



## **History & Innovation**

At the end of 2005, a professional range of high quality loudspeakers was born – LOTUSLINE.

LOTUSLINE has applied three proprietary technologies in three
SIC™ technology in Lotusline SB series
MVC <sup>™</sup> technology in Lotusline MA series SHM <sup>™</sup> collinear waveguide technology in Lotusline LA system
LOTUSLINE acquired its own compiler software EASE Focus, called LA system.
LOTUSLINE applied a new proprietary technology CLS <sup>™</sup> (Coaxial line source) technology.
LOTUSLINE has licensed EASE Focus 2 and applied a new
SSA based cabinets are arrayable asymmetrical elements to be
used unitary or coupled up to full hemispherical perfectly coherent point source.
LOTUSLINE first proposed the concept of spherical waves. This technology was first applied to the SSA series.
LOTUSLINE officially authorized the establishment of the Asia-
Pacific Operations Center in Guangzhou, China. This operations
center works closely with Europe to become a big family.
LOTUSLINE first proposed the concept of precise adjustable
radiation and adaptive adjustment, to fully prepare for the
innovative application of Al in the field of professional acoustics
innovative application of AI in the neid of professional acoustics

LOTUSLINE systems are state of the art innovative products and offer the sound designer, sophisticated but easy to use electro acoustic tools, which are the key to sound.

## Contact & Support

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Forget the system and enjoy the sound !

# Technologies



The key to Sound

#### Coaxial Technology

Classical arrangement of two way loudspeakers uses separate transducers positioned on a common front baffle. In the transition frequency region, due to the difference of path length between the listening point and the two separate sources, spatial frequency answer cannot be homogenous. This problem is particularly sensitive for short field listening such as stage monitoring and small venues.

By superposing both of the two sources, coaxial technology eliminates the problem and creates a perfect homogenous acoustic field on all the speaker coverage as well horizontally as vertically.

The advantages of the coaxial approach include: single point source radiation, total wavefront coherency at all frequencies and superimposed LF/HF dispersion characteristics that are free of polar lobbing effects typical of traditional horn and woofer combinations. The net result is natural, studio monitor level sound quality that is ideal for proximity use.

Lotusline MA & MQ series include two different coaxial arrangements.

The first one uses the main driver cone as horn load for the HF driver.

This arrangement offer the largest possible conical coherent coverage and is used in MA8v<sub>2</sub>, MA10v<sub>2</sub>, MA12v<sub>2</sub> and MA15v<sub>2</sub>.

The second one uses a separate horn for the HF driver.

This arrangement offers smaller aperture angles and higher lomid efficiency by loading the main cone in its throat region. We call it "active" horn loading.

This arrangement is used in MQ60.

#### Line Source Technology

All line arrays are not line sources ! What's the difference ?

A true line source array generate an homogenous acoustic field on all its coverage area, in all its frequency range and is free of interference problems. The net result is the same sound from near field to far field.

The conception of a true line source encounters a lot of technical problems the designer has to solve. The main one is the fusion of all individual sources in only one virtual line source in order to generate on all the frequency range a perfect free of lobbing effects toroidal wavefront. If the solution is evident for low frequencies, this is not the same piece of cake for high ones. The acoustical size of a sound source is close to the wavelength of the generated signal. At 100Hz, the wavelength is 3.4m, so, two speakers distant of 1.2m (half the wavelength) create a perfect coherent source. At 1kHz, the wavelength is only 34cm and these two speakers are no more a coherent source and generate interferences. At 10kHz, the wavelength is 3.4cm and there are no speakers able to realize the performance to be smaller than 1.7cm in the real professional sound reinforcement world.

Many improvements have been made in line source technology, but the physical remain the same.

SHM<sup>™</sup> and SIC<sup>™</sup>, Lotusline proprietary technologies applied in LA series, are fundamental improvements in professional loudspeaker design.

By respecting line source rules and all other acoustic laws, Lotusline LA series are true line source line arrays with a real behaviour close to the mathematical theory.



Standard coaxial arrangement



Coaxial active norn arrangement

# Proprietary Technologies

#### SHM<sup>™</sup> Technology

**SHM**<sup>TM</sup> (Single Horn loaded Midrange) improve dramatically midrange bandwidth and efficiency by avoiding multiple components dispersion and using collinear mid and hi frequency horns layout.

First line array uses mid drivers on plane baffle. Small improvements in efficiency have been made by using compression load midrange directly in the front common waveguide, but creating irregularities in frequency response, and dispersion in characteristics due to the multiplication of components. Actually, coaxial midrange equipped with rear standard HF driver is used in common acoustic chamber imposing a long path to high frequency waves. Lotus Line Array uses the shortest possible design by positioning the toroidal HF drivers in front of the midrange driver.

SHM<sup>™</sup> technology reduces the total harmonic distortion both in high frequencies by minimizing the length of waveguides and in low mid by increasing the radiating surface of the driver.

## CLS<sup>™</sup> Technology

CLS™ (Coaxial Line Source)technology is the definitive solution for two way configuration line source symmetrical array systems.

Standard two way line source arrays using only one low frequency driver are asymmetrical cabinets, CLS<sup>™</sup> based Lotusline CL series are symmetrical and optimized minimum front baffle sized.

CLS<sup>TM</sup> technology offers all advantages of coaxial active horn arrangement applied to line source array systems. It means, minimum front baffle size, perfect symmetry of the baffle and so, perfect symmetry of the coverage.

Lotusline CL series uses **CLS**<sup>TM</sup> technology, increasing the efficiency in low mid region, shaping the wavefront from spherical to ovoid and increasing consequently the maximum crossover frequency in vertical coupling.

## SSA<sup>™</sup> Technology

**SSA™** (Spherical Source Array) technology is Lotusline's answer to an old question: How to build a high SPL, compact and configurable, true point source system?

SSA<sup>™</sup> cabinets are mathematically equivalent to a portion of a spherical segment whose acoustic centre at the centre of the mother sphere. In more simple words, SSA<sup>™</sup> cabinets are like pieces of orange, they can be used individually and can also rebuild a complete fruit. SSA<sup>™</sup> cabinets are perfectly arrayable without audible interferences, even in very high frequencies.

Each cabinet can be used unitary for covering small areas or coupled with other SSA<sup>TM</sup> cabinets for larger ones.

### MVC<sup>™</sup> Technology

**MVC**<sup>TM</sup> (Multi Vent Convection) technology, increase the power handling capacity of vented loudspeaker by combining acoustical and cooling functions of vents. Multiple curved vents are placed around the main loudspeaker offering a natural air convection flow lowering the temperature of the voice coil in any working position. **MVC**<sup>TM</sup> equipped speakers are much more thermal breakdown proofed than standard ones, and decrease thermal compression by lowering nominal temperature of the moving coil.

The MVC<sup>™</sup> (multi vent convection) technology, allows the Lotusline CL, MQ and MA series to handle nominal full power capacity in any working position.

### SIC<sup>™</sup> Technology

SIC<sup>™</sup> (Single Interactive Chamber) technology, increases bandwidth and efficiency while reducing total volume of vented bass loudspeaker by combining rear and front load in the same volume. Because rear and front load do not work in the same frequency region, it is possible, with a special calculation layout, to fuse both functions in only one. In practice, SIC<sup>™</sup> technology, by using this new physical approach, virtually suppresses one of the two volumes and dramatically reduce the total size of vent loaded subwoofer.

Further advantage of SIC<sup>™</sup> technology is the better cooling of the loudspeakers due to the exceptionally large size of the vent aperture.

#### Lotusline Technologies

#### SIC<sup>™</sup>technology used in SB Series

Best versus frequency-extension to size ratio Hi efficiency Better cooling

MVC<sup>™</sup> and Coaxial technologies used in MQ and MA Series Point source, regular spatial response, perfect acoustic field Better cooling, lo thermal compression in any working position

#### CLS<sup>™</sup>, MVC<sup>™</sup> and Coaxial technologies used in CL Series True line source system Point source regular spatial response, perfect acousting

Point source, regular spatial response, perfect acoustic field Better cooling, lo thermal compression in any working position SSA<sup>™</sup>, MVC<sup>™</sup> technologies used in SSA Series Spherical source array system Point source arrangement Better cooling, lo thermal compression in any working position

SHM<sup>™</sup>and line source technologies used in LA Series True line source system Low distortion at hi SPL Perfectly coherent arrays controlling vertical opening







The key to Sound

## Line Source system

# LA series



The key to Sound

#### LA 10v2 & LA 20v2

Lotusline LA series are based on the latest electro acoustics developments and include SHM<sup>™</sup> and SIC<sup>™</sup> proprietary technologies.

SHM<sup>™</sup> (Single Horn loaded Midrange) improve dramatically midrange bandwidth and efficiency by avoiding multiple components dispersion and using collinear mid and hi frequency horns layout.

First line array uses mid drivers on plane baffle. Small improvements in efficiency have been made by using compression load midrange directly in the front common waveguide, but creating irregularities in frequency response, and dispersion in characteristics due to the multiplication of components. Actually, coaxial midrange equipped with rear standard HF driver is used in common acoustic chamber imposing a long path to high frequency waves. Lotusline Line Array uses the shortest possible design by positioning the toroidal HF drivers in front of the midrange driver.

SHM<sup>™</sup> technology reduces the total harmonic distortion both in high frequencies by minimizing the length of waveguides and in low mid by increasing the radiating surface of the driver.

Lotusline Line Array are high efficient systems, thanks to the entirely horn loaded design, and the use of the best modern European custom build transducers. Combined with the true line source design of Lotusline Line Array, high sound pressure levels can be obtained in far field with the best tonal balance on the whole system coverage.

