

# LOUDSPEAKER SYSTEMS



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From  
concept  
to reality

Logic Systems  
Pro Audio

THE DIFFERENCE IS IN THE DETAIL





## Who are we?

The Logic Systems brand was founded in 1993. Over the intervening years the company has grown from humble origins in converted farm buildings to the current purpose built 10,000 sq. ft. factory in rural Lincolnshire. Traditionally an OEM supplier of birch cabinets to a variety of clients including industry giants JBL, the early years saw a developing reputation as not just a manufacturer, but a design house with the ability to take a concept and turn it into reality in double quick time. The desire to take a greater control of the company's destiny led to that design ability being applied to the company's own brand products and the launch of the 'Logic Systems' brand at the PLASA show in 1997.

In 1997 the factory output was still 80% OEM product and just 20% own brand, but with rapid development within five years this had become 100% own brand product. Since 1997 there has been a massive investment in both marketing and R&D, resulting in highly developed products which have gained an enviable reputation for sonic quality, premium quality and reliability. Combining this with first class customer service has earned the brand both respect and an established position in the world Pro Audio marketplace.

While in the earlier years a strong market was developed in the UK, the last few years have seen a massive increase in export sales with Asia and the Middle East becoming the company's primary markets. While the product range was always targeted towards a broad cross section of the marketplace including installation, Church and theatre, the launch of Ethos VA array in 2004 has given the company an all important prime position in the Live sound market, further launches of Ethos CA and more recently Ethos V12 have built on this growing reputation.

**'Defined by detail', Loudspeakers by Logic Systems.**

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*The UK has a rich heritage in producing outstanding loudspeaker products. Logic Systems has a simple aim to build on that heritage and apply new technologies to design, develop and manufacture the next generation of premium loudspeaker products in the UK, for the global Pro Audio market.*

*In a complex world, where time is always at a premium we apply a design Ethos, which we call, 'Defined Detail' to ensure that every product combines not only unparalleled acoustic detail, but also ensures that they are elegantly simple to use in the real world.*



Ethos Array is centred on the VA enclosure, which has directivity of 120° x 10° V. While the VA can be used free standing for vocal applications it is more commonly combined with the Nd315 cabinet for extended bass response. The Nd315 can be flown above an array or used as the basis of a ground stack. Multiple Nd315 cabinets will lock together when ground stacked. For larger applications when substantial sub bass reinforcement is required the Nd218 cabinet can be groundstacked with the system, while greater projection can also be achieved by the addition of Ethos V12, flown above the existing array. All B Series bass enclosures use a semi-bandpass structure that enhances the cabinets SPL capability over its chosen passband.

To benefit from the cabinets full performance they should be used in the horizontal/landscape mode. The low height of the B Series cabinets also makes them eminently suitable for installations where cabinets need to be housed under seating or podiums.

## VA Nd315 Nd218



### Installation

For permanently installed Ethos array systems, Logic Systems offers the Nd315i and Nd218i installation specific versions of the cabinets.

## Ethos VA

Description	• A compact, bi-amp, vertically arraying, full range enclosure. The cabinet incorporates a 2 x 8" midrange with a waveguide mounted 2 x 1" HF.
Frequency Response	• 80Hz – 20kHz
Power handling/Impedance	• Bass/mid: 500w (8 ohm), HF: 160w (8 ohm)
Sensitivity*	• Bass/mid 103dB HF 110dB
Directivity	• Horizontal: 120° Vertical: 10°
Weight	• 28Kg
Options:	• Heavy duty transit dolly and flightcase cover. (Per 3 VA.)



## Ethos Nd315

Description	• A compact, high power, bass enclosure with 3 x 15" neodymium cone drivers with integrated fly system.
Frequency Response	• 40Hz – 135Hz
Power handling/Impedance	• 3000w
Sensitivity*	• 106dB
Directivity	• Omni-directional
Weight	• 95Kg (Dolly 9Kg)
Options:	• Heavy duty transit dolly and cover

## Ethos Nd218

\* Sensitivity measured at 1 metre with 2.83V, using band limited pink noise.

Description	• A compact, high power, sub bass enclosure with 2 x 18" neodymium cone drivers.
Frequency Response	• 40Hz- 100Hz
Power handling/Impedance	• 2400w (4 ohm)
Sensitivity*	• 104dB
Directivity	• Omni-directional
Weight	• 72Kg (Dolly 9Kg)
Options:	• Heavy duty transit dolly and cover



To optimise the acoustic performance of Ethos array, Logic Systems provides the choice of the DP2140 or DP2160 digital system controllers. Presets are available for a variety of Ethos Array combinations and all functions and networking of controllers can be managed with the complimentary 'Podware' Software.



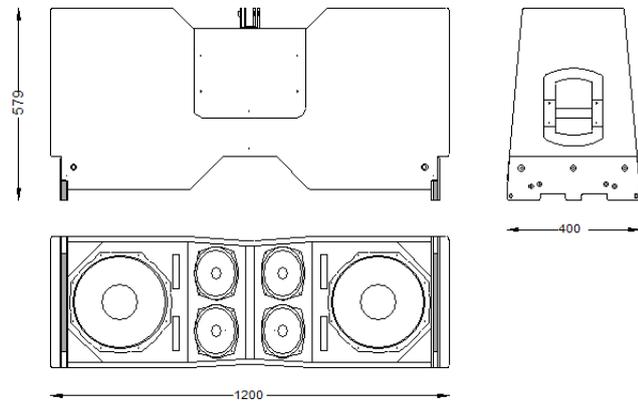
Ethos V12 array is composed from a range of two cabinets, which can be combined in a variety of ways to cover front of house sound from venues such as grand theatres up to large stadium concerts. The system is designed to ground stack as easily as it will fly. Ultimate flexibility is combined with sonic excellence as the Ethos V12 system is versatile and equally at home in fixed install or touring. Both cabinets are finished in a black Polyurea coating. The system comprises of two integrated elements:

Ethos V12, a vertically arraying loudspeaker with 90° horizontal by 10° vertical directivity.

