



VHD Series Subwoofers

User Guide

- VHD2.16
- VHD2.18J
- VHD4.18
- VHD1.21
- VHD2.21/VHD2.21R
- VHD4.21/VHD4.21R

Important safety instructions

Before using your VHD Subwoofers, be sure to carefully read the applicable items of these operating instructions and the safety suggestions.

1. Read all product instructions.
2. Keep printed instructions, do not throw away.
3. Respect and review all warnings.
4. Follow all instructions.
5. Do not use this unit near water, in unprotected outdoor areas or in rain or wet conditions.
6. Clean only with dry cloth.
7. Install in accordance with KV2 Audio's recommended installation instructions.
8. Do not install near any heat sources such as heat radiators, heat registers, stoves or other apparatus that produce heat.
9. Only use accessories specified by KV2 Audio.
10. Install the product only with rigging specified by KV2 Audio, or sold with the loudspeaker.
11. Unplug this loudspeaker during lightning storms or when unused for long periods of time.
12. Refer all servicing to qualified service personnel. Servicing is required when the loudspeaker has been damaged in any way, liquid has been spilled or objects have fallen into the loudspeaker; rain or moisture has entered the loudspeaker; the loudspeaker has been dropped; or when for undetermined reasons the loudspeaker does not operate normally.
13. There are no user serviceable parts inside and removable may void the warranty.
14. An experienced user shall always supervise this professional audio equipment.

NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

WARNING: To prevent fire or electric shock, do not expose this equipment to rain or moisture.

SAFETY SUMMARY

To reduce the risk of electric shock, disconnect the loudspeaker from the AC mains before installing audio cable. Reconnect the power cord only after making all signal connections. Connect the loudspeaker to a twopole, three-wire grounding mains receptacle. The receptacle must be connected to a fuse or circuit breaker. Connection to any other type of receptacle poses a shock hazard and may violate local electrical codes. Do not allow water or any foreign object to get inside the loudspeaker. Do not put objects containing liquid on or near the unit. To reduce the risk of overheating the loudspeaker, avoid exposing it to direct sunlight. Do not install the unit near heat-emitting appliances, such as a room heater or stove. This loudspeaker contains potentially hazardous voltages. Do not attempt to disassemble the unit. The unit contains no user serviceable parts, repairs should be performed only by factory trained service personnel.

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VHD2.16

BASS MODULE

VHD2.16 - part number KVV 987 142



Application

Specifically designed to accompany the VHD2.0 and VHD1.0 as a true full range high output system for live performance and music

- Hire and Production
- Concert venues
- Large Theatres
- Scalable into multiple large systems
- Fixed installation

Introduction

The VHD2.16 double 15" subwoofer is a development of KV2 Audio's ES 2.5 design that has become a standard for compact, high output subwoofer devices. Acoustical design is based on extreme loading of asymmetrical chambers delivering exceptional output and control. The cabinet is built to the same robust standards as the VHD4.18 and delivers output in excess of 140 dB when configured in a pair. It also functions as a very effective upper bass cabinet when used alongside the ultra low frequency VHD1.21 or 2.21 subwoofers as part of a five way active system. It is ideal for use in live applications that require reproduction of low frequencies with very high transient content at high output levels.

The VHD2.16 Bass Module consists of a purpose designed Very High Definition passive enclosure, containing two custom designed 15" woofers and a design that has been applied based on extreme loading of asymmetrical chambers to attain the optimum speaker loading, output, control and performance. The end result is a fast, dynamic, Very High Definition sub woofer, truly capable of reproducing the articulation in a bass guitar, whilst also producing definition of the Bass drum Kick.

Acoustic Components

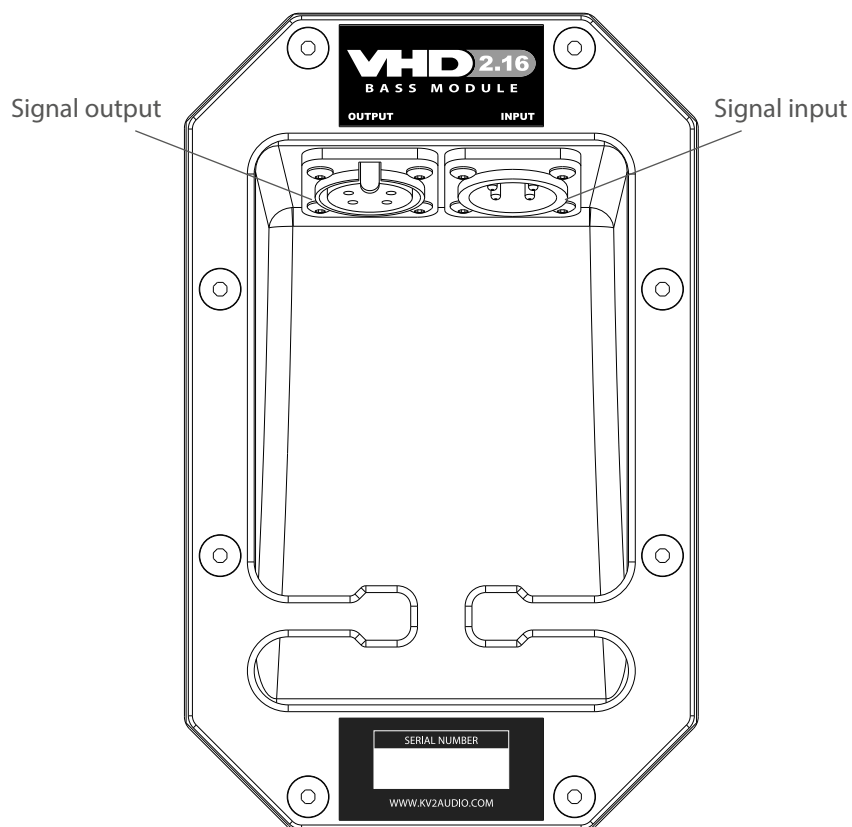
The VHD2.16 woofer technology is based around high efficiency, high power woofer designs. The device features two 15" woofers, with high temperature 4" (100 mm) inside/outside epoxy baked polyimide voice coil assembly's, that undergoes multiple baking and curing processes as well as advanced magnetic structures with complex cooling systems. The woofer cone has been specially developed to withstand the demanding and extreme loading environment within the dual chambers.

Enclosure Design

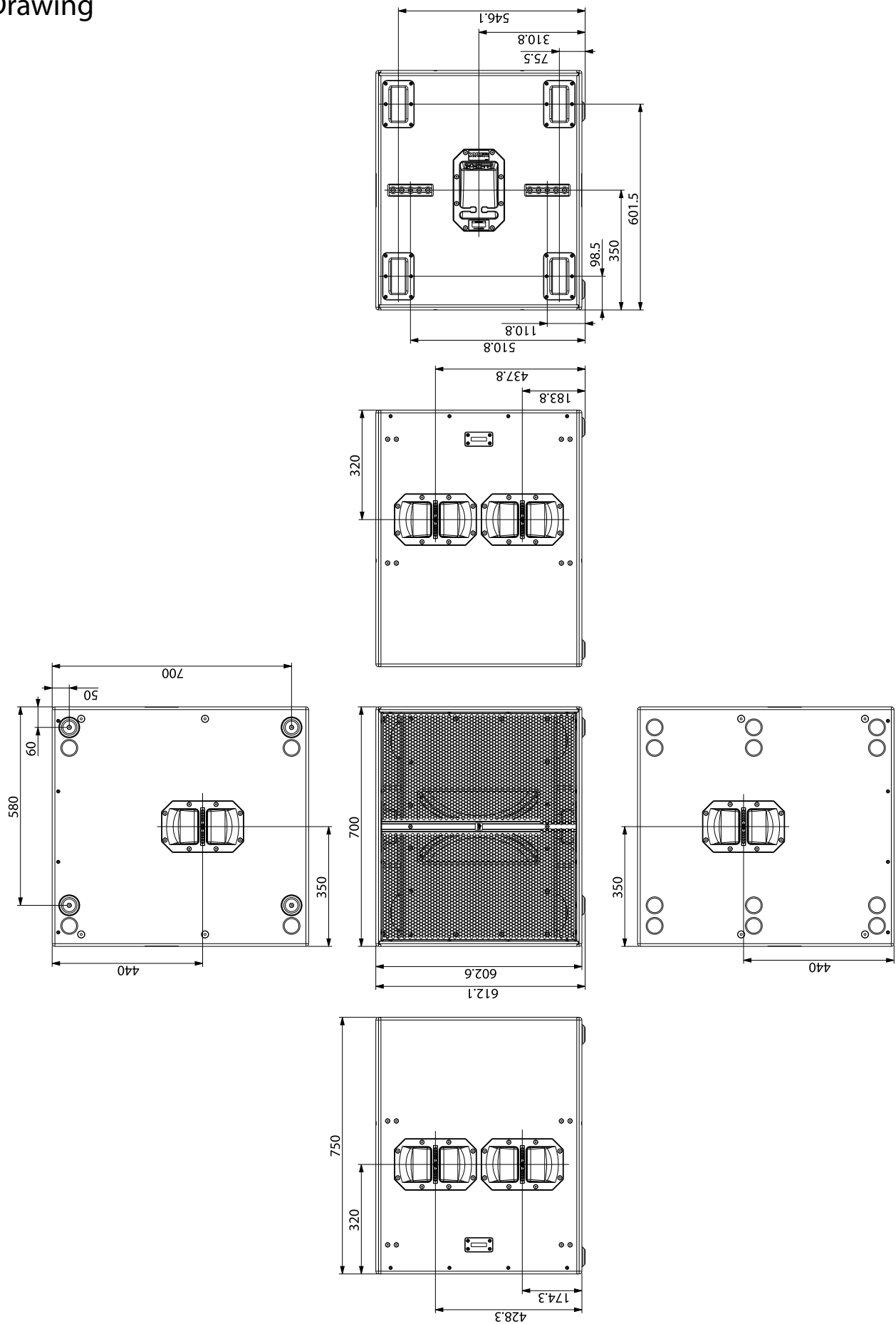
The VHD2.16 is a compact, Twin Asymmetric chamber Bandpass design, in a lightweight Baltic Birch enclosure featuring a large number of ergonomically designed parts that make it an easy speaker to set up and use. There are 4 side handles and one top and bottom that make it easy to pick up and reposition the unit in a natural - instinctive and intuitive manner. The VHD2.16 Sub woofer Module employs low friction feet to enable easy locking into existing and other KV2 Audio VHD cabinets and for easy movement. Flytrack is fitted within the enclosure to allow easy flying and suspension via the KV2 Audio propriety certified Flyware system.

