Install

QFLEX 16-WP

Digitally Steerable Powered Column Array Loudspeaker with 16 Independently Controlled Drivers, Integrated DSP and BeamEngine GUI Control for Installation Applications (Weather Protected)

- Digitally steerable column array speaker system provides high intelligibility speech and music reproduction

- 8 3" low frequency drivers and 8 1" high frequency drivers with individual 100 Watt Class D amplifiers

- Class leading ±70° steering control with 16 channels of integrated DSP and amplification

- Intuitive BeamEngine GUI for asymmetric pattern creation and even near and far field SPL coverage

- High density array of transducers with proportional frequency spacing prevents aliasing artefacts

- Ideal for the most challenging acoustic environments due to extended frequency range steering control

- For installation applications with coverage distances up to 25 m (82')

- Fully PA/VA compliant

- Fully integrated amplified speaker system connects to other TANNOY products via VNET

- Input accessory options for constant voltage systems and Audinate Dante* digital audio networks

- All components weather and dust resistant to IP54

- Architecturally styled aluminium enclosure with a semi matt white painted finish

- Corrosion resistant aluminium perforated grille

The QFLEX 16-WP is a powered, digitally steerable multi-channel, column array loudspeaker designed as a complete solution for installed applications with challenging acoustics, such as houses of worship, transportation hubs, convention centres, conference facilities, shopping malls, performing arts centres and museums. Certified for water and dust ingress protection to IP54 standard, QFLEX 16-WP is an exceptional choice for indoor swimming pools or work areas with unusually high levels of dust or moisture, as well as outdoor applications where weather conditions are moderate. The heart of the system is our proprietary VNET loudspeaker networking platform, which comprises both software and hardware DSP components that produce extremely-high speech intelligibility, impactful music reinforcement, and complete loudspeaker system diagnostics and monitoring.

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- Included custom brackets allow quick and accurate installation

- AES3 input and link connections on RJ-45 connectors with internal sample rate conversion up to 96 kHz

- 10-Year Warranty Program*

- Designed and engineered in the U.K.

Class-Leading Control

While many competing steerable arrays allow only a modest steering range across specific frequencies, the QFLEX 16-WP has a class-leading ±70° steering control, plus 16 channels of integrated DSP and amplification for consistent and highly intelligible full-range voice and music applications.

A Revolution in Sound Technology

The first digitally steerable column array loudspeaker of its kind, QFLEX 16-WP's revolutionary BeamEngine technology steers the the full-range sound away from surfaces that cause reflections. The intuitive BeamEngine GUI allows the designer to specify target areas. Rather than only providing a limited palette of opening and steering angles, the BeamEngine GUI generates a steering algorithm that is tailored for that specific area. The resulting asymmetrical pattern delivers similar sound pressure levels (SPL) in both the near and far field for superb coverage and intelligibility – all in a very aesthetically-pleasing package.
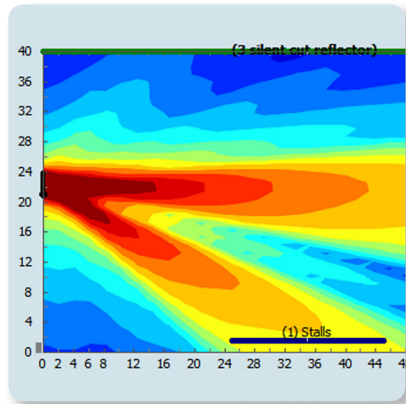
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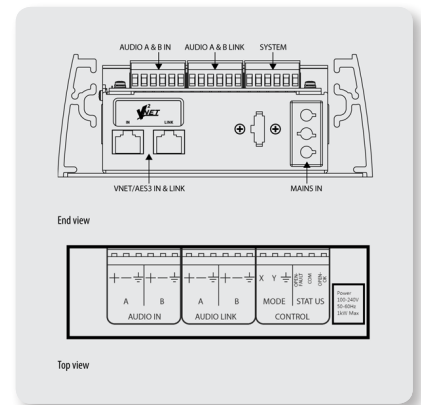GUI Control for Installation Applications
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Drivers, Power & DSP

The QFLEX 16-WP column array loudspeaker comprises eight 3" low frequency drivers and eight 1" high frequency drivers, each with their own individual 100 Watt Class D amplifier and integrated cutting edge DSP. Presented in a high density array with proportional frequency spacing, QFLEX 16-WP's drivers provide digitally-steerable coverage for distances up to 25 m (82') – with no aliasing artefacts. A robust internal DSP engine works seamlessly with the proprietary VNET and BeamEngine software, both of which are available for free download at tannoy.com.

