

# Montarbo

## USER MANUAL – SECTION 1



### **NETTUNO 10**

### **PORTABLE PA SYSTEM**

#### **CONTENTS**

1. PACKAGE CONTENTS
2. NETTUNO SERIES
3. NETTUNO 10
4. CONFIGURATIONS
5. TOP I/O CONNECTIONS
6. SUBWOOFER I/O CONNECTIONS
7. MIXER CONTROL PANEL
8. DISPLAY FUNCTIONS
9. STREAMING AUDIO VIA BLUETOOTH®
10. REMOTE CONTROL
11. QUICK SETUP
12. INSTALLATION EXAMPLES
13. TROUBLESHOOTINGS
14. TECHNICAL SPECIFICATIONS

## **1.PACKAGE CONTENTS**

2 x passive speaker  
1 x active subwoofer  
1 x user manual - section 1  
1 x user manual – section 2  
1 x power cable  
2 x speakON® cable  
1 x pole  
1 x transport cover

The warnings in this manual must be observed together with the “USER MANUAL - Section 2”.

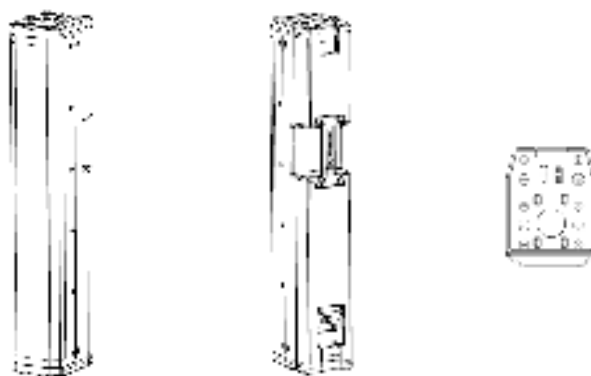
*Thank you for purchasing a Montarbo product, an Italian company founded in 1962, always at the service of music and professional audio. Montarbo products, original and cuttingedge, are designed with the utmost attention to detail and durability over time. Reliability is in line with the high quality standards and sensitivity to environmental impact that distinguish the company.*

## **3.NETTUNO SERIES**

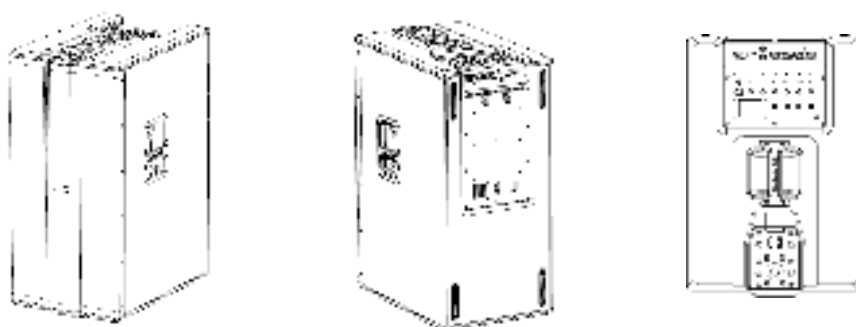
Nettuno is the new series of PA portable system designed by Montarbo for a wide range of both indoor and outdoor applications. Nettuno 10 offers everything you need for small situations: two passive tops and an active subwoofer with integrated mixer that can be controlled entirely via app, a great solution for venues, small bands or musicians. Nettuno 20, composed of an active sub and a passive top, is designed for medium-sized professional use but always without sacrificing ease of use: installation is immediate, a new amplifier guarantees reliability and power, all parameters can be controlled remotely via RDNet hardware. The top of the range is Nettuno 50, a system that includes an active top and two active subwoofers that can be used in medium/large sized situations; impressive sound pressure, small dimensions, simple and quick assembly, versatility of use and all the advantages of control via RDNet hardware.

### **3.NETTUNO 10**

The system consists of two passive tops and an active subwoofer. Each top is equipped with six 3.25" full-range speakers (V.C. 1") with coverage (100x10); the mechanical design integrates a handle on the back side and a 36mm diameter hole on the bottom side for pole mounting. A stack lock system allows the fixing between two tops and between the top and the subwoofer. The top dimensions are 116x701x155.5 mm, the weight is 7.5Kg.



