

GTX 10i GTX 10Pi GTX 10Wi

HIGH DEFINITION LINE ARRAY MODULES

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. SAFETY PRECAUTIONS AND GENERAL INFORMATION

The symbols used in this document give notice of important operating instructions and warnings which must be strictly followed.

\triangle	CAUTION	Important operating instructions: explains hazards that could damage a product, including data loss		
A	WARNING	Important advice concerning the use of dangerous voltages and the potential risk of electric shock, personal injury or death.		
i	IMPORTANT NOTES	Helpful and relevant information about the topic		
	SUPPORTS, TROLLEYS AND CARTS	Information about the use of supports, trolleys and carts. Reminds to move with extreme caution and never tilt.		
	WASTE DISPOSAL	This symbol indicates that this product should not be disposed with your household waste, according to the WEEE directive (2012/19/EU) and your national law.		



This manual contains important information about the correct and safe use of the device. Before connecting and using this product, please **read this instruction** manual carefully and **keep it on hand for future reference**. The manual is to be considered an integral part of this product and must accompany it when it changes ownership as a reference for correct installation and use as well as for the safety precautions. The company will not assume any responsibility for the incorrect installation and / or use of this product.

All the precautions, in particular the safety ones, must be read with special attention, as they provide important information.

SAFETY PRECAUTIONS GENERAL SAFETY PRECAUTIONS

- Protect loudspeaker AC and signal lines from damage. Make sure they are
 positioned in a way that they cannot be stepped on or crushed by objects.
- To prevent the risk of electric shock, never open this product: there are no parts inside that the user needs to access. Never attempt to carry out any operations, modifications or repairs that are not expressly described in this manual.
- If this product begins emitting any strange odours or smoke, in case of an active speaker immediately switch it off and disconnect the power cable; in case of a passive speaker switch the amplifier off and remove it from the line.
- Contact your authorized service centre or qualified personnel if any of the following occur:
 - The device does not function (or works in an anomalous way).
 - The cable has been damaged.
 - Objects or liquids are inside the loudspeaker.
 - The loudspeaker has been damaged due to heavy impacts or fire.
- 5. Make sure that no objects or liquids can get into this product, as this may cause a short circuit. This apparatus shall not be exposed to dripping or splashing. No objects filled with liquid, such as vases, shall be placed on this apparatus. No naked sources (such as lighted candles) should be placed on this apparatus.
- 6. Do not connect this product to any equipment or accessories not foreseen. For suspended installation, only use the dedicated anchoring points and do not try to hang this product by using elements that are unsuitable or not specific for this purpose. Also check the suitability of the support surface to which the product is anchored (wall, ceiling, structure, etc.), and the components used for attachment (screw anchors, screws, brackets not supplied by RCF etc.), which must guarantee the security of the system / installation over time, also considering, for example, the mechanical vibrations normally generated by transducers. To prevent the risk of falling equipment, do not stack multiple units of this product unless this possibility is specified in the user manual.
- 7. The company strongly recommends to install this product only by professional qualified installers (or specialised firms) who can ensure correct installation and certify it according to the regulations in force. The entire audio system must comply with the current standards and regulations regarding electrical systems.
- 8. Supports, trolleys and carts: The equipment should be only used on supports,

- trolleys and carts, where necessary, that are recommended by the manufacturer. The equipment / support / trolley / cart assembly must be moved with extreme caution. Sudden stops, excessive pushing force and uneven floors may cause the assembly to overturn. Never tilt the assembly.
- 9. Hearing loss: Exposure to high sound levels can cause permanent hearing loss. The acoustic pressure level that leads to hearing loss is different from person to person and depends on the duration of exposure. To prevent potentially dangerous exposure to high levels of acoustic pressure, anyone who is exposed to these levels should use adequate protection devices. When a transducer capable of producing high sound levels is being used, it is necessary to wear ear plugs or protective earphones. See the technical specifications in the instruction manual for the maximum sound pressure the loudspeaker can produce.

ACTIVE DEVICES: ACTIVE SPEAKERS and AMPLIFIERS

- 1. The mains voltage is sufficiently high to involve a risk of electrocution; install and connect this product before plugging it in.
- Before powering up, make sure that all the connections have been made correctly and the voltage of your mains corresponds to the voltage shown on the rating plate on the unit, if not, please contact your dealer.
- The metallic parts of the unit are earthed through the power cable. An apparatus with CLASS I construction shall be connected to a mains socket outlet with a protective earthing connection by a 3-pole power cord.
- Protect the power cable from damage; make sure it is positioned in a way that it cannot be stepped on or crushed by objects.
- 5. If the product is not used for a long period, disconnect the power cable.
- This product is intended for instructed person only, as defined in the IEC 62368-1 3rd Ed. Interfaces at ES3 level present.
- 7. Ensure that no children have access to the installation materials and components.
- 8. Before powering up, make sure that all the connections have been made correctly and the voltage of your mains corresponds to the voltage shown on the rating plate on the unit. If not, please contact your dealer.
- Always make sure the power cord and all plug assemblies are certified and suitable for the use in the particular countries where the product shall be installed.
- 10. Use the mains plug to disconnect the apparatus from the mains.
- 11. If the device is provided with internal fuse, contact your authorized service centre or qualified personnel in case of necessary replacement.
- 12. If the device is provided with power socket with accessible fuse holder, or accessible independent fuse holder, disconnect mains cable device before fuse replacement. The fuse on the AC mains input may be on the neutral, the AC mains shall be disconnected to de-energize the phase.

PASSIVE DEVICES and ACCESSORIES

- Loudspeaker lines (amplifier outputs) can have a sufficiently high voltage to involve a risk of electrocution: never install or connect this loudspeaker when amplifiers are switched on.
- 2. Make sure all connections have been made correctly and the loudspeaker input impedance is suitable for the amplifier output.
- To ensure a correct sound reproduction, loudspeaker phase is to be respected (loudspeakers are connected respecting the amplifier polarity). This is important when loudspeakers are installed adjacent one another, for instance, in the same room.
- 4. To prevent inductive effects from causing hum, noise and a bad system working, loudspeaker lines should not be laid together with other electric cables (mains), microphone or line level signal cables connected to amplifier inputs.
- The loudspeaker cable shall have wires (twisted, if possible, to reduce inductive
 effects due to surrounding electro-magnetic fields) with a suitable section and
 a sufficient electrical insulation. Refer to local regulations since there may be
 additional requirements about cable characteristics.
- 6. Do NOT connect loudspeaker low impedance (8 4 Ω) inputs to 100 / 70 V constant voltage lines.

