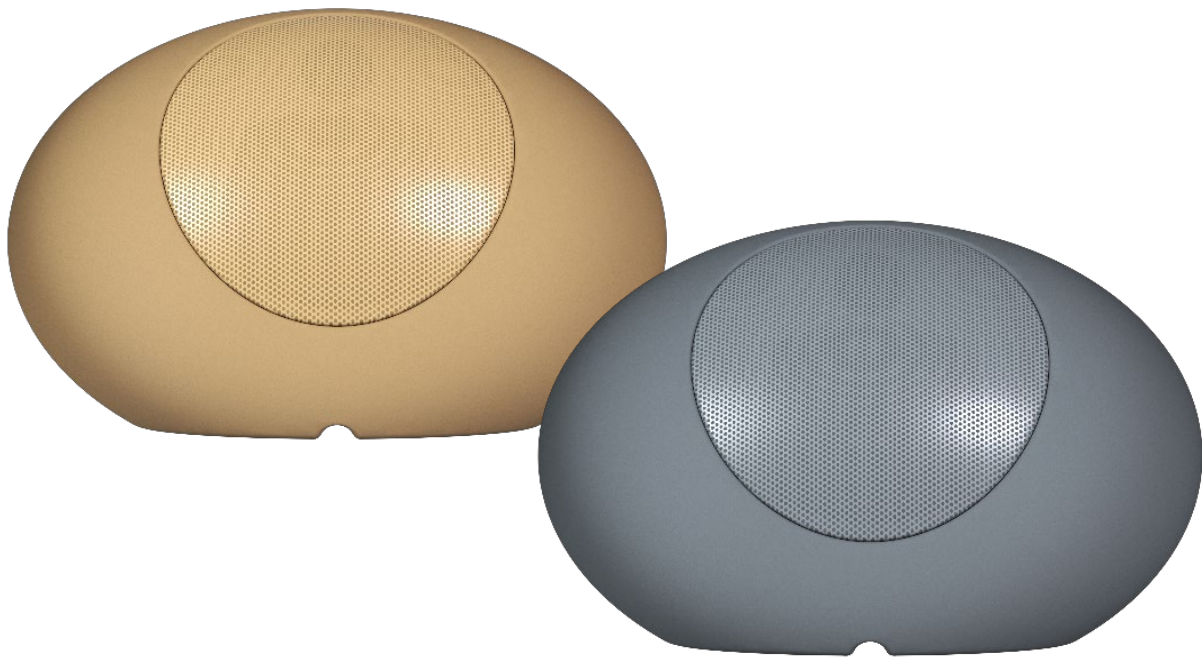


ZEN-15

COMMERCIAL LOUDSPEAKERS
5" Outdoor Speaker



USER MANUAL



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1. PRECAUTIONS

1.1 Important Notice



WARNING: SHOCK HAZARD - DO NOT OPEN

AVIS: RISQUE DE CHOC ÉLECTRIQUE - NE PAS OUVRIR



The flashing light with an arrowhead symbol inside an equilateral triangle on it is intended to alert the user of the presence of non-insulated “dangerous voltage” within the enclosure, which might be of sufficient magnitude to pose a risk of electric shock to users.



The exclamation mark within an equilateral triangle is intended to alert the user of the requirement for important operating and maintenance (servicing), for which instructions may be found in the literature accompanying the appliance.

WARNING (If applicable): Terminals marked with symbol “⚡” may be of sufficient magnitude to pose a risk of electric shock. The external wiring connected to terminals requires installation by a technician, or the use of ready-made leads or cords.

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

WARNING: A device with Class I manufacturing ought to be connected to a mains socket outlet with a protective earthing connection.



WARNING: Ecler products have a long lifetime of more than 10 years. This product must never be discarded as unsorted urban waste, but must be taken to the nearest electrical and electronic waste treatment centre.



