



ESM Series

User Guide

• ESM26 • ESM12



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.

ESM Series · Important Safety Instructions

Important Safety Instructions

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

1. Read all product instructions.
2. Keep printed instructions, do not throw away.
3. Respect and review all warnings.
4. Follow all instructions.
5. Do not use this unit near water, in unprotected out door areas or in rain or wet conditions.
6. Clean only with dry cloth.
7. Do not block any ventilation openings.
8. Install in accordance with KV2 Audio's recommended installation instructions.
9. Do not install near any heat sources such as heat radiators, heat registers, stoves or other apparatus that produce heat.
10. Do not defeat the safety purpose of the grounding type plug. A grounding type plug has two blades and a third grounding connector. The third connector is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
11. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles. The AC mains plug or appliance coupler shall remain readily accessible for operation.
12. Only use accessories specified by KV2 Audio.
13. Install the product only with rigging specified by KV2 Audio, or sold with the loudspeaker.
14. Unplug this loudspeaker during lightning storms or when unused for long periods of time.
15. Refer all servicing to qualified service personnel. Servicing is required when the loudspeaker has been damaged in any way, such as when the power-supply cord or plug has been damaged; liquid has been spilled or objects have fallen into the loudspeaker; rain or moisture has entered the loudspeaker; the loudspeaker has been dropped; or when for undetermined reasons the loudspeaker does not operate normally.
16. Do not remove front or back panels. Removal of the panel will expose hazardous voltages. There are no user serviceable parts inside and removable may void the warranty.
17. An experienced user shall always supervise this professional audio equipment.

**CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE PANELS.
NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.**

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

SAFETY SUMMARY

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

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ESM26

The Ultimate compact Passive Monitor

ESM26 - part number KVV 987 263



Application

Specifically designed as an extremely compact-low profile passive-vocal floor monitor

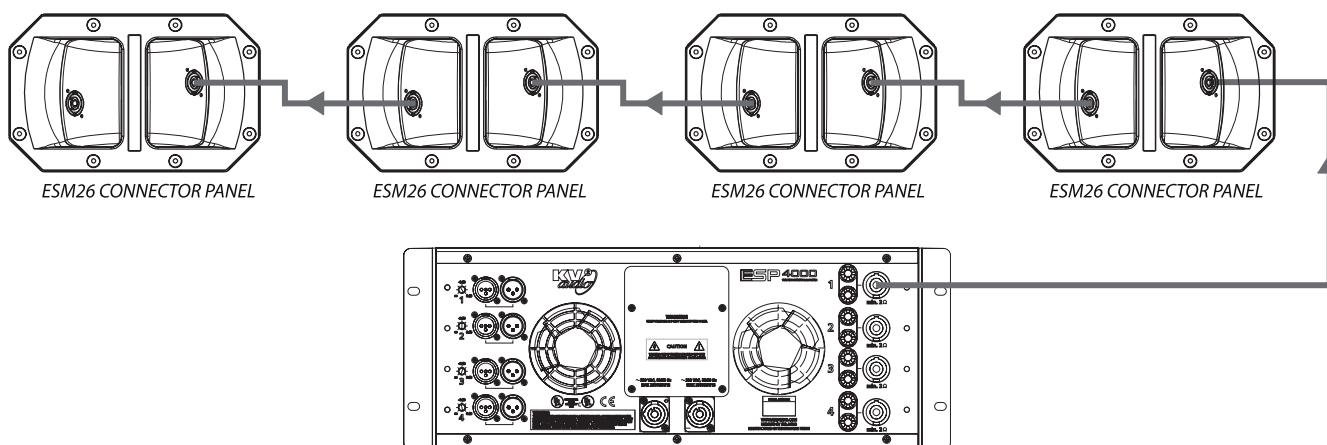
- Live performance
- Concert venues
- Portable PA
- Fixed installations

Introduction

The ESM26 is a purpose built stage monitor with incredible clarity and presence, especially in the all important vocal range. Incorporating two high quality 6" drivers and a 1.75" compression driver on a 100 x 100 degree horn flare. The ESM26 utilises KV2's revolutionary delay line technology for optimum output and feedback rejection. A full width bass port along the bottom of the cabinet couples with the floor to deliver bass response comparable to monitors twice its size. Under 400mm wide this small monitor takes up minimal room on stage and is ideal for visually critical applications like TV and theatre.

