MARK AUDIO®

ErGO stereo system

OWNER'S MANUAL

MARK VISION

A WORD FROM *MARCO DE VIRGILIIS*

Thank you for choosing a **Markaudio** product!
Markaudio is a division of **Mark World** dedicated to pro audio sound reinforcement.
Building on the top-level reputation built up over many years by our industry-leading brands *Markbass* and *DV Mark* , **Markaudio** boasts the same high level of innovation and engineering.
The result is groundbreaking sound quality, impressive power, and innovative design.
Hope you will enjoy your new **Markaudio** P.A. system, and we invite you to contact us any time with your comments and questions, at *info@markaudio.it*.

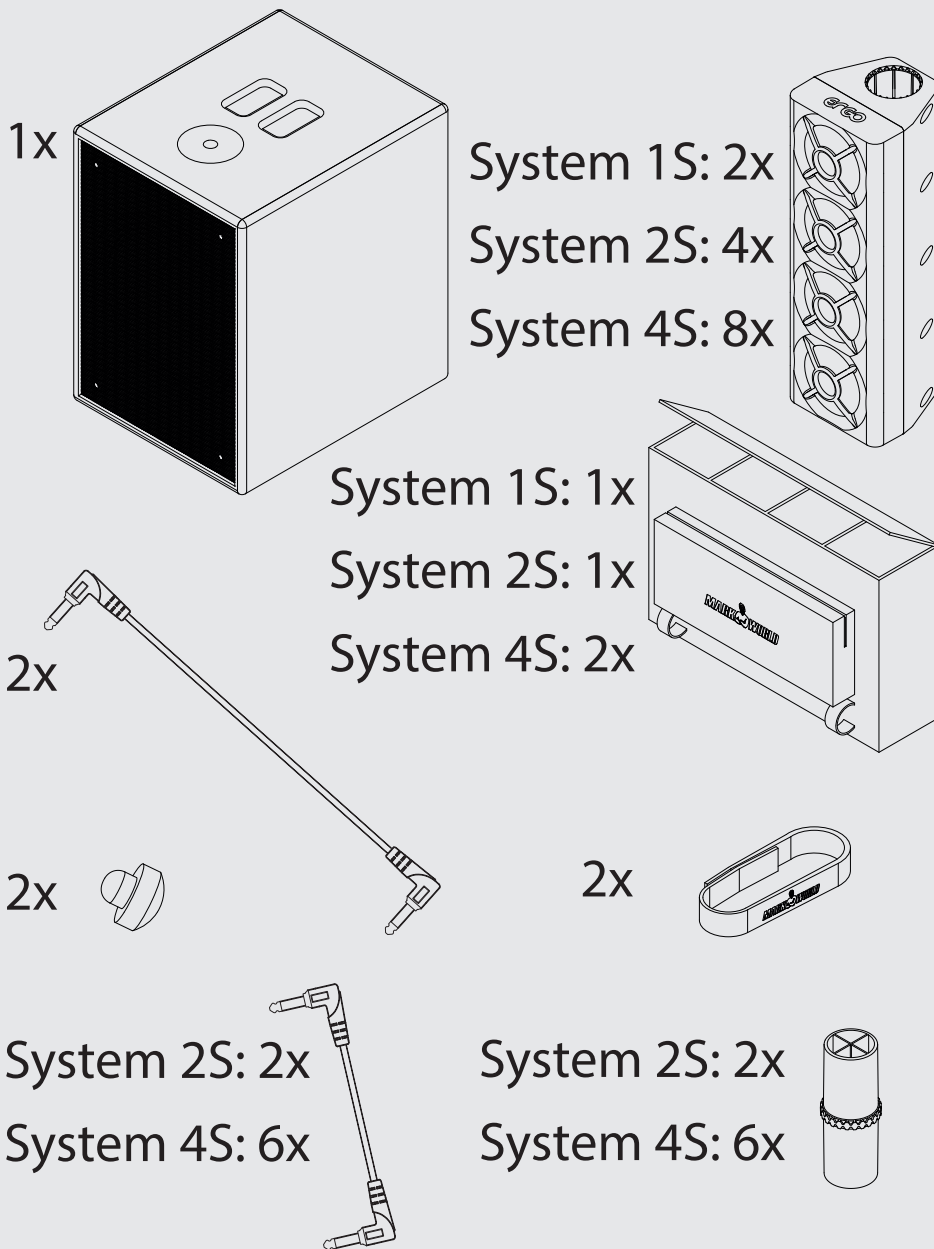Thanks again, and good music!
Marco De Virgiliis

