AMP-8075 & AMPI-8075

8-Channel Power Amplifiers, 75W/Ch.

- > *High-efficiency eight-channel amplifier*
- > *Robust and reliable performance*
- > *Professional sound quality*
- > *75 watts per channel @ 4/8 Ohms*
- > *Each channel configurable for Lo-Z or Hi-Z operation*
- > *Model AMP-8075 supports 100-120V AC line power and 4/8Ω or 70V output*
- > *Model AMPI-8075 supports 220-240V AC line power and 4/8Ω or 100V output*
- > *Mono, stereo, and bridged modes*
- > *Comprehensive fault and speaker protection per channel*
- > *Extensive front panel status indicators and output meters*
- > *High-speed Ethernet LAN connectivity*
- > *Software configuration, control, and monitoring*
- > *Crestron® control system integration support*
- > *Crestron Fusion® enterprise management support [1]*
- > *Rear panel +24 dBu balanced inputs and level adjustments*
- > *Detachable terminal block connectors for easy servicing*
- > *Single-space 19" rack mountable*
- > *High-density stackable without extra vent spacing*

Crestron® AMP-8000 series amplifiers are designed to complement the Crestron Avia™ family of digital signal processors, and are well-suited for all types of commercial audio applications. Each model furnishes eight channels of clean, efficient amplification in a space-saving 1 RU rack-mountable chassis. Each channel is configurable for Lo-Z or Hi-Z operation, as well as stereo and bridged modes. Network connectivity enables configuration, monitoring, and control via the Crestron Avia Audio Tool software, a Crestron control system, or Crestron Fusion®.[1]

Solid & Efficient Performance

AMP-8000 series amplifiers 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 with varying line voltages.

Configurable & Controllable

The AMP-8075 model delivers 75 watts per channel into 4 or 8 ohm "Lo-Z" loads. Each channel is individually configurable via software for use with "Hi-Z" distributed speaker systems (either 70V or 100V depending on model). Adjacent pairs of channels may be configured for stereo or bridged operation. Stereo mode enables remote control of a stereo pair of speakers using a single set of controls. Bridged mode allows two channels to be combined to provide a single channel delivering 150 watts into 8 ohms.

Two versions of the AMP-8075 are offered. The namesake AMP-8075 model supports 4/8 ohm and 70V output, and operates on 100-120V AC line power. The "international" AMPI-8075 model supports 4/8 ohm and 100V output, and operates on 220-240V AC line power.

Both models feature professionally balanced inputs and support input signal levels up to +24 dBu. Rear panel input attenuation controls allow for signal level matching. Remote level control and monitoring is enabled using the Crestron Avia Audio Tool software, or using a touch screen control panel or mobile device through integration with a Crestron control system. Integration with a control system also enables centralized monitoring and control of multiple amplifiers throughout a facility as part of a Crestron Fusion managed enterprise.

Fully Protected

AMP-8000 series amplifiers feature comprehensive protection against overheating, shorted or overloaded speaker lines, excessive signal levels, and other faults. Each channel is independently protected, allowing an individual channel to enter protection mode without interrupting the operation of other channels. Protection is automatic, quickly disconnecting the speaker line and shutting down the affected channel, and then restoring normal operation once the fault is resolved. Clear indication of any fault is provided on the front panel, and may also be reported to a control system to provide notification on a touch screen or mobile device, through a text message or e-mail, or at a central help desk using Crestron Fusion.

AMP-8075 & AMPI-8075 8-Channel Power Amplifiers, 75W/Ch.

AMP-8075 – Front View

AMP-8075 – Rear View

SPECIFICATIONS

Communications

Ethernet: 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP, SSL, SSH, SFTP (SSH File Transfer Protocol)

USB Device: USB device port for computer console (setup)

Audio

Input Signal Types: Balanced or unbalanced analog line-level

Output Signal Types: 4/8 Ohm, 70 Volt direct-coupled (AMP-8075 only), 100 Volt direct-coupled (AMPI-8075 only)

Operating Modes: (Configurable via Crestron Avia Audio Tool software)

Mono: Each channel is configurable to operate independently from all other channels

Stereo: Adjacent channels (1&2, 3&4, 5&6, 7&8) are configurable to operate as a stereo pair with linked control settings

Bridged: Adjacent channels (1&2, 3&4, 5&6, 7&8) are configurable to operate as an 8 Ohm bridged mono output

4/8Ω Mode: Each channel is configurable for 4/8 Ohm "Lo-Z" output

70V Mode (AMP-8075 only): Each channel is configurable for 70 Volt "Hi-Z" output

100V Mode (AMPI-8075 only): Each channel is configurable for 100 Volt "Hi-Z" output

Output Power, AMP-8075:

75 Watts per channel @ 4-8 Ohms or 70 Volts nominal

150 Watts per bridged pair of channels @ 8 Ohms

Output Power, AMPI-8075:

75 Watts per channel @ 4-8 Ohms or 100 Volts nominal

150 Watts per bridged pair of channels @ 8 Ohms

Frequency Response:

