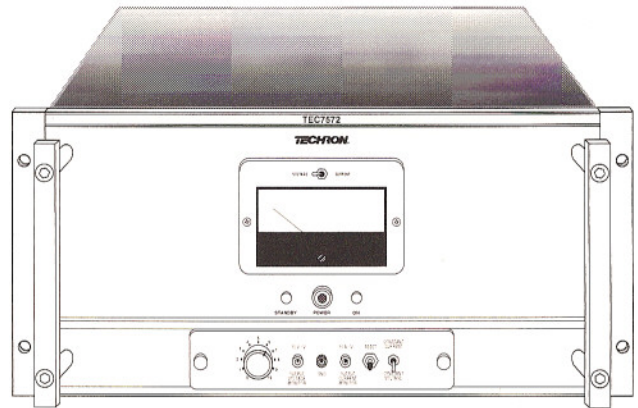


TEC7562/TEC7572 Power Amplifier

The TEC7572 amplifier supplies a linear, low-noise, high-power, wide-bandwidth, controlled voltage (CV) or controlled current (CC) output. In CV mode, the output is an amplified *voltage* representation of the input voltage signal. In CC mode, the output is an amplified *current* representation of the input voltage signal. The TEC7562 supplies CV operation only.



Features

This amplifier provides precision amplification of signals with frequencies from dc to over 20 kHz (in CV mode). Much higher frequencies are attainable, depending on application. Important features of the amplifiers include:

- ❑ Maximum output of 1,018 W rms into a 4- Ω load. Maximum output current of 15.9 A rms into a 4- Ω load. Maximum output voltage of 64 V rms into a 4- Ω load.
- ❑ Connecting two amplifiers in series for push-pull operation approximately doubles available output voltage.
- ❑ AC input 120 V standard (47–63 Hz). Internal selection of 100, 200, 220, or 240 V (single phase).
- ❑ Protection circuitry prevents damage due to high line voltage, overtemperature, RF burnouts, input overload, excessive output demand, mismatched loads, shorted loads, and internal malfunction (in CV mode).
- ❑ Low-noise differential input (TEC7572 only; TEC7562 has single-ended input).
- ❑ Residual noise (from dc to 100 kHz) is less than 0.88 mV rms.
- ❑ In the TEC7572, an analog meter displays peak output voltage or current. Front panel jacks provide external monitoring of output voltage and current. Easy front-panel selection of either CV or CC mode.

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 to test a variety of electrical devices? 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.

Specifications

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 CV mode. Specifications depend on load and waveform and are subject to manufacturing change.)

Physical

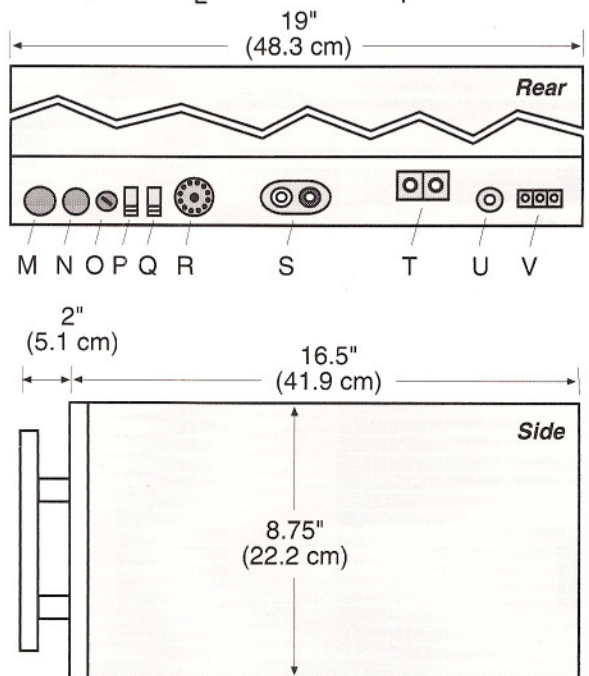
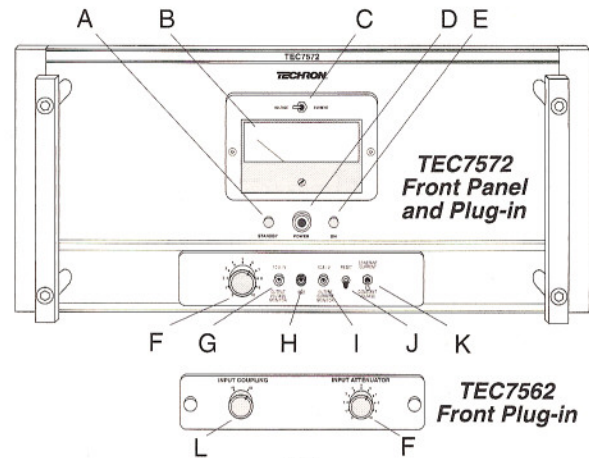
Weight: 92 pounds (41.7 kg)

Chassis: Aluminum with steel reinforcements

Finish: Light pearl

Indicators, Controls and Connectors:

- (A) Standby Indicator
- (B) Analog meter (TEC7572 only)
- (C) Meter voltage/current selector switch (TEC7572 only)
- (D) Power Switch
- (E) On Indicator
- (F) Input Attenuator
- (G) Output Voltage Monitor (TEC7572 only)
- (H) Monitor Ground (TEC7572 only)
- (I) Output Current Monitor (TEC7572 only)
- (J) Reset Switch (TEC7572 only)
- (K) CC/CV Mode Selector Switch (TEC7572 only)
- (L) AC/DC Coupling Switch (TEC7562 only)
- (M) AC Power Input
- (N) High Voltage Fuse
- (O) Low Voltage Fuse
- (P) Low Frequency Protect Switch (when selected, initiates standby when dc-10 Hz @ 10 V or more appears at the output)
- (Q) Delay Switch (when selected, invokes a four-second delay whenever turning on power switch)
- (R) Interlock (signals and controls for multiple amplifier systems)



- (S) Output (five-way binding posts)
- (T) Output (barrier block)
- (U) Single-ended Input (BNC connector) for TEC7562
- (V) Differential Input (barrier block) for TEC7572

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.