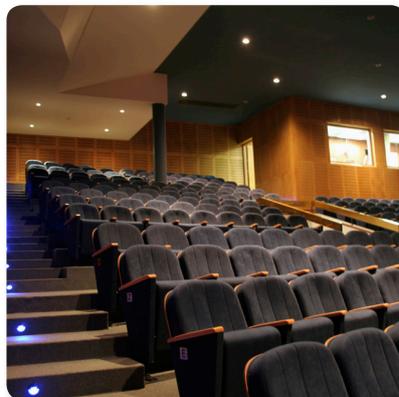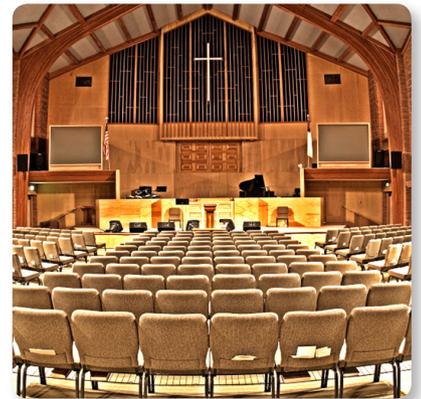# QFLEX 32

Digitally Steerable Powered Column Array Loudspeaker with 32 Independently Controlled Drivers, Integrated DSP and BeamEngine GUI Control for Installation Applications

- Digitally steerable column array speaker system provides extremely high intelligible speech and music reinforcement

- Class leading ±70° steering control with 32 channels of integrated DSP and amplification

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

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

- 16 3" low frequency drivers and 16 1" high frequency drivers with individual 100 Watt Class D amplifiers and integrated cutting edge DSP

- For installation applications with coverage distances up to 50 m (164')

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

- Fully integrated speaker system connects to other TANNOY VNET enabled products

- Accessory options for constant voltage systems, Audinate Dante* digital audio networks, Ethernet control, and AES3 break in interface

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

- Fully PA/VA compliant

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

The QFLEX 32 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. 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.

Class-Leading Control

While many competing steerable arrays allow only a modest steering range across specific frequencies, the QFLEX 32 has a class-leading ±70° steering control, plus 32 channels of integrated DSP and amplification for consistent and highly intelligible full-range voice and music applications.
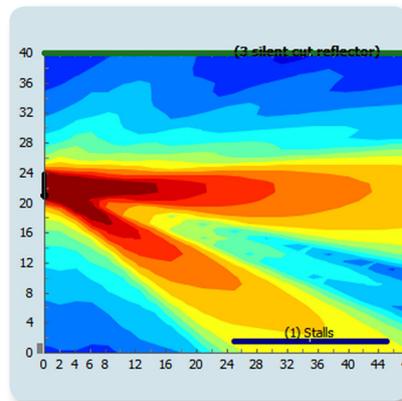
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QFLEX 32

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GUI Control for Installation Applications

- Corrosion resistant aluminium perforated grille
- Included custom brackets allow quick and accurate installation
- 10-Year Warranty Program*
- Designed and engineered in the U.K.

A Revolution in Sound Technology

The first digitally steerable column array loudspeaker of its kind, QFLEX 32'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.

Drivers, Power & DSP

The QFLEX 32 column array loudspeaker comprises sixteen 3" low frequency drivers and sixteen 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 32's drivers provide digitally-steerable coverage for distances up to 50 m (164') – 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 here.
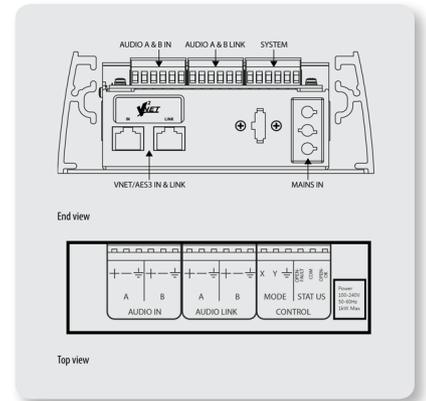
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Scalability

Designed to provide premium-grade performance as a standalone self-powered column array, QFLEX 32 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 32 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.

