2x210W Commercial Power Amplifier, 4/8Ω or High-Power 70V

- > ENERGY STAR® qualified power amplifier
- > Ultra-efficient space-saving design
- > Low total cost of ownership
- > High-output power, low noise, low distortion performance
- > Each channel selectable for 4/8Ω or 70V operation
- > Two channels each rated 210W@4 Ω , 120W@8 Ω , and 210W@70V^[1]
- > Bridgeable for 420W@8Ω
- > Individual channel power control via jumper or remote contact
- > Auto power-down after 30 minutes of no signal
- > Instant auto power-on when an input signal is detected
- > No inrush current during power-up
- > Over current and DC offset protection per output
- > Thermal protection on the power supply and each channel
- > Front panel signal, clip, and fault indicators per channel
- > Professional balanced inputs
- > Detachable terminal block connectors
- > Rear panel ±10dB input level controls
- > Convection cooled no noisy fans
- > Single-space 1U rack mountable
- > Under 15 inches deep
- > Universal power supply with active power factor correction

Crestron® AMP-series Commercial Power Amplifiers provide a perfect combination of high output and efficiency for all types of professional audio applications. 100% Crestron engineered and built, these amplifiers are ENERGY STAR® qualified to enable organizations to fulfill their green initiatives without compromising on audio performance. Advanced design features include a high-efficiency amp topology with active power factor corrected power supply, delivering a generous amount of power in a space-saving 1U rack-mountable chassis.

The AMP-2210HT provides two independent channels of amplification with configurable outputs to suit a range of system designs. Each channel is configurable via a simple selector switch to handle either low-Z or 70V constant-voltage speaker systems. Each channel is rated for 210W @ 70V or 4Ω , or 120W @ 8Ω . Additionally, the two channels may be bridged together to deliver a robust 420W @ 8Ω to a single load. [1]

ENERGY STAR® Qualified

Its ultra-efficient design allows the AMP-2210HT to meet demanding ENERGY STAR qualification requirements, affording a cost-reducing solution for everything from boardrooms and auditoriums to paging and background music systems. Auto power-down places the amplifier into a low-power standby state if no input signal is detected for 30 minutes. The amplifier quickly powers back on the instant an input signal is detected. In addition, each amp channel can be independently enabled or disabled via jumpers or remote contacts, reducing power consumption by shutting down individual channels when they are not





needed. Whether switched remotely or through an AC power controller, the AMP-2210HT draws no added inrush current during power-up, reducing AC circuit requirements and potentially eliminating the need for extra power sequencing equipment.

Professional System Integration

The AMP-2210HT includes professional balanced inputs with rear-panel ±10dB input level adjustments to assure compatibility with a wide range of audio sources. Remote power control is enabled for each channel using external contact closures, switches, or control system relays. All input, output, and remote control connections are facilitated via detachable screw-terminal connectors to simplify installation and servicing.

Cool and Compact

The AMP-2210HT features a durable, lightweight chassis that may be placed on a shelf, or rack-mounted using the rack ears provided. At only one rack space high and under 15 inches deep, it is ideal for installations requiring a lot of power in a limited space. Its efficient, cool-running design gives off substantially less heat than comparably rated amplifiers. Convection cooling means there are no noisy fans, allowing the AMP-2210HT to be installed in a boardroom lectern or credenza without affecting noise levels.

Rugged and Dependable

All AMP-series amplifiers are designed for ultimate dependability in a wide range of commercial environments. Built-in over current and DC offset protection on each channel helps prevent damage to the amplifier and speakers due to external or internal faults. Discrete thermal protection is also provided on each channel and the power supply. Front panel indicators are provided for each channel to show signal presence, clipping, and fault conditions.



SPECIFICATIONS

Audio

Typical of 2 mono amplifier channels:

Input Signal Type: Balanced or unbalanced analog line-level

Output Signal Types: 4/8 Ohm or 70 Volt Output Power: 120 Watts at 8 Ohms; 210 Watts at 4 Ohms;

420 Watts at 8 Ohms bridged; 210 Watts at 70 Volts^[1]

Damping Factor: >100

Protection: Over Current, Over/Under Voltage, Over Temperature,

DC Offset

Frequency Response: 20Hz to 20kHz ± 0.5 dB at 4/8 0hms;

