FBT X PRO Processed Active Speaker Instruction Manual

Contents

1 FBT X PRO Processed Active Speaker
2 PRECAUTIONS
3 IMPORTANT SAFETY INSTRUCTIONS
4 COMMON FEATURES
5 POWER SUPPLY
6 CONNECTORS
7 ACCESSORIES
8 INSTALLATION MODES
9 DIMENSIONS
10 CONTROLS AND FUNCTIONS
11 CONNECTION EXAMPLES
12 ROTATABLE HORN
13 TECNICAL SPECIFICATIONS
14 FCC
15 Documents / Resources
15.1 References
16 Related Posts

FBT X PRO Processed Active Speaker

Specifications:

- Model: 43727
- Website: **http://muzcentre.ru/**
- Compliance: FCC Part 15
- ID: 2AWM5-XLITE-XPRO

Product Information:
This device is designed to meet FCC regulations and features a power outlet for easy accessibility. It must be connected to a mains power outlet with a protective earth connection. The device can be used in fixed/mobile conditions without restrictions on RF exposure.

Usage Instructions:

Warnings and Precautions:
Ensure not to open the device to avoid the risk of electric shock. Do not expose the equipment to rain or moisture. Refer servicing to qualified personnel only. Follow all safety instructions provided in the manual.

Installation:
Install the device so that the power cord outlet is easily accessible. Connect the device to a power outlet with a protective earth connection.

Safety Instructions:

1. Read and keep the provided instructions.
2. Heed all warnings and follow instructions carefully.
3. Avoid using the device near water sources.
4. Clean the device with a dry cloth only.
5. Do not block ventilation openings.
6. Install the device according to the manufacturer’s instructions.

FAQ:

- **Q: Can I use this device near water?**
  A: No, it is advised not to use this device near water sources to prevent any risk of electric shock.
- **Q: What should I do if I encounter interference during operation?**
  A: This device is designed to accept interference. If interference causes undesired operation, please consult qualified service personnel for assistance.

PRECAUTIONS

WARNING
RISK OF ELECTRIC SHOCK DO NOT OPEN
TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE

WHERE MARKED, THIS SYMBOL INDICATES A DANGEROUS NON ISOLATED VOLTAGE INSIDE THE LOUDSPEAKER: SUCH VOLTAGE COULD BE SUFFICIENT TO RESULT IN THE RISK OF ELECTRIC SHOCK.

WHERE MARKED, THIS SYMBOL INDICATES IMPORTANT USAGE AND MAINTENANCE INSTRUCTIONS IN THE ENCLOSED DOCUMENTS. PLEASE REFER TO THE MANUAL.
THE DEVICE MUST BE CONNECTED TO THE MAINS THROUGH A POWER OUTLET WITH A PROTECTIVE EARTH CONNECTION This device features a power outlet; install the device so that the outlet for the power cord is easily accessible.

PRECAUTIONS

- For proper air ventilation please make sure to leave sufficient clearance (min 11 inc.) on all sides of the device.
- Please do not cover the ventilation slots with papers, table cloths, curtains, etc. in order not to prevent ventilation of the device.
- Please do not piace any naked flame source, such as lighted candles, on the device.
- Please keep the device away from water springs and splashes and please do not place any objects containing liquids, such as vases, on the device.

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
8. Do not install near any heat sources, such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or

the third prong are provided far your safety. If the provided plug does not fit into your outlet, consult an electrician fr replacement of the obsolete outlet.

10. Protect the power card from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments accessories specified by the manufacturer
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused far long periods of time.
14. Refer alf servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply card or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

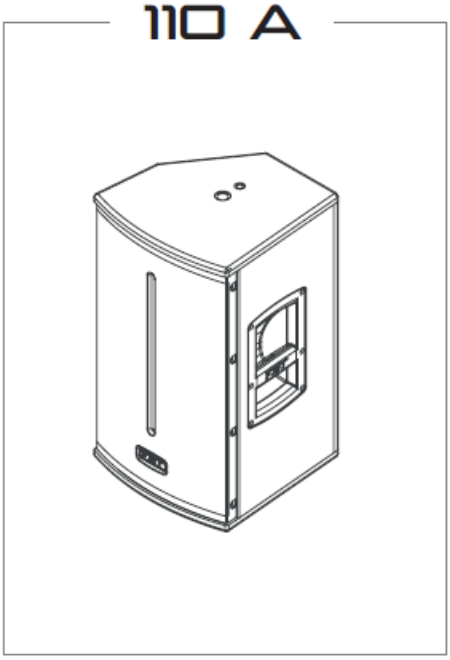
The X-PRO series has been renewed with the redesign of all the electronics, increasing power and adding important innovations, such as a 3-channel mixer and the use of BLUETOOTH 5.0 for streaming audio from smartphones and tablets, in addition to the use of more efficient speakers capable of generating a higher sound pressure. The “power unit” is also new featuring a switching power supply with automatic voltage switch in the 100-240Vac range; two high-efficiency Class D channels, a three-channel mixer with two micro/line inputs, a stereo input and channel for wireless audio streaming with BLUETOOTH 5.0 protocol (compatible with previous versions) that allows the simultaneous recognition of two speakers with the possibility of remote volume control. The introduction of fan with smart control of the number of revolutions allows amplifier operating temperatures to be kept low, ensuring noise-free operation.

COMMON FEATURES

- Plywood cabinet with anti-scratch coating and an internal ply reinforcement.
- High-efficiency custom FBT speakers with high linear excursion capacity.
- Compression drivers with 25mm aperture and 35mm coil.
- 1200W LF and 300W HF high dynamic Class D amplifier.
- Universal switching power supply 100-240Vac.
- Bluetooth 5.0
- DSP processor with 4 equalization presets.
- Advanced filtering algorithms, dynamic equalization of low frequencies, energy control that change depending on the preset chosen.
- 3-channel mixer: one dedicated BLUETOOTH 5.0 channel, two independent micro/line channels with separate volume and one with stereo jack input, balanced XLR MIX output or CH1 LINK.
- Built-in handles, M10 anchor points for suspended installation, stand support, 35° and 45° diffuser monitor profile.

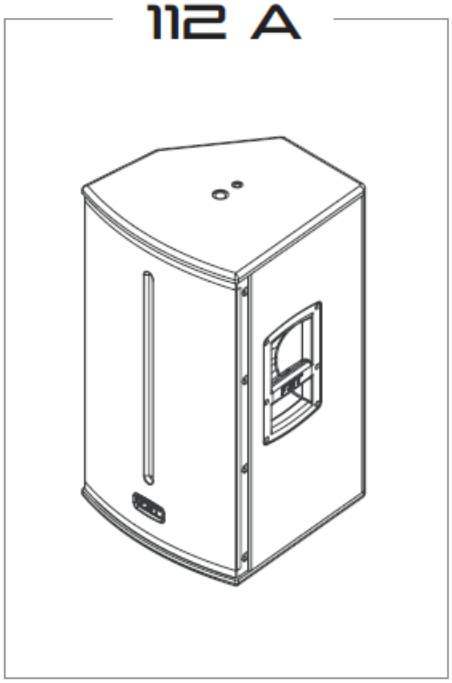
GENERAL FEATURES

110 A



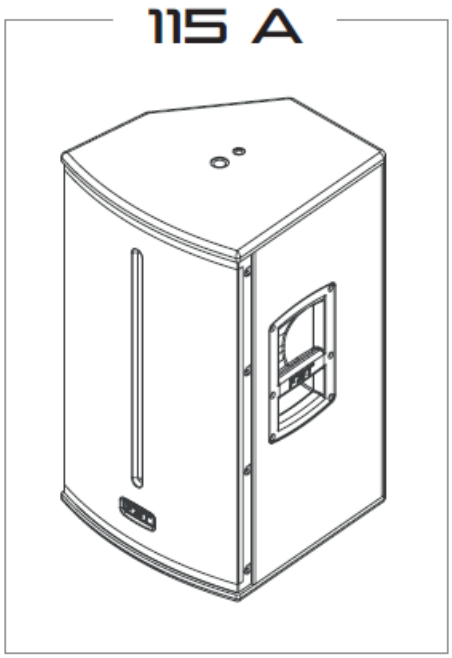
- 1200W + 300W
- 2 way bi-amplified bass reflex
- FBT custom 250mm (10”) LF woofer with 64mm (2,5”) voice coil
- FBT 25mm (1”) throat 135mm (1.4”) voice coil HF compression driver
- 58Hz 20KHz frequency response
- 80 °H x 50 °V rotatable constant directivity horn
- 35° monitor taper

