

## Stereo / Mono Audio Power Amplifier - 60 Watts

AT-GAIN-60



The Atlona **Gain™ 60 (AT-GAIN-60)** is a compact power amplifier designed for low or high impedance applications. A mode selector switch allows the Gain 60 to deliver two channels of 30 watts each into 4 or 8 ohms, or a single channel of 60 watts at 24, 70, or 100 volts. This Class-D amplifier is energy efficient and convection-cooled without the need for fans. Additionally, the Gain 60 is UL 2043 plenum-rated, allowing convenient yet discreet installation in a plenum airspace above a drop ceiling. Selectable balanced captive screw and unbalanced RCA inputs are provided for system design versatility. The Gain 60 is controllable via TCP/IP or RS-232, and can be integrated with Atlona AV switchers, HDBaseT™ receivers, and OmniStream™ AV decoders and audio devices for a wide variety of sound reinforcement applications.

### Package Contents

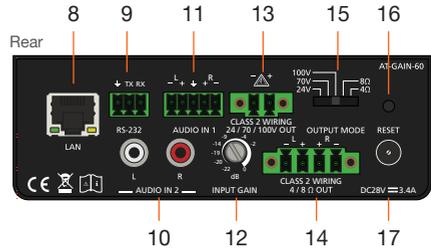
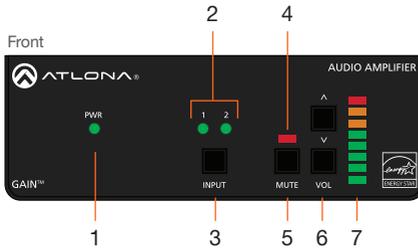
- 1 x AT-GAIN-60
- 1 x Captive screw connector, 2-pin
- 1 x Captive screw connector, 3-pin
- 1 x Captive screw connector, 4-pin
- 1 x Captive screw connector, 5-pin
- 1 x 28 V / 3.4 A DC power supply
- 1 x Installation Guide



**IMPORTANT:** Visit <http://www.atlona.com/product/AT-GAIN-60> for the latest firmware updates and User Manual.



Panel Description



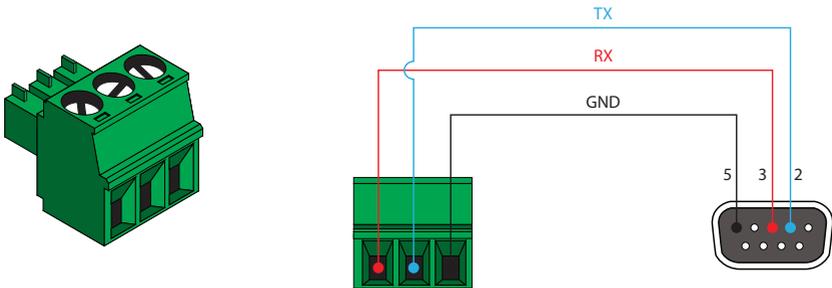
- 1 PWR**  
This LED indicator glows solid green when the unit is powered. When set to standby mode, this LED indicator glows solid amber.
- 2 1 / 2**  
These LED indicators display the currently selected input. The active input will be indicated by a solid green LED.
- 3 INPUT**  
Press this button to select the desired audio input.
- 4 Mute LED Indicator**  
This LED indicator will glow solid red when the audio output is muted.
- 5 MUTE**  
Press this button to mute the audio output. Press the button again to unmute the audio output.
- 6 VOL**  
Press these buttons to adjust the output volume. Press the top button to increase volume; press the bottom button to decrease the volume.
- 7 Audio Output Indicator**  
Displays the output audio level. If the volume level peaks at the red indicator (0 dB), then clipping will occur.
- 8 LAN**  
Connect an Ethernet cable from this port to the Local Area Network.
- 9 RS-232**  
Connect the included 3-pin captive screw connector from this port to an RS-232 controller or automation system.

