

DSP1501 Digital Phased Array Speaker



Description

The DSP1501 Phased Array Column Loudspeaker utilizes advanced electronic and digital signal processing (DSP) technology to precisely control the main beam radiation direction. Unlike conventional fixed-directivity column speakers, the DSP1501 enables flexible adjustment of the loudspeaker's vertical directivity and radiation angle through an intuitive web-based control interface. Its built-in digital equalizer significantly enhances audio clarity and overall sound quality. Characterized by superior sound reproduction, reliable high performance, and user-friendly operation and installation, it is ideally suited for a wide range of professional sound reinforcement applications.

Features

- Three-directional beam steering capability.
- Active column loudspeaker with integrated digital power amplifier.
- Supports 3 standard line-level audio inputs and 170V constant-voltage amplifier input (70V \pm 10V).
- Onboard volume control and balanced signal processing adjustment.
- Wired and wireless beam directivity modulation control through a web-based controller.

Specifications

Model	DSP1501
Line Input Sensitivity (Optional)	300 (-10dB) / 500 (-06dB) / 1000 (00dB) mV
Constant Voltage Input Sensitivity	70 (\pm 10) (-10dB) V
Max. SPL (1m)	105 \pm 2dB
Number of Speaker Units	10 PCS
Speaker Unit Size	4 Inch
Amplifier Rated Output Power (Per Channel)	\geq 10 W
Amplifier Output Noise	<1 mV

(Per Channel)	
Distortion (Within the frequency range, under normal operating conditions)	<0.5 %
Graphic Equalizer Frequency Points	125/200/315/500/800/1.25k/1.6k/2k/2.5k/3.15k/4k/5k/6.3k/8k/10K (15 bands in total) Hz
Equalizer Adjustment Amplitude	±10 dB
Frequency Response:	80-18k (±3dB) Hz
Horizontal Radiation Angle	> 120 Degree
Vertical Radiation Angle	<50 Degree
The Main Beam Adjustable Range (Vertical)	±45 Degree
Grid Adaptation Capacity	AC100-270V /50-60Hz
Package dimensions: (L × W ×H)	1505×265×280 mm
Dimensions (L × W ×H)	1365×132.5×145.5 mm
Gross weight	20 kg
Net Weight	16.5 kg

Direction Curve

(1) 30m flat venue, with downward focus length as 6m, 15m, 26.5m and wall mount height 5.5m



Figure 1: 3 SPL distribution map for preset positioning

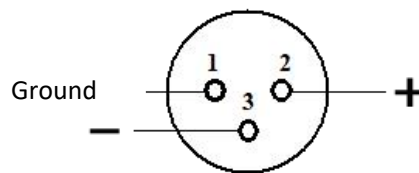
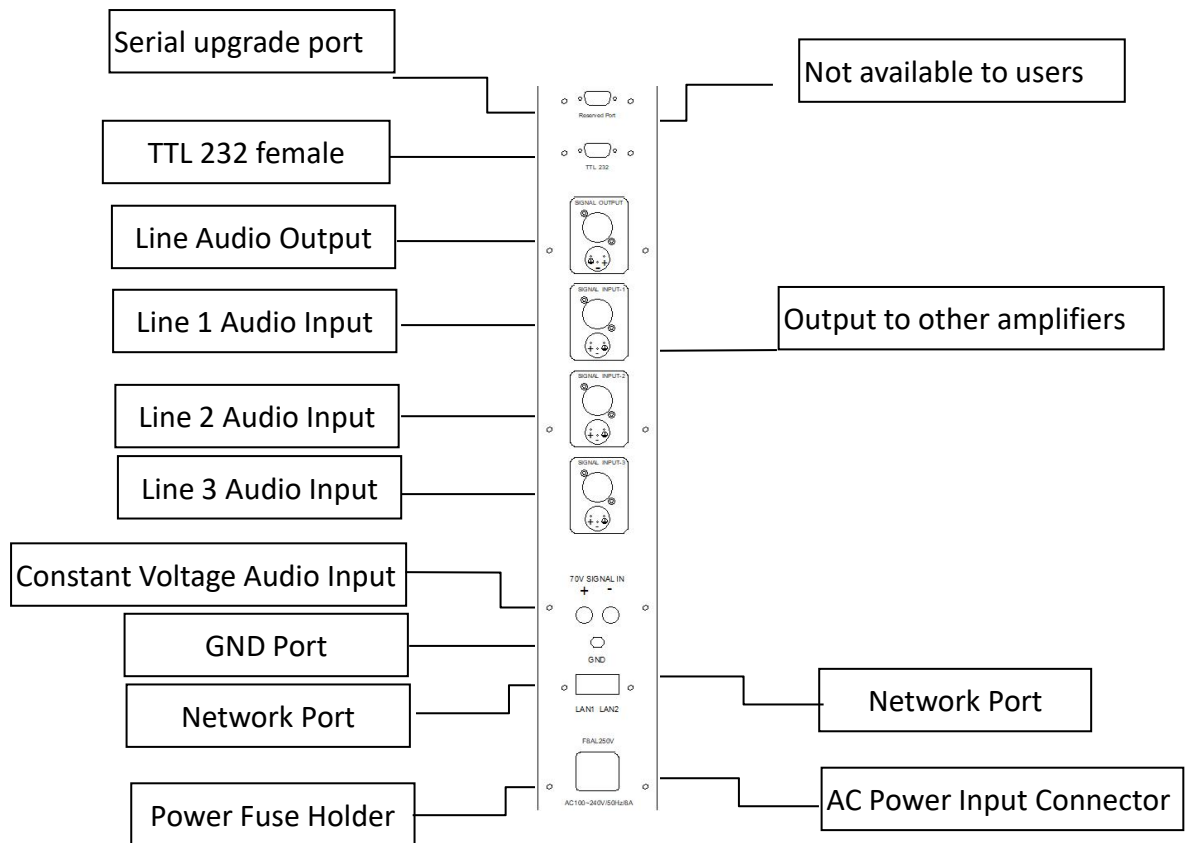
Installation Diagram



(DSP1501)

Please refer to the actual product

Instruction on the Back Connectors



XLR Connection