The Lotusline LA series three points hanging compression mechanism also reduces needed floor surface and saves installation time due to the straight vertical array configuration used during setup. The final curvature is quickly and easily obtained when the system is on its working position. By releasing the compression on the rear point, Lotusline Line Array returns to the straight vertical position in a few seconds and is ready for a fast disassembly.

Due to its exceptional sound quality, its power capacity, and its fast and easy rigging, Lotusline Line Array series are intended for daily use in touring companies, as well as for permanent installation in theatres, congress centres or arenas.

#### Fly rigging accessories





LAFM03



#### Easefocus





## LA Series



Lotusline LA10v2 are line array modules designed for variable curvature vertical tangent array, including SIC™ technology and SHM™ proprietary technology, able to build long throw line sources system .

The LA10v2 is an active three-way loudspeaker system. The low section comprises two 10 inch drivers loaded by a 4th order SIC™ bass reflex enclosure. The mid section comprises one 8 inch driver, the high section includes two 1.75" (44.4mm coil) neodymium high frequency compression drivers mounted on the SHM™ waveguide which provides a 60° horizontal coverage and 0° to 10° vertical coverage,

The 60° horizontal coverage and 0° to 10° vertical coverage offer the sound designer the best versatility for any precisely designed installation. Lotusline LA10v2 are completely compatible with Lotusline subwoofers series and can be stacked directly on anyone.

Due to its exceptional sound quality, its power capacity, and its fast and easy rigging, Lotusline Line Array series are intended for daily use in touring companies, as well as for permanent installation in theatres, congress centres or arenas.

## Specifications

FEATURES	Low Section	Mid Section	High Section
Frequency range with processor (±3dB)	65 Hz to 400 Hz	200 Hz to 1500 Hz	1200 Hz to 19 kHz
Sensitivity@1W/1m, f>80Hz1	105 dB SPL	106 dB SPL	113 dB SPL
Maximum continuous level at 1m <sup>2</sup>	132 dB SPL	129 dB SPL	135 dB SPL
Peak level at 1m, f>65Hz	138 dB SPL	135 dB SPL	141 dB SPL
Nominal impedance	2 x 16 Ohms	16 Ohms	32 Ohms
Nominal horizontal coverage@-6dB <sup>3</sup>		60°	
Unit nominal vertical coverage@-6dB <sup>3</sup>	0° to 10°(0.5°,1°,1.7°,	2.6°,4.2°,6.7°,8.5°,10°,i	nter-enclosure angles)
COMPONENTS			
Transducers	2 x 10" weatherproof loudspeakers	1 x 8" weatherproof loudspeakers	2 x toroidal compression drivers
Coil diameter	77 mm	45 mm	44.4 mm
Type of load	SIC <sup>™</sup> Bass reflex	SHM™ horn	SHM™ horn
Power (AES/ Peak )	500 W / 2000 W	300 W / 1200 W	160 W / 900W
<b>CONSTRUCTION &amp; CHARACTERISTICS</b>			
Cabinet	18mm birch plywood wi	th internal braces	
Crossover	Factory presets		
Connectors	50cm link cable, 1 x Spe	eakon NL8MP	
Handles	4 wood integrated hand	les	
Rigging	Proprietary 3 points compression system		
Dimensions (H x W x D)	331 x 1000 x 738 mm		
Net unit weight	58 kg 128 lbs		
Gross weight, packed	62 kg 137 lbs		







Side



Тор

1. Sensitivity is the average SPL measured over the components rated bandwidth. LA series sensitivity are given for a minimum line of four units. 2. Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth

3. Directivity is averaged over the frequency range. 4. The SPEAKON connectors are wired as follow : LF1: hot pin 1+, cold pin 1-, LF2: hot pin 2+, cold pin 2-, MF: hot pin 3+, cold pin 3-, HF: hot pin 4+, cold pin 4-.

## LA Series





Lotusline LA20v2 are line array modules designed for variable curvature vertical tangent array as well as horizontal constant curvature horizontal tangent array, including SIC™ technology and SHM™ proprietary technology.

The LA20v₂ is an active three-way loudspeaker system. The low section comprises two 10 inch driver loaded by a 4th order SIC<sup>™</sup> bass reflex enclosure, The mid section comprises one 8 inch driver, the high section includes two 1.75"(44.4mm) coil, neodymium high compression drivers mounted on the SHM<sup>™</sup> waveguide which provides a 100° horizontal coverage and 10° to 20° vertical coverage,

Designed to build medium throw line sources, the 100°horizontal coverage and 10° to 20° vertical coverage of LA20v2 perfectly complement LA10v2 line sources for downfill.

Composite arrangements of LA10v2 and LA20v2 are the best solution to cover any large audience area homogeneously. Lotusline LA20v2 are completely compatible with Lotusline subwoofers series and can be stacked directly on anyone.

#### Specifications 1000 FEATURES **High Section** Low Section Mid Section Frequency range with processor (±3dB) 65 Hz to 400 Hz 200 Hz to 1500 Hz 1200 Hz to 19 kHz 387 Sensitivity@1W/1m, f>80Hz1 105 dB SPL 106 dB SPL 111 dB SPL Maximum continuous level at 1m<sup>2</sup> 132 dB SPL 129 dB SPL 133 dB SPL Front 138 dB SPL Peak level at 1m, f>65Hz 138 dB SPL 135 dB SPL Nominal impedance 2 x 16 Ohms 16 Ohms 32 Ohms 736 Nominal horizontal coverage@-6dB3 100° Unit nominal vertical coverage@-6dB3 10° to 20°(9°,11°,15°,20°,inter-enclosure angles) COMPONENTS 354 2 x 10" weatherproof 1 x 8" weatherproof 2 x toroidal 10 Transducers loudspeakers loudspeakers compression drivers Coil diameter 77 mm 45 mm 44.4 mm Side Type of load SIC<sup>™</sup> Bass reflex SHM<sup>™</sup> horn SHM™ horn Power (AES/Peak) 500 W / 2000 W 300 W / 1200 W 160 W / 900W **CONSTRUCTION & CHARACTERISTICS** 18mm birch plywood with internal braces Cabinet Factory presets Crossover Connectors 50cm link cable, 1 x Speakon NL8MP 4 wood integrated handles Handles Proprietary 3 points compression system Riaaina Dimensions (H x W x D) 387 x 1000 x 736 mm Top Net unit weight 58 kg 128 lbs Gross weight, packed 62 kg 137 lbs

1. Sensitivity is the average SPL measured over the components rated bandwidth. LA series sensitivity are given for a minimum line of four units

2. Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth

3. Directivity is averaged over the frequency range. 4. The SPEAKON connectors are wired as follow : LF1: hot pin 1+, cold pin 1-, LF2: hot pin 2+, cold pin 2-, MF: hot pin 3+, cold pin 3-, HF: hot pin 4+, cold pin 4-.

# Line Source system

# CL series

#### CL 16 / CL 3040 / CL 40 / CL 40T

Lotusline CL series are compact but high power systems, they include MVC<sup>™</sup> technology and the new CLS<sup>™</sup> Lotusline proprietary technology.

CLS<sup>™</sup> technology, Coaxial Line Source is the definitive solution for two way configuration line source symmetrical array systems. Standard two way line source arrays using only one low frequency driver are asymmetrical cabinets, CLS<sup>™</sup> based Lotusline CL series are symmetrical and optimized minimum front baffle sized.

CLS<sup>™</sup> technology offers all advantages of coaxial active horn arrangement applied to line source array systems. It means, minimum front baffle size, perfect symmetry of the baffle and so, perfect symmetry of the coverage.

Lotusline CL series uses CLS<sup>™</sup> technology, increasing the efficiency in low mid region, shaping the wavefront from spherical to ovoid and increasing consequently the maximum crossover frequency in vertical coupling.

CLS<sup>™</sup> technology is a major improvement for two way line source array design.

Lotusline CL series are ideal for fixed installation. They can be used one by one in distributed configuration as well as coupled up to four depending on the coverage angle needed. The integrated rigging system allows vertical and horizontal coupling. A minimum quantity of cabinets is used to cover large areas in mid throw installations like; Central cluster for theater and side systems for music and spatial effects.

Main FOH for stage in clubs, side fills and distributed PA.

#### Products line



CL I6 Compact high-power coaxial line source array element

#### Fly rigging accessories







CL 3040 High-power coaxial line source array cabinet





CL 40 / CL 40T High-power coaxial line source array cabinet









Lotusline CL16 is a compact two way coaxial line source system, include MVC<sup>™</sup> technology and the CL5<sup>™</sup> Lotusline proprietary technology.

The CL16 is an active two-way loudspeaker system. The low-mid section comprises a 10 inch coaxial driver loaded by a 4th order MVC<sup>™</sup> bass reflex enclosure. The high section includes a 1 inch throat (1.75" voice coil) high frequency compression driver mounted on **CLS**<sup>™</sup> waveguide that provides an 100° horizontal coverage and 0° to 16° vertical coverage.

The CL16 is designed for fixed installation and touring sound. Can be used one by one in distributed configuration as well as coupled up to twenty four depending on the coverage angle needed.

The integrated rigging system allows vertical and horizontal coupling.

A minimum quantity of cabinets is used to cover large areas in mid throw installations like: Performing arts centers, theatres, churches and touring sound reinforcement for mid-sized venues.

