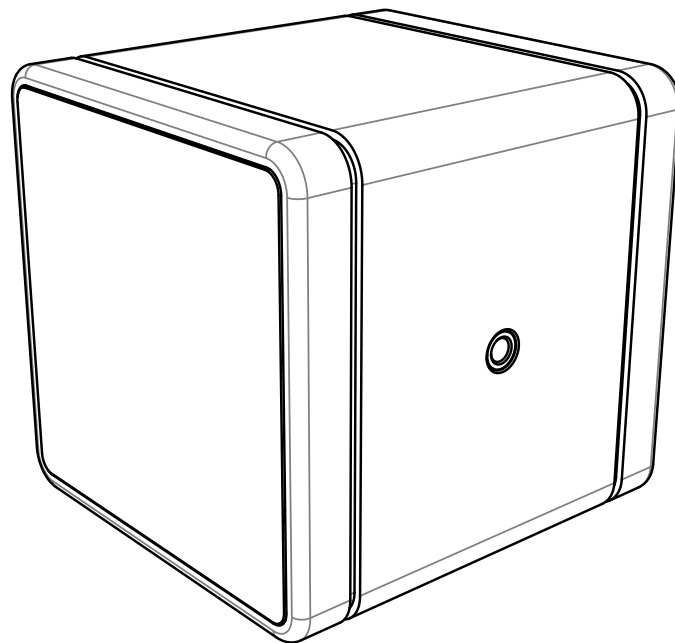




CHARLIE 4

Miniature Loudspeaker



USER MANUAL



SAFETY REGULATIONS

In order to avoid risks for the user's and other people's safety, as well as annulling the warranty, it is advisable to read the suggestions in this section for correct use of the product.

The user must assume the responsibility for making sure that the use of any rigging system and its components in any particular circumstance or venue conform to all applicable laws and regulations in force at the time.

This unit was designed as part of a sound reinforcement or audio recording system.

Any use other than that foreseen by the manufacturer is carried out under the sole responsibility of the user.

- The unit must **ONLY** be connected to the amplified output of an amplifier, a powered mixer or another unit with this type of output (e.g. a self-powered loudspeaker enclosure with an amplified auxiliary output). A suitable power cable in compliance with current safety norms must be used to connect the unit.
- The amplifier connected to the unit must only

be switched on after having connected and switched on all the other components of the sound reinforcement/recording system, to avoid annoying noises that can sometimes damage the loudspeakers.

- The unit must only be moved when the cables are disconnected.
- Only dedicated accessories, specifically designed for the system, or any standard accessories foreseen may be used when installing.
- The mechanical operation of the product and the accessories used must be checked periodically.
- This unit produces high sound pressure levels that can damage hearing if listened to under incorrect conditions.
- The unit must only be opened and/or repaired by specialist staff.
- For any requirements of a technical nature, contact OUTLINE or authorized staff.

DISPOSAL OF WASTE MATERIALS

 Your product is designed and manufactured with high quality material and components, which can be recycled and reused. When this crossed-out wheeled bin symbol is attached to a product, it means the product is covered by the European Directive 2002/96/EC and subsequent amendments. This means that the product must **NOT** be disposed with other waste. It is the user's

responsibility to dispose of their electrical and electronic equipment by handing it over to an approved re-processor. For more information about where you can send your equipment for recycling, please contact your local distributor. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.

CONFORMITY

 All the Outline electroacoustic and electronic devices are in accordance with the objects stated by below CEE directives:

The CE declaration of conformity is attached to the product warranty.



SYSTEM DESCRIPTION

CHARLIE 4 is a miniature, externally powered loudspeaker ideal for high quality distributed sound systems and short-throw applications.

The loudspeaker features a single 4"-inch ferrite magnet woofer mounted in a sealed box, providing a full range frequency response from a single diaphragm which deliver the best phase coherence, optimal vocal presence, intelligibility and clarity. Only high quality Italian made components are used in this low distortion loudspeaker.

