

## **ESD Speakers**

## **User Guide**

ESD Cube

ESD5

ESD25

ESD6

ESD8

ESD36

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# ESD Speakers · Content

## ESD Speakers · Content



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**ESD Cube - KVV 987 377** 

## **ESD Cube**

**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

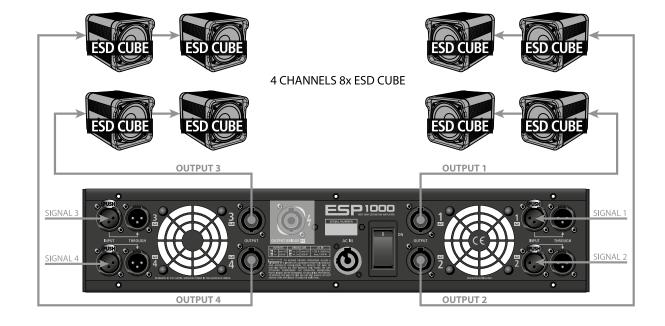
### Introduction

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)



## ESD Cube · Installation · Drawings



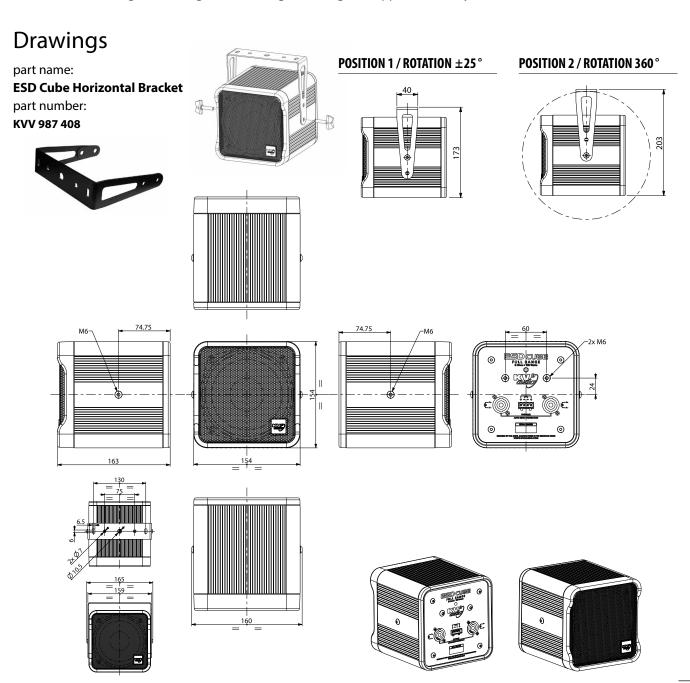
#### Installation

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.

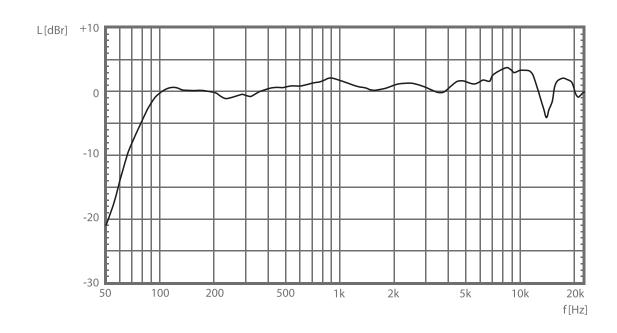
The ESD Cube is supplied with a single Horizontal Bracket, 2 locking screws with spacers and one 3 mm Allen key. Each ESD Cube is equipped with two oval mounting apertures designed for easy vertical or horizontal attachment. To enable fixing to a ceiling or alternatively to the wall, measure out the 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.

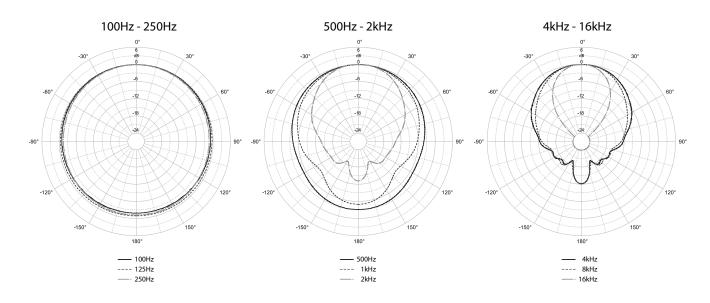
Fix the Wall Bracket using the remaining four countersunk screws. Position the ESD Cube on to the Wall Bracket's pin heads and fix it sliding the cabinet down. When mounting the ESD Cube on the ceiling, slide the cabinet backward and fix/secure it using two locking screws and tighten using the supplied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







## Vertical / Horizontal Polarplots



## ESD Cube · Specifications



## **Specifications**

Weight

#### **System Acoustic Perfomance**

-,	
Max SPL Long-term	110dB
Max SPL Peak	116dB
-3dB Response	90Hz to 18kHz (with ESP1000 equalization)
Recommended Power	100W
Sensitivity	90dB
Impedance	$\Omega$ 8
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
Speaker Input	
Speaker Input	2x Neutrik Speakon®, Terminal Block
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")

3 kg (6.6lbs)



## 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

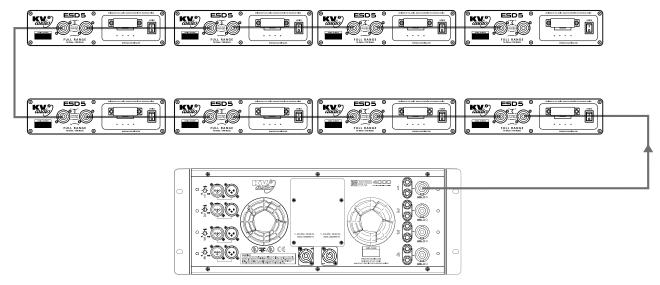
The ESD5 is a very high quality 2-way full-range compact low profile passive loudspeaker with performance that defies its size. Delivering exceptional clarity for speech and program reproduction, the ESD5 is perfect for discreet installations and audio visual presentations where sound quality is paramount, 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.