#### Specifications

FEATURES	Low Section	High Section
Frequency range with processor (±3dB)	60 Hz to 1100 Hz	1100 Hz to 20 kHz
Sensitivity@1W/1m, f>80Hz1	98 dB SPL	110 dB SPL
Maximum continuous level at 1m <sup>2</sup>	123 dB SPL	129 dB SPL
Peak level at 1m, f>65Hz	129 dB SPL	133 dB SPL
Nominal impedance	8 Ohms	16 Ohms
Nominal horizontal coverage@-6dB <sup>3</sup>		100°
Unit nominal vertical coverage@-6dB <sup>3</sup>	0° to 16°(0.5°,1°,2°,3°,4°,6°,8°,1	0°,12°,14°,16°,inter-enclosure angles)
COMPONENTS		
Transducers	1 x 10" weatherproof loudspeakers	1 x 1" throat compression driver coaxially mounted
Coil diameter	75 mm	45 mm
Type of load	MVC™ Bass reflex	Arrayable horn
Power ( AES/ Peak )	300 W / 9000 W	80 W / 200W
<b>CONSTRUCTION &amp; CHARACTERISTICS</b>		
Cabinet	18mm birch plywood with interna	al braces
Crossover	Factory presets	
Connectors <sup>₄</sup>	35cm link cable, 1 x Speakon NL	4MP
Handles	4 wood integrated handles	
Rigging	Proprietary 3 points flying syst	tem
Dimensions (H x W x D)	320 x 448 x 510 mm	
Net unit weight	23.6 kg 51.9 lbs	
Gross weight, packed	27.2 kg 59.8 lbs	

Sensitivity is the average SPL measured over the components rated bandwidth.
 Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth

Directivity is averaged over the frequency range.
 The SPEAKON connectors are wired as follow: LF: hot pin 1+, cold pin 1-, HF: hot pin 2+, cold pin 2-.





The Lotusline CL3040 is a compact but high power system including MVC<sup>™</sup> technology and the CLS<sup>™</sup> Lotusline proprietary technology.

The CL3040 is an active two-way loudspeaker system. The low-mid section comprises a 15 inch coaxial driver loaded by a 4th order MVC<sup>™</sup> bass reflex enclosure. The high section includes a 1.4 inch throat (3" voice coil) neodymium high frequency compression driver mounted on **CLS**<sup>™</sup> waveguide that provides an 30° to 40° horizontal coverage and 90° vertical coverage.

The CL3040 is a high power two way coaxial line source system, designed for fixed installation. Can be used one by one in distributed configuration as well as coupled up to four depending on the coverage angle needed. The integrated rigging system allows vertical and horizontal coupling.

A minimum quantity of cabinets is used to cover large areas in mid throw installations like: Central cluster for concert halls, theater and side systems for music and spatial effects. Main FOH for stage in clubs, side fills and distributed PA.

Specifications		
CEATINDES	Low Section	High Section
	60 HZ to 1100 HZ	1100 Hz to 20 kHz
Sensitivity@1W/1m, t>80Hz	100 dB SPL	112 dB SPL
Maximum continuous level at 1m <sup>2</sup>	127 dB SPL	132 dB SPL
Peak level at 1m, f>65Hz	133 dB SPL	136 dB SPL
Nominal impedance	8 Ohms	16 Ohms
Nominal horizontal coverage@-6dB <sup>3</sup>		90°
Unit nominal vertical coverage@-6dB <sup>3</sup>	30° to 40°(30°,35°,40	)°,inter-enclosure angles)
COMPONENTS		
Transducers	1 x 15" weatherproof loudspeakers	1 x 1. 4" throat compression driver coaxially mounted
Coil diameter	75 mm	75 mm
Type of load	MVC <sup>™</sup> Bass reflex	Arrayable horn
Power (AES/ Peak )	500 W / 1500 W	120 W / 300W
<b>CONSTRUCTION &amp; CHARACTERISTICS</b>		
Cabinet	18mm birch plywood with internal	braces
Crossover	Factory presets	
Connectors	2 x Speakon NL4MP	
Handles	2 x Aluminium integrated handles	· · · · · · · · · · · · · · · · · · ·
Rigging	Optional CL3040FM01, CL3040F	M02. CL3040FM03
Dimensions (H x W x D)	750 x 507 x 576 mm	
Net unit weight	41.5 kg 91.3 lbs	
Cross weight peaked	45 5 kg 100 1 lba	
Gross weight, packed	40.0 Kg 100.1 IDS	

Sensitivity is the average SPL measured over the components rated bandwidth.
 Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth
 Directivity is averaged over the frequency range.
 The SPEAKON connectors are wired as follow: LF: hot pin 1+, cold pin 1-, HF: hot pin 2+, cold pin 2-.





The Lotusline CL40 is a compact but high power system including **MVC**<sup>™</sup> technology and the **CLS**<sup>™</sup> Lotusline proprietary technology.

The CL40 is an active two-way loudspeaker system. The low-mid section comprises a 15 inch coaxial driver loaded by a 4th order **MVC**<sup>™</sup> bass reflex enclosure. The high section includes a 1.4 inch throat (3" voice coil) neodymium high frequency compression driver mounted on **CLS**<sup>™</sup> waveguide that provides an 40° horizontal coverage and 90° vertical coverage.

The CL40 is a high power two way coaxial line source system, designed for fixed installation. Can be used one by one in distributed configuration as well as coupled up to four depending on the coverage angle needed. The integrated rigging system allows vertical and horizontal coupling.

A minimum quantity of cabinets is used to cover large areas in mid throw installations like: Central cluster for concert halls, theater and side systems for music and spatial effects. Main FOH for stage in clubs, side fills and distributed PA.

Specifications		
FEATURES	Low Section	High Section
Frequency range with processor (±3dB)	50 Hz to 1100 Hz	1100 Hz to 20 kHz
Sensitivity@1W/1m, f>80Hz1	99 dB SPL	107 dB SPL
Maximum continuous level at 1m <sup>2</sup>	127 dB SPL	127 dB SPL
Peak level at 1m, f>65Hz	133 dB SPL	134 dB SPL
Nominal impedance	8 Ohms	16 Ohms
Nominal horizontal coverage@-6dB³		90°
Jnit nominal vertical coverage@-6dB³		40°
COMPONENTS		
Transducers	1 x 15" weatherproof loudspeakers	1 x 1. 4" throat compression driver coaxially mounted
Coil diameter	75 mm	75 mm
Type of load	MVC <sup>™</sup> Bass reflex	Arrayable horn
Power ( AES/ Peak )	500 W / 1500 W	100 W / 250W
CONSTRUCTION & CHARACTERISTICS		
Cabinet	18mm birch plywood with interna	braces
Crossover	Factory presets	
Connectors	2 x Speakon NL4MP	
Handles	2 x Aluminium integrated handles	5
Rigging	Optional CL40FM01, CL40FM02	CL40FM03, CL40FM04
Dimensions (H x W x D)	750 x 535 x 576 mm	
Net unit weight	38.2 kg 80.1 lbs	
Gross weight, packed	42.2 kg 92.8 lbs	

Sensitivity is the average SPL measured over the components rated bandwidth.
 Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth

Directivity is averaged over the frequency range.
 The SPEAKON connectors are wired as follow : LF: hot pin 1+, cold pin 1-, HF: hot pin 2+, cold pin 2-.





The Lotusline CL40T loudspeaker cabinets provide a versatile system designed for high quality coupled or distributed sound reinforcement in high performance fixed installation.

The CL40T is a compact but high power system including MVC<sup>™</sup> technology and the CLS<sup>™</sup>Lotusline proprietary technology.

The CL40T is a two-way loudspeaker system with integrated crossover and 100V transformer. The low-mid section comprises a 15 inch coaxial driver loaded by a 4th order MVC<sup>™</sup> bass reflex enclosure. The high section includes a 1.4 inch throat (3" voice coil) neodymium high frequency compression driver mounted on **CLS<sup>™</sup>** waveguide that provides an 40° horizontal coverage and 90° vertical coverage. The Lotusline CL40T crossovers are build with air core inductors, MKP capacitors and wirewound resistors.

Lotusline CL40T is a ideal for fixed installation. Can be used one by one in distributed configuration as well as coupled up to four depending on the coverage angle needed. The integrated rigging system allows vertical and horizontal coupling.

A minimum quantity of cabinets is used to cover large areas in mid throw installations like; With IP54 classification, 700V insulation, 100V transformer, two power handling, the CL40T is particularly suitable for deported security installation in large open public spaces.

#### Specifications

Specifications			535
FEATUREO		High Section	
FEATURES	Low Section	High Section	
Frequency range with processor (±3dB)	60 Hz to 1100 Hz	1100 Hz to 20 kHz	
Sensitivity@1W/1m, f>80Hz1	99 dB SPL	104 dB SPL	
Maximum continuous level at 1m <sup>2</sup>	127	dB SPL	
Peak level at 1m, f>65Hz	132	dB SPL	<b>a</b>
Nominal horizontal coverage@-6dB <sup>3</sup>		90°	
Unit nominal vertical coverage@-6dB <sup>3</sup>		40°	Fror
Nominal input	100V, 1	25W - 250W	
COMPONENTS	8 Oh	ms 600W	[   •
Transducers	1 x 15" weatherproof loudspeakers	1 x 1. 4" throat compression driver coaxially mounted	750
Coil diameter	75 mm	75 mm	╷║╙
Type of load	MVC™ Bass reflex	Arrayable horn	
Power (AES/ Peak )	600 \	W / 1500W	
<b>CONSTRUCTION &amp; CHARACTERISTICS</b>			Side
Cabinet	18mm birch plywood with intern	nal braces	
Crossover	Factory presets		/
Connectors	2 x Waterproof cable glands, 70	00V insulated terminal	/***
Handles	2 x Aluminium integrated handl	es	576
Classification	Ip54		
Rigging	Optional CL40FM01, CL40FM0	02, CL40FM03, CL40FM04	
Dimensions (H x W x D)	750 x 535 x 576 mm		<u>↓_</u>
Net unit weight	40 kg 88 lbs		Тор
Gross weight, packed	43 kg 94.6 lbs		

1. Sensitivity is the average SPL measured over the components rated bandwidth. 2. Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth 3. Directivity is averaged over the frequency range.