VHD2.16 · Rear Panel

Rear Panel



Drawing



Specifications

System Acoustic Performance

Max SPL Long-term	143 dB (4× VHD2.16)
Max SPL Peak	149 dB (4× VHD2.16)
-3 dB Response	37 Hz to 100 Hz
-10 dB Response	32 Hz to 130 Hz
Impedance	8 Ω
Crossover Point	70 to 130 Hz

Low Frequency Section

Acoustic Design	Twin Asymmetrical loading
Low Frequency Amplifier Requirement	1600 W / 2× VHD2.16 (VHD3200 amp.)
Woofer Size / Voice Coil Diameter / Design	2× 15" / 4" / Inside Outside
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Advanced ventilated neodymium

Speaker Input

Speaker Input	AP4 male
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Speaker Output

Speaker Output	AP4 female
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Cabinet

Cabinet Material	Baltic birch
Handles	6
Color	Black (wear resistant polymer coating)

Physical Dimensions

Height	600 mm (23.62")
Width	700 mm (27.55")
Depth	750 mm (29.52")
Weight	65 kg (143 lb)

Amplification and control requirements

Amplification and control	VHD3200
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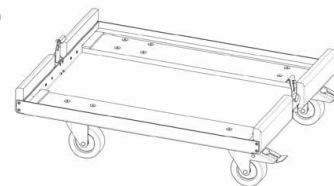
Cover for VHD2.16

part name: **Cover VHD2.16**
 part number: **KVV 987 155**
 - used with cart



Cart for VHD2.16, VHD4.18

part name: **Cart for VHD2.16, VHD4.18**
 part number: **KVV 987 100**
 - with hardwood bumpers



Bass speaker cable LF15, AP4 connectors - 1.5 m

part name: **LF15**
 part number: **KVV 987 121**
 - 1.5 m (5 ft)
 - for Bass Module daisy-chaining



Bass speaker cable LF40, AP4 connectors - 4 m

part name: **LF40**
 part number: **KVV 987 122**
 - 4 m (13 ft)
 - for Bass Module hook-up



Bass speaker cable LF100, AP4 connectors - 10 m

part name: **LF100**
 part number: **KVV 987 123**
 - 10 m (33 ft)
 - for Bass Module hook-up



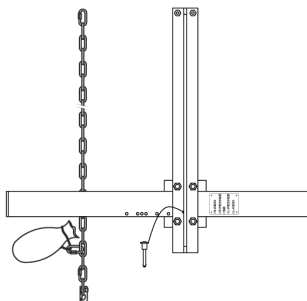
Bass speaker cable LF200, AP4 connectors - 20 m

part name: **LF200**
 part number: **KVV 987 124**
 - 20 m (66 ft)
 - for Bass Module hook-up



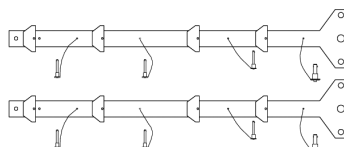
Fly Bar for VHD Systems

part name: **Fly Bar for VHD Systems**
 part number: **KVV 987 252**



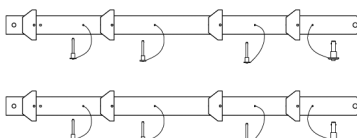
VHD Bass Extension Flybar

part name: **VHD Bass Extension Flybar**
 part number: **KVV 987 308**



VHD Bass Fly Bar Arm

part name: **VHD Bass Fly Bar Arm**
 part number: **KVV 987 307**



VHD2.18J

BASS MODULE

VHD2.18J - part number KVV 987 373



Application

Especially designed to add extreme low frequency extension with exceptional high output to the VHD, SL, ES and ESR ranges, with or without other KV2 Audio subwoofers

- Large scale live music and playback performance
- Nightclub and EDM Extreme Resolution
- Large Concert venues
- Hire and Production
- Fixed Installation
- Cinema
- Easily incorporated into projects with VHD, SL, ES and ESR products

Introduction

The new VHD2.18J is a direct radiating bass-reflex speaker containing two 18" high performance transducers. These 18" transducers are designed to withstand very high power levels. The optimised, high efficiency, bass-reflex design of the VHD2.18J produces considerably more output than other similar double 18" enclosures. Constructed of Baltic Plywood, integrated proprietary Flyware allows for fast rigging of multiple cabinets when they are needed to be flown. An ideal subwoofer for any application where direct radiating bass speaker reproduction is required.

Acoustic Components

The VHD2.18 woofer technology is based around a custom made high efficiency, high power woofer design. The device features two 18" woofers, with high temperature 4.5" (116 mm) multiple layer aluminium voice coil assemblies, with a double Silicone spider for optimised compliance. The advanced magnetic structure and ventilated voice coil gap improves cooling dramatically, which in turn significantly reduces power compression. The woofer cone has been specially developed to withstand the demands of high power and very low frequency extension.

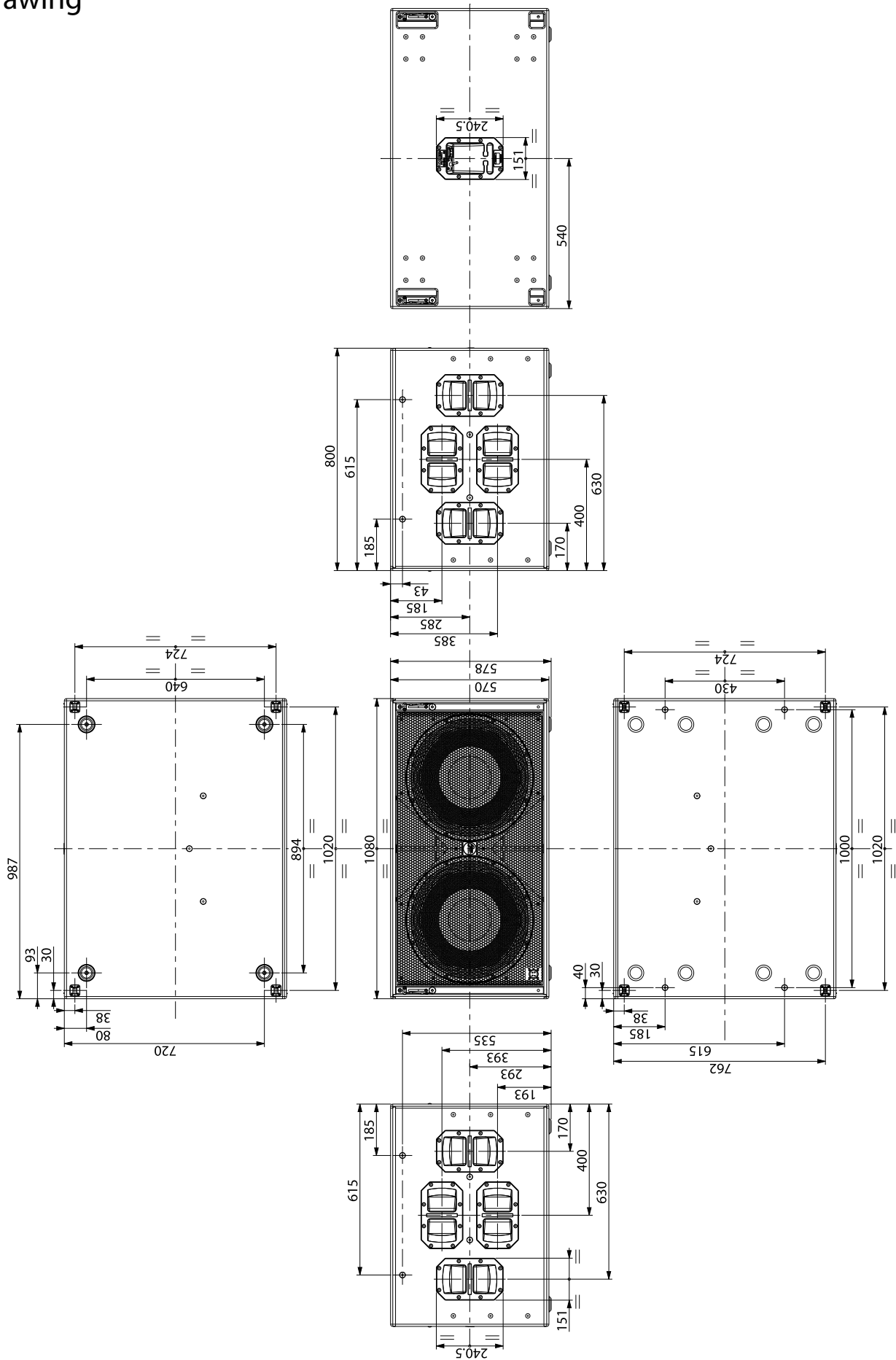
Enclosure Design

The VHD2.18J is an optimised, high efficiency bass-reflex design, with a revolutionary new design characteristic (patent pending) developed by KV2 Audio Engineering. This brand new design gives considerably more output than other similar double 18" enclosures, whilst maintaining the full low frequency bandwidth. The cabinet is a Baltic Birch enclosure featuring a large number of ergonomically designed parts that make it an easy speaker to set up and use. There are 6 side handles allowing you to reposition the unit in a natural and intuitive manner. The VHD 2.18J Sub woofer Module also employs low friction feet to enable easy movement and locking into other VHD2.18J cabinets. A unique new Flying system is fitted discretely within the enclosure to allow easy flying of single or multiple cabinets using the KV2 Audio propriety certified Flyware system.

