



## ARQIS Series

CABINET LOUDSPEAKERS

*Architectural Loudspeaker Cabinets*



## USER MANUAL

## INDEX

<b>Important note</b> .....	3
<b>Precautions</b> .....	3
<b>Introduction</b> .....	4
<b>Models</b> .....	4
<b>Connections</b> .....	7
<b>Recommended amplifier</b> .....	8
<b>Positioning</b> .....	8
<b>Installation</b> .....	8
<b>Technical specifications</b> .....	9
<b>Diagram</b> .....	11

## 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.



Warning: an inappropriate usage of the device could cause injury, death or damage the apparatus.

## PRECAUTIONS

- Read these instructions
- Keep these instructions
- Heed all warnings
- Follow all instructions
- Do not use this apparatus near water
- Clean only with dry cloth
- Install in accordance with the manufacturer's instructions
- Do not install near any heat sources such as radiators or heat registers
- Only use attachments/accessories specified by the manufacturer
- Refer all servicing to qualified personnel

## 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.

## MODELS

### *ARQIS105*

- Full range, 2-way architectural loudspeaker
- 70 WRMS @ 8  $\Omega$
- 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

### *ARQIS106*

- Full range, 2-way architectural loudspeaker
- 120 WRMS @ 8  $\Omega$
- 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

### *ARQIS108*

- Full range, 2-way architectural loudspeaker
- 175 WRMS @ 8  $\Omega$
- 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

### *ARQIS205*

- Full range, 2-way architectural loudspeaker
- 140 WRMS @ 8  $\Omega$
- 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

### *ARQIS208*

- Full range, 2-way architectural loudspeaker
- 300 WRMS @ 8  $\Omega$
- 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

#### *ARQIS110*

- Full range, 2-way architectural loudspeaker
- 220 WRMS @ 8  $\Omega$
- 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.
- Metal safety sling included, to avoid drops in case of accidental detachment from the wall surface
- Available in black and white finish

#### *ARQIS112*

- Full range, 2-way architectural loudspeaker
- 340 WRMS @ 8  $\Omega$
- 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.
- Metal safety sling included, to avoid drops in case of accidental detachment from the wall surface
- Available in black and white finish

### *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

### *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

## **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 Ω). A cross-section of at least 2.5mm<sup>2</sup> is recommended for distances up to 10m; 4 or 6mm<sup>2</sup> for longer distances. Following formula gives the required section, assuming 4% losses:

$$\text{Cross section in mm}^2 = \frac{\text{Length in m}}{\text{Loudspeaker impedance in } \Omega}$$

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.

## 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 SB10: between 150 and 300W RMS
- ARQIS SB15: between 600 and 1000W RMS

## 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.

## 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.

## TECHNICAL SPECIFICATIONS

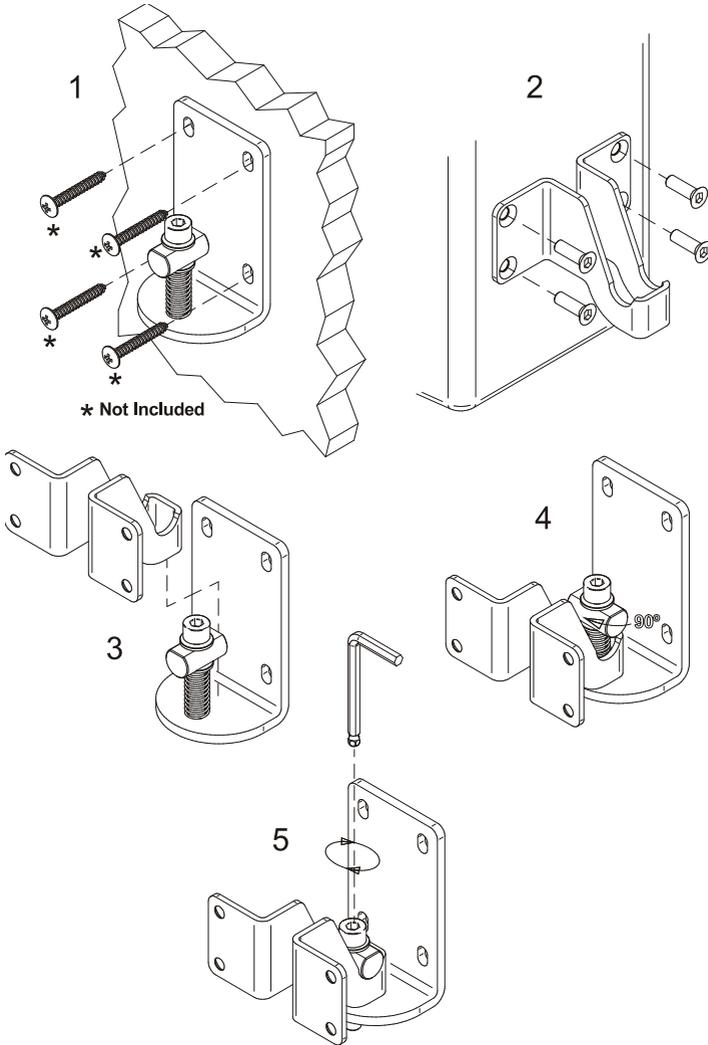
	ARQIS105	ARQIS106	ARQIS108
<b>Ways</b>	2	2	2
<b>Impedance</b>	8Ω	8Ω	8Ω
<b>RMS power</b>	70 WRMS	120 WRMS	175 WRMS
<b>Program power</b>	140 WRMS	240 WRMS	350 WRMS
<b>SPL 1W/1m</b>	89 dB	92dB	93dB
<b>Max SPL @ 1m</b>	110 dB	116dB	118dB
<b>Frequency response (±3dB)</b>	85Hz÷20kHz	75Hz÷19kHz	60Hz÷19kHz
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

