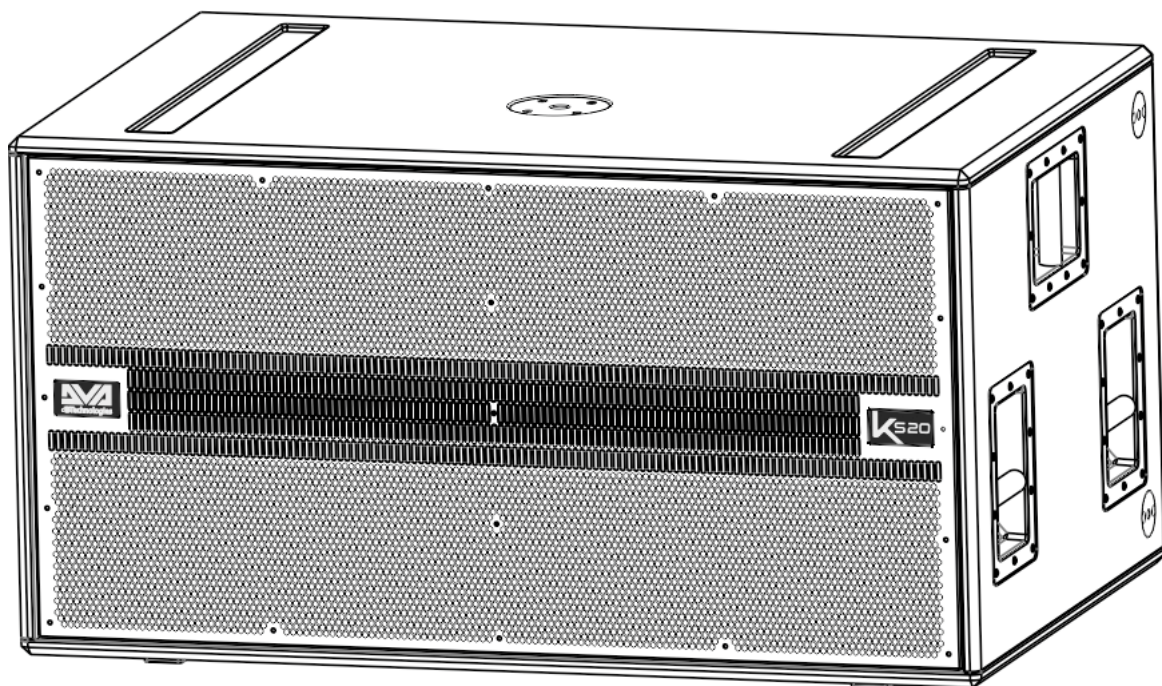




KS20

Quick start user manual
Section 1



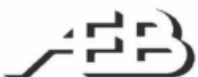
The warnings in this manual must be observed together with the "USER MANUAL - Section 2".

Le avvertenze nel presente manuale devono essere osservate congiuntamente al "MANUALE D'USO - Sezione 2".

Die Warnungen in diesem Handbuch müssen in Verbindung mit der "BEDIENUNGSANLEITUNG - Abschnitt 2" beobachtet werden".

Les avertissements spécifiés dans ce manuel doivent être respectés ainsi que les "CARACTERISTIQUES TECHNIQUES - Section 2".

Las advertencias del presente manual se deben tener en cuenta conjuntamente con las del "MANUAL DEL USUARIO" - Sección 2".



A.E.B. Industriale Srl Via Brodolini, 8 Località Crespellano 40053 VALSAMOGGIA BOLOGNA (ITALIA)
Tel +39 051 969870 Fax +39 051 969725 www.dbtechnologies.com info@dbtechnologies-aeb.com



Thank you for choosing a dBTechnologies Product!