Rear Panel



Drawing



Specifications

System Acoustic Performance

Max SPL Long-term	136 dB
Max SPL Peak	142 dB
-3 dB Response	32 Hz to 200 Hz
-10 dB Response	28 Hz to 250 Hz
Impedance	4 Ω
Crossover Point	70 Hz to 150 Hz

Low Frequency Section

Acoustic Design	High Efficiency, Front Loaded, Bass Reflex
Low Frequency Amplifier Requirement	1 600 W / 1× VHD2.18J per channel of VHD3200 amp
Number of Drivers	2
Woofer Size / Voice Coil Diameter / Design	18"/4.5"
Magnet Type	Neodymium
Diaphragm Material	Epoxy Reinforced Cellulose

Speaker Input

Speaker Input	AP4
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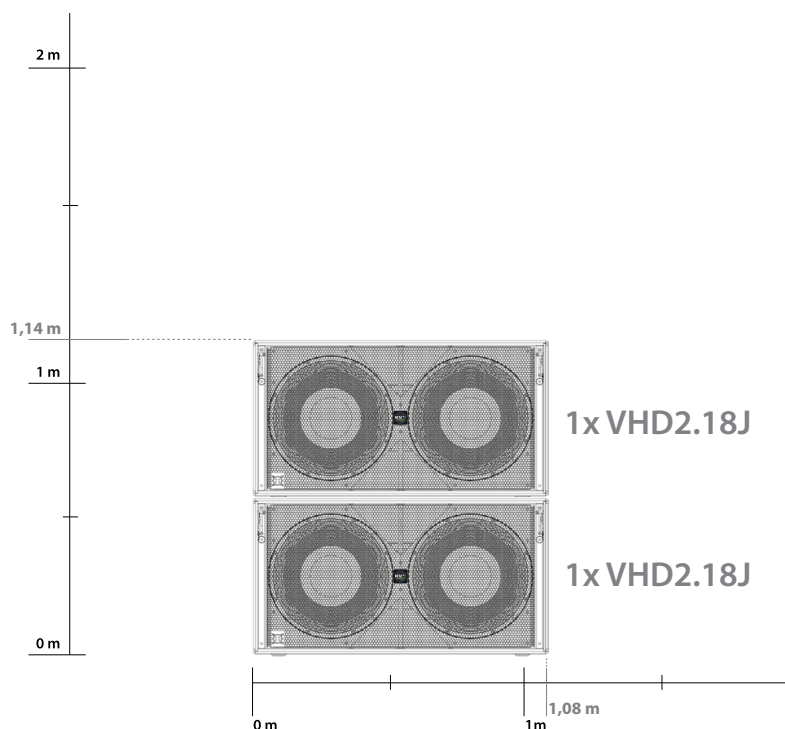
Cabinet

Cabinet Material	Baltic birch
Handles	8
Color	Black (wear resistant polymer coating)

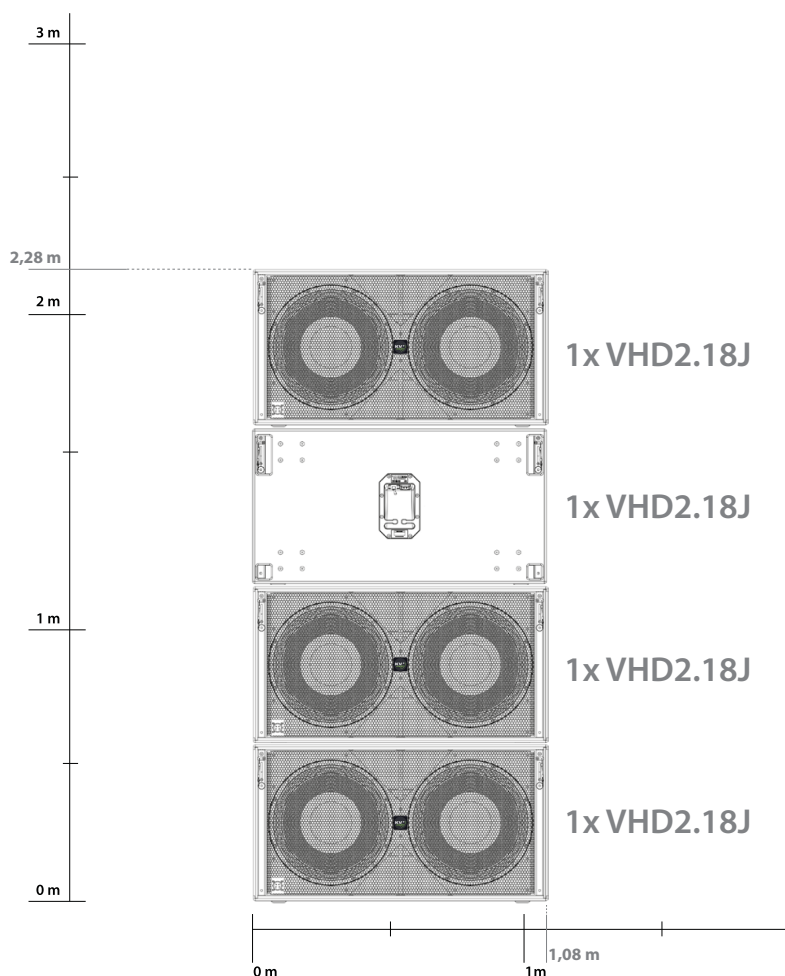
Physical Dimensions

Height	570 mm (22.44")
Width	1 080 mm (42.52")
Depth	800 mm (31.5")
Weight	93 kg (205 lb)

Double stack Configuration



Cardioid Configuration



VHD2.18J · Flying instructions

Flying instructions

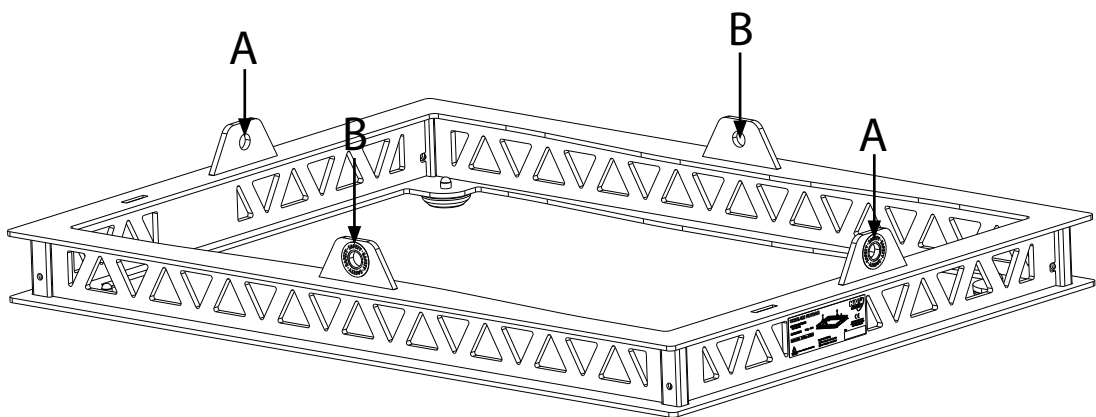
FLYBAR VHD2.18J

MAXIMUM ALLOWANCE:
12× VHD2.18J

FLYBAR WEIGHT:
34 kg (75 lb)

MAX. LOAD:
1 750 kg (3 858 lb)

HANGING OPTION:	
A	for VHD2.18J – B for SAFETY
B	for VHD2.18J – A for SAFETY

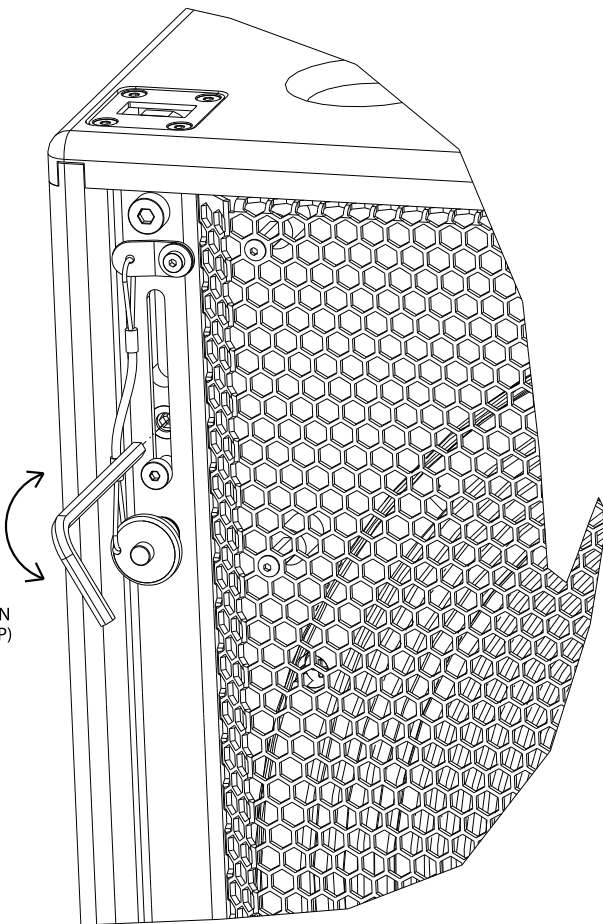


Instructions for hanging or locking positions

1. PLACE THE ALLEN KEY IN THE SLOT
 - 2A. TURN RIGHT TO STOP FOR LOCKING POSITION
 - 2B. TURN LEFT TO STOP FOR HANGING POSITION
- (ALL 4 HANGING SLOTS)

LOCKING POSITION
(TURN RIGHT TO STOP)

HANGING POSITION
(TURN LEFT TO STOP)



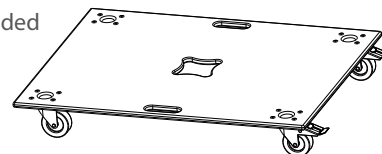
Cover for 2x VHD2.18J

part name: **Cover for 2x VHD2.18J**
 part number: **KVV 987 388**
 - used with or without cart



Cart for VHD2.18J

part name: **Cart for VHD2.18J**
 part number: **KVV 987 378**
 - wheels (125 mm) included



Bass speaker cable LF15, AP4 connectors - 1.5 m

part name: **LF15**
 part number: **KVV 987 121**
 - 1.5 m (5 ft)
 - for Bass Module daisy-chaining



Bass speaker cable LF40, AP4 connectors - 4 m

part name: **LF40**
 part number: **KVV 987 122**
 - 4 m (13 ft)
 - for Bass Module hook-up



Bass speaker cable LF100, AP4 connectors - 10 m

part name: **LF100**
 part number: **KVV 987 123**
 - 10 m (33 ft)
 - for Bass Module hook-up



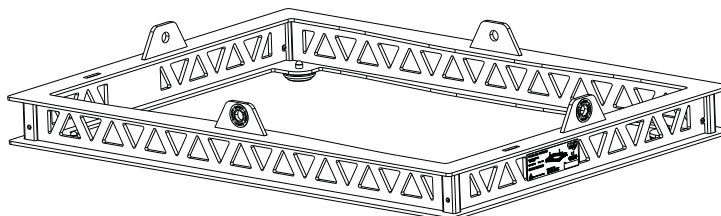
Bass speaker cable LF200, AP4 connectors - 20 m

part name: **LF200**
 part number: **KVV 987 124**
 - 20 m (66 ft)
 - for Bass Module hook-up



