

HALCRO dm38 stereo power amplifier

Specifications and features

POWER

Power output into 4ohms resistive > 350W

Power output into 8ohms resistive > 180W

DISTORTION (Footnote 1).

At full power output, all harmonic distortion orders

THD <-110dB (<3000 parts per billion) up to 20kHz (100kHz B.W.) at 350W into 4 ohms.

THD @ 1kHz <-130dB (<300 parts per billion).

For sum of 19 and 20kHz tones, each delivering 100W into 4 ohms = peak power 350W, intermodulation products each <-110dB relative to output.

SMPTE-IM intermodulation products each <-110dB relative to output.

INPUTS

There are 3 input modes:

- An unbalanced voltage mode input with an impedance of 10kohm
 - A balanced voltage mode input with an impedance of 10kohms + 10kohms
 - A current-mode input with a 60ohm input impedance to minimize cable reflections (to be fed from an infinite impedance current source)
- Voltage gain of the balanced and unbalanced inputs is 30V/V
The gain of the current mode is 5V/mA

NOISE

The equivalent input noise at the input is 5nV/sqrt(Hz) for the voltage modes and 6pA/sqrt(Hz) for the current mode.

SLEW RATE LIMIT
= 100V/μs

POWER SUPPLY
(Footnote 2).

Active power factor correction minimizes mains current harmonic distortion

• Operates from 90 to 140V RMS, 45-65Hz, or 200 to 240V RMS, 45-65Hz.

• Less than 100 parts per million mains hum and ripple on the amplifier power rails

• Conforms with all current emission and safety standards

OVERLOAD (Footnote 3).

Recovery from hard overload at 20kHz into 4ohms: 1μs.

PROTECTION

The amplifier protection:

- Is short-circuit proof
- Has over current limiting
- Will cut out if temperature is excessive
- Will cut out if a continuous D.C. offset appears on output
- Will cut out if output current exceeds 10A average continuously over a period of a few minutes
- Is protected against most input overloads

The power supply protection:

- Will cut out if most common faults are detected in the power supply (e.g. over-voltage, master clock at incorrect frequency, excessive temperatures etc)
- Is protected against most mains transients

COMPONENTS
(Footnote 4).

All semiconductors are at least industrial grade in both the power supply and amplifier, for reliability

All electrolytic capacitors are exceptionally long life industrial grade in both the amplifier and power supply

Only highly linear resistors and the lowest impedance polypropylene capacitors are employed in the critical audio path

6-layer PCBs are used in the power amplifier to minimize stray magnetic fields and to accurately define voltages

4-layer PCBs are used in the power

supply to minimize E.M.I. and voltage transients, which improves reliability and power efficiency

COMPARTMENTS

There are 3 heavily shielded compartments:

A power supply unit

An input amplifier section

A power amplifier compartment

FILTERING

Series and common mode EMI filtering is present

on the mains input

between the amplifier and power supply

High frequency filtering is present at the inputs and output.

DIMENSIONS

Weight: 120 lbs. or 55 kg

Height: 31 inches or 79 cm

Width: 16 inches or 40 cm

Depth: 16 inches or 40 cm

Shipping weight:

187 lbs. or 85 kg

FOOTNOTES

1 THD specifications of our typical best competitors are, 200,000 parts per billion.

2 Unique to the best of our knowledge.

3 Indicates no excessive negative feedback.

4 "Industrial" grade is a higher grade than the "commercial" grade used by most manufacturers.

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