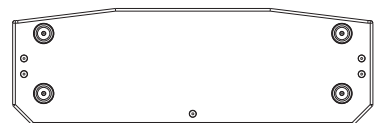
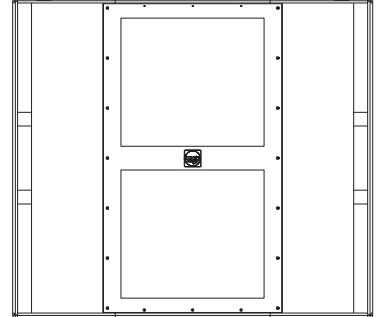
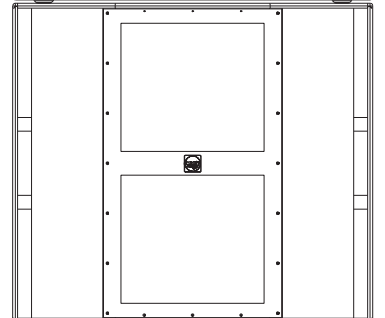
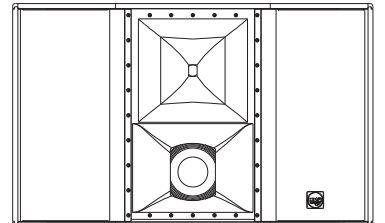
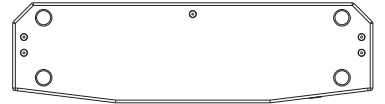




SL Series User Guide



- **SL3000**
- **SL412**
- **SL2.15**



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 expectation.

SL series

Introduction	4
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SL3000



Overview	5
Getting started	6
Features - Front panel	7
Features - Rear panel	8
Using the system - Full Range	9
Using the system - Subwoofers	10
Specifications	11
Block diagram	12

SL412, SL412i



Overview	13
Technology	14
Specifications	15
Frequency characteristics	16
SL412 - Drawing	17
SL412i - Drawing	18

SL2.15, SL2.15i



Overview	19
Technology	20
Specifications	21
SL2.15 - Drawing	22
SL2.15i - Drawing	23

SL series

Accessories	24
Configurations	25

Thank you for purchasing this KV2 Audio, SL series system, consisting of the SL3000 stereo controller/amplifier unit, two SL412 speakers and optional variants of subwoofers.

The new SL412 and SL2.15 speakers incorporate an eye catching, slim, stylish cabinet design. Designed to integrate either externally through simple wall mounting, suspension, ground stacking, or internally into walls and surfaces. These units can be designed and supplied with custom colors, grill templates and logos, offering a flexible and true designer integration product. Using KV2 Super Live Audio technology, the SL412 loudspeaker utilizes 4 x 12" low mid-range components and the proven and highly respected horn assembly from the VHD1.0 with a single 8" mid-range and 3" large format NPVD compression driver. This mid-high horn has an extremely coherent-wide horizontal dispersion of over 110 degrees whilst the purpose designed 4 x 12" configuration dramatically reduces the most common problem of immediate reflections within the 300÷800Hz range usually associated with wide dispersion loudspeakers. The end result is a full and wide sound propagation exactly where it is required. Whilst the SL412 can be utilized with any of KV2's wide range of sub woofer systems depending on the actual application, the accompanying SL2.15 utilizes the same slim line design to allow for an aesthetically pleasing and acoustically punchy system that can virtually disappear against a wall. The SL2.15 incorporates 2 x 15" speakers in a specially designed shallow cabinet to output maximum bass response.

The SL412i & SL2.15i are exact identical performance and finish units of the existing SL412 & SL2.15, except they do not incorporate the fixed handles for touring and presentation use.

The 'i' version is designated for fixed installation use with the same existing mounting and flyware fixings.

This manual contains important information on operating the SL system correctly and safely. Please take some time and read this manual to familiarize yourself with the advanced features of this system.

The SL3000 Amplifier is a three-way, active control and amplification systems, specifically designed for the KV2 Audio SL series loudspeaker systems. It houses all signal processing and amplification as well as providing control for external subwoofer cabinets configurations, and to operate additional subwoofer cabinets if needed. External subwoofers are powered by the external subwoofer amplifier (VHD3200).

The amplifier compliment and configuration inside the SL3000 Amplifier is as follows:

High Frequency - 100-watt, Class AB, Push pull, Low intermodulation design.

Mid Frequency - 200-watt, Class AB, Push pull, Low intermodulation design.

Low Frequency - 1000-watt, High-efficiency, Current-enhancing switch mode technology with Linear Active Filter.

In most cases it would be advisable to use a KV2 Audio Line driver (LD4) in addition at the mixer end to ensure that the line to the amplifier is driven correctly and the signal integrity maintained.

Although this system is simple to operate, improper use can be dangerous. This is a very high-powered device that can put out high voltages and sizeable currents. Always use safe operating techniques with the SL series system.

FOR YOUR SAFETY, READ THE IMPORTANT PRECAUTIONS SECTION AS WELL AS THE INPUT, OUTPUT AND POWER CONNECTION SECTIONS OF THIS MANUAL.

Warranty

Your SL System is Warrantied against defects in material and workmanship. Please refer to your supplier for more warranty details.

Service

WARNING! Electronic components, risk of SHOCK!

In the unlikely event that your product requires service, it must be returned to an authorized KV2 Audio distributor, service centre or shipped directly to the factory.

All warranty and service repairs must be undertaken by qualified technical personnel.

If the unit/s need to be shipped back to the factory, we advise using the original packing to reduce the risk of damage in transit.

Please contact your nearest KV2 Audio centre for service details. Distributors list can be found at www.kv2audio.com.

SL3000 Amplifier Rack mounted



SL3000 - 250V part number: *KVV 987 280*
SL3000 - 230V part number: *KVV 987 279*
SL3000 - 115V part number: *KVV 987 278*

Features

- The SL3000 Amplifier is a stereo, three-way, active control and amplification system specifically designed for the KV2 Audio SL Series modular loudspeaker systems.
- It houses all signal processing and amplification as well as providing control for external subwoofers cabinet configurations to run further subwoofer cabinets, if needed.
- External subwoofer is powered by the external subwoofer amplifier (VHD3200).
- The amplifier compliment inside the SL3000 Amplifier is as follows:
 - High Frequency - 100-watt, Class AB, push pull, low intermodulation design
 - Mid Frequency - 200-watt, Class AB, push pull, low intermodulation design
 - Bass - 1000-watt, high-efficiency, current-enhancing switch mode technology with Linear Active Filter

SL3000

For full range systems, use one, or a combination of, the following Bass Modules:



SL2.15
 - part num. *KVV 987 274*
 Double 15-inch SL Subwoofer



VHD4.18
 - part num. *KVV 987 079*
 Single 18-inch Ultra low frequency subwoofer



VHD2.21
 - part num. *KVV 987 249*
 Double 21-inch Ultra low frequency subwoofer

For running subwoofers use VHD3200 Amplifier.

(Two SL2.15 speakers requires one channel of the two channel VHD3200 subwoofer amplifier unit.)



VHD3200-250V *KVV 987 176*
VHD3200-230V *KVV 987 083*
VHD3200-115V *KVV 987 084*

Unpacking

Unpack the SL3000 Amplifier and check to see if there is any damage to it. If you find any damage notify your supplier immediately. Only the consignee may institute a claim with the carrier for damage incurred during shipping. Be sure to save the carton and all packing materials for the carrier's inspection.

Should you ever need to ship the unit, only use the original factory packaging. If the shipping carton is unavailable, contact your supplier to obtain a replacement.

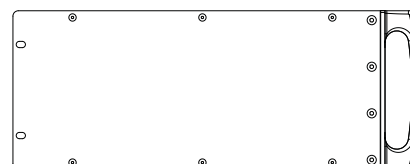
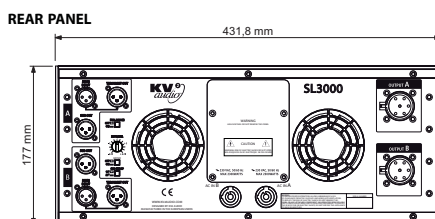
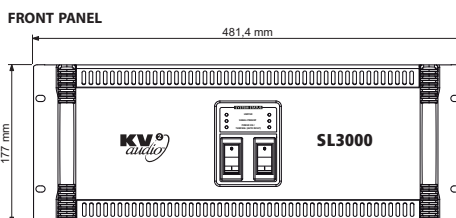
The SL3000 Amplifier carton should contain:

- SL3000 Amplifier control unit
- User guide
- Two PowerCon detachable power cables

Amplifier rack mounting

The SL3000 Amplifier will mount in standard 19" rack systems. Integral rear mounting rack ears are also provided for additional support, do not rely on fixing and mounting the amplifier using just the front panel as support. Use eight screws and washers to mount the amplifier to the equipment rack rails. We recommend using a shock mounted rack for touring use to prolong the life of your amplifier.

Overview



Cooling

The SL3000 Amplifier have a comprehensive cooling system featuring chassis sealed PCB board mounting and shock mounted, speed controlled fans. This means that the cooling system never drives air across PCB boards, connectors or components, ensuring prolonged electronic component lifespan and minimizing maintenance cycles.

Air is drawn into the front of the amplifier by the two fans on the rear panel, this passes over the cooling fans of the heat sinks and exhausts through the rear. If the heat sink gets too hot, its sensing circuit will open the output relay, disconnecting the load.

It is important to have an adequate air supply at the front of the amplifier, and enough space around the rear of the amplifier to allow the cooling air to escape. If the unit is rack mounted, do not use doors or covers on the rear of the rack, the exhaust air must flow without restriction. If you are using racks with closed backs, use fans on the rear rack panel to ensure an ample air supply.

NOTE: The filters at the top and bottom of the front panel must be kept clean and free of dust and dirt to allow full operation-CHECK PERIODICALLY

AC Requirements

Two PowerCon cables are provided to connect the SL3000 Amplifier to a suitable AC power supplies. Each cable powers each separate amplifier channel for sufficient current delivery.

