





# RCF KXL 4-A Two Way Active Speaker Modules Owner's **Manual**

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# **RCF KXL 4-A Two Way Active Speaker Modules**



### 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.
A	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.

# **IMPORTANT**

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**

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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. Hearing loss: Exposure to high sound levels can cause permanent hearing loss.
- 9. 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 earplugs or protective earphones. See the technical specifications in the instruction manual for the maximum sound pressure the loudspeaker can

#### **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.
- 2. 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.
- 3. 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.
- 4. 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.
- 6. Ensure that no children have access to the installation materials and components.
- 7. 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.
- 8. . 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.
- 9. Use the mains plug to disconnect the apparatus from the mains.
- 10. If the device is provided with internal fuse or if it requires operations, contact your authorized service centre or qualified personnel as defined in the IEC 62368-1 3rd Ed. Interfaces at ES3 level present.
- 11. 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**

- 1. 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.
- Make sure all connections have been made correctly and the loudspeaker input impedance is suitable for the amplifier output.
- 3. 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.
- 5. The loudspeaker cable shall have wires (twisted, if possible, to reduce inductive effects due to surrounding electromagnetic 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 2) inputs to 100 / 70 V constant voltage lines.

#### SUSPENDED DEVICES

- 1. 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.
- 2. 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.
- 3. 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 recommended 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**

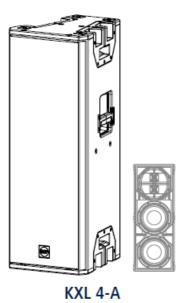
- To prevent ine occurrence of noise on line signal cables, use screened cables only and avoid putting them close
   to:
- Equipment that produces high-intensity electromagnetic fields Power cables Loudspeaker lines WARNING!
- CAUTION! To prevent the risk of fire or electric shock, never expose this product to rain or humidity.
- WARNING! CAUTION! To prevent the risk of fire or electric shock, never expose this product to rain or humidity.
- WARNING! To avoid the risk of electric shock, do not connect to the mains supply if the device is open or, in the case of speakers, while the grille is removed.
- WARNING! To reduce the risk of electric shock, do not disassemble his product unless you are qualified. Refer servicing to qualified service personnel.

#### **CORRECT DISPOSAL OF THIS PRODUCT**

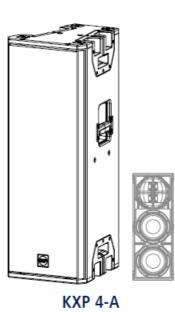
This product should be handed over to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product 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.

#### **DESCRIPTION**

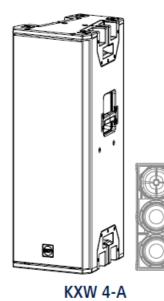
modules deliver top quality sound for demanding events indoors or outdoors, and for small- to medium-sized areas. Their design provide the audio engineer with tonal balance and intelligibility while maintaining an unobtrusive and adaptable footprint. Offering all the advantages of line array technology, such as high directivity, long range and uniform level distribution, they are the preferred sound set-up for high quality suspended systems both in vertical and horizontal arrangement. Each model offers a different coverage depending on the horn mounted on the speaker.



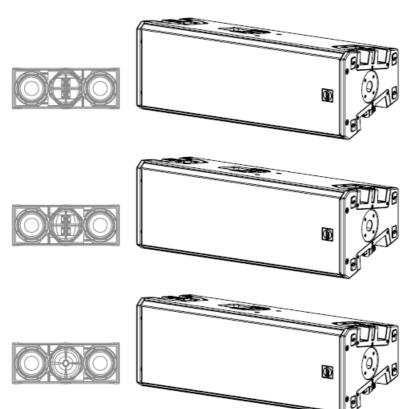
Single or coupled vertical use Horizontal coverage angle: 100° Vertical coverage angle: 25°



Single or coupled vertical use Horizontal coverage angle: 60° Vertical coverage angle: 25°



Single vertical use Horizontal coverage angle: 100° Vertical coverage angle: 50°



KXL C4-A

Vertical or horizontal array use Horizontal coverage angle: 100° Vertical coverage angle: 25°

# KXP C4-A

Vertical or horizontal array use Horizontal coverage angle: 60° Vertical coverage angle: 25°

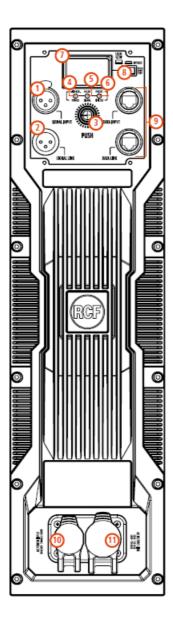
# KXW C4-A

Vertical or horizontal array use Horizontal coverage angle: 100° Vertical coverage angle: 50°