- 10 AUDIO IN 2 (unbalanced)**  
Connect RCA cables, from an analog line input, to these ports. Both analog stereo or two mono connections are supported. Input impedance is 10 kΩ.
- 11 AUDIO IN 1**  
Connect the included captive screw connector, from a balanced / unbalanced analog line output, to this port. Input impedance is 20 kΩ.
- 12 INPUT GAIN**  
Turn this pot to adjust the audio input gain in 4 dB increments.
- 13 24 / 70 / 100V**  
Connect the included 2-pin captive screw connector from this port to a distributed speaker system. Before connecting the speakers, set the speaker voltage using the **OUTPUT MODE** switch.
- 14 4 / 8 Ω OUT**  
Connect the included 4-pin captive screw connector from this port to a pair of program / stereo speakers. Before connecting the speakers, set the speaker impedance using the **OUTPUT MODE** switch.
- 15 OUTPUT MODE**  
Slide this switch to set the correct speaker impedance or voltage setting.
- 16 RESET**  
Press this button to reset the unit to factory-default settings.
- 17 DC 28V**  
Connect the included 28 V DC locking power supply to this power receptacle.

## RS-232 Connector

The AT-GAIN-60 provides RS-232 control between an automation system and an RS-232 device. This step is optional.

1. Use wire strippers to remove a portion of the cable jacket.
2. Remove at least 3/16" (5 mm) from the insulation of the RX, TX, and GND wires.
3. Insert the TX, RX, and GND wires into correct terminal on the included captive screw block.

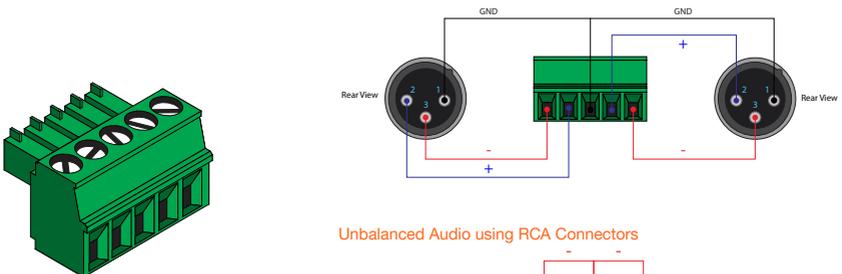


## Analog Audio Input Connector

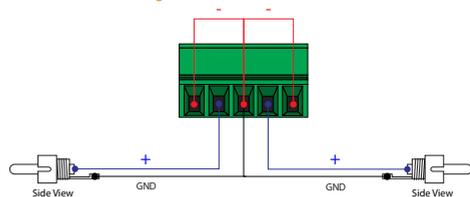
The **AUDIO IN 1** connector on the AT-GAIN-60 provides the ability to connect either balanced or unbalanced audio inputs, using the included 5-pin captive screw block.

Balanced audio connections use two signal wires and a ground to minimize interference in audio signals. Unbalanced audio connections use one signal wire and a ground and are used if system components don't support balanced signals.

### Balanced Audio using XLR Connectors



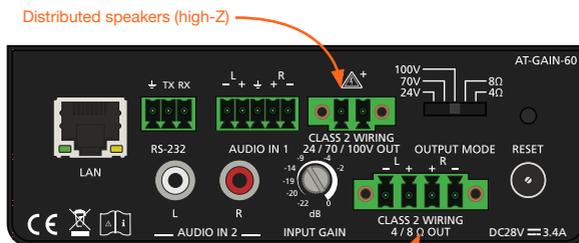
### Unbalanced Audio using RCA Connectors



## Installation

- Connect an analog audio source to the **AUDIO IN** ports. Once connected, press the **INPUT** button on the front panel, to switch between the RCA and the 5-pin captive screw port.
  - RCA cables (unbalanced)**  
Connect shielded RCA-type cables from the audio source to the **AUDIO IN 2** left/right RCA jacks.
  - Balanced/Unbalanced**  
Connect the included 5-pin captive screw to the **AUDIO IN 1** port. Use the desired wiring configuration, on the previous page.
- Determine the use-case scenario of the AT-GAIN-60. The AT-GAIN-60 can be configured as either one of the following. Only one type of speaker connection is permitted at a time.
  - Distributed speaker system (high impedance)**  
Set the **OUTPUT MODE** switch to the required voltage setting: **24V**, **70V**, or **100V**. This mode is used for commercial applications and longer speaker cable runs.
  - Program speakers / stereo (low impedance)**  
Set the **OUTPUT MODE** switch to the impedance setting of the speakers being connected: **4Ω** or **8Ω**. This mode is used for consumer applications and shorter speaker cable runs.