## V12 SB218

Ethos SB218, a 2 x 18" direct radiating sub bass cabinet designed to fly above the Ethos V12 or serve as a basis of a ground stacked system or the Ethos V12 can be ground stacked directly from the Fly frame.

The Ethos VA cabinets can be flown under the Ethos V12 array to act as down fills.

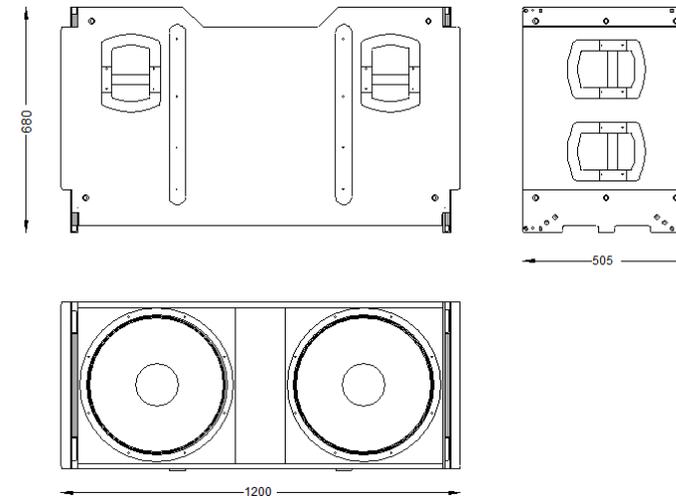


## Ethos V12

Description	• A large format, vertically arraying, full range enclosure. The cabinet incorporates 2 x 12" bass, 4 x 6.5" midrange and waveguide mounted 2 x 1.4" HF.
Frequency Response	• 55Hz - 20KHz
Power handling/Impedance	• Bass: 800w (16 ohm), Mid: 800w (16 ohm), HF: 220w (16 ohm)
Sensitivity*	• Bass 102dB, Mid 95dB, HF 108dB
Directivity	• Horizontal: 90°, Vertical 10°
Weight	• 72kg
Options	• Heavy duty transit dolly and cover

## Ethos SB218

Description	• A direct radiating, high power sub bass enclosure with 2 x 18" neodymium cone drivers with integrated fly system.
Frequency Response	• 35Hz - 95Hz
Power handling/Impedance	• 2400w (4 ohm)
Sensitivity*	• 104dB
Directivity	• Omni-directional
Weight	• 75kg
Options	• Heavy duty transit dolly and cover



To optimise the acoustic performance of Ethos array, Logic System provides the choice of the DP2140 or DP2160 digital system controllers. Presets are available for a variety of Ethos Array combinations and all functions and networking of controllers can be managed with the complimentary 'Podware' Software.

\* Sensitivity measured at 1 meter with 2.82V, using band limited pink noise.

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The Ethos CA is an ultra-compact fixed angle array box, which has been designed for ultimate flexibility. Having the ability to be pole mounted, groundstacked or flown in an array, the CA enclosure gives you options that have never before been available from just one product.

Functionality is further increased with the option of two coverage angles; 90° x 20° for the Ethos CA20 and 90° x 10° for the Ethos CA10.

CA10  
CA20  
Nd115  
Nd215



While the CA can be used free standing for vocal applications it can also be combined with the Ethos Nd115 or Ethos Nd215 bass enclosure which can either be used as the basis of a groundstack or flown above an array.

When further low end reinforcement is required the Ethos Nd218 can also be added to the system. System control comes from the DP2140 / DP2160 which contains presets for a variety of combinations.

## Ethos CA10 and CA20

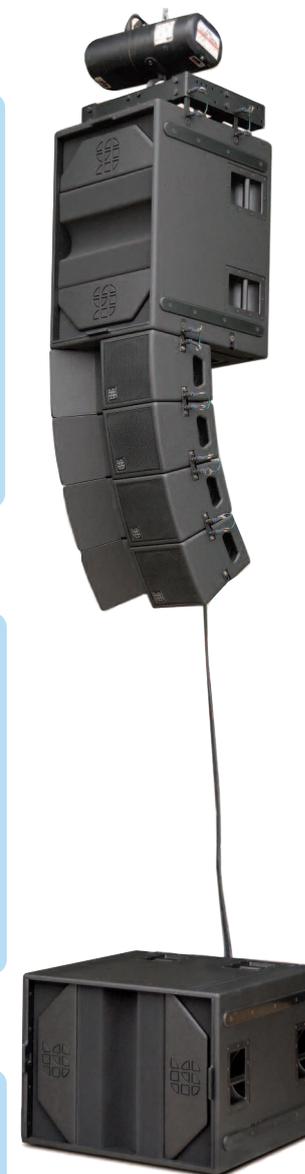
Description	• An ultra compact passive, fixed angle array enclosure that combines an 8" neodymium mid/bass driver with two waveguide mounted neodymium compression drivers.
Frequency Response	• 100Hz - 20kHz
Power handling/Impedance	• 250w (16 ohm)
Sensitivity*	• 97dB (1 cabinet) 103dB (2 cabinets)
Directivity	• Horizontal: 90° Vertical: CA10 -10°, CA20 - 20°
Weight	• 15kg

## Ethos Nd115

Description	• A compact, high power bass enclosure, with a 15" neodymium bass driver and integrated fly system.
Frequency Response	• 40Hz – 135Hz
Power handling/Impedance	• 1000w (8 ohm)
Sensitivity*	• 96dB
Directivity	• Omni-directional
Weight	• 35Kg (Dolly: 6Kg.)
Options:	• Heavy duty transit dolly and cover.

