



## **TRAIL103**

### **ACOUSTIC CABINETS**

*Lighting rail mount loudspeaker*



# **USER MANUAL**

# CONTENTS

<b>Important note</b> .....	3
<b>Precautions</b> .....	3
<b>Introduction</b> .....	4
<b>Main features</b> .....	4
<b>Connecting</b> .....	4
<b>Location and fitting</b> .....	6
<b>Technical specifications</b> .....	13
<b>Packaging content</b> .....	13

## IMPORTANT NOTE

Congratulations. You now own the result of a well-designed, carefully produced manufacture. We thank your for your trust by having chosen our TRAIL 103 lighting rail mount loudspeaker.

To achieve its maximum working order and performance, it is VERY IMPORTANT, before connecting, to read this manual carefully. To guarantee optimum working order, we recommend that maintenance be carried out by our authorized Technical Services.



Warning: misuse of this device may cause bodily harm, death or damage the equipment.

## PRECAUTIONS

- Read these instructions
- Keep these instructions
- Pay attention to all the warnings
- Follow all the instructions
- Do not use this equipment near water
- Clean only with a dry cloth
- Install following the manufacturer's instructions
- Do not install near heat sources such as radiators or heaters.
- Use the accessories specified by the manufacturer.
- In the event of any repair, contact a qualified technical service.

## INTRODUCTION

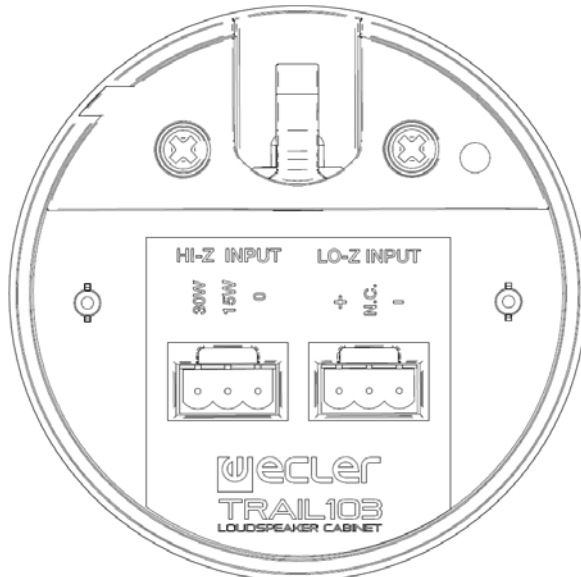
TRAIL103 is a 3" loudspeaker with the appearance of a lamp. It is fitted with a three-fold installation system: in lighting rail, on a surface and using an adapter for a truss or threaded bar. It includes connections for low impedance (4 ohm) and for high impedance (15W and 30W). Available in white and in black.

## MAIN FEATURES

- 3" loudspeaker
- Installation options in lighting rail, on a surface and using an adapter for a truss or threaded bar.
- Connection for low impedance: 4 ohm.
- Connection for high impedance: 15/30W connector
- Available in white and in black

## CONNECTING

The TRAIL103 accepts high or low impedance operation. In this regard, the rear panel is fitted with 2 Euroblock connectors to allow for setting the work mode. The HI-Z INPUT connector allows the system to operate in high impedance (100V line) and the LO-Z INPUT connector in low impedance (\*).



The 100V line connector makes it possible to set the maximum power with which each unit will operate. So in areas where a low noise level is required, the 0 and 15W terminals are used to connect the loudspeaker, while in areas here a higher level is required, the 0 and 30W terminals are used.

Note: in the event of using the loudspeaker in 70V installations, the corresponding power ratings for the 100V position are reduced to half those indicated in the connector terminals. In the case of 50V installations, they are reduced to a quarter.

The low impedance connector allows for setting the loudspeakers so that they operate under these conditions, with a maximum power rating of 30W. In the event of adopting this setting, the limitations of the amplifier must be taken into account when connecting several loudspeakers to the output, especially if the impedance of the unit falls below  $4\Omega$ . Furthermore, it is important for the connecting cable joining the outputs on the amplifier and the loudspeakers is good quality and as short as possible. This becomes particularly important when the distances to cover are considerable and the loudspeaker impedance is low.