# **REAR PANEL FEATURES AND CONTROLS**

1. FEMALE XLR INPUTS (BAL/UNBAL) The system accepts XLR input connectors.

- MALE XLR SIGNAL OUTPUT The output XLR connector provides a loop through for speakers daisy chaining.
   The balanced connector is connected in parallel and can be used to send the audio signal to other amplified speakers or supplementary amplifiers.
- 3. SYSTEM SET UP ENCODER Pushing the encoder allows the user to select a function (gain reduction, delay, preset). Rotate the encoder to select a value or a preset.
- 4. A POWER / GAIN REDUCTION LED POWER LED: This LED illuminates green when the speaker is properly connected to the main power supply, confirming that the device is powered and ready for operation. GAIN REDUCTION LED: This LED activates when the gain adjustment encoder is pressed. Once lit, rotating the encoder allows the user to set the desired gain reduction. The adjustment provides fine control:
  - Increments of 0.1 dB for the first 10 dB of reduction.
  - Increments of 1 dB beyond 10 dB up to the maximum reduction of 99 dB.
  - This system ensures precise and customizable volume control tailored to the audio environment.
- 5. DELAY / SIGNAL LED SIGNAL LED: This indicator lights green when an audio signal is detected at the main input, confirming that the signal is actively being received by the speaker. DELAY LED: Press the encoder twice to activate the delay adjustment mode, indicated by the green delay LED. Rotate the encoder to set the desired delay value. Adjustments are made in 0.1-meter increments for the first 10 meters. Beyond 10 meters, adjustments are made in 1-meter increments. The maximum delay setting is 20 meters. This feature allows precise time alignment for audio systems, ensuring that sound reaches the audience in synchronization across multiple speaker setups.
- 6. PRESET / LIMITER LED LIMITER LED: The amplifier includes a built-in limiter circuit designed to prevent amplifier clipping or overdriving the transducers. When the soft clipping circuit is engaged, the LIMITER LED blinks red. Occasional blinking is normal and indicates the limiter is functioning as intended to protect the system. However, if the LED lights continuously, it signals excessive input levels, and the signal level should be reduced to prevent potential damage. PRESET LED: Press the encoder three times to activate the preset selection mode, indicated by the PRESET LED lighting green. Rotate the encoder to select and load the desired preset, allowing quick configuration changes to match the specific audio requirements of the system.
- 7. SYSTEM SET UP DISPLAY It displays the system setting values. In case of RNet active connection a rotating segment will light up.
- 8. RNET LOCAL SETUP/BYPASS. When released the local setup is loaded and RDNet can only monitor the speaker. When switched the RDNet setup is loaded and bypass any speaker local preset.
- ORNET IN/OUT PLUG SECTION The RDNET IN/OUT PLUG SECTION features ether CON connectors for the RDNet protocol. This allows the user to completely control the speaker using the RDNet software.
- 10. POWERCON INPUT SOCKET PowerCON TRUE TOP IP-Rated power connection.
- 11. POWERCON OUTPUT SOCKET Sends the AC power to another speaker. Power link: 100V~ 13A MAX 1300W | 240V~ 16A MAX 3500W.

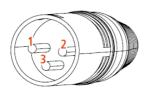


WARNING: The Powercon connector is used to disconnect the system from the power supply network. It shall be easily accessible after the installation and during the use of the system.

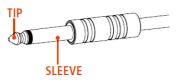
# **CONNECTIONS**

The connectors must be wired according to the standards specified by the AES (Audio Engineering Society).

MALE XLR CONNECTOR **Balanced** wiring



TS JACK CONNECTOR **Unbalanced mono wiring** 



FEMALE XLR CONNECTOR **Balanced** wiring



TRS JACK CONNECTOR



PIN 1 = GROUND (SHIELD)

PIN 2 = HOT (+)

PIN 3 = COLD (-)

**Balanced mono wiring** 

= GROUND (SHIELD)

= HOT (+)

= COLD (-)

#### BEFORE CONNECTING THE SPEAKER

On the rear panel you will find all the controls, signal and power inputs. At first verify the voltage label applied to the rear panel (115 Volt or 230 Volt). The label indicates the right voltage. If you read a wrong voltage on the label or if you can't find the label at all, please call your vendor or authorized RCF SERVICE CENTRE before connecting the speaker. This fast check will avoid any damage. In case of need of changing the voltage please call your vendor or authorized RCF SERVICE CENTRE. This operation requires the replacement of the fuse value and is reserved to an RCF SERVICE CENTRE.

#### **BEFORE TURNING ON THE SPEAKER**

You can now connect the power supply cable and the signal cable. Before turning on the speaker make sure the volume control is at the minimum level (even on the mixer output). It is important that the mixer is already ON before turning on the speaker. This will avoid damages to the speaker and noisy "bumps" due to turning on parts on the audio chain. It is a good practice to always turn on the speakers at last and turning them off immediately after their use. You can now turn ON the speaker and adjust the volume control to a proper level.

#### **PROTECTIONS**

The speakers are equipped with a complete system of protection circuits. The circuit is acting very gently on audio signal, controlling level and maintaining distortion at acceptable level.

# **VOLTAGE SETUP (RESERVED TO THE RCF SERVICE CENTRE)**

100-240 Volt, 50-60 Hz SETUP: FUSE VALUE T6.3 A L 250V

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.

#### PRESETS IMPORTANT

OTE: The following presets are valid for KXL 4-A, KXP 4-A and KXW 4-A only

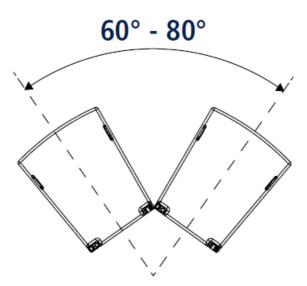
PRESET		LOW FREQ.	HIGH FREQ.		<b>3</b>	<b>₽</b> ₽
L 1 L2 L3 L4	LINEAR Linear Linear Linear	Linear High pass 3 dB Boost -3 dB Shelf	Linear Linear Linear Linear	SERIA	MADE IN ITALY	S.P.A. VIA RAFFI 24 reggio emili
C5 C 1	CLOSE LISTENING CLOSE LISTENING	Linear High pass	-3 dB Shelf -3 dB Shelf	SERIAL NUMBER	ľ	AELLO SAI A – ITALY
F I	FAR LISTENING FAR LISTENING	Linear High pass	3 dB Shelf 3 dB Shelf	3ER	IX	) SANZIO, 13 'ALY
0 1 U2			S2: High Pass U2: High Pass			읈

To select a PRESET, push the encoder until the preset led lights up. Rotate the encoder to the desired PRESET, then push the encoder again to confirm the selection.

- LI LINEAR Is the totally linear preset. The speaker curve response is perfectly lineac It is ideal when listening outdoor or in low reverberation rooms, at medium distance and at a medium or high sound pressure level.
- L2 LINEAR HIGH PASS This preset is the same as LI with a 24 dB/oct. high pass filter at 100 Hz. To be used
  when the speaker is a part of a bigger system, when is a satellite of a subwoofer system or when the
  application is speech reproduction.
- L3 LINEAR LOW LEVEL PLAYBACK This preset is linear with a gentle +3 dB boost at low frequency. To be used when playing at low level or for playback music.