## Ethos Nd215

Description	• A compact, high power, bass enclosure with 2 x 15" neodymium cone drivers with integrated fly system.
Frequency Response	• 40Hz – 135Hz
Power handling/Impedance	• 2000w (4 ohm)
Sensitivity*	• 102dB
Directivity	• Omni-directional
Weight	• 57Kg (Dolly: 8Kg)
Options:	• Heavy duty transit dolly and cover.



\* Sensitivity measured at 1 metre with 2.83V, using band limited pink noise.

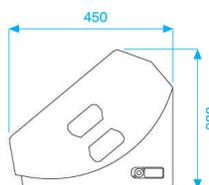
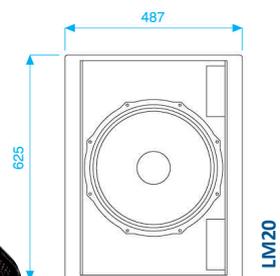
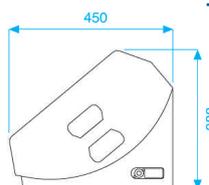
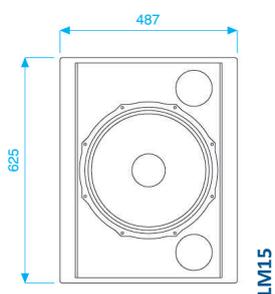
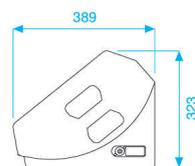
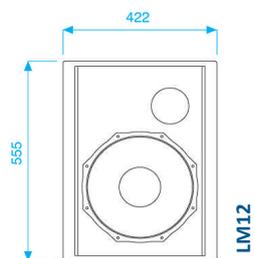
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LM Series; The LM series has been designed as state of the art live sound stage monitors.

The passive only LM12 offers compact dimensions combined with excellent vocal projection and high power handling. The cabinet also includes a tophat mount to increase its functionality.

The LM15 enclosure combines the attributes of the LM12 with increased SPL and power handling. It also benefits from a state of the art Neodymium Mid/Bass driver and 1.4" exit compression driver.

The LM20 is the reference rock and roll wedge, combining a neodymium Mid/Bass driver with a large format 1.4" neodymium compression driver, it also benefits from being switchable between passive and active modes. All cabinets are constructed from 15mm birch plywood and finished in a hardwearing textured paint finish.



## LM12

Description	• A compact, passive stage monitor combining a 12" cone driver with a coaxially mounted 1" compression driver.
Frequency Response	• 60Hz - 20kHz
Power handling/Impedance	• 400w (8 ohm)
Sensitivity*	• 98dB
Directivity	• 60° conical above 1.5kHz
Weight	• 24Kg

## LM15

Description	• A compact, passive, stage monitor, combining a 15" neodymium cone driver with a coaxially mounted 1.4" compression driver.
Frequency Response	• 55Hz - 20kHz
Power handling/Impedance	• 600w (8 ohm)
Sensitivity*	• 99dB
Directivity	• 60° conical above 1kHz
Weight	• 27Kg

## LM20

Description	• A compact active/passive switchable stage monitor, combining a 15" neodymium cone driver with a coaxially mounted 1.4" neo compression driver.
Frequency Response	• 45Hz - 20 KHz
Power handling/Impedance	• 600w (8 ohm)
Sensitivity*	• 99dB
Directivity	• 60° conical above 1kHz
Weight	• 27Kg

\* Sensitivity measured at 1 metre with 2.83V, using band limited pink noise.

The acoustic performance of the LM series monitors can be optimized using the Logic Systems DP2140 or DP2160 digital system controllers. Each contains presets to enhance the performance of the LM series cabinets in passive mode and also a bi-amp preset for the LM20 cabinet.



## 1296 B215 SB118

Origin 1296 has been designed as a six box 6kw FOH concert system. Utilising the latest lightweight amplifier modules and onboard DSP software. The top end is covered by the Origin 1296 Active a powered fully horn loaded three way mid/high enclosure. Whilst the bottom end is covered by the Origin B215 Active and Origin SB118 Active self powered bass and sub bass enclosures which are run in parallel over the same pass band and share a common 40 Hz tuning.

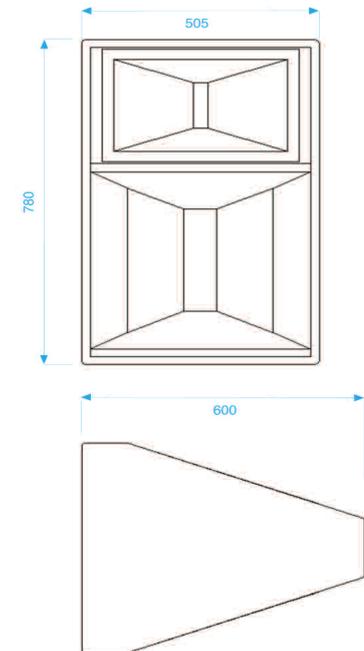
Providing a complete plug and go FOH concert system without the need for amp racks making setup time as quick as possible.

Origin will also be available in a passive format using the logic systems DP2140 system controller containing presets for the bi-amp operation of the Origin system.



