ART 810-A
ART 812-A
ART 815-A

PROFESSIONAL ACTIVE SPEAKERS

1. SAFETY PRECAUTIONS AND GENERAL INFORMATION

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

	CAUTION	Important operating instructions: explains hazards that could damage a product, including data loss
	WARNING	Important advice concerning the use of dangerous voltages and the potential risk of electric shock, personal injury or death.
	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.

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.
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.
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 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.
2. 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 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.

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.
3. 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 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 this 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 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.

FCC NOTES

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.

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

ART 810-A | ART 812-A | ART 815-A

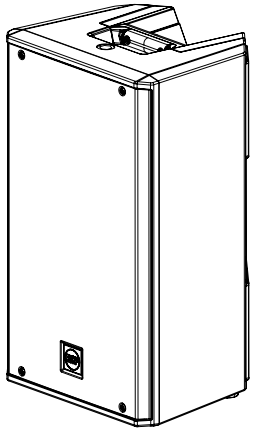
The ART 8 family sets a benchmark in the professional active speaker market, delivering outstanding performance, versatility, and reliability for live sound and installation applications.

All models in the series are equipped with a 1.75” compression driver that ensures exceptional vocal clarity, intelligibility, and sound projection. The woofers, available in different sizes depending on the model, provide an extremely linear response and precise, deep low-frequency control, making each speaker perfectly suited to applications requiring power, definition, and dynamic performance.

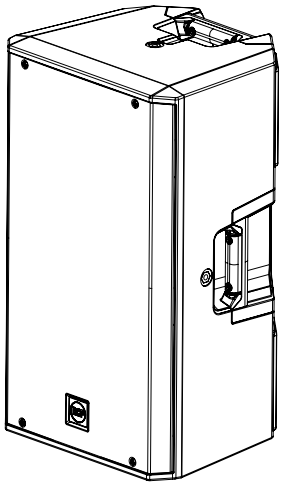
The transducers are manufactured using the most advanced assembly technologies, while the built-in 1400 W amplifier is managed by a powerful DSP that controls crossover, equalization, phase alignment, soft limiting, and system protections. The integration of proprietary FiRPHASE and Bass Motion Control (BMC) technologies, specifically optimized for each model, guarantees a coherent frequency response, crystal-clear reproduction, and deep, controlled bass.

The sleek cabinet design is made from a special polypropylene composite material with internal M-brace reinforcement, combining lightweight construction with maximum strength. This makes the speakers easy to carry and simple to install on a pole, flown, wall-mounted, or truss-mounted, thanks to multiple available rigging points.

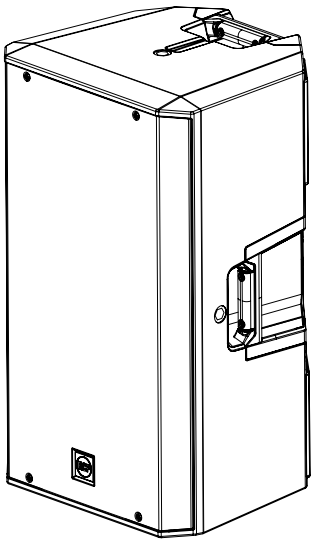
The ART 8 series is engineered to deliver maximum operational flexibility, superior sound quality, and professional reliability in every situation.



ART 810-A
1400 Watt
10” Woofer - 2,5” v.c.
1.75” Compression Driver
16 kg / 35.27 lbs

