



# ESD Series Subwoofers

## User Guide

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ESD1.10 • ESD1.12 • ESD1.15 • ESD1.18



# The Future of Sound. Made Perfectly Clear.

At KV2 Audio our vision is to constantly develop technologies that eliminate distortion and loss of information providing a true dynamic representation of the source.

Our aim is to create audio products that absorb you, place you within the performance and deliver a listening experience beyond expectations.

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# ESD1.10

## SUBWOOFER 500Watts

ESD1.10 - part number KVV 987 391



### Application

Specifically designed as a passive subwoofer to accompany and compliment the ESD Cube systems, or as a standalone compact low frequency solution for space limited applications.

- Fixed installations
- Bars-small entertainment projects and peripheral sound
- Museums or Theme park projects
- Small footprint and dimensions allow placement under seating and fixtures

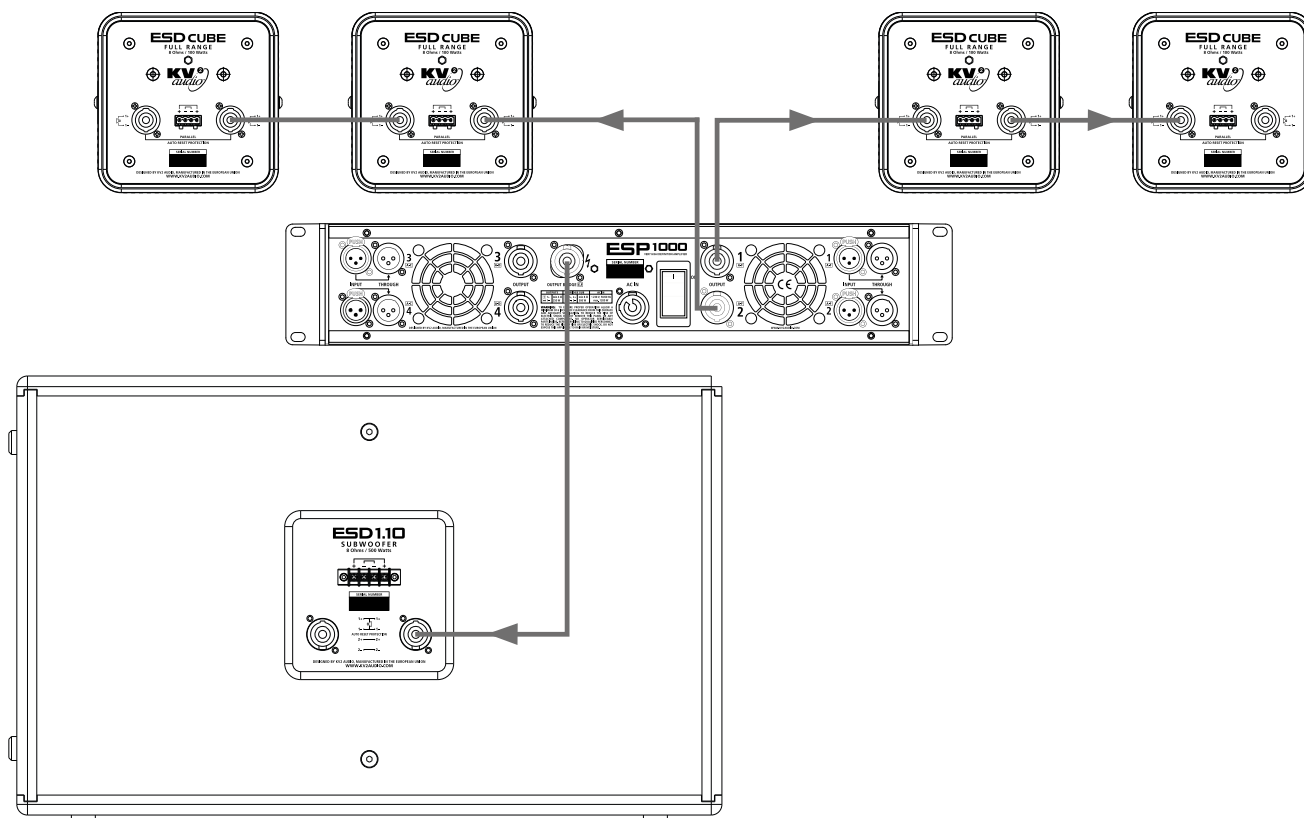
### Introduction

The ESD1.10 is a compact passive 10" subwoofer featuring a high quality neodymium transducer. The smallest subwoofer within the KV2 range, it has been designed to compliment the ESD Cube Ultra compact Passive loudspeaker, creating a full range system solution when partnered with the Cube and ESP1000 amplifier. With power handling of 500 watts the ESD1.10 is capable of delivering tight, fast and controlled bass response, at high output levels from a very compact cabinet and is ideal for any discreet low frequency applications alongside other KV2 Audio products.

