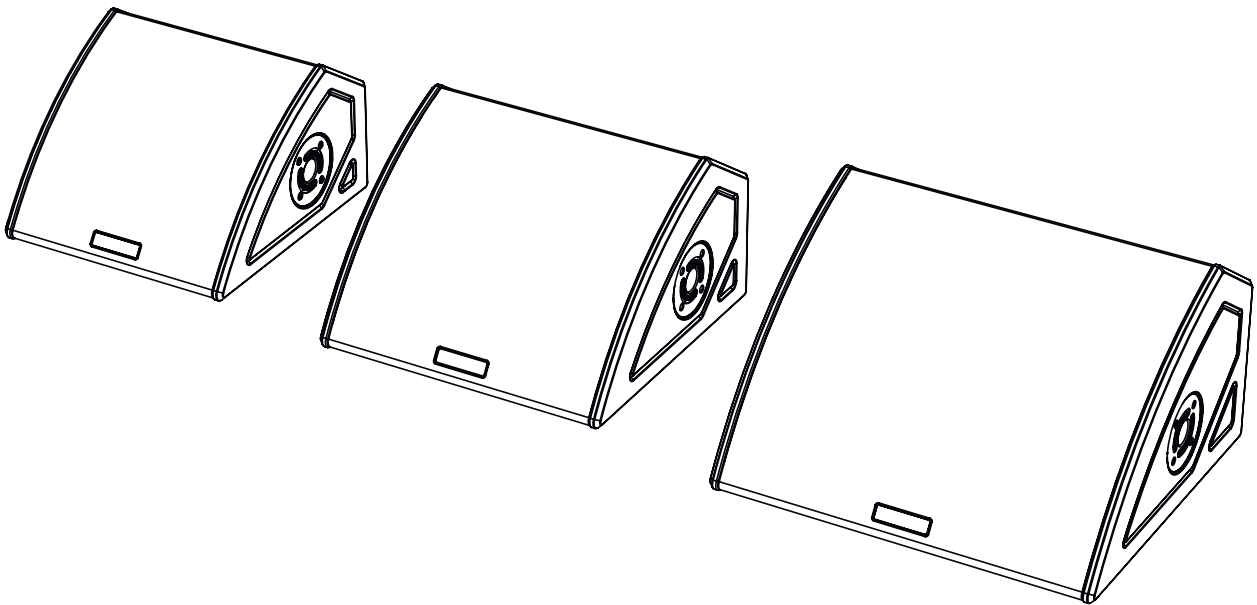


FLEXSYS
FMX10

FLEXSYS
FMX12

FLEXSYS
FMX15



USER MANUAL

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

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1. GENERAL INFORMATION

WELCOME!

Thanks for purchasing a product designed and developed in Italy by dBTechnologies! These monitors are the product of a long experience in the sound reinforcement industry. They make use of optimised sound, electronic and material research solutions.

PRODUCT OVERVIEW

The FMX line, with its optimised acoustic performance over an extended frequency range, is a high-end line for stage monitors.

Its main features are:

- coaxial configuration
- enhanced versatility, offering two positions when used as a stage monitor or installed on a tripod stand as PA amplification system
- ease of handling and quick configuration thanks to presets that can be set from the amplifier panel to suit specific application

USER REFERENCE

To make the most of your VIO loudspeaker, we recommend that you:

- read the quick start user manual included in the package and this user manual thoroughly and keep this manual during the whole life of the product.
- Register your product at <http://www.dbtechnologies.com> under “[SUPPORT](#)”.
- keep proof of purchase and WARRANTY (User manual “section 2”).

