

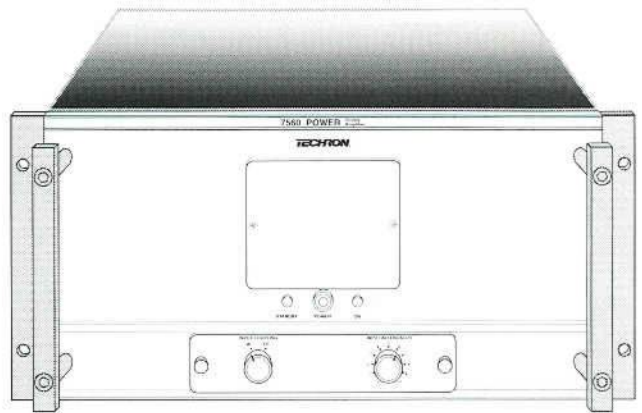
7560/7570 Power Amplifiers

These power amplifiers supply a controlled voltage (7560/7570) or controlled current (7570) output. In controlled voltage (CV) mode, the output is an amplified voltage representation of the input voltage signal. In controlled current (CC) mode, the output is an amplified current representation of the input voltage signal. If the load's impedance changes, the amplifier seeks to maintain the desired voltage (in CV) or current (in CC).

Features

These amplifiers provide precision amplification of signals with frequencies from dc to over 20 kHz. Much higher frequencies are attainable, depending on application. Important features of the amplifiers include:

- ☐ Maximum output of 1,018 W rms into a 4 ohm load.
- ☐ AC input 120 V standard (47-63 Hz). Internal selection of 100, 200, 220, or 240 V.
- ☐ The 7570 has selectable controlled current or controlled voltage modes.
- ☐ Connecting two amplifiers in series for push-pull operation approximately doubles available output voltage.
- ☐ Stand-alone or rack-mounted operation.
- ☐ Protection circuitry prevents damage due to high line voltage, overtemperature, RF burnouts, input overload, excessive output demand, mismatched loads, shorted loads, and internal malfunction.
- ☐ Maximum output voltage of 64 V rms into 4 Ω .
- ☐ Maximum output current of 15.9 A rms into 4 Ω .
- ☐ Maximum slew rate of 36 V/ μ s for the 7560 (20 V/ μ s for 7570).
- ☐ Residual noise for the 7560 is only 0.88 mV rms (0.55 mV for 7570) from DC to 100 kHz.
- ☐ Input impedance for the 7560 is 20 k Ω (25 k Ω for 7570).



Applications

Versatile Techron amplifiers are useful in numerous industrial and commercial power applications. For example, consider how they have been used in these environments:

Magnetic Resonance Imaging—Techron amplifiers produce magnetic gradient fields used in MRI scanners, the most sophisticated and powerful medical diagnostic tools available.

Power Industry Testing—Power utilities use Techron amplifiers to test protective relays, fuses, and circuit breakers.

Vibration Test Devices—Techron amplifiers supply reliable power to numerous shaker devices such as large and small tables and have even been used to resonate a building at low frequency.

Manufacturing—Need a 50 Hz power supply to simulate European frequency? Want to supply clean power for your processes? Need to do some electroplating? Techron amplifiers have been used in these and many other jobs.

Positioning—Techron amplifiers are used to drive actuators and servos for numerous applications. From telescopes to laser beams to medical uses, industry depends on the low distortion levels of our amplifiers for precise positioning.

And, with a wealth of technical knowledge, our skilled application engineers can show you how to handle new and unusual applications.

Performance*

Max Output Power: 1,018 W rms into 4 Ω

Max Output Voltage: 64 V rms into 4 Ω

Max Output Current: 15.9 A rms into 4 Ω

(*Tests used 1 kHz sine wave with amplifier in controlled-voltage mode. Specifications depend on load and waveform and are subject to manufacturing change.)

Physical

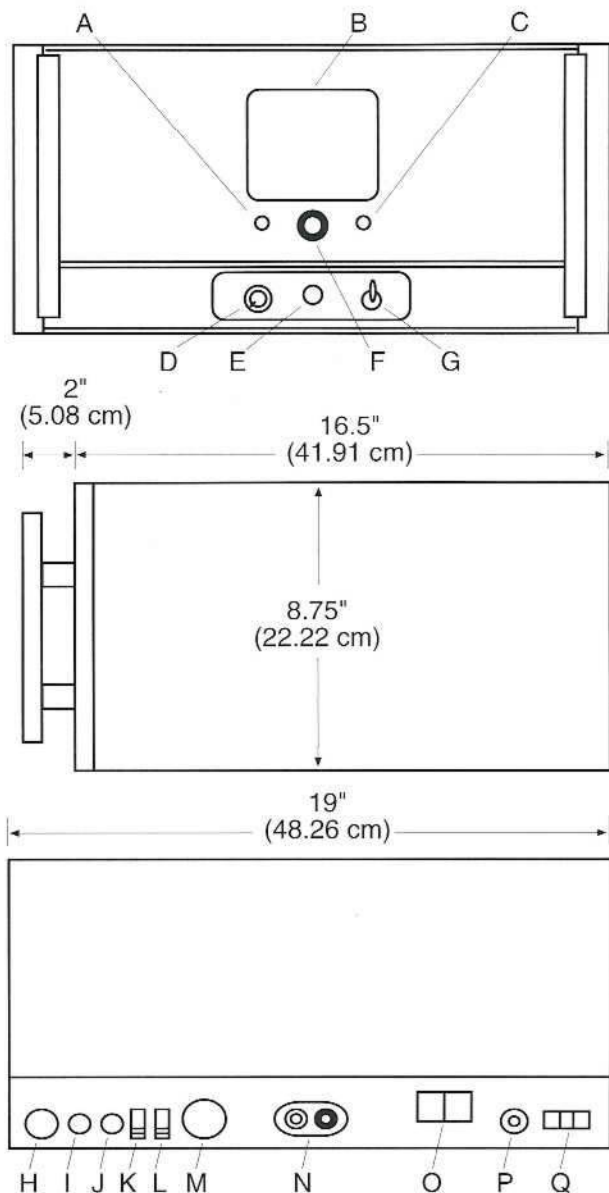
Weight: 92 pounds (41.7 kg)

Chassis: Aluminum with steel reinforcements

Finish: Tan and brown two-tone panel coated with durable textured polyurethane

Indicators, Controls and Connectors:

- (A) Standby Indicator
- (B) Accessory analog meter location
- (C) On Indicator
- (D) Input Coupling Switch (switches between ac or dc coupling of input) on 7560; Input Attenuator (attenuates input signal) on 7570
- (E) Current Monitor (7570 only)
- (F) Power Switch
- (G) Input Attenuator on 7560; Mode Switch (CV or CC) on 7570
- (H) AC Power Input
- (I) High Voltage Fuse
- (J) Low Voltage Fuse
- (K) Low Frequency Protect Switch (when selected, initiates standby when dc-10 Hz @ 10 V or more appears at the output)
- (L) Delay Switch (when selected, invokes a four-second delay whenever turning on power switch)
- (M) Interlock (signals and controls for multiple amplifier systems)
- (N) Output (five-way binding posts)
- (O) Output (barrier block)
- (P) Input (BNC connector, 7560 only)
- (Q) Input (barrier block, 7570 only)



Support

Every Techron product is supported by our practices and people. Techron provides

- ☐ application engineering for your technical questions and customized product needs.
- ☐ a 1-year limited warranty.
- ☐ comprehensive technical manuals and related product information.
- ☐ a fully equipped service facility and experienced service technicians.

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