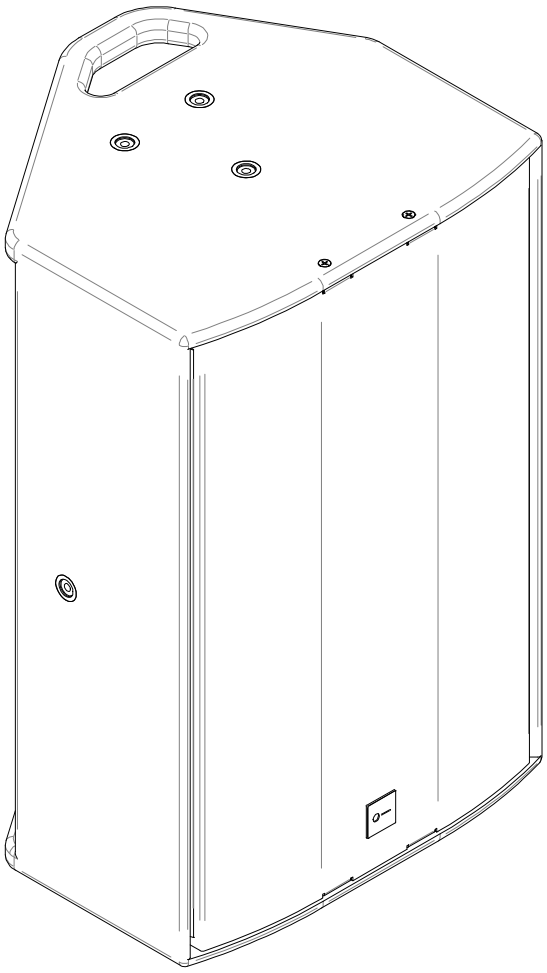
OUTLINE®

Operating Manual

P15

Coaxial Loudspeaker



[•-] sound vision.

P15 Operating Manual
Version: 0100
Release date: 2025/06/20

Refer all servicing to qualified personnel, through your Outline dealer.

Safety regulations.

Please ensure that you follow these guidelines for the safe and proper use of the product to avoid any risks to personal safety or warranty issues.
This unit is specifically designed for use as part of a sound reinforcement or audio recording system.
Any use beyond the manufacturer's intended purpose is the sole responsibility of the user.

- Do not expose the unit to rain or use it in areas with high humidity levels or near water.
- Prevent any liquids or solid objects from entering the unit. If this occurs, cease use and promptly contact an authorised service center.
- Connect the unit ONLY to the amplified output of an amplifier, powered mixer, or another unit with this type of output (e.g. a self-powered loudspeaker enclosure with an amplified auxiliary output). Always use a suitable power cable that meets current safety standards when connecting the unit.
- Before powering on the amplifier, it is crucial to ensure that all other components of the sound reinforcement/ recording system are connected and switched on to prevent potential damage to the loudspeakers from disruptive noises.
- Move the unit only when the cables are disconnected.
- Use only dedicated accessories designed for the system or standard accessories for installation purposes.
- Periodically inspect the mechanical operation of the product and the accessories used.
- Keep in mind that this unit can produce high sound pressure levels that could damage hearing under incorrect conditions.
- Do not attempt to open or repair the unit by yourself; seek help from specialised personnel.
- For any technical assistance, contact OUTLINE or their authorised staff.

Disposal of waste materials.

Your product is designed and manufactured with high quality materials 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 2012/19/EU 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 Outline electro-acoustic and electronic devices are in conformity with the provisions of EC/EU directives (as stated in our CE Declaration of conformity).

CE Declaration of Conformity

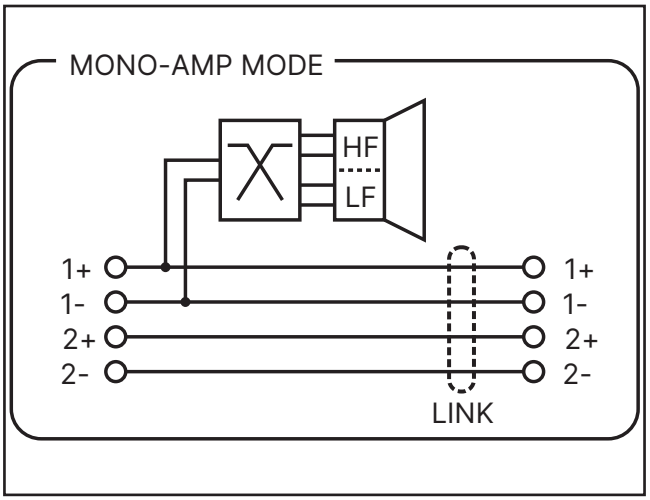
The company OUTLINE SRL, with headquarters in Via Leonardo da Vinci 56, Flero (BS), declares under its sole responsibility that all electro-acoustic and electronic audio low frequency professional products, speakers components and loudspeakers included, are manufactured in ITALY according to the below stated standards and directives (where applicable). The technical files for the products (where applicable) are compiled by Outline s.r.l.