Refer to [Connection Diagrams \(page 7\)](#) for example applications.



**NOTE:** The AT-GAIN-60 only supports one type of speaker connection at a time: high-impedance or low-impedance.

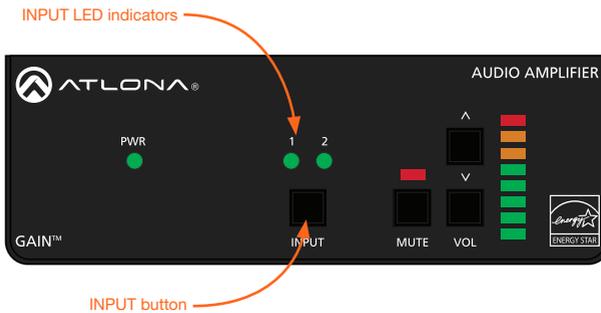
- Connect the speakers to the proper port on the AT-GAIN-60, based on the selection made in the previous step.
- Connect the **LAN** port to a network switch for set up and control of the unit.
- Connect the included power supply to the **DC 28V** power receptacle.
- Connect the IEC power cable to an available electrical outlet.

## IP Configuration

By default, the AT-GAIN-60 is set to DHCP mode, allowing a DHCP server (if present) to assign the unit an IP address.

### Switching the IP mode

Press and hold the **INPUT** button for approximately 10 seconds. Release the button once both input LED indicators **1** and **2** begin to flash. The number of flashes will indicate the currently selected IP mode:



LED flashes	Description	
Two	Static mode	IP address: 192.168.1.254 Subnet mask: 255.255.0.0 Gateway: 192.168.1.1
Four	DHCP mode	

## Resetting to Factory-Default Settings

Press and hold the **RESET** button, on the back of the unit, for approximately 10 seconds, then release. The LED indicators on the LAN port will flash and the unit will automatically reboot. Note that the AT-GAIN-60 will be placed in DHCP mode, as part of the reset procedure.

## AMS 2.0

For easy configuration of Atlona devices, AMS 2.0 is available from <https://atlona.com/ams> for free. Two options can be used for installation: The free Linux-based software download or the easy-to-install server hardware (AT-AMS-HW).

Once AMS has been set up:

1. Open a browser on the same network as AMS 2.0 and go to the IP address of AMS 2.0. View the AMS 2.0 installation instructions on how to find the IP address of the software, if necessary.
2. Enter the login information on the AMS 2.0 web page, then click the **Login** button.
3. View the AT-GAIN-60 manual for routing and configuration.

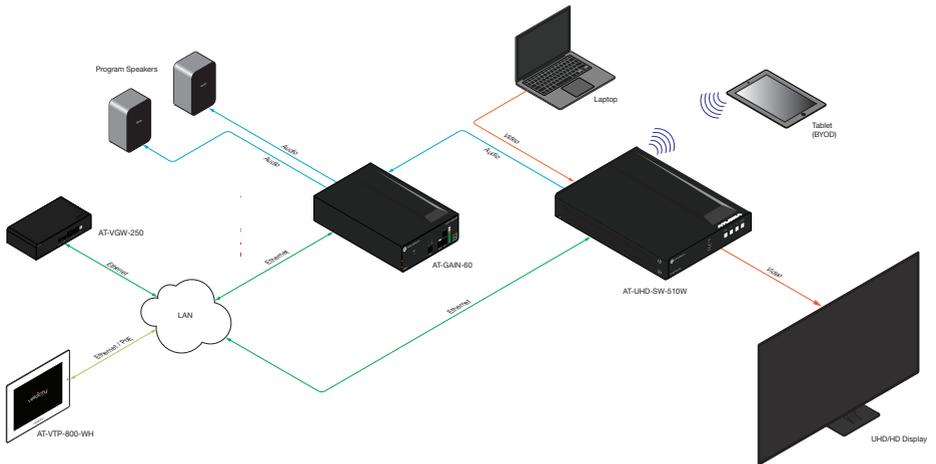
## Web GUI

The AT-GAIN-60 includes a built-in web GUI, which allows easy management and control of all features. Follow the instructions below to access the web GUI.

