

ARQIS Series

CABINET LOUDSPEAKERS

Architectural Loudspeaker Cabinets



USER MANUAL

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1. IMPORTANT REMARK



WARNING: SHOCK HAZARD - DO NOT OPEN

AVIS: RISQUE DE CHOC ÉLECTRIQUE - NE PAS OUVRIR



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: To prevent fire or shock hazard, do not expose this equipment to rain or moisture.

WARNING: An apparatus with Class I construction shall be connected to a mains socket-outlet with a protective earthing connection.

2. IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Unplug the apparatus during lightening sorts or when unused for long periods of time.
13. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. Disconnecting from mains: Switching off the POWER switch all the functions and light indicators of the amplifier will be stopped, but fully disconnecting the device from mains is done unplugging the power cord from the mains input socket. For this reason, it always shall remain readily operable.
15. Equipment is connected to a socket-outlet with earthing connection by means of a power cord.
16. The marking information is located at the bottom of apparatus.
17. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on apparatus.

NOTE: *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.*



WARNING: This product must not be discarded, under any circumstance, as unsorted urban waste. Take to the nearest electrical and electronic waste treatment centre.

NEEC AUDIO BARCELONA, S.L. accepts no liability for any damage that may be caused to people, animal or objects due to failure to comply with the warnings above.

3. IMPORTANT NOTE

Congratulations! You are the owner of carefully designed and manufactured equipment. We thank you for trusting in us and choosing our ARQIS Series loudspeaker cabinets.

In order to get the optimum operation and efficiency from this unit, it is VERY IMPORTANT - before you plug anything - to read this manual very carefully and bear in mind all considerations specified within it. We strongly recommend that its maintenance be carried out by our Authorised Technical services.

4. INTRODUCTION

Based on studying installers and interior design and system integration professionals as well as on a permanent contact with them, the ARQIS line of speakers is designed for fixed installation, especially in environments in need of a compact speaker offering high output, easy installation, long-term reliability and excellent sound quality.

5. MODELS

5.1. ARQIS105

- Full range, 2-way architectural loudspeaker
- 70 WRMS @ 8 Ω
- 5,25" woofer
- 1" tweeter
- Double INPUT/STACK connector, Euroblock type, with security attachment screws to avoid accidental disconnection
- Wall bracket included, allowing for pan & tilt adjustment, employing a single screw for fastening
- Metal safety sling included, to avoid drops in case of accidental detachment from the wall surface
- Available in black or white finish

5.2. ARQIS106

- Full range, 2-way architectural loudspeaker
- 120 WRMS @ 8 Ω
- 6,5" woofer
- 1" compression driver (rotatable)
- Double INPUT/STACK connector, Euroblock type, with security attachment screws to avoid accidental disconnection
- Wall bracket included, allowing for pan & tilt adjustment, employing a single screw for fastening
- Metal safety sling included, to avoid drops in case of accidental detachment from the wall surface
- Available in black or white finish

5.3. ARQIS108

- Full range, 2-way architectural loudspeaker
- 175 WRMS @ 8 Ω
- 8" woofer
- 1" compression driver (rotatable)
- Double INPUT/STACK connector, Euroblock + Speakon© type, with security attachment screws to avoid accidental disconnection
- Wall bracket included, allowing for pan & tilt adjustment, employing a single screw for fastening
- U-bracket wall-mount accessory compatible, ARQ108UB (not included)
- Metal safety sling included, to avoid drops in case of accidental detachment from the wall surface
- Available in black or white finish

5.4. ARQIS205

- Full range, 2-way architectural loudspeaker
- 140 WRMS @ 8 Ω
- 2 x 5,25" woofer
- 1" compression driver (rotatable)
- Double INPUT/STACK connector, Euroblock + Speakon© type, with security attachment screws to avoid accidental disconnection
- U-bracket wall-mount included, allowing for tilt adjustment
- 8 x M8 cabinet flying points
- Metal safety sling included, to avoid drops in case of accidental detachment from the wall surface
- Available in black or white finish