MARK AUDIO ERGO
stereo system

INDEX

WHAT'S IN THE BOX

ERGO stereo system

1x

System 1S: 2x
System 2S: 4x
System 4S: 8x

System 1S: 1x
System 2S: 1x
System 4S: 2x

2x

2x

2x

System 2S: 2x
System 4S: 6x

System 2S: 2x
System 4S: 6x

INTRODUCTION

ERGO **stereo system** is a ultra-portable active sound system (composed by two modular line array plus a subwoofer) that combines quality of sound and design with high operating efficiency of our power amplifier.

Modularity is the keyword of this innovative system, designed for one-man band, small band to big orchestra, home and movie theaters, churches… here 3 different configurations which can be adapted to all your needs giving unparalleled flexibility whatever the application: from small to large audience!

ERGO **system 1S 121**

features four 2.0" full range custom transducers (1 ERGO module) for each of two line array satellites and one 1x12" subwoofer (ERGO 121);

ERGO **system 2S 121**

features eight 2.0" full range custom transducers (2 ERGO modules) or each of two line array satellites and one 1x12" subwoofer (ERGO 121);

ERGO **system 4S 121**

features sixteen 2.0" full range custom transducers (4 ERGO modules) for each of two line array satellites and one 1x12" subwoofer (ERGO 121);

ERGO **stereo systems** include high power class-D amplifiers, the ERGO 121 subwoofer features a three-way amplifier with DSP controlled crossover (500W for low channel + 200W for high channel, 100W for left channel + 100W for right channel).

The processing of the ERGO DSP allows to deliver a high output from these small systems with a precise and focused response on both low and high frequencies and a quick control of distorsion.

ERGO **stereo systems** design offers a perfect listening experience to the audience with its accurate sound.

The installation is easy and simple and the different mounting setup options are available to suit every taste and need of the listener.

The innovative design of the satellite allows to rotate each module respect to the position of subwoofer; it also allows to use a part of the satellite as a 'Floor monitor'.

RIGHT (1) and LEFT LINK (2)
Line out to connect another Markaudio system to the principal system.

GAIN INSTRUMENT (3)
This knob regulates the gain level of the INSTRUMENT input.

INSTRUMENT CLIP (4)
This clip LED allows you to set the optimal gain level of your signal due to instrument input.

PRESETS (5)
The selector allows you to choose between 6 different equalization settings, optimized for the use with the different systems:

ERGO 1S (1)
ERGO 1S with Boost (2)
ERGO 2S (3)
ERGO 2S with Boost (4)
ERGO 4S (5)
ERGO 4S with Boost (6);

CLIP LEFT (6) and RIGHT (7)
The clip LEDs allow you to set the optimal level of the stereo signal send to the system's speakers. To find the optimal level back off the power amp level (MASTER) so that the LEDs rarely turn on..

MONO/STEREO SWITCH (8)
When a stereo signal is connected to the AUX or BT Input you can send separate channels to satellites in STEREO mode.
Otherwise you can send the same sound source to both satellites in MONO mode.

MASTER LEVEL (9)
This is the MASTER Volume level.

ON (10) Power status indicator LED.
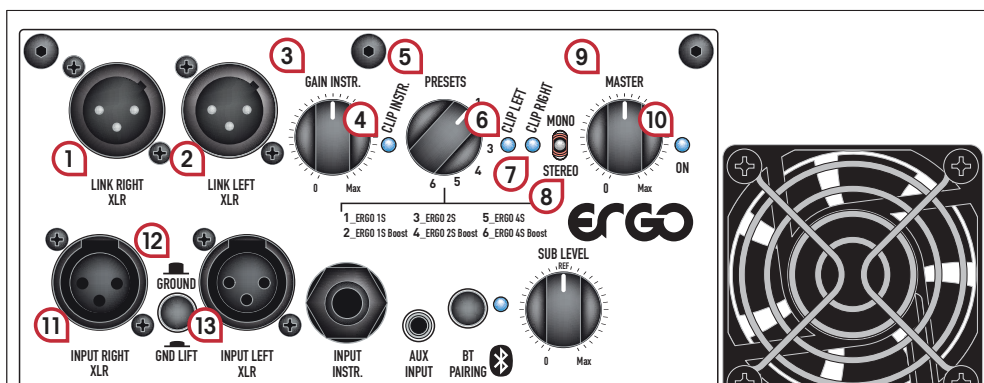
RIGHT (11) and LEFT (13) XLR INPUTS
XLR Balanced Inputs.
The XLR 3-pole female jack is electronically balanced (hot pole: #2). You can use unbalanced sources only if your cables have pole 3 jumpered to pole 1.
Important: when powering up, turn on your sound source (CD player and mixer, for example) before turning on the MarkAudio cabinets. When powering off, turn the cabinets off first.

