

NEW PRODUCT INFO

PRELIMINARY INFORMATION. SPECS & IMAGES SUBJECT TO CHANGE.

WLA-1A

Active Hybrid Curvature Array

The WLA-1 Hybrid Curvature Array system.....is now.....ACTIVE.

The new WLA-1A active system incorporates all the incredible hardware features of its passive brother - the WLA-1 System. The EVO-Fold waveguides, the drivers created by Beyma in Europe and the Hybrid Curvature Array configuration are all included....but the new WLA-1A Active now brings powerful internal amplification and refined internal DSP processing to the party.

It has never been this easy to achieve stunning sonic results in a huge variety of venues.

WLA-112A - 12" coaxial element

680 W Continuous

1360 W Peak

WLA-115A - 15" coaxial element

830 W Continuous

1660 W Peak

WLA-121SUBA - 21" active subwoofer

2200 W Continuous

4400 W Peak



AVAILABILITY

WLA-1A System

Shipping from Q3 2023

FEATURES

- Internal amplification
- Internal DSP including FIR filters
- Network connection using RS485 protocol
- 12" and 15" coaxial drivers from Beyma
- 21" Subwoofer with 4.0" Quattro voice coil
- EVO-Fold waveguide
- Integral side plate rigging
- Premium Baltic birch construction
- .gll files available for download
- Versatile with comprehensive hardware accessories

