

ES
503

NEW PRODUCT
2015

OLED DSP INTERFACE
STEREO OR MONO CONFIGURATION
TRI-AMP DIGITAL ACTIVE SYSTEM
DIGITAL MIXER ON-BOARD
3 INPUT CHANNELS (MIC/INSTR/LINE)
BLUETOOTH® STEREO AUDIO RECEIVER BUILT-IN
CUSTOMIZABLE BALANCED OUTPUT CHANNEL (MIX/MONITOR/AUX)
LOGARITHMIC COLUMN ARRAY FOR EXTENDED VERTICAL COVERAGE
INNOVATIVE PHASE PLUG FOR IMPROVED INTELLIGIBILITY
AUTO-RANGE PSU

Entertainment Stereo System

ES503 is a 3-amped stereo sound system composed by two passive tops and one 12" subwoofer. The sub hosts a 1000W power amp module with auto-range PSU and a 3-channels mixer with Bluetooth® connection. A powerful DSP – controlled through an advanced user-interface with an OLED display – manages both the coverage of the entire system and all functions of the mixer, making the ES503 a real gem in terms of sound performance and versatility.

 **Bluetooth®**



Tri-Amp Entertainment Stereo System

ES 503

Acoustic Coherent Coverage

The ES Series is the result of experience gained from dBTechnologies in the acoustic design of vertical array systems. The components of the top are aligned mechanically (**Logarithmic Curved Column Array**) so as to increase the coverage of the vertical beam. Furthermore, there is a special “**double-ringed phase plug**” that enhances the horizontal coverage and guarantees a rich and crystal clear sound to the system.



Technical Data

Speaker Type	3-amped Stereo System with two full-range tops and one subwoofer
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Acoustical Data

Frequency Response [-10dB]	37 - 15.000 Hz
Max SPL	121 dB
MF-HF	8x 3"
MF-HF Type	Neodymium
LF	12"
Directivity	95x65°

Amplifier

Amp Technology	Digipro® G3
Amp Class	Class-D
Power Amp	1000 W
Controls	1x OLED Display with rotary encoder w/switch 1x Audio signal monitoring LED 1x USB port (service data)
Power Supply	SMPS with PSU Auto-range
Power Connection	VDE socket
Cooling	Convection

Processor

Controller	DSP 24 Bit/48 kHz
System Presets	Factory presets + User defined
Limiter	Dual Active, Peak, RMS, Thermal
Crossover Frequency LF-MF	206 Hz

Inputs

Mic/Instrument Channel	1x Combo (XLR/Jack) balanced/unbalanced input
Line Channels	2x Combo (XLR/Jack) balanced/unbalanced inputs
Media Channel	1x Bluetooth® built-in receiver
Mix Output	1x XLR balanced output

Mechanics

Housing (Subwoofer)	15mm Black Painted Birch Plywood
Housing (Tops)	Polypropylene PP
Handles	2x lateral side (Subwoofer)
Dimensions WxHxD (Tops)	95x360x137 mm – 3.74x13.98x5.39 in
Dimensions WxHxD (Subwoofer)	465x400x430 mm - 18.3x15.7x16.9 in
Weight (1 Top)	1.9Kg – 4.19lbs.
Weight (Subwoofer)	16.4Kg – 36.16lbs.

Fast Speaker Connection

The enclosure of the two satellites embeds a slide connection system, which assures perfect top-to-top matching without the risk of incorrect assembly. It also includes the electrical connection between the two tops. The letters A and B marks these two speakers respectively, making them easily identifiable. The “A” satellite receives the powered signal from the subwoofer through a 4-poles male Speakon connector and relaunch the audio through the quick connection system on top of its cabinet. The “B” satellite is both equipped with the Speakon connector and the quick connection system, but in case of stacked use its position must be over the “A” speaker. In other words, both tops can be used on speaker stands or poles, showing identical acoustic characteristics and aesthetic, but in case of vertical array the default setup must be respected.



