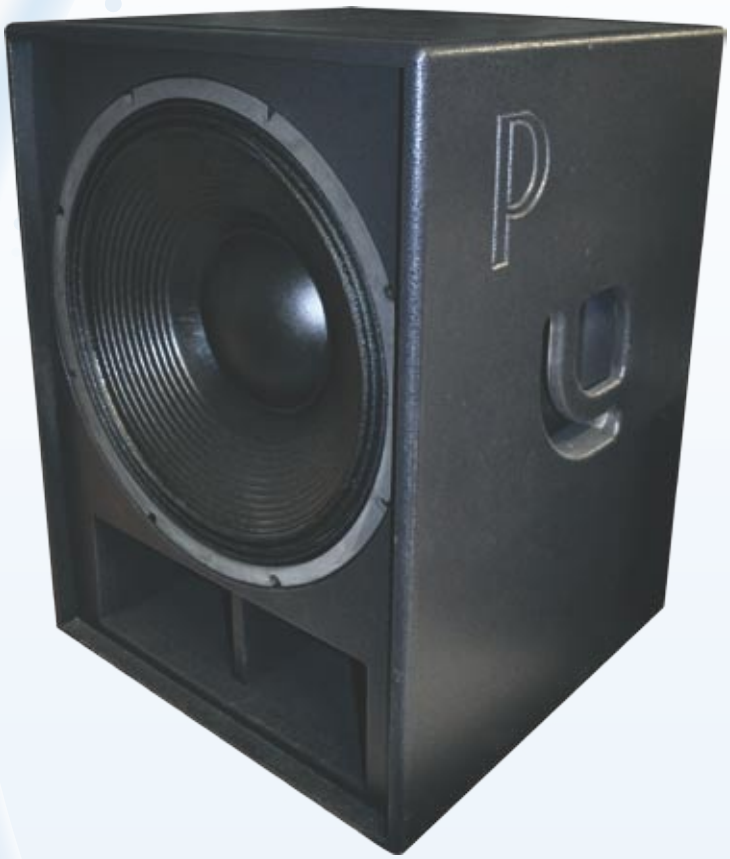
# B21HP / B21HPA

## 1 x 21”- Subwoofer, Bi-amplified / self-powered



**Presentation: PROPHON B21HP**
The PROPHON B21HP infra sub, is by our knowledge the most powerful woofer available, with its 4kW continues power handling. Designed to be used as a complement to 18” or 15” woofers in large , producing those bone-shaking, earth-trembling lowest frequencies down to 20 Hz.
The woofer, weighing an impressive 18,5 kg., have a massive voice-coil diameter of 6” and a 60 mm. peak to peak excursion, the neodymium magnet has an extremely high force factor and linear excursion.
With double silicone spider, ventilated voice-coil gap for reducing power compression, and an aluminium demodulating ring for very low distortion.
The B21HP has the same width (600 mm.) as the single 18” woofer PROPHON B18HP, allowing for easy combinations and rigging.

The woofer 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 often are made in china or in other developing countries.

**B21HP comes in two versions**
- **Standard passive version** (bi-amplified) where an external amplifier are used to power the speaker *(PROPHON P4200, P5600 see the electronics section in this brochure)*
- **Active version** (self-powered) with built in 1500W class-D amplifiers *(see extended information below)*

**The active version (B21HPA)**
Fully DSP processed built-in amplifier, with on-board, high definition signal processors,
The B21HPA houses a 1500W @ 8 ohm amplifier with dedicated on-board DSP.