This preset is linear with a gentle -3 dB shelf at low frequency. It is ideal for a better sound balance in reverberant rooms

- L4 LINEAR INDOOR and for indoor speech reproduction.
- CI CLOSE Close listening preset. To be used when the average listener is closer than 3 meter. The preset shows a gentle -3 dB shelf in high frequencies. The sound balance is natural and never aggressive.
- C2 CLOSE HIGH PASS This preset is the same as CI with a 24 dB/oct. high pass filter at 100 Hz.
- FI FAR Far listening preset. To be used when the average listener distance is more than 10 meter. The preset shows a +3 dB shelf in high frequencies to compensate the air absorption. The clarity and intelligibility in distance are improved.
- F2 FAR HIGH PASS This is the same as FI with a 24 dB/oct. high pass filter at 100 Hz.
- SI, S2 SIDE COUPLING PRESETS These presets are linear when the speaker are coupled side to side.
  These presets are properly designed for speakers coupled with a horizontal coupling angle from 700 to 800.
  The front of the cabinets shall be split and the rear of the cabinets shall be close. The S2 preset features the low frequency high pass filter.
- UI, U2 VERTICAL COUPLING PRESETS These presets are linear when the speaker are coupled vertically.
  The vertical coupling angle can vary from 00 to 100 in 20 steps. Smaller coupling angles offers a narrower
  directivity but a better sound projection and far distance definition. The U2 preset features the low frequency
  high pass filter.



#### To reset the speaker to the original settings :

- 1. Turn off the speaker
- 2. Keep the encoder pressed
- 3. Turn on the speaker (The status yellow led will blink slowly, keep the encoder pressed)
- 4. Wait until the 2 digits display will turn to show the completed reset procedure

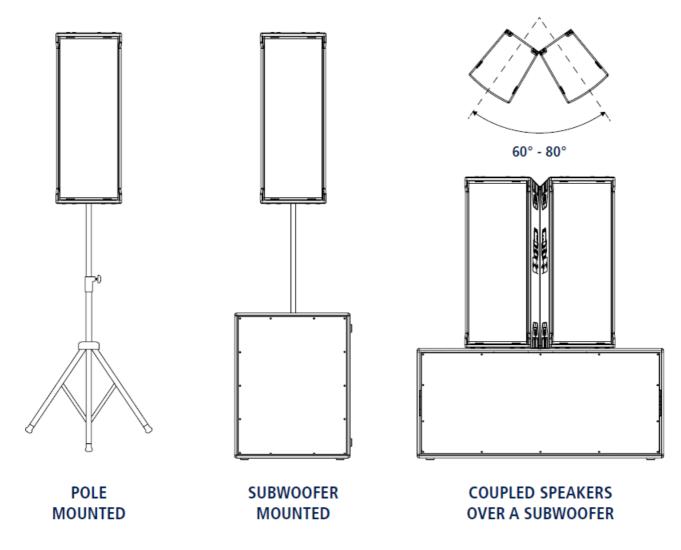
#### Now release the encoder

The reset procedure is finished

Using the RDNet IN/OUT connection it is possible to load in the speaker memory a dedicated user equalisation. The speaker reset procedure will cancel even this equalisation.

# **FLOOR CONFIGURATIONS**

IMPORTANT NOTE: The following configurations are valid for KXL 4-A, KXP 4-A and KXW 4-A only



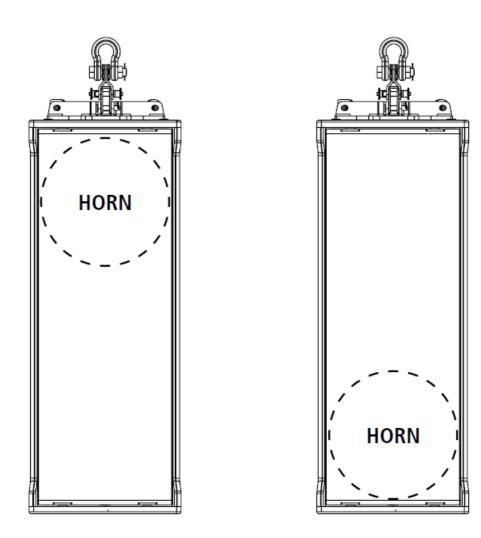
\* This configuration is suggested only for KXP 4-A

# SUSPENDED CONFIGURATIONS

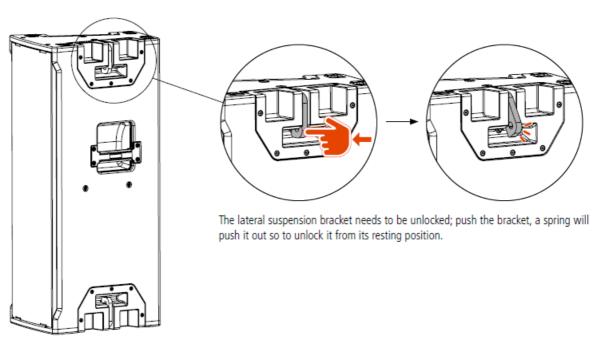
IMPORTANT NOTE: The following configurations are valid for KXL 4-A, KXP 4-A and KXW 4-A only

### SINGLE SUSPENSION ON VERTICAL FLYBAR

This configuration is suggested for KXL 4-A, KXP 4-A and KXW 4-A. The speakers can be suspended with the vertical flybar (FL-B V TT 4) indifferently with the horn in upper or lower position.

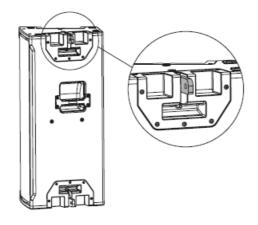


# **UNLOCKING THE SUSPENSION BRACKET**

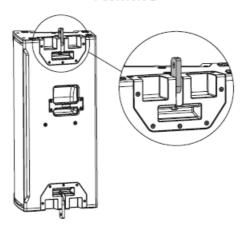


The bracket locks itself in two positions as shown in the pictures: POSITION "1", for a line array cluster configuration (horizontal) and POSITION "2", for a sound column cluster configuration (vertical)

