



# ESD Speakers

## User Guide

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ESD Cube

ESD5

ESD25

ESD6

ESD8

ESD36

ESD10

ESD12

ESD15

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# ESD Cube

ESD Cube - KVV 987 377

Ultra Compact Passive Speaker



## Application

Specifically designed as an ultra compact passive loudspeaker system for reproduction of high quality speech and recorded music.

- Suitable in fixed installations as a full range speaker or as a system with accompanying subwoofers
- Excellent peripheral reinforcement for main KV2 systems
- Fill-in speaker
- Compact spot monitoring / playback
- Ceiling or under balcony mounting

## Introduction

The ESD Cube is a very high quality ultra compact low profile 5" passive loudspeaker, utilising a unique trans-coil transducer design for superior vocal reproduction, extended high frequency response, increased dynamic range and the lowest distortion of any comparable speaker in its class. Housed in an aluminium enclosure, its compact dimensions make it extremely discreet for peripheral reinforcement in theaters, bars, clubs, churches, museums or tourist attractions. Along with the dedicated ESP1000 amplifier, a combination of up to 8 ESD Cube units, or 4 Cube units with either one or two ESD1.10 subwoofers can be operated.

## Connection

The ESD Cube features both Speakon (NL4) connectors and a terminal block. Along with the ESP1000 amplifier, a combination of up to 8 ESD Cube units, or 4 Cube units with either one or two ESD1.10 subwoofers can be operated.

Example of the connection (4 channels and 8 ESD Cubes) - for more see ESP1000 User Manual (KVV 120 136)



## Installation

**IMPORTANT! WHEN INSTALLING THE CUBE BRACKET ENSURE YOU USE THE CORRECT PLUGS AND FIXINGS TO ENABLE SECURE ATTACHMENT TO A SURFACE USING THE SUPPLIED BRACKET SCREWS. KV2 AUDIO IS NOT RESPONSIBLE FOR ANY FAILURE, DAMAGE OR INJURY CAUSED BY THE INSTALLER NOT APPLYING THIS DUE CARE AND ATTENTION.**

The ESD Cube is supplied with a single Horizontal Bracket, 2 locking screws with spacers and one 3 mm Allen key. Each ESD Cube is equipped with two oval mounting apertures designed for easy vertical or horizontal attachment. To enable fixing to a ceiling or alternatively to the wall, measure out the center point of the ESD Cube Wall bracket. There are two extra holes on the Wall Bracket, designed to accept locking screws - this side belongs on the rear side of the ESD Cube cabinet.

Fix the Wall bracket using one center countersunk screw. Rotate the Wall bracket around the central screw and set the correct angle of the bracket.

Fix the Wall Bracket using the remaining four countersunk screws. Position the ESD Cube on to the Wall Bracket's pin heads and fix it sliding the cabinet down. When mounting the ESD Cube on the ceiling, slide the cabinet backward and fix/secure it using two locking screws and tighten using the supplied Allen key.

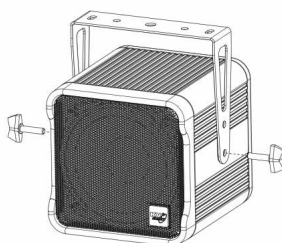
## Drawings

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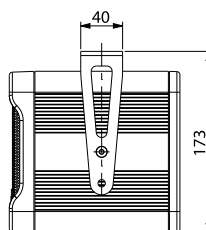
**ESD Cube Horizontal Bracket**

part number:

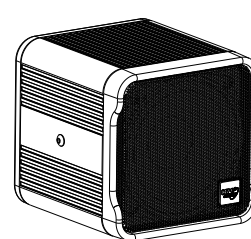
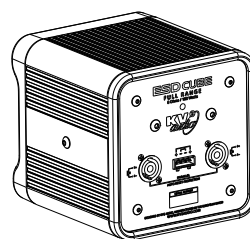
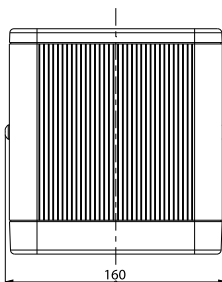
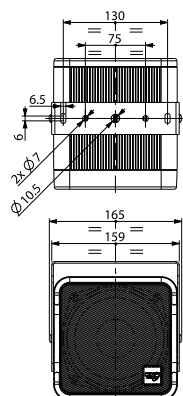
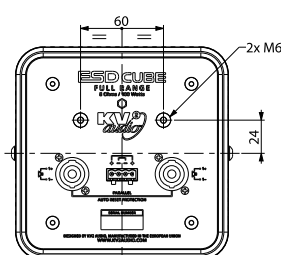
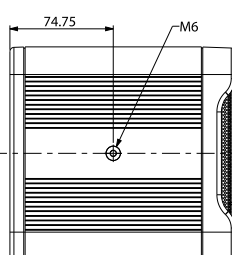
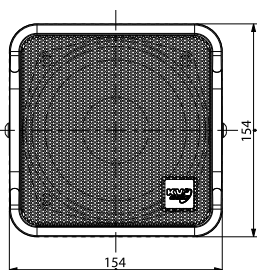
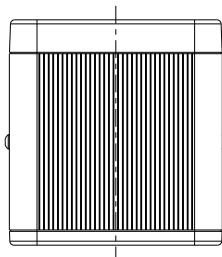
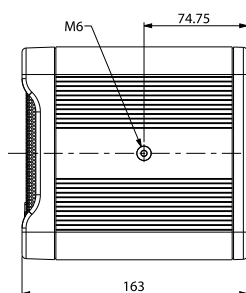
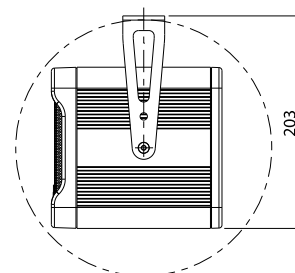
**KVV 987 408**



**POSITION 1 / ROTATION  $\pm 25^\circ$**

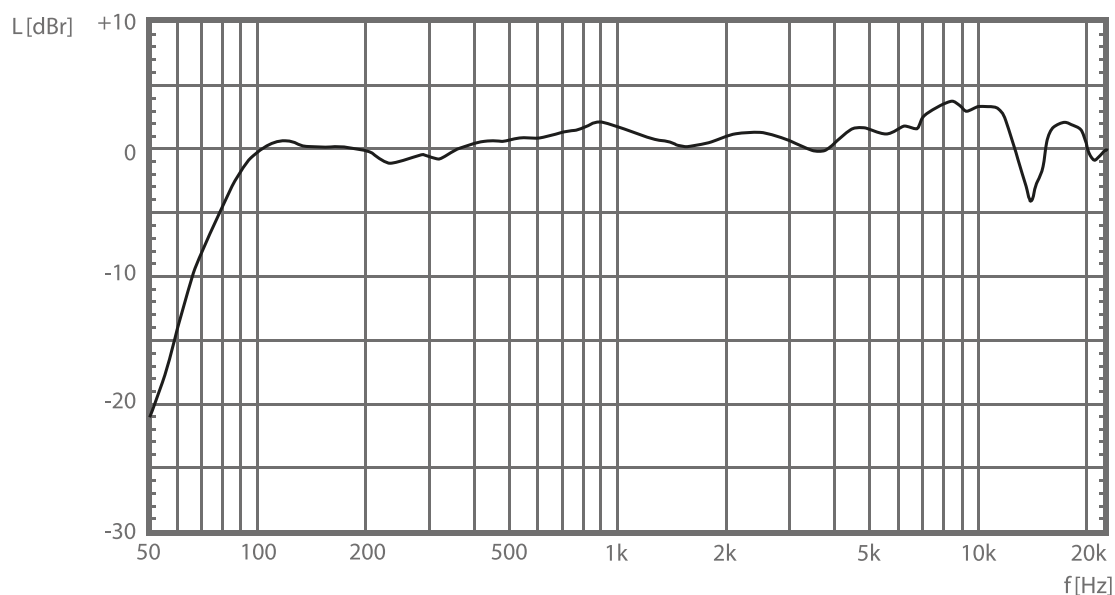


**POSITION 2 / ROTATION  $360^\circ$**

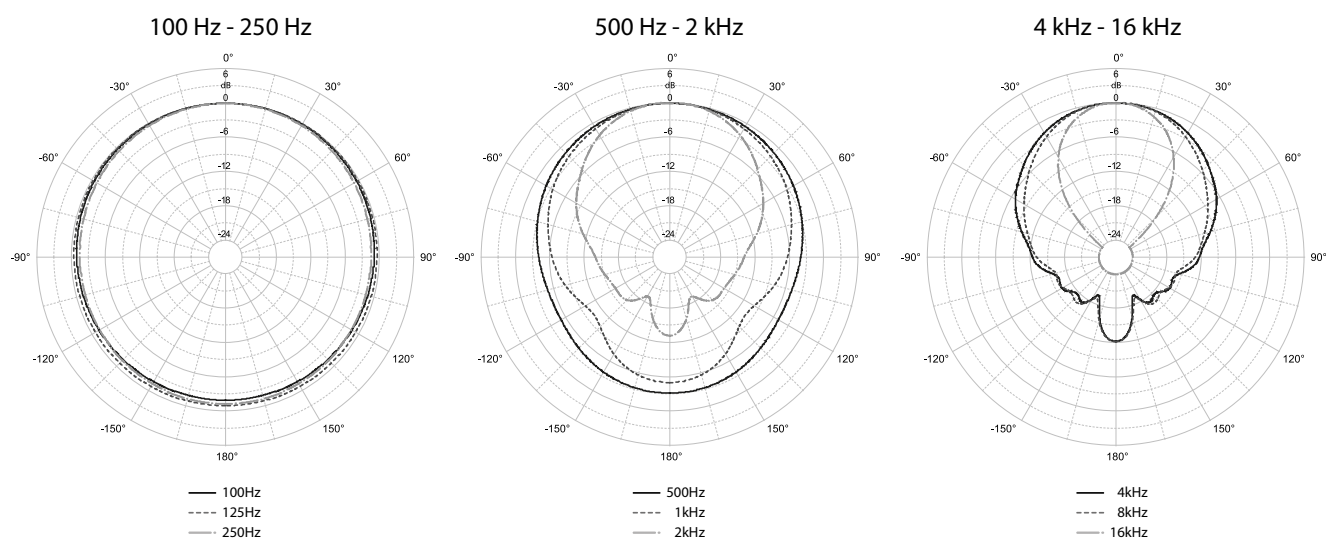




## Frequency response



## Vertical / Horizontal Polarplots



## Specifications

### System Acoustic Performance

Max SPL Long-term	110 dB
Max SPL Peak	116 dB
-3 dB Response	90 Hz to 18 kHz (with ESP1000 equalization)
Recommended Power	100 W
Sensitivity	90 dB
Impedance	8 $\Omega$
Crossover Point	no - full range

### Full Range Transducer

Acoustic Design	Closed box, Front Loaded
Magnet Type	Neodymium
Protection	Thermal breaker - autoreset
Number of drivers	1
Woofer Size	5" AIC Trans-coil
Diaphragm Material	Epoxy Reinforced Cellulose

### Signal Output

Output channels	1
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### Speaker Input

Speaker Input	2x Neutrik Speakon®, Terminal Block
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### Cabinet

Cabinet Material	Extruded Aluminium
Color	Matt Black or any RAL

### Physical Dimensions

Height	154 mm (6")
Width	154 mm (6")
Depth	163 mm (6.4")
Weight	3 kg (6.6 lb)

# ESD5

ESD5 - KVV 987 340

The Ultimate Compact Passive System



## Application

Specifically designed as a super- discreet passive loudspeaker for reproduction of recorded music and speech

- Suitable in fixed installations as a full range speaker or as a system with accompanying subwoofers
- Excellent peripheral reinforcement for main KV2 systems
- Fill-in speaker
- Monitoring
- Ceiling or under balcony mounting

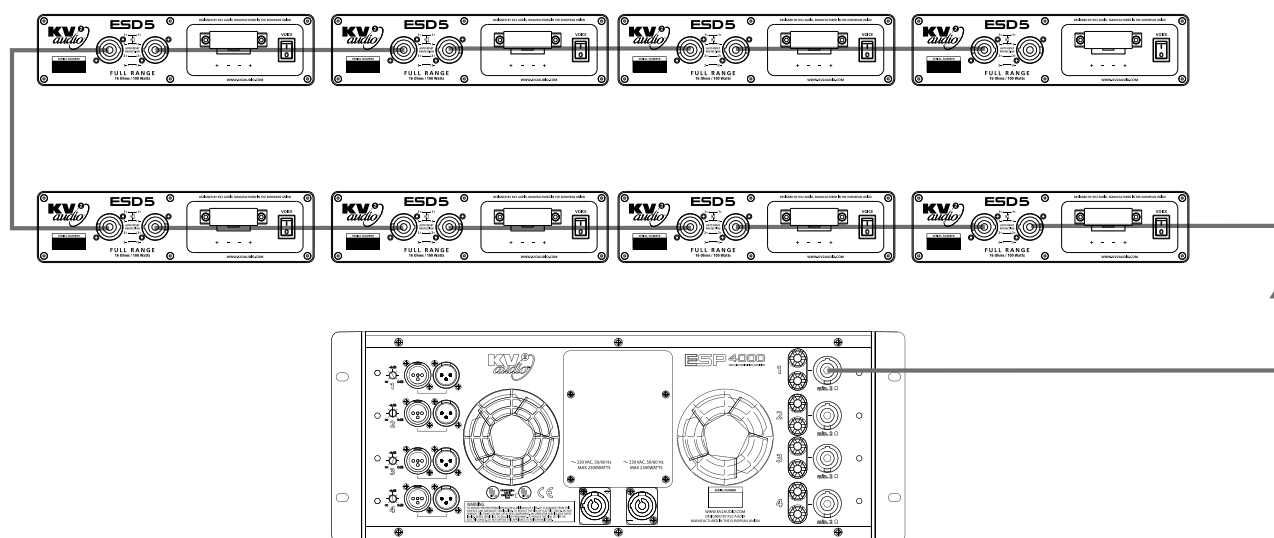
## Introduction

The ESD5 is a very high quality 2-way full-range compact low profile passive loudspeaker with performance that defies its size. Delivering exceptional clarity for speech and program reproduction, the ESD5 is perfect for discreet installations and audio visual presentations where sound quality is paramount, but aesthetic dimensions are of equal importance. The ESD5's high impedance capability means that up to sixteen units can be run from a single suitable quality stereo amplifier, to provide a high fidelity background program throughout a venue. A built-in switchable voice eq circuit is included.

## Connection

The ESD5 features both Speakon (NL4) connectors and a terminal block. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESD5's.

PARALLEL CONNECTION OF THE ESD5 (16 Ω) - TOTAL IMPEDANCE 2 Ω



## Installation

The ESD5 is supplied with a single "ESD5 Wall Bracket", 2 locking screws with spacers and one 3 mm Allen key. Each ESD5 is quipped with two oval mounting apertures designed for easy vertical or horizontal attachment to the ESD5 Wall Bracket.

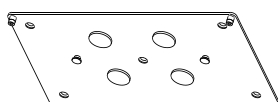
To enable fixing to a ceiling or alternatively to the wall, measure out the center point of the ESD5 Wall bracket. There are two extra holes on the Wall Bracket, designed to accept locking screws - this side belongs on the rear side of the ESD5 cabinet.

Fix the Wall bracket using one center countersunk screw. Rotate the Wall bracket around the central screw and set the correct angle of the bracket.

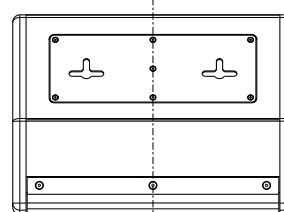
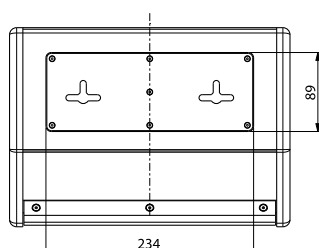
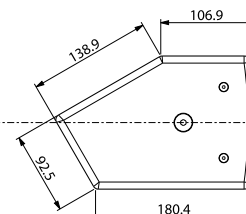
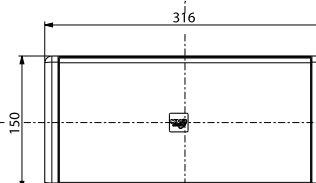
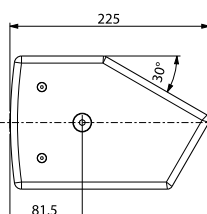
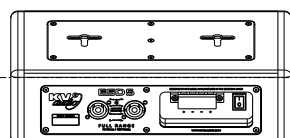
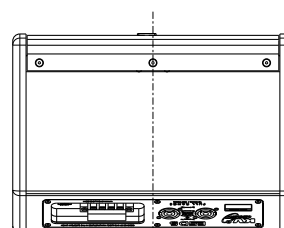
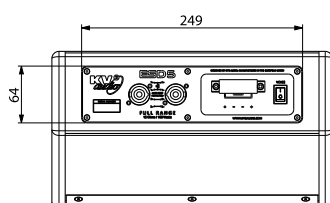
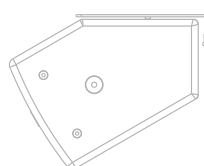
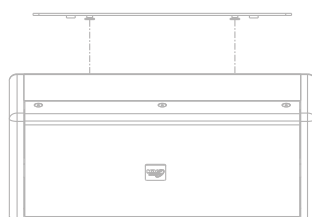
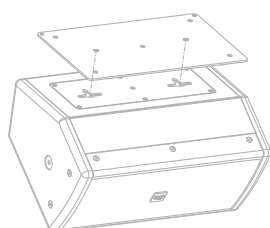
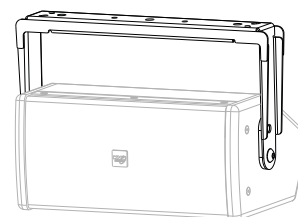
Fix the Wall Bracket using the remaining four countersunk screws. Position the ESD5 on to the Wall Bracket's pin heads and fix it sliding the cabinet down. When mounting the ESD5 on the ceiling, slide the cabinet backward and fix/secure it using two locking screws and tighten using the supplied Allen key.