# SSA Series



Lotusline SS15 loudspeaker system are based on the latest electro acoustics developments and include the new SSA<sup>™</sup> proprietary technology.

The SS15 is an active two-way loudspeaker cabinet. The low-mid section comprises a 15 inch high power driver loaded by a MVC<sup>™</sup> bass reflex enclosure. The high section includes a 1.4 inch throat (3" voice coil) neodymium high frequency compression driver mounted on SSA<sup>™</sup> waveguide that provides an 45° horizontal coverage and 60° (+15° up, -45° down) vertical coverage.

The loudspeaker enclosure constructed of 18 mm birch plywood with internal braces remains free of vibration at extreme sound pressure levels. The enclosure have 2 aluminum integrated handles on the sides and include 8 x M6 integrated nuts.

\$\$15 cabinets are great tools offering the sound designer a wide range of new possibilities as well for shadow zone which cannot be covered by the main system, as for building FOH systems in theatres, clubs, auditoriums, churches and all places where long throw is not a mandatory parameter but, a constant tonal balance with distance is.

SS15 cabinets eliminate the need of extra downfill cabinets and can cover places with front stalls and balcony. SS15 cabinets are designed for constant curvature vertical tangent array as well as horizontal constant curvature horizontal tangent array. Like other Lotusline products, SS15 cabinets are equipped with all necessary points for an easy and secure rigging using proprietary accessories.

#### Specifications

FEATURES Low Section High Section
Frequency range with processor (±3dB) 50 Hz to 700 Hz 700 Hz to 20 kHz
Sensitivity@1W/1m, f>80Hz1         98 dB SPL         106 dB SPL
Maximum continuous level at 1m <sup>2</sup> 125 dB SPL 126 dB SPL
Peak level at 1m, f>65Hz 131 dB SPL 131 dB SPL
Nominal impedance 8 Ohms 16 Ohms
Nominal horizontal coverage@-6dB <sup>3</sup> 45°
Unit nominal vertical coverage@-6dB <sup>3</sup> 60°(+15°up, -45°down)
COMPONENTS
Transducers     1 x 15" weatherproof     1 x 1.4" throat compression       loudspeakers     driver coaxially mounted
Coil diameter 77 mm 77 mm
Type of load MVC™ Bass reflex SSA™ horn
Power (AES/ Peak ) 500 W / 2000 W 100 W / 300W
CONSTRUCTION & CHARACTERISTICS
Cabinet 18mm birch plywood with internal braces
Crossover Factory presets
Connectors 2 x Speakon NL4MP
Handles 2 x Aluminium integrated handles
Rigging 8 x 6mm integrated nuts, optional SS15FM01, SS15FM02
Dimensions (H x W x D) 870 x 588 x 533 mm
Net unit weight 40 kg 88 lbs
Gross weight, packed 45 kg 99 lbs

Sensitivity is the average SPL measured over the components rated bandwidth.
 Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth

Directivity is averaged over the frequency range.
 The SPEAKON connectors are wired as follow : LF: hot pin 1+, cold pin 1-, HF: hot pin 2+, cold pin 2-.

## Point Source system



# MA series

#### MA 15v<sub>2</sub> / MA 12v<sub>2</sub> / MA 10v<sub>2</sub> / MA 8v<sub>2</sub>

The Lotusline MA series loudspeaker enclosures provide a versatile system that is designed for high quality distributed sound reinforcement or high performance monitoring. Using true point source coaxial technology, the Lotusline MA series features advanced components in a flexible, multipurpose format that is suitable for either touring or fixed installation.

The MA series are passive two-way loudspeaker. The low/mid section comprises a bass driver loaded in a 4thorder MVC<sup>™</sup> enclosure, The hi section includes a High Frequency compression driver assembled in a coaxial configuration along with the full low section loudspeaker providing a conical opening.

Further advantages of the coaxial approach include: single point source radiation, total wavefront coherency at all frequencies and superimposed LF/HF dispersion characteristics that are free of polar lobbing effects typical of traditional horn and woofer combinations. The net result is natural, studio monitor level sound quality that is ideal for proximity use.

The MA series provides a very coherent acoustic field with 90°-120° conical coverage.

The MVC<sup>™</sup>(Multi Vent Convection) technology, allows the Lotusline MA series to handle nominal full power capacity in any working position.

The enclosure comprises two angles side, 45° and 60° for stage monitor application and include two 35mm built in stand supports as well as four wood integrated handles and 5 cargo standard rigging points.

The Lotusline MA series crossovers are build with air core inductors, MKP capacitors and wirewound resistors.

The Lotusline MA series apply full power handling with low thermal compression.

#### Product line / Fly rigging accessories



## MQ Series





The Lotusline MQ60 loudspeaker cabinets provide a versatile system designed for high quality distributed sound reinforcement in high performance fixed installation or stage monitoring. Using true point source coaxial technology and increasing directivity design, the MQ60 offers a full coverage free of lobbing effects inside and outside the coverage angles.

The coaxial technology combined with increasing controlled directivity design used in the MQ60 is the best solution to recreate true point source with natural sounding behaviour. The MQ60 is the perfect answer to obtain high intelligibility and clarity in semi reverberant acoustic environments.

The MQ60 is a two-way loudspeaker system with integrated crossover. The low-mid section comprises a 15 inch bass driver loaded by a 4th order MVC<sup>™</sup> bass reflex enclosure, The high section includes a 1.4 inch throat (3" voice coil) neodymium high frequency compression driver assembled in a coaxial configuration together with the low section loudspeaker providing a conical opening. The MQ60 provides a coherent acoustic field with 60° conical average coverage.

Two MQ60 can be used coupled to increase the SPL and coverage while minimizing destructives interferences. The MQ60 is meant as a main F.O.H and distributed sound system in big rooms like convention centres, theatres, clubs and multipurpose venues or corporate events.

#### Specifications

			485
FEATURES	Low Section	High Section	 
Frequency range with processor (±3dB)	55 Hz to 1100 Hz	1100 Hz to 20 kHz	
Sensitivity@1W/1m, f>80Hz1	98 dB SPL	113 dB SPL	u u
Maximum continuous level at 1m <sup>2</sup>	126 dB SPL	130 dB SPL	22
Peak level at 1m, f>65Hz	130 dB SPL	134 dB SPL	
Nominal impedance	8 Ohms	16 Ohms	
Nominal horizontal coverage@-6dB <sup>3</sup>	60°	conical	Front
COMPONENTS			
Transducers	1 x 15" weatherproof loudspeakers	1 x 1. 4" throat compression driver coaxially mounted	566 — 566 — • • •
Coil diameter	75 mm	75 mm	nn
Type of load	MVC™ Bass reflex	Conical Horn	
Power (AES/ Peak )	600 W / 1500 W	100 W / 250W	
<b>CONSTRUCTION &amp; CHARACTERISTICS</b>			*** ***
Cabinet	18mm birch plywood with internal	braces	30° -
Crossover	Passive mode: Internal passive n Active model: Factory presets	etwork	Side
Connectors	2 x Speakon NL4MP		485
Handles	2 wood integrated handles		
Rigging	Optional M60FM01, M60FM02, M	M60FM03	
Dimensions (H x W x D)	556 x 485 x 566 mm		
Net unit weight	27.5 kg 60.5 lbs		
Gross weight, packed	30.5 kg 67.1 lbs		
			Тор

Sensitivity is the average SPL measured over the components rated bandwidth.
 Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth
 Directivity is averaged over the frequency range.
 The SPEAKON connectors are wired as follow: LF: hot pin 1+, cold pin 1-, HF: hot pin 2+, cold pin 2-.



- 415

60

Тор



The Lotusline MA15v2 loudspeaker enclosures provide a versatile system that is designed for high quality distributed sound reinforcement or high performance monitoring. Using true point source coaxial technology, the Lotusline MA series features advanced components in a flexible, multipurpose format that is suitable for either touring or fixed installation.

The MA15v2 is a passive two-way loudspeaker. The low/mid section comprises a 15 inch bass driver loaded in a 4th order MVC<sup>™</sup> enclosure, The hi section includes a 1.4 inch high frequency compression driver assembled in a coaxial configuration along with the full low section loudspeaker providing a conical opening.

The MA15v2 provides a very coherent acoustic field with 90° conical coverage.

As a main F.O.H the MA15v2 is meant for vocal applications, stage monitoring or distributed sound. Combined with Lotusline subwoofers, the MA15v2 allows to create compact and powerful systems suitable for all indoor or outdoor configuration.

The MA15v2 is also ideal for distributed sound reinforcement and can be used in medium power front-of-house (FOH) applications for theatres, clubs, multi-purpose venues or corporate events.

#### Specifications

FEATURES	Low Section	High Section		
Frequency range with processor (±3dB)	55Hz to 1100 Hz	1100 Hz to 20 kHz	680	
Sensitivity@1W/1m, f>80Hz1	100	dB SPL		
Maximum continuous level at 1m <sup>2</sup>	127	dBSPL		
Peak level at 1m, f>65Hz	133	dB SPL		4
Nominal impedance	8	Ohms		Front
Nominal horizontal coverage@-6dB³	90°	conical		
COMPONENTS				397 -
Transducers	1 x 15" weatherproof loudspeaker	1 x 1.4" throat compression driver coaxially mounted		
Coil diameter	75 mm	45 mm		
Type of load	MVC <sup>™</sup> Bass reflex	Conical Horn		
Power (AES/ Peak )	500 V	V / 2000 W		
<b>CONSTRUCTION &amp; CHARACTERISTICS</b>				
Cabinet	18mm birch plywood with inter	nal braces		
Crossover	Internal passive network			Side
Connectors <sup>4</sup>	4 x Speakon NL4MP			
Handles	4 wood integrated handles		+,	
Rigging	4 inserts for Omnimount 60 set	ries, 5 standard cargo points	† /	
Dimensions (H x W x D)	680 x 452 x 397 mm		412	രി
Net unit weight	31.5 kg 69.4 lbs			\ <b>v</b> /
Gross weight, packed	34.6 kg 76.3 lbs		+	<u> </u>

. Sensitivity is the average SPL measured over the components rated bandwidth

Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth
 Directivity is averaged over the 600Hz-12 kHz range.
 The SPEAKON connectors are wired, hot : pin 2+, cold : pin 2-.