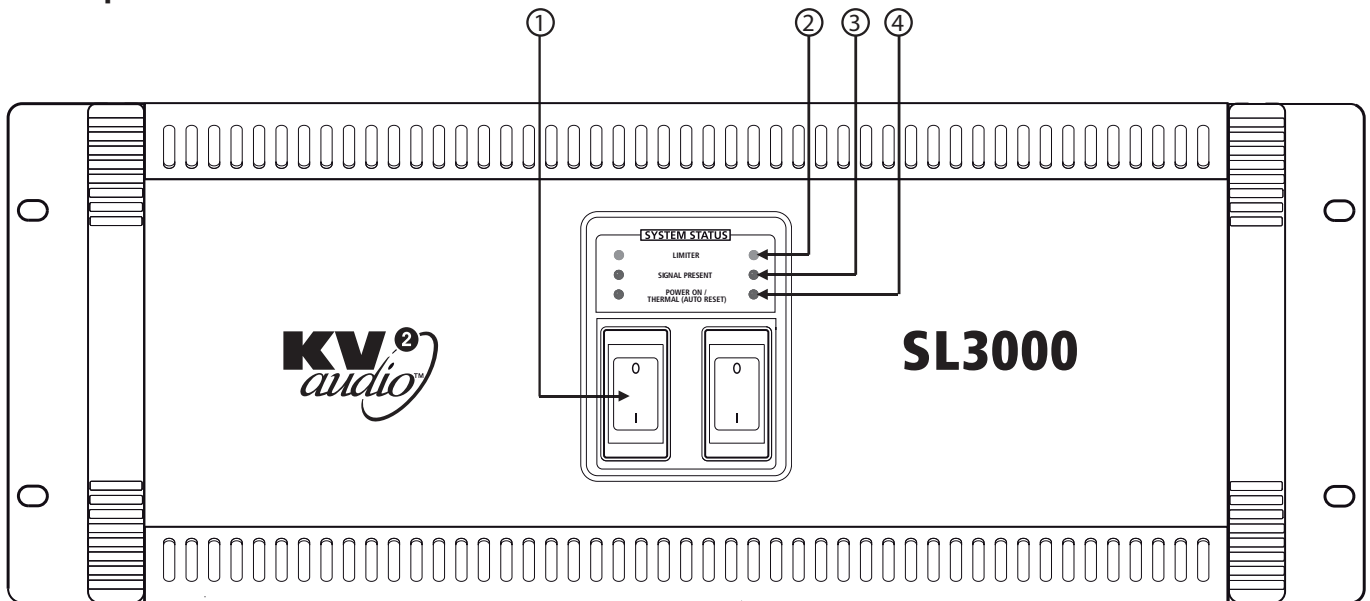
The PowerCon is a connector without breaking capacity, i.e. the PowerCon should not be connected or disconnected under load or while it is live. Always isolate your AC supply before disconnecting the PowerCon connector.

Your amplifier will be supplied preset to the voltage used in your area. The table below provides typical current draw figures for the SL3000 Amplifier.

AC Input	Current draw with amplifier running at Average Power (Each Channel)	Current draw with amplifier running at Peak Power (Each Channel)
250V	3.2A	5A
230V	3.5A	5.4A
115V	7A	11A

Current draw of SL3000 Amplifier

Front panel



1) AC Mains Switch

The SL3000 Amplifier has a combination AC Main switch/circuit breaker on the front panel. If the switch shuts off during normal use, push it back to the ON position once. If it will not stay on you should take the unit to qualified service personnel to have it serviced.

2) LIMITER

Red LED, indicates that the audio limiter has been activated. This RMS limiter protects speakers against overload.

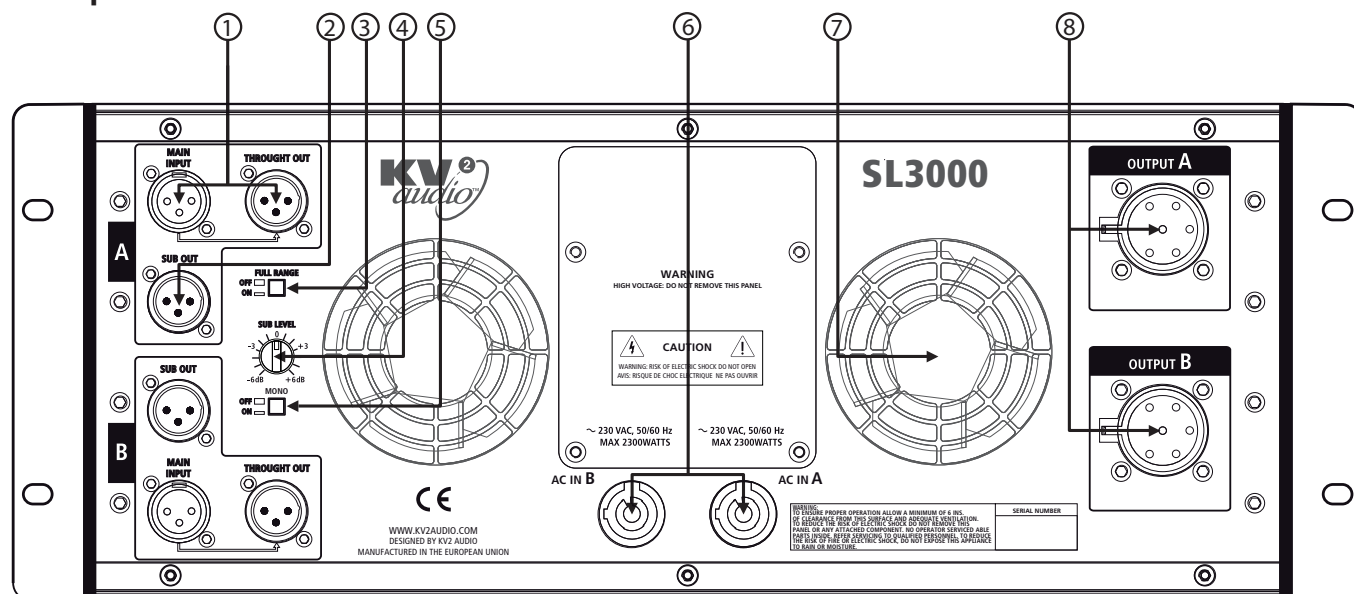
3) SIGNAL PRESENT

Green LED indicates when audio signal is present at the amplifier input.

3) POWER ON/ THERMAL (AUTO RESET)

Green LED indicates that the AC power is on. When red, it indicates that the thermal limit of the SL3000 Amplifier has been exceeded and the unit has shut down.

Rear panel



1) MAIN INPUT / TROUGHT OUT

This is the main system input balanced XLR connector with associated Through Signal Output connector for sending unprocessed signal to other devices in a system.

2) SUB OUT

Balanced XLR output connector, used to connect additional subwoofer. Output is active even when FULL RANGE switch is ON.

3) FULL RANGE

Switch, selects the amplifier crossover setup, when ON full range signal is reproduced by Classic cabinets, when OFF signal is by frequency band in conjunction with the subwoofer output setup.

4) SUB LEVEL

This is the level control for the External Sub output in the range -6 to +6 dB.

5) MONO

Switch, sets SUB OUT outputs summing SUB OUT outputs channel A and B together.

6) PowerCon Power Connectors

The SL3000 Amplifier uses two connectors per two channel. Each connector supplies one channel. They accept standard PowerCon terminated AC Mains cables.

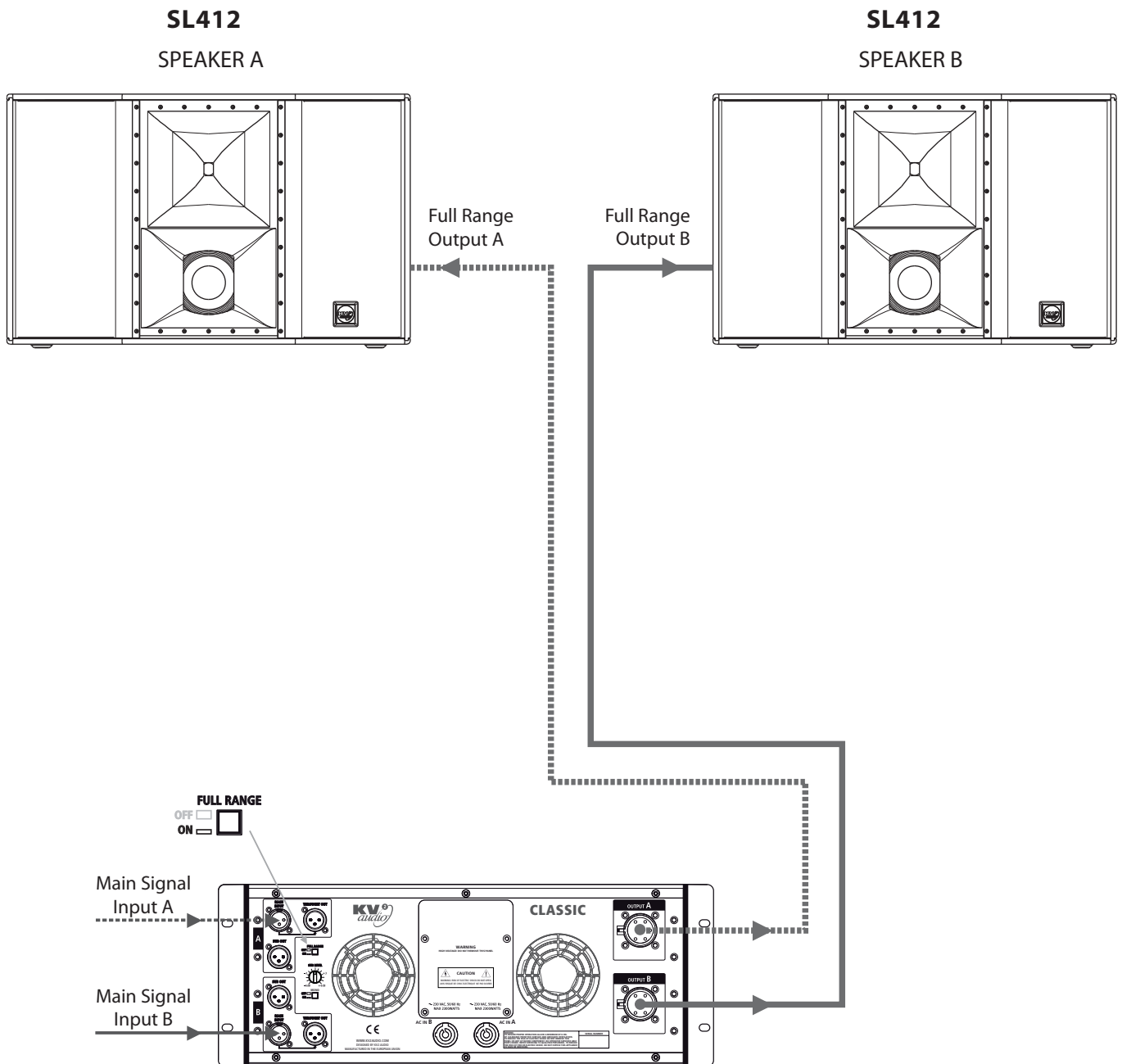
7) Fans

The cooling fans operate continuously while the amplifier is on. An internal temperature sensor increases the speed of the fans during high temperature conditions. Air enters through the front grille and exits through the rear. Be sure to allow adequate air flow to the front of the rack in which the SL3000 Amplifier is mounted.