(\*) Note: The loudspeaker distribution system on a 100V/70V line historically arose from the technical need to mix loudspeakers with different impedances and/or power ratings on the same line or amplification channel, all this without the need to be concerned about the total impedance of the resulting whole. Additionally, this system makes it possible, with minimum losses of impedance, to use long stretches of cable and a slightly shorter section than that normally used in low impedance installations.

## **ATTENTION!**

**If the system is accidentally connected to an amplifier with a low impedance output, via the high impedance terminals (HI-Z INPUT connector), no damage will occur to the loudspeaker, but it will operate far below its performance features. In the event of accidentally connecting the loudspeaker to a low impedance 100V network (LO-Z INPUT connector), this will seriously damage it.**

## LOCATION AND FITTING

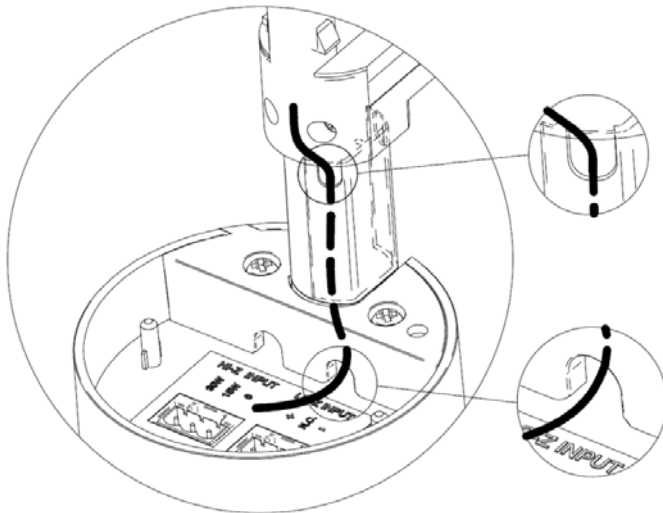
The TRAIL103 offer different fitting systems. Included in the packing you will find all the accessories needed for the different options: installation on a lighting rail, on a surface (wall or ceiling) and in a threaded bar or truss.

The following rules should be followed:

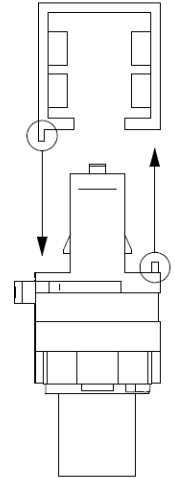
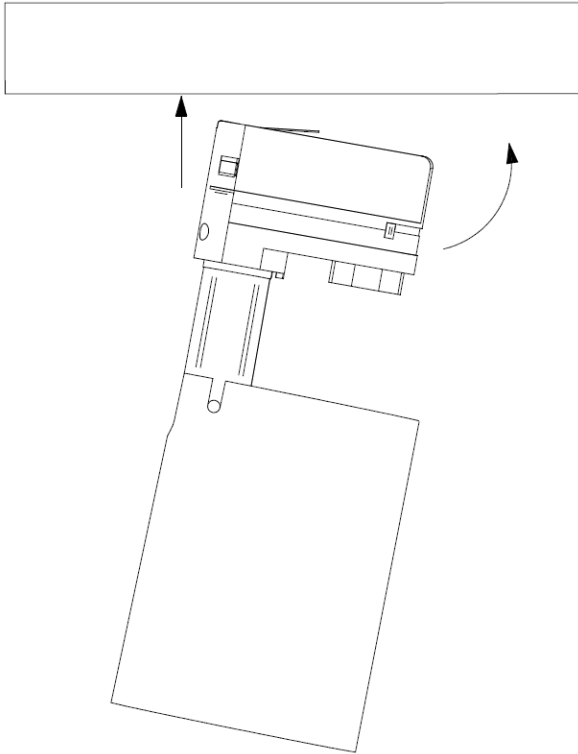
- At all times, install the unit on solid, firm surfaces if choosing to install on a surface (ceiling/wall).
- Installation on a lighting rail: TRAIL103 is compatible with 4 thread/3 circuit lighting rail systems.
- For good sound reproduction, there should be no obstacle between the loudspeakers and those listening.
- Adjust the sound pressure levels to the playback needs. Despite its small size, TRAIL103 has a performance far higher than domestic loudspeakers.