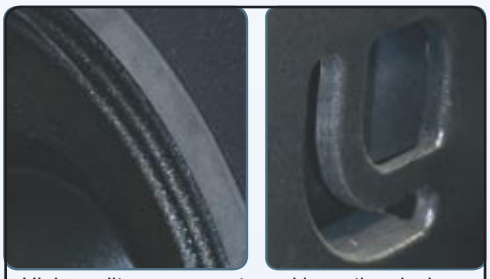
**There are 4 presets setups:**
1) HP-filter@70Hz
2) HP-filter@90Hz
3) Cardioid setup1, only to be used with another B21HPA using preset 1
   *(see separate data sheet for proper system setup)*
4) Cardioid setup2, only to be used with another B21HPA using preset 2
   *(see separate data sheet for proper system setup)*

# B21HP / B21HPA

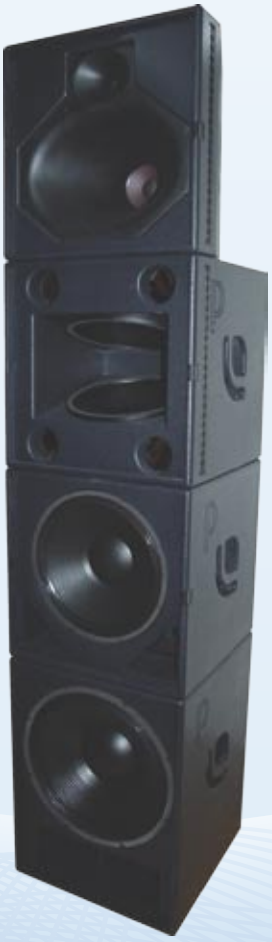
## 1 x 21”- Subwoofer, Bi-amplified / self-powered

**Features B21HP:**

- High SPL - low distortion
- Infra sub, covering the lowest frequencies
- Two handles
- M20 / 35mm. top hat
- Stacking rails.
- High power 21”- woofer. (4000W 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.



High quality components and inovative designs, here showing the 4kW woofer, and the newly designed, easy to use, handle



*Picture showing the B21HPA in the ”clubland” self-powerd sound system. Acting as an infra sub, together with a B18HPA, CLV215A and CLH81A.*

| **Technical data B21HP:** | |
|---|---|
| Model | B21HP |
| Low frequency driver | 1 x 21” woofer, 6”- voice coil |
| Construction | Tuned bass reflex |
| Sensitivity (open space) | 99 dB@1W/1m. |
| Nominal impedance | 4 ohm |
| Power handling R.M.S. / cont.. | 2000W / 4000W |
| Max SPL, half space (calc.) | 138dB @ 4800W |
| frequency response +/- 6dB | 20Hz - 500Hz |
| Measurements H x W x D mm. | 800 x 600 x 650 |
| Weight | 50 kg. |
| Recommended crossover for passive version | LP@60-80Hz, 24-48dB/oct<br>HP@20Hz, 24-48dB/oct |
| Recommended Amplifier | PROPHON P10000 |
| Recommended pre-programmed DSP processors | PROPHON DSP260, DSP480 |
| Recommended Powerage | 2000W - 4000W @ 4 ohm |
| Connections passive version | 2 x Neutrik Speakon<br>1+ /1- Input / through, 2+ / 2- Link |
| Applications | - Fixed Installation<br>- Live performances<br>- Stacked in an cardioid array, or single ended use. |
| Accessories | - Castors, front-cover,<br>- Speaker Stand Kit |
| **Extended technical specifications B21HPA, with 1500W built-in amplifier** | |
| Connectors | Input: Neutrik XLR female<br>Link out: Neutrik XLR male<br>Power in: Neutrik powercon blue<br>Power out: Neutrik powercon grey |
| Input sensitivity | 10 kOhm balanced to ground |
| Mains voltage acceptance | AC 95V - 250V, 50/60 Hz<br>automatic selections of mains voltage range |
| Input current (195-250V $_{ac}$ 1/8 max output power ) | 2,2 Arms |
| Input current (95-125V $_{ac}$ 1/8 max output power ) | 3,6 Arms |
| Consumption (1/8 max output power) | 270VA |
| 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) | 213,4 BTU/h |
| Thermal emission (1/4 power @ 4 ohm) | 402,9 BTU/h |
| Gain | 32 dB (voltage gain: x 40) |
| 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 / SMPTE IMD | < 0,05% from 0,1W to full power |