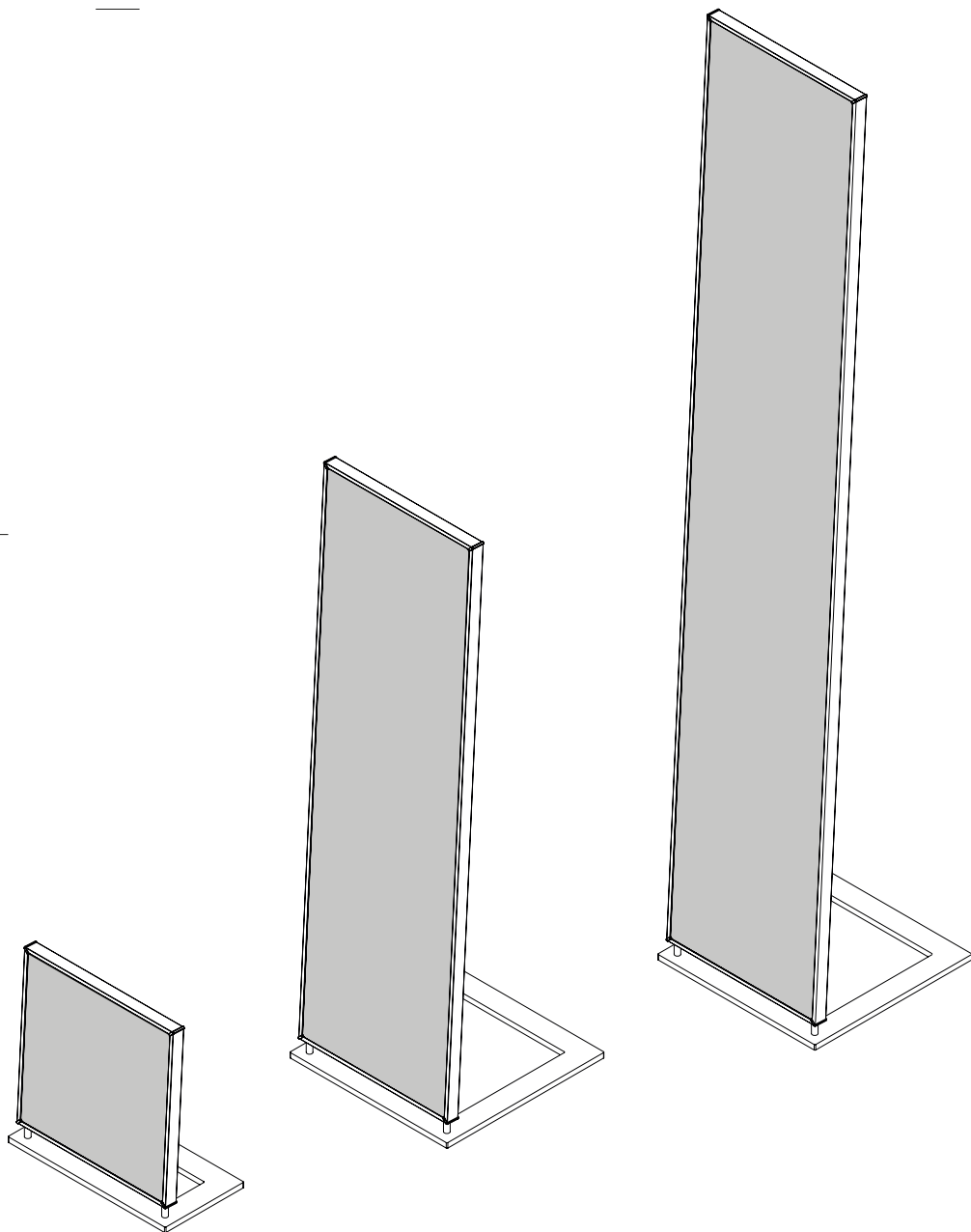

FLAG ISODYNAMIC SPEAKERS

INSTALLATION AND USE

2



—
1 / WARNINGS

2 / PACKAGING CONTENTS

3 / ASSEMBLY INSTRUCTIONS

4 / POSITIONING IN THE LISTENING ROOM

5 / SPEAKERS CONNECTIONS

6 / REMOTE CONTROL

7 / LED INDICATORS ON THE BACK PANEL

8 / TECHNICAL SPECIFICATIONS

9 / CLEANING AND MAINTENANCE

10 / WARRANTY ACTIVATION

11 / ASSISTANCE
—

1 / WARNINGS

- For any assistance intervention, please contact qualified personnel.
- To safely proceed with the assembly and installation of the M and L model, we recommend the assistance of a second person.
- Do not expose the speakers to dripping or splashing and do not place objects containing liquids above it.
- Do not place the speakers near heat sources, in humid or too cold environments.
- Temperature of use: from 10 to 35°C.
- Do not expose the device to direct sunlight.
- Keep the device away from sharp objects and objects that may be attracted to magnets.



[ACTIVE VERSIONS ONLY]

CAUTION RISK OF ELECTRIC SHOCK!

Do not open the device for any reason, even if disconnected from the mains.



CAUTION!

It is important to avoid touching the speaker's part covered with fabric. Below it there is the speaker's membrane which may be damaged by contacting with foreign objects. Please keep in mind, when you need to move the speaker, to always hold the profile's perimeter, without touching the fabric. Always handle and move the speaker holding the perimeter profile without touching the fabric. Always use the perimeter profiles without taking them off. They must not be pulled as they could come off.



CAUTION!

Under the entire surface of the fabric there are powerful magnets and a delicate membrane therefore this surface must never impact with any type of stuff or being put beside magnets or ferromagnetic objects that could be attracted to the speaker's surface.



CAUTION!

The speaker, if correctly installed on its base, is in firm balance. Slight fluctuations of the panel are usual. Do not lean, push or modify its balance in any way, as it may cause the falling or the overturning of the device.

FONICA INTERNATIONAL S.R.O. does not assume responsibility for any damage caused to people and/or things due to assembly and/or an incorrect use of the speaker.



CAUTION!

Loudspeakers in the active, powered version require a stable ground connection. Verification of the earth connection in the power socket where the equipment is connected by a qualified person is required. The active loudspeaker must be connected to the protective earth conductor of the system through the power cable connected to an earthed power socket. This socket must be easily accessible after the installation of the loudspeakers. The part of the cables inside the equipment that connect the power connector to the switch remains energized even after the switch is opened.

Never open or disassemble parts of the loudspeakers: they contain dangerous parts and can irremediably compromise the safety and functioning of the loudspeakers.



CAUTION!

This speaker is intended for exclusive use together with its supplied stand and installed according to the instructions. The use of the speaker with other supports can lead to product instability and cause injury.

