



hd ML-Series

LineArray Stick

The **hd ML-Series** is a product family of very compact LineArray Sticks designed specifically for high-quality music and speech reproduction. The lightweight and elegant speakers can be set up and installed in only a few seconds. A perfect integration into the existing room architecture or stage design is achieved by the slim and stylish design of the column speakers and therefore makes the hd ML-Series the first choice of system integrators, event organizers, agencies, musicians and audiences.

The hd ML-Series consists of the **hd ML8**, **hd ML16**, **hd ML24** and **hd ML32** as passive column loudspeakers. Due to the modular design of the hd ML-Series, it is possible to realize customer-specific lengths and assemblies for optimum adaptation to the respective requirements. In the hd ML-Series special designed 2” broadband drivers produce a wave front with accurate cylindrical dispersion characteristics in the whole operating frequency range and up to the highest audible frequencies. The resulting longer throw distance and better speech intelligibility compared to conventional column loudspeakers predestines the hd ML-Series LineArray Sticks for use in acoustically difficult environments such as churches, airports or halls. The long throw of up to 35m and smooth horizontal coverage of 100° makes the hd ML-Series a decent and powerful loudspeaker for superior audio environments with only few speakers.

The 2” chassis, with their small diaphragm weight and almost the same size as the human vocal cords, are the best choice for reproducing the human voice in the most difficult applications such as houses of worship, conference rooms, airports, train stations and live music.

The hd ML-Series is also available with the implementation of the hd Beamforming-Technology. The hd MLBeam-Series are self-powered, digitally steered column speakers with integrated High-End-DSP and powerful multi-channel amplifiers. Extensive beamforming algorithms are applied to shape the sound where it belongs and to take control of all acoustical parameters.

Due to the true 1-way design, the ML Series is free of interference in the important mid frequency range because there are no phase shifts in a crossover that typical 2-way systems have. The result is outstanding sound quality in music and speech, enhanced dynamics and even coverage of the listening areas. The hd ML series is fully compatible with the Harmonic Design® system concept and can be perfectly combined with the active subwoofers hd P12, hd P15 and hd P18 or Harmonic Design System amplifiers.



The **hd MLC** Cardioid expansion module is available for demanding applications in mobile and permanent installations, effectively reducing the backward radiated frequency components by up to 20 dB. The further optimized directivity of the column speaker by the cardioid module thus considerably reduces the feedback susceptibility in the low-mid range and at the same time improves speech intelligibility, since no sound energy is radiated diffusely into unwanted areas. The hd MLC module is mounted directly on the back of the hd LineArray Stick and driven by a separate amplifier channel. Cardioid or hypercardioid characteristics can be easily retrieved using the corresponding DSP preset via the hd LevelZ software. In addition to the reduction of the back radiated sound energy, the hd MLC Cardioid module also extends the SPL capabilities in the low-mid range of the hd ML-Series towards the audience. This makes the sound even more punchy and dynamic with the same line length.

All loudspeakers can be used in distributed high voltage applications with the 100V-option. Various mounting solutions are available with the full-length U-slot at the backside of the column speaker. M6 square nuts can be inserted easily to use tilt and swivel wall mounts or stand adaptors for fixed installations or mobile use.

Key Features

- passive LineArray Stick
- cylindrical wave propagation
- perfect sound & excellent dynamics
- wide coverage 100° x 15°
- superb speech intelligibility
- best integration into room architecture
- custom sizes available
- 100V-version available

Applications

live music, DJ, houses of worship, broadcast, conference, hotels, airports, stations, A/V installations, mobile use

Options

RAL color, various mounting and connection solutions, 100V-version, custom length, transport bag, self-powered Beamforming speakers (hd Beam-Series)

suggested Subwoofer

hd Sub-Series, hd P-Series

Model	Type	Transducers	Impedance	Power Rating RMS / Peak	Sensitivity (1W / 1m)	SPLmax	Freq. Range (-6dB)	Weight	Dimensions W x H x D (mm)
ML8	LineArray Stick	8x 2“	8 Ω	200 / 280 W	89 dB	119 dB	160 Hz - 20 kHz	4 kg	80 x 553 x 78
ML16	LineArray Stick	16x 2“	4 Ω	400 / 560 W	92 dB	123 dB	140 Hz - 20 kHz	6 kg	80 x 1000 x 78
ML24	LineArray Stick	24x 2“	6 Ω	600 / 840 W	95 dB	125 dB	120 Hz - 20 kHz	8 kg	80 x 1513 x 78
ML32	LineArray Stick	32x 2“	8 Ω	800 / 1120 W	96 dB	127 dB	90 Hz - 20 kHz	10 kg	80 x 1958 x 78
MLC	Cardioid Add-On	9 x 2“	4 Ω	225 / 315 W	89 dB	117 dB	80 Hz - 500 Hz	5 kg	80 x 708 x 78