8) Speaker EP6 Connectors

Accepts a standard EP6 terminated loudspeaker cable for connecting up to a single SL412 cabinet. We recommend using 2.5mm/core cables.

Full range setup

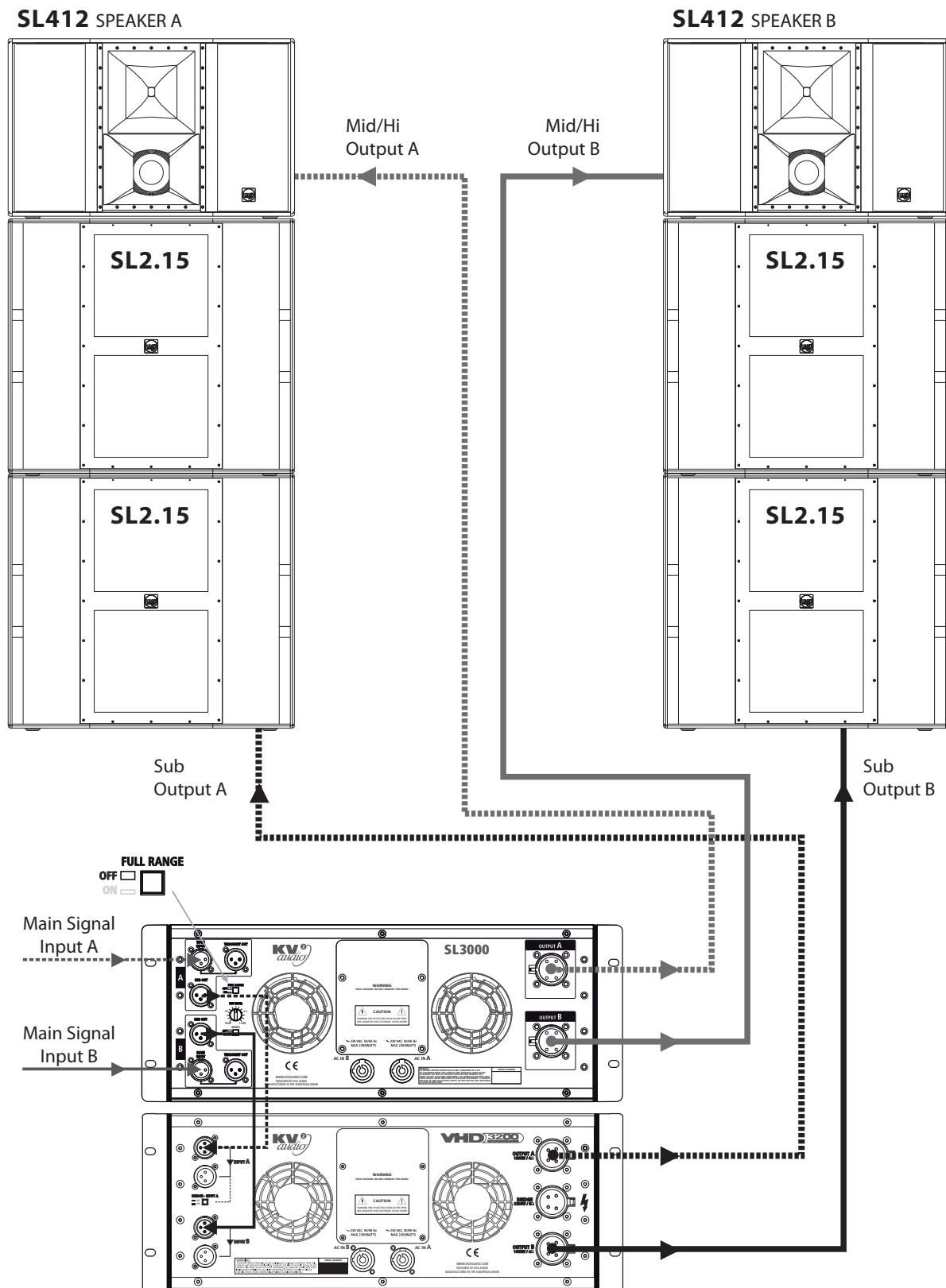


SL3000

Using the system

Set SL3000 Amplifier to FULL RANGE ON mode. SL412 cabinets plays full range signal.

External subwoofer setup



Set SL3000 Amplifier to FULL RANGE OFF mode. Signal is crossed over at Hi/Mid for SL412 cabinets and SUB for external subwoofer.

SUB SET UP LEVEL setting depends on which subwoofer unit is used.

SL3000

Using the system

Output Channels	
Number of Channels	2 (stereo)
Total Output Power	2x 1300W

High Frequency Amplifier Specification	
Type	Class AB - Push Pull - Low IM Design Transformer balanced output
Rated Continuous Power	100W
Distortion	<0.02%
Operating Bandwidth	400Hz ÷ 2,5kHz

Mid Frequency Amplifier Specification	
Type	Class AB - Push Pull - Low IM Design Transformer balanced output
Rated Continuous Power	200W
Distortion	<0.02%
Operating Bandwidth	400Hz ÷ 2,5kHz

Low Frequency Amplifier Specification	
Type	High efficiency, Current-enhancing switch mode
Rated Continuous Power	1000W
Distortion	<0.02%
Operating Bandwidth	35Hz ÷ 400Hz

Signal Input	
Input Sensitivity	1V RMS
Input Impedance	20kΩ (balanced)

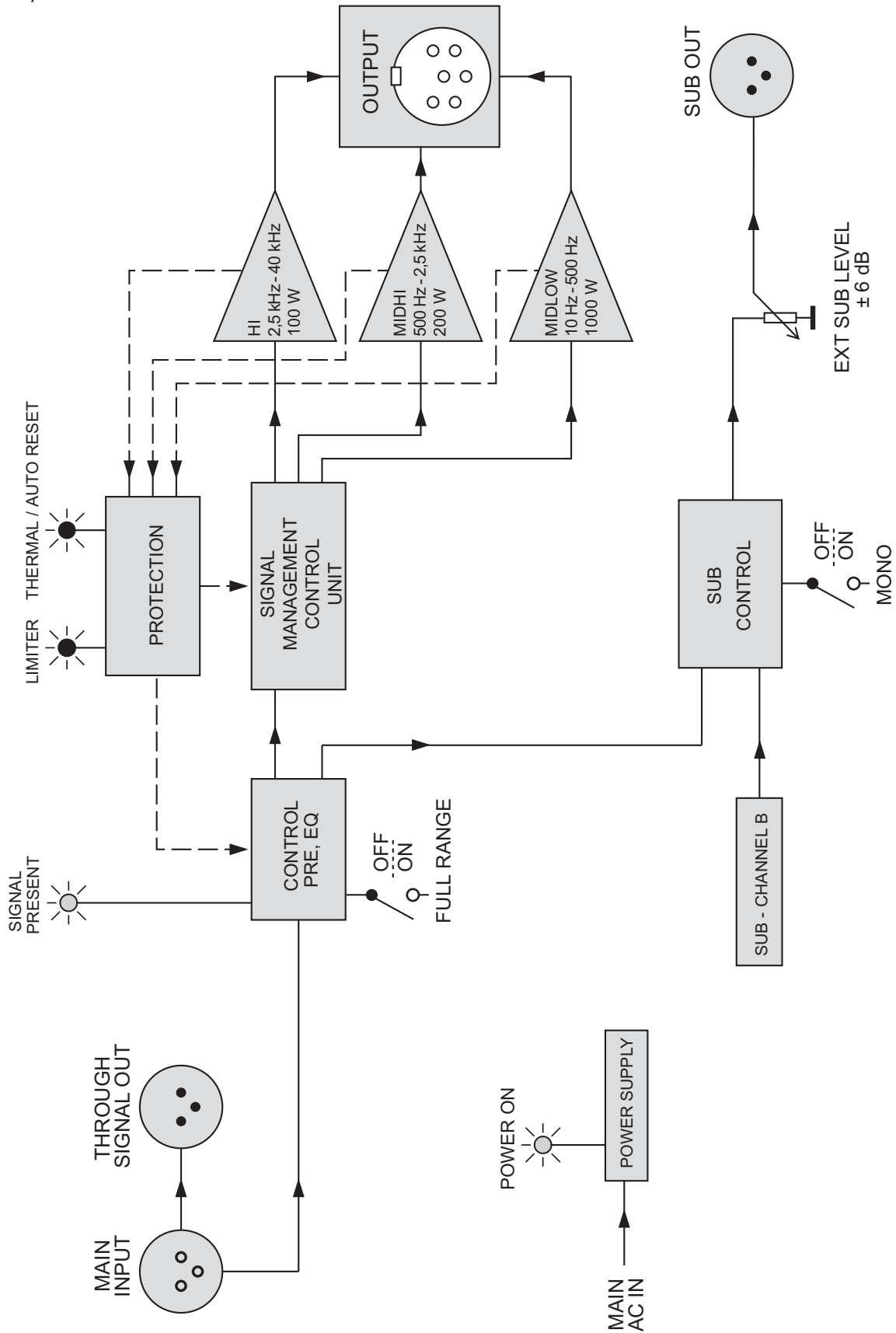
Speaker Output	
Speaker Output	2x EP6

Power	
Power Connector	2x Neutrik PowerCon®
Operating Voltage	115V / 230V / 250V
Operating Voltage Range	100 ÷ 120V@60Hz 205 ÷ 240V@50Hz 225 ÷ 260V@50Hz
Recommended Amperage	2x10A 115V 2x5A 230V 2x5A 250V

