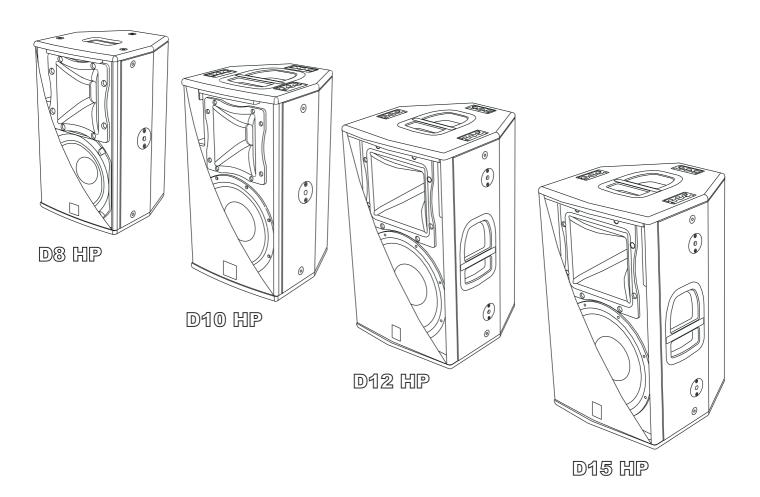


### HP<sub>SERIES</sub>







MANUALE D'USO - Sezione 1

**USER MANUAL - Section 1** 

**BEDIENUNGSANLEITUNG - Abschnitt 1** 

**CARACTERISTIQUES TECHNIQUES - Section 1** 



### **DESCRIPTION**

The speakers of DVX HP series use cutting edge digital amplifiers of the DIGIPRO® G2 series, providing with different powers 800W, 1200W and 1400W, to meet the requirements of any kind of application.

These highly efficient amplifiers provide high power with limited weight and dimension. Thanks to the low power dissipated, the cooling of the amplifier module does not require a fan.

The digital preamplifier with DSP (Digital Signal Processing) controls the audio crossover of the acoustic components, the frequency response, the limiter, and the acoustic phase alignment. A selector enables to select one of two different equalizations - "FULL RANGE" or "STAGE MONITOR" - to provide high versatility for the different applications.

The amplifiers DIGIPRO® G2 use power supplies featuring SMPS (Switched-Mode Power Supplies) technology.

This technology increases power supply efficiency and minimizes its weight.

### DXV D8 HP

The D8 HP bi-amped active speaker is equipped with a DIGIPRO® amplifier delivering 800W.

D8 HP is a bi-amped speaker features a woofer 8" (voice coil 2") and a compression driver 1" (voice coil 1.4") on a 90°x70° aluminium CD- horn.

The speaker's horizontal directivity is 90° by default factory setting.

The speaker is made of 12mm birch ply wood, the one top handle housing, the 6 flytracks, the 10 M8 threads and the 2 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.



### DVX D10 HP

The D10 HP bi-amped active speaker is equipped with a DIGIPRO<sup>®</sup> G2 amplifier delivering 1200W.

D10 HP is a bi-amped active speaker features a woofer 10" (voice coil 2,5") and a compression driver 1" (voice coil 1,75") on a 90°x70° aluminium CD-horn.

The speakers' horizontal directivity is 90° by default factory setting.

The speaker is made of 12mm birch ply wood, the one top handle in aluminum, the 6 flytracks, the 6 M10 threads and the 2 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.



### DVX D12 HP

The D12 HP bi-amped active speaker is equipped with a DIGIPRO® 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°x40° 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.



### DVX D15 HP

The D15 HP bi-amped active speaker is equipped with a DIGIPRO® G2 amplifier delivering 1400W

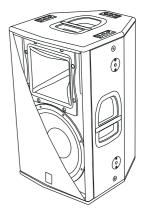
The D15 HP is a bi-amped active speaker features a 15" (voice coil 3") woofer and a 1.4" (voice coil 3") compression driver installed on a 60°x40° aluminium CD-horn.

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
- 2) **LIMITATION:** an error is detected and the performance of the speaker is limited (the 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.
- 3) **FAILURE:** a severe malfunction is detected. The speaker switches to "mute".

