

DATASHEET

## PAN BEAM PB 16 - ACTIVE DIGITAL STEERABLE COLUMN SPEAKER



The **Pan Beam PB 16** is a slim line speaker in an appealing design. The Pan Beam **PB 16** can generate four independent beams, to get an optimal sound coverage on the listening area. It is possible to modify the beam through various optimizers (max SPL, SPL + min side lobes, min side lobes). Operated via a user friendly Windows Software, the connection to the computer is made through a RS 485 network. Over the digital signal processing the vertical and the inclination angle, the volume, sound and delay can be entered and controlled. The **Pan Beam PB 16** is equipped with 16 specially-designed 3.5" chassis, DSP modules and 16 digital amplifiers offering maximum performance of 80 watts per channel. A single **Pan Beam PB 16** can cover a listening area of 35 meters, with constant speech intelligibility and sound pressure.

### FEATURES:

High efficiency, integrated protection circuits, high speech intelligibility even in the most adverse acoustic environments. Sleek and unobtrusive design, remote monitoring, two audio inputs (transformer-balanced)

### INTEGRATED DSP CONTROL FOR:

- The vertical radiation (opening / angle)
- 5-band parametric equalizer
- Volume control
- Internal delay up to 370 ms
- Connection to media control possible
- two independent line inputs with automatic priority switching

For the **Pan Beam series**, there is a wide range of mounting accessories for fixed installations and mobile applications.

The Pan Beam units can be cascaded from the Pan Beam PB 08 up to **PB16/24/32/40**, to control the lower limit frequency, the sound pressure and to improve the coverage.

All **Pan Beam** speakers are designed, developed with high-quality materials and manufactured according to strict criteria by Pan Acoustics in Germany.

### MADE IN GERMANY

### ADDITIONAL OPTIONS

- automatically volume control with ambient noise detection
- extensive mounting accessories
- AES / EBU
- 100V Option
- IP 54 / 65
- RAL Colour Option  
(Standard color: Aluminum RAL 9006)

### APPLICATIONS

Churches, Mosque, Museum, Live Sound, Train stations, Airports, Sports grounds, Parliament Conference rooms, Auditorium, Shopping center, A/V Installations

## TECHNICAL DATA PAN BEAM PB 16

### ACOUSTIC SPECIFICATION

|   |   |
|---|---|
| <b>Type:</b>  | Fullrange-System with 16 x 3,5"-Driver    |
| <b>Frequency response:</b>                                | 70 Hz - 17 kHz (+3/-10 dB)*               |
| <b>Dispersion Horiz.:</b>                                 | 130° (3 kHz), 70° (10 Hz)                 |
| <b>vertical Beamangle:</b>                                | 3°- 40°, digital steerable                |
| <b>Beams:</b>   | 4   |
| <b>Acoustic focus adjustable, depending on the length</b> |   |
| <b>Tilt:</b>  | -70° - +70°, digital steerable            |
| <b>Focus Distance:</b>                                    | 1 m up to 75 m                            |
| <b>Typical Distance:</b>                                  | 35 m                                      |
| <b>SPL-limit (peak):</b>                                  | 131 dB SPL* @1m (cal.)   97 dB SPL @ 25 m |
| <b>Dynamic-Range:</b>                                     | >92 dB                                    |

\*anechoic halfspace conditions