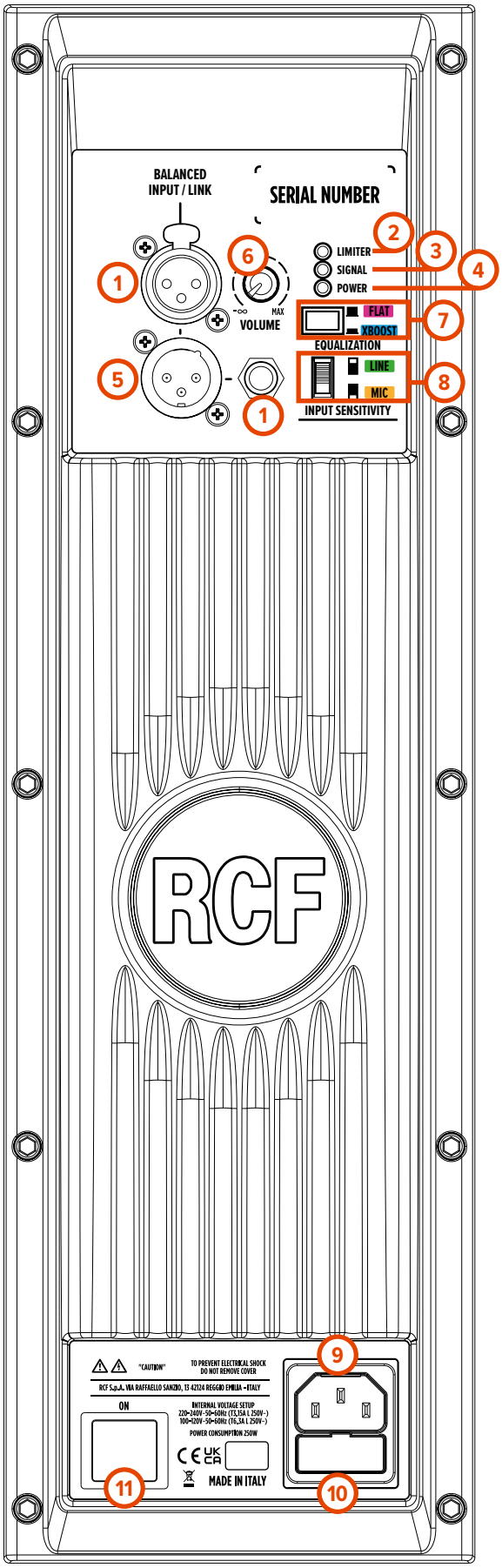


ART 812-A
1400 Watt
12” Woofer - 2,5” v.c.
1.75” Compression Driver
19 kg / 41.89 lbs



ART 815-A
1400 Watt
15” Woofer - 2,5” v.c.
1.75” Compression Driver
22,4 kg / 49.38 lbs

3. REAR PANEL FEATURES AND CONTROLS



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

2 LIMITER LED The amplifier has a built in limiter circuit to prevent clipping of the amplifiers or overdriving the transducers. When the soft clipping circuit is active the LED blinks orange. It is okay if the limit LED blinks occasionally. If the LED blinks frequently or lights continuously, turn down the signal level.

3 SIGNAL LED The signal indicator lights green if there is signal present on the main XLR input.

4 POWER LED This LED lights up when the speaker is on.

5 MALE XLR SIGNAL OUTPUT
The output XLR connector provides a loop trough for speakers daisy chaining.

6 VOLUME CONTROL Adjusts the master volume.

7 FLAT/XBOOST SWITCH Sets the flat or boost equalization.

XBOOST increases the depth and richness of the low frequencies. It is optimal for background music or when the speaker is used full-range and without a subwoofer.

FLAT equalisation is recommended for all other applications.

8 INPUT SENSITIVITY SWITCH Position the switch in LINE to use a line level source (0 dB) or MIC to use a microphone source.

9 STANDARD 3-PRONG IEC SOCKET Power connection.

10 FUSE CARRIER Mains fuse housing.

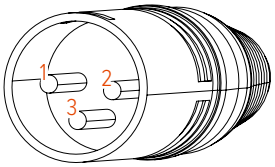
11 POWER MAIN SWITCH The power switch turns the AC power ON and OFF.

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.