## Drawings

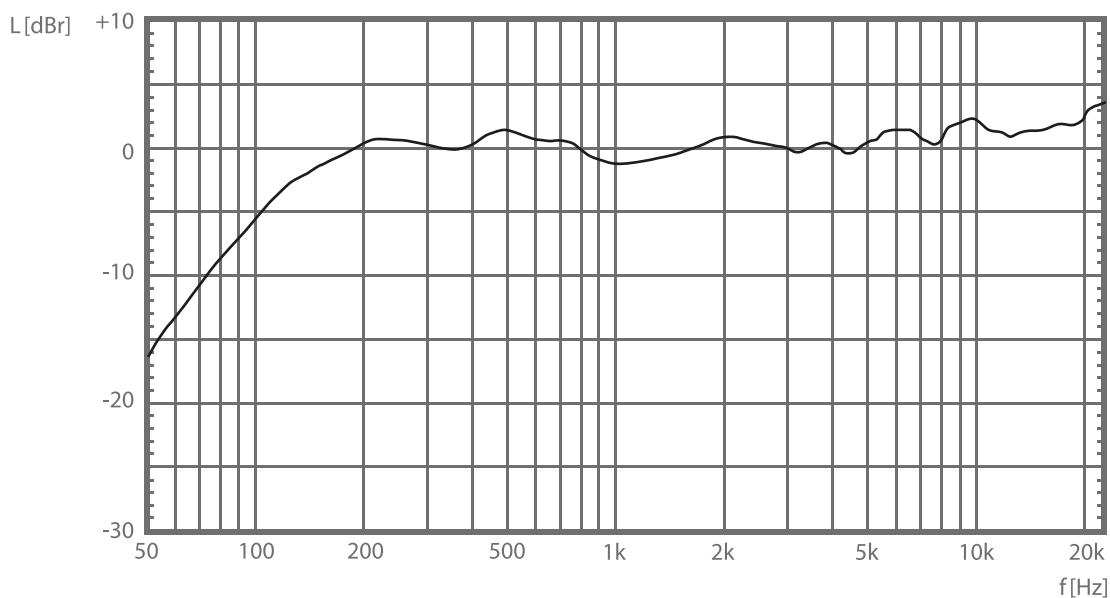
part name:  
**ESD5/25 Ceiling mount bracket**  
(included with the product)



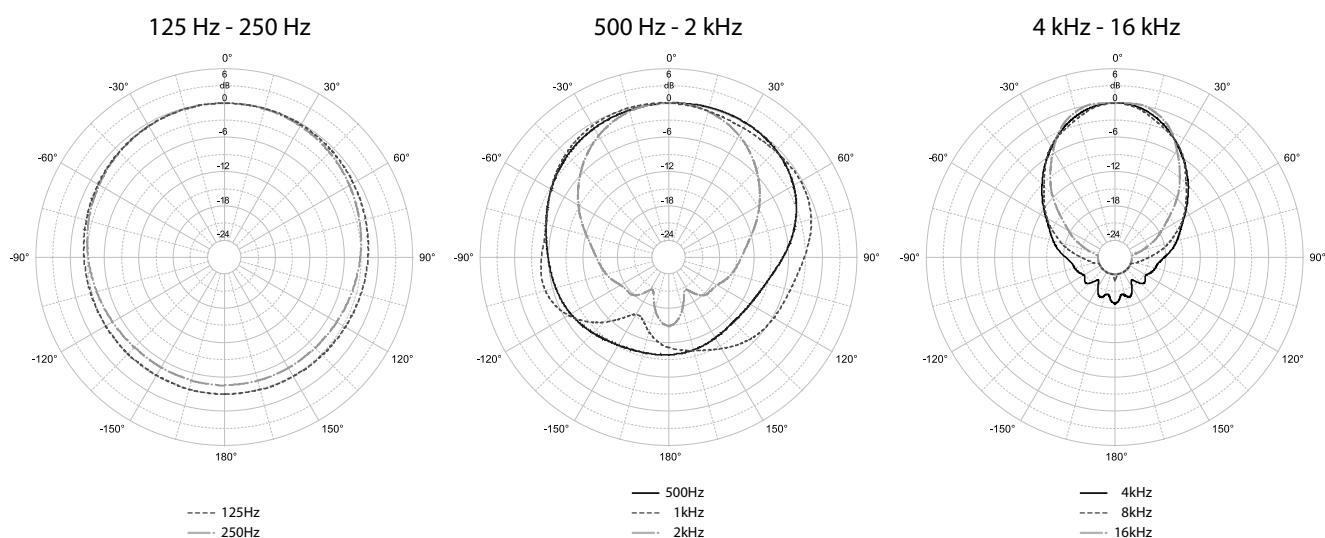
part name:  
**ESD5 Horizontal Bracket**  
part number:  
**KVV 987 491**



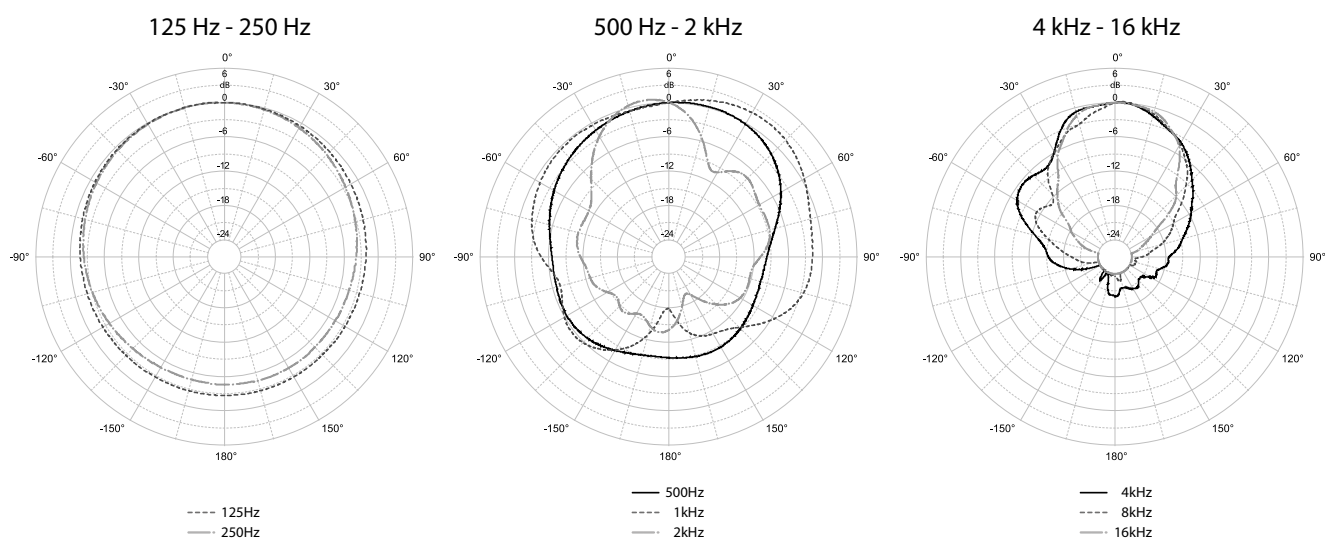
## Frequency response



## Vertical Polarplots



## Horizontal Polarplots



## Specifications

### System Acoustic Performance

Max SPL Long-term	109 dB
Max SPL Peak	115 dB
-3 dB Response	125 Hz to 22 kHz
-10 dB Response	74 Hz to 28 kHz
Recommended Power	100 W
Sensitivity	89 dB
Impedance	16 $\Omega$
Crossover Point	3.0 kHz

### High Frequency Section

Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	90° x 90°
Throat Exit Diameter / Diaphragm Size	1" / 1.3"
Diaphragm Material	Titanium
Magnet Type	Ferrite
Protection	RMS Limiter

### Low Frequency Section

Acoustic Design	Closed box
Woofer Size / Voice Coil Diameter	5" / 1.75"
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Ferrite
Protection	RMS Limiter

### Speaker Input

Speaker Input	2x Neutrik Speakon®, Terminal Block
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### Cabinet

Cabinet Material	Baltic birch
Color	"Orange peeled" Matt Black or any RAL

### Physical Dimensions

Height	150 mm (5.9")
Width	316 mm (12.4")
Depth	225 mm (8.84")
Weight	7 kg (15.4 lb)

# ESD25

## 2-Way Full-Range Compact Low Profile Passive Loudspeaker



## Application

Specifically designed as a super- discreet passive loudspeaker for reproduction of recorded speech and music

- Suitable in fixed installations as a full range speaker or as a system with accompanying subwoofers
- Excellent peripheral reinforcement for main KV2 systems
- Fill-in speaker
- Monitoring
- Ceiling or under balcony mounting

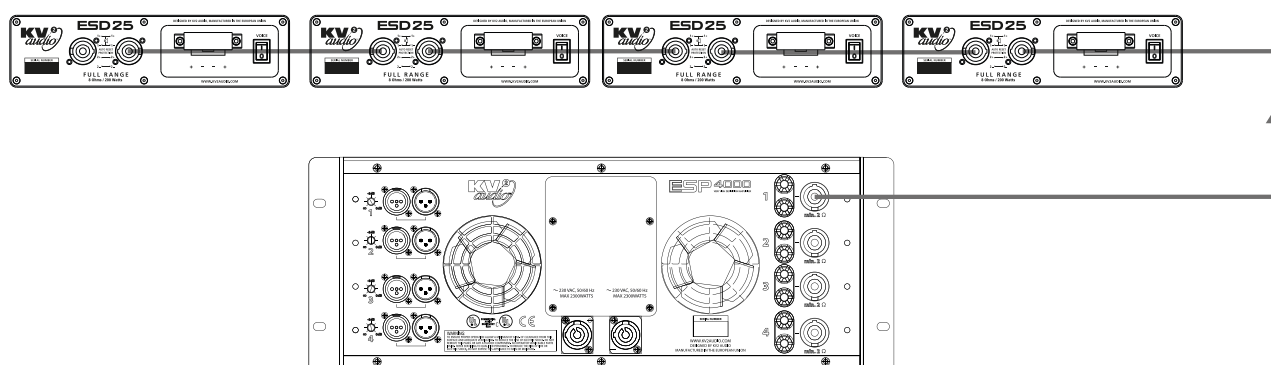
## Introduction

The ESD25 is a very high quality, 2-way full-range compact low profile passive loudspeaker with enhanced lower bass extension. Its opposing driver design assists with pattern control of the low mid frequencies, reducing reflections in reverberant spaces and improving intelligibility. Delivering exceptional clarity for speech and program reproduction, the ESD25 is ideal for under balcony or front stage fill applications in theaters and performing arts spaces where transparent supplementation of the main system is required. As with the already widely acclaimed ESD5, the ESD25 is shaped to fit discreetly into these applications and comes with its own integral bracket for quick installation. A built-in switchable voice eq circuit is included.

## Connection

The ESD25 features both Speakon (NL4) connectors and a terminal block. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESD25's.

PARALLEL CONNECTION OF THE ESD25 (8  $\Omega$ ) - TOTAL IMPEDANCE 2  $\Omega$





## Installation

The ESD25 is supplied with a single "ESD25 Wall Bracket", 2 locking screws with spacers and one 3 mm Allen key. Each ESD25 is equipped with two oval mounting apertures designed for easy vertical or horizontal attachment to the ESD25 Wall Bracket.

To enable fixing to a ceiling or alternatively to the wall, measure out the center point of the ESD25 Wall bracket. There are two extra holes on the Wall Bracket, designed to accept locking screws - this side belongs on the rear side of the ESD25 cabinet.

Fix the Wall bracket using one center countersunk screw. Rotate the Wall bracket around the central screw and set the correct angle of the bracket.

Fix the Wall Bracket using the remaining four countersunk screws. Position the ESD25 on to the Wall Bracket's pin heads and fix it sliding the cabinet down. When mounting the ESD25 on the ceiling, slide the cabinet backward and fix/secure it using two locking screws and tighten using the supplied Allen key.

## Drawings

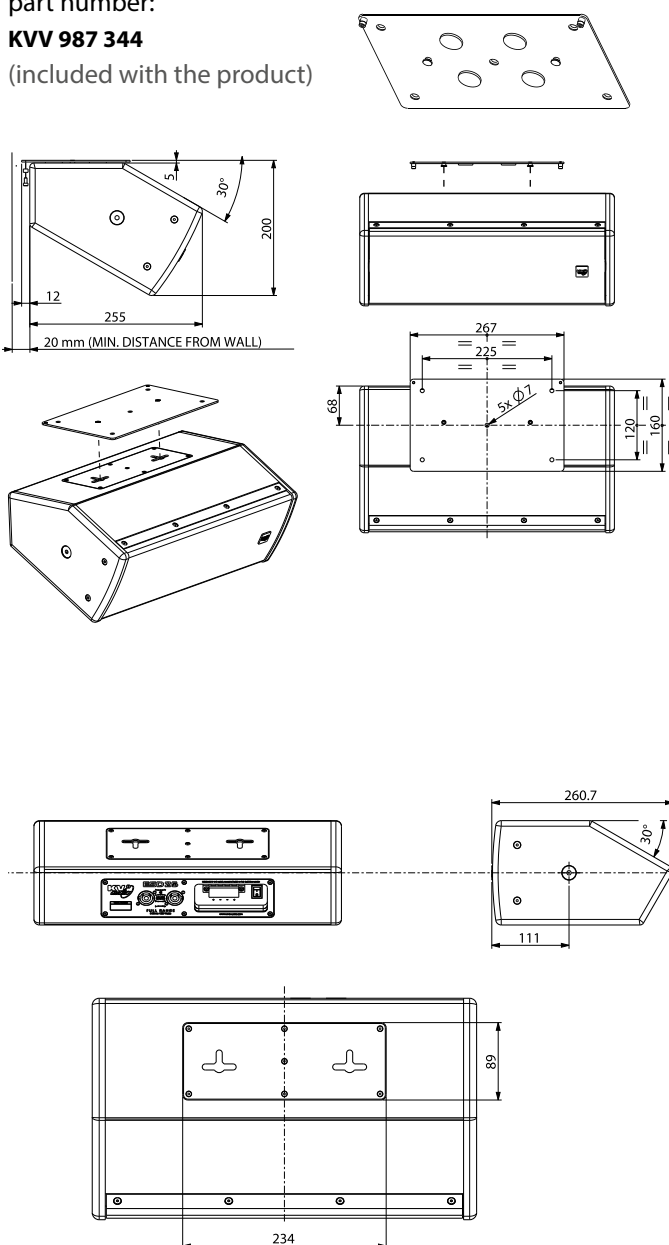
part name:

**ESD5/ESD25 Ceiling Mount Bracket**

part number:

**KVV 987 344**

(included with the product)

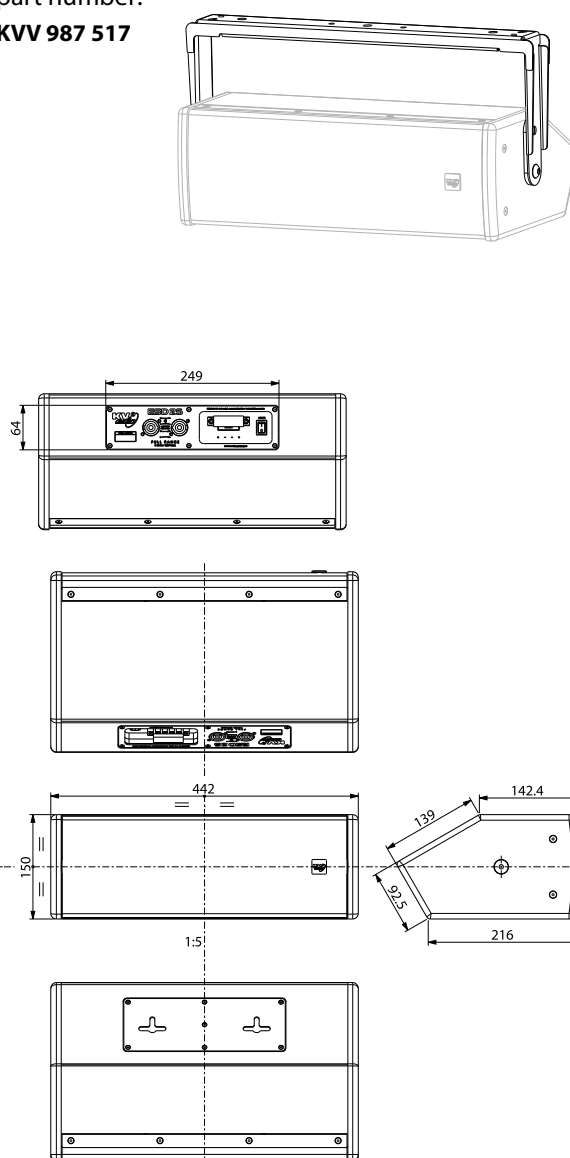


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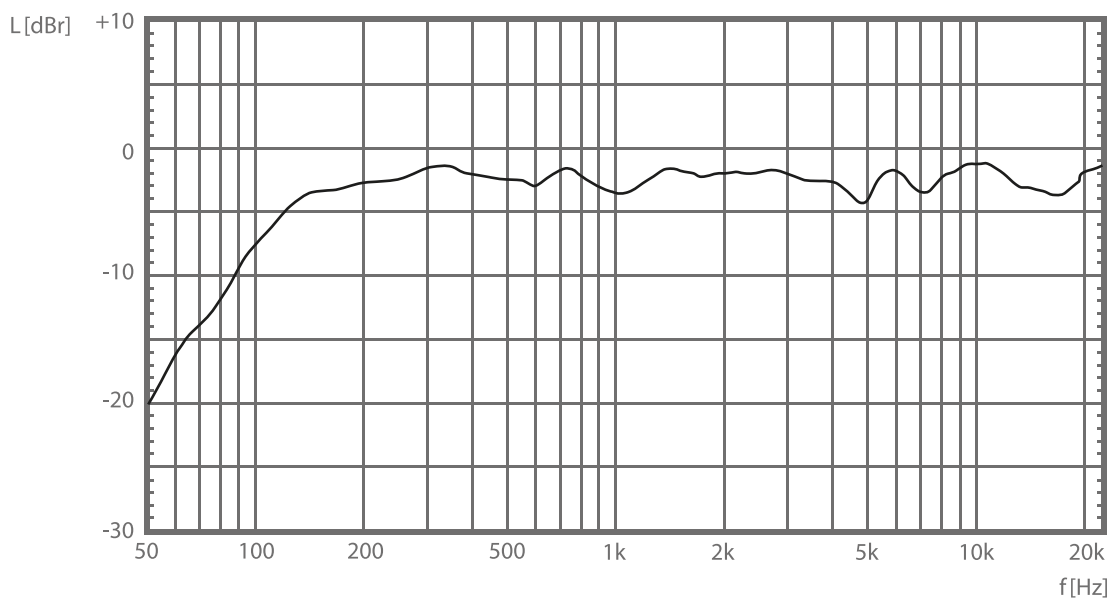
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part number:

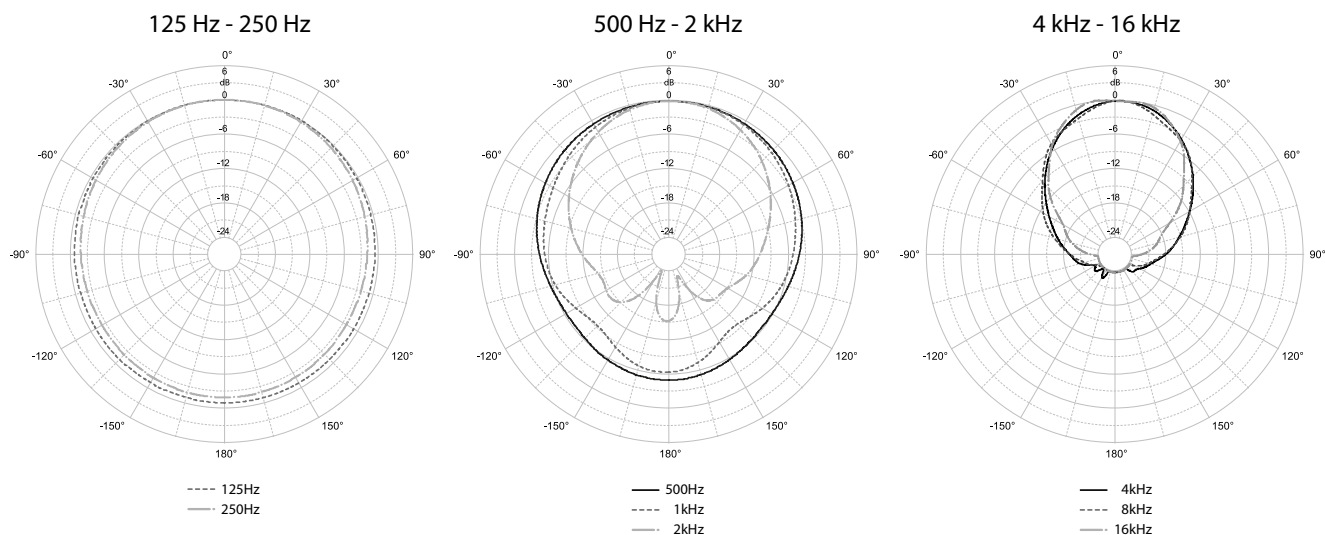
**KVV 987 517**



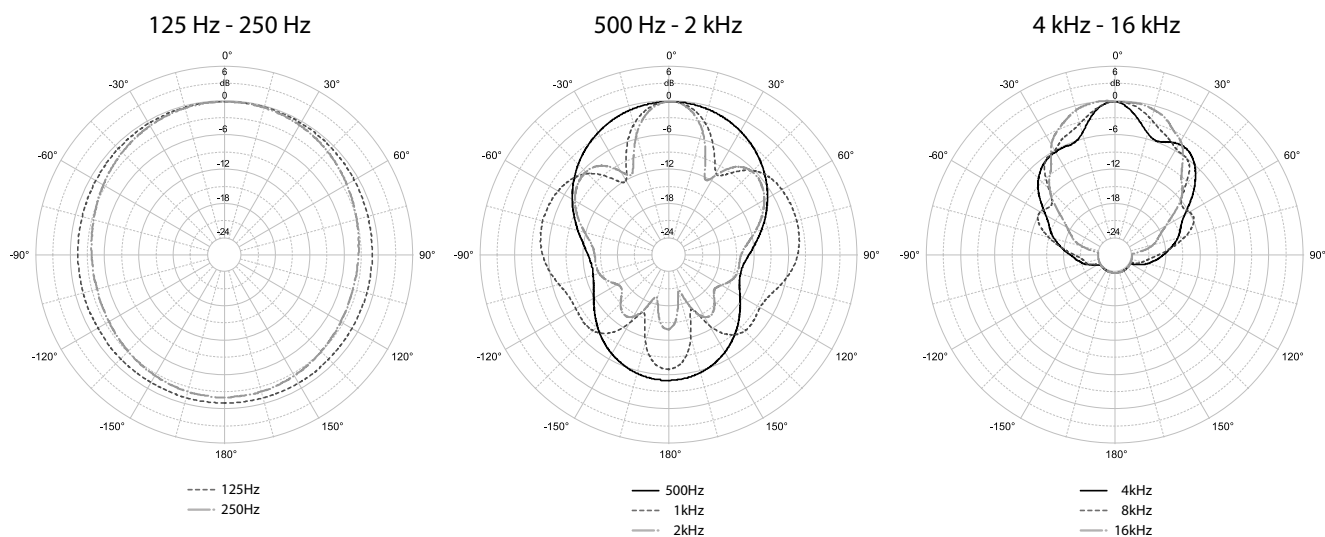
## Frequency response



## Vertical Polarplots



## Horizontal Polarplots



## Specifications

### System Acoustic Performance

Max SPL Long-term	118 dB
Max SPL Peak	124 dB
-3 dB Response	120 Hz to 22 kHz
-10 dB Response	72 Hz to 28 kHz
Recommended Power	200 W
Sensitivity	92 dB
Impedance	8 $\Omega$
Crossover Point	3.0 kHz

### High Frequency Section

Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	90° x 90°
Throat Exit Diameter / Diaphragm Size	1" / 1.3"
Diaphragm Material	Titanium
Magnet Type	Ferrite
Protection	RMS Limiter

### Low Frequency Section

Acoustic Design	Closed box
Number of drivers	2
Woofer Size / Voice Coil Diameter	5" / 1.75"
Magnet Type	Ferrite
Diaphragm Material	Epoxy Reinforced Cellulose
Protection	RMS Limiter

### Speaker Input

Speaker Input	2x Neutrik Speakon®, Terminal Block
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### Cabinet

Cabinet Material	Baltic birch
Color	"Orange peeled" Matt Black or any RAL

### Physical Dimensions

Height	150 mm (5.9")
Width	442 mm (17.4")
Depth	260.7 mm (10.26")
Weight	9.6 kg (21.2 lb)

# ESD6

**FULL RANGE 175 Watts**

**The Ultimate Compact Passive System**



## Application

**Specifically designed as a passive loudspeaker for reproduction of recorded music in small areas**

- Suitable in Fixed installations as full range stand-alone
- or with subwoofers
- Excellent peripheral reinforcement for main KV2 systems
- Portable PA for Multi-Media applications
- Compact floor monitoring solutions
- Domestic and Professional studio monitoring

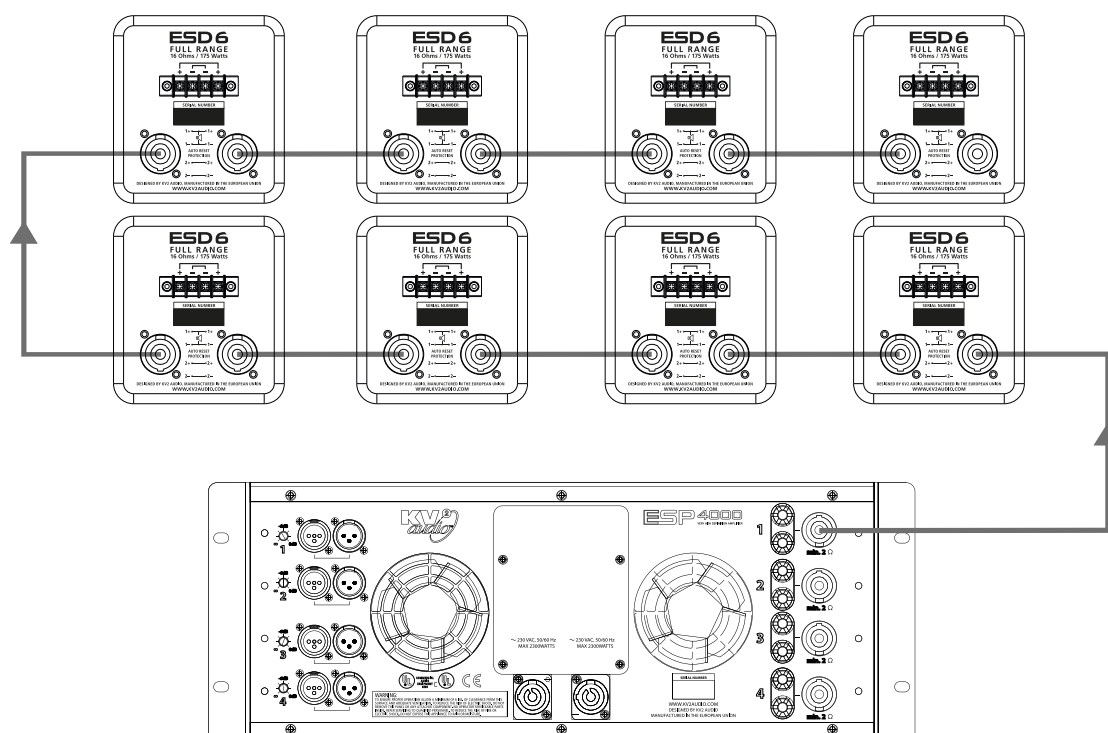
## Introduction

The ESD6 is a high quality 2-way full-range compact passive loudspeaker with output that defies its size. Delivering amazing clarity for speech and program reproduction, the ESD6 is perfect for discreet installations and audio visual presentations where sound quality is paramount but size also matters. The ESD6's high impedance capability means that up to sixteen units can be run from a single suitable quality stereo amplifier to provide a high fidelity background program throughout a venue.

## Connection

The loudspeaker system is connected to an amplifier using Speacon (NL4) connectors or the terminal board. The connectors are interconnected in parallel to connect more loudspeaker systems.

PARALLEL CONNECTION OF THE ESD6 (16 Ω) - TOTAL IMPEDANCE 2 Ω



## Installation

Installations should be carried out using KV2 Audio's horizontal or vertical U brackets. They are mounted vertically using M10 points located on the side of the cabinet or in the top handle and bottom M10 plate (supplied with horizontal bracket) for horizontal fixing and to a mounting post with a diameter of 35 mm using a support flange.

The ESD6 also features a 35 mm speaker pole mount adapter housed at the bottom of the cabinet for use with conventional speaker stands and poles.

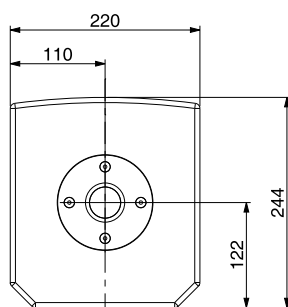
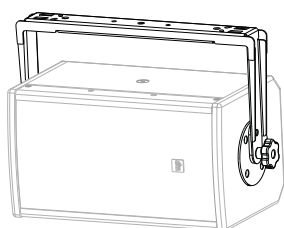
## Drawings

part name:

**ESD6 "U" HORIZONTAL BRACKET**

part number:

**KVV 987 483**

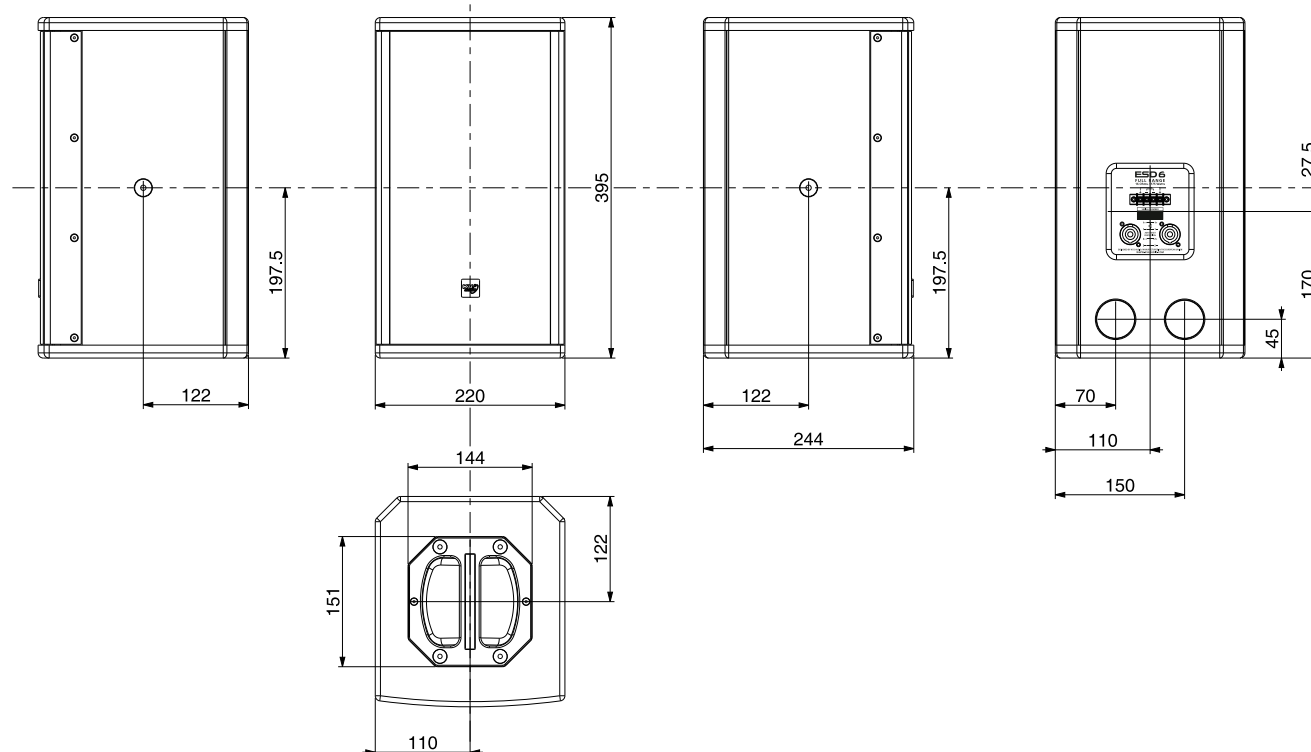
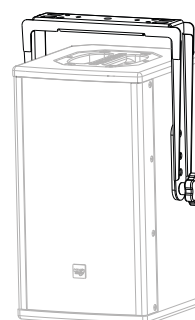


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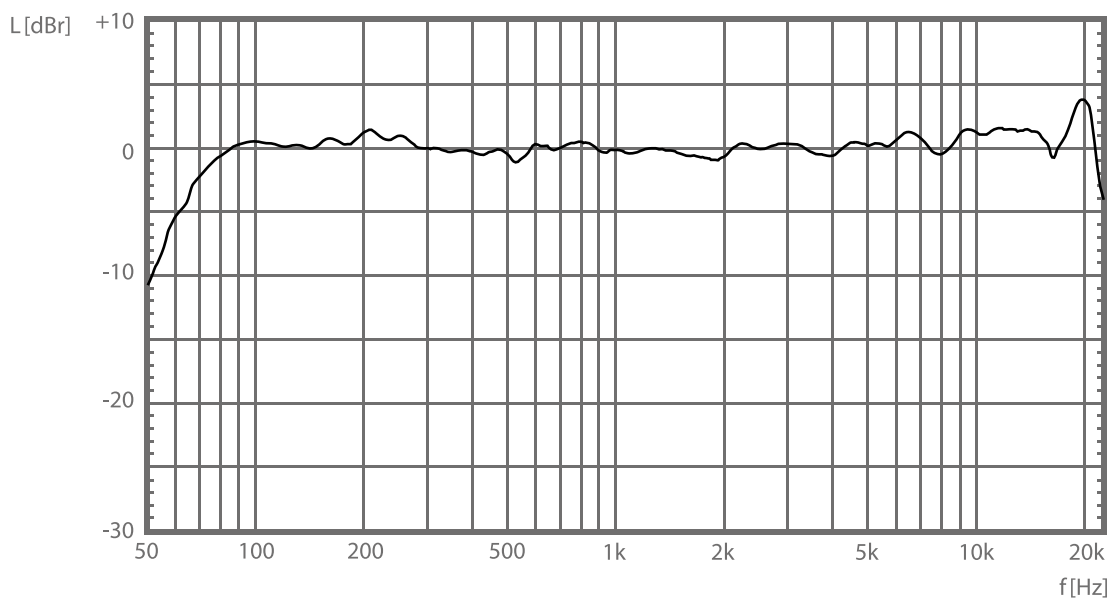
**EX6, ESD6 "U" VERTICAL BRACKET**

part number:

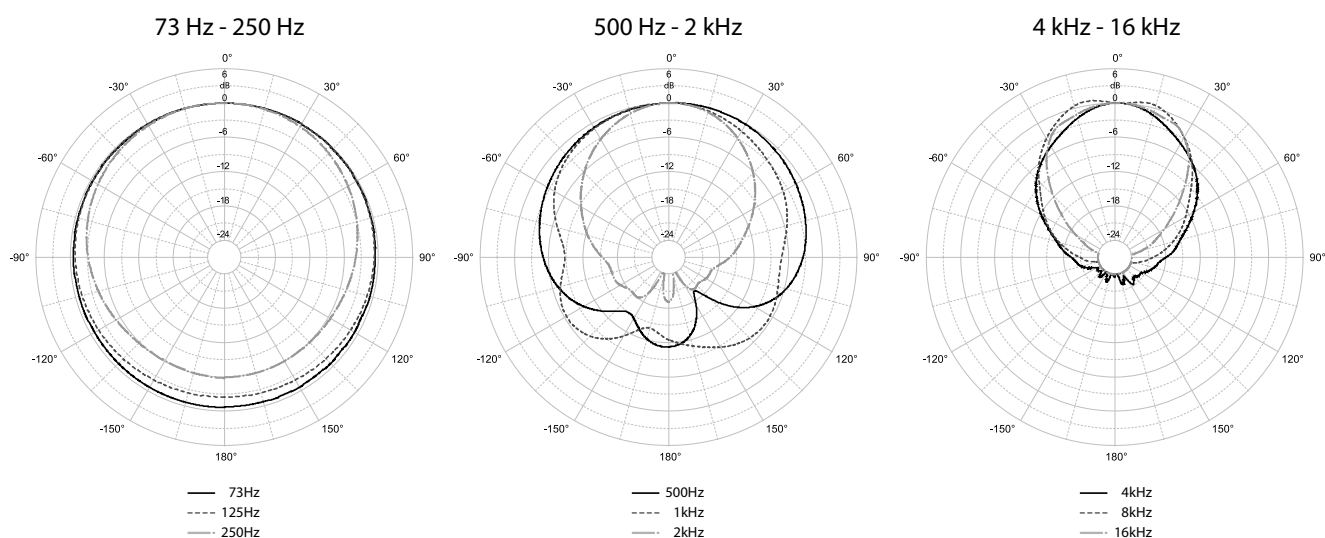
**KVV 987 484**



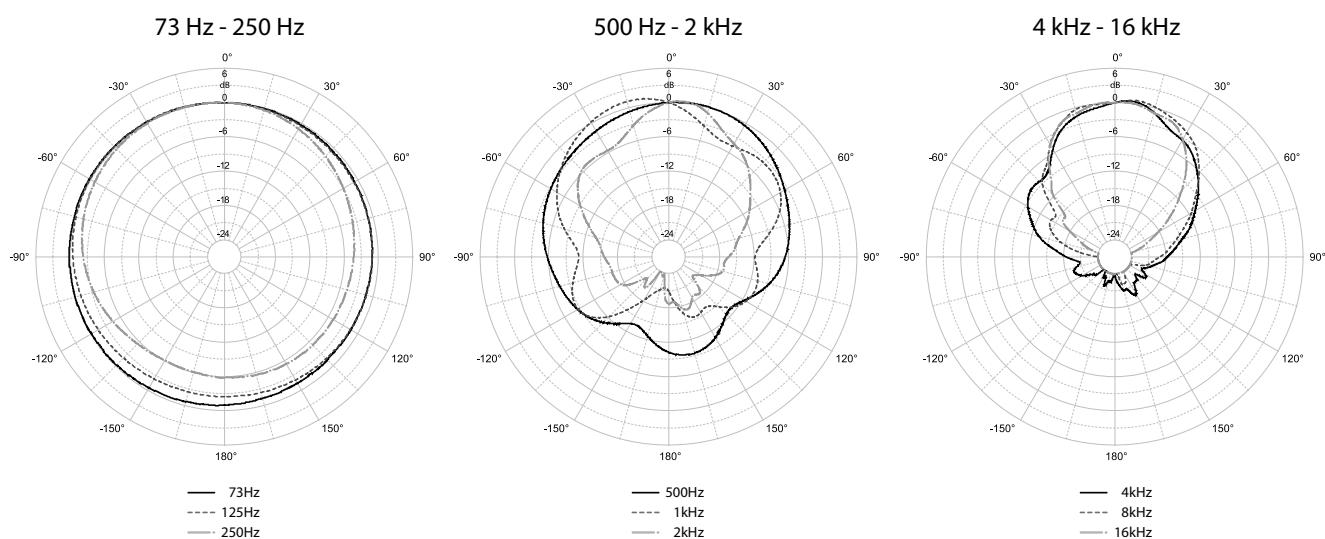
## Frequency response



## Horizontal Polarplots



## Vertical Polarplots



## Specifications

### System Acoustic Performance

Max SPL Long-term	117 dB
Max SPL Peak	123 dB
-3 dB Response	68 Hz to 20 kHz
-10 dB Response	51 Hz to 28 kHz
Recommended Power	175 W
Sensitivity	92 dB
Impedance	16 $\Omega$
Crossover Point	2.0 kHz

### High Frequency Section

Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	100° x 100°
Throat Exit Diameter / Diaphragm Size	1" / 1.75"
Diaphragm Material	Nitride Titanium
Magnet Type	Neodymium
Protection	RMS Limiter

### Low Frequency Section

Acoustic Design	Front Loaded, Bass Reflex
Woofer Size / Voice Coil Diameter	6" / 1.75"
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium
Protection	RMS Limiter

### Speaker Input

Speaker Input	2x Neutrik Speakon®, Terminal Block
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### Cabinet

Cabinet Material	Baltic birch
Handles	1
Pole Mount	35 mm
Color	"Orange peeled" Matt Black or any RAL

### Physical Dimensions

Height	395 mm (15.55")
Width	220 mm (8.66")
Depth	244 mm (9.61")
Weight	9.5 kg (20.9 lb)



# ESD8

**FULL RANGE**

**8 Ohms**



## Application

**Purpose designed as a discreet portable passive loudspeaker for speech and music content**

- Corporate presentations and functions
- Full range performance with addition of subwoofers
- Infills
- Close monitoring
- Fixed installations

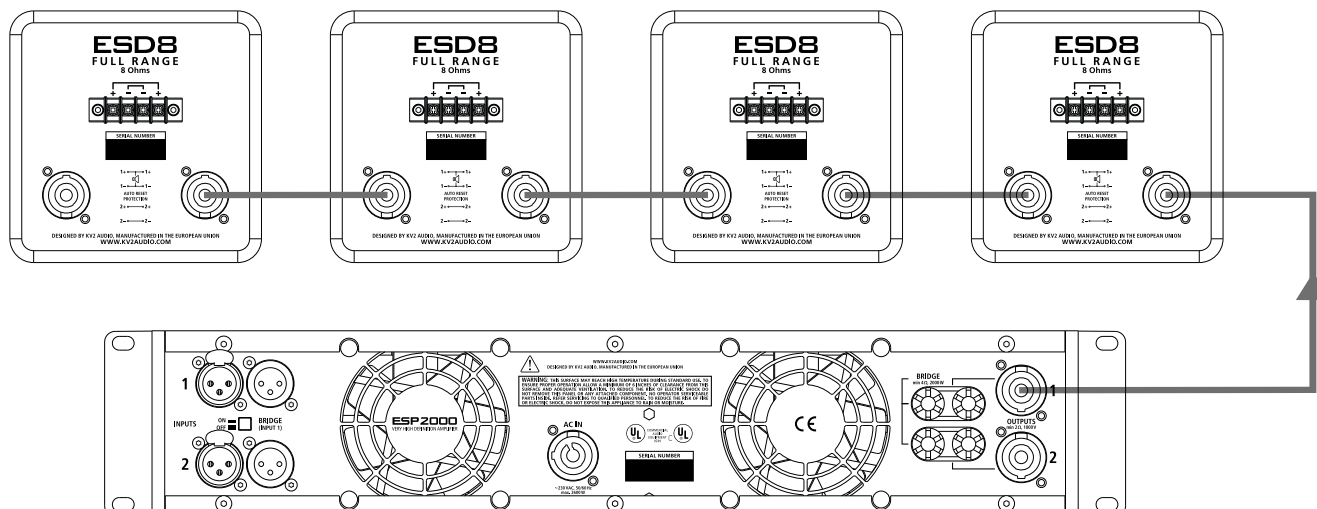
## Introduction

The ESD8 is a compact passive 2-way, high output full-range loudspeaker incorporating an 8" trans-coil woofer and a 1" compression driver coupled to a wide dispersion horn. Presented conservatively in a unique angled low-profile Baltic birch enclosure and designed to present exceptional speech and music definition, the ESD8 provides a smooth hi fidelity response and delivers a natural sound quality and level that is superior to many larger competing products. Ideal as a main system speaker or as an in-fill for larger systems, the flexible ESD8 can be applied quickly and efficiently on podiums, stands or suspended.

## Connection

The ESD8 features both Speakon (NL4) connectors and a terminal block. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESD8's.

PARALLEL CONNECTION OF THE ESD8 (8 Ω) - TOTAL IMPEDANCE 2 Ω



## Installation

Installations should be carried out using KV2 Audio's horizontal or vertical U brackets. They are mounted vertically using M10 points located on the side of the cabinet or in the top handle and bottom M10 plate (supplied with horizontal bracket) for horizontal fixing and to a mounting post with a diameter of 35 mm using a support flange.

The ESD8 also features a 35 mm speaker pole mount adapter housed at the bottom of the cabinet for use with conventional speaker stands and poles.

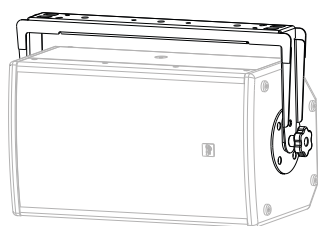
## Drawings

part name:

**ESD8 "U" HORIZONTAL BRACKET**

part number:

**KVV 987 422**

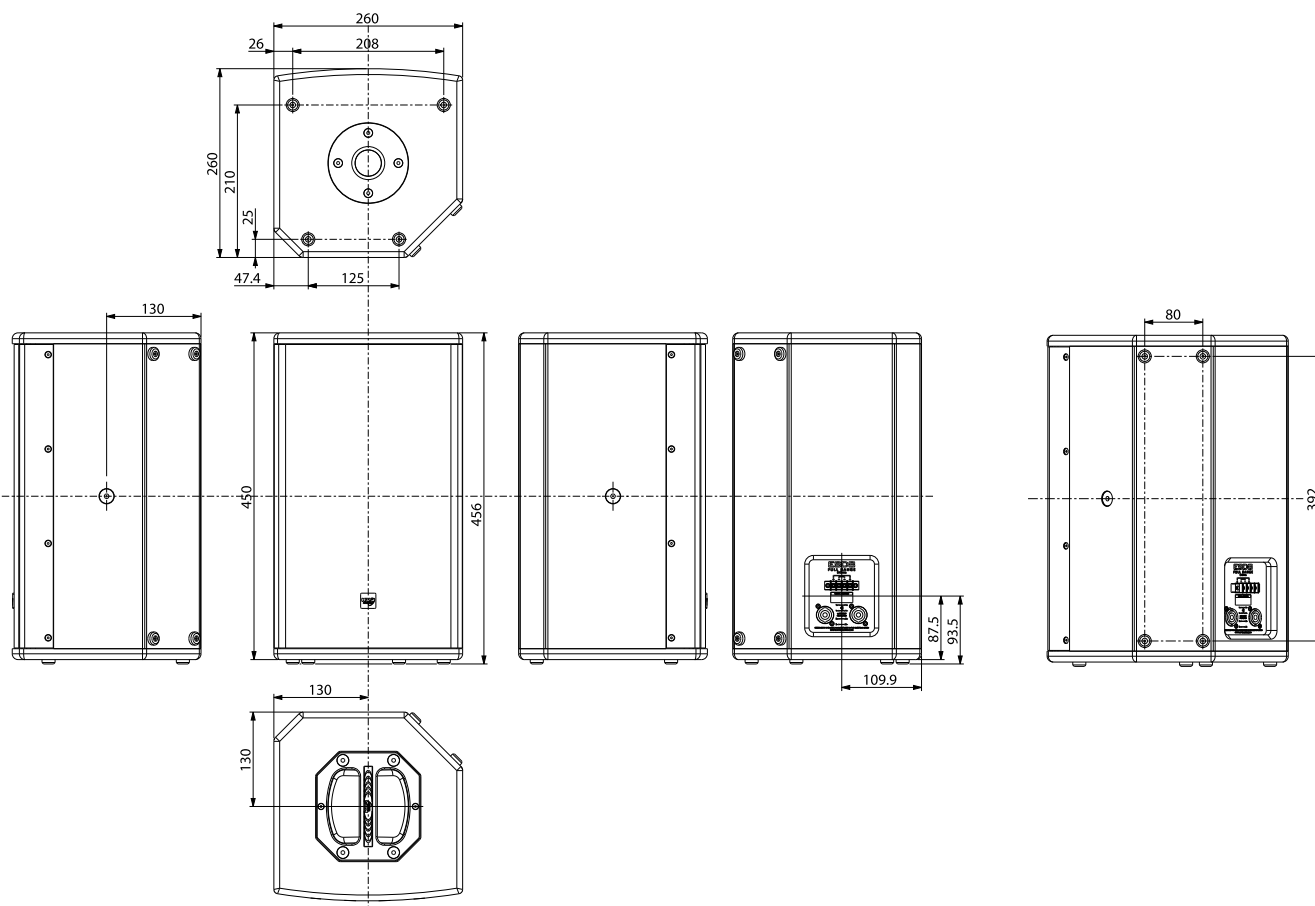
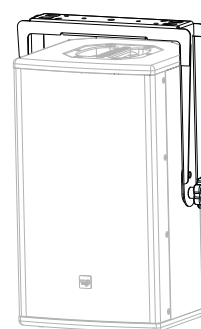


part name:

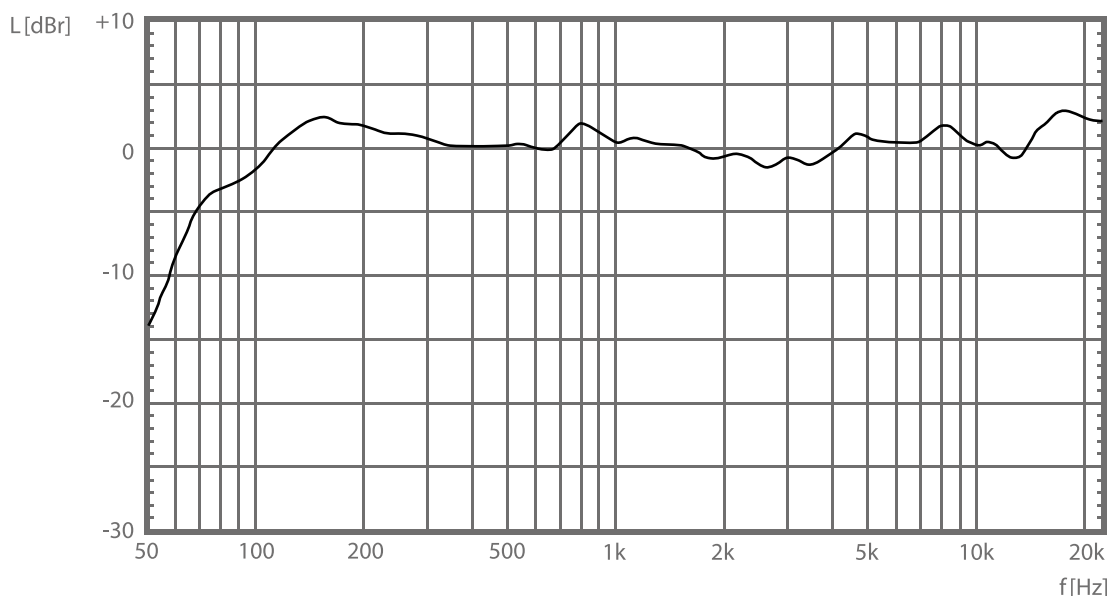
**ESD8 "U" VERTICAL BRACKET**

part number:

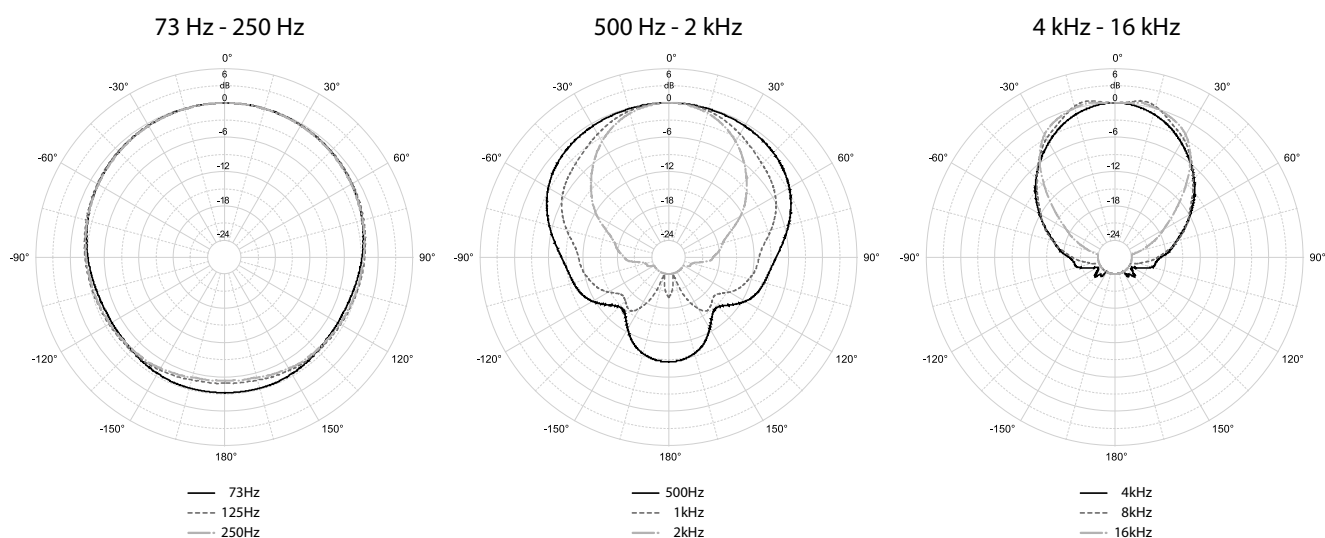
**KVV 987 421**



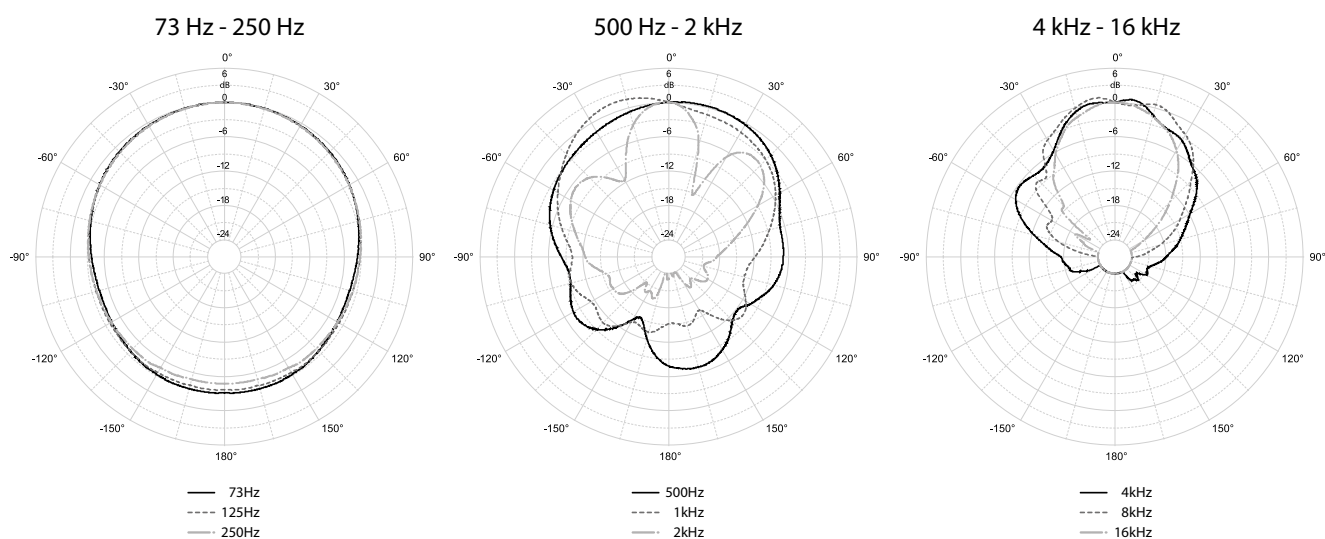
## Frequency response



## Horizontal Polarplots



## Vertical Polarplots



## Specifications

### System Acoustic Performance

Max SPL Long-term	120 dB
Max SPL Peak	126 dB
-3 dB Response	80 Hz to 20 kHz
-10 dB Response	62 Hz to 28 kHz
Recommended Power	275 W
Sensitivity	94 dB
Impedance	8 $\Omega$
Crossover Point	2.2 kHz

