B6HP / B6HPA

2 x 18”- Subwoofer, Bi-amplified / self-powered

Presentation: PROPHON B6HP
The PROPHON B-Series subwoofer was designed for use as a high power subwoofer with recorded music and for live applications, such as nightclubs, live stages, concert halls, auditorium etc.
The B6HP Subwoofer is a very powerful subwoofer with 2 x 18”- low frequency transducers mounted in an extremely reinforced cabinet, with separately vented, tuned chambers. The design was developed and engineered with advanced computer simulation software in close collaboration with some of our prophon users and customers, to satisfy the need in a high power subwoofer dedicated to reproducing controlled subwoofer frequencies with minimum distortion.

Using separately vented chambers minimizes distortion and influence between the two 18”- transducers.
The two 18”- transducers are specially designed to endure long hours of high performance low frequency transmission, with reinforced cone, double spider technology, 4” voice coil, and with ventilation chambers in the magnet for minimizing and diverting the heat, which also prolongs the lifetime of the speakers.

The woofers are protected by a fully covering 1,5 mm perfored steel grille and a speaker foam, both with minimum air flow resistance, so as not to influence the sound in a negative way. The paint is a hardened two-component lacque.
Both of the above mentioned components combined with state of the art computerized CNC machines when manufacturing, 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 when comparing quality and reliability with other brands, where assembly and manufacturing are often made in china or in other developing countries.

In short: the B6HP is a very powerful subwoofer for use in a variety of applications in both live performances and fixed installations, in nightclubs, live stages, concert halls, festivals, bands etc.

B6HP comes in two versions
- **Standard passive version** (bi-amplified) where an external amplifier are used to power the speaker *(PROPHON P4200, P5600, P3000 or P3000DSP, see the electronics section in this brochure)*
- **Active version** (self-powered) with built in 2100W class-D amplifiers *(see extended information below)*

The active version (B6HPA)
Fully DSP processed built-in amplifier, with on-board, high definition signal processors,
The B6HPA houses two separately controlled 1050W @ 8 ohm amplifiers, (total output power 2100W@8ohm).
Each 18” woofer has a 1050W@8 ohm dedicated, DSP-controlled amplifier.

There are 4 presets setups:
1) HP-filter@90Hz
2) HP-filter@110Hz
3) Cardioid setup1, only to be used with another B6HPA using preset 1 *(see separate data sheet for proper system setup)*
4) Cardioid setup2, only to be used with another B6HPA using preset 2 *(see separate data sheet for proper system setup)*

Features B6HP:
- High SPL - low distortion
- Two handles on each side
- M20 / 35mm. top hat
- Stacking rails.
- High power 18”- woofer. (2400W cont.)
- Prepared for four castors (not included).
- Fully covering protective perfored steel grille with speaker foam.
- 18 mm. 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.

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Picture showing an active rigg with
2 pcs. of the B6HPA and 2 pcs. of the 222A
(See self-powered sound systems for more information)

Technical data B6HP:	
Model	B6HP
Low frequency driver	2 x 18” woofer, 4”- voice coil
Construction	Tuned bass reflex
Sensitivity (open space)	103 dB@1W/1m.
Nominal impedance	4 ohm
Power handling R.M.S. / cont..	2400W / 4800W
Max SPL, half space (calc.)	140dB @ 4800W
frequency response +/- 6dB	25Hz - 500Hz
Measurements H x W x D mm.	1200 x 600 x 650
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 - 5000 @ 4 ohm
Connections passive version	2 x Neutrik Speakon 1+ /1- Input / through, 2+ / 2- Link
Applications	- Fixed Installation - Live performances - Stacked in an cardioid array, or single ended use.
Accessories	- Castors, front-cover, - Speaker Stand Kit

Picture showing the active 2100W module with Neutrik powercon in/out, Neutrik XLR in / through, volume control and preset selector.

Extended technical specifications B6HPA, with 2x1050W built-in amplifiers	
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
Input current (195-250V ac 1/8 max output power)	2,9 Arms
Input current (95-125V ac 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^{O} 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