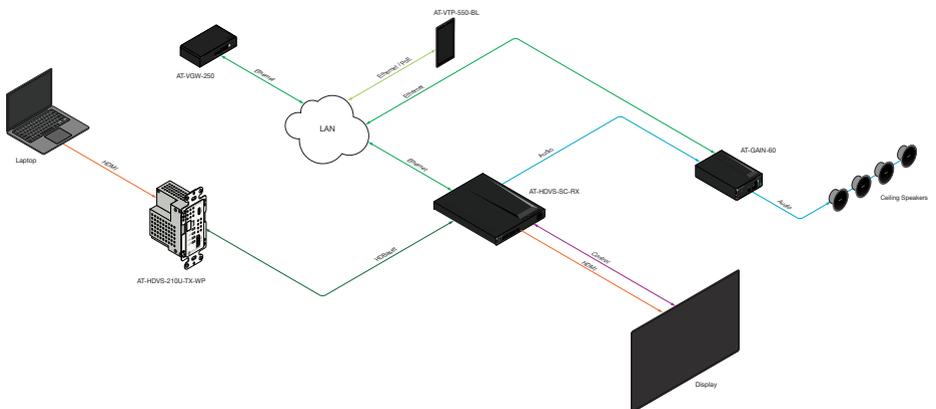
1. Set the IP mode of the AT-GAIN-60. Refer to [IP Configuration \(page 5\)](#) for more information.
2. Connect an Ethernet cable from the **LAN** port on the AT-GAIN-60 to the Local Area Network (LAN).
3. Use an IP scanner to determine the IP address of the AT-GAIN-60.
4. Launch a web browser and enter the IP address of the unit.
5. The AT-GAIN-60 **Login** page will be displayed.
6. Enter the following information on the **Login** page.  
Login:            admin  
Password:        Atlona
7. Click the **Login** button.