Physical Dimensions	
Height	177.8mm (7.0"), 4RU
Width	483mm (19.0")
Depth	495mm (19.5")
Weight	39.2kg (86.62lbs)

SL3000 block diagram

Channel A, channel B is identical



SL3000

Block diagram

SL412, SL412i Wide dispersion Active-driven Speaker



SL412 part number: *KVV 987 273*

SL412i part number: *KVV 987 287*

Description

The SL412 is an exceptionally flat frequency response and Very High Definition sound system. Emphasizes every detail and nuance of a performance and transfers the atmosphere to each and every audience member. Max. Wide dispersion, Slim, discreetly profiled wall mount cabinet

SL412 Applications

- Live music applications
- Professional portable PA Systems for large format AV, speech and multimedia playback
- Professional DJ loudspeaker systems

SL412i Applications

- Very high quality fixed installations

Slim-line Sound System Benefits

Total flexibility

The requirement for truly 'environment integrated' enclosures is always a difficult prospect, with large, or often deep enclosures protruding into and breaking up sight lines. Requests are often received from both architects and interior designers for less obtrusive units, whilst providing the highest integrity in sound quality, output and coverage.

Superb sound

KV2 Audio Slim-line system uses Super Live Audio technology with greater dynamic range than any current similar solution.

Easy set-up

Plug-and-play connection to SL3000 amp/processor module. Slim, discreetly profiled, wall mount design. Cabinet features two handles, eight suspension points and "integral feet" for easy positioning on stage.

One SL3000 control and amplification unit runs stereo SL412 speaker system.



SL3000-115V KVV 987 280

SL3000-230V KVV 987 279

SL3000-250V KVV 987 278

For full range systems, use one, or a combination of, the following Bass Modules:



SL2.15

- part num. *KVV 987 274*

Double 15-inch
SL Subwoofer



VHD4.18

- part num. *KVV 987 079*

Single 18-inch Ultra low
frequency subwoofer



VHD2.21

- part num. *KVV 987 249*

Double 21-inch Ultra low
frequency subwoofer

Features

- High-output, slim, discreetly profiled Mid/High wall mount cabinet
- 134dB sustained output, 137dB peak
- Wide dispersion at high frequencies, controlled at low-mids to reduce indoor reflections
- Mid/High horn design provides optimized transducer loading and controlled dispersion
- Patent-Pending 3" diaphragm nitride-titanium compression driver with complex geometry phase plug for higher output and lower distortion performance and neodymium
- Eight-inch midrange driver with 3.0", Trans Coil, neodymium magnetic motor structure for increased control and output and decreased distortion and weight
- Proprietary midrange heat dissipation system controls voice coil temperature, ensures high dynamics and extends transducer lifespan
- Front-loaded, 4x twelve-inch mid-bass drivers with 3.00" voice coil assembly and neodymium magnetic motor structure
- Professional, exterior-grade Baltic birch construction with wear-resistant polymer coating. Proprietary corner and side handle designs for simplified handling and carrying
- Four internal corner and one back brace with nine M10 suspension points. A total of 27 suspension points are available for custom installation applications
- Two SL412 speakers requires one SL3000 amplifier unit

The **SL412** is a 3-way high output, active-driven, wide dispersion loudspeaker module. It is designed as part of a sound reinforcement speaker system that includes the SL3000 system control and amplification system.

The SL412 Loudspeaker system benefits from being designed exclusively to operate above 60 Hz. By optimizing the ideal operating band pass of each system component, the SL412 can achieve extremely high output levels consistently and safely.

Active-driven by the SL3000 unit

Power, electronic crossovers, phase alignment, equalization, time correction and speaker protection are provided within the SL3000 unit. This "one plug in, one-plug-out" system ensures fast, easy set up and complete control. It gives you the benefits of active sound reinforcement technology, yet locates the electronics in an easy-access rackmount module.

Together, the SL412 and SL3000 unit deliver the highest dynamic range of any system currently available, providing new levels of clarity, depth and resolution.

Advanced compression driver

KV2 Audio's transducer partner, 18 Sound in Cavriago, Italy, manufactures and co-develops all SL412 components. The compression driver is a 3-inch nitride-titanium diaphragm design, featuring a complex geometry phase plug that dramatically lowers distortion, eliminates ring modes and provides clearer, ripple free performance.

Mid/High horn design

The SL412 features a mid/high integrated horn design with a number of unique features. The horn design is based on constant directivity geometry with an emphasis on maintaining low transducer compression ratios, high output and wide dispersion (110° x 40°). The midrange speaker is fixed to a large aluminum heat sink which is attached to a precisely designed midrange "chamber". The combination provides optimal cone loading and heat dissipation. Further loading and dispersion is controlled through a precision phase plug.

Heat-resistant midrange

Midrange frequencies between 450Hz and 2.2kHz are reproduced by an eight-inch midrange speaker that provides 106 dB of sensitivity (1 watt / 1 meter) when coupled with the integrated horn. The magnetic motor assembly features a Trans Coil 3" diameter voice coil assembly and extensive use of neodymium. Because of the limited linear movement of most midrange transducers - usually 2-3mm - ventilation of the voice coil assembly and magnetic structure is poor and failure rate from heat fatigue is high. The SL412 midrange dissipates heat passively through the use of a massive aluminum heat sink. When combined with the SL3000 amplifier unit control electronics, the system provides high output levels safely and consistently over infinite periods of time and dramatically reducing heat associated transducer problems such as power compression and decreased dynamics.

Neodymium mid-bass transducer

The SL412 features a four twelve-inch neodymium mid-bass speakers with front loaded bass reflex design. It is important to note that neodymium is not a transducer panacea, as it cannot safely operate at the same typical operating temperatures ferrite does. Using neodymium requires a profound understanding of material science and finite element analysis to properly design a stable, high force magnetic structure that functions correctly. 18 Sound and KV2 audio engineering jointly designed the twelve-inch mid-bass driver for the SL412.

The SL412 mid-bass transducers reproduces frequencies from 60Hz to 450Hz. Used mid-bass transducers are very precise and fast with high sensitivity. The high efficiency neodymium motor provides an extraordinary amount of force that delivers complete control of the cone mass and a high overall weight loss.

Easy to set up

The SL412 is the ultimate, nice looking enclosure featuring a number of ergonomically designed components that make it a light, small, and easy speaker to set up and use.

KV2 designed and tooled new cabinet handles for use in their products. The two side handles make it easy to pick up and reposition the SL412 in a natural, instinctive manner.

There are four industrial grade, internal braces placed at each corner and one internal brace on the back. Corner braces are held in places by four M6 and two M10 bolts, the back brace is held by two M6 and one M10, providing a wide range of installation and suspension flexibility.



SL412 rear panel (cable connection to SL3000 unit Amplifier/Controller)

System Acoustic Performance

Max SPL Long-term	134dB
Max SPL Peak	137dB
-3dB Response	70Hz ÷ 22kHz
-10dB Response	58Hz ÷ 22kHz

High Frequency Section

Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	110° x 40°
Rotatable Horn	NO
High Frequency Amplifier Requirement	100W
Throat Exit Diameter / Diaphragm Size	1.4" / 3"
Diaphragm Material	Nitride Titanium
Magnet Type	Neodymium

Mid Range Section

Acoustic Design	Horn Loaded
Mid Horn Coverage Horizontal / Vertical	110° x 40°
Rotatable Horn	NO
Midrange Amplifier Requirement	200W
Woofers Size / Voice Coil Diameter / Design	8" / 3.0" / Trans Coil
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium

Low Frequency Section

Acoustic Design	Front Loaded, Bass Reflex
Number of Drivers	4
Woofers Size / Voice Coil Diameter / Design	12" / 3" / Inside outside
Magnet Type	Neodymium and Ferrite

Speaker Input

Speaker Input	EP6
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Speaker Output

Speaker Output	-
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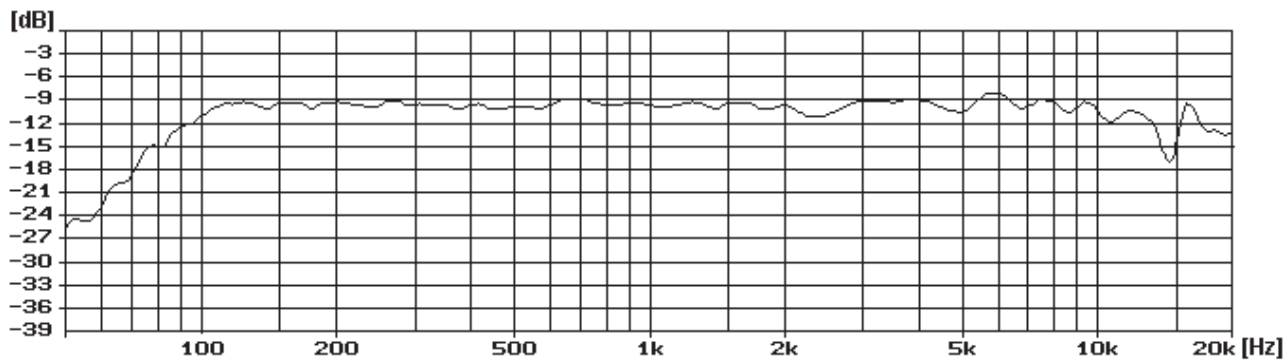
Cabinet