Flybar for VHD2.18J

part name: **Flybar for VHD2.18J**
 part number: **KVV 987 376**

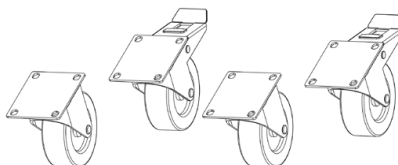


Wheel kit (125 mm)

part name: **Wheel kit (125 mm)**
 part number: **KVV 987 355**

Package includes:

- 4x Wheel (2x with brake)
- 16x M8x16 mm Screw Hexagon Head
- 16x M8 Washer Serrated



VHD4.18

BASS MODULE

VHD4.18 - part number KVV 987 079



Application

Specifically designed to accompany the VHD2.0 and VHD1.0 as a true full range high output system for live performance and music

- Hire and Production
- Concert venues
- Large Theatres
- Scalable into multiple large systems
- Fixed installation

Introduction

The VHD4.18 is a quad 18" subwoofer system, comprising of four individual loudspeaker cabinets. The objective is to make the system easy to transport and setup. When assembled, the VHD4.18 system becomes a high efficiency neodymium subwoofer system with immense output. The system was designed with very high sensitivity in mind; it provides 110 dB at 1 W/1m and a tremendous output of 149 dB when running at full power. Each cabinet incorporates a large port area that becomes an optimized horn aperture when all four cabinets are stacked together. The quad 18" subwoofer system delivers extreme output and controlled low frequency resolution.

The VHD4.18 Bass Module consists of a purpose designed Very High Definition passive enclosure, containing one custom designed 18" woofer and a low Q design that has been applied to attain the optimum speaker loading and performance. The end result is a fast, dynamic, Very High Definition sub woofer, truly capable of reproducing the largest of dynamics and transients for all styles of music reproduction.

Acoustic Components

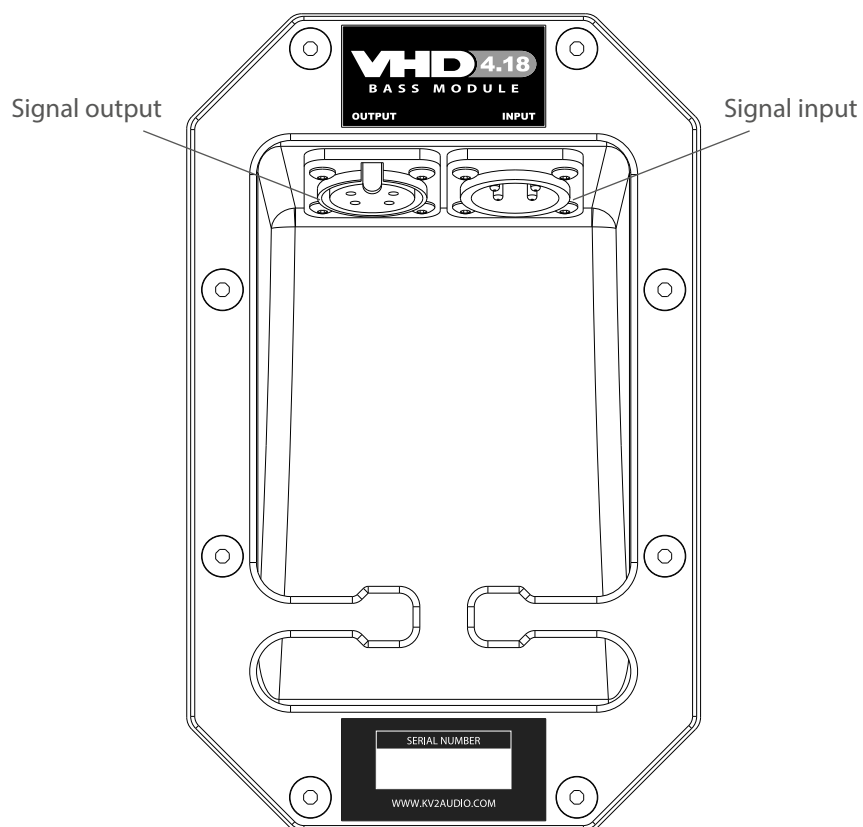
The VHD4.18 woofer technology is based around very high efficiency, high power woofer designs. The device features a single 18" cone with a high temperature 4" (100 mm) inside/outside epoxy baked polyimide voice coil assembly, that undergoes multiple baking and curing processes as well as advanced neodymium magnetic structures with complex cooling systems. The woofer cone has been specially developed to withstand the demanding environment within the hybrid low load chamber.

Enclosure Design

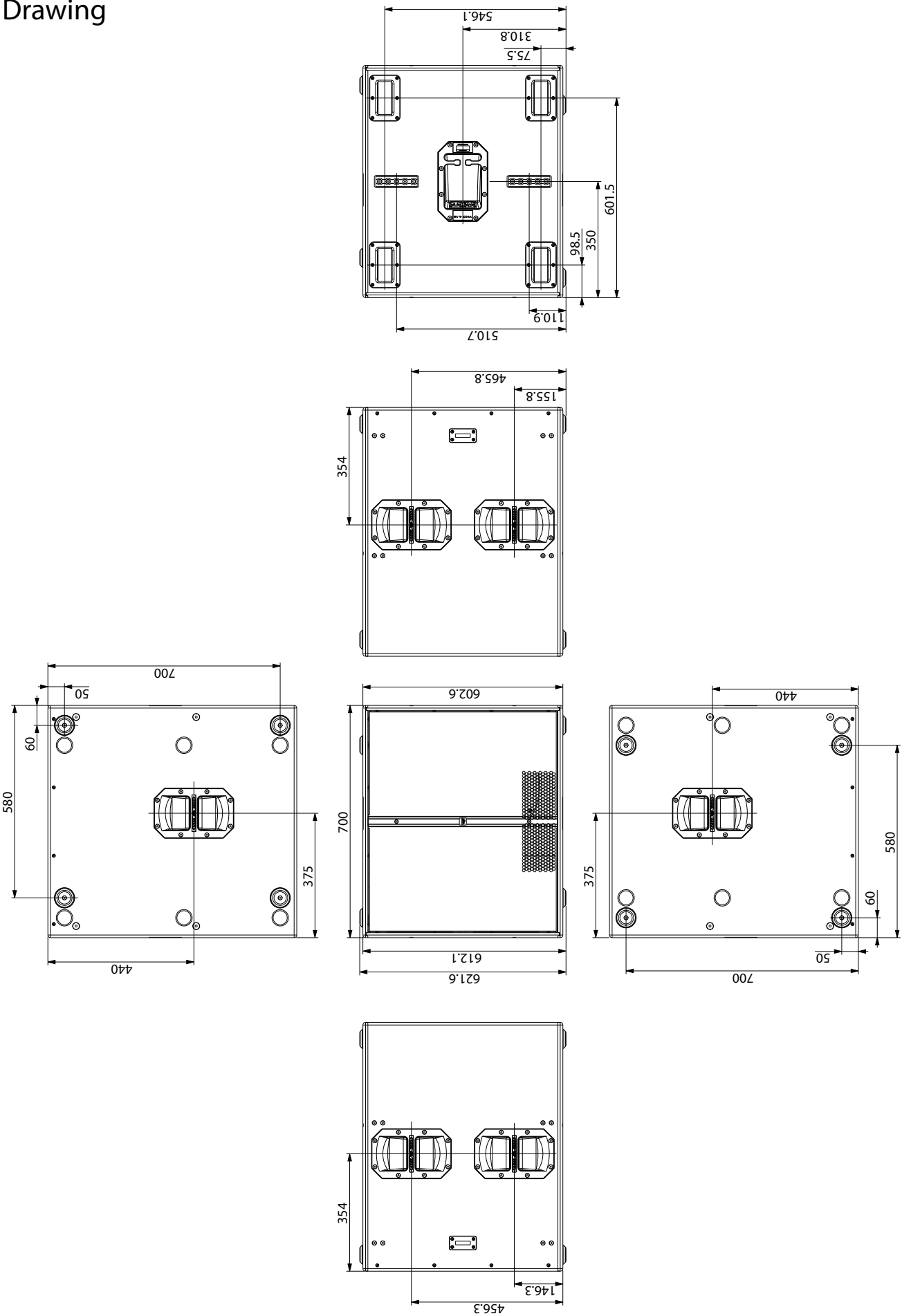
The VHD4.18 is a compact, hybrid low load ported horn design, in a lightweight Baltic Birch enclosure featuring a large number of ergonomically designed parts that make it an easy speaker to set up and use. There are 4 side handles and one top and bottom that make it easy to pick up and reposition the unit in a natural - instinctive and intuitive manner. The VHD2.16 Sub woofer Module employs low friction feet to enable easy locking into existing and other KV2 Audio VHD cabinets and for easy movement. Flytrack is fitted within the enclosure to allow easy flying and suspension via the KV2 Audio propriety certified Flyware system.