## ESD5 · Installation · Drawings



### Installation

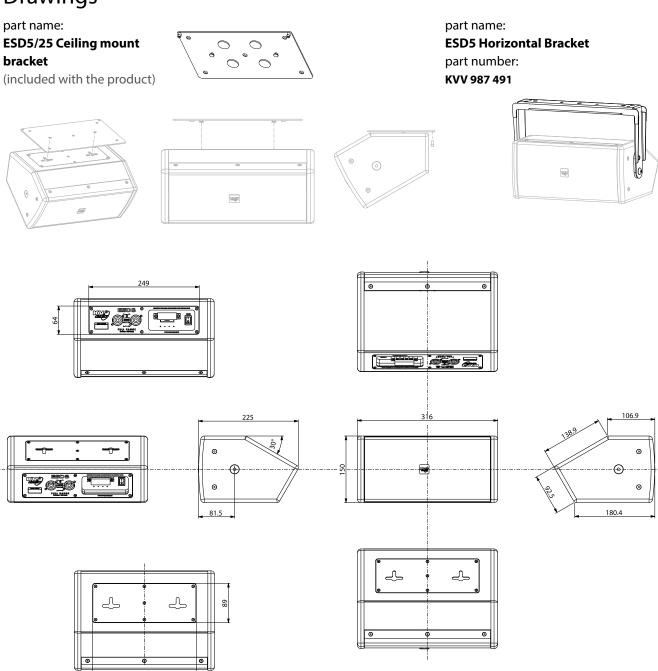
The ESD5 is supplied with a single "ESD5 Wall Bracket", 2 locking screws with spacers and one 3 mm Allen key. Each ESD5 is quipped with two oval mounting apertures designed for easy vertical or horizontal attachment to the ESD5 Wall Bracket.

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.

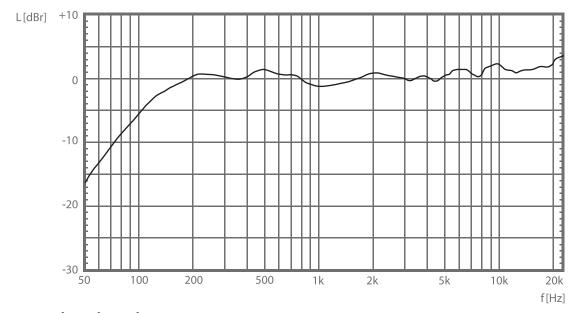
Fix the Wall bracket using one center countersunk screw. Rotate the Wall bracket around the central screw and set the correct angle of the bracket.

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.

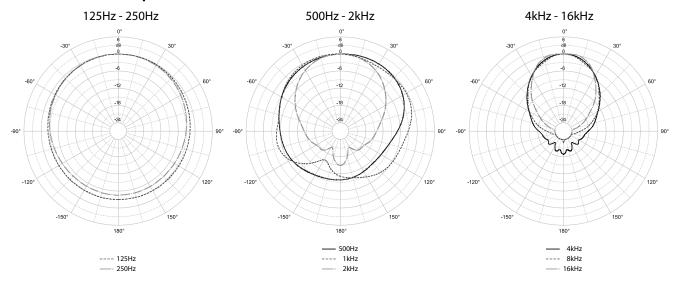
### Drawings



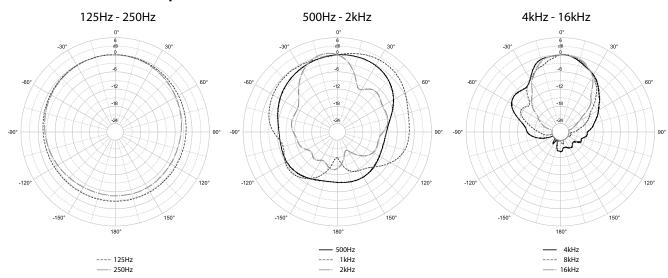




## **Vertical Polarplots**



## **Horizontal Polarplots**



## $\mathsf{ESD5} \cdot \mathsf{Specifications}$



## **Specifications**

Depth

Weight

#### **System Acoustic Perfomance**

System Acoustic Perfomance	
Max SPL Long-term	109dB
Max SPL Peak	115dB
-3dB Response	125Hz to 22kHz
-10dB Response	74Hz to 28kHz
Recommended Power	100W
Sensitivity	89dB
Impedance	16Ω
Crossover Point	3.0kHz
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
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")
D d.	224.7 (0.0411)

224.7 mm (8.84")

7 kg (15.4lbs)



## ESD25

ESD25 - KVV 987 368

#### 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

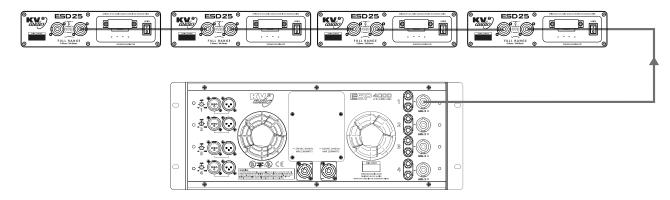
#### Introduction

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 $\Omega$ 



## ESD25 · Installation · Drawings



### Installation

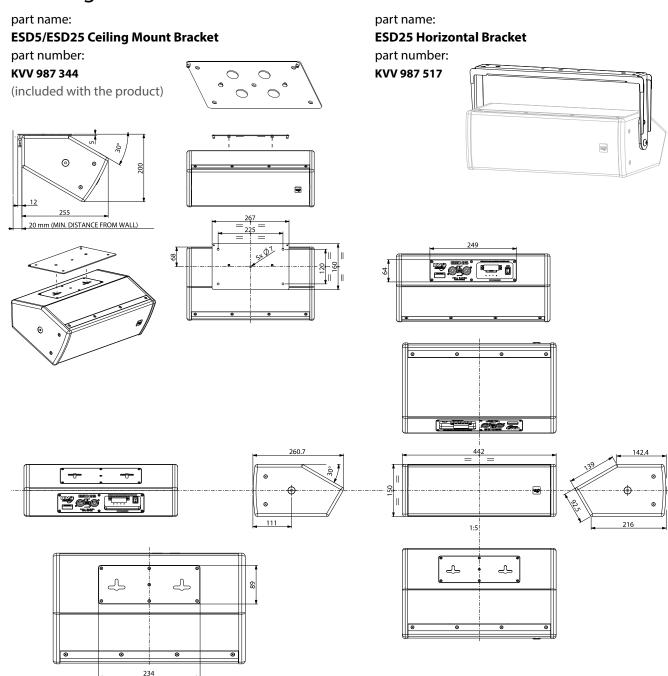
The ESD25 is supplied with a single "ESD25 Wall Bracket", 2 locking screws with spacers and one 3 mm Allen key. Each ESD25 is equipped with two oval mounting apertures designed for easy vertical or horizontal attachment to the ESD25 Wall Bracket.

