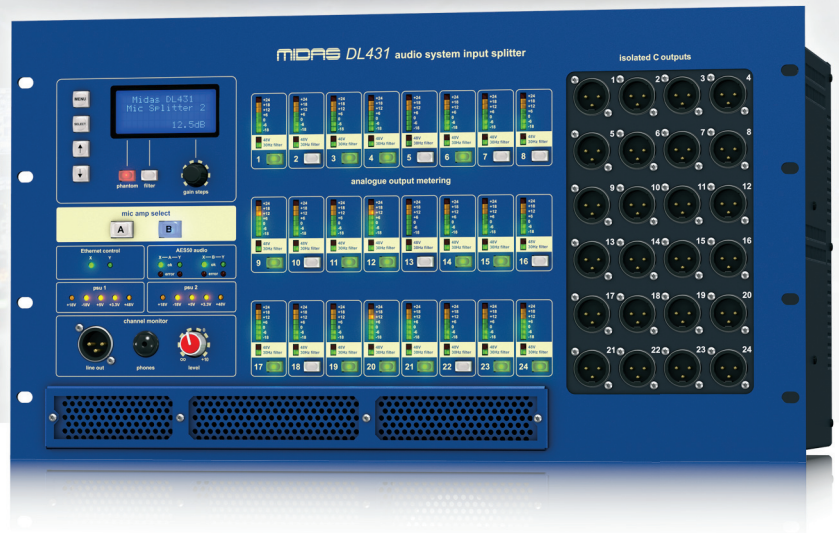


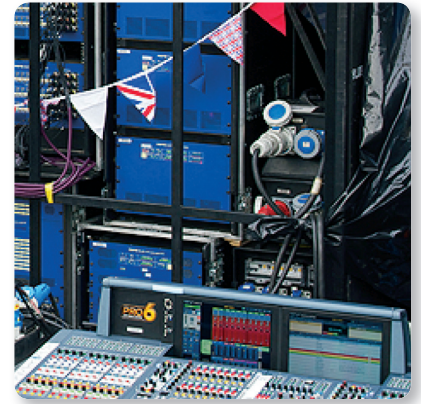
PRO SERIES DL431

24 Input, 72 Output Active Microphone
Splitter with Independent MIDAS
Microphone Preamplifiers



- ⊗ 24 channel microphone splitter with 2 electronically and 1 transformer balanced outputs per channel
- ⊗ 3 award-winning MIDAS microphone preamplifiers per channel with switchable +48 V phantom power
- ⊗ 2 independent dual redundant AES50 (X and Y) network ports
- ⊗ Local channel monitoring with integrated headphone amplifier
- ⊗ 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
- ⊗ Features Neutrik etherCON* AES50 network ports
- ⊗ Rugged 6U rackmount chassis for durability in portable applications
- ⊗ Dual redundant auto-ranging universal switch-mode power supplies
- ⊗ 3-Year Warranty Program*
- ⊗ Designed and engineered in England

DL431 is a 6U 19" fixed-configuration rack I/O unit designed for microphone signal splitting applications with 24 mic/line level inputs and 72 line level outputs, and delivers legendary MIDAS sound quality utilising our time-tested and road-proven technologies. Featuring two independent MIDAS microphone preamplifiers with 2.5 dB gain steps plus a third fixed gain MIDAS Microphone preamplifier per input channel, two dual redundant AES50 network interfaces, dual redundant Ethernet control ports and a MIDI Interface (In, Out, Thru), the DL431 is the ideal partner to the MIDAS PRO3, PRO6, PRO9, XL8 and PRO X digital consoles, enabling a digital snake connection from Front of House to stage.



*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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Award-Winning MIDAS Microphone Preamplifier

The **MIDAS** microphone preamplifier is considered by leading live sound and recording engineers to be the very essence of the famous **MIDAS** sound. More than 40 years of design experience paired with the finest choice of premium-grade components lead to the acclaimed warmth and depth - bringing out subtle ambience, maintaining spatial positioning and more effectively capturing a precise sound image. The acclaimed sound of the award-winning **MIDAS** microphone preamplifier has inspired generations of live sound engineers to their best work, creating sonic panoramas that have captivated audiences worldwide.

Since pristine sound always begins with the microphone preamplifier, the first point where the signal enters the console, DL431 features the latest generation of **MIDAS** microphone preamplifiers, which faithfully reproduce every sonic detail so no part of a performance will ever be missed. Transparent and pristine sound, low noise and high common-mode rejection are all hallmarks of this classic design.