2 / PACKAGING CONTENTS

FLAG S

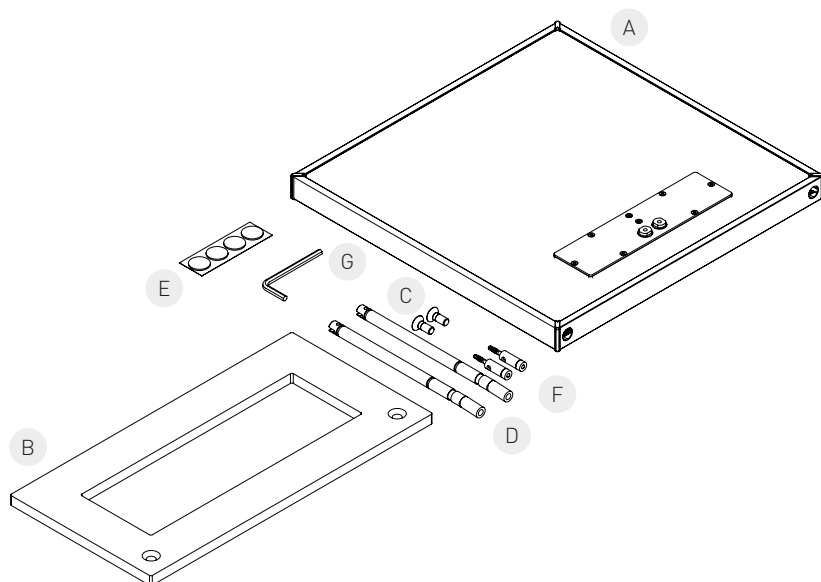
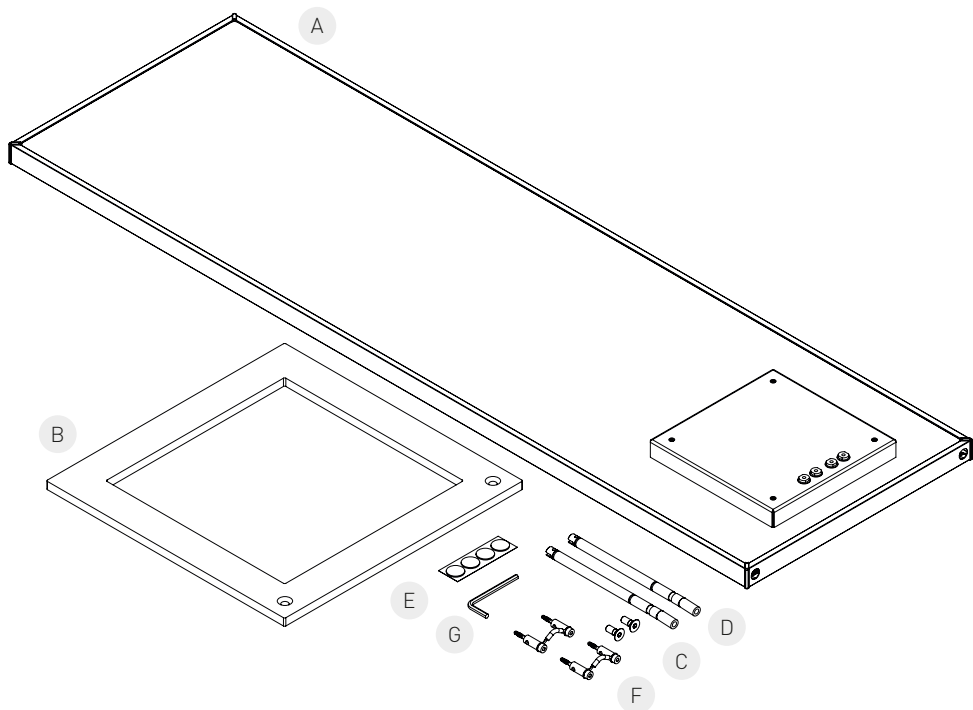


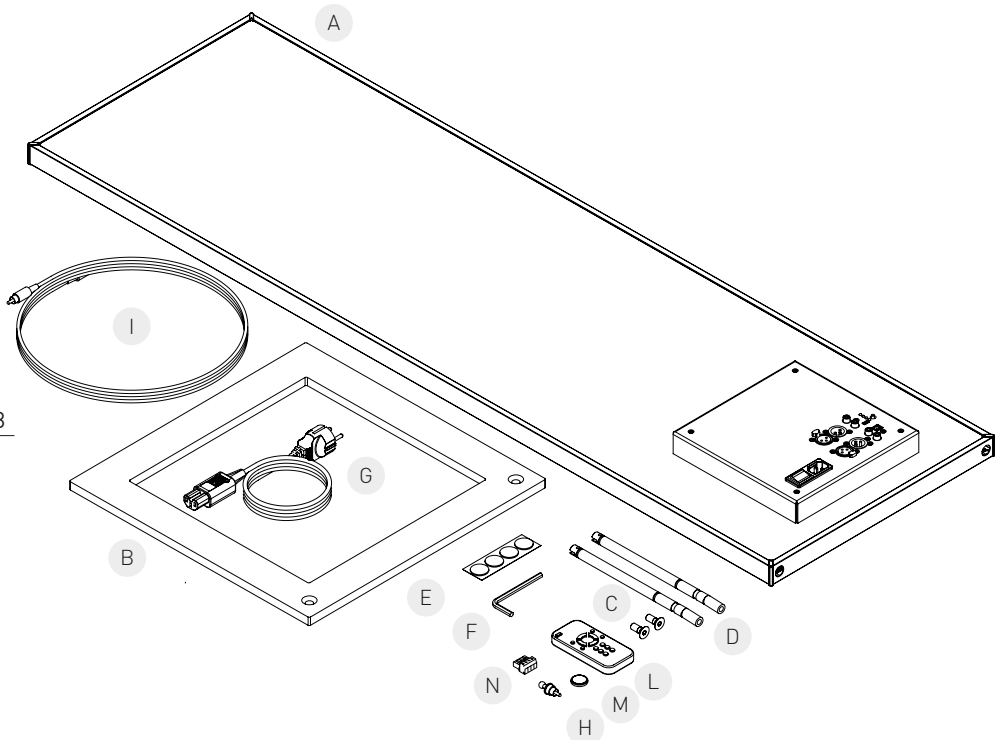
FIGURA	N°	CONTENT
A	1	Isodynamic panel
B	1	Base
C	2	M8 screws
D	2	Fixing bars
E	4	Rubber feet
F	2	Banana plugs
G	1	Hex key

FLAG M/L PASSIVE VERSIONS



PICTURE	N°	CONTENT
A	1	Isodynamic panel
B	1	Base
C	2	M8 screws
D	2	Fixing bars
E	4	Rubber feet
F	2	Jumpers with N.4 banana plugs
G	1	Hex key

FLAG M/L ACTIVE VERSIONS



8

PICTURE	N°	CONTENT
A	1	Isodynamic panel
B	1	Base
C	2	M8 screws
D	2	Fixing bars
E	4	Rubber feet
F	1	Hex key
G	1	Power cord
H	1	Shorting RCA plug

PICTURE	N°	CONTENT
I	1	75 Ohm RCA cable (1 for a speakers pair)
L	1	Remote control (1 for a speakers pair)
M	1	Remote control battery (1 for a speakers pair)
N	1	4 poles connector with screws*

*Only for analogic input version

3 / ASSEMBLY SEQUENCE



CAUTION!

