





D15 HP



MANUALE D'USO - Sezione 1 **USER MANUAL - Section 1 BEDIENUNGSANLEITUNG - Abschnitt 1 CARACTERISTIQUES TECHNIQUES - Section 1** 

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#### DVX D12 HP

The D12 HP bi-amped active speaker is equipped with a  $DIGIPRO^{\circ}G2$  amplifier delivering 1400W.

The D12 HP is a bi-amped active speaker features 12" (voice coil 3") woofer and a 1.4" (voice coil 3") compression driver installed on a  $60^{\circ}x40^{\circ}$  aluminium CD- horn.

The speaker's horizontal directivity is 60° by default factory setting.

The speaker is made of 15mm birch ply wood, the 3 handles, the 6 flytracks, the 6 M10 threads and the 4 flypins located on the sides and the back of the speaker are enabling easy transport and installation.

The speaker has been designed to be used also as stage monitor (45° angle). By rotating the horn you can maintain the same coverage angle also when the speaker is used as monitor.

In the bottom of the box there is a standard pole mount cup (D36mm) made of aluminium.

#### <u>DVX D15 HP</u>

The D15 HP bi-amped active speaker is equipped with a DIGIPRO $^{\circ}$ G2 amplifier delivering 1400W

The D15 HP is a bi-amped active speaker features a 15" (voice coil 3") woofer and a 1.4" (voice coil 3") compression driver installed on a  $60^{\circ}x40^{\circ}$  aluminium CD- horn.

The speaker's horizontal directivity is 60° by default factory setting.

The speaker is made of 15mm birch ply wood, the 3 handles, the 6 flytracks, the 6 M10 threads and the 4 flypins located on the sides and the back of the speaker are enabling easy transport and installation.

The speaker has been designed to be used also as stage monitor (45° angle). By rotating the horn you can maintain the same coverage angle also when the speaker is used as monitor.

In the bottom of the box there is a standard pole mount cup (D36mm) made of aluminium.

#### COMMANDS AND FUNCTIONS (reference page 29)

#### 1) "BALANCED INPUT" CONNECTOR

These balanced inputs can be used to connect balanced or unbalanced microphones or audio sources at line level (0dB) (eg. preamplifier, mixer, recorder, CD player, musical instrument, ...).

#### 2) "LINK" - "INPUT-LINK" CONNECTORS

The balanced connector is connected in parallel with input (1) and can be used to send the audio signal to other amplified speakers, recorders or supplementary amplifiers.

#### 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) "READY" INDICATOR LIGHT

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

#### 6) "SENSITIVITY" INPUT SENSITIVITY CONTROL

This control adjusts the sensitivity of the signal amplifier input. This control does not affect the "LINK" - "INPUT - LINK" output level.

#### 7) "MODE" SWITCH

This two-way switch allows to choose between two different system presets. The "FULL RANGE" position allows linear response of the speaker, which is mainly suitable for the "live" application.

The "STAGE MONITOR" position makes its use easier in the monitor application by limiting the low frequencies, which are emphasized by the floor.

#### 8) "INPUT SENS" SWITCH

Position the switch in LINE to use a line level source (0 dB) or MIC to use a microphone.

#### 9) FUSE CARRIER "FUSE"

Mains protection fuse housing. The fuse specifications are found in the data plate of the apparatus. In case of failure to replace it with one of the same type and value specified.

#### 10) "MAINS INPUT" POWER SOCKET

To connecting the power cable provided. The connector used for mains connection is a POWER CON® (blue) socket

#### 11) "MAINS LINK" OUTPUT POWER SOCKET

To linking the mains power. The output is connected in parallel with input (10) and can be used to power another active speaker. The connector is a POWER CON® (grey) socket.

#### 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 max input power and of the maximum allowed current of the first power socket.



## CHARACTERISTICS AND PROTECTION

#### Front Grille

The speakers's components in the box are protected by 1.2mm (DVX D8HP and D10 HP) or 1.5mm (DVX D12HP and D15 HP) metal steel grille covered by foam on backside.

#### Cooling

Thermal control is provided by the internal microprocessor which, by means of two sensors. controls the temperature of the amplifier and of the power supply, avoiding overheating by limiting the overall volume.

In case of overheating (> 80 degrees) the volume decreases proportionally to the temperature increase, making the change unnoticeable.

The correct volume and all the functions are automatically restored when standard operating temperatures are reached.

#### Switch on

The amplifiers are equipped with a microprocessor to control the DSP and the amplifier.

The correct switch on of the amplifier is ensured by an initialization procedure; during this test stage the LEDs ("LIMITER", "SIGNAL" AND "READY"), located on the amplifier module, remain off for approx. 2 sec.

At the end of the switch on procedure, on the amplifier module, the "READY" green LED only remains steadily on.

