AMP-2100 Series

Dual-Channel Modular Power Amplifiers, 100W/Ch.; 4/8Ω, 70V, or 100V

> *ENERGY STAR® certified power amplifier*
> *Ultra-efficient space-saving design*
> *Choice of 4/8Ω, 70V, or 100V outputs*
> *Two channels, 100 Watts per channel*
> *Half-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 limiters*
> *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 adjustments with tamper-preventive magnetic cover*
> *Front panel power/standby, fault, and signal/clip indicators*
> *Internal universal 100-240V power supply*

Shown with level control cover installed

Finally, a space saving, energy efficient, commercial grade, professional performance amplifier solution that's totally configurable yet remarkably straightforward. Whether you need a stereo 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 Ω) or Hi-Z (70 or 100 Volt) speaker types. 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. (All AMP-2100 models are half-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.

4/8Ω, 70V, or 100V Output

The AMP-2100 is a dual channel amplifier, conservatively rated at 100 Watts per channel, with a choice of "Lo-Z" outputs to drive 4 or 8 Ohm speakers, or "Hi-Z" outputs to drive a distributed speaker system. Three models are offered: The AMP-2100 model has 4/8 Ω outputs, the AMP-2100-70 has 70 Volt outputs, and the AMP-2100-100 has 100 Volt outputs. Output wiring is facilitated using detachable terminal blocks. Balanced and unbalanced inputs are provided for connection to one stereo or two mono source(s) 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-2100 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-2100 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-2100 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, both outputs mute automatically until the fault condition is resolved. In the event of a prolonged fault, such as an internal component failure, the outputs mute instantly and the amplifier shuts down.

CRESTRON®

Front View

Rear View

ENERGY STAR® Certified

Its energy-efficient design enables the AMP-2100 to meet demanding ENERGY STAR requirements. Crestron modular amps, like the AMP-2100, allow organizations to fulfill their green initiatives without compromising on audio performance. In addition to its high efficiency under operation, the AMP-2100 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-2100 automatically enters a low-power standby state if no input signal is detected on either channel 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-2100: 100 Watts per channel @ 4-8 Ohms
Output Power, AMP-2100-70: 100 Watts per channel @ 70 Volts nominal
Output Power, AMP-2100-100: 100 Watts per channel @ 100 Volts nominal
Frequency Response, AMP-2100: 20 Hz to 20 kHz ±0.5 dB
Frequency Response, AMP-2100-70/100: 200 Hz to 20 kHz ±0.5 dB
High-Pass Filter (AMP-2100-70/100 only): -3 dB @ 80 Hz, 12 dB/octave
THD+N: <0.1% [1]
S/N Ratio: >100 dBA, 20 Hz to 20 kHz, balanced
Crosstalk: -75 dB at 1 kHz
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: (2) 2-pin 7.62 mm reversed gender 20A detachable terminal blocks; Power amplifier outputs;
Wire Size: Terminals accept up to 12 AWG (3.31 mm²);
Note: Outputs are direct-coupled, not transformer isolated

AUDIO IN 1 – 2 (unbalanced): (2) RCA connectors, female;
Unbalanced line-level audio inputs;
Maximum Input Level: 2.24 Vrms, +7 dBV (+9.2 dBu)

AUDIO IN 1 – 2 (balanced): (1) 5-pin 3.5 mm detachable terminal block;
Balanced line-level audio inputs;
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

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 – 2: (2) Red LEDs; each indicates an over-temperature or over-current fault on the corresponding channel
SIGNAL 1 – 2: (2) Bi-color green/red LEDs, green indicates input signal presence and red indicates input signal clipping on each corresponding channel
Input Level 1 – 2: (2) Screwdriver-adjustable rotary controls, each adjusts the input attenuation level for the corresponding channel, tamper-preventive magnetic cover included

Power

Main Power: 1 Amp @ 100-240 Volts AC, 50/60 Hz
Power Consumption: 45 Watts, all channels driven at 1/8th output power;
  16 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 1/2-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)