5.5. ARQIS208

- Full range, 2-way architectural loudspeaker
- 300 WRMS @ 8 Ω
- 2 x 8" woofer
- 1" compression driver (rotatable)
- Double INPUT/STACK connector, Euroblock + Speakon© type, with security attachment screws to avoid accidental disconnection
- U-bracket wall-mount included, allowing for tilt adjustment
- 8 x M8 cabinet flying points
- Metal safety sling included, to avoid drops in case of accidental detachment from the wall surface
- Available in black or white finish

5.6. ARQIS110

- Full range, 2-way architectural loudspeaker
- 220 WRMS @ 8 Ω
- 10" woofer
- 1" compression driver (rotatable)
- Double INPUT/STACK connector, Euroblock + Speakon© type, with security attachment screws to avoid accidental disconnection
- 35 mm mount socket, compatible with SR12 wall bracket (not included) & TRIPO1 floor stand (not included)
- U-bracket wall-mount accessory compatible, ARQ110UB (not included)
- 8 x M8 cabinet flying points.
- Available in black and white finish

5.7. ARQIS112

- Full range, 2-way architectural loudspeaker
- 340 WRMS @ 8 Ω
- 1 x 12" woofer
- 1" compression driver (rotatable)
- Double INPUT/STACK connector, Euroblock + Speakon© type, with security attachment screws to avoid accidental disconnection
- 35 mm mount socket, compatible with SR12 wall bracket (not included) & TRIPO1 floor stand (not included)
- U-bracket wall-mount accessory compatible, ARQ112UB (not included)
- 8 x M8 cabinet flying points.
- Available in black and white finish

5.8. ARQISSB6T

- 6,5" subwoofer + 6,5" pasive radiator
- Ready for 70/100V installations: power selector 60/120W & 8 ohm
- Euroblock connector and spring loaded input terminals
- LPF cut-off frequency selection: OFF/ 120Hz / 150Hz
- Wall-mount hardware included
- Available in black or white finish

5.9. ARQISSB10

- 1-way surface-mount subwoofer
- 150 WRMS @ 8 ohm
- 10" woofer
- Euroblock connector and spring loaded input terminals
- LPF cut-off frequency selection: OFF/ 120Hz / 150Hz
- Wall-mount hardware included
- 12 x M8 cabinet flying points
- Available in black or white finish

5.10. ARQISSB15

- 1-way architectural subwoofer
- 600 WRMS @ 8 Ω
- 15" woofer
- Double INPUT/STACK connector, Speakon© type
- 35 mm top-hat mount socket, for pole mount combinations with ARQIS10, ARQIS12, etc.
- 8 x M8 cabinet flying points.
- Available in black finish

6. CONNECTIONS

The connection cables which connect the amplifiers output and the speaker should be of good quality, have sufficient conductor area and be as short as possible. The latter fact is especially important when the distance is long and the load impedance low (4-8 W). A cross-section of at least 2.5mm² is recommended for distances up to 10m; 4 or 6mm² for longer distances. Following formula gives the required section, assuming 4% losses:

Cross section in mm²=(Length in m)/(Loudspeaker impedance in Ω)

Always respect the polarity. All models have an Euroblock connector, and a second connector (Euroblock or Speakon®, depending on model), thereby facilitating the parallel connection of speakers.

7. RECOMMENDED AMPLIFIER

Following table shows the output power of the amplifier adequate to each acoustic system:

- ARQIS 105: between 70 and 150W RMS
- ARQIS 106: between 120 and 250W RMS
- ARQIS 108: between 150 and 300W RMS
- ARQIS 205: between 150 and 300W RMS
- ARQIS 208: between 300 and 600W RMS
- ARQIS 110: between 220 and 450W RMS
- ARQIS 112: between 340 and 700W RMS
- ARQIS SB6T: between 120 and 250W RMS
- ARQIS SB10: between 150 and 300W RMS
- ARQIS SB15: between 600 and 1000W RMS

8. POSITIONING

Consider following general rules:

Place the speakers on a solid and firm surface. Subwoofers placed directly and horizontally on the ground have a higher output than hanged or directly on the floor, but vertically. No obstacles should stand between the enclosures and the audience. The high frequencies are very directive compared to the low frequencies, so that any obstacle will impair their response. In case large audiences must be addressed, a better long distance sound propagation will be achieved if the enclosures are flown high enough.

