

# hd HLS-Series

### HybridLineSource

#### Revolutionary HybridLineSource-Technology.

The HybridLineSource is a new and worldwide unique loudspeaker system developed by Harmonic Design, which reduces the needed truck space dramatically and improves the quality of a public address system to a new level of uniformity and complete absence of distortions. The HybridLineSource System is equipped with two specially HybridLineSource



hd HLS20

hd HLS24

**HybridLineSource** 

designed high performance 10" resp. 12" neodymium low frequency chassis and reaches already a sensitivity of 107dB (hd HLS20P) and 108dB (hd HLS24P) in the low-mid-frequency range.

#### Powerful LineSource-Unit makes the Difference.

The exceedingly large-dimensioned high frequency LineSource-section consists of three resp. four 1.4" neodymium compression drivers with a special polymer diaphragm, coupled to dedicated LineSource wave formers generating a cylindrical wave front with a vertical opening angle of 40°. Therefore the throw of a HybridLineSource-System is comparable with a LineArray. Due to the coaxial setup the horizontal coverage pattern is free of interference in the crossover area and perfectly consistent over an angle range of 100°. Double-Hangs become redundant.

#### Efficiency new Defined.

The innovative and unique hybrid horn-loaded-, vented-, coaxial- and LineArray- enclosure design ensures seamless efficiency, most compact dimensions and undistorted high SPL larger 144 dB. The hd HLS24 HybridLineSource-System sets new standards in every event in the popular and daily used double-12" class. With the use of multiple 1.4"

compression drivers the typically occurring distortion of a single driver at higher levels, is dramatically reduced another advantage is the improved headroom to cover larger distances. The special SuperVentedDesign ensures a dynamic and broadband reproduction below 60 Hz without additional subwoofers in standalone full range mode. Cut mode guarantees strict neutrality in maximum performance applications.

#### **Easily Combinable.**

The mechanical structure allows the use on a speaker stand or flown vertical arrays. Every loudspeaker has an integrated 3-point FastRig rigging system where the inter element curvature can be set precisely in 5° steps from 5° to 20°.

#### Reliable and Audiophile.

Operation takes place with Harmonic Design® system amplifiers and guarantees outstanding performance and compatibility even in the worst circumstances as well as highest efficiency in terms of power consumption, truck space and output level. Up to two loudspeakers can be connected in parallel to the Harmonic Design® system amplifiers. An optional available passive phase optimized

crossover allows simple and quick operation on a single system amplifier channel. The 2-way active BI AMP mode guarantees strict neutrality for maximum performance applications. An accurate prediction is possible with EASE Focus.

### **Sophisticated Accessories save Time and Costs.**

The hd HLS-RF3 is a rigging frame and stand adaptor likewise that may be used to carry a single unit on a speaker stand with precise adjustable tilt in 1° steps from 0° - 20° as well as to fly a vertical array of up to three loudspeakers. This gives best flexibility for daily changing applications while reducing the accessories effort.

#### Sound with System.

There are perfectly matched hd TourSys systems comprised of top loudspeakers, subwoofers and system amplifiers as complete Allround-PA systems available. Several TourSys systems may be combined to realize shows with up to 5.000 listeners.







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# hd HLS20

## HybridLineSource





#### **Key Features**

- passive 2-way loudspeaker with 2x 10"N / 3x 1.4"N
- power handling 1200 W / 4800 W (AES/Peak)
- coverage 100° x 40°
- optional frequency- and phaseoptimized crossover
- innovative hybrid design
- integrated 3-Point FastRig-Rigging
- weight 34 kg

#### **Applications**

rental companies, live music, DJ, concert halls, mobile use, discotheque, sports arenas

#### Options

passive XO, hd HLS20-RF3, hd UniFrame16, hd HLS20-Tour-Case, RAL-Color

#### for extended low frequency usage

hd Sub18, hd P18, hd Infra218

Мо	odel	Transducers	Impedance	Power Rating RMS / Peak	Sensitivity (1W / 1m)	SPLmax	Freq. Range (-6dB)	Weight	<b>Dimensions</b> W x H x D (mm)
HL	S20	2x 10"N	LF: 4 Ω, HF: 16 Ω	1200 / 4900 \	LF: 107 dB HF: 109 dB	143 dB	70 Hz - 20 kHz	34 kg	400 x 520 x 540
HLS	320P	3x 1.4"N	passive XO: 4 Ω	1200 / 4600 VV	107 dB	145 UB	70 HZ - 20 KHZ	36 kg	400 X 320 X 340



# hd HLS24

### HybridLineSource



#### **Key Features**

- passive 2-way loudspeaker with 2x 12"N / 4x 1.4"N
- power handling 1200 W / 4800 W (AES/Peak)
- coverage 100° x 40°
- optional frequency- and phaseoptimized crossover
- innovative hybrid design
- integrated 3-Point FastRig-Rigging
- weight 45 kg



#### Applications

rental companies, live music, DJ, concert halls, mobile use, discotheque, sports arenas

#### **Options**

passive XO, hd HLS24-RF3, hd UniFrame16, hd HLS24-TourCase, RAL-Color

#### for extended low frequency usage

hd Sub18, hd P18, hd Infra218

Model	Transducers	Impedance	Power Rating	Sensitivity	SPLmax	Freq. Range	Weight	Dimensions
			RMS / Peak	(1W / 1m)		(-6dB)		W x H x D (mm)
HLS24	2x 12"N	LF: 4 Ω, HF: 8 Ω	1200 / 4800 W	LF: 108 dB HF: 110 dB	144 dB	60 Hz - 20 kHz	45 kg	480 x 675 x 560
HLS24P	4x 1.4"N	passive XO: 4 Ω		108 dB			47 kg	



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