### High Frequency Section

Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	100° x 100°
Rotatable Horn	Symmetric
Throat Exit Diameter / Diaphragm Size	1" / 1.75"
Diaphragm Material	Titanium
Magnet Type	Neodymium
Protection	RMS Limiter

### Low Frequency Section

Acoustic Design	Front Loaded, Bass Reflex
Number of Drivers	1
Woofer Size / Voice Coil Diameter / Design	8" / 2" / Trans coil
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium
Protection	Thermal breaker - auto reset

### Speaker Input

Speaker Input	2x Neutrik Speakon®, Terminal Block
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### Cabinet

Cabinet Material	Baltic birch
Handles	1
Color	"Orange peeled" Matt Black or any RAL

### Physical Dimensions

Height	456 mm (17.95")
Width	260 mm (10.23")
Depth	260 mm (10.23")
Weight	13 kg (28.6 lb)

# ESD36

**FULL RANGE 350 Watts**

**The Ultimate Passive Compact 3-way**



## Application

**Specifically designed as a passive loudspeaker for reproduction of recorded music in small areas**

- Suitable in Fixed installations as full range stand-alone or with subwoofers
- Multi-purpose fixed installations
- Domestic and Professional studio monitoring

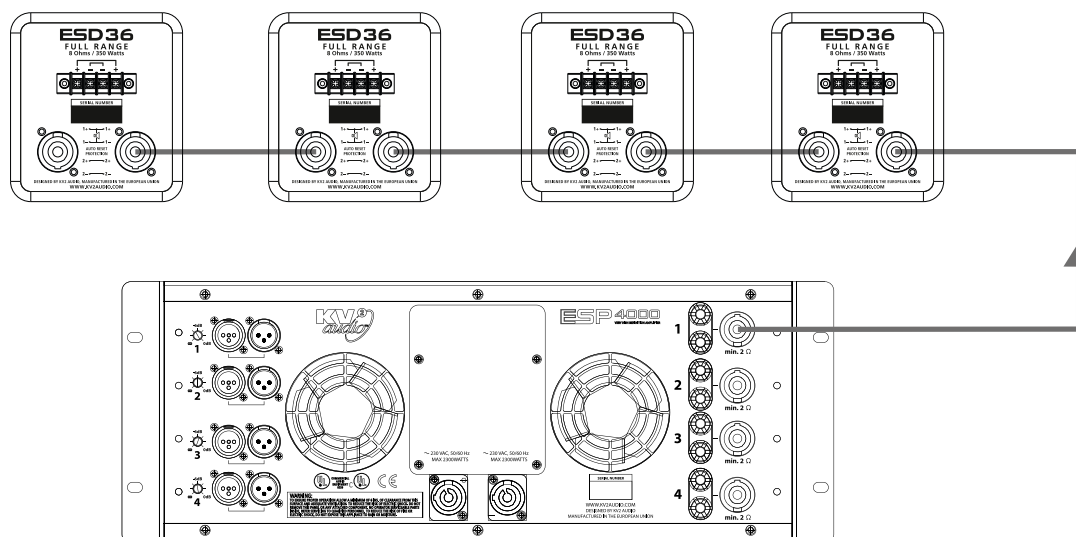
## Introduction

One of the more unique loudspeakers offered by KV2 Audio the ESD36 is a passive, full-range 3-way speaker system for speech and music reproduction. The ESD36 features a 6" driver dedicated to high quality mid-range reproduction and a further two low frequency 6" drivers for enhanced bass extension. Alongside the same compression driver as featured in the popular EX6, the ESD36 offers comparable performance to many 12" cabinets with an enhanced vocal performance from this 3-way design.

## Connection

The ESD36 features both Speakon (NL4) connectors and a terminal block. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESD36's.

PARALLEL CONNECTION OF THE ESD36 (8 Ω) - TOTAL IMPEDANCE 2 Ω



## Installation

Installations should be carried out using KV2 Audio's horizontal or vertical U brackets. They are mounted vertically using M10 points located on the side of the cabinet or in the top handle and bottom M10 plate (supplied with horizontal bracket) for horizontal fixing and to a mounting post with a diameter of 35 mm using a support flange.

The ESD36 also features a 35 mm speaker pole mount adapter housed at the bottom of the cabinet for use with conventional speaker stands and poles.

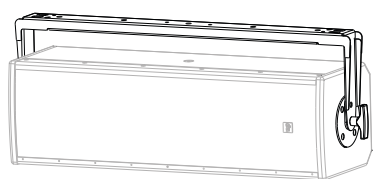
## Drawings

part name:

**ESD36 "U" HORIZONTAL BRACKET**

part number:

**KVV 987 490**

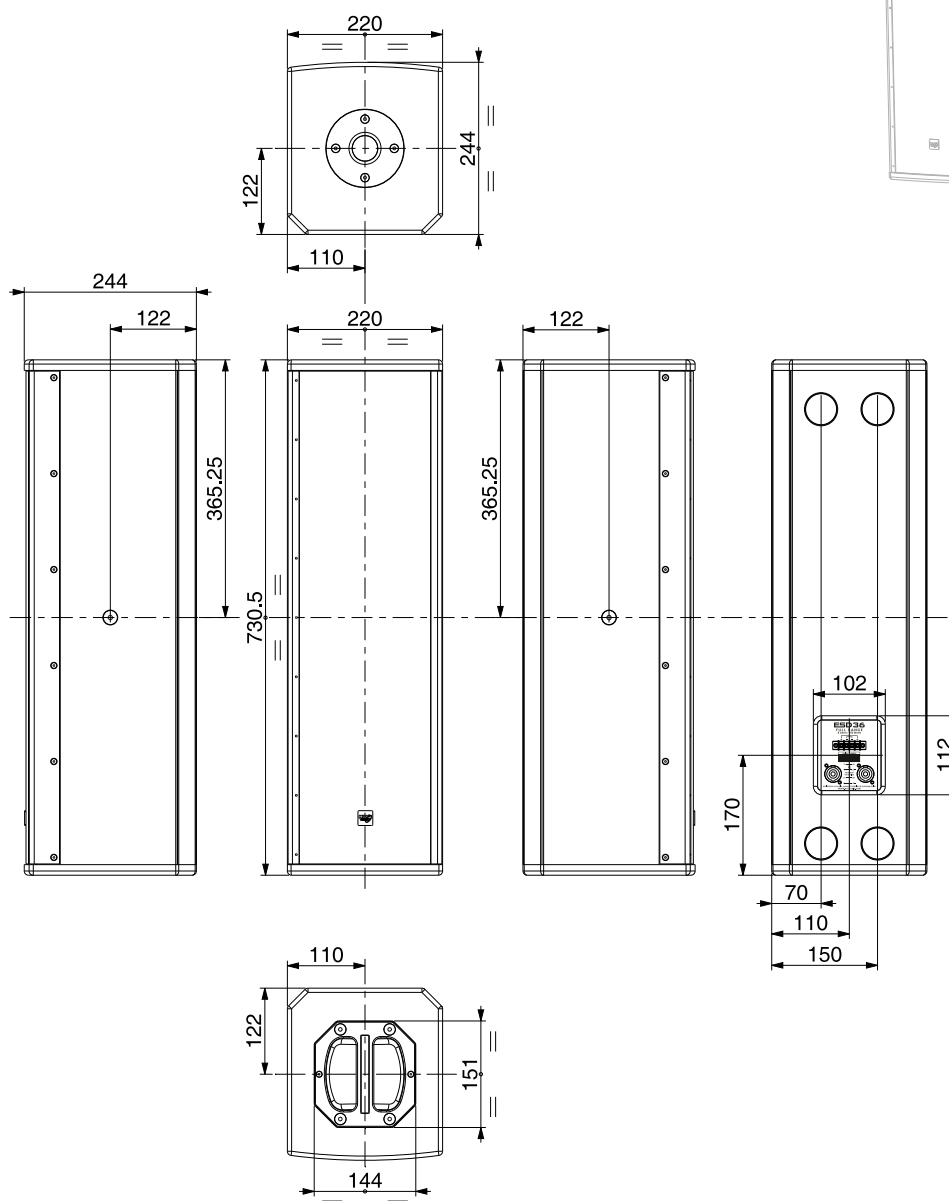


part name:

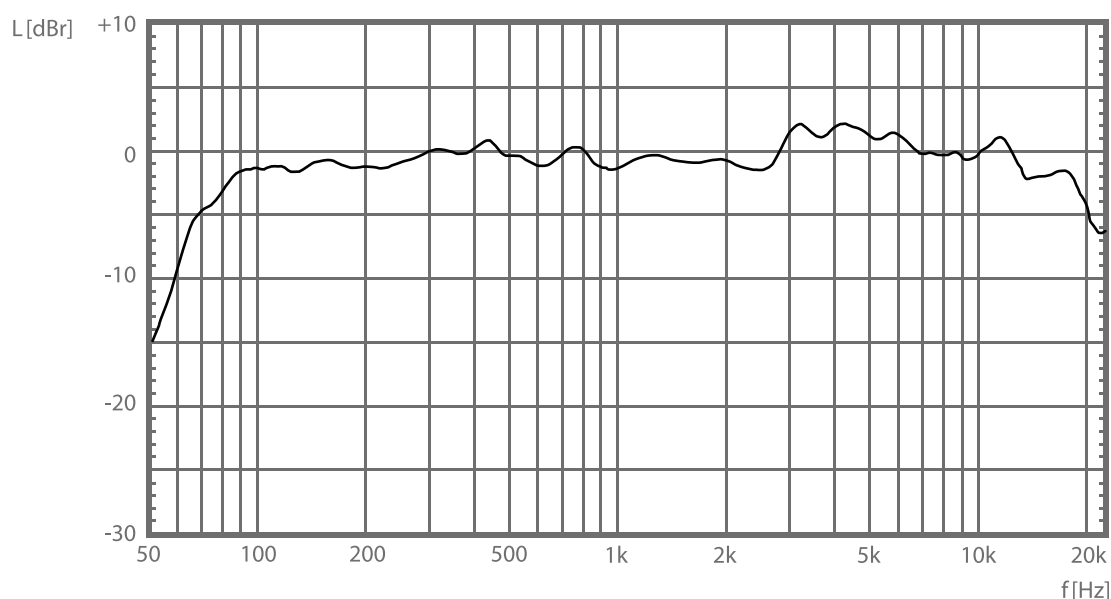
**ESD36 "U" VERTICAL BRACKET**

part number:

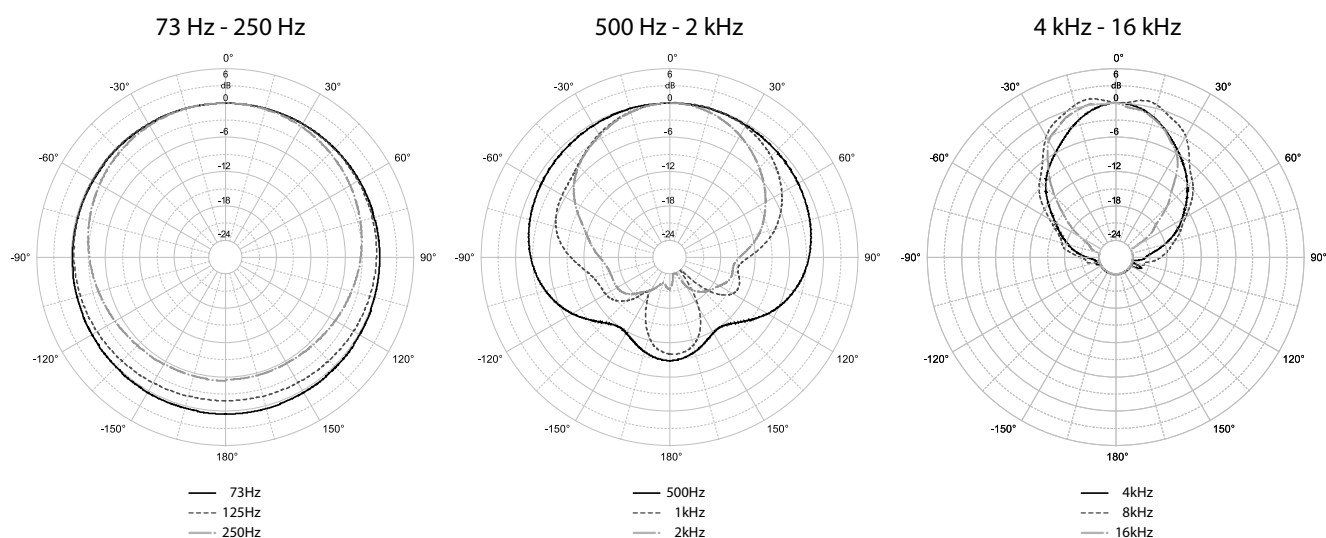
**KVV 987 489**



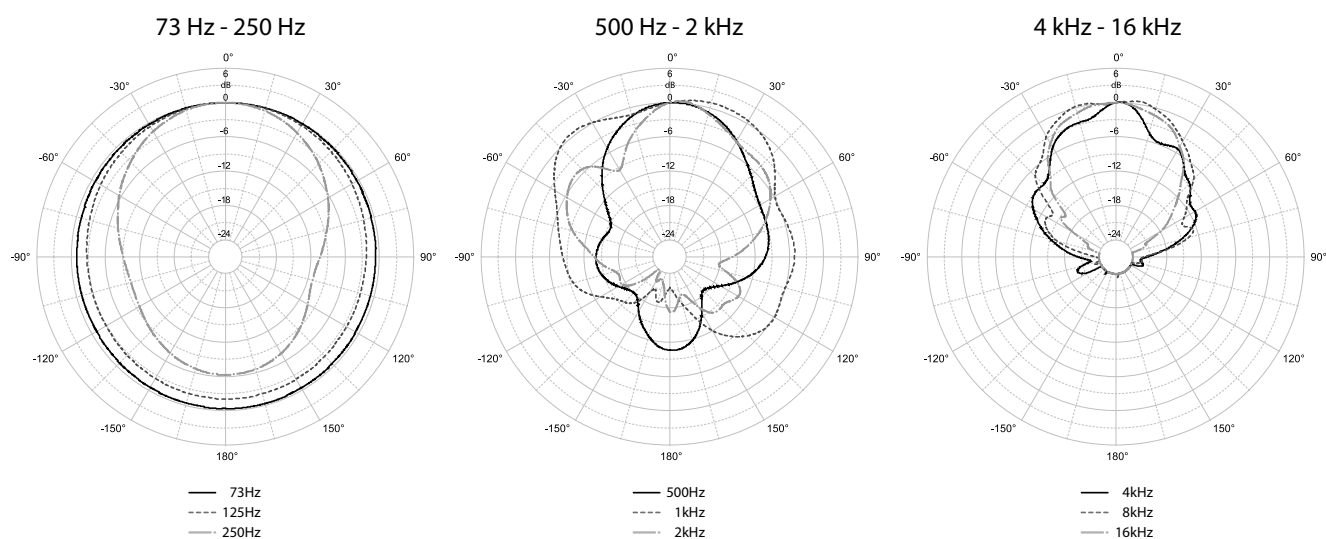
## Frequency response



## Horizontal Polarplots



## Vertical Polarplots





## Specifications

### System Acoustic Performance

Max SPL Long-term	122 dB
Max SPL Peak	128 dB
-3 dB Response	65 Hz to 25 kHz
-10 dB Response	57 Hz to 30 kHz
Recommended Power	350 W
Sensitivity	94 dB
Impedance	8 Ω
Crossover Point	600 Hz, 2.5 kHz

### High Frequency Section

Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	100° x 100°
Throat Exit Diameter / Diaphragm Size	1" / 1.75"
Diaphragm Material	Nitride Titanium
Magnet Type	Neodymium
Protection	RMS Limiter

### Mid Range Section

Acoustic Design	Low Inductance Lightweight
Woofer Size / Voice Coil Diameter	6" / 1.75"
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium
Protection	RMS Limiter

### Low Frequency Section

Acoustic Design	Front Loaded, Bass Reflex
Woofer Size / Voice Coil Diameter	2× 6" / 1.75"
Magnet Type	Neodymium
Diaphragm Material	Epoxy Reinforced Cellulose
Protection	RMS Limiter

### Speaker Input

Speaker Input	2× Neutrik Speakon®, Terminal Block
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### Cabinet

Cabinet Material	Baltic birch
Handles	1
Pole Mount	35 mm
Color	"Orange peeled" Matt Black or any RAL

### Physical Dimensions

Height	730.5 mm (28.76")
Width	220 mm (8.66")
Depth	244 mm (9.60")
Weight	17.6 kg (38.8 lb)

# ESD10

**FULL RANGE 500 Watts**

**The Ultimate Compact Passive System**



## Application

Specifically designed as a passive loudspeaker for high quality, high output portable music playback and live performance in small areas

- Full range stand-alone solution or scalable to larger systems with subwoofers
- Large conference and small to medium performance venues
- Multi-purpose fixed installations
- Personal monitoring
- In-fill for larger main KV2 Audio systems or third party systems

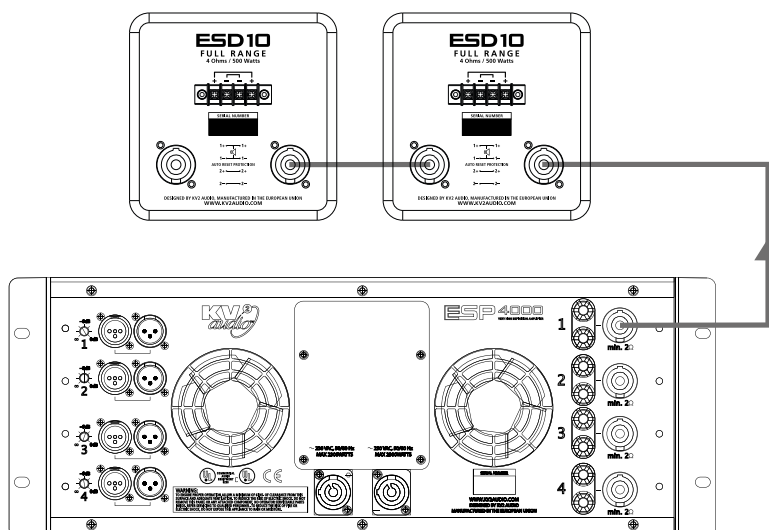
## Introduction

The ESD10 is a compact passive 2-way, high output, full-range loudspeaker incorporating a 10" trans-coil woofer and a wide dispersion rotatable horn. The ESD10 provides a smooth hi fidelity response and delivers sound quality and level that is superior to many larger competing products. Ideal as a main system speaker or as an fill-in for larger systems. The ESD10 is an all round affordable passive solution that simply exudes quality.