For the M and L versions it is necessary the assistance of a second person.



CAUTION!

During the assembly phase, it is important to avoid touching the part of the speaker covered by the fabric. Below it there is the speaker membrane which can be damaged by contact with external bodies. You can safely handle the speaker through its base and the aluminum: the base, when assembled, becomes a structural part and can be used to lift or move the speaker.



CAUTION!

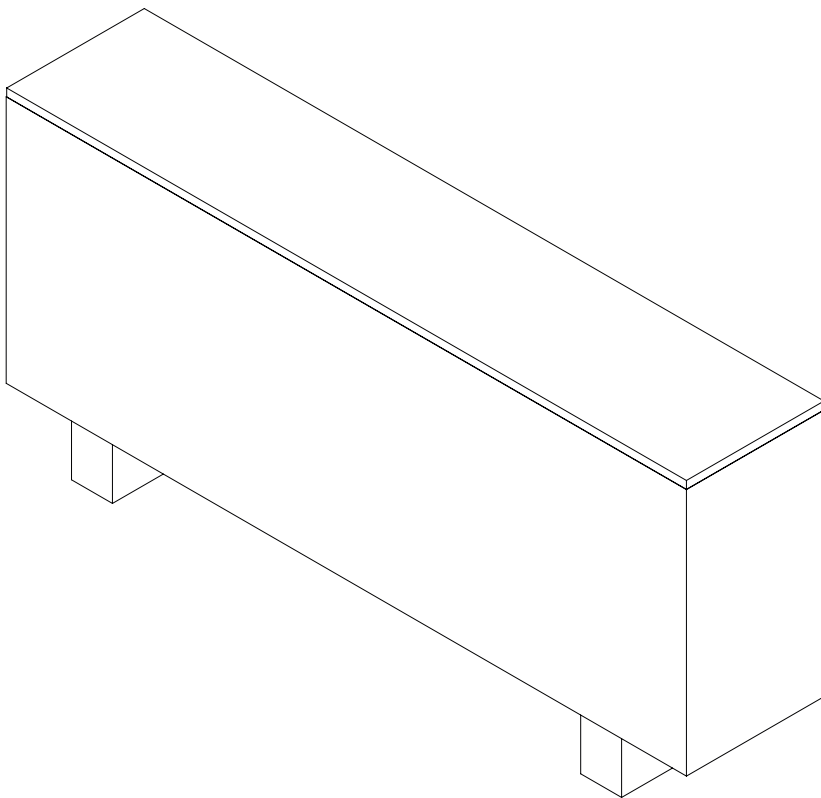
During the assembly process, it's important to keep away tools and metal objects from the speaker, as they may be attracted by the magnetic parts of the speaker, resulting in potential of damage.

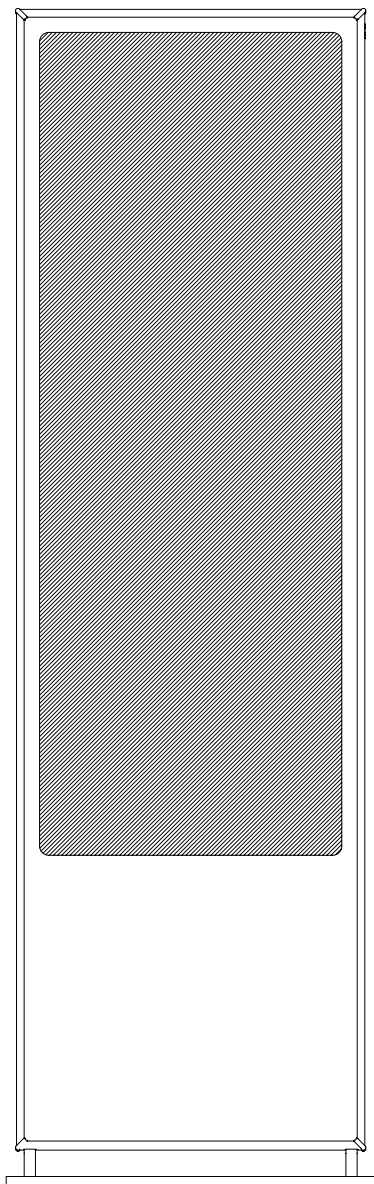
STEP 1

Place the package stably on the ground.

Unscrew the screws on the top and remove it from the packaging.

Inside are the two loudspeakers, the bases and the box containing all the necessary parts.





STEP 2

Extract the planar acoustic diffuser by holding it by the perimeter edges, without pulling them: place a hand under the lower profile and lift it gently, one person on each short side, without touching the internal part, highlighted in the drawing alongside.

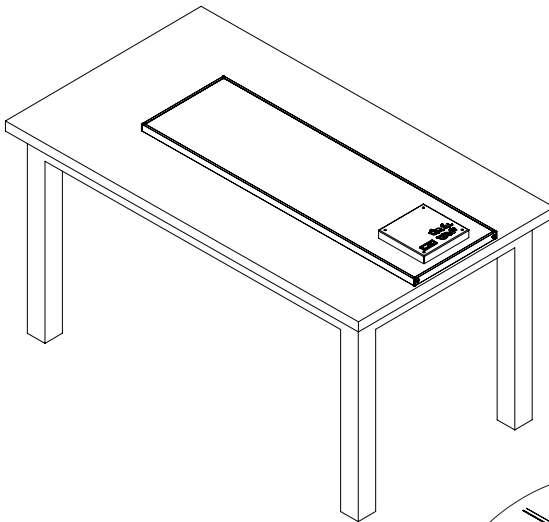


CAUTION!

You **MUST NOT** touch nor get close with ANY object, especially ferromagnetic objects that could be attracted by the powerful magnets underlying the surface, to the central area (indicated by the continuous lines in the illustration), both from the front and the back. Instead, handle the speaker from the peripheral area (up to 2.5cm from the lateral edge and from the upper one, and from about 30cm from the bottom); be careful not to pull the profiles.

STEP 3 A

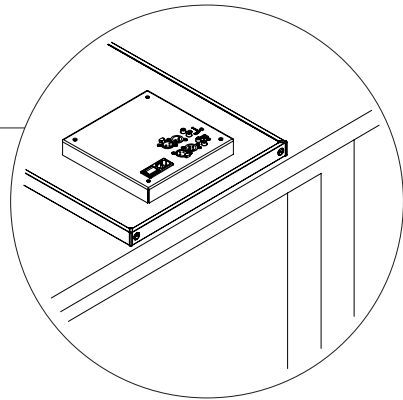
Place the planar speakers on a flat surface such as a clean table, without any object on the surface, the planar speakers must be removed from the packaging and placed face down; therefore, with the side that in the packaging is inwards (towards the other speaker) positioned at the top once placed. In any case, it is the side with the protrusion upwards, as in the figure: the connections remain upwards. The image shows a active M but the procedure is identical also for passive M and for the corresponding versions of the L.



