

# D2AUDIO® MXM100

Designed for manufacturers of high-volume Multi-Room Distributed Audio systems

XRT/XR/MXR

XS/XA

XM/MXM

LXC

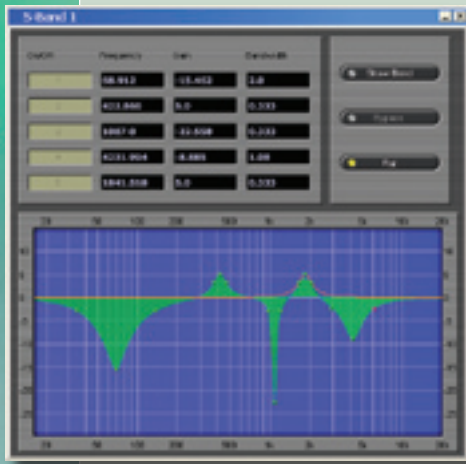
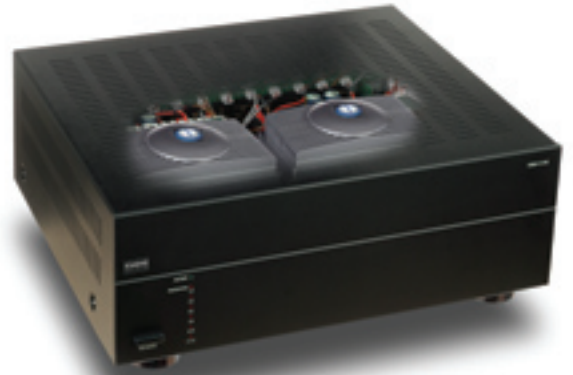
CX/CXT

## Unprecedented power and sound quality from a digital amplifier

- 100 watts x 6/8 channels, 8 $\Omega$
- 165 watts x 6/8 channels, 6 $\Omega$
- <0.05% THD+N
- >105 dB SNR
- $\pm 0.5$  dB frequency response, 20Hz to 20kHz

## Unparalleled audio processing flexibility and simplicity for customizing amplifier and speaker performance:

- Input Channel Processing: Input Routing and Selection, 3-Band Parametric EQ, 6/8 x 6/8 Channel Router/Mixer
- Output Channel Processing: Tone Control, 5-Band Parametric EQ, Compression/Limiting, Adjustable Time Delay, Independent Channel Attenuation, Master Volume Control
- 2-wire serial control interface with simple API
- Automatic module startup enables microcontroller-free designs
- Integrated EEPROM automatically remembers last user settings



## Digital audio inputs eliminate the need for any digital-to-analog conversion or analog volume controls, assuring low distortion

I<sup>2</sup>S/Left-Justified Pure Digital Path Audio Inputs from 32kHz to 96kHz (16-24 bit).

## Evaluating the Processing Power of the MXM100

The D2Audio Canvas System Design GUI option allows for your designers to experiment with the power of the MXM Audio Processing capabilities quickly and easily in the development stage of the MRDA design.

## Graceful Protection

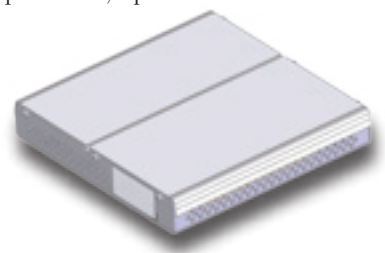
Automatic short-circuit and short-to-ground recovery. Graceful brown-out recovery. Integrated thermal sensor feedback. Soft current limiting without shutdown.

## Accelerates manufacturer design time and agency certification

Complete digital amplifier module with controller, output stages, output filters, optional heat sink and fan, and EMI-shielded package. Designed for ease of compliance with FCC, UL, CSA, CE requirements.

## Achieve an ultra low-profile MRDA design

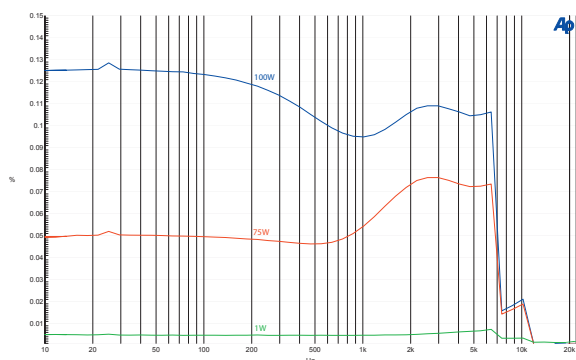
The MXM100 flat-top design package allows for your design to fit into profiles that you never thought possible, all while enabling you to have complete design control over the heatsink size. It offers the ultimate in time-to-market, customization and cost savings.