112 A



- 1200W + 300W
- 2 way bi-amplified bass reflex
- FBT custom 320mm (12”) LF woofer with 64mm (2,5”) voice coil
- FBT 25mm (1”) throat 135mm (1.4”) voice coil HF compression driver
- 50Hz 20KHz frequency response

- 80 °H x 50 °V totatable constant directivity horn
- 35° monitor taper



- 1200W + 300W
- 2 way bi-amplified bass reflex
- FBT custom 380mm (15”) LF woofer with 64mm (2.5”) voice coil
- FBT 25mm (1”) throat 135mm (1.4”) voice coil HF compression driver
- 42Hz 20KHz frequency response
- 80 °H x 50 °V totatable constant directivity horn
- 35° – 45° monitor taper

POWER SUPPLY

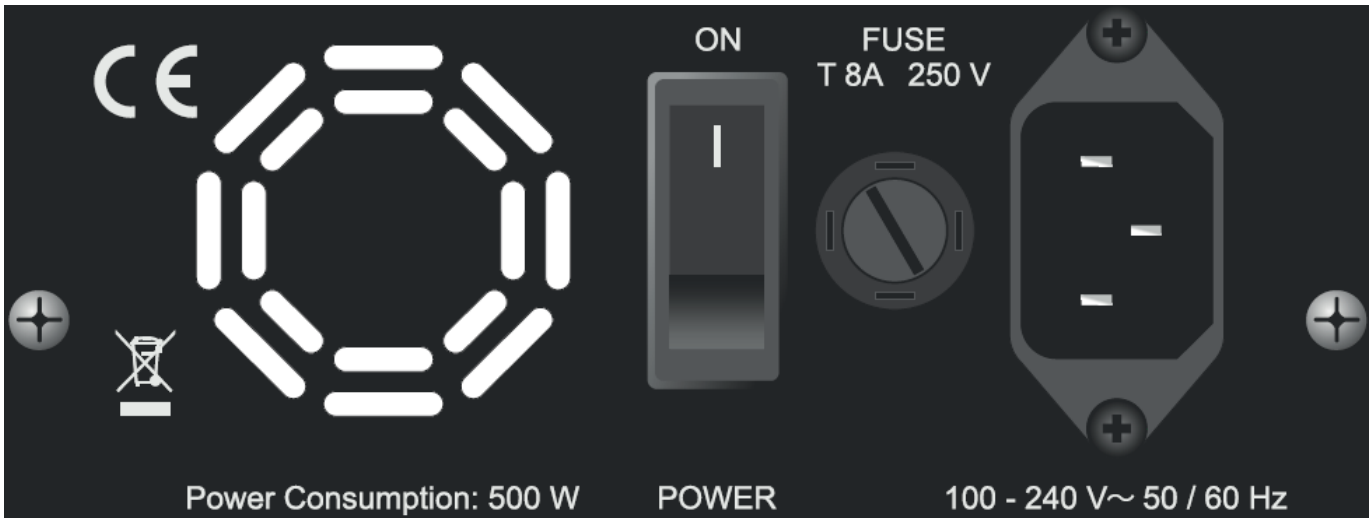
CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN
TO PREVENT THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT OPEN. TO PREVENT RISK OF FIRE ALWAYS REPLACE FUSE WITH SAME TYPE AND RATING. THIS APPARATUS MUST BE EARTHED.
ENGINEERED IN ITALY by FBT ELETTRONICA SPA MADE IN CHINA

2AWM5 – XLITE – XPRO

This device complies with part 15 ofthe FCC Rules.

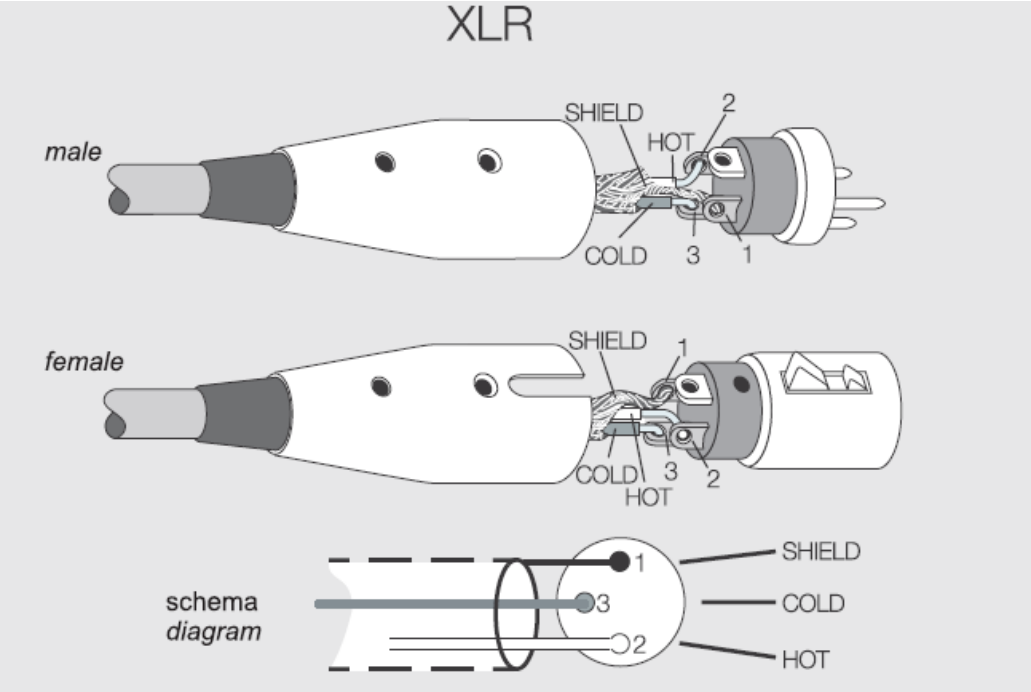
Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.



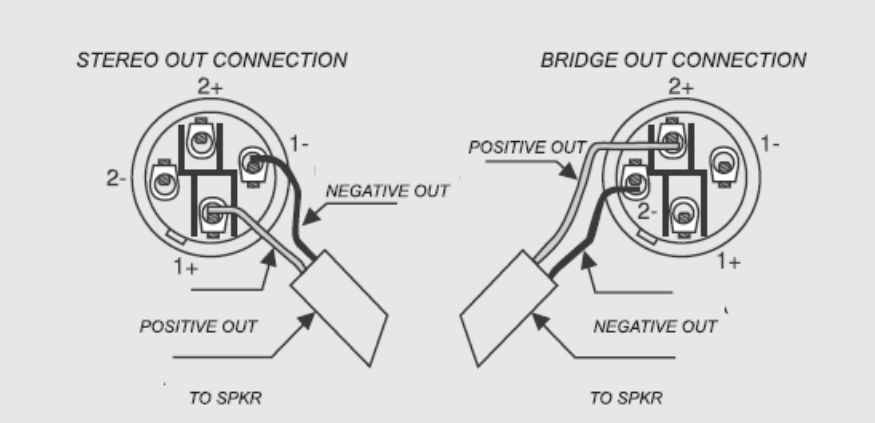
The speaker has been designed and manufactured to work with 100-240Vac 50/60Hz universal mains voltage. The power socket also included a fuse box; faulty fuses shall be replaced only with fuses having the same electrical features and value.

