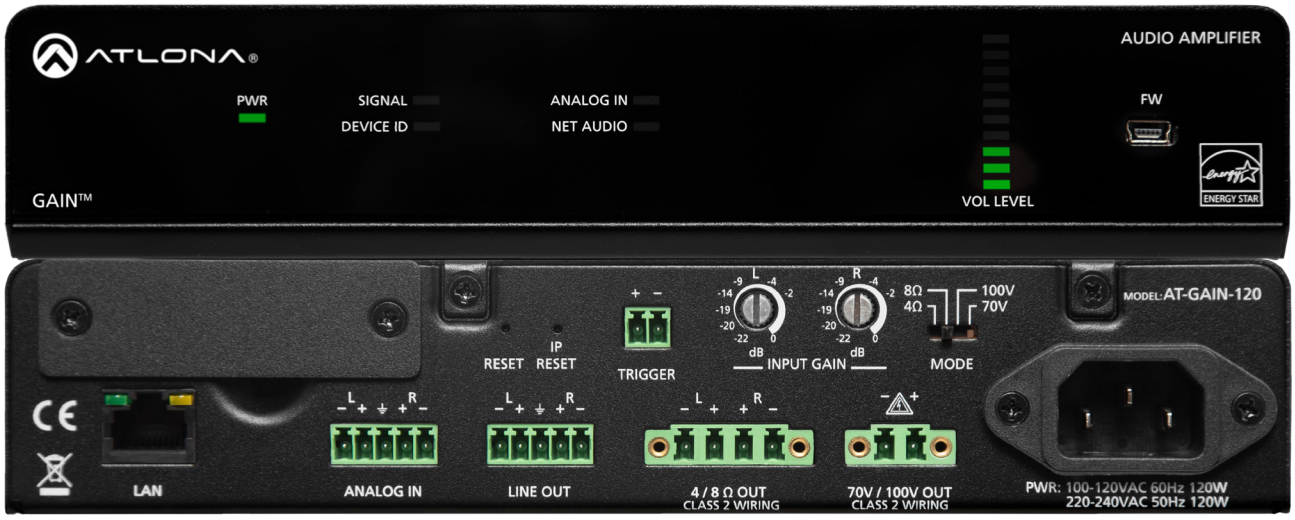
Stereo / Mono
Audio Power Amplifier - 120 W



Introduction

The Atlona **Gain™ 120** (**AT-GAIN-120**) is a compact power amplifier designed for low or high impedance applications. A mode selector switch allows the Gain 120 to deliver two channels of 60 watts each into 4 or 8 ohms, or a single channel of 120 watts at 70 or 100 volts. This Class-D amplifier is energy efficient and ENERGY STAR qualified, and is also convection-cooled to allow installation in conference rooms and quiet installation environments without the need for fans. In addition to the amplified speaker output, a line level audio output allows the incoming audio to be fed into an additional amplifier or audio system. The Gain 120 is controllable via TCP/IP or external trigger, and can be integrated with Atlona AV switchers and OmniStream™ AV systems for a wide variety of sound reinforcement applications.

Available for the Gain 120 is the AT-GAIN-NET networked audio card, featuring an AES67 and Dante dual-channel audio bridge. The AT-GAIN-NET adds the capability to accept two channels over a network from a Dante or AES67-equipped DSP, as well as Atlona OmniStream AV encoders.

Applications

- **Meeting rooms, conference rooms, training rooms, and classrooms**
  The Gain 120 can receive audio from an Atlona AV switcher or DSP, and then feed the audio to program speakers on the front wall, or a distribution of ceiling speakers.
- **Facility audio systems**
  The Gain 120 can be integrated with a centralized audio distribution system for paging and background music, as well as audio content targeted to specific zone.