SAFETY PRECAUTIONS AND GENERAL INFORMATION

SUSPENDED DEVICES

- Suspending any object is a potentially dangerous operation and should only be attempted by individuals who have a thorough knowledge of the techniques and regulations of rigging objects overhead.
- The company strongly recommends that all devices should be suspended taking
 into account all current national, federal, state and local regulations. It is the
 responsibility of the installer to ensure that all devices are safely installed in
 accordance with all such regulations.
- The company strongly recommends to inspect the system at least once a year. If any sign of weakness or damage is detected remedial actions should be taken immediately.
- 4. The user is responsible for making sure that the supporting surfaces and any additional hardware used is capable of supporting the system. Any hardware used to suspend a loudspeaker array that is not provided by or associated with the company is not reccomended and is under the responsibility of others.

OPERATING PRECAUTIONS

- Install the product in accordance with manufacturer's instructions.
- Mechanical and electrical factors need to be considered when installing a professional audio system (in addition to those which are strictly acoustic, such as sound pressure, angles of coverage, frequency response, etc.).
- If the product needs to be used in a cold environment, slowly warm up the voice coils by sending a low-level signal for about 15 minutes before sending high-power signals.
- Place this product far from any heat sources and always ensure an adequate air circulation around it.
- Do not overload this product with too much power or for a long time.
- Never force the control elements (keys, knobs, etc.).



IMPORTANT

To prevent the occurrence of noise on line signal cables, use screened cables only and avoid putting them close to:

- Equipment that produces high-intensity electromagnetic fields
- Power cables
- Loudspeaker lines

WARNING! CAUTION! To prevent the risk of fire or electric shock, never expose this product to rain or humidity.

WARNING! To prevent electric shock hazard, do not connect any speaker to mains power supply while the grille is removed.

WARNING! To reduce the risk of electric shock, do not disassemble this product unless you are qualified. Refer servicing to qualified service personnel.

CORRECT DISPOSAL OF THIS PRODUCT

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This product should be handed over to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling 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 thisproduct will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority or your household waste disposal service.

CARE AND MAINTENANCE

To ensure a long-life service, this product should be used following these advices:

- If the product is intended to be set up outdoors, be sure it is under cover and protected to rain and moisture.
- In the case of fixed installations, it is recommended to schedule periodic checks of the entire system and all its parts for the entire duration of the installation
- All personnel involved in the installation must be adequately trained and educated on safety procedures and equipped with appropriate personal protective equipment (PPE).
- If it is necessary to replace a part, always contact authorized centers only or use only parts supplied by RCF.
- RCF is not responsible for problems or malfunctions encountered in the case of replacements of parts or modifications to the system initiated by the user.
- Do not use abrasives, cleaning solvents, alcohol, benzene or other volatile substances for cleaning the external parts of this product.
 Always use a dry cloth to clean the exterior surfaces of the speaker and always do it when the power is turned off.

WARNING! CAUTION! For powered devices, clean only when the power is turned off.

RCF S.p.A. reserves the right to make changes without prior notice to rectify any errors and / or omissions.

Always refer to the latest version of the manual on www.rcf.it.

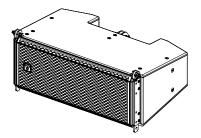
2. DESCRIPTION

TT+ GTX INSTALLATION SERIES

TT+ GTX Installation Series is engineered to deliver peak performance and exceptional durability in both indoor and outdoor settings, making it ideal for medium to large-scale, high-demand installations.

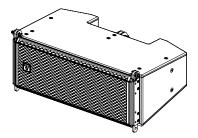
Featuring industry-leading transducers, the series ensures outstanding sound reproduction quality and offers optimized directivity across various models, enabling precise customization for any project. Innovative design refinements enable TT+ True Resistive Waveguide to provide effective driver loading and precise pattern control for transducers. Symmetrical component positioning and special DSP crossover filtering provide constant directivity and perfect continuity of the hemicylindrical wave directivity without lobes and discontinuities. The integrated rigging hardware allows the system engineer to create arrays with 0° to 10° angles between modules, with 1° steps.

Up to 16 modules can be fastened on a single fly-bar. These systems are specifically designed to integrate seamlessly with the XPS 16K four-channel DSP amplifiers (6 modules per unit).



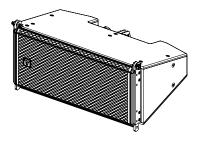
GTX 10i

2 x 10" Neo Woofer 4.0" Neo Compression Driver Coverage angle: 110° H x 15° V 33 kg / 72.75 lbs



GTX 10Pi

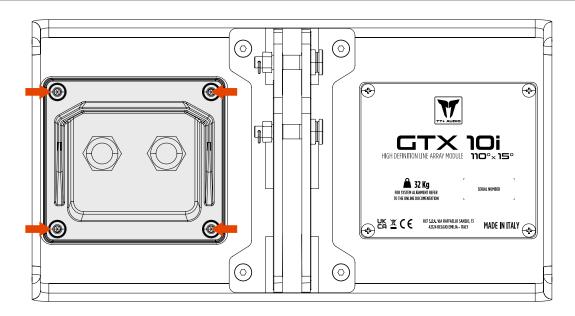
2 x 10" Neo Woofer 4.0" Neo Compression Driver Coverage angle: 70° H x 15° V 33 kg / 72.75 lbs



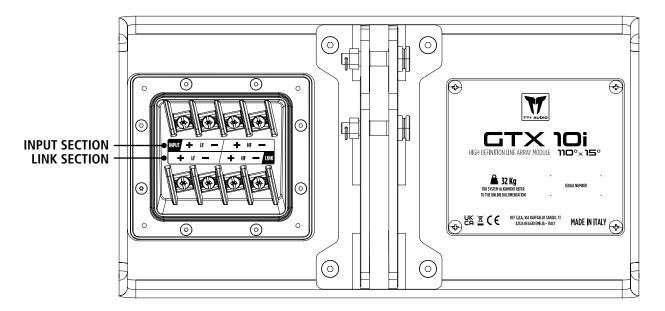
GTX 10Wi

2 x 10" Neo Woofer 4.0" Neo Compression Driver Coverage angle: 110° H x 30° V 32.5 kg / 71.65 lbs

2. DESCRIPTION



The left rear panel is covered by a plastic contact protection cover. Remove the four screws to remove the plastic cover and to expose the connection board base.