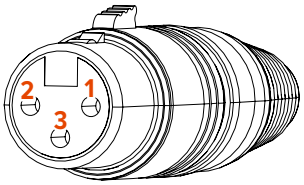
5. CONNECTIONS

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

MALE XLR CONNECTOR
Balanced wiring

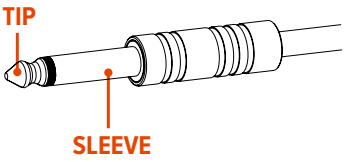


FEMALE XLR CONNECTOR
Balanced wiring

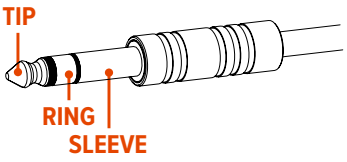


PIN 1 = GROUND (SHIELD)
PIN 2 = HOT (+)
PIN 3 = COLD (-)

6.3 mm TS CONNECTOR
Unbalanced mono wiring



6.3 mm TRS CONNECTOR
Balanced mono wiring



SLEEVE = GROUND (SHIELD)
TIP = HOT (+)
RING = 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

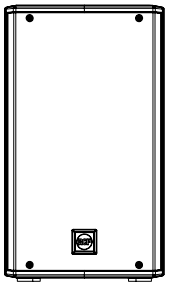
ART Series active speakers are equipped with a complete system of protection circuits. The circuit is acting very gently on audio signal, controlling level and maintaining distortion at acceptable level.

VOLTAGE SETUP (RESERVED TO THE RCF SERVICE CENTRE)

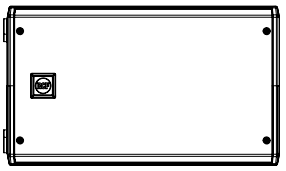
200-240 Volt, 50 Hz (FUSE VALUE T3.15 A L 250V)
100-120 Volt, 60 Hz (FUSE VALUE T6.3 A L 250V)

FLOOR CONFIGURATIONS

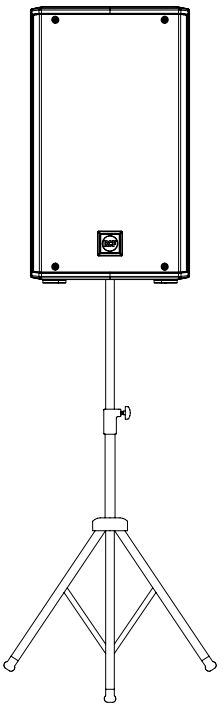
Several configurations are possibile with ART 8 Speakers; they can be placed on the floor or on a stage as main PA or used as stage monitors; they can also be pole mounted on a speaker stand or over a subwoofer.