The Lotusline MA12v2 loudspeaker enclosures provide a versatile system that is designed for high quality distributed sound reinforcement or high performance monitoring. Using true point source coaxial technology, the Lotusline MA series features advanced components in a flexible, multipurpose format that is suitable for either touring or fixed installation.

The MA12v2 is a passive two-way loudspeaker. The low/mid section comprises a 12 inch bass driver loaded in a 4th order MVC<sup>™</sup> enclosure, The hi section includes a 1 inch high frequency compression driver assembled in a coaxial configuration along with the full low section loudspeaker providing a conical opening.

The MA12v2 provides a very coherent acoustic field with 90° conical coverage.

As a main F.O.H the MA12v2 is meant for vocal applications, stage monitoring or distributed sound. Combined with Lotusline subwoofers, the MA12v2 allows to create compact and powerful systems suitable for all indoor or outdoor configuration.

The MA12v2 is also ideal for distributed sound reinforcement and can be used in medium power front-of-house (FOH) applications for theatres, clubs, multi-purpose venues or corporate events.

#### Specifications

Specifications			<del> =</del>	— 415 —
FEATURES	Low Section	High Section		
Frequency range with processor (±3dB)	60Hz to 1100 Hz	1100 Hz to 20 kHz	600	
Sensitivity@1W/1m, f>80Hz1	98	dB SPL		
Maximum continuous level at 1m <sup>2</sup>	125	dB SPL		æ
Peak level at 1m, f>65Hz	131	dB SPL		
Nominal impedance	8	Ohms		Front
Nominal horizontal coverage@-6dB <sup>3</sup>	90°	conical		
COMPONENTS			1	— 357 —
Transducers	1 x 12" weatherproof loudspeaker	1 x 1" throat compression driver coaxially mounted		
Coil diameter	77 mm	45 mm	<u>:</u>	• •
Type of load	MVC <sup>™</sup> Bass reflex	Conical Horn		. U
Power (AES/ Peak )	400 W	//1500 W	9	n I
CONSTRUCTION & CHARACTERISTICS				
Cabinet	18mm birch plywood with inter	nal braces		0:44
Crossover	Internal passive network			Side
Connectors <sup>₄</sup>	4 x Speakon NL4MP			
Handles	2 wood integrated handles		1	/
Rigging	4 inserts for Omnimount 60 ser	ies, 5 standard cargo points		-
Dimensions (H x W x D)	600 x 415 x 357 mm		377	ු
Net unit weight	22 kg 48.4 lbs			$\setminus$ /
Gross weight, packed	25 kg 55 lbs			

. Sensitivity is the average SPL measured over the components rated bandwidth

Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth
 Directivity is averaged over the 600Hz-12 kHz range.
 The SPEAKON connectors are wired, hot : pin 2+, cold : pin 2-.

Top



MA IOvz Point source system	The key to Sound
	Coaxial technology
	Passive Two way system
	Single point source
×.	Conical 110° waveguide
	Natural sound reproduction
	■ MVC <sup>™</sup> Bass-reflex cooling
N	Full power handling with low thermal compression
8	Suitable for medium-power FOH and side fill applications
	Designed for high performance fixed installation and touring or stage monitoring
	OEM factory presets for approved digital processors

The Lotusline MA10v2 loudspeaker enclosures provide a versatile system that is designed for high guality distributed sound reinforcement or high performance monitoring. Using true point source coaxial technology, the Lotusline MA series features advanced components in a flexible, multipurpose format that is suitable for either touring or fixed installation.

The MA10v2 is a passive two-way loudspeaker. The low/mid section comprises a 10 inch bass driver loaded in a 4th order MVC<sup>™</sup> enclosure, The hi section includes a 1 inch high frequency compression driver assembled in a coaxial configuration along with the full low section loudspeaker providing a conical opening.

The MA10v2 provides a very coherent acoustic field with 110° conical coverage.

Combined with Lotusline subwoofers, the MA10v2 allows to create compact and powerful systems suitable for all indoor or outdoor configuration.

The MA10v2 is also ideal for distributed sound reinforcement and can be used in medium power front-of-house (FOH) applications for theatres, clubs, multi-purpose venues or corporate events.

#### Specifications 415 FEATURES Low Section **High Section** Frequency range with processor (±3dB) 60Hz to 1300 Hz 1300 Hz to 20 kHz 600 Sensitivity@1W/1m, f>80Hz1 98 dB SPL Maximum continuous level at 1m<sup>2</sup> 123 dB SPL ത 129 dB SPL Peak level at 1m, f>65Hz Nominal impedance 8 Ohms Front Nominal horizontal coverage@-6dB3 110° conical 357 COMPONENTS 1 x 10" weatherproof 1 x 1" throat compression Transducers loudspeaker driver coaxially mounted 45 mm Coil diameter 45 mm Type of load MVC<sup>™</sup> Bass reflex Conical Horn Power (AES/Peak) 300 W / 1200 W D **CONSTRUCTION & CHARACTERISTICS** 18mm birch plywood with internal braces Cabinet Side Internal passive network Crossover 4 x Speakon NL4MP Connectors<sup>4</sup> 2 wood integrated handles Handles Rigging 4 inserts for Omnimount 60 series, 5 standard cargo points Dimensions (H x W x D) 377 526 x 346 x 297 mm ා Net unit weight 18.4 kg 40.6 lbs Gross weight, packed 20.5 kg 45.2 lbs Тор

. Sensitivity is the average SPL measured over the components rated bandwidth

Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth
 Directivity is averaged over the 600Hz-12 kHz range.
 The SPEAKON connectors are wired, hot : pin 2+, cold : pin 2-.



MA $8_{V2}$ Point source system	
	<ul> <li>Coaxial technology</li> <li>Passive Two way system</li> <li>Single point source</li> <li>Conical 120° waveguide</li> <li>Natural sound reproduction</li> <li>MVC<sup>™</sup> Bass-reflex cooling</li> <li>Full power handling with low thermal compression</li> <li>Designed for high performance fixed installation and touring or stage monitoring</li> <li>OEM factory presets for approved digital processors</li> </ul>

The Lotusline MA8v2 loudspeaker enclosures provide a versatile system that is designed for high quality distributed sound reinforcement or high performance monitoring. Using true point source coaxial technology, the Lotusline MA series features advanced components in a flexible, multipurpose format that is suitable for either touring or fixed installation.

The MA8v2 is passive two-way loudspeaker . The low/mid section comprises a 8 inch bass drive loaded in a 4th order MVC<sup>™</sup> enclosure, The hi section includes an annular tweeter assembled in a coaxial configuration along with a the low/mid loudspeaker providing a conical opening. The MA8v2 uses provides a very coherent acoustic field with 120° conical coverage.

The MA8v2 is also ideal for distributed sound reinforcement and can be used in A/V, broadcast, theatres, clubs, multi-purpose venues or corporate events.

Specifications		
FEATURES	Low Section	High Section
Frequency range with processor (±3dB)	60Hz to 1800 Hz	1800 Hz to 20 kHz
Sensitivity@1W/1m, f>80Hz1	93 c	IB SPL
Maximum continuous level at 1m <sup>2</sup>	115	dB SPL
Peak level at 1m, f>65Hz	118	dB SPL
Nominal impedance	8 0	Ohms
Nominal horizontal coverage@-6dB <sup>3</sup>	120°	conical
COMPONENTS		
Transducers	1 x 8" weatherproof loudspeaker	1 x dome tweeter coaxially mounted
Coil diameter	45 mm	25 mm
Type of load	MVC <sup>™</sup> Bass reflex	Conical Horn
Power (AES/ Peak )	160 W	//320W
<b>CONSTRUCTION &amp; CHARACTERISTICS</b>		
Cabinet	18mm birch plywood with intern	al braces
Crossover	Internal passive network	
Connectors <sup>4</sup>	4 x Speakon NL4MP	
Handles	2 wood integrated handles	
Rigging	4 inserts for Omnimount 60 seri	es, 5 standard cargo points
Dimensions (H x W x D)	433 x 302 x 260 mm	
Net unit weight	11.6 kg 25.6 lbs	
Gross weight, packed	13.4 kg 29.5 lbs	

1. Sensitivity is the average SPL measured over the components rated bandwidth

Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth
 Directivity is averaged over the 600Hz-12 kHz range.
 The SPEAKON connectors are wired, hot : pin 2+, cold : pin 2-.



# Subwoofer Source system

# SB series

### SB 115 / SB 215S / SB 218S / SB 218PS

Lotusline SB series are based on the latest electro acoustics developments and include SIC<sup>™</sup> proprietary technology.

**SIC<sup>™</sup>** technology, Single Interactive Chamber, increases bandwidth and efficiency while reducing total volume of vented bass loudspeaker by combining rear and front load in the same volume. Because rear and front load do not work in the same frequency region, it is possible, with a special calculation layout, to fuse both functions in only one. In practice, **SIC<sup>™</sup>** technology, by using this new physical approach, virtually suppresses one of the two volumes and dramatically reduce the total size of vent loaded subwoofer. Further advantage of **SIC<sup>™</sup>** technology is the better cooling of the loudspeakers due to the exceptionally large size of the vent aperture.

