



**hd PL16**  
PowerLine Stick

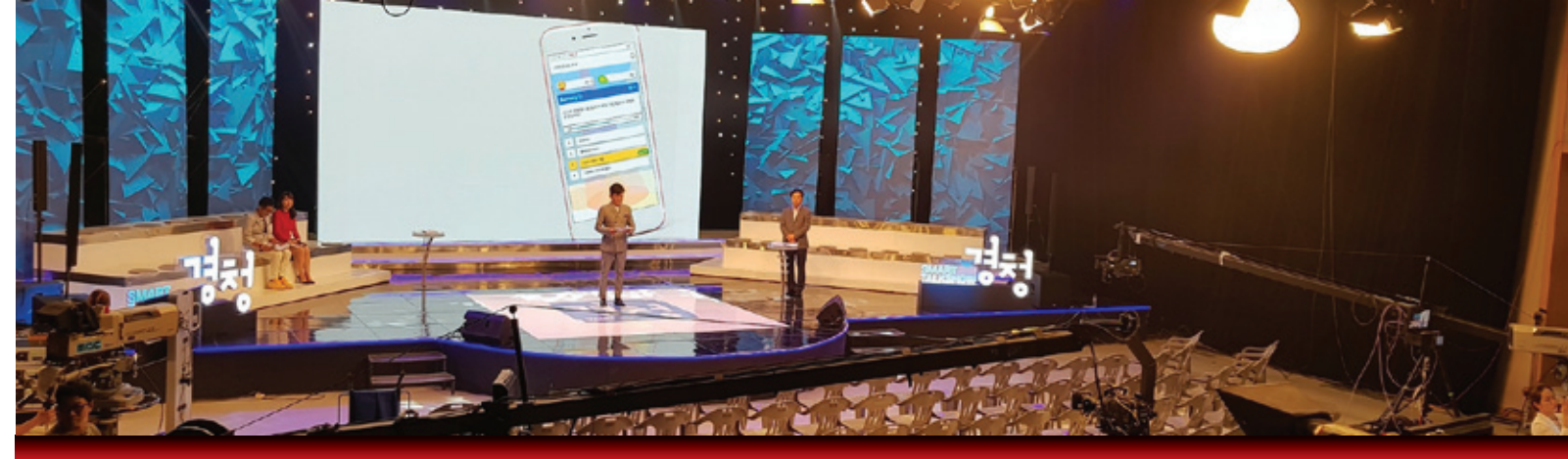
# hd PL-Series

## PowerLine Stick

The **hd PL-Series** extends the Harmonic Design® LineArray Stick portfolio with a more powerful PowerLine Stick loudspeaker series. The elegant design introduced with the hd ML-Series has been transferred to a slightly larger column speaker series. Lightweight and highly stiff aluminum enclosures paired with groundbreaking newly developed 3" drivers provide high reliability and performance. The true 1-way design delivers superb natural sound reproduction of music and speech in reference studio monitor quality. For mobile applications, the elegant PowerLine sticks can be combined with active system subwoofers of the hd P-Series with their open system architecture to create an elegant and high-performance PA system. With the modular design of each Harmonic Design® column loudspeaker series, custom lengths and color schemes are available to meet the needs of any permanent installation project. A perfect integration into existing space architecture and stage scenery due to the remarkable size-to-performance-ratio makes the hd PL-Series the first choice of architects, system integrators and rental companies around the world.

The **hd PL12**, **hd PL16** and **hd PL24** are the standard models of the hd PL-Series. Equipped with high-performance hd 3" broadband drivers, the hd PL-Series produces a coherent sound field with cylindrical wave propagation. Extensive research and use of new materials has been required to increase the frequency range to the highest audible frequencies with fullrange speakers that do not require additional tweeters. The 1-Way design improvements provide a longer, coherent throw range with less loss of level and frequency over distance at the same time. Cylindrical wave propagation provides better speech intelligibility compared to other column loudspeakers and predestines the PowerLine Stick hd PL-Series for use in difficult acoustic environments such as churches, train stations, airports or concert halls where clarity, performance and an unobtrusive appearance are required.

The hd PL-Series is also available with the implementation of the hd Beamforming-Technology. The hd PLBeam-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.



The **hd PLC** Cardioid expansion module is available for demanding applications in mobile and permanent installations, effectively reducing the backward radiated frequency components by up to 20dB. 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 PLC module is mounted directly on the back of the hd PowerLine 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 PLC Cardioid module also extends the SPL capabilities in the low-mid range of the hd PL-Series towards the audience. This makes the sound even more punchy and dynamic with the same line length.

For mobile application the hd PL-Series column speakers are equipped with a Neutrik NL4MP an model dependant either with a 35 mm stand adaptor flange on the bottom or with a rear side mounted tilt/swivel stand adaptor. For fixed installations the connection is made through an almost invisible cable outlet on the back and terminal blocks inside.

### Key Features

- passive PowerLine Stick
- cylindrical wave propagation
- perfect sound & excellent dynamics
- high SPL
- wide coverage 80° x 10°
- 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 colors, various mounting and connection solutions, 100V-version, custom length e.g. PL32, PL40  
self-powered Beamforming speakers (hd Beam-Series)

### suggested Subwoofer

hd Sub-Series

| Model | Type            | Transducers | Impedance | Power Rating<br>RMS / Peak | Sensitivity<br>(1W / 1m) | SPLmax | Freq. Range<br>(-6dB) | Weight | Dimensions<br>W x H x D (mm) |
|-------|-----------------|-------------|-----------|----------------------------|--------------------------|--------|-----------------------|--------|------------------------------|
| PL12  | PowerLine Stick | 12x 3"      | 6 Ω       | 450 / 630 W                | 94 dB                    | 124 dB | 130 Hz - 18 kHz       | 9 kg   | 108 x 1029 x 104             |
| PL16  | PowerLine Stick | 16x 3"      | 4 Ω       | 600 / 840 W                | 96 dB                    | 127 dB | 110 Hz - 18 kHz       | 11 kg  | 108 x 1353 x 104             |
| PL24  | PowerLine Stick | 24x 3"      | 6 Ω       | 900 / 1260 W               | 97 dB                    | 128 dB | 80 Hz - 18 kHz        | 15 kg  | 108 x 2001 x 104             |
| PLC   | Cardioid Add-On | 9x 3"       | 4 Ω       | 340 / 470 W                | 93 dB                    | 120 dB | 70 Hz - 500 Hz        | 7 kg   | 108 x 878 x 104              |



...simply harmonic sound