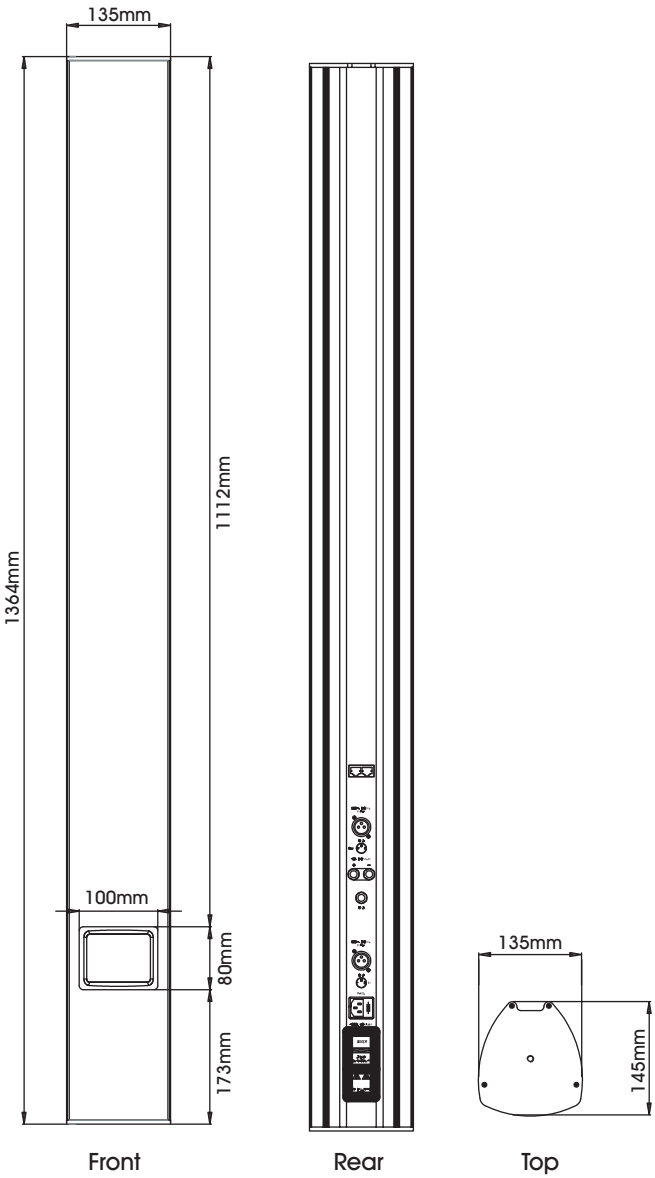
EMLA-1501

Phased - Active Line Array Speaker

Features

- Active Line Array - integrated power amplifier and equalizer
- Superb speech intelligibility with natural voice
- Even sound pressure and constant directivity
- Variable Elevation Angle
- Focus Distance
- Adjustable Volume, Bass, treble and sensitivity
- Setting up by a simple remote control
- Energy Saving mode - Standby mode
- Fewer installation points - Easy installation
- Cost - effective

Product Dimension



Product Description

The active line array from EMIX produces clear, natural sound for excellent intelligibility of both speech and music. With the technology of DSP (Digital Signal Processing), the audio characteristic of the line array can be adjusted to meet the acoustical requirement of different venue. Other than that, the line array also provides big coverage and long acoustical reach. Therefore, only a few line array speakers are needed to fill up the coverage.

Function

Active Line Array

The Active line array loudspeaker used a class D amplifier. The build in amplifier means that the loudspeakers can be operates without external amplification. They also have an on-board DSP (Digital Signal Processor), which may controls the frequency and delay time of each driver in the array, thus allowing remote control adjustment of loudspeaker characteristic like direction and focus distance. The presence of a DSP means there is no need for extra equalizer.

Variable Elevation Angle

The active line array loudspeaker allows the direction of the main lobe to be tilted without changing the speaker position. This is done by programming different delay for each driver in the array. For example, by remote control a longer delay for the bottom drivers of the array, the lobe is effectively tilted downwards. This feature allows us to have more mounting flexibility.

Focus Distance

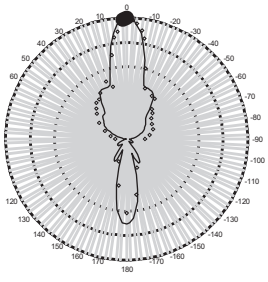
The focus distance is the point which the output from each driver in the array coverage. By adjusting the focus distance, we can set how far the main lobe reaches before the dirver contribution are out os phase and their sound energy become part of the diffuse sound field.