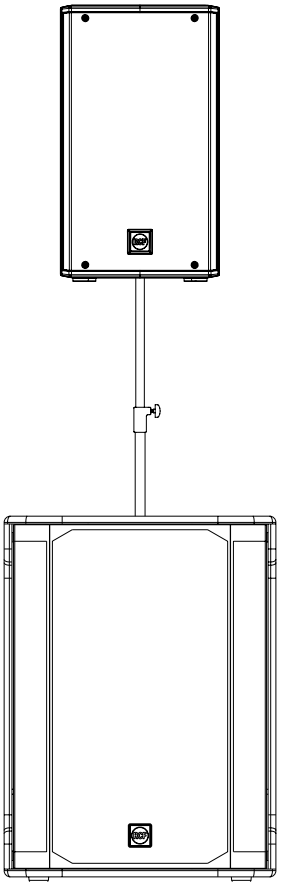
FLOOR OR STAGE STANDING



STAGE MONITOR

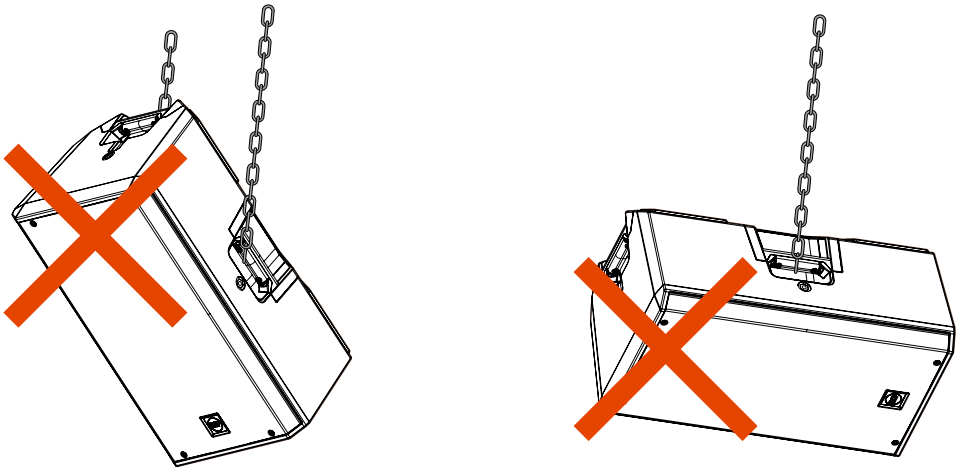


POLE MOUNTED

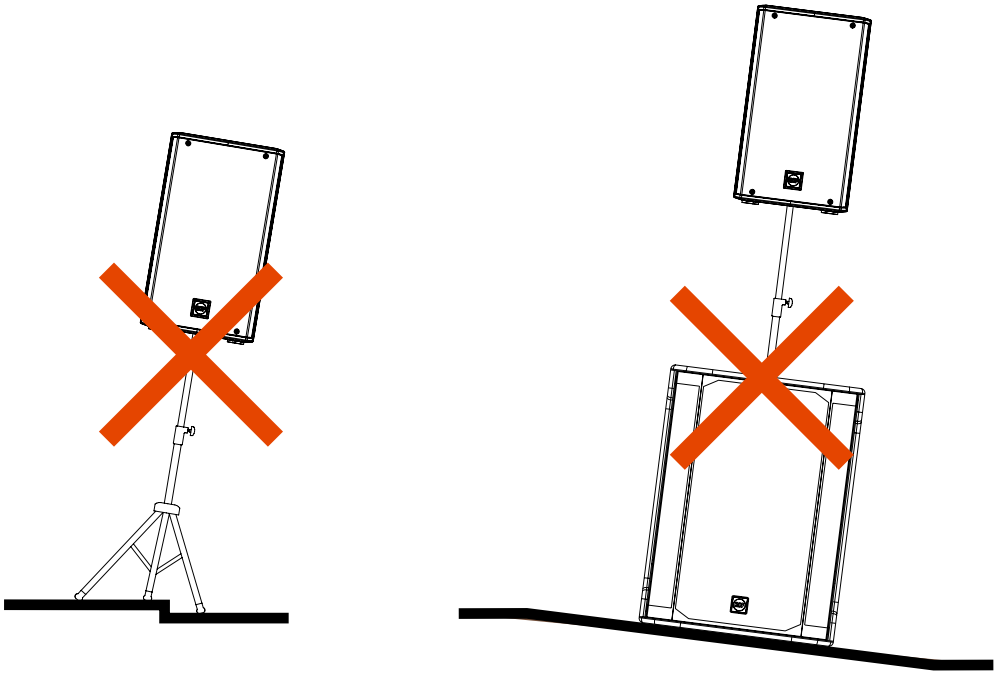


SUBWOOFER MOUNTED

6. INSTALLATION



WARNING! CAUTION! Never suspend ART speakers by there handles. Handles are intended for transportation, not for rigging.



WARNING! CAUTION! To use this product with the subwoofer pole-mount, before installing the system, please verify the allowed configurations and the indications regarding the accessories, on the RCF website to avoid any danger and damages to people, animals and objects. In any case, please assure the subwoofer which is holding the speaker is located on an horizontal floor and without inclinations.

