## 2x210W Commercial Power Amplifier, $4/8\Omega$ or 70/100V

- > 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, 70V, or 100V operation
- > Two channels each rated 210W@4 $\Omega$ , 120W@8 $\Omega$ , and 120W@70/100V
- > Transformer isolated 70 and 100 Volt outputs
- > 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.

## 2-Channel Universal Design

The AMP-2210T provides two independent channels of amplification with configurable outputs to suit a wide range of system designs. Each channel is configurable via a simple selector switch to handle either low-Z or constant-voltage speaker systems. Each channel is rated for 210W @  $4\Omega$ , or 120W @  $8\Omega$ , 70V, or 100V. Additionally, the two channels may be bridged together to deliver a robust 420W @  $8\Omega$  to a single load. The 70/100V outputs are transformer isolated to handle long and complex wire runs.

## **ENERGY STAR® Qualified**

Its ultra-efficient design allows the AMP-2210T 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-2210T 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-2210T includes professional balanced inputs with rear-panel  $\pm 10$ dB 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-2210T 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-2210T 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.



# AMP-2210T 2x210W Commercial Power Amplifier, 4/8Ω or 70/100V

## **SPECIFICATIONS**

#### **Audio**

Typical of 2 mono amplifier channels:

Input Signal Type: Balanced or unbalanced analog line-level

Output Signal Types: 4/8 Ohm, 70 Volt, or 100 Volt

Output Power: 120 Watts at 8 Ohms; 210 Watts at 4 Ohms;

420 Watts at 8 Ohms bridged;

120 Watts at 70 or 100 Volts (Transformer isolated)

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 70/100 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 Ohms Bridged;

0.1% @ 80Hz to 20kHz, 120W at 70/100 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 70/100V 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

 $\textbf{OUTPUT 1-2, CLIP:} \ \ \textbf{(2)} \ \text{amber LEDs, indicate a clipping condition on each}$ 

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,  $100V / 70V / 4/8\Omega$  (rear): (2) 3-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;

63 Watts @ 70/100V, 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;

113 BTU/Hr @ 70/100V, 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

15.1 lb (6.9 kg)



AMP-2210T - Rear View

#### **MODELS & ACCESSORIES**

#### **Available Models**

AMP-2210T: 2x210W Commercial Power Amplifier, 4/8Ω or 70/100V

#### Notes:

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 <a href="https://www.crestron.com/salesreps">www.crestron.com/salesreps</a> or by calling 800-237-2041.

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