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 connect it 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



### **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.

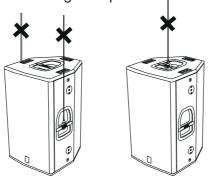
The loudspeaker has the following mounting options:

- bookshelf (Fig. 1 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!



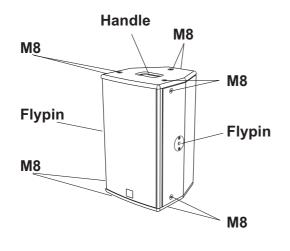


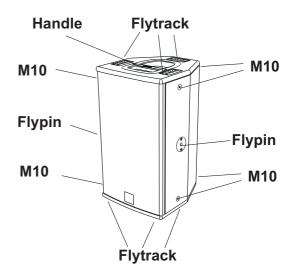


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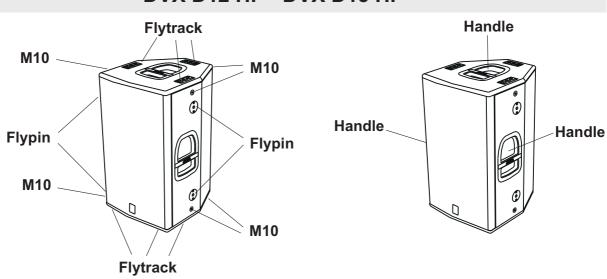
### **DVX D8 HP**

### **DVX D10 HP**





### DVX D12 HP - DVX D15 HP



### **EMICLASSIFICATION**

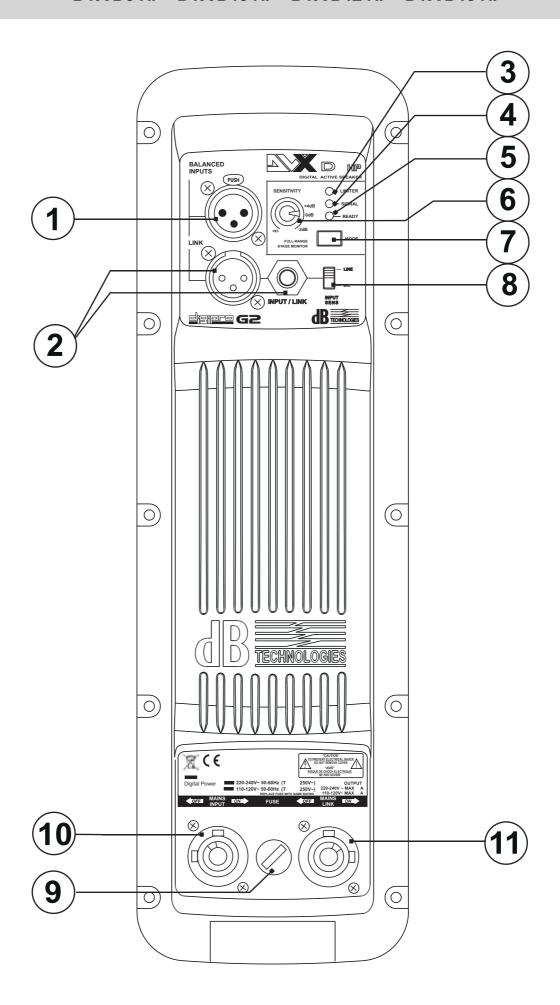
According to the standards EN 55103 this equipment is designed and suitable to operate in E3 (or lower E2, E1) Electromagnetic environments.