WARNING! CAUTION! The use of these speakers with Stand and Pole Mount accessories can be done by qualified and experienced personnel only, trained appropriately on professional systems installations. In any case it's the user's final responsibility to ensure the system safety conditions and avoid any danger or damage to people, animals and objects.

7. 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.

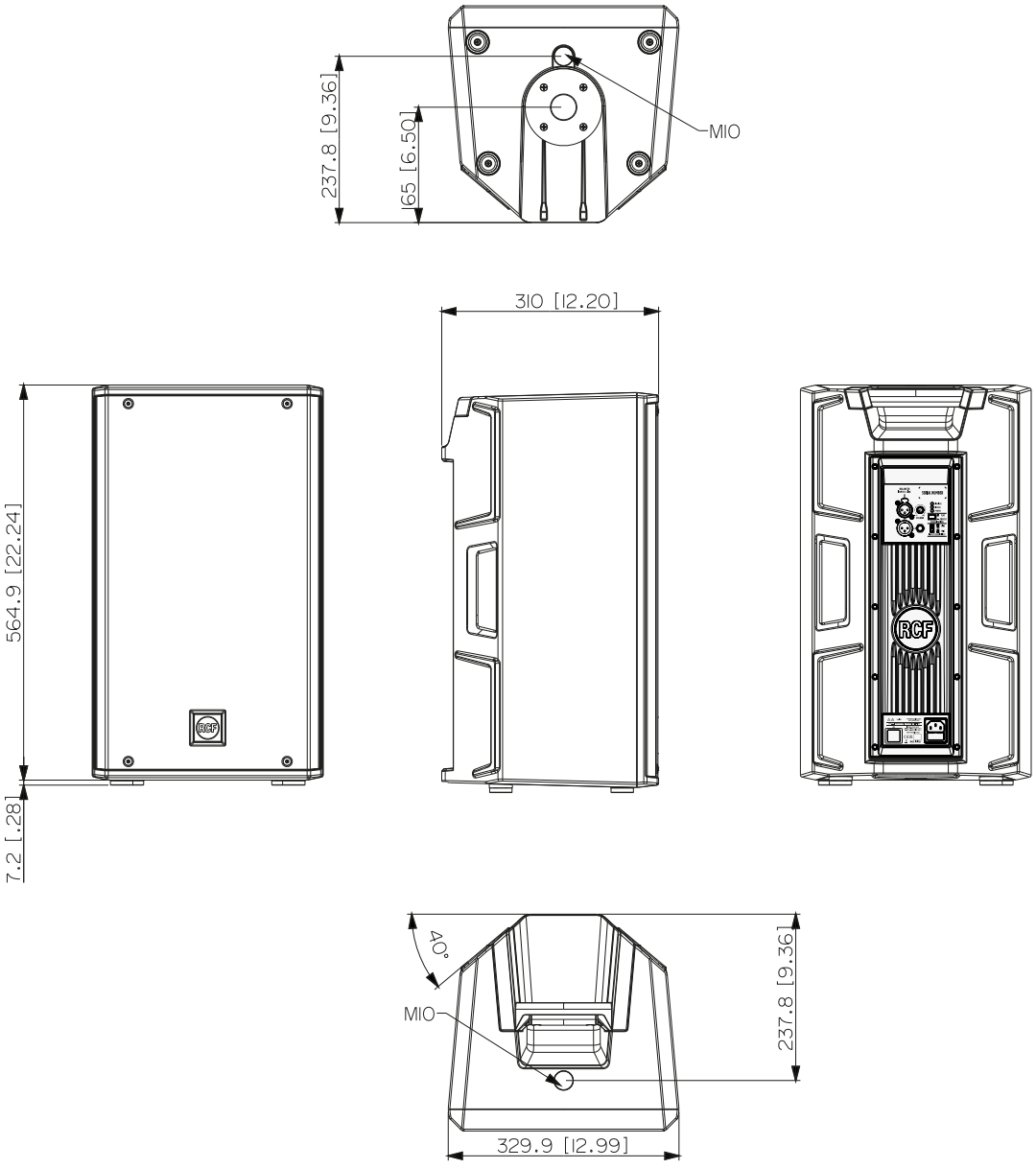
THE SOUND IS VERY LOW AND HISSING
The source gain or the output level of the mixer might be too low.

