# DL16

16 Input, 8 Output Stage Box with 16 MIDAS Microphone Preamplifiers, ULTRANET and ADAT Interfaces

- 8 16 award-winning MIDAS PRO microphone preamplifiers with switchable 48 V phantom power
- 8 electronically balanced low impedance line level outputs
- ULTRANET personal monitoring system connectivity for in-ear applications
- Digital audio and control connectivity for TURBOSOUND speaker systems with ULTRANET networking capability
- Dual AES50 SuperMAC ports for cascading additional DL16 stageboxes—no merger or router required
- Oual ADAT outputs providing 16-channel digital output on two optical TOSLINK\* connectors
- 8 Remote operation via shielded CAT5e cable up to 330 ft / 100 m length
- All settings programmable from front panel controls or console
- Status indicator LEDs on front panel
- Headphones output assignable to any of the inputs or outputs for on-stage monitoring
- MIDI In/Out for bidirectional communication between MIDAS M32 Series console and on-stage MIDI devices
- Features Neutrik etherCON\* AES50 and ULTRANET network ports
- Rugged 2U rackmount chassis for durability in portable applications
- Auto-ranging universal switch-mode power supply
- 3-Year Warranty Program\*
- Ø Designed and engineered in England



Digital mixing has revolutionized virtually everything in the liveentertainment production workflow, and now that same cutting-edge technology brings live production distribution signal into the modern age. The DL16 Stage Box provides 16 of our award-winning preamplifiers microphone with switchable +48 V phantom power; 8 balanced analogue XLR returns



at the stage end; an integrated ULTRANET output for connecting to BEHRINGER P16-M personal monitor mixers; plus connectivity for your ADAT-compatible outboard equipment.

If your application calls for more inputs, or just want to keep your cable runs short and tidy, putting a DL16 at stage front and another behind the drum riser provides an additional 16 inputs for drum and guitar/bass amp mic'ing. The best part – all it takes is a single CAT5 cable per stage box.



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#### **MIDAS - The Legend in Sound Quality**

Ever since our formation in the 1970s, we have had a long history of innovation and leadership in the world of audio mixing consoles. Employed by the most famous touring acts and installations worldwide, our XL4 and Heritage H3000 consoles quickly became industry standards.

We have built an impeccable reputation for our no-compromise approach to audio and build quality, and in particular for our Award-winning Mic Preamps which are considered by industry experts as the industry's best sounding designs. Building on this legacy, the DL16 features 16 of the very same preamplifiers that are used in our highly-acclaimed PRO Series consoles.

#### **ULTRANET – Seamless Integration**

The world-renowned engineers at KLARK TEKNIK, MIDAS, TURBOSOUND and BEHRINGER have all come together to create something truly innovative that will change live and studio workflow forever – ULTRANET. This revolutionary technology seamlessly transmits up to 16 independent channels of 24-bit digital audio and control data via a single CAT5 cable between compatible digital devices – including mixers, I/O stage boxes, powered loudspeakers and personal monitoring systems. Advantages realized through ULTRANET digital networking, versus traditional analog methods: audio signals are impervious to Radio Frequency Interference (RFI); signal crosstalk is eliminated; and ease of setup translates directly into significant time saved during installation. ULTRANET effectuates a powerful digital eco-system that gives you unparalleled control over every element of your audio production environment from one convenient location.





#### **ADAT-Ready**

Many manufacturers have adopted the ADAT digital interface as a means of transferring digital data between certain types of audio devices, such as mixers, synthesizers, lighting rigs and effect processors. The DL16's onboard ADAT Outputs enable splitting the high-quality MIDAS Pro Series preamp signals to outboard devices – including recording systems. When more channels are required, these optical sockets can alternately be used to connect ADAT-equipped D/A converters (such as the Behringer ADA8200) for up to 16 additional analogue outputs.



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#### **Dual AES50 Ports for Massive Connectivity**

Connecting over a single shielded (STP) CAT5 cable, up to three DL16s can be daisy-chained to deliver 48 channels in and 24 out to the stage. KLARK TEKNIK's AES50 simultaneously provides high channel counts, extremely low and deterministic latencies, accurate phase-aligned networked clock distribution, error detection, network redundancy, with simple deployment and ease of use to meet the needs of the live performance industry. This unique combination also benefits both live and studio recording applications, as well as post-production, broadcasting and audio routing infrastructure.

- 48 bidirectional audio channels @ 48 kHz over Neutrik etherCON-terminated shielded (STP) CAT5 cable (max. length 100 meters / 328 feet)
- Single cable duplex interconnection for audio and sample clocks
- Ethernet physical layer audio data transmission
- High channel count and ultra-low deterministic latency (2x3 samples = 1/8 ms per node)
- Accurate phase-aligned clock distribution
- Comprehensive error detection and management
- Provision for redundant networking
- Minimal configuration total ease of deployment and use
- Ethernet TCP/IP protocol-compatible auxiliary data channel
- Royalty-free implementations available as Xilinx FPGA cores
- OEM modules available from developer partners





#### Remotely Controllable Preamps Make Setup a Breeze

DL16's ingenious monitoring/head amp control section allows you to select any of the 16 inputs, 8 bus outputs or P-16 output streams for immediate line checks. In addition to signal metering at the stage box, you can also set individual input channel Gain, apply +48 V phantom power – and listen directly to the input signal via headphones and much more. Once set, all configuration settings can be locked at the console for total system security.



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#### Assignable Headphones Output for On-Stage Monitoring

For easy set up and signal routing verification, a headphones jack is conveniently located on the front of the DL16, giving you the option of listening directly to any of the 16 inputs. Simply select the signal you need to monitor by scrolling through the 16 channels whilst adjusting the gain and selecting the operating mode – all via a single robust rotary control.





#### **MIDI In/Out**

Using scene automation has never been simpler or more convenient. The automation scenes allow MIDI events to be incorporated, so that external MIDI-compatible devices can be controlled as part of a scene change via your console's MIDI output. Additionally, console events can be triggered from an external MIDI source via your console's MIDI input. You can also control the gain and phantom power settings remotely using the MIDI communication functionality.



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### **Unparalleled Performance**

As you can see, the DL16 digital stage box is the ideal 16 x 8 signal distribution solution thanks to our legendary remote controllable mic preamps, KLARK TEKNIK's AES50 connectivity and a wealth of other professional-grade features. Built tough enough to withstand the rigors of the road, the DL16 only takes up two rack spaces and connects to FOH with a single, inexpensive CAT5 cable. Now you can have the missing link between the stage and FOH at a fraction of the cost of competing systems – and we back it up with a comprehensive warranty program.

Visit your local authorised dealer, or get yours online today – and find out what the MIDAS DL16 Stage Box can do for your next performance or studio session.





### 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.



Product Information Document

I/O Interfaces

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

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