-Directive 2006/42/CE of 17 May 2006 "Machinery Directive"
-Legislative Decree 17 of 27/01/10, "Implementation of Directive 2006/42/CE regarding machinery, and which modifies directive 95/16/CE regarding lifts (elevators)";
-Legislative Decree 81 of 9/04/08, "Implementation of Art. 1 of law N° 123 of 3/08/07 on the matter of safeguarding health and safety in workplaces" and later amendments regarding the improvement of safety and health of workers in workplaces;
-Directive 2014/35/EU, "Low Voltage";
-Directive 2014/30/EU, "Electromagnetic Compatibility";
-Directive 2003/10/CE (Legislative Decree 195/06), "Protection from noise";
-Directive 2011/65/UE (RoHS) Restriction of the use of certain hazardous substances in electrical and electronic equipment.
-Legislative Decree 195 of 10/04/06, "Implementation of Directive 2003/10/CE regarding the exposure of workers to risks arising from physical agents (noise)";
-UNI EN ISO 12100 (2010), "Safety of machinery - General principles for design – Risk assessment and risk reduction";
-UNI EN ISO 13857 (2020), "Safety of machinery -- Safety distances to prevent hazard zones being reached by upper and lower limbs";
-UNI EN ISO 13854 (2020), "Safety of machinery - minimum gaps to avoid crushing of parts of the human body";
-UNI EN ISO 13850 (2015), "Safety of machinery - Emergency stop - Principles for design";
-UNI EN 614-1 (2009), "Safety of machinery - Ergonomic design principles - Part 1: Terminology and general principles";
-UNI EN 614-2 (2009), " Safety of machinery - Ergonomic design principles - Interaction between machinery design and work tasks";
-UNI EN 894-1 (2009), "Safety of machinery - Ergonomics requirements for the design of displays and control actuators - General principles for human interactions with displays and control actuators";
-UNI EN 894-2 (2009), "Safety of machinery - Ergonomics requirements for the design of displays and control actuators – Displays";
-UNI EN 894-3 (2009), "Safety of machinery - Ergonomics requirements for the design of displays and control actuators – Control actuators";
-UNI EN ISO 14120 (2015), "Safety of machinery – Guards - General requirements for the design and construction of fixed and movable guards";
-UNI EN 981 (2009), "Safety of machinery - Systems of auditory and visual danger and information signals"
-UNI EN ISO 13849-1 (2016) "Safety of machinery – Safety-related parts of control systems – Part 1: General principles for design";
-UNI EN ISO 13855 (2010) "Safety of machinery - Positioning of protective equipment with respect to the approach speeds of parts of the human body"
-UNI EN ISO 14188 (2018), "Safety of machinery – Prevention of unexpected start-up";
-UNI EN ISO 13856-2 (2013), "Safety of machinery - Pressure sensitive protective devices - Part 2: General principles for the design and testing of pressure sensitive edges".
-UNI EN ISO 4871 (2009) "Acoustics — Declaration and verification of noise emission values of machinery and equipment";
-CEI EN 60204-1 (2018), (CEI 44-5), "Safety of machinery - Electrical equipment of machines - Part 1: General rules";
-CEI EN IEC 60947-1 (2021), (CEI 121-21), "Low-voltage switchgear and control gear - Part 1: General rules";
-CEI EN 60446 (2008), (CEI 16-4), "Basic and safety principles for man-machine interface, marking and identification - Identification of conductors by colours or alphanumerics";
-CEI EN 61310-1 (2008), (CEI 44-8), "Safety of machinery - Indication, marking and actuation - Part 1: Requirements for visual, acoustic and tactile signals";
-CEI EN 61310-2 (2008), (CEI 44-9), "Safety of machinery - Indication, marking and actuation - Part 2: Requirements for marking";
-UNI EN 1990 (2006), "Eurocode - General structural design criteria";
-UNI EN 1991-1-1 (2004), "Eurocode 1 – Actions on structures - Part 1-1: General actions – Densities, self-weight and imposed loads for buildings"
-CEI EN 62368-1:2014+A11:2017: Audio/video, information and communication technology equipment - Part 1: Safety requirements
-CEI EN 61000-6-4 Electromagnetic compatibility (EMC) Part 6-4: Generic standards - Emission standard for industrial environments
-CEI EN 61000-6-2 Electromagnetic compatibility (EMC) Part 6-2: Generic standards - Immunity standard for industrial environments
-CEI EN 55032:2015, EN 55032:2015/A11:2020: Electromagnetic compatibility of multimedia equipment. Emission requirements
-CEI EN 55035:2017, EN 55035:2017/A11:2020: Electromagnetic compatibility of multimedia equipment. Immunity requirements
-CEI EN 61000-3-2:2014: Limits for harmonic current emissions for equipment input current ≤ 16 A per phase
-CEI EN 61000-3-3:2013: Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤16 A per phase
-EN IEC 63000:2018 Technical documentation for the assessment of electrical and electronic products with respect to the resriction of hazardous substances