Energy Saving more

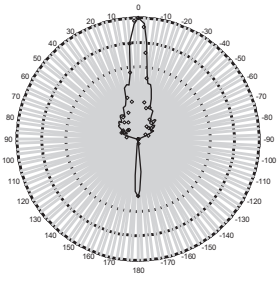
If there is no operation to the line array loudspeaker within 30seconds, the screen will automatically enter into energy saved mode, you may press any key from the remote controller to enter into associated operating interface.

Frequency Response

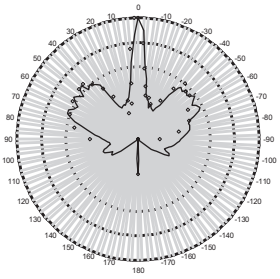
1 kHz



2 kHz



4 kHz



8 kHz

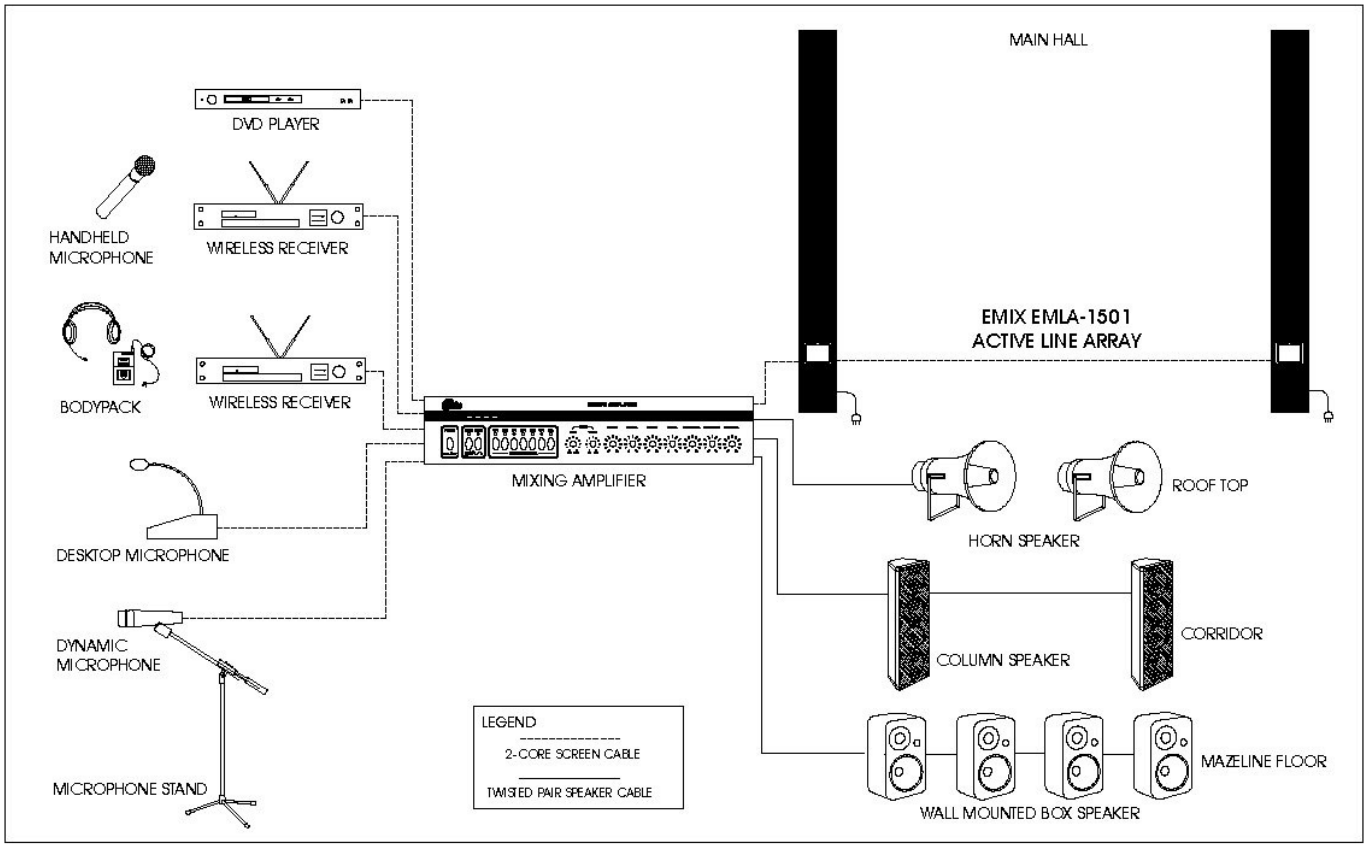
Technical Specifications

Transducer	10 X 4" Full Range
Rated Power	10 X 10W(8ohm)
SPL	93dB
Frequency Response	120Hz ~ 16.8KHz
Speaker Coverage	
Horizontal Angle (Fixed)	200degree
Vertical (adjustable)	Opening Angle 80° to 100° Elevation Angle -45° to +45° Focus Dist. 5m to 99m
Power Amplifier	PWM (Class D)
Signal Processing	Digital Volume control (0 to 32) Digital Pre-gain control (-10dB, 16dB & 0dB) Bass & Treble (+6dB) Power (On & Off) Mute (On & Off) Auto Digital noise gate
Nominal Level	300mV (Line input) 100V Line Signal Input
LED Screen	3inch by 1.5inch
Protection	Thermal overload Short Circuit
Equalizer	14 Band EQ (80Hz, 120Hz, 270Hz, 420Hz, 640Hz, 1KHz, 1.5KHz, 2.2KHz, 3.3KHz, 7.5KHz, 12KHz, 18Hz, 20KHz)
DSP Module	
Type	28 to 56-bit 50 MIPS digital double - precision processor
Memory	16K byte RAM
ADC	2 Channel Sigma-delta Converters
DAC	2 Channel 18bit sigma-delta Converter