GROUND LIFT (12)
This switch may be needed for the cancellation of hum due to ground loops with other apparatuses.

INPUT INSTRUMENT (14) Line input 1/4" jack (for direct plugging a MONO instrument);
AUX INPUT (15)

Line input jack for plugging a STEREO audio signal through mini-jack connector;
BT PAIRING (16)

The pushbutton enables the pairing connection between **ERGO** 121 STEREO and a Bluetooth audio source (available ONLY in Bluetooth version);
BT LED (17)

The led shows you when bluetooth receiver is enabled and when an external audio device is connected to **ERGO** 121 STEREO (available ONLY in Bluetooth version);
VOLUME LOW (18)

This is the volume level of the LOW channel (1 x 12" woofer);
POWER OUT RIGHT (19)

Use this output to connect the first column of **ERGO** module/s as showed at the following CONNECTIONS instructions (RIGHT CHANNEL);
POWER OUT LEFT (20)

Use this output to connect the second column of ERGO module/s as showed at the following CONNECTIONS instructions (LEFT CHANNEL);
COOLING (21)

Forced ventilation stabilizes the working temperature of electronic components for continuous performance, even after a long period of operation. Avoid using the loudspeaker on irregular surfaces that might block the vents;
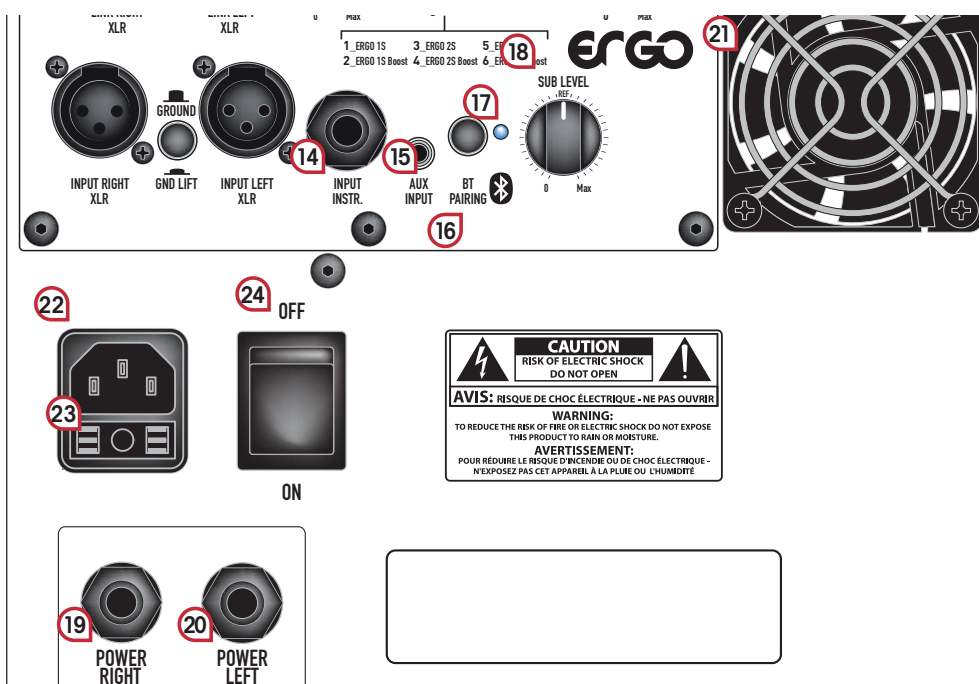**AC POWER SOCKET (22)**

VDE power jack for connecting the power cable from the unit to a wall power source.
Make sure the unit is grounded; all three terminals of the AC power plug must be connected to avoid any injury to the user or damage to the unit.
Markaudio powered speakers are manufactured to be used in the country where they have been sold, and are factory preset to that country's voltage. So make sure you're sending the correct voltage to your amp before you connect it to AC power;
FUSE (23) Fuse housing;
ON/OFF SWITCH (24) On/off power switch.

