

# HB212 / HB212A

2 x 12"- Horn loaded arena subwoofer, Bi-amplified / self-powered



## Presentation: PROPHON HB212

When it comes to large venues, places of worship, festivals, concerts and nightclubs, **the PROPHON HB212 will blow you away!**

With a staggering max SPL of 144dB (45-100Hz), and a frequency range coverage down to 25 Hz (-6dB)

HB212 delivers a sound that can only be described as "natural" where all low-frequency-instrument will be present in an unsurpassed clarity and accuracy, thanks to the special horn design and the specially designed high power neodymium 12"-woofers. The horn design ensures long-throw coverage, making the subwoofer ideal for using outdoor or in large indoor events with line array systems or horn loaded systems.

To be able to compete with the SPL, sensitivity and long throw of the HB212 you will need a shipload of regular front-loaded 18"- woofers.

Only two HB212 on each side easily covers a medium to large live performance venue with thousands of people in the audience.

HB212 has a sensitivity of 110 dB@1W/1m. from 45 to 100 Hz, and 103 dB @ 30 hz. (half-space)

The cabinet has two handles on each side (a total of 8 handles) and 4 castors in the back for easy transportation and rigging, it is a relatively small sized, lightweight subwoofer, taking into account what it can produce in SPL.

The HB212 is prepared with rigging and flying hardware to be used with any of the PROPHON range of line array

The paint is a hardened two-component lacque and it is manufactured with state of the art computerized CNC machines, this ensures a very high quality, in the sound as well in the cabinet, guaranteeing a long lifetime with minimum service.

All woodwork and assembly are made in Sweden with a result that can clearly be seen and heard when comparing quality and reliability with other brands, where assembly and manufacturing often are made in china or in other developing countries.

## HB212 comes in two versions

- **Standard passive version** (bi-amplified) where an external amplifier are used to power the speaker  
(*PROPHON P4200, P10000 see the electronics section in this brochure*)
- **Active version** (self-powered) with built in 2 x 1050W class-D amplifiers (*see extended information below*)

## The active version (HB212A)

Fully DSP processed built-in amplifier, with on-board, high definition signal processors,

The HB212A houses two 1050W @ 8 ohm amplifier with separately dedicated on-board DSP's.

## Features HB212:

- High SPL - low distortion
- Long-throw horn loaded design
- Eight handles
- High power 12"- neodymium woofers. (2000W cont..)
- Prepared for four castors (not included).
- Fully covering protective perforated steel grille with speaker foam.
- 18 mm. reinforced high quality birch plywood
- Special two-component hardened paint.
- Two versions, Active and passive
- High quality components made in Europe.
- Designed, assembled and manufactured in Sweden.

# HB212 / HB212A

2 x 12"- Horn loaded arena subwoofer, Bi-amplified / self-powered

HB212 is perfect to use in combination with a line array or a horn loaded system. In this way having a long throw sound system down to the lowest frequencies, covering vast distances on outdoor events.



Super reinforced 18 mm. high quality plywood, ensures minimum vibrations, thus raises the max SPL considerably.



Picture showing four pcs of the HB212A stacked together, creating an overdimensioned horn baffle, helping the woofers to produce even lower frequencies at high SPL.

## Technical data HB212:

Model	HB212
Low frequency driver	2 x 12" woofer, 4"- voice coil
Construction	Horn loaded high power long-throw
Sensitivity (half space)	103 dB@30Hz, 110dB@45-100Hz, 1W/1m.
Nominal impedance	4 ohm
Power handling R.M.S. / cont..	2000W / 4000W
Max SPL, half space (calc.)	144dB @ 4000W (45-100Hz)
frequency response +/- 6dB	25Hz - 500Hz
Measurements H x W x D mm.	900 x 720 x 1240
Weight	80 kg.
Recommended crossover for passive version	LP@80-120Hz, 24-48dB/oct HP@35Hz, 24-48dB/oct
Recommended Amplifier	PROPHON P10000
Recommended pre-programmed DSP processors	PROPHON DSP260, DSP480
Recommended Powerage	1500W - 4000W @ 4 ohm
Connections passive version	2 x Neutrik Speakon 1+ /1- Input / through, 2+ / 2- Link
Applications	- Large fixed Installation - Large live performances - Stacked, or single ended use.
Accessories	- Castors, front-cover, ground-stack hardware - Flight ware, rigging hardware

## Extended technical specifications HB212A, with 2x1050W built-in amplifier & DSP

Connectors	Input: Neutrik XLR female Link out: Neutrik XLR male Power in: Neutrik powercon blue Power out: Neutrik powercon grey
Input sensitivity	10 kOhm balanced to ground
Mains voltage acceptance	AC 95V - 250V, 50/60 Hz automatic selections of mains voltage range (Power factor correction, PFC)
Input current (195-250V <sub>ac</sub> 1/8 max output power )	2,9 Arms
Input current (95-125V <sub>ac</sub> 1/8 max output power )	5,5 Arms
Consumption (1/8 max output power)	410VA
Max output current draw	35 A
Cooling	Temperature controlled continues variable speed fan
Max operating ambient temperature	40 <sup>0</sup> C
Thermal emission (1/8 power @ 4 ohm)	281,7 BTU/h
Thermal emission (1/4 power @ 4 ohm)	464,3 BTU/h
Gain	38 dB (voltage gain: x 80)
Frequency response	10 Hz - 30 kHz (+/-3dB, 1w @ 8 ohm)
S/N ratio	> 112 dB(A) (20 Hz - 20 kHz)
Damping factor	> 500 @ 100 Hz
THD+N	< 0,05% from 0,1W to full power