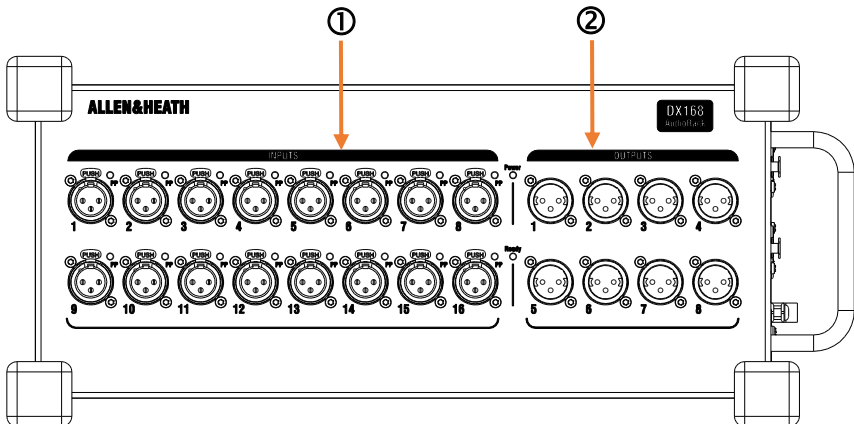# ALLEN&HEATH

DX168

The DX168 is a portable, rugged I/O Expander for Allen & Heath 96kHz digital mixing systems. It provides 16 remote controlled mic/line preamps and 8 XLR line outputs. It connects to the mixer over a single Cat5e cable.

A second DX168, DX012 or DX164-W can be connected when running in Cascade mode. Alternatively, a redundant connection can be made to compatible hardware.

The DX168 can be operated horizontally with the connectors facing upward or sideward, or vertically to save space on stage. It can also be mounted in a 19" rack or fligthcase using the optional **AB1608-RK19** kit. A hard-wearing padded polyester carry case is also available, part number **AP9932**.

ⓘ Update the mixing system to the latest available version of firmware before connecting the DX Expander. The unit might operate incorrectly when running earlier firmware.
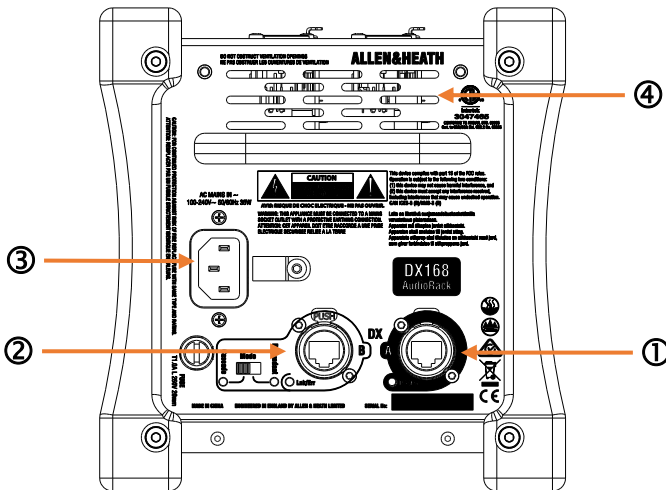
Front panel

① **Input sockets**   Balanced XLR mic/line inputs with +48V Phantom Power indicator. The preamps are built into the DX168 and their Gain, Pad and +48V are controlled from the mixing system.

The +48V indicator detects voltage at the socket whether supplied by the DX168 or received from an external source.

② **Output sockets** Balanced XLR outputs operating at nominal +4dBu level.

Side panel

① **DX A** EtherCon port for connection to the mixing system. The cable carries the audio signals as well as preamp control and system status data.

② **DX B** EtherCon port for daisy chaining of a second unit or cable redundancy. Switch to **Redundant** for 2 cable connection to compatible hardware e.g. dLive S Class or DX Link card. Switch to **Cascade** for connection to a second DX168, DX012 or DX164-W unit.

④ **Mains power input**   IEC connector and fuse for the built-in universal voltage PSU. This accepts voltages from 100 to 240V AC 50/60Hz. Secure the cable to the plastic P-clip using a T20 screwdriver.