### Connection

The ESD1.10 features both Speakon (NL4) connectors and a terminal block. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESD1.10's.

EXAMPLE OF CONNECTION: ESD1.10 BRIDGED OUTPUT (8Ω)



ESD1.10 · Overview

## Specifications

### System Acoustic Performance

Max SPL Long-term	121dB
Max SPL Peak	124dB
-3dB Response	40Hz to 150Hz
-10dB Response	37Hz to 170Hz (with ESP1000 equalization)
Recommended Power	500W
Sensitivity	94dB
Impedance	8Ω
Crossover Point	80Hz to 150Hz

### Low Frequency Section

Acoustic Design	Twin Asymmetrical loading
Number of Drivers	1
Woofer Size / Voice Coil Diameter / Design	10" / 3" / Inside Outside
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium
Protection	Thermal breaker - autoreset

### Speaker Input

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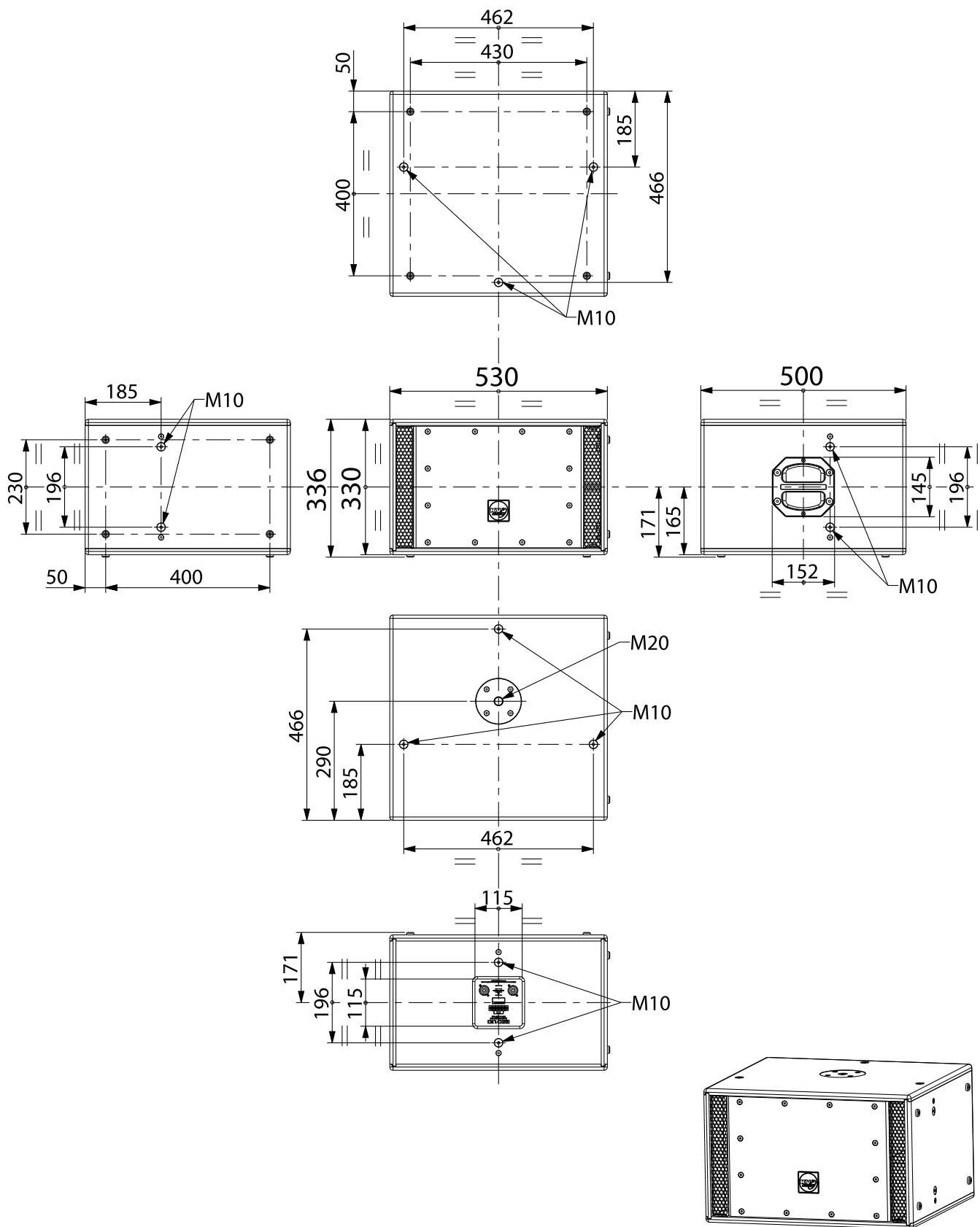
### Cabinet