12

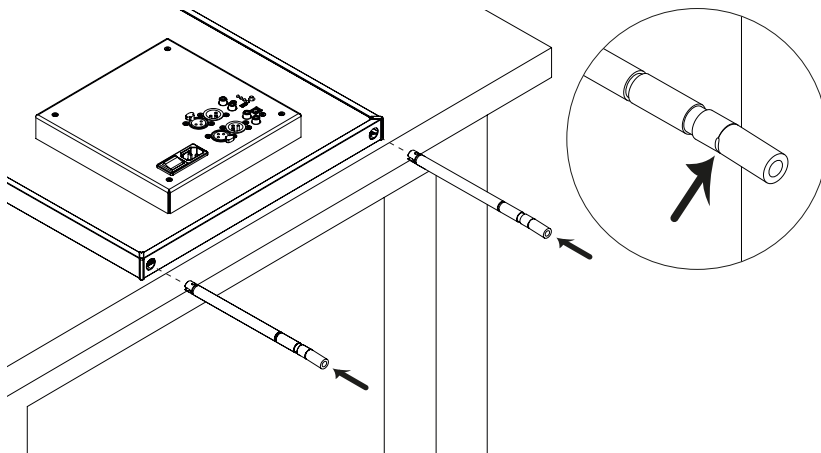
STEP 3 B

Unpack only the bottom part of the speaker, with two holes at the end. In the illustration, the planar speaker is completely uncovered for clarity.



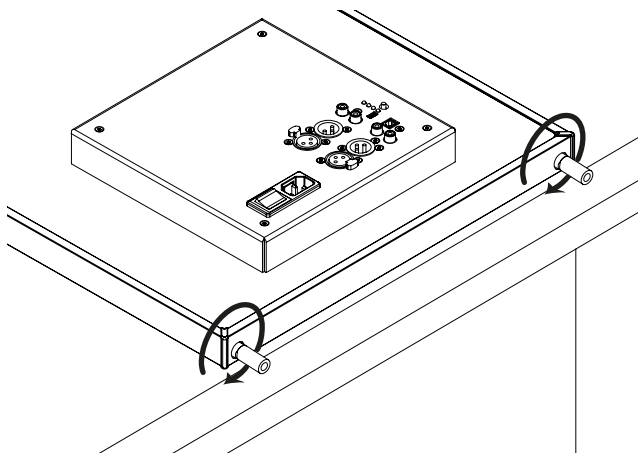
STEP 4

Insert the bars as deeply as possible into the appropriate holes, on the bottom of the speaker, keeping the bend point visible on the shaft at 90° in an anti-clockwise direction.

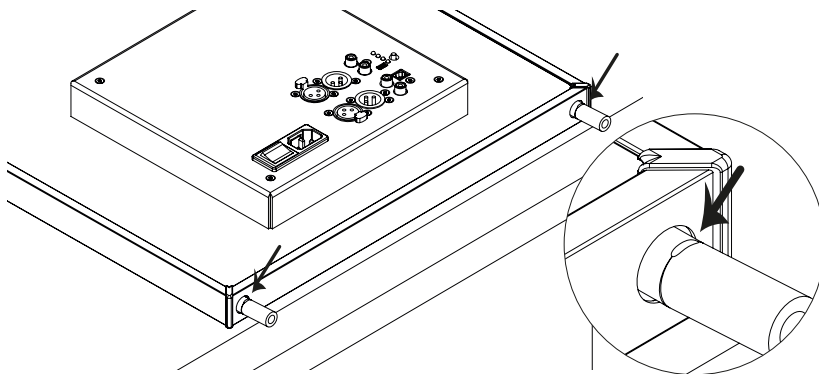


Rotate the bars 90° clockwise to end of stroke.

Also, make sure the bars are anchored to the panel frame by trying to extract them and pull without turning them. If they have not been inserted correctly, they will slip off. Do not proceed further until the bars are perfectly hooked, or the final position of the speaker would be dangerously unstable.

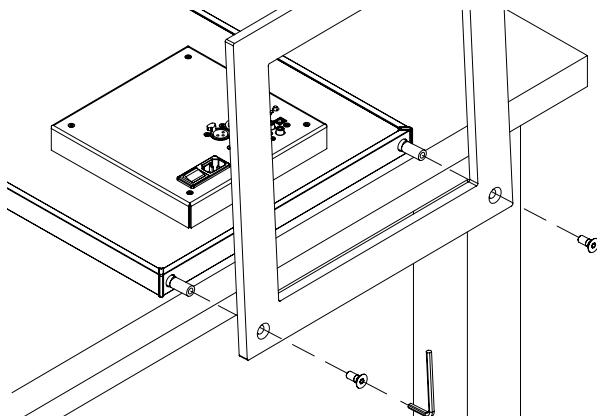


Make sure the **bend point** should be perfectly on top. Also, make sure the bars are anchored to the panel frame by trying to extract them and pull without turning them. If they have not been inserted correctly, they will slip off. Do not proceed further until the bars are perfectly hooked, or the final position of the speaker would be dangerously unstable.



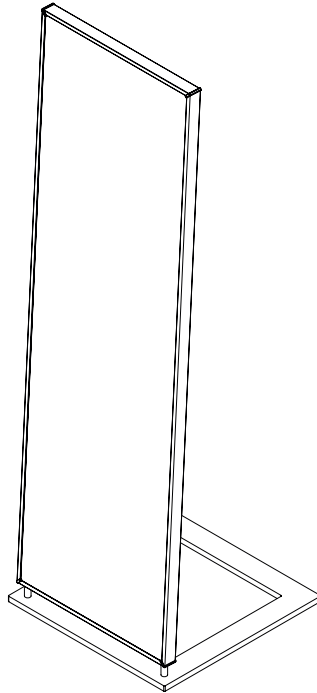
14

Remove the base from the packaging and turn it so that the side with the two holes is facing down. The countersink of the holes needs to be at the opposite side to the bar. **Insert the two supplied M8 screws** into the two holes of the base and screw them with the hex key to the mounted bars on the panel. **Make sure the screws are tighten**, as they will be responsible of the entire system stability.



STEP 5

Lift the device by holding it from the base and from the aluminum profiles and place it on the floor in the right position.

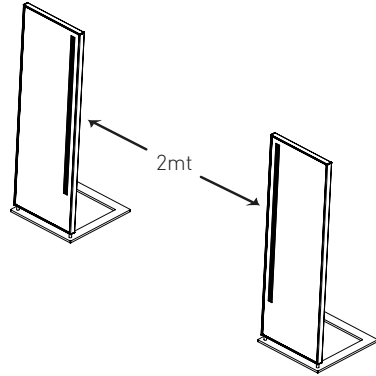


CAUTION!

