

# R4/R8 Compact Powered Line Array





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The R4/R8 Powered Compact Line Array System is the ultimate solution for sound reinforcement where optimum energy control is required. The system comprises of an internal 600W amplifier, subwoofer, four full-range line array cabinets, and programmable DSP control. The cabinets are mechanically connected using a three-point suspension system, and integral rigging allows flexibility in a variety of array configurations. The R4/R8 Powered Compact Line Array System is suitable for Halls, Auditoriums, Performing Arts, Houses of Worship and other medium sized venues.



**R4** | Four full-range loudspeakers deliver clear, powerful audio at high SPL and can be stacked together to form multi-cluster setups for individual applications. The bracketry provides fine vertical splay angle adjustments at 1° intervals.



**R8** | The active bass enclosure houses two 8" low frequency drivers, pre-amp, output power amplifier & DSP. The integrated system processes the input signal and distributes via the power amplifier to all 5 speakers.



**Ribbon Tweeter** | The four full-range loudspeakers utilise custom ribbon tweeters, with extremely flat response curves. The lightweight transducer ensures excellent transient response.

## Key Features & Benefits

- Each system comes complete with subwoofer, 4 mid-high line array cabinets, internal power amplification, DSP control, all rigging hardware and connecting speaker cables
- Compact design for medium scale sound reinforcement
- Internal amplification, programmable DSP control, (via USB or RS-232 port) gain, crossover, equalisation, compressor/limiter, and time alignment
- Software included
- Rear panel peak level indicator, level control
- Two 8" low frequency drivers (R8 active amplification module)
- Two 4" mid frequency drivers and one high frequency ribbon driver in each R4 line array module
- 120° controlled horizontal coverage
- Splay angle adjustable in 1° steps
- XLR line input with XLR "loop through"
- Mechanically connected cabinet design with three-point suspension system allowing flexibility in a variety of array configurations

**Unique Speaker Design** | Utilising a unique thin foam surround and specially coated paper speaker cone results in efficient reduction of harmonic distortion.

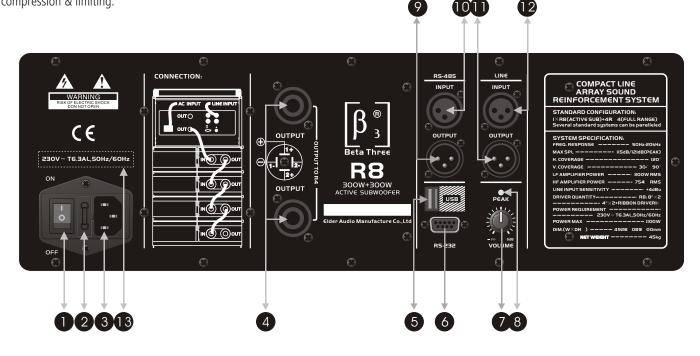


#### Active Amplifier & DSP

DSP and linear amplification technology are integrated into the R8 active amplifier module. With a total power handling of 600W RMS, the amplifier can drive the entire 5 speaker cluster at the same time. With USB & RS-485 connections for remote PC control, the included software helps to achieve all-round control over frequency response, delay, crossover, equalisation, gain, compression & limiting.

The DSP module is protected by a metal casing which shields the interface from interference.

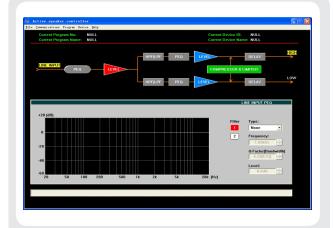
The system is kept stable and reliable by the built-in cooling system which is equipped with both aluminum heat-sink and a stepless/brushless fan for quiet, continuous operation.



- 1. Power On/Off Switch
- 2. Fuse
- 3. Power Input Socket
- 4. Signal Output (NL4 Socket)
- 5. USB Port

- 6. RS-232 Port
- 7. Volume
- 8. Signal Peak Indicator
- 9. RS-485 Output
- 10. RS-485 Input

- 11. Line Output
- 12. Line Input
- 13. AC Input Information



**DSP Software Interface** | The active module with built-in DSP processor manages and adjusts HF and LF drivers separately. It includes control for gain, crossover, equalisation, compression, limiting, delay and phase inversion. The integrated testing and control software helps provide maximum protection for your system.

#### **DSP Software Features**

- Built-in high performance DSP
- 24 bit AD/DA converters
- Precise filter algorithm and gain control
- Intelligent protection system
- Several optional filters which are available for specific applications upon request
- 6 configuration modes which can be saved for convenient use at any moment.
- Configuration mode updates which can be downloaded from the manufacturer's website
- Connection to any Windows based PC via USB or RS-232 port
- Multiple units can be controlled by linking via RS485



## **Amplifier Specifications**

Low Frequency Power Amplifier		Pre Amplifier	
Distortion limit output power ( 0.5% THD @ 630Hz )	300W	Input Sensitivity:	0.775V
Load Impedance	4Ω	Crossover Point:	2kHz
Distortion (THD)	0.1%	Input Impedance:	10KΩ ( Balanced )
Protection	Output maladjustment protection	Power Supply:	AC 230V/50Hz
	DC protection,Input signal limiting,		
	Overload protection		
	Overheat protection		
	Power on/off pop elimination		
Full Range Power Amplifier		Control/Connection	
Distortion limit output power ( 0.5% THD @ 630Hz )	300W	Knob:	Volume
1 1	10	1 P 4	Peak Indicator
Load Impedance	4Ω	Indicator:	reak illulcator
	0.1%	Indicator:  Input Connector:	XLR
<u> </u>			
Distortion (THD)	0.1%	Input Connector:	XLR
Distortion (THD)	0.1% Output maladjustment protection	Input Connector:	XLR 1 x male XLR ( Input )
Distortion (THD)	0.1% Output maladjustment protection DC protection, Input signal limit,	Input Connector:	XLR 1 x male XLR ( Input )
Distortion (THD)	0.1% Output maladjustment protection DC protection, Input signal limit, Overload protection	Input Connector:	XLR 1 x male XLR ( Input )

## System Specifications

Frequency Response ( -3dB ):	50Hz-40KHz
Rated Power ( RMS ):	R8 (LF): 300W, R4 (M/H): 300W
Rated SPL ( 1W @ 1m )	115dB
Maximum SPL ( 1W @ 1m )	121dB
Crossover Point:	LF/MF 125Hz MF/ HF 3.2kHz
Input Impedance:	10ΚΩ
Dispersion ( H x V ):	120° x (30° - 90°) adjustable
Connector:	NL4
Power supply:	AC 230V /50Hz
Dimensions (W x D x H ):	492mm x 608mm x 900mm
Packaging Dimensions ( 1set/pack ):	696mm x 696mm x 580mm
Net Weight ( 1set/pack ):	45Kg
Gross Weight ( 1set/pack ):	50Kg

### Cabinet Dimensions