The subwoofer is equipped with two 12" woofers (V.C. 3") and a new generation amplifier capable of delivering amplification power of 1000 W RMS. The strenght of the system is the 8-channel mixer integrated in the subwoofer which features Bluetooth® connectivity for audio streaming and remote control from a mobile device via app (see Remote Control chapter). The mechanical design integrates two side handles (one on each side) and one on the top panel alongside which there is an M20 threaded hole for installing the top on a pole. The dimensions are 380x804x570 mm and the weight is 36.8 Kg.

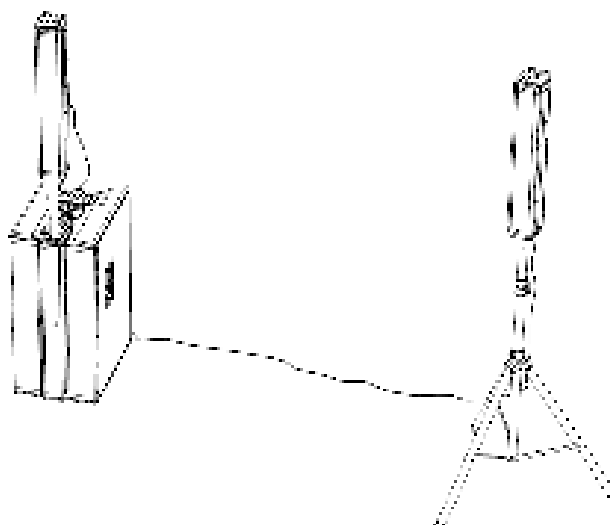


## 4.CONFIGURATIONS

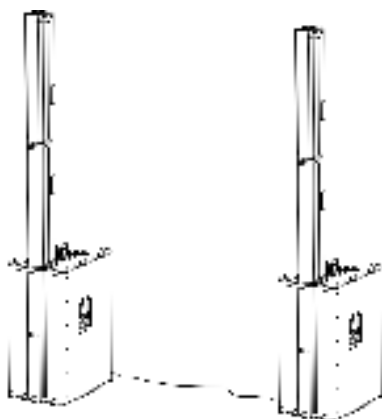
### MONO 1.1



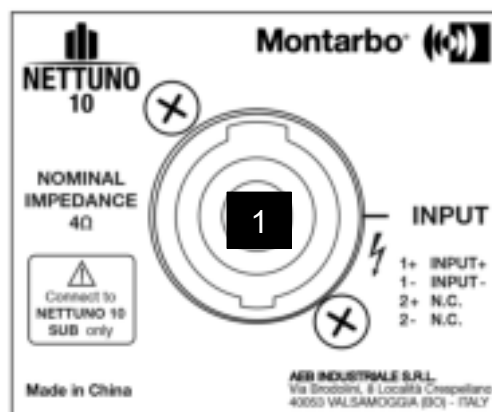
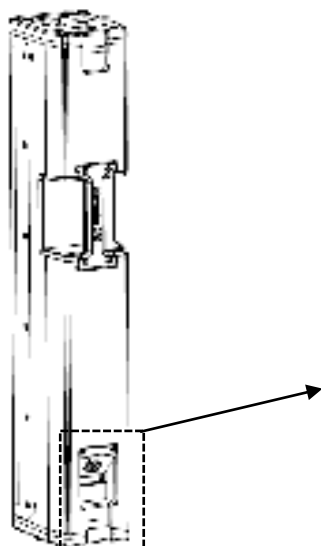
### STEREO 2.1