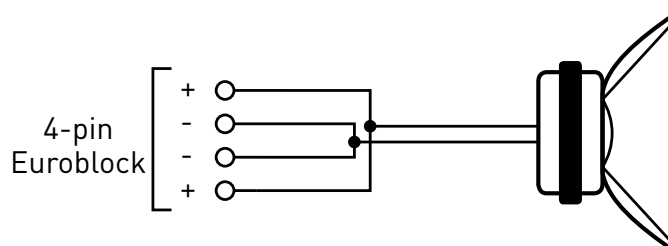
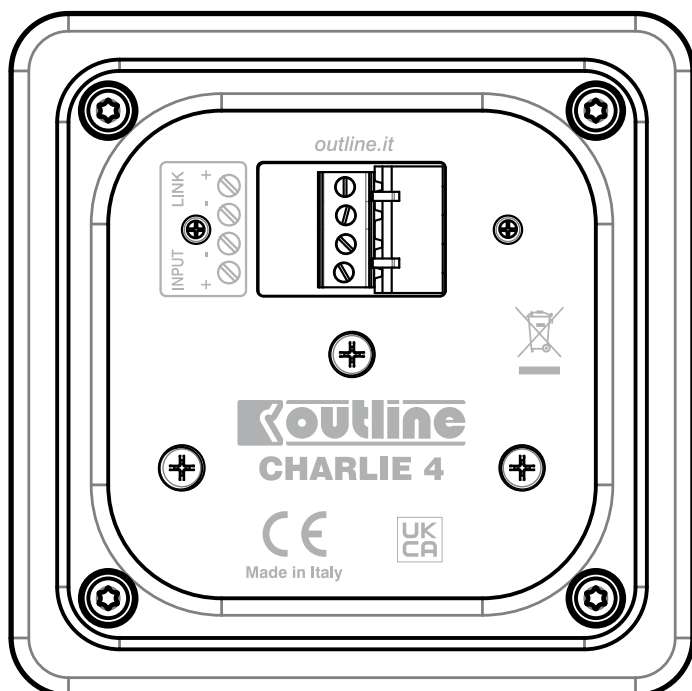
The cabinet, in HCDF (Hydrophobic Compact Density Fiber), is coated with a black textured polyurethane paint and the grill has an epoxy powder coating. Custom RAL colour repainting options are available for installations with specific cosmetic requirements.

The ultra compact, high tensile strength, lightweight enclosure is equipped with a 4-pin Euroblock connector.

AMPLIFIER CONNECTION

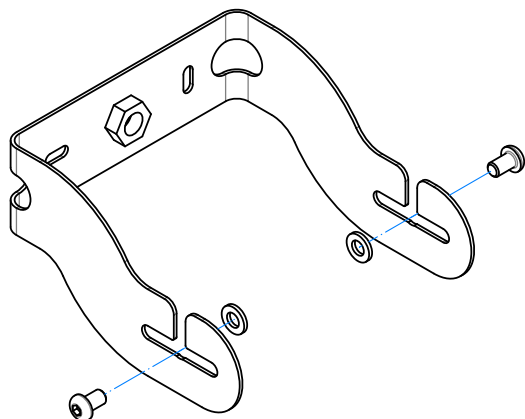
Charlie 4 is using one driver. The unit requires just one amplification channel and the connection is available on a 4-pin Euroblock socket.

The system shall be used with the suggested Outline amplifier and presets DSP.



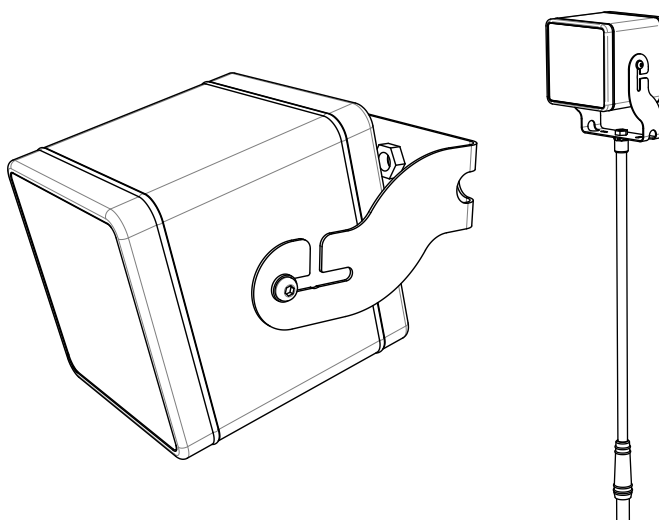
RIGGING INSTRUCTIONS

This system offers two M6 threaded inserts, one on each side, which allow to properly use rigging bracket to hang the speaker.