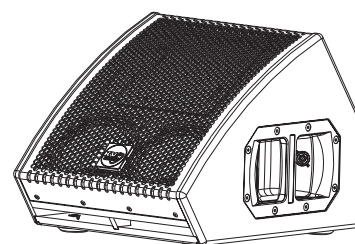
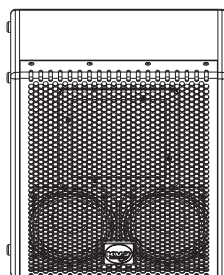
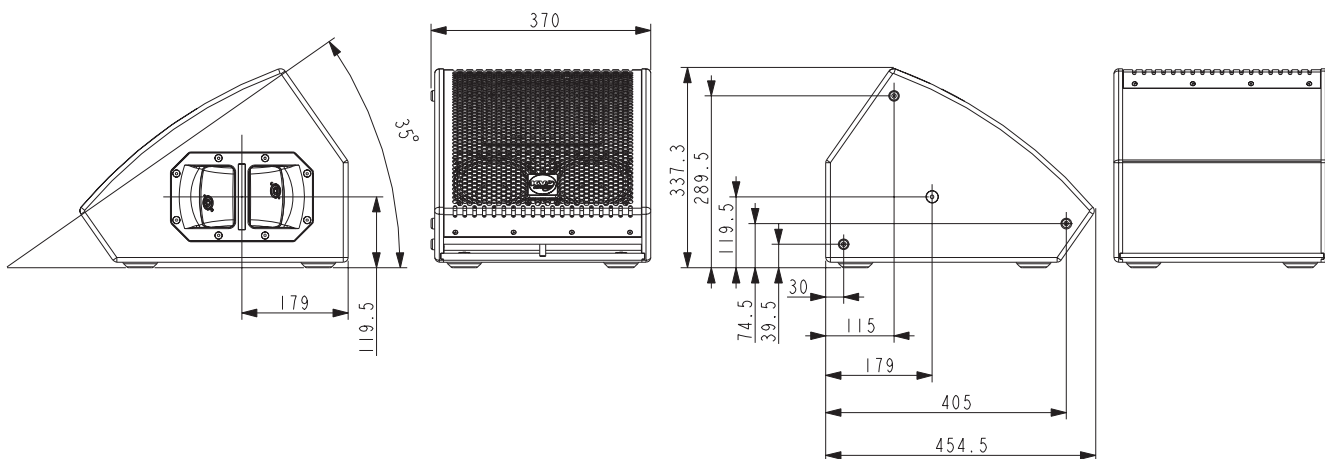
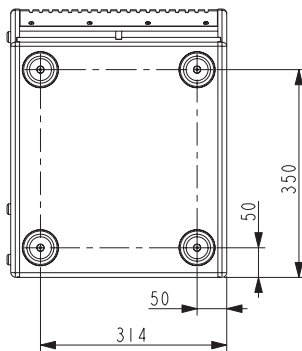
Connection

The ESM26 features two Speakon (NL4) connectors. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESM26's.



PARALLEL CONNECTION OF THE ESM26 (8Ω) - TOTAL IMPEDANCE 2Ω

Drawings



Specifications

System Acoustic Performance	
Max SPL Long-term	123dB
Max SPL Peak	126dB
-3dB Response	70Hz to 16kHz
Recommended Power	275W
Sensitivity	98dB
Impedance	8Ω
Crossover Point	2.5kHz
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
Low Frequency Section	
Acoustic Design	Front Loaded, Bass Reflex
Number of Drivers	2
Woofer Size / Voice Coil Diameter	6" / 1.75"
Magnet Type	Neodymium
Diaphragm Material	Epoxy Reinforced Cellulose
Speaker Input	
Speaker Input	2x Neutrik Speakon®
Features	
RMS Limiter	autoreset
Cabinet	
Cabinet Material	Baltic birch
Handles	1
Color	"Orange peeled" Matt Black or any RAL
Physical Dimensions	
Height	337.3 mm /13.28"
Width	370 mm /14.57"
Depth	454.5 mm /17.89"
Weight	15 kg

ESM 12

The Ultimate Passive Monitor

ESM12L - part number KVV 987 216

ESM12R - part number KVV 987 218



Application

Specifically designed as an extremely high output, full range-low profile passive vocal and music floor monitor