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

1/4-width and 1/2-width units, each shown with surface mounting kit (included)

Dimensions

Height: 1.74 in (45 cm) without feet;
1.82 in (47 mm) with surface kit

Width: 8.65 in (220 mm);
9.75 in (248 mm) with surface kit;
19.00 in (483 mm) with rack kit

Depth: 10.46 in (266 mm)

Weight

4.2 lb (1.9 kg) without mounting kits
4.5 lb (2.0 kg) maximum with surface or rack kit

Compliance

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

MODELS & ACCESSORIES

Available Models

AMP-2100: Dual-Channel Modular Power Amplifier, 100W/Ch., 4/8Ω
AMP-2100-70: Dual-Channel Modular Power Amplifier, 100W/Ch., 70V
AMP-2100-100: Dual-Channel Modular Power Amplifier, 100W/Ch., 100V

Available Accessories

CBL Series: Crestron® Certified Interface Cables
AUD-EXT: Audio over CAT5 Extenders

Notes:

1. Measured at full power on all models except AMP-2100-100 measured -3 dB below full power.
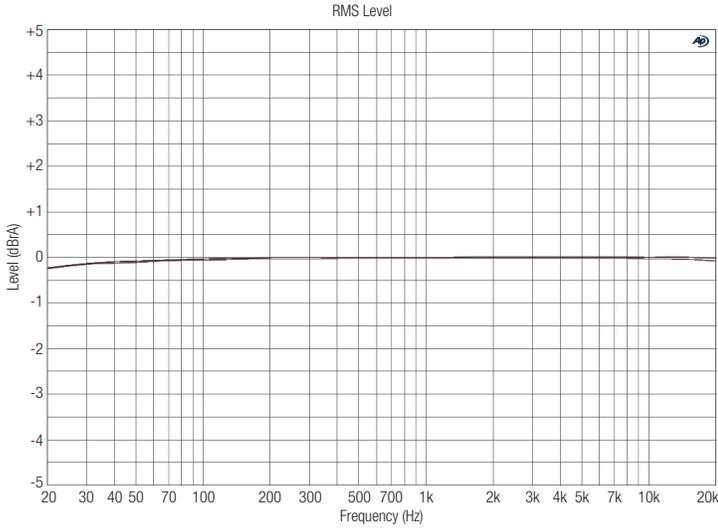
This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.
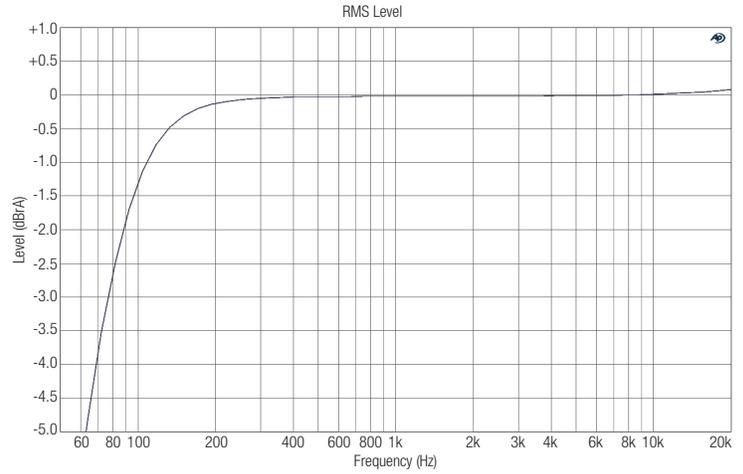
Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

RMS Level

Frequency Response – AMP-2100 (Lo-Z)

RMS Level

Frequency Response – AMP-2100-70/100 (Hi-Z)

DIMENSIONAL DIAGRAM

10.46 in
266 mm

10.20 in
259 mm

8.65 in
220 mm

1.74 in
45 mm

10.46 in
266 mm

9.75 in
248 mm

1.82 in
47 mm

Unit with surface mounting kit installed