## user manual

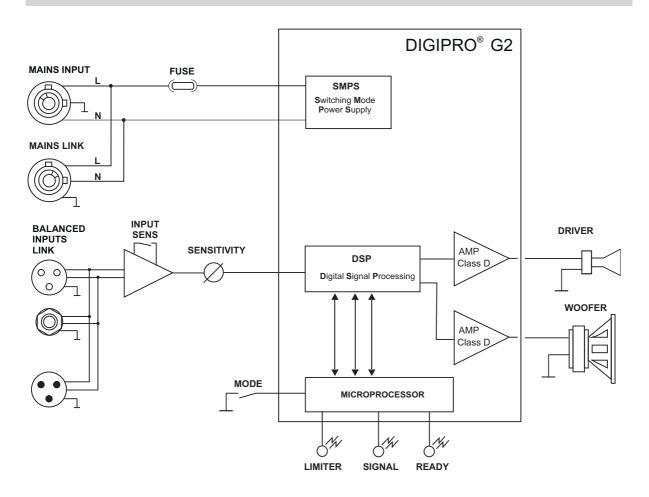
# TECHNICAL SPECIFICATIONS

	97/7 08/10	97070	910 XX	977 770
,	בוואס אאס		UVA DIZHE	TIGIO VAO
System	Active Bi-Amp	Active Bi-Amp	Active Bi-Amp	Active Bi-Amp
Type of amplifier	Class D	Class D	Class D	Class D
Power	400W RMS/800W PEAK	600W RMS/1200W PEAK	700W RMS/1400W PEAK	700W RMS/1400W PEAK
Frequency response	100 -19000Hz (-3dB) 75-20000Hz (-10dB)	85-19000Hz (-3dB) 70-20000Hz (-10dB)	68-19000Hz (-3dB) 55-20000Hz (-10dB)	57-19000Hz (-3dB) 49-20000Hz (-10dB)
Crossover	1850Hz - 24dB/oct	1650Hz - 24dB/oct	1350Hz - 24dB/oct	1320Hz - 24dB/oct
Sound pressure (max SPL) 125dB	125dB	127dB	131dB	132dB
Components	1x8" woofer - 2" voice coil 1x1" compression driver - 1.4" voice coil	1x10" woofer - 2.5" voice coil 1x1" compression driver - 1.75" voice coil	1x12" woofer-3" voice coil 1x1.4" compression driver-3" voice coil	1x15" woofer - 3" voice coil 1x1.4" compression driver - 3" voice coil
Dispersion	90°x70°	90°x70°	60°x40°	60°x40°
Inputsensitivity	-40dBu/-3dBu (MIC/LINE)	-40dBu/-3dBu (MIC/LINE)	-40dBu/-3dBu (MIC/LINE)	-40dBu/-3dBu (MIC/LINE)
Impedance input	2K2ohm/ 20Kohm (MIC/LINE)	2K2ohm/20Kohm (MIC/LINE)	2K2ohm/ 20Kohm (MIC/LINE)	2K2ohm/ 20Kohm (MIC/LINE)
Power supply	110-220V∼ 50-60Hz 220-240V∼ 50-60Hz	$110-220V \sim 50-60Hz$ $220-240V \sim 50-60Hz$	$110-220V \sim 50-60$ Hz $220-240V \sim 50-60$ Hz	$110-220V \sim 50-60Hz$ $220-240V \sim 50-60Hz$
Inrush current	18,7A	22,4A	22,4A	22,4A
Housing shape	Trapezoidal	Trapezoidal	Trapezoidal	Trapezoidal
Colour	Black	Black	Black	Black
Dimension (WxHxD)	250x425x260mm	290x510x310mm	370x625x395mm	430x690x450mm
Weight	9,7Kg	15,8Kg	27,5Kg	30,3Kg
Flying support	10× M8 2× flypin	6× flytrack 6× M10 2× flypin	6x flytrack 6x M10 4x flypin	6x flytrack 6x M10 4x flypin
Pole mount cup	D36mm (aluminium)	D36mm (aluminium)	D36mm (aluminium)	D36mm (aluminium)
Handle	1 housing - top side	 1 aluminium - top side	2 aluminium - one per side 1 aluminium - top side	2 aluminium - one per side 1 aluminium - top side
Rotating horn	Yes	Yes	Yes	Yes

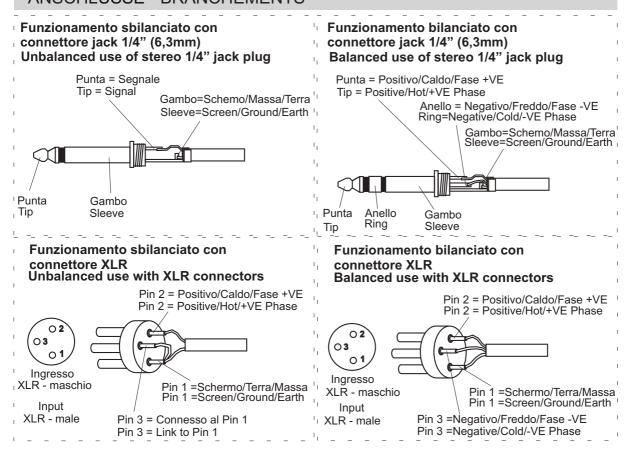
### DVX D8 HP - DVX D10 HP - DVX D12 HP - DVX D15 HP



