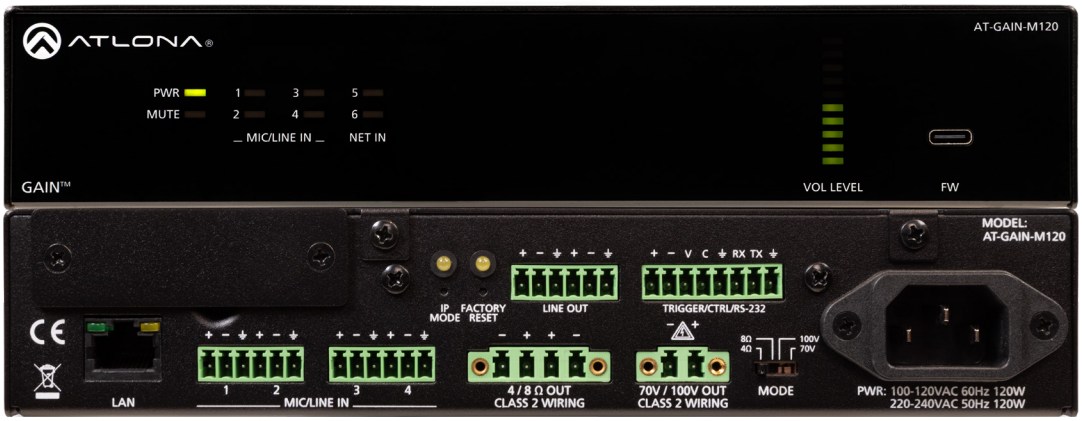
Stereo / Mono Mixer Amplifier
120 Watts



Introduction

The Atlona **AT-GAIN-M120** is a mixer amplifier designed for low or high impedance education and commercial applications. A mode selector switch allows the GAIN-M120 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. 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 amplifier includes LAN and RS-232 interfaces for automated operation from Velocity™ or third-party control systems. It also supports remote volume control from the optional AT-GAIN-VOL wallplate.

The GAIN-M120 includes advanced configuration features that can be tailored to the specific requirements of any project. It has four analog inputs which may be configured for mono or stereo as well as mic or line levels. On-board signal processing supports gain and ducking adjustments for each input as well as delay, high/low pass filters, equalization, and attenuation for each output. It also supports separate mixes for the amplifier and line outputs.

The GAIN-M120 is also compatible with the AT-GAIN-NET networked audio card, which adds the ability to accept two channels of network audio from a Dante® or AES67 equipped DSP, as well as Atlona OmniStream™ AV encoders.

Applications

- **Classrooms**
  Distribute lesson audio to low impedance speakers in the room, lower program audio when teacher speaks in a microphone, and mute audio for PA announcements.
- **Meeting Rooms**
  The GAIN-M120 can receive audio from an AV switcher or DSP, and then feed the audio to a high impedance distributed speaker network in the room.

Key Features

- Four analog inputs may be configured for mono or stereo as well as mic or line levels.
- On-board mixer supports gain and ducking adjustments for each input as well as delay, high/low pass filters, equalization and attenuation for each output.
- Supports separate mixes for the amplifier and line outputs.
- Selectable low or high impedance operation.
  - » 2 x 60 watts @ 4 or 8 ohms.
  - » 1 x 120 watts @ 70 or 100 volts.
- Ducking lowers the level of program audio sources when signal is detected on the selected input.
- Balanced line level output allows the mixed signal to be passed to an assistive listening system or separate amplifier.
- Standby mode for reducing power consumption and energy costs when not in use.
- Contact closure to engage mute or standby mode from an external system.
- LAN and RS-232 interfaces for configuration as well as control from Velocity or third-party automation systems.
- Status LEDs for power, mute, and input.
- Rack-mountable 1U, half rack width enclosure.
- Integrated power supply, no external converter required.
- Optional AT-GAIN-VOL volume control wallplate.
- Optional AT-GAIN-NET network audio interface.
- Includes product insert, captive screw connectors, US power cord, short rack ear, long rack ear, and dual mounting plate.