VHD4.18 · Rear Panel

Rear Panel



Drawing



Specifications

System Acoustic Performance

Max SPL Long-term	146 dB (4× VHD4.18)
Max SPL Peak	152 dB (4× VHD4.18)
-3 dB Response	36 Hz to 100 Hz
-10 dB Response	31 Hz to 130 Hz
Impedance	8 Ω
Crossover Point	70 Hz to 130 Hz

Low Frequency Section

Acoustic Design	Horn reflex loaded
Low Frequency Amplifier Requirement	800 W / 1× VHD4.18 (VHD3200 amp.)
Woofer Size / Voice Coil Diameter / Design	18" / 4" / Inside Outside
Magnet Type	Neodymium
Diaphragm Material	Epoxy Reinforced Cellulose

Speaker Input

Speaker Input	AP4 male
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Speaker Output

Speaker Output	AP4 female
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Cabinet

Cabinet Material	Baltic birch
Handles	6
Color	Black (wear resistant polymer coating)

Physical Dimensions

Height	600 mm (23.62")
Width	700 mm (27.55")
Depth	750 mm (29.52")
Weight	52 kg (114.4 lb)

Amplification and control requirements

Amplification and control	VHD3200
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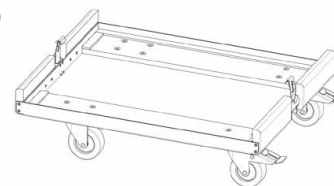
Cover for VHD4.18

part name: **Cover VHD4.18**
 part number: **KVV 987 105**
 - used with cart



Cart for VHD4.18, VHD2.16

part name: **Cart for VHD4.18, VHD2.16**
 part number: **KVV 987 100**
 - with hardwood bumpers



Bass speaker cable LF15, AP4 connectors - 1.5 m

part name: **LF15**
 part number: **KVV 987 121**
 - 1.5 m (5 ft)
 - for Bass Module daisy-chaining



Bass speaker cable LF40, AP4 connectors - 4 m

part name: **LF40**
 part number: **KVV 987 122**
 - 4 m (13 ft)
 - for Bass Module hook-up



Bass speaker cable LF100, AP4 connectors - 10 m

part name: **LF100**
 part number: **KVV 987 123**
 - 10 m (33 ft)
 - for Bass Module hook-up



Bass speaker cable LF200, AP4 connectors - 20 m

part name: **LF200**
 part number: **KVV 987 124**
 - 20 m (66 ft)
 - for Bass Module hook-up



VHD1.21

BASS MODULE

VHD1.21 - part number KVV 987 080



Application

Specifically designed to add extreme low frequency extension to the VHD2.0 and VHD1.0 in conjunction with other VHD subwoofers

- Live performance
- Fixed installation
- Cinema
- Theatre

Introduction

Single 21", Low Q band-pass sub woofer system that adds extension and weight for applications where you want to feel, as well as hear, very high definition audio working down to 23 Hz. It is ideal for use in live applications that require reproduction of low frequencies with very high transient content at high output levels. With an efficiency for two boxes of 102 dB, it shares the same footprint as the other VHD sub woofers in a compact lightweight easily transported package. Alongside the VHD2.16, it forms part of a remarkable five way active system.

The VHD1.21 Bass Module consists of a purpose designed Very High Definition passive enclosure, containing one custom designed 21" woofer and a low Q design that has been applied to attain the optimum speaker loading and performance. The end result is a fast, dynamic, Very High Definition sub woofer, truly capable of reproducing the articulation in a bass guitar, whilst also extending down to very low frequencies.

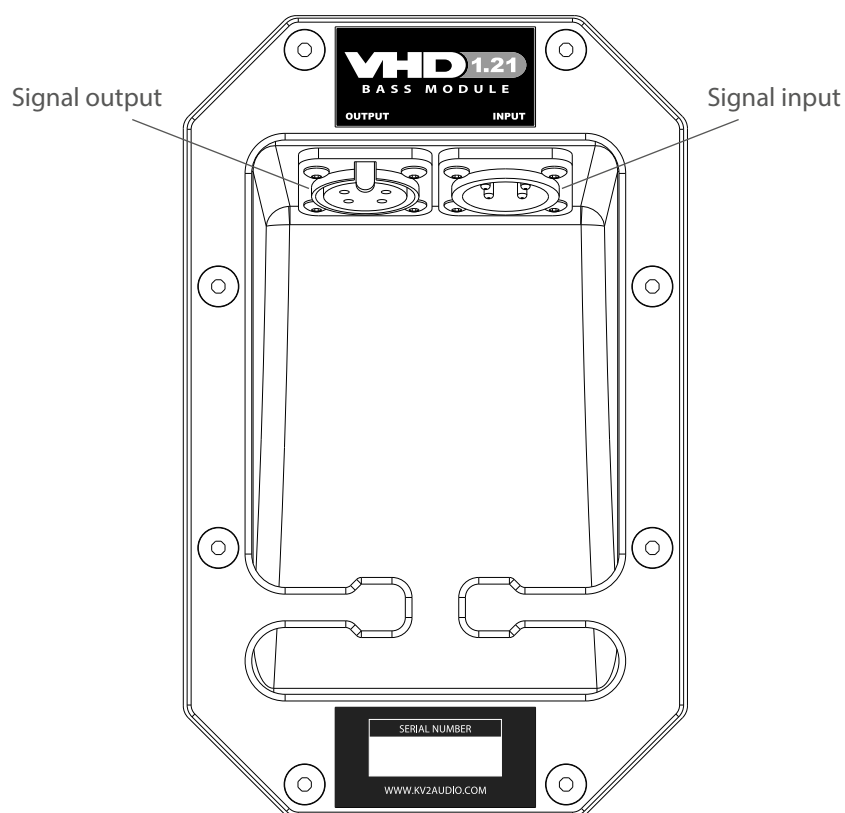
Acoustic Components

The VHD1.21's woofer technology is based around high efficiency, high power woofer designs. The device features a single 21" woofer, with a high temperature 4" (100 mm) inside/outside epoxy baked polyimide voice coil assembly, that undergoes multiple baking and curing processes as well as advanced magnetic structures with complex cooling systems and a Carbon Fibre reinforced cone assembly. The woofer cone has been specially developed to withstand the demanding environment within the large single chamber.

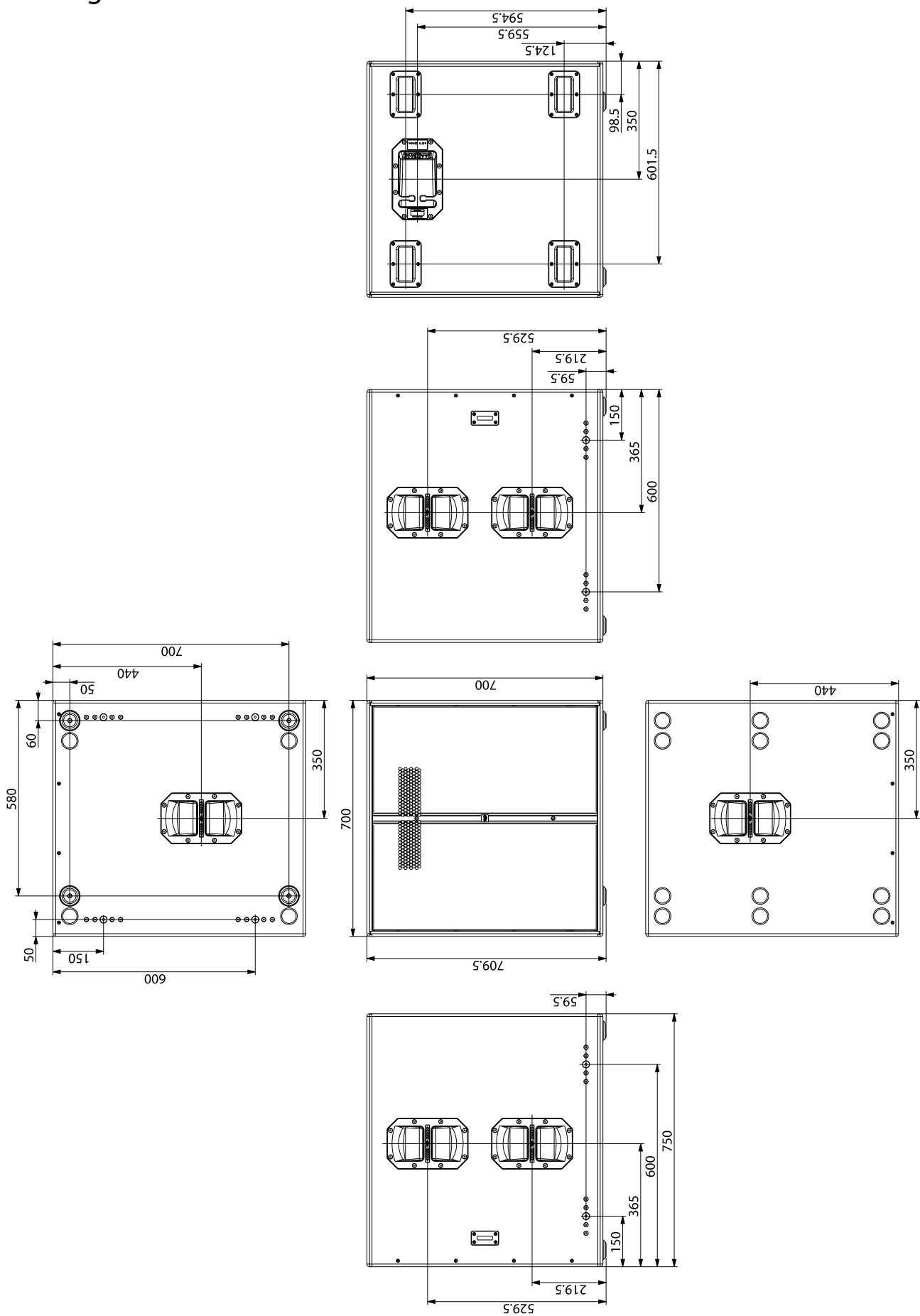
Enclosure Design

The VHD1.21 is a compact, large chamber bass reflex low Q Bandpass design, in a lightweight Baltic Birch enclosure featuring a large number of ergonomically designed parts that make it an easy speaker to set up and use. There are 4 side handles and one top and bottom that make it easy to pick up and reposition the unit in a natural - instinctive and intuitive manner. The VHD1.21 Sub woofer Module employs low friction feet to enable easy locking into existing and other KV2 Audio VHD cabinets and for easy movement.