Over the years many mix engineers have found this robust and overload-tolerant design takes on a whole new dimension of sound when driven hard, the crystal-clear audiophile reproduction giving way to just the right combination of harmonics, a warm and organic sound heard by millions of concert goers and recorded for posterity on countless live albums over the years.

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.

DL431 is compatible with all **MIDAS PRO Series** and **XL8** digital consoles and audio system engines, as well as with any other 96 kHz-enabled AES50-equipped devices.



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Microphone Splitter

Each input connector on the DL431 feeds three separate MIDAS microphone preamplifiers, two with independent remote gain control and +48V phantom power switching, and a third with fixed gain to drive the front panel transformer-balanced analogue output for interfacing to third party recording or outside broadcast equipment.

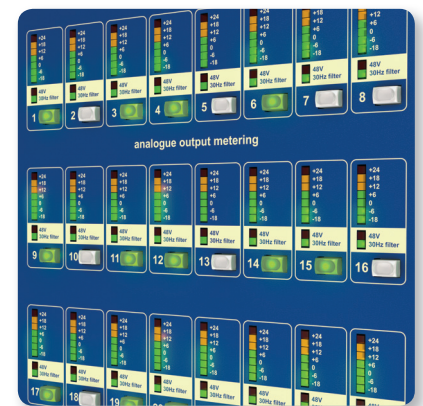
The two independent variable gain microphone preamplifiers can be remotely controlled from two separate locations, such as the Front of House and Monitor mix positions. Each remotely controlled microphone preamplifier also has a dedicated analogue split output on the DL431 rear panel.

A local channel monitoring facility with an integral headphone amplifier and separate line output allows incoming signals to be checked at source, an essential aid for system set-up and confirming signal integrity.

Remote Console or Front Panel Control

All configuration settings for DL431 can be set either remotely from the mixing console, or directly via the intuitive and easy to understand front panel. DL431 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.

Each input channel has dedicated selection switch and LED bargraph metering, plus indicators for phantom power and high pass filter status.



Built for the Road

Featuring a rugged steel 6U rackmount enclosure, the DL431 is designed for the rigours of live concert touring. Premium Neutrik connectors are used for reliable audio and network connections, night after night.

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Auto-ranging universal switch-mode power supply

DL431 features dual-redundant power supplies, which are auto-voltage sensing for use on a worldwide basis and provide seamless switchover in the unlikely event of a loss of one power supply.



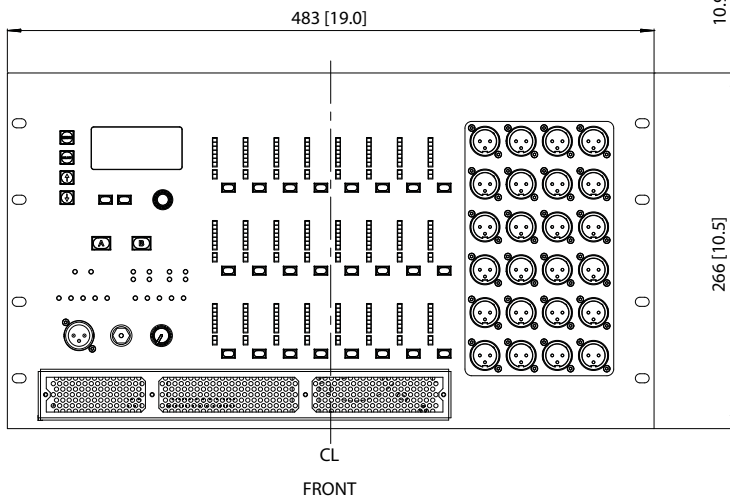
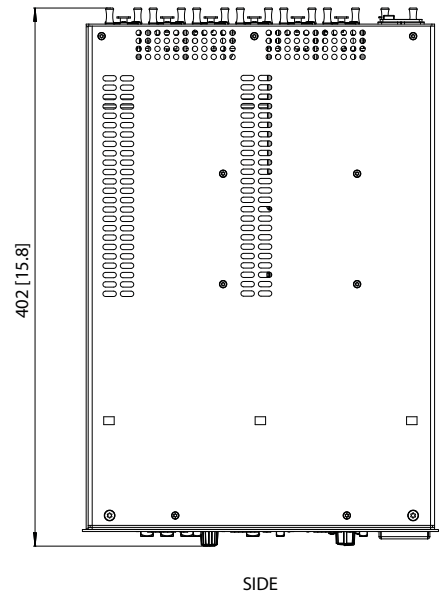
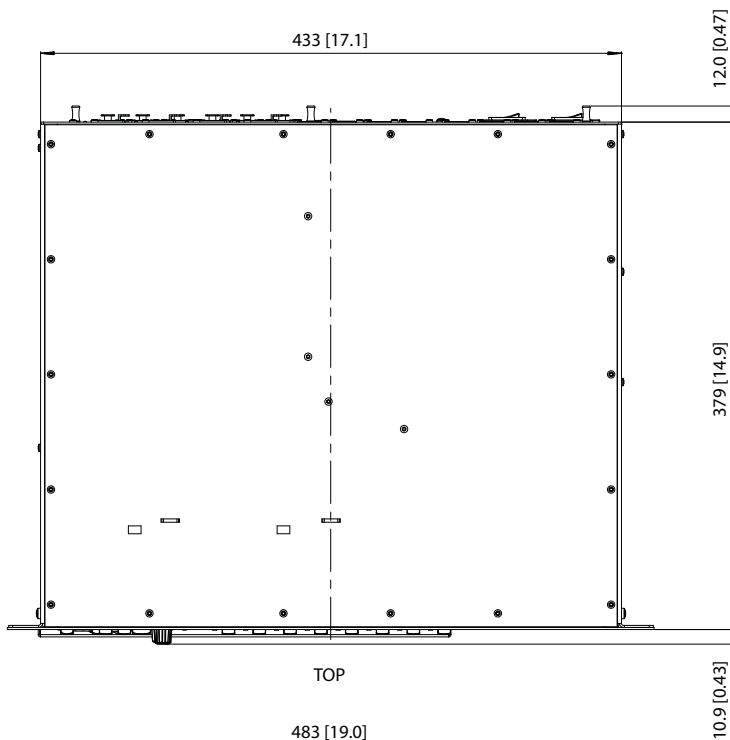
You Are Covered