## Origin 1296 Active

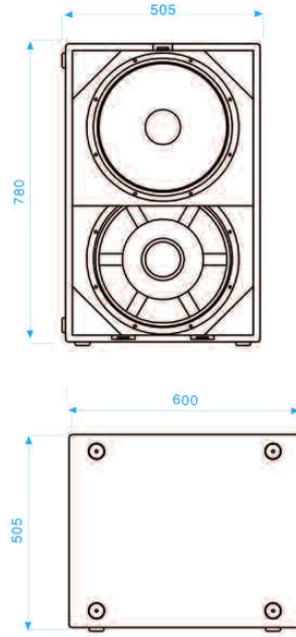
Description	<ul style="list-style-type: none"> <li>• A self powered, fully horn loaded, three way mid/high enclosure. Features a horn loaded 12" cone driver combined with a dual diaphragm coaxial compression driver, mounted on a 60/40 horn all driven by an onboard 3 way class D power module with built in DSP.</li> </ul>
Frequency response	<ul style="list-style-type: none"> <li>• 150Hz - 20 kHz</li> </ul>
Power handling	<ul style="list-style-type: none"> <li>• 400w</li> </ul>
Sensitivity	<ul style="list-style-type: none"> <li>• 105 db</li> </ul>
Directivity	<ul style="list-style-type: none"> <li>• 60° H x 40V above 600Hz</li> </ul>
Weight	<ul style="list-style-type: none"> <li>• 54kg (dolly 9 kg)</li> </ul>
Options	<ul style="list-style-type: none"> <li>• Unpowered version, Heavy duty transit dolly and Padded cover available</li> </ul>



\* Note: (1) Sensitivity measured at 1 metre with 2.83V, using band limited pink noise

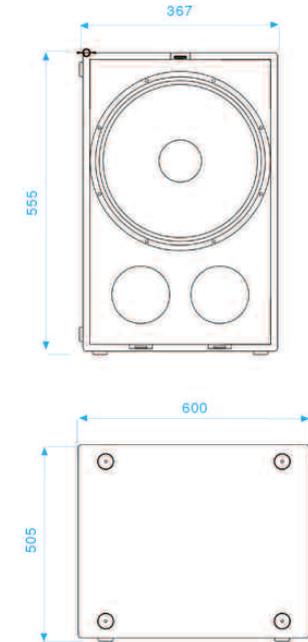
## Origin B215 Active

Description	A compact, self powered bass enclosure, featuring two direct radiating 15" bass drivers combined in a push pull configuration, driven by an onboard class D power module with built in DSP.
Frequency response	• 40Hz - 150Hz
Power handling	• 1400w
Sensitivity	• 101 db
Directivity	• Omni-directional
Weight	• 63 kg
Options	• Unpowered version Padded cover available and heavy duty transit dolly



## Origin SB118 Active

Description	A compact, self powered sub/bass enclosure, featuring a direct radiating 18" bass driver driven by an onboard class D power module with built in DSP.
Frequency Response	• 40Hz – 150Hz
Power handling	• 1200w
Sensitivity	• 98db
Directivity	• Omni-directional
Weight	• 48 kg
Options	• Unpowered version Padded cover available and heavy duty transit dolly



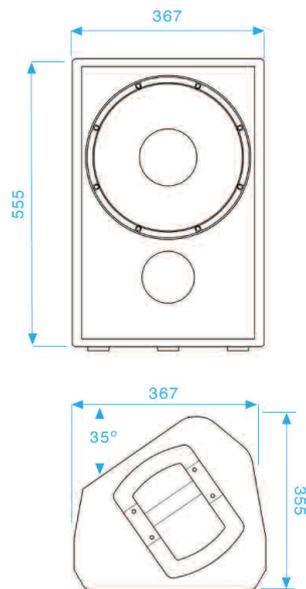
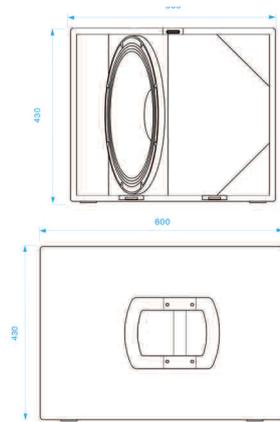
\* Note: (1) Sensitivity measured at 1 metre with 2.83V, using band limited pink noise

\* Note: (1) Sensitivity measured at 1 metre with 2.83V, using band limited pink noise



## B115 012

The Origin B115A utilises a long excursion 15" bass cone which is mounted in a compact dual vented band pass enclosure. The bass cone is driven actively by its own integrated amplifier channel; while performance is optimised by the onboard DSP control which ensures an incredibly linear frequency response. The high power bass driver and state of the art electronics add up to an easy to manage cabinet which delivers tight and detailed bass extension. The Origin12 cabinet combines a 12" Neodymium Mid/Bass cone with a coaxially mounted 1.4" compression driver, which is passively crossed over. The coaxial layout has many acoustic advantages, which include crystal clear vocal projection, a must in its target application. Neodymium driver technology also helps to minimise the cabinet's weight, while to aid functionality the cabinet can be used in monitor or front of house applications. The Origin12 can be used free standing, or can be combined with the Origin B115 bass enclosure as a fullrange integrated system.



## Origin B115



## Origin 012



Frequency Response	• 45Hz - 150Hz
Components	• Bass: 15" cone driver
Power handling	• 700w
Sensitivity	• 96db
Directivity	• Omni-directional
Impedance	• 8 Ohms nominal
Connections	2 x Neutrik NL4 connectors 1+/1- Input 2+/2- no connection
Weight	• 36Kg Unpowered version heavy duty transit dolly and padded cover available

Frequency Response	• 60Hz - 18kHz
Components	• 12" neodymium cone driver HF: 1.4" exit neo compression driver, coaxially mounted
Power handling	• 350w
Sensitivity	• 99db
Directivity	• 60° conical above 1kHz
Impedance	• 8 Ohms nominal
Connections	2 x Neutrik NL4 connectors 1+/1- Input 2+/2- no connection
Weight	• 17.5Kg (23Kg) Unpowered version and padded cover available