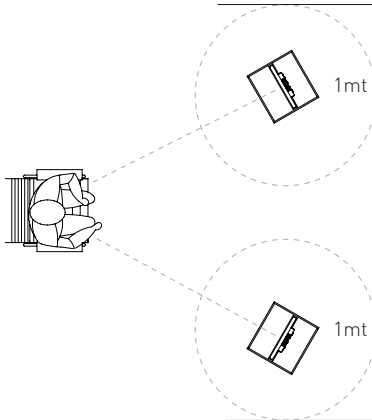
For absolute safety in using the speakers, use the supplied double-sided adhesive feet, applying them making them adhere to the bottom of the base and, after that, to the previously cleaned floor surface. The adhesive does not damage the surface of the floor. The surface must be clean, solid and smooth. Do not apply them on a dirty, uneven, crumbly or unsuitable surface such as carpets, rugs. The use of the speaker with other supports can lead to product instability and cause damages.

4 / POSITIONING IN THE LISTENING ROOM

To better appreciate the sound experience of the planar FLAG, the speakers should be placed on the vertices of an ideal equilateral triangle, where the third vertex is the listening position. In particular, the right speaker (recognizable by the serial number on the back of the speaker, which ends with the letter R), must be placed on the right of the listening position, while the left speaker (recognizable by the serial number ending with the letter L), must be placed to the left of the listening position.



16



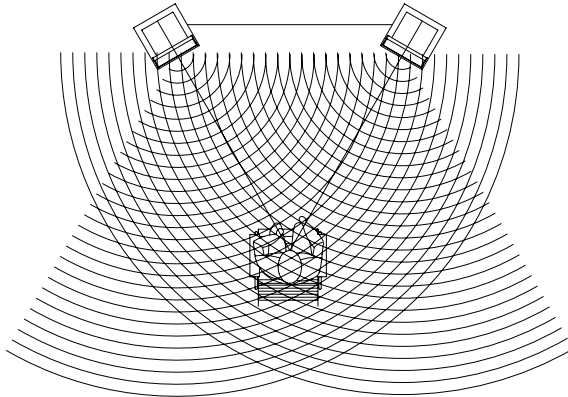
You should also **turn the speakers towards the listening position**, as shown in the figure.

If the listening room permits, it is recommended to place the speakers at least **1 meter distance from the walls**.

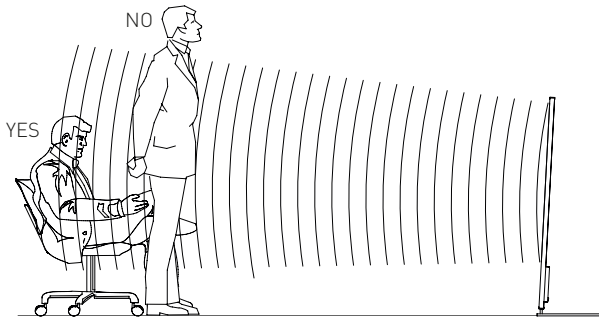


In case the distance between the two speakers is less than 2 meters, it is recommended to swap the position of the left and right speakers in order to expand the stereo effect. This solution is viable by swapping the loudspeakers for passive or active versions with analogue input; in the case of active versions with digital input, please contact the seller to edit the speaker.

FLAG speakers are set with an angle of inclination which allows them to optimise the listening experience.



The high-frequency membrane of the speakers is a linear sound source, not a punctiform one. This allows an excellent dispersion on the horizontal plane and therefore, with the consequence of lateral expansion of the optimal listening point (allowing more people to be in the ideal listening point). However, this involves a reduced dispersion on the vertical plane, which is less critical but once identified the ideal listening height just above the centre of the speakers, remains the same for all the listeners.

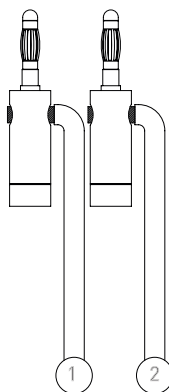
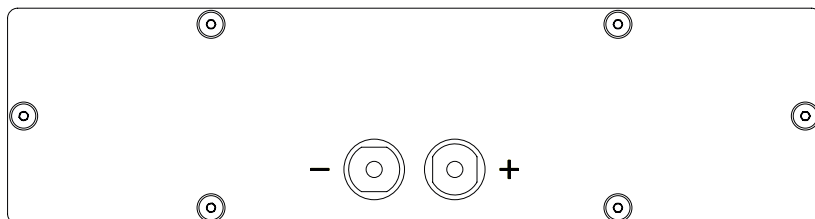


Due to the slight changes in the physical properties of the materials that make up the membranes, the speakers will reach their maximum potential, in terms of sound quality, after at least 50 hours of use.

5 / CONNECTION OF THE SPEAKERS

ONLY FOR FLAG S

You can connect the speaker to an audio amplifier via the supplied banana plugs. Unscrew the back of the banana plug and insert the stripped wire from the amplifier in the hole as shown in the illustration, then screw the back part of the connector making sure the cable is firmly attached to the banana plug. Then insert the banana plugs into the appropriate sockets on the back of the speaker. In case you are using a cable that already ends up with banana plugs, you can directly insert it into the sockets, respecting the polarity, without using the connectors supplied.



CAUTION!

Respect the colour code
(positive: red / negative: black)

ONLY FOR PASSIVE FLAG M/L VERSIONS

You can connect the speaker to an audio amplifier through MONOWIRING, BIWIRING or BIAMPLIFICATION connection (see the picture of connection possibilities).

In the first case, a two-pole cable (+ and -) is connected to each speaker from the amplifier respecting the polarity. In this case, you need to use the jumpers connectors supplied. For each speaker, insert the jumpers into the appropriate sockets on the speaker respecting the colour code, (positive: red / negative: black), then connect the cables coming from the amplifier to two of the four banana connectors on the jumpers. You can insert the stripped wire by unscrewing the back of the banana plug, then make sure that the cable is well tightened to the connector (see the picture). It is also possible to insert banana connectors into the same ones already present on the jumpers, or unscrew the back part of the connectors to insert spade connectors. It won't change if you use HIGH or LOW connectors: connect the + to one of the two + and the - to one of the two -.

In the case of BIWIRING or BIAMPLIFICATION connection, 4 poles must be connected for each diffuser, two positives and two negatives, in the first case coming from a single amplifier, instead in the second case they come from two different amplifiers. (In BIAMPLIFICATION case, to ensure optimal audio reproduction, both amplifiers need to have the same gain on the signal). In both cases, you can plug the cables directly with the banana plugs into the sockets on the speakers, following the indication of the polarity (positive / negative) and of the HIGH and LOW frequencies.

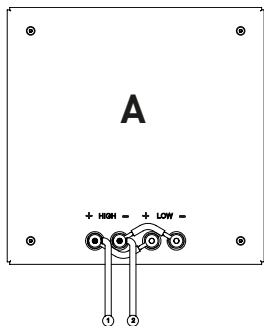
You can also unscrew the supplied banana plugs, remove the jumpers and insert the banana plugs into the appropriate sockets on the speakers to use them with a stripped cable or spade connectors.



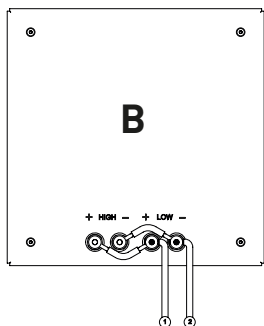
CAUTION!