# POSITION 1

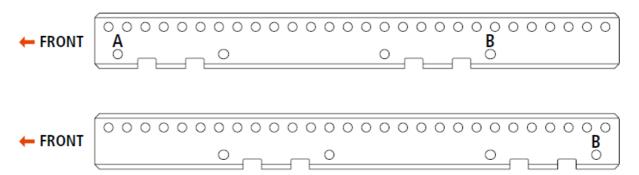


# POSITION 2

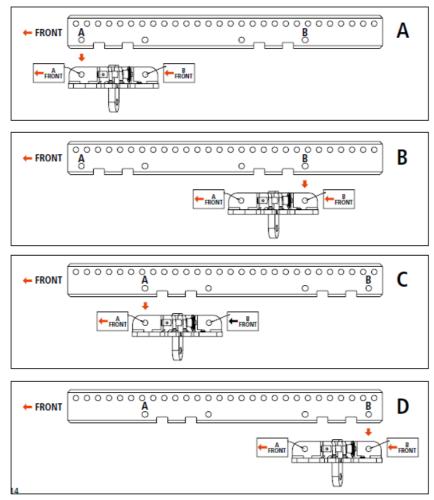


# PREPARING THE FLYBAR

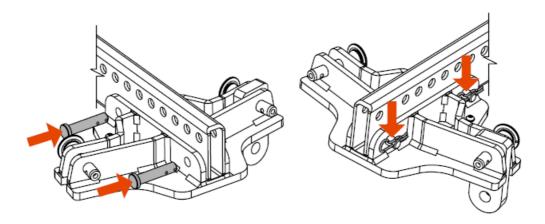
It is possible to place the tube on the flybar in two different positions as shown in the pictures



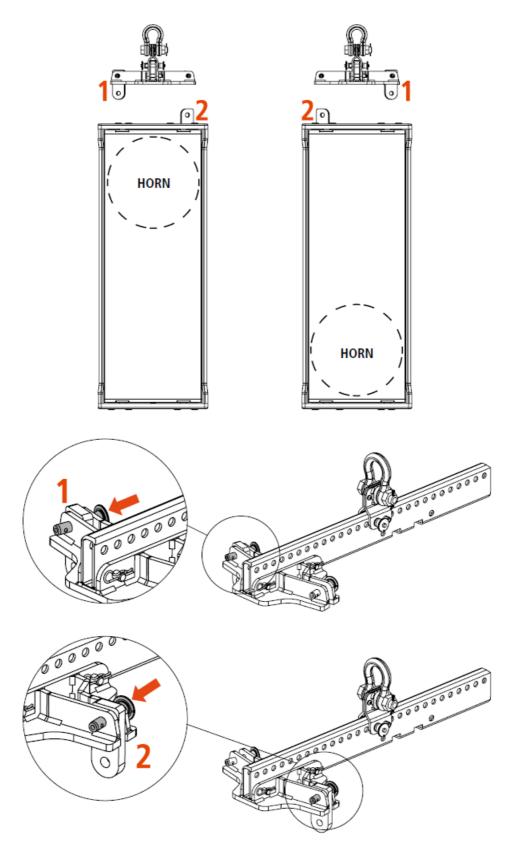
Refferring to the "FRONT" and the letters indication, 4 different flybar configurations are obtainable:



**WARNING!** CAUTION! Always lock the tube on the flybar with the two pins pointed on the picture and secure them with the split pins on the other side.

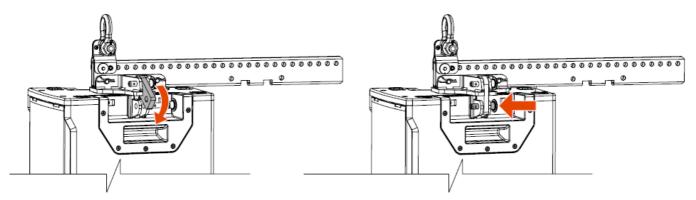


Depending on the speaker orientation (with the horn on the upper or lower side) place the flybar on the speaker and secure the two linking brackets with the quick lock pins as shown on the following pictures:

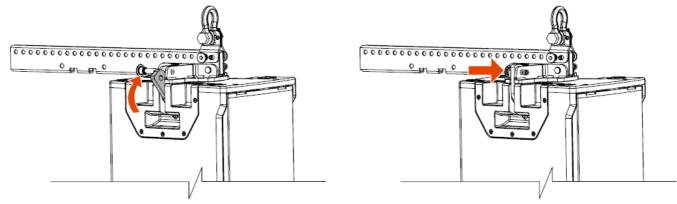


# LINKING THE FLYBAR TO THE SPEAKER

On one side of the speaker lower the linking bracket and fix it to the speaker with the quick lock pin



On the other side of the speaker raise the linking bracket and fix it to the flybar with the quick lock pin.

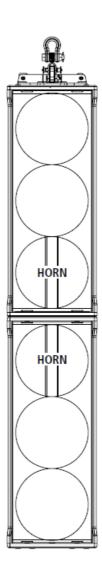


# **DOUBLE SUSPENSION ON VERTICAL FLYBAR**

This configuration is suggested for KXL 4-A and KXP 4-A; not suggested with KXW 4-A.

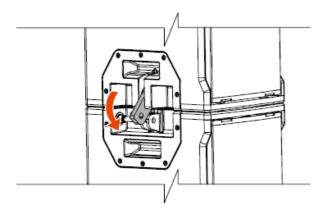
Two linked speakers can be suspended on the vertical flybar (FL-B V TT 4). The speakers must be positioned with their horns side by side and linked together with the linking brackets.

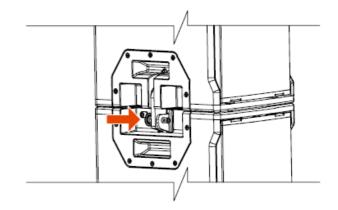
Once the first speaker is linked to the flybar, the second speaker can be suspended to the first speaker.



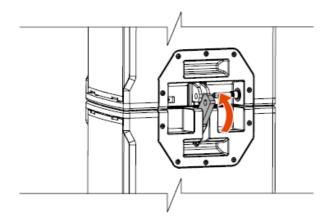
Follow the instructions on PART 7.1 to link the first speaker to the flybar.

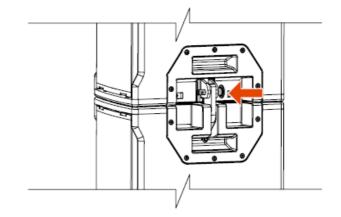
On one side of the speaker lower the linking bracket and fix it to the speaker with the quick lock pin





On the other side of the speaker raise the linking bracket and fix it to the other speaker with the quick lock pin.