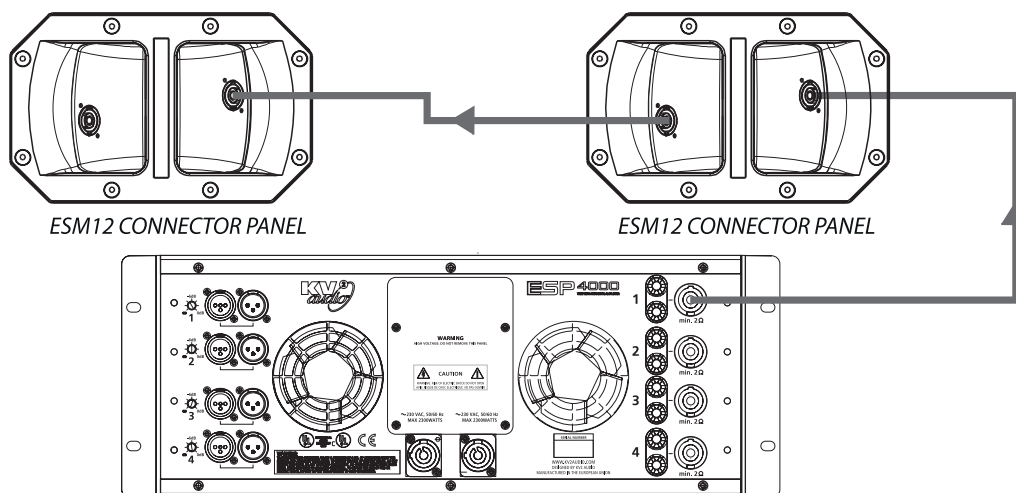
- Live performance
- Concert venues
- Portable PA
- Fixed installations

Introduction

The ESM12 is a full-range low profile 2-way, passive monitoring solution with a 12" trans-coil neo woofer and the same 3" NVPD large format compression driver found in our flagship VHD products. The ESM12 also features our revolutionary passive delay line, which dramatically reduces feedback. Housed in a professional Baltic Birch cabinet, with a protective Polymer coating and heavy-duty grill, the ESM12 can be utilized for FOH applications with the inclusion of a pole mount. Truly one of the most impressive monitoring solutions on the market today, the ESM12 is available in left and right configurations.