The upper section of the connection board base receives the signal; the left carrier are for the Low Frequencies and the right carriers are for the High Frequencies.

The lower section of the connection board base sends the signal to another speaker; just like the input section, the left carrier are for the Low Frequencies and the right carriers are for the High Frequencies.

To connect GTX 10i, GTX 10Pi and GTX 10Wi speakers, it is possible to use cables with a section up to AVG 9.

WARNING! CAUTION! Loudspeaker connections should be only made by qualified and experienced personnel having the technical know-how or enough specific instructions (to ensure that connections are made correctly) in order to prevent any electrical danger.

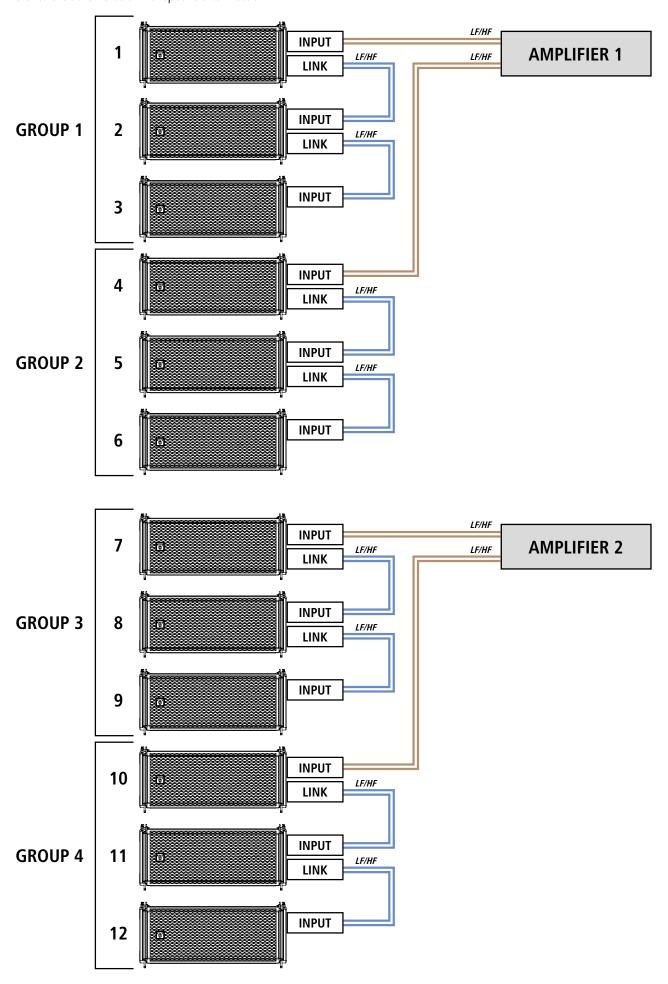
To prevent any risk of electric shock, do not connect loudspeakers when the amplifier is switched on.

Before turning the system on, check all connections and make sure there are no accidental short circuits.

The entire sound system shall be designed and installed in compliance with the current local laws and regulations regarding electrical systems.

3. CONNECTIONS

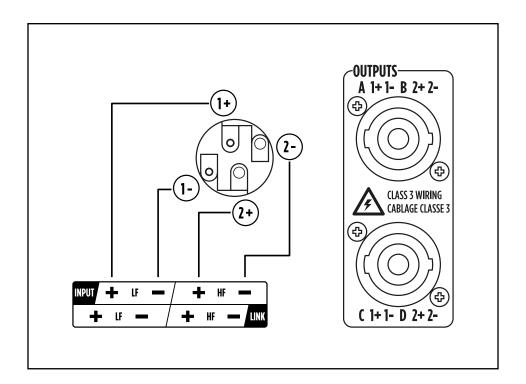
Each XPS 16K amplifier can drive up to **six** modules at the same time, three for each pair of amplification channels. Refer to the scheme below for speakers connection.



In order to match with XPS 16K speaker's preset, GTX 10i must be connected to the amplifier on specific channels pairs, as shown in the picture.

CHANNELS PAIR AB			
LF+	to	A 1+	
LF-	to	A 1-	
HF+	to	B 2+	
HF-	to	B 2-	

CHANNELS PAIR CD			
LF+	to	C 1+	
LF-	to	C 1-	
HF+	to	D 2+	
HF-	to	D 2-	



4. SOFTWARE MANUALS FOR GTX SYSTEMS

For design, simulation and modeling of the system, refer to **Shape D3D** Software Manual (from version 1.0). For tuning, management, design, measurement and control of the system, refer to **RDNet** Software Manual (from version 5.0).

Shape D3D

Shape D3D is TT+ AUDIO's simulation software for modeling line arrays acoustic performance, column arrays, point source loudspeakers, and subwoofers. The software facilitates tasks related to acoustic design, predicting SPL and frequency performance, aligning loudspeakers, rigging hardware, and ensuring safety parameters are met. Shape D3D enables autosplay for line arrays to properly plan the system coverage and allows users to streamline setup and tuning for touring applications.

Export Shapes to RDNet

Within Shape D3D, users can define listening planes representing audience areas within a specific venue, creating a 3D representation with multiple virtual microphones for IR-modeled measures. The RDNet remote control software can import data defined in Shape D3D to generate control data and provide full configuration details to the system after deployment.

