

# **TANNOY Digitally Steerable Powered Column Array Loudspeaker Instruction Manual**

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**Quick Start Guide** 



## **QFLEX 16LS-WP**

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

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## Important Safety Instructions



Terminals marked with this symbol carry an electrical current of sufficient magnitude to constitute a risk of electric shock. Use only high-quality professional speaker cables with 1/4" TS or twist-locking plugs pre-installed. All other installation or modifications should be performed only by qualified personnel.

This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure – voltage that may be sufficient to constitute a risk of shock.

This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.



## Caution

To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user-serviceable parts inside. Refer servicing to qualified personnel.



#### Caution

To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing liquids and no objects filled with liquids, such as vases, shall be placed on the apparatus.



#### Caution

These service instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operation instructions. Repairs have to be performed by qualified service personnel.

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with a dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with

one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Use only attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.
- 16. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
- 17. Correct disposal of this product: This symbol indicates that this product must not be disposed of with household waste, according to the WEEE Directive (2012/19/EU) and you're national law. This product should be taken to a collection center licensed for the recycling of waste electrical and electronic equipment (EEE). The mishandling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the efficient use of natural resources. For more information about where you can take your waste equipment for recycling, please contact your local city office or your household waste collection service.
- 18. Do not install in a confined space, such as a bookcase or similar unit.
- 19. Do not place naked flame sources, such as lighted candles, on the apparatus.
- 20. Please keep the environmental aspects of battery disposal in mind. Batteries must be disposed of at a battery collection point.
- 21. Use this apparatus in tropical and/or moderate climates.

# **LEGAL DISCLAIMER**

MUSIC Tribe accepts no liability for any loss which may be suffered by any person who relies either wholly on or in part upon any description, photograph, or statement contained herein. Technical specifications, appearances, and other information are subject to change without notice. All trademarks are the property of their respective owners. MIDAS, KLARK TEKNIK, LAB GRUPPEN, LAKE, TANNOY, TURBOSOUND, TC ELECTRONIC, TC HELICON, BEHRINGER, BUGERA and COOLAUDIO are trademarks or registered trademarks of MUSIC Tribe Global Brands Ltd. © MUSIC Tribe Global Brands Ltd. 2018 All rights reserved.

## **LIMITED WARRANTY**

For the applicable warranty terms and conditions and additional information regarding MUSIC Tribe's Limited Warranty, please see complete details online at <a href="mailto:musictri.be/warranty">musictri.be/warranty</a>.

## Introduction

Congratulations on the purchase of your new QFlex-WP loudspeaker.

Tannoy has developed the QFlex Life Safety (LS) models as a cost-effective solution for critical, life safety applications, a solution that balances complex power consumption needs with the high performance and intelligibility that is the core of the proven QFlex range. Based on Tannoy's superior knowledge and heritage of speech intelligibility in critical listening in difficult acoustic environments, the new models have an optimized driver placement and improved current draw, making them perfect for applications where emergency voice alarms or communications may be required.

The new QFlex 16LS column loudspeaker is designed primarily for large transportation hubs as part of a PA/VA system where speech is the main audio source, either from live announcements or via a pre-recorded message. These new QFlex life safety models are specifically intended to optimize voice reinforcement, and as a result, make them more affordable.

The weather-proofed (WP) versions of QFlex provide protection against water and dust ingress to the IP54 standard. These enhanced QFlex models benefit from gasket sealed enclosures, solid aluminum rear panels, grade 304 stainless steel mounting hardware and sealed cable gland on the input and power connector. This specification makes QFlex capable of operating in more challenging environments where limited moisture and dust/airborne contaminants are an issue.

The simple-to-use BeamEngine software allows accurate adjustment of coverage area from a fixed, vertical mounting location. In addition to excellent vocal performance, the QFlex range is fully capable of full-range music applications and can also be used in conjunction with any VNET subwoofer. 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 commissioning and ongoing venue network control, incorporating real-time diagnostics of electronics and drive units, are all managed by the exclusive VNET software package.

## Unpacking

Every Tannoy QFlex product is carefully tested and inspected before being packaged and leaving the factory. After unpacking your loudspeaker, please inspect for any exterior physical damage, and save the carton and any relevant packaging materials in case the loudspeaker again requires packing and shipping. In the event that damage has been sustained in transit, notify your dealer immediately. Each QFlex carton is marked to show each module's position in the array.