CONNECTIONS ERGO stereo system

ERGO satellite is composed by different modules, each one composed by four 2" full-range speakers.
ERGO **system 1S 121** features 2 ERGO modules
ERGO **system 2S 121** features 4 ERGO modules
ERGO **system 4S 121** features 8 ERGO modules

Each module fits to another one and you can decide the preferred angle exploiting "pivot" edges.

INSTALLATION

1. Put the **ERGO 121 STEREO** on the floor vertically;

2. Mount 'Tripods stands' (not included) near the **ERGO 121 STEREO** and insert the first **ERGO** module insert the first **ERGO** module on the top of each tripod;

3. Use the first 'long' jack cable to connect the 'Power Out LEFT" of the **ERGO 121** subwoofer to the LEFT **ERGO** module input. Use the second 'long' jack cable to connect the 'Power Out RIGHT" of the **ERGO 121** subwoofer to the RIGHT **ERGO** module input;

4. If you have **ERGO system 2S** or **ERGO system 4S**, take the second, the third and the fourth modules and fix them on the top of the first one through the equipped junctions (pivot) with the angle you prefer (repeat this step for each **ERGO** column);

5. Take 1 or 3 'short' jack cables and link each module with the close one as shown in the table (repeat this step for each **ERGO** column);

6. Put 1 jack cap to the uncovered output of last **ERGO** module;

7. Use the "Velcro band" to link long cables;"

8. Link the power cord (230 V) and turn on your system.
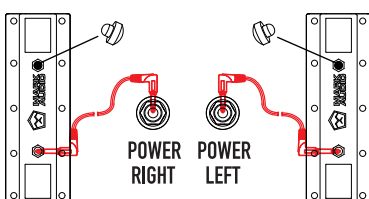
ERGO
TRIPOD STANDS

AC / ERGO
LONG CABLE

AC / ERGO SHORT CABLE

JACK CAP

STRAP CABLE

POWER RIGHT POWER LEFT

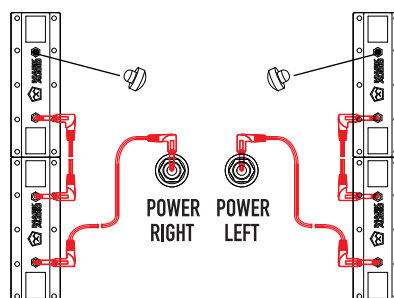POWER RIGHT POWER LEFT
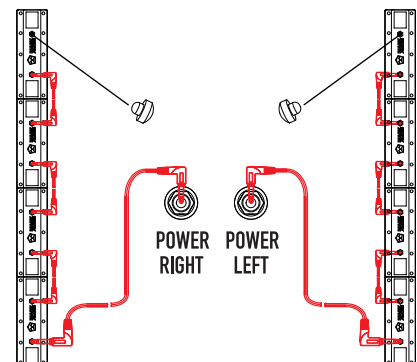
POWER RIGHT POWER LEFT