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.

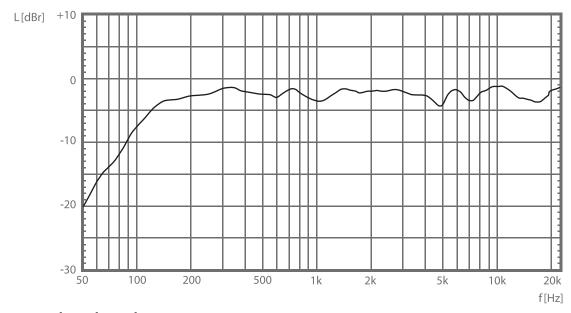
Fix the Wall bracket using one center countersunk screw. Rotate the Wall bracket around the central screw and set the correct angle of the bracket.

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.

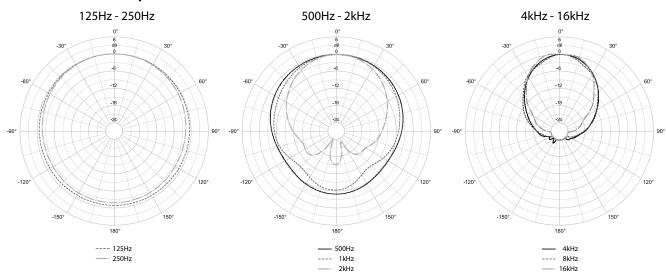
### Drawings



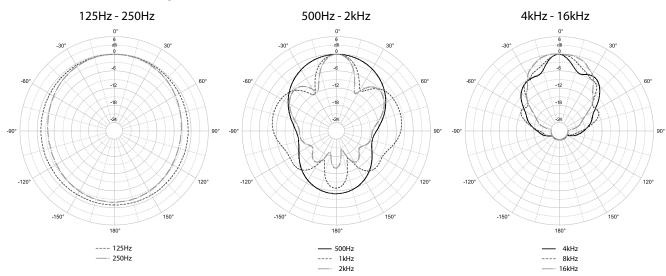




## **Vertical Polarplots**



## **Horizontal Polarplots**



## $\mathsf{ESD25} \cdot \mathsf{Specifications}$



## **Specifications**

Depth

Weight

System	Acoustic	Perfomance
--------	----------	------------

System Acoustic Perfomance	
Max SPL Long-term	118dB
Max SPL Peak	124dB
-3dB Response	120Hz to 22kHz
-10dB Response	72Hz to 28kHz
Recommended Power	200W
Sensitivity	92dB
Impedance	Ω8
Crossover Point	3.0kHz
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
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")

260 mm (10.24")

9.6 kg (21.2lbs)



ESD6 - KVV 987 206

## 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

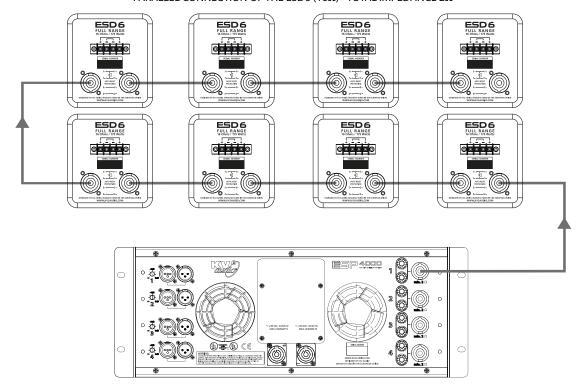
#### Introduction

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 $\Omega$ ) - TOTAL IMPEDANCE $2\Omega$



## $\mathsf{ESD6} \cdot \mathsf{Installation} \cdot \mathsf{Drawings}$

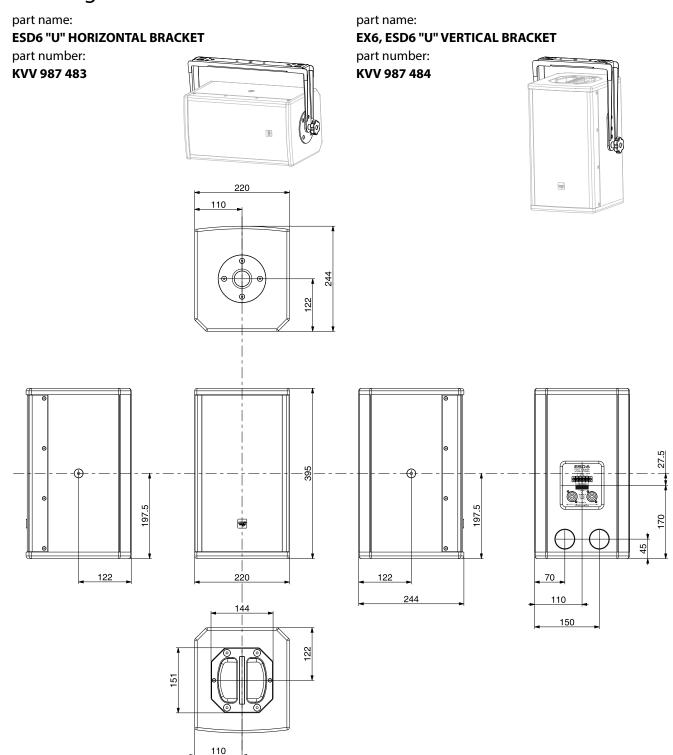


### Installation

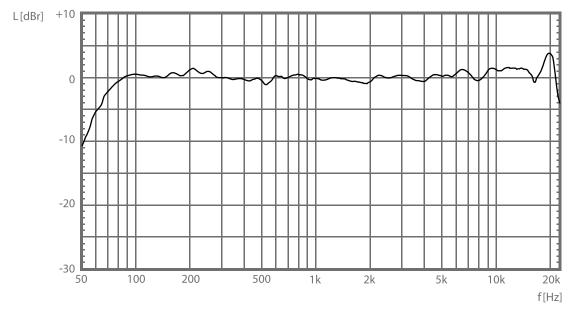
Installations should be carried out using KV2 Audio's horizontal or vertical U brackets. They are mounted vertically using M10 points located on the side of the cabinet or in the top handle and bottom M10 plate (supplied with horizontal bracket) for horizontal fixing and to a mounting post with a diameter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

The 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.