## Connection

The ESD10 features both Speakon (NL4) connectors and a terminal block. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESD10's.

PARALLEL CONNECTION OF THE ESD10 (4 Ω) - TOTAL IMPEDANCE 2 Ω



## Installation

Installations should be carried out using KV2 Audio's horizontal or vertical U brackets. They are mounted vertically using M10 points located on the side of the cabinet or in the top handle and bottom M10 plate (supplied with horizontal bracket) for horizontal fixing and to a mounting post with a diameter of 35 mm using a support flange.

The ESD10 also features a 35 mm speaker pole mount adapter housed at the bottom of the cabinet for use with conventional speaker stands and poles.

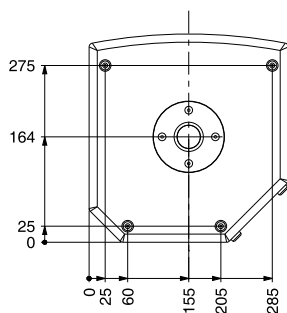
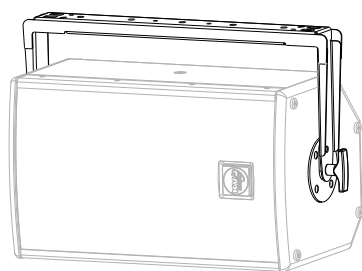
## Drawings

part name:

**EX10, ESD10 "U" HORIZONTAL BRACKET**

part number:

**KVV 987 486**

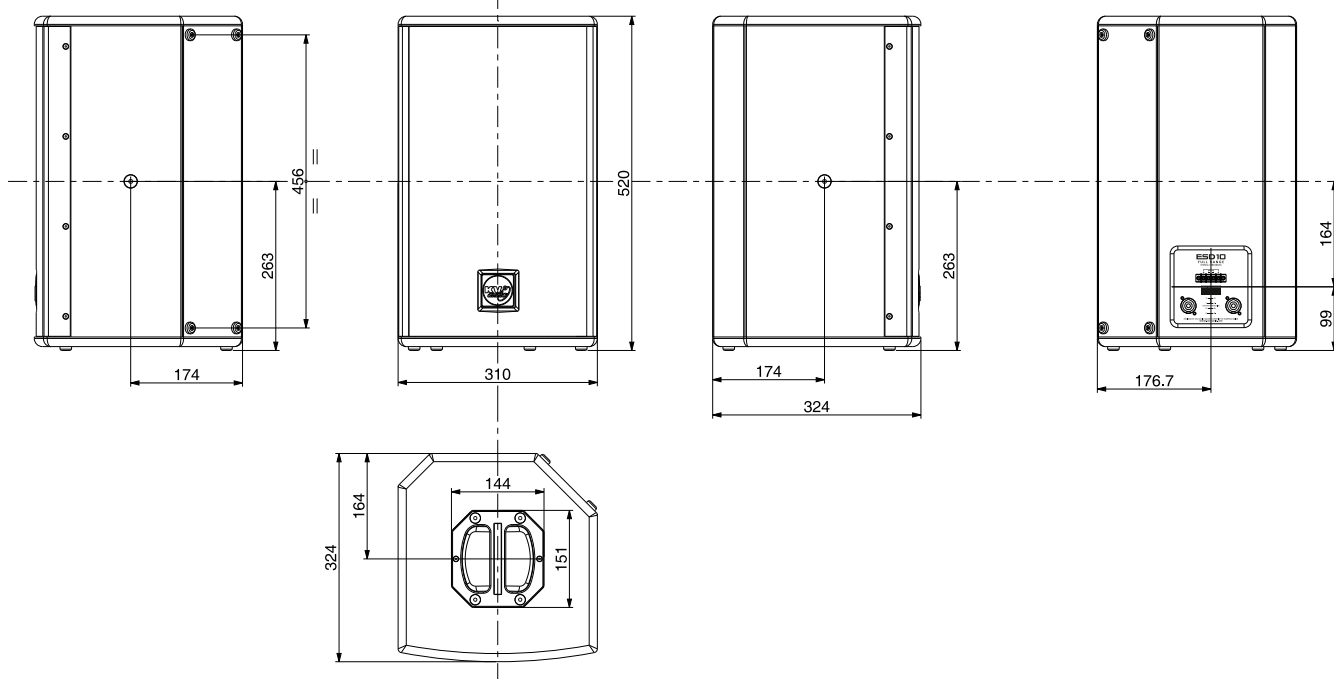
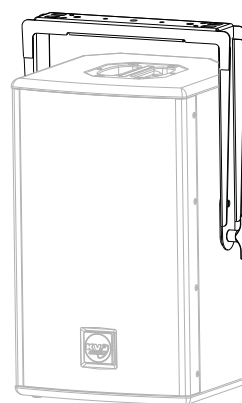


part name:

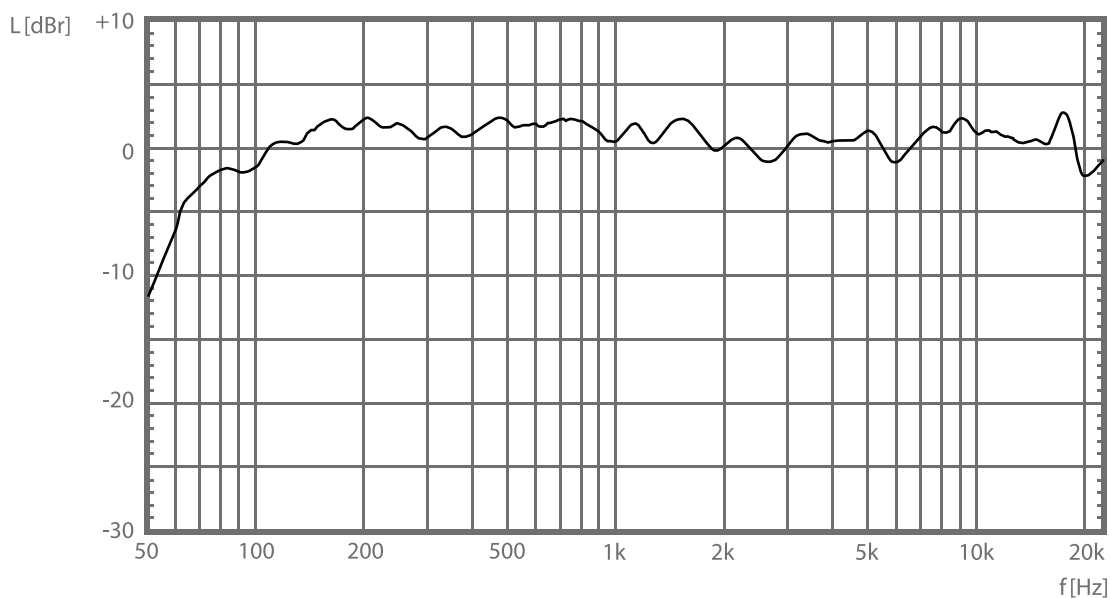
**EX10, ESD10 "U" VERTICAL BRACKET**

part number:

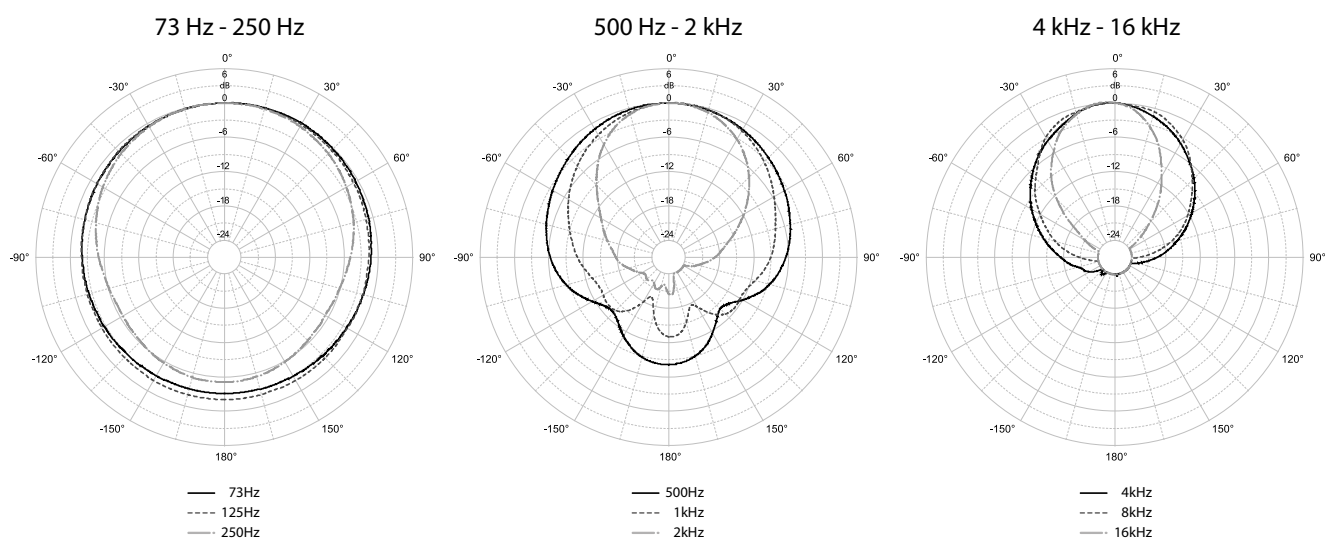
**KVV 987 485**



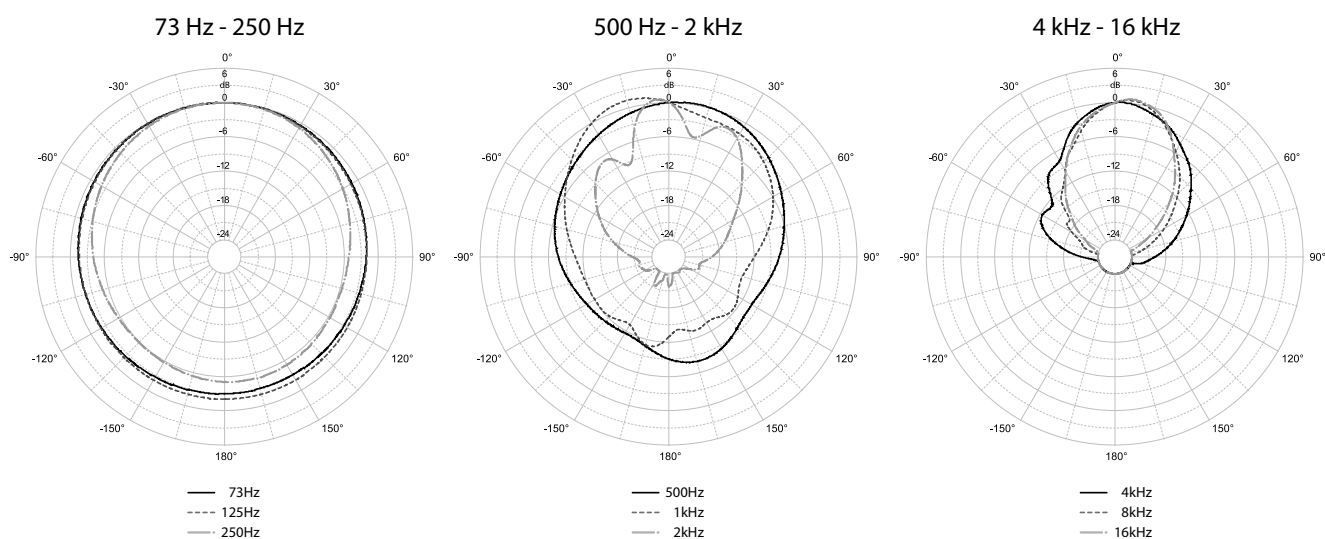
## Frequency response



## Horizontal Polarplots



## Vertical Polarplots



## Specifications

### System Acoustic Performance

Max SPL Long-term	125 dB
Max SPL Peak	131 dB
-3 dB Response	65 Hz to 20 kHz
-10 dB Response	56 Hz to 28 kHz
Recommended Power	500 W
Sensitivity	96 dB
Impedance	4 Ω
Crossover Point	1.8 kHz

### High Frequency Section

Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	100° x 90°
Rotatable Horn	YES
Throat Exit Diameter / Diaphragm Size	1" / 1.75"
Diaphragm Material	Nitride Titanium
Magnet Type	Neodymium
Protection	RMS Limiter

### Low Frequency Section

Acoustic Design	Front Loaded, Bass Reflex
Woofer Size / Voice Coil Diameter / Design	10" / 2.5" / Trans Coil
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium
Protection	RMS Limiter

### Speaker Input

Speaker Input	2× Neutrik Speakon®, Terminal Block
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### Cabinet

Cabinet Material	Baltic birch
Handles	1
Pole Mount	35 mm
Color	"Orange peeled" Matt Black or any RAL

### Physical Dimensions

Height	520 mm (20.47")
Width	310 mm (12.20")
Depth	324 mm (12.76")
Weight	16.5 kg (36.38 lb)

# ESD12

ESD12 - KVV 987 199

**FULL RANGE 500 Watts**

**The Ultimate Passive System**



## Application

**Designed as a passive loudspeaker for the highest quality vocal and full range live performance in medium areas**

- Suitable for medium to large conference, Theatre and small to medium scale concerts
- Scalable from stand alone to full range large systems by adding subwoofers
- Fixed installations
- Houses of worship
- Stage monitoring

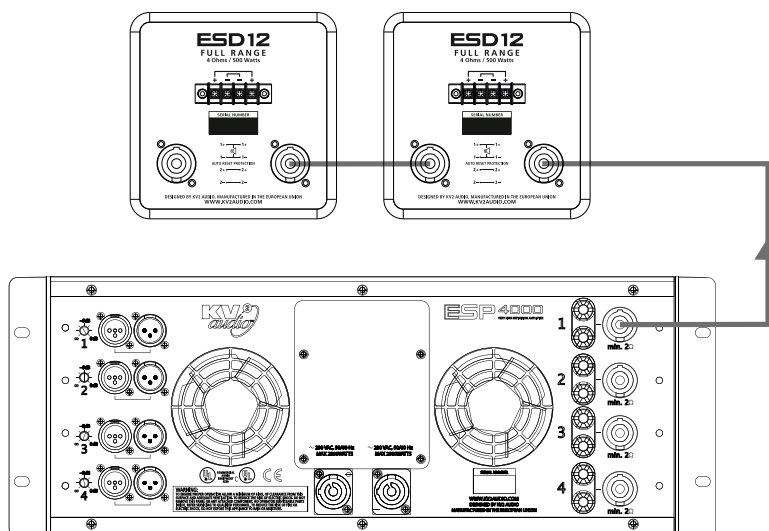
## Introduction

The ESD12 is a high quality 2-way, passive full range loudspeaker that provides unmatched clarity and definition in a simple elegant package. The ESD12 utilizes a 12" Trans Coil woofer and the same 3" NVPD large format compression driver found in our flagship VHD products, which has one of the lowest distortion ratings on the planet. Combined with our unique delay line technology the ESD12 delivers a beautifully balanced, phase coherent and accurate compact, 2-way passive solution that is adaptable to a wide range of applications.

## Connection

The ESD12 features both Speakon (NL4) connectors and a terminal block. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESD12's.

PARALLEL CONNECTION OF THE ESD12 (4  $\Omega$ ) - TOTAL IMPEDANCE 2  $\Omega$



# ESD12 · Installation · Drawings

## Installation

Installations should be carried out using KV2 Audio's horizontal or vertical U brackets. They are mounted vertically using M10 points located on the side of the cabinet or in the top handle and bottom M10 plate (supplied with horizontal bracket) for horizontal fixing and to a mounting post with a diameter of 35 mm using a support flange.

The ESD12 also features a 35 mm speaker pole mount adapter housed at the bottom of the cabinet for use with conventional speaker stands and poles.