Respect the colour code
(positive: red / negative: black)

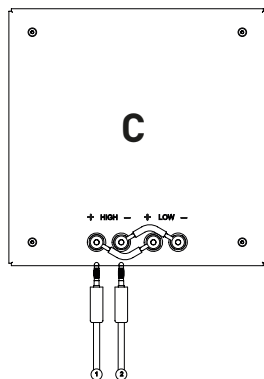
List of **connection methods of passive flag M / L versions** according to available cables: single (mono-wiring, with a bipolar cable +/- for each speaker) or double (bi-wiring, with double bipolar cable +/- for each speaker), with stripped cable or with existing banana plug terminations. Configurations A and B are equivalent. Configurations C and D are equivalent.



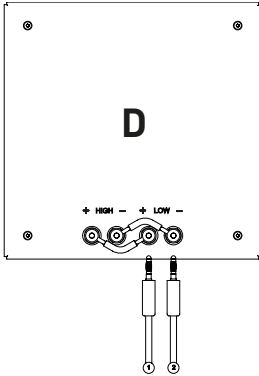
mono-wiring with stripped cable,
1 to + of the amplifier, 2 to -
of the amplifier



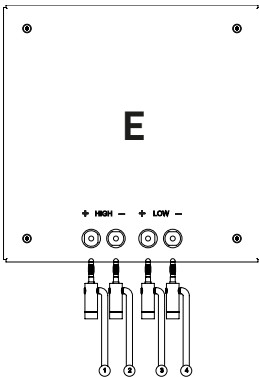
mono-wiring with stripped cable,
1 to + of the amplifier, 2 to -
of the amplifier



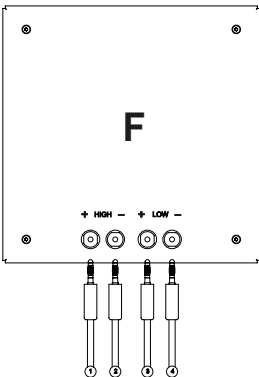
mono-wiring with banana plugs cable,
1 to + of the amplifier, 2 to -
of the amplifier



mono-wiring with banana plugs cable,
1 to + of the amplifier, 2 to -
of the amplifier



*bi-wiring with stripped cable,
1 to + of the amplifier,
2 to - of the amplifier,
3 to + of the amplifier,
4 to - of the amplifier



*bi-wiring with banana plugs cable,
1 to + of the amplifier,
2 to - of the amplifier,
3 to + of the amplifier,
4 to - of the amplifier

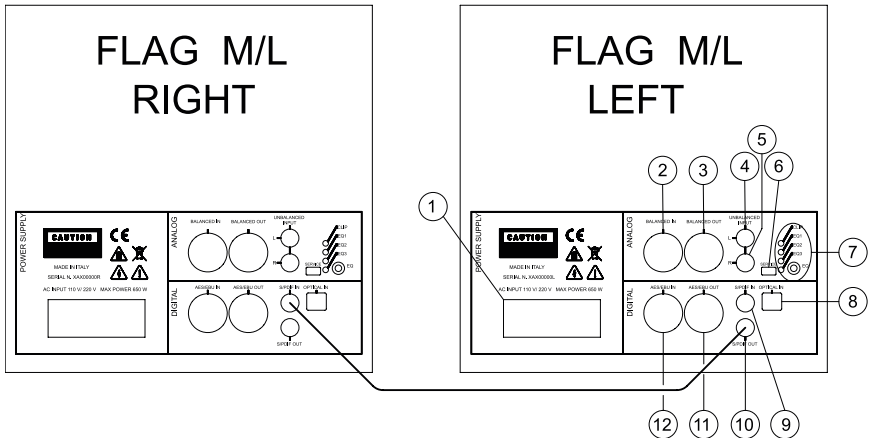
* The bi-wiring solutions are the same for bi-amplification.

ONLY FOR ACTIVE FLAG M/L VERSIONS

DIGITAL INPUT VERSION

- 1_ IEC 220V power socket with switch
- 2_ 3 poles XLR balanced analog signal input
- 3_ 3 poles XLR balanced analog signal output
- 4_ LEFT unbalanced RCA analog signal input
- 5_ RIGHT unbalanced RCA analog signal input
- 6_ USB socket for authorized assistance service connection only
- 7_ Selector of the three available equalizations and led indicators
- 8_ TOSLINK digital input
- 9_ S/PDIF RCA digital input
- 10_ S/PDIF RCA digital output
- 11_ AES/EBU XLR 3 poles digital output
- 12_ AES/EBU XLR 3 poles digital input

22

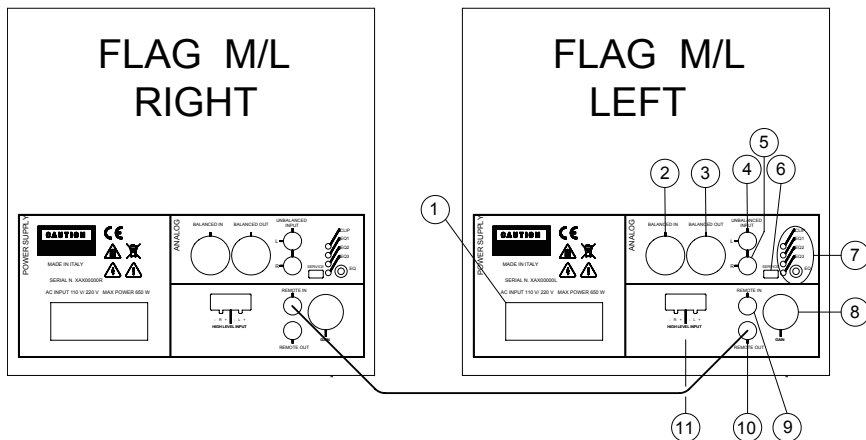


Connect the S/PDIF OUT of the left speaker with the supplied 75 ohm RCA cable, to the S/PDIF IN input of the right speaker (it is possible to recognize the left speaker from the right one, by reading the last letter of the serial number, located on the back of the speaker).

Here's an example: [XAX00000L -> Left XAX00000R -> Right]

ANALOG INPUT VERSION

- 1_ IEC 220V power socket with switch
- 2_ 3 poles XLR balanced analog signal input
- 3_ 3 poles XLR balanced analog signal output
- 4_ LEFT unbalanced RCA analog signal input
- 5_ RIGHT unbalanced RCA analog signal input
- 6_ USB socket for authorized assistance service connection only
- 7_ Selector of the three available equalizations and led indicators
- 8_ Knob for gain adjustment
- 9_ REMOTE IN RCA connector
- 10_ REMOTE OUT RCA connector
- 11_ High level analog input 4 poles connector.



