



hd HLS24

HybridLineSource

The HybridLineSource technology is a world-class new speaker design developed by Harmonic Design that dramatically reduces the needed truck space and improves the quality of public address systems to a new level of uniformity and complete absence of distortions. The **hd HLS24** is the BI-AMP version with two specially designed high-performance 12" N woofers and achieves an efficiency of 108 dB even in the low/mid range. The exceedingly large-dimensioned high frequency LineSource-section consists of four 1.4" neodymium compression drivers with a special polymer diaphragm that, when coupled to a waveguide, produce a cylindrical wavefront with a vertical coverage angle of 40°. The throw range of the HybridLineSource system is comparable to a LineArray. Due to the symmetrical, coaxial structure, the horizontal radiation behavior is free of interference in the transfer area and absolutely uniform over an angular range of 100°. Double-hanging becomes redundant. An accurate prediction of the radiated sound field as well as calculation the optimum splay angles for the given setup is possible with EASE Focus.



Features

- revolutionary HybridLineSource technology
- extreme efficiency, long throw range
- BI-AMP for uncompromising sound
- Power rating 1200 W / 4800 W (AES / Peak)
- Radiation pattern 100° x 40°
- Standalone or as a vertical array
- innovative highly efficient housing design
- integrated 3-point FastRig rigging

Applications

FOH large sound system, mobile or fixed, live events, clubs, sports venues, theaters, city halls, Airports, train stations

Model	hd HLS24
Order number	60110
Acoustic design	HybridLineSource
Transducers	2x 12" N LF 4x 1.4" N HF
Impedance	LF: 4 Ω, HF: 4 Ω
Crossover	active, 900 Hz
Coverage (hor x ver)	100° x 40°
Frequency range (-6dB)	60 Hz - 20 kHz
Sensitivity (1W / 1m)	LF: 108 dB, HF: 110 dB
Power Rating AES / Peak	1200 / 4800 W
SPLmax @ 10% THD	144 dB
Enclosure	robust multiplex housing with polyurethane coating black, recessed connection panel with 2x NL4, 35 mm flange, transport handles, integrated rigging, steel grille with acoustic foam
Optional Accessories	Installation version (Art. 40092) hd HLS24-RF3 (Art. 60801) hd UniFrame16 (Art. 60805) Transport protection cover, TourCase RAL color, weather resistant
Weight	45 kg
Dimensions (W x H x D)	480 x 675 x 560 mm



...simply harmonic sound

hd HLS24 datasheet

Redefined efficiency.

The innovative and unique enclosure design provides for tremendous efficiency, compact dimensions and undistorted maximum sound pressure greater than 144 dB. The hd HLS24 HybridLineSource system sets new standards in all disciplines in the double 12" class. By using a LineSource unit with several powerful high-frequency drivers, the distortion is reduced to an absolute minimum and at the same time enormous reserves are available for the sounding of large distances.

Easy to combine.

The housing design allows applications on a tripod or flown vertical arrays of up to five elements. The angle between the individual loudspeakers can be precisely adjusted from 0° to 18° in 6° increments via the integrated FastRig rigging.



Sophisticated accessories save time and money.

The hd HLS24-RF3 is a flying frame and tripod adapter at the same time, which can be used to carry a loudspeaker on a speaker stand with precisely adjustable inclination in 1° increments from 0° - 15° as well as for flying a vertical array of up to five speakers. This ensures the greatest possible flexibility of daily changing sound reinforcement tasks with simultaneously reduced accessory costs.

Reliability and audiophile quality.

Operation takes place exclusively via Harmonic Design system amplifiers and guarantees outstanding performance and compatibility even under adverse conditions as well as maximum efficiency in terms of power consumption, pack size and output. The BI-AMP version guarantees strict neutrality for maximum performance applications and requires two amplifier channels. The hd HLS24P with passive crossover is available under article no. 60115.