Rear Panel



Drawing



Specifications

System Acoustic Performance

Max SPL Long-term	135 dB (2× VHD1.21)
Max SPL Peak	141 dB (2× VHD1.21)
-3 dB Response	29 Hz to 100 Hz
-10 dB Response	23 Hz to 130 Hz
Impedance	8 Ω
Crossover Point	70 Hz to 120 Hz

Low Frequency Section

Acoustic Design	Large chamber low Q band pass
Low Frequency Amplifier Requirement	800 W / 1× VHD1.21 (VHD 3200 amp.)
Woofer Size / Voice Coil Diameter / Design	21" / 4" / Inside Outside
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium

Speaker Input

Speaker Input	AP4 male
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Speaker Output

Speaker Output	AP4 female
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Cabinet

Cabinet Material	Baltic birch
Handles	6
Color	Black (wear resistant polymer coating)

Physical Dimensions

Height	700 mm (27.55")
Width	700 mm (27.55")
Depth	750 mm (29.52")
Weight	60 kg (132.0 lb)

Amplification and control requirements

Amplification and control	VHD3200
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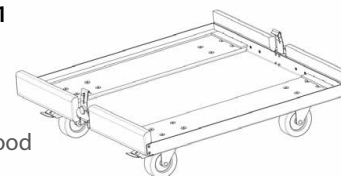
Cover for VHD1.21

part name: **Cover VHD1.21**
 part number: **KVV 987 107**
 - used with cart



Cart for VHD1.21

part name: **Cart for VHD1.21**
 part number: **KVV 987 109**
 - Front mount
 aluminium
 VHD2.21 cart - with hardwood
 bumpers



Bass speaker cable LF15, AP4 connectors - 1.5 m

part name: **LF15**
 part number: **KVV 987 121**
 - 1.5 m (5 ft)
 - for Bass Module daisy-chaining



Bass speaker cable LF40, AP4 connectors - 4 m

part name: **LF40**
 part number: **KVV 987 122**
 - 4 m (13 ft)
 - for Bass Module hook-up



Bass speaker cable LF100, AP4 connectors - 10 m

part name: **LF100**
 part number: **KVV 987 123**
 - 10 m (33 ft)
 - for Bass Module hook-up



Bass speaker cable LF200, AP4 connectors - 20 m

part name: **LF200**
 part number: **KVV 987 124**
 - 20 m (66 ft)
 - for Bass Module hook-up



VHD 2.21
BASS MODULE

VHD 4.21
BASS MODULE



VHD2.21 - part number KVV 987 249

VHD2.21R - part number KVV 987 496

VHD4.21 - part number KVV 987 548

VHD4.21R - part number KVV 987 558

Application

Especially designed to add extreme low frequency-last octave extension with exceptional high output to the VHD2.0 and VHD1.0 in conjunction with other VHD subwoofers

- Large scale live music and playback performance
- Hire and Production
- Large Concert venues
- Cinema
- Nightclub
- Fixed installation
- Easily incorporated into multiple system projects with ES and SL products

Introduction

Originally developed for Super Live Audio within the VHD system, the VHD2.21/VHD4.21 subwoofers are voiced for live music yet excel equally in high-energy club and dance applications. Operating down to 25 Hz, they integrate seamlessly with other VHD products, the smaller ES range, or can serve as exceptionally powerful stand-alone subwoofers capable of complementing any other manufacturer's system. Unlike traditional 21" and dual-21" subwoofers typically designed more for effect than precision, the VHD2.21/VHD4.21 deliver tight, fast transient response and extreme dynamics, even at higher bass frequencies — qualities rarely found in units of this size. Despite their output capability, they remain consistent with KV2's philosophy of maximum performance from a compact footprint. For applications requiring an 8 Ω configuration, KV2 offers the VHD2.21/VHD2.21R, which deliver comparable performance characteristics in an alternative impedance option. One VHD2.21 (8 Ω load) can be driven by a single VHD3200/R in bridge mode. The VHD4.21/VHD4.21R operate at 4 Ω , providing extremely high output capability for large-format and high-demand applications. Two VHD4.21/R (4 Ω load) units in parallel can be driven by a single VHD7000D. Flyable versions — VHD2.21R (KVV 987 496) and VHD4.21R — are available, featuring additional fixings and compatibility with the VHD4.21 / VHD2.21 Flybar (KVV 987 398).

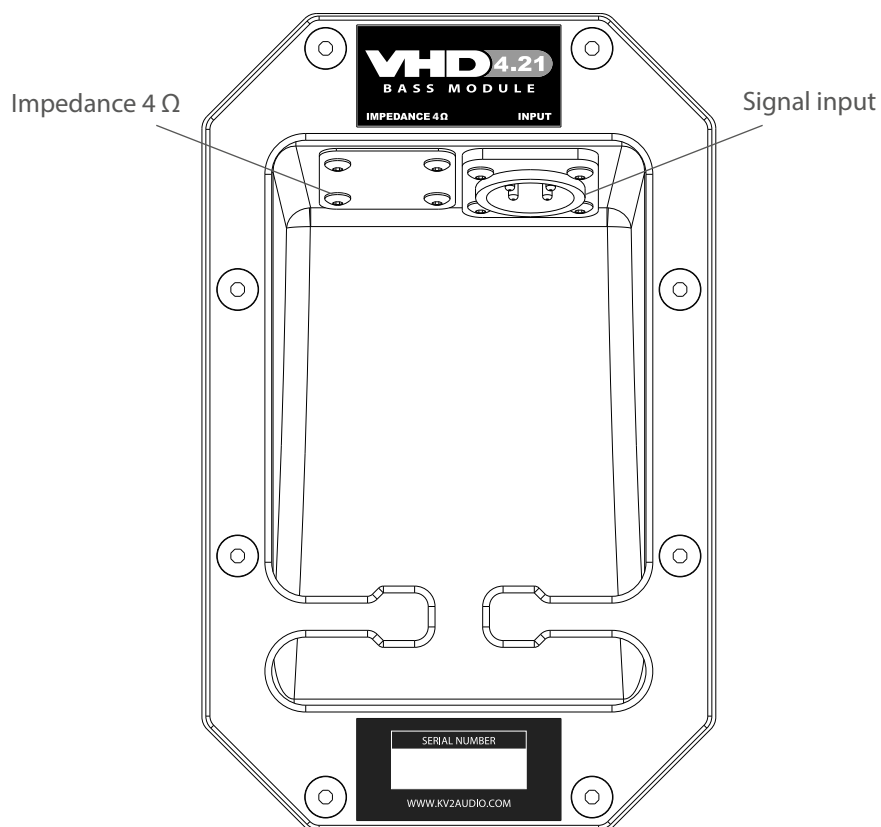
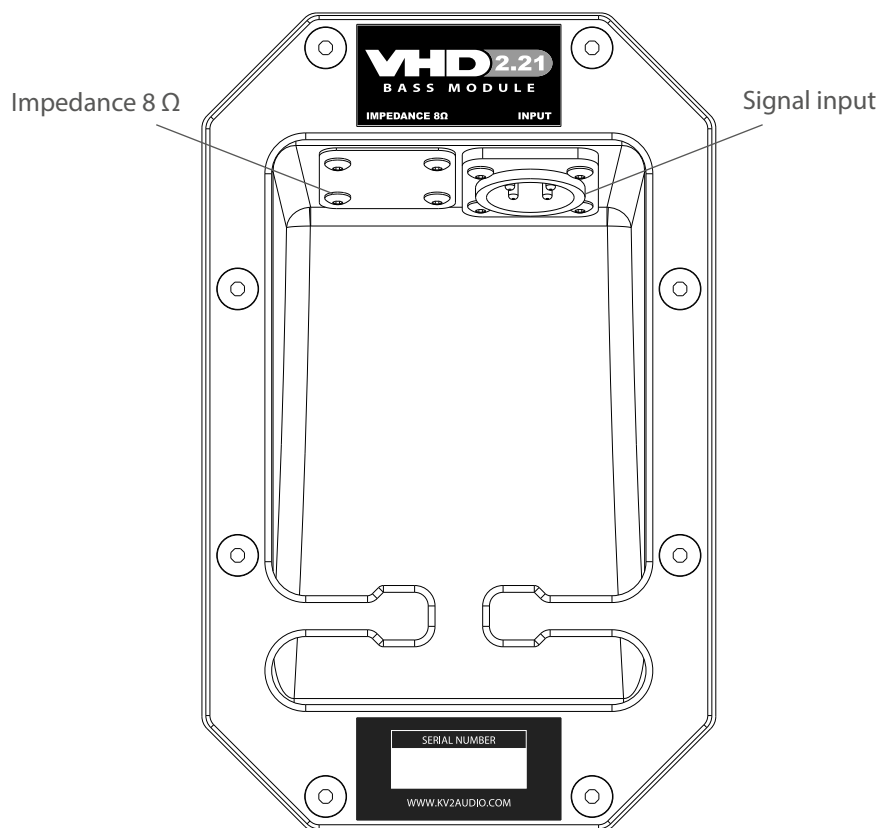
Acoustic Components

The VHD2.21/VHD4.21 woofer technology is based around very high efficiency, high power woofer designs. The device features two 21" cones with a high temperature 6" (153 mm) inside/outside epoxy baked reinforced cellulose voice coil assembly, that undergoes multiple baking and curing processes as well as advanced neodymium advanced ventilated magnetic structures with complex cooling systems. The woofer cone has been specially developed to withstand the demanding environment within the Bandpass chamber.