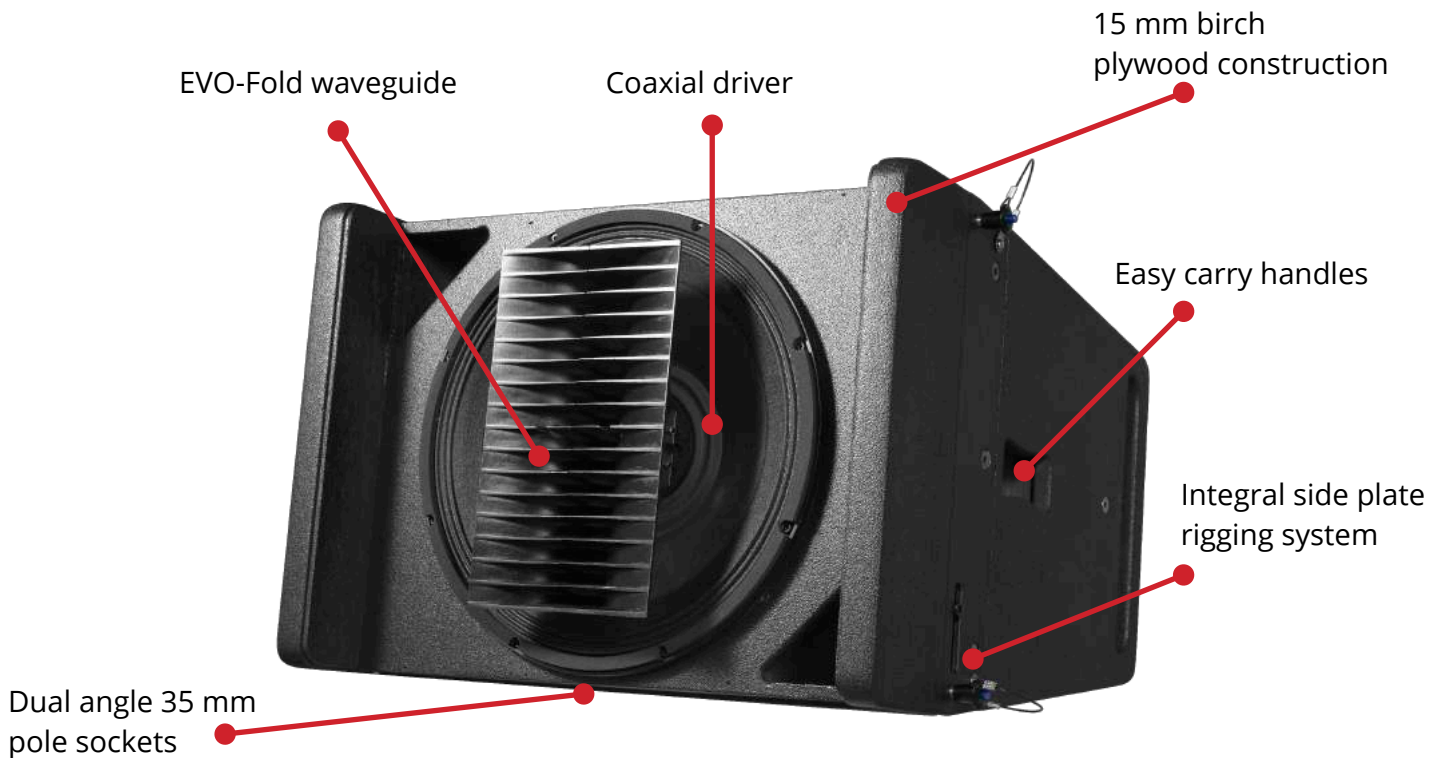
COAXIAL DESIGN



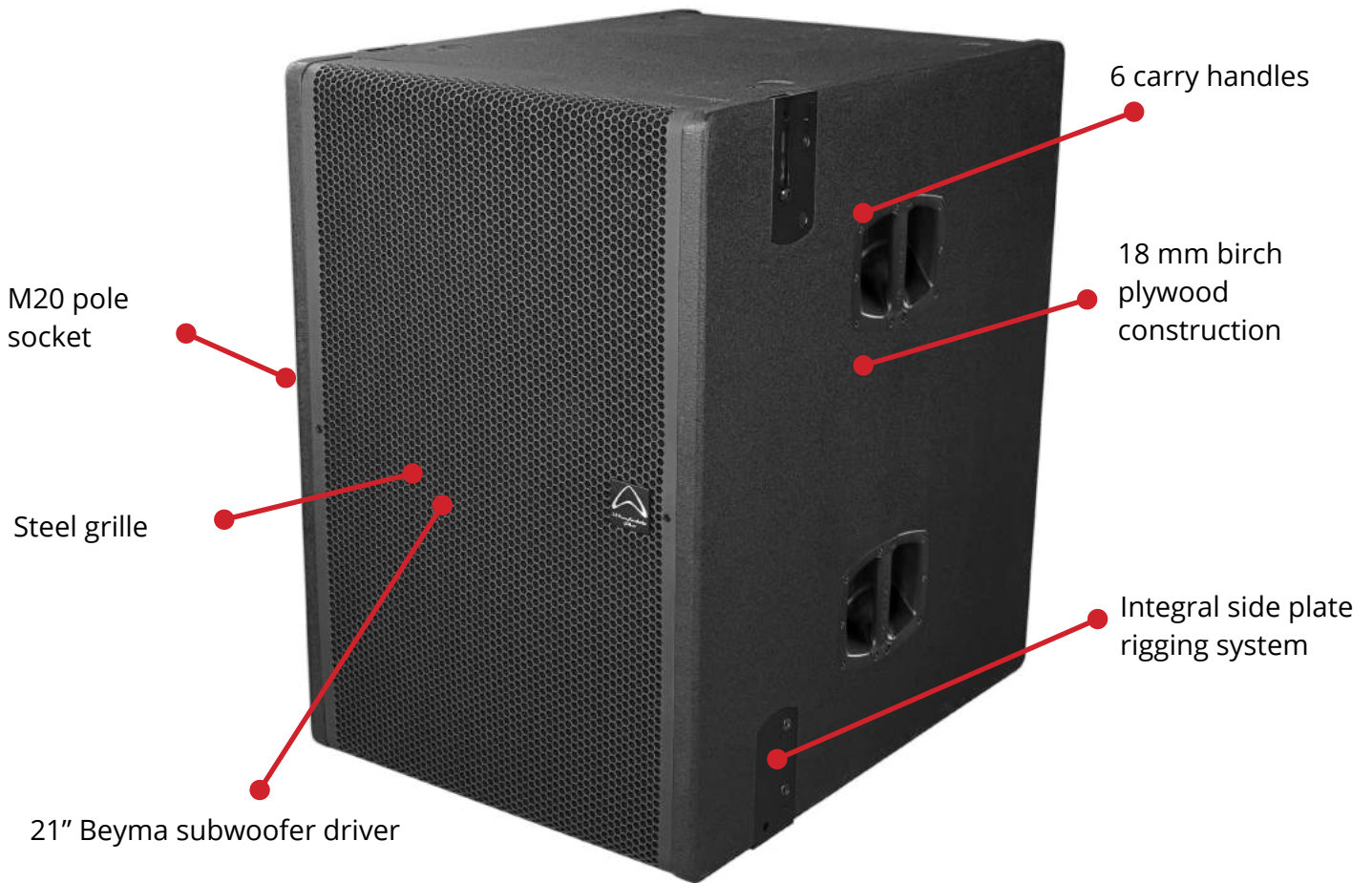
The 12" and 15" elements use coaxial drivers from Beyma in Europe.

This coaxial design gives consistent coverage on both Horizontal and Vertical planes - while competitive traditional constant curvature two way systems do not have consistent coverage in one axis at least by design.

WLA-112A and WLA-115A coaxial design gives consistent coverage and is unique.

