Series One is a direct outgrowth of our research into Series Three, the world’s most sophisticated professional amplifiers. Series One is designed for those discriminating users who demand superior audio performance but don’t require front removable channel modules, detented gain controls, or true dual monaural configuration. Series One benefits from refinements in our time proven circuitry, the use of premium components, and our latest design techniques.

The Model 1700 is a very high power amplifier designed for professional and commercial audio applications requiring both high performance and high reliability. The result of careful research, the 1700 is loaded with useful features and benefits.

FEATURES:

- High performance, full complementary circuit.
- Independent DC and sub audio speaker protection on each channel.
- Calibrated gain controls.
- Active balanced inputs.
- Octal input sockets for accessory modules such as crossovers, limiters, and transformers.
- Mono-bridging switch.
- 1/4” RTS, XLR, and barrier strip input connectors.
- Patented Output Averaging™ short-circuit protection.
- Clipping indicators.
- High turbulence flow through cooling.
- Automatic two speed fan.
- Direct mounted power transistors.
- 3 year warranty
MODEL 1700 SPECIFICATIONS

OUTPUT POWER (per channel):
Continuous Average Output Power both channels driven:
8 ohms, 20 Hz–20 kHz, 0.1% THD 325 watts
4 ohms, 20 Hz–20 kHz, 0.1% THD 500 watts
Continuous Average Output Power one channel driven:
8 ohms, 1 kHz, 1% THD 420 watts
4 ohms, 1 kHz, 1% THD 700 watts
2 ohms, 1 kHz, 1% THD 1000 watts ±1 dB
Continuous Average Output Power bridged mono operation:
8 ohms, 20 Hz–20 kHz, 0.1% THD 1000 watts

DISTORTION (8 ohms):
THD, 20 Hz–20 kHz at rated power shall be less than 0.1%.
SMPTÉ-IMD less than 0.01% at rated power.

FREQUENCY RESPONSE:
20 Hz–20 kHz, ±0.5, –1 dB at 1 watt.

POWER BANDWIDTH:
5 Hz to 70 kHz

DAMPING FACTOR:
200 at 8 ohms.

SLEW RATE:
21 V/µs

DYNAMIC HEADROOM:
1.9 dB at 8 ohms.

NOISE:
-100 dB below full output, A weighted.

SENSITIVITY:
With gain control at maximum, 34 dB voltage gain, 1.02 Vrms for rated power at 8 ohms.

INPUT IMPEDANCE:
20 kilohms balanced and unbalanced noninverting or 10 kilohms unbalanced inverting.

POWER REQUIREMENTS:
110–125 Vac, 60 Hz.

POWER CONSUMPTION:
12.7 Aac at 120 V

DIMENSIONS:
7" tall (four rack spaces), 19" wide, 10.8" deep.

WEIGHT:
54 lb net, 57 lb shipping weight.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

ARCHITECTS AND ENGINEERS SPECIFICATIONS:

The power amplifier shall contain all solid-state circuitry, using complementary silicon semiconductors. It shall be capable of operating from 110–125 Vac, 60 Hz.

The amplifier shall contain two independent channels. Each channel shall have independent protective circuitry against open circuit, short circuit, or reactive loads, and the remaining channel shall continue to operate if one channel fails. A muting circuit shall provide three seconds of muting after turn-on, and shall mute within 1/4 second after turn-off or loss of power, to protect the load against turn-on or turn-off thumps. Self-resetting thermal shutdown shall protect the circuitry against temperatures in excess of 90°C, and a front panel resettable circuit breaker shall protect against AC overloads.

Each channel of the amplifier shall be capable of meeting the following performance criteria, with both channels driven simultaneously, unless otherwise stated: Output power, 8 ohms per channel, 20 Hz–20 kHz, less than 0.1% distortion, at least 325 watts rms per channel. Output power, 4 ohms per channel, 20 Hz–20 kHz, less than 0.1% distortion, at least 500 watts rms per channel.

Frequency response shall be 20 Hz–20 kHz, ±0.5, –1 dB at 1 watt output. SMPTÉ-IMD distortion shall be less than 0.01% at rated power, 8 ohms, and less than 0.05% at rated power, 4 ohms. THD damping factor shall be at least 200. Signal to noise, below rated output, shall be at least 100 dB (A weighted). Dynamic headroom at 8 ohms shall be at least 1.9 dB. The voltage gain shall be 34 dB at full gain. The input sensitivity for rated 8 ohm power shall be 1 Vrms. Balanced input impedance shall be 20 kilohms balanced and unbalanced noninverting, 10 kilohms unbalanced inverting. Balanced, bridging output circuitry shall be standard, and the amplifier shall meet all performance criteria in the balanced or unbalanced mode. The amplifier shall have built-in fan cooling, with automatic two speed operation. Air flow shall be from back to front. Each channel shall have the following controls, indicators, and connectors: Rear mounted gain control calibrated in dB. Clipping indicator, responding proportionally to any distortion in excess of 0.1%. Balanced/unbalanced input jack of the 1/4" ring, tip, sleeve type (tip inverting). Balanced input jack of the XLR type. Balanced input of the barrier strip screw terminal type. Octal accessory socket with DC power for active and passive input accessories. Speaker terminols of the 5-way binding post type. In addition, the chassis shall feature a rear mounted mono-bridging switch; 8-position microswitches for bypassing the octal sockets, paralleling the two channels, and assigning a single octal accessory to both channels, front mounted AC switch and circuit breaker, and built-in rack mounting ears. The chassis shall mount in a 19" rack, occupying 4 rack spaces (7½). Chassis depth behind the rails shall be 10.8" plus allowance for the binding posts. The front protrusion shall be 0.25" unless optional 1.375" handles are installed. Weight shall be 57 lb. The amplifier shall be the QSC Model 1700.