RDNet® 5 Networked Management

RDNet is an advanced management, design, measurement and control platform for TT+ AUDIO systems. A network user can remotely monitor system status, measure the system frequency/phase response and control levels, delays, EQs, and many other settings of single or grouped devices, including advanced subwoofer array configurations.

AMFG® EASE

Within EASE, each loudspeaker is described by a system definition profile, known as a GLL file, containing the loudspeaker system's mechanical, electronic, and acoustic properties. TT+ AUDIO provides GLL files for all TT+ Audio loudspeakers. These GLL files can be shared with EASE and EASE Focus software for system design and acoustic simulation.

5. RIGGING THE SYSTEM

TT+ Audio has developed a complete procedure to set up and hang a line array system starting from software data, enclosures, rigging, accessories, cables, until the final installation.





WARNING! CAUTION! GENERAL RIGGING WARNINGS AND SAFETY PRECAUTIONS:

- Suspending loads should be done with extreme caution
- When deploying a system always wear protective helmets and footwear
- Never allow people to pass under the system during the installation process
- Never leave the system unattended during the installation process
- Never install the system over areas of public access
- Never attach other loads to the array system
- Never climb the system during or after the installation
- Never expose the system to extra loads created from the wind or snow





WARNING! CAUTION!

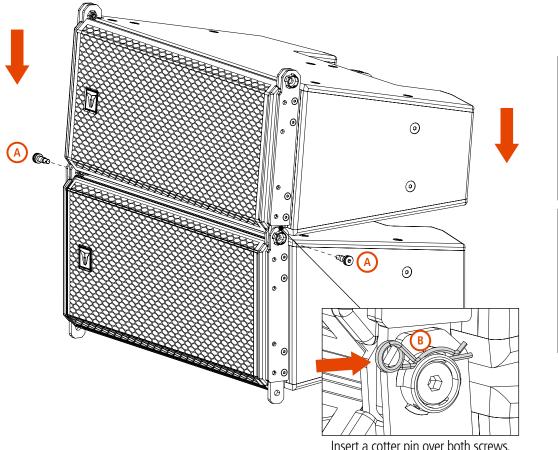
The system must be rigged in accordance with the laws and regulations of the Country where the system is used. It is responsibility of the owner or rigger to make sure the system is properly rigged in accordance with Country and local laws and regulations.

Always check that all the parts of the rigging system that are not provided from TT+ Audio are:

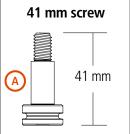
- Appropriate for the application
- Approved, certified and marked
- **Properly rated**
- In perfect condition
- Each cabinet support the full load of the part of the system below. It is very important that each single cabinet of the system is properly checked

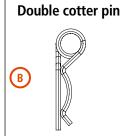
CONNECTING THE FRONT SIDE - MODELS GTX 10i GTX 10Pi GTX 10Wi 6.1

To connect two modules together (either one of the three models) place one on top of the other making the front brackets match eachother and fix them by screwing two 41 mm M8 screws (A) on both sides. Once the screws have been tightened, insert a double cotter pin (B) on both sides as shown in the picture.



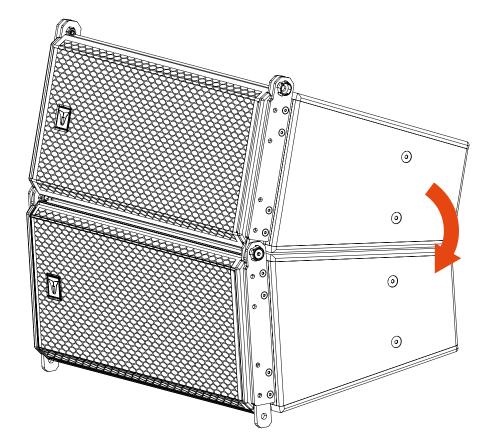
USE THESE COMPONENTS FOR FRONT LOCKING





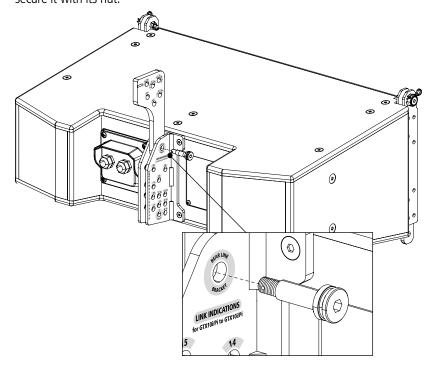
Insert a cotter pin over both screws.

Lean the top speaker over the bottom one.

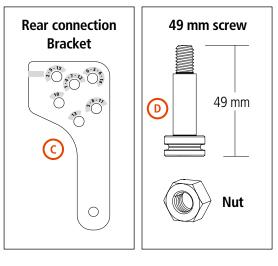


6.2 CONNECTING THE REAR SIDE - MODELS GTX 10i GTX 10Pi

Fix the rear connection bracket on the cabinet rear bracket with a 49 mm M8 screw through the Rear Link Bracket hole and secure it with its nut.

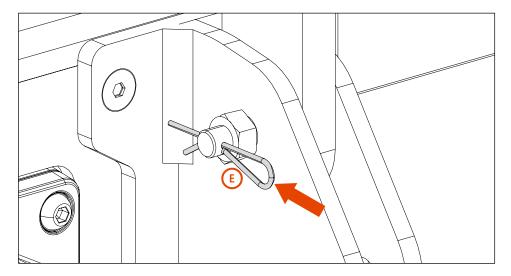


USE THESE COMPONENTS FOR REAR LOCKING





Once the screw has been tightened on its nut, insert a single cotter pin (E) on the screw as shown in the picture.