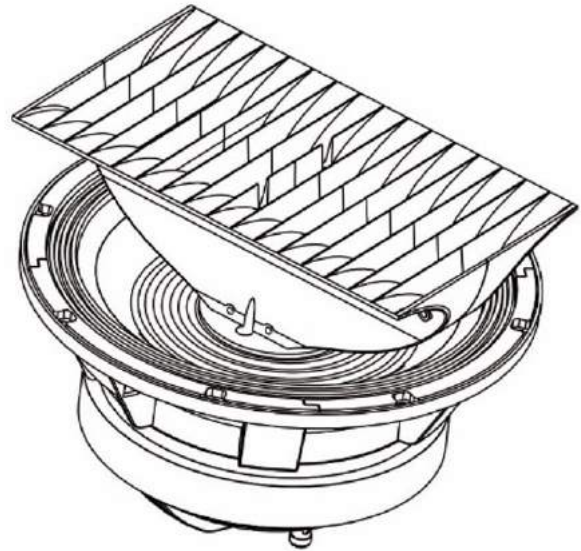
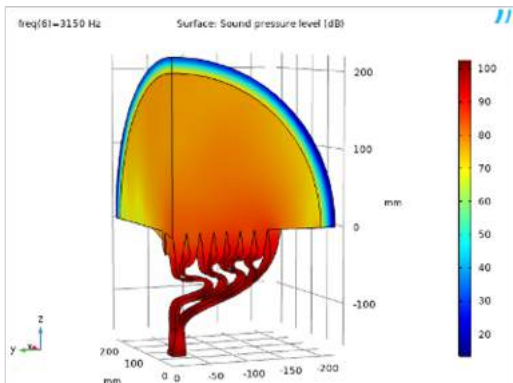


21" SUBWOOFER



EVO-Fold

A work of art



EVO-Fold reduces the usual phase issues that traditional constant curvature line arrays have due to them having the drive units physically some distance apart in the array. One specially-designed coaxial mid-high frequency driver is loaded to a unique EVO-Fold horn. The EVO-Fold horn combines a unique folded and manifold design. The most advanced FEM technology has been used to create this.

The high-mid energy exits produce a uniphase sound in the widest range of frequencies. And visually, the detail of the EVO-Fold waveguide is a work of art.

Patents in progress for Appearance, Utility and Invention. EVO-Fold is an exclusive Wharfedale Pro technology.

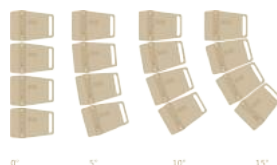
Configurations



Use an optional **SP-4 pole** to connect the 21" subwoofer to a 12" or 15" element. These have dual angle 35 mm pole sockets to ensure the best coverage for the event.



Use the optional **WLA-1 Common Fly Frame** to fly any combination as a traditional flown array.



Use the optional **WLA-1 Link** to create a horizontal array with WLA-112A or WLA-115A.

