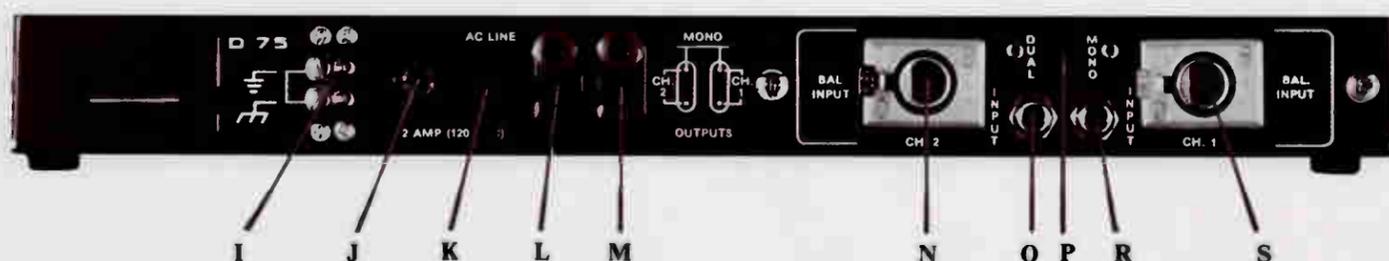
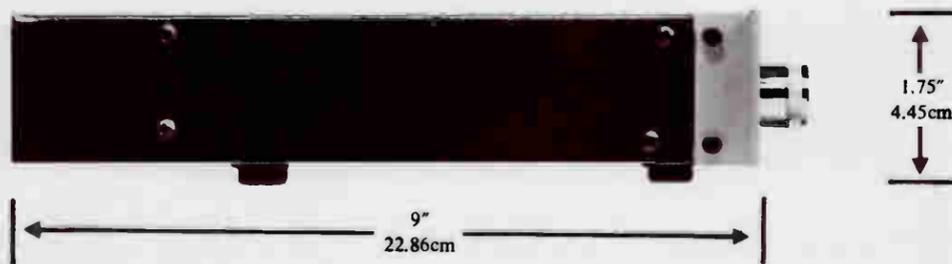


Crown D-75 Professional Power Amplifier



Controls Connections Dimensions



- A-Headphone Jack
- B-Channel 1 Input Level Control
- C-Channel 1 Signal Presence LED
- D-Channel 1 IOC™ (Input Output Comparitor) LED
- E-Channel 2 IOC™ (Input Output Comparitor) LED
- F-Channel 2 Signal Presence LED
- G-Channel 2 Input Level Control
- H-On/Off Switch
- I-Ground Isolation Terminal

- J-Fuse Holder
- K-AC Power Line
- L-Channel 2 Main Outputs
- M-Channel 1 Main Outputs
- N-Channel 2 Balanced Input (XLR)
- O-Channel 2 Unbalanced Input (1/4" Phone)
- P-Mono/Stereo Switch
- R-Channel 1 Unbalanced Input (1/4" Phone)
- S-Channel 1 Balanced Inputs (XLR)



1718 W. Mishawaka Road, Elkhart, Indiana 46514
 American Innovation and Technology Since 1951

Crown D-75 Power Amplifier

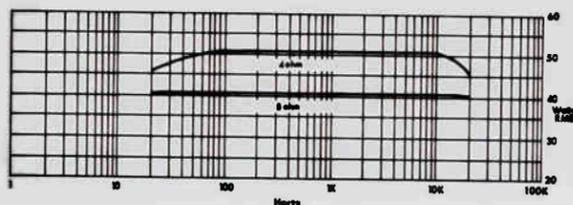
The CROWN D-75 power amplifier, requiring only 1 1/4" (4.45cm) of vertical rack space, was designed to operate safely and continuously into a variance of load requirements. The D-75 provides 35 watts per channel minimum RMS (both channels operating) into an 8 ohm load over a bandwidth of 20Hz-20KHz at a rated sum total harmonic distortion that is 0.05% of the fundamental output voltage. The frequency response of the unit varies no more than ±0.1dB from 20Hz-20KHz at 1 watt into 8 ohms. Features of the D-75 include active balanced inputs, XLR connectors, an easily accessible mono-stereo switch, and front panel LEDs indicating overloads and signal presence. A special feature of the D-75 is the provision for isolating chassis ground from electrical ground. The D-75 offers traditional Crown durability and a full 3 year warranty.