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.

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Dimensions



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Technical Specifications

General Specifications

Dimensions	6U x 402 mm deep
Net weight	21.5 kg
Power requirements	100 to 240 VAC, 50 to 60 Hz
Operating temperature range	+5°C to +40°C
Storage temperature range	-20°C to +60°C
Dynamic range (DL431 analogue input to DL431 analogue output)	124 dB unweighted
Dynamic range (DL431 analogue input to DL451 analogue output)	110 dB unweighted

Inputs and Outputs

Analogue inputs	
Connector	3-pin XLR balanced
Phantom power	48 V with local switch and remote control from XL8 control centre
Gain control A	-2.5 dB to +45 dB analogue gain in 2.5 dB steps with local and remote control
Gain control B	Independent second channel identical to above
Filter A	30 Hz high pass with local defeat switch and remote control from control centre
Filter B	Independent second channel identical to above
Meter (24-off)	7-segment, -18 dBu to +24 dBu
Meter A/B	Meters can be switched to monitor A or B pre-amplifiers
A/D converter A	24-bit, 96k and 128 times over sampling
A/D converter B	Independent second channel identical to above

Analogue outputs

Connector A	3-pin XLR balanced
Connector B	Independent second channel identical to above
Connector C	Independent third channel on front-mounted 3-pin XLR, balanced and transformer isolated (with fixed gain of -6 dB)
Headphone connector	¼" jack
Audio monitor	3-pin XLR balanced

Digital (system) outputs

System connector A	AES50 (24 channels of digital audio) on etherCON XLR
System connector B	Independent second channel identical to above
Duplicate connector A	AES50 (24 channels of digital audio) on XLR providing dual redundant back up of A channels
Duplicate connector B	AES50 (24 channels of digital audio) on XLR providing dual redundant back up of B channels

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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 24 input channels with three microphone preamplifiers per input channel - two independent remotely-controlled variable gain microphone preamplifiers with 2.5 dB gain steps and one fixed gain microphone preamplifier. Each variable gain preamplifier shall feed a rear panel servo-balanced electronic output and each fixed gain preamplifier shall feed a front panel transformer-isolated output, all on industry-standard XLR connectors, for a total of 72 outputs. The interface unit 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 dual redundant digital network audio interfaces shall be provided. Two dual redundant Ethernet control ports and 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.

Each input channel shall have a selection switch, LED signal metering bargraph and LED indication for +48 V phantom power and high pass filter status.

A local channel monitoring facility with an integral headphone amplifier and separate line output shall be provided for monitoring input channel signals.

The interface unit shall include two auto-ranging universal switch-mode power supplies with dual redundancy for use on a worldwide basis.

The interface unit shall be housed in a standard 6U 19" rackmount chassis, and shall be 483 mm wide x 402 mm deep x 266 mm high (10.5" x 15.8" x 10.5"), with nominal weight 21.5 kg (47.3 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 DL431 and no other alternative shall be acceptable.

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I/O Interfaces

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24 Input, 72 Output Active Microphone
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