

ESD Series Subwoofers User Guide

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.

ESD Series Subwoofers · Contents



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ESD1.10 · Overview









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.

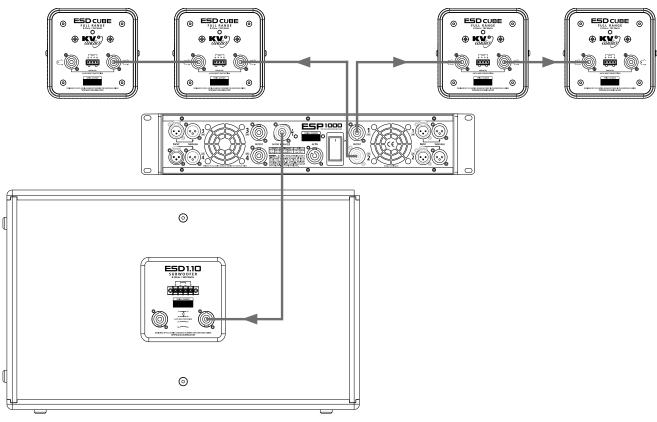
- Fixed installations
- Bars-small entertainment projects and peripheral sound
- Museums or Theme park projects
- Small footprint and dimensions allow placement under seating and fixtures

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 · Specifications

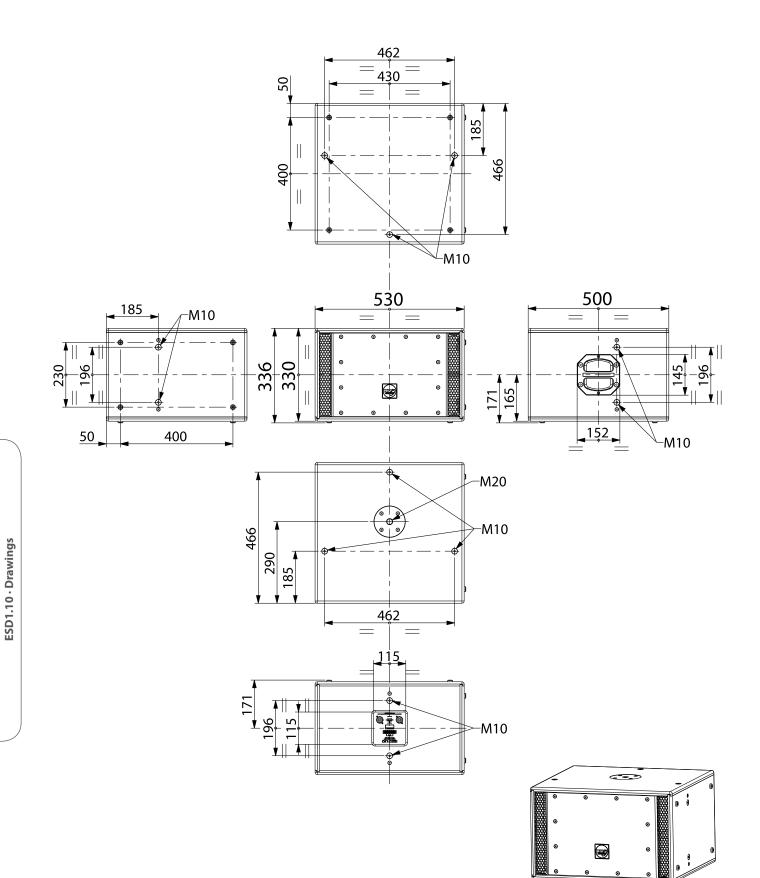


System Acoustic Perfomance		
Max SPL Long-term	121dB	
Max SPL Peak	124dB	
-3dB Response	40Hz to 150Hz	
-10dB Response	35Hz	
Recommended Power	500W	
Sensitivity	94dB	
Impedance	8Ω	
Crossover Point	150Hz	
Low Frequency Section		
Acoustic Design	Twin Asymmetrical loading	
Number of Drivers	1	
Woofer Size / 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	
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)	

ESD1.10 · Drawings



Drawings



ESD1.12 · Overview



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.

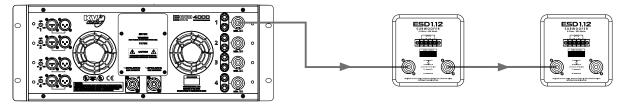
This subwoofer's low profile and size makes it ideal for discreet applications.