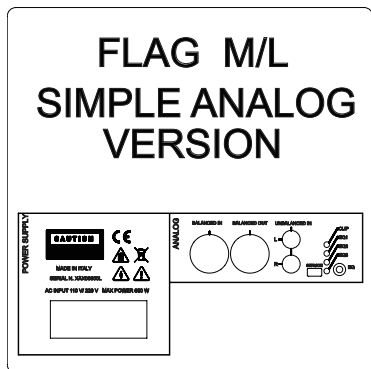
Connect the REMOTE OUT of the left speaker with the supplied 75 ohm RCA cable, to the REMOTE IN input of the right speaker (it is possible to recognize the left speaker from the right one, by reading the last letter of the serial number, located on the back of the speaker).

Here's an example: {XAX00000L -> Left XAX00000R -> Right}

SIMPLE ANALOG VERSION

For this version, all the indications of the analog version apply, except for the following precautions:

- The system is not remote controlled
- The speakers are independent and therefore the modification of the equalization must be done manually with the selector on the back of the speaker itself.
- The input selection takes place automatically between XLR and RCA, depending on what is connected and / or used
- You can enter indifferently in the RCA R or L input since the sum of the two inputs is in any case made.
- Enter with the right channel in the right speaker and with the left channel in the left speaker.
- Attention, the volume adjustment must be made from the connected preamplifier or in any case from the connected source, so pay attention to the volume of the source when the speakers turn on by sending a signal.
- In the simple analog version, once both speakers have been turned on with the ON / OFF buttons on the back, just send them the musical signal, since there is no remote control. When the speakers go to stand-by due to lack of music signal, they will automatically turn on again the next time the music signal is sent.



-
- Connect the power cords to both speakers by using the switch located on the back of each speaker, proceed with the ignition of the right speaker and then by turning on the left one.
 - Power on (through the switch on the back of the speaker) the RIGHT speaker first and the LEFT after.
 - By pressing the ON / OFF key on the supplied remote control, the green LED of each speaker will light up intermittently, until the speakers recognize the input signal. The speakers turn on automatically when they detect an input signal and they turn off after 15 minutes of signal absence.
 - In the simple analog version, once both speakers have been turned on with the ON / OFF buttons on the back, just send them the musical signal, since there is no remote control. When the speakers go to stand-by due to lack of music signal, they will automatically turn on again the next time the music signal is sent.

AUDIO SOURCE CONNECTIONS

- **UNBALANCED:** connect the RIGHT output of the source to the UNBALANCED RIGHT input of the right speaker and insert the supplied RCA shorting connector to the UNBALANCED LEFT connector on the speaker. Connect the LEFT output of the source to the UNBALANCED LEFT input of the speaker left and insert the supplied RCA shorting connector to the UNBALANCED RIGHT input on the speaker.
- **BALANCED:** connect the RIGHT output of the source to the BALANCED IN input of the right speaker and the LEFT output of the source to the BALANCED IN input of the left speaker. It is possible to use the BALANCED OUT of both speakers to transmit the signal to others audio equipment.

DIGITAL VERSIONS ONLY

- **S/PDIF:** connect the output of the digital source with a 75 Ohm RCA cable to the S/PDIF input of the left speaker. The left speaker will pick up the LEFT digital signal, instead the RIGHT digital signal will be sent to the right speaker through the 75 Ohm RCA cable previously connected between the two speakers.
- **OPTICAL:** connect the Toslink optical output of the source with an optical cable to the OPTICAL IN input of the left speaker. The left speaker will pick up the LEFT digital signal, while the RIGHT digital signal will be sent to the right speaker through the 75 Ohm RCA cable previously connected between the two speakers.
- **AES/EBU:** connect the output source with a 110 Ohm 3 poles XLR cable to the AES/EBU IN input of the left speaker. The left speaker will pick up the LEFT digital signal, while the RIGHT digital signal will be sent to the right speaker through the 75 Ohm RCA cable previously connected between the two speakers. You can use the AES/EBU OUT output to send the digital signal to other audio equipments with AES/EBU input.

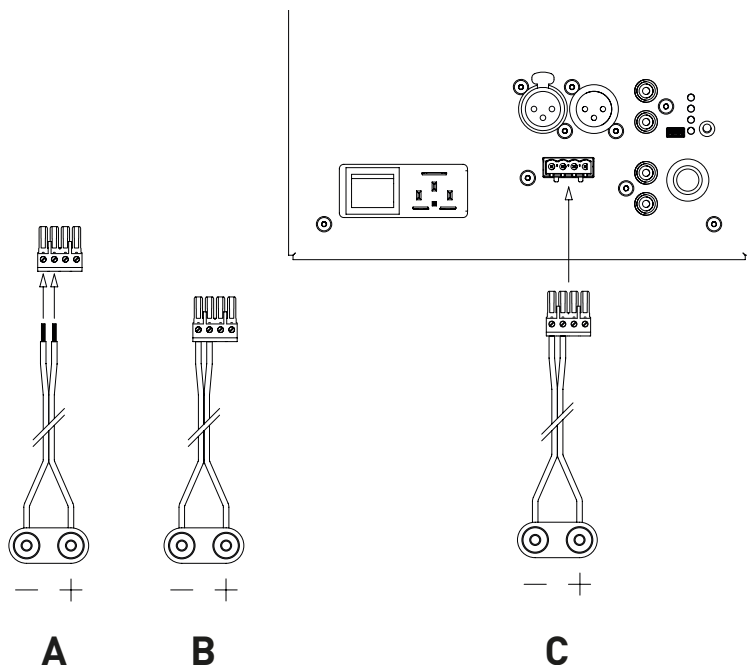
ANALOGIC VERSIONS ONLY

- **HIGH LEVEL ANALOGUE:** input designed for the connection of external amplifiers. By using this input, the amplifier inside the speakers does not get excluded. The signal from the external amplifier is attenuated and then amplified from the internal speaker's amplifier. It is necessary to install the appropriate green connector on the power cables coming from the

amplifier following the diagram in the figure, then insert the connector into the appropriate space on the speaker. You must do it for both speakers.

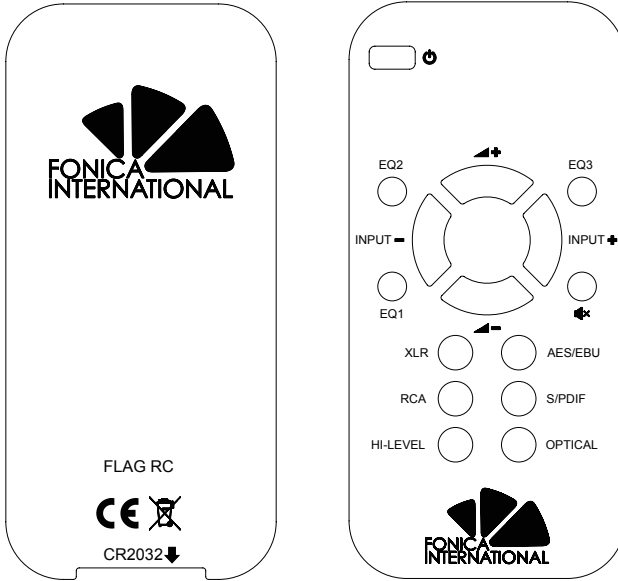
To connect the provided connector to the cable from the amplifier, unscrew the screws, insert the stripped cable into the housing under the screw (A), then tighten the screw (B) and finally insert it into the connector (C).