The loudspeaker enclosure constructed of 18 mm birch plywood with internal braces remains free of vibration at extreme sound pressure levels.

The enclosure have wood integrated handles on the sides and can be fitted with 4 optional castor plates on the back.

#### Products line





SB 115 Subwoofer system	The key to Sound
	<ul> <li>High power subwoofer system</li> <li>High efficiency</li> <li>SIC<sup>™</sup> Technology</li> <li>Full power handling with low thermal compression</li> <li>Suitable for medium-power FOH and another applications</li> <li>Designed for high performance fixed installation and touring</li> <li>OEM factory presets for approved digital processors</li> </ul>

Lotusline SB115 is a subwoofer offering low frequencies reinforcement for medium to high power systems. It uses one 15 inch transducer loaded by Single Interactive Chamber.

This technology offers the advantages of using a small volume for the load of the speaker, high efficiency in the usable bandwidth and perfect control of the excursion of the diaphragm.

The SB115 subwoofer with Single Interactive Chambers have been developed to offer the best versus frequency-extension to size ratio.

The SB115 provides a very dynamic and punchy sound reproduction for the sound effects that are commonly found in electronic music where the whole dynamic capacity of systems is used. This subwoofer offers full flexibility for low frequency reinforcement of the Lotusline speakers and the Line Array systems.

The SB115 is also ideal for Stadiums, arenas, and concert halls, Medium to large theatres, Cinema and nightclubs, multi-purpose venues or corporate events.

#### Specifications

			- 645
FEATURES	Low Section		
Frequency range with processor (±3dB)	40 Hz to 250 Hz	440	
Sensitivity@1W/1m, f>80Hz1	101 dB SPL		
Maximum continuous level at 1m²	128 dB SPL		
Peak level at 1m, f>65Hz	131 dB SPL		
Nominal impedance	8 Ohms		Front
COMPONENTS			
Transducers	1 x 15" weatherproof loudspeakers		
Coil diameter	75 mm		
Type of load	SIC™ Bass reflex	452	
Power (AES/ Peak )	500 W / 1000 W	453	
<b>CONSTRUCTION &amp; CHARACTERISTICS</b>			
Cabinet	18mm birch plywood with internal braces		
Crossover	The Crossover points shall be 80~120 Hz with 24 dB per octave Linkwitz-Riley characteristics.		Side
Connectors <sup>3</sup>	2 x Speakon NL4MP		
Handles	2 x wood integrated handles		
Mounting on stand and bracket	1 x 35mm built in stand fitting		
Dimensions (H x W x D)	440 x 645 x 618 mm	618	<u> </u>
Net unit weight	35 kg 77.2 lbs		
Gross weight, packed	38 kg 83.8 lbs		

Sensitivity is the average SPL measured over the components rated bandwidth

2. Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth 3. The SPEAKON connectors are wired, hot : pin 1+, cold : pin 1-.

Тор



SB 215S Subwoofer system
Very high power subwoofer system
High efficiency
SIC<sup>™</sup> Technology
Full power handling with low thermal compression
Suitable for medium-power FOH and another applications
Designed for high performance fixed installation and touring
OEM factory presets for approved digital processors

Lotusline SB215S is a subwoofer offering low frequencies reinforcement for high power systems. It uses two 15 inch transducers loaded by Single Interactive Chamber.

This technology offers the advantages of using a small volume for the load of the speaker, high efficiency in the usable bandwidth and perfect control of the excursion of the diaphragm.

The SB215S subwoofer with Single Interactive Chambers have been developed to offer the best versus frequency-extension to size ratio.

The SB215S provides a very dynamic and punchy sound reproduction for the sound effects that are commonly found in electronic music where the whole dynamic capacity of systems is used. This subwoofer offers full flexibility for low frequency reinforcement of the Lotusline speakers and the Line Array systems.

The SB215S is also ideal for Stadiums, arenas, and concert halls, Medium to large theatres, Cinema and nightclubs, multi-purpose venues or corporate events.

#### Specifications

FEATURES	Low Section	
Frequency range with processor (+3dB)	25 Hz to 250 Hz	
Sensitivity@1W/1m $f>80Hz^1$	103 dB SPI	
Maximum continuous level at 1m <sup>2</sup>	137 dB SPI	436
Peak level at 1m, f>65Hz	141 dB SPL	
Nominal impedance	4 Ohms	
COMPONENTS		
Transducers	2 x 15" weatherproof loudspeakers	Front
Coil diameter	101.6 mm	t []
Type of load	SIC™ Bass reflex	
Power (AES/ Peak )	2400 W / 6000 W	453
<b>CONSTRUCTION &amp; CHARACTERISTICS</b>		
Cabinet	18mm birch plywood with internal braces	<u>i</u>
Crossover	The Crossover points shall be 80~120 Hz with 24 dB per octave Linkwitz-Riley characteristics.	Side
Connectors <sup>3</sup>	2 x Speakon NL4MP	
Handles	4 x wood integrated handles	
Mounting on stand and bracket	1 x 35mm built in stand fitting	
Dimensions (H x W x D)	436 x 1000 x 618 mm	618
Net unit weight	64.6 kg 142.4 lbs	
Gross weight, packed	69.1 kg 152.3 lbs	

1. Sensitivity is the  $\ensuremath{\operatorname{average}}\xspace$  SPL measured over the components rated bandwidth

2. Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth

3. The SPEAKON connectors are wired, hot : pin 1+, cold : pin 1-.

Тор



The key to Sound SB 2185 Subwoofer system Very high power subwoofer system High efficiency SIC<sup>™</sup> Technology ■ Full power handling with low thermal compression Suitable for medium-power FOH and another applications Designed for high performance fixed installation and touring OEM factory presets for approved digital processors

Lotusline SB218S is a subwoofer offering low frequencies reinforcement for high power systems. It uses two 18 inch transducers loaded by Single Interactive Chamber.

This technology offers the advantages of using a small volume for the load of the speaker, high efficiency in the usable bandwidth and perfect control of the excursion of the diaphragm.

The SB218S subwoofer with Single Interactive Chambers have been developed to offer the best versus frequency-extension to size ratio.

The SB218S provides a very dynamic and punchy sound reproduction for the sound effects that are commonly found in electronic music where the whole dynamic capacity of systems is used. This subwoofer offers full flexibility for low frequency reinforcement of the Lotusline speakers and the Line Array systems.

The SB218S is also ideal for Stadiums, arenas, and concert halls, Medium to large theatres, Cinema and nightclubs, multi-purpose venues or corporate events.

#### Specifications

FEATURES	Low Section	1000
Frequency range with processor $(\pm 3 dB)$	28 Hz to 250 Hz	
Sensitivity@1W/1m, f>80Hz1	103 dB SPL	516
Maximum continuous level at 1m <sup>2</sup>	137 dB SPL	
Peak level at 1m, f>65Hz	141 dB SPL	
Nominal impedance	4 Ohms	Front
COMPONENTS		1 Tont
Transducers	2 x 18" weatherproof loudspeakers	
Coil diameter	101.6 mm	
Type of load	SIC™ Bass reflex	535 🔘 🔘
Power (AES/ Peak )	2400 W / 6000 W	
<b>CONSTRUCTION &amp; CHARACTERISTICS</b>		
Cabinet	18mm birch plywood with internal braces	Side
Crossover	The Crossover points shall be 80~120 Hz with 24 dB per octave Linkwitz-Riley characteristics.	
Connectors <sup>3</sup>	2 x Speakon NL4MP	
Handles	6 x wood integrated handles	
Mounting on stand and bracket		
Dimensions (H x W x D)	516 x 1000 x 881 mm	
Net unit weight	84.2 kg 185.6 lbs	
Gross weight, packed	90.2 kg 198.9 lbs	
		Тор

Sensitivity is the average SPL measured over the components rated bandwidth

2. Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth 3. The SPEAKON connectors are wired, hot : pin 1+, cold : pin 1-.



The key to Sound SB 218PS Subwoofer system Very high power subwoofer system High efficiency Direct radiating, optimized bass reflex design ■ Full power handling with low thermal compression Suitable for medium-power FOH and another applications Designed for high performance fixed installation and touring OEM factory presets for approved digital processors

Lotusline SB218PS is the companion subwoofer for LA, CL, MQ and MA system features, direct radiating 18-inch transducers loaded in an optimally-sized and tuned vented enclosure. With power handling capacity of 2400 W(AES) long term (6000W/peak) and response to 35 Hz.

The SB218PS is ideal for applications requiring maximum low frequency extension and impact. The SB218PS provides unparalleled low end punch and bass articulation combined with high power handling and efficiency.

Due to its compact design and critically damped tuning, multiple SB218PS enclosures couple effectively while providing the bass definition and musicality that only a direct radiating subwoofer can provide.

The SB218PS provides a very dynamic and punchy sound reproduction for the sound effects that are commonly found in electronic music where the whole dynamic capacity of systems is used. This subwoofer offers full flexibility for low frequency reinforcement of the Lotusline speakers and the Line Array systems.

The SB218PS is also ideal for distributed sound reinforcement and can be used in theatres, clubs, multi-purpose venues or corporate events.