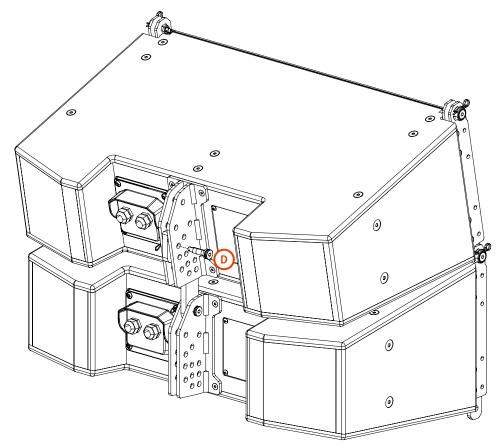


IMPORTANT NOTE: All screws and nuts used to connect modules and flybars must be blocked with a threadlocker like LOCTITE 243 (or another product with similar characteristics).

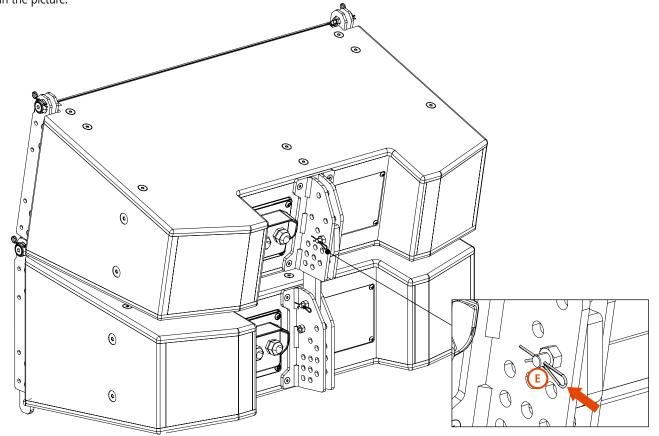
WARNING! CAUTION! The system should always be installed by qualified and experienced personnel having the technical know-how or enough specific instructions in order to prevent any danger.

Place a module over the lower one and connect the front side as described on chapter 7.1.

Lift up the upper cabinet to the desired angle and fix the connection bracket through the corresponding hole by inserting a 49 mm M8 screw .

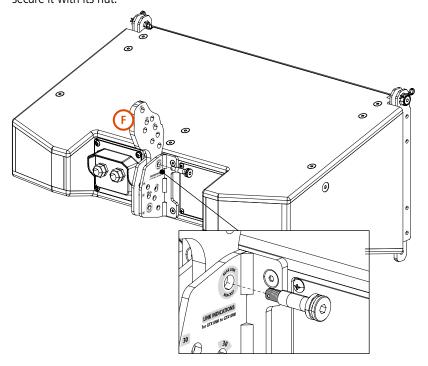


On the other side secure the screw with its nut. Once the screw has been tightened, insert a single cotter pin (E) on the screw as shown in the picture.

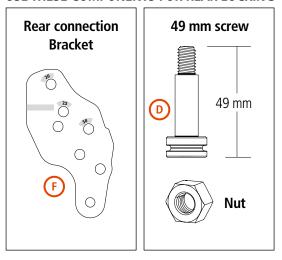


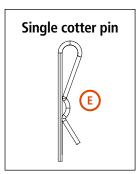
6.3 CONNECTING THE REAR SIDE - MODEL GTX 10Wi

Fix the rear connection bracket F on the cabinet rear bracket with a 49 mm M8 screw through the Rear Link Bracket hole.and secure it with its nut.

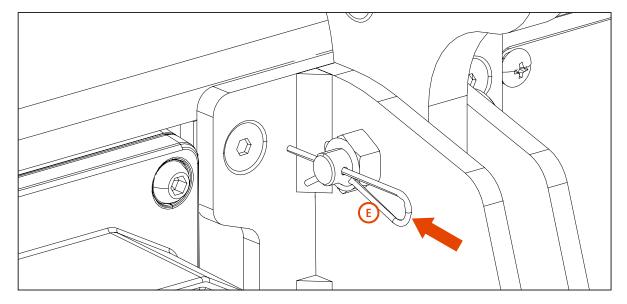


USE THESE COMPONENTS FOR REAR LOCKING





Once the screw has been tightened on its nut, insert a single cotter pin (E) on the screw as shown in the picture.

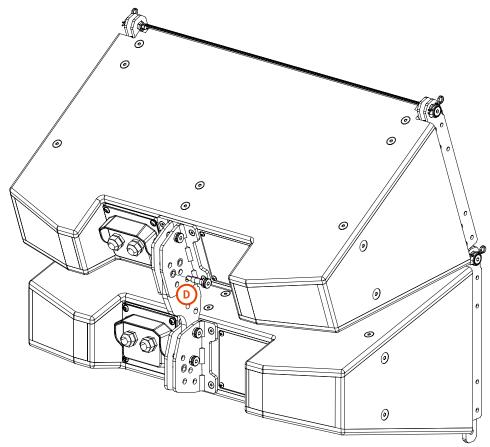


IMPORTANT NOTE: All screws and nuts used to connect modules and flybars must be blocked with a threadlocker like LOCTITE 243 (or another product with similar characteristics).

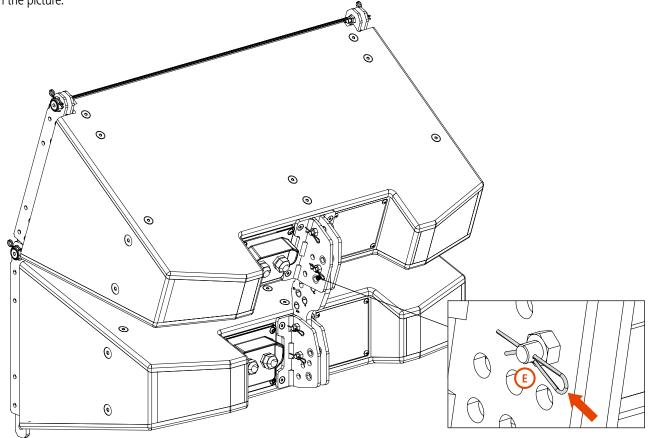
WARNING! CAUTION! The system should always be installed by qualified and experienced personnel having the technical know-how or enough specific instructions in order to prevent any danger.

Place a module over the lower one and connect the front side as described on chapter 7.1.