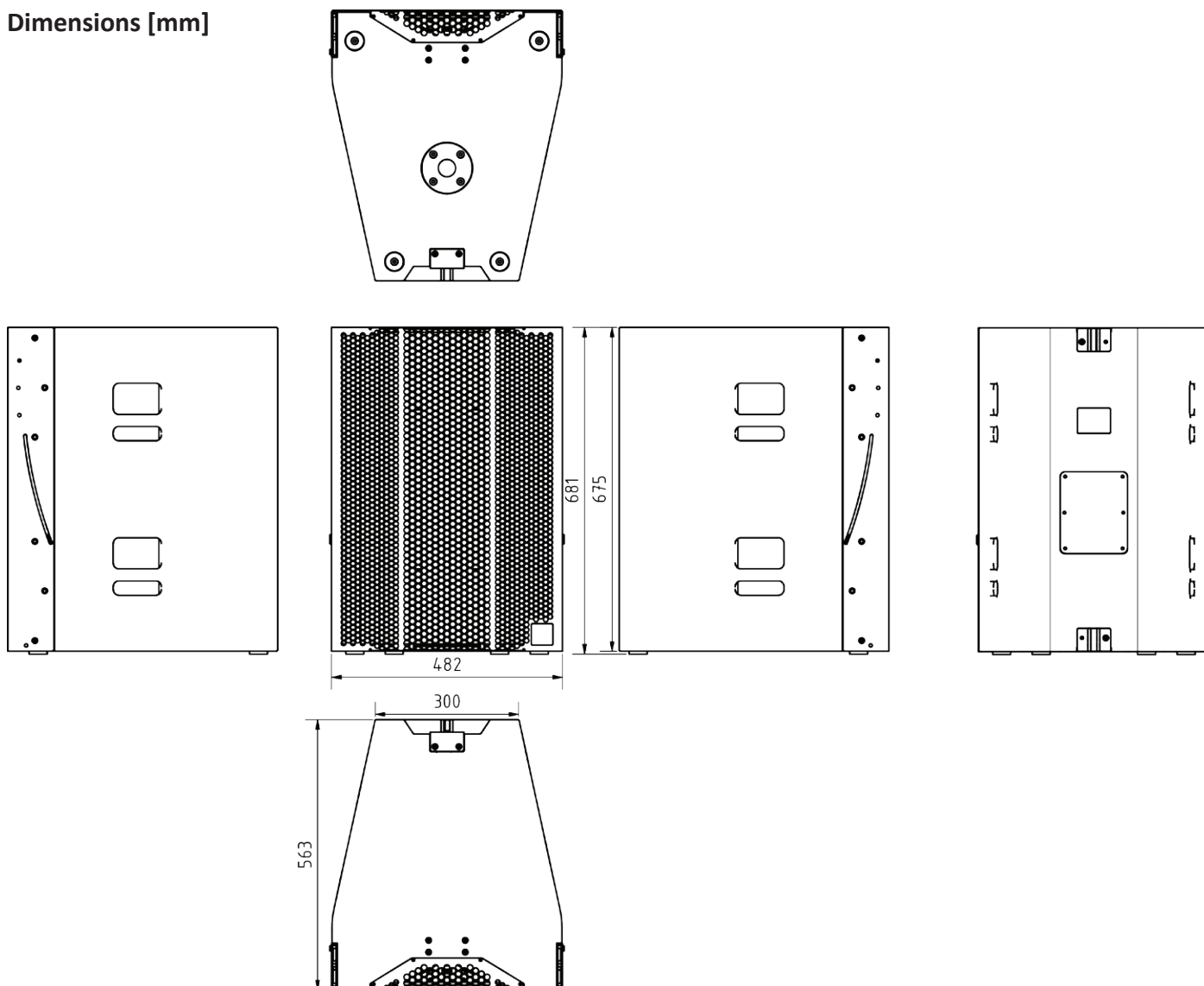


Sound with System.

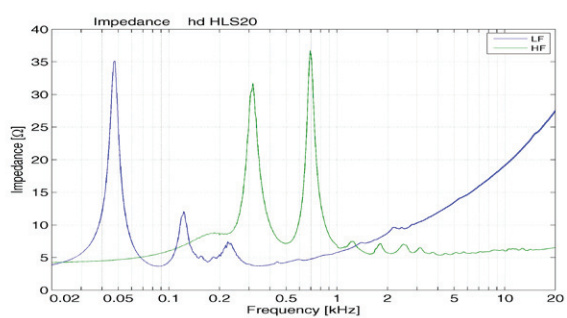
The TourSys systems are available as perfectly tuned all-round full sound systems consisting of top speakers, subwoofers and system amplifiers. Several TourSys systems can be extended to a large system to realize sound reinforcement with up to 10,000 listeners.

hd HLS24 datasheet

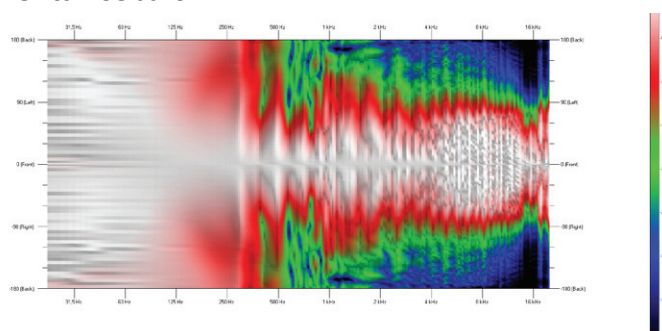
Dimensions [mm]