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1.2 Key Safety Directions

1. Read the following directions.
2. Keep the following directions.
3. Heed all warnings.
4. Follow all directions.
5. Do not use this device in proximity to water.
6. Clean only with a 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 devices (including amplifiers) that may release heat.
9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades, being 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, contact a qualified electrician for a 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 of exit from the device.
11. Only use attachments/accessories specified by the manufacturer.
12. Unplug the device during lightening sorts or when unused for long periods of time.
13. Refer all servicing to qualified personnel. Servicing is required when the device has been damaged in any way, such as power supply cord or plug damage, liquid spillage or objects onto the device, the device has been exposed to rain or humidity, 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, therefore, it should always remain easily accessible
15. Equipment is connected to a socket-outlet with an earthing connection by means of a power cord.
16. The marking information is located at the bottom/rear of the unit.
17. The device shall not be exposed to dripping or splashing liquids, and no liquid-filled objects, such as a filled up glass, shall be placed on top of the device.

1.3 Cleaning Directions



Clean the unit with a soft, dry clean cloth or slightly wet with water and neutral liquid soap only, then dry it with a clean cloth. Be careful that water never gets into the unit through any hole. Never use alcohol, benzine, solvents or abrasive substances to clean this unit.

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.



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2. WARRANTY & ENVIRONMENT

**Thank you for choosing our Ecler ZEN-15!
We greatly value your trust.**

It is **VERY IMPORTANT** to carefully read this manual and to fully understand its **contents before any connecting takes place** in order to make the best use of this equipment, as well as to get the best performance from it.

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.



Ecler is truly committed with the environment and planet sustainability, energy saving and CO₂ emission reduction. Recycling materials and using non-contaminant components are also top priorities in our green crusade.

Ecler has deeply evaluated and analyzed the environmental impacts of all the processes involved in the production of this product, including packaging, and has alleviated, reduced and/or compensated for them.

3. PACKAGE CONTENTS

- 1 x ZEN-15 outdoor loudspeaker.
- First Steps Guide.
- Warranty card.



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4. DESCRIPTION & FEATURES

ZEN-15 is an above-ground mounting loudspeaker with an elegant, rounded shape that seamlessly blends the world of audio technology with the aesthetics of nature. This discreet outdoor audio solution effortlessly integrates into outdoor environments, providing a harmonious balance between functionality and visual appeal.

4.1 Main Features

- 5" 2-way Outdoor Speaker.
- Available in grey (RAL7042) and sand (RAL1001) colours.
- 70W RMS @ 8Ω / 60W RMS @ 70/100V.
- 8 ohms and 70V/100V compatible.
- Weather-protected with IP65 rating.
- Easy mounting.
- Fixing and support via hanging loop.

5. 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 (8 Ω). 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:

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



See detailed connections diagram on next page.



