





MIDAS DL8 PoE Powered 8 Input 8 Output Stage Box User Guide

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MIDAS DL8 PoE Powered 8 Input 8 Output Stage Box



Product Information

The DL8 is a PoE-Powered 8 Input, 8 Output Stage Box featuring Midas PRO Microphone Preamplifiers and 2 Powered ULTRANET Monitoring Outputs. It is designed to provide high-quality audio signal processing and distribution for live sound applications.

Specifications

• Model: DL8

Power Source: PoE (Power over Ethernet)

Inputs: 8Outputs: 8

• Mic Preamps: Midas PRO

• Monitoring Outputs: 2 Powered ULTRANET

• Version: 2.0

Product Usage Instructions

Safety Instructions

- 1. Always be aware of dangerous voltage inside the enclosure.
- 2. Read and follow all important operating and maintenance instructions provided in the manual.
- 3. Do not remove the top cover or rear section of the device. No user-serviceable parts inside.
- 4. Ensure the apparatus is connected to a MAINS socket outlet with a protective earthing connection.

FAQ

Q: How do I connect microphones to the DL8?

A: You can connect microphones to the DL8 using XLR cables into the designated input channels.

Quick Start Guide

DL8

PoE-Powered 8 Input, 8 Output Stage Box with Midas PRO Microphone Preamplifiers and 2 Powered ULTRANET Monitoring Outputs

Important Safety Instructions

- Terminals marked with this symbol carry electrical current of sufficient magnitude to constitute risk of electric shock. Use only high-quality professional speaker cables with 1/4" TS or twist-locking plugs pre-installed. All other installation or modification should be performed only by qualified personnel.
- This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure – voltage that may be sufficient to constitute a risk of shock.
- This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.
- Caution

To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside. Refer servicing to qualified personnel.

Caution

To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing liquids and no objects filled with liquids, such as vases, shall be placed on the apparatus.

Caution

These service instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operation instructions. Repairs have to be performed by qualified service personnel.

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other.
 - A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Use only attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.
- 16. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
- 17. Correct disposal of this product: This symbol indicates that this product must not be disposed of with household waste, according to the WEEE Directive (2012/19/EU) and your national law. This product should be taken to a collection center licensed for the recycling of waste electrical and electronic equipment (EEE).

The mishandling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the efficient use of natural

resources. For more information about where you can take your waste equipment for recycling, please contact your local city office, or your household waste collection service.

- 18. Do not install in a confined space, such as a book case or similar unit.
- 19. Do not place naked flame sources, such as lighted candles, on the apparatus.
- 20. Please keep the environmental aspects of battery disposal in mind. Batteries must be disposed-of at a battery collection point.
- 21. This apparatus may be used in tropical and moderate climates up to 45°C.

LEGAL DISCLAIMER

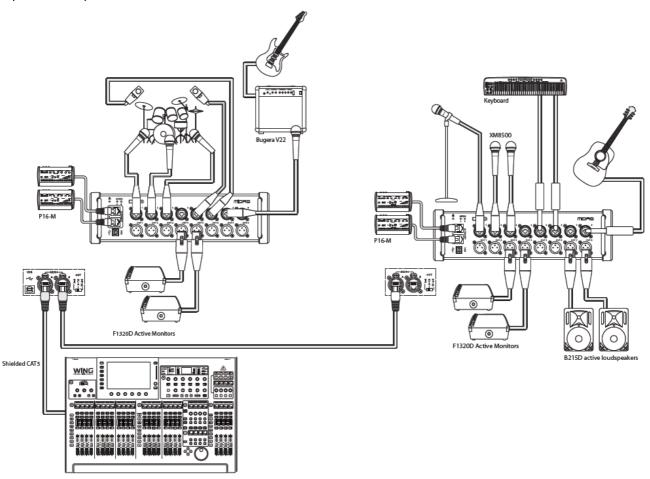
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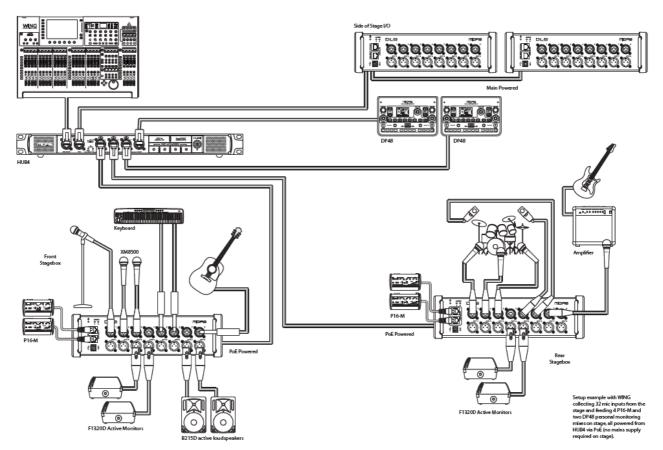
LIMITED WARRANTY

