

# AMP-150 Series

## Single-Channel Modular Power Amplifiers, 50W, 70V or 100V

- > ENERGY STAR® certified power amplifier
- > Ultra-efficient space-saving design
- > Choice of 70V or 100V output
- > Single channel, 50 Watts
- > Quarter-width, 1 RU form factor
- > Surface or rack mountable
- > Gangable with other Crestron® modular amps
- > All mounting and ganging hardware included
- > High-density stackable
- > Convection cooling — no mechanical fans
- > Comprehensive fault and speaker protection
- > Clip limiter
- > Low noise, low distortion, high headroom
- > Low power consumption
- > Automatic low-power standby
- > Balanced and unbalanced inputs
- > Detachable terminal blocks for easy servicing
- > Front panel level adjustment with tamper-preventive magnetic cover
- > Front panel power/standby, fault, and signal/clip indicators
- > Internal universal 100-240V power supply

Finally, a space saving, energy efficient, commercial grade, professional performance amplifier solution that's totally configurable yet remarkably straightforward. Whether you need a single-channel amp that mounts on a wall or under a table, or a multichannel rack mount amp with multiple output types and power levels, Crestron® modular amps are astoundingly simple to specify and install in any configuration you require.

### All-Inclusive Modular Design

Crestron modular amplifiers are offered in a range of output power levels, with single and dual-channel models available, and with options to address either Lo-Z (4/8  $\Omega$ ) or Hi-Z (70 or 100 Volt) speaker types. (*AMP-150 models support Hi-Z only.*) Each model is housed in either a quarter- or half-width rack-mountable form factor that can be installed individually or ganged together in a single rack space. (*AMP-150 models are quarter-width.*) Every model ships complete with all the hardware required for installation of the unit by itself or in combination with any other unit(s). Rack and surface mount kits are included, so there are no other mounting accessories or rack shelves to purchase.

Whether mounting in a rack, attaching to a flat surface, or simply placing on a shelf, it's easy to combine multiple units into a single assembly. Just remove a couple of screws, slide the side panel off and attach it to the next unit, slide the two units together, and reinstall the screws. The complete multichannel amp assembly is sturdy and solid, with the look of a full-space unit. Attach the appropriate sized rack ears or surface brackets and it's ready to mount.



### 70V or 100V Output

The AMP-150 is a single channel amplifier, conservatively rated at 50 Watts, with a "Hi-Z" output to drive a distributed speaker system. Two models are offered: The AMP-150-70 has a 70 Volt output, and the AMP-150-100 has a 100 Volt output. Output wiring is facilitated using a detachable terminal block. Balanced and unbalanced inputs are provided for connection to a mono or stereo (summed) source via a detachable terminal block or RCA connectors.

### Solid & Efficient Performance

All Crestron modular amps are engineered to deliver exceptional performance and reliability with low distortion, low noise, and high power headroom. Advanced Class D technology maximizes efficiency to reduce power consumption and heat dissipation. An internal universal power supply with power factor correction ensures consistent performance at varying line voltages.

### Convection Cooled

The ultra-efficient design of the AMP-150 ensures cool running operation without the use of internal fans. This means there's no fan noise to disturb nearby listeners and no moving parts to break down. Cool operation also helps to ensure long term reliability. The AMP-150 is high-density stackable with other Crestron modular amps, allowing multiple units to be installed vertically in an equipment rack without extra ventilation space in between.

### Fully Protected

The AMP-150 features comprehensive protection against overheating, shorted or overloaded speaker lines, excessive input signals, and other faults. Built-in clip limiting prevents extreme output signals and distortion that can damage the speakers or amplifier. In the case of a shorted speaker line or overheating condition, the output mutes automatically until the fault condition is resolved. In the event of a prolonged fault, such as an internal component failure, the output mutes instantly and the amplifier shuts down.

# AMP-150 Single-Channel Modular Power Amplifiers, 50W

## ENERGY STAR® Certified

Its energy-efficient design enables the AMP-150 to meet demanding ENERGY STAR requirements. Crestron modular amps, like the AMP-150, allow organizations to fulfill their green initiatives without compromising on audio performance. In addition to its high efficiency under operation, the AMP-150 draws no added inrush current during power-up, thereby reducing AC circuit requirements and allowing multiple units to be connected to a single switched circuit. To reduce energy usage further, the AMP-150 automatically enters a low-power standby state if no input signal is detected for 25 minutes, and returns to full operation within a half-second the instant an input signal is detected.

