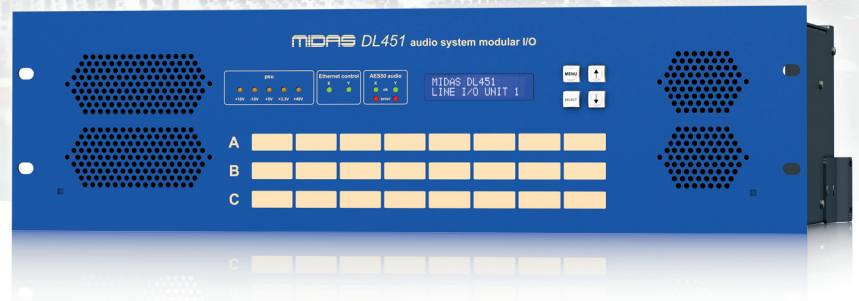


I/O Interfaces

PRO SERIES

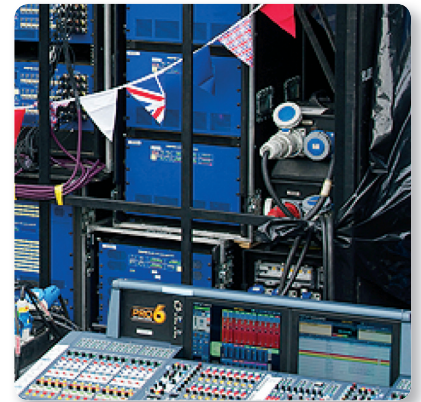
DL451

Modular Stage Box with 3 Card Slots and up to 24 Inputs and 24 Outputs



- ⊗ Modular stage box accepts 3 DL4 series I/O cards
- ⊗ Up to 24 audio inputs and 24 audio outputs
- ⊗ 24 bit audio operation with 96 kHz sample rate
- ⊗ Remote operation up to 80 m via CAT5/5e cable
- ⊗ All settings programmable from front panel controls or console
- ⊗ PSU status indicator LEDs and configuration LCD display on front panel
- ⊗ Supports dual redundant AES50 (X and Y) networks
- ⊗ Two GPIO 25-pin D-type opto-isolated connectors for external device control
- ⊗ MIDI In, Out and Thru connectors
- ⊗ Features Neutrik etherCON* AES50 network ports
- ⊗ Rugged 3U rackmount chassis for durability in portable applications
- ⊗ Auto-ranging universal switch-mode power supply
- ⊗ 3-Year Warranty Program*
- ⊗ Designed and engineered in England

DL451 is a 3U 19" modular configurable rack mount I/O unit with provision for 3 DL4 Series interface cards and up to 24 audio inputs and 24 audio outputs. With two AES50 network ports and two Ethernet control ports providing dual redundancy, plus a MIDI Interface (In, Out, Thru), the DL451 is the ideal partner to all MIDAS Pro Series digital consoles, enabling a digital snake connection from Front of House to stage or to provide additional local I/O at the console mix position.



Modular Expansion Cards

Five DL4 Series card options are available for DL451:

- DL441 - 8 Analogue Mic/Line Input Card with MIDAS Microphone Preamplifiers
- DL442 - 8 Analogue Line Output Card
- DL443 - Analogue 8 Input, 8 Output Card with ¼" TRS Connectors
- DL444 - Analogue 8 Input, 8 Output Card with MIDAS Microphone Preamplifiers and D-Type Connectors
- DL452 - AES3 Digital 8 Input, 8 Output Card with Sample Rate Conversion

DL451 can accept up to 3 of these cards in any combination. The DLIO-BP blanking plate is also available as an accessory should not all card positions be populated.

*All third-party trademarks are the property of their respective owners. Their use neither constitutes a claim of the trademark nor affiliation of the trademark owners with MUSIC Group. Product names are mentioned solely as a reference for compatibility, effects and/or components. Warranty details can be found at music-group.com.

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Digital Audio Networking

SuperMAC (AES50-Compliant) digital audio networking technology from KLARK TEKNIK simultaneously provides high channel counts, ultra low and deterministic latencies, sample-synchronous and phase-aligned networked clock distribution, error detection and correction, network redundancy, and ease of deployment and use – to meet the demanding requirements of live concert touring.

DL451 is compatible with all MIDAS PRO Series digital consoles and audio system engines, as well as with any other 96 kHz-enabled AES50-equipped devices.



Remote Console or Front Panel Control

All configuration settings for DL451 can be set either remotely from the mixing console, or directly via the intuitive and easy to understand front panel. DL451 features a front panel LCD display with intuitive menu navigation for all configuration options with LED status indicators, which provide clear feedback of operational status over wide viewing angles and distances. Clear indication is provided showing power supply output rail condition and AES50 and Ethernet network connection status and activity.

External Control Ports

DL451 features two General Purpose (GPIO) 25-pin D-type connectors for external device control, one for inputs and the other for outputs, which are opto-isolated to ensure galvanic isolation and avoid ground loops. External trigger events received via the input port are relayed to the PRO Series control centre, and external devices can in turn be triggered from the output port in response to scene change messages inserted in the console automation show file running in the control centre. An industry-standard MIDI interface (In, Out, Thru) is also provided to send and receive MIDI messages which can also be used in conjunction with the control centre's automation system.