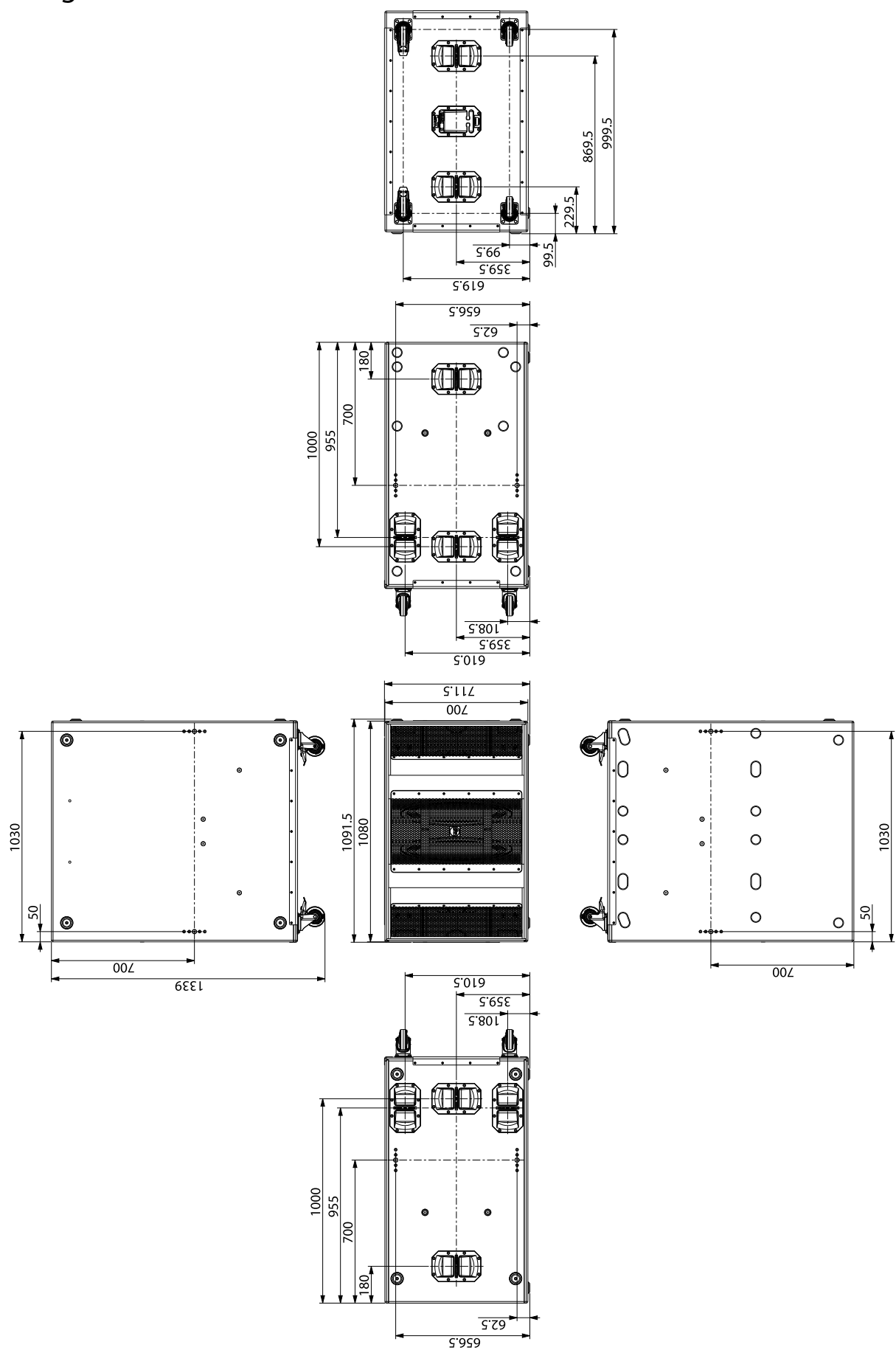
Enclosure Design

The VHD2.21/VHD4.21 is a full size low port loss Bandpass design, in a substantial Baltic Birch enclosure featuring a large number of ergonomically designed parts that make it an easy speaker to set up and use. Internal steel bracing bars are utilized to ensure rigid integrity and there are 6 side handles and two top and bottom that make it manageable to pick up and reposition the unit in a natural - instinctive and intuitive balanced manner. The VHD2.21/VHD4.21 Subwoofer Module employs 4 fixed cast wheels feet to enable easy transportation and there are numerous dimples to allow locking and securing of existing and other KV2 Audio VHD cabinets .

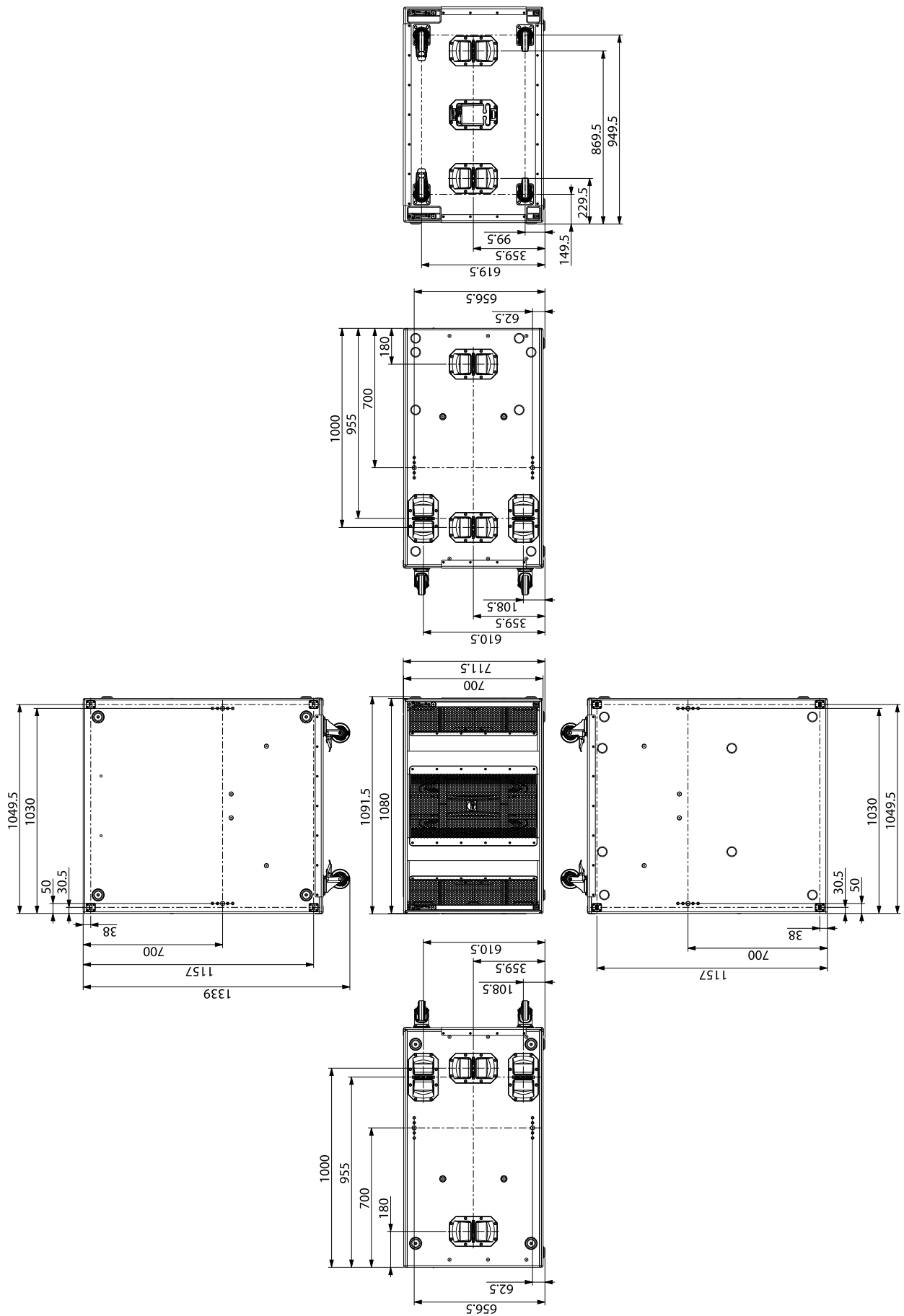
Rear Panels



Drawing



Drawing



Specifications

System Acoustic Performance

Max SPL Long-term	143 dB (2× VHD2.21/VHD4.21)
Max SPL Peak	149 dB (2× VHD2.21/VHD4.21)
-3 dB Response	34 Hz to 180 Hz
-10 dB Response	28 Hz to 240 Hz
Impedance VHD2.21/VHD2.21R	8 Ω
Impedance VHD4.21/VHD4.21R	4 Ω
Crossover Point	60 Hz to 120 Hz

Low Frequency Section

Acoustic Design	Bandpass with low port losses
Low Frequency Amplifier Requirement	3 500 W
Woofer Size / Voice Coil Diameter	2x 21" / 6"
Magnet Type	Neodymium Advanced Ventilated
Diaphragm Material	Epoxy Reinforced Cellulose

Speaker Input

Speaker Input	AP4 male
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Cabinet

Cabinet Material	Baltic birch
Handles	10
Color	Black (wear resistant polymer coating)

Physical Dimensions

Height	700 mm (27.56")
Width	1 080 mm (42.52")
Depth	1 340 mm (52.76")
Weight	155 kg (341.7 lb)
Weight - R - flying version	158 kg (348 lb)

Amplification and control requirements

Amplification and control	VHD2.21 by VHD3200/ VHD3200D, VHD4.21 by VHD7000D
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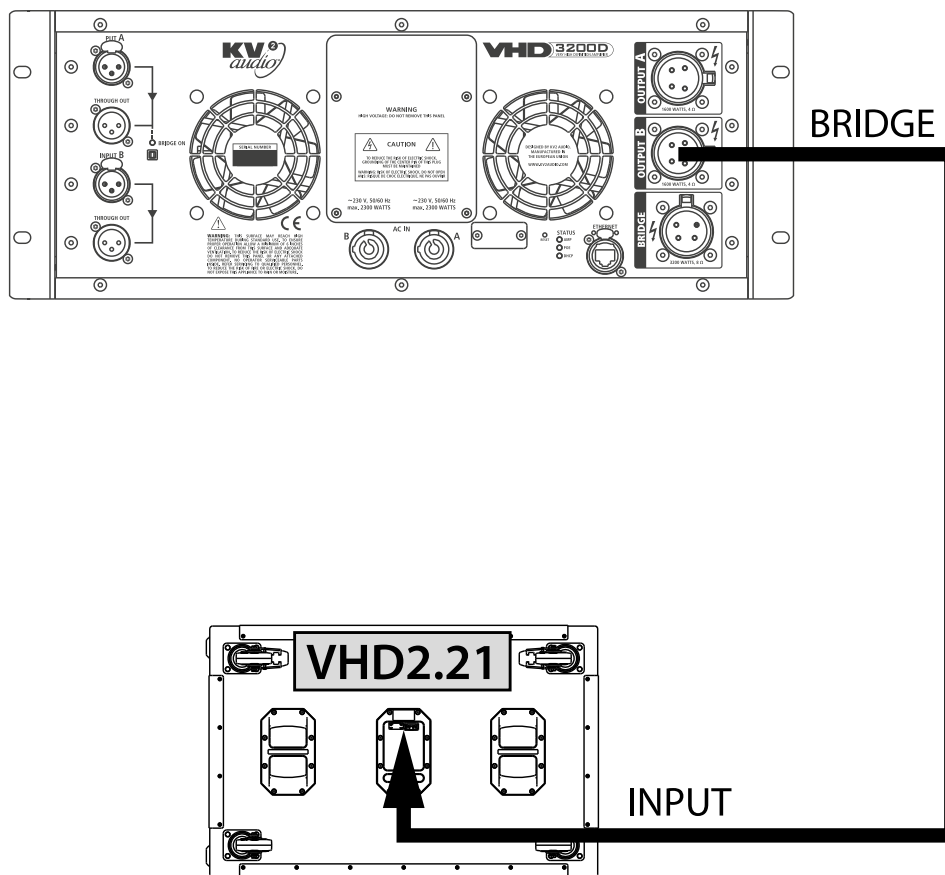
Outputs connections

1× VHD2.21 (8 Ω), run with VHD3200D or VHD3200D

- total impedance 8 Ω

The minimum recommended output load on VHD3200 bridge output connector is 4 Ω .

Use KV2 LF cable with 4-pin Amphenol connectors (AP4) only.