THE SOUND IS HISSING EVEN AT PROPER GAIN AND VOLUME
The source might send a low quality or noisy signal

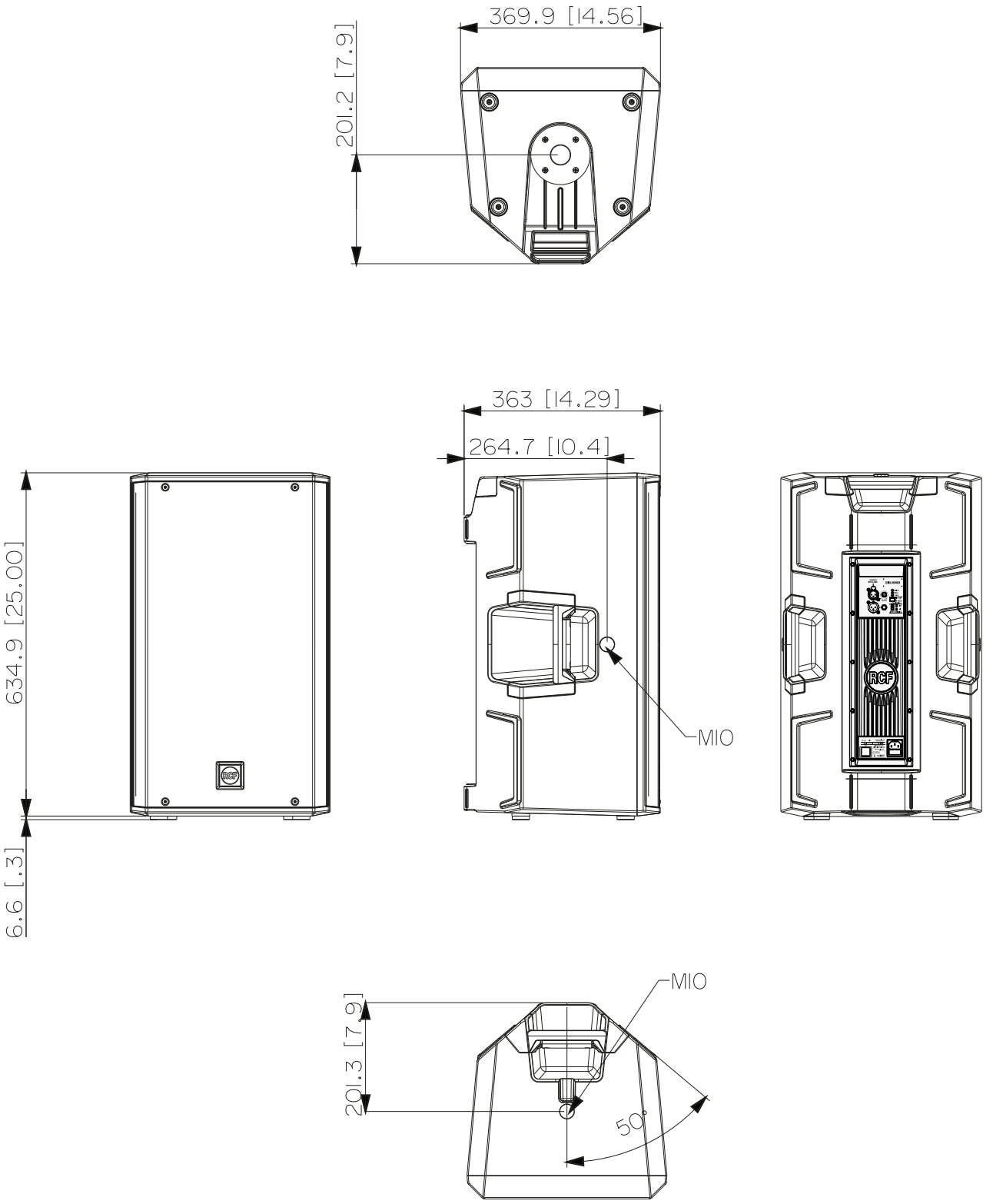
HUMMING OR BUZZING NOISE
Check out the AC grounding and all the equipments connected to the mixer input including cables and connectors.