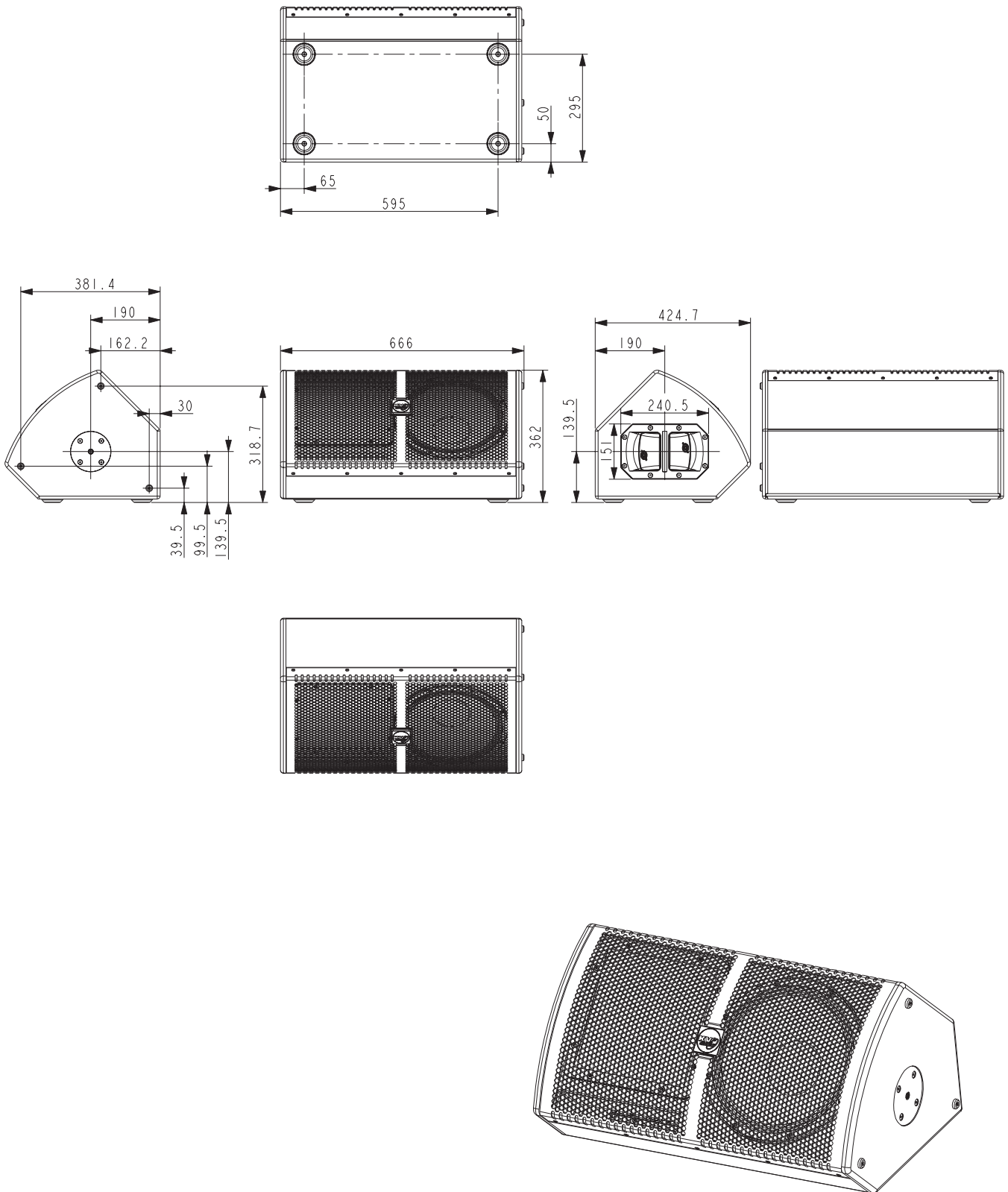
Connection

The ESM12 features Speakon (NL4) connectors. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESM12's.