80Hz to 20kHz +0/-3 dB at 70 Volts

THD: 0.05% @ 1kHz, full rated power at 4/8 0hms, 8 0hms Bridged, or

70/100 Volts;

0.1% @ 20Hz to 20kHz, 120W at 8 0hms; 0.2% @ 20Hz to 20kHz, 210W at 4 0hms;

0.1% @ 20Hz to 20kHz, 420W at 8 0hms Bridged;

0.1% @ 80Hz to 20kHz, 210W at 70 Volts

S/N Ratio: >103 dB, A-weighted Crosstalk: >70 dB @ 1kHz

Gain: 23 dB with INPUT LEVEL control set at 12 o'clock nominal position

Input Sensitivity: 2.22 Vrms for rated output power with INPUT LEVEL

control set at 12 o'clock nominal position
Input Detection Threshold: 40 mV RMS @ 1 kHz
Input Level Adjustment: ±10 dB from nominal

Connectors

G: 6-32 screw, chassis ground lug

INPUT CH 1 – 2: (2) 3-pin 3.5mm detachable terminal blocks;

Balanced/unbalanced line-level audio inputs;

Input Level: 5.3 Vrms maximum with INPUT LEVEL control set at minimum

position;

Input Impedance: 24k Ohms balanced, 12k Ohms unbalanced

SPEAKER OUTPUT CH 1 -2: (2) 4-pin 7.62mm 15A detachable terminal

blocks;

 $4\Omega/8\Omega$ and 70V power amplifier outputs; Wire Size: Terminals accept up to 14 AWG

REMOTE: (1) 6-pin 3.5mm detachable terminal block;

Provides (2) remote control inputs; enables independent power control of each channel via local jumpers or remote contact closures;

inputs may be safely paralleled for global control

FUSE T6.3AH 250V: Main fuse holder:

5x20 mm, 250V, 6.3AH, time-lag, high-rupture rated

100-240V~50/60Hz: (1) IEC C14 male chassis plugs, main power input;

Mates with removable power cord (included)

Controls & Indicators

PWR: (1) dual-color LED, green indicates ACTIVE state, yellow indicates STANDBY state

INPUT 1 − 2, SIGNAL: (2) green LEDs, indicate signal presence on each corresponding channel

OUTPUT 1-2, CLIP: (2) amber LEDs, indicate a clipping condition on each corresponding channel

OUTPUT 1-2, FAULT: (2) red LEDs; indicate over-temperature, over-current, over or under power supply voltage, or DC offset condition on each corresponding channel

INPUT CH 1 – 2 LEVEL (rear): (2) Rotary input boost/attenuate adjustments w/center detent at nominal

SPEAKER OUTPUT CH 1 - 2, 70V / 4/8 Ω (rear): (2) 2-position slide switches, select the output configuration for each corresponding channel ON/REMOTE/OFF (rear): (1) 3-position slide switch; selects between all channels powered on, all channels powered off, or remote control of each individual channel

Power Requirements

Main Power: 100-240 Volts AC, 50/60 Hz

Power Consumption:

62 Watts @ 8 Ohms, all channels driven at 1/8th output power; 88 Watts @ 4 Ohms, all channels driven at 1/8th output power; 89 Watts @ 70V, all channels driven at 1/8th output power;

26 Watts, all channels idle;

<1 Watt in standby

Environmental

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

Heat Dissipation:

110 BTU/Hr @ 8 Ohms, all channels driven at 1/8th output power; 121 BTU/Hr @ 4 Ohms, all channels driven at 1/8th output power; 125 BTU/Hr @ 70V, all channels driven at 1/8th output power; 89 BTU/Hr, all channels idle;

<3.4 BTU/Hr in standby

Enclosure

Chassis: Metal with black finish, vented top and sides, convection cooled Front Panel: Metal, black finish with polycarbonate label overlay

Mounting: Freestanding or 1U 19-inch rack-mountable (adhesive feet and rack ears included)

Dimensions

Height: 1.70 in (44 mm) **Width:** 17.28 in (439 mm);

19.0 in (483 mm) with rack ears

Depth: 14.59 in (371 mm)

Weight

15.6 lb (7.1 kg)





AMP-2210HT - Rear View

MODELS & ACCESSORIES

Available Models

AMP-2210HT: 2x210W Commercial Power Amplifier, $4/8\Omega$ or High-Power 70V

Notes:

1. The 70V output is not transformer isolated on the AMP-2210HT model.

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.

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