9. INSTALLATION

In the ARQIS series, the best way to install the enclosure was studied for each model. Each model from the ARQIS range is supplied with the optimal installation system. ARQIS205 / ARQIS208 / ARQIS110 / ARQIS 112 / ARQISSB10 / ARQISSB15 also have built-in M8 rigging points for suspension from a compatible structure or "truss" using steel cables.

IMPORTANT NOTE: The equipment must in no case be suspended using its carrying handles (if any); use the appropriate accessories for each application. Whenever a ceiling/wall mounting bracket is used, it is mandatory to add a redundant safety system. Use wire ropes, slings or chains of the appropriate diameter to prevent the fall of the speaker in case the main mounting system is pulled out.

10. TECHNICAL SPECIFICATIONS

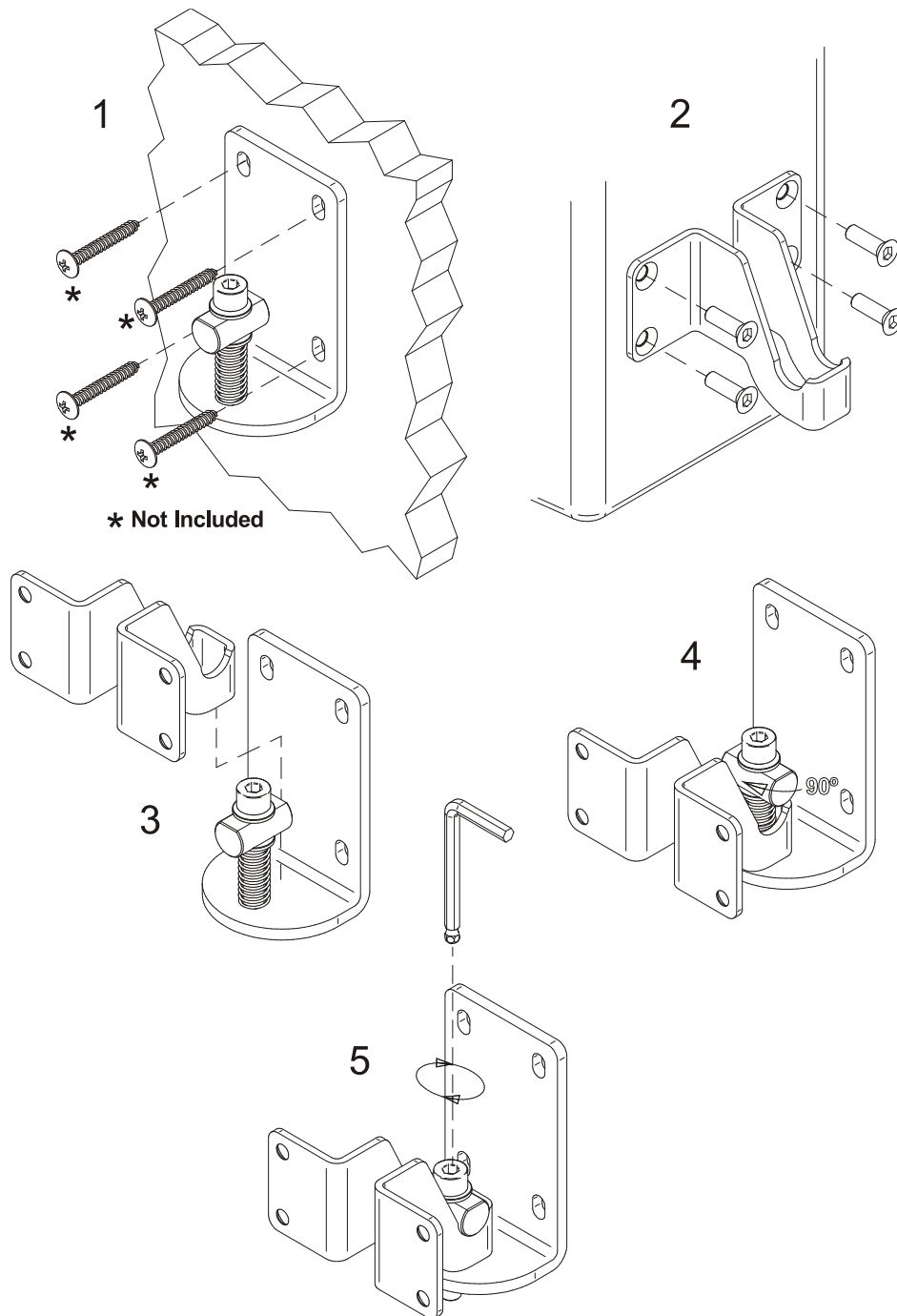
	ARQIS105	ARQIS106	ARQIS108
Ways	2	2	2
Impedance	8Ω	8Ω	8Ω
RMS power	70 WRMS	120 WRMS	175 WRMS
Program power	140 WRMS	240 WRMS	350 WRMS
SPL 1W/1m	89 dB	92dB	93dB
Max SPL @ 1m	110 dB	116dB	118dB
Frequency response (±3dB)	85Hz÷20kHz	75Hz÷19kHz	60Hz÷19kHz
Cross-over frequency	3.2kHz	3.2kHz	3.5kHz
Dispersion (HxV)	120°x120°	90°x60°	90°x60°
Driver LF/MF	5.25"	6.5"	8"
Driver HF	Dome tweeter 1"	Compression driver 1"	Compression driver 1"
Connection	Euroblock 2 ways	Euroblock 2 ways	Euroblock 2 ways + Speakon® 4 ways
Dimensions (WxHxD)	186x280x210mm	216x350x240mm	244x390x280mm
Weight	3.6kg	7.4kg	8.4kg
Colour	Black / White	Black / White	Black / White

