

Specifications & Featuresdm88 MonoblockPOWER

Power output into 4ohms resistive > 500W

Power output into 8ohms resistive > 270W

DISTORTION (Footnote 1)

At full power output, all harmonic distortion orders

THD <-126dB (< 500 parts per billion) up to 20kHz (100kHz B.W.) at 500W into 4ohms.

THD @ 1kHz is <-140dB (<100 parts per billion).

For a sum of 19 and 20kHz tones, each delivering 100W into 4ohms = peak power 500W, intermodulation products each <-126dB relative to output.

SMPTE-IM intermodulation products each <-126dB relative to output

INPUTS

There are 4 input modes:

- An unbalanced voltage mode input with an impedance of 100kOhm
- A balanced voltage mode input with an impedance of 100kOhms +100kOhms
- A current-mode input with a 60Ohm input impedance to minimize cable reflections (to be fed from an infinite impedance current source)
- A minimal path voltage mode with an input impedance of 660Ohms.

The voltage gain of the balanced and unbalanced inputs is 60V/V and 30V/V for the minimal path mode.

The gain of current mode is 9V/mA.

COMPARTMENTS

There are 4 heavily shielded compartments:

- A power supply unit
- An input amplifier section
- A power amplifier compartment
- An output filter compartment

dm78 MonoblockPOWER

Power output into 4ohms resistive > 400W

Power output into 8ohms resistive > 225W

DISTORTION (Footnote 1)

At full power output, all harmonic distortion orders

THD <-120dB (< 1000 parts per billion) up to 20kHz (100kHz B.W.) at 400W into 4ohms.

THD @ 1kHz is <-134dB (<200 parts per billion).

For a sum of 19 and 20kHz tones, each delivering 100W into 4ohms = peak power 400W, intermodulation products each <-120dB relative to output.

SMPTE-IM intermodulation products each <-120dB relative to output

INPUTS

There are 3 input modes:

- An unbalanced voltage mode input with an impedance of 100kOhm
- A balanced voltage mode input with an impedance of 100kOhms +100kOhms
- A current-mode input with a 60Ohm input impedance to minimize cable reflections (to be fed from an infinite impedance current source)

The voltage gain of the balanced and unbalanced inputs is 60V/V

The gain of current mode is 9V/mA.

COMPARTMENTS

There are 4 heavily shielded compartments:

- A power supply unit
- An input amplifier section
- A power amplifier compartment
- An output filter compartment

dm38 Stereo unitPOWER

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)

The voltage gain of the balanced and unbalanced inputs is 30V/V

The gain of the current mode is 5V/mA

COMPARTMENTS

There are 3 heavily shielded compartments:

- A power supply unit
- An input amplifier section
- A power amplifier compartment

Generic Specifications for all units on Next Page

Specifications & Features

Generic Specifications for All Units

POWER SUPPLY (Footnote 2)

All units

- Active power factor correction minimizes mains current harmonic distortion
- Less than 100 parts per million mains hum and ripple on the amplifier power rails
- Conforms with all current emission and safety standards

dm88/78

- Operates at all voltages from 85 through to 270V r.m.s. 45-65Hz, without any internal or external switches

dm38

- 110 V model operates from 90 through to 140 V r.m.s, 45-65 Hz
- 240 V model operates from 200 through to 240 V r.m.s, 45-65 Hz.

COMPONENTS (Footnote 4)

For reliability, all semiconductors are at least industrial grade in both the power supply and amplifier.

All electrolytics are rated to 105°C in both the amplifier and power supply.

- Only highly linear resistors and the lowest impedance polypropylene capacitors are employed in the critical audio path.
- Six-layer PCBs are used in the power amplifier to minimize stray magnetic fields and to accurately define voltages.
- Four-layer PCBs are used in the power supply to minimize E.M.I. and voltage transients, which improves reliability and power efficiency.

PROTECTION

The amplifier protection:

dm88

- Will cut out if temperature is excessive
- Will cut out if output current exceeds 12A average continuously over a period of a few minutes

dm78

- Has gradual power limiting if amplifier becomes too hot
- Will cut out if output current exceeds 12A average continuously over a period of a few minutes

dm38

- Will cut out if temperature is excessive
- Will cut out if output current exceeds 10A average continuously over a period of a few minutes

All units

- Is short-circuit proof
- Has over current limiting
- Will cut out if a continuous D.C. offset appears on output
- 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

OVERLOAD (Footnote 3)

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

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

Maximum slew rate for both small signal and maximum output voltage is 100V/µs, (which is equivalent to a maximum output voltage at approximately 250kHz.)

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

(per monoblock)

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,
 (one pair including pallet):
 385 lbs. or 175 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.