Scalability

Designed to provide premium-grade performance as a standalone self-powered column array, QFLEX 16-WP is also an exceptional choice for multiple-column configurations consisting of other TANNOY VNET enabled products. Implementation of the network between nodes is via high-quality rugged Neutrik Ethercon connectors, which are compatible with standard RJ45 plugs, and CAT5 cable. Each speaker has a unique address for auto-location on the network.

System Add-Ons

A wide range of accessory options are available for the VNET-enabled QFLEX 16-WP including: The VNET ETHERNET INTERFACE; VNET USB RS232 INTERFACE; VNET2-AES INTERFACE, VNET INTERFACE POWER SUPPLY; VNET INTERFACE RACK MOUNT; SENTINEL SM1, for monitoring VNET networked PA/VA systems, as well as the QFLEX ISOLATOR, for eliminating potential ground/hum issues.
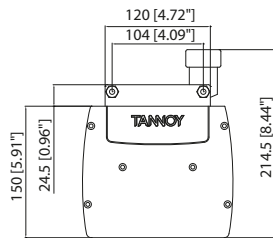
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IP54 & PA/VA Compliant

In addition to its IP54 water and dust resistance certification, QFLEX 16-WP's high level of telemetry functionality renders it fully PA/VA compliant for use in any life safety or mass notification environment.

Build Quality

The architecturally styled corrosion resistant aluminium enclosure and perforated grille are finished in a semi matt white paint. The QFLEX 16-WP also includes the necessary custom mounting hardware for quick and accurate installation.

You Are Covered

We always strive to provide the best possible Customer Experience. Our products are made in our own MUSIC Tribe factory using state-of-the-art automation, enhanced production workflows and quality assurance labs with the most sophisticated test equipment available in the world. As a result, we have one of the lowest product failure rates in the industry, and we confidently back it up with a generous Warranty program.
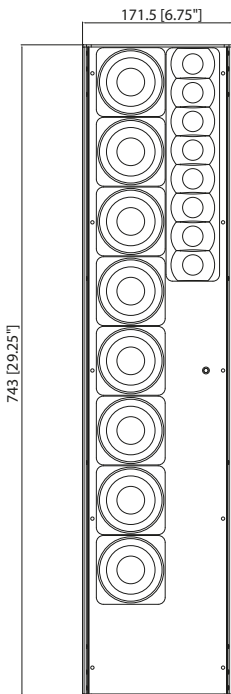
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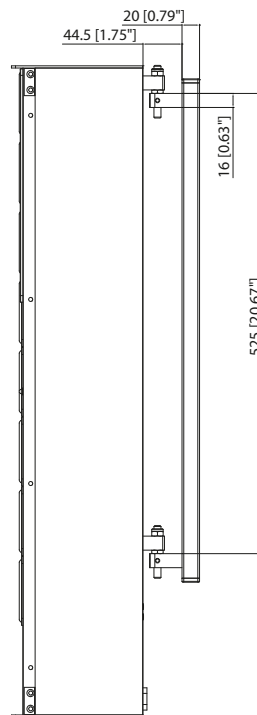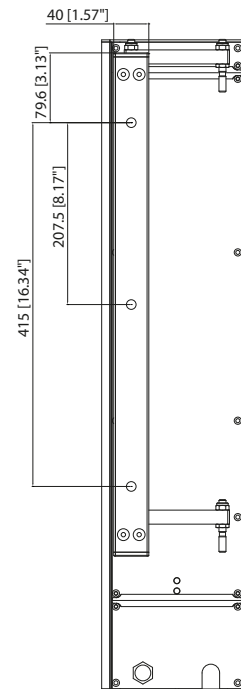(Weather Protected)

Dimensions

TOP

FRONT

SIDE

BACK

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Technical Specifications

Configuration	
4" LF	—
3" LF	8
1" HF	8
No. of amp channels 100 W (RMS) @ 4 Ohms	16
Vertical dispersion	Variable between 10 - 100 degrees (asymetrical & multiple beams may also be generated)
Frequency range	130 Hz - 20 kHz
Horizontal dispersion	120 degrees
Aiming Angle Limit	± 70 degrees
LF beam control limit	700 Hz
Maximum SPL @ 100 ft (30 m)*	94 dB
Column height	743 mm (29.3")
Column width	172 mm (6.7")
Column depth	150 mm (5.9")
Typical application distance**	25 m (82 ft)
Sample rate	96 kHz
Audio inputs	Analogue & AES/EBU
Weight (incl. hardware)	13.3 kg (29.3 lbs)
Accessories	VNET USB Interface, VNET Ethernet Interface, VNET2-Dante Bridge, VNET Interface Power Supply, Sentinel SM1 System Monitor, AES Break-in box, QFlex Isolator
Mains Supply	100 - 240 V~ 50/60 Hz
Power consumption	150w @ ⅛ max power

