MX 700



he MX 700 has been designed to combine QSC's legendary reliability and sonic quality into a low cost/high performance package. The compact size of the MX 700 makes it perfect for working musicians who don't want to carry bulky amplifiers, but still demand high power. It is also ideal for powering mid range drivers and tweeters in large sound systems. The MX 700 provides 170 watts per channel into 8 ohms, 270 into 4 ohms, and 350 into 2 ohm loads.

The MX 700 uses 2-speed fan cooling to minimize operating temperatures and fan noise. Front panel gain controls and clip indicators make operational settings simple and straightforward. Rear panel input and output connectors allow for easy interface to outboard equipment.

QSC is a pioneer in premium quality, high power, low profile amplifiers with thousands of units installed in touring systems and concert halls worldwide. The MX 700 puts QSC's proven technology to work in a very economical package. The result is proven reliability at a new level of value.

350 watts	per channel	at 2 ohms

270 watts per channel at 4 ohms

Only 12" deep-fits shallow racks

Low profile—Only 2 rack spaces high

Lightweight—Only 25 lbs.

Two-speed fan for quiet operation

Direct mounted power transistors for better thermal performance

Recessed front panel controls for easy access and protection from damage

1/4" and barrier strip input connectors

"Touch proof" binding post output connectors

Clipping indicators

THX approved for cinema applications

3 year warranty PLUS optional 3 year extended service contract

LOAD	FTC CONTINUOUS AVERAGE	EIA WATTS
	20Hz-20kHz, 0.1% THD	1kHz, 1% THD
Stereo (W/Ch)		
8Ω	150 watts	170 watts
4Ω	225 watts	270 watts
2Ω		350 watts*
Mono-Bridged		
16 Ω	300 watts	340 watts
8Ω	450 watts	540 watts
4Ω		700 watts*

*typical



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OUTPUT POWER (per channel)

8 ohms, 20 Hz to 20 kHz, 0.1% THD, 150 watts 8 ohms, 1kHz, 1% THD, 170 watts 4 ohms, 20 Hz to 20 kHz, 0.1% THD, 225 watts 4 ohms, 1 kHz, 1% THD, 270 watts 2 ohms, 1 kHz, 1% THD, 350 watts*

OUTPUT POWER (bridged mono)

8 ohms, 20 Hz to 20 kHz, 0.1% THD, 450 watts 4 ohms, 1 kHz, 1% THD 700 watts* *typical

DISTORTION:

SMPTE-IM, less than 0.025% THD 20Hz-20kHz less than 0.1% 0.01% typical

FREQUENCY RESPONSE:

20 Hz to 20 kHz, +0/-1 dB 8 Hz to 100 kHz, +0/-3 dB

DAMPING FACTOR:

Greater than 200

DYNAMIC HEADROOM: 3 dB at 4 ohms **NOISE:** 100 dB below rated output (A weighted)

SENSITIVITY: 0.96 Vrms for rated power (8 ohms)

VOLTAGE GAIN: 35 (31 dB)

INPUT IMPEDANCE: 10K unbalanced, 20K balanced

CONTROLS:

Front: AC Switch, Ch 1 and Ch 2 Gain Knobs

INDICATORS:

PWR-ON: Green LED CLIP: Red LED

CONNECTORS: (each channel)

Input: Barrier strip and 1/4" RTS Speakers: "Touch proof" binding posts

COOLING: Two-speed fan, rear-to-front air flow.

AMPLIFIER PROTECTION:

Full short circuit†, open circuit, ultrasonic, and RF protection. Stable into reactive or mismatched loads

LOAD PROTECTION:

AC coupled output. 2-second turn on and instant off muting

OUTPUT CIRCUIT TYPE:

Complementary linear outputs, grounded collector, class A/B

POWER REQUIREMENTS: 100,120, 240 Vac, 50-60 Hz

POWER CONSUMPTION:

Normal Operation: 4 ohms per channel: 3.7 amps, 120 Vac (444VA). Maximum (full power, 2 ohms per channel): 14.6 amps, 120 Vac (1752 VA)

DIMENSIONS:

19.0" (48.3 cm) rack mounting 3.5" (8.9 cm) tall (2 spaces) 12.0" (30.5 cm) deep (rear support ears)

WEIGHT: 25 lbs (11.3 kg) net, 33 lbs (15.0 kg) shipping

†Output Averaging™ short circuit protection (US Patent 4,321,554) SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The amplifier shall contain all solid-state circuitry, using complementary silicon output devices. The amplifier shall operate from 50-60 Hz AC power, with internal taps for selecting voltages 100,120, or 220-240 Vac. The amplifier shall operate from a normal household AC outlet, drawing less than 444 VA when driven with random program material at 1/8 rated power into four ohm loads. The amplifier shall be supplied with a single molded AC cord having an appropriate AC plug for the intended operating voltage.

The amplifier shall employ forced-air cooling with a two speed fan for minimum acoustic noise. Air flow shall be from rear to front to avoid temperature rise inside the rack. Rack mounting shall be possible without clearance necessary between amplifiers for ventilation. The amplifier shall be capable of continuous operation at 1/8 power, into four-ohm loads, for ambient temperatures up to 104° F (40° C).



The amplifier shall contain two independent channels, with separate AC transformer secondaries, power supplies, and protection systems. All protection systems shall be self resetting upon removal of fault, and the remaining channel shall continue to operate. Each channel shall have independent protective circuitry against open circuit, short circuit, or mismatched loads. Each channel shall monitor temperature of its heat sink, and shall trigger fan speed boost, and if necessary, signal muting to prevent excessive temperature rise. Each channel shall have on-off muting, acting for two seconds after turn-on, and within 1/4 second after turn-off or loss of AC power. Each channel shall have DC fault protection for the load. Fault fuses shall be adequately large to prevent nuisance blowing at any output power the amplifier is capable of delivering.

Each channel shall have the following controls and displays: A front panel Gain control and a red LED showing true amplifier clipping. The front panel shall also include a power switch and green LED power-on indicator.

The output connectors for each channel shall include a "touch proof" binding post.

The input connectors shall be mounted on the rear panel and shall provide barrier strip and 1/4" connections for each channel. Inputs shall be electronically balanced, with a minimum impedance of 10 kilohms per side, and a common mode rejection of at least 50 dB from 20 Hz to 20 kHz.

Each channel shall be capable of meeting the following performance criteria with both channels driven: Sine-wave output power of 150 watts into eight ohms, and 225 watts into four ohms, 20Hz to 20kHz, with less than 0.1% THD. Frequency response at 3dB below rated power shall be 20Hz to 20kHz within 0.15 dB. The voltage gain shall be 35, equivalent to 31dB, and the input sensitivity shall be .96 Vrms. The signal to noise ratio over the range of 20 Hz to 20 kHz shall exceed 100 dB, A weighted. IHF damping factor shall exceed 200.

The amplifier chassis shall occupy two rack spaces, with provision for securing the rear corners. Depth from mounting surface to tips of rear supports shall be 12.0" (30.5 cm).

Weight shall not exceed 25 lbs. (11.3 kg.). The amplifier shall be the QSC Audio Products Model MX 700.