Specifications

Inputs	
Mic / Line	4 analog inputs, configurable individually as microphone or line level Microphone Input Level: –50 dBV (typical) Consumer Line Level: –10 dBV Professional Line Level: +4 dBV
Dante	2 channels using AT-GAIN-NET (optional module)
Impedance	> 20 kΩ
Signal Detection Threshold	≤ 1 Vrms (–60 dBV) at 1 kHz
Phantom Power	+48 VDC, 10 mA (available when input is set to mic level)

Outputs	
Type	Class D
Modes	Stereo (4/8 Ω) or Mono 70V/100V
Impedance	< 10 kΩ
Line-Level	Stereo, unpowered

Amplifier Performance	
Power	2 × 60 W @ 4/8 Ω; 1 x 120 W @ 70V or 100V (mono)
Frequency Response	Low Impedance: 20 Hz – 20 kHz (±1 dB) High Impedance: 200 Hz – 12 kHz (±1 dB), 80 Hz – 20 kHz (±3 dB)
THD+N	0.1% @ 1 kHz, 3 dB below full output, 8 Ω 0.3% from 100 Hz to 16 kHz, 3 dB below full output, 4/8 Ω
SNR	> 85 dB
CMRR	> 75 dB @ 60 Hz, 1 kHz, 10 kHz

Signal Processing	
High-Pass Filter	Butterworth, selectable slopes: 6/12/18/24/30 dB/oct
Low-Pass Filter	Butterworth, selectable slopes: 6/12/18/24/30 dB/oct
5-Band Parametric EQ	Center Frequency: 20 Hz – 20 kHz Q Factor: 1 – 15 Gain: –36 dB to +12 dB
Delay	0 – 30 ms (adjustable in 0.1 ms steps)

Ethernet	
Port	1 x RJ45
Standards and Protocols	HTTP, HTTPS, mDNS
Speeds	10/100/1000 Mbps
Addressing	DHCP, Static

RS-232	
Port	1 x 3-pin captive screw, TX, RX, GND
Use	Device control and configuration
Baud Rates	9600, 19200, 38400, 57600, 115200
Data Flow	Bidirectional

Buttons and Indicators	
Buttons:	
IP MODE, RESET	2 x momentary, tact-type, recessed
MODE	1 x 4-position slide switch
Indicators:	
PWR, MUTE	2 x LED, green
MIC / LINE IN (1 - 4)	4 x LED, green
NET IN (5 - 6)	2 x LED, green
IP MODE, RESET	2 x LED, green

Connectors	
MIC/LINE IN	2 x 6-pin captive screw
4/8 Ω OUT	1 x 4-pin, 5.08 mm lock-down screw connector
70V / 100V OUT	1 x 2-pin, 5.08 mm lock-down screw connector
LINE OUT	1 x 6-pin captive screw
TRIGGER/CTRL/RS-232	1 x 8-pin captive screw
LAN	1 x RJ45
FW	1 x USB type C, female
PWR	1 x IEC

Environmental	Fahrenheit	Celsius
Operating Temperature	+32 to +122	0 to +50
Storage Temperature	-4 to +140	-20 to +60
Operating Humidity (RH)	20% to 90%, non-condensing	

Power	
Low Power Mode	0.5 W
Network Standby Mode	2 W
Auto-Standby Timer	Configurable from 1 to 1440 minutes
BTU/h	12.3 (idle) 67.9 (maximum power)
Supply	100 - 240 V AC, 50/60 Hz

Dimensions (H x W x D)	Inches	Millimeters
Unit	---	---

Weight	Pounds	Kilograms
Device	---	---

Certification	
Device	CE, RoHS, FCC

Compliance	
NDAA-889	Yes
TAA	No

Warranty	
3 years	View the full warranty information here: https://atlona.com/warranty

Accessories

SKU	Description
AT-GAIN-VOL	Volume Control Wallplate
AT-GAIN-NET	AES67 / Dante Network Audio Interface

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