20 Hz to 20 kHz ±0.5 dB at 1 Watt, 4-8 Ohms;

200 Hz to 20 kHz ±0.5 dB at 1 Watt, 70/100 Volts

High Pass Filter: -3 dB @ 80 Hz, 12 dB per octave in 70V or 100V mode

THD+N: <0.1% @ 1 kHz at 3 dB below clipping

S/N Ratio: >103 dBA, 20 Hz to 20 kHz

Channel Separation: >70 dB

Input Sensitivity: 1.23 Vrms, +4 dBu (balanced) for full rated output power

Fault Protection:

Over Current: Protects each channel individually against an excessive speaker load or shorted speaker line

DC Offset: Protects each channel and speaker line against DC voltages sensed at each output

Over Temperature: Protects the amplifier power supply and each channel against overheating due to poor ventilation or excessive temperature

Under Voltage: Protects the amplifier if the internal power supply voltage is below tolerance due to excessive output levels or insufficient line voltage

Note: All faults report to the control system, and indicate on the front panel and in the software tool.

Output Relays: Disconnects the speaker line at each output under fault conditions, and during startup and shutdown

Audio Ramp: Ramps each channel's audio level up to its last used setting after the corresponding output relay has closed following startup or fault recovery; ramp time ~2 seconds

Connectors

LINE INPUTS 1 – 8: (8) 3-pin 3.5 mm detachable terminal blocks;
Balanced line-level audio inputs;
Maximum Input Level: 12.3 Vrms, +24 dBu;
Input Impedance: 20k Ohms balanced

SPEAKER OUTPUTS 1 – 8: (8) 2-pin 7.62 mm reversed gender 20A detachable terminal blocks;
Power amplifier outputs;
Wire Size: Terminals accept up to 12 AWG (3.31 mm^2);
Note: Output is direct-coupled in all modes for all load types, not transformer isolated

LAN: (1) 8-pin RJ45 female;
10Base-T/100Base-TX Ethernet LAN port

100-120V~ 50/60Hz 3A (AMP-8075): (1) IEC 60320 C14 main power inlet;
Mates with removable power cord (included)

220-240V~ 50/60Hz 2A (AMPI-8075): (1) IEC 60320 C14 main power inlet;
Mates with removable power cord (included)

FUSE: T10AH250V (AMP-8075): Main fuse;
1/4" x 1-1/4", 10A, time-lag, 250V, ceramic

FUSE: T6AH250V (AMPI-8075): Main fuse;
5 x 20 mm, 6.3A, time-lag, 250V, ceramic

G: (1) 6-32 screw;
Chassis ground lug

COMPUTER (front): (1) USB Type B female;
USB computer console port (for setup only)

Controls & Indicators

PWR: (1) Bi-color green/amber LED, indicates operating power supplied from AC line power, amber indicates startup in progress, green indicates normal operation, alternating green/amber indicates absence of a network connection
RESET: (1) Recessed pushbutton, restores last saved settings
STATUS, FAULT 1 – 8: (8) Red LEDs, each indicates an under-voltage fault condition on the corresponding channel
STATUS, CURRENT 1 – 8: (8) Blue LEDs, each indicates an over-current fault condition on the corresponding output
STATUS, DC 1 – 8: (8) Blue LEDs, each indicates a DC offset fault condition on the corresponding channel
STATUS, THERM 1 – 8: (8) Blue LEDs, each indicates an over-temperature fault condition on the corresponding channel
STATUS, 70V 1 – 8 (AMP-8075 only): (8) Blue LEDs, each indicates the corresponding channel is configured for 70 Volt operation
STATUS, 100V 1 – 8 (AMPI-8075 only): (8) Blue LEDs, each indicates the corresponding channel is configured for 100 Volt operation
VU 1 – 8: (8) 5-segment LED bar graph audio level meters for each corresponding output; each contains (4) blue LEDs for -40dB, -30dB, -20dB, and -10dB, and (1) red LED for CLIP
LINE INPUTS 1 – 8 (rear): (8) Screwdriver-adjustable rotary controls, each adjusts the input attenuation level for the corresponding channel
LAN (rear): (2) LEDs, green LED indicates Ethernet link status, amber LED indicates Ethernet activity
SETUP (rear): (1) Red LED and (1) pushbutton for Ethernet setup, flashes while updating firmware
Power Switch (rear): (1) Rocker switch, turns main power on or off

Power

Main Power (AMP-8075): 3 Amps @ 100-120 Volts AC, 50/60 Hz
Main Power (AMPI-8075): 2 Amps @ 220-240 Volts AC, 50/60 Hz
Power Consumption: 173 Watts, all channels driven at 1/8th output power;
70 Watts, all channels idle

Environmental

Temperature: 41° to 104° F (5° to 40° C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 350 BTU/hr, all channels driven at 1/8th output power;
250 BTU/hr, all channels idle

Construction

Chassis: Metal, variable-speed fan-cooled, vented sides
Front Panel: Metal, black finish with polycarbonate label overlay

Mounting: Freestanding or 1 RU 19-inch rack-mountable (front rack ears and rear support brackets included)