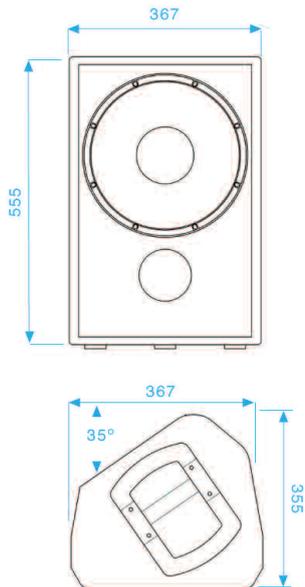
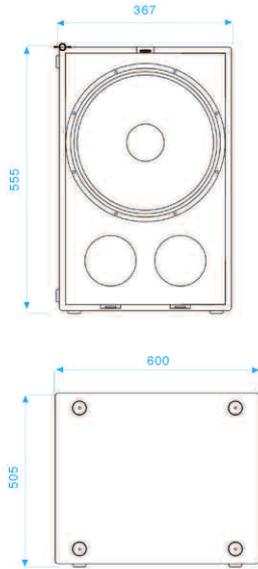


## OSB118 O15

The Logic Systems Origin SB118 is a compact sub/bass enclosure which features a direct radiating 18" bass driver. Sonically the Origin SB118 features the weight expected of an 18" driver, but also retains punch and control. The Origin15 cabinet combines a 15" Neodymium Mid/Bass cone with a coaxially mounted 1.4" compression driver, which is passively crossed over. The coaxial layout has many acoustic advantages, which include crystal clear vocal projection, a must in its target application.

Neodymium driver technology also helps to minimise the cabinet's weight, while to aid functionality the cabinet can be used in monitor or front of house applications.

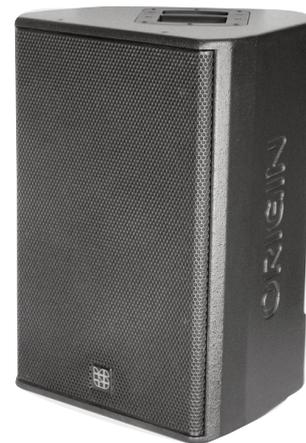
The Origin15 can be used free standing, or can be combined with the OriginSB118 bass enclosure as a fullrange integrated system.



## Origin SB118



## Origin O15



Frequency Response	• 40Hz - 150Hz
Components	• Sub Bass: 1 x 18" cone driver
Power handling	• 1200w RMS
Sensitivity	• 98db
Directivity	• Omni-directional
Impedance	• 8 Ohms nominal
Connections	• 2 x Neutrik NL4 connectors 1+/1- Input 2+/2- Linked connection
Weight	• 48Kg Unpowered version heavy duty transit dolly and padded cover available

Frequency Response	• 55Hz - 18kHz
Components	• Bass/mid: 15" neodymium cone driver HF: 1.4" exit compression driver, coaxially mounted
Power handling	• 600w
Sensitivity	• 99db
Directivity	• 60° conical above 1kHz
Impedance	• 8 Ohms nominal
Connections	• 2 x Neutrik NL4 connectors 1+/1- Input 2+/2- no connection
Weight	• 23Kg (29Kg) Unpowered version and padded cover available

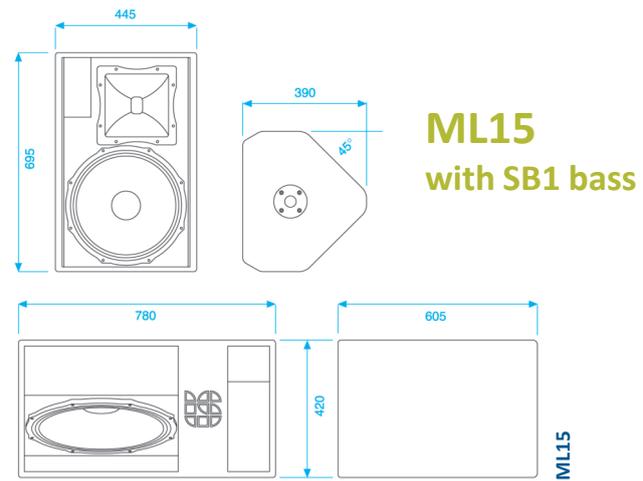
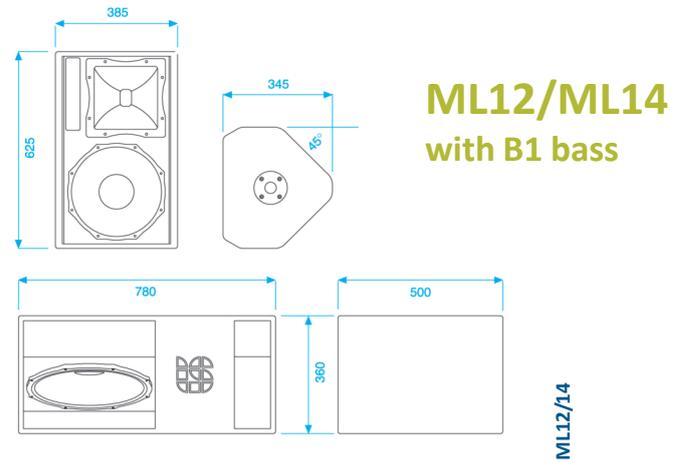
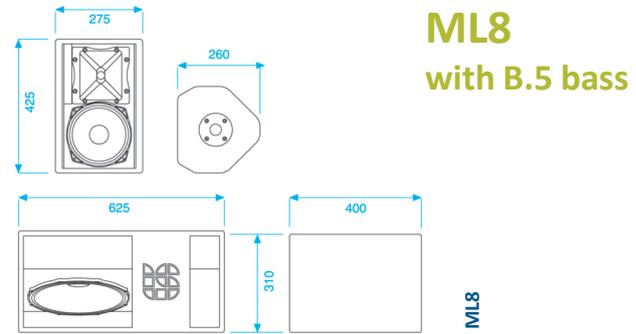


ML Series is Logic Systems premium product range. With applications within Audio Visual, Church, Theatre and Live sound ML is a true multi-functional product.