	ARQIS205	ARQIS208
Ways	2	2
Impedance	8Ω	8Ω
RMS power	140 WRMS	300 WRMS
Program power	280 WRMS	600 WRMS
SPL 1W/1m	92dB	96dB
Max SPL @ 1m	116dB	124dB
Frequency response (±3dB)	85Hz÷18kHz	65Hz÷18kHz
Cross-over frequency	2.6kHz	3.5kHz
Dispersion (HxV)	90°x60°	90°x60°
Driver LF/MF	2x5.25"	2x8"
Driver HF	Compression driver 1"	Compression driver 1"
Connection	Euroblock 2 ways + Speakon® 4 ways	Euroblock 2 ways + Speakon® 4 ways
Dimensions (WxHxD)	480x186x210mm	610x244x280mm
Weight	8.4kg	14.4kg
Colour	Black / White	Black / White

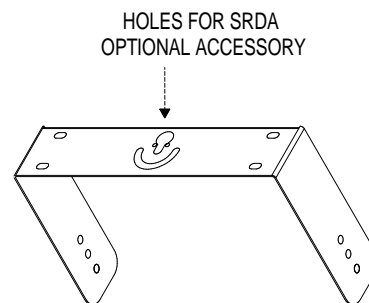
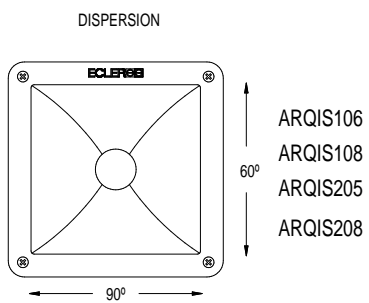
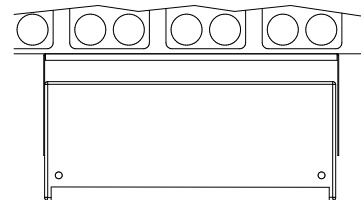
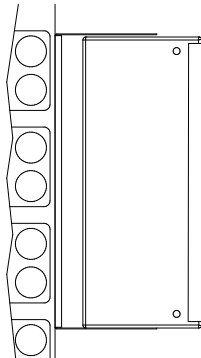
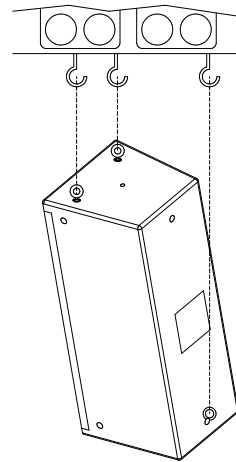
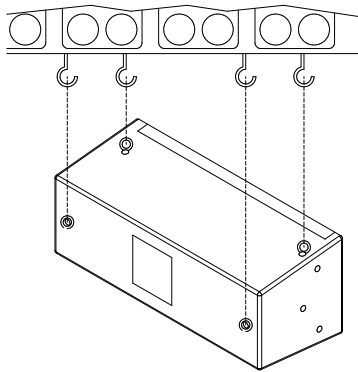
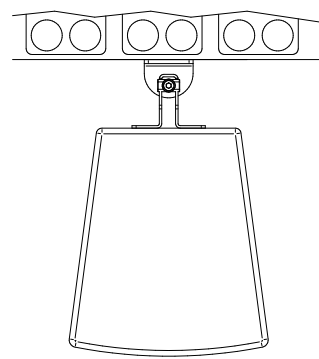
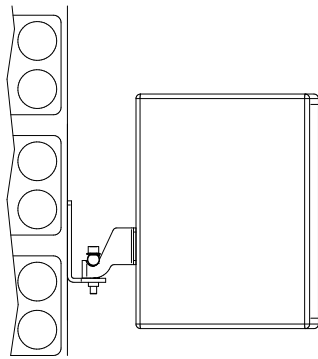
	ARQIS110	ARQIS112
Ways	2	2
Impedance	8Ω	8Ω
RMS power	220 WRMS	340 WRMS
Program power	440 WRMS	680 WRMS
SPL 1W/1m	95dB	97dB
Max SPL @ 1m	118dB	122dB
Frequency response (±3dB)	60Hz±18kHz	60Hz±18kHz
Cross-over frequency	3.5kHz	2.5kHz
Dispersion (HxV)	90°x50°	80°x40°
Driver LF/MF	10"	12"