Cabinet Material	Baltic birch
Handles	2
Flyware	20x M10 mounting points
Color	"Orange peeled" Matt Black or any RAL

Physical Dimensions

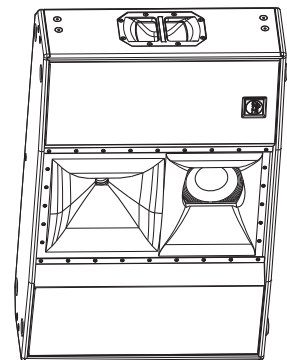
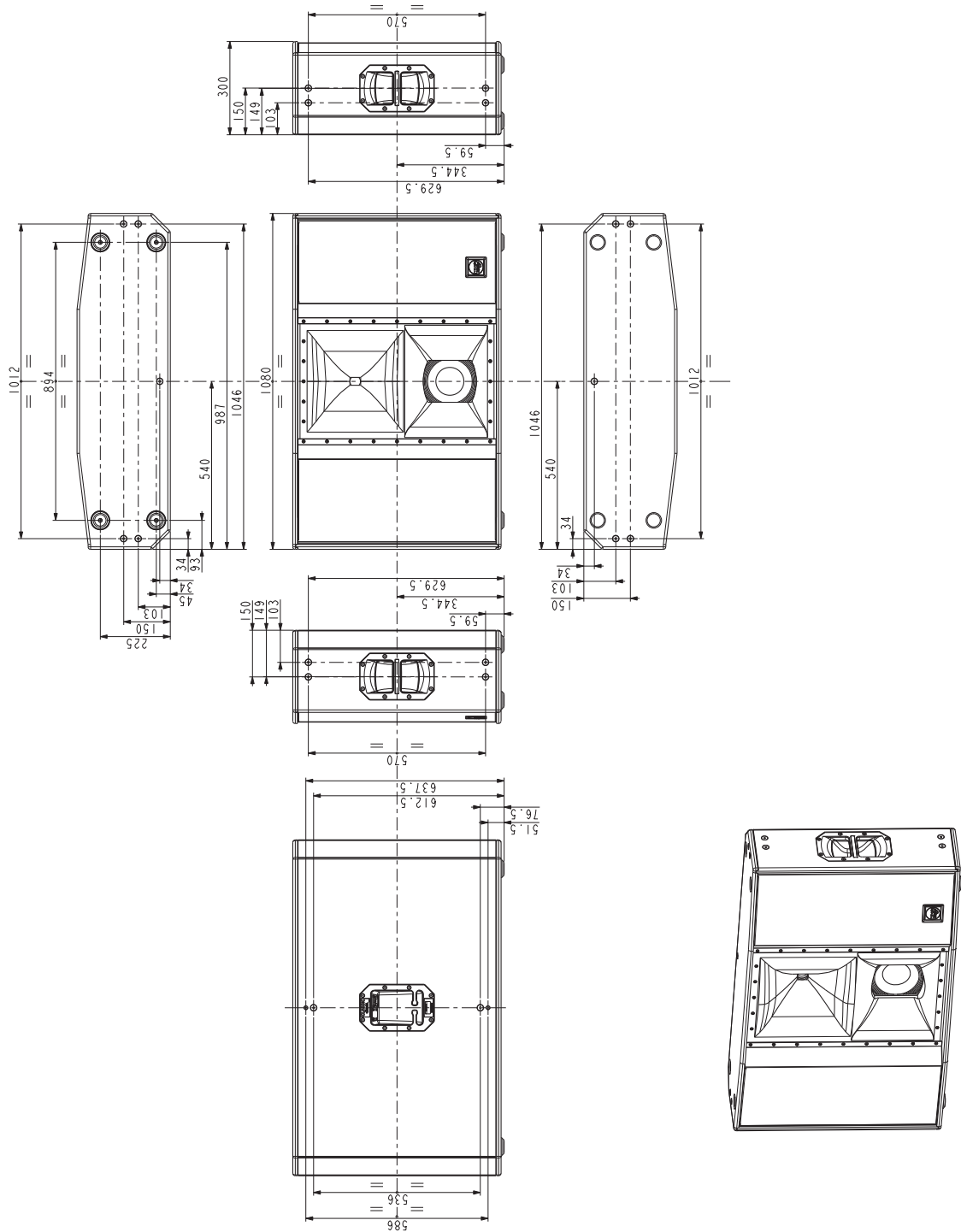
Height	670mm (26.38")
Width	1080mm (42.52")
Depth	300mm (11.81")
Weight	60kg (132.28lbs)

Frequency response



SL412

Frequency characteristics

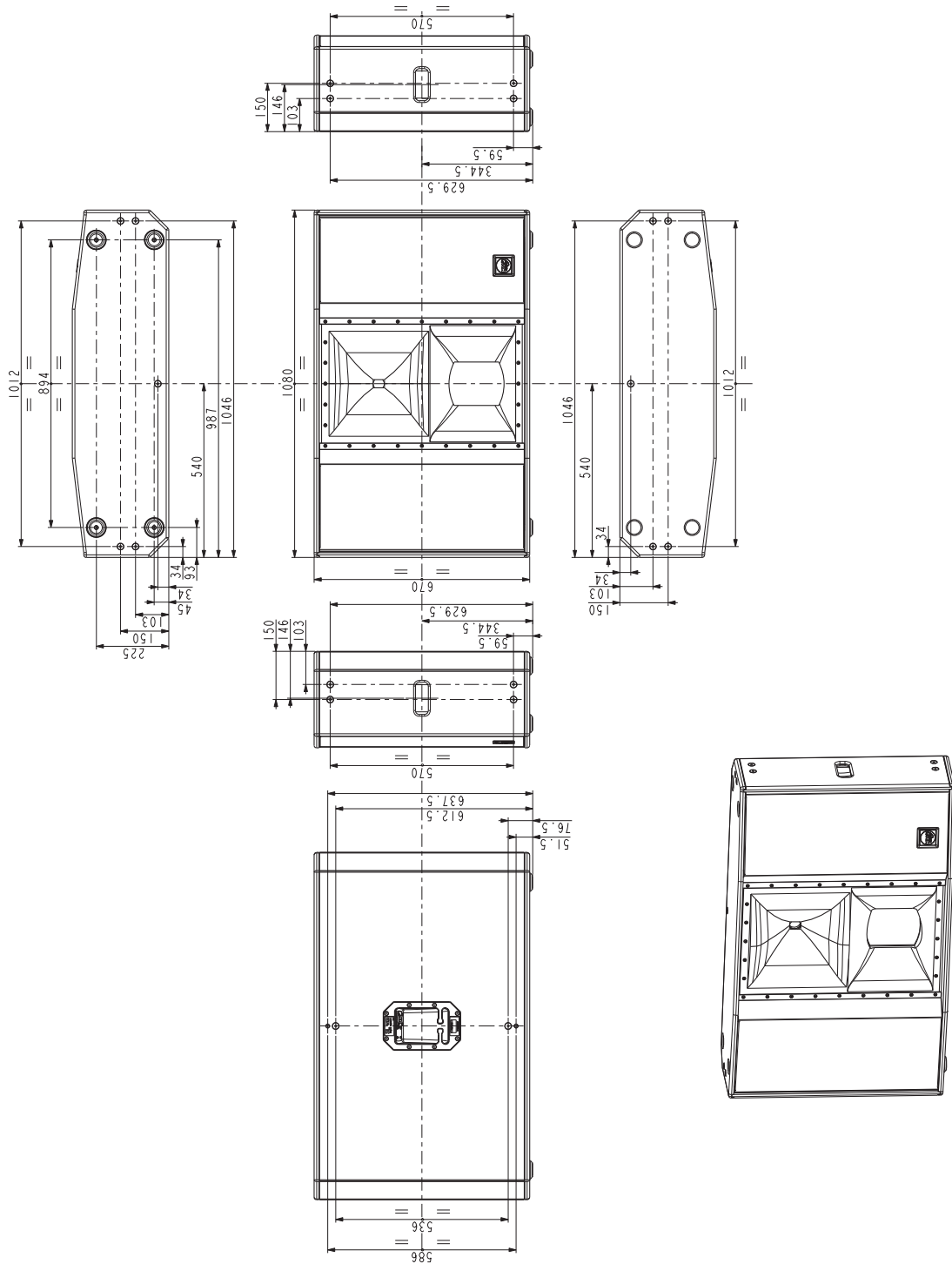


SL412 Architects and Engineer’s Specifications

The three-way, mid / high loudspeaker system shall incorporate four 12-inch mid-bass (MB) transducer a 8-inch mid range (MR) speaker and a 1.4-inch exit compression driver high frequency (HF) transducer. The LF drivers are direct radiating, tuned for optimum mid-bass response. The HF and MR transducers shall be loaded in constant directivity mid/high horn assembly. The system has a nominal coverage pattern of 110° (horizontal) x 40° (vertical).

The loudspeaker enclosure shall have a slim shape and shall incorporate, two side handles with integrated M10 suspension points, integrated internal braces with total 18 M10 suspension points. The speaker cabinet shall be finished with an ultra wear resistant black polymer coating and fitted with a weather resistant perforated steel grill. The system shall receive power from a separate stereo Amplifier SL3000.

Amplifier and controller module SL3000 consisting of separate power amplifiers for high, midrange and midbass transducers as well as signal processing including electronic band pass crossovers, limiters, phase alignment, time correction, equalization and speaker protection. The speaker system shall connect to the SL3000 via proprietary cables terminated in Amphenol AP-6 connectors. The three-way mid / high loudspeaker system shall be the KV2 Audio SL412.



SL412 Architects and Engineer's Specifications

The three-way, mid / high loudspeaker system shall incorporate four 12-inch mid-bass (MB) transducer a 8-inch mid range (MR) speaker and a 1.4-inch exit compression driver high frequency (HF) transducer. The LF drivers are direct radiating, tuned for optimum mid-bass response. The HF and MR transducers shall be loaded in constant directivity mid/high horn assembly. The system has a nominal coverage pattern of 110° (horizontal) x 40° (vertical).