Lift up the upper cabinet to the desired angle and fix the connection bracket through the corresponding hole by inserting a 49 mm M8 screw .



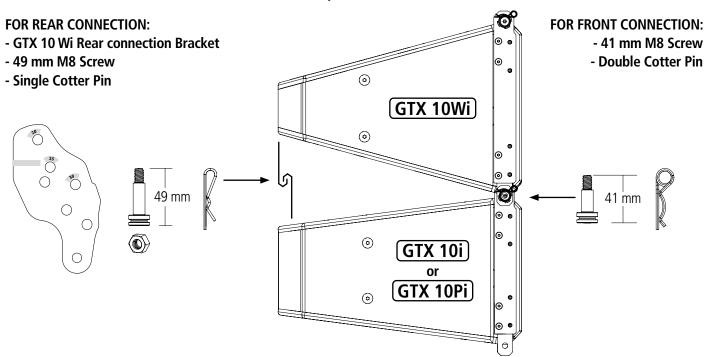
On the other side secure the screw with its nut. Once the screw has been tightened, insert a single cotter pin (E) on the screw as shown in the picture.



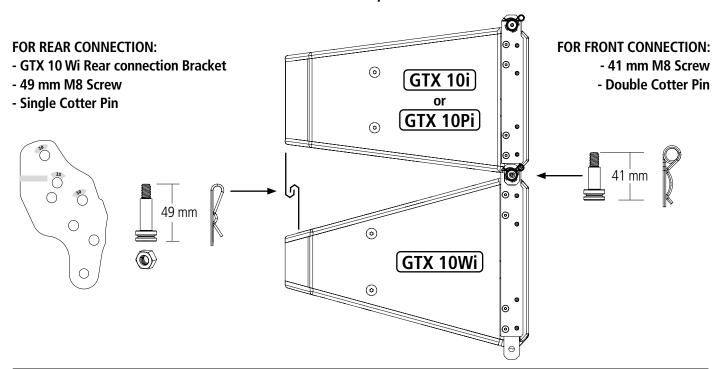
6.4 CONNECTING DIFFERENT MODELS

When connecting a **GTX 10Wi** module to **GTX 10i** or **GTX 10Pi**, follow the instructions described on chapter 7.3. Whether GTX 10Wi is placed above or below, always use GTX 10Wi rear connection bracket.

GTX 10Wi above, GTX 10i or 10Pi below



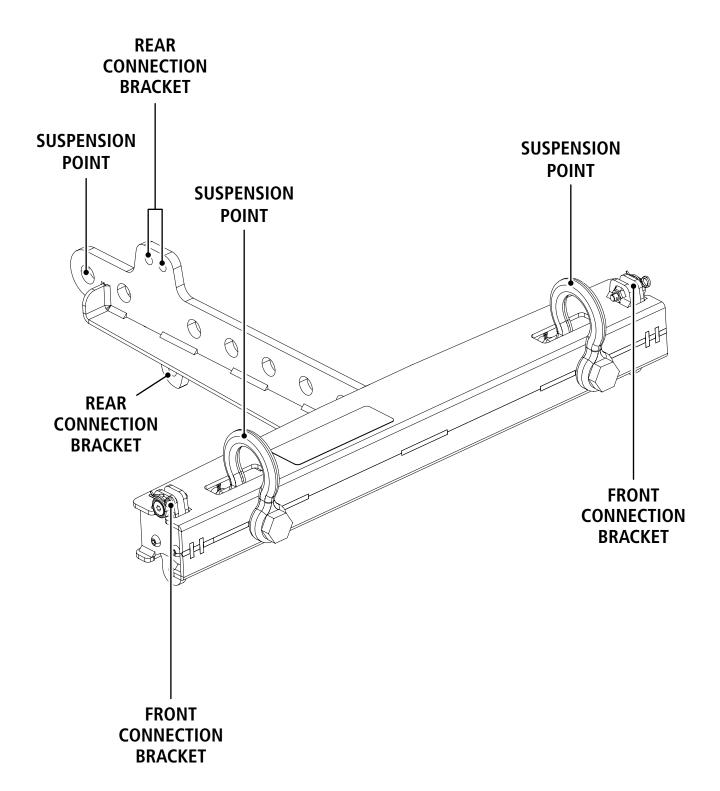
GTX 10i or 10Pi above, GTX 10Wi below



IMPORTANT NOTE: All screws and nuts used to connect modules and flybars must be blocked with a threadlocker like LOCTITE 243 (or another product with similar characteristics).

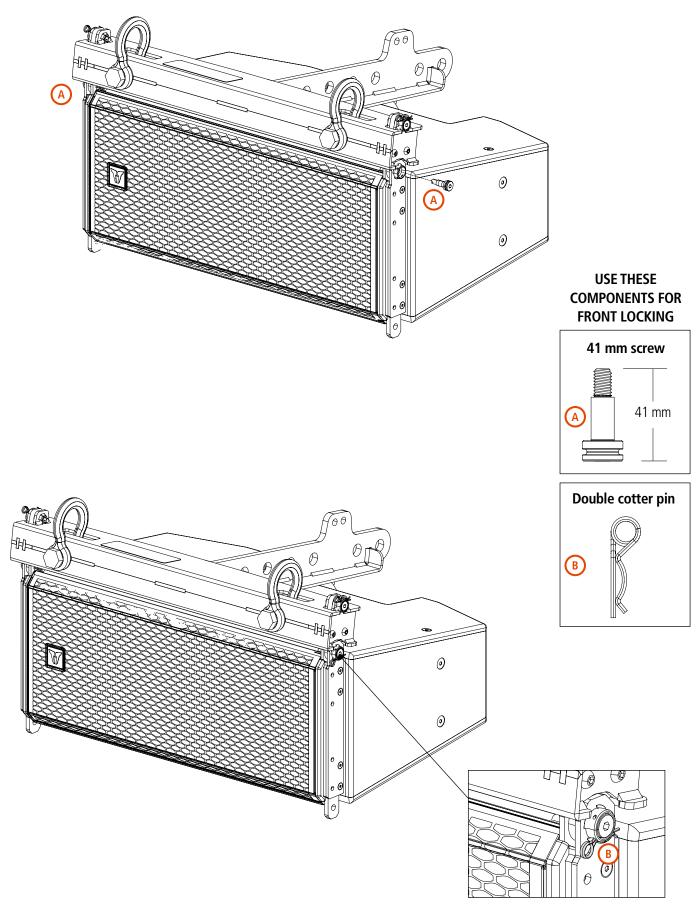
WARNING! CAUTION! The system should always be installed by qualified and experienced personnel having the technical know-how or enough specific instructions in order to prevent any danger.