Cabinet Material	Baltic birch
Handles	1
Pole Mount	M20
Color	"Orange peeled" Matt Black or any RAL

### Physical Dimensions

Height	335 mm (13.2")
Width	530 mm (20.9")
Depth	500 mm (19.7")
Weight	21.3 kg (46.96lbs)

## Drawings

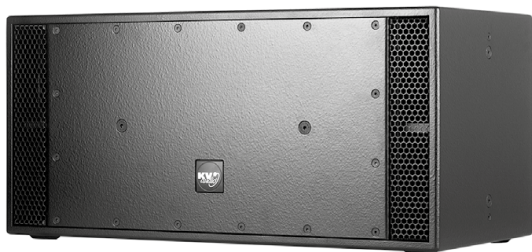


ESD1.10 · Drawings

# ESD1.12

## SUBWOOFER 600Watts

ESD1.12 - part number KVV 987 225



### Application

Specifically designed as a passive subwoofer to accompany and compliment the ESD5/6 as a true full range system

- For fixed installation
- Bars-small entertainment projects
- Small footprint and dimensions allow placement under seating and fixtures

### Introduction

The ESD1.12 is a very compact passive, high output subwoofer. The ESD1.12 is a passive version of the active EX1.2, 12" subwoofer and features the same high quality neodymium driver.

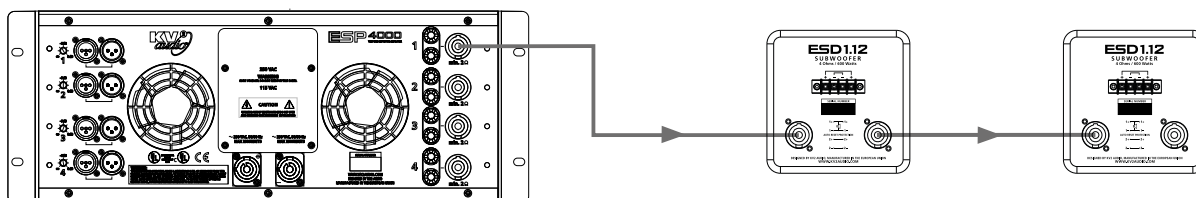
This subwoofer's low profile and size makes it ideal for discreet applications.

With a power handling of 600 watts, the ESD1.12 is capable of delivering tight, fast, controlled bass response at high output levels from a compact cabinet.

The ESD1.12 woofer is protected by a reverse thermal-circuit breaker (autoreset) and features a professional Baltic Birch construction with a wear resistant polymer coating and a specially designed handle for simplified handling and carrying. The ESD1.12 is also available in any RAL colour (white RAL9003 on stock).

### Connection

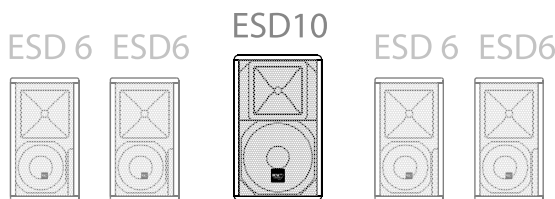
The ESD1.12 features both Speakon (NL4) connectors and a terminal block. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESD1.12's.