The loudspeaker enclosure shall have a slim shape and shall incorporate, two side handles with integrated M10 suspension points, four integrated internal braces with eight M10 suspension points, two M10 suspension point on the back. The speaker cabinet shall be finished with an ultra wear resistant black polymer coating and fitted with a weather resistant perforated steel grill. The system shall receive power from a separate stereo Amplifier SL3000.

Amplifier and controller module SL3000 consisting of separate power amplifiers for high, midrange and midbass transducers as well as signal processing including electronic band pass crossover filters, phase alignment, time correction, equalization and speaker protection. The speaker system shall connect to the SL3000 via proprietary cables terminated in Amphenol AP-6 connectors. The three-way mid / high loudspeaker system shall be the KV2 Audio SL412.

SL2.15, SL2.15i Bass Enclosure



SL2.15 part number: *KVV 987 274*

SL2.15i part number: *KVV 987 298*

Description

The SL2.15 (8 ohm) is double 15" subwoofer. Acoustical design is based on direct radiation system with bass reflex.

The speakers cabinets can be easily stacked close to the wall and combined arbitrarily with SL412 Mid-Hi enclosure.

It also functions as a very effective upper bass cabinet when used alongside the Ultra Low Frequency VHD1.21 subwoofers as part of a five way active system.

SL2.15 Applications

- Live music applications
- Professional portable PA Systems for large format AV, speech and multimedia playback
- Professional DJ loudspeaker systems

SL2.15i Applications

- Very high quality fixed installations

Slim-line Sound System Benefits

Total flexibility

The requirement for truly 'environment integrated' enclosures is always a difficult prospect, with large, or often deep enclosures protruding into and breaking up sight lines. Requests are often received from both architects and interior designers for less obtrusive units, whilst providing the highest integrity in sound quality, output and coverage.

Superb sound

KV2 Audio Slim-line system uses Super Live Audio technology with greater dynamic range than any current similar solution.

Easy set-up

Plug-and-play connection to SL3000 amp/processor module. Slim, discreetly profiled, wall mount design. Cabinet features two handles, eight suspension points and "integrating feet" for easy positioning on stage.

Two SL4.15 speakers requires one channel of two channel VHD3200 subwoofer amplifier unit



VHD3200-250V *KVV 987 176*

VHD3200-230V *KVV 987 083*

VHD3200-115V *KVV 987 084*

For full range systems, use one, or a combination of, the following Bass Modules:



SL2.15

- part num. *KVV 987 274*

Double 15-inch
SL Subwoofer



VHD4.18

- part num. *KVV 987 079*

Single 18-inch Ultra low
frequency subwoofer



VHD2.21

- part num. *KVV 987 249*

Double 21-inch Ultra low
frequency subwoofer

- Slim, discreetly profiled wall mount cabinet
- 129dB sustained output, 132dB peak with very high dynamic range
- Simple wall mounting, suspension, ground stacking, or internally into walls and surfaces
- These units can be designed and supplied with custom colors, grill templates and logos, offering a flexible and true designer integration product
- Front-loaded, 2x 15-inch bass drivers with 3.00" voice coil assembly and ferrite magnetic motor structure
- Professional, exterior-grade Baltic birch construction with wear-resistant polymer coating
- Proprietary side handle designs for simplified handling and carrying
- Internal corner and back brace with M10 suspension points. A total of 20 suspension points are available for custom installation applications
- Two SL2.15 speakers requires one channel of two channel VHD3200 subwoofer amplifier unit

The **SL2.15** is a compact, slim cabinet, high output bass module designed as a component of an SL Series sound reinforcement speaker system.

The SL2.15 was designed as a direct radiation system with bass reflex, this system provides high output power from a relatively small and very shallow cabinet footprint. It is ideal for use in installation applications that require reproduction of low frequencies with very high transient content and where is no space for large subwoofers cabinets.

Fast and easy setup

Power for the SL subwoofer system is provided from external amplifier VHD3200, as a crossover and control system us used SL3000 Amplifier from KV2 Audio ensuring fast, easy set up and complete control. Together with an SL Series Mid/High module and an SL3000 system, they deliver the highest dynamic range of any system currently available providing new levels of clarity, depth and resolution.

Durable, high-output low frequency transducers

KV2 Audio's transducer development and manufacturing partner, 18 Sound in Cavriago, Italy, manufactures the woofer for the SL2.15. The device is the result of their state-of-the-art R&D facility and advanced production capabilities.

The transducer features a double silicone spider, polyimide voice coil assembly that undergoes multiple baking and curing processes as well as an advanced magnetic structure with advanced cooling system.

Built with load-in and load-out in mind

The SL2.15 is a very compact, slim, lightweight enclosure featuring a number of ergonomically designed parts that make it an easy speaker install and use.

SL2.15 uses cabinet handles designed and tooled by KV2 for use in their products. The two side handles make it easy to pick up and reposition in a natural, instinctive manner.

Perfections in the details

The enclosure has four feets made from special acetal copolymer material. This material has two very essential properties that make it ideal for use in this application, high density and a very low coefficient of friction makes cabinet easy to move and slide cabinets with high durability.

Easy to install

There are eight industrial grade, internal braces placed at each corner. Each brace is held in place by four M6 and two M10 bolts providing a wide range of installation and suspension flexibility.

SL2.15

TEchnology



SL2.15 rear panel (cable connection to SL3000 unit Amplifier/Controller)

System Acoustic Performance

Max SPL Long-term	129dB
Max SPL Peak	132dB
-3dB Response	40Hz ÷ 500Hz
-10dB Response	35Hz ÷ 500Hz
Sensitivity	100dB
Impedance	8Ω
Crossover Point	100÷500Hz

Low Frequency Section

Acoustic Design	<i>Direct-Radiating with Bass Reflex</i>
Subwoofer Amplifier Requirement	<i>1600W /2x SL2.15 (VHD3200 amp.)</i>
Number of Drivers	2
Woofer Size / Voice Coil Diameter / Design	<i>2x 15" / 3" Inside Outside</i>
Diaphragm Material	<i>Epoxy Reinforced Cellulose</i>
Magnet Type	<i>Ferrite</i>

Speaker Input

Speaker Input	<i>EP4</i>
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Speaker Output

Speaker Output	<i>EP4</i>
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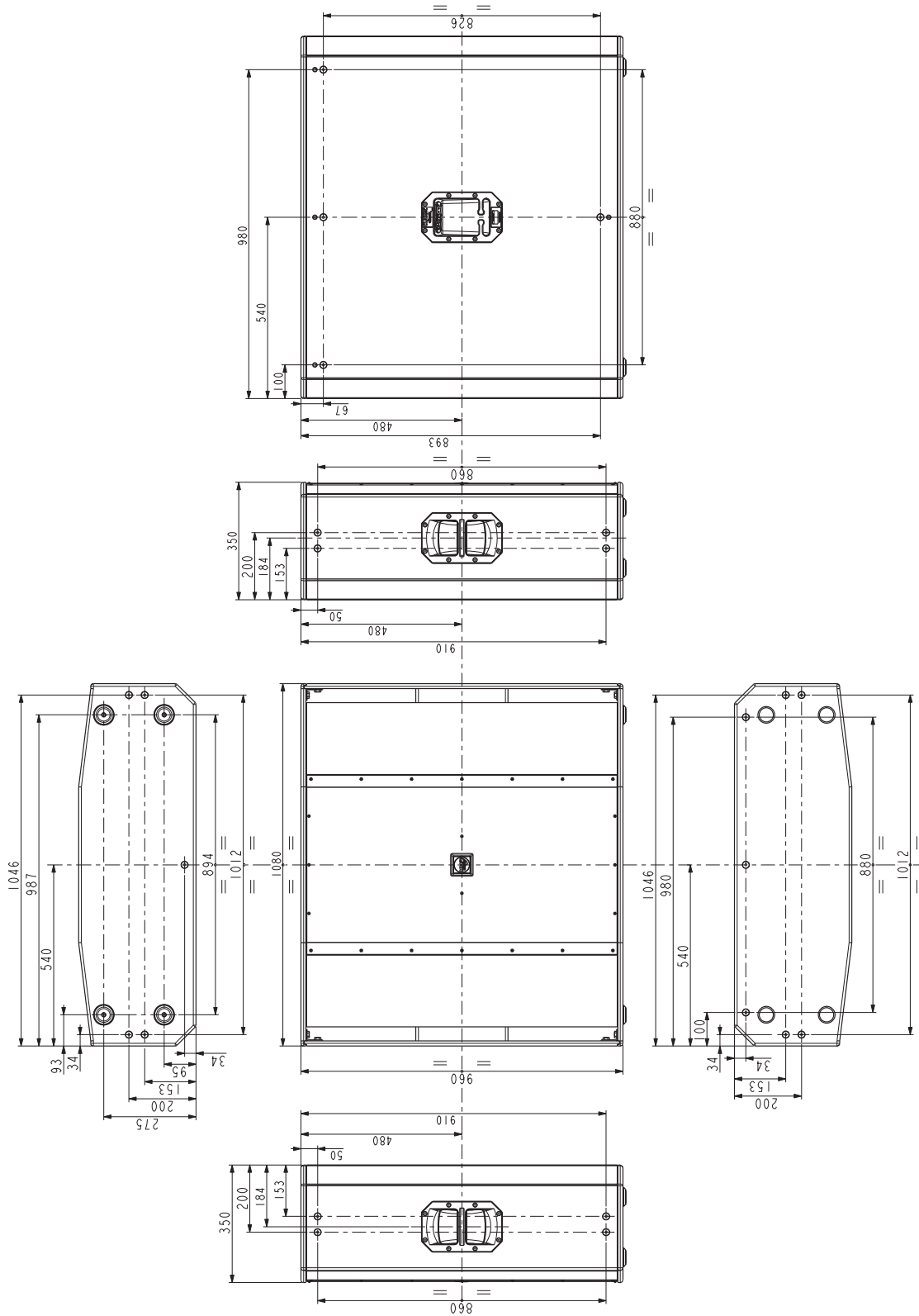
Cabinet