A 3 unit horizontal array has 60 V x 100 H dispersion

SPECIFICATIONS



Model Name	WLA-112A	WLA-115A	WLA-121SUBA
System Typology	Hybrid Curvature Array	Hybrid Curvature Array	Subwoofer
System Type	Active 12" coaxial Bi-Amplified	Active 15" coaxial Bi-Amplified	Active 21" Subwoofer
Configuration	two-way	two-way	Single Subwoofer
Frequency Response (+/-3 dB)	55 Hz - 20 KHz	42 Hz - 20 KHz	25 Hz - 100 Hz
Frequency Range (- 10 dB)	35 Hz - 25 KHz	25 Hz - 25 KHz	18 Hz - 125 Hz
Sensitivity 2.83 V/1 m	101 dB	102 dB	103 dB*
Calculated Maximum SPL @ 1 m	133 dB	135 dB	140 dB*
System Peak SPL	139 dB**	141 dB**	147 dB**
*			level at 1 m under half space conditions using pink noise with crest factor 2, with dedicated preset.
**	level at 1 m under free field conditions using pink noise with crest factor 4, with dedicated preset.	level at 1 m under free field conditions using pink noise with crest factor 4, with dedicated preset.	level at 1 m under half space conditions using pink noise with crest factor 4, with dedicated preset.
Waveguide Type	EVO-Fold®	EVO-Fold®	/
Nominal Coverage (H x V)	100° x 20°	100° x 20°	/
Signal Processing	DSP based, 8 FIR presets	DSP based, 8 FIR presets	DSP based, 8 presets
Preset list	A) 1 to 2 SPKR 100 Hz HPF B) 3 to 4 SPKR 100 Hz HPF C) 5 to 6 SPKR 100 Hz HPF D) 1 SPKR E) 2 SPKR F) 3 to 4 SPKR G) 5 to 6 SPKR H) CUSTOM	A) 1 to 2 SPKR 100 Hz HPF B) 3 to 4 SPKR 100 Hz HPF C) 5 to 6 SPKR 100 Hz HPF D) 1 SPKR E) 2 SPKR F) 3 to 4 SPKR G) 5 to 6 SPKR H) CUSTOM	A) 1 SPKR 80 Hz LPF B) 1 SPKR 100 Hz LPF C) >2 SPKR 80 Hz LPF D) >2 SPKR 100 Hz LPF E) CARDIOID AUDIENCE F) CARDIOID STAGE G) CUSTOM H) CUSTOM
Amplifiers			
Amplifier Design	Class D	Class D	Class D
Power Rating:	1360 W Peak (1200 W LF + 160 W HF), 680 W Continuous (600 W LF + 80 W HF)	1660 W Peak (1500 W LF + 160 W HF), 830 W Continuous (750 W LF + 80 W HF)	4400 W Peak, 2200 W Continuous
Thermal Protection	Amplifier Shut Down. Auto Reset	Amplifier Shut Down. Auto Reset	Amplifier Shut Down. Auto Reset
Low Line Voltage Shut Down	60% Nominal Line Voltage	60% Nominal Line Voltage	60% Nominal Line Voltage
Driver Protection	Independent LF/ HF RMS and Peak Limiters	Independent LF/ HF RMS and Peak Limiters	RMS, Peak Limiters and DC
DC and Short Protection	Yes	Yes	Yes
Clip Limiter	Yes	Yes	Yes
Limiter Indicator	Red LED	Red LED	Red LED
Signal Indicator	Green LED	Green LED	Green LED
Power/Active Indicator	White LED	White LED	White LED
Find Function Indicator	Blue LED	Blue LED	Blue LED
Input Sensitivity	+4 dBu	+4 dBu	+4 dBu
Maximum Input Level	+18 dBu	+18 dBu	+18 dBu
Input Impedance	Balanced:10 KΩ	Balanced:10 KΩ	Balanced:10 KΩ
AC Power details - Power Supply	High Efficiency Dual Switching Mode Power Supply	High Efficiency Dual Switching Mode Power Supply	High Efficiency Dual Switching Mode Power Supply
Connectors			
Input Connector	Balanced socket XLR	Balanced socket XLR	Balanced socket XLR
Link Connector	Balanced pin XLR	Balanced pin XLR	Balanced pin XLR
UPDATE	USB Type B	USB Type B	USB Type B
NETWORK (RS485)	RJ45	RJ45	RJ45
AC Power Options	AC 100-120 V~ and 220-240 V~, 50/60 Hz Automatic	AC 100-120 V~ and 220-240 V~, 50/60 Hz	AC 100-120 V~ and 220-240 V~, 50/60 Hz
Special Features		Copper Demodulating rings in both LF and HF units Waterproof LF cone Shared High performing Ferrite magnet system design	Aluminium demodulating ring Waterproof LF cone Malt Cross® TCS
Rigging & Hardware:			
Vertical Splay angle range:	3 points for rigging 0° - 5° - 10° - 15°	3 points for rigging 0° - 5° - 10° - 15°	3 points for rigging /
Horizontal Splay angle	15°	15°	/
Accessories:	WLA-1 FLY FRAME	WLA-1 FLY FRAME	WLA-1 FLY FRAME
Stand pole:	Dual Angle -2.5° / +7.5°	Dual Angle -2.5° / +7.5°	M20 Pole mount
Handles:	2 side / 2 back	2 side / 2 back	2 side (4 pcs) + 2 (top / bottom)
Cabinet Type	Trapezoid	Trapezoid	Rectangular
Enclosure Material and finish	15 mm plywood / Rhino Rock	15 mm plywood / Rhino Rock	18 mm plywood / Rhino Rock
Colour	Black paint	Black paint	Black paint
Grille Material & Finish	Powder coated perforated steel	Powder coated perforated steel	Powder coated perforated steel
Dimensions - Unpacked:			
Height Front	332 mm / 13.1"	408 mm / 16.1"	820 mm / 32.3"
Height Rear	246.4 mm / 9.7"	302 mm / 11.8"	/
Width	566 mm / 22.3"	566 mm / 22.4"	566 mm / 22.4"
Depth	465 mm / 18.3"	543 mm / 21.3"	760 mm / 29.9"
Dimensions - Packed:			
Height	661 mm / 26.0"	661 mm / 26.0"	895 mm / 35.2"
Width Front	550 mm / 21.7"	630 mm / 24.8"	656 mm / 25.8"
Width Rear	550 mm / 21.7"	630 mm / 24.8"	/
Depth	410 mm / 16.7"	490 mm / 19.3"	850 mm / 33.5"
Weight			
Net Weight	30.4 kg / 66.9 lbs	35.5 kg / 78.1 lbs	74.0 kg / 162.8 lbs
Gross Weight	32.8 kg / 72.2 lbs	38.5 kg / 84.7 lbs	80.0 kg / 176 lbs



Errors and omissions excepted (E&OE) : Wharfedale Pro : 2023

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