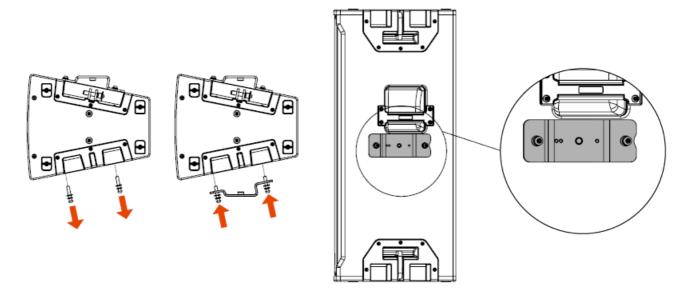
The two speakers are now linked together.

#### **WALL MOUNTING**

This configuration is suggested for KXL 4-A, KXP 4-A and KXW 4-A.

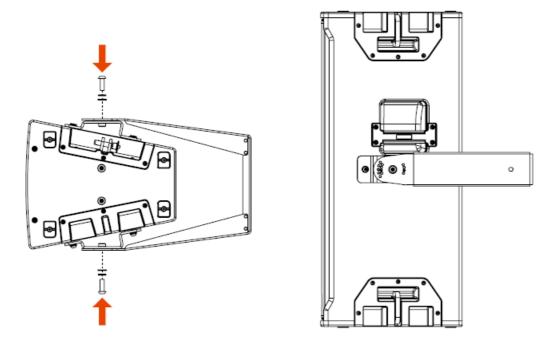
The speakers can be mounted on a wall with the vertical bracket V-BR TT 4.

Unscrew the four M8 lateral screws from the speaker, position the bracket and screw it to the speaker with the same M8 screws as shown in the image (place the bracket exactly as shown in the image). Use the flat washers and the serrated washers provided to install the vertical bracket.

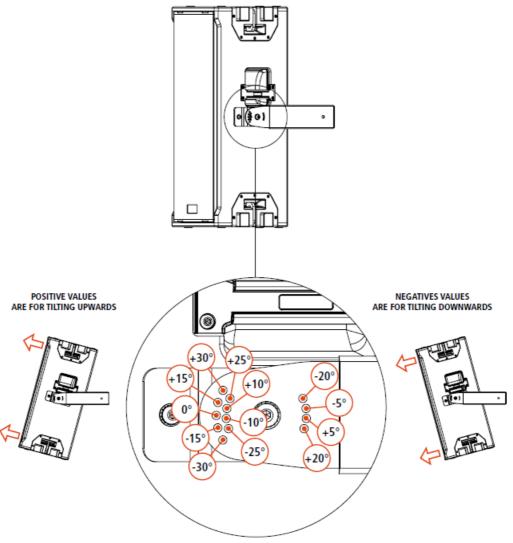


Place the V-BR bracket on the speaker and secure it using the M10 screws (Use the flat washers and the serrated washers provided).

Do not completely clamp the screws to allow the speaker inclination.



Now define the inclination angle and fix the speaker with the M6 screws provided, then clamp the M10 screws completely.



REFER TO THIS ILLUSTRATION TO DETERMINE THE INCLINATION ANGLE

IMPORTANT NOTE: For wall mounting use wall inserts (screw anchor or chemical) with the followings specs:

• min nominal share load 167 N

- · min nominal traction load 3047 N
- · safety factor equal or higher than 4

#### **PRESETS**

**IMPORTANT NOTE**: The following presets are valid for KXL C4-A, KXP C4-A and KXW C4-A only. Since KX C4-A speakers are studied to be used in clusters, the usual RCF line array preset management is considered. To select a PRESET, push the encoder until the preset led lights up. Rotate the encoder to the desired PRESET, then push the encoder again to confirm the selection.

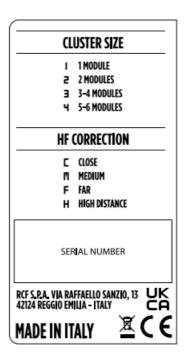
#### **LOW FREQUENCY PRESET**

In the low frequency range the interaction between the sound of single cabinets produces an increase of sound level in low frequencies proportional to the number of loudspeakers in the cluster. This effect unbalances the global equalization of the system: the interaction between the loudspeakers decreases, increasing the frequency (they become more directive) For the control of the displacement described above it is necessary to progressively reduce the low frequencies level in the global equalization reducing the gain if the frequency decreases (low shelf filter). The preset is suggested considering the number of the cabinets in the cluster: the final tuning of the system should be done with measurements and listening sessions, considering the environmental conditions.

#### HIGH FREQUENCY PRESET

The sound propagation, in particular the high frequencies (1.5 KHz and up), depends essentially on the conditions of the air in which it travels. We can generally affirm that air absorbs high frequencies and the amount of absorption depends on temperature, humidity and the distance that sound covers. The decibel decrease is well modelled by a mathematical formula that combines the three parameters (temperature, humidity and distance) giving a profile of the absorption in function of the frequency.

In the case of a loudspeaker cluster the goal is the audience coverage with the best possible uniformity, obtainable only by compensating for the absorption introduced by air? It is easy to understand that every cabinet should be compensated differently from the other array cabinets because the compensation should consider the distance at which the cabinet is aiming The compensation should be translated in terms of decibels that should be progressively added with the increase of high frequencies



There are 4 groups of 4 prestes, making a total of sixteen presets:

• C – CLOSE (C1, C2, C3, C4)

When the listening distance is less than 8 meters.

• M - MEDIUM (M1, M2, M3, M4)

When the listening distance goes from 8 to 16 meters.

• F - FAR (F1, F2, F3, F4)

When the listening distance goes from 16 to 32 meters.

• H - HIGH DISTANCE (H1, H2, H3, H4)

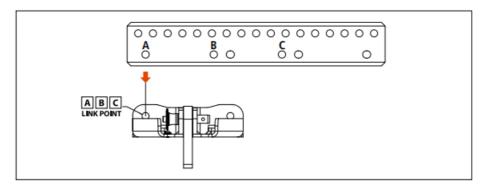
When the listening distance is more than 32 meters.