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Built for the Road

Featuring a rugged steel 3U rackmount enclosure, the DL451 is designed for the rigours of live concert touring. Premium Neutrik connectors are used to ensure reliable network connections, night after night.

Auto-ranging universal switch-mode power supply

DL451 features a universal power supply, which is auto-voltage sensing for use on a world-wide basis.



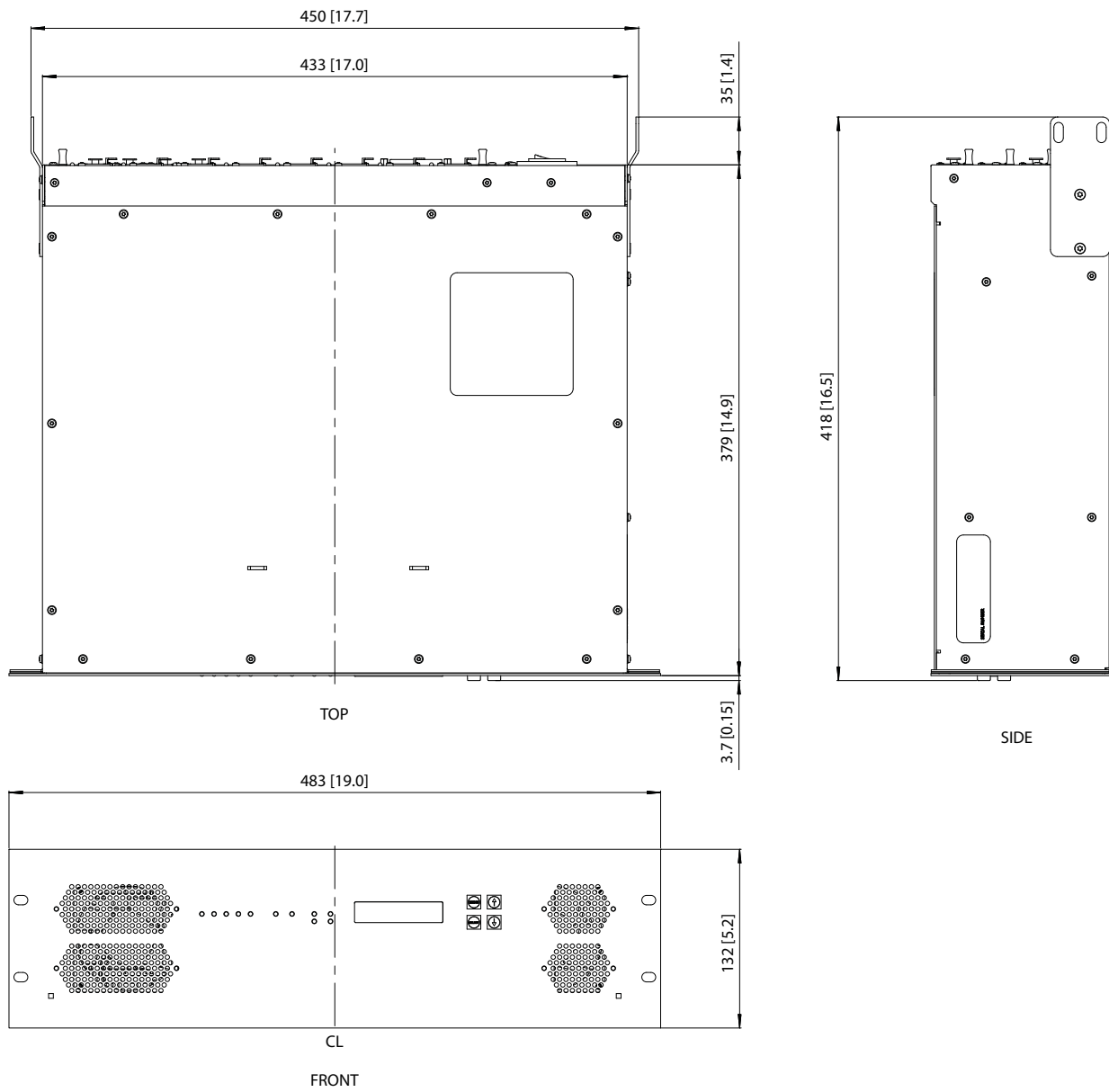
You Are Covered

We always strive to provide the best possible Customer Experience. Our products are made in our own MUSIC Group factory using state-of-the-art automation, enhanced production workflows and quality assurance labs with the most sophisticated test equipment available in the world. As a result, we have one of the lowest product failure rates in the industry, and we confidently back it up with a generous 3-Year Warranty program.