CONNECTORS

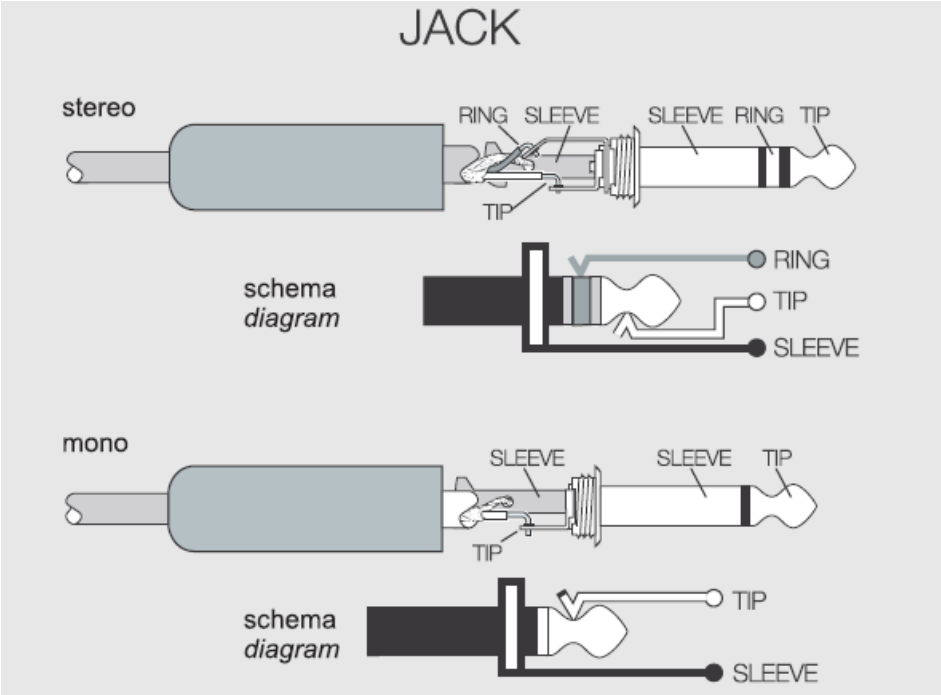


The 3-pole XLR connectors are almost always used for conducting mono-balanced signals; the three poles correspond respectively to ground (1), the positive signal (2) and the negative signal (3).

SPEAKON@



SPEAKON is a connector wich is specially adapted for connecting power terminals to loudspeakers; when inserted in an appropriate socket it locks so as to prevent accidental disconnection; moreover, it is equipped with protection against electrical shocks and guarantees the correct polarization

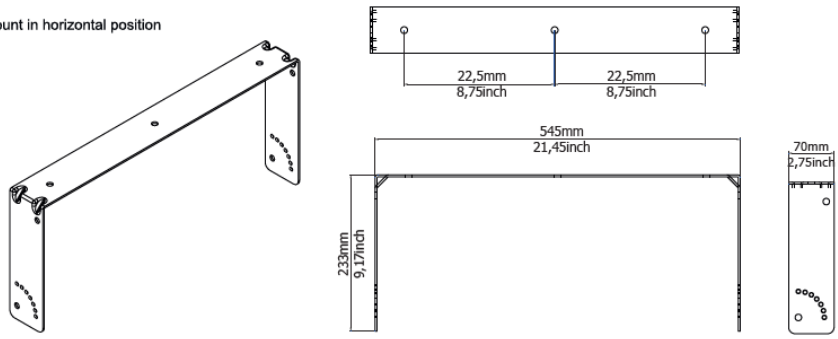


The JACKS are typical connectors for the transporting of two separate signals through two channels, left and right, using a single connector and therefore they can be either mono or stereo. Mono jacks (TS) also known as unbalanced jacks, are recognizable from stereo or balanced jacks (TRS) by their composition. The point of the mono jacks is divided into two parts, tip and ground Tip and Slave) to which the two poles are connected; the stereo or balanced Jacks are divided in three parts, as they have a central ring (Ring) which is connected to a second wire, the third (negative) pole.

ACCESSORIES

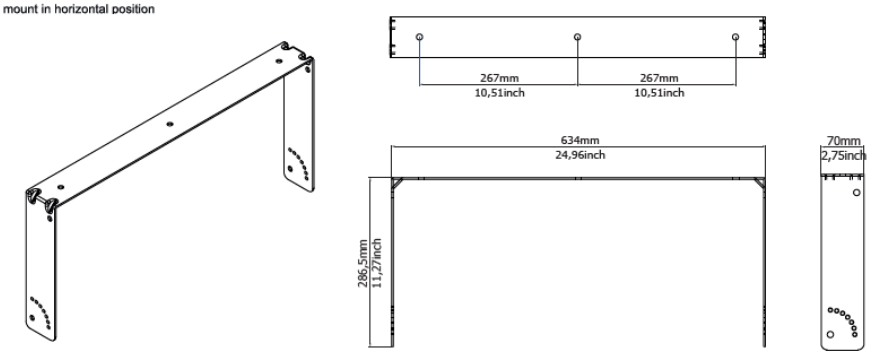
XP-U10

Wall metal bracket to mount in horizontal position



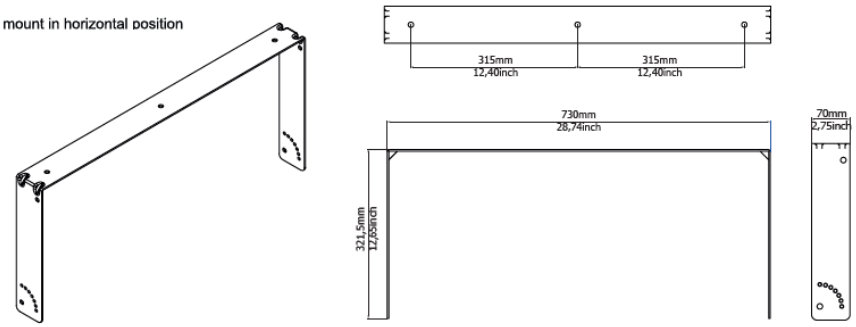
XP-U12

Wall metal bracket to mount in horizontal position



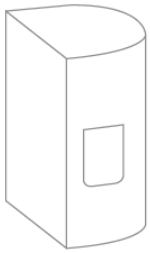
XP-U15

Wall metal bracket to mount in horizontal position



XP-C10 XP-C12 XP-C15

Nylon cover



INSTALLATION MODES

- X-PRO sound speakers must be installed using the flying accessories described in this manual and following

the special assembly instructions by qualified staff only, strictly complying with the current regulations and safety standards in force in the country of installation.

- FBT flying accessories are manufactured for their exclusive use with X-PRO systems and have not been designed for being used with any other speaker or device.
- Any possible elements of the ceiling, floor or further supports where X-PRO systems are to be installed shall be able to safety bear the load.
- The flying accessories in use are to be coupled and secured safely to both the sound speaker and the ceiling (or the other support).
- When components are fitted to ceilings, floors or beams, always make sure that ali couplers and fixing elements are properly sized and have an adequate load capacity.
- Besides the main suspension system, all flying speakers in theatres, indoor stadiums or in several other work and /or leisure facilities shall be provided with an additional independent safety system with the adequate load capacity. Only steel cables and chains with certified load capacity can be used as an additional safety device.
- Hang X-PRO speakers using only originai accessories
- When choosing the piace of installation, the suspension cable and the mounting supports make sure they are able to bear speaker and flying accessories' weight with the proper safety factor
- As for fixed installations, always schedule and carry out special inspections on a regular basis in arder to check all the parts that have to guarantee system safety over time
- Do not hang the system by the handles: handles have been designed for speaker transport, andf are not suitable for its suspension
- Never lean on/hang from the flying speaker
- FBT Elettronica SpA will not be held liable for damage or injuries caused by supports or structures which are not sufficiently sturdy or by incorrect installation.

WARNING: X-PRO series cabinets are equipped with flying attachments. Never attempt to hang the speakers by the handles; only use the anchor points provided.

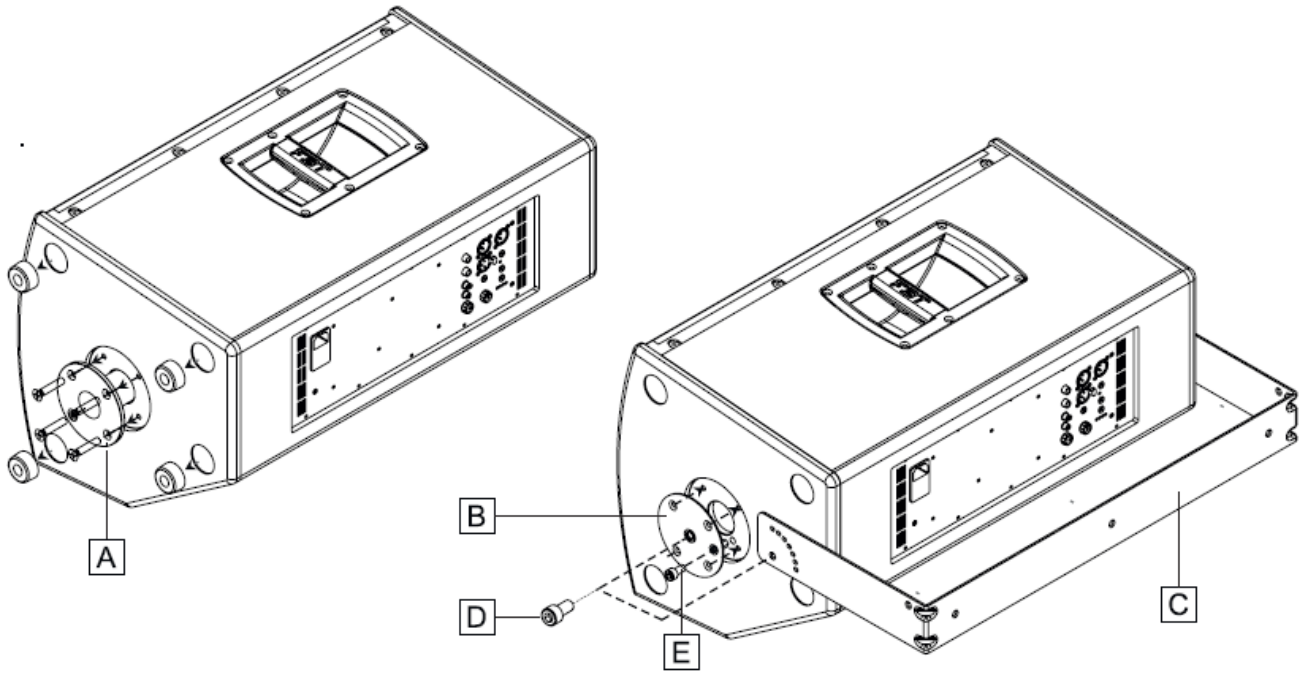
X-PRO speakers can be installed as follow:

- Suspension by wall bracket
- Installation on tripod stand or coupled with the subwoofer
- Simple stack installation with the subwoofer on the ground

SUSPENSION BY WALL BRACKET

1. Carefully choose speakers place of installation and make sure that the structure can bear box weight
2. Remove speaker's feet
3. Remove the stand adapter (A)
4. Fit bracket support flange (B)
5. Secure the bracket (C) to the wall by means of screws, in all its fixing holes
6. Place the speaker between the two bracket arms and fix it using the M10 cylinder-headed screw (D)
7. Use the other M6 cylinder-head screw (E) for orienting the speaker as preferred

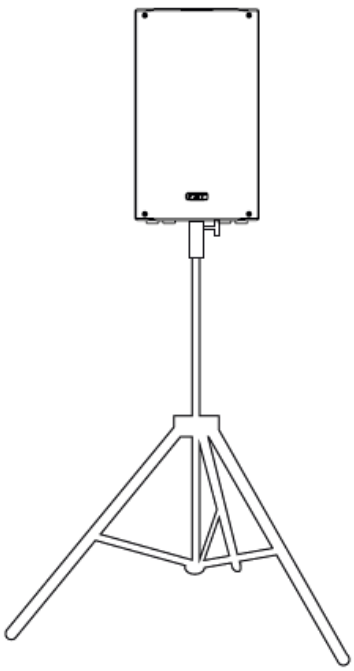
4X
Rubber feet



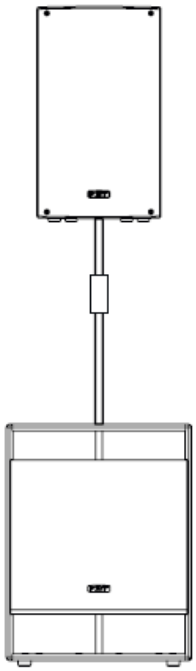
INSTALLATION ON TRIPOD STAND

AII X-PRO satellites are designed to be installed on floor stand. Such installation will allow medium-high frequency sources to be better aligned to listener's ear.

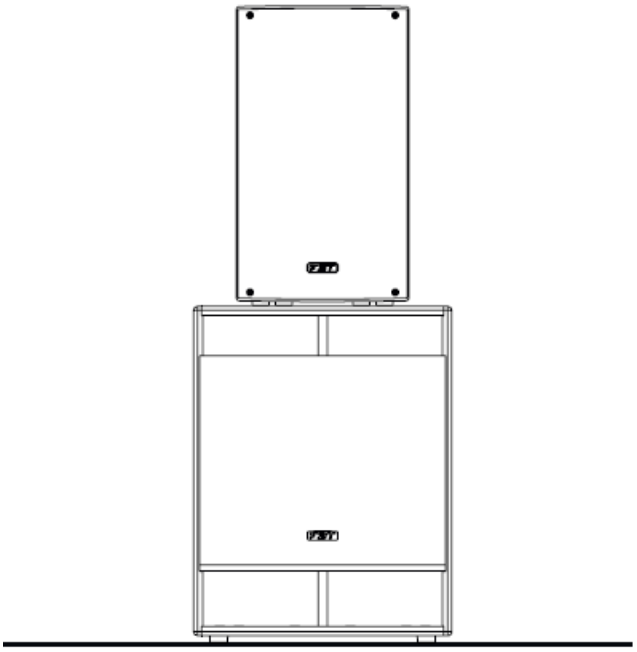
- Make sure that the stand can bear speaker's weight
- Piace the stand on a flat and antislip surface
- Widen stand base as much as possible to increase its stability



