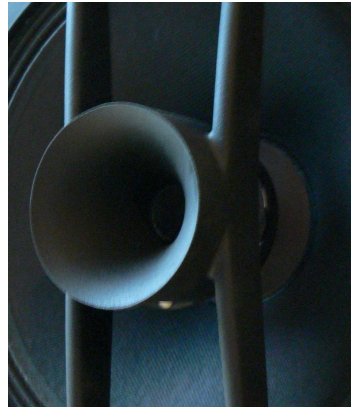


Swissonor.ch

B.A.C.H.12



“Bringing back life to music »

B.A.C.H. 12 = Bass Adjustable Coaxial Horn with 12” driver

2-way coaxial and coplanar loudspeaker with Tractrix-horn, featuring fine adjustment in the low end and discrete adjustable mids and highs.

Innovative and unique solutions, combined in a high-end concept, bring you uncompromised sonic performance.

This product is handcrafted in Switzerland. More than 70 percent of the costs are generated in Switzerland, 25 more percent in the bordering countries.



## Goals

The basic idea was the design of a high-efficiency loudspeaker combining several contradictory requirements allowing reproduction of living music as vector of intense emotions:

- **Relaxed listening** of all music styles, from very low to very high levels
- **The use of amplifiers covering all power classes**, explosive dynamics even with single-ended tube amplifiers with power as low as 4 W per channel
- **Reproduction of infinite details**, without projection, due to the placement of the driver diaphragms in a unique coaxial and coplanar configuration. This feature brings better spatial reproduction fidelity, too. In classic coaxial designs, the high-frequency driver diaphragm is situated far behind the low-frequency driver, resulting in huge high-frequency delay. Some loudspeaker-manufacturers introduced complex time-delay networks for the low-frequency driver to compensate this inconvenient.
- **Enhanced listening zone** (horizontally and vertically) due to the housings diamond-shaped section, facilitating the angular placement. The controlled directivity results in a smooth polar diagram in both planes.
- **Extreme dynamics** thanks to the very high efficiency combined with high power rating. That's the only way to avoid the audible thermal compression of classic loudspeakers.
- **Easy placement**, adjacent to a wall or even near a corner. The  $2\pi$  environment is integral part of the loudspeaker design. The fine-tunable bassreflex opening and the discrete adjustable mid- and high range allow optimized integration in rooms of different size, adsorbition rates and listening distances.
- **Less excitement of room resonance and echoes** due to controlled directivity and high efficiency. This can be explained by the (to easily forgotten) physical law of energy continuum.
- **Long term reliability** and value conservation due to oversized long-life components. All parts have been selected by numerical simulation, measuring and during hundreds of listening hours using objective and subjective quality criteria.
  - Drivers for professional use, designed and built in Europe
  - Bass/Midrange driver: Cast aluminium frame, vented core and spider
  - Compression driver : Self-centering diaphragm, field replaceable
  - Selves : Mundorf ribbon selves
  - Capacitors : Polypropylène 400V, loss angle < 0,0003
  - Resistors : MOX and cement 10W
  - Internal wiring : Signal cables in quad configuration
  - Connectors: Laboratory connectors 100V 24-32 A
  - Soldering: Silver solder

## Technical specification

Continuous noise AES standard.....300 W  
 Program power (6dB crest factor).....500 W  
 Peak power <10ms.....1000 W  
 Rated impedance.....8 Ohm  
 Sensitivity (Thiele half space reference efficiency).....97 dB(1W/1m)  
 Maximum acoustic output (1 loudspeaker).....117 dB  
 Maximum acoustic output (pair of loudspeakers).....123 dB  
 Frequency range in-axis .....46 – 16'000 Hz(+/- 3dB)  
 Recommended amplifier rating (tube amps).....4 - 30 Watt at 8 Ohm  
 Recommended amplifier rating (solid state amps)..... 20 – 80 Watt at 8 Ohm  
 Maximum reasonable amplifier power.....400 Watt at 8 Ohm  
 Frequency dividing network, free air cabled.....1,4 kHz, 12 dB/octave  
 Low frequency adjustment range.....+/-3 dB continued  
 Medium/high adjustment range (2 + 8 kHz).....+/-1,5 dB discrete  
 Polarity : Positive voltage on red terminal gives forward cone motion  
 Housing : Handmade from oiled plywood with Canadian maple veneer inside and outside  
 External dimensions (including spike)..... 396 x 396 x 1172 mm

Hearing is believing, come in for a listening session at :



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