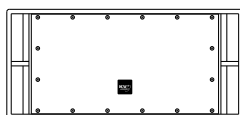
PARALLEL CONNECTION OF THE ESD1.12 (4Ω) - TOTAL IMPEDANCE 2Ω

### Configurations example

ESD1.12 + 1x ESD10 or 4x ESD6



ESD1.12



ESD1.12 + 1x ESD10 or 4x ESD6

## Specifications

### System Acoustic Performance

Max SPL Long-term	124dB
Max SPL Peak	127dB
-3dB Response	38Hz to 150Hz
-10dB Response	34Hz to 170Hz
Recommended Power	600W
Sensitivity	97dB (half-space area)
Impedance	4Ω
Crossover Point	80Hz to 150Hz

### Low Frequency Section

Acoustic Design	Twin Asymmetrical loading
Number of Drivers	1
Woofer Size / Voice Coil Diameter / Design	12" / 3" / Inside Outside
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Ferrite
Protection	Thermal breaker - autoreset

### Speaker Input

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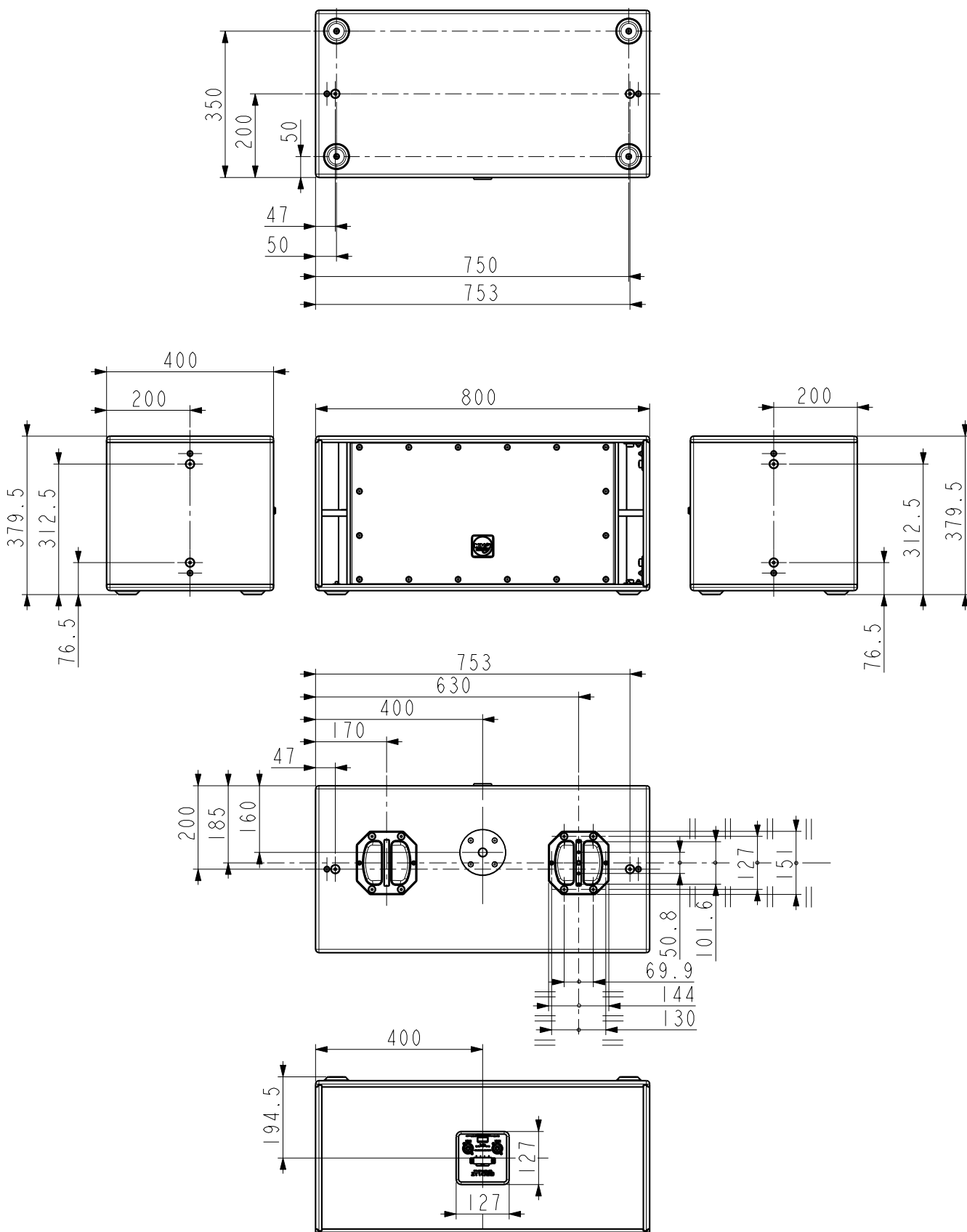
### Cabinet