#### **Models**

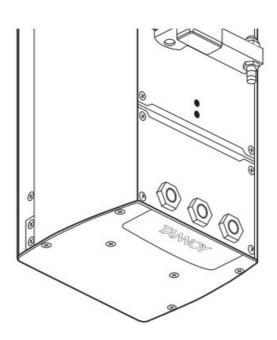
Model	Modules
QFlex 16LS-WP	1x QFlex 8M-16LS-WP + 1x QFlex 8ST-16LS-WP

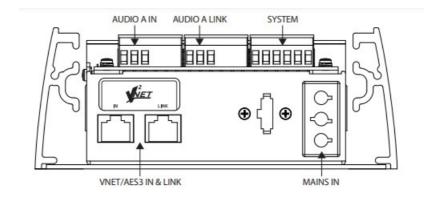


## **Connections**

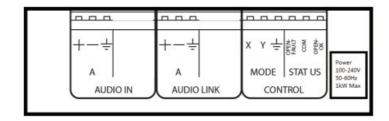
**NOTE:** QFlex is a professional product intended for installation by properly qualified and certificated personnel. **Cable Management** 

All connections (AC, Network, and Signal) are accessed at the bottom of the QFlex column. This allows for neat, unobtrusive cable management in your installation. The connectors will not be visible when installation is complete. Connections are accessed by the removal of the lower rear access plate on a QFlex master which will require the use of a Philips screwdriver.





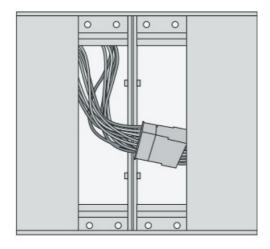
**End view** 



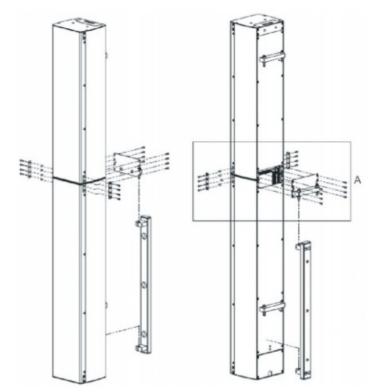
Top view

# **Assembly**

Place each module in its respective position on the assembly area keeping them slightly spaced apart. All electronic components are housed in the master module of a QFlex 16LS. Connect the multipin connectors as shown.

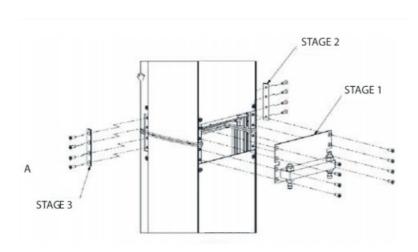


Align the two columns together as shown below.



Having the hinge points on either side of the QFlex column allows the loudspeaker to be rotated at 90 degrees to the mounting structure allowing easy access to the input connector panel.

The installer must ensure that the mounting surface is capable of safely and securely supporting the loudspeaker. Seek help from architects, structural engineers, or other specialists if in any doubt.

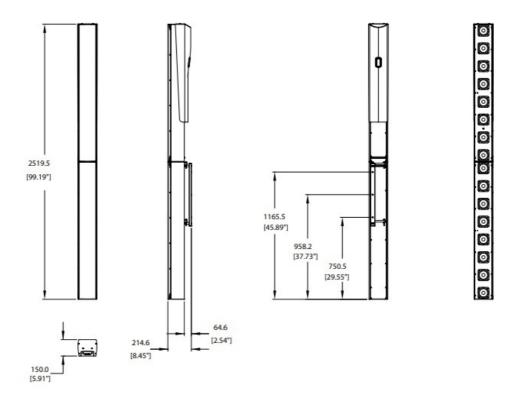


Attach the joining plates in the three stages as shown. Only one wall bracket is required to mount the two modules. For flexibility, the wall bracket can be mounted to either the top or the bottom column. The wall bracket can be hinged on the left or right pivot points. 3mm Allen grub screws allow the QFlex to be locked at the desired horizontal angle.

# Mounting

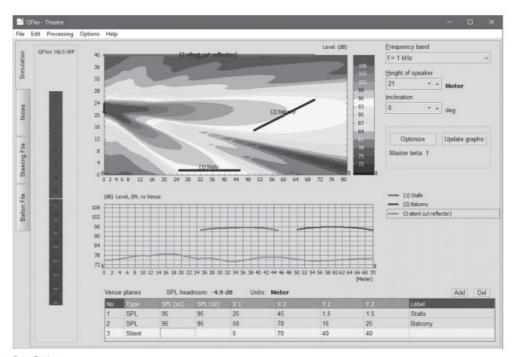
#### **QFLEX 16LS-WP**

For mounting instructions and schematics, please refer directly to QFlex Operations Manual – available at <a href="mailto:Tannoypro.com">Tannoypro.com</a>.