DVA KS20 is an active horn loaded subwoofer with bass reflex, equipped with two 18" transducers with a 4" voice coil. The powerful double DIGIPRO® G3 amplifier section, capable of handling up to 1800 W (RMS power), is controlled by a DSP, which can perform a detailed customization of the output sound of the subwoofer. In particular, thanks to the new interface, it is possible to quickly tune various types of installation, controlling the level, the phase and delay of the output. The input and output audio connections can be set in mono or stereo configuration.

Check the site www.dbtechnologies.com for the complete user manual!

1) Unpacking

The box contains:

- N°1 DVA KS20
- N°1 Mains cable with Neutrik® powerCON connector
- N°1 100-120 V FUSE
- This quick start and warranty documentation

2) Easy installation

DVA KS20 is equipped with:

Hole for M20 pole mounting (A)

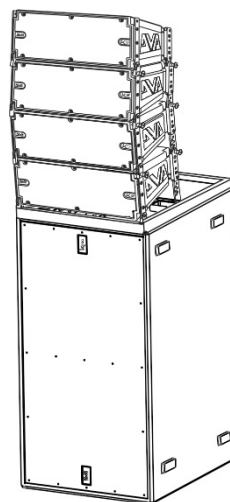
Pick points for DRK-10 and DRK-20 fly bars mounting (B)

3 Metal handles per side, for easy handling (C)

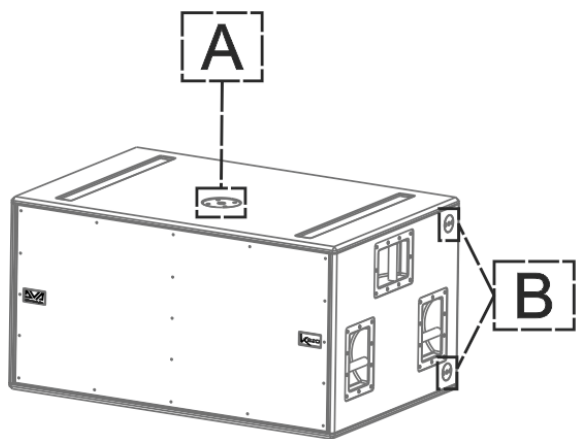
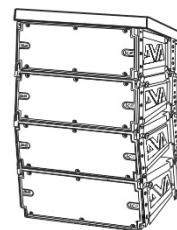
Additional holes for direct wheels mounting (D)

In particular, two installation examples are shown in the following pictures:

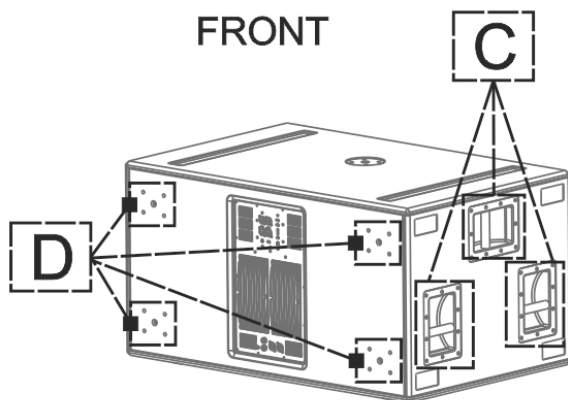
Stacked: DVA KS20 subwoofer, DRK-10/20 Fly Bar, DVA K5 line-array



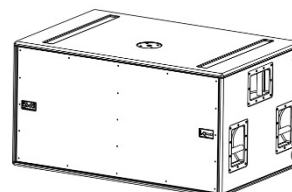
DVA K5 line-array flown with DRK 10/20 Fly Bar, 1 matched KS20 subwoofer