Architects Engineers Specifications

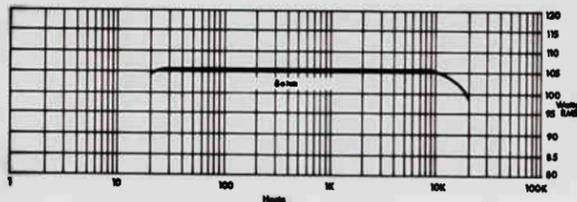
The power amplifier, being of two channels, shall deliver a minimum of 35 watts into 8 ohms each with both channels operating, or 45 watts into loads of 4 ohms each with both channels operating. When strapped into mono, it shall be capable of delivering 70 watts into a 16 ohm load or 95 watts into 8 ohm loads. The amplifier's outputs shall have internal protection against possible shorted, mismatched and open circuits. It shall provide instantaneous limiting with no annoying thumps or cutouts. The circuitry shall incorporate voltage amplifiers whose slew rate is controlled to protect the overall amplifier against RF burnout. The D-75 shall provide (in dualchannel operation) a voltage gain of 20.6 ±2%, (or 26.3 ±0.2dB) at maximum gain, have an input sensitivity of 0.81 volts ±2% for full rated output and be capable of driving any load safely -including completely reactive loads. Hum and noise shall be 110dB below the rated output from 20Hz-20KHz. Intermodulation distortion shall be less than 0.05% from .01 watt to 35 watt into 8 ohms (per channel). The dimensions shall allow for standard 19" (48.26cm) EIA rack mounting. It shall be 1 1/4" (4.45cm) high and 9" (22.86cm) deep from the mounting surface. It shall weigh 10 lbs (4.5Kg) net. The power requirements shall be 50 to 400Hz AC with adjustable taps for 120 or 240V ±10%. At idle the amplifier shall draw 15 watts or less and at its full rated output, it shall draw 120 watts. The amplifier shall be class AB+B and be of completely solid state design with a frequency response from 5Hz-100KHz, ±1.2dB at 1 watt into 8 ohms. The power amplifier shall be a CROWN D-75.

Standard Specifications

Output Power (4 ohms):	45 watts per channel minimum RMS (both channels operating) into a 4 ohm load over a bandwidth of 20Hz-20KHz at a rated RMS sum total harmonic distortion of 0.05% of the fundamental output voltage (stereo).
Output Power (8 ohm):	35 watts per channel minimum RMS (both channels operating) into an 8 ohm load over a bandwidth of 20Hz-20KHz, at a rated RMS sum total harmonic distortion of .05% of the fundamental output voltage (stereo).
Output Power (8 ohm):	95 watts minimum RMS into an 8 ohm load over a bandwidth of 20Hz-20KHz at a rated RMS sum total harmonic distortion of 0.05% of the fundamental output voltage (mono).
Output Power (16 ohm):	70 watts minimum RMS into a 16 ohm load over a bandwidth of 20Hz-20KHz at a rated RMS sum total harmonic distortion of 0.05% of the fundamental output voltage (mono).



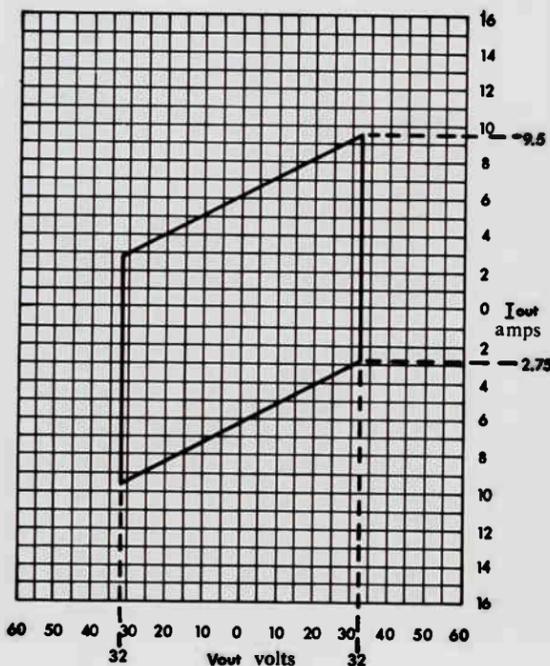
Power vs. Frequency (stereo)



Power vs. Frequency (mono)

EIA Specifications

Power Output (4 ohms):	74 watts RMS at less than 1% distortion ±1dB over the frequency range of 20Hz-20KHz. In the stereo mode single channel driven into 4 ohm load.
Power Output (8 ohms):	50 watts RMS at less than 1% distortion ±1dB over the frequency range of 20Hz-20KHz. In the stereo mode single channel driven into 8 ohms load.
Power Output (8 ohm):	100 watts RMS at less than 1% distortion ±1dB over the frequency range of 20Hz-20KHz. In the mono mode into an 8 ohm load.
Power Output (16 ohm):	80 watts RMS at less than 1% distortion ±1dB over the frequency range of 20Hz-20KHz. In the mono mode into a 16 ohm load.

