

MAILA® SAT

PASSIVE ARRAY SATELLITE SPEAKER



FEATURES

- Ultra-compact passive array satellite speaker
- Advanced WaveAhead® technology with coaxial driver array + passive membrane for extended low-mid response
- 5 × 1" titanium tweeter and 1 × 6.5" woofer with SonicGuide® waveguide
- Frequency range: 100 Hz – 20 kHz
- Radiation pattern: 100° (h) x 8° (v)
- Innovative EasySplay® mechanism for angle adjustment (0-8°) of each satellite with only one hand
- SmartLink+® enables cable-free connection of satellite and COL column or SPA amplifier module
- Scalable to up to eight MAILA® SAT satellites
- Unibody aluminium housing

DESCRIPTION

The MAILA® SAT satellite speaker is a true line array element and is full of surprises. The elegant and robust unibody aluminium enclosure houses five 1" tweeters in front of a 6.5" midrange driver, arranged in a coaxial design based on Advanced WaveAhead® technology and coupled almost interference-free via the SonicGuide® (two combined waveguides). The result is a classic line array radiation pattern with impressive throw and energy density. The horn-loaded 6.5" midrange driver with 1.8" voice coil and neodymium driver features a split-path waveguide as well as a phase plug and enables a particularly high sensitivity in the midrange.

The tweeter section is formed by five vertically arranged 1" dome tweeters that do not require a compression chamber and thus offer an even and natural dispersion pattern (100° horizontal x 8° vertical). At the same time, the midrange driver's phase plug reduces the heat generated by the tweeter voice coils, contributing to the satellite's increased efficiency. Furthermore, the passive membrane placed behind the woofers provides extended punch down to 100 Hz despite the compact dimensions of the satellite housing.

On the back of the housing of each MAILA® SAT is a rotating handle which hides a groundbreaking innovation: via the patented EasySplay® mechanism, users can adjust the inclination of each individual satellite continuously from 0° to 8° in the blink of an eye. The angle can be adjusted with just one hand, even under load. In this way, every MAILA® system offers a uniquely flexible concept for adapting the sound coverage to any sound reinforcement situation at any time.

For an especially easy setup, the passive MAILA® SAT array satellites are equipped with the LD Systems SmartLink+® system, which ensures a cable-free connection between the MAILA® SAT modules as well as between MAILA® SAT and MAILA® SPA amplifier module or MAILA® COL column module. Both the audio signal and the power supply for the passive MAILA® elements are provided via the robust aluminium rails. In addition, SmartLink+® allows the installed satellites to be detected for automatic or manual DSP processing.

SPECIFICATIONS

Product number	LDMAILASAT
General	
Type	Passive
Peak load capacity (AES)	170 W
RMS load capacity (AES)	50 W
Max. SPL peak	128.2 dB (sine burst, fullspace/1 m, THD≤10 %)



Product number	LDMAILASAT
Max. SPL peak	129.1 dB (pink noise, fullspace/1 m, CF 4)
Max. SPL average	115 dB (sine burst, BW, fullspace/1 m, THD≤10 %)
Speaker system	2-way system
Beam angle	100° (hor.) / 8° (vert.)
Input connector types	SmartLink+®
Colour	Black

Bass driver	
Size	6.5"
Magnet	Neodymium
Voice coil	1.8"

Tweeter	
Driver size	1"
Quantity	5
Design	Titanium Dome Tweeter

Housing	
Design	Bass reflex
Number of handles	1
Chassis material	Die-cast aluminium
Coating	Powder coated

Dimensions & weight	
Width	205 mm
Height	234 mm
Depth	226 mm
Weight	7.65 kg

ARCHITECT & ENGINEER'S SPECIFICATIONS

The satellite speaker module shall be designed as a true line array element with a 100 Hz to 20 kHz frequency response and an average SPL of 115 dB.

The satellite speaker shall feature a robust unibody aluminium enclosure. The enclosure shall house a coaxial driver configuration, consisting of a horn-loaded 6.5-inch midrange driver with a 1.8-inch voice coil and five vertically arranged 1-inch dome tweeters. The midrange driver shall utilize a split-path waveguide and a phase plug for enhanced sensitivity and reduced heat generation, while the tweeter array shall offer a natural and even dispersion pattern of 100° horizontal by 8° vertical without requiring a compression chamber.

The speaker's design shall incorporate two combined waveguides to achieve an interference-free coupling of the tweeters and the midrange driver. This design shall result in a classic line array radiation pattern.

The satellite speaker shall include a passive membrane placed behind the woofers, allowing for extended bass response down to 100 Hz.

The module shall allow users to continuously adjust the inclination angle of each individual satellite from 0° to 8°.

The satellite speaker shall employ a cable-free connection between compatible components. The link shall deliver the low-mid as well as the tweeter audio-signals separately via robust aluminium rails and shall support automatic or manual DSP processing by detecting the installed satellite configuration.

The loudspeaker shall be 234 × 205 × 228 mm and weigh 7.65 kg.

The unit shall be the LD Systems MAILA® SAT, or an approved equivalent. The MAILA® SAT unit can be combined with other MAILA® modules to build a complete, customizable modular intelligent line array sound system.

TECHNICAL DRAWING

Scale 1: 5