### How to **install on a lighting track:**

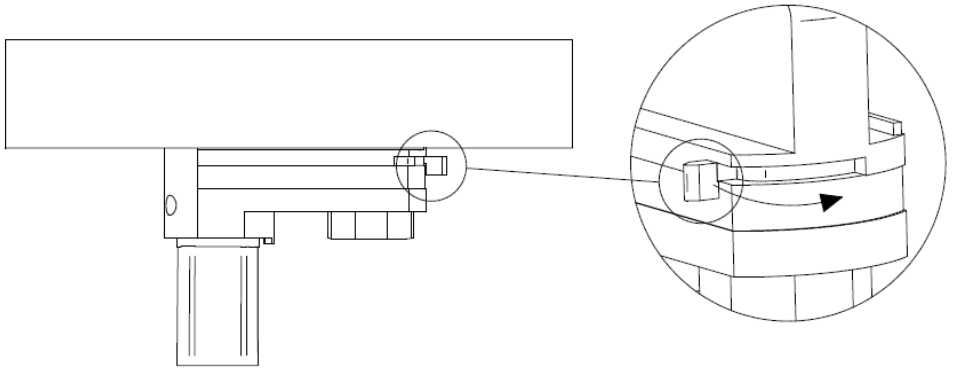
1. Remove the side covers covering the loudspeaker arm.
2. Thread the audio cables through the holes so that the cable is then hidden under the side covers.
3. Break the lug on the side cover to take out the cable. Use pliers to do this.



4. Place the side covers threading the audio cable through the hole made. Exert slight pressure on the covers until they are firmly in place.
5. Connect up the loudspeaker. Consult the chapter “CONNECTING” for further details.
6. Fit the rear cover.
7. Place the loudspeaker on the lighting rail, as shown in the illustrations.



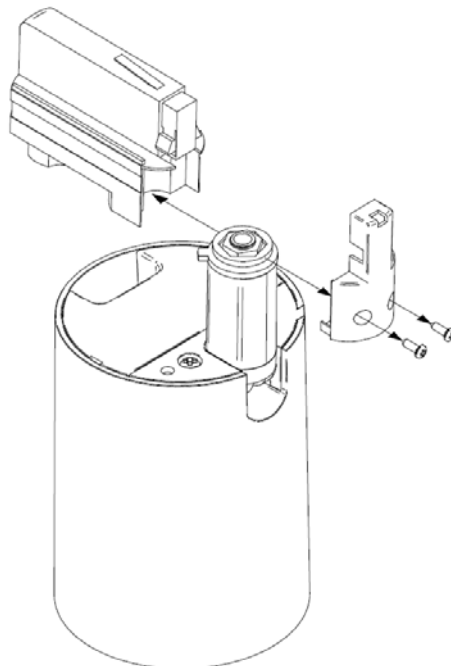
8. Ensure that the adapter wheel is in the OFF position. Rotate the safety lug to secure the loudspeaker on the lighting rail. Rotate the wheel until in a position other than OFF and the safety lug will be blocked.



9. Orientate the loudspeaker to obtain the required position on the vertical and horizontal axes.

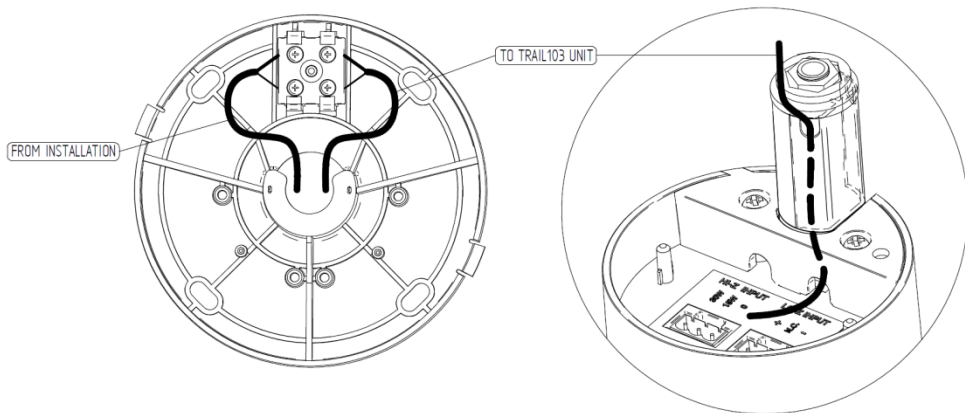
How to **install on a surface**:

1. Remove the fitting accessory on the lighting rail. To do this, remove the securing screws, as shown in the illustration.

