X-Series Amplifier, 75 W



- Compact, configurable ENERGY STAR® certified power amplifier
- Quarter-rack width form factor, gangable with other next generation half- and quarter-rack width form factor Crestron products
- 1RU high design is surface or rack mountable
- Configurable for either LoZ or Hi-Z operation
- Configurable for 1x up to 75 W output for Hi-Z or Bridged or 2x up to 35 W output for stereo low impedance
- Low noise, low distortion, and high headroom
- Comprehensive fault and speaker protection
- Captive speaker connectors for secure and robust connectivity
- Support for two channels of balanced or unbalanced line inputs
- Stereo or mono-summed operation
- Convection cooled for noiseless operation
- Standby functionality turns on amplifier in approximately 0.1s when input sensing circuitry detects an audio signal
- Rack and surface mount parts are included
- Stereo ALS line level output for assistive listening systems
- Remote standby feature allows for instant on/off control over amplifier outputs via a simple contact closure input
- Front panel power/standby, Hi-Z, fault, and signal/clip indicators
- Internal universal 100-240V power supply

The AMP-X75 is a high performance, space saving, energy efficient amplifier that's totally configurable, yet simple to use. Whether you need a stereo amplifier that mounts on a wall or under a table, or a high impedance speaker run fed from a rack mounted unit, the AMP-X75 is simple to specify and install in any configuration.

LoZ ($4/8 \Omega$) and Hi-Z (70V or 100V) Output

The AMP-X75 is a 2-channel amplifier (up to 35 W per single-ended, low impedance channel) which can also be configured for a single channel of bridged operation (up to 75 W for the bridged channel), or for a single channel of high impedance operation (up to 75 W) to drive a distributed speaker system (70V or 100V). Balanced and unbalanced

inputs are available for connection to a single stereo or two mono source(s) via detachable terminal blocks or a 3.5 mm TRS connector. Balanced and unbalanced inputs are summed for simultaneous use.

NOTE: Each configuration can output up to its respective power rating.

Solid and Efficient Performance

The AMP-X75 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 and long-term reliability. The AMP-X75 is high-density stackable with other Crestron modular amplifiers, allowing multiple units to be installed vertically in an equipment rack without needing extra ventilation space.

Modular Design

The AMP-X75 is housed in a quarter-width rack-mountable form factor that can be installed individually or ganged together with other units 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 multiple amplifiers into a single assembly. Additional or replacement X-Series amplifier mounting hardware is available for purchase as the RMK-AMP-X mounting kit.

Fully Protected

The AMP-X75 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, 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-X75 to meet demanding ENERGY STAR requirements. In addition to its high efficiency operation, the AMP-X75 powers down automatically when no input signal is detected for more than 25 minutes, reducing overall power consumption and heat as part of an Energy Star® compliant system design. The amplifier quickly powers back on the instant an input signal is detected. A remote input can connect to a contact closure to place the amplifier in standby mode.



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Specifications	

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Output Power		
Mode	1 Channel Driven	2 Channels Driven
LoZ, 8 ohm (single ended)	35 W	35 W
LoZ, 4 ohm (single ended)	35 W	35 W
LoZ, 8 ohm Bridged	75 W	N/A
Hi-Z 70V	75 W	N/A
Hi-Z 100V	75 W	N/A

Input Signal Types Balanced or unbalanced analog line-

Frequency 20 Hz to 20 kHz \pm 0.5 dB at 1 W

Response

High-Pass Filter -3 dB @ 80 Hz, -12 dB/octave

(70V and 100V operation only)

THD+N <0.1% at 1 kHz @ -3 dB full rated output

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 35 W (8 Ohms), 75 W (70V/100V)

Gain 23 dB @ 8 Ohms, Balanced Input

Protection Clipping, over current, under voltage,

over temperature, DC offset, extreme

high frequency

Standby Mode 25 minutes with no signal present,

typical

Wake Time 0.1 s typical Wake Threshold 0.44 mV typical

Connectors

OUTPUT

(1) 4-pin 5.08 mm pitch, 12A plug with **SPEAKER**

screw locking retainers;

Power amplifier output;

Wire Size: Terminals accept up to

12 AWG (3.31 mm²)

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

AUDIO IN (UNBALANCED) (1) 3.5 mm TRS connector, female; Unbalanced line-level audio inputs;