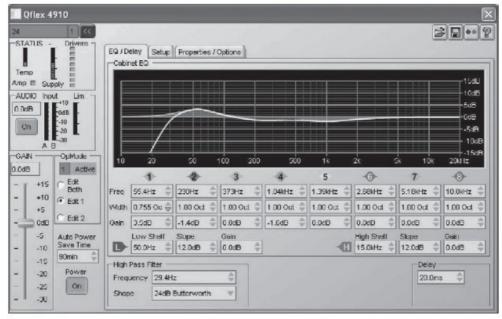


## **Software**

The BeamEngine and VNET (Podware) software applications are needed to operate the QFlex speakers. Refer to the VNET and QFlex manuals for information on installation and operation. Visit tannoy.com to download all associated documents for the QFlex line.

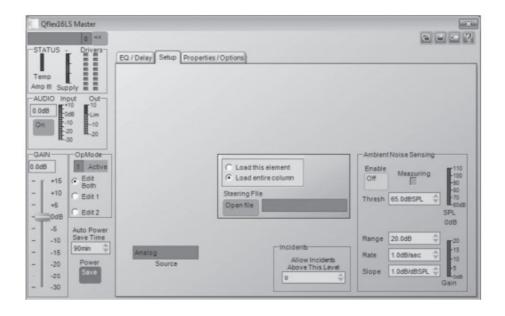


BeamEngine



VNET (Podware)

# Ambient noise sensing feature



# **Specifications**

QFlex 16LS-WP

Configuration	
4' LF	16
No. damp <tunnels 011.151="" 100w="" 4="" a1,="" ohms<="" td=""><td>16</td></tunnels>	16
Vertical dispersion	5- KO degrees symmetrical or asymmetric, singk a muttipk beats
Frequency range	150 112 – 1311Hz
Horaontalospersim	120 degrees
Awning zsgkloot	+bar/Smuts
LI beam control limit	230Hz
Wrote SM. 0 100 ft (30 lor	994
Column height	23193mm09n
Column wdth	150 mm (53')
Column depth	2144 ea MS,
Typical **awe Oman*"	Up to64m (YAW
Sample rate	%kHz
Mao spats	Anakque &AESIBU
Weight 0rnt hardware)	36.3 kg 180.0 DS <sub>)</sub> )
kneesocks	YliET USS Interface, MI Ethernet Interface, VIIET2-Ozate er doe, WET lateiixe Power Sop*, Sentinel SMI System Aloitok MS Break-In box, Okalsolator
Mains supply	100.240V- 50. <sup>1</sup> 60Hz
Power cottonnion	140W0% max power

<sup>\*</sup> Note: The maximum power requirements for QFlex models are 1000 W

# Other important information

## Important information

- 1. Register online. Please register your new MUSIC Tribe equipment right after you purchase it by visiting behringer.com. Registering your purchase using our simple online form helps us to process your repair claims more quickly and efficiently. Also, read the terms and conditions of our warranty, if applicable.
- 2. Malfunction. Should your MUSIC Tribe Authorized Reseller not be located in your vicinity, you may contact the MUSIC Tribe Authorized Fulfiller for your country listed under "Support" at <u>behringer.com</u>. Should your country not be listed, please check if the problem can be dealt with by our "Online Support" which may also be found under "Support" at <u>behringer.com</u>. Alternatively, please submit an online warranty claim at behringer.com BEFORE returning the product.
- 3. Power Connections. Before plugging the unit into a power socket, please make sure you are using the correct

mains voltage for your particular model. Faulty fuses must be replaced with fuses of the same type and rating without exception.

# FEDERAL COMMUNICATION COMMISSION COMPLIANCE INFORMATION



Responsible Party Name: MUSIC Tribe Brands UK Ltd.

Address: Klark Industrial Park, Walter Nash Road, Kidderminster, Worcestershire, DY11 7HJ United Kingdom

Phone Number: +44 1562 732290

## **QFLEX 16LS-WP**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This equipment 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.



This product conforms with essential requirements of EMC Directive 2014/30/EU, LV Directive 2014/35/EU, RoHS Directive 2011/65/EU, and WEEE Directive – 2012/19/EU. **Warning:** Operation of this equipment in a residential environment could cause radio interference.

#### **Documents / Resources**



TANNOY Digitally Steerable Powered Column Array Loudspeaker [pdf] Instruction Manual Digitally Steerable Powered Column Array Loudspeaker 6 Independently Controlled Drivers Int egrated DSP Beam Engine GUI Control Steerable Powered Column Array Loudspeaker, QFLE X 16LS-WP

#### References

- <a>Behringer | Home</a>
- Music tribe Music is life
- Otannoypro.com Sudut Pandang Kita

Manuals+, home privacy