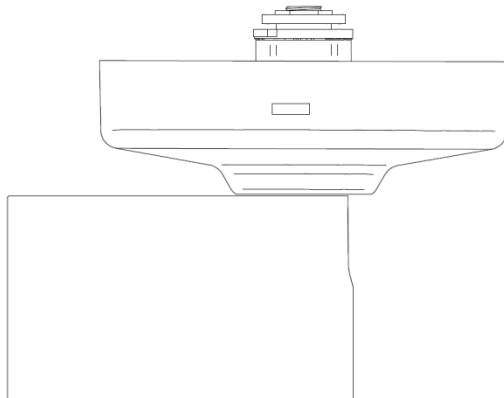




2. Thread the audio cables through the hole in the base. This is fitted with a socket inside the base to ease making connections (optional).

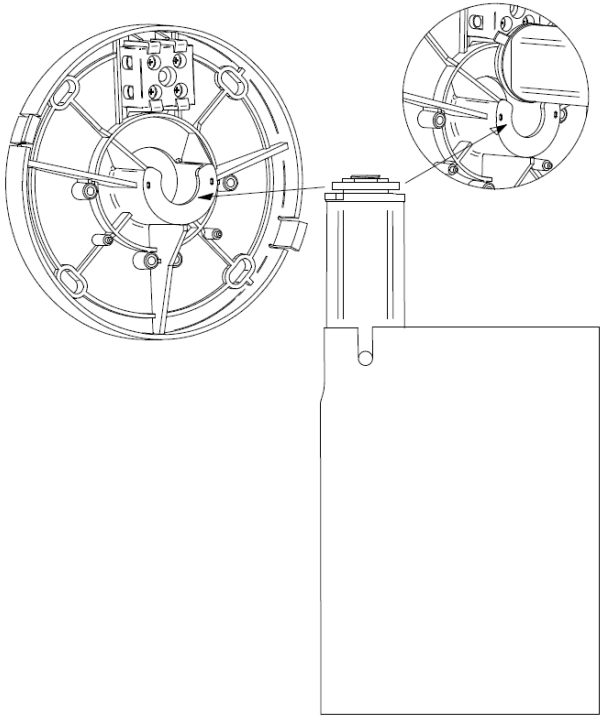


3. Attach the base to the surface. Make sure that the surface is solid and firm. To this end, it has 4 holes. It is advisable to use  $\varnothing 4$ mm screws (not included).
4. Push the cover on the base through the loudspeaker arm to make the connections.

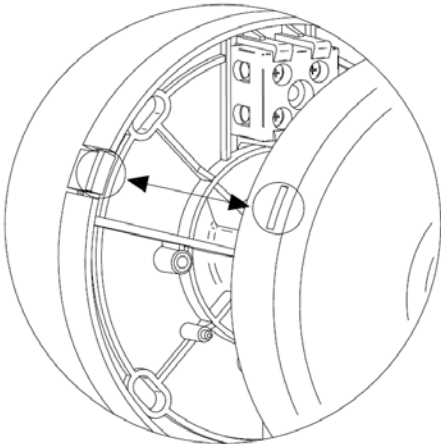


5. Make the connections. Follow steps 1 to 6 shown in the previous section: installing the lighting rail.

6. Insert the attachment for the loudspeaker arm on the previously installed based, in line with the following illustration.