## Connection Diagrams

### Program / Stereo Speakers Application



### Distributed Speakers Application

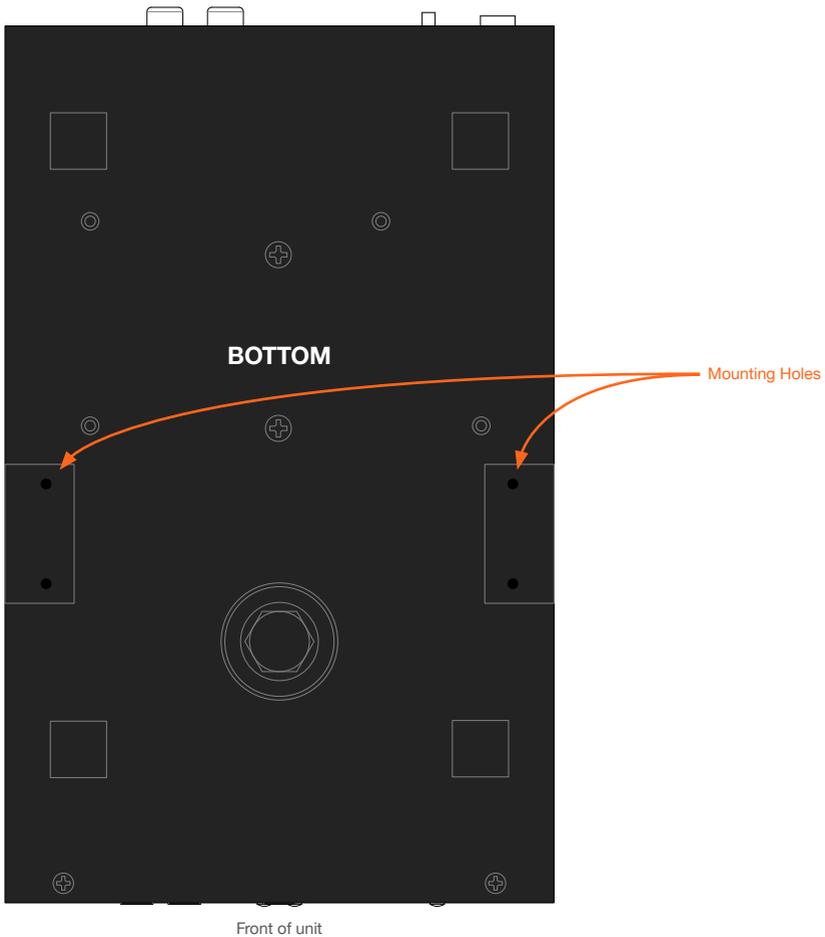


## Mounting Instructions

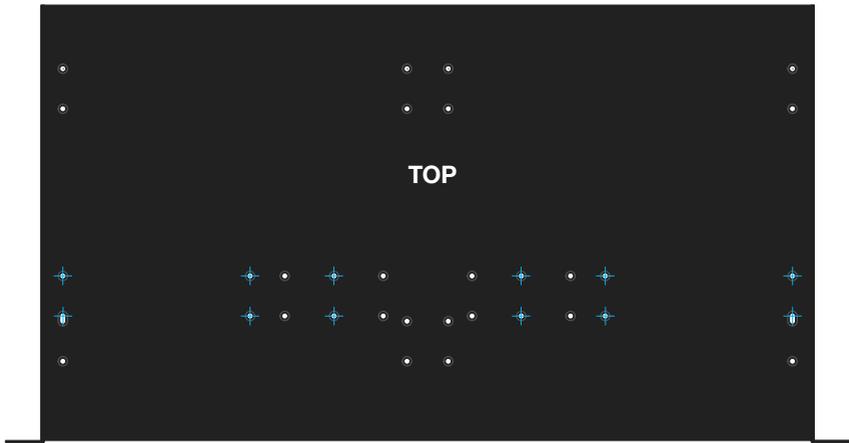
### Mounting three AT-GAIN-60 units

The following provides instructions for mounting up to three AT-GAIN-60 unit in the AT-RACK-1U (not included).

1. Turn the AT-GAIN-60 so that the bottom of the unit is facing upward.
2. Locate the two sets of holes on either side of the unit, as shown below:



3. Mount each of the AT-GAIN-60 units in the rack. Match the mounting holes on the bottom of each AT-GAIN-60 with the holes in the rack tray, marked in the illustration below.



Front of rack tray

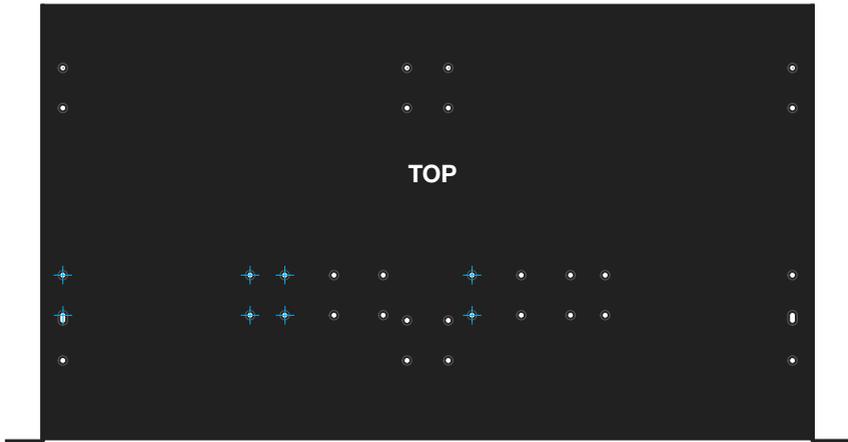
4. Install the rack tray in the rack shelf and secure the rack tray with two screws on either side.



## Mounting two AT-GAIN-60 units

The following provides an alternate method for mounting AT-GAIN-60 units closer together. This option provides extra space in the AT-RACK-1U (not included) for cabling, etc.

1. Turn the AT-GAIN-60 so that the bottom of the unit is facing upward.
2. Locate the two sets of holes on either side of the unit. Refer to page 7 for the location of the mounting holes.
3. Mount each of the AT-GAIN-60 units in the rack. Match the mounting holes on the bottom of each AT-GAIN-60 with the holes marked in the illustration below.



Front of rack tray

4. Install the rack tray in the rack shelf and secure the rack tray with two screws on either side.





**Notes**



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