QSC SERIES ONE

MODEL 1080

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, defeated 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 1080 is a moderate power, single rack space amplifier designed for professional and commercial audio applications requiring both high performance and high reliability. The result of careful research, the 1080 is loaded with useful features and benefits.

FEATURES:

- High-performance, full-complementary circuit.
- Independent DC and sub-audio speaker protection on each channel.
- Delayed turn-on, instant turn-off with pop filter.
- Dual power supplies.
- Recessed calibrated gain controls.
- Active balanced inputs.
- Octal input sockets for active or passive input modules such as crossovers, limiters, or transformers.
- Octal socket programming switches.
- Mono-bridging switch.
- Two 1/4" RTS front-mounted stereo headphone jacks.
- 1/4" RTS, XLR, and barrier input connectors.

- 5-way binding post output connectors arranged for mono-bridging.
- Patented Output Averaging™ short-circuit protection.
- Clipping indicators.
- Large passive heatsinks for ample cooling.
- Direct mounted power transistors.
- Sculptured aluminum front panel.
- Two-year warranty.
- Premium components throughout:
  High-speed, low-noise, low-distortion 5532 op-amp front end.
  Large SOA (Safe Operating Area) high-speed, triple-diffused MESA output devices.
  High-density, low ESR filter capacitors.
SPECIFICATIONS

OUTPUT POWER (Per Channel)
Continuous Average Output Power both channels driven:
8 ohms, 20-20kHz, 0.1% THD – 35 Watts
4 ohms, 20-20kHz, 0.1% THD – 60 Watts
2 ohms, 20-20kHz, 0.1% THD – 60 Watts
Continuous Average Output Power one channel driven:
8 ohms, 1kHz, 1% THD – 42 Watts
4 ohms, 1kHz, 1% THD – 65 Watts
2 ohms, 1kHz, 1% THD – 80 Watts
Continuous Average Output Power bridged-mono operation:
8 ohms, 20-20kHz, 0.1% THD – 100 Watts
4 ohms, 20-20kHz, 0.1% THD – 120 Watts

DISTORTION (8 ohms)
THD – 20-20kHz of rated power shall be less than 0.1%
SMpte-IMD less than 0.01% of rated power
FREQUENCY RESPONSE 20-20kHz, +0, -0.5dB
DAMPING FACTOR 200 at 8 ohms
DYNAMIC HEADROOM 2dB at 8 ohms
NOISE – 100dB below full output, A-weighted
SENSITIVITY .83V RMS for rated power of 8 ohms
INPUT IMPEDANCE 20K balanced or 10K unbalanced
POWER REQUIREMENTS 110-125V, 60Hz, 2.5A
DIMENSIONS 1.75”T X 19”W X 8.7”D Deep
WEIGHT 12 lbs
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 110-125V, 60Hz AC current.
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 on-circuit. A muting circuit shall provide three seconds of muting after turn-on, and shall mute within 1/2 second after turn-off or loss of power; to protect the load against turn-on or turn-off transients. Self-resetting thermal shutdown shall protect the circuitry against temperatures in excess of 90 degrees 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, 20-20kHz, less than 0.1% distortion, at least 35 watts RMS per channel.
Output power, 4 ohms per channel, 20-20kHz, less than 0.1% distortion, at least 50 watts RMS per channel.
Output power, 2 ohms per channel, 20-20kHz, less than 0.1% distortion, at least 60 watts RMS per channel.
Frequency response shall be 20-20kHz with less than 0.5dB deviation.
SMpte-IMD distortion shall be less than 0.01% of rated power, 8 ohms, and less than 0.02% of rated power, 4 ohms.
IFRF damping factor shall be at least 200.
Signal to noise, Rmswaded output, shall be at least 100dB (A-weighted).
DYNAMIC HEADROOM of 8 ohms shall be at least 2dB.
The voltage gain shall be 26dB at full Gain.

The power gain shall be 64dB of full Gain.
The input sensitivity for rated 8-ohm power shall be .83V RMS.
Balanced input impedance shall be 20K ohms; unbalanced input impedance shall be 10K ohms.
Balanced, bridging input circuitry shall be standard, and the amplifier shall meet all performance criteria in the balanced or unbalanced mode.
The amplifier shall have external, passively cooled heat sinks.
Each channel shall include the following controls, indicators, and connectors:
Front 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” TRS unbalanced type (TRS).
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 terminals of the 5-way binding post type.
In addition, the chassis shall feature two sets of two microphone jacks, a mono-bridging switch accessible from the bottom of the amplifier, 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 breakers, and built-in rack mounting ears.
The chassis shall mount in a 19” inch rack, occupying 1 rack space (1.75 inches). Chassis depth behind the rails shall be 8 inches. The front protrusion shall be 0.6 inch. Weight shall be 12 lbs.
The amplifier shall be the QSC Model 1080.

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