PA/VA Compliant

Engineered for the ultimate in reliability, QFLEX 32's high level of telemetry functionality renders it fully PA/VA compliant for use in any life safety or mass notification environment.

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Build Quality

The architecturally styled aluminium enclosure is finished in a semi matt white paint with a corrosion resistant aluminium perforated grille. The QFLEX 32 includes the necessary custom brackets mounting hardware for quick and accurate installation. Mains input and output link power connectors are Neutrik powerCON.

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.
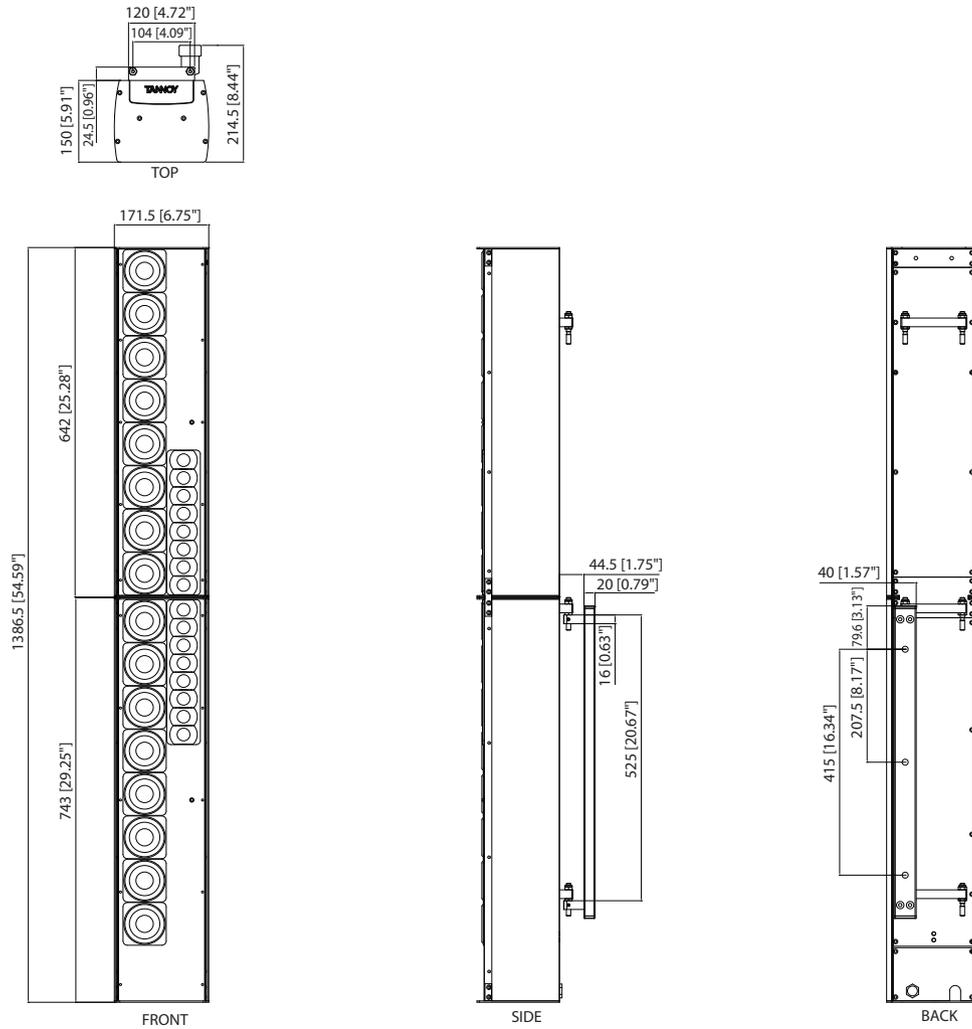
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Dimensions