MECHANICAL AND ACOUSTICAL FEATURES

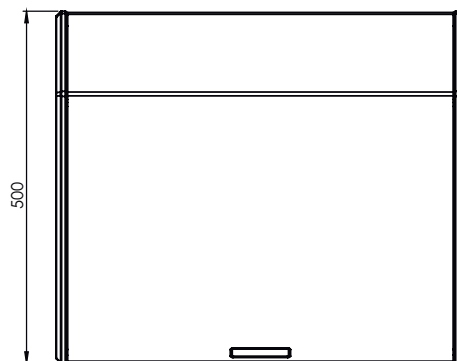
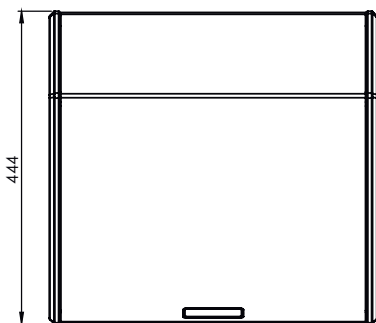
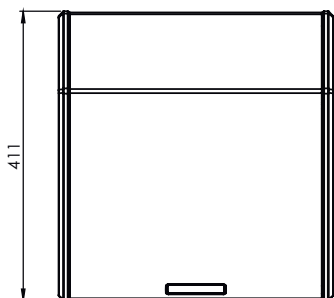
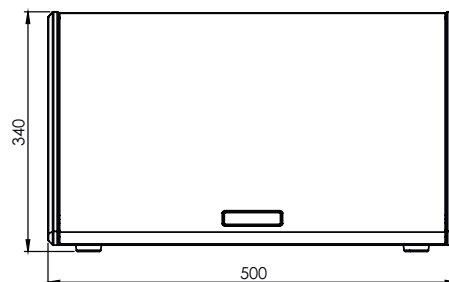
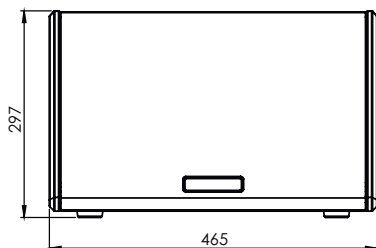
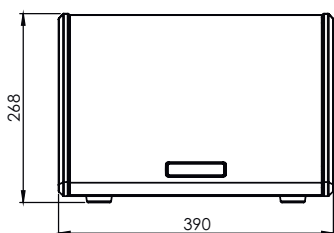
DIMENSIONS

The dimensions are:

390 mm (L), 268 mm (H), 411 mm (W) [FMX10],

465 mm (L), 297 mm (H), 444 mm (W) [FMX12],

500 mm (L), 340 mm (H), 500 mm (W) [FMX15]



SOUND COVERAGE

The monitor's particular dispersion ensures 60° (H) x 90° (V) coverage. This ensures good dispersion performance in all use configurations, including vertical arrangement. Coaxial configuration provides excellent off-axis coverage and excellent sound results at close listening distance. Also to be noted the rotary horn, for even greater versatility of use.

PACKAGE CONTENTS

When you open the FMX loudspeaker package, ensure that all contents are present. The package contains:

- FMX series monitor
- power supply cable with VDE connector
- quick start user manual and warranty documents