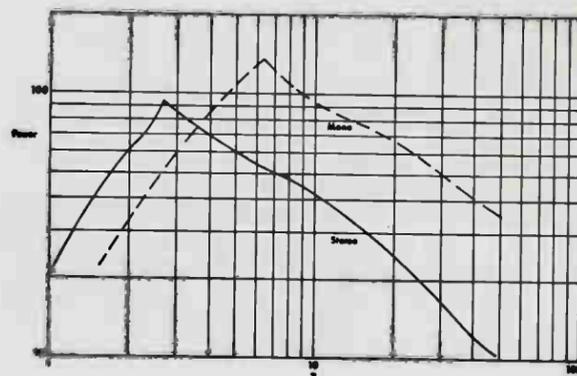


VI Plot
Output Voltage vs. Current Available

General Specifications

Frequency Response:	±0.1dB 20Hz-20KHz at 1 watt into 8 ohms (stereo). ±1.2dB 5Hz-100Hz at 1 watt into 8 ohms (stereo). ±0.2dB 20Hz-20KHz, 1 watt, 16 ohms (mono). ±1dB 6Hz-50KHz, 1 watt, 16 ohms (mono).
1KHz Power:	40 watts RMS into 8 ohms, per channel, both channels operating, 0.1% total harmonic distortion; 55 watts RMS into 4 ohms, per channel, both channels operating, 0.1% total harmonic distortion. 80 watts RMS into 16 ohms; 110 watts RMS into 8 ohms, 0.1% total harmonic distortion (mono).
Harmonic Distortion:	Less than 0.001% from 20Hz-400Hz, and increasing linearly to 0.05% at 20KHz at 35 watts RMS per channel into 8 ohms (stereo). Less than 0.001% from 20Hz-400Hz and increasing linearly to 0.05% at 20KHz at 70 watts into 16 ohms (mono).
I.M. Distortion (60Hz-7KHz 4:1):	Less than 0.05% from 0.01 watts to 0.25 watts, and less than 0.01% from 0.25 watts to 70 watts into 16 ohms (mono). Less than 0.05% from 0.01 watts to 0.25 watts, and less than 0.01% from 0.25 watts to 35 watts into 8 ohms per channel (stereo).
Slewing Rate:	6 volts per microsecond (stereo), 12 volts per microsecond (mono).
Damping Factor:	Greater than 400, DC-400Hz into 8 ohms (stereo). Greater than 400, DC-400Hz into 16 ohms (mono).
Output Impedance:	Less than 15 milliohms in series with less than 3 microhenries (stereo). Less than 30 milliohms in series with less than 6 microhenries (mono).
Load Impedance:	Rated for 8 and 4 ohm usage; safely drives any load including completely reactive loads (stereo). Rated for 8 and 16 ohm usage, safely drives any load including completely reactive loads (mono).

Voltage Gain:	20.6 = (or 26.3 ±2dB) at maximum gain (stereo). 41.2 ±2% (or 32.3 ±0.2dB) at maximum gain (mono).
Input Sensitivity:	.812 volts ±2% for 35 watts into 8 ohms (stereo). .812 volts ±2% for 70 watts into 16 ohms (mono).
Output Signal:	Unbalanced, dual channel (stereo). Balanced, single channel. Channel 1 controls are active, Channel 2 is inactive, but not cut out.
Hum and Noise:	From 20Hz to 20KHz the hum and noise level is 110dB below the rated output.
Phase Response:	+10°, -15° 20Hz-20KHz at 1 watt.
Input Impedance:	(XLR balanced) 20,000 ohms at ±30% (XLR unbalanced) 10,000 ohms ±30%. (Phone jacks unbalanced) 25,000 ohms ±30%.
Amplifier Output Protection:	Total protection against shorted, mismatched or open outputs. Volt-ampere limiting circuitry acts instantaneously with no annoying thumps or cutouts.
Overall Protection:	AC line fused. The controlled slewing rate of the voltage amplifiers protect the overall amplifier against RF burnout. Input overload protection is furnished by an internal resistance at the amplifier's inputs.
DC Output Offset:	(shorted input) ±10 millivolts.
Turn On:	Instantaneous, with minimum thump and no program delay.
Circuit:	A total of 42 transistors, 18 signal diodes, 2 zener diodes, 4 rectifiers and 1 linear IC (dual op-amp) are utilized in a wideband multiple feedback loop design.
Power Supply:	A specially designed low profile transformer, two regulated supplies for complete isolation and stability plus computer grade filter capacitors serve to power the D-75.
Power Requirements:	AC voltage of 100, 120, 200, 220, and 240 volts ±10% at a line-frequency between 50 and 400Hz may be used.
Power Consumption:	±15 watts while at idle, 120 watts at the full rated output.



Power vs. Impedance

Heat Sinking:	The entire amplifier is used as a heat sink. Front-panel extrusion acts as a sink along with the chassis covers.
Chassis:	Aluminum-chassis construction for maximum heat conduction and minimum weight.
Controls:	Two input-level controls and a power switch on the front panel. A mono-stereo switch, located next to the input jacks, on the rear panel.
Indicators:	2 IOC indicators (red). 2 signal-presence indicators (green). 1 power indicator (amber).
Connectors, Input:	Cannon 3 pin audio connector in which pin 2 is positive, (for a positive output signal) or 1/4" phone jack.
Ground Link:	A means for isolating chassis-ground from electrical ground is provided on the rear panel. The grounds are always connected internally by 2.7 ohms.
Output:	Color-coded binding posts with a 1/4" stereo headphone jack on the front panel.
Dimensions:	19" long, 9" deep, and 1 1/4" high (8 1/2" deep from mounting surface). A 19" Western Electric standard rack-mounting system is utilized.
Weight:	10 pounds net weight.
Finish:	Satinized aluminum front panel with gray suede Lexan insert.