TOP

FRONT

SIDE

BACK

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Technical Specifications

Configuration	
3" LF	16
1" HF	16
No. of Amp Channels 100 W (RMS) @ 4 Ohms	32
Vertical Dispersion	Variable between 10 - 100 degrees (Asymmetric & 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	400 Hz
Maximum SPL @ 100 ft (30 m)*	100 dB
Column Height	1387 mm (54.6")
Column Width	171.5 mm (6.7")
Column Depth	150 mm (5.9")
Typical Application Distance**	50 m (165 ft.)
Sample Rate	96 kHz
Audio Inputs	Analogue & AES/EBU
Net Weight	23.5 kg (51.8 lbs)
Accessories	SM1, VNET ETHERNET INTERFACE, VNET USB RS232 INTERFACE, VNET2-AES INTERFACE, VNET INTERFACE POWER SUPPLY, VNET INTERFACE RACK MOUNT, QFLEX ISOLATOR
Mains supply	100-230 V~ 50/60 Hz
Max Input power/watts	560

* Average spl (1 khz – 8 khz). Based on a mounting height of 10 m (33 ft) and a target area @ 30m (98.5 Ft) and 10 m (33 ft) wide.
Maximum attainable spl is dependant on the dimension of the target area(s). Exact figures can be derived in the beamengine™ programme.
** Based on the above venue criteria achieving 95 db spl at the quoted distance.