## SPECIFICATIONS

### Audio

**Input Signal Types:** Balanced or unbalanced analog line-level

**Output Power, AMP-150-70:** 50 Watts @ 70 Volts nominal

**Output Power, AMP-150-100:** 50 Watts @ 100 Volts nominal

**Frequency Response:** 200 Hz to 20 kHz  $\pm 0.5$  dB

**High-Pass Filter:** -3 dB @ 80 Hz, 12 dB per octave

**THD+N:**  $<0.1\%$  <sup>[1]</sup>

**S/N Ratio:**  $>100$  dBA, 20 Hz to 20 kHz, balanced

**Input Sensitivity:** 1.23 Vrms, +4 dBu balanced;  
0.316 Vrms, -10 dBV unbalanced;  
For full rated output power

**Go To Sleep Time:** 25 minutes with no signal present

**Wake Time:** 0.5 second typical

**Wake Threshold:** 5 to 20 mV typical

**Protection:** Clip limiter, over current, under voltage, over temperature, DC offset, extreme high frequency

### Connectors

**SPEAKER OUT:** (1) 2-pin 7.62 mm reversed gender 20A detachable terminal block; Power amplifier output;

**Wire Size:** Terminals accept up to 12 AWG (3.31 mm<sup>2</sup>);

*Note: Output is direct-coupled, not transformer isolated*

**AUDIO IN L/R (unbalanced):** (2) RCA connectors, female;

Unbalanced line-level audio inputs (summed);

**Maximum Input Level:** 2.24 Vrms, +7 dBV (+9.2 dBu)

**AUDIO IN L/R (balanced):** (1) 5-pin 3.5 mm detachable terminal block;

Balanced line-level audio inputs (summed);

**Maximum Input Level:** 7.75 Vrms, +20 dBu;

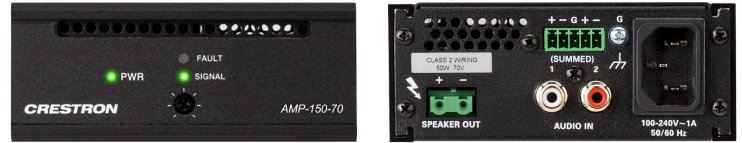
**Input Impedance:** 20k Ohms

**G:** (1) 6-32 screw;

Chassis ground lug

**100-240V~1A 50/60 Hz:** (1) IEC 60320 C14 main power inlet;

Mates with removable power cord, included



Front & Rear Views

### Controls & Indicators

**PWR:** (1) Bi-color green/amber LED, indicates operating power supplied from AC line power, turns green while operating and amber when in standby

**FAULT:** (1) Red LED; indicates an over-temperature or over-current fault

**SIGNAL:** (1) Bi-color green/red LED, green indicates input signal presence and red indicates input signal clipping

**Input Level:** (1) Screwdriver-adjustable rotary control, adjusts the input attenuation level, tamper-preventive magnetic cover included

### Power

**Main Power:** 1 Amp @ 100-240 Volts AC, 50/60 Hz

**Power Consumption:** 17 Watts, all channels driven at 1/8th output power;  
8 Watts, idle;  
 $<0.5$  Watt, standby (sleep)

### Environmental

**Temperature:** 41° to 104° F (5° to 40° C)

**Humidity:** 10% to 90% RH (non-condensing)

### Construction

**Chassis:** Metal, convection-cooled (fanless), vented front and rear

**Front Panel:** Metal, black finish with polycarbonate label overlay

**Mounting:** Freestanding, surface-mount, or 1/4-width 1 RU 19-inch rack-mountable; gangable with other Crestron modular AMP series products (adhesive feet, surface mounting kit, ganging kit, and rack mounting kit included)

### Dimensions

**Height:** 1.74 in (45 cm) without feet;

1.82 in (47 mm) with surface kit

**Width:** 4.33 in (110 mm);

5.43 in (138 mm) with surface kit;

19.00 in (483 mm) with rack kit

**Depth:** 10.46 in (266 mm)

### Weight

1.9 lb (0.9 kg) without mounting kits

2.2 lb (1.0 kg) maximum with surface or rack kit

### Compliance

ENERGY STAR, ErP (1275/2008/EC), UL 60065, FCC Class A commercial use

# AMP-150 Single-Channel Modular Power Amplifiers, 50W



One 1/2-width and one 1/4-width units ganged together (ganging kit and rack mounting kit included)



Single 1/2-width unit with surface mounting kit (included)

## MODELS & ACCESSORIES

### Available Models

**AMP-150-70:** Single-Channel Modular Power Amplifier, 50W, 70V

**AMP-150-100:** Single-Channel Modular Power Amplifier, 50W, 100V

### Available Accessories

**CBL Series:** Crestron® Certified Interface Cables

**AUD-EXT:** Audio over CAT5 Extenders

#### Notes:

1. AMP-150-70 measured at full power, AMP-150-100 measured -3 dB below full power.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at [www.crestron.com/salesreps](http://www.crestron.com/salesreps) or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: [patents.crestron.com](http://patents.crestron.com).

Certain Crestron products contain open source software. For specific information, please visit [www.crestron.com/opensource](http://www.crestron.com/opensource).

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