

Desigo® Fire Safety Modular System

Digital Audio Card and Local Page Board
Models DAC-NET and LPB

Architect & Engineer Specifications

- Audio signal source
- On-board microprocessor
- Built-in, ground-fault detection
- Transmits eight (8) audio channels
- Programmable, custom messages or tones
- Five (5) minutes of message / tone-storage memory
- Provides communication of 99 types, max., of the following modules, via the CAN bus:
 - SCM-8 ▪ TZC-8B
 - LCM-8 ▪ LVM
 - FCM-6 ▪ ZAC-40
 - FMT ▪ ZAM-180
- 'Class B' (Style 4), via two (2) pairs of wires
- 'Class A' (Style 7), via four (4) pairs of wires
- UL864 | CAN / ULC Listed

Product Overview

The Digital Audio Card (Model DAC-NET) provides the audio source for the Desigo Fire Safety Modular (Desigo Modular) Voice Evacuation System, and provides D-NET network communication to and from the Operator Interface (OI) and between enclosures.

Model DAC-NET is capable of transmitting eight (8) digital channels of audio, via two (2) pairs of wire. One (1) DAC-NET is required in each Desigo Modular voice-panel enclosure, and can be wired 'Class A' (Style 7) – four (4) pairs of wires, or 'Class B' (Style 4) – two (2) pairs of wires.

Additionally, Model DAC-NET, which plugs into one (1) slot in the Model CC-5 or Model CC-2 Card Cage, has on-board light-emitting diodes (LEDs) for system status and troubleshooting.

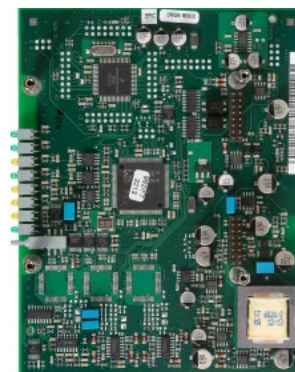
Indication of 'Power' | 'Communication' | 'Internal Operation' | 'Ground Fault' and 'Trouble-event' conditions are also provided.

Model DAC-NET contains an on-board microprocessor, providing communication with switch modules, LED modules, microphone, telephone zone cards, and zone amplifiers across the Control Area Network CAN Bus. Additionally, 99 CAN-address modules can be supervised by one (1) Model DAC-NET.

Model DAC-NET contains on-board tones and pre-recorded EVAC and ALERT messages. Additionally, custom messages or tones can be downloaded to the DAC-NET using the custom-configuration software tool, ZEUS-D, of a Desigo Modular voice system for a total of five minutes of storage memory.



Model DAC-NET
Digital Audio Card



Model LPB
Local Page Board



Specifications

D-NET communication is supervised for open, short and ground fault. Each input / output is electrically isolated. The maximum distance between two DAC-NETs is 2,300 feet [701 m] (14 AWG to 18 AWG twisted, unshielded wire).

A maximum wiring length can be up to 23,000 feet [7010 m] of twisted, unshielded wire through the entire D-NET network, totaling (32) DAC-NET nodes.

The Local Page Board (Model LPB) is used to connect the microphone – mounted inside the Live Voice Module (Model LVM) – and the voice-internal telephone system. Model LPB serves as a plug-on board to Model DAC-NET, and converts the two (2) analog input signals into the system's internal digital format.

Up to five (5) Model LVM modules can be connected to Model LPB. Additionally, Model LPB has one (1) analog output to connect to the monitor speaker, which is mounted inside Model LVM.

The one (1) analog output is one (1) of eight (8) voice-internal audio channels selectable at the Desigo Modular system.

Temperature and Humidity Range

Products are UL 864 10th Edition Listed for indoor dry locations within a temperature range of 120⁺/-3°F (49⁺/-2°C) to 32⁺/-3°F (0⁺/-2°C) and a relative humidity of 93⁺/-2% at a temperature of 90⁺/-3°F (32⁺/-2°C).

Electrical Ratings

POWER CONSUMPTION (DAC-NET)	
24V CURRENT DRAW: [Back Plane]	230mA
24V CURRENT DRAW: [Screw Terminal]	0
6.2V CURRENT DRAW: [Back Plane]	0
24V CURRENT DRAW: [Standby]	230mA

Details for Ordering

MODEL OR TYPE	PART NUMBER	PRODUCT
DAC-NET	500-035100	Digital Audio Card
LPB	500-035200	Local Page Board

NOTICE – The information contained in this data-sheet document is intended only as a summary, and is subject to change without notice. The product(s) described here has/have a specific instruction sheet(s) that cover various technical, limitation and liability information.

Copies of install-type, instruction sheets – as well as the *General Product Warning and Limitations* document, which also contains important data, are provided with the product, and are available from the Manufacturer.

Data contained in the aforesaid type of documentation should be consulted with a fire-safety professional before specifying or using the product.

Any further questions or assistance concerning particular problems that might arise, relative to the proper functioning of the equipment, please contact the Manufacturer.

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