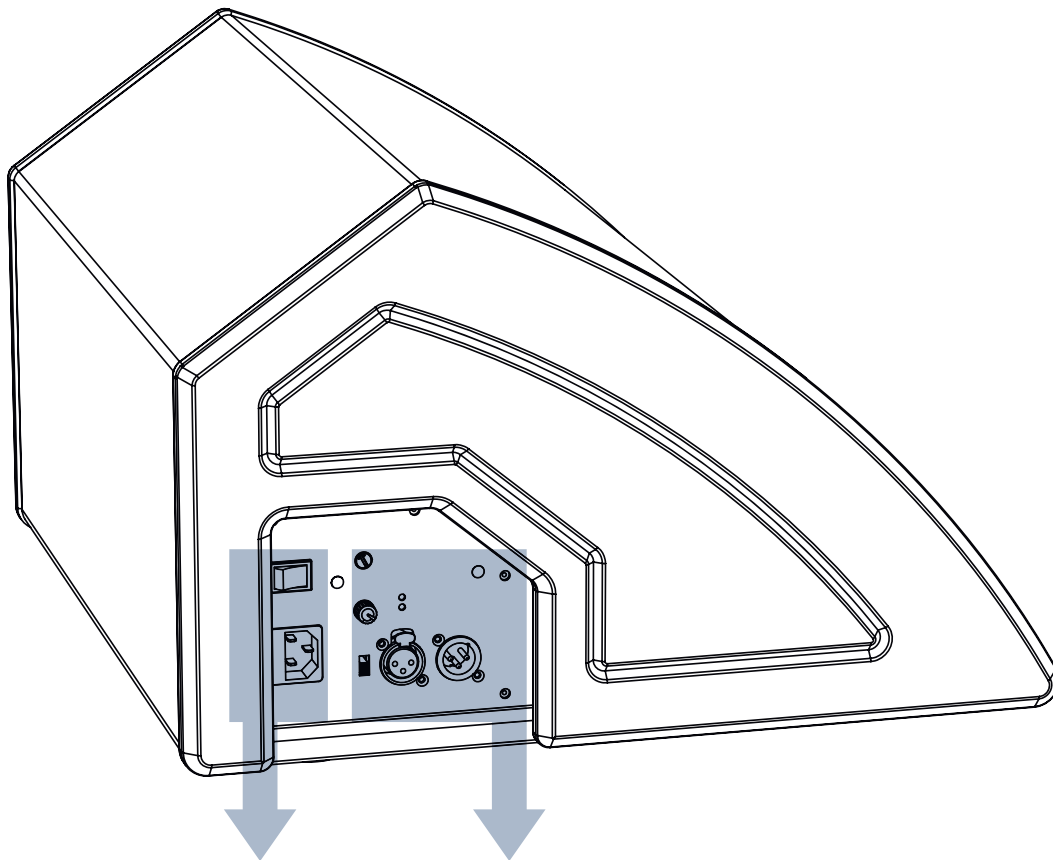
FEATURES OF THE AMPLIFIER AND CONTROL SECTIONS

The class D amplifier is the heart of the FMX monitor.

It allows delivering up to 400 W RMS [FMX 10] and 600 W RMS [FMX12-15]

The operation is silent and efficient, and does not require an active ventilation system.

System is controlled by a powerful DSP allowing an immediate and simple configuration in any context of use.



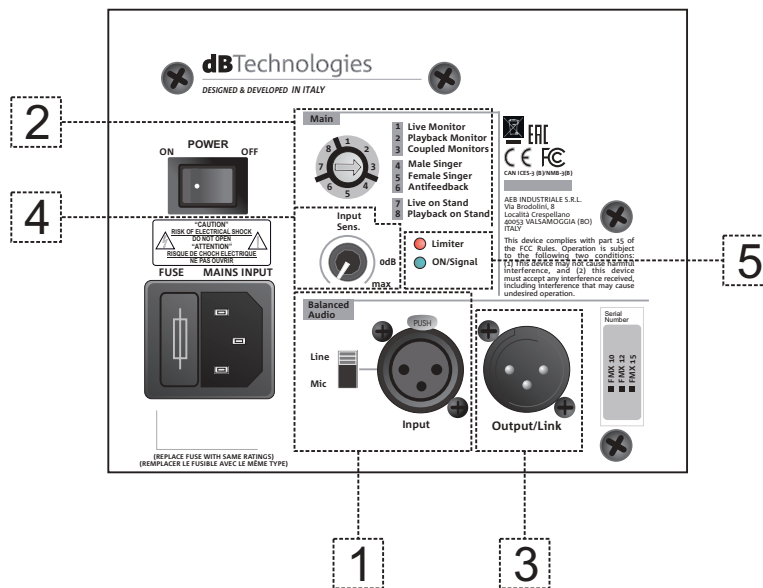
POWER SUPPLY
SECTION

INPUT, OUTPUT AND
CONTROL SECTION

The panel positioned on subwoofer back side is made up of:

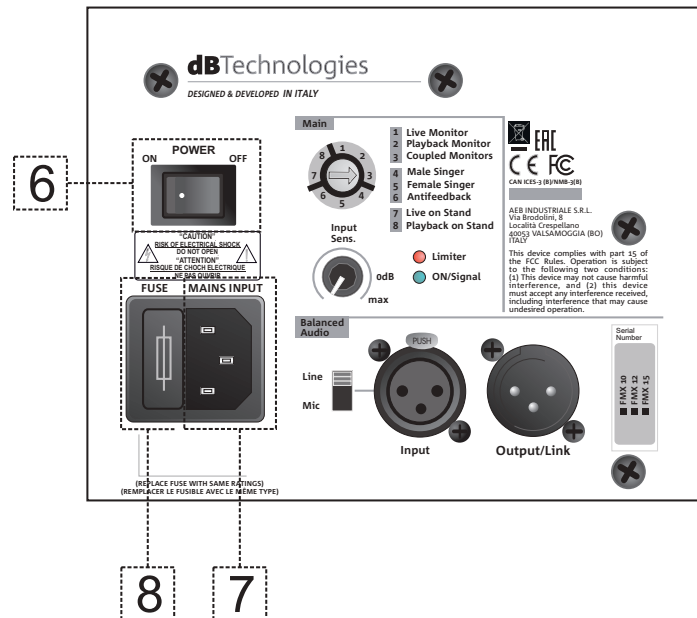
- **Input, Output and Control Section**
- **Power Supply Unit Section**

INPUT, OUTPUT AND CONTROL SECTION



- 1. AUDIO INPUT ("Balanced audio Input") with Mic/Line input selector.**
Input compatible with balanced XLR cables. Used for the input connection of the audio signal coming from the mixer (selector set to "Line") or from a microphone (selector set to "Mic").
- 2. MAIN PRESET**
Rotary switches to set the presets based on application and context of use.
- 3. AUDIO OUTPUT ("Output/Link")**
Connector compatible with balanced cables with XLR connectors. It is used for the output connection, both directly and with the link to another monitor (Link).
- 4. INPUT SENSITIVITY**
It allows adjusting the input sensitivity.
Before starting monitor and system configuration, set at 0 dB.
- 5. STATUS LEDs ("Status")**
LEDs relating to module operation.
Limiter: lights up in case of activation, and possibly provides a warning signal - to be checked - with cyclic flashing.
ON/Signal: it lights up discontinuously/continuously signalling the presence of an input signal.

POWER SUPPLY UNIT SECTION



6. POWER OFF
On/off switch.

7. VDE SOCKET
It allows the insertion of the cable with VDE connector.

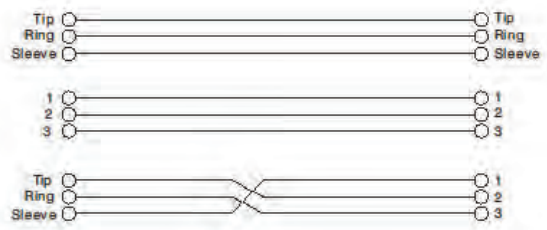
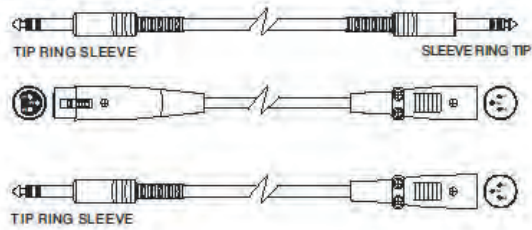
8. FUSE HOUSING
Housing for the fuse.



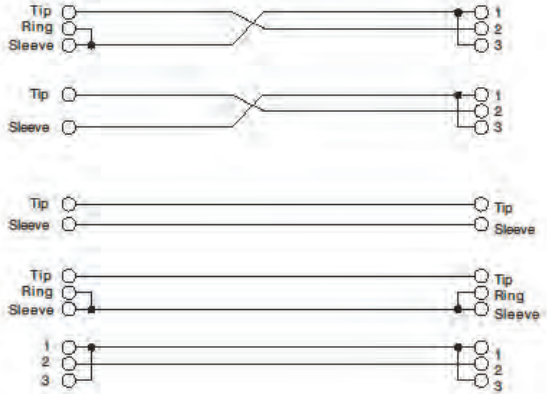
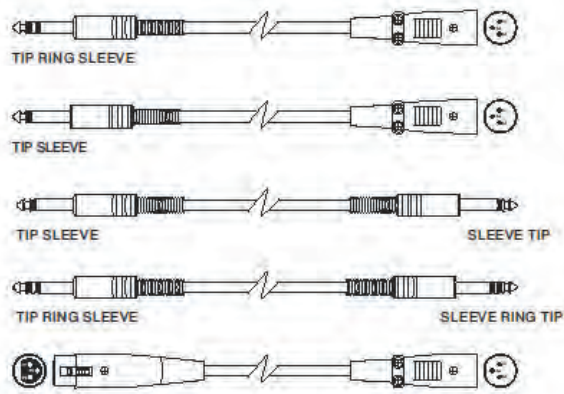
WARNING!

