

DESCRIPTION

The MediaMatrix F-DCM is a networked audio input and output node that supports both CobraNet and Dante protocols. The device provides a serial interface (RS-232 or RS-485), as well as GPIO interfaces, for control of locally connected devices.

The F-DCM features two mic/line inputs on XLR and Euro connectors, each with 48V phantom power, and two line level outputs on Euro connectors. The line output channels are also amplified by dedicated 25 watt power amplifiers for driving local near field monitors through the screw terminal connectors on the rear of the unit.

Extended serial control is provided, plus two general purpose input and two general purpose output connections. The mic level, phantom power on/off and input mute for each channel can be controlled remotely via the network connection.

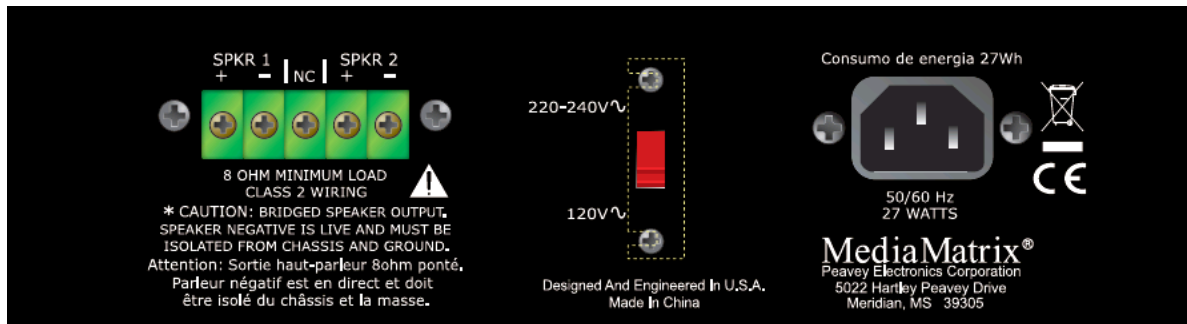
The unit is housed in a compact and durable 18-gauge steel chassis that can be mounted easily under tables, in millwork or in equipment racks or housings. The internal power supply that can be switch selected for 120V or 220-240V, 50/60Hz at 20W operation, which connects via an IEC connector in the rear panel.

The F-DCM works in conjunction with other MediaMatrix devices, including NIONs and CABs. It is configured using NWare, and can be managed using NWare or SNMP.

FEATURES

- Two mic/line inputs on both XLR and Euro input connectors
- Two audio outputs on both line level Euro blocks and speaker level screw terminals
- 48V phantom power on XLR and Euro input connectors
- Two 25W, 8Ohm outputs for local loudspeakers via screw terminal connectors
- Compact 1/2U-wide, 2U high chassis
- Convenient front-panel rotary controls for unit ID selection on CobraNet
- Simple configuration via NWare
- Remote monitoring and control via NWare or SNMP
- Low power requirements.

Rear panel



Specifications

Front Panel Connections

- 2 balanced mic/line inputs on:
 - XLR (F) connectors (latchless) or
 - 3 pin Euro connectors.
- 2 balanced Euro line outputs.

Rotary Encoders: Two rotary encoders for setting unit ID on CobraNet network, to identify it uniquely to control software.

Audio Network: CobraNet / Dante female RJ-45 connector with MDI/MDI-X pin out for connecting to 100/1000 Base-T Ethernet networks.

Serial port: RS-232 or RS-485 full-duplex serial connection, on three-pin Mini Euro connector.

GPIO: 2 logic inputs and 2 logic outputs.

Analog Audio Inputs

Frequency response: 20Hz ~ 20 kHz (+/-0.1 dBr).

THD+n: at 1 kHz +25 dBu in: 0.009%

Dynamic range: >= 101dB.

Crosstalk: < -90 dB.

Maximum input at gain=0: +25dBu.

Input gain control: 0 TO +60 dB in 3dB steps.

Input impedance: 6.8KOhms.

Equivalent input noise (EIN): <-123dBu.

Sample rate: 48 kHz.

Line level Outputs

2 line outputs.

Frequency response: 20Hz ~ 20 kHz (+0/-0.1 dBr).

THD+n: <0.002% @ 1kHz.

Dynamic range: >= 102dB.

Crosstalk: <-90dB.

Full-scale output: +18 dBu.

Output impedance: 50 Ohms.

Minimum load impedance: 600 Ohms.

Sample rate: 48 kHz.

Power Amplifier

2 channels driven by line outputs 1 and 2.

Rated output power 25 watts each channel, into 8 Ohm loads.

8 Ohm minimum load each channel.

-1 dBFS on output drives the amplifier to rated power.

Amplifier dynamic range: 92dB.

Notes:

- All specifications are typical for any input/output channel.
- All measurements are made with an AC line of 120 Volts rms / 60 Hz.
- Noise and THD measurements made un-weighted, bandwidth limited 10Hz to 22KHz.
- All measurements are made in the analog domain with gain/attenuation set for unity unless otherwise stated.
- All measurements are made using 48 kHz sample rate.

Rear Panel Connections

2 Speaker outputs.

Note: The speaker outputs are bridged and should not be connected to ground.

Mains Power: Voltage selector switch for 120 VAC or 220-240 VAC, 50-60 Hz at 20W operation.

CobraNet Performance

2 audio sub channels at 48 kHz sample rate, 5.33ms latency to CobraNet transmit bundles. 100MB network speed, full duplex (auto sensing). Static IP or DHCP server.

Dante Performance

Data Format: 24-bit audio.

Protocol: 100Mb Ethernet / IP with proprietary Dante protocol.

1GB network speed, full duplex (auto sensing).

Channels: 2x2 channels at 48kHz sample rate.

Mechanical Specifications

Chassis Style: 2RU high, 1/2RU wide EIA rack package with mounting lugs available for installing either one or two units in a 2RU space. Can be mounted to millwork using the included mounting ears.

Dimensions: 8.6in. W x 10in. D x 2.6in. H

With mounting ears: 10in. W x 10in. D x 2.6in. H

Environment

Operating temperature: 0° to +60°C.

Operating humidity: Up to 100%, non-condensing.

Architect's & Engineer's Specifications

Audio Network Input/Output and Control Node

The Input/Output and Control Node shall be a 2RU-high, 1/2RU-wide industrial package designed for fixed installation in engineered audio and communication systems. It shall provide two analog audio input channels, and two analog audio output channels. The audio network shall be CobraNet or Dante, operating on a 100Base-T Ethernet physical interface. The analog audio inputs shall provide 48V phantom powering for microphones, and remote control of gain.

Both of the audio outputs shall be amplified by dedicated 25 watt power amplifiers. The audio network interface shall provide two general-purpose input and two general-purpose output connections. The internal power supply shall be switch selectable for 120V or 220-240V, 50/60Hz at 20W operation.

The audio network interface shall provide either an RS-232 or RS-485 serial port. The audio network interface shall be the MediaMatrix F-DCM or approved equal.



FCC/ICES Compliancy Statement

This device complies with Part 15 of the FCC. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Warning: Changes or modifications to the equipment not approved by Peavey Electronics Corp. can void the user's authority to use the equipment.

Note – This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their expense.



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Warranty registration and information for U.S. customers available online at
www.peaveycommercialaudio.com/warranty
or use the QR tag below



Features and specifications subject to change without notice.

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Logo referenced in Directive 2002/96/EC Annex IV
(OJ(L)37/36,13.02.03 and defined in EN 50419: 2005
The bar is the symbol for marking of new waste and
is applied only to equipment manufactured after
13 August 2005