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

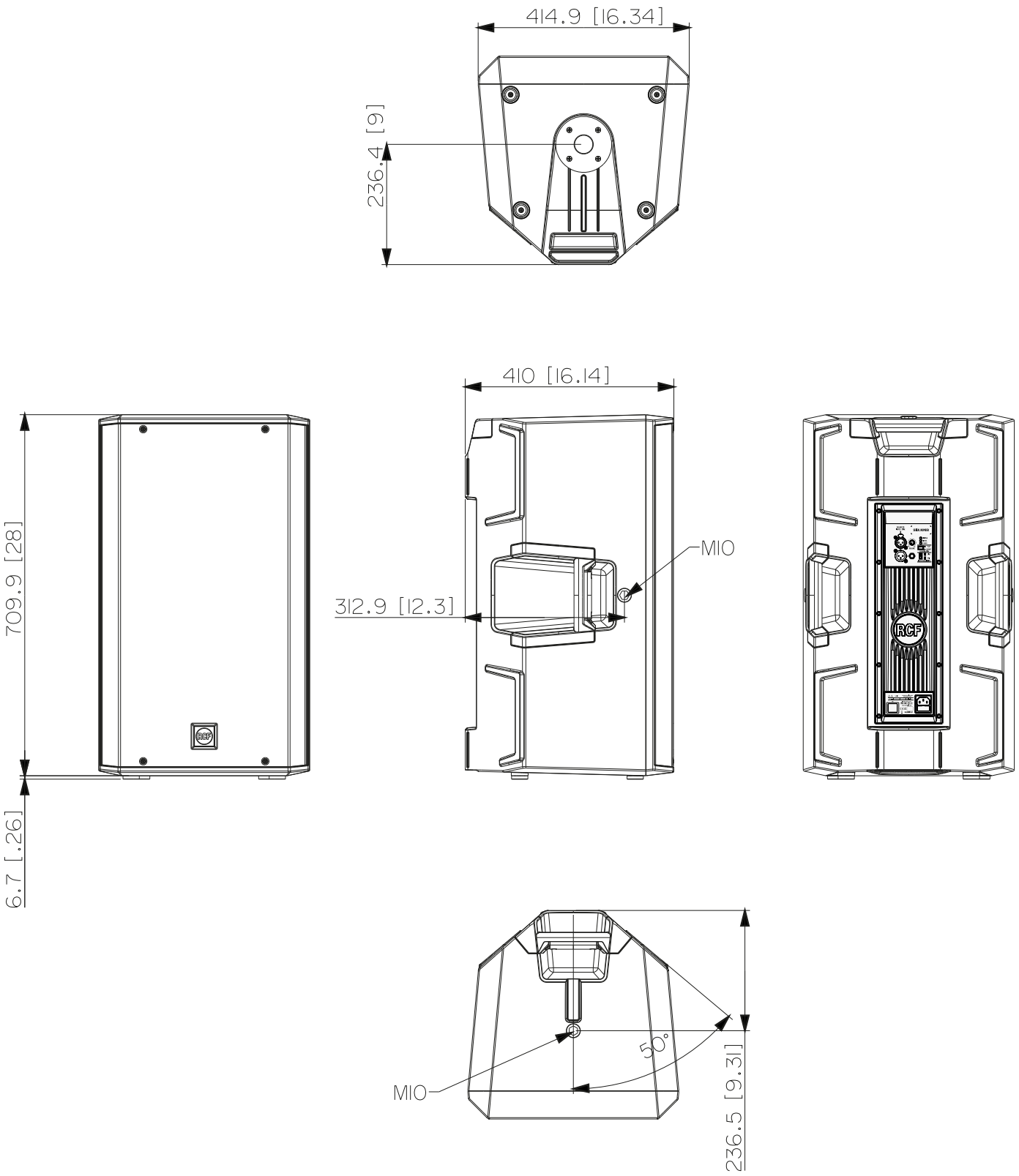
ART 810-A DIMENSIONS



ART 812-A DIMENSIONS



ART 815-A DIMENSIONS



SPECIFICATIONS

		ART 810-A	ART 812-A	ART 815-A
Acoustical specifications	Frequency Response	50 Hz - 20000 Hz	50 Hz - 20000 Hz	45 Hz - 20000 Hz
	Max SPL @ 1m	129 dB	129 dB	130 dB
	Horizontal coverage angle	100°	100°	100°
	Vertical coverage angle	60°	60°	60°
Transducers	Compression Driver	1 x 1.0'', 1.75'' v.c	1 x 1.0'', 1.75'' v.c	1 x 1.0'', 1.75'' v.c
	Woofer	1 x 10'', 2.5'' v.c	1 x 12'', 2.5'' v.c	1 x 15'', 2.5'' v.c
Input/Output section	Input signal	bal/unbal	bal/unbal	bal/unbal
	Input connectors	XLR, Jack	XLR, Jack	XLR, Jack
	Output connectors	XLR	XLR	XLR
	Input sensitivity	-2 dBu/+4 dBu	-2 dBu/+4 dBu	-2 dBu/+4 dBu
	Mic. Input Sensitivity	-32 dBu	-32 dBu	-32 dBu
Processor section	Crossover Frequencies	1600	1600	1600
	Protections	Thermal, RMS	Thermal, RMS	Thermal, RMS
	Limiter	Soft Limiter	Soft Limiter	Soft Limiter
	Controls	Volume, Boost, MIC/Line	Volume, Boost, MIC/Line	Volume, Boost, MIC/Line
