



XL8 Live Performance Systems

Introduction

Digital goes Midas. The industry held its collective breath when the XL8 was unveiled in 2006 as this was not merely another digital mixing console. It brought audio control and distribution, in fact all aspects of the live performance to one single control centre. Being a Midas it coupled sound quality, flexibility and reliability with an ease and familiarity of use unrivalled by other digital control surfaces.

The XL8 has been designed so the engineer doesn't have to think in terms of numbers, pages or layers. The user navigates the system and identifies channels by colours and groupings, which they themselves create. This method allows an individualised approach to mixing, rather than working within hardware-dictated numerical limitations.

Overview:

- Five "Daylight Visible" Screens with 3-way KVM switch
- 432 inputs and 432 outputs connectivity
- Direct Point to Point routing, any in to any out with metering
- 4 I/O box alternatives: distributable I/O with 600m range
- 112 mix inputs onto 51 buses
- 12 VCAs
- 8 POPulation Groups
- 4 EQ types and 5 dynamics styles as standard
- 16 effects devices
- Up to 51 1/3 octave graphic EQs (37 standard)
- Configurable "Area B" for dual operators
- 2 independent stereo solo systems
- 55 P&G Motorised Faders
- Surround panning including 5.1, Quad and LCRS
- 500m bi-directional 192+192 channel redundant snake
- All I/O units connected by AES50 bi-directional 24+24 channel CAT-5e
- All I/O can be 100 metres from Front of House or Stage router positions
- 8 AES50 Ports on the Control Centre and 10 on stage router (DL461) for I/O expansion
- Scene by scene re-assignment of routing and effects
- All DSP processing, AD/DA conversion and networked audio is at 96kHz sample rate
- All DSP processing, AD/DA conversion and networked audio is fully and automatically time aligned
- Extensive and comprehensive scene automation system
- Show files are fully compatible across software releases and all Midas digital consoles
- MIDI and GPIO automated events at FOH and stage
- Ethernet tunnel provided for 3rd part communications through snake
- Dual-Redundant Linux Control Computers
- Dual-redundant audio networks
- DSP, I/O and controls redundancy
- Single and dual (for FOH + monitors) versions
- Three year factory warranty

Accessories:

- Klark Teknik DN9696 96 track High Resolution Audio Recorder
- Klark Teknik DN9650 Network Bridge (MADI, Dante, Aviom, Ethersound, CobraNet)





XL8 Live Performance System Touring

The touring version of the XL8 Live Performance System has been especially configured for high profile concerts, festivals and major events. Main inputs are connected via DL431 remote control 5-way mic splitters which have three fully independent non-interacting mic pres per input. Two of these are remote controllable (2.5dB steps) and the third is fixed gain, feeding out as analogue via isolating transformers. The two remote control mic pres separately feed both Midas digital networks and analogue outputs. The DL431 units can be shared by the FOH and monitor XL8 consoles providing a cost effective system but still retaining independent analogue mic pre remote gain control for the two engineers. Both Midas digital network connections are duplicated for redundancy and the DL431 also has dual-redundant power supplies.

Audio outputs are routed to any of the 5 supplied DL451 configurable I/O units, each of which can have up to 24 outputs and 24 inputs depending on I/O card options fitted. Any DL451 (and DL431) unit can be up to 100m from either the stage router or FOH location. The stage router can be up to 500m from FOH. All of these connections are dual redundant, as are the network routers.

XL8 Touring Configuration:

- Five "Daylight Visible" Screens with 3-way KVM switch
- 432 inputs and 432 outputs connectivity
- 112 mix inputs onto 51 buses
- 12 VCAs
- 8 POPulation Groups
- 16 effects devices
- Up to 51 Klark Teknik EQs with DN9331 Rapide control
- Configurable "Area B"
- 150m bi-directional 192+192 channel redundant fibre optic snake (max 500m)
- Local I/O
 - 1 x DL451 Up to 24 in / 24 out configurable I/O
- Stage I/O
 - 4 x DL451 Up to 24 in / 24 out configurable I/O
 - 4 x DL431 24 in 5 way split: fixed configuration
 - 2 x DL461 Audio System Signal Router
- Klark Teknik DN9331 Rapide Graphic Controller as standard
- Control centre supplied in flight case

Additional I/O Box Options:

- DL251 48 in / 16 out fixed configuration I/O
- DL351 Up to 64 in / 64 out configurable I/O

I/O Card Options:

- DL441 Analogue Mic / Line Input "I" card
- DL442 Analogue Output "O" card
- DL443 8 Analogue Line In and 8 Analogue Line Out "TRS" card
- DL452 AES/EBU Input and Output "D" card
- DL444 8 Analogue Mic In and 8 Analogue Line Out "D Sub" card

Accessories:

- Klark Teknik DN9696 96 track High Resolution Audio Recorder
- Klark Teknik DN9650 Network Bridge (MADI, Dante, Aviom, Ethersound, CobraNet)

Control Centre Weight and Dimensions:

Width 1875mm x Depth 1054.27mm (73.82" x 41.51") Weight: 159kg (350.53lbs) *

*weights are approximate and out of flight case



XL8 Live Performance System Install

The Install Version of the XL8 Live Performance System has been especially configured to be cost effective for permanent installations. The I/O XLRs are replaced by high-density D-type connectors. Each of the four remote DL451 24 channel in and 24 channel out I/O boxes can be separately placed up to 100m from the stage router unit, which can itself be up to 500m from the control surface. The DL444 I/O cards in the DL451 frame each have 8 channels of remote controlled Midas mic pre with 2.5dB steps as well as 8 line level outputs.

This version is ideally suited to theatres, multi-purpose venues, house-of-worship (and touring applications where 5-way active mic split may not be required).

XL8 Install Configuration:

- Five "Daylight Visible" Screens with 3-way KVM switch
- 432 inputs and 432 outputs connectivity
- 112 primary inputs
- 12 VCAs
- 8 POPulation Groups
- 16 effects devices
- Up to 51 Klark Teknik EQs with DN9331 Rapide control
- Configurable "Area B"
- 150m bi-directional 192+192 channel redundant fibre optic snake (max 500m)
- Local I/O
 - 1 x DL451 pre-configured with DL441 "I" card, DL442 "O" card and DL452 "D" card
- Stage I/O
 - 4 x DL451 pre-configured with DL444 "D Sub" cards
 - 2 x DL461 Audio System Signal Router
- Control centre supplied in crate

Additional I/O Box Options:

- DL251 48 in / 16 out fixed configuration I/O
- DL351 Up to 64 in / 64 out configurable I/O
- DL431 24 in 5 way split: fixed configuration I/O

I/O Card Options:

- DL441 Analogue Mic / Line Input "I" card
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Accessories:

- Klark Teknik DN9331 Rapide Graphic Controller
- Klark Teknik DN9696 96 track High Resolution Audio Recorder
- Klark Teknik DN9650 Network Bridge (MADI, Dante, Aviom, Ethersound, CobraNet)

XL8 Variants

The prepackaged Touring and Install versions of the XL8 represent just two examples of I/O connectivity. The comprehensive and easy to use Midas networking allows for many variations of I/O type and connectivity and covers a wide range of system costs. Please contact your distributor to discuss other options.

Audio System Signal Router

Midas DL461

The DL461 is a 3U 19" rack unit, which performs the stage-to-console link using a single CAT-5e cable (under 100 metres) or fibre-optic link (up to 500 metres) for the XL8 with redundant backup links.

In addition to audio and control connections to the ten DSP modules it features ten AES50 connections for local I/O, as well as BNC and AES3 word clock interfaces and Ethernet tunnel. Dual DL461s are supplied with each XL8 system providing full network redundancy to both FoH and I/O units.

Overview:

- Two DL461s included in a XL8 Live Performance System
- Integrated open-architecture AES50 digital audio distribution
- Fully duplicated network for redundancy
- Up to 100 metres of dual redundant connectivity between hardware elements with CAT-5e
- Up to 500m of dual redundant connectivity between DL461 and control surface with optical fibre
- Automatic integral delay management system - audio outputs time and phase coherent
- Flexible, expandable hardware system
- Ethernet TCP-IP tunnel at 10Mbits/sec for third parties
- 3U



Audio System Signal Processor

Midas DL471

The DL471 is a 1U 19" rack unit, which forms part of the XL8 modular DSP engine.

It features its own discrete power supply, AES50 and Ethernet interfaces, as well as a dual, ultra high-speed, contra-rotating and self healing data loop for direct processor to processor communications.

Each XL8 system includes ten DL471 units of which one is a redundant hot spare (n+1 resilience model).

Overview:

- Ten DL471s included in a XL8 Live Performance System
- Dual redundant AES50 ports
- Dual redundant Ethernet ports
- Advanced FPGA architecture
- 4.8 Gigaflops of processing power per DL471
- 1U