PRO SERIES DL451

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Dimensions



PRO SERIES

DL451

Modular Stage Box with 3 Card Slots and
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Technical Specifications

General Specifications

Dimensions	3U x 418 mm (16.5" deep)
Net weight	10.1 kg (22.2 lbs)
Power requirements	100 V to 240 V, 50 to 60 Hz
Operating temperature range	+5°C to +40°C
Storage temperature range	-20°C to +60°C

Inputs and Outputs

MIDI and GPIO

MIDI connector	In, Out and Thru on 5-pin DIN
GPIO IN connector	25-pin D-type (opto isolated)
GPIO OUT connector	25-pin D-type (opto isolated)

Digital system inputs and outputs

System connector	AES50 (24 channels of bidirectional digital audio) on etherCON XLR
Duplicate connector	AES50 (24 channels of bidirectional digital audio) on etherCON XLR providing dual redundant back up of channels

PRO SERIES

DL451

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Architecture and Engineering Specifications

The interface unit shall be designed for digital audio mixing applications and be optimised for use in live performance. It shall feature a modular construction, allowing for 3 proprietary format interface cards, providing up to 24 audio inputs and 24 audio outputs and shall be capable of operating at 96 kHz sampling rate.

The interface unit shall support a 100 Megabit Ethernet frame-based digital audio network that shall offer dual redundancy and be compliant with the Audio Engineering Society AES50-2011 standard. Two digital audio network ports and two Ethernet control ports shall be provided, both operating on a dual redundant basis.

The interface unit shall include two General Purpose (GPIO) 25-pin D-type connectors for external device control, one connector for inputs and one connector for outputs, both of which shall be opto-isolated to provide galvanic isolation. An industry-standard MIDI Interface (In, Out, Thru) shall also be provided.

The interface unit shall provide both front panel and remote network configuration of operational settings and provide an alphanumeric LCD display with associated menu navigation buttons, and LED status indication of power supply output rail condition and digital audio and control network connection status and activity.

The interface unit shall include an auto-ranging universal switch-mode power supply for use on a worldwide basis.

The interface unit shall be housed in a standard 3U 19" rackmount chassis, and shall be 483 mm wide x 418 mm deep x 132 mm high (19.0" x 16.5" x 5.2"), with nominal weight 10.1 kg (22.2 lbs). The interface unit shall be installed in a rack frame or road case capable of safely supporting its weight. Input, output, and power connections shall be made at the rear panel of the interface unit. Installers shall allow adequate space at the rear for connection and disconnection of input, output, and power connections. The power requirements shall be 100 to 240 VAC, 50 to 60 Hz.

The interface unit shall be the [MIDAS DL451](#) and no other alternative shall be acceptable.

I/O Interfaces

PRO SERIES DL451

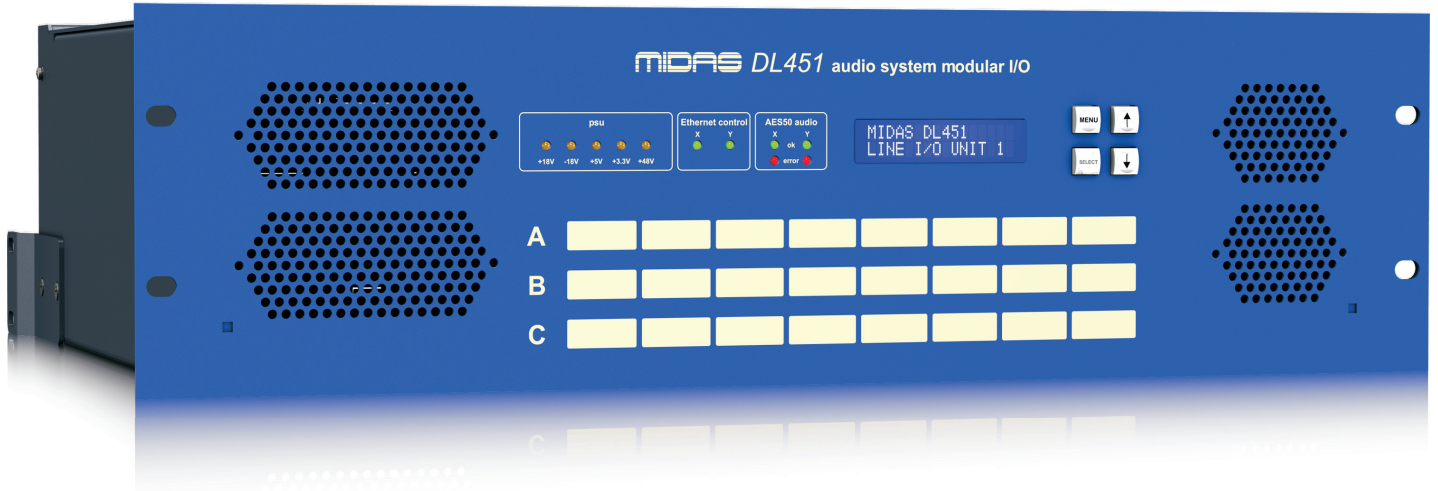
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I/O Interfaces

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For service, support or more information contact the MIDAS location nearest you:

Europe
MUSIC Group Services UK
Tel: +44 156 273 2290
Email: CARE@music-group.com

USA/Canada
MUSIC Group Services NV Inc.
Tel: +1 702 800 8290
Email: CARE@music-group.com

Japan
MUSIC Group Services JP K.K.
Tel: +81 3 6231 0454
Email: CARE@music-group.com

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