Driver HF	Compression driver 1"	Compression driver 1"
Connection	Euroblock 2 ways + Speakon® 4 ways	Euroblock 2 ways + Speakon® 4 ways
Dimensions (WxHxD)	359x495x310mm	416x565x352mm
Weight	14.8kg	20.0kg
Colour	Black / White	Black / White

	ARQISSB6T	ARQISSB10	ARQISSB15
Ways	6,5" subwoofer and 6,5" passive radiator	10" subwoofer	15" subwoofer
Impedance	8Ω + 8Ω	8Ω	8Ω
RMS power	120W	150W	600W
Program power	240W	300W	1200W
SPL 1W/1m	94dB	94dB	98dB
Max SPL @ 1m	115dB	115dB	125dB
Frequency response (±3dB)	60Hz-1.5kHz	45Hz-3kHz	45Hz-3kHz
Connection	Euroblock connector and spring loaded input terminals	Euroblock connector and spring loaded input terminals	2xSpeakon®
Dimensions (WxHxD)	380x200x150mm	600x442x228mm	534x460x525mm
Weight	5.0 kg	16.5 kg	32.0 kg
Colour	Black / White	Black / White	Black

11. INSTALLATION DIAGRAMS



Wall bracket assembly diagram



ARQIS series installation diagram



All product characteristics are subject to variation due to production tolerances. **NEEC AUDIO BARCELONA S.L.** reserves the right to make changes or improvements in the design or manufacturing that may affect these product specifications.

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