

MANUALE D'USO
USER MANUAL
BEDIENUNGSANLEITUNG
CARACTERISTIQUES TECHNIQUES





DESCRIPTION

The bi-amped DVX DM stage monitor speaker series is equipped with DIGIPRO® series class D amplifier. This high-efficiency amplifier delivers high output power in a compact size and low weight. Thanks to its high efficiency the cooling of the amplifier module is obtained statically, thus avoiding the use of a external fans.

The power supply circuits of the DIGIPRO® amplifier has been conceived to work in fullrange mode; thanks to the SMPS (Switched-Mode Power Supplies) technology with PFC (Power Factor Correction) the operation with supply voltages between 100 Vac and 240Vac is guaranteed by ensuring the same sound performances even with floating and non-stabilized power supply systems.

DVX DM 28

The bi-amped active stage monitor is equipped with a DIGIPRO* amplifier delivering 500W RMS for the bass section and 250W RMS for the high frequency section.

The active two-way speaker features two neodymium 8" (voice coil 2.5") woofers and a neodymium 1" (voice coil 1.75") compression driver installed on a CD- horn with double horizontal dispersion 90°x60°-40°.

The speaker is made of 15mm birch ply wood, the 2 recessed handles on each side of the speaker are enabling easy transport and installation.

DVX DM12

The bi-amped DM12 active stage monitor is equipped with a DIGIPRO® amplifier delivering 500W RMS for the bass section and 250W RMS for the high frequency section. The DM12 active two-way speaker features a neodymium 12° (voice coil 3°) woofer and a neodymium 1.4" (voice coil 2.5") compression driver installed on a 40°x90° aluminium CD-horn.

The speakers' horizontal directivity is 40° by default factory setting.

The speaker is made of 15mm birch ply wood, the 2 recessed handles and the 6 M8 threads located on the sides and the back of the speaker are enabling easy transport and installation.

On the right side of the cabinet (bottom), there is a standard pole mount cup (D36mm) made of aluminium.

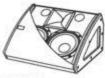
DVX DM15

The bi-amped DM15 active stage monitor is equipped with a DIGIPRO® amplifier delivering 500W RMS for the bass section and 250W RMS for the high frequency section. The DM15 active two-way speaker features a neodymium 15" (voice coil 3.5") woofer and a neodymium 1.4" (voice coil 2.5") compression driver installed on a 40°x60° aluminium CD-hom.

The speakers' horizontal directivity is 40° by default factory setting.

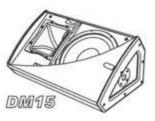
The speaker is made of 15mm birch ply wood, the 2 recessed handles and the 6 M8 threads located on the sides and the back of the speaker are enabling easy transport and installation.

On the right side of the cabinet (bottom), there is a standard pole mount cup (D36mm) made of aluminium.



DM28





CONTROLS AND FUNCTIONS

1) "BALANCED INPUT" INPUT CONNECTOR

Balanced input at line level. Accepts "XLR" sockets.

2) "BALANCED LINK/OUT" OUTPUT CONNECTOR

The "XLR" connector connected in parallel with input (1) can be used to send the input audio signal to another amplified speaker.

3) "LIMITER" INDICATOR LIGHT

This indicator shows red to indicate that the internal limiter circuit has tripped. This prevents amplifier distortion and protects the speakers against overloads.

4) "SIGNAL" INDICATOR LIGHT

This indicator shows green to indicate the presence of the audio signal (at a level of -20dB).

5) "MUTE" INDICATOR LIGHT

This yellow indicator indicates amplifier status.

The LED is off in normal operating conditions.

6) "READY" INDICATOR LIGHT

This indicator shows green to indicate that the main power voltage is correct. The LED shows green normal operating conditions

7) "INPUT SENS" INPUT SENSITIVITY CONTROL

This control adjusts the sensitivity of the signal amplifier input.

This control does not affect the "BALANCED LINK/OUT" output level

8) "MODE" SWITCH

This two-way switch allows to choose between two different system presets. The "STAGE MONITOR" position makes its use easier in the monitor application by limiting the low frequencies, which are emphasized by the floor. The "FLAT" position allows linear response when used vertically on speaker stand.

9) "MAINS INPUT" POWER SOCKET

For connecting the power cable provided.

The connector used for mains connection is a POWER CON® (blue) socket

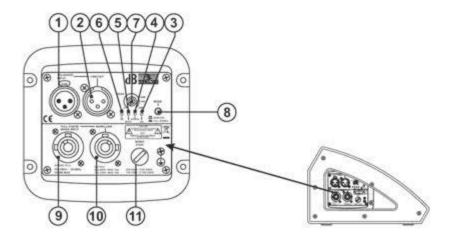
10) "MAINS OUTPUT LINK" POWER SOCKET

For linking the mains power. The output is connected in parallel with input (9) and can be used to power another active speaker.

The connector is a POWER CON® (grey) socket

11) "MAINS FUSE" FUSE CARRIER

Mains fuse housing.



CHARACTERISTICS

Front Grille

The speakers's components in the buffle are protected by 1.5mm metal steel grille covered by foam on backside.

Cooling

The amplifier is cooled by means of the aluminium panel placed on the bottom of the speaker.

The thermal protection is ensured by an internal circuit which controls the temperature of the amplifier and protects this against any risk of overheating thus limiting the general volume (temperature >70°C).