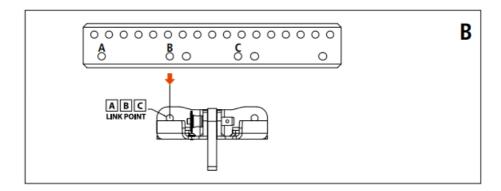
The number following the letter stands for the number of speakers on the cluster.

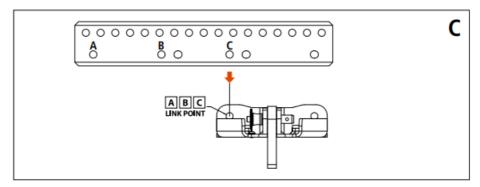
### SUSPENDED CONFIGURATIONS

#### PREPARING THE FLYBAR

Referring to indications A, B, C on the flybar for positioning the tube on the hole A B C LINK POINT, it is possible to set the Flybar in 3 different configurations.

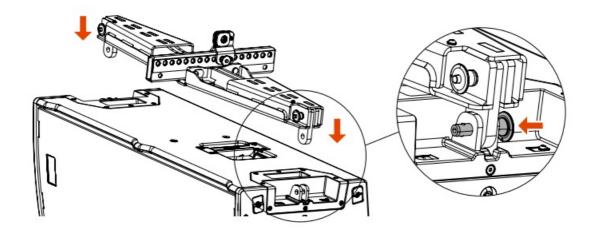






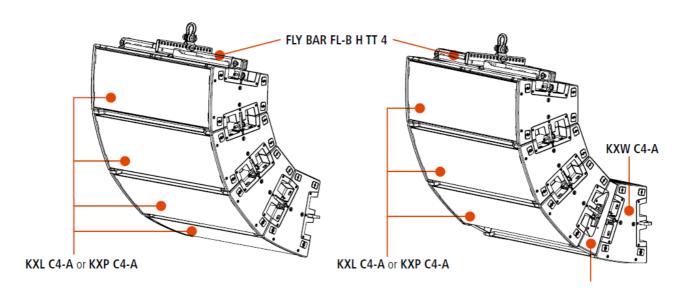
# LINKING THE FLYBAR TO THE SPEAKER (HORIZONTAL CONFIGURATION)

Place the Flybar over the speaker by matching the two lateral brackets, then insert the quick lock pin on both sides.



# LINKING TWO OR MORE SPEAKERS TOGETHER (HORIZONTAL CONFIGURATION)

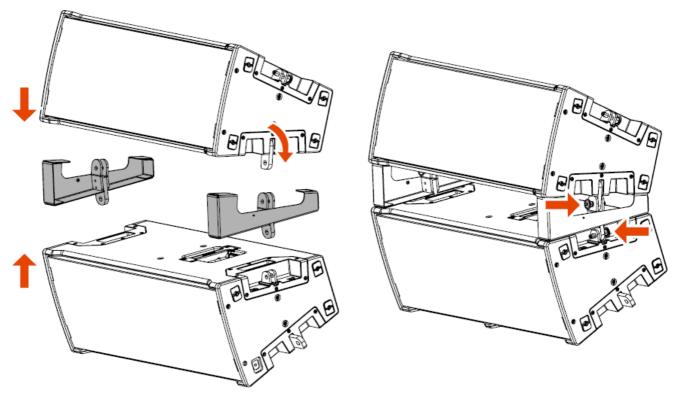
To link two or more speakers together in horizontal configuration, raise the lateral bracket on one speaker and insert it to the corresponding seat on the other speaker; then secure it by inserting the quick lock pin? The same operation must be done on both sides of the speaker.



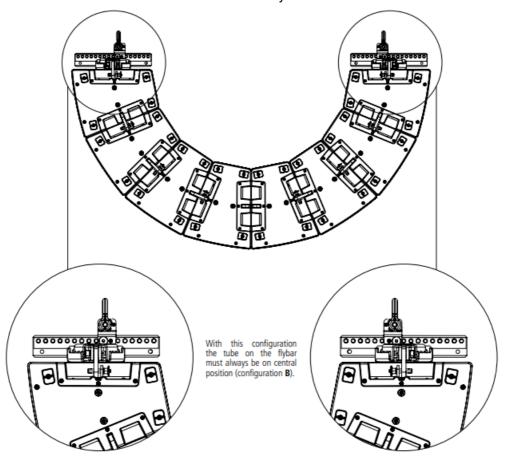
- With the use one single flybar it is possible to suspend up to 4 modules; each one of the can either be a KXL C4-A or a KXP C4-A (KXW C4-A not reccommended in this configuration).
- The specific accessory LINK BAR FL-B LINK TT 4 must be placed between the third and the fourth speaker only when a KXW C4-A is placed as last speaker.

**IMPORTANT NOTE**: The following configurations are valid for KXL C4-A, KXP C4-A, KXW C4-A only. KX C4-A models can be suspended with the use of their specific flybar FLY BAR FL-B H TT 4.

To link the LINK BAR FL-B LINK TT4 to the speakers, simply proceed like linking two speakers: raise the lateral bracket on one speaker and insert it to the corresponding seat on the LINK BAR; then insert the lower lateral bracket of the LINK BAR into its seat on the lower speaker. Secure both brackets by inserting the quick lock pins. The same operation must be done on both sides of the LINK BAR.



Up to 8 modules can be suspended together with the use of two flybars (as shown in the picture below); in this configuration all the modules can KXL C4-A or KXP C4-A only?



**IMPORTANT NOTE:** RCF highly reccommends to chek on Easy Focus Software to verify if your configuration is appropriate for your application.

