ALLEN&HEATH

DT168

Getting Started Guide

The DT168 is a portable, rugged Dante I/O unit. It can be used to complement Allen & Heath digital mixing systems on a Dante network. It provides 16 remote controlled mic/line preamps and 8 XLR line outputs. It connects to the Dante network over a single Cat5e cable, or two cables for redundancy.
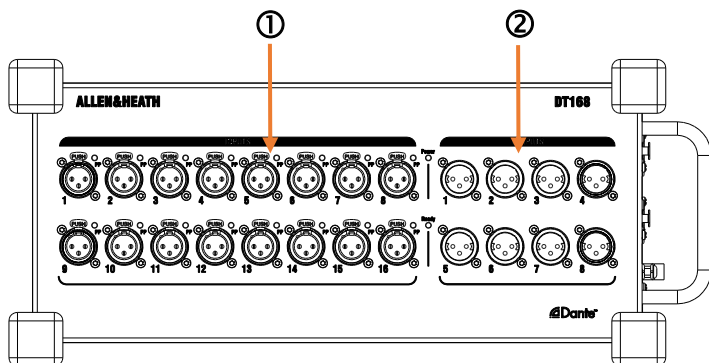
The DT168 can be operated horizontally with the connectors facing upward or sideward, or vertically to save space on stage. It can also be mounted in a 19" rack or flight case using the optional **AB1608-RK19** kit. A hard-wearing padded polyester carry case is also available, A&H part number **AP9932**.

Software and firmware

Visit the Audinate website to learn more about Dante, and download Dante Controller to route audio and configure devices on a Dante network: https://www.audinate.com/

ⓘ Preamp control of the DT168 by an SQ mixer requires SQ firmware V1.4 or higher and SQ Dante card firmware V1.0.5+.

ⓘ Preamp control of the DT168 by a dLive mixer requires dLive firmware V1.8 or higher and a dLive M-DL-Dante 64x64 or 128x128 card. Use of the iLive/GLD M-Dante card is not supported.

ⓘ Check www.allen-heath.com for the latest DT168 firmware and instructions on how to update it.

Front panel

① **Input sockets**   Balanced XLR mic/line inputs with +48V Phantom Power indicator. The preamps are built into the DT168 and their Gain, Pad and +48V are controlled from the network.

The +48V indicator detects voltage at the socket whether supplied by the DT168 or received from an external source.
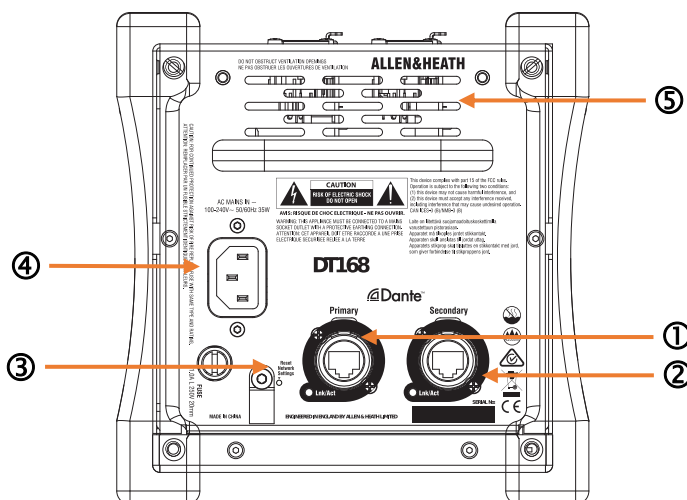
② **Output sockets**   Balanced XLR outputs operating at nominal +4dBu level.

Side panel

① **Dante Primary**   EtherCon port for connection to the Dante network. The cable carries the audio signals as well as preamp control data.

② **Dante Secondary**   Can be set to Redundant mode or to Switched mode for connection to multiple devices, for example two mixing consoles. Set the port mode in Dante Controller.