With symmetrical 45° back angles and rotatable horn flare all cabinets can be used in arrays, in portrait or landscape mode for distributed systems, or for stage monitoring.

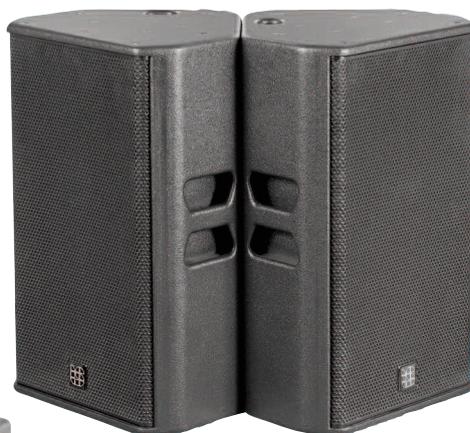
All cabinets benefit from state of the art loudspeaker components, many of which benefit from neodymium magnet structures. ML Series products are designed for incredibly linear frequency response, which is enhanced when they are combined as an integrated system with the DP2140 / DP2160 digital loudspeaker management system and the B series complimentary bass enclosures.

- ML8
- ML12
- ML14
- ML15



ML

The symmetrical back angles of the ML series permit perfect array angles to be set within both live sound and fixed install.



ML8  
ML12  
ML14  
ML15



All cabinets have top hat mounts for pole mounting above their complimentary bass enclosures. A full range of brackets are available to aid the installation of the ML series, along with theatrical yokes for truss mounting of ML product.

In monitor mode the cabinets benefit from connections on the end cheeks.

The symmetrical back angles also enable cabinets to be used either horn to horn or horns apart, without the need for matched pairs.



**Install** – While the ML range has no installation specific versions, its integrated bracket points and insert points make installation easy and its acoustic qualities make it the preferred choice for the discerning installer.

## ML8

Description	• An ultra compact cabinet that combines a Neodymium 8" cone driver with a 1" compression driver.	• A compact, high power, bass enclosure with 12" cone driver.
Frequency Response	• 70Hz - 20kHz	• 55 – 150 Hz
Power handling/Impedance	• 250w (16 ohms)	• 400w (8 ohms)
Sensitivity*	• 97dB	• 98dB
Directivity	• 90° x 60° above 2kHz	• Omni-directional
Weight	• 12Kg	• 25Kg

## B.5

## ML12 - 14

Description	ML12 - A compact enclosure combining a 12" cone driver with a 1" compression driver. ML14 - Physically identical to the ML12, but with a Neodymium 1.4" compression driver.	• A compact, high power, bass enclosure with 15" cone driver.
Frequency Response	• 55Hz - 20kHz	• 45 Hz – 150 Hz
Power handling/Impedance	• 400w (8 ohms)	• 500w (4 ohms)
Sensitivity*	• 98dB	• 99dB
Directivity	• 90° x 40° above 1.5kHz	• Omni-directional
Weight	• 27Kg	• 36Kg
Option		• 8 ohm version of B1 available

## B1

## ML15

Description	• A compact enclosure combining a 15" cone driver with a Neodymium 1.4" compression driver.	• A compact, high power, bass enclosure with 18" cone driver.
Frequency Response	• 50Hz - 20kHz	• 45 Hz – 100 Hz
Power handling/Impedance	• 500w (8 ohms)	• 1200w (8ohm)
Sensitivity*	• 99dB	• 98dB
Directivity	• 90° x 40° above 1.2kHz	• Omni-directional
Weight	• 31Kg	• 42Kg

## SB1

**Optional** - 60° x 40° flare rate available.

\* Sensitivity measured at 1 metre with 2.83V, using band limited pink noise.

Please note - ML8 cabinets are boxed in pairs.



To assist the integration of speakers into systems, Logic Systems offers a choice of two digital system controllers. Housed in a 1 unit chassis the DP2140 offers a fully assignable two input four output format, while the DP2160 offers two inputs and six outputs. Both controllers have the option of a network card, and the Podware software enables computer control of both DSP settings and network control. Preset files are available for all Logic Systems products and custom files can quickly be generated to tailor the control to specific venues or projects.

## DP2140 DP2160

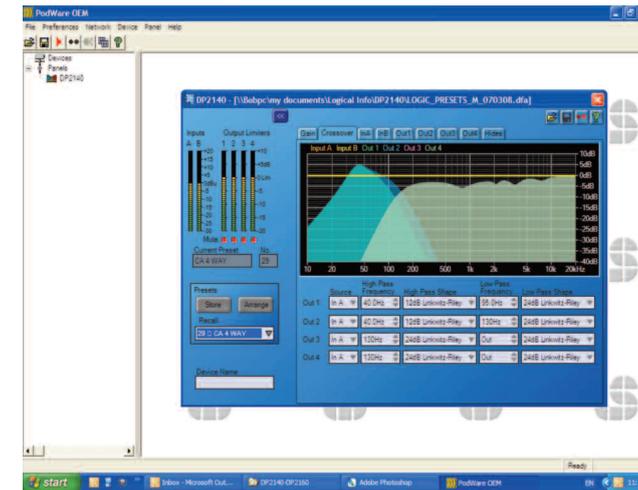


## Technical Specification

Inputs	• 2
Input Impedance	• 10k Ohm Electronically balanced
Maximum Input level	• +20dBu
Outputs	• four (DP2140) or six (DP2160)
Output Impedance	• 100 Ohm, ground balanced
Maximum Output Level	• +202dBu into 600ohm load
Sample Rate	• 96kHz
Bit Depth	• 24 bit
Frequency Response	• 10Hz to 40 kHz
THD	• 0.01%, (+10dBu, 20Hz to 20 kHz)
Dynamic Range	• 112dB (A weighted, 22 kHz bandwidth)
Mains Power	• 85v to 250v AC, 50 / 60Hz
Consumption	• 25watts
Dimensions	• 44mm (H), 482mm (W), 254mm (D)
Weight	• 2.7Kg's net

