



# COMMERCIAL AUDIO SERIES

# **Architectural & Engineering Specifications**

## 180A

The Crown<sup>®</sup> 180A shall be an amplifier for commercial and industrial audio. It provides 4-ohm and constant-voltage outputs (70V and 100V). The 180A has 1 input and one 80W power amplifier.

# **Specifications**

The 180A shall have the following specifications:

Minimum guaranteed power into 4 ohms or 70V/100V output: 80W maximum power at 1 kHz with 0.5% THD. Frequency Reponse (at 1 watt from 4-ohm tap): 70 Hz - 19 kHz +/- 1 dB. Frequency Response (at line out): 20 Hz to 20 kHz +/-1 dB. Power Bandwidth (at 4-ohm tap, 2 dB below maxium 1 kHz power): 50 Hz to 20 kHz with < 0.5% THD. Signal to Noise Ratio (ref. to rated power, master volume at minimum): 85 dB. DC Output Offset: <  $\pm 5$  mV. THD: Less than 0.5% at rated power at 1 kHz. Input Sensitivity (for full output at maximum gain): 800 mV. Input Impedance (nominal): 100 kilohms. Minimum Load Impedance: 100V output 160 ohms, 70V output 80 ohms, 4-ohm output 4/8 ohms. Crosstalk: -70dB at 1kHz. Line Output Level (nominal): 1V into 10 kilohms. AC Line Voltages Available: 100V 50/60 Hz, 120V 60 Hz, 220V 50/60 Hz, 230V 50/60 Hz, 240V 50/60 Hz. Operating Temperature/Humidity: 0 degrees C to 40 degrees C at 95% relative humidity (non-condensing). Storage Temperature: -20 degrees C to 85 degrees C.

# Front Panel Controls and Indicators

Front panel controls and indicators shall include the following:

Power Switch: Pushbutton on-off switch. Master Volume Controls: One per output channel, detented potentiometer with knob. Tone Controls: Bass and Treble non-detented potentiometers on each channel, Bass  $\pm 10$  dB at 100 Hz, Treble  $\pm 10$  dB at 10 kHz. Power Indicator: Blue LED indicates power on. Output Signal Presence Indicator: Green LED, one for each input channel, illuminates when input signal exceeds 100 mV (45 dB below full power) from the 4-ohm tap. Clip Indicators: Red LED, one per output channel, illuminates at threshold of audible distortion.

## **Rear Panel Controls and Connectors**

Rear panel controls and connectors shall include the following:

Reset Button: Resets the circuit breaker that protects the power supply; 220/230/240V units shall have a fuse instead. AC Power Inlet: Detachable IEC. Auxiliary Power Input: 2-position terminal strip for 24 VDC (±10%) backup power; accepts up to 14 AWG terminal forks. Amplifier Output Connector: 4-position terminal strip with COM (Common), 4 ohms, 70V and 100V terminals; accepts up to 10 AWG terminal forks, non-touch cover included. Output VCA Connector: 4-pin Phoenix-type connector for two VCA control lines of +10 VDC and ground; compatible with Crown 1-VCAP and 4-VCAP modules. Line Out Connector: One 3-pin balanced Phoenix-type connector, post master, pre-VCA, level controlled by master volume control. Amp Input Connector: 3-pin Phoenix-type, high-impedance balanced.

## Miscellaneous

Cooling shall be by convection. Included protection mechanisms shall be current limiting, over-temperature thermal cutout, and DC-fault load protection.

Included accessories shall be a power cord, detachable rack ears, screws for rack ears, non-touch cover for output connectors, Phoenix-type connectors, and spade lugs. Optional accessories shall be a 1-VCAP remote volume control for one channel, and a 4-VCAP remote volume control for four channels.

The dimensions of the amplifier shall allow for 19 inch (48.3 cm) EIA standard (RS-310-B) rack mounting. The amplifier shall be 3.5 inches (8.9 cm) high, and 12.2 inches (31 cm) deep behind the rack-mounting surface (not including the non-touch cover).

The amplifier shall weigh 21.0 lb (9.5 kg).

The amplifier shall be designated the Crown 180A.



A Harman International Company

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