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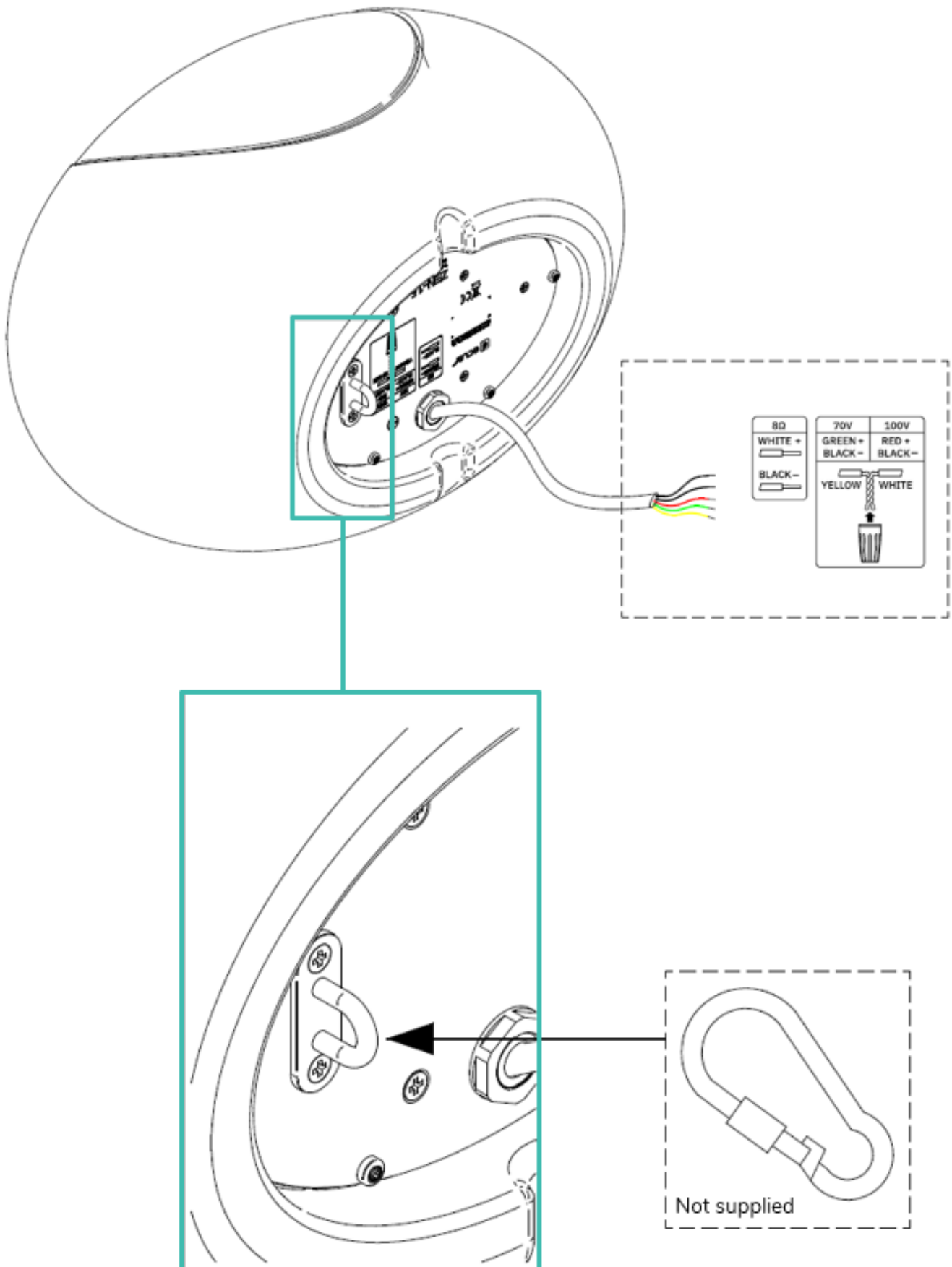
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5.1 Connection & Installation Diagram



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6. RECOMMENDED AMPLIFIER

The output power of the **recommended amplifier** for ZEN-15 is **140W RMS**.

7. POSITIONING & INSTALLATION

7.1 Positioning

Consider following general rules.

Place the speaker on a solid and firm surface. 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.



Download all EASE files by clicking on the image:



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8.1 Technical Specifications

ZEN-15

SYSTEM	
Effective Freq. Range ¹	70Hz-20kHz (-10dB)
Coverage angle ²	191°x150° (HxV)
Power handling	70W RMS / 280W Peak
Sensitivity ³	84dB (1W/1m)
Maximum SPL ⁴	102dB continuous / 108dB peak
Power options	100V: 60W / 8Ω 70V: 60W / 8Ω
Recommended amplifier power	140W RMS
TRANSDUCERS	
Ways	2-ways full range
Low frequency driver	5,25" Woofer
High frequency driver	1" Silk Dome Tweeter
Nominal impedance	8Ω
FILTERS	
Crossover filter	1,65 KHz
PHYSICAL	
Connection type	External multi-wire cable with waterproof connection plug included
Installation options	Above-ground mounting
Environmental	IP65
Enclosure material	Polyethylene
Grille material	Aluminium
Operating temperature	Min: -20°C; -4°F Max: 70°C; 158°F
Operating humidity	<85% HR
Storage temperature	Min: -20°C; -4°F Max: 70°C; 158°F
Storage humidity	<90% HR
Included accessories	Waterproof 4-wire connector
Cable length	1m
Finished colour	sand (RAL7042) or grey (RAL1001)
Dimensions (WxHxD)	410x260x290 mm / 16.14x10.24x11.42 in
Weight	4.4Kg / 9.7lb
Pieces per box	1
Shipping dimensions (WxHxD)	500x350x370 mm / 19.69x13.78x14.57 in.
Shipping weight	6.6Kg. / 14.55lb



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¹ below the sound pressure level at specified sensitivity.