Cabinet Material	Baltic birch
Handles	2
Pole Mount	M20
Flyware	8x M10 suspension points
Color	"Orange peeled" Matt Black or any RAL

### Physical Dimensions

Height	379.5 mm (14.94")
Width	800 mm (31.49")
Depth	400 mm (15.75")
Weight	26.7 kg (58.8lbs)

## Drawings





# ESD 1.15

## SUBWOOFER 600Watts

ESD1.15 - part number KVV 987 241



### Application

Specifically designed as a passive subwoofer to accompany any of the ESD range to create true full range system performance

- Fixed installation
- Portable PA
- Bars-small entertainment projects
- Scalable into larger systems

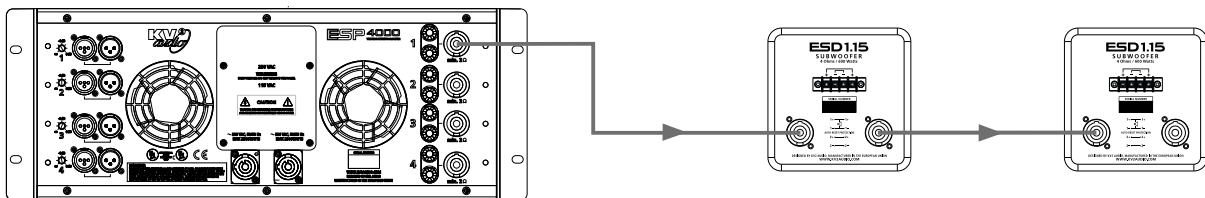
### Introduction

The ESD1.15 is a compact passive, high output subwoofer. The ESD1.15 features a single 15" neodymium driver. Offering a peak SPL of 130dB the ESD1.15 produces considerable output yet in true KV2 style retains a compact footprint. Multiple units of ESD1.15's can be stacked together to create a powerful and scalable subwoofer system. With a power handling of 600 watts and high efficiency, the ESD1.15 is capable of delivering fast, controlled bass response at high output levels from a compact cabinet.

The ESD1.15 woofer is protected by a reverse thermal-circuit breaker (autoreset) and features a professional Baltic Birch construction with a wear resistant polymer coating and a specially designed handle for simplified handling and carrying. The ESD1.15 is also available in any RAL colour (white RAL9003 on stock).

### Connection

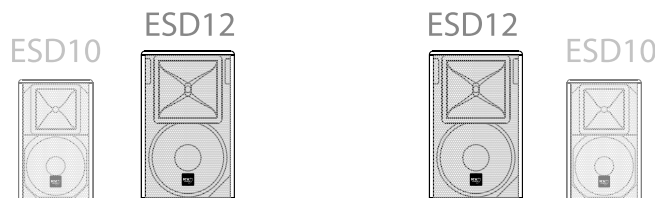
The ESD1.15 features both Speakon (NL4) connectors and a terminal block. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESD1.15's.



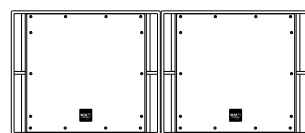
PARALLEL CONNECTION OF THE ESD1.15 (4Ω) - TOTAL IMPEDANCE 2Ω

### Configurations example

2x ESD1.15 + 2x ESD10 or 2x ESD12



ESD1.15



2x ESD1.15 + 2x ESD10 or 2x ESD12

## Specifications

### System Acoustic Performance

Max SPL Long-term	127dB
Max SPL Peak	130dB
-3dB Response	37Hz to 150Hz
-10dB Response	34Hz to 170Hz
Recommended Power	600W
Sensitivity	99dB (half-space area)
Impedance	4Ω
Crossover Point	80Hz to 150Hz

### Low Frequency Section

Acoustic Design	Twin Asymmetrical loading
Number of Drivers	1
Woofer Size / Voice Coil Diameter / Design	15" / 3" / Inside Outside
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Ferrite
Protection	Thermal breaker - autoreset