(Note: The customer is ultimately responsible for the design of the external heat sink. Should the designer choose to add a fan, the MXM module offers PWM fan control output pins which automatically turns on/off as well as increases/decreases fan speed depending on the ambient temperature surrounding the module.)

D2-PS-MXM100-110

THD+N vs. Frequency Performance (8Ω)



## Achieve an optimized high-frequency response regardless of speaker load

The D2Audio AFRC™ option enables the installer to automatically achieve the same flat frequency response at the high-end, even if the load is not 8 ohms.

## Visible display of amplifier status

Overheat/Short-Circuit ERROR reporting

## Distribute up to four stereo input sources, all at independent sample rates

D2Audio's Advanced Sample Rate Conversion on all inputs (I2S, Left-Justified) allows for your state-of-the-art digital MRDA design

to accept up to 4 different stereo audio sources, each with a different sampling frequency without the need for adding additional sample rate converters.

**Efficient, cool design reduces weight by 5x and space by 3x. Minimizes the need for large audio racks and venting of equipment closets**

93% efficient. 6.9 x 6.8 x 1.2 inches. 0.7 lbs.

SKU	Input Channels	Output Channels							
		Ch 1	Ch 2	Ch 3	Ch 4	Ch 5	Ch 6	Ch 7	Ch 8
D2-0XM010008-00061C	8	100 W, 8Ω	100 W, 8Ω	100 W, 8Ω	100 W, 8Ω	100 W, 8Ω	100 W, 8Ω	100 W, 8Ω	100 W, 8Ω
D2-0XM010006-00061C	6	100 W, 8Ω	100 W, 8Ω	100 W, 8Ω	100 W, 8Ω	100 W, 8Ω	100 W, 8Ω		

### Performance

- 100 watts x 6/8 channels, 8Ω
- 165 watts x 6/8 channels, 6Ω
- >105 dB SNR
- <0.15% THD+N (100W, 20Hz to 20kHz)
- <0.10% THD+N (75W, 20Hz to 20kHz)
- <0.05% THD+N (1W, 20Hz to 20kHz)
- ±0.5 dB frequency response, 20 Hz to 20 kHz
- 93% Efficient

### Audio Processing

- Input Channel Processing
  - Input Routing and Selector
  - 3-Band Parametric EQ
  - 6/8 x 6/8 Router/Mixer
- Output Channel Processing
  - 5-Band Parametric EQ
  - Compression/Limiting
  - Adjustable Time Delay
  - Independent Channel Attenuation
  - Master Volume Control

### Standard Features

- 8-channel IFS Audio Inputs (32-96 kHz, 16-24-bit)
- Advanced Sample Rate Conversion (SRC) on all inputs
- Standard 2-wire serial interface and software control API
- PWM controlled voltage output for fan speed connection
- Internal microcontroller functions and EEPROM
- Graceful short-circuit, thermal and over-current fault protection.

### Advanced Feature Options

- D2Audio AFRC™
- D2Audio Speaker Detect™
- D2Audio Canvas™ System Designer Graphical User Interface (GUI)
- Loudness Contour

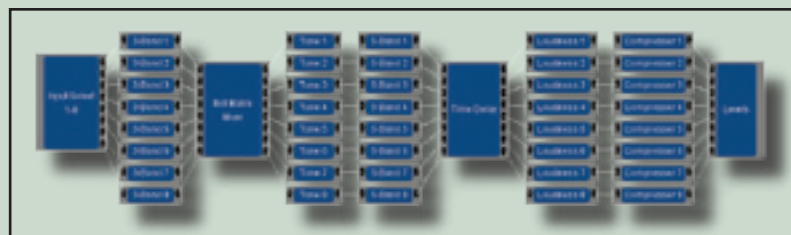
### Dimensions

- 6.9 x 6.8 x 1.2 in
- 17.5 x 17.3 x 3.0 cm

### Weight

- 0.7 lbs (1 kg)

### Audio Processing Chain as shown in D2Audio Canvas GUI



Note: D2A and D2Audio are registered trademarks of D2Audio Corporation. Specifications listed in this document are subject to change without notice.

### Example: Ultra Low Profile 8-Channel x 100 Watt Multi-Room Distributed Audio System