* Note: The maximum power requirements for QFlex models are 1000 W

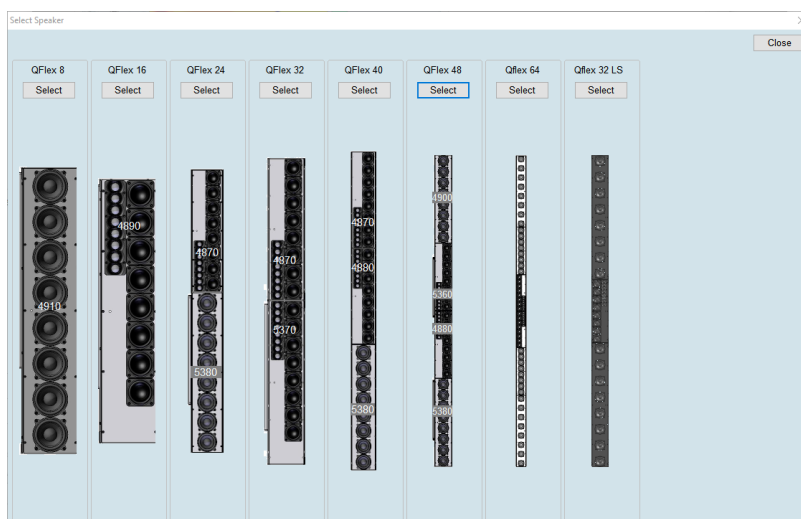**TANNOY**

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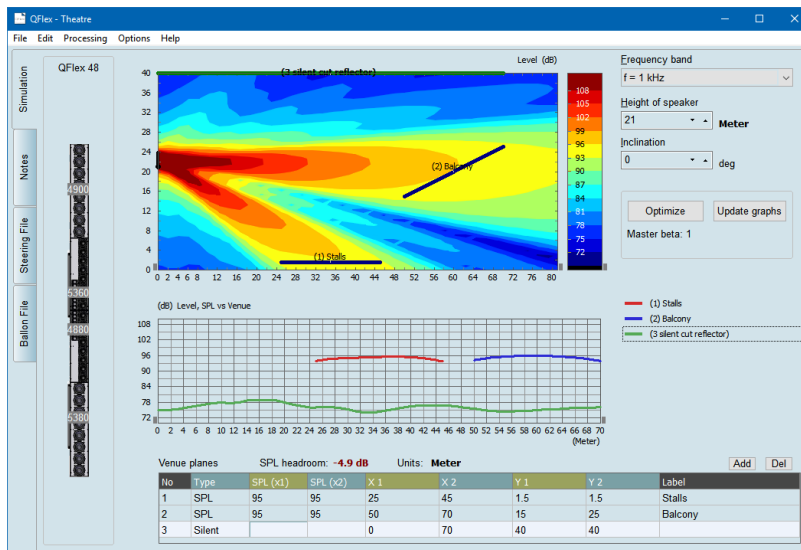
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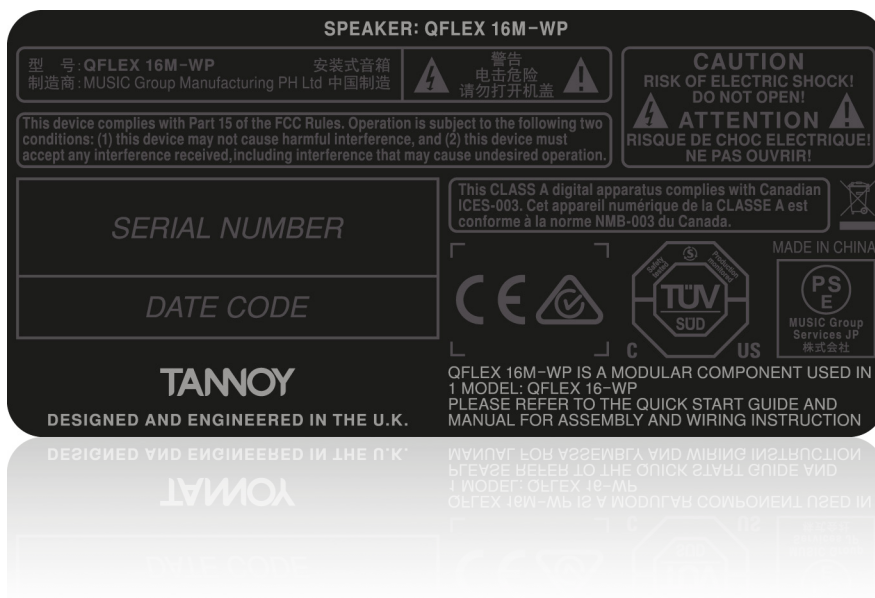(Weather Protected)

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For service, support or more information contact the TANNOY location nearest you:

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