③ **Reset Network settings**   Hold down the recessed switch for 10 seconds to reset the network settings for the DT168. This will delete any static IP address and revert to factory default (DHCP / zero-conf).
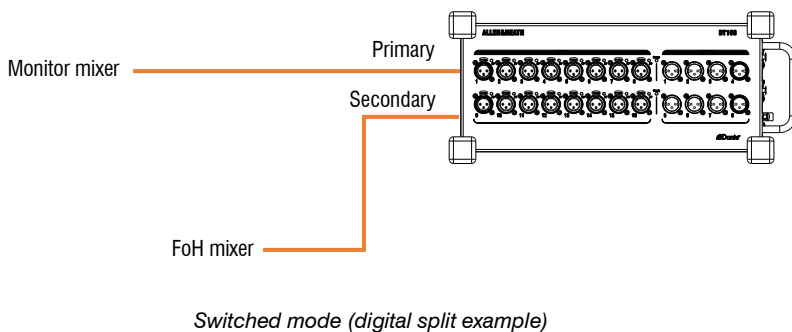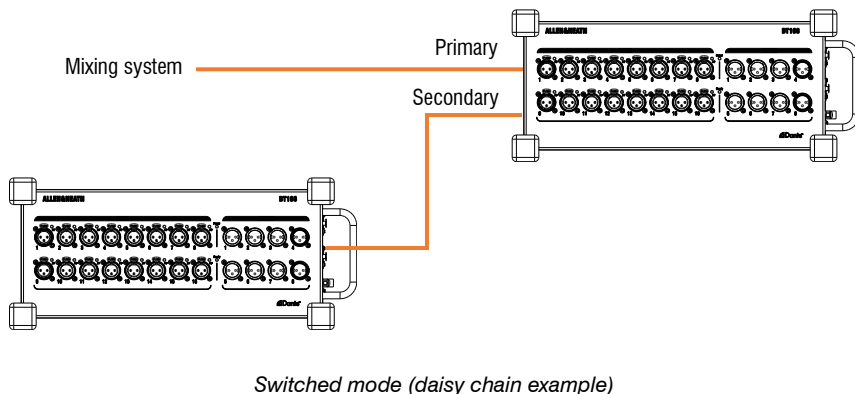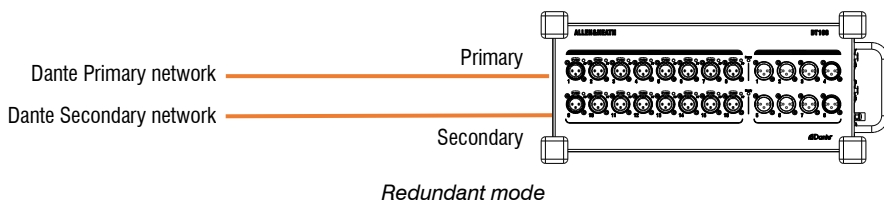

④ **Mains power input**   IEC connector and fuse for the built-in universal voltage PSU. This accepts voltages from 100 to 240V AC 50/60Hz. Secure the cable to the plastic P-clip using a T20 screwdriver.

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

Connection

Dante Primary network — Primary
Dante Secondary network — Secondary

Redundant mode

Mixing system — Primary
Secondary

Switched mode (daisy chain example)

Monitor mixer — Primary
Secondary

FoH mixer

Switched mode (digital split example)

Setting clock and patching signals

Use Dante Controller's **Routing** tab to patch signals between Dante devices. When a valid DT168 socket is routed to a dLive / SQ Dante card, and patched to an Input channel, the dLive / SQ will present preamp gain, +48V and Pad controls for the socket.

Use Dante Controller's **Clock Status** tab to select the Dante network master. The DT168 should always be slave on the Dante network, with the mixer typically set to "*Preferred Master*" and "*Enable Sync To External*".

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)
Dante	Switched or Redundant mode, 48kHz/96kHz
Power and Temperature	
Mains Voltage Operating Range	100-240V AC, 50/60Hz
Mains Power Consumption	40W max
Operating Temperature Range	0°C to 40°C (32°F to 104°F)
Dimensions and Weight	*Width x Depth x Height x Weight*
DT168	410 x 190 x 185 mm x 4.6kg
	(16.1" x 7.5" x 7.3" x 10.1lbs)