On-Board 3 Channels Mixer

The ES503 is equipped with a three-channel mixer controlled by a DSP. The first channel features a MIC/instrument balanced/unbalanced combo connector with impedance compensation, notch-filter with selectable frequency and adjustable gain with 3 positions (0, +10, +20dB). The second and third channels are LINE inputs with balanced/unbalanced combo connector. The EQ of the whole system can be switched from several optimized factory presets or a custom user-defined one.

Customizable Balanced Output Channels

The balanced AUX/MIX output can be used as a **direct link**, or, alternatively, as an **AUX output**. In this case you can actually feed a stage monitor or another speaker for which a custom separate mix is needed. In addition to that, a dedicated notch filter is available in order to avoid any feedback.

When in double column mode, this output acts as a source of a second ES system providing left or right content.



Integrated Audio Bluetooth® Module

The ES503 is equipped with built-in Bluetooth® stereo receiver module, which allows to send audio from any device (such as mobile phones, tablets or audio players) with Bluetooth® connection. We can consider them as 2 additional sources, reaching 5 total input channels on the integrated digital mixer!

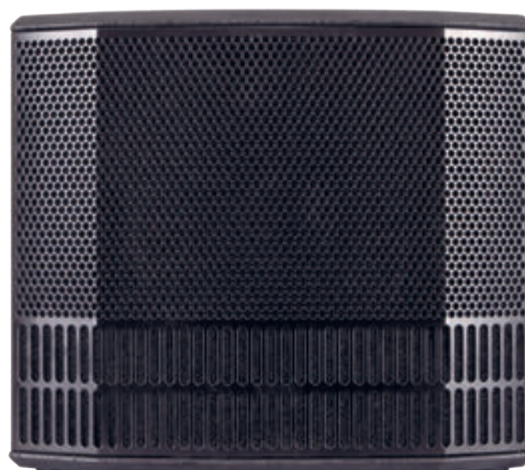
User-Friendly Interface

The ES503 is incredibly simple to set up and comes with an intuitive wizard that guides the user step-by-step and automatically configures the system according to the application. The advanced graphical interface allows to enter the heart of the system, to store and recall configuration presets, adjust levels, EQ and create a post/post gain mix for different purposes. The OLED display, visible even in the sunlight, is mounted behind an elegant smoked screen and provides all the necessary information to the total system control. All editing operations are carried out through a single rotary encoder with switch, making them extremely easy and error-free.

The integrated USB port allows the user upgrade the firmware of the ES503, ensuring that the system is always updated to the latest version.

12" Bass-reflex Subwoofer

The bass-reflex subwoofer houses a generous 12" woofer and the amplifier module. In addition to the input connectors and controls of the user-interface, there are two Speakon outputs and a VDE Mains connector. The enclosure, sturdy and stylish, is made of birch plywood coated with a durable scratch-resistant black coat, which makes it truly road-ready. Two recessed handles (one per side) help easy transport. Finally the metal grid with foam, in addition to protecting the woofer and give a very elegant and professional look, helps the reflex effect. The lower part of the grid, placed right on the reflex ports, have in fact holes with a larger diameter to enhance air flow.



Tri-Amp Entertainment Stereo System

ES 503 System Configurations

The ES503 bundle is composed by subwoofer, two tops, a D25mm pole and a Speakon/Speakon cable to connect the sub to the first top. The speaker pole is splittable in two segments for easy transport. The system also provides a large group of accessories, such as D25mm speaker stands, two 25mm tripod stands with transport bag, speakon-speakon cable kit, wheel trolley, a bag for the ES tops and the D25mm pole, and a bag for the 12" subwoofer.

Three configurations are available:

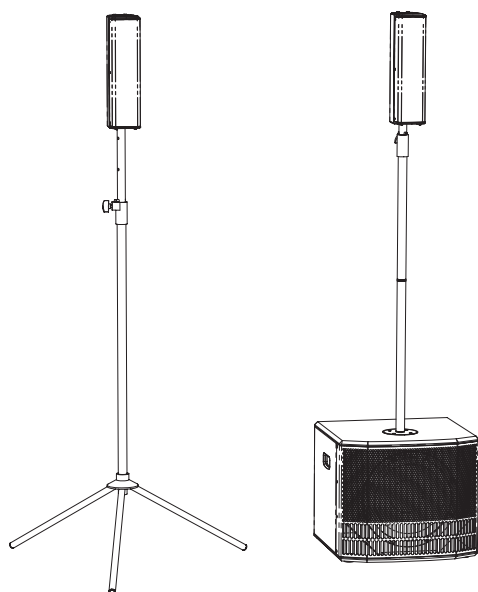
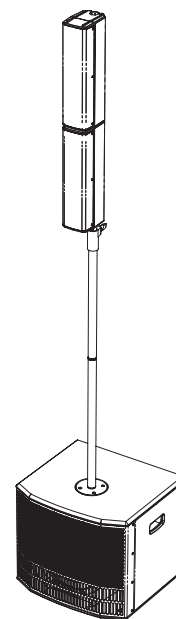
Option 1: SINGLE COLUMN MODE, 1x stand pole

Option 2: SINGLE STEREO MODE, 2x tripod or 1x stand pole and 1x tripod

Option 3: DOUBLE COLUMN MODE, 2x ES 503 in single column mode

Option 1: SINGLE COLUMN MODE, 1x stand pole

In the first option the two satellites are connected top-on-top and are placed on the subwoofer through the supplied D25mm pole. The system is used in mono so all inputs are routed to both outputs in mono. Of course the user can adjust volumes, 3-band EQ and send a second mix with different levels to the AUX/MIX output.

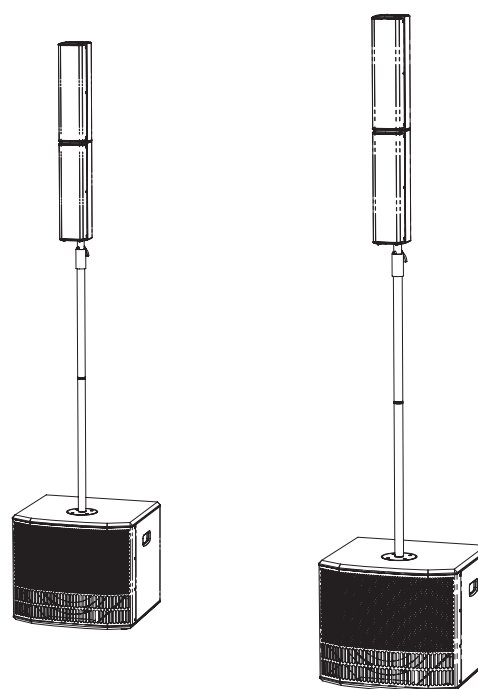


Option 2: SINGLE STEREO MODE 2x tripods or 1x stand pole and 1x tripod

This second option implies the use of two tripods and two optional Speakon-Speakon cables to connect the subwoofer to the tops placed on tripods. The system is in stereo: The Mic/Instrument input is assigned to both channels; CH1/LINE L (and Bluetooth® L) is assigned to Output L; CH2/LINE R (and Bluetooth® R) is assigned to Output R. Of course the user can adjust pan, volumes and EQ. He can also prepare a second mix with different levels for the AUX / MIX output.

Option 3: DOUBLE COLUMN MODE, 2x ES 503 in single column mode

The third option uses two ES 503 systems in single column mode: one of the two becomes the master for the second, feeding the signal thanks to the integrated balanced output channel. This way, both systems are driven by the master's on-board mixer and any setup is guided through the master's OLED display.



ES 503 Accessories

SK-25TT	Kit composed by 2x telescopic tripod speaker stands (D25mm) + Bag
TC-ES12	Tour cover for ES Entertainment System 12inch Subwoofer
TC-ESTOP	Tour cover for 2x ES Entertainment System tops and 1x D25mm pole
DT-50	Trolley for transport. Suggested for ES Entertainment System. Max 50kg [110.2 lbs]
DCK-4P	Kit composed by 2x speakon cables (4 p), 7m [23 feet]
TK-ES12	Transport Kit composed by 1xTC-ES12, 1xTC-ESTOP, 1xDT-50
Stereo Kit ES503	Kit composed by 1xSK-25TT, 1x DCK-4P