X Series Ampilfier

- *ENERGY STAR® certified power amplifier*
- *1 RU high design is surface or rack mountable*
- *Half-rack width form factor, gangable with other next generation half-rack width form factor products*
- *LoZ (4/8 Ω) and Hi-Z (70 V or 100 V) operation*
- *Configurable for 4 x 75 W output, 2 x 150 W output, and 2 x 75 W + 1 x 150 W (bridged) output*
- *Designed in partnership with ICEpower® to create a high performance amplifier with the latest technology*
- *Low noise, low distortion, high headroom*
- *Comprehensive fault and speaker protection*
- *Captive speaker connectors for secure and robust connectivity*
- *Balanced and unbalanced inputs*
- *Always On feature allows constant on connection with very low power consumption*
- *Front panel power/standby, fault, and signal/clip indicators*
- *Internal universal 100-240 V power supply*

The Crestron® AMP-X300 is a high performance, space saving, energy efficient, professional grade amplifier solution that's totally configurable, yet simple to use. 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, the AMP-X300 is simple to specify and install in any configuration.

LoZ (4/8 Ω) and Hi-Z (70 V or 100 V) Output

The AMP-X300 is a 4-channel amplifier (at 75 W per channel) which can also be configured for 2-channel bridged operation (at 150 W per channel), with a choice of "LoZ" outputs to drive 4- or 8-Ohm speakers, or "Hi-Z" outputs to drive a distributed speaker system (70 V or 100 V). Balanced and unbalanced inputs are provided for connection to two stereo or four mono source(s) via detachable terminal blocks or RCA connectors.

ICEpower® and Crestron Design

The AMP-X300 was designed in partnership with ICEpower® to create a custom, flexible, high performance amplifier topology that is suitable for a variety of audio applications.

Solid & Efficient Performance

The AMP-X300 is 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 ensures consistent performance at varying line voltages.

Convection Cooling

The efficient design ensures cool running operation to ensure long term reliability. The AMP-X300 is high-density stackable with other Crestron modular amps, allowing multiple units to be installed vertically in an equipment rack without needing extra ventilation space.

Modular Design

The AMP-X300 is housed in a half-width rack-mountable form factor that can be installed individually or ganged together in a single rack space. The amplifier ships complete with all the hardware required for installation. Rack and surface mount parts 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 placing on a shelf, it's easy to combine two amplifiers into a single assembly.

Fully Protected

The AMP-X300 features protection against overheating, shorted or overloaded speaker lines, excessive input signals, and other faults. 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.

ENERGY STAR® Certified

An energy-efficient design enables the AMP-X300 to meet demanding ENERGY STAR requirements. In addition to its high efficiency under operation, the AMP-X300 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-X300 can be configured to enter a low-power standby state if no input signal is detected on either channel for 25 minutes. Signal detection has been optimized for sensitivity to improve response time when triggering the amplifier to the "on" state, allowing it to return to full operation within a half-second the instant an input signal is detected.

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Specifications

Audio

Input Signal Types	Balanced or unbalanced analog line-level

Output Power

Mode	1 Channel Driven	2 Channels Driven	3 Channels Driven	4 Channels Driven
LoZ, 8 ohm	150 W	150 W	100 W	75 W
LoZ, 4 ohm	200 W	150 W	100 W	75 W
LoZ, 8 ohm Bridged	300 W	150 W	N/A	N/A
Hi-Z 70 V	300 W	150 W	N/A	N/A
Hi-Z 100 V	300 W	150 W	N/A	N/A

NOTE: Total output power from all channels combined (simultaneously) is 300 W.

Frequency Response	20 Hz to 20 kHz ±0.5 dB at 1 W
High-Pass Filter (70 V and 100 V operation only)	-3 dB @ 80 Hz, -12 dB/octave
THD+N	<0.1% at 1 kHz @ -3 dB full rated output power
S/N Ratio	>103 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 150 W (8 Ohms), 300 W (8 Ohms Bridged), 300 W(70 V/100 V)
Gain	29 dB @ 8 Ohms
Protection	Over current, under voltage, over temperature, DC offset, extreme high frequency
Go to Sleep Time	25 minutes with no signal present (when set to POWER SAVER)
Wake Time	0.5 s typical
Wake Threshold	0.44 mV typical

Connectors

CH1-CH4	(2) 4-pin 5.08 mm pitch, 12 A plug with screw locking retainers; Power amplifier output; Wire Size: Terminals accept up to 12 AWG (3.31 mm^2)

NOTE: Output is direct-coupled, not transformer isolated.