For the applicable warranty terms and conditions and additional information regarding Music Tribe's Limited Warranty, please see complete details online at community.musictribe.com/pages/support#warranty

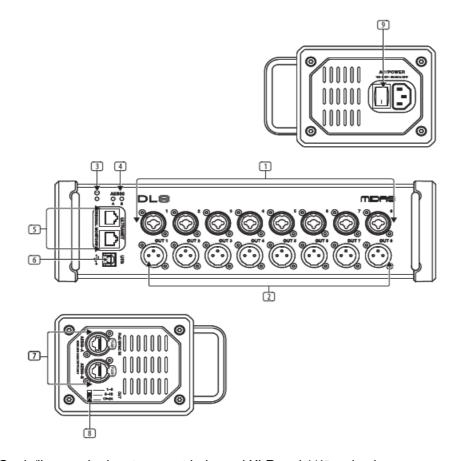
DL8 Hook-up

1. Step 1: Hook-Up





2. Step 2: Controls



- 1. Midas PRO mic/line combo inputs accept balanced XLR and 1/4" male plugs.
- 2. XLR outputs accept balanced XLR female plugs.
- 3. POWER LED lights when the unit is powered on.
- 4. AES50 LEDs light green when the corresponding AES50 port is connected and synchronized, and light red when connected but not synchronized.

- 5. ULTRANET ports allow direct connection of 2 P16-M personal mixers. The ports provide phantom power, allowing the P16-M units to operate without additional power supplies.
- 6. USB port can be used to connect a PC for updating the firmware.
- 7. AES50 ports A and B allow connection to a SuperMAC digital multi-channel network via shielded Cat-5e Ethernet cable with terminated ends compatible to Neutrik etherCON. The unit can also be powered via compatible Midas hubs connected to port A. NOTE: The clock master, typically the digital mixer, must be connected to the AES50 port A, while additional stage boxes would be connected to port B. See 'Step 3: Channel Management' for details.
- 8. OUTPUT select switch determines which group of 8 AES50-A channels appear at the physical XLR output jacks. When using multiple stage boxes, this allows different output signals to be sent to each unit.
- 9. POWER switch turns the unit on and off.

3. Step 3: Channel Management

Signals are routed to and from the DL8 and a mixer or S16/DL16 via CAT-5e cable, with maximum cable runs up to 80 meters. The clock source is always received on AES50 port A, and the P-16 ULTRANET signals are carried on AES50-A channels 33-48. The 8 analog outputs can carry AES50-A channels 1-8, 9-16, or 17-24, selectable via the 3-position switch on the side of the stagebox.

44.1/48 kHz	0	output Switch		XLR analog	P-16 Ultranet
dock sync	Out 1-8	Out 9-16	Out 17-24	out 1-8	out 1-16
AES50-A	х			= AES50-A, ch01-ch08	
AES50-A		Х		= AES50-A, ch09-ch16	= AES50-A, ch33-ch48
AES50-A			х	= AES50-A, ch17-ch24	

When chaining multiple DL8 units, the input signals from the other stageboxes in the chain are sent to the first DL8 stagebox's AES50 port B. These signals are shifted up by 8 channels and then forwarded to the mixer from AES50 port A (see chart for details). The output select switch would typically be set to the '9-16' position to allow different signals to be sent from the 2 stageboxes.

	TX		RX		TX		RX	
4	A	DL8 -1 (Out 1-8)	В	—	A	DL8 -2 (Out 9-16)	В	
	1 - 8	Local In 1-8 (DL8-1)	1-8		1 - 8	Local In 1-8 (DL8-2)	1 - 8	
	9 - 16	Local In 1-8 (DL8-2)	9 - 16	K	9 - 16	—	9 - 16	K
	17-24	4	17-24	K	17-24	4	17-24	K
	25-32	◀	25-32	K	25-32	<	25-32	K
	33-40	<	33-40	K	33-40	<	33-40	K
	41-48	4	41-48		41-48	4	41-48	
	TX		RX		TX		RX	

4. From mixer

	RX		TX		RX		TX
-	A	DL8 -1 (Out 1-8)	В)	A	DL8 -2 (Out 9-16)	В
	1-8	Local XLR OUT 1-8 *	1-8	-	1 - 8	Local XLR OUT 1-8 *	1 - 8
	9 - 16	Local XLR OUT 9-16 *	9 - 16		9 - 16	Local XLR OUT 9-16 *	9 - 16
	17-24	Local XLR OUT 17-24*	17-24	-	17-24	Local XLR OUT 17-24 *	17-24
	25-32		25-32	—	25-32		25-32
	33-40	P16 OUT 1-8	33-40	-	33-40	P16 OUT 1-8	33-40
	41-48	P16 OUT 9-16	41-48	\longrightarrow	41-48	P16 OUT 9-16	41-48
	RX		TX		RX		TX