ERGO SYSTEM 1S CONNECTIONS   ERGO SYSTEM 2S CONNECTIONS   ERGO SYSTEM 4S CONNECTIONS

INSTALLATION - MORE CONFIGURATIONS

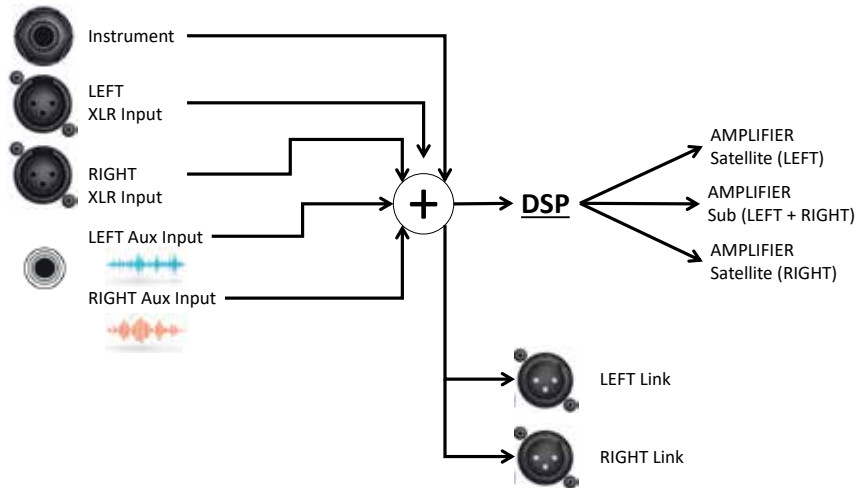ERGO monitor configuration

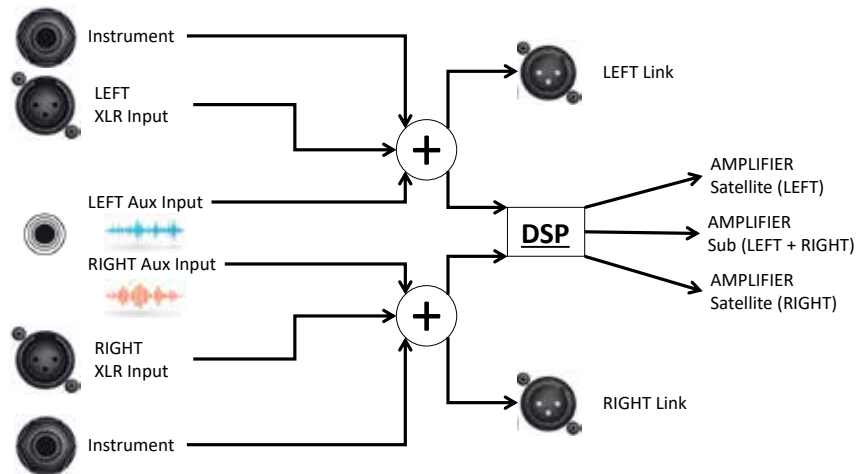**360°** rotating speaker column (15° steps)

ERGO desk configuration

ERGO Wall Mount configuration

MONO MODE

Instrument

LEFT
XLR Input

RIGHT
XLR Input

LEFT Aux Input

RIGHT Aux Input

+ → DSP

AMPLIFIER
Satellite (LEFT)

AMPLIFIER
Sub (LEFT + RIGHT)

AMPLIFIER
Satellite (RIGHT)

LEFT Link

RIGHT Link

LEFT + RIGHT

LEFT + RIGHT

STEREO MODE

Instrument

LEFT XLR Input

LEFT Link

+

LEFT Aux Input

RIGHT Aux Input

DSP

AMPLIFIER
Satellite (LEFT)

AMPLIFIER
Sub (LEFT + RIGHT)

AMPLIFIER
Satellite (RIGHT)

RIGHT XLR Input

+

Instrument

RIGHT Link

LEFT

RIGHT

TECHNICAL DETAILS

ERGO system 1S 121

ACOUSTICAL SPECIFICATIONS
   Frequency response: 50 Hz- 20 kHz
   Max SPL: 123 dB
   Horizontal coverage angle: 120°
   Vertical coverage angle: 30°
   Satellite: 4x2.0", 16 Ohm
   Sub: 1 x 12", 8 Ohm
INPUT/OUTPUT SECTION
   Input connectors: Jack-XLR male-AUX-Bluetooth
   Output connectors: XLR female
   Input sensitivity: -1.1 dBu (@1 kHz)
DSP PROCESSOR SECTION
   Crossover frequencies: 180 Hz
   Protections: Thermal, rms
   Limiter: Soft limiter
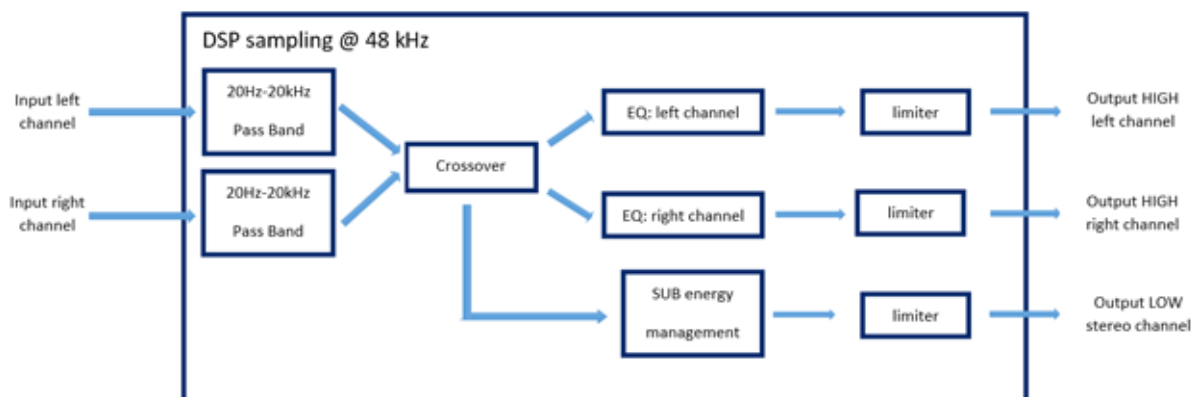   Controls: Volume, EQ
AMPLIFIER
   Total Power: 1400 W PEAK (@ 4 Ohm)
   High frequencies: 200+200 W PEAK (@ 4 Ohm)
   Low frequencies: 1000 W PEAK (@ 4 Ohm)
   Total Power: 700 W RMS (@ 4 Ohm)
   High frequencies: 100+100 W RMS (@ 4 Ohm)
   Low frequencies: 500 W RMS (@ 4 Ohm)
   Cooling: Convection
   Power Connection: VDE connector
CABINET
   Cabinet Material: multiply poplar
   Handles: 1 top
   Pole Mount/Cap: Yes, 2 tripods
   Colour: Black
PHYSICAL
   Weight Fullrange: 2 Kg
   Weight SUB: 16.5 Kg
   Fullrange Speaker Pole mount
   Height SUB: 21 in. / 53 cm
   Height Satellite: 10.2 in. / 26 cm