Dimensions

Height: 1.72 in (44 cm)
Width: 17.28 in (439 mm);
19.00 in (483 mm) with rack ears
Depth: 14.69 in (374 mm)

Weight

12.6 lb (5.72 kg)

Compliance

UL 60065, FCC Class A commercial use

MODELS & ACCESSORIES

Available Models

AMP-8075: 8-Channel Power Amplifier, 75W/Ch., 4/8Ω or 70V, North America & Japan, 100-120V
AMPI-8075: 8-Channel Power Amplifier, 75W/Ch., 4/8Ω or 100V, International, 220-240V

Available Accessories

DSP Series: Crestron Avia™ Digital Signal Processors
SW-AAT: Crestron Avia™ Audio Tool
SAROS Series: Saros® Commercial Speakers

Notes:

1. Integration with Crestron Fusion requires a control system and custom programming.

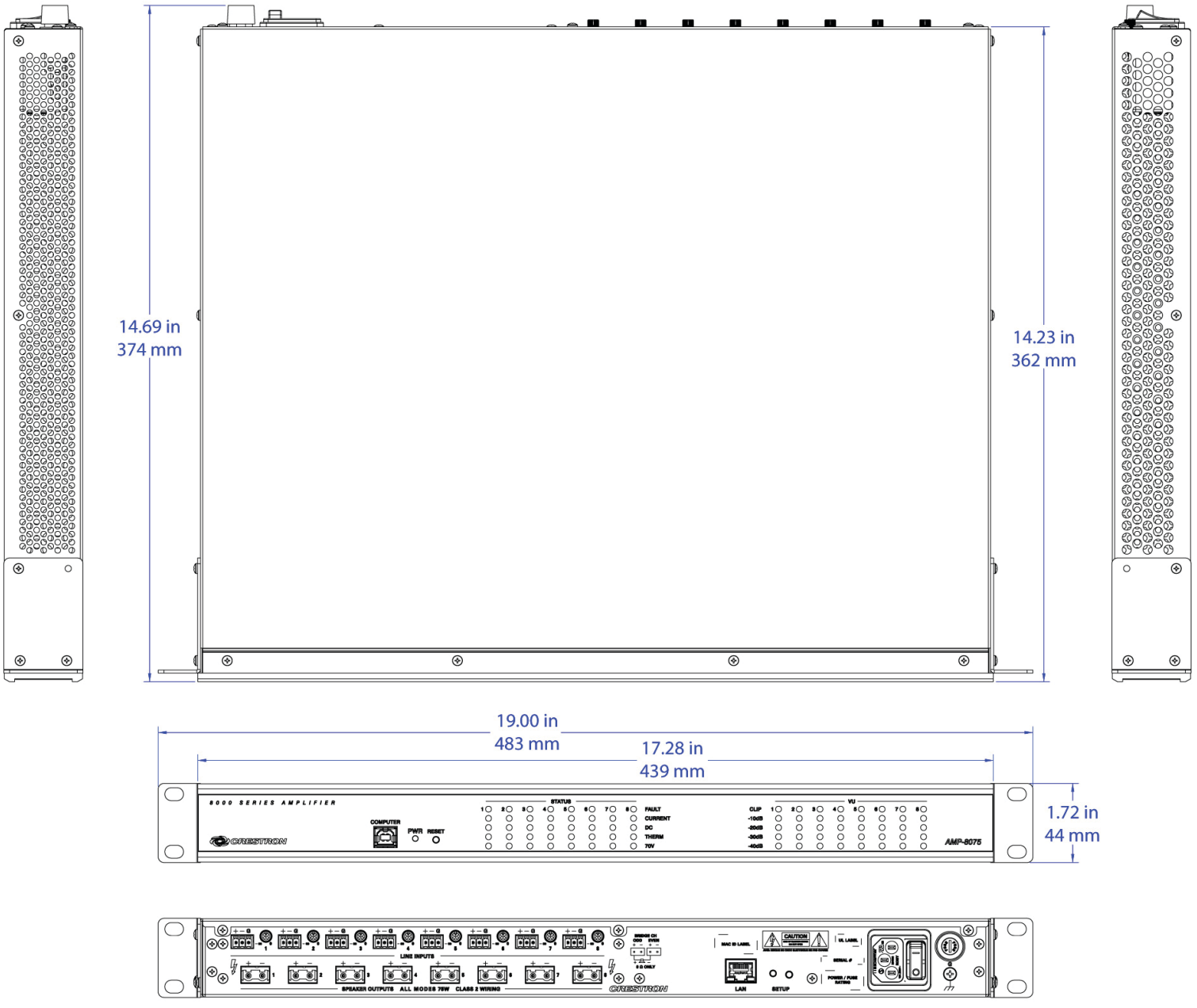
This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

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.

AMP-8075 & AMPI-8075 8-Channel Power Amplifiers, 75W/Ch.

DIMENSIONAL DIAGRAM



Crestron Electronics, Inc. 15 Volvo Drive | Rockleigh, NJ 07647
Tel: 800.237.2041 / 201.767.3400 | Fax: 201.767.1903
www.crestron.com

Specifications subject to change without notice. Revised 03/19/19