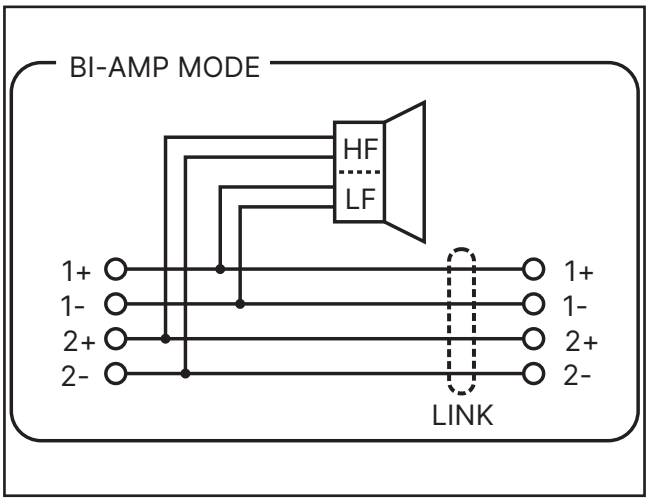
OUTLINE SRL
Stefano Noselli - Production and Purchase Director
Release date 20 June 2025

Amplifier connection.

The P15 loudspeaker utilizes a woofer and a compression driver along with a passive crossover. The connection panel includes two NL4 connectors and the loudspeaker can be used either in mono-amp or in bi-amp mode. To switch between these modes, simply remove the four screws that secure the connection panel. Then, reposition the Euroblock connector to the desired setting, which will be visible through the inspection window. An Outline amplifier is required to drive the system properly. Please refer to the preset guide available on our website (www.outline.it) for settings specific to your amplifier model.



Mono-amp connection



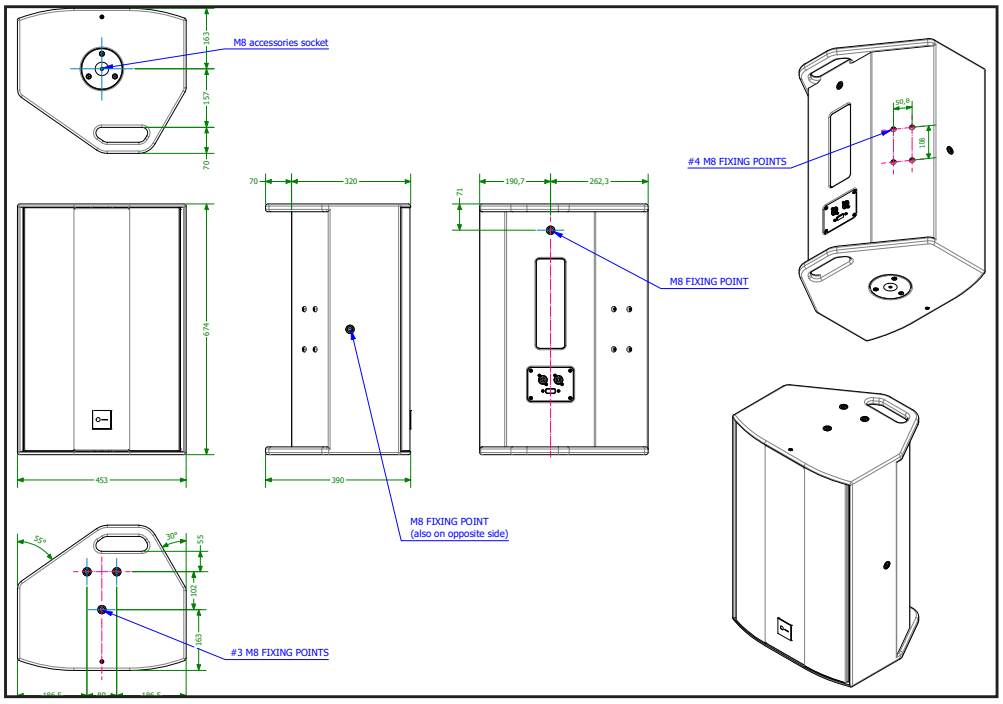
Bi-amp connection

Rigging instructions

This system provides numerous rigging options. It features four M8 screws on the rear-side panel, three M8 fixing points on the top and another three M8 fixing points, one per side (left, right, rear), allowing for the use of a variety of rigging accessories to install the speaker securely. Outline strongly recommends using a secondary safety device whenever the system is rigged to ensure safety.

