



COMMERCIAL AUDIO SERIES

160MA

Architectural & Engineering Specifications

160MA

The Crown® 160MA shall be a mixer-amplifier for commercial and industrial audio. It provides 8-ohm and constant-voltage outputs (70V and 100V).

The 160MA has 4 inputs and one 60W power amplifier.

Specifications

The 160MA shall have the following specifications:

Minimum guaranteed power into 8 ohms or 70V/100V output: 60W maximum power at 1 kHz with 0.5% THD; Frequency Response (at 1 watt from line out): 50 Hz to 20 kHz \pm 1 dB, 19 Hz - 34 kHz +0, -3 dB; Signal to Noise Ratio (ref. to rated power, master volume at minimum): Mic: > 58 dB, Line: > 60 dB, Telephone: > 60 dB, Inputs 2/3/4: > 78 dB; THD + N: < 0.5% at rated power at 1 kHz, < 0.1% at 5W at 1 kHz; Input Sensitivity (for full output at maximum gain): Input 1: Mic 3mV, Line 800mV, Input 2: 400mV, Input 3: 400mV, Input 4: 400mV; Input Impedance (nominal): Mic: 2.2 kilohms, Line: 10 kilohms, RCA: 10 kilohms; Crosstalk: -82 dB at 1kHz (Ch. 1 line input 0.8V, Ch. 1 volume at minimum, other channel volumes at maximum); Line Output Level (nominal): 1V into 10 kilohms; Phantom Power: 15 VDC; AC Line Voltages Available: Universal Power Supply. Line voltage tolerance +15%, -20%; Operating Temperature/Humidity: 0° C to 40° C at 95% relative humidity (non-condensing); Storage Temperature: -20° C to 85° C.

Front Panel Controls and Indicators

Front panel controls and indicators shall include the following:

Power Switch: Pushbutton on-off switch; Input Volume Controls: Four controls, one per input, detented potentiometers with knobs; Tone Controls: Bass and Treble non-detented recessed potentiometers under master output volume control, Bass \pm 10 dB at 100 Hz, Treble \pm 10 dB at 10 kHz; Power Indicator: Blue LED indicates power on; Input Signal Presence Indicators: Green LED, one above each channel's input attenuator, illuminates when input signal exceeds -40 dBu; Input Signal Clip Indicators: Green LED, one above each channel's input attenuator, flashes brightly at threshold of audible distortion; Output Signal Presence Indicator: Green LED above master output volume control illuminates when any input signal exceeds -40 dBu; Output Signal Clip Indicators: Red LED above master output volume control flashes brightly at threshold of audible distortion; Master Output Volume Control: Detented potentiometer with knob.

Rear Panel Controls and Connectors

Rear panel controls and connectors shall include the following:

AC Power Inlet: Detachable IEC accepts US or Euro style power cords; Amplifier Output Connector: 4-position terminal barrier block with COM (Common), 8 ohms, 70V and 100V terminals, accepts up to 10 AWG terminal forks, non-touch cover included; Preamp Line Out Connector: 3-pin balanced Phoenix-type for connection to external amplifiers, level independent of master volume control; Input Connector 1: 5-terminal Phoenix connector. 3 terminals for balanced signal, 2 terminals for priority contact closure, which mutes other channels when DIP switch 3 is on; Input Connector 2: Unbalanced line-level RCA-type connectors; Input Connector 3: Unbalanced line-level RCA-type connectors; Input Connector 4: Unbalanced line-level RCA-type connectors; Telephone (MOH) Output Connector: 4-terminal Phoenix connector (2 terminals for 1W output to 8-ohm speaker, 2 terminals for 600-ohm output to PBX music-on-hold port); MOH Level Control: Trim pot adjusts level for Music-On-Hold output from Telephone (MOH) Output Connector; Amp Configuration DIP Switch: DIP switch selection for multiple functions; VOX Threshold: Trim pot controls how loud the voice on CH1 must be before muting other channels, can be set for no muting.

Miscellaneous

Cooling shall be by convection. Included protection mechanisms shall be current limiting, over-temperature thermal cutout, and DC-fault load protection. The unit shall be protected against turn-on/turn-off thumps.

Included accessories shall be a power cord, non-touch cover for output connectors, and Phoenix-type connectors. Optional accessories shall be Part no. IST 600-ohm Isolation Transformer for Telephone Output or Input 1, Part no. RM1 single rack mount kit for mounting a single MA unit in a rack, Part no. RM2 double rack mount kit for mounting two MA units side-by-side in a rack, Part no. S-Cover 10-pack of security knobs.

The dimensions of the mixer-amplifier shall be as follows:
Width: half rack width (9.5 in. or 24.1 cm), height (front panel): 3.5 in. (8.9 cm), height (including feet): 4.1 in. (10.5 cm), depth (front panel to back panel): 12.2 in. (31.0 cm), depth (front of knobs to back panel): 13.9 in. (35.2 cm).

The mixer-amplifier shall weigh 9 lb 7 oz (4.3 kg).

The mixer-amplifier shall be designated the Crown 160MA.



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2/08 140615-1