## DOUBLE SYSTEM



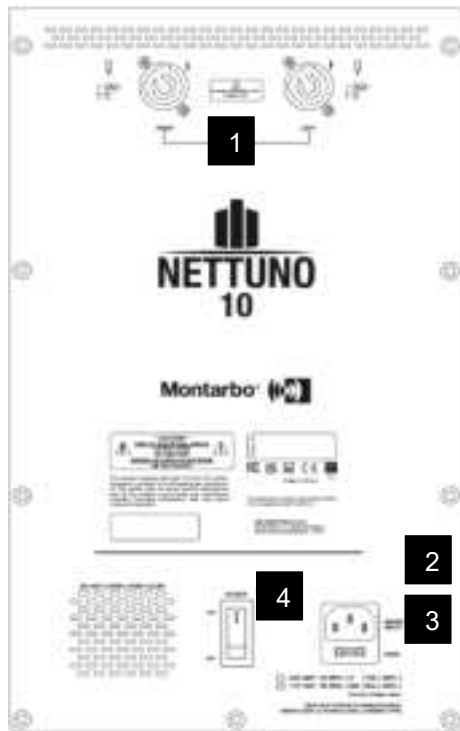
## 5.TOP I/O CONNECTIONS



### 1 SPEAKON TOP INPUT

Input with speakON® connector, use supplied speakON® cables to connect this input to subwoofer output.

## 6.SUBWOOFER I/O CONNECTIONS



### 1 USCITE SPEAKON SUB

Outputs with speakON® connectors, use supplied speakON® cables to connect this output to top inputs.

### 2 MAINS INPUT

IEC input socket with integrated mains filter. Each package is supplied with the necessary power cable specific to your area. With the speaker switched off, insert the power cable into this socket. For your own safety, never disconnect the earth plug.

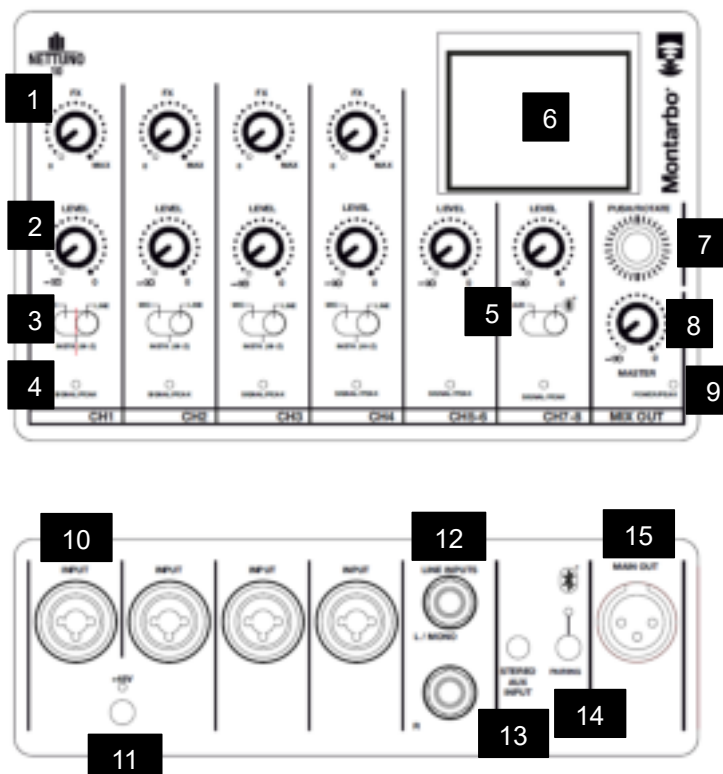
### 3 FUSE

Mains fuse holder. **ATTENZIONE:** only replace the fuse with one of the same type and rating. If the fuse continues to blow, contact an authorized service centre.

### 4 POWER ON/OFF

This switch turn the system on (I position) or off (O position).

## 7.MIXER CONTROL PANEL



## **1 FX**

Use this knob to adjust FX level on channels 1,2,3,4 in a separate way. Select the FX type from the display or from the app.

## **2 LEVEL**

Use this knob to adjust channel level.

## **3 MIC/HI-Z/LINE SWITCH**

Use this switch to select between mic, line or Hi-Z input sensitivity.

## **4 SIGNAL/PEAK LED**

This LED shines green, when power is applied. It turns RED when any of the power amps clip, or when the input channel is overloaded. Adjust the input level so that the amplifier protection circuit intervenes as little as possible. When a channel is muted the corresponding LED flashes; if the Master channel is muted all the LEDs start flashing.