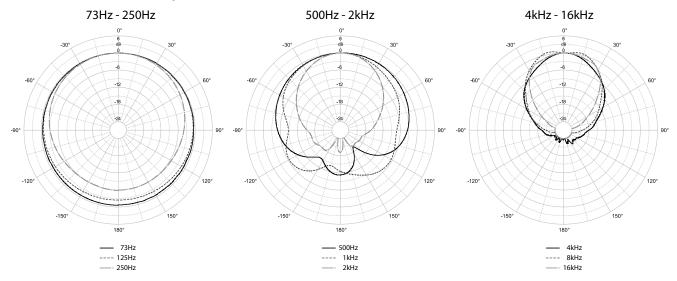
### Drawings



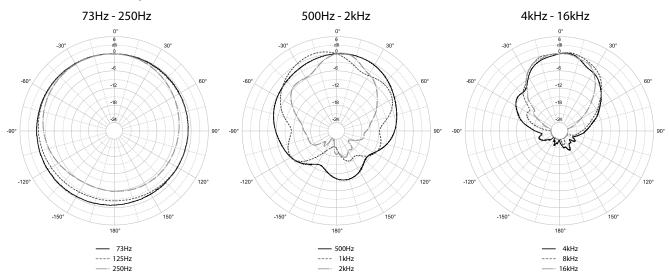




## **Horizontal Polarplots**



## **Vertical Polarplots**



## $\mathsf{ESD6} \cdot \mathsf{Specifications}$



## **Specifications**

Width

Depth

Weight

#### **System Acoustic Perfomance**

117dB
123dB
68Hz to 20kHz
51Hz to 28kHz
175W
92dB
16Ω
2.0kHz
Horn Loaded
100° x 100°
1" / 1.75"
Nitride Titanium
Neodymium
RMS Limiter
Front Loaded, Bass Reflex
6" / 1.75"
Epoxy Reinforced Cellulose
Neodymium
RMS Limiter
2x Neutrik Speakon®, Terminal Block
Baltic birch
1
35 mm
"Orange peeled" Matt Black or any RAL
390 mm (15.35")

220 mm (8.66")

240 mm (9.45")

9.5 kg (20.9lbs)



ESD8 - KVV 987 423

# 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

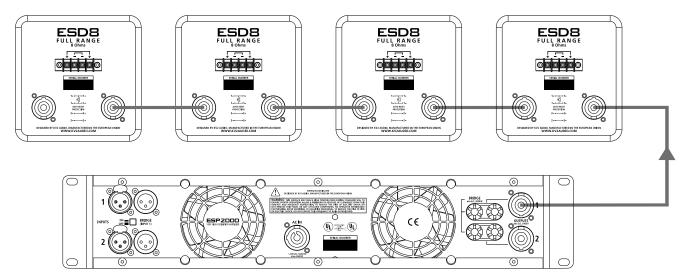
### Introduction

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 $\Omega$ ) - TOTAL IMPEDANCE 2 $\Omega$ 



## $\mathsf{ESD8} \cdot \mathsf{Installation} \cdot \mathsf{Drawings}$



### 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.

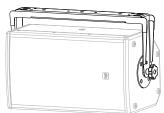
The ESD8 also features a 35 mm speaker pole mount adapter housed at the bottom of the cabinet for use with conventional speaker stands and poles.

### Drawings



KVV 987 422

part name:



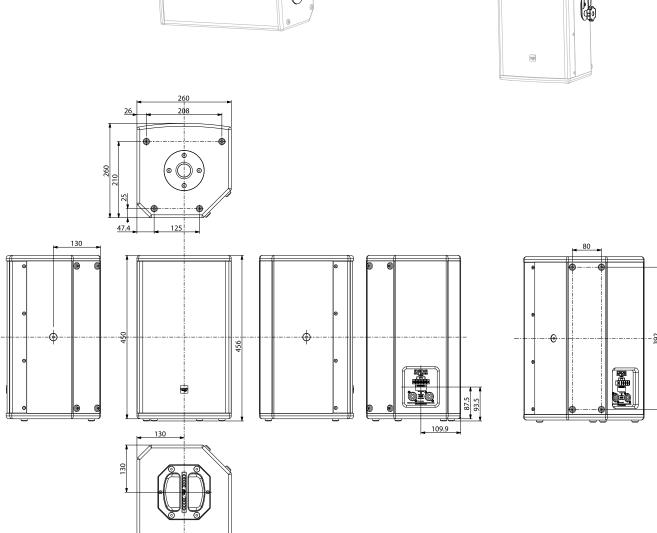
part name:

#### **ESD8 "U" VERTICAL BRACKET**

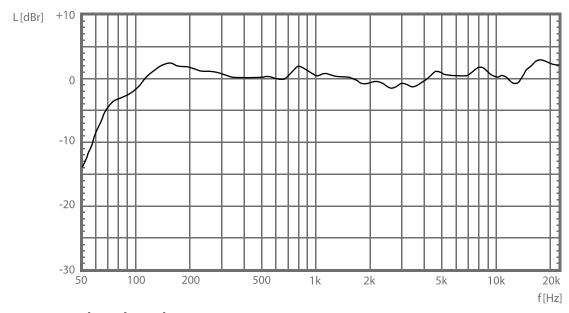
part number:

KVV 987 421

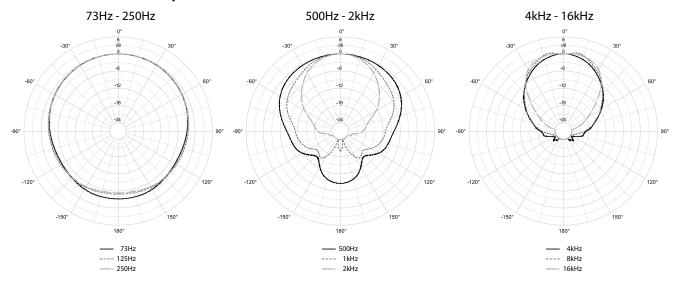




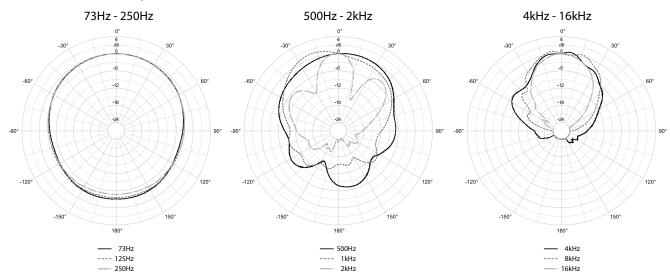




## **Horizontal Polarplots**



## **Vertical Polarplots**



## ESD8 · Specifications



## Specifications

#### **System Acoustic Perfomance**

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

#### **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**

#### 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 (28.6lbs)



ESD36 - KVV 987 224

## 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

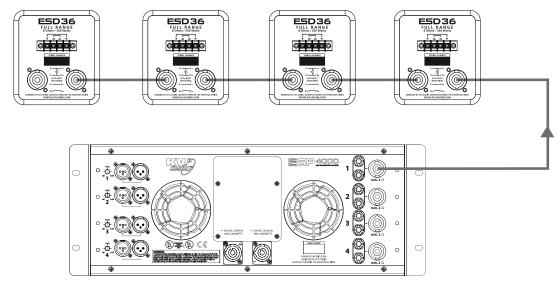
#### Introduction

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 $\Omega$ ) - TOTAL IMPEDANCE $2\Omega$



## $ESD36 \cdot Installation \cdot Drawings$

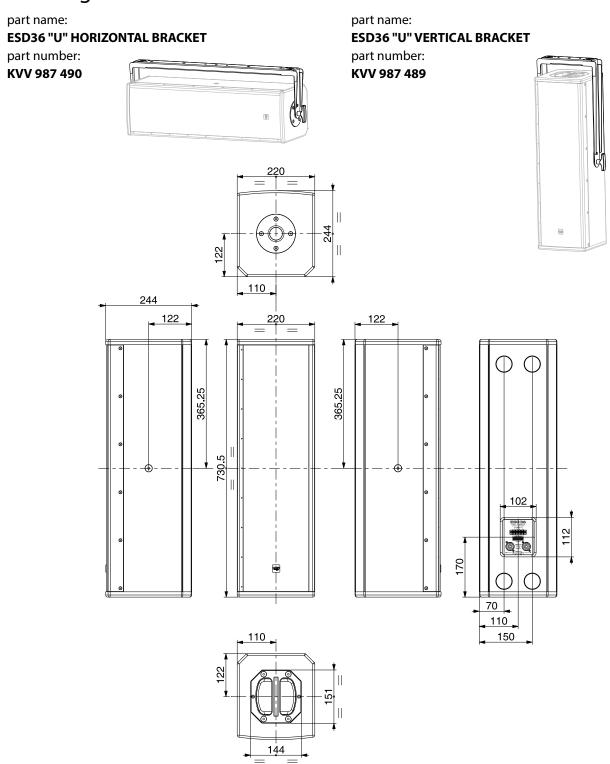


### Installation

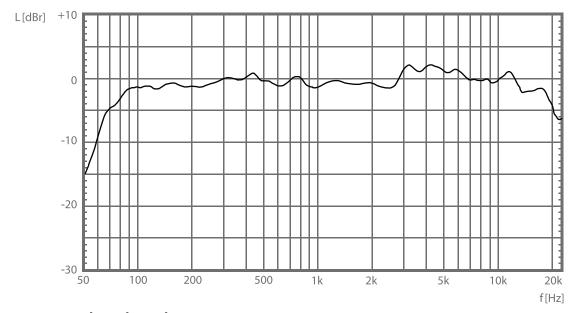
Installations should be carried out using KV2 Audio's horizontal or vertical U brackets. They are mounted vertically using M10 points located on the side of the cabinet or in the top handle and bottom M10 plate (supplied with horizontal bracket) for horizontal fixing and to a mounting post with a diameter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

The 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.

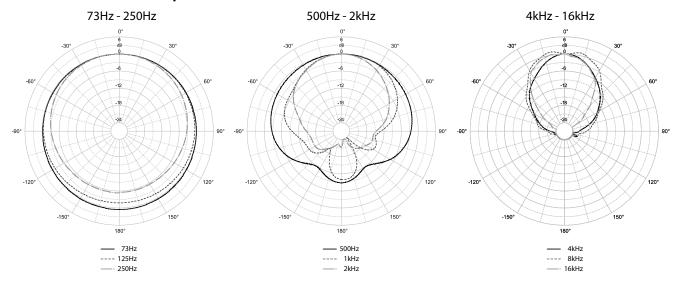
### Drawings



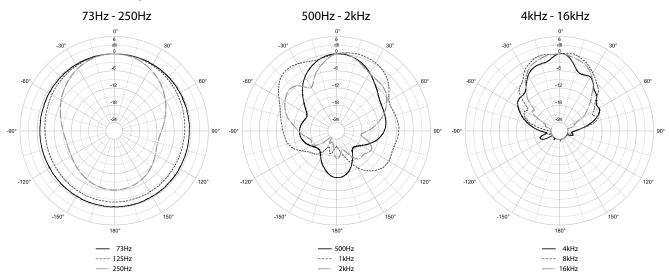




## **Horizontal Polarplots**



## **Vertical Polarplots**



## ESD36 · Specifications



## **Specifications**

System Acoustic Ferromance	
Max SPL Long-term	122dB
Max SPL Peak	128dB
-3dB Response	65Hz to 25kHz
-10dB Response	57Hz to 30kHz
Recommended Power	350W
Sensitivity	94dB
Impedance	8Ω
Crossover Point	600Hz, 2.5kHz
High Frequency Section	
Acoustic Design	Horn Loaded
History Covers as Heritage at al / Vertical	1000 1000

Horn Loaded
100° x 100°
1" / 1.75"
Nitride Titanium
Neodymium
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 x 6" / 1.75"
Magnet Type	Neodymium
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
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 (38.8lbs)



ESD10 - KVV 987 207

## **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

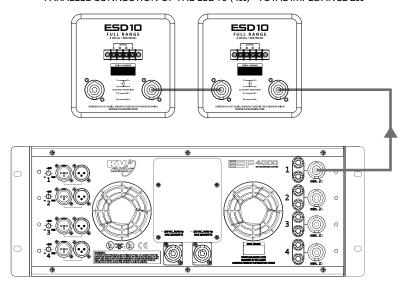
#### Introduction

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 $\Omega$ ) - TOTAL IMPEDANCE 2 $\Omega$