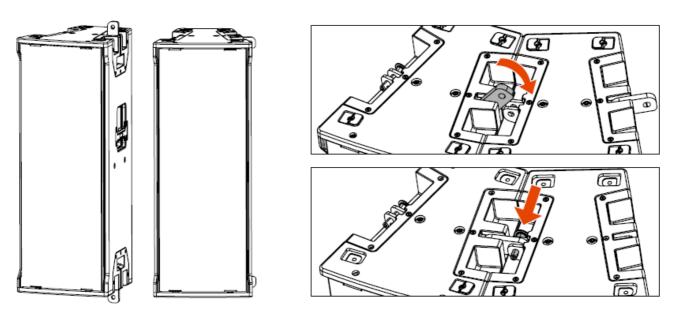
### SUSPENDED CONFIGURATIONS

# **LIFTING BRACKET HORIZ. H-PLATE TT4**

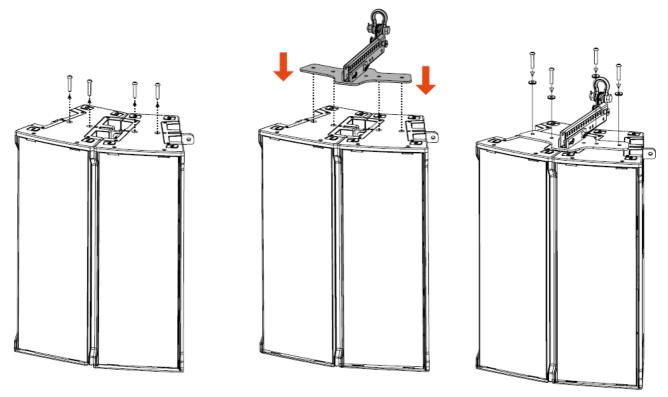
With the accessory LIFTING BRACKET HORIZ H-PLATE TT4 it is possibile to suspend 2 or 3 KXL C4-A or KXP

# **LINKING 2 SPEAKERS FOR VERTICAL SUSPENSION**

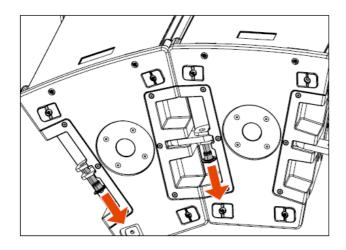
Place two KXL C4-A or KXP C4-A side by side and link them together by lowering the two lateral brackets (upper and lower) and securing them with the quick lock pin

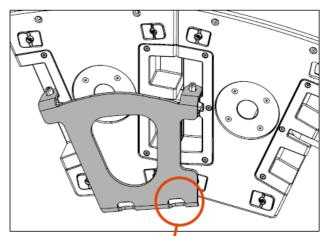


Unscrew the two M10 bolts on top of each speaker (four total) and place the H-PLATE on top Then fix the H-PLATE with 4xM10 screws and washers



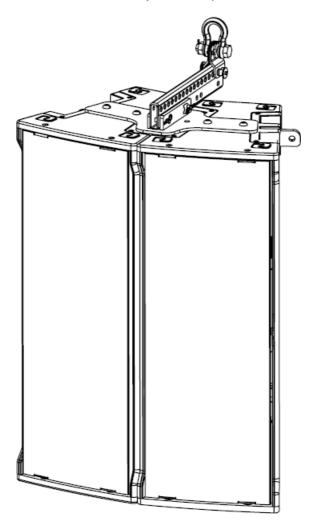
On the bottom side, partially extract two quick lock pins (one from the central speaker and one from one of the speakers beside), enough to free the front side of their seat Then place the bottom plate on its seat and secure it by pushing back the quick lock pins all the way through





This is the hanging point to use in the 2 speakers configuration

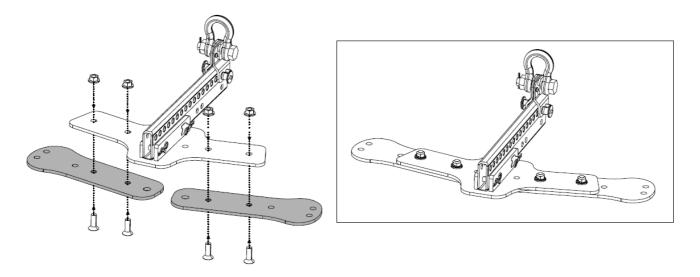
The 2-speakers vertical configuration is now set and ready to be suspended



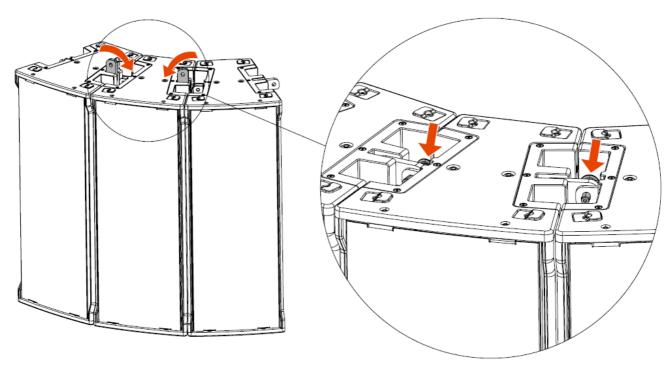
IMPORTANT NOTE: This configuration is only suitable with KXL C4-A and KXP C4-A; it is not reccommended for KXW C4-A.

# **LINKING 3 SPEAKERS FOR VERTICAL SUSPENSION**

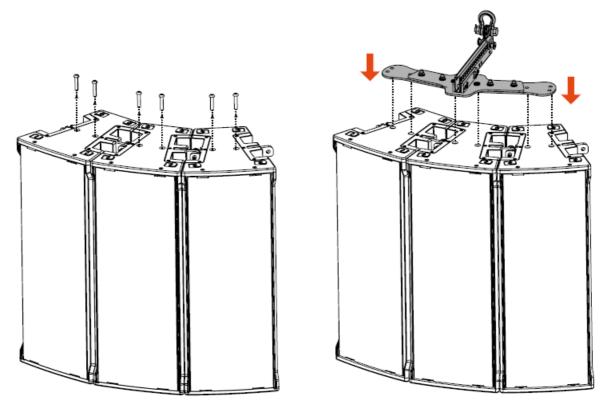
To suspend three speakers (KXL C4-A or KXP C4-A) with the LIFTING BRACKET HORIZ. H-PLATE TT4, you need to prepare the bracket by adding the two extension plates to the main bracket, as shown in the image Secure the extension plates by tightening the bolts on each nut on the other side



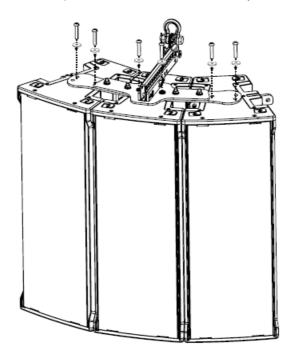
Now place three KX C4-A speakers side by side and link them together by lowering the two lateral brackets (upper and lower) and securing them with the quick lock pins