TECHNICAL DETAILS

ERGO system 2S 121

ACOUSTICAL SPECIFICATIONS
  Frequency response: 50 Hz- 20 kHz
  Max SPL: 126 dB
  Horizontal coverage angle: 120°
  Vertical coverage angle: 30°
  Satellite: 8 x 2.0", 8 Ohm
  Sub: 1 x 12", 8 Ohm
INPUT/OUTPUT SECTION
  Input connectors: Jack-XLR male-AUX-Bluetooth
  Output connectors: XLR female
  Input sensitivity: -1.1 dBu (@1 kHz)
DSP PROCESSOR SECTION
  Crossover frequencies: 180 Hz
  Protections: Thermal, rms
  Limiter: Soft limiter
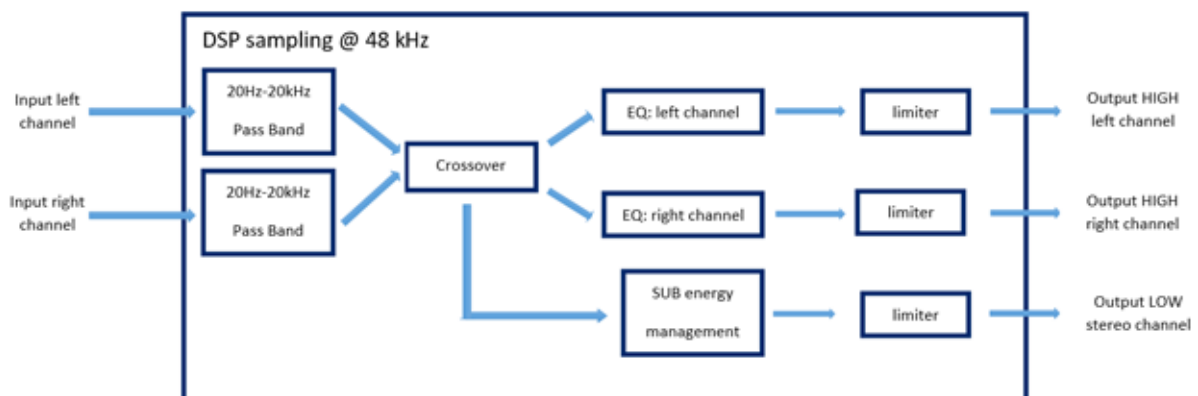 Controls: Volume, EQ
AMPLIFIER
  Total Power: 1400 W PEAK (@ 4 Ohm)
  High frequencies: 200+200 W PEAK (@ 4 Ohm)
  Low frequencies: 1000 W PEAK (@ 4 Ohm)
  Total Power: 700 W RMS (@ 4 Ohm)
  High frequencies: 100+100 W RMS (@ 4 Ohm)
  Low frequencies: 500 W RMS (@ 4 Ohm)
  Cooling: Convection
  Power Connection: VDE connector
CABINET
  Cabinet Material: multiply poplar
  Handles: 1 top
  Pole Mount/Cap: Yes, 2 tripods
  Colour: Black
PHYSICAL
  Weight Satellite: 4 Kg
  Weight SUB: 16,5 Kg
  Fullrange Speaker Pole mount
  Height SUB: 21 in. / 53 cm
  Height Satellite: 20.4 in. / 52 cm