Make sure to respect the polarity and the position of the cables on the connector and avoid the wires to come off the connection, as this could cause unwanted contact with potentially harmful to the connected electronic devices.



- **GAIN**: the gain knob allows you to adjust the speaker input gain in the case the speaker remote control is not used, but instead a preamplifier or a source with volume control.

6 / REMOTE CONTROL



- The speakers can be switched on and off by using the ON / OFF apposite button.
- By using the INPUT - and INPUT + key on the remote control, it is possible to sequentially select the audio inputs.
- By using the VOL + and VOL - keys, it is possible to respectively increase and decrease the volume level by 1 dB at a time. When switched on, the speakers are automatically set to a moderate volume level.
- Through the MUTE key it is possible to interrupt the audio output from the speakers. The green led, on each speaker will start flashing, indicating the mute status. By pressing again the MUTE key the speaker exits from MUTE state.
- Through the keys EQ1, EQ2, EQ3 it is possible to select 3 different equalization presets to better adapt the frequency response of the speakers to their position in the listening environment. **CAUTION:** each preset stores the audio input used.

-
- Press the XLR key to select the corresponding input
 - Press the RCA key to select the corresponding input

ONLY ANALOG VERSIONS

- Press the HI-LEVEL key to select the corresponding input

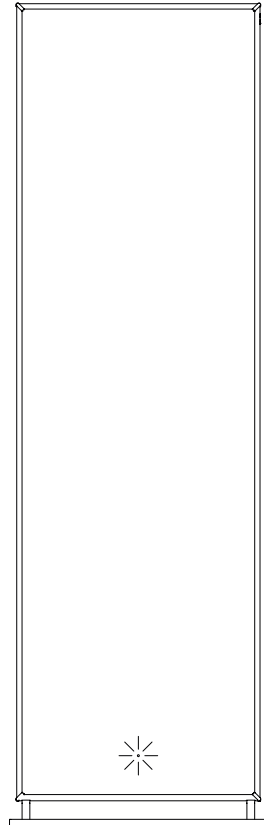
ONLY DIGITAL VERSIONS

- Press the AES/EBU key to select the corresponding input
- Press the S/PDIF key to select the corresponding input
- Press the OPTICAL key to select the corresponding input

- The AUTO DETECT audio input is selected by default. With this setting, the speakers detect the presence of signal on all inputs and it automatically activates the input where the signal is detected. After 10 seconds of no signal from the source being used, the speakers will search other signals from other inputs. If multiple inputs are active at the same time, the speaker will follow this order of precedence for the inputs:

1. AES/EBU
2. S/PDIF
3. OPTICAL
4. BALANCED
5. UNBALANCED

- To enter AUTO DETECT mode press the XLR key and then the INPUT – key.



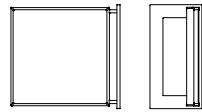
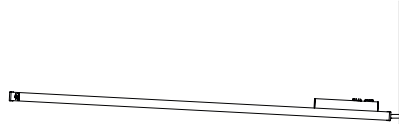
The active speakers version have a LED in the center, next to the base of the speaker, as indicated on the illustration. It will light up according to the following:

- Weak STATIC RED light: the speakers are connected to the mains, but they are on stand-by mode.
- STATIC GREEN light: the speakers are active, and they play the music signal.
- INTERMITTENT GREEN light: the speakers are active but on MUTE mode.
- RED AND GREEN INTERMITTENT: intervention of the soft clip limiter. The speakers are reaching the maximum output power level. It's recommended to decrease the listening volume.
- STATIC RED light: speakers are on fatal error. It is necessary to turn off the speakers with the appropriate switch, on the back panel. Wait 30 seconds than turn the speakers on. If the problem persists, contact the assistance.
- INTERMITTENT RED light (1 in a second): temperature is too high, the output power of the speakers is limited until the temperature is within the normal range of use.
- INTERMITTENT RED light (2 in a second): temperature is too low for the correct speaker operation.
- When a key on the remote control is pressed, the green LED on the left speaker flashes to indicate that the command has been received.

To control the speakers with the remote control, point it at the left speaker LED.

7 / LED INDICATORS ON THE BACK PANEL

- **INTERMITTENT RED** light during the peak of music signal: intervention of the soft clip limiter. The speakers are reaching the maximum output power level. It is recommended decreasing the listening volume.
- **STATIC RED** light: fatal error. It is necessary to turn off the speakers with the appropriate switch, located on the back of the panel. Wait 30 seconds, then turn on the speakers. If the problem persists, contact the assistance.
- **INTERMITTENT RED** light (1 in a second): temperature is too high, the output power of the speakers is limited until the temperature is within the normal range of use.
- **INTERMITTENT RED** light (2 in a second): temperature is too low for the correct speaker operation.
- **STATIC GREEN** light: the speakers are active and playing the music signal.
- **INTERMITTENT GREEN** light: the speakers are active, but on MUTE mode.
- Green led EQ1 indicates that equalization curve number 1 is selected.
- Green led EQ2 indicates that equalization curve number 2 is selected.
- Green led EQ3 indicates that equalization curve number 3 is selected.



	S	M	L
DIMENSIONS (mm) panel only (LxHxP)	380x380x30	380x1240x30	380x1990x30
DIMENSIONS (mm) panel with back electronic parts (LxHxP)	380x380x32	380x1240x65	380x1990x65
DIMENSIONS (mm) total including the base (LxHxP)	400x422x200	400x1282x400	400x2031x400
WEIGHT (Kg) of the panel only	4,6	16,3	27,4
WEIGHT (Kg) of the panel with base	9,6	22,9	34
DIMENSIONS (mm) of the base (LxHxP)	400x12x200	400x12x400	400x12x400
WEIGHT (Kg) of the base	5	6,6	6,6
EFFICIENCY (dB/W/m) passive versions	85	86	87
NOMINAL IMPEDANCE (Ω) passive versions	6	4	8
FREQUENCY RESPONSE (Hz)	80-20K	60-20K	50-20K

8 / CLEANING AND MAINTENANCE

- To clean the fabric parts of the speaker, gently stroke with a soft brush, making sure not to press too firmly.
- To clean the aluminum parts of the speaker, use a damp soft cloth.



CAUTION!

Before cleaning the speaker, you must turn it off by pushing the switch on the rear and remove the power cord from the mains.

9 / WARRANTY ACTIVATION

To activate the warranty please email direzione@fonica-international.com with the serial number of the speakers and the purchase documents, specifying the date of the purchase.

10 / ASSISTANCE

For technical assistance email direzione@fonica-international.com
Customers residing in Italy can directly contact us by calling **+39 035.42.18.936**



www.fonicainternational.com

FONICA INTERNATIONAL S.R.O. – Via Costanza Cerioli, 65 - 24068 - Seriate (BG) - Italy
P.IVA CZ64508587 - info@fonicainternational.com