Cabinet Material	<i>15mm Baltic birch</i>
Handles	2
Color	<i>"Orange peeled" Matt Black or any RAL</i>

Physical Dimensions

Height	<i>960mm (37.8")</i>
Width	<i>1080mm (42.52")</i>
Depth	<i>350mm (13.78")</i>
Weight	<i>61kg (134.5lbs)</i>

SL2.15



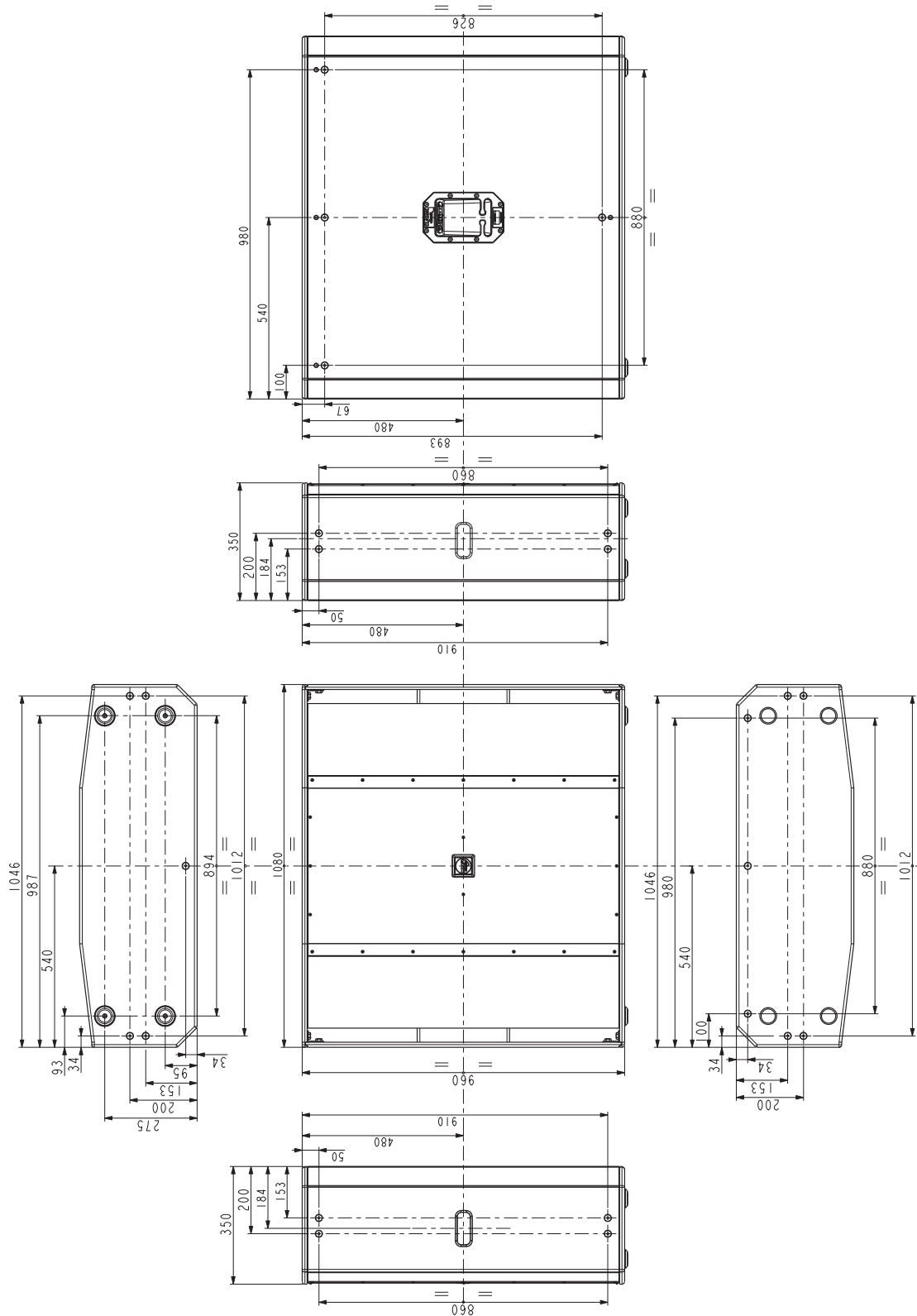
Drawing

SL2.15 Architects and Engineer's Specifications

The bass module loudspeaker system shall incorporate two 15-inch low frequency (LF) transducer with ferrite motors and 3-inch polyimide, high-temperature voice coils. The LF driver shall be mounted inside a compact wood enclosure with bass reflex design.

The loudspeaker enclosure shall have a slim shape and shall incorporate two side handles with integrated M10 suspension points and incorporate integrated internal braces with 23 M10 suspension points. The speaker cabinet shall be finished with an ultra wear resistant black polymer coating and fitted with a weather resistant perforated steel grill.

This speaker shall receive power from a separate subwoofer amplifier module (VHD3200) including speaker protection. The speaker system shall connect to the amplifier module via proprietary cables terminated in Amphenol AP-4 connectors.



SL2.15i Architects and Engineer's Specifications

The bass module loudspeaker system shall incorporate two 15-inch low frequency (LF) transducer with ferrite motors and 3-inch polyimide, high-temperature voice coils. The LF driver shall be mounted inside a compact wood enclosure with bass reflex design.

The loudspeaker enclosure shall have a slim shape and shall incorporate two side cut-out handles and integrated internal braces with 23 M10 suspension points. The speaker cabinet shall be finished with an ultra wear resistant black polymer coating and fitted with a weather resistant perforated steel grill.

This speaker shall receive power from a separate subwoofer amplifier module (VHD3200) including speaker protection. The speaker system shall connect to the amplifier module via proprietary cables terminated in Amphenol AP-4 connectors.

<p>ES Mid/Hi speaker cable MH15, AP6 connectors - 1,5m part name: MH15 part number: KVV 987 147 - 1,5m (5ft), Mid/Hi Module hook-up</p>	
<p>ES Mid/Hi speaker cable MH60, AP6 connectors - 6m part name: MH60 part number: KVV 987 125 - 6m (20ft), Mid/Hi Module hook-up</p>	
<p>ES Mid/Hi speaker cable MH120, AP6 connectors - 12m part name: MH120 part number: KVV 987 126 - 12m (40ft), Mid/Hi Module hook-up</p>	
<p>ES Mid/Hi speaker cable MH180, AP6 connectors - 18m part name: MH180 part number: KVV 987 127 - 18m (60ft), Mid/Hi Module hook-up</p>	
<p>ES Bass speaker cable LF15, AP4 connectors - 1,5m part name: LF15 part number: KVV 987 121 - 1,5m (5ft) - for ES Bass Module daisy-chaining</p>	
<p>ES Bass speaker cable LF40, AP4 connectors - 4m part name: LF40 part number: KVV 987 122 - 4m (13ft) - for ES Bass Module hook-up</p>	
<p>ES Bass speaker cable LF100, AP4 connectors - 10m part name: LF100 part number: KVV 987 123 - 10m (33ft) - for ES Bass Module hook-up</p>	
<p>ES Bass speaker cable LF200, AP4 connectors - 20m part name: LF200 part number: KVV 987 124 - 20m (66ft) - for ES Bass Module hook-up</p>	
<p>Speaker Cable kit part name: CABLE-KIT part number: KVV 987 047 The ES Cable Pack consist of four high-quality Amphenol AP cable assemblies designed for use with ES Series. - 2 pcs LF15 - 1pc LF40 - 1pc MH60</p>	

<p>SL System fly bar part name: UBV - SL412 part number: KVV 987 293 - 4 pcs Quick-lock-pins 6mm included - 4 pcs M10 hex screws with a hole included</p>	
<p>Joining bracket for SL412, SL2.15 part name: SL BRACKET 01 part number: KVV 987 300 - 8 pcs Quick-lock-pins 6mm included - 8 pcs M10 hex screws with a hole included</p>	
<p>Wall mounting bracket part name: SL BRACKET 02 part number: KVV 987 299 - 1 pc M10x30 included</p>	
<p>Amphenol AP6 cable-mount female connector part name: AP-6-11 part number: KVV 987 050</p>	
<p>Amphenol AP6 cable-mount male connector part name: AP-6-12 part number: KVV 987 051</p>	
<p>Amphenol AP4 cable-mount female connector part name: AP-4-11 part number: KVV 987 048</p>	
<p>Amphenol AP4 cable-mount male connector part name: AP-4-12 part number: KVV 987 049</p>	

SL - Full range mode

Description

- Stereo system requires:
1x SL3000 - stereo amplifier
- Up to 1000 people
- Number of bass cabinets and SUB LEVEL setup - depends on the style of music

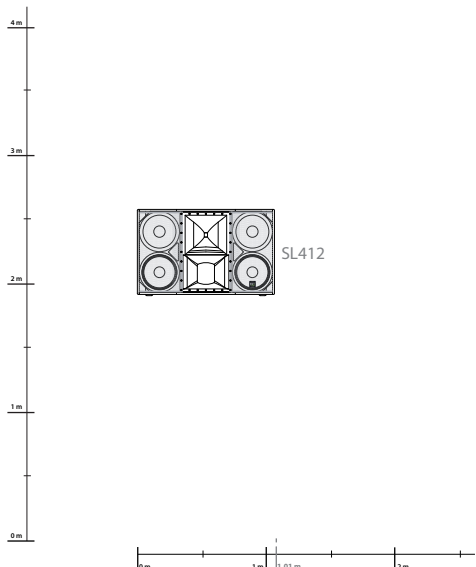
Products:

Count	Product
2	SL412
1	SL3000

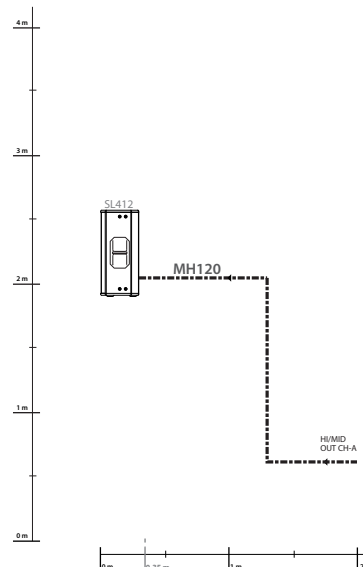
Accessories:

Count	Accessory Title
2	Cable MH120

Front view



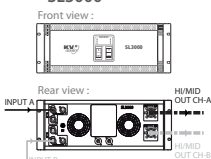
Wiring



Amplifiers

CH - A, B

SL3000



SL - Configuration A

Description

- Stereo system requires:
1 x SL3000 - stereo amplifier
1 x VHD3200 - sub amplifier
- Up to 2000 people
- Number of bass cabinets and SUB LEVEL setup - depends on the style of music

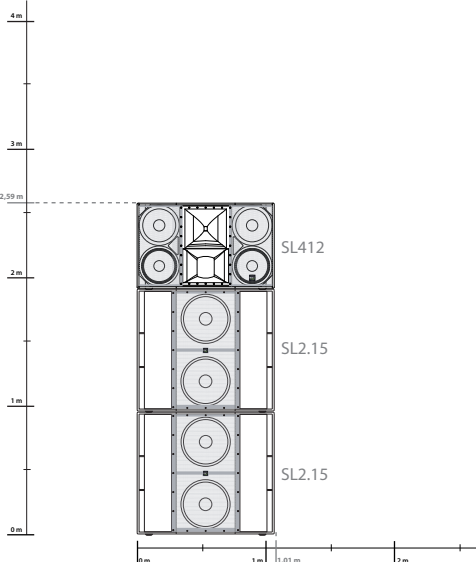
Products:

Count	Product
2	SL412
4	SL2.15
1	SL3000
1	VHD3200

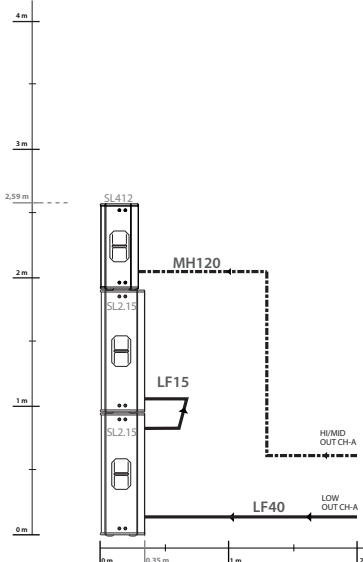
Accessories:

Count	Accessory Title
2	Cable MH120
2	Cable LF15
2	Cable LF40

Front view



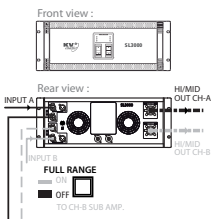
Wiring



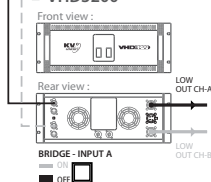
Amplifiers

CH - A, B

SL3000



VHD3200



SL - Configuration B

Description

- Stereo system requires:
1 x SL3000 - stereo amplifier
2 x VHD3200 - sub amplifier
- Up to 2000 people
- Number of bass cabinets and SUB LEVEL setup - depends on the style of music

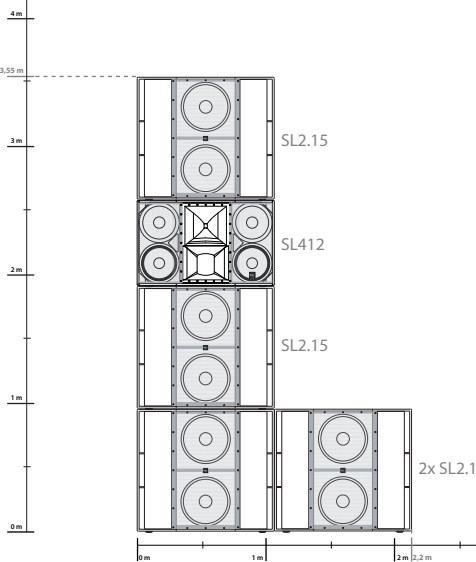
Products:

Count	Product
2	SL412
8	SL2.15
1	SL3000
2	VHD3200

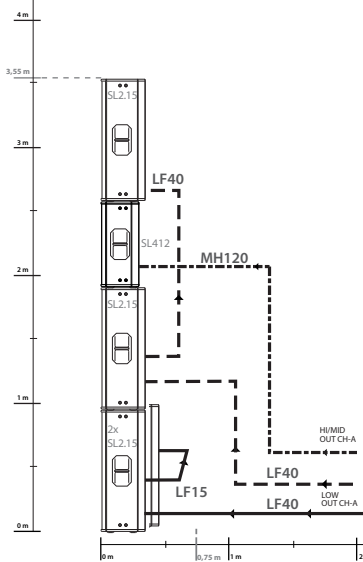
Accessories:

Count	Accessory Title
2	Cable MH120
8	Cable LF40

Front view



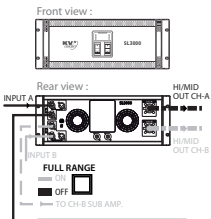
Wiring



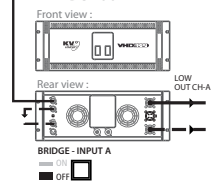
Amplifiers

CH - A

SL3000



VHD3200



SL - Configuration C

Description

- Stereo system requires:
1x SL3000 - stereo amplifier
2x VHD3200 - sub amplifier
- Up to 2000 people
- Number of bass cabinets and SUB LEVEL setup - depends on the style of music

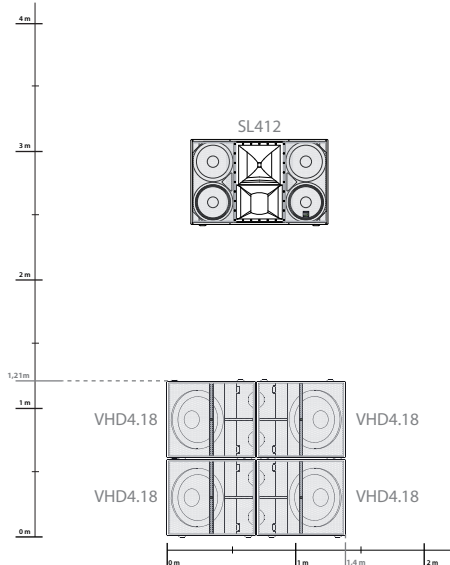
Products:

Count	Product
2	SL412
8	VHD4.18
1	SL3000
2	VHD3200

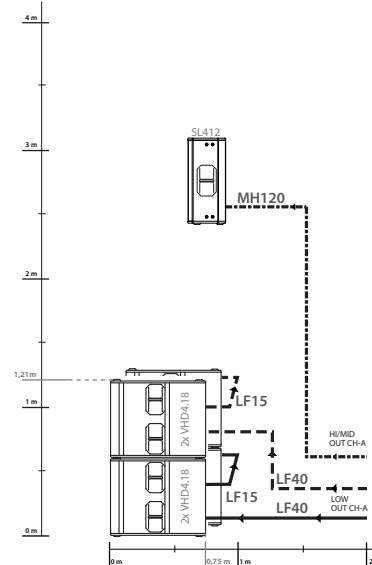
Accessories:

Count	Accessory Title
2	Cable MH120
4	LF15
4	LF40

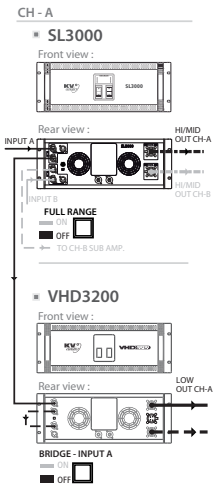
Front view



Wiring



Amplifiers



SL - Configuration D

Description

- Stereo system requires:
1x SL3000 - stereo amplifier
1x VHD3200 - sub amplifier
- Up to 2000 people
- Number of bass cabinets and SUB LEVEL setup - depends on the style of music

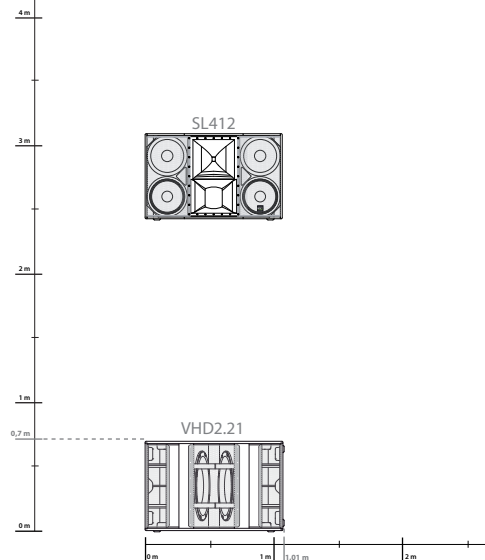
Products:

Count	Product
2	SL412
2	VHD2.21
1	SL3000
2	VHD3200

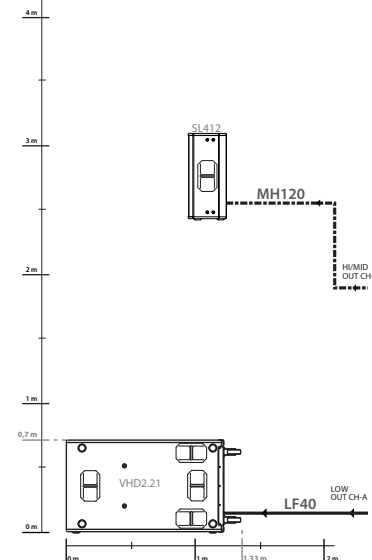
Accessories:

Count	Accessory Title
2	Cable MH120
2	Cable LF40

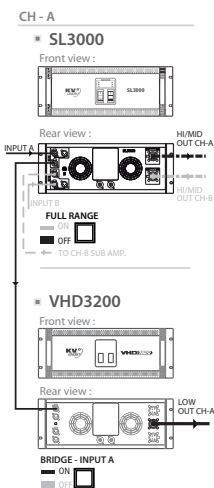
Front view



Wiring



Amplifiers



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 expectation.



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