# **≌СГОШП**Power Amplifier Quick Reference

# **D** Series



#### INTRODUCTION

The D-Series of Crown professional power amplifiers are used wherever audio is found - in the lab, on the road, in the home and in the studio - they are standards for moderate power applications such as recording or broadcast studio nearfield monitoring, video suite audio monitoring, a recording/ broadcast studio headphone amp or a small paging system. Designed, built and carefully checked to ensure reliable operation with a wide variety of loads, their high reliability is particularly important in reducing maintenance costs. D-Series amplifiers are covered by Crown's comprehensive Three Year No-Fault Full Warranty. This warranty protects your investment no matter what happens to your amp. This transferable warranty also guarantees that you amplifier will continue to meet or exceed all original specifications.

#### **D-45 Output Power**

20W/Ch 16 Ohms 25W/Ch 8 Ohms 35W/Ch 4 Ohms 70W Bridged Mono 8 Ohms 50W Bridged Mono 16 Ohms

#### **D-75A Output Power**

25W/Ch 16 Ohms 40W/Ch 8 Ohms 55W/Ch 4 Ohms 110W Bridged Mono 8 Ohms 80W Bridged Mono 16 Ohms

## **SONIC PERFORMANCE**

(Note: the following performance measurements were made in Dual mode with both channels driven into an 8 Ohm load).

Signal/Noise: 106dB.

Damping Factor: >400 from DC to

400Hz.

**Controlled Siew Rate:** (Siew rates are limited to useful levels for ultrasonic/Rf

protection) >6V/ms.

IMD: <0.01% At Rated Output.

THD: <0.001% from 20Hz to 400 Hz. increasing linearly to 0.05% at 20Khz.

Frequency Response: ±0.1dB from

20Hz to 20 KHz at 1 watt.

Phase Response: +10° to -15° from

20Hz to 20KHz at 1 watt.

Input Impedance: Nominally 20 KOhm balanced, and 10KOhm unbalanced.

Output Impedance: <15mOhm in series

with <3mH.

#### **CONTROLS & INDICATORS**

**Front Panel:** On/Off Switch, Level Controls, Enable, Signal, IOC indicators. **Internal:** Dual/Mono jumper.

### **CONNECTORS**

Input: Balanced Three-Pin Female Neutrik® Combination XLR and 1/4 inch Phone Connector for Each Channel. Output: A Four-Terminal Barrier Block on the back panel,and a stereo headphone jack located on the front panel. Headphone jack is unpadded and in parallel with the main outputs.

#### STRUCTURAL

Weight: Net 10 lbs.

**Dimensions:** 1.75" x 19" x 8.38"

**Cooling:** Convection.

AC Power: 120V 60Hz. (North America)

#### **CIRCUITRY DESIGNS**

Output topology employs Class AB+B mode of operation where the driver transistors carry the bias current while the output transistors serve only as boosters. The output transistors sense when the driver transistors are developing significant current draw from the load and thus take over and deliver the needed current. The output stage is of a quasi-complementary format using no bias current into the output transistors themselves. The result is maximum efficency with minimum crossover notch distortion and idling amplifier heat. Protective circuitry includes Voltage-Current limiting, superior to most other forms of protection because it directly senses the overload condition and instantly reacts to relieve the overload, and acts only as long as the overload exists. Front panel indicators are provided to show signal presence and IOC (Input-Output Comparator), indicating distortion greater than 0.05%.



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