6.5 CONNECTING THE FLYBAR

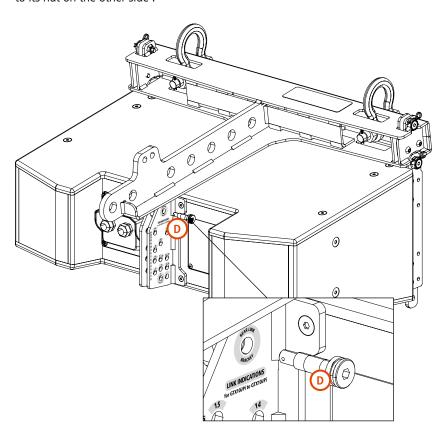


The flybar connects the same way to GTX 10i, GTX 10Pi and GTX 10Wi.

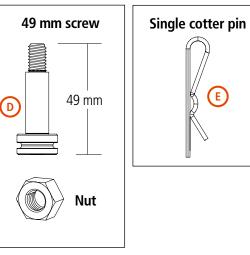
Place the flybar over the module making the front brackets match eachother and fix them by screwing two 41 mm M8 screws A on both sides. Once the screws have been tightened, insert a double cotter pin B on both sides as shown in the picture.



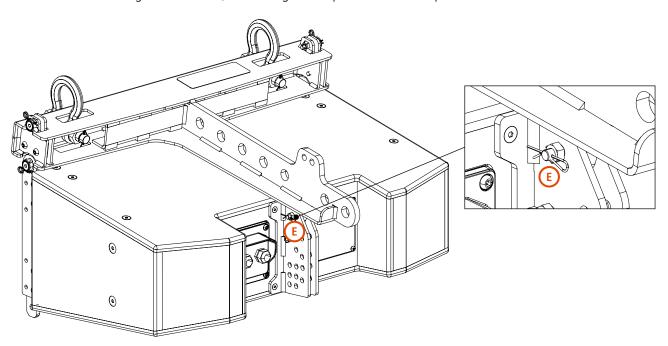
On the rear side, lower the flybar until the rear bracket matches the Rear Link Bracket hole; insert a 49 mm M8 screw and tighten it to its nut on the other side .



USE THESE COMPONENTS FOR REAR LOCKING



Once the screw has been tightened to its nut, insert a single cotter pin as shown in the picture

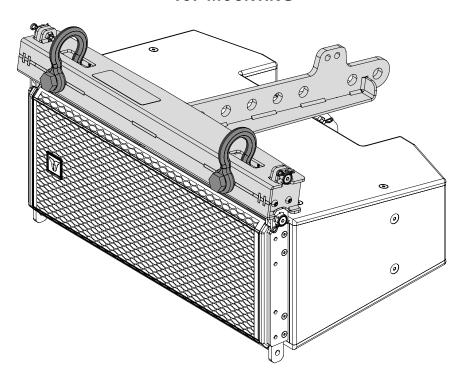


IMPORTANT NOTE: All screws and nuts used to connect modules and flybars must be blocked with a threadlocker like LOCTITE 243 (or another product with similar characteristics).

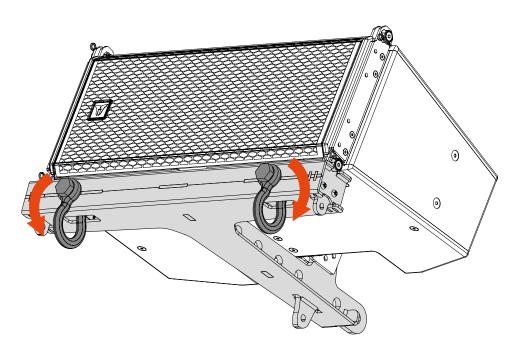
WARNING! CAUTION! The system should always be installed by qualified and experienced personnel having the technical know-how or enough specific instructions in order to prevent any danger.

In case of large configurations the flybar can be fixed on the cabinet bottom the same way it is fixed on top.





