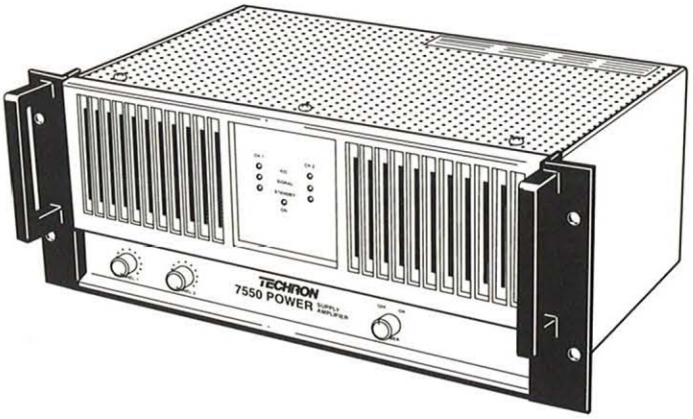
TECHRON®

We Power Your Strongest Ideas

7550 Power Amplifier

This dual-channel member of the 7500 family of amplifiers supplies a controlled voltage output and operates at frequencies from dc to 20 kHz.



Features

The 7550 is a dual-channel amplifier with controlled voltage output. Important features of this amplifier include the following:

- ❑ The 7550 offers up to 350 watts of pure power into 4 ohms.
- ❑ Controlled current output is optional.
- ❑ Outputs can be "bridged" together for higher output to a single channel.
- ❑ Internal circuitry protects the 7550 from shorts, mismatches, and open circuits in voltage mode.
- ❑ Patented input/output comparator (IOC) circuitry immediately alerts you to any distortion exceeding 0.05%.
- ❑ Signal presence indicators verify complete signal flow—input to output.
- ❑ Standard voltage gain is 20.
- ❑ The amplifier installs easily into a standard 19" rack and occupies a 4U rack space.
- ❑ A cooling fan is built in.
- ❑ The 7550 can operate on input power of 100, 120, 200, 220, or 240 Vac rms at 47–63 Hz.
- ❑ All Techron amplifiers are designed and manufactured in the U.S.A. and are backed by a limited, 1–year warranty.
- ❑ Techron fully supports the 7550 with application engineering, service facilities, and complete technical information.

Applications

Versatile construction in 7500 amplifiers make them useful in numerous industrial and commercial power applications. For example, consider how they have been used in these environments:

Shaker 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.

Positioning—7500 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.

Auto industry—In this industry, 7500 amplifiers power special coils to set up magnetic fields for testing sophisticated auto electronics.

Manufacturing—Need a 50 Hz power supply to simulate European frequency? Want to test fuses, circuit breakers, even power relays? Want to supply clean power for your processes? Need to do some electroplating? 7500 amplifiers have been used in these and many other jobs.

Tranducers—Whether under water or under ground, 7500 amplifiers drive tranducers, used in such ways as saving fish and finding resources.

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

Specifications

Performance

(Per channel; both channels driven)

Output Load (for performance listed): 4 Ω

Max. Output Voltage: 37.4 V rms, 52.9 V Peak

Max. Output Current: 9.4 A rms, 13.2 A Peak

Maximum Output Power: 350 W rms

Slew Rate: 30 V/µs

Output Impedance: <0.012 Ω

Load Impedance for Max. Power Transfer: 2.7 Ω

Input Impedance: 10 kΩ

Residual Noise (20 Hz–20 kHz): <0.130 mV

Voltage Gain: 20.6 ± 2% or 26.3 ± 0.3 dB at maximum gain

Physical

Weight: 57 lbs (25.9 kg)

Cooling: Forced air

Chassis: Aluminum (for maximum cooling and minimum weight)

Finish: Two tone front panel (tan and dark brown) coated in textured polyurethane, black anodized chassis and covers

Indicators, Controls and Connectors:

(A) Channel Level Controls

(B) IOC Indicators

(C) Signal Presence Indicators

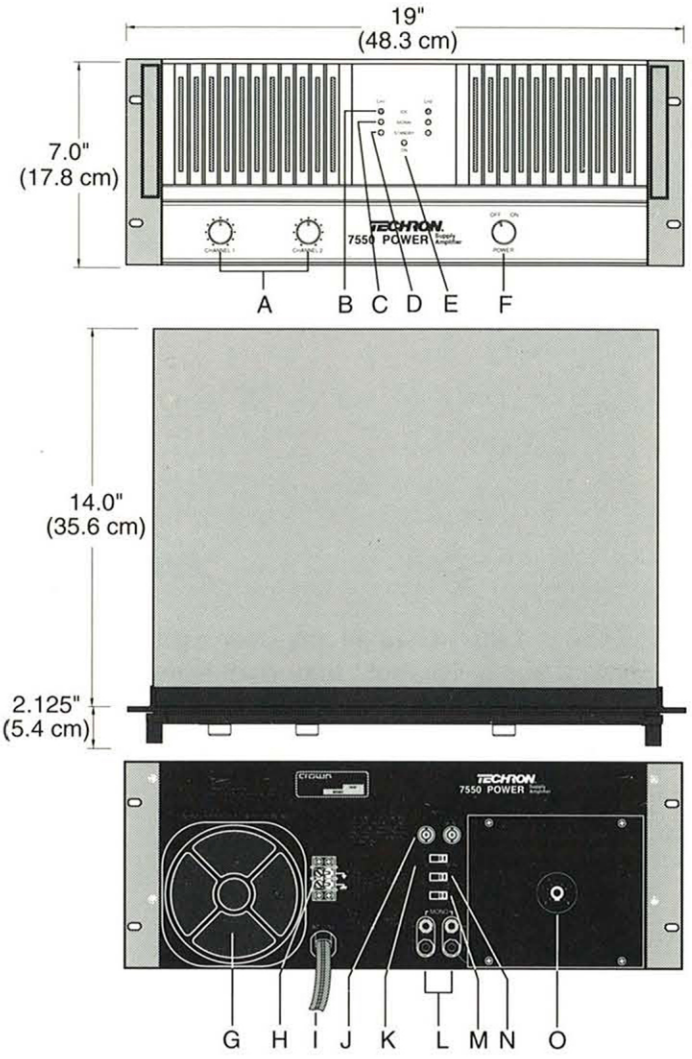
(D) Standby Indicators

(E) Power Indicator

(F) On/Off Switch

(G) Cooling Fan

(H) Ground Connections



(I) AC Power Cord

(J) Input BNC Connectors

(K) Dual/Bridged Output Switch

(L) Output Binding Posts

(M) Delay Switch

(N) Low Frequency Protection Switch

(O) 11–pin Accessory Socket

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.