- The connectors of this section are also used as power switches.
- Do not obstruct the rear heat sinks of the amplifier. If the module heats up excessively, the audio volume is gradually reduced until the module is thermally stabilized. The audio is automatically restored when the normal operating temperature is reached.
- In the event of a malfunction, remove power supply immediately and disconnect the module from the power mains. Contact an authorised repair centre.
- Never attempt to disassemble the amplifier in any way.
- Only use cables with original, high quality Neutrik® connectors. Periodically check their integrity.

* **Balanced**



* **Unbalanced**



2. INSTALLATION AND CONFIGURATION



WARNING!

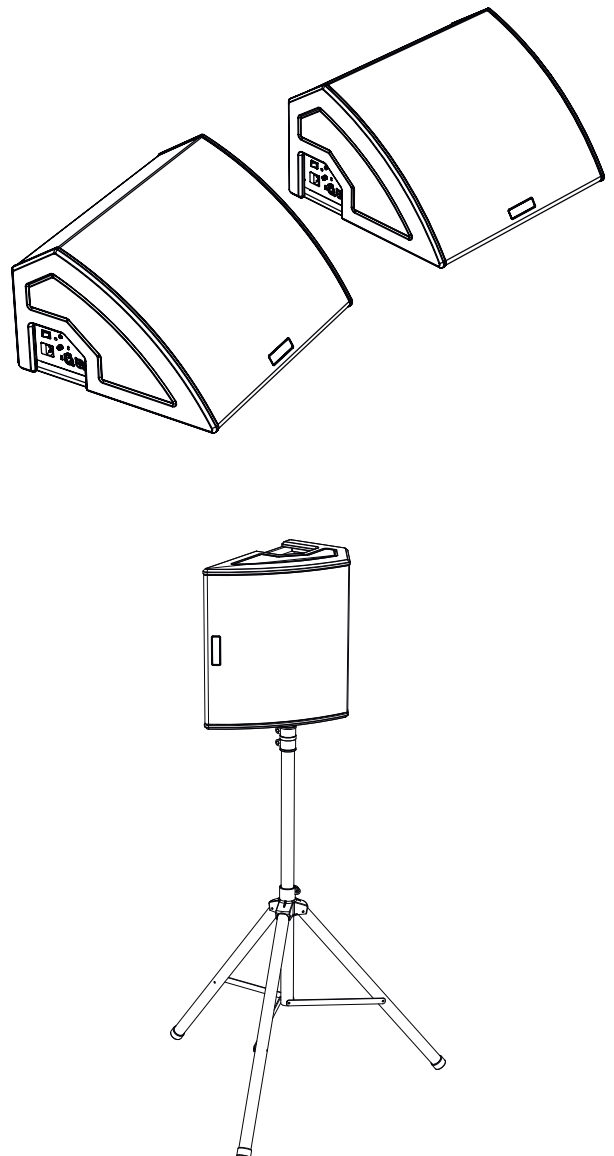
The product and accessories must be handled by experienced personnel only! Make sure that the installation is positioned in a stable and safe manner in order to avoid hazardous conditions for people, animals and/or objects.

The user is required to follow regulations and mandatory laws on safety of the country in which the product is used. For safe use, regularly check the operation of all parts and integrity before use.

Design, calculations, installation, testing and maintenance of suspended systems or professional audio stacks must be performed by authorised personnel only. AEB Industriale is not responsible for improper installations, non-compliant with safety requirements.