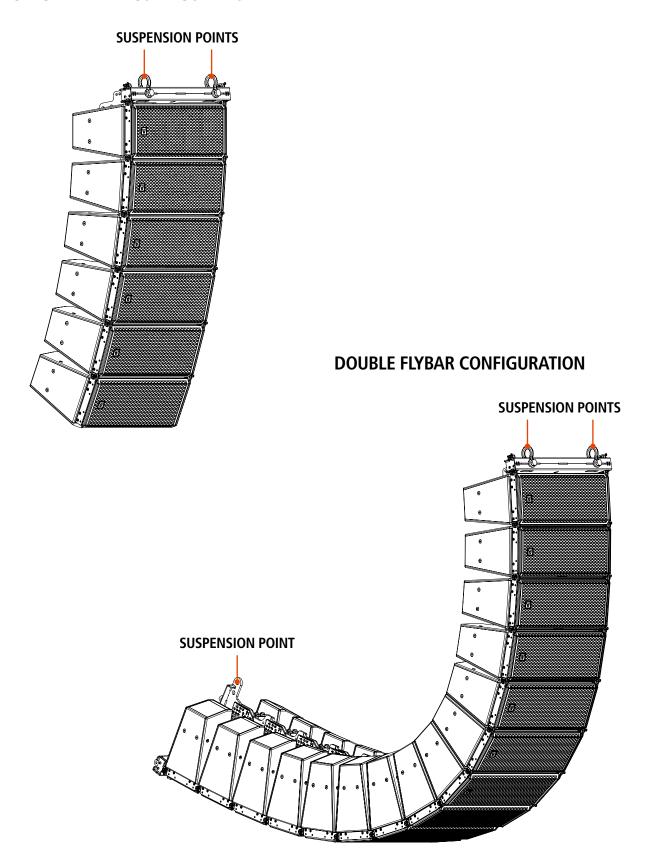
BOTTOM MOUNTING

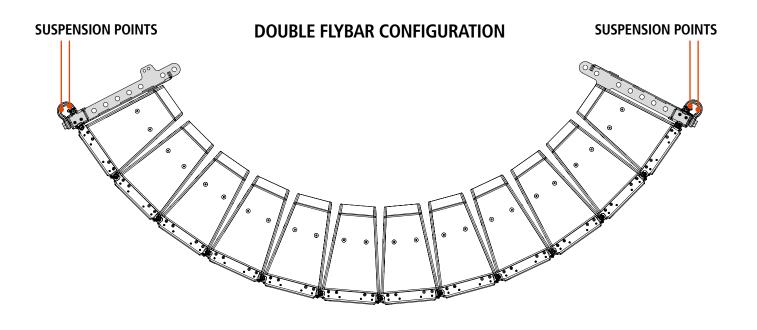


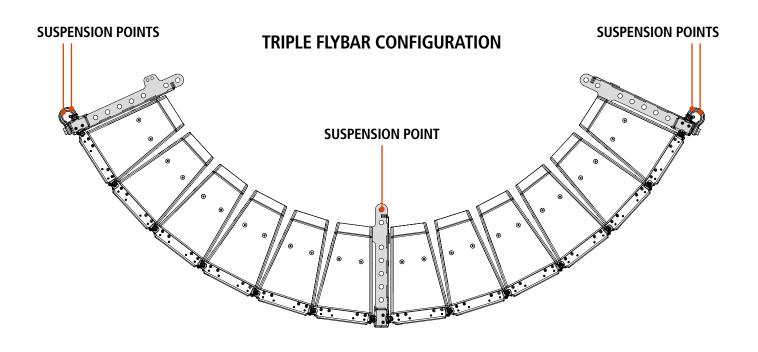
TURN THE SHAKLES UPSIDE DOWN WHEN USING THE FLYBAR ON BOTTOM CONFIGURATION

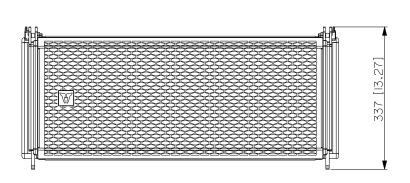
EXAMPLES OF CONFIGURATIONS

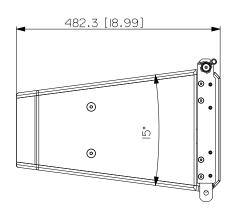
SINGLE FLYBAR CONFIGURATION

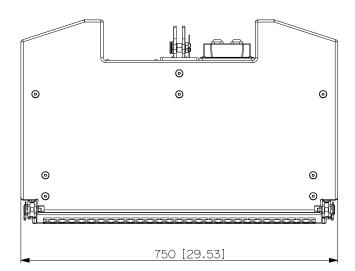


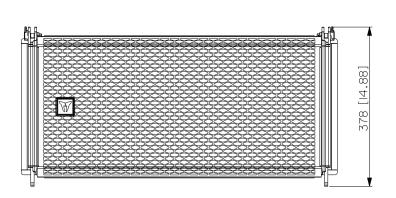


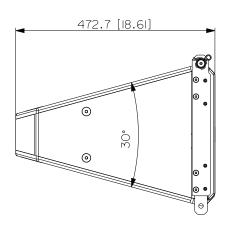


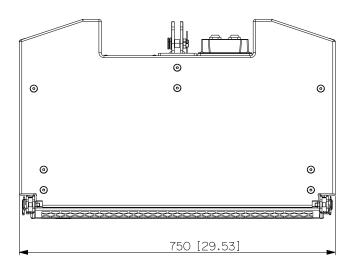












		GTX 10i	GTX 10Pi	GTX 10Wi
Acoustical specifications	Frequency Response (-10dB)	42 Hz ÷ 20000 Hz	42 Hz ÷ 20000 Hz	42 Hz ÷ 20000 Hz
	Max SPL @ 1m	143 dB	143 dB	143 dB
	Horizontal coverage angle	110°	70°	110°
	Vertical coverage angle	15°	15°	30°
Power section	Amplification Nominal Impedance LF Nominal Impedance HF Recommended Amplifiers	Bi-Amp 8 ohm 8 ohm XPS 16K, XPS 16KD	Bi-Amp 8 ohm 8 ohm XPS 16K, XPS 16KD	Bi-Amp 8 ohm 8 ohm XPS 16K, XPS 16KD
Transducers	Compression Driver	1 x 1.4" neo, 4.0" v.c	1 x 1.4" neo, 4.0" v.c	1 x 1.4" neo, 4.0" v.c
	Woofer	2 x 10" neo, 3.0" v.c	2 x 10" neo, 3.0" v.c	2 x 10" neo, 3.0" v.c
Input/Output section	Input connectors Output connectors	Screw Terminals Screw Terminals	Screw Terminals Screw Terminals	Screw Terminals Screw Terminals
Standard compliance	Safety agency	CE compliant	CE compliant	CE compliant
Physical specifications	Cabinet/Case Material	Birch plywood	Birch plywood	Birch plywood
	Hardware	Array fittings	Array fittings	Array fittings
	Grille	Steel with clothing	Steel with clothing	Steel with clothing
	Color	Black	Black	Black
Size	Height	337 mm / 13.27 inches	337 mm / 13.27 inches	378 mm / 14.88 inches
	Width	750 mm / 29.53 inches	750 mm / 29.53 inches	750 mm / 29.53 inches
	Depth	482.3 mm / 18.99 inches	482.3 mm / 18.99 inches	472.7 mm / 18.61 inches
	Weight	33 kg / 72.75 lbs	33 kg / 72.75 lbs	32.5 kg / 71.65 lbs