In case of severe failure of the speaker, on the amplifier module, the "LIMITER" red LED flashes. The speaker switches to "mute".

#### **Failure indications and safeties**

The microprocessor is able to signal three different kinds of failure by flashing the "LIMTER" red LED on the amplifier panel before the lighting up of the "READY" green LED. The three types of failure are:

- 1) **WARNING:** a non severe error or auto-ripristinate malfunction is detected and the performance of the speaker is not limited
- LIMITATION: an error is detected and the performance of the speaker is limited (the 2) sound level is reduced by 3dB).

This does not affect the operation of the speaker since it continues to operate. However, it is necessary to call the service centre to solve the issue.

FAILURE: a severe malfunction is detected. The speaker switches to "mute". 3)

Flashing	Indication
1 or 2	Warning
3 or 4	Limitation
from 5 to 8	Failure

#### In case of failure, the "READY" green LED remains off.

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 connectit again.

If this error signaling remains active contact the authorized service center to resolve the problem.

### **ROTATING HORN**

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 90° by default for D8 HP and D10 HP speakers and with the horn positioned horizontal at 60° by default for D12HP and D15 HP speakers.

If you wish to change the coverage angle (FIG.A page 33, 34):

- 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.

## LOUDSPEAKER INSTALLATION



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 page 35)
- floor (monitor) (Fig.2 page 35)
- on speaker stands (Fig.3 page 36)
- suspended with eyebolts (Fig.4 page 36,37) or flytracks excluded DVX D8HP -(Fig.5 page 37)
- brackets supplied by the manufacturer

#### WARNING

Never use the handles to hang the speaker!



WARNING only for DVX D8HP 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!





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#### **EMICLASSIFICATION**

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

# **TECHNICAL SPECIFICATIONS**

	DVX D8HP
System	Active Bi-Amp
Type of amplifier	Class D
Power	400W RMS/800W PEAK
Frequency response	100 -19000Hz (-3dB) 75-20000Hz (-10dB)
Crossover	1850Hz - 24dB/oct
Sound pressure (max SPL)	125dB
Components	1x8" woofer - 2" voice coil 1x1" compression driver - 1.4" vc
Dispersion	90°×70°
Input sensitivity	-40dBu/-3dBu (MIC/LINE)
Impedance input	2K2ohm/20Kohm (MIC/LIN
Power supply	110-220V
Inrush current	18,7A
Housing shape	Trapezoidal
Colour	Black
Dimension (WxHxD)	250x425x260mm
Weight	9,7Kg

1.4" voice coil

# Flying support Weight

Pole mount cup

10 × M8 2 × flypin

D36mm (aluminium) 1 housing - top side

> Rotating horn Handle

#### 1x10" woofer - 2.5" voice coil 1x1" compression driver - 1.75" voice coil 2K2ohm/20Kohm (MIC/LINE) -40dBu/-3dBu (MIC/LINE) 600W RMS/1200W PEAK 50-60Hz 50-60Hz 85 -19000Hz (-3dB) 70-20000Hz (-10dB) D36mm (aluminium) 1650Hz - 24dB/oct 290x510x310mm Active Bi-Amp 110-220V $\sim$ 220-240V $\sim$ Trapezoidal 6 x flytrack 6 x M10 2 x flypin Class D °07x°06 15,8Kg 127dB 22,4A Black

IIC/LINE)

# DVX D12HP Active Bi-Amp

DVX D10HP

1x12" woofer - 3" voice coil 1x1.4" compression driver - 3" voice coil 700W RMS/1400W PEAK 68-19000Hz (-3dB) 55-20000Hz (-10dB) 1350Hz - 24dB/oct Class D 131dB

2K2ohm/20Kohm (MIC/LINE) -40dBu/-3dBu (MIC/LINE) 2 aluminium - one per side 1 aluminium - top side 50-60Hz 50-60Hz D36mm (aluminium) 370x625x395mm 110-220V  $\sim$  220-240V  $\sim$ 6 x flytrack 6 x M10 4 x flypin Trapezoidal 60°x40° 27,5Kg 22,4A Black

## DVX D15HP Active Bi-Amp

700W RMS/1400W PEAK 57-19000Hz (-3dB) 49-20000Hz (-10dB) 1320Hz - 24dB/oct Class D 132dB

1x15" woofer - 3" voice coil 1x1.4"compression driver - 3" voice coil 60°x40°

2K2ohm/20Kohm (MIC/LINE) -40dBu/-3dBu (MIC/LINE) 50-60Hz 50-60Hz D36mm (aluminium) 430x690x450mm 110-220V  $\sim$  220-240V  $\sim$ Trapezoidal 6x flytrack 6x M10 4x flypin 30,3Kg 22,4A Black

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2 aluminium - one per side 1 aluminium - top side

Yes

Yes

1 aluminium - top side

Yes

Yes