INSTALLATION

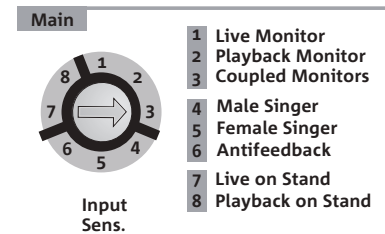
Monitor conventional floor installation is extended by the possibility of vertical configuration on a tripod stand. In the latter case, please ensure that the central foot is positioned forwards. For this type of installation, use an additional fastener (not supplied).



CONFIGURATION

The possible DSP configurations are:

- 1 Live Monitor, for the traditional live use on stage
- 2 Playback Monitor, for a music program playback
- 3 Coupled Monitors, to use several monitors at the same time
- 4 Male Singer, for the reproduction of male singing
- 5 Female Singer, for the reproduction of female singing
- 6 Antifeedback, with equalisation designed to prevent the Larsen effect
- 7 Live on Stand, for live use in stand configuration (vertical)
- 8 Playback on Stand, for a music program playback in stand configuration



3. TROUBLESHOOTING

The monitor does not turn on:

1. Check that power supply is present upstream of the installation.

The monitor turns on but produces no sound:

1. Check that the audio signal input connections or the audio signal re-links are properly carried out.
2. Check that the Input Sensitivity is set to 0 dB.
3. Check that the audio source (mixer) is properly connected and active.

4. SPECIFICATIONS

GENERAL INFORMATION

Type:	Active coaxial monitor
-------	------------------------

ACOUSTICAL SPECIFICATIONS

Frequency response [- 6 dB]:	65 - 16.5 kHz [10] / 56 - 15.5 kHz [12] / 50 - 15.5 kHz [15]
Frequency response [- 10 dB]:	57 - 19 kHz [10] / 52 - 19 kHz [12] / 46 - 19 kHz [15]
Max SPL (1 m):	125 dB [10] / 128 dB [12-15]
HF:	1" (V.C.: 1") [10] / 1" (V.C.: 1.3") [12-15] -
LF:	10" - 12" - 15" (V.C.: 2")
Crossover frequency:	1800 Hz [10] - 1740 Hz [12-15]
Coverage:	60° x 90°

AMPLIFIER

Amplification class:	Class D
Amplification power (Peak)	800 W [10] - 1200 W [12-15]
Amplification power (RMS):	400 W [10] - 600 W [12-15]
Cooling technique:	Convection

PROCESSOR

Internal controller:	DSP 28/56 bit 48 kHz
Limiter:	Peak, RMS, Thermal

USER INTERFACE

Indicator LEDs:	Limiter, Signal, Mute/prot, Ready
Controls	Sensitivity / Preset / Line-Mic switch

INPUTS AND OUTPUTS

Power supply inputs:	VDE
Audio inputs:	1x XLR IN balanced (insulation: Floating ADC)
Audio outputs:	1x XLR link OUT balanced, HPF Xover audio

POWER SUPPLY SPECIFICATIONS (ABSORPTION)

Absorption at 1/3rd of power in maximum use conditions (**):	0.8 A (220-240V~) - 1.4 A (100-120V~) [10] / 1.2 A (220-240V~) - 2 A (100-120V~) [12-15]
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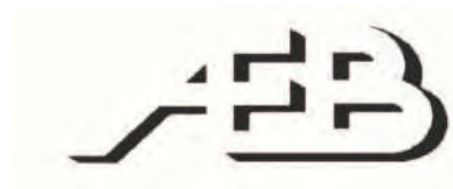
**** NOTE FOR INSTALLER:** Values refer to 1/3rd of power, under heavy operating conditions (music programme with frequent clipping and limiter activation). In case of professional installations and tours we recommend sizing according to these values.

MECHANICAL SPECIFICATIONS

Material:	cabinet made from painted plywood
Grille:	full metal - CNC machining
Handles:	integrated

Width:	390 mm [10] - 465 mm [12] - 500 mm [15]
Height:	268 mm [10] - 297 mm [12] - 340 mm [15]
Depth:	411 mm [10] - 444 mm [12] - 500 mm [15]
Weight:	11.3 kg - 13.9 kg - 16.9 kg

Product features, specifications and appearance are subject to changes without prior notice. dBTechnologies reserves the right to make changes or improvements in design or manufacture without any obligation to incorporate such changes or improvements in previously manufactured products.



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