### Speaker Input

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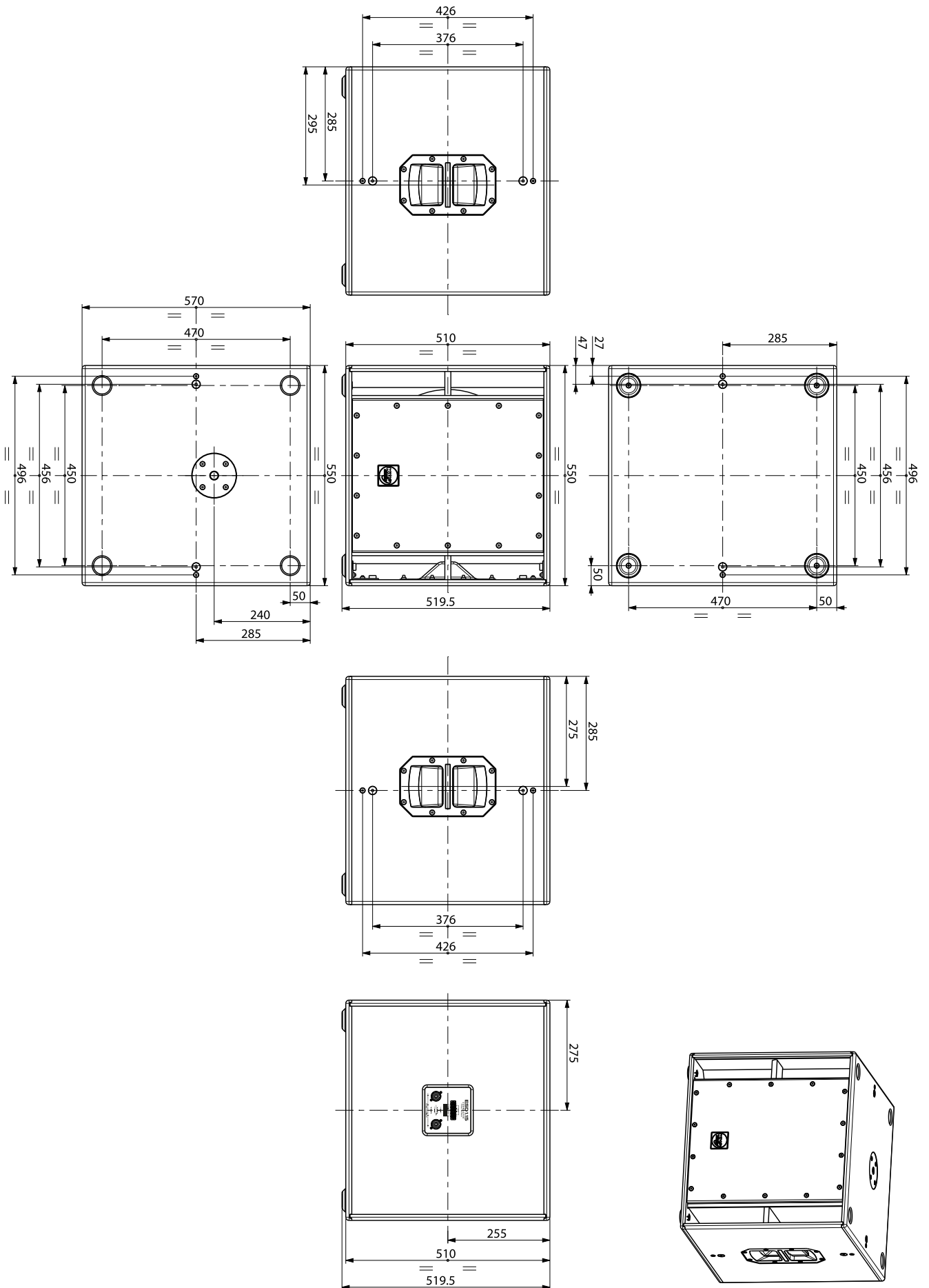
### Cabinet

Cabinet Material	Baltic birch
Handles	2
Pole Mount	M20
Flyware	8x M10 suspension points
Color	"Orange peeled" Matt Black or any RAL

### Physical Dimensions

Height	510 mm (20.08")
Width	550 mm (21.65")
Depth	570 mm (22.44")
Weight	34.2 kg (75.4lbs)

## Drawings



ESD1.15 · Drawings

# ESD 1.18

## SUBWOOFER 1000Watts

ESD1.18 - part number KVV 987 242



### Application

Specifically designed as a passive subwoofer to accompany any of the ESD range to create true full range system performance

- Fixed installation
- Portable PA
- Bars-small entertainment projects
- Scalable into larger systems