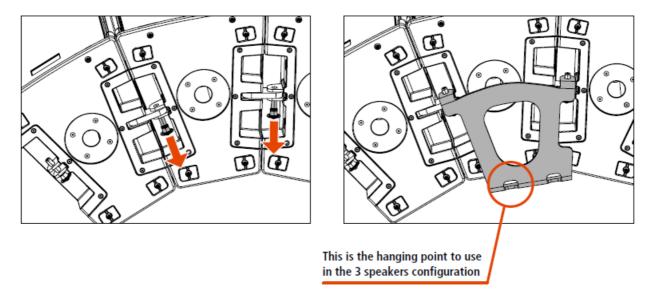
Unscrew the two M10 bolts on top of each speaker (six total) and place the H-PLATE over the central speaker



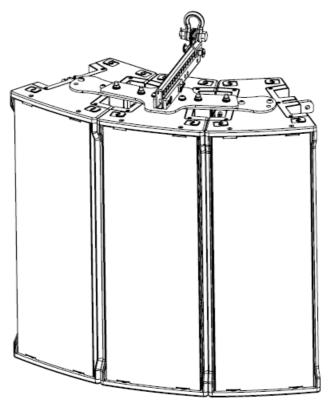
Screw back the six M10 bolts (and washers) to secure the bracket to the speakers



On the bottom side, partially extract both quick lock pins, enough to free the front side of their seat Then place the bottom plate on its seat and secure it by pushing back the quick lock pins all the way through



The 3-speakers vertical configuration is now set and ready to be suspended?



IMPORTANT NOTE: This configuration is only suitable with KXL C4-A and KXP C4-A; it is not reccommended for KXW C4-A.

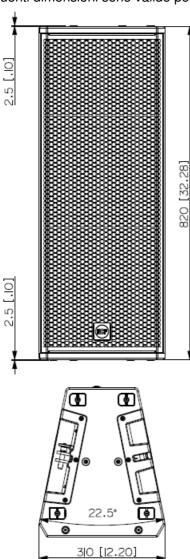
# **TROUBLESHOOTING**

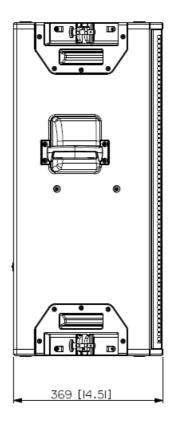
- THE SPEAKER DOESN'T TURN ON
   Make sure the speaker is switched on and connected to an active AC power
- THE SPEAKER IS CONNECTED TO AN ACTIVE AC POWER BUT DOESN'T TURN ON Make sure the power cable is intact and connected correctly.
- THE SPEAKER IS ON BUT DOESN'T MAKE ANY SOUND
   Check if the signal source is sending correctly and if the signal cables are not damaged.
- THE SOUND IS DISTORTED AND THE OVERLOAD LED BLINKS FREQUENTLY Turn down the output level of the mixer.

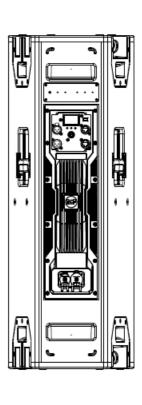
- THE SOUND IS VERY LOW AND HISSING
  - The source gain or the output level of the mixer might be too low.
- THE SOUND IS HISSING EVEN AT PROPER GAIN AND VOLUME
  - The source might send a low quality or noisy signal
- HUMMING OR BUZZING NOISE
  - Check out the AC grounding and all the equipments connected to the mixer input including cables and connectors.

# **DIMENSIONS**

The following dimensions are valid for all the six models of KX 4-A and KX C4-A. Le seguenti dimensioni sono valide per tutti e sei i modelli di KX 4-A e KX C4-A.







# **SPECIFICATIONS**

	Frequency Response:	45 Hz ÷ 20000 Hz
Acoustical specifications	Max SPL @ 1m:	135 dB

		100°H x 25°V (KXL 4-A; KXL C4-A)
	Coverage angle:	600°H x 25°V (KXP 4-A; KXP C4-A)
		100°H x 50°V (KXW 4-A; KXW C4-A)
		1 x 1.5" neo, 4.0" v.c
Transducers	Compression Driver: Woofer:	2 x 10" neo, 3.0" v.c
	Input signal:	bal/unbal
Input/Output section	Input connectors:	XLR, RDNet Ethercon
	Output connectors:	XLR, RDNet Ethercon
	Input sensitivity:	+4 dBu
	Crossover Frequencies:	900Hz
Processor section	Protections:	Thermal, RMS
	Limiter:	Fast Limiter
	Controls:	Selectable preset, volume, delay
	RDNet:	Yes
	Total Power:	3200 W Peak, 1600 W RMS
Power section	High frequencies:	1200 W Peak, 600 W RMS
	Low frequencies:	2000 W Peak, 1000 W RMS
	Cooling:	Convection
	Connections:	Powercon IN/OUT
Standard compliance	CE marking:	Yes
	Cabinet/Case Material:	Baltic birch plywood
Physical specifications	Hardware:	Array fittings, 2xM10 on the top, 2xM8
	Handles:	2 side, 2 rear
	Pole mount/Cap:	Yes
	Grille:	Steel
	Color:	Black
	Height:	825 mm / 32.48 inches
Size	Width:	316 mm / 12.44 inches
	Depth:	369 mm / 14.53 inches
	Weight:	30.4 kg / 67.02 lbs

	Package Height:	410 mm / 16.14 inches
Shipping informations	Package Width:	865 mm / 34.06 inches
	Package Depth:	365 mm / 14.37 inches
	Package Weight:	33.5 kg / 73.85 lbs

# **Documents / Resources**



RCF KXL 4-A Two Way Active Speaker Modules [pdf] Owner's Manual 4-A, C4-A, KXL 4-A Two Way Active Speaker Modules, Two Way Active Speaker Modules, Active Speaker Modules, Speaker Modules

# References

- Res Audio Experience
- User Manual

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