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 (4 Ω) - TOTAL IMPEDANCE 2 Ω

Configurations example

ESD1.12 + 1x ESD10 or 4x ESD6





ESD1.12 + 1*x ESD10* or 4*x ESD6*

ESD1.12 · Specifications

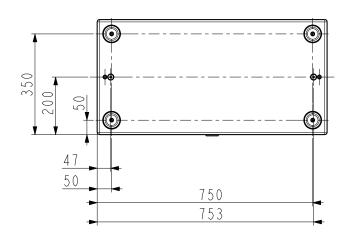


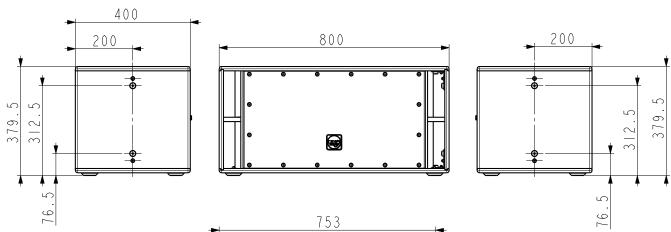
System Acoustic Perfomance		
Max SPL Long-term	124dB	
Max SPL Peak	127dB	
-3dB Response	38Hz to 150Hz	
-10dB Response	34Hz to 170Hz	
Recommended Power	600W	
Sensitivity	97dB (half-space area)	
Impedance	4Ω	
Crossover Point	80Hz to 150Hz	
Low Frequency Section		
Acoustic Design	Twin Asymmetrical loading	
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	
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)	

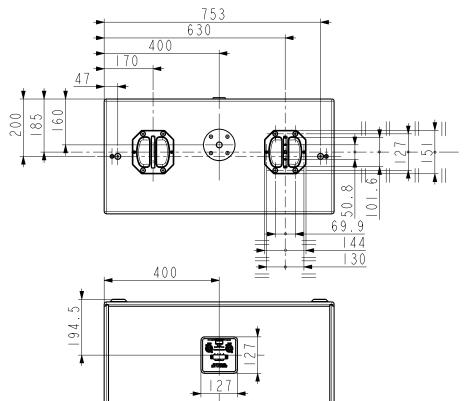
ESD1.12 · Drawings



Drawings







ESD1.12 · Drawings

ESD1.15 · Overview



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

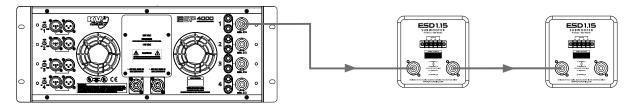
Introduction

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.



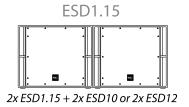
PARALLEL CONNECTION OF THE ESD1.15 (4 Ω) - TOTAL IMPEDANCE 2 Ω

Configurations example

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







ESD1.15 · Specifications

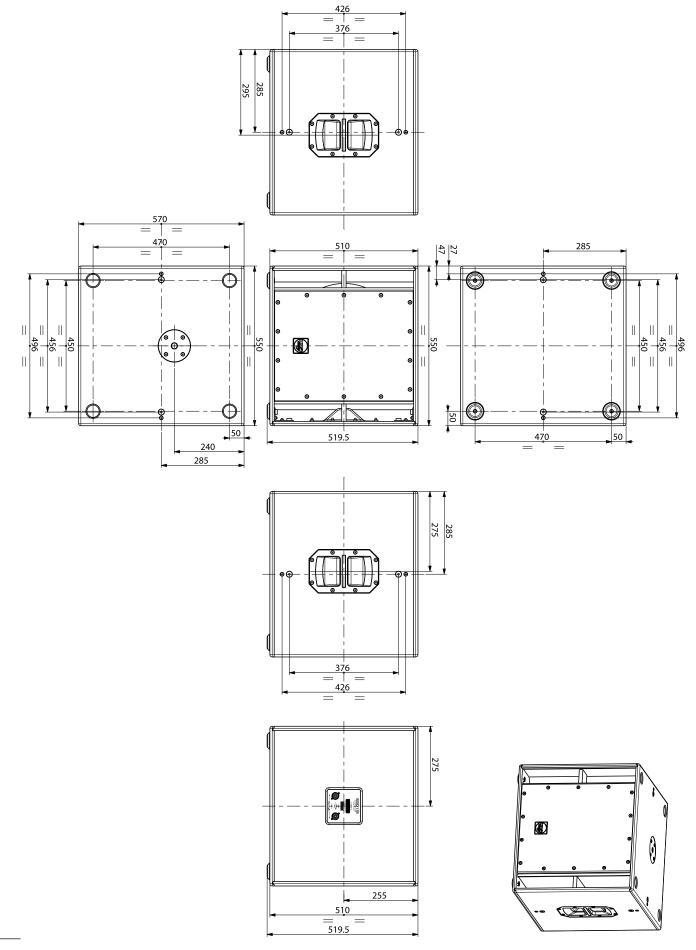


System Acoustic Perfomance		
Max SPL Long-term	127dB	
Max SPL Peak	130dB	
-3dB Response	37Hz to 150Hz	
-10dB Response	34Hz to 170Hz	
Recommended Power	600W	
Sensitivity	99dB (half-space area)	
Impedance	4Ω	
Crossover Point	80Hz to 150Hz	
Low Frequency Section		
Acoustic Design	Twin Asymmetrical loading	
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	
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)	

ESD1.15 · Drawings



Drawings



ESD1.18 · Overview



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

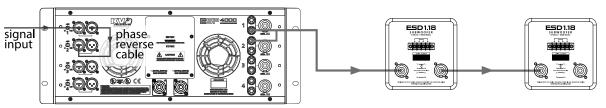
The ESD1.18 is a high output subwoofer. The ESD1.18 is a passive version of the active EX1.8, 18" subwoofer and features the same high quality neodymium driver. The unit provides a very firm foundation on which to build a powerful ESD system.