### SCHEMA A BLOCCHI - BLOCK DIAGRAM BLOCKSCHALTBILD - SCHEMAS FONCTIONNELS



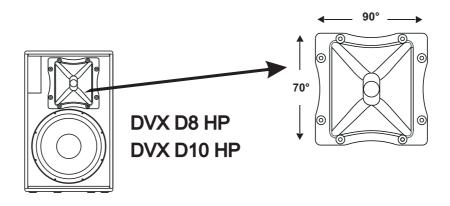
### COLLEGAMENTI - CONNECTIONS ANSCHLÜSSE - BRANCHEMENTS

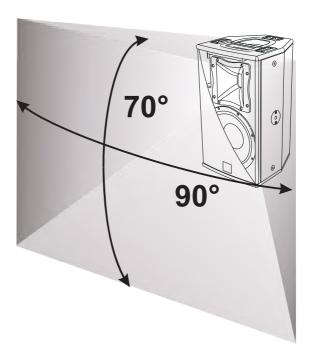


### **DVX D8 HP DVX D10 HP** 0 510 **(** 310 290 260 250 45°

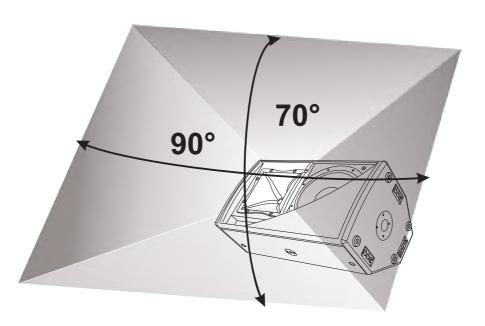
## **DVX D12 HP DVX D15 HP ( ③ (** 370 395 450 430

### ANGOLO DI COPERTURA TROMBA / HORN ANGLE COVERED HOCHTONHORN ABSTRAHLWINKEL / ANGLE DE COUVERTURE COTÈ

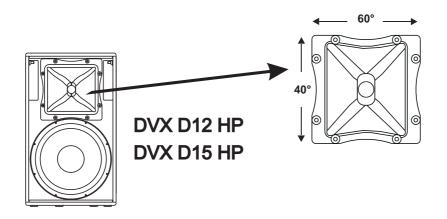


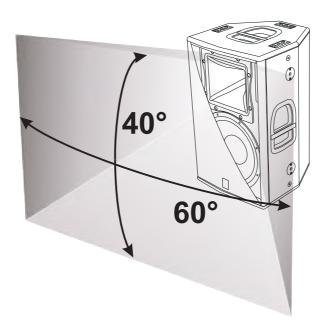


Utilizzo a pavimento (monitor) con tromba ruotata Floor use (monitor) with rotated horn. Verwendung auf dem Boden (monitor) mit gedrehtem Horn. Utilisation au sol (écran) avec cône tourné

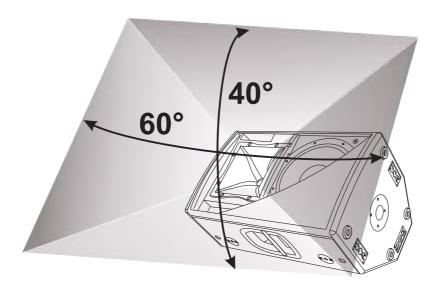


### ANGOLO DI COPERTURA TROMBA / HORN ANGLE COVERED HOCHTONHORN ABSTRAHLWINKEL / ANGLE DE COUVERTURE COTÉ





Utilizzo a pavimento (monitor) con tromba ruotata Floor use (monitor) with rotated horn. Verwendung auf dem Boden (monitor) mit gedrehtem Horn. Utilisation au sol (écran) avec cône tourné



### ISTRUZIONI DI SICUREZZA PER ACCESSORI SAFETY INSTRUCTIONS FOR ACCESSORIES ZUBEHÖR SICHERHEITSHINWEISE INSTRUCTIONS DE SÉCURITÉ POUR LES ACCESSOIRES



Contattare dB Technologies per gli accessori da utilizzare a corredo.