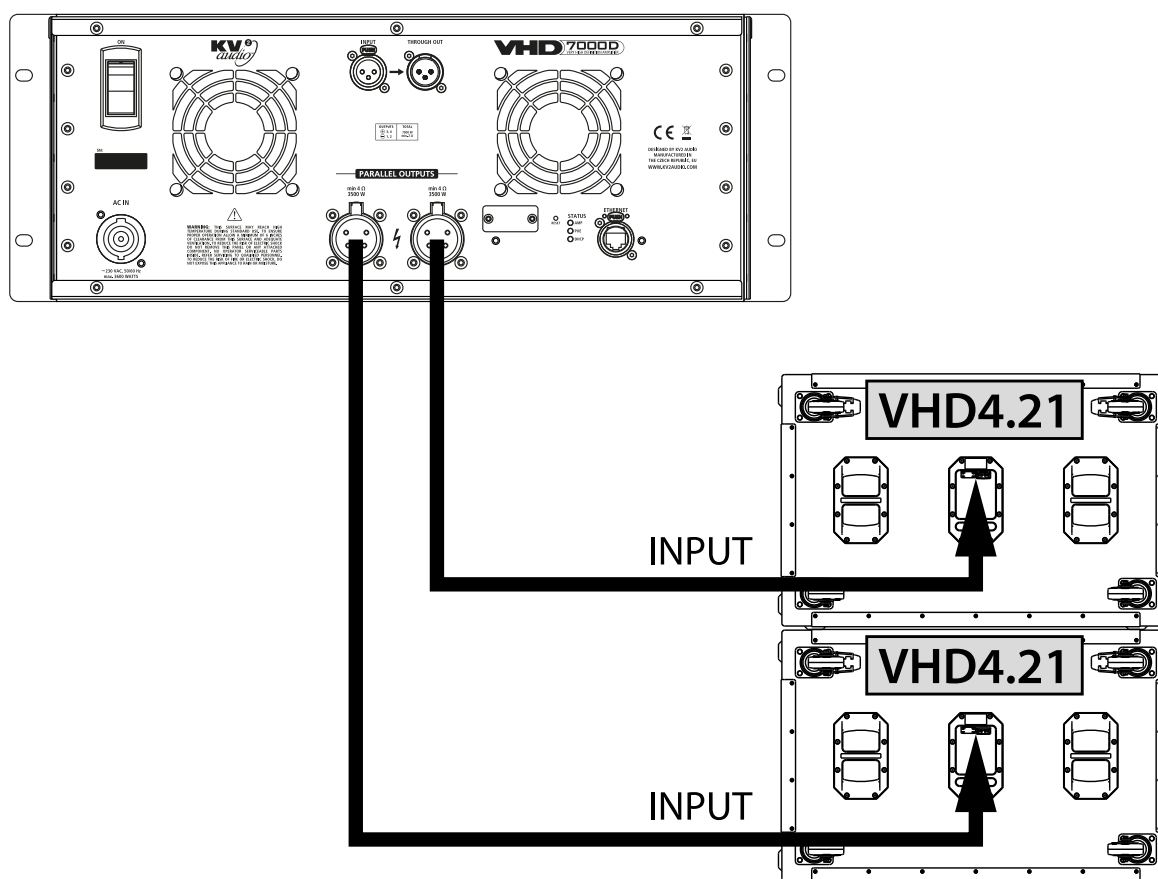


Outputs connections

2× VHD4.21 (4 Ω each), run with VHD7000D

- total impedance 2 Ω

VHD7000D speaker outputs connectors are wired in parallel. The minimum recommended output load is 4 Ω per connector. Use KV2 LF cables with 4-pin Amphenol connectors (AP4) only.



Flying instructions

VHD4.21R, VHD2.21R FLYBAR

MAXIMUM ALLOWANCE:

4× VHD4.21R Active + 4× VHD4.21R Passive or 8× VHD2.21R Passive Subwoofer

FLYBAR WEIGHT:

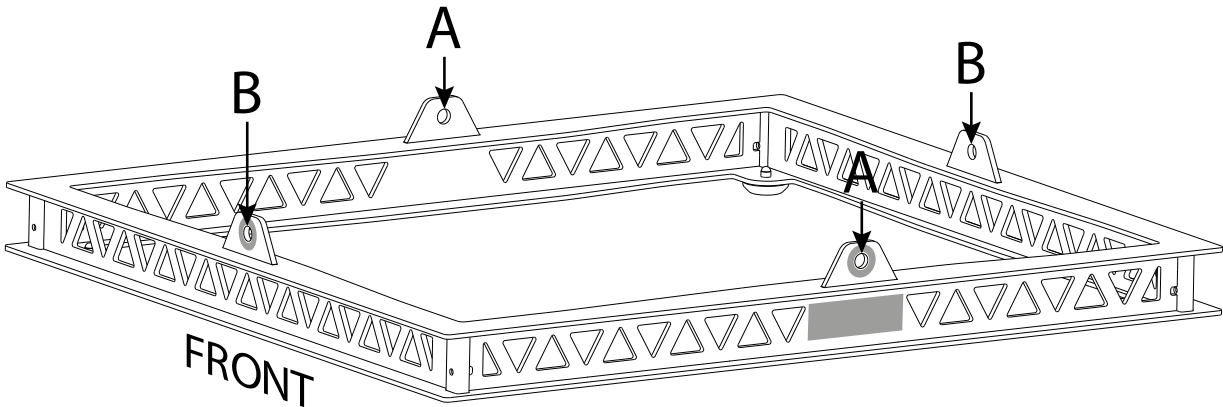
43.5 kg (96 lb)

MAX. LOAD:

1 400 kg (3 087 lb)

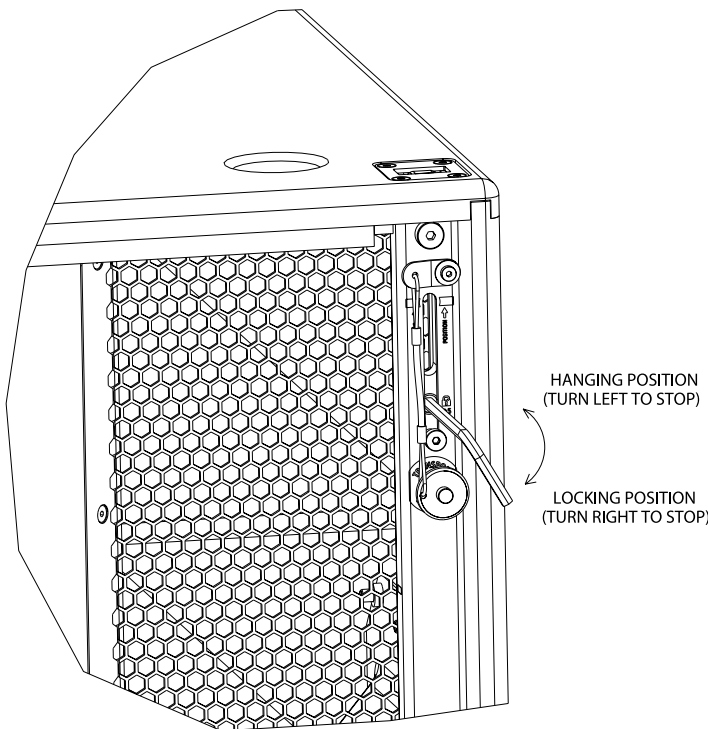
HANGING OPTION:

A	for VHD4.21R – C for SAFETY
B	for VHD2.21R – C for SAFETY
C	for VHD2.21R or VHD4.21R – B for SAFETY



Instructions for hanging or locking positions

1. PLACE THE ALLEN KEY IN THE SLOT
 - 2A. TURN RIGHT TO STOP FOR LOCKING POSITION
 - 2B. TURN LEFT TO STOP FOR HANGING POSITION
- (ALL 4 HANGING SLOTS)



Cover for VHD2.21/4.21

part name: **Cover VHD2.21/4.21**

part number: **KVV 987 352**

description:

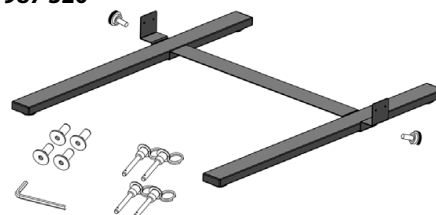
- heavy duty
- padded



SL Ground Stack

part name: **SL Ground Stack**

part number: **KVV 987 320**



Bass speaker cable LF15, AP4 connectors - 1.5 m

part name: **LF15**

part number: **KVV 987 121**

- 1.5 m (5 ft)
- for Bass Module daisy-chaining



Bass speaker cable LF40, AP4 connectors - 4 m

part name: **LF40**

part number: **KVV 987 122**

- 4 m (13 ft)
- for Bass Module hook-up



Bass speaker cable LF100, AP4 connectors - 10 m

part name: **LF100**

part number: **KVV 987 123**

- 10 m (33 ft)
- for Bass Module hook-up



Bass speaker cable LF200, AP4 connectors - 20 m

part name: **LF200**

part number: **KVV 987 124**

- 20 m (66 ft)
- for Bass Module hook-up



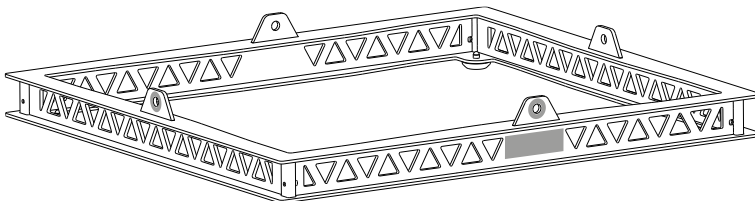
VHD4.21R / VHD2.21R Flybar

part name: **VHD4.21R / VHD2.21R Flybar**

part number: **KVV 987 398**

description:

- heavy duty
- padded



Warranty

Your VHD Subwoofers are covered against defects in material and workmanship.

Refer to your supplier for more details.

Service

In the unlikely event that your VHD Subwoofers develops a problem, it must be returned to an authorised distributor, service centre or shipped directly to the KV2 Audio factory. Because of the complexity of the design and the risk of electrical shock, all repairs must be attempted only by qualified technical personnel.

If the unit needs to be shipped back to the factory, it must be sent in its original carton. If improperly packed, the unit may be damaged.

To obtain service, contact your nearest KV2 Audio Service Centre, Distributor or Dealer.



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Made Perfectly Clear.

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