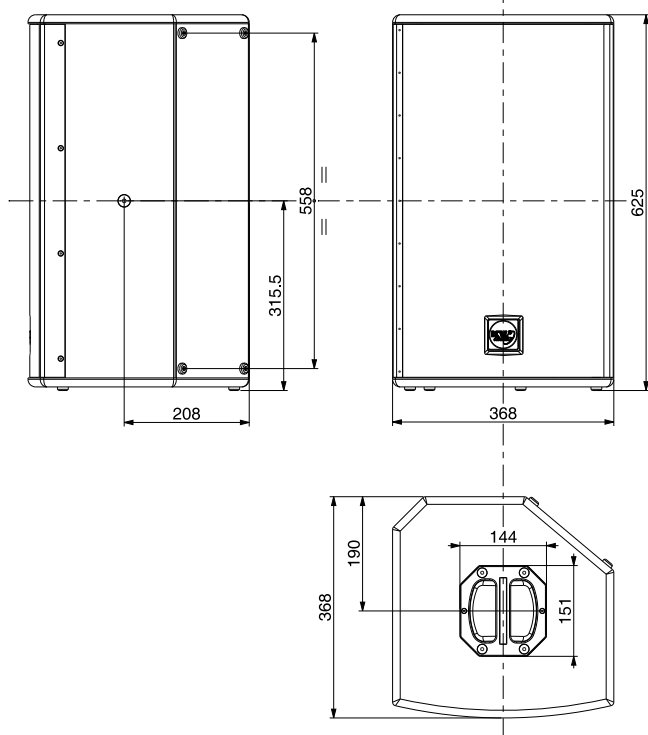
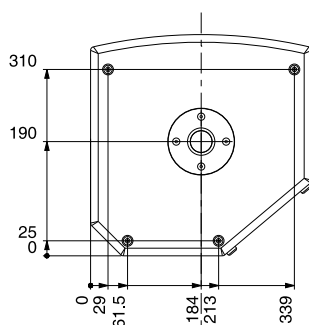
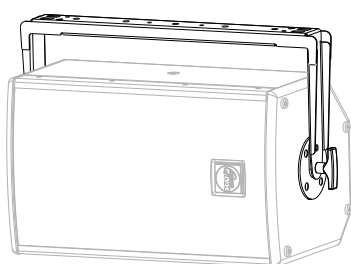
## Drawings

part name:

**ESD12 "U" HORIZONTAL BRACKET**

part number:

**KVV 987 487**

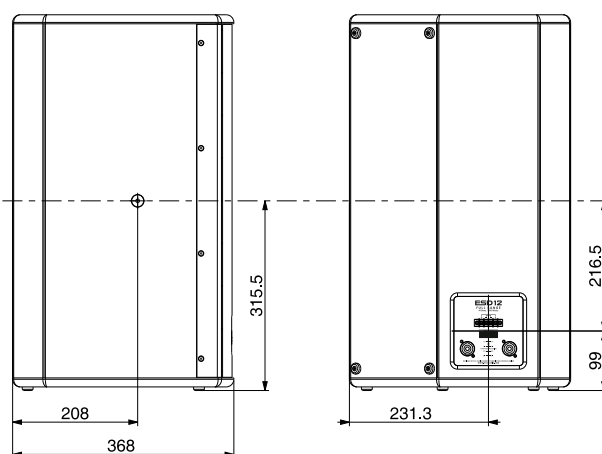
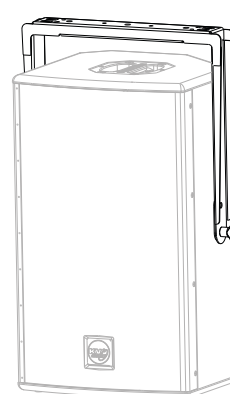


part name:

**EX12, ESD12 "U" VERTICAL BRACKET**

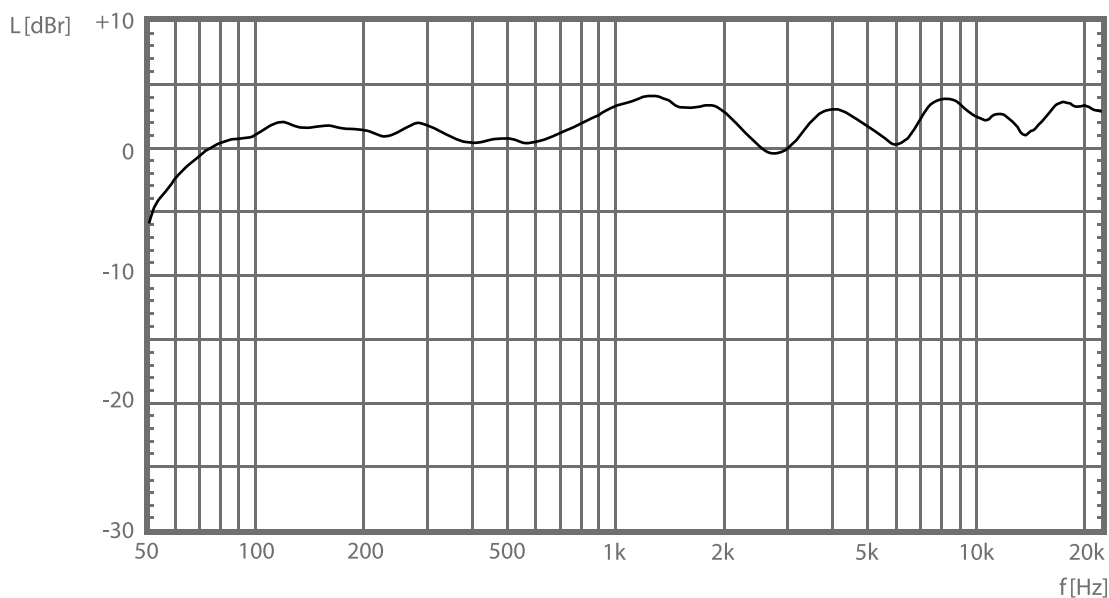
part number:

**KVV 987 488**

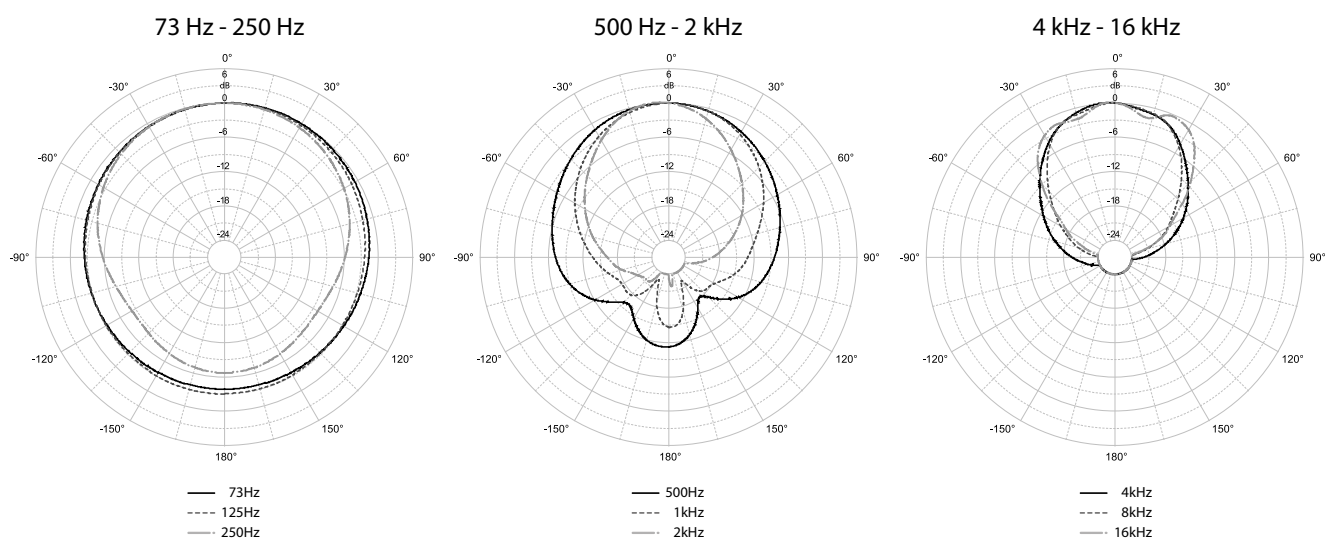




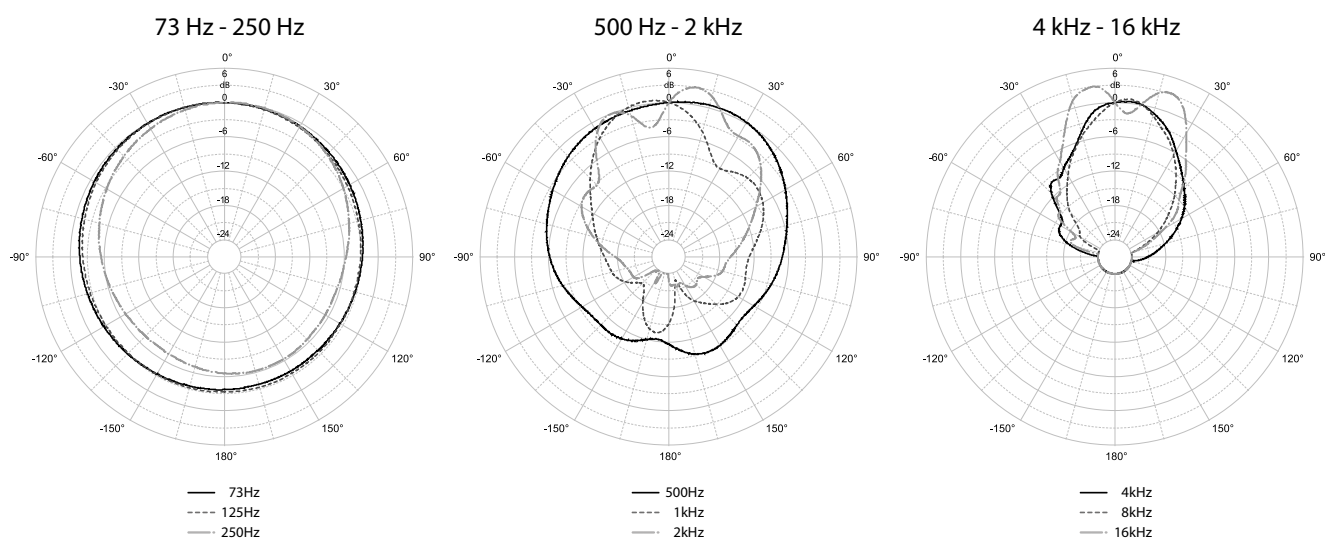
## Frequency response



## Horizontal Polarplots



## Vertical Polarplots



## Specifications

### System Acoustic Performance

Max SPL Long-term	127 dB
Max SPL Peak	133 dB
-3 dB Response	55 Hz to 22 kHz
-10 dB Response	50 Hz to 30 kHz
Recommended Power	500 W
Sensitivity	98 dB
Impedance	4 $\Omega$
Crossover Point	1.2 kHz

### High Frequency Section

Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	80° x 40°
Rotatable Horn	YES
Throat Exit Diameter / Diaphragm Size	1.4" / 3"
Diaphragm Material	Nitride Titanium
Magnet Type	Neodymium
Protection	RMS Limiter

### Low Frequency Section

Acoustic Design	Front Loaded, Bass Reflex
Woofer Size / Voice Coil Diameter / Design	12" / 2.5" / Trans Coil
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium
Protection	Thermal breaker - autoreset

### Speaker Input

Speaker Input	2× Neutrik Speakon®, Terminal Block
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### Cabinet

Cabinet Material	Baltic birch
Handles	1
Pole Mount	35 mm
Color	"Orange peeled" Matt Black or any RAL

### Physical Dimensions

Height	625 mm (24.61")
Width	368 mm (14.48")
Depth	368 mm (14.48")
Weight	23 kg (50.7 lb)

# ESD15

ESD15 - KVV 987 313

## The Full Range Passive System



## Application

Specifically designed as a true full-range, passive loudspeaker for high quality, high output portable music playback and live performance in small areas

- High quality fixed installations without subwoofer
- Small live performances
- Church installations
- Conferences
- Video/film presentation

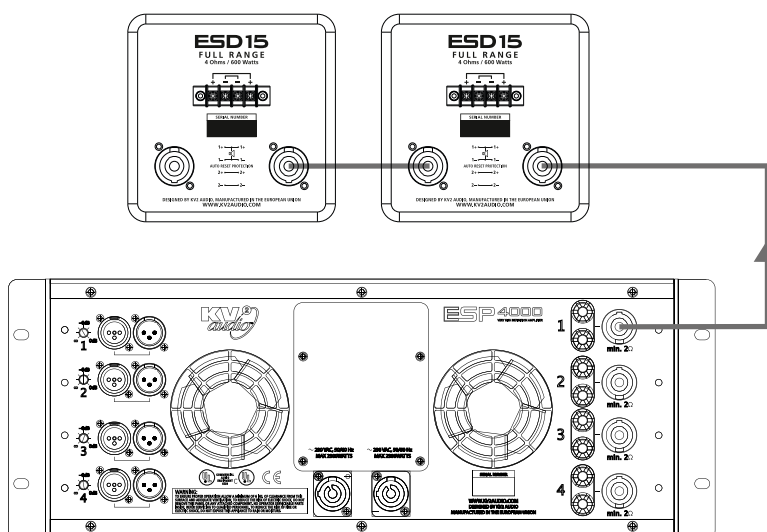
## Introduction

The new ESD15 incorporates a unique coaxial 15" transducer with a 1.75" Nitride Titanium Neodymium Compression Driver on a wide dispersion 80 x 60 degree horn. Whilst most coaxial speakers will try to cover the full frequency response, the ESD15's coaxial driver only covers bass and highs leaving the all important mid-range to a 6" neodymium speaker mounted on a large 80 x 60 degree horn. This resolves the issue of the 15" driver trying and failing to reproduce mid-range, a common problem with conventional coaxial designs. The ESD15's unique design provides extremely flat, full range reproduction from a compact yet powerful package that out performs speakers twice its size, weight and price.

## Connection

The ESD15 features both Speakon (NL4) connectors and a terminal block. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESD15's.

PARALLEL CONNECTION OF THE ESD15 (4  $\Omega$ ) - TOTAL IMPEDANCE 2  $\Omega$



## Installation

Installations should be carried out using KV2 Audio's horizontal or vertical U brackets. They are mounted vertically using M10 points located on the side of the cabinet or in the top handle and bottom M10 plate (supplied with horizontal bracket) for horizontal fixing and to a mounting post with a diameter of 35 mm using a support flange.

The ESD15 also features a 35 mm speaker pole mount adapter housed at the bottom of the cabinet for use with conventional speaker stands and poles.

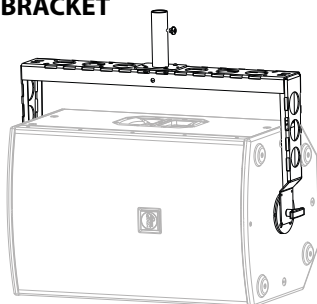
## Drawings

part name:

**ESD15, ES1.0 HORIZONTAL BRACKET**

part number:

**KVV 987 035**

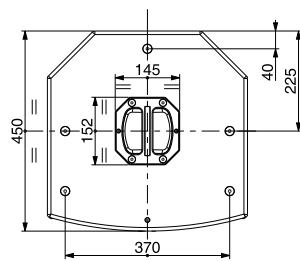
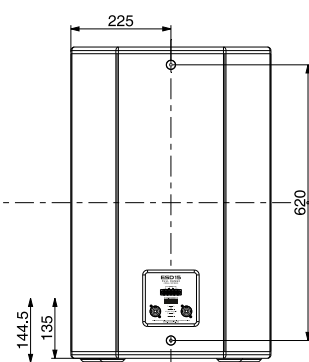
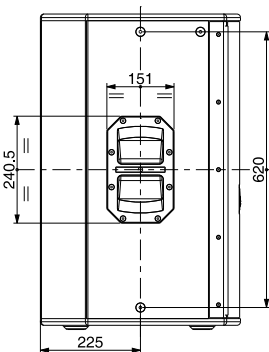
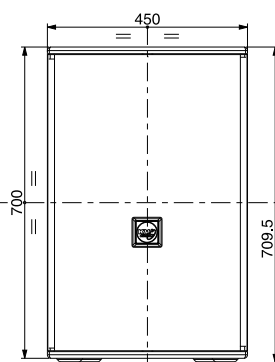
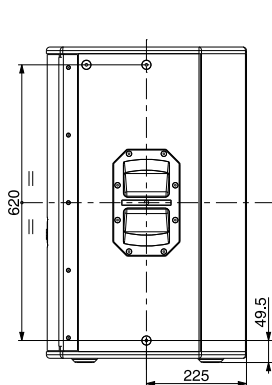
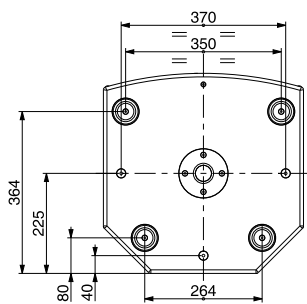
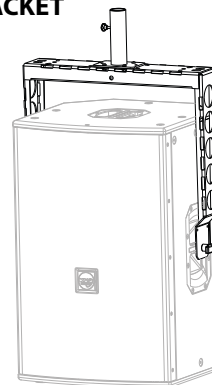


part name:

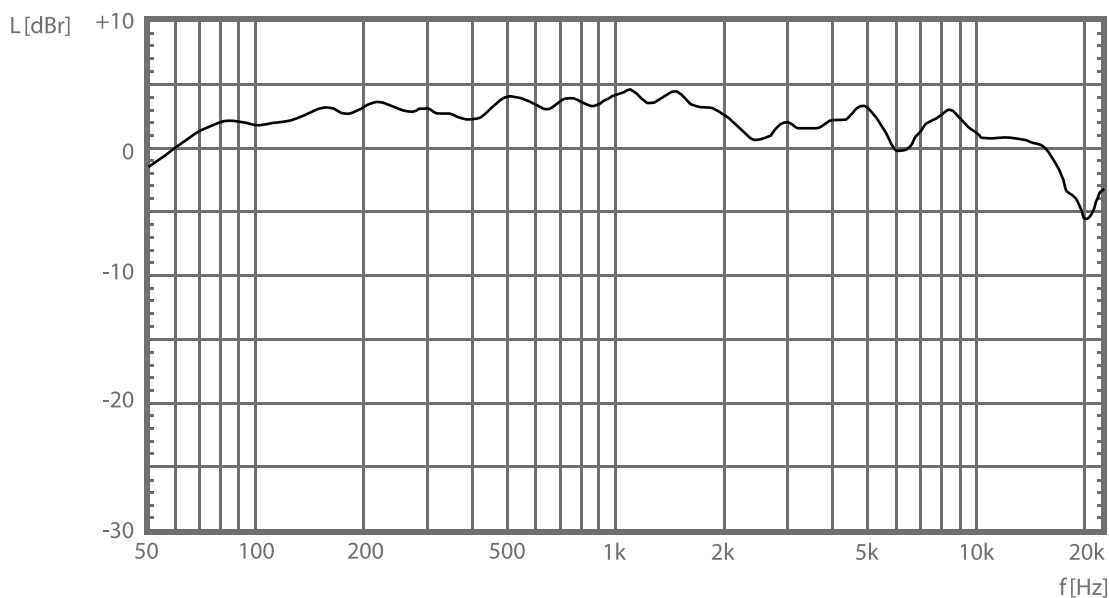
**ESD15, ES1.0 VERTICAL BRACKET**

part number:

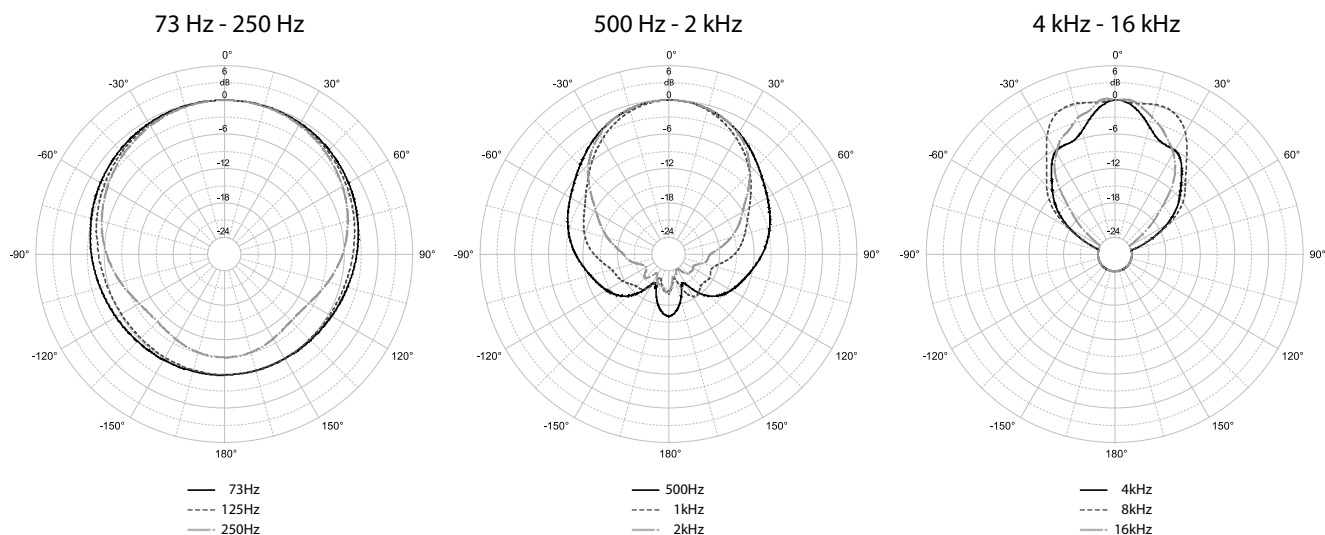
**KVV 987 032**



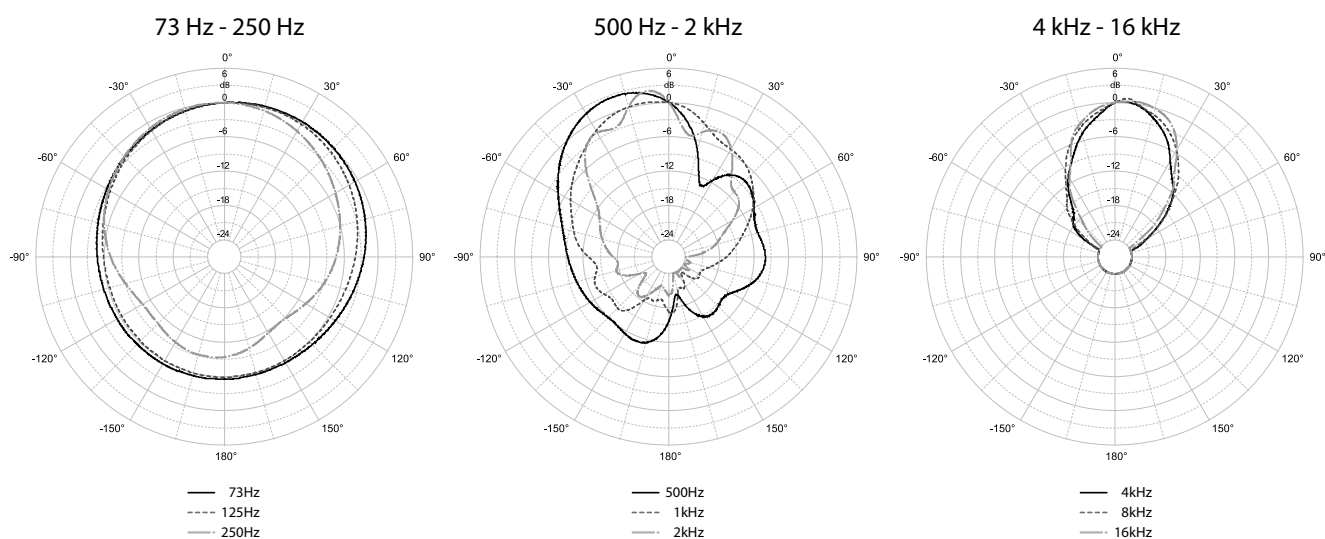
## Frequency response



## Horizontal Polarplots



## Vertical Polarplots



## Specifications

### System Acoustic Performance

Max SPL Long-term	126 dB
Max SPL Peak	132 dB
-3 dB Response	48 Hz to 18 kHz
-10 dB Response	45 Hz to 28 kHz
Recommended Power	500 W
Sensitivity	97 dB
Impedance	4 Ω
Crossover Point	500 Hz, 2.5 kHz

### High Frequency Section

Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	80° x 60°
Throat Exit Diameter / Diaphragm Size	1" / 1.75"
Diaphragm Material	Nitride Titanium
Magnet Type	Neodymium
Protection	Electronic RMS and Peak Limiter

### Mid Range Section

Acoustic Design	Horn Loaded
Mid Horn Coverage Horizontal / Vertical	80° x 60°
Woofer Size / Voice Coil Diameter	6" / 1.5"
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium
Protection	RMS Limiter

### Low Frequency Section

Acoustic Design	Front Loaded, Bass Reflex
Woofer Size / Voice Coil Diameter	15" / 4"
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium
Protection	RMS Limiter

### Speaker Input

Speaker Input	2x Neutrik Speakon®, Terminal Block
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### Cabinet

Handles	3
Pole Mount	35 mm

### Physical Dimensions

Height	709.5 mm (27.93")
Width	450 mm (17.71")
Depth	450 mm (17.71")
Weight	35 kg (77.2 lb)

## PADDED HEAVY DUTY COVERS

### Cover for ESD6

part name:  
**Cover ESD6**  
part number:  
**KVV 987 210**  
description:  
- heavy duty  
- padded



### Cover for ESD36

part name:  
**Cover ESD36**  
part number:  
**KVV 987 260**  
description:  
- heavy duty  
- padded



### Cover for ESD10

part name:  
**Cover ESD10**  
part number:  
**KVV 987 211**  
description:  
- heavy duty  
- padded



### Cover for ESD12

part name:  
**Cover ESD12**  
part number:  
**KVV 987 212**  
description:  
- heavy duty  
- padded



## ESD Cube Horizontal

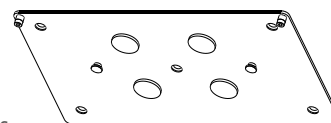
part name:  
**ESD Cube Horizontal Bracket:**  
part number:  
**KVV 987 408**  
description:  
- 2 Male Thumb  
Wing Knob M5  
- 1 Allen key



*(included with the product)*

## ESD5/ESD25 Ceiling Mount Bracket

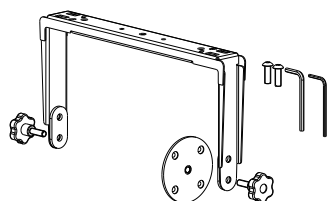
part name:  
**ESD5/ESD25 Ceiling Mount Bracket**  
part number:  
**KVV 987 344**  
description:  
- 2 locking screws  
M4×10 mm with spacers  
- 1 Allen key



*(included with the product)*

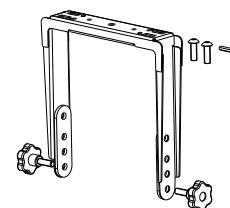
### Horizontal Bracket for ESD6

part name:  
**ESD6 Horizontal Bracket**  
part number:  
**KVV 987 483**  
description:  
- black  
- including two connection  
bolts and bracket



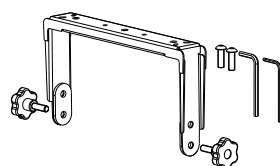
### Vertical Bracket for ESD6

part name:  
**ESD6 Vertical Bracket**  
part number:  
**KVV 987 484**  
description:  
- for EX6, ESD6  
- black  
- including two  
connection bolts



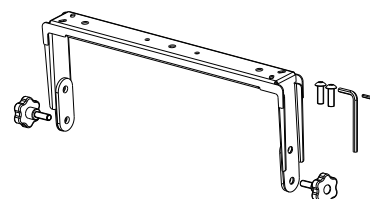
### Horizontal bracket for ESD5

part name:  
**ESD5 Horizontal Bracket**  
part number:  
**KVV 987 491**  
description:  
- black  
- including two  
connection  
bolts and bracket



### Horizontal bracket for ESD25

part name:  
**ESD25 Horizontal Bracket**  
part number:  
**KVV 987 517**  
description:  
- black  
- including two  
connection bolts





## Horizontal Bracket for ESD8

part name:

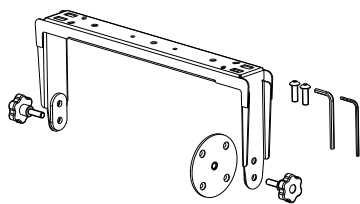
**ESD8 Horizontal Bracket**

part number:

**KVV 987 422**

**description:**

- black
- including two connection bolts and bracket



## Vertical Bracket for ESD8

part name:

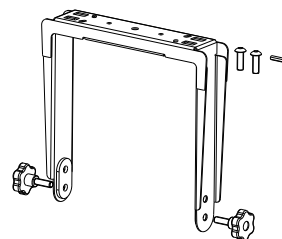
**ESD8 Vertical Bracket**

part number:

**KVV 987 421**

**description:**

- black
- including two connection bolts



## Horizontal Bracket for ESD36

part name:

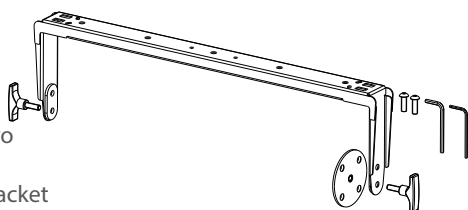
**ESD36 Horizontal Bracket**

part number:

**KVV 987 490**

**description:**

- black
- including two connection bolts and bracket



## Vertical Bracket for ESD36

part name:

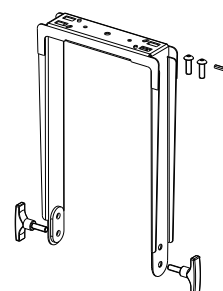
**ESD36 Vertical Bracket**

part number:

**KVV 987 489**

**description:**

- black
- including two connection bolts



## Horizontal Bracket for ESD10

part name:

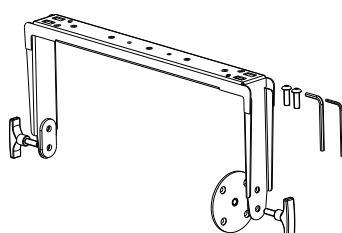
**ESD10 Horizontal Bracket**

part number:

**KVV 987 486**

**description:**

- for EX10, ESD10
- black
- including two connection bolts and bracket



## Vertical Bracket for ESD10

part name:

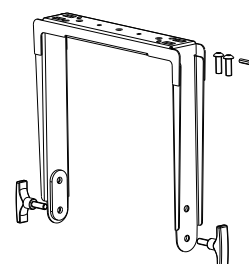
**ESD10 Vertical Bracket**

part number:

**KVV 987 485**

**description:**

- for EX10, ESD10
- black
- including two connection bolts



## Horizontal bracket for ESD12

part name:

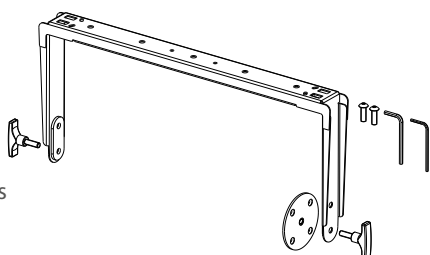
**ESD12 Horizontal Bracket**

part number:

**KVV 987 487**

**description:**

- for ESD12
- black
- including two connection bolts and bracket



## Vertical bracket for ESD12

part name:

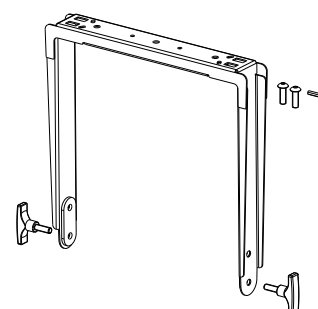
**EX12 Vertical Bracket**

part number:

**KVV 987 488**

**description:**

- for EX12, ESD12
- black
- including two connection bolts



## Horizontal bracket for ESD15

part name:

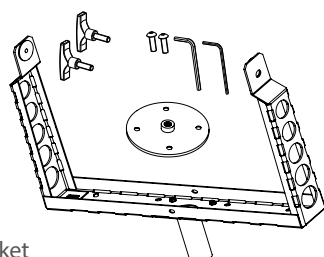
**ESD15 Horizontal Bracket**

part number:

**KVV 987 035**

**description:**

- black
- for ES1.0, ES1.5 or ESD15
- including top hat cover adaptor plate and two connection bolts and bracket



## Vertical bracket for ESD15

part name:

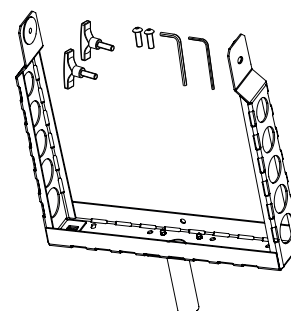
**ESD15 Vertical Bracket**

part number:

**KVV 987 032**

**description:**

- for ES1.0 or ESD15
- black
- including two connection bolts





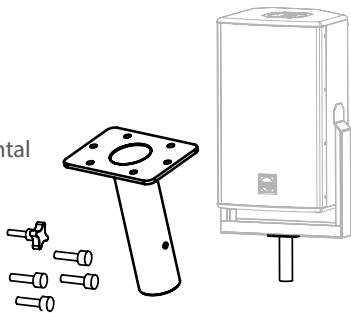
## Bracket Top Hat Adapter

part name:  
**Top Hat Adapter**

part number:  
**KVV 987 090**

**description:**

- for vertical and horizontal brackets
- including bolts
- black



## Speaker pole - universal

part name:

**KV2-H**

part number:  
**KVV 987 292**

**description:**

- Heavy duty telescopic speakerpole
- 0.735 to 1.23 m
- diameter 35 mm
- weight 2.2 kg
- max. load 50 kg
- bottom terminal M20
- matte black



## Speakon speaker cable 4.15

part name:  
**CABLE SPEAKON 4.15**

part number:  
**KVV 987 326**

**description:**

- 4 wire speaker cable
- Speakon NL4 connectors
- 1.5 m (5 ft)



## Speakon speaker cable 4.40

part name:  
**CABLE SPEAKON 4.40**

part number:  
**KVV 987 327**

**description:**

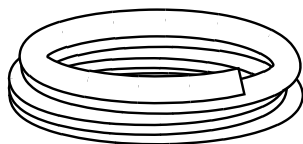
- 4 wire speaker cable
- Speakon NL4 connectors
- 4 m (13 ft)



## Speaker cables

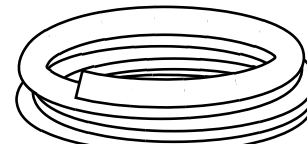
part name:  
**1 m - round flexible speaker cable,  
cross section 2x 1.5 mm**

part number:  
**WX 002**



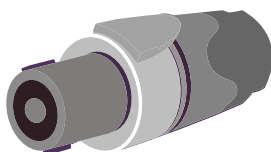
part name:  
**1 m - round flexible speaker cable,  
cross section 4x 2.5 mm**

part number:  
**WX 003**



part name:  
**SPEAKON NL4**

part number:  
**KA 027**



part name:  
**ESD, Speakon NL4 wiring**

positive pin  
(1 +, 2 + parallel)

negative pin  
(1 -, 2 - parallel)

**Speakon NL4 wiring**

1+ — 1+

1- — 1-

2+ — 2+

2- — 2-

## Recommended maximum speaker cable length

MINIMUM CROSS SECTION [mm²]	LENGTH [m], impedance 4 Ω	LENGTH [m], impedance 8 Ω	LENGTH [m], impedance 16 Ω
1.5	8	15	30
2.5	15	30	60
2 x 2.5	20	40	90
4	25	50	100

## Warranty

Your ESD is covered against defects in material and workmanship.

Refer to your supplier for more details.

## Service

In the unlikely event that your ESD develops a problem, it must be returned to an authorised distributor, service centre or shipped directly to our 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.









The Future of Sound.  
Made Perfectly Clear.

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