## **5 AUX IN/BLUETOOTH® SWITCH**

Use this switch to select channel 7-8 input source between Stereo Aux Input and external device via Bluetooth®.

## **6 DISPLAY**

Provides a menu read-out manipulated and activated by the push/rotate encoder.

## **7 PUSH/ROTATE ENCODER**

Rotary knob that allows the user to select and choose menu options on the LCD display screen. Pushing the button in till it detents makes a menu choice (for more information please read the Display Function chapter in this manual).

## **8 MASTER LEVEL**

This knob adjusts system output level.

## **9 POWER/PEAK LED**

This LED shines green, when power is applied. It turns RED when any of the power amps clip, or when the input channel is overloaded. Regolare il livello dei canali e del master in modo da far intervenire il meno possibile tale circuito.

## **10 INPUT**

Balanced combo input on XLR/jack 6,35mm for mic, line, Hi-Z signals.

## **11 +48V**

This button activates the +48V power supply on CH.1 and CH.2; connect the microphone cable before activating and disconnect the cable before deactivating. Check if your microphone requires a +48V power supply.

## **12 LINE INPUTS**

Balanced input on TRS jack 6,35mm for line level signals.

### 13 STEREO AUX INPUT

Unbalanced input with 3.5mm stereo socket for wired connection with external devices.

### 14 PAIRING

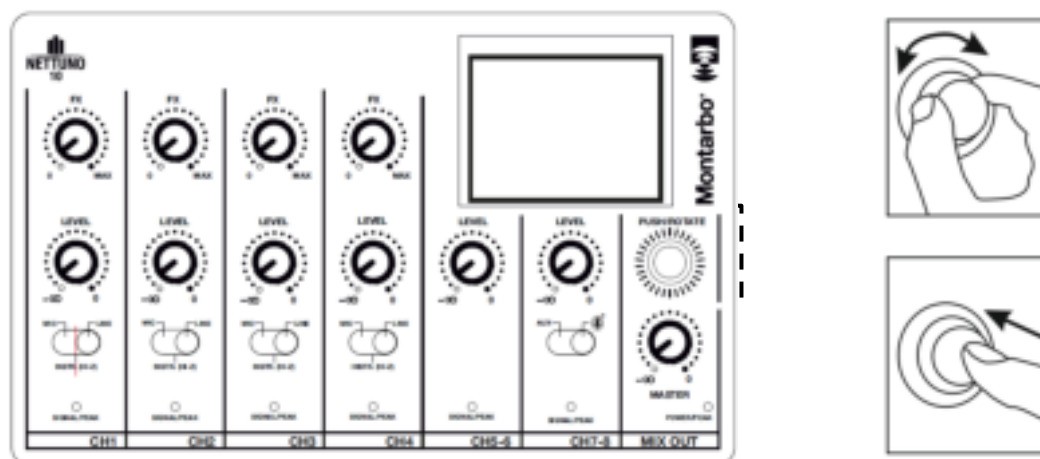
Button that allows to sync and connect the system to a smartphone or tablet via Bluetooth® for audio streaming (follow the procedure on chapter 9 Streaming audio via Bluetooth®).

### 15 MAIN OUT

Balanced Output on XLR connector allows for parallel connection of multiple systems.

## 8.DISPLAY FUNCTIONS

Use the rotary knob to select and choose the following menu options on the LCD. Pushing the button in till it detents makes a menu choice.



SETUP: allows to set the configuration between Mono and Stereo mode

BALANCE: adjust the signal between left and right speaker.

PRESET: load preset eq for Nettuno 10 play mode.

SUB LEVEL: adjust the sub level.

CONTOUR: adjust the Contour level on each channel.

FX: choose the FX to load on the FX channel.

APP: enable the remote control from an external device via Bluetooth®.

SCREEN: allows to block the screen of the display.

RESET: allows to return to the factory settings.

INFO: provides information about the firmware version currently installed on the system.