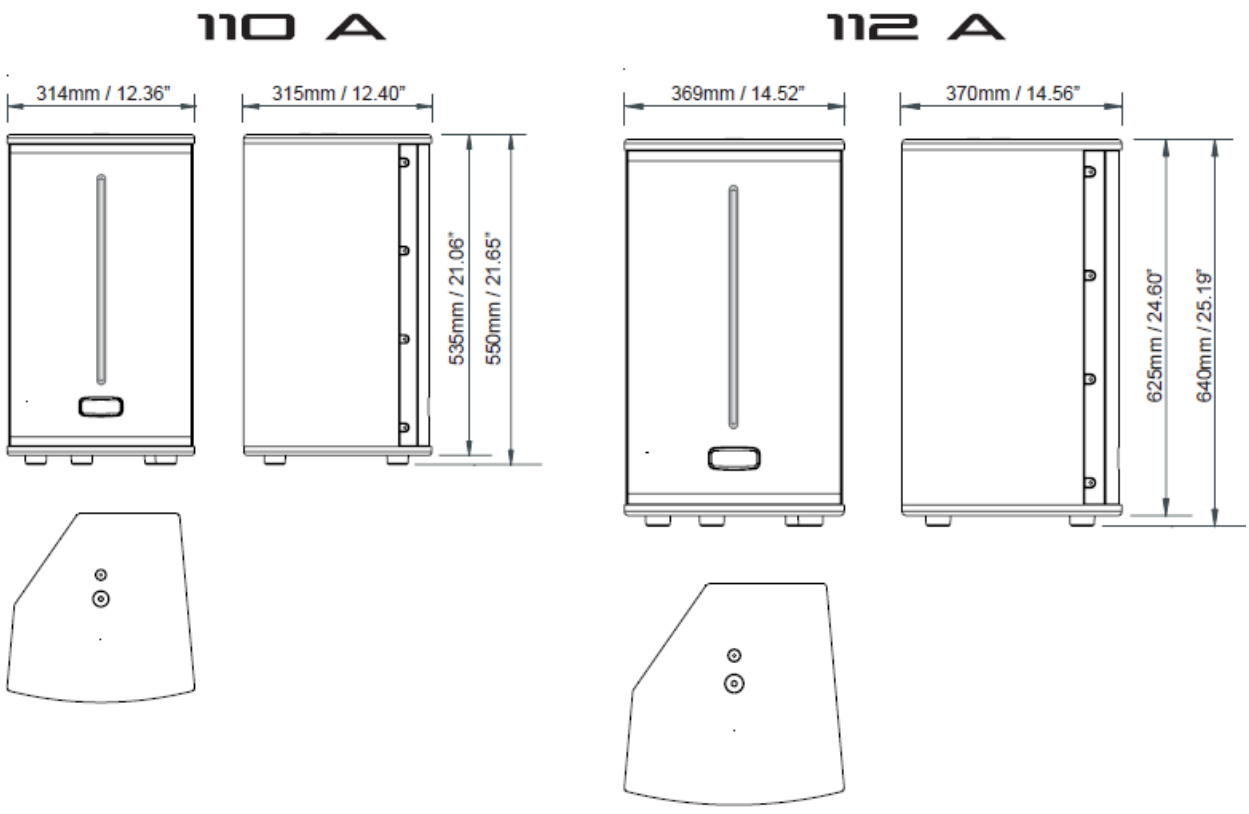
POSIZIONAMENTO A STACK

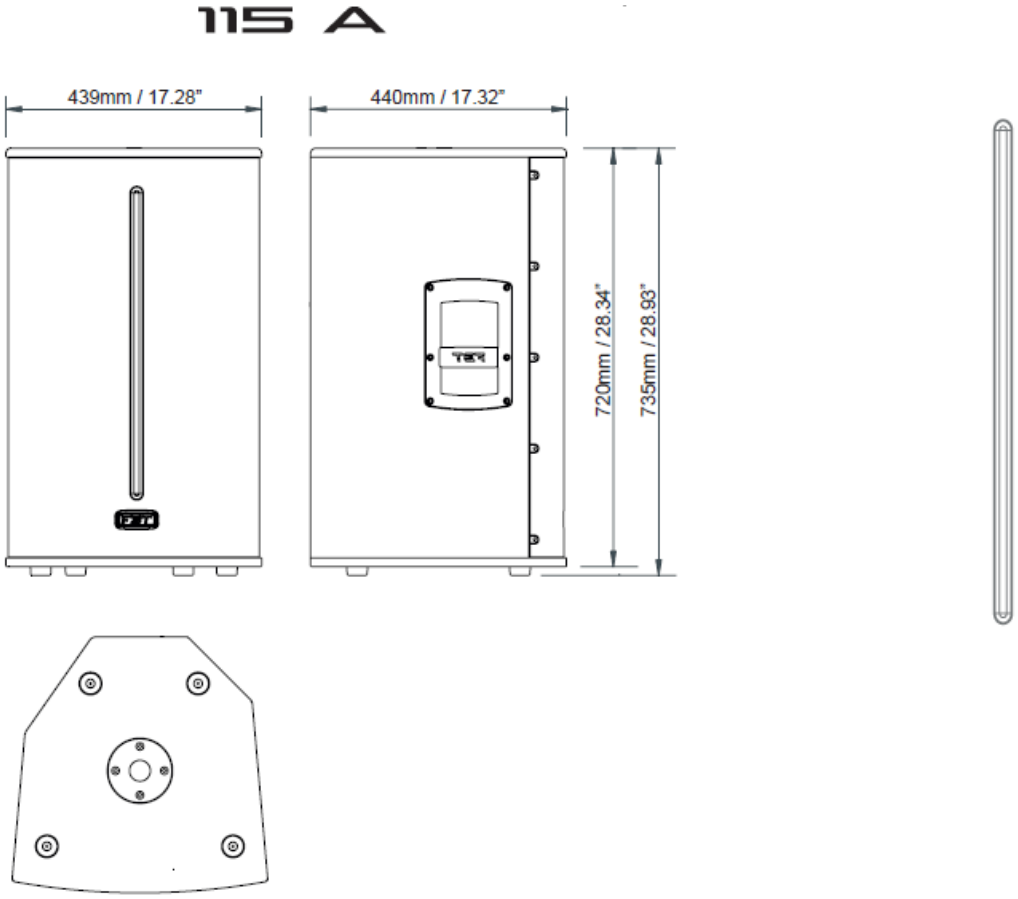


STACK INSTALLATION

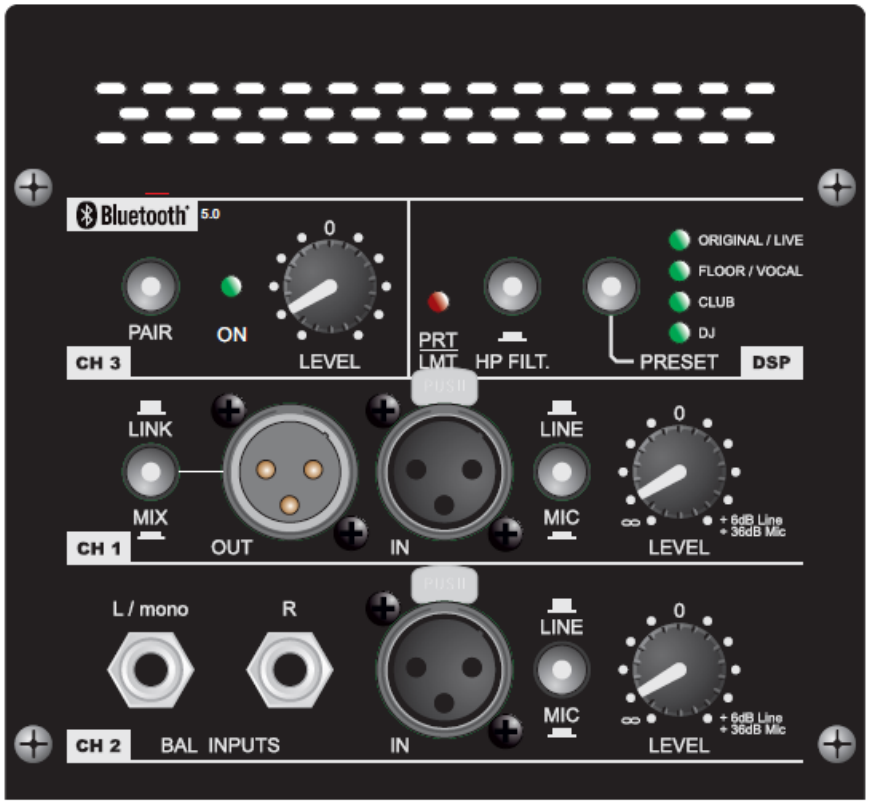


DIMENSIONS


110 A
314mm / 12.36"
315mm / 12.40"
535mm / 21.06"
550mm / 21.65"
112 A
369mm / 14.52"
370mm / 14.56"
625mm / 24.60"
640mm / 25.19"



CONTROLS AND FUNCTIONS



DSP

- PRT/LMT: The PRT/LMT LED indicates when the limiter is triggered to prevent thermal overload and the protection status due to an internal malfunction. If this occurs (fixed light and no signal), turn off the speaker

and wait at least 5 seconds before turning it back on. If the LED remains on, contact technical support. If the LED flashes accompanied by a music signal, it indicates that the maximum power has been reached. Do not increase the volume beyond this threshold to avoid degrading sound quality and damaging the transducer.

- HP FILTER: The HP FILTER button activates a “high pass” filter with a cutoff frequency of about 100Hz at 18dB oct (to be activated in configuration with the subwoofer). The PRESET function, managed by DSP, allows you to modify the speaker response by adapting the timbre to the specific applications; in addition to equalization, the presets also modify the dynamic processing to guarantee maximum SPL.
- ORIGINAL / LIVE: The ideal preset for most “live” applications
- FLOOR / VOCAL: The speaker is “specialized” for use as a stage monitor and also allows for maximum speech intelligibility.
- CLUB: Preset with accentuated bass and slightly attenuated treble, also suitable for medium/low volume listening.
- DJ: Suitable for disco club installations.

CH1
The XLR IN socket is used to connect a mixing console or microphone; for low level signals, such as microphones, set the LINE/MIC button to the MIC position; for high-level signals (typically -10dB/+4dB), such as mixers, set the LINE position.

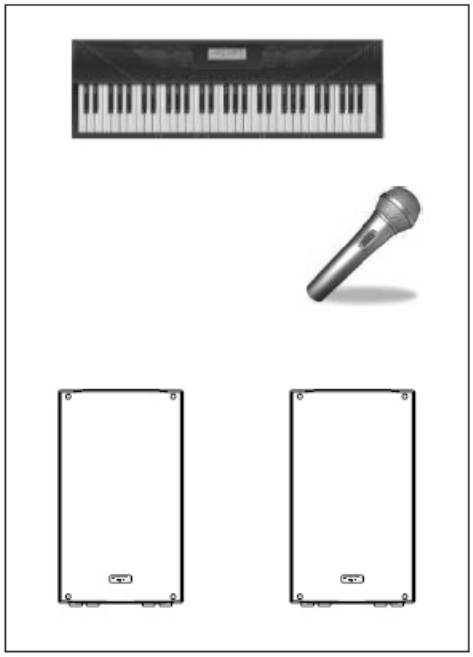
CH2
This channel has 6.3mm jack sockets for keyboard or CD/MP3 player connection; the XLR IN socket is used to connect a mixing console or microphone; for low level signals, such as microphones, set the LINE/MIC button to MIC position, for high level signals (typically -10/+4dBV), such as mixers, set the LINE position.