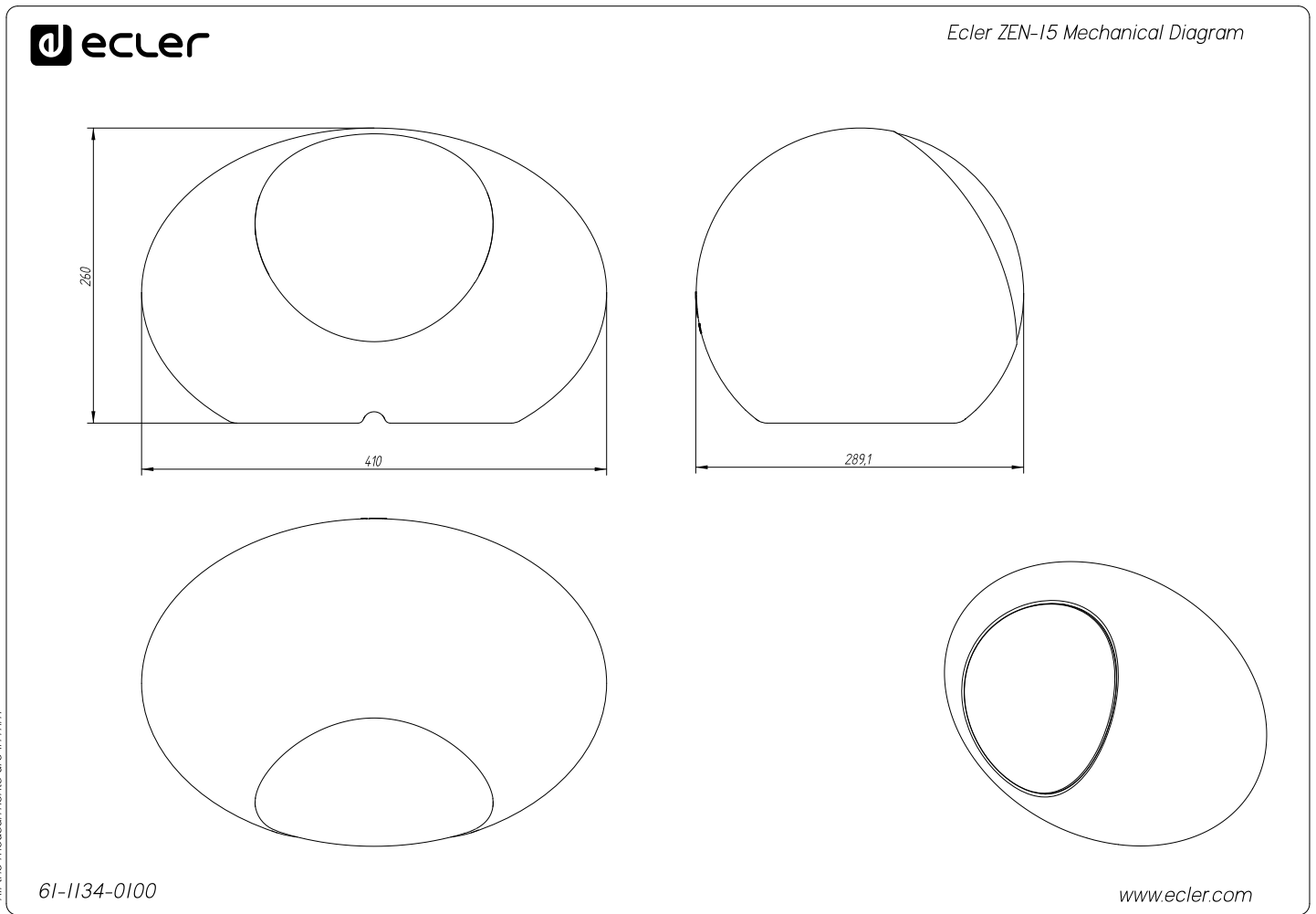
² 6dB below the sound pressure level than that at the direction of maximum level, Max. angle between 1 kHz and 4 kHz.

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.

8.2 Mechanical Diagram

All measurements are in mm.



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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 [Support / Technical requests](#).

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