#### Specifications

		1
FEATURES	Low Section	1000
Frequency range with processor $(\pm 3 dB)$	35 Hz to 200 Hz	
Sensitivity@1W/1m, f>80Hz1	105 dB SPL	516
Maximum continuous level at 1m <sup>2</sup>	139 dB SPL	
Peak level at 1m, f>65Hz	143 dB SPL	
Nominal impedance	4 Ohms	Eropt
COMPONENTS		FIOIIL
Transducers	2 x 18" weatherproof loudspeakers	
Coil diameter	101.6 mm	
Type of load	Direct radiating, bass reflex	535 🔘 🔘
Power (AES/ Peak )	2400 W / 6000 W	
CONSTRUCTION & CHARACTERISTICS		
Cabinet	18mm birch plywood with internal braces	Side
Crossover	The Crossover points shall be 80~120 Hz with 24 dB per octave Linkwitz-Riley characteristics.	
Connectors <sup>3</sup>	2 x Speakon NL4MP	
Handles	6 x wood integrated handles	
Mounting on stand and bracket		
Dimensions (H x W x D)	516 x 1000 x 881 mm	
Net unit weight	94.5 kg 208.3 lbs	
Gross weight, packed	99.7 kg 219.8 lbs	
		Тор

Sensitivity is the average SPL measured over the components rated bandwidth
 Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth
 The SPEAKON connectors are wired, hot : pin 1+, cold : pin 1-.



The key to Sound

## Subwoofer Source system

# SW series

### SW 15 / SW 25 / SW 18 / SW 28

The Lotusline SW series are subwoofer designed with the latest state of the art simulations tools in terms of acoustic quality, mechanical strength and optimized cooling.

The loudspeaker enclosure constructed of 18 mm birch plywood with internal braces remains free of vibration at extreme sound pressure levels.

Due to its compact design and critically damped tuning, multiple SW serier enclosures couple effectively while providing the bass definition and musicality that only a direct radiating subwoofer can provide.

The SW series are also ideal for distributed sound reinforcement and can be used in theatres, clubs, multi-purpose venues or corporate events.

#### **Products lines**



# SW Series



The key to Sound



The Lotusline SW15 is a subwoofer designed with the latest state of the art simulations tools in terms of acoustic quality, mechanical strength and optimized cooling. The SW15 incorporates one high excursion and low distortion 15-inch driver installed in direct radiation enclosure and loaded by a critically damped bass reflex incorporating multiple vents (MVC technology) for a better cooling.

The 15-inch transducers have a 3 inch (76 mm) copper sandwich voice coil on black Kapton former for low power compression and double treated cone for water protection. Triple demodulating rings combined with 8mm excursion capability, die cast aluminium basket, massive vented magnet structure offer the best performances even in very low frequencies.

Its power handling capacity of 500 W (AES) long term and 2000 W (Peak) all other the usable frequency bandwidth from 43 to 500 Hz (± 3 dB) offers a permanent 123 dB SPL and 129 dB SPL peak.

The enclosure constructed of 18 mm birch plywood with internal braces remains free of vibration at extreme sound pressure levels. The enclosure have 2 aluminum integrated handles on the sides and can be fitted with 4 optional rigging parts on the sides.

The SW15 is also ideal for distributed sound reinforcement and can be used in theaters, clubs, multi-purpose venues or corporate events.

#### Specifications

FEATURES	Low Section	455
Frequency range with processor (±3dB)	43 Hz to 500 Hz	
Sensitivity@1W/1m, f>80Hz1	96 dB SPL	525
Maximum continuous level at 1m <sup>2</sup>	123 dB SPL	
Peak level at 1m, f>65Hz	129 dB SPL	
Nominal impedance	8 Ohms	<u>+_</u> ₩W
Nominal directivity @ -6dB	Configuration dependant	Front
COMPONENTS		
Transducers	1 x 15" weatherproof loudspeakers	
Coil diameter	76 mm	
Type of load	Direct radiating, bass reflex	486 0
Power (AES/ Peak )	500 W / 2000 W	
<b>CONSTRUCTION &amp; CHARACTERISTICS</b>		
Cabinet	18mm birch plywood with internal braces	Side
Crossover	The Crossover points shall be 80~300 Hz with 24 dB per octave Linkwitz-Riley characteristics.	
Connectors <sup>3</sup>	4 x Speakon NL4MP	
Handles	2 x Aluminium integrated handles	
Rigging	Optional SW15RP01	597
Dimensions (H x W x D)	486 x 455 x 597 mm	
Net unit weight	29 kg 64 lbs	
Gross weight, packed	32 kg 72.4 lbs	
		Тор

Sensitivity is the average SPL measured over the components rated bandwidth

2. Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth 3. The SPEAKON connectors are wired, hot : pin 1+, cold : pin 1-.



## SW Series

SW 25 Subwoofer system	I he key to Sound
Sw 25 Subwooter system	<ul> <li>Very high power subwoofer system</li> <li>High efficiency</li> <li>Direct radiating, optimized bass reflex design</li> <li>Full power handling with low thermal compression</li> <li>Suitable for large and medium-power FOH and another applications</li> <li>Designed for high performance fixed installation and touring</li> <li>OEM factory presets for approved digital processors</li> </ul>

The Lotusline SW25 is a subwoofer designed with the latest state of the art simulations tools in terms of acoustic quality, mechanical strength and optimized cooling. The SW25 incorporates two high excursion and low distortion 15-inch driver installed in direct radiation enclosure and loaded by a critically damped bass reflex incorporating multiple vents (MVC<sup>™</sup> technology) for a better cooling.

The 15-inch transducers have a 4.0 inch (100 mm) copper sandwich voice coil on black Kapton former for low power compression and double treated cone for water protection. Triple demodulating rings combined with 8 mm excursion capability, die cast aluminium basket, massive vented magnet structure offer the best performances even in very low frequencies.

Its exceptional power handling capacity of 2000W(AES) long term and 5000W(Peak) all other the usable frequency bandwidth from 35 to 200 Hz (± 3 dB) offers a permanent 138 dB SPL and 142 dB SPL peak.

The enclosure constructed of 18 mm birch plywood with internal braces remains free of vibration at extreme sound pressure levels.

The enclosure have 4 aluminium integrated handles on the sides and include two 35mm built in stand supports on the top.

The SW25 is also ideal for distributed sound reinforcement and can be used in theatres, clubs, multi-purpose venues or corporate events.

#### Specifications

FEATURES Frequency range with processor (±3dB) Sensitivity@1W/1m, f>80Hz <sup>1</sup> Maximum continuous level at 1m <sup>2</sup> Peak level at 1m, f>65Hz Nominal impedance COMPONENTS	Low Section 35 Hz to 200 Hz 105 dB SPL 138 dB SPL 142 dB SPL 4 Ohms	1000
Transducers Coil diameter Type of load Power (AES/ Peak ) <b>CONSTRUCTION &amp; CHARACTERISTICS</b> Cabinet Crossover	2 x 15" weatherproof loudspeakers 101.6 mm Direct radiating, bass reflex 2000 W / 5000 W 18mm birch plywood with internal braces The Crossover points shall be 80~120 Hz with 24 dB per octave Linkwitz-Riley characteristics.	484 Side
Connectors <sup>3</sup> Handles Mounting on stand and bracket Dimensions (H x W x D) Net unit weight Gross weight, packed	2 x Speakon NL4MP 4 x Aluminium integrated handles 2 x 35mm built in stand fitting 466 x 1000 x 650 mm 50 kg 110 lbs 53.5 kg 117.7 lbs	650 Top

Sensitivity is the average SPL measured over the components rated bandwidth

2. Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth 3. The SPEAKON connectors are wired, hot : pin 1+, cold : pin 1-.

# Lotusline

# SW Series

SW 18 Subwoofer system	The key to Sound
	High power subwoofer system
	High efficiency
	Direct radiating, optimized bass reflex design
	Full power handling with low thermal compression
	<ul> <li>Suitable for large and medium-power FOH and another applications</li> </ul>
A	Designed for high performance fixed installation and touring
	<ul> <li>OEM factory presets for approved digital processors</li> </ul>

The Lotusline SW18 is a subwoofer designed with the latest state of the art simulations tools in terms of acoustic quality, mechanical strength and optimized cooling. The SW18 incorporates one high excursion and low distortion 18-inch driver installed in direct radiation enclosure and loaded by a critically damped bass reflex incorporating multiple vents (MVC<sup>™</sup> technology) for a better cooling.

The 18-inch transducer have a 4.0 inch (100mm) copper voice coil which has 1200W continuous program power capacity, together with FEA optimized and double silicone spider with optimized. The 18-inch transducer is neodymium magnet assembly, it has a smart ventilated voice coil gap for reduced power compression.

Its exceptional power handling capacity of 1200W(RMS) long term and 2400W(Peak) all other the usable frequency bandwidth from 31 to 200 Hz (± 3 dB) offers a permanent 131 dB SPL and 135 dB SPL peak.al braces remains free of vibration at extreme sound pressure levels.

The enclosure have 4 aluminium integrated handles on the sides and include one 35mm built in stand supports on the top. The SW18 is also ideal for distributed sound reinforcement and can be used in theatres, clubs, multi-purpose venues or corporate events.



		650
FEATURES	Low Section	
Frequency range with processor (±3dB)	31 Hz to 200 Hz	
Sensitivity@1W/1m, f>80Hz1	101 dB SPL	550
Maximum continuous level at 1m²	131 dB SPL	
Peak level at 1m, f>65Hz	135 dB SPL	
Nominal impedance	8 Ohms	
COMPONENTS		Front
Transducers	1 x 18" weatherproof loudspeakers	+
Coil diameter	100 mm	
Type of load	Direct radiating, bass reflex	
Power ( AES/ Peak )	1200 W / 2400 W	
<b>CONSTRUCTION &amp; CHARACTERISTICS</b>		
Cabinet	18mm birch plywood with internal braces	
Crossover	The Crossover points shall be 80~120 Hz with 24 dB per octave Linkwitz-Riley characteristics.	Side
Connectors <sup>3</sup>	2 x Speakon NL4MP	
Handles	4 x Aluminium integrated handles	
Mounting on stand and bracket	1 x 35mm built in stand fitting	
Dimensions (H x W x D)	550 x 650 x 697 mm	
Net unit weight	48.2 kg 106.3 lbs	
Gross weight, packed	51.2 kg 112.9 lbs	

1. Sensitivity is the average SPL measured over the components rated bandwidth

2. Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth

3. The SPEAKON connectors are wired, hot : pin 1+, cold : pin 1-.

Тор

# Lotusline

# SW Series



The Lotusline SW28 is a subwoofer designed with the latest state of the art simulations tools in terms of acoustic quality, mechanical strength and optimized cooling. The SW28 incorporates two high excursion and low distortion 18-inch driver installed in direct radiation enclosure and loaded by a critically damped bass reflex incorporating multiple vents (MVC<sup>™</sup> technology) for a better cooling.