Key Features

- Selectable low or high impedance operation.
- 2 x 60 watts @ 4 or 8 ohms.
- 1 x 120 watts @ 70 or 100 volts.
- Class-D efficient amplifier design.
- ENERGY STAR® qualified.
- Convection cooled – no need for fans.
- Optional AES67 / Dante™ networked audio interface (AT-GAIN-NET) – receives two-channel audio from OmniStream AV encoders or compatible audio devices.
- Available AT-RACK-1RU rack shelf – required accessory for rack installation(1).
- Automatic standby, configurable from 5 to 25 minutes of inactivity, to minimize power consumption.
- Rear panel input level controls.
- Integrated protection circuitry automatically activates in the event of clipping, short circuit, thermal overload, and more.
- Low inrush current to prevent audible “thumps” when multiple amps are powered on simultaneously.
- Balanced line-level output for pass-through to an additional amplifier or audio system.
- Integrated five-band equalizer.
- TCP/IP control of volume level, muting, and EQ.
- Ideal for IP-based control from Atlona Velocity™ Control System.
- Trigger port ideal for occupancy sensor or control system to remotely power down amplifier or wake from standby.
- Front panel signal status LEDs for power, signal presence, volume level, device identification, and internal protection activation.
- Rack-mountable 1U, half rack width enclosure.
- Includes installation guide, power cable (US), and captive screw connectors.

Specifications

Input Signal	
Analog Input	Balanced: 20 kΩ, unblanced: 10 kΩ
CMRR	51 dB / 58 dB
Detection Threshold	0 dBV = 2.218 dBu

Output Signal	
Distributed speakers (mono)	70 V / 100 V
Program speakers (stereo)	4 Ω / 8 Ω, line-level
Power	70 V = 120 W 100 V = 120 W 4 / 8 Ω = 60 W per channel

Audio Processing	
D/A Conversion	24-bit, selectable sampling rate
Audio Formats	24-bit uncompressed, selectable at 44.1, 48, 88.2, and 96 kHz sampling rate
Latency	2 ms
Signal Processing	Volume, Auto on/off signal sensing, 80 Hz HPF
Network Audio Transport	Dante, AES67
Equalization	5-band, adjustable: 40 Hz, 150 Hz, 500 Hz, 2 kHz, and 10 kHz bands Range: -10 dB to +10 dB

Audio Performance	
Frequency Response	20 Hz - 20 kHz, ±2 dB @ 4 Ω load
THD + N	< 0.1% @ 1kHZ, 3 db below clipping
SNR	> 90 dBA WTD
Damping Factor	< 90 @ 8 Ω
Amplifier Type	Class D

Temperature	Fahrenheit	Celsius
Operating	32 °F to 122 °F	0 °C to 50 °C
Storage	-40 °F to 158 °F	-40 °C to 70 °C
Humidity (RH)	90% RH, non-condensing	

Power	
Standby Mode	Powers down after 5 - 25 minutes (adjustable) of no signal; complies with ENERGY STAR power consumption limits of < 0.5 W in standby mode
Consumption	120 W (max.)
Standby Consumption	normal standby < 0.5 W network standby < 2 W
BTU/h	508.1
Supply	100 - 240 V AC, 50/60 Hz, 120 W

Connectors, Controls, and Indicators		
INPUT	1 - RJ45 (AT-GAIN-NET network audio card, only), 100 Mbps	
LAN	1 - RJ45	
ANALOG IN	1 - 5-pin captive screw, balanced: 20 k Ω, unbalanced: 10 kΩ	
LINE OUT	1 - 5-pin, captive screw	
TRIGGER	1 - 2-pin captive screw	
4 / 8 Ω OUT	1 - 4-pin, 5.08 mm lock-down screw connector	
70V / 100V OUT	1 - 2-pin, 5.08 mm lock-down screw connector	
FW	1 - mini-USB, type-B	
INPUT GAIN	2 - Rotary pots, L/R channel	
MODE	1 - Slider switch, 4-pole, 4 Ω / 8 Ω / 70 V / 100 V	
RESET	1 - Push button, tact-type	
IP RESET	1 - Push button, tact-type	
Power	1 - IEC power receptacle	
PWR	1 - LED indicator, green	
SIGNAL	1 - LED indicator, green	
DEVICE ID	1 - LED indicator, green	
ANALOG IN	1 - LED indicator, green	
NET AUDIO	1 - LED indicator, green	
VOL LEVEL	1 - Multi-LED indicator	

Dimensions	Inches	Millimeters
H x W x D	1.69 x 8.66 x 12.99	43 x 220 x 330

Weight	Pounds	Kilograms
Device	19.84	9

Certification	
Device	CE, FCC, CB, RoHS, WEEE, FCC, ENERGY STAR®

Warranty	
Device	To view the product warranty, use the following link: https://atlona.com/warranty

Footnotes

(1) The AT-RACK-1RU rack shelf is a required accessory to ensure a proper, secure rack installation. Additionally, 2U of space will be required to install the Gain 120 in a rack.

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