### Introduction

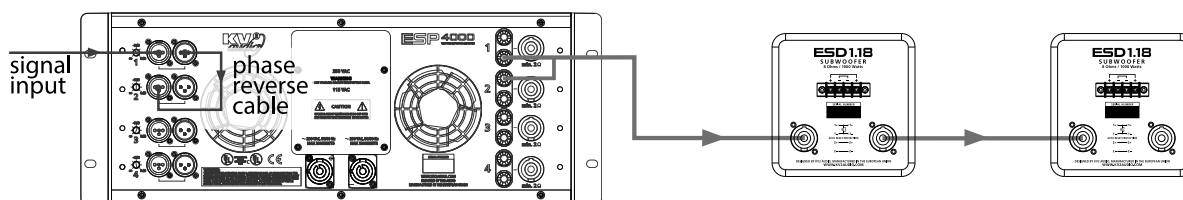
The ESD1.18 is a high output subwoofer. The ESD1.18 is a passive version of the active EX1.8, 18" subwoofer and features the same high quality neodymium driver. The unit provides a very firm foundation on which to build a powerful ESD system.

With a power handling of 1000 watts, the ESD1.18 is capable of delivering controlled bass response at very high output levels from a relatively small cabinet.

The ESD1.18 woofer is protected by a reverse thermal-circuit breaker (autoreset) and features a professional Baltic Birch construction with a wear resistant polymer coating and a specially designed handle for simplified handling and carrying. The ESD1.18 is also available in any RAL colour.

### Connection

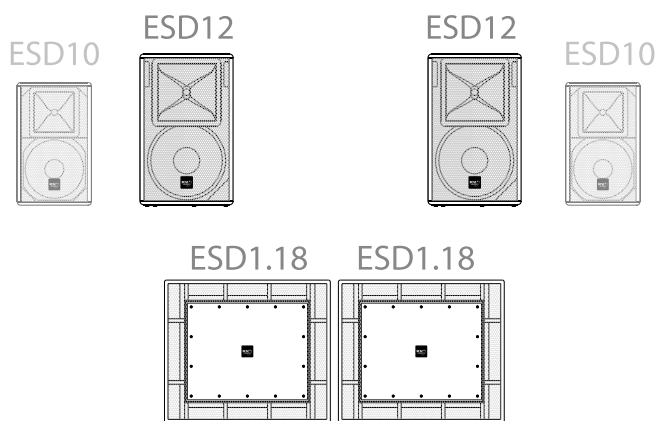
The ESD1.18 features both Speakon (NL4) connectors and a terminal block. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESD1.18's.



PARALLEL CONNECTION OF THE ESD1.18 (8Ω) FROM THE BRIDGED ESP4000 - TOTAL IMPEDANCE 4Ω

### Configurations example:

2x ESD1.18 + 2x ESD12 or 2x ESD10



2x ESD1.18 + 2x ESD12 or 2x ESD10

## Specifications

### System Acoustic Performance

Max SPL Long-term	131dB
Max SPL Peak	134dB
-3dB Response	30Hz to 150Hz
-10dB Response	28Hz to 170Hz
Recommended Power	1000W
Sensitivity	100dB
Impedance	8Ω
Crossover Point	70 to 150Hz

### Low Frequency Section

Acoustic Design	Twin Asymmetrical loading
Number of Drivers	1
Woofer Size / Voice Coil Diameter / Design	18" / 4" / Inside Outside
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium
Protection	Thermal breaker - autoreset