If the temperature reaches the maximum operating temperature (>80°C), the audio signal is set to the "MUTE" position and it will be indicated by the switching on of the yellow "MUTE" LED.

The required volume and all functions will be restored automatically when the normal operating temperatures are reached.

Protection

When the yellow "MUTE" LED turns on continuously, it means that a malfunction has been detected on the speaker, thus setting this to the mute position.

Perform the checks listed below:

- Check if the speaker is properly connected to the power supply.
- Make sure that the power supply is of correct voltage.
- Check that the amplifier is not overheated.
- Disconnect the speaker from the mains power supply, wait for a few minutes and connect it again.

If after these tests the yellow "MUTE" LED is still on, please contact an authorised service centre.

CONNECTIONS

Connecting to the mains supply

Each active speaker features its own power cable. Connection is done by a Neutrik POWER CON® (blue) model which permits easy and fast connection to the speaker as well as being an excellent locking system.

The same connector serves as a switch to turn ON and OFF the active loudspeaker by turning the connector to the left (OFF) or right (ON).

The active speaker must be connected to a power supply able to deliver the maximum required power.

Main power supply linking

On the rear of the speaker, a Neutrik POWER CON® connector (grey) offers linking the mains power supply.

This socket links the power supply to another speaker, thereby reducing the direct connections to the mains. Maximum amplifier input power is shown on the amplifier panel. The maximum number of speakers connected together varies of maximum power and of the maximum allowed current of the first power socket.

ROTATING HORN (only for DVX DM12 and DVX DM15)

When used horizontally, the loudspeaker allow to maintain the same coverage angle by featuring a rotating horn.

The speakers are always supplied by the manufacturer with the horn positioned horizontal at 40° by default.

If you wish to change the coverage angle (FIG. 5):

- unscrew the fixing screws of the grille
- remove the front protective grille by slightly pressing on one side and taking the grille off the recessed slots
- unscrew the eight fixing screws of the horn
- rotate the horn in the desired position (the horn should never be removed from the driver!)
- tighten the fixing screws of the horn
- put the grille back in the recessed slots and tighten the screws of the grille.

EMICLASSIFICATION

According to the standards EN 55103 this equipment is designed and suitable to operate in E3 (or lower E2, E1) Electromagnetic environments.

LOUDSPEAKER INSTALLATION



WARNING

Make sure that the loudspeaker is securely installed in a stable position to avoid any injuries or damages to persons or property.

For safety reasons do not place one loudspeaker on top of another without proper fastening systems. Before hanging the loudspeaker check all the components for damages, deformations, missing or damaged parts that may compromise safety during installation.

If you use the loudspeakers outdoors avoid places that are exposed to bad weather.

The loudspeaker has the following mounting options:

- bookshelf (Fig. 1)
- on speaker stands (Fig.2)
- suspended with M8 eyebolts (only DM 12 and DM 15) (Fig.3)



To hang the loudspeaker use only one eyebolt for each hanging point The hanging points are of M8 threads.

Do not unscrew both bolts recessed in the housing!







WRONG

SAFETY INSTRUCTIONS FOR ACCESSORIES



Contact dB Technologies for accessories to be used with speakers.

Will not accept any responsibilty when inappropriate accessories or not suitable additional devices are used.

TECHNICAL SPECIFICATIONS

	DVX DM28	DVX DM12	DVX DM15
System	Active Bi-Amp	Active Bi-Amp	Active Bi-Amp
Type of amplifier	Class D	Class D	Class D
RMS power	500W+250W	500W+250W	500W + 250W
Frequency response	89-19000Hz (-3dB) 70-20000Hz (-10dB)	68-19000Hz (-3dB) 55-20000Hz (-10dB)	59-19000Hz (-3dB) 50-20000Hz (-10dB)
Crossover	1600Hz - 24dB/oct	1400Hz-24dB/oct	1350Hz - 24dB/oct
Sound pressure (max SPL)	130dB	131dB	132dB
Components	2x8" woofer - 2.5" voice coil Neodimio 1x1" compression driver - 1.75" voice coil	1x12"woofer - 3"voice coil Neodimio 1x1.4"compression driver - 2.5" voice coil	1x15" woofer - 3.5" voice coil Neodimio 1x1.4" compression driver - 2.5" voice coil
	Neodimio	Neodimio	Neodimio
Dispersion	90°x60-40°	40"x90"	40"x60"
Input sensitivity	max-3dBu	max-3dBu	max-3dBu
Impedance input	Balanced 20Kohm Unbalanced 10Kohm	Balanced 20Kohm Unbalanced 10Kohm	Balanced 20Kohm Unbalanced 10Kohm
Powersupply	Full-range con PFC 100-240Vac 50-60Hz	Full-range con PFC 100-240Vac 50-60Hz	Full-range con PFC 100-240Vac 50-60Hz
Colour	Black	Black	Black
Dimension (WxHxD)	480x265x418mm	660x305x378mm	734x338x442mm
Weight	14Kg	17.5Kg	21Kg
Flying support		6×M8	6×M8
Pole mount cup		D38mm(aluminium)	D36mm (aluminium)
Handle	2 (1each side)	2 (1 each side)	2 (1eachside)
Rotating horn		Yes	Yes