Each 18-inch transducer have a 4.0 inch (100mm) copper voice coil which has 1200W continuous program power capacity, together with FEA optimized and double silicone spider with optimized. The 18-inch transducer is neodymium magnet assembly, it has a smart ventilated voice coil gap for reduced power compression.

Its exceptional power handling capacity of 2400W(RMS) long term and 5000W(Peak) all other the usable frequency bandwidth from 31 to 200 Hz (± 3 dB) offers a permanent 141 dB SPL and 145 dB SPL peak.

The enclosure constructed of 18 mm birch plywood with internal braces remains free of vibration at extreme sound pressure levels. The enclosure have 6 aluminium integrated handles on the sides and can be fitted with 4 optional castor plates on the back.

The SW28 is also ideal for distributed sound reinforcement and can be used in theatres, clubs, multi-purpose venues or corporate events.

#### Specifications

FEATURES	Low Section	1000
Frequency range with processor (±3dB)	31 Hz to 200 Hz	t
Sensitivity@1W/1m, f>80Hz1	106 dB SPL	
Maximum continuous level at 1m²	141 dB SPL	550
Peak level at 1m, f>65Hz	145 dB SPL	
Nominal impedance	4 Ohms	
COMPONENTS		Front
Transducers	2 x 18" weatherproof loudspeakers	±
Coil diameter	100mm	
Type of load	Direct radiating, bass reflex	
Power (AES/ Peak )	2400 W / 5000 W	
<b>CONSTRUCTION &amp; CHARACTERISTICS</b>		
Cabinet	18mm birch plywood with internal braces	Side
Crossover	The Crossover points shall be 80~120 Hz with 24 dB per octave Linkwitz-Riley characteristics.	oluc
Connectors <sup>3</sup>	2 x Speakon NL4MP	Π
Handles	6 x Aluminium integrated handles	
Mounting on stand and bracket		
Dimensions (H x W x D)	550 x 1000 x 820 mm	
Net unit weight	94.5 kg 208.3 lbs	
Gross weight, packed	99.7 kg 219.8 lbs	
		Тор

1. Sensitivity is the average SPL measured over the components rated bandwidth

2. Power rating displays the long term AES power handling capacity using pink noise with a 6 dB crest factor over the components rated bandwidth

3. The SPEAKON connectors are wired, hot : pin 1+, cold : pin 1-.

# LAM Series



The key to Sound LAM 8 / 12 Power Amplifier Integrated DSP management system on board Under Armonia Plus system manager net work controlled ■ 2048 taps FIR filters With two 4-channel models available namely 8 and 12 FIXED PFC Armonía-Plus Can deliver up to 3000W per channel DSP SRM 4 20 NETWORK SAFETY System Manager SWITCHING Designed for high performance fixed installation and touring

LAM is an optimized amplifier platform developed for wishing to offer a complete speaker package to all systems of Lotusline loudspeaker, all Lotusline loudspeakers systems are recommended to applicate under the preset datas of DSP on board. LAM is Acronym for Lotusline All Markets, this CB scheme-certified, EMC Tested amplifier platform allows efficient global market access and simple applications for all Lotusline users.

Proprietary speaker presets can be created and shared through the widely adopted ArmoníaPlus software. Based on Lotusline amplification technology, LAM includes comprehensive signal processing, 2048 taps FIR filters, Damping Factor Control, Dynamic EQ, analog, AES3, Dante/AES67 inputs and outputs, and a bright 4.3" IPS display with capacitive touch. The patented PFC-equipped power supply can operate anywhere in the world, and sports 750J of energy storage to provide a consistent performance.With two 4-channel models available, namely the 8 and the 12, the LAM offers ample power and voltage and can deliver up to 3000 W per channel.The amplifier can be controlled remotely with ArmoníaPlus or by third-party software, and locally through the display interface. The available functions include preset recall, gain, delay, and muting, satisfying all most common end user's requirements.



Component Diagram



# LAM Series

LAM 8 / 12 Power Amplifier



#### The key to Sound



- Integrated DSP management system on board
- Under Armonia Plus systtem Manager net work Controlled
- 2048 taps FIR filters
- With two 4-channel models available namely 8 and 12
- Can deliver up to 3000W per channel
- Designed for high performance fixed installation and touring

## Specifications

Channol	Handling

Outputs	4 x Speakon NL4			
Innuts	4 Dante/AES67 TX (from local input or DSP)			
inputs	4 XLR female			
Analog	4 XLR male (LINK)			
Digital AFS3	2 XLR fema	le (4 x audio channels)	)	
Digital ALSS	2 XLR male	(LINK)		
Digital Dante/AES67	2 XLR Ethe	rcon (4 x audio channe	els)	
Audio				
	Gain	LAM8	LAM12	
Input sensitivity @ 8 Ω	32 dB	2.77	2.77	Vrms
S/N (20 Hz - 20 kHz	@8Ω)	109 Typ.	110 Typ.	dB(A)
Max input level		24 dBu		
Frequency Response @ 8 Ol	nm load	20 Hz - 20	kHz +/- 1.0 dB	
Crosstalk (1 kHz)		-75 dB typ.		
Input impedance		20 kΩ	Balanced	
CMRR		65	dB typ.	
THD+N (from 0.1 W to Half Po	ower)	< 0.1% (typical < 0.05%)		
SMPTE IMD (from 0.1 W to H	alf Power)	< 0.1% (ty	pical < 0.05%)	
Output impedance at 100 Hz	pedance at 100 Hz 30 mΩ			
DSP				
AD converters	24 Bit Tandem™ @ 48 kHz 125 dB-A Dynamic Range - 0.005 % THD+N			
DA converters	24 Bit Tandem™ @ 48 kHz 117 dB-A Dynamic Range - 0.003 % THD+N			
Sample rate converter	24 Bit @ 96 kHz 140 dB Dynamic Range - 0.0001 % THD+N			
Internal precision	32 bit floating point			
Latency	2.5 ms fixed latency architecture			
Memory/Presets	50 amplifier snapshots, virtually unlimited speaker presets			
Delay	2 s (input) + 100 ms (output) for time alignment			
Equalizer	Raised-cosine, custom FIR, parametric IIR: peaking, hi/lo-shelving, all-pass, band-pass, band-stop, hi/lo-pass			
Crossover	linear phase (FIR), Butterworth, Linkwitz-Riley, Bessel: 6 dB/oct to 48 dB/oct (IIR)			
Limiters	TruePower <sup>™</sup> , RMS voltage, RMS current, Peak limiter			
Damping control	Active DampingControl™ and LiveImpedance™ measurement			
Display Specs				
Resolution	480x272, 4.3" diagonal			
Brightness	600 nit			
Control	Multitouch capacitive. Rotary encoder 20 steps/turn with pushbutton			

Data subject to change without notice

Output Stage		LAM 8	LAM12	
	per channel @ 8 $\Omega$ (symmetrical)*	1400 W	1800 W	
	per channel @ 4 $\Omega$ (symmetrical)*	2000 W	2700 W	
wer	per channel @ 2 $\Omega$ (symmetrical)*	2000 W	2000 W	
output po	per channel @ 8 $\Omega$ (asymmetrical)**	1500 W	1900 W	
	per channel @ 4 $\Omega$ (asymmetrical)**	2300 W	3000 W	
Max	per channel @ 2 $\Omega$ (asymmetrical)**	2000 W	2000 W	
	@ 8 Ω bridged	4000 W	5400 W	
	@ 4 Ω bridged	4000 W	4000 W	
Maximum unclipped output voltage		155 $V_{\text{peak}}$	180 $V_{\text{peak}}$	
Maximum output current		>55 A <sub>peak</sub>	>55 A <sub>peak</sub>	

\* All channels driven and loaded symmetrically \*\* All channels driven, but channels 2 and 4 at -6dB

Power & Thermal		LAM8	LAM12		
@ 100 V	Standby	Power	16	16	W
	Idle	Power	42	42	W
	1/8 Power @ 4Ω	Power	1460	1570*	W
		Current Draw	15.3	16.5	A <sub>rms</sub>
		Thermal Loss	1550	1670	BTU/h
@ 240V	Standby	Power	17	17	W
	Idle	Power	42	42	W
	1/8 Power @ 4Ω	Power	1440	1940	W
		Current Draw	6.6	8.9	A <sub>rms</sub>
		Thermal Loss	1480	2000	BTU/h
Power supply		Universal regulated	switch mode with P	FC, SRM	
Nominal voltage (±10%)		100-240 VAC @ 50-60Hz			
Operating Voltage		90-264 VAC @ 50/60 Hz			
AC Mains connector		IEC C20	inlet (20 A max)		
Limited by AC current to 1/10 Rated Power					

Networking			
Connectivity	Two Gigabit Ethernet ports, switched, Ethercon connectors		
Supported topologies	Star, Daisy Chain		
Remote interface	ArmoníaPlus or other preferred software		
Construction			
Dimensions	483 x 381 x 88.9 mm (19 x 15 x 3.5 in)		
Weight	LAM8	LAM12	
	11.3 kg	11.3 kg	

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