Always place the washers between the cabinet and the bracket, as shown in the figure.

The bracket has rails in correspondence with two inserts to perfectly fit the cabinet in any case and a M10 threaded insert for stand mounting.



ACCESSORIES

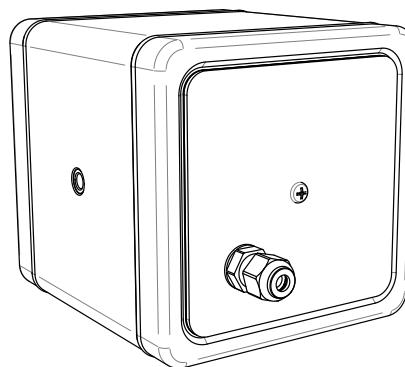
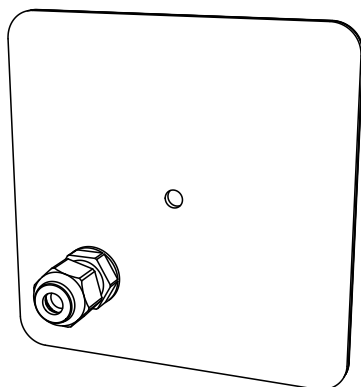
There are other three M4 threaded insert on the rear panel to use other accessories, weatherproof cable protection or safety cable attachments.

Please, note that screws longer than 25 mm cannot be used for these inserts and they must always be covered, when they are not used, to protect the loudspeaker from dust or anything else.

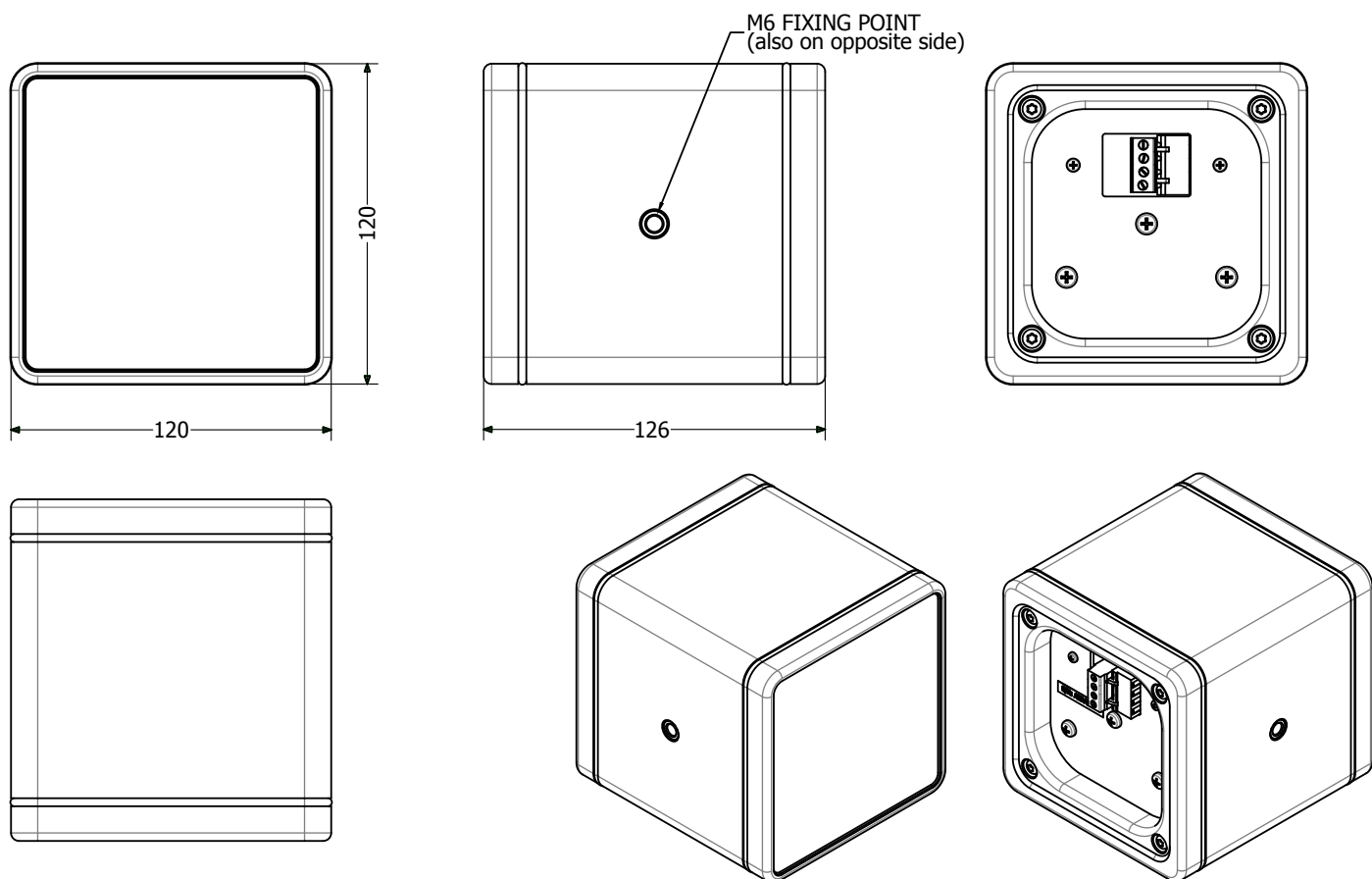
A weatherproof cable protection plate (WPCON-04 - optional) is available to ensure the normal operation also in extreme conditions.