FRONT

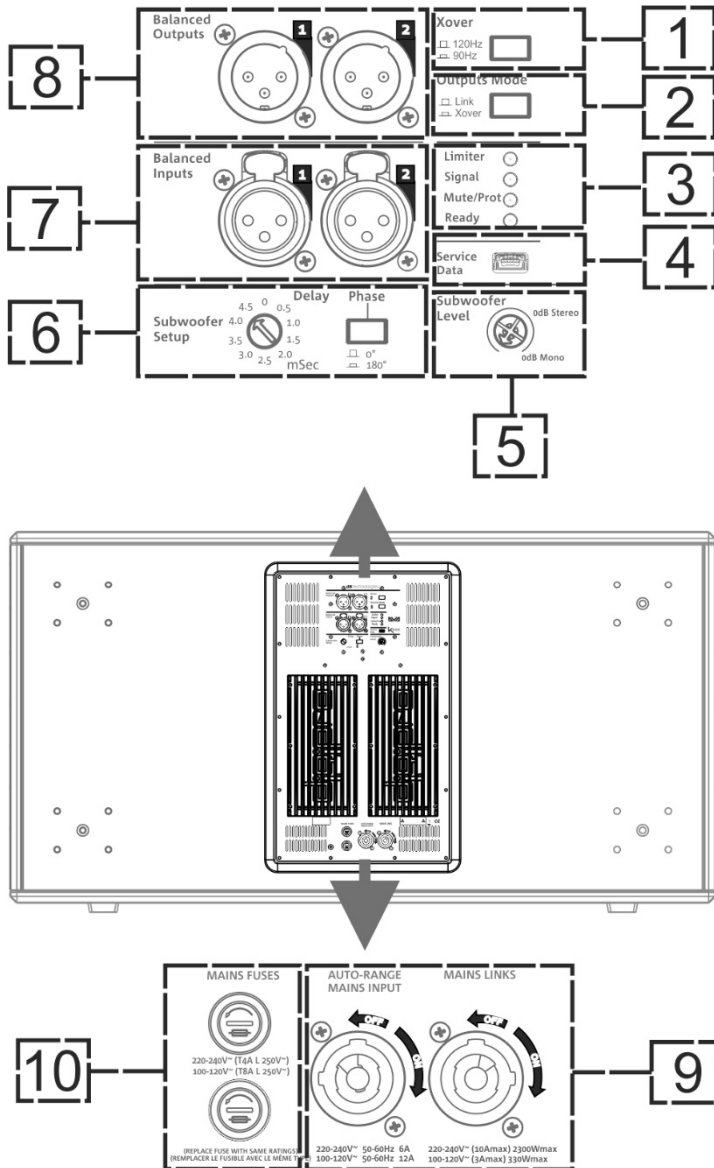


REAR



First switch on:

The double DIGIPRO G3® amplifier of DVA KS20 is controlled by a powerful DSP. All the connections and controls are in the rear amplifier control panel:



- 1 – Xover switch (for the choice of frequency cutoff)
- 2 – Output mode switch (Link or Xover mode)
- 3 – LEDs (Limiter, Signal, Mute/Prot)
- 4 – Service data mini B-type USB port
- 5 – Subwoofer level rotary encoder
- 6 – Subwoofer Setup switch (Phase) and BCD rotary switch (Delay)
- 7 – Balanced inputs
- 8 – Balanced outputs
- 9 – Auto range mains input and mains links
- 10 – Mains fuses

WARNING

The fuse is factory set for 220-240 V operation.

If it is necessary to change the fuse to 100-120V range:

1. Disconnect the speaker from any cable
2. Wait 5 minutes
3. Substitute the fuse with the correct one supplied

DVA KS20

Use only cables with Neutrik® connectors!

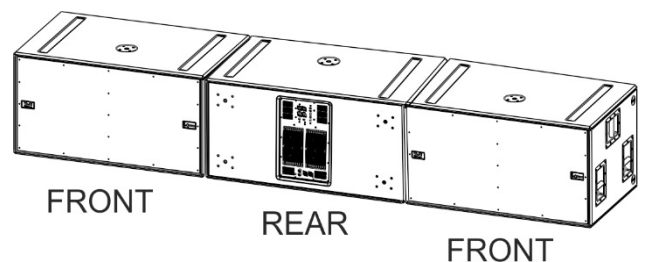
a) Once you have properly set up the desired configuration (see also the DVA KS20 complete user manual and accessories instructions for further information), connect the audio input (mono) or inputs (stereo) (7). Connect the output (mono) or outputs (stereo) (5) and consequently set the Subwoofer level to 0 dB in the right position (5).

b) Set properly the Outputs Mode (2), (“Link” in case of direct link connection, “Xover” in case the output is sent to another speaker or speaker array). If you have selected the “Xover” Mode with the related switch (2), select the correct frequency with the Xover switch (1).