## $\mathsf{ESD10} \cdot \mathsf{Installation} \cdot \mathsf{Drawings}$

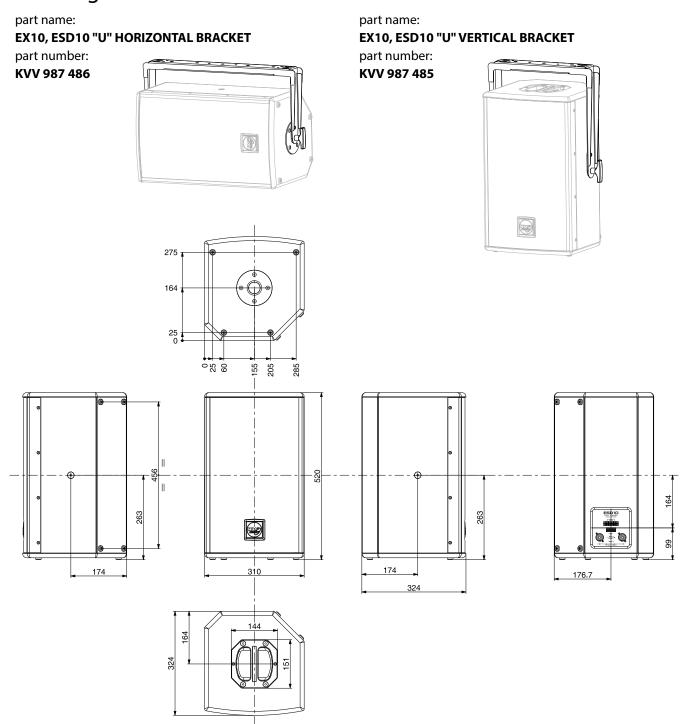


### Installation

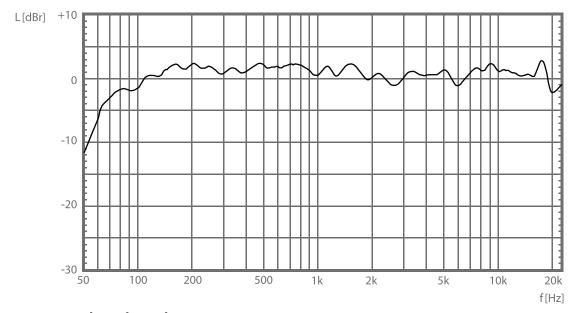
Installations should be carried out using KV2 Audio's horizontal or vertical U brackets. They are mounted vertically using M10 points located on the side of the cabinet or in the top handle and bottom M10 plate (supplied with horizontal bracket) for horizontal fixing and to a mounting post with a diameter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

The 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.

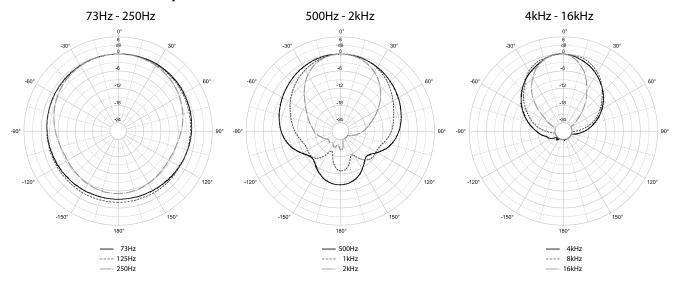
### Drawings



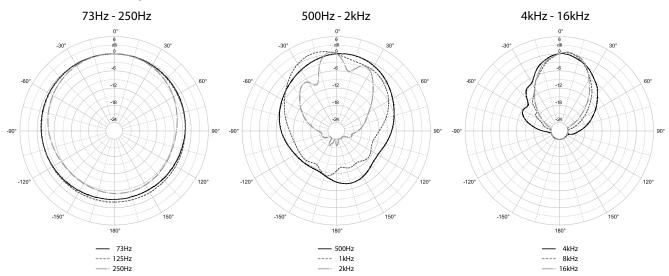




## **Horizontal Polarplots**



## **Vertical Polarplots**



## $\mathsf{ESD10} \cdot \mathsf{Specifications}$



## **Specifications**

#### **System Acoustic Perfomance**

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

#### **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	x Neutrik Speakon®, Terminal Block
-----------------	------------------------------------

#### **Cabinet**

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

#### **Physical Dimensions**

Height	514 mm (20.32")
Width	310 mm (12.20")
Depth	324 mm (12.76")
Weight	16.5 kg (36.38lbs)



ESD12 - KVV 987 199

## **ESD12**

#### **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

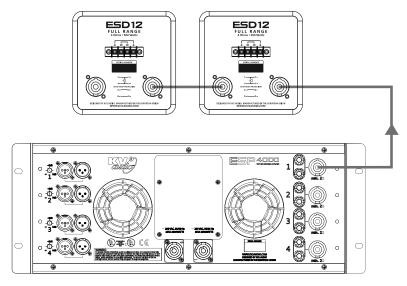
### Introduction

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 $\Omega$



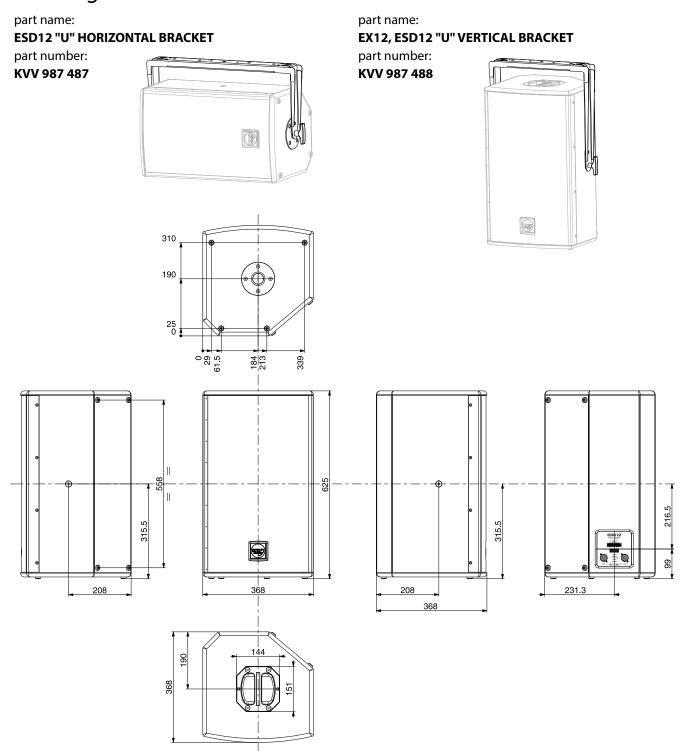
## $\mathsf{ESD12} \cdot \mathsf{Installation} \cdot \mathsf{Drawings}$

