

The DQRack is the optimum amplification and control package for any EM Acoustics system, intended to offer a standardised solution primarily for mobile and touring applications. The combination of three Dante-enabled DQ20D amplifiers along with a dedicated signal I/O and output/mains power I/O package provides vital flexibility and effortless expandability.

FEATURES AND BENEFITS

- 12-channel touring amplifier rack
- · Analogue, AES and Dante inputs and distribution
- 96kHz sample rate throughout
- Dedicated output and mains power distribution
- 32A 3-phase universal power supplies
- · Concealed integrated flying system
- Shock-mounted frame for all electronics contained within rugged plywood construction

APPLICATIONS

- Concert touring
- Large venue installation

The DQRack is a flyable touring rack comprising 12 channels of premium Class-D amplification within the 10U shock-mounted frame. Built for a life on the road, the DQRack is the optimum solution for touring with unmatched versatility and for a wide variety of different applications. The DQRack contains three Dante-enabled DQ20D amplifiers, a dedicated signal and data I/O unit and a dedicated output and mains power distribution unit to give maximum flexibility in use. All inputs and available from the front panel, whereas outputs and mains power are presented on the rear to keep cabling neat and efficient.

The SiglO input and data distribution unit provides four analog inputs – linked to all amplifiers – as well as the individual AES input and buffered AES output for each amplifier. It also contains a managed Cisco network switch to generate separate VLANs for Dante Primary, Secondary and Control networks, with trunk ports to allow linking of racks with the minimum of cable, and optional connectors for optical fibre. Status LED's for the network switch are presented on the front panel for easy identification.

The PowerlO unit is presented on the rear of the DQRack and offers all connections for mains power and loudspeaker output distribution. Outputs are provided in two formats – two 19-pole connectors handle 6 amplifier channels each (identified by the clear graphical legend by each connector) and are the optimum choices for large array applications. For increased flexibility, each amplifier also has its own speakON NL8 connector that carries the four channels of each specific amplifier. Mains



input to the DQRack is handled by a 32A 3-phase connector on a trailing cable, and a 32A 3-phase output is provided for linking racks. Additionally, two local power outlets are also provided – an internal Neutrik powerCON connector supplies power to the SiglO unit, and an external 20A powerCON connector is provided for local power needs - this output is isolated on its own MCB.

The mechanical package of the DQRack is another area where no compromises have been made. All components are housed within a shock-mounted frame, ensuring maximum protection against damage in transit. The external casing is manufactured from premium Birch plywood, coated in the same 3-step polyurethane finish as our loudspeaker products making the DQRack not just aesthetically consistent but inherently rugged and reliable. Sliding rack doors minimise wasted space, and the external dimensions are optimised for efficient truck pack. Concealed within the sides of the DQRack is a simple and efficient flying system – which allows up to three DQRack units to be safely suspended from the optional FG-DQRack flying grid. For flying or stacking, the wheelboard is easily removable from the base of the DQRack to allow the flying hardware to engage between racks. The flying system doubles as a means of safely locking stacked racks together – although recesses for castors to sit in are also provided for temporary stacking.

The DQRack is ideal for any EM Acoustics touring loudspeaker system but has particular merit with HALO-A and HALO-B line array systems.





TECHNICAL SPECIFICATIONS

DQRACK CONTENTS 3 x DQ20D advanced system amplifiers

SigIO input distribution unit

PowerIO mains/output distriburion unit

NET WEIGHT 110.5kg / 243.1lbs

DIMENSIONS 786 (30.9) x 607 (23.9) x 695 (27.4) mm/(ins) (including wheelboard)

CONSTRUCTION 15mm (5/8") multi-laminate Birch plywood – rebated, screwed and glued

Finished in impact and weather resistant polyurethane

RIGGING AND HARDWARE Four-point concealed flying system, ultra-high tensile steel

Rated to 3 DQRacks at 10:1 safety factor

Four flush handles

Removable locking wheelboard 12 channels, 5000W RMS @ 2 ohms

OUTPUT POWER 12 channels, 5000W RMS @ 2 ohms

SIGIO CONNECTIVITY 4 x analog input & link output (linked to all amplifiers)

3 x AES input (one per amplifier) 3 x AES output (one per amplifier) 2 x Dante Primary RJ45 2 x Dante Secondary RJ45 2 x Control Network RJ45

2 x Trunk Port RJ45 1 x local network RJ45

2 x GBIC optical connectors (optional)

SIGIO INDICATORS Status LEDs for all network switch ports

POWERIO CONNECTIVITY

32A IEC 60309 3-phase input (male on trailing cable)

32A IEC 60309 3-phase output (female on chassis)

20A Neutrik powerCON outlet 2 x 19-pole output connectors 3 x Neutrik NL8 output connectors

1 x Neutrik 20A powerCON output connector

POWERIO INDICATORS

3 x indicator LEDs (one per phase)

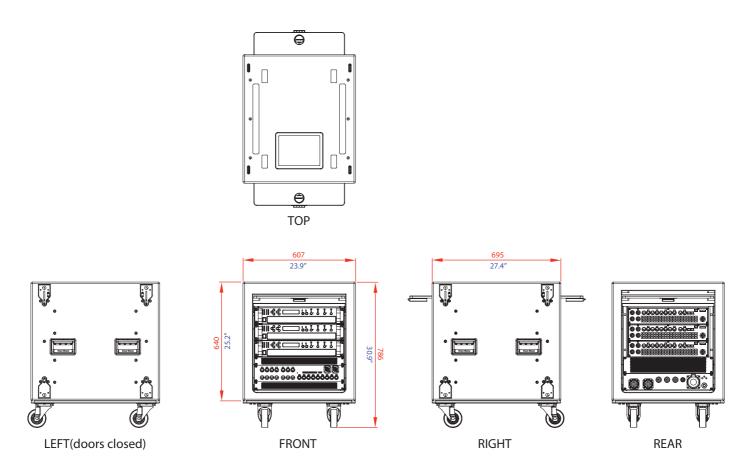
1 x 20A MCB protecting local output

ACCESSORIES

FG-DQRack master flying grid for DQRack

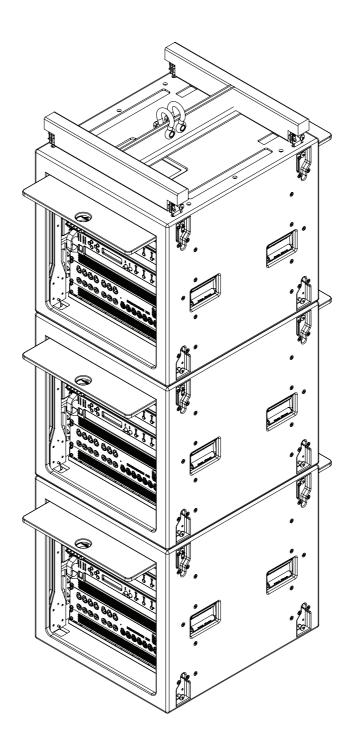


ENGINEERING DRAWING





RIGGING EXAMPLE



3 x DQRack flown with FG-DQRack