

AUDEO 103 & 106

CABINET LOUDSPEAKERS
Surface Mount Loudspeakers



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 (If applicable): The terminals marked with symbol of "2" may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the use of ready-made leads or cords.

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: When switching off the POWER switch, all the functions and light indicators of the unit will be stopped, but fully disconnecting the device from mains is done by unplugging the power cable from the mains input socket. For this reason, it always shall remain easily accessible.
- **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 the unit.
- **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

Thank you for choosing our Ecler AUDEO cabinet loudspeakers!

It is VERY IMPORTANT to carefully read this manual and to fully understand its contents before any connection in order to maximize your use and get the best performance from this equipment.

To ensure optimal operation of this device, we strongly recommend that its maintenance be carried out by our authorised Technical Services.

All ECLER products are covered by warranty, please refer to www.ecler.com or the warranty card included with this product for the period of validity and conditions.

4. INTRODUCTION

The AUDEO acoustic cabinet is the result of a profound analysis of present and future needs for playing music and announcements. Some of the most evident and direct applications for the AUDEO cabinet are shops, department stores, schools, conference rooms, hotels, industries, offices, museums, halls, hospitals, leisure areas, etc. But the Ecler design team has attempted to go even further and, being aware of the enormous variety of areas and situations in which an acoustic cabinet can be used, has made the wishes of more demanding installers, architects and decorators a reality:

- Integration. The attractive external appearance of the cabinets and their mounts, and the ease and speed with which they can be installed and positioned them make them the perfect choice for a wide number of applications and architectural environments.
- Exclusivity. There is no other cabinet quite like it. It is a unique Ecler design that is
 different, personal and most importantly can be adapted to a wide variety of
 situations. It consists of a two-way system with a tweeter in the centre surrounded
 by a woofer.
- Flexibility. The AUDEO comes with a switch at the rear that lets you configure the sound cabinet for its desired function. All the cabinets can work in low or high impedance, and in the latter case, at different levels of power. Simple, quick and versatile.
- Reliability and quality. The AUDEO is, first and foremost, a sound cabinet with a surprising sound quality, especially given its size. This is due to its attractive design and carefully selected components.
- Suitable for outdoor installation: IP54 qualification for the AUDEO103 and 106 models.



5. CONNECTIONS

The AUDEO103 and 106 models allow for operation at high or low impedance. To this end, there is a five-position switch on the rear panel that allows you to select the operating mode. The first four switch





positions allow the system to operate in high-impedance mode and the fifth, in low-impedance mode. (*)

The four 100 V power line switch positions allow you to set the maximum power that will be used by each unit. Thus, in areas where a low sound level is required, the lower positions are used (5 or 7.5 W for the AUDEO106 / 2.5 or 5 W for the AUDEO103), while in areas in which a higher level is required, the higher positions are used (15 or 30 W for the AUDEO106 / 7.5 or 15 W for the AUDEO103).

Note: If you use the speaker in 70V installations, the power for the 100V position will be half the amount shown on the switch. When used in 50V installations, it will be a fourth of the amount.

The fifth position corresponds to operation in low impedance (8 Ω) and a maximum power of 50 W for the AUDEO106 and 25 W for the AUDEO103. In the case of adopting this configuration, the amplifier limits must be considered when connecting several speakers to its output, especially if the impedance of the system falls below 4 Ω . In addition, it is important for the cable connecting the amplifier and speaker outputs to be of good quality and as short as possible; this is particularly important if large distances are to be covered and the impedance of the speakers is low.

(*) N.B.: The system of distributing the speakers on a 100V/70V line has historical origins in the need to mix speakers with different impedances and/or power capacities on the same line or amplification channel without having to worry about the total impedance of the resulting system. Also, this solution allows you to use longer lengths of cable with a considerably lower section than is normally used in low-impedance installations with minimum power loss.

CAUTION: The AUDEO106 and 103 are supplied in origin with the switch in the 100V/30W or 100V/15W position, respectively. If you accidentally hook the system up to a low-impedance amplifier, no damage will be done to the speaker, but it will perform far below its real capabilities. If you accidentally connect the speaker to a 100 V network in the 8 Ω position, this will cause serious damage to the speaker.



6. PLACEMENT AND MOUNTING

Consider following general rules:

- Place the loudspeaker cabinet on solid and firm surfaces.
- No obstacles should stand between the enclosures and the audience.
- Although the speakers can be used outdoors, they should not be directly exposed to sunlight or rain.
- Always adjust the output sound pressure levels to the reproduction requirements.
 Despite their small size, they can produce significantly higher-pressure levels than home speakers.