To install the plate proceed as follows:

- Attach the neoprene gasket following the outline of the cap. Beware to start and finish on the bottom edge.
- Pass the wires through the cable glands before installing the accessory.
- Fix the plate and secure the screw (no longer than 25 mm) into the threaded insert in the center of the rear panel as shown in the picture.



OVERALL DIMENSIONS



TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS

Frequency response (-10dB)	110 Hz - 17 kHz
Nominal Dispersion	Axisymmetric 60° (average above 3 kHz)
Impedance (Nom/Min)	16 Ω / 12.7 Ω
Watt AES (Continuous/Peak)	70 W / 280 W
Maximum SPL Output *	118 dB

* calculated using +12 dB Crest Factor signal (AES 2012), Free Field

PHYSICAL

Component	4" High Power & Dispersion Fullrange Driver
Loading	Sealed Box
Connectors	4-pin Euroblock
Cabinet Material	HCDF (Hydrophobic Compact Density Fiber)
Cabinet Finish	Black or White textured polyurethane paint (overpainted RAL colors on request)
Grill	Epoxy Powder coated
Installation points	2 x M6 + 3 x M4 on the rear panel + 1 x M10 on bracket
H x W x D	120 mm - 4 6/8" x 120 mm - 4 6/8" x 126 mm - 5"
Weight	1.55 Kg - 3.4 lb



APPENDIX - PERIODIC CONTROLS

All the loudspeakers, before the shipment, are fully tested at the end of the production line, but before the system is installed an overall check shall be performed to ensure that the system has not been

damaged during the shipment. Periodic controls shall be performed at regular time intervals. The following table represents an ideal check.

Loudspeaker Serial Number:				Position:				
Date								
Transducers Impedance								
Loudspeaker cabinet								
Loudspeaker grills								
Screws								
Additional notes								
Signature								





Outline carries out on-going research for product improvement. New materials, manufacturing methods and design upgrades are introduced to existing products without prior notice as a routine result of this philosophy. For this reason, any current Outline product may differ in some aspect from its description, but will always equal or exceed the original design specifications unless otherwise stated.

© Outline 2021
Operating manual product code: Z OMCharlie4
Release: 20210930
Printed in Italy