Power section	Total Power	1400 W Peak	1400 W Peak	1400 W Peak
	High frequencies	400 W Peak	400 W Peak	400 W Peak
	Low frequencies	1000 W Peak	1000 W Peak	1000 W Peak
	Cooling	Convection	Convection	Convection
	Connections	VDE	VDE	VDE
Standard compliance	Safety agency	CE compliant	CE compliant	CE compliant
Physical specifications	Cabinet/Case Material	PP Composite	PP Composite	PP Composite
	Hardware	2 x M10 (1 on top, 1 on bottom)	3 x M10 (1 on top, 1 each side)	3 x M10 (1 on top, 1 each side)
	Handles	1 on top	1 on top, 1 each side	1 on top, 1 each side
	Pole mount/Cap	35 mm insert	35 mm insert	35 mm insert
	Grille	Steel	Steel	Steel
	Color	Black	Black	Black
Size / Weight	Height	564.9 mm / 22.24 inches	634.9 mm / 25 inches	709.9 mm / 27.95 inches
	Width	329.9 mm / 12.99 inches	369.9 mm / 14.56 inches	414.9 mm / 16.33 inches
	Depth	310.2 mm / 12.21 inches	363.2 mm / 14.3 inches	410.2 mm / 16.15 inches
	Weight	16 kg / 35.27 lbs	19 kg / 41.89 lbs	22.4 kg / 49.38 lbs

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