AUDIO IN (UNBALANCED)	(4) RCA connectors, female; Unbalanced line-level audio inputs (Summing on CH1 + CH2 and CH3 + CH4); Maximum Input Level: 2.24 Vrms, +7 dBV (+9.2 dBu)
AUDIO IN (BALANCED)	(4) 3-pin 3.5 mm detachable terminal block; Balanced line-level audio inputs; Channel pairs 1 - 2 and 3 - 4 can each be configured to operate as stereo channels or a downmixed mono channel; Maximum Input Level: 7.75 Vrms, +20 dBu; Input Impedance: 20k Ohms
G	(1) 6-32 screw; Chassis ground lug
100-240V~ 1.2-0.6 A 50/60 Hz	(1) IEC 60320 C14 main power inlet; Mates with removable power cord, included

Controls & Indicators

PWR	(1) White/Red LED; White indicates amplifier is on and ready for use; Red indicates amplifier is in standby
HI-Z	(1) White LED; Indicates when Hi-Z mode is enabled (70 V or 100 V); Channels 1 - 2 and 3 - 4 are bridged and set to 70 V or 100 V operation
SIGNAL	(4) White LEDs (one per input); Indicates when an active input signal is present
FAULT	(4) Red LEDs (one per input); Indicates that the input channel is faulted or clipping

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GAIN 1-4	(4) Screwdriver-adjustable rotary controls, one per input channel; Adjusts the input attenuation level for the corresponding input channel
LoZ Modes	(2) Slide switches, 1 switch for CH1 + CH2, 1 switch for CH3 + CH4; Selects stereo, summed, or bridged operation

- **STEREO** preserves channels 1 and 3 as left, and channels 2 and 4 as right.
- **SUMMED** mixes channels 1 and 2 into one channel and channels 3 and 4 into one channel.
- **BRIDGED** maps channels 1 and 3 to their respective outputs with higher power of amplification. Channels 2 and 4 are not connected.

Operations Mode	(1) Slide switch; Sets the amplifier LoZ (4 or 8 Ω) or Hi-Z operation (70 V or 100 V)
Power Mode	(1) Slide switch; Selects "Power Saver" or "Always On" operation

Power

Main Power	1.2-0.6 A @ 100-240 VAC, 50/60 Hz
Power Consumption	75 W, (4 channels driven at 1/8th output power, 4 ohms); 16 W, idle (Hi-Z mode); 0.365 W, power saver (230VAC/50Hz)

Environmental

Temperature	41 to 104° F (5° to 40° C)
Humidity	10% to 90% RH (non-condensing)

Construction

Chassis	Metal, convection cooled (fanless)
Front Panel	Metal, black finish with polycarbonate label overlay
Mounting	Freestanding, surface mount, or 1/2 width 1 RU 19 in. rack mountable; Gangable with other Crestron modular AMP series products (adhesive feet and surface mounting kit included; Ganging kit and rack mounting kit optional)

Dimensions

Height	1.75 in. (44 mm) without feet; 1.83 in. (46 mm) with feet
Width	8.67 in. (220 mm) without mounting brackets 19.00 in. (483 mm) with mounting brackets
Depth	11.04 in. (280 mm)

Weight

5.3 lb (2.4 kg)

Compliance

ENERGY STAR, ErP (1275/2008/EC), UL 62368, FCC Class B residential use

Model

AMP-X300
Modular Amplifier

Available Accessories

CBL Series
Crestron® Certified Interface Cables

AUD-EXT
Audio over CAT5 Extenders

BRIDGE/HI-Z USES GAIN 1&3 ONLY

Joining plate attached (x4)

11.04 in. (280 mm)

3.65 in. (93 mm)

6.35 in. (161 mm)

10.75 in. (273 mm)

1.35 in. (34 mm)

9.37 in. (238 mm)

8.67 in. (220 mm)

1.75 in. (44 mm)

1.83 in. (46 mm)

PWR HI-Z

CH1 CH2 CH3 CH4

FAULT

SIGNAL

CRESTRON

AMP-X300

Crestron Electronics Inc.