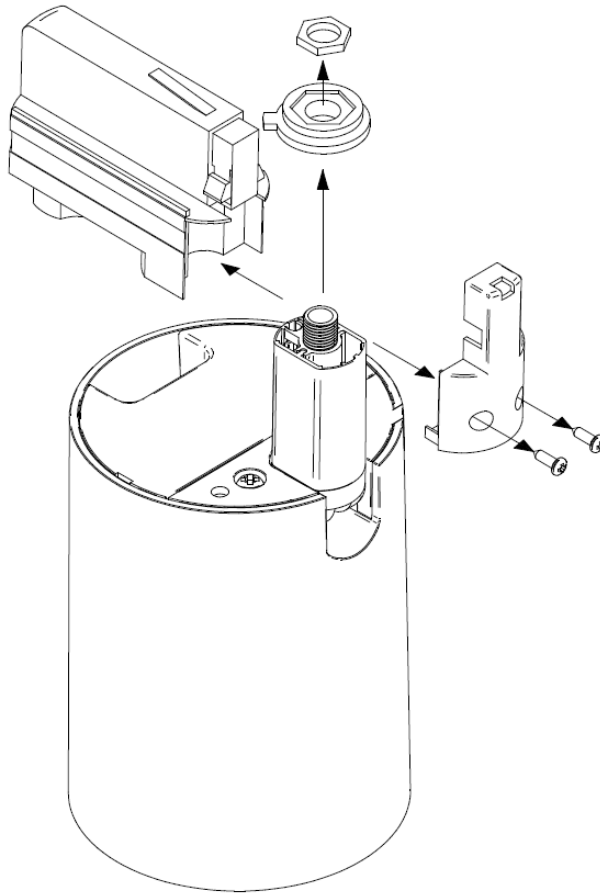
7. Attach the cover to the base. To do so, apply pressure to the cover against the base so that the groove and lugs are in line. You will hear a click when it is attached.



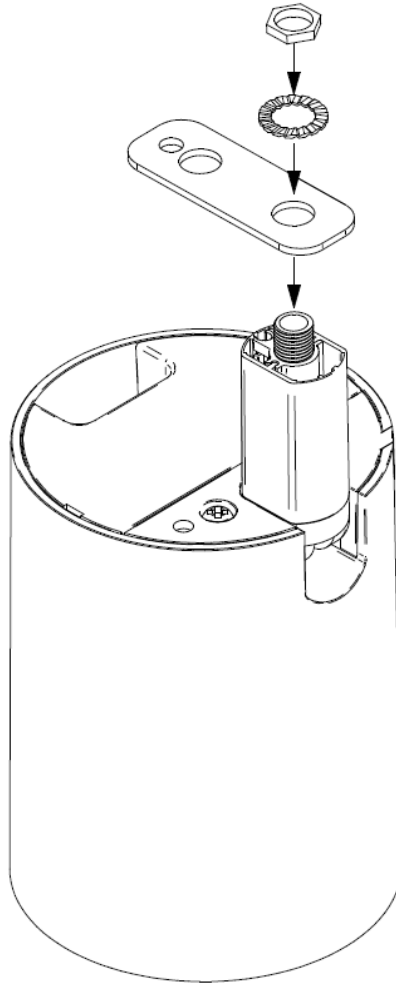
8. Orientate the loudspeaker to obtain the required position with the vertical and horizontal axes.

Procedure for **installing on a truss or threaded bar**:

1. Remove the lighting rail mounting accessory. To do so, remove the attachment screws, as shown in the illustration. Also remove the washer and plastic part on the loudspeaker arm.



2. Secure the mounting accessory on the threaded bar or truss, as shown in the illustration below.



3. Make the connections. Follow steps 1 to 6 as detailed in the previous section: installing on lighting rail.
4. Secure the loudspeaker on the threaded bar or truss and orientate the loudspeaker until obtaining the required position on the vertical and horizontal axes.

## TECHNICAL SPECIFICATIONS

<b>Ways</b>	1
<b>Driver diameter</b>	3"
<b>RMS power</b>	30 W
<b>Power connections</b>	Lo-Z: 4Ω; Hi-Z: 15/30 W @ 100V
<b>Input impedance</b>	4Ω/667Ω/333Ω
<b>High frequency response</b>	20 kHz
<b>Sensitivity 1W/1m</b>	83 dB
<b>Dimensions (without arm)</b>	Ø96mm x 110mm
<b>Fixing system</b>	4 wire 3 circuit rail system
<b>Support arm</b>	Swivel (pan and tilt)
<b>Connection type</b>	Euroblock terminals 3C
<b>Weight</b>	1.00 kg

## PACKAGING CONTENT

- TRAIL103
- Accessory for mounting on a lighting rail (installed in the loudspeaker)
- Accessory for mounting on a surface (2 parts: base + cover)
- Accessory for mounting on a threaded bar or truss (2 parts: plate + M10 serrated washer)
- Rear loudspeaker cover
- Euroblock connector 3C P=5.08
- Screw 5.1x20 (for securing the safety cable, not included)
- Brief User's Guide
- Guarantee card

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](mailto:information@ecler.es) [www.ecler.com](http://www.ecler.com)