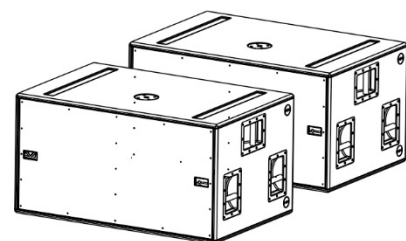
c) Choose the Subwoofer Setup (Delay and Phase) (6) to obtain the proper behavior. For example, in the 3-elements cardioid configuration, set the “Phase” to 180° and the “Delay” to 3.5 mSec. For another example, in Endfire configuration, with two DVA KS20s front panels at the distance of 1,35 mt, let the “Phase” to 0° value, and set the “Delay” to 4.0 ms in the most forward subwoofer.

N.B. Please note that these values are purely for information and they can depend on different setup variables.

Cardioid configuration



Endfire configuration



d) Connect the power link (9) to potential other DVA KS20s or line-array elements, if needed. Then connect the power supply (9) to the module. The “Ready” LED turns on, signaling the proper power connection. Turn the Subwoofer level (5) to the desired value. The “Signal” LED (3) starts blinking at the presence of audio signal (greater than -20 dBu).

For further information, download the complete user manual: www.dbtechnologies.com/EN/Downloads.aspx or scan the QR code.

Rev 1.3 cod. 420120234Q

Technical Data

Speaker Type: Active horn loaded subwoofer

Acoustical data

Frequency Response [-10 dB]: 41 - 120 Hz

Max SPL: 138 dB

LF: (2x) 18"

LF Voice Coil: 4"

Crossover frequencies: 90 Hz, 120 Hz LPF

Amplifier

Amp Technology: (2x) Digipro® G3

Amp Class: Class-D

RMS Power: 1800 W

Peak Power: 3600 W

Processor

Controller: DSP, 28/56 bit 48 kHz

Limiter: Peak, Thermal

Controls: Rotary Delay Control (0-4.5 ms, steps: 0.5 ms) and switches (Outputs Mode, Phase, Xover), Subwoofer level

Input

Mains connections: PowerCON® In/link

Signal Input: (Balanced) 2x IN (L,R)

Signal Out: (Balanced) 2x OUT (L,R)

USB connector: mini USB B-type (for SERVICE DATA)

Mechanics

Housing: Birch plywood

Grille: CNC Metal grille black painted

Mounting points: 2x Pick points for DRK10/20 frames

Pole Mount: yes, for M20 screw pole mount

Width: 1100 mm (43.31 in)

Height: 580 mm (22.83 in)

Depth: 720 mm (28.35 in)

Weight: 84 kg (185.19 lbs.)



Scan with your QR Reader
App to download the
complete User Manual

Download the complete user manual on:

www.dbtechnologies.com/EN/Downloads.aspx

EMI CLASSIFICATION

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

FCC CLASS B STATEMENT ACCORDING TO TITLE 47, PART 15, SUBPART B, §15.105

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 turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

WARNING: Make sure that the loudspeaker is securely installed in a stable position to avoid any injuries or damages to persons or properties. 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 outdoor avoid spots exposed to bad weather conditions.

Contact dB Technologies for accessories to be used with speakers. dBTechnologies will not accept any responsibility for damages caused by inappropriate accessories or additional devices.

Features, specification and appearance of products are subject to change without notice.

dBTechnologies reserves the right to make changes or improvements in design or manufacturing without assuming any obligation to change or improve products previously manufactured.