## 9.STREAMING AUDIO VIA BLUETOOTH®

Follow this procedure to stream audio via Bluetooth® from an external device:

- Make sure that the device to be paired to the system is switched on and ready for connection via Bluetooth®. With the system switched on,

press the PAIRING button to activate Bluetooth® synchronisation. The relevant green LED will flash.

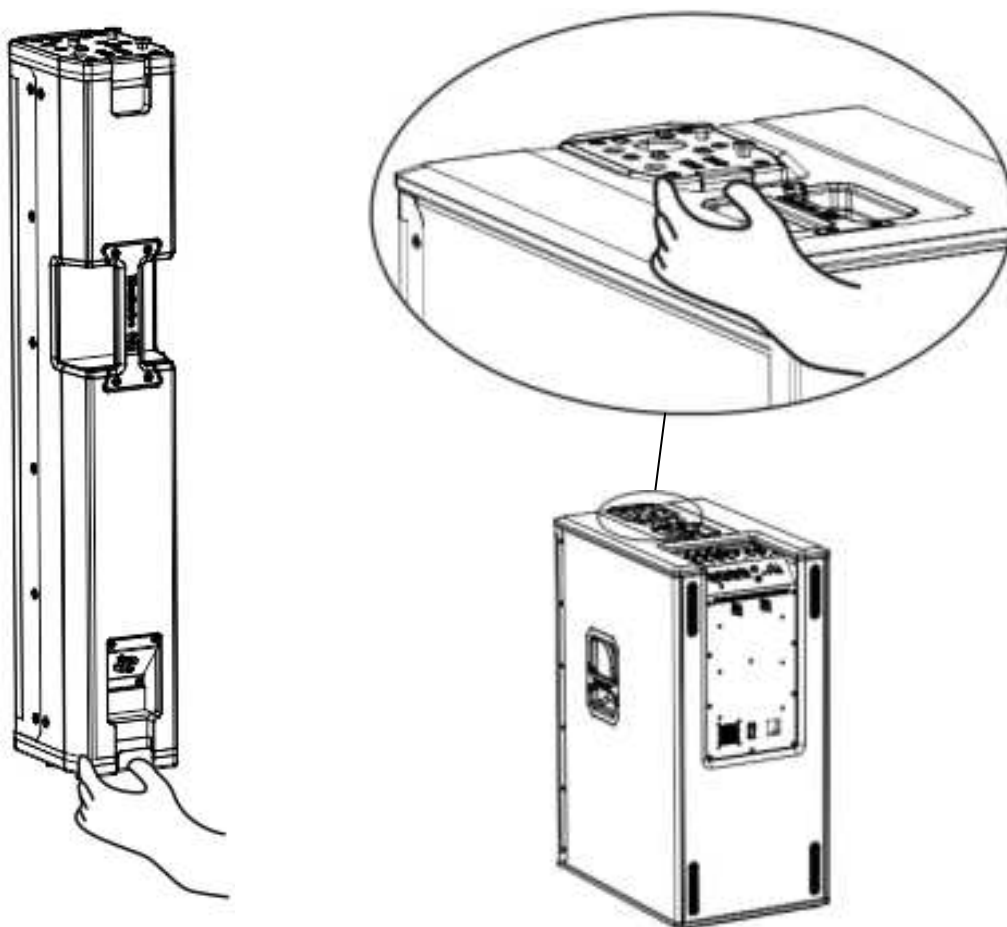
- Check on the mobile device that the name of the system (Nettuno 10) appears among the available devices.
- Select the system model to pair the device. The LED is steady on and signals correct synchronisation.
- Move the Aux In/Bluetooth® switch on Bluetooth® and for proper listening level, adjust the CH7-8 and MAIN level.

## 10.REMOTE CONTROL

Bluetooth® allows remote control of the Nettuno 10 system with the Nettuno 10 Controller free iPad app available on App Store. Install the app on the iPad, launch the app and enable the remote control from the mixer display of the Nettuno 10 (APP menu). The connection is immediate.