TECHNICAL DETAILS

ERGO system 4S 121

ACOUSTICAL SPECIFICATIONS
Frequency response: 50 Hz- 20 kHz
Max SPL: 129 dB
Horizontal coverage angle: 120°
Vertical coverage angle: 30°
Satellite: 16x2.0", 4 Ohm
Sub: 1 x 12", 4 Ohm

INPUT/OUTPUT SECTION
Input connectors: Jack-XLR male-AUX-Bluetooth
Output connectors: XLR female
Input sensitivity: -1.1 dBu (@1 kHz)

DSP PROCESSOR SECTION
Crossover frequencies: 180 Hz
Protections: Thermal, rms
Limiter: Soft limiter
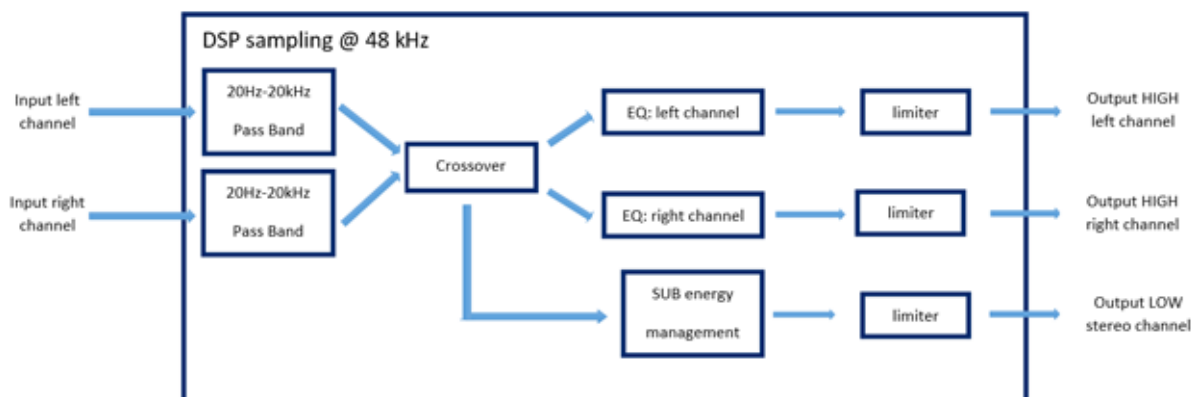Controls: Volume, EQ

AMPLIFIER
Total Power: 1400 W PEAK (@ 4 Ohm)
High frequencies: 200+200 W PEAK (@ 4 Ohm)
Low frequencies: 1000 W PEAK (@ 4 Ohm)
Total Power: 500 W RMS (@ 4 Ohm)
High frequencies: 100+100 W RMS (@ 4 Ohm)
Low frequencies: 500 W RMS (@ 4 Ohm)
Cooling: Convection
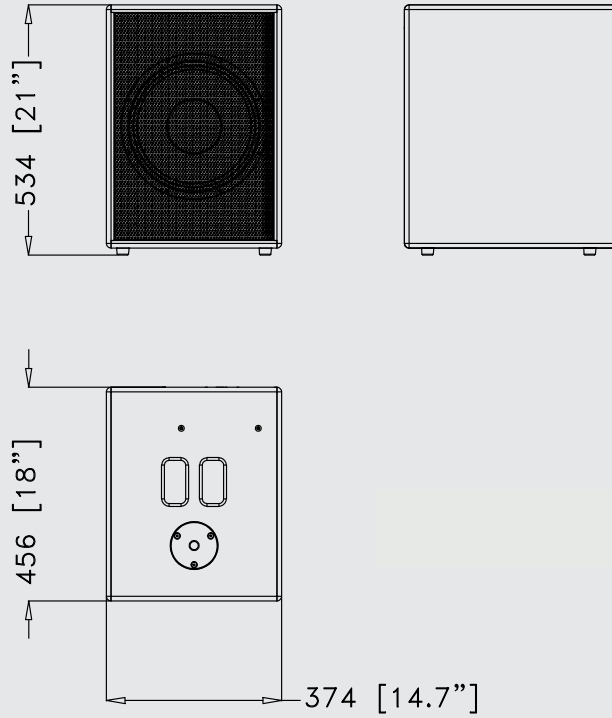Power Connection: VDE connector