Specifications

	DL8
Processing	
	24-bit @ 44.1 / 48 kHz,
A/D-D/A conversion	114 dB dynamic range (A-weighted)
Networked I/O latency (stagebox in > console processing* > stagebo x out)	1.1 ms
Connectors	
Programmable mic preamps, designed by Midas, balanced XLR/TRS combo	8
Line outputs, balanced XLR	8
ULTRANET outputs, RJ45	
(power supplied for Behringer P16-M personal mixers)	2
AES50 port, SuperMAC networking, NEUTRIK etherCON	2
USB port for system updates, type B	1
Mic Input Characteristics (Midas PRO)	
Mic input impedance XLR jack, unbal. / bal.	5 kΩ / 10 kΩ
THD + noise, 20 dB gain, 0 dBu out	< 0.006%, unweighted
Phantom power, switchable per input	+48 V
Equivalent input noise level, XLR (input shorted)	-125 dBu, unweighted
CMRR, XLR, @ 20 dB gain (typical)	>75 dB
Input/Output Characteristics	
Frequency response @ 48 kHz sample rate	10 Hz – 22 kHz, 0 dB to -1 dB
Dynamic range, analog mic in to analog out (typical)	106 dB, 22 Hz to 22 kHz, unweighted

A/D dynamic range, mic preamp to converter (typical)	109 dB, 22 Hz to 22 kHz, unweighted
D/A dynamic range, converter and output	108 dB, 22 Hz to 22 kHz, unweighted
Crosstalk rejection @ 1 kHz, adjacent channels	100 dB
Non clip maximuminput level, XLR	+23 dBu
Line input impedance TRS jack, unbal. / bal.	5 kΩ / 10 kΩ
Non clip maximum input level, TRS	+23 dBu
Output Characteristics	
Output impedance, XLR, unbal. / bal.	50 Ω / 100 Ω
Output level, XLR, nom. / max.	+21 dBu
Residual noise level, XLR	-88 dBu, 22 Hz to 22 kHz, unweighted
Digital In/Out	
AES50 SuperMAC networking @ 48 or 44.1 kHz, 24-bit PCM	2 x 48 Channels, bidirectional
AES50 SuperMAC cable length, CAT5 shielded**	< 80 m recommended
ULTRANET networking @ 48 or 44.1 kHz, 22-bit PCM	2
ULTRANET cable length, CAT5 shielded	< 75 m
ULTRANET phantom power for P16-M personal mixers	2 powered outputs

	DL8
Power	
Switch-mode autorange power supply	100-240 V (50/60 Hz)
Power consumption	35 W
Powered over Ethernet (PoE)	AES50-A PoE/SYNC IN
Physical	
Standard operating temperature range	5°C to 40°C (41°F to 104°F)
Dimensions (H x W x D)	95 x 149 x 332 mm (3.7 x 5.9 x 13.1")
Weight	2.45 kg (5.4 lbs)

^{*} Incl. all channel and bus processing, excl. insert effects and line delays ** Klark Teknik NCAT5E-50M recommended

FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION

Behringer

DL8

Responsible Party Name: Music Tribe Commercial NV Inc.

Address: 122 E. 42nd St.1,

8th Floor NY, NY 10168, United States Email Address: legal@musictribe.com

DL8

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 his own expense. This equipment complies with Part 15 of the FCC rules. 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, including interference that may cause undesired operation.

Warning: Operation of this equipment in a residential environment could cause radio interference.

Important information:

Changes or modifications to the equipment not expressly approved by Music Tribe can void the user's authority to use the equipment.

Hereby, Music Tribe declares that this product is in compliance with Directive 2014/35/EU, Directive 2014/30/EU, Directive 2011/65/EU and Amendment 2015/863/EU, Directive 2012/19/EU, Regulation 519/2012 REACH SVHC and Directive 1907/2006/EC.

- Full text of EU DoC is available at https://community.musictribe.com/
- EU Representative: Music Tribe Brands DK A/S
- Address: Gammel Strand 44, DK-1202 København K, Denmark
- UK Representative: Music Tribe Brands UK Ltd.
- Address: 6 Lloyds Avenue, Unit 4CL London EC3N 3AX, United Kingdom

Documents / Resources



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DL8 PoE Powered 8 Input 8 Output Stage Box, DL8, PoE Powered 8 Input 8 Output Stage Box, Input 8 Output Stage Box, Output Stage Box, Stage Box

References

- Music Tribe
- Music Tribe
- Music Tribe
- Music Tribe
- User Manual

Manuals+, Privacy Policy