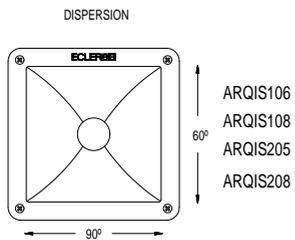
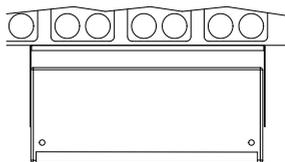
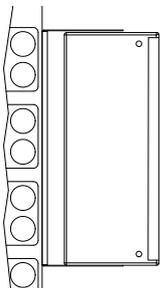
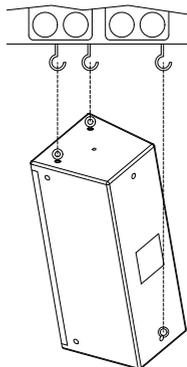
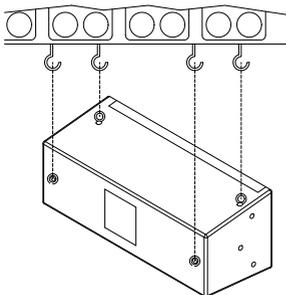
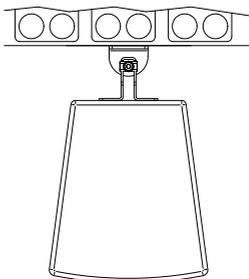
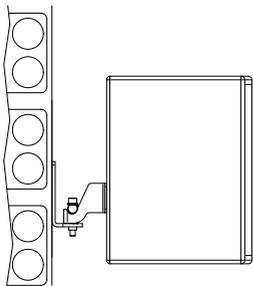
	ARQIS205	ARQIS208
<b>Ways</b>	2	2
<b>Impedance</b>	8Ω	8Ω
<b>RMS power</b>	140 WRMS	300 WRMS
<b>Program power</b>	280 WRMS	600 WRMS
<b>SPL 1W/1m</b>	92dB	96dB
<b>Max SPL @ 1m</b>	116dB	124dB
<b>Frequency response (±3dB)</b>	85Hz÷18kHz	65Hz÷18kHz
<b>Cross-over frequency</b>	2.6kHz	3.5kHz
<b>Dispersion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

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

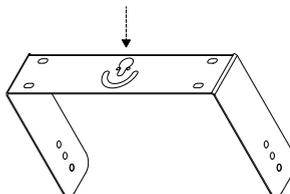
	ARQISSB10	ARQISSB15
<b>Ways</b>	10" subwoofer	15" subwoofer
<b>Impedance</b>	8Ω	8Ω
<b>RMS power</b>	150W	600W
<b>Program power</b>	300W	1200W
<b>SPL 1W/1m</b>	94dB	98dB
<b>Max SPL @ 1m</b>	115dB	125dB
<b>Frequency response (±3dB)</b>	45Hz-3kHz	45Hz-3kHz
<b>Connection</b>	Euroblock connector and spring loaded input terminals	2xSpeakon®
<b>Dimensions (WxHxD)</b>	600x442x228mm	534x460x525mm
<b>Weight</b>	16.5 kg	32.0 kg
<b>Colour</b>	Black / White	Black

DIAGRAM





HOLES FOR SRDA  
OPTIONAL ACCESSORY



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.

Motors, 166-168 08038 Barcelona - Spain - (+34) 932238403 information@ecler.es [www.ecler.com](http://www.ecler.com)