⑤ **Vents** Ensure good ventilation at the sides and back of the unit. Avoid obstruction of vents while operating. Avoid dirt or liquid ingress.

Cables

Cat5e or higher STP cable is required for DX connections with a maximum cable length of 100m per connection.
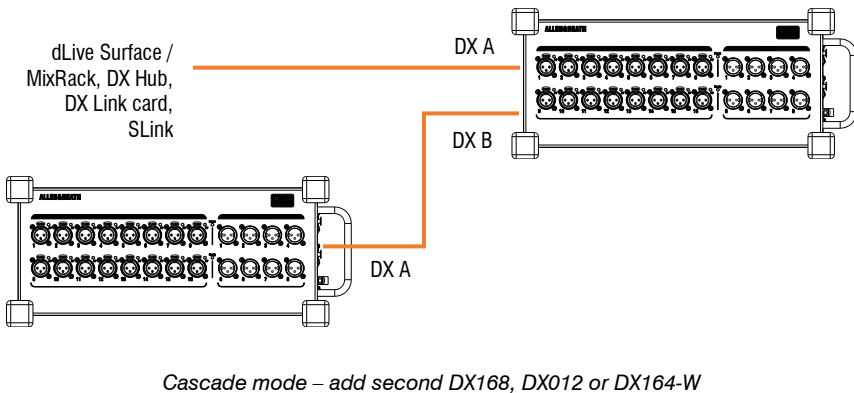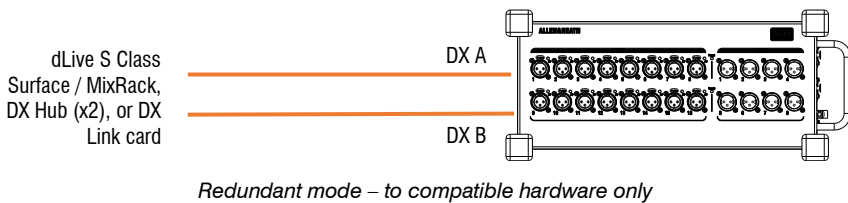
Allen & Heath can provide a number of Cat5e and Cat6 cables suitable for use with the DX Expander:

AH9997   2m CAT5e cable with Neutrik EtherCon locking connectors

AH10887   100m drum of CAT6 cable with Neutrik EtherCon locking connectors
AH10886   80m drum of CAT6 cable with Neutrik EtherCon locking connectors
AH10885   50m drum of CAT6 cable with Neutrik EtherCon locking connectors
AH10884   20m drum of CAT6 cable with Neutrik EtherCon locking connectors

Contact your local A&H dealer for more information.

Connection

dLive S Class Surface / MixRack, DX Hub (x2), or DX Link card

DX A

DX B

Redundant mode – to compatible hardware only

dLive Surface / MixRack, DX Hub, DX Link card, SLink

DX A

DX B

DX A

Cascade mode – add second DX168, DX012 or DX164-W

ⓘ Update the mixing system to the latest available version of firmware before connecting the DX Expander. The unit might operate incorrectly when running earlier firmware.

Specification

Mic/Line XLR Inputs	Balanced XLR, +48V phantom power
Mic/Line Preamp	Fully recallable
Input Sensitivity	-60 to +15dBu
Analogue Gain	+5 to +60dB, 1dB steps
Pad	-20dB Active PAD
Maximum Input Level	+30dBu (PAD in)
Input Impedance	>4kΩ (Pad out), >10kΩ (Pad in)
Mic EIN	-127dB with 150Ω source
Analogue XLR Outputs	Balanced, Relay protected
Output Impedance	<75Ω
Nominal Output	+4dBu = 0dB meter reading
Maximum Output Level	+22dBu
Residual Output Noise	-92dBu (muted, 20-20kHz)
Operating Temperature Range	0°C to 40°C (32°F to 104°F)
Power	
Mains Voltage Operating Range	100-240V AC, 50/60Hz
Mains Power Consumption	20W max
Dimensions and Weight	*Width x Depth x Height x Weight*
DX168	410 x 190 x 185 mm x 4.6kg
	(16.1" x 7.5" x 7.3" x 10.1lbs)