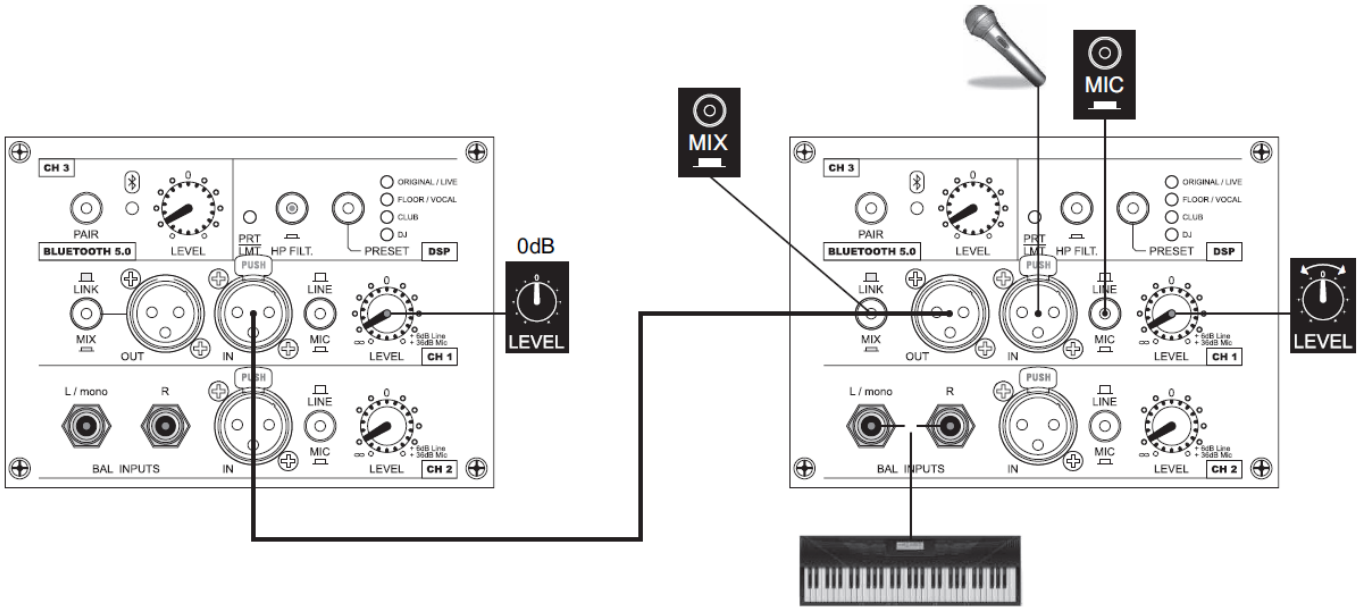
CH3
BLUETOOTH 5.0: Enable Bluetooth mode on your tablet or smartphone device. Press the PAIR button, the relevant LED flashes, the speaker model will appear in the list of new devices. Confirm the pairing, the LED indicator light remains steady. Repeat the same step to connect a second speaker (Two speakers can only be paired simultaneously with a BLUETOOTH 5.0-compatible device). The pairing procedure must be repeated every time the speaker is switched off. Both speakers will play the same signal (summed L+R)

OUT
The XLR OUT socket allows connection to another speaker; enabling the dedicated button in the MIX position allows you to mix the sounds by adding the signals present in channels 1, 2, 3. With the button in the LINK position, the output is the physical link of the input in CH1.

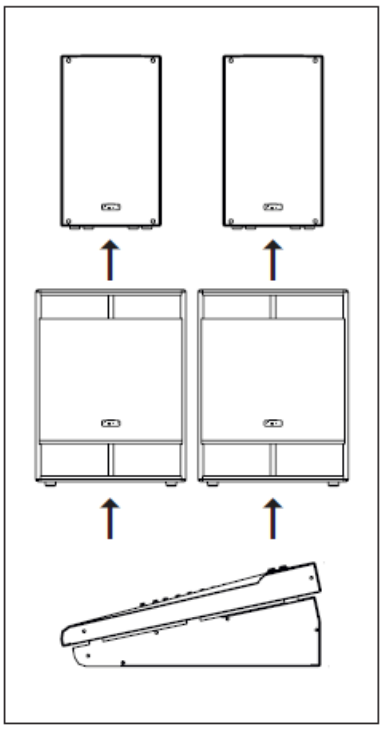
CONNECTION EXAMPLES

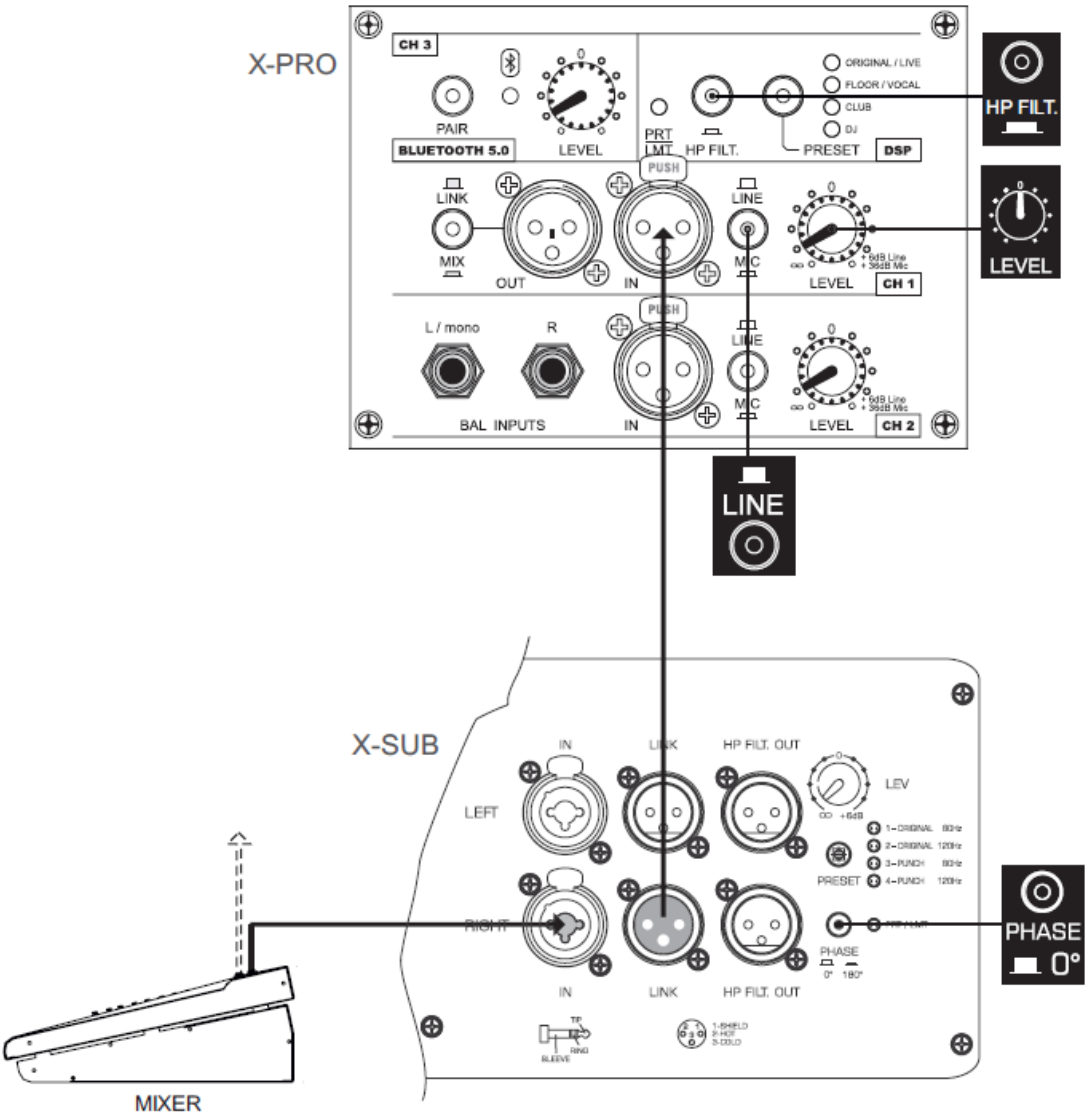
Configuration with 2 speakers connected together with connection of a microphone and a musical instrument.