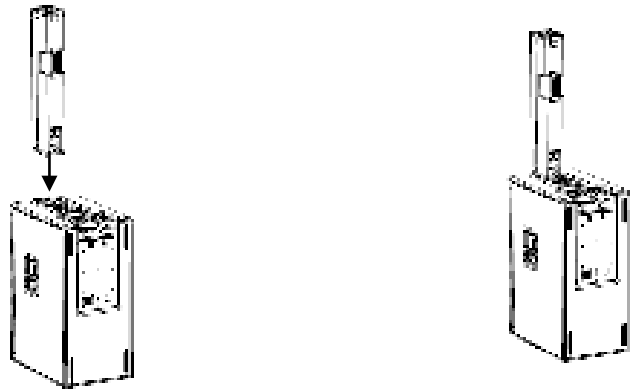
## 11.QUICK SETUP MONO MODE

Both tops must be stacked above the subwoofer. Before assembly, make sure that the safety levers are pushed inwards and not in the released position.

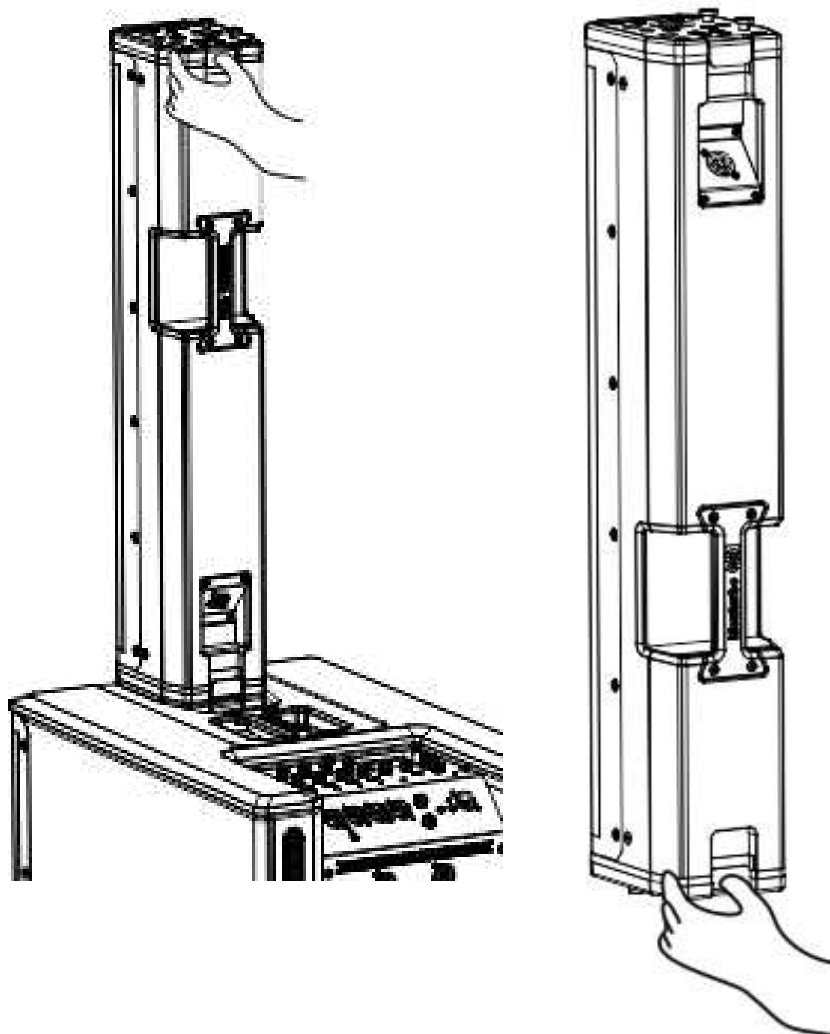




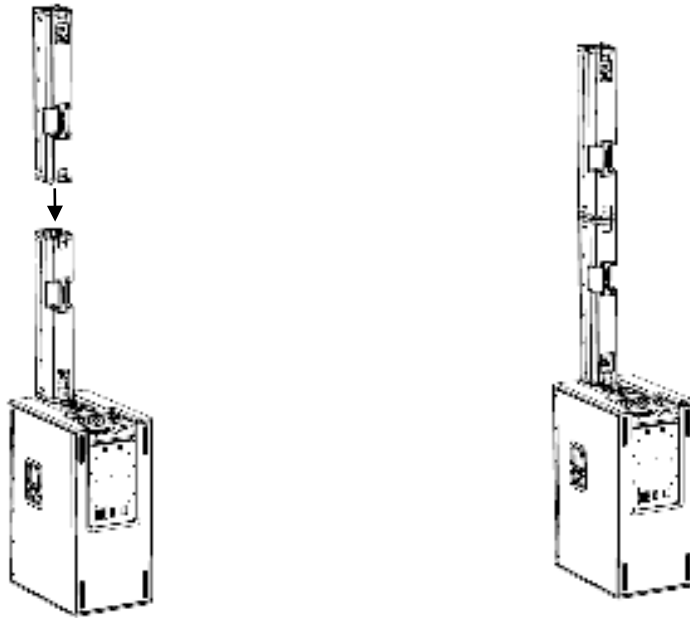
Align the locking systems and apply pressure to engage. If the assembly is correct, the safety levers move outwards (released position) with a “click”.