Additionally, the loudspeaker can be mounted on a 35 mm speaker stand using the A ADAPT36-M8 adapter or by replacing the M8 fixing point with the A STREC35-01 accessory.

You can review the datasheet to find a variety of available rigging accessories for more options.



P15 Technical specifications.

PERFORMANCE

Frequency Response (-10 dB)	45 Hz - 19.5 kHz (FR preset) 55 - 19.5 kHz (HP preset)
Nominal Dispersion H x V (-6 dB)	80° x 60°
Maximum SPL Output (AES75)*	**Mono Amp mode** GTA series: FR preset (1) - 114,8 dBZ - 130,1 dBZpk - 111,2 dBA HP preset (2) - 114,9 dBZ - 130,9 dBZpk - 112,2 dBA TTM8K4: FR preset (3) - 118 dBZ - 134,2 dBZpk - 114,7 dBA HP preset (4) - 118 dBZ - 134,2 dBZpk - 115,3 dBA TTM12K4: FR preset (3) - 118 dBZ - 134,2 dBZpk - 114,7 dBA HP preset (4) - 118 dBZ - 134,2 dBZpk - 115,3 dBA ISA4D32: FR preset (2) - 115,7 dBZ - 131,8 dBZpk - 112,2 dBA HP preset (1) - 114,4 dBZ - 130,9 dBZpk - 111,6 dBA L3000: FR preset (2) - 114 dBZ - 129,9 dBZpk - 110,4 dBA HP preset (5) - 115 dBZ - 130,8 dBZpk - 112,2 dBA Bi Amp mode GTA series: FR preset (4) - 117,7 dBZ - 135,9 dBZpk - 114,5 dBA HP preset (5) - 118,3 dBZ - 136,7 dBZpk - 115,7 dBA TTM8K4: FR preset (4) - 118 dBZ - 136,2 dBZpk - 114,7 dBA HP preset (5) - 118,4 dBZ - 136,6 dBZpk - 115,8 dBA TTM12K4: FR preset (4) - 118 dBZ - 136,2 dBZpk - 114,7 dBA HP preset (5) - 118,4 dBZ - 136,6 dBZpk - 115,8 dBA ISA4D32: FR preset (3) - 117,3 dBZ - 135,1 dBZpk - 114 dBA HP preset (4) - 117,6 dBZ - 135,5 dBZpk - 115 dBA
Number of Acoustic Ways	2
Number of Amplifier Channels	1 (Mono Amp mode) - 2 (Bi Amp mode)
Nominal Impedance	8 Ohm (Mono Amp mode) - 8+16 Ohm (Bi Amp mode)
Max Cabinets per Channel/Amp	Mono Amp mode: GTA Quattro - 4/16, GTA Otto - 4/32 TTM8K4 - 2/8, TTM12K4 - 3/8 ISA4D32 - 1/3 L3000 - 1/2 Bi Amp mode: GTA Quattro - 4/8, GTA Otto - 4/16 TTM8K4 - 2/4, TTM12K4 - 3/6 ISA4D32 - 1/2
IP Rating	IP 54
Operating Temperature	+ 60° C / - 25°C

*AES75-2023 max. linear sound level;

(1) RMS input level of -5 dBV (0,562 V); (2) RMS input level of -4 dBV (0,631 V); (3) RMS input level of -2 dBV (0,794 V);

(4) RMS input level of -1 dBV (0,891 V); (5) RMS input level of 0 dBV (1,0 V)

PHYSICAL

Transducers	1×15” Nd low frequency driver 3” VC, 1×1,3” exit Nd high frequency driver, 3” VC
Connectors	2x Neutrik Speakon NL4 in parallel
Cabinet Material	Wood
Cabinet Finish	Solar gris polyurea painting
Grille	Metal solar gris painting weave pattern grill
Handling	2 handles on the rear side of the box
Mounting Points	10 x M8 threaded points
Dimensions (H x W x D)	674 × 463 × 390 mm, 26.5” x 18.2” x 15.4”
Weight	24,8 kg, 54.7 lb
Standard Colour / RAL	Solar gris (proprietary color)

SHIPPING DETAILS

Shipping dimensions (H x W x D)	730 × 550 × 480 mm – 28.7” x 21.7” x 18.9”
Shipping weight	27.8 kg, 61.3 lb
Order code	O1P15
Taric number (HS code)	8518.22.00

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