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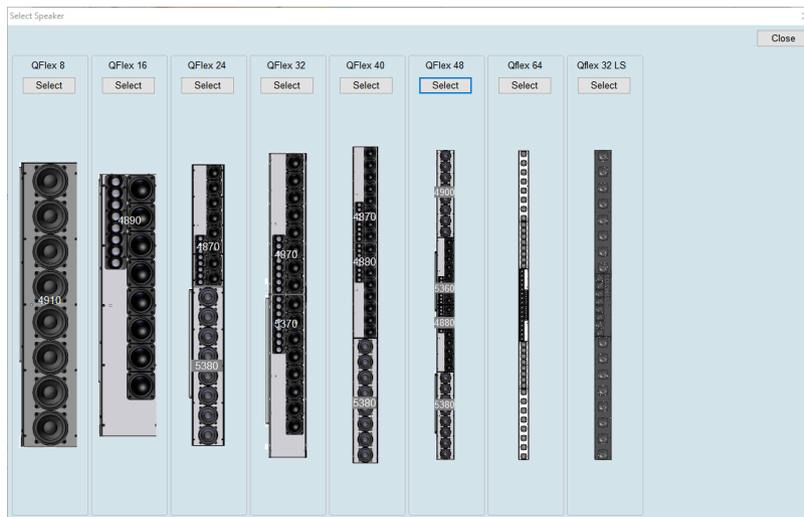Digitally Steerable Powered Column Array
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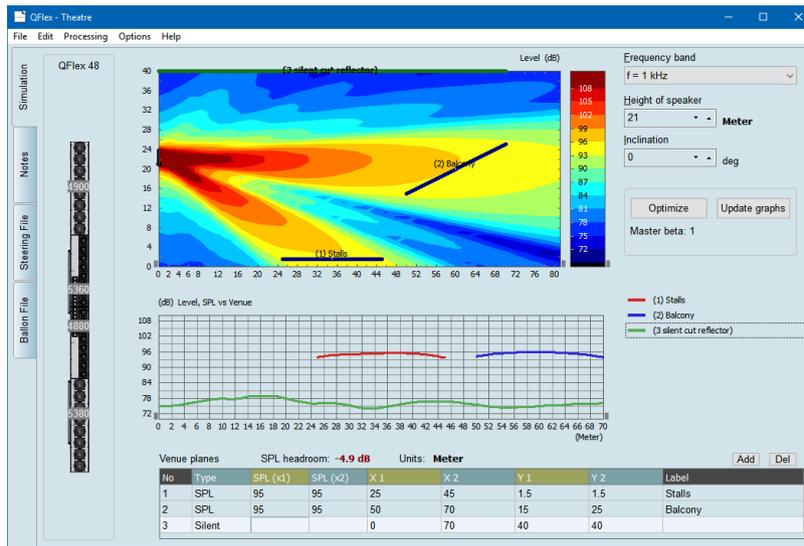
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QFLEX 32
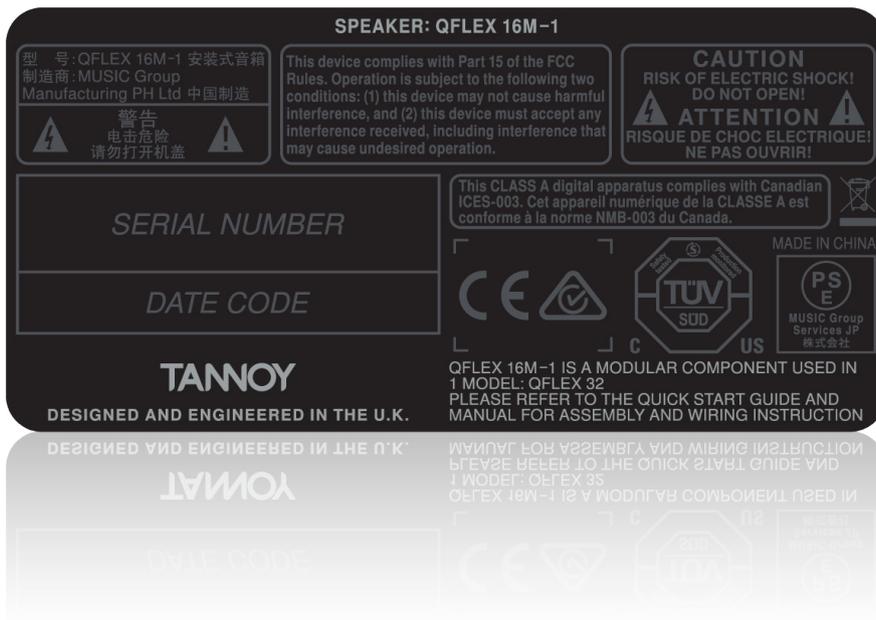
Digitally Steerable Powered Column Array
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SPEAKER: QFLEX 16M-1

型　号：QFLEX 16M-1 安装式音箱
制造商：MUSIC Group
Manufacturing PH Ltd 中国制造

警告
电击危险
请勿打开机盖

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION
RISK OF ELECTRIC SHOCK!
DO NOT OPEN!
ATTENTION
RISQUE DE CHOC ELECTRIQUE!
NE PAS OUVRIR!

SERIAL NUMBER

DATE CODE

This CLASS A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la CLASSE A est conforme à la norme NMB-003 du Canada.

MADE IN CHINA

TANNOY

DESIGNED AND ENGINEERED IN THE U.K.

QFLEX 16M-1 IS A MODULAR COMPONENT USED IN 1 MODEL: QFLEX 32
PLEASE REFER TO THE QUICK START GUIDE AND MANUAL FOR ASSEMBLY AND WIRING INSTRUCTION

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

Europe	USA/Canada	Japan
MUSIC Tribe Brands UK Ltd.	**MUSIC Tribe Commercial NV Inc.**	**MUSIC Tribe Services JP K.K.**
Tel: +44156 273 2290	Tel: +1 702 800 8290	Tel: +81 3 6231 0453
Email: CARECrea@music-group.com	Email: CARECrea@music-group.com	Email: CARECrea@music-group.com
CAREEnte@music-group.com	CAREEnte@music-group.com	CAREEnte@music-group.com
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