is available.

Applications

Classrooms

- Distribute lesson audio to low impedance room speakers, reduce program audio when the teacher microphone is active, and mute for PA announcements.

Meeting Rooms

- Receive audio from an AV switcher or DSP and feed a high impedance distributed speaker network in the room.

Key Features

- Four analog inputs individually configurable as mic (with +48V Phantom) or line level.
 - 2×60W @ 4/8Ω (stereo) or 1×120W @ 70V/100V (mono).
 - On-board mixer with gain, ducking, delay, HPF/LPF, 5-band parametric EQ per input and output.
 - Independent mixes for amplifier and line outputs with separate gain control.
 - Ducking reduces program audio when signal is detected on the selected input.
-

- Balanced line-level output for assistive listening or secondary amplifier.
- LAN (RJ45) and RS-232 for configuration and control from Velocity or third-party systems.
- Standby mode configurable from 1 to 1440 minutes.
- Optional GN-GAIN-Y1511 Dante/AES67 network audio interface.
- Rack-mountable 1RU half-rack-width; ships with short/long rack ears and dual mounting plate.

Specifications

Inputs	
Mic/Line	4 analog inputs, configurable individually as mic or line
Mic Input Level	-50dBV typical
Consumer Line Level	-10dBV
Professional Line Level	+4dBV
Phantom Power	+48VDC, 10mA (mic mode)
Input Impedance	>20k Ω
Signal Detection	$\leq 1V_{rms}$ (-60dBV) at 1kHz
Amplifier Performance	
Power	2 \times 60W @ 4/8 Ω ; 1 \times 120W @ 70V/100V (mono)
Type	Class D
Frequency Response (Low-Z)	20Hz–20kHz, ± 1 dB
Frequency Response (High-Z)	200Hz–12kHz, ± 1 dB; 80Hz–20kHz, ± 3 dB
THD+N	0.1% @ 1kHz, 3dB below clipping
SNR	>85dB
CMRR	>75dB
Signal Processing	
HPF	Butterworth, 6/12/18/24/30 dB/oct selectable
LPF	Butterworth, 6/12/18/24/30 dB/oct selectable
5-Band Parametric EQ	20Hz–20kHz; Q: 1–15; Gain: -36 to +12dB
Delay	0–30ms (0.1ms steps)
Ethernet	
Port	1 \times RJ45
Protocols	HTTP, HTTPS, mDNS
Speed	10/100/1000 Mbps
Addressing	DHCP, Static
RS-232	
Port	1 \times 8-pin captive screw
Baud Rates	9600–115200
Data Flow	Bidirectional

Connections		
Mic/Line In	2×6-pin captive screw	
4/8Ω Output	1×4-pin 5.08mm lock-down screw	
70V/100V Output	1×2-pin 5.08mm lock-down screw	
Line Out	1×6-pin captive screw	
Control/RS-232	1×8-pin captive screw	
LAN	1×RJ45	
Firmware	1×USB-C female	
Power	1×IEC	
Power		
Supply	100–240 VAC, 50/60Hz (integrated)	
Low Power Mode	0.5W	
Network Standby	2W	
Standby Timer	1–1440 min configurable	
Idle Power Consumption (5min after power on)	21.76W	
Under Load	4Ω-1W	24.21W
	4Ω-1/8 power	38.98W
	4Ω-1/3 power	69.91W
	4Ω-full power	165.57W
	8Ω-1W	23.82W
	8Ω-1/8 power	37.94W
	8Ω-1/3 power	64.52W
	8Ω-full power	154.82W
Mechanical		
Dimensions (H×W×D)	1.75"×8.875"×13" (44×225×330mm)	
Weight	6.94 lbs (3.15 kg)	
Enclosure	1RU, half-rack-width	
Environmental		
Operating Temperature	+32°F to +122°F (0°C to +50°C)	
Storage Temperature	-4°F to +140°F (-20°C to +60°C)	
Humidity	20%–90%, non-condensing	
Regulatory		
Certifications	CE, RoHS, FCC	
Compliance	NDAA-889	
Warranty	3 years	