### Speaker Input

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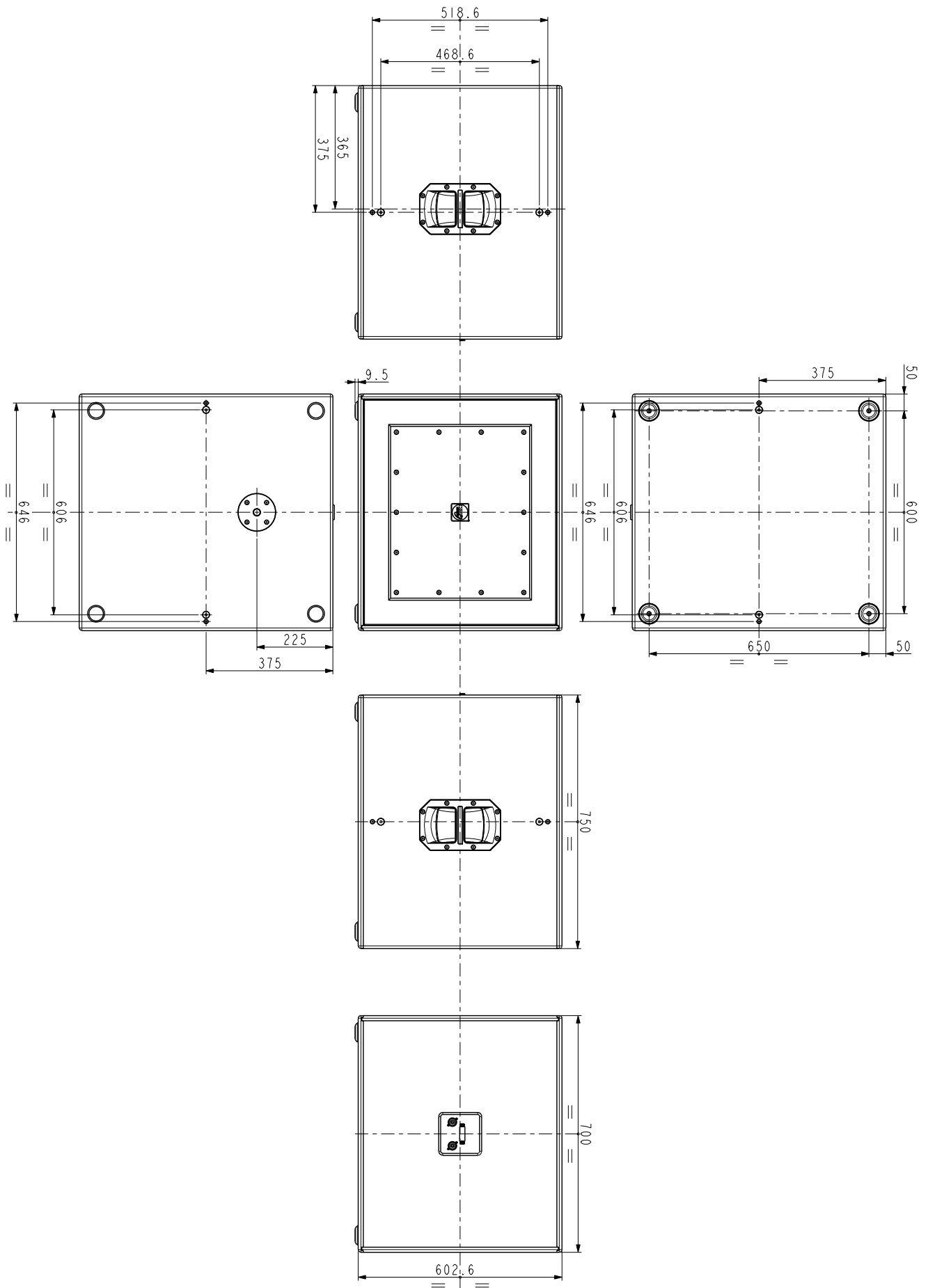
### Cabinet

Cabinet Material	Baltic birch
Handles	2
Pole Mount	M20
Color	"Orange peeled" Matt Black or any RAL
Flyware	8x M10 suspension points

### Physical Dimensions

Height	612 mm (24.1")
Width	700 mm (27.56")
Depth	750 mm (29.5")
Weight	52 kg (114.7lbs)

## Drawings



## Speaker pole - universal

part name:

**KV2-H**

part number:

**KVV 987 130**

**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 NL4FX 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 NL4FX connectors
- 4m (13ft)



## Speakon NL4 wiring

part name:

**ESD, Speakon NL4 wiring**

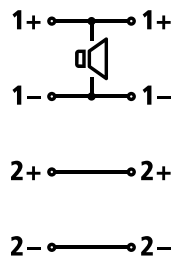
positive pin

(1 +, 2 + parallel)

negative pin

(1 -, 2 - parallel)

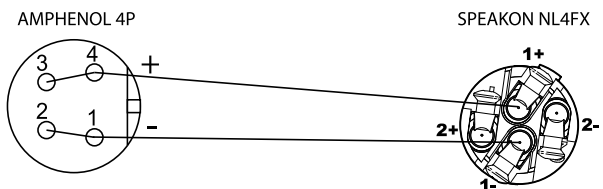
Speakon NL4 wiring



## AP4 to Speakon wiring

part name:

**ESD, AP4 to Speakon wiring**



## Recommended speaker cable lengths

MINIMUM CROSS SECTION [mm <sup>2</sup> ]	LENGTH [m], impedance 4Ω	LENGTH [m], impedance 8Ω	LENGTH [m], impedance 16Ω
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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