Maximum Input Level: 2.24 Vrms, +7 dBV

(+9.2 dBu)

AUDIO IN (BALANCED) (2) 3-pin 3.5 mm detachable terminal

block;

Balanced line-level audio inputs; Maximum Input Level: 7.75 Vrms,

+20 dBu;

Input Impedance: 20k Ohms

ALS OUT (1) 3.5 mm connector, female;

> Unbalanced line level audio output, 0.316 Vrms, -10 dBV nominal; Maximum Output Level: 2.24 Vrms,

+7 dBV (+9.2 dBu);

Fixed audio output for assisted listening

devices duplicates the summed (Unbalanced + Balanced) audio inputs

REMOTE (1) 2 pin 3.5 mm detachable terminal

block;

Connect to dry contact closure to place

amplifier in standby mode.

G (1) 6-32 screw;

Chassis ground lug

100-240V~ 370-(1) IEC 60320 C14 main power inlet; 200 mA 50/60 Hz

Mates with removable power cord,

included

Controls & Indicators

PWR (1) White/Red LED;

White indicates amplifier is on and ready

Red indicates amplifier is in standby

HI-Z (1) White LED;

Indicates when Hi-Z mode is enabled

(70V or 100V);

Channels 1 - 2 are bridged and set to 70V

or 100V operation

SIGNAL (2) White/Red LEDs (one per input);

White indicates when an active input

signal is present

Red indicates when an active input signal

clip/limiting is present

(2) Red LEDs (one per input); **FAULT**

Indicates that the input channel is

faulted

GAIN 1-2 (2) Screwdriver-adjustable, detented

rotary controls, one per input channel; Adjusts the input attenuation level for the corresponding amplifier channel



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Modes

(1) Slide switch;

Selects stereo, summed, bridged, 70V, or 100V operation

- STEREO (LoZ): The input signal received on each channel is sent to its respective output for use in applications where left and right channel separation is required. The two GAIN controls are independently adjustable.
- SUM (LoZ): The input signals sent to a channel pair (1 + 2) are summed and sent to their respective individual outputs. The two GAIN controls are independently adjustable.
- BRIDGE (LoZ): The input signals sent to a channel pair (1 + 2) are summed and sent to a bridged output (1 + 2) for use in high-power applications. The GAIN 1 control adjusts the bridged 1 + 2 output.
- 70V (Hi-Z): The input signals sent to a channel pair (1 + 2) are summed and sent to a bridged output (1 + 2) for use in Hi-Z 70V applications. The GAIN 1 control adjusts the bridged 1 + 2 output.
- 100V (Hi-Z): The input signals sent to a channel pair (1 + 2) are summed and sent to a bridged output (1 + 2) for use in Hi-Z 100V applications. The GAIN 1 control adjusts the bridged 1 + 2 output.

Power

Main Power

370-200 mA @ 100-240VAC, 50/60 Hz

Power Consumption 18.63 W, (2 channels driven at 1/8th

output power, 4 ohms); 7.60 W, idle (Hi-Z mode);

0.41 W, standby (230VAC/50 Hz)

Environmental

Temperature

Humidity

41 to 104°F (5° to 40°C)

Heat Dissipation

10% to 90% RH (non-condensing)

63.6 BTU/hr @ 4 Ohms, all channels driven at 1/8th output power;

25.9 BTU/hr, idle (Hi-Z mode); 1.4 BTU/hr in standby

Construction

Chassis

Metal, convection cooled (fan less)

Front Panel Metal, black finish with polycarbonate

label overlay

Mounting

Freestanding, surface mount, or 1/4 width 1 RU 19 in. rack mountable; Gangable with other Crestron modular AMP series products (adhesive feet, surface mounting, rack mounting, and ganging hardware all included)

Dimensions

Height

1.75 in. (44 mm) without feet; 1.83 in. (46 mm) with feet

Width

4.33 in. (110 mm) without mounting

brackets;

19.00 in. (483 mm) with mounting

brackets

Depth

8.78 in. (223 mm)

Weight

2.1 lb (0.95 kg)

Compliance

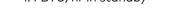
Regulatory Model: M201929003

ENERGY STAR, ErP (1275/2008/EC), Intertek® Listed for US & Canada, FCC Class B residential use

Model

AMP-X75

X-Series Amplifier



AMP-X75

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This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

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AMP-X75

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