### Installation

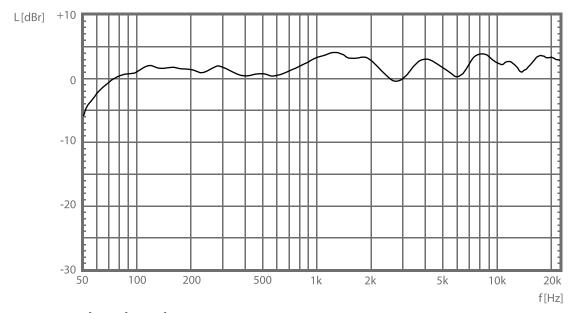
Installations should be carried out using KV2 Audio's horizontal or vertical U brackets. They are mounted vertically using M10 points located on the side of the cabinet or in the top handle and bottom M10 plate (supplied with horizontal bracket) for horizontal fixing and to a mounting post with a diameter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

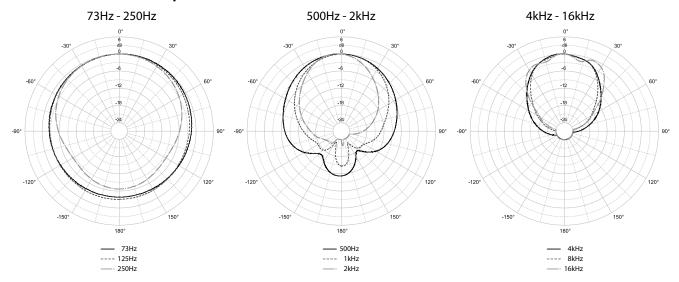
### Drawings



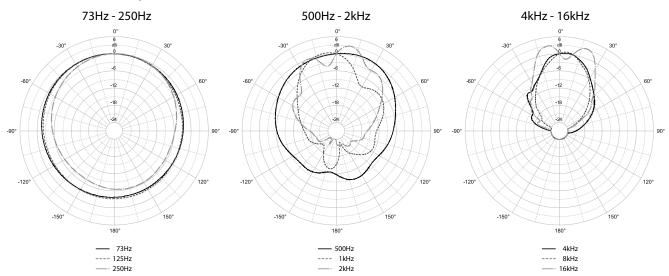




## **Horizontal Polarplots**



## **Vertical Polarplots**



## $\mathsf{ESD12} \cdot \mathsf{Specifications}$



## **Specifications**

#### **System Acoustic Perfomance**

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

#### **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	2x Neutrik Speakon®, Terminal Block
-----------------	-------------------------------------

#### **Cabinet**

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

#### **Physical Dimensions**

•	
Height	619 mm (44.37")
Width	368 mm (14.48")
Depth	368 mm (14.48")
Weight	23 kg (50.7lbs)



ESD15 - KVV 987 313

## **ESD15**

#### 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

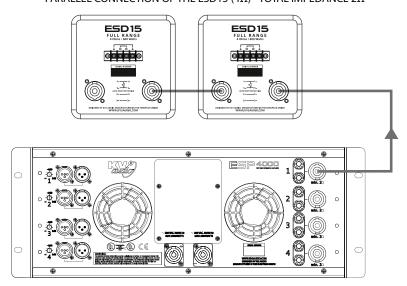
### Introduction

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 $\Omega$



## $\mathsf{ESD15} \cdot \mathsf{Installation} \cdot \mathsf{Drawings}$

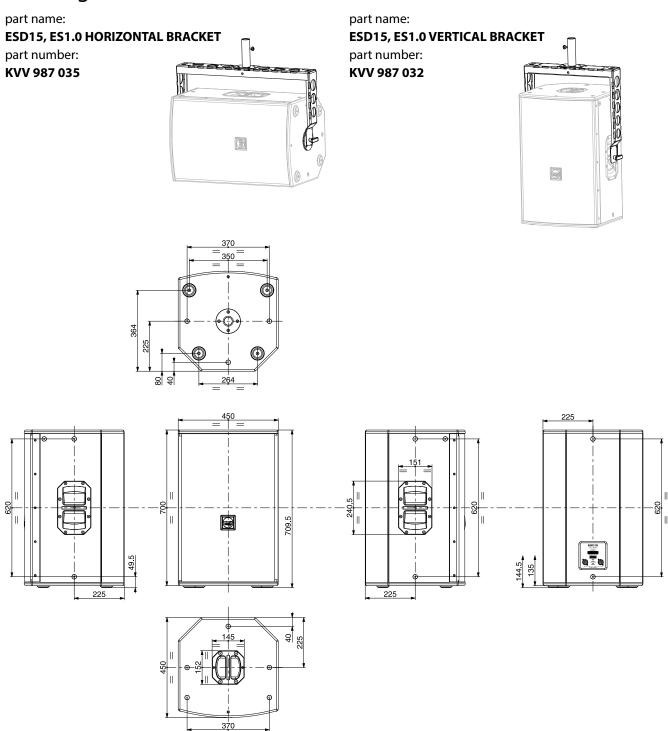


### Installation

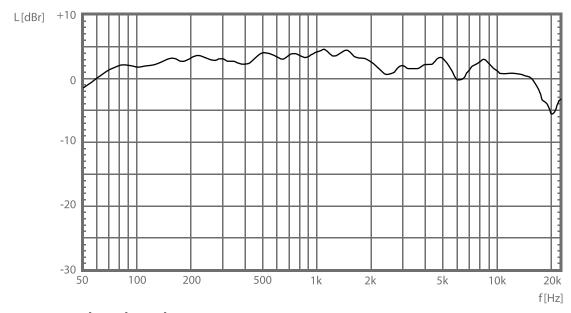
Installations should be carried out using KV2 Audio's horizontal or vertical U brackets. They are mounted vertically using M10 points located on the side of the cabinet or in the top handle and bottom M10 plate (supplied with horizontal bracket) for horizontal fixing and to a mounting post with a diameter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

The 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.