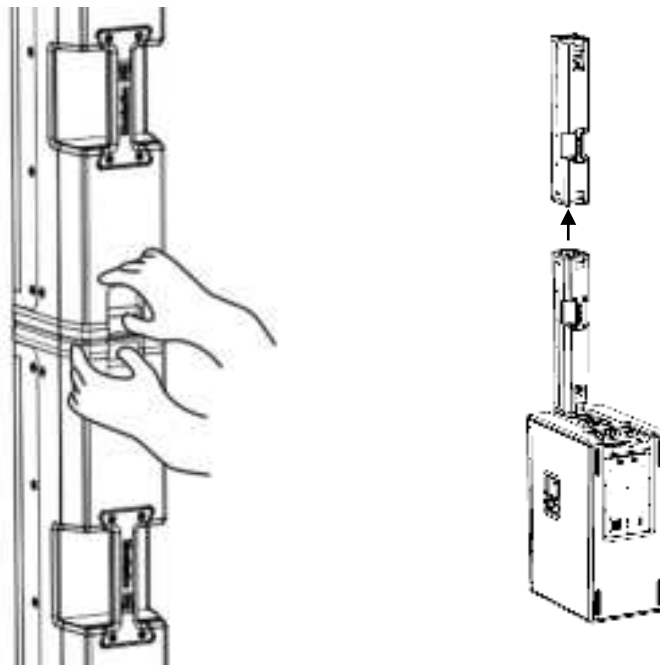
Push inwards the safety levers to arm the blocking systems of the two tops as shown.



Place the second top on the first upside down, then align the blocking systems and apply pressure to engage. If the assembly is correct, the safety levers move outwards (released position) with a “click”.

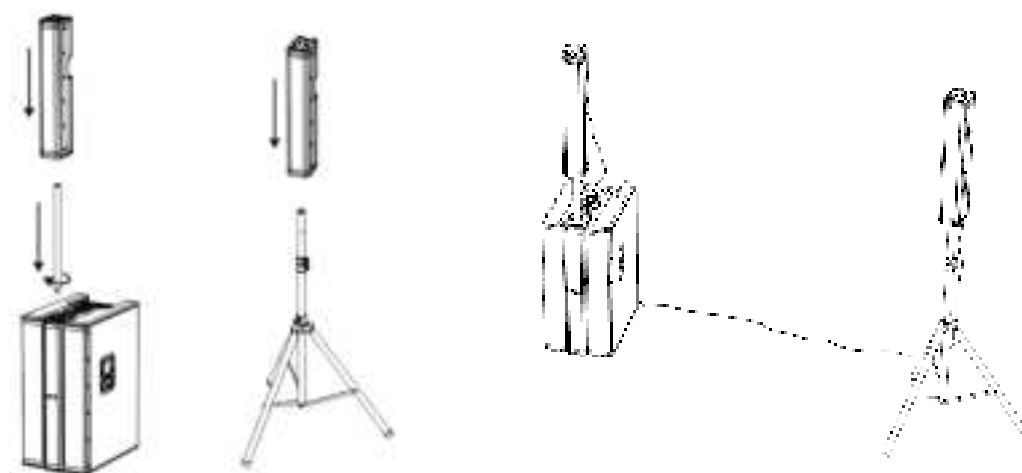


Push both safety levers to disassemble the cluster.