The AUDEO packaging contains everything you need to install the enclosures:

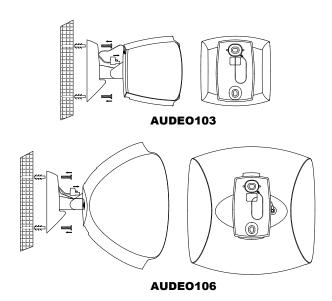
- Two articulated wall mounts (one per cabinet).
- Four screws and four 6 mm wall anchors (two per cabinet).
- Two M5 Allen key.
- Two safety steel slings to protect against accidental detachment (one per cabinet).
- Two Euroblock connectors (one per cabinet).
- An instruction manual.
- Two warranty forms (one per cabinet).

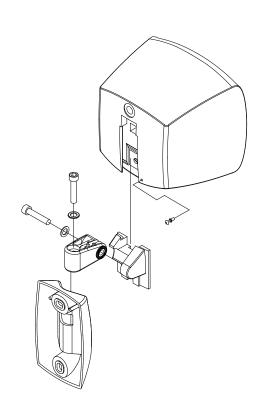
Wall mounting procedure:

- 1. Drill two 6 mm holes in the wall, coinciding with the position of the mount holes.
- 2. Insert four 6 mm rawl plugs in the holes.
- 3. Fasten the safety guide at the back of the mount (as shown in the diagram).
- 4. Put the mount in place, after first passing the sling and speaker cable through the square hole of the mount. Insert and tighten the screws supplied, holding the mount firmly against the wall.
- 5. Use the Euroblock connector to connect the speaker cable to the connector on the back part of the cabinet. Make sure to line up the right polarity on the terminals and ensure the cable goes through the square hole on the mount guide.
- 6. Put the cabinet in its final position by sliding it vertically downwards so that the guide on the back fits into the mount guide.
- 7. Fasten the safety cable to the back of the cabinet to prevent it from accidentally falling and causing damage to objects and/or people.
- 8. Move the cabinet until it is in the correct position in terms as regards the vertical and horizontal axes. Tighten the Allen screws on the mount to secure that position at both axes.
- 9. Set the power switch to the desired position.
- 10. Conceal the excess length of the guide and cable (a few centimetres) by inserting it in the opening in the mount.



MOUNTING DIAGRAMS







7. TECHNICAL CHARACTERISTICS

AUDEO103

AUDEO103	
System	
Effective frequency range ¹	118 Hz-20 kHz
Coverage angle ²	207°x207° (HxV)
Power handling	25 W RMS / 100 W Peak
Sensitivity ³	86 dB (1W/1m)
Maximum SPL ⁴	100 dB continuous / 106 dB peak
Power options	100V: 15W / 7,5W / 5W / 2,5W / 8Ω
	70V: 7,5W / 5W / 2,5W / 1.25 / 8Ω
Recommended amplifier power	50 W RMS
Transducers	
Ways	2
Low frequency driver	3,5" woofer
High frequency driver	0,5" tweeter
Nominal impedance	Ω8
Physical	
Installation options	Wall
Environmental	IP54 rated
Enclosure material	Reinforced ABS
Mounting system	Cabinet
Included accessories	Wall mounting accessories
Finished colour	White (RAL 9003) or black (RAL 9005)
Dimensions (WxHxD)	Without accessories:
	132 x 134 x 110 mm / 5.2 x 5.28 x 4.33 in.
Weight	1.45 kg / 3.2 lb



AUDEO106

106 Hz-20 kHz
120°x120° (HxV)
50 W RMS / 200 W Peak
90 dB (1W/1m)
107 dB continuous / 113 dB peak
100V: 30W / 15W /7,5W / 5W / 8Ω
70V: 15W /7,5W / 5W / 2,5 / 8Ω
100 W RMS
2
6,5" woofer
1" tweeter
8Ω
Wall
IP54 rated
Reinforced ABS
Cabinet
Wall mounting accessories
White (RAL 9003) or black (RAL 9005)
Without accessories:
241 x 244 x 163 mm / 9.49 x 9.61 x 6.42 in
2.3 kg / 5.07 lb

 $^{^{\}rm 1}$ 10dB below the sound pressure level at specified sensitivity

² 6dB below the sound pressure level than that at the direction of maximum level. Max. angle between 1 kHz to 4 kHz.

 $^{^{3}}$ Measured on-axis, far field and referenced to 1 meter by inverse square law. Average from 100 Hz to 10 kHz.

 $^{^{4}}$ Calculated from sensitivity and power handling specifications, exclusive of power compression





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.

For technical queries contact your supplier, distributor or complete the contact form on our website, in <u>Support / Technical requests</u>.

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