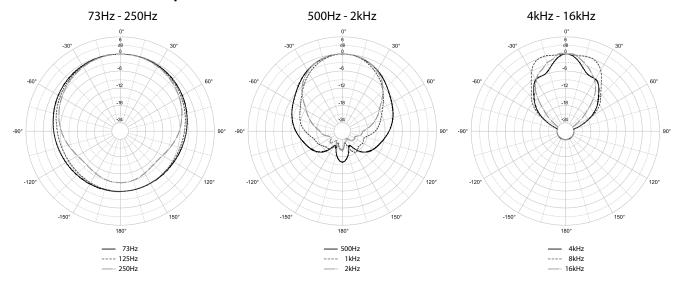
### Drawings



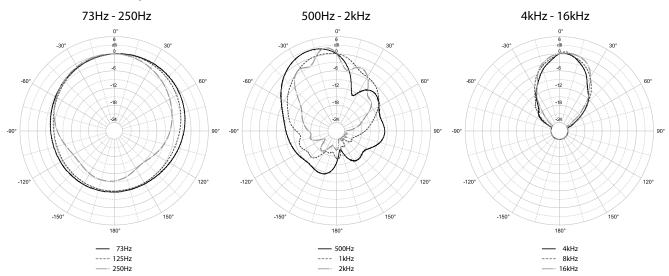




## **Horizontal Polarplots**



## **Vertical Polarplots**



## ESD15 · Specifications



## **Specifications**

System Acoustic Perfomance		
Max SPL Long-term	126dB	
Max SPL Peak	132dB	
-3dB Response	48Hz to 18kHz	
-10dB Response	45Hz to 28kHz	
Recommended Power	500W	
Sensitivity	97dB	
Impedance	$4\Omega$	
Crossover Point	500Hz, 2.5kHz	
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	
Cabinet		
Handles	3	
Pole Mount	35 mm	
Physical Dimensions		

#### **Physical Dimensions**

Height	700 mm (27.55")
Width	450 mm (17.71")
Depth	450 mm (17.71")
Weight	35 kg (77.2lbs)

## ESD Speakers · Accessories



#### 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** 

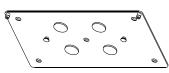
part number:

KVV 987 344

description:

- 2 locking screws M4x10mm with spacers

- 1 Allen key



(included with the product)

#### **Horizontal Bracket for ESD6**

part name:

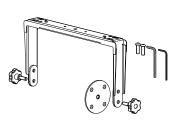
**ESD6 Horizontal Bracket** 

part number:

KVV 987 483

description:

- including two connection bolts and bracket



#### **Vertical Bracket for ESD6**

part name:

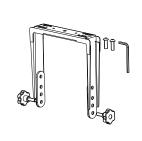
**ESD6 Vertical Bracket** 

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** 

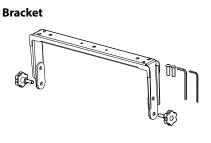
part number:

KVV 987 517

description:

- black

- including two connection bolts



## ESD Speakers · Accessories



#### **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:

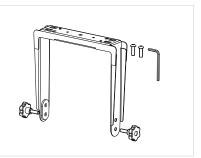
#### **ESD8 Vertical Bracket**

part number:

#### KVV 987 421

#### description:

- black
- including two connection bolts



#### **Horizontal Bracket for ESD36**



#### **Vertical Bracket for ESD36**

part name:

#### **ESD36 Vertical Bracket**

part number:

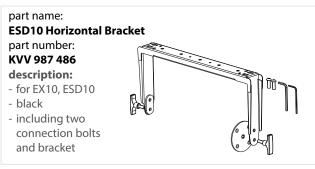
#### KVV 987 489

#### description:

- black
- including two connection bolts



#### **Horizontal Bracket for ESD10**



#### **Vertical Bracket for ESD10**

part name

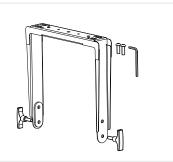
#### **ESD10 Vertical Bracket**

part number:

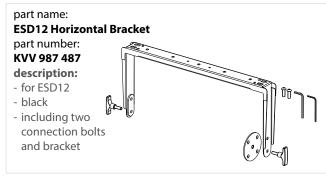
#### KVV 987 485

#### description:

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



#### **Horizontal bracket for ESD12**



#### **Vertical bracket for ESD12**

part name:

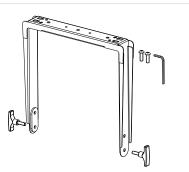
#### **EX12 Vertical Bracket**

part number:

#### KVV 987 488

#### description:

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



#### **Horizontal bracket for ESD15**

part name:

#### **ESD15 Horizontal Bracket**

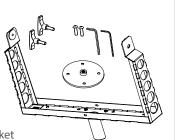
part number:

#### 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:

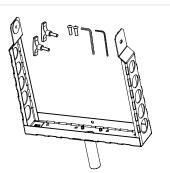
#### **ESD15 Vertical Bracket**

part number:

#### KVV 987 032

description:

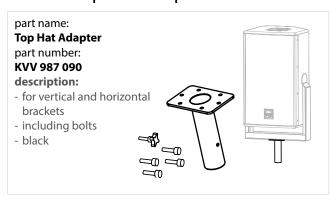
- for ES1.0 or ESD15
- black
- including two connection bolts



## ESD Speakers · Accessories



#### **Bracket Top Hat Adapter**



#### Speaker pole - universal



#### Speakon speaker cable 4.15

#### part name: CABLE SPEAKON 4.15 part number: KVV 987 326

- description:4 wire speaker cable
- Speakon NL4 connectors
- 1,5m (5ft)



### Speakon speaker cable 4.40

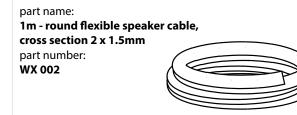
## part name: **CABLE SPEAKON 4.40** part number:

## KVV 987 327 description:

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



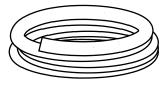
### Speaker cables



part name:

1m - round flexible speaker cable, cross section 4 x 2.5mm 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



2-----2-

### Recommended maximum speaker cable length

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

## ESD Speakers · Warranty · Service



### 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.

#### **KV2 Audio International**

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