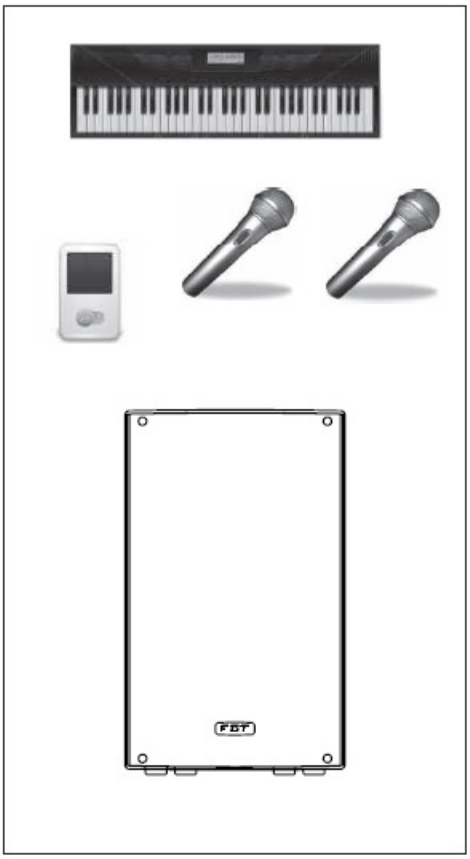
Configuration with two speakers, subwoofers and mixers respectively. You can also connect the mixer to the X-PRO speaker input and relaunch the output to the subwoofer by setting the button on the LINK.

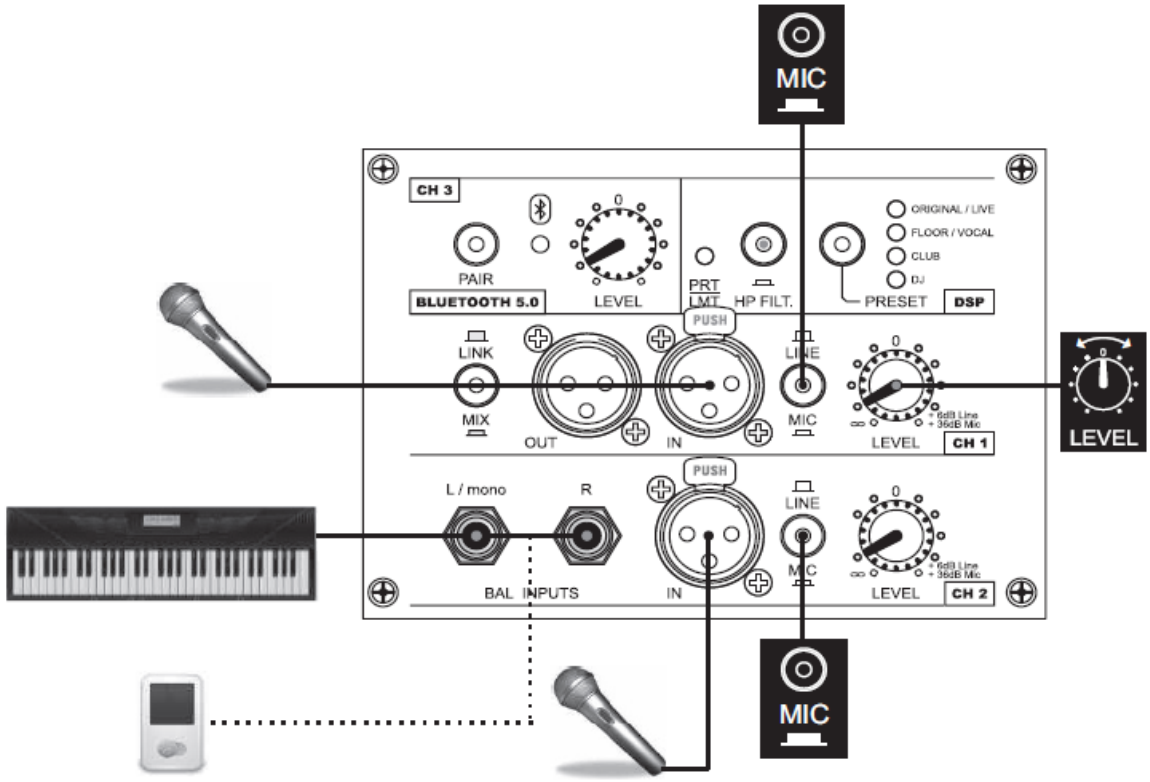




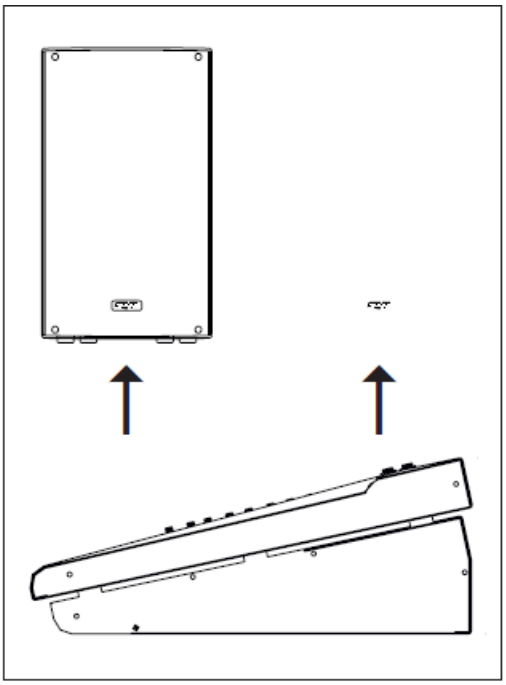
CONNECTION EXAMPLES

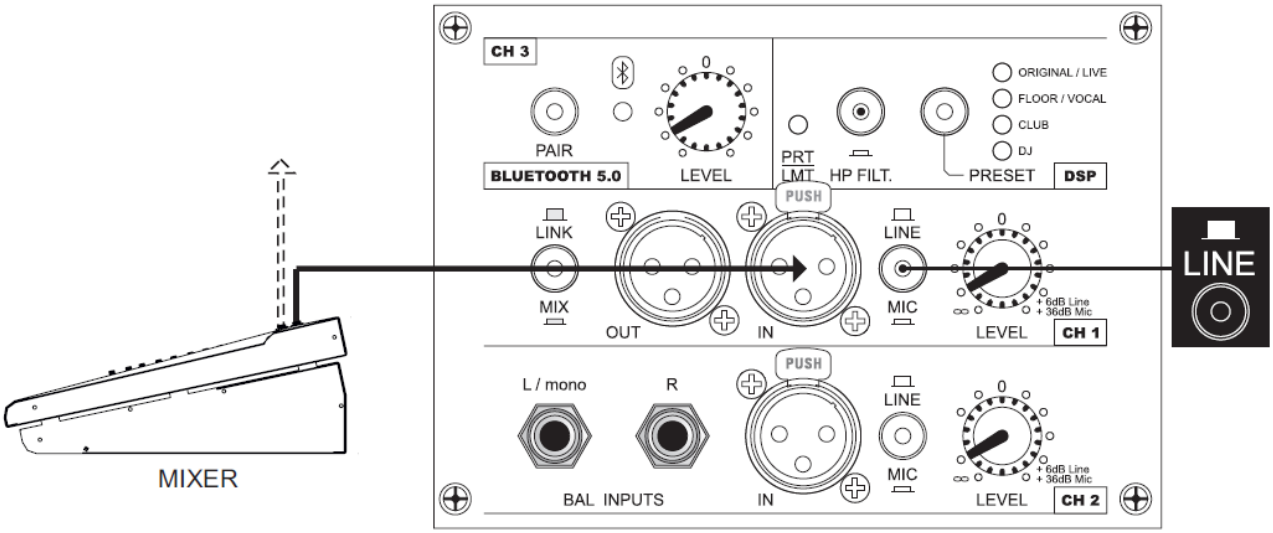
Configuration of 1 speaker connected to 2 microphones, a keyboard and CD/MP3 player.