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

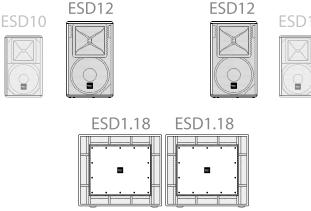
The ESD1.18 features both Speakon (NL4) connectors and a terminal block. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESD1.18's.



PARALLEL CONNECTION OF THE ESD 1.18 (8 Ω) FROM THE BRIDGED ESP4000 - TOTAL IMPEDANCE 4 Ω

Configurations example:

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



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

ESD1.18 · Specifications

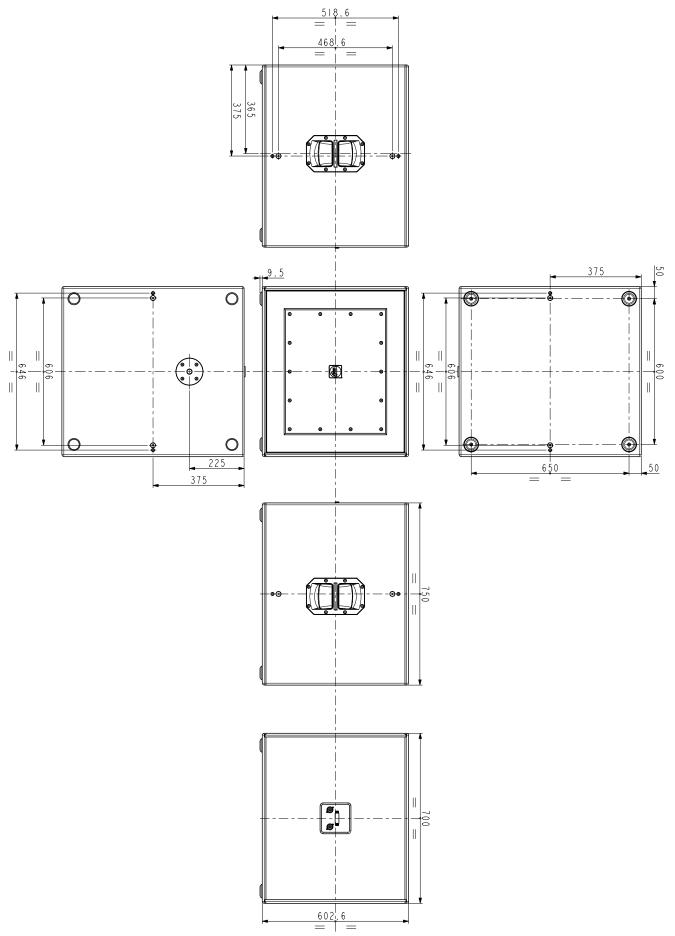


System Acoustic Perfomance		
Max SPL Long-term	131dB	
Max SPL Peak	134dB	
-3dB Response	30Hz to 150Hz	
-10dB Response	28Hz to 170Hz	
Recommended Power	1000W	
Sensitivity	100dB	
Impedance	Ω8	
Crossover Point	80 to 150Hz	
Low Frequency Section		
Acoustic Design	Twin Asymmetrical loading	
Number of Drivers	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	
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)	

ESD1.18 · Drawings

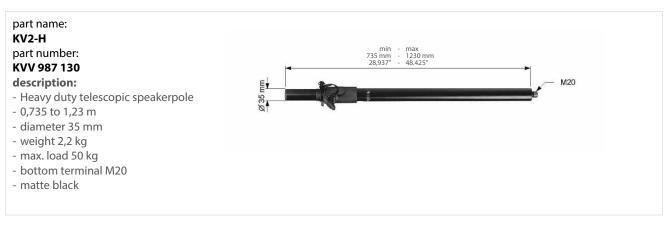


Drawings





Speaker pole - universal



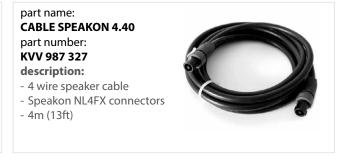
Speakon speaker cable 4.15

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

- 4 wire speaker cable
- Speakon NL4FX connectors
- 1,5m (5ft)



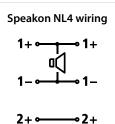
Speakon speaker cable 4.40



Speakon NL4 wiring

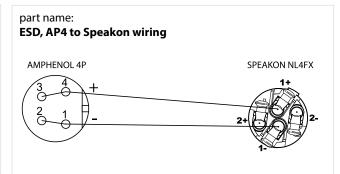
part name: ESD, Speakon NL4 wiring

positive pin (1 +, 2 + parallel) negative pin (1 -, 2 - parallel)



2---2-

AP4 to Speakon wiring



Recommended speaker cable lenghts

MINIMUM CROSS SECTION [mm ²]	LENGTH [m], impedance 4 Ω	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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