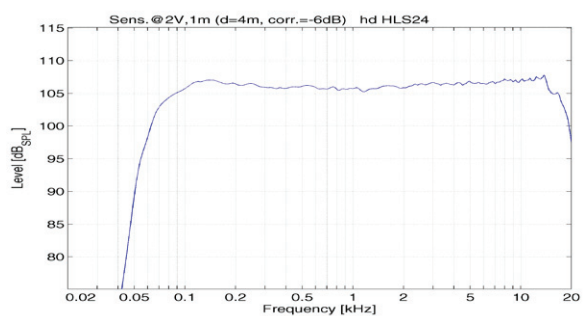
Impedance



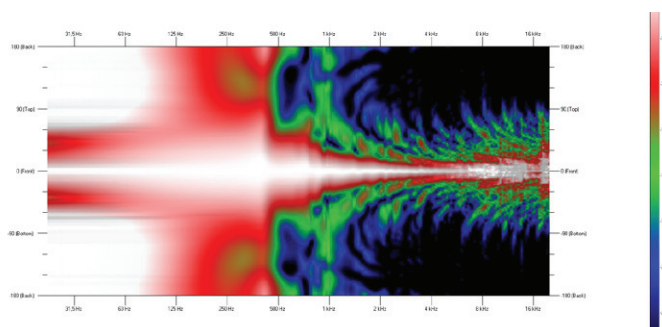
Horizontal Isobars



Frequency response with DSP preset

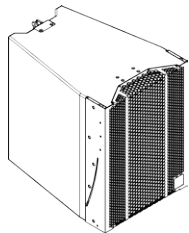


Vertical Isobars



hd HLS24 datasheet

Accessories



Installation version

Elegant design for permanent installation without handles and without 35 mm flange

Order number: 40092 (hd HLS24i)



RAL color

Special color per article according to RAL color chart

Order number: 1073



Weather resistant

Impregnation against weather influences

Order number: 4610



hd HLS24-RF3

Multifunctional flying frame and tripod tilting adapter. To carry a speaker on a tripod with precisely adjustable tilt in 1° increments up to 15° or to fly a vertical array of up to three speakers

Incl. 1x HLS load adapter, 1x HLS ArcSpacer, 4x front-lock pin, 2x load adapter pin

Order number: 60801



hd UniFrame16

universal groundstack/flying frame for hd LSA12, hd HLS20, hd HLS24 and flyable subwoofers

Order number: 60805



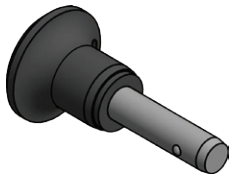
Transport cover HLS24

Hardwearing transport cover made of polyester with 10 mm padding and hd logo imprint

Order number: 30120

hd HLS24 datasheet

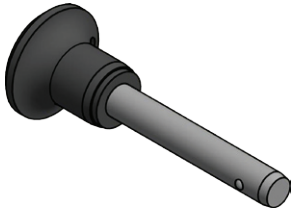
Accessories



HLS-Front-Lock-Pin

self-locking ball lock pin with black mushroom type handle, $\varnothing 6 \times 15$ mm

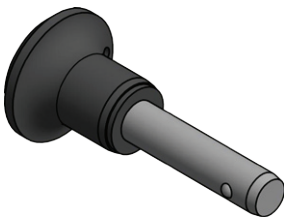
Order number: 900302



HLS-Loadadapter-Pin

self-locking ball lock pin with black mushroom type handle, $\varnothing 6 \times 30$ mm

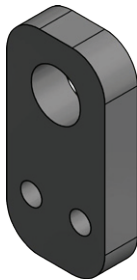
Order number: 900301



HLS-Rear-Lock-Pin

self-locking ball lock pin with black mushroom type handle, $\varnothing 8 \times 25$ mm

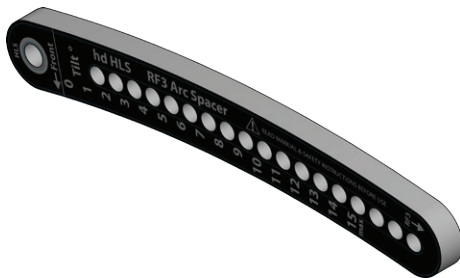
Order number: 900303



HLS-Loadadapter

Load adapter for holding a shackle with max. $\varnothing 15$ mm for use with hd HLS24-RF3

Order number: 900315



HLS-ArcSpacer

Halfbow for adjusting the vertical tilt angle when used with hd HLS24-RF3, $0^\circ - 15^\circ$

Order number: 900317



hd HLS24-TourCase

Double case for two hd HLS24 incl. RF3 flying frame with 8x folding handles (2x per side) and 4x 100 mm wheels

Order number: 950050