CABINET
Cabinet Material: multiply poplar
Handles: 1 top
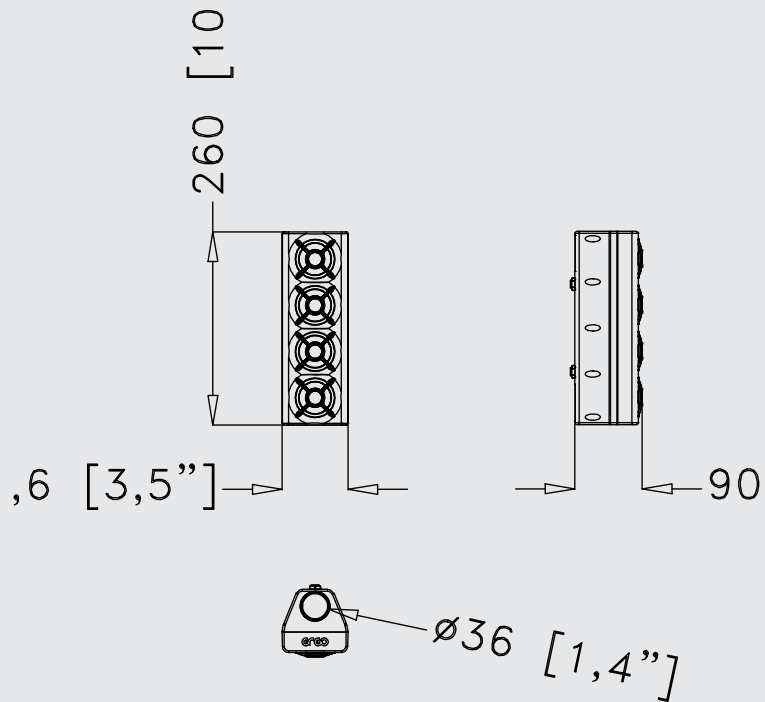Pole Mount/Cap: Yes, 2 tripods
Colour: Black

PHYSICAL
Weight Fullrange: 8 Kg
Weight SUB: 16.5 Kg
Speaker Pole mount
Height SUB: 21 in. / 53 cm
Height Satellite: 40.8 in. / 1.04 m

MARK AUDIO ⲉⲅGO
stereo system

ⲉⲅGO stereo system size mm

ⲉⲅGO
121

534 [21"]

456 [18"]

374 [14.7"]
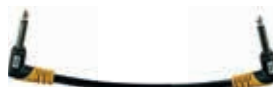
ⲉⲅGO
module

260 [10

,6 [3,5"]

90

ø36 [1,4"]

ACCESSORIES

ERGO module
Single ERGO loudspeaker module with 4x2" speakers

ERGO Short Cable
150mm speaker cable (1/4" to 1/4" jack) for ERGO connection (included only in the ERGO Systems)

ERGO long cable
2000mm speaker cable (1/4" to 1/4" jack) for ERGO connection (included only in the ERGO Systems)

ERGO Speaker Pole
Pole for mounting ERGO modules on subwoofer Ø 35mm. Adjustable height: 735-1230mm (included in ERGO Systems)

Tripod Stand
2 x Tripod with pole Ø 35
Adjustable height: 1200 - 1800 mm

ERGO Wall Mount
Mechanical Interface for fixing ERGO to a wall Ø 35mm

Strap cable
Velcro stand cables retainer (included only in the ERGO Systems)

ERGO System Bag
Bag for 4 ERGO modules, stands and cables (included only in the ERGO Systems)

ERGO 121 Cover
ERGO 121 cover

ERGO pivot
Pivot to connect ERGO modules together

Jack cap
Cap (2pcs) for sealing the speaker's female input jack when not in use

POWER REQUIREMENT

100V; 120V; 230V; 240V 50/60Hz
(Voltage is factory preset according to region of sale).
Markaudio amps are manufactured to be sold and used in the country of purchase, and are factory preset to that country's voltage. Due to homologation issues, the voltage may not be changed.

FUSE

EUROPE 4 A 250V T 5x20

AUSTRALIA/UK 4 A 250V T 5x20

USA/CANADA 8 A 250V T 5x20

JAPAN 10 A 250VT 5x20