Si declina ogni responsabilità da un utilizzo inappropriato degli accessori o di dispositivi aggiuntivi non idonei allo scopo.

Contact dB Technologies for accessories to be used with speakers.

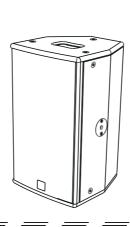
Will not accept any responsibilty when inappropriate accessories or not suitable additional devices are used.

Kontaktieren sie dBTechnologies für passendes Lautsprecherzubehör. Falls unpassendes Zubehör verwendet wird, wird jegliche Haftung ausgeschlossen.

Contact dBTechnologies pour les accessoires à utiliser avec la machine.

N'accepterons pas toutes les responsabilités lorsque des accessoires inappropriés ou ne conviennent pas à des dispositifs supplémentaires sont utilisés.

UTILIZZO IN APPOGGIO SUPPORTED USE ANWENDUNG UTILISATION EN APPUI



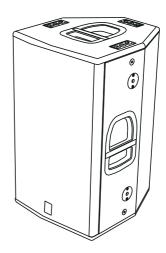
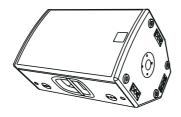
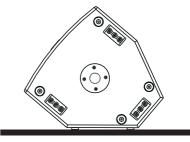
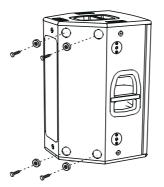


Fig. 1

UTILIZZO A PAVIMENTO (MONITOR) FLOOR USE (MONITOR) VERWENDUNG AUF DEM BODEN (MONITOR) UTILISATION AU SOL (ÉCRAN)





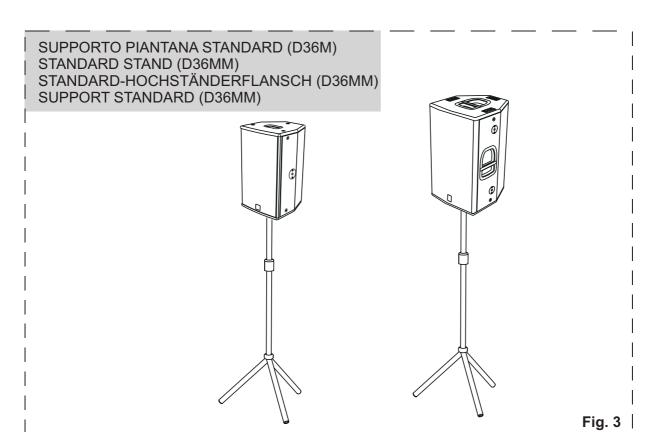


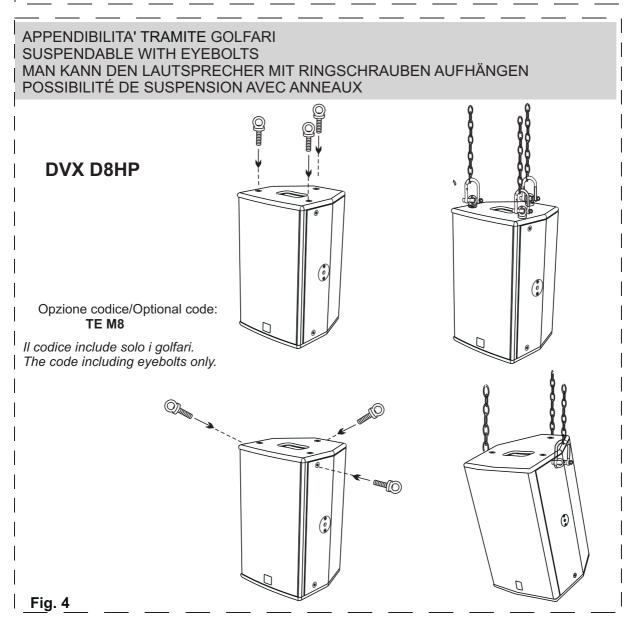
SOLO DVX D12 HP - D15 HP NUR DVX D12 HP- D15 HP
ONLY DVX D12 HP - D15 HP SEULEMENT DVX D12 HP- D15 HP