## STEREO MODE

Screw the supplied pole into the subwoofer threaded hole and place the top above the pole. The other top must be installed on an optional tripod stand with standard 35 mm diameter pole at a proper distance.



Connect the tops to the subwoofer using the speakON® supplied cables.

Connect the audio sources to the inputs (channel levels zeroed).

Link additional speakers.

Insert the mains cable and turn on the speaker.

Set the Mono/Stereo configuration from the mixer display of the Nettuno 10 (Setup Menu). In Mono mode ch.5/6,7/8 are summed in mono.

Adjust all volumes as desired.

## 12.INSTALLATION EXAMPLES

### STEREO MODE

Place one top above the subwoofer using the supplied pole and the other top on an optional tripod stand. Screw the supplied pole into the subwoofer threaded hole and place the top above the pole. The maximum height allowed between the speaker base and the floor is 150 cm (**to be verified**).

The other top must be installed on an optional tripod stand with standard 35 mm diameter pole. The maximum height allowed between the speaker base and the floor is 170 cm (**to be verified**). For other configurations is necessary an additional fastening (not supplied).

## **13.TROUBLESHOOTING**

### **The speaker does not turn on:**

- Check for the correct power supply upstream of the system.
- Check that the power cable with VDE connector is correctly inserted.

### **The speaker outputs poor or distorted sound**

- Adjust the source volume appropriate of mixer section inputs.
- Check that the cables used are not damaged. Use only good quality cables in good condition.

### **Background noise:**

- Turn off the power and disconnect all connected devices.
- Connecting one device at a time, check the signal from each source to find out which one caused the problem.

## 14. TECHNICAL SPECIFICATIONS

|                             | NETTUNO 10 TOP                      | NETTUNO 10 SUB  |
|-----------------------------|-------------------------------------|---|
| Type                        | Passive full range speaker          | Active subwoofer  |
| Max SPL (@1m)               | 113dB                               | 132dB   |
| Frequency response (-10 dB) | 170Hz-20kHz                         | 40Hz-0.2kHz   |
| Frequency response (-6 dB)  | 200Hz-16kHz                         | 40Hz-0.17kHz  |
| HF                          | 6x3,25" - 1" V.C. full range driver | -   |
| LF                          | -                                   | 2x12" - 3" V.C.   |
| Coverage (H x V)            | 110° H x10° V                       | -   |
| Crossover frequency         | 0.18kHz                             | 0.18kHz   |
| RMS power                   | 250W                                | 500 W   |
| Peak power                  | 500W                                | 1000 W  |
| I/O connections             | 1 x SPEAKON® (Input)                | 4 x XLR/JACK TRS (Input)<br>2x JACK TRS 6,35mm (Input)<br>1x JACK TRS 3,5mm (Input)<br>1x XLR (Output)<br>2 x SPEAKON® (Output) |
| Bluetooth® version          | -                                   | 5.0 Dual Mode   |
| Cabinet                     | Plywood                             | Plywood   |
| Dimensions (L x A x P)      | 116x701x155,5 mm                    | 380x804x570 mm  |
| Weight                      | 7.5Kg                               | 36.8Kg  |

*Please follow all the regulations described in this manual (section 1 and 2). Don't use the handles to hang the speakers. Use certified accessories only and trained personell. Product features, specifications and appearance are subject to changes without prior notice. AEB Industriale S.R.L reserve the right to make changes or improvements in design or manufacture without any obligation to incorporate such changes or improvements in previously manufactured products.*

*speakON® is a trademark Neutrik AG.*

*This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.*

*The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth® SIG, Inc. and any use of such marks by AEB Industriale S.R.L SRL is under license. Other Trademarks and trade names are those of their respective owner*

## FCC WARNING

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.