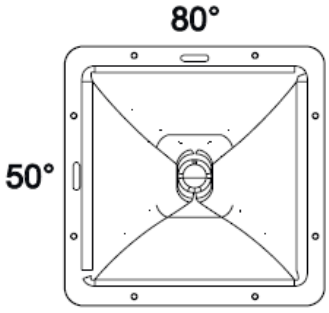
Basic configuration with two speakers and mixers



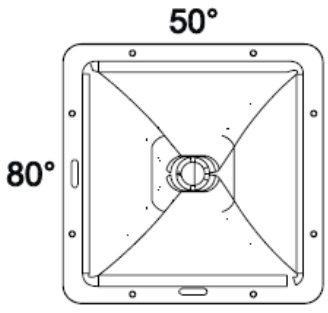


ROTATABLE HORN

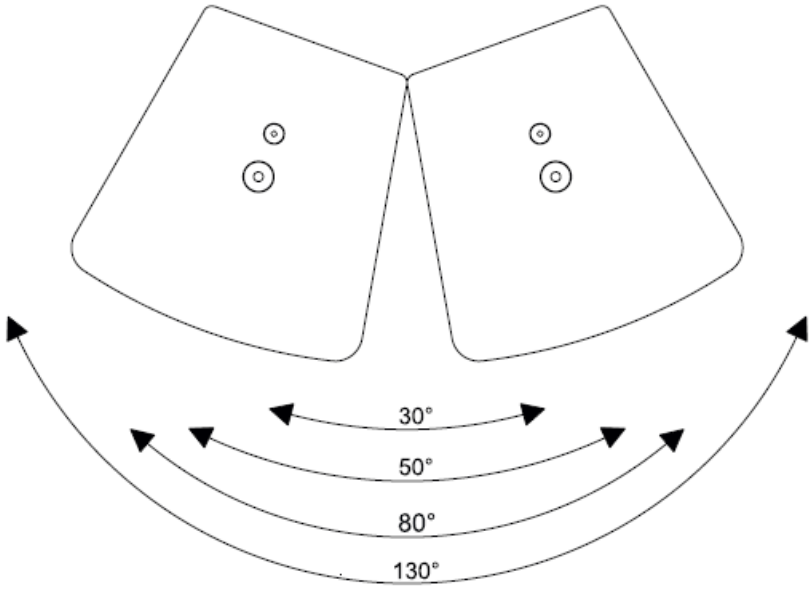
The X-PRO models feature a constant directivity rotatable horn. The constant directivity rotatable horn permits getting a response whose frequency is almost constant in every direction covered by horn operation and a balanced sound timbre emission over the whole coverage angle. Horn rotaion changes the dispersion angle so as to use the speakers in horizontal position or when they are aligned in a array.



Horn coverage angle



Rotated horn coverage angle

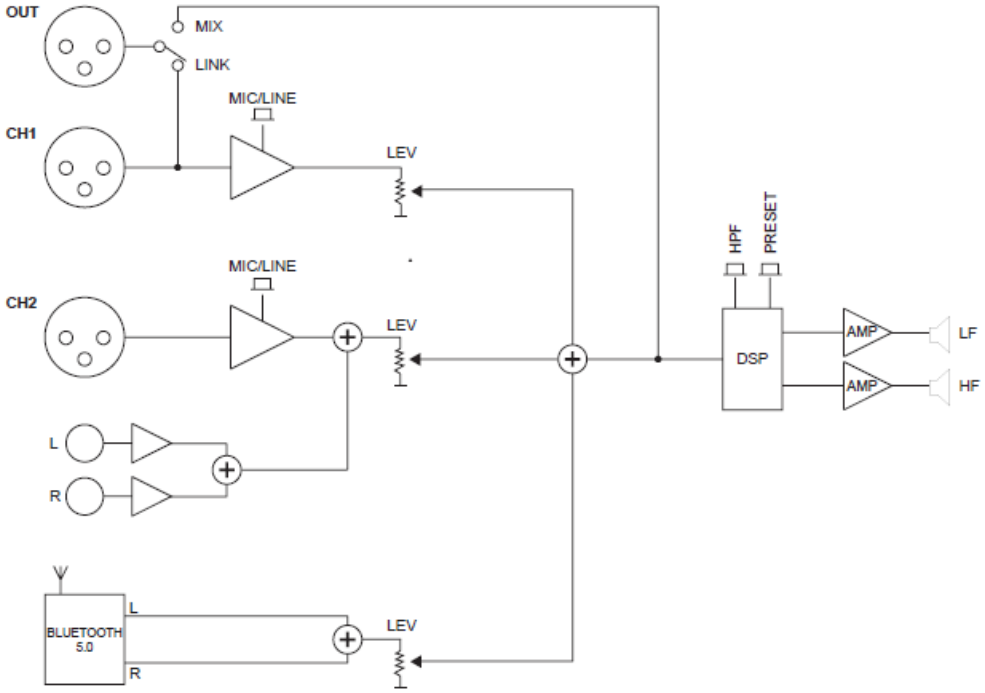


- 30° : with 50° horn position
- 50° : with 80° horn position
- 80° : total coverage with 50° horn position
- 130° : total coverage with 80° horn position

TECNICAL SPECIFICATIONS

		110 A	112 A	115 A	
Configuration	vie w ay vi ewed	2	2	2	Configuration
peak LF/HF peak LF/HF	W	1200/300	1200/300	1200/300	Built-in amplifier peak LF/ HF
	-6dB	58Hz – 20KH z	50Hz – 20KH z	42Hz -20KHz	Frequency response
	mm i nch	250-bobina 6 410 – 2.5 coil 250-bobine 6 4250-spule 64	320-bobina 6 412 – 2.5 coil 320-bobine64 320-spule 64	380-bobina 6 415 – 2.5 coil 380-bobine 6 4380-spule 6 4	Low frequency
	mm i nch	25-bobina 35 1 – 1.4 coil25-bobine 3525-spule 35	25-bobina 35 1 – 1.4 coil25 -bobine 3525 -spule 35	25-bobina 35 1 – 1.4 coil25 -bobine 3525 -spule 35	High frequency
peak SPL max cont. / pea k	dB	123 / 127	124 / 129	125 / 130	Max SPL cont. / peak Max Schalldruck cont. / peak
Dispersion	H x V	80° x 50°ruotabile – rotatable	80° x 50°ruot abile – rotata ble	80° x 50°ruot abile – rotata ble	Dispersion
	kOh m	22	22	22	In put impedance
	VA	500	500	500	AC power requirement
		XLR IN/OUT, Jack ST	XLR IN/OUT, Jack ST	XLR IN/OUT, Jack ST	Input connectors
	m ft	5 16,4	5 16,4	5 16,4	Power cord
	mm i nch	314 x 550 x 3 1512,36 x 21, 65 x 12,40	369 x 640 x 3 7014,52 x 25, 19 x 14,56	439 x 735 x 44017,28 x 2 8,93 x 17,32	Net dimension (WxHxD)
	Kg lb	13,529,76	18 39,68	22 48,50	Net weight
	mm i nch	410 x 625 x 4 1016,14 x 24, 60 x 16,14	465 x 715 x 4 6518,30 x 28, 14x 18,30	535 x 810 x 53521,06 x 3 1,88 x 21,06	Transport dimensions (Wx HxD)
	Kg lb	15, 5 34,17	20,8 45,85	25 55,11	Transport weight

BLOCK DIAGRAM



WARNING: where affixed on the equipment or package, the barred waste bin sign indicates that the product must be separated from other waste at the end of its working life for disposal. At the end of use, the user must deliver the product to a suitable recycling centre or return it to the dealer when purchasing a new product. Adequate disposal of the decommissioned equipment for recycling, treatment and environmentally compatible disposal contributes in preventing potentially negative effects on the environment and health and promotes the reuse and/or recycling of equipment materials. Abusive product disposal by the user is punishable by law with administrative sanctions. All informations included in this operating manual have been scrupulously controlled; however FBT is not responsible for eventual mistakes. FBT Elettronica SpA has the right to amend products and specifications without notice.

- This symbol used on the main switch to indicate the “ON” position.
- Protective earth (ground): To identify any terminal which is intended for connection to an external conductor for protection against electric shock in case of a fault, or the terminal of a protective earth (ground) electrode.
- CE The product complies with the essential requirements of the relevant European health, safety and environmental protection legislation.
- Allternating current: To indicate on the rating plate that the equipment is suitable for alternating current only; to identify relevant terminals

B&C AND NEUTRIK ARE THE TRADEMARKS OF THEIR RESPECTIVE OWNERS, THE “BLUETOOTH®” WORD MARK AND LOGOS ARE REGISTRED TRADEMARKS OWNDE BY BLUETOOTH SIG, INC.

FBT ELETTRONICA SPA
Via Paolo Soprani 1 – 62019 RECANATI – ITaly

- Tel. 071750591
- Fax. 071 7505920

- email: info@fbt.it – www.fbt.it

FCC

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.

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 tuming 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.

Warning: Changes or modifications to this unit not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

FCC Radiation Exposure Statement
The device has been evaluated to meet general RF exposure requirement. The device can be used in fixed/mobile min20cm exposure condition without restriction.

Documents / Resources

	FBT X PRO Processed Active Speaker [pdf] Instruction Manual X PRO Processed Active Speaker, X PRO, Processed Active Speaker, Active Speaker, Speaker

References

- Профессиональная акустика — Активные акустические системы.
- Home | FBT
- User Manual

Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.