Sample Frequency	Sampling rates support up to 192KHz Normal at 48.8KHz
Main Voltage	230VAC
Power Consumption	<110W
Main Fuse	4A
Ambient Temperature	-10 to 60°C
Weight	13Kg
Colour	Beige Colour

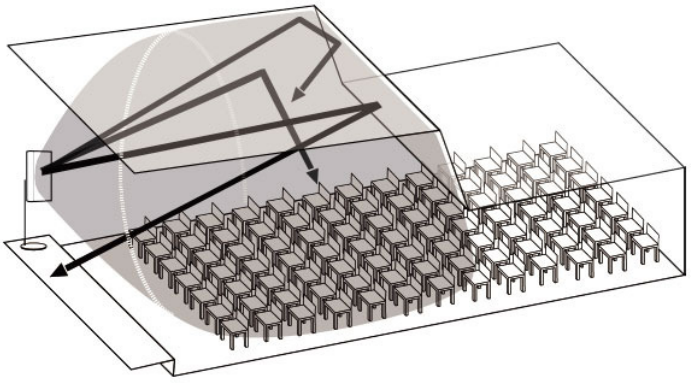
Parts Included

Quantity	Component
1	3-pin XLR Cable
1	Power Cord
1	Remote Control
1	Bracket
1	User Manual

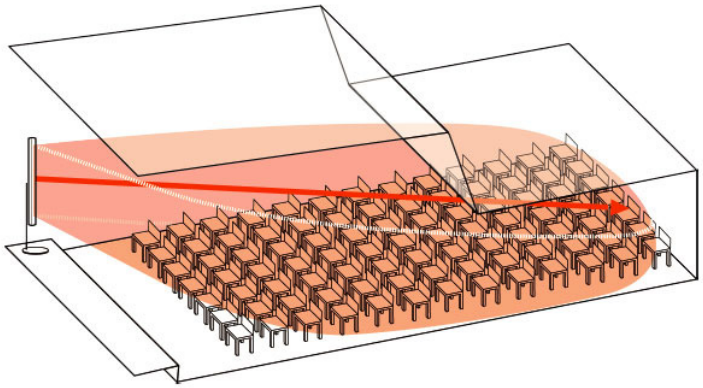
Schematic Diagram



Mechanical Aiming



Electronics Aiming



Multipurpose hall with conventional loudspeakers
In comparison, conventional loudspeaker offer a less direction coverage, particular in the vertical plane. Sound at the front are often too loud, while at the back, the sound may be too quite or lacking in clarity due to insufficient reach.

Phased - Active Line Array Speaker
The electronics steerable line array involves specifically optimizing the amplifier electronics, digital signal processor (DSP) and remote control give a more targeted sound transmissions to audience areas. The speaker also provide a more even room coverage, from the front row right to the very back. Potential reflections from the ceiling, floor or walls can be minimized, maing the sound clearer and more pleasant for the audience, with dramatically improved speech intelligibility. The speaker is also good for public speakers, with less sound from the room reflecting back onto the stage.