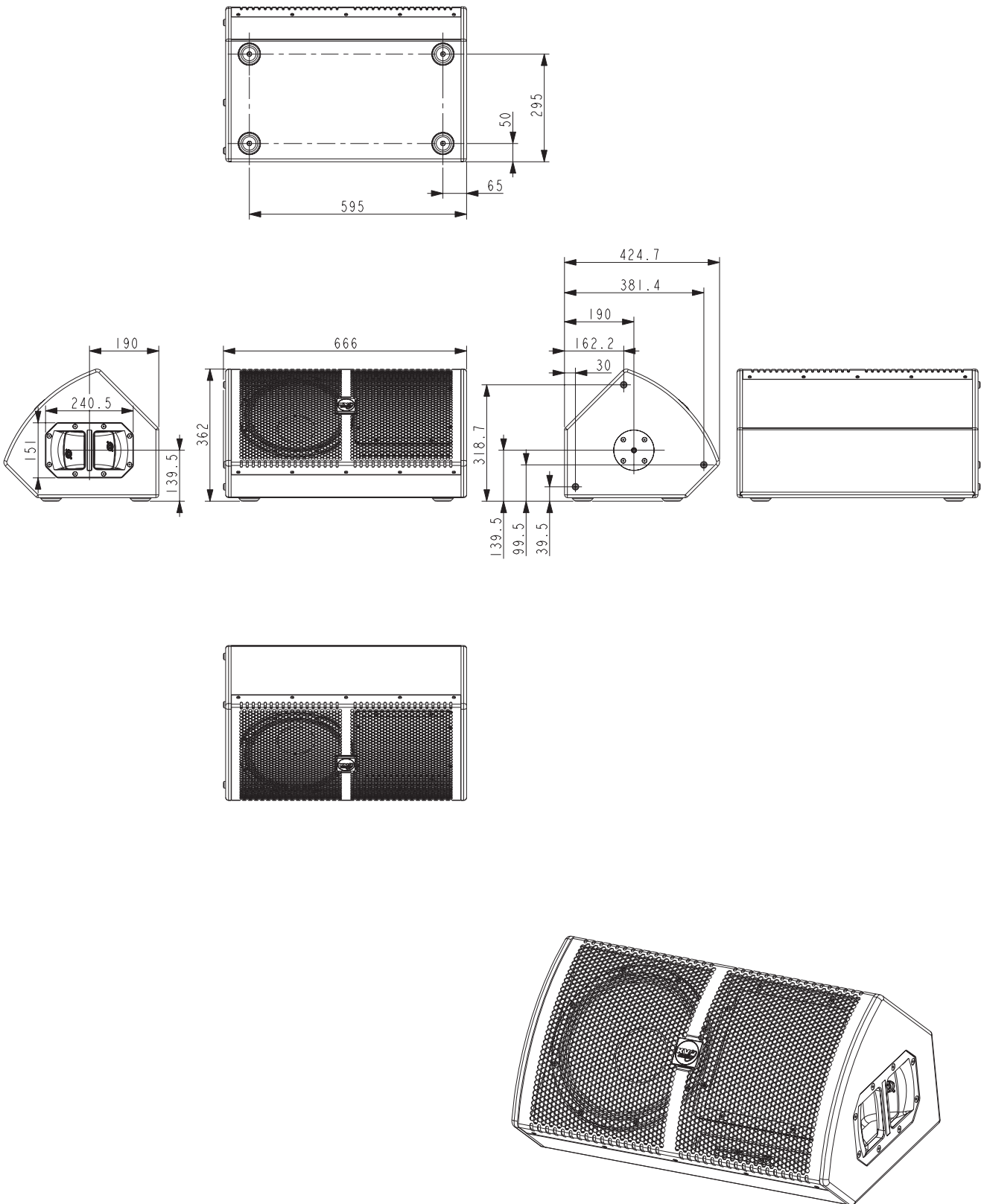


PARALLEL CONNECTION OF THE ESM12s (4Ω) - TOTAL IMPEDANCE 2Ω

Drawings



Drawings



Specifications

System Acoustic Performance	
Max SPL Long-term	127dB
Max SPL Peak	130dB
-3dB Response	55Hz to 22kHz
Recommended Power	500W
Sensitivity	98dB
Impedance	4Ω
Crossover Point	1.2kHz
High Frequency Section	
Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	40° x 80°
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
Magnet Type	Neodymium
Diaphragm Material	Epoxy Reinforced Cellulose
Protection	Thermal breaker - autoreset
Speaker Input	
Speaker Input	2x Neutrik Speakon®
Cabinet	
Cabinet Material	Baltic birch
Handles	1
Pole Mount	35 mm
Color	"Orange peeled" Matt Black or any RAL
Physical Dimensions	
Height	368 mm (14.48")
Width	606 mm (23.86")
Depth	368 mm (14.48")
Weight	23 kg (50.7lbs)

Covers

Cover for ESM26

part name:
COVER ESM26
 part number:
KVV 987 281
 description:
 - heavy duty
 - padded



Cover for ESM12-Left

part name:
COVER ESM12L
 part number:
KVV 987 262
 description:
 - heavy duty
 - padded



Cover for ESM12-Right

part name:
COVER ESM12R
 part number:
KVV 987 261
 description:
 - heavy duty
 - padded



Bass speaker cables

Bass speaker cable Speakon 4.40

part name:
Cable Speakon 4.40
 part number:
KVV 987 327
 description:
 - 4 wire speaker cable
 - Speakon NL4 connectors
 - 4m (13ft)
 - for K-RIG Bass Module hook-up



Bass speaker cable Speakon 4.15

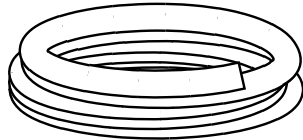
part name:
Cable Speakon 4.15
 part number:
KVV 987 326
 description:
 - 4 wire speaker cable
 - Speakon NL4 connectors
 - 1,5m (5ft)
 - for K-RIG Bass Module hook-up



Speaker cables

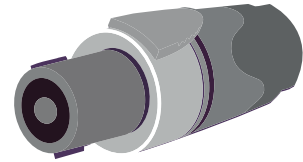
Speaker cable 2 x 1,5mm

part name:
1m - round flexible speaker cable,
cross section 2 x 1.5mm
 part number:
WX 002



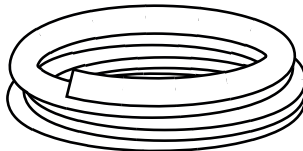
Speakon NL4

part name:
SPEAKON NL4
 part number:
KA 027



Speaker cable 4 x 2,5mm

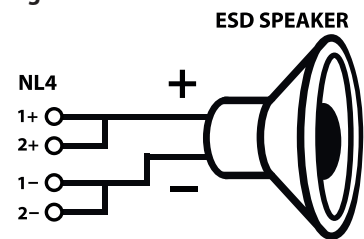
part name:
1m - round flexible speaker cable,
cross section 4 x 2.5mm
 part number:
WX 003



part name:
ESM, Speakon NL4 wiring

positive pin
 (1 +, 2 + parallel)

negative pin
 (1 -, 2 - parallel)



Recommended speaker cable lengths

MINIMUM CROSS SECTION [mm ²]	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 ESM Series is covered against defects in material and workmanship.

Refer to your supplier for more details.

Service

In the unlikely event that your ESM Series 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.



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Made Perfectly Clear.

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