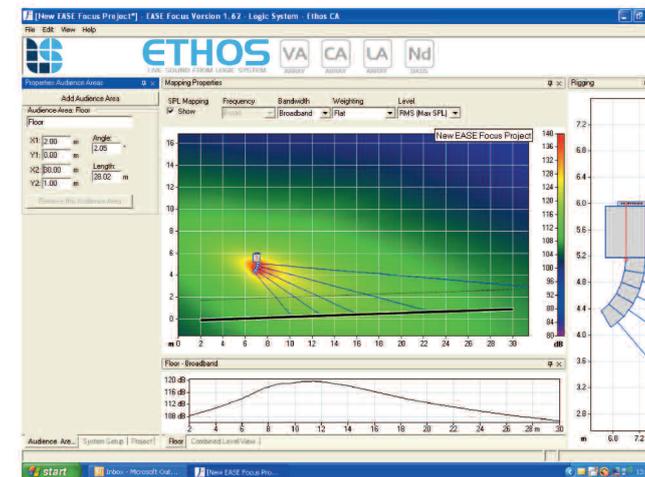
## System Control software

All Logic Systems digital system controllers can be controlled by the Podware software package, which will allow remote access to all controller functions. Controllers fitted with network cards can also be networked via Cat 5 connections and controlled from the one screen. Grouping of controllers is also possible.



## Loudspeaker prediction software

For all users of Ethos Array products, Logic Systems offer the Ease Focus loudspeaker aiming programme. With presets available for Ethos CA, VA and V12, a model of an array drop can be built within the programme allowing predictions for coverage and achievable SPL levels.



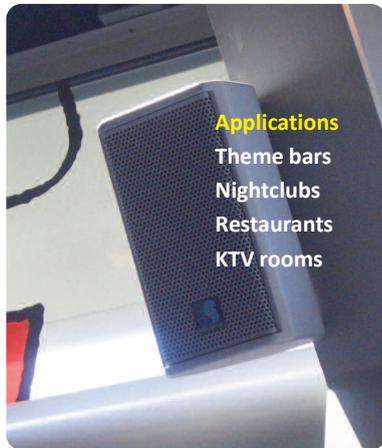


IS7  
IS8  
IS10  
IS12

The IS Series of cabinets is a dedicated installation range aimed at the theme bar and nightclub market. The products are the result of extensive consultation with installation contractors and consultants, and bring a quality of sound and build quality not normally available at this price point, delivering a large sound from a small box.

For extended bass response the IS series cabinets can be integrated with a variety of bass cabinets from the Logic Systems product range. For further details of the available options see pages 21+22.

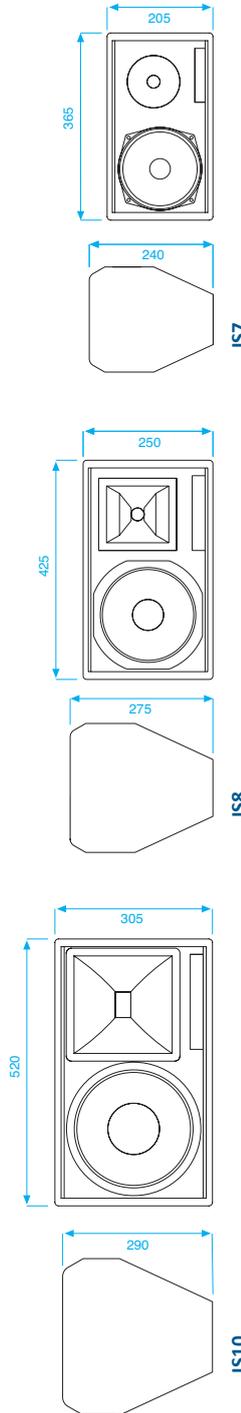
The DP2140/DP2160 digital system controller contain presets for combining IS series cabinets with bass options.



**Colour** – IS Series cabinets are available in black or white as standard colours. As this product is often installed into design led environments the product also benefits from a custom colour option. This can be based on RAL or BS numbers or even Dulux codes.

**Brackets** – All IS series cabinet come with a wide range of mounting options. Cabinets have back, side and top bracket points as standard, they also benefit from insert points to further assist the installer. To enable the cabinets to be fitted in either landscape or portrait mode all HF units in the IS series can be rotated.

**DSP** – DP2140 digital system controller as mentioned above can be used as a method of combining the IS series with bass cabinets from the product range, but it has further facilities that may assist the installer. The unit contains presets that will sonically enhance all IS series product giving a flat and linear frequency response. The built in time delay can also be used to time align different zones within a venue, or set different drive levels and limiting levels. An OEM function also allows parameters to be locked off. To aid convenience the unit can be configured from your laptop via the 'Podware software package.



IS7

Description	• A compact, full range, background cabinet with 6.5" cone driver and metal dome
Frequency Response	• 70Hz- 20kHz
Power handling/Impedance	• 100w (8 ohm)
Sensitivity*	• 94dB
Directivity	• 100° Conical above 2kHz
Weight	• 8Kg

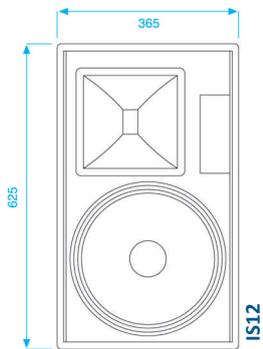
IS8

Description	• A compact, full range, foreground box with 8" cone driver and 1" compression driver
Frequency Response	• 60Hz – 20kHz
Power handling/Impedance	• 200w (8 ohms)
Sensitivity*	• 96dB
Directivity	• 90° x 60° above 2kHz
Weight	• 12Kg

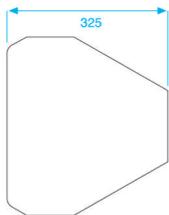
IS10

Description	• A compact, full range, speaker enclosure with 10" cone driver and 1" exit compression driver on CD flare
Frequency Response	• 58Hz – 20kHz
Power handling/Impedance	• 300w (8 ohms)
Sensitivity*	• 96dB
Directivity	• 90° x 60° above 1.5kHz
Weight	• 18Kg

\* Sensitivity measured at 1 metre with 2.83V, using band limited pink noise.

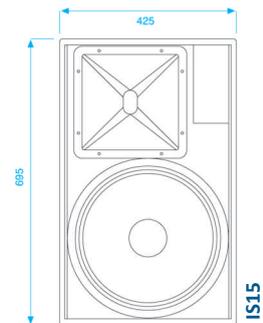


IS12

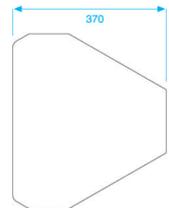


## IS12

Description	<ul style="list-style-type: none"> <li>A compact, passive, installation cabinet featuring a 12" cone driver and a 1" compression driver</li> </ul>
Frequency Response	<ul style="list-style-type: none"> <li>60Hz – 20kHz</li> </ul>
Power handling/Impedance	<ul style="list-style-type: none"> <li>350w (8 ohms)</li> </ul>
Sensitivity*	<ul style="list-style-type: none"> <li>97dB</li> </ul>
Directivity	<ul style="list-style-type: none"> <li>90°h x 60°v above 2kHz</li> </ul>
Weight	<ul style="list-style-type: none"> <li>22Kg</li> </ul>



IS15

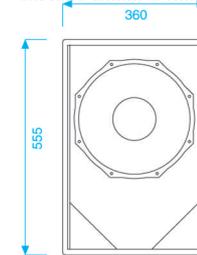


## IS15

Description	<ul style="list-style-type: none"> <li>A compact, passive, installation cabinet featuring a 15" cone driver and a 1.4" compression driver on a CD flare</li> </ul>
Frequency Response	<ul style="list-style-type: none"> <li>55Hz – 20 kHz</li> </ul>
Power handling/Impedance	<ul style="list-style-type: none"> <li>400w (8 ohms)</li> </ul>
Sensitivity	<ul style="list-style-type: none"> <li>98 db</li> </ul>
Directivity	<ul style="list-style-type: none"> <li>90°H x 40°V above 1.5kHz</li> </ul>
Weight	<ul style="list-style-type: none"> <li>23kg</li> </ul>

## Installed BASS options

The choice of bass to integrate with IS series products will be venue dependant and also reflect the required music policy of the operator. As a consequence Logic Systems offers a broad range of options. Within the IS installed bass range there are the four options detailed in the following two pages that fit many users requirements. All four products have the advantage of being able to be installed in either portrait or landscape mode, B120i and B150i also have insert points to enable them to be flown. If the project requires a product with minimised height to fit under seating in the landscape mode then the B.5 and B1 cabinets from the ML Series require consideration. For the discerning client who wants the ultimate bass experience for either a live sound or dance venue then installation versions of the Ethos Mid bass range is the solution.



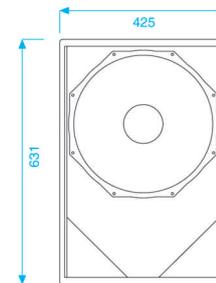
B120i



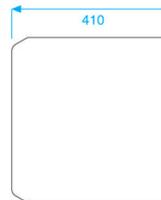
## B120i

Description	<ul style="list-style-type: none"> <li>A compact installation specific bass enclosure featuring a 12" cone driver</li> </ul>
Frequency Response	<ul style="list-style-type: none"> <li>55Hz – 150Hz</li> </ul>
Power handling/Impedance	<ul style="list-style-type: none"> <li>400w (8 ohms)</li> </ul>
Sensitivity*	<ul style="list-style-type: none"> <li>98dB</li> </ul>
Directivity	<ul style="list-style-type: none"> <li>Omni-directional</li> </ul>
Weight	<ul style="list-style-type: none"> <li>22Kg</li> </ul>

## B120i B150i



B150i



## B150i

Description	<ul style="list-style-type: none"> <li>A compact installation specific bass enclosure featuring a 15" cone driver</li> </ul>
Frequency Response	<ul style="list-style-type: none"> <li>45Hz – 150Hz</li> </ul>
Power handling/Impedance	<ul style="list-style-type: none"> <li>500w (4 ohm) (8 ohms option)</li> </ul>
Sensitivity*	<ul style="list-style-type: none"> <li>99dB</li> </ul>
Directivity	<ul style="list-style-type: none"> <li>Omni-directional</li> </ul>
Weight	<ul style="list-style-type: none"> <li>25Kg</li> </ul>



## B300i SB180i

The B300i and SB180i can be used in both portrait or landscape mode. They can also be used as distributed bass or sub bass solutions or blocked together to form larger bass structures. This is particularly easy as they share a common shell size, in this mode the cabinets will couple acoustically and give increased SPL.



### B300i

Description	• A compact installation specific, high power bass enclosure featuring 2 x 15" cone drivers
Frequency Response	• 40Hz – 150Hz
Power handling/Impedance	• Bass: 1000w (4 ohms)
Sensitivity*	• Bass: 105dB
Directivity	• Omni-directional
Weight	• 63Kg

### SB180i

Description	• A compact installation specific, high power sub bass enclosure featuring an 18" cone driver
Frequency Response	• 40Hz – 100Hz
Power handling/Impedance	• 1200w
Sensitivity*	• Sub Bass: 98dB
Directivity	• Omni-directional
Weight	• 48Kg