**Nota:** E' possibile montare 4 piedi in gomma sul fianco per utilizzo in appoggio (in dotazione) **Note:** It is possible to mount 4 rubber feet on the side for bookshelf use (provided)

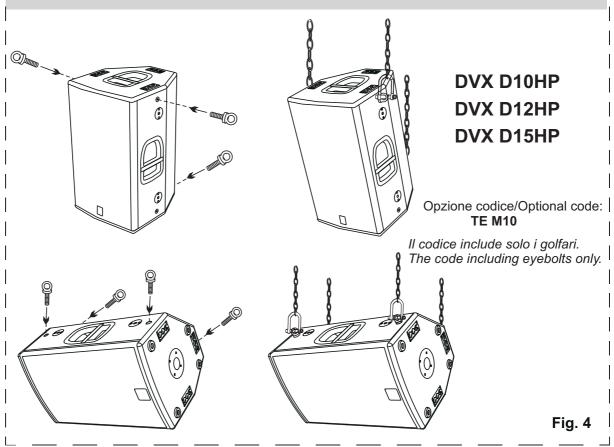
**Anmerkung**: Zur Verwendung als Boden-Monitor können die 4 beiliegende Gummifüße montiert werden.

**Note:** Il est possible de monter quatre pieds caoutchouc sur le coté puor une utilisation en appui (en dotation)

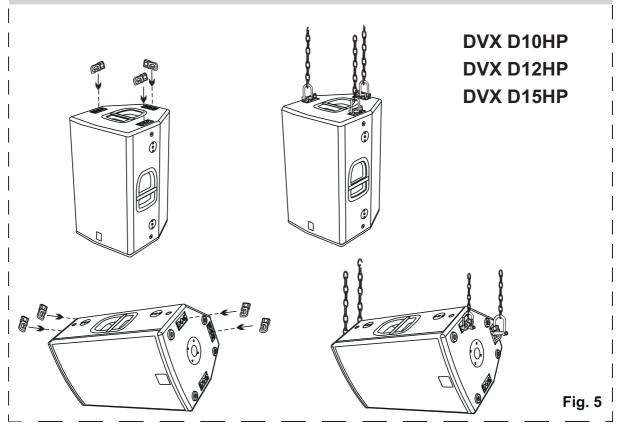




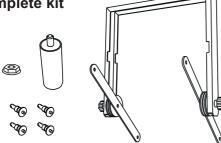
### APPENDIBILITA' TRAMITE GOLFARI SUSPENDABLE WITH EYEBOLTS MAN KANN DEN LAUTSPRECHER MIT RINGSCHRAUBEN AUFHÄNGEN POSSIBILITÉ DE SUSPENSION AVEC ANNEAUX



APPENDIBILITA' TRAMITE FLYTRACKS SUSPENDABLE WITH FLYTRACKS MAN KANN DEN LAUTSPRECHER MITTELS FLUGSCHIENEN AUFHÄNGEN POSSIBILITÉ DE SUSPENSION AVEC FLYTRACK



### Kit completo Complete kit



Staffa a muro/supporto piantana Wall bracket/stand adaptor

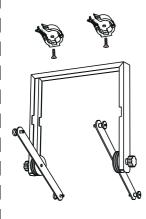
opzione DTF 12 --> DXV D12 HP opzione DTF 15 --> DXV D15 HP

Gli accessori per il fissaggio della staffa non sono forniti in dotazione The fixing accessory for wall bracket are not suppling with the kit

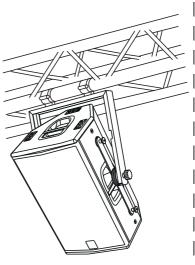


Per fissaggio a muro For wall brackets





Fissaggio su strutture a traliccio Fixing on truss structures





Per supporto piantana Stand adaptor



## Kit completo Complete kit Staffa supporto piantana Stand adaptor opzione DTF 8 --> DXV D8 HP opzione DTF 10 --> DXV D10 HP Ø Per supporto piantana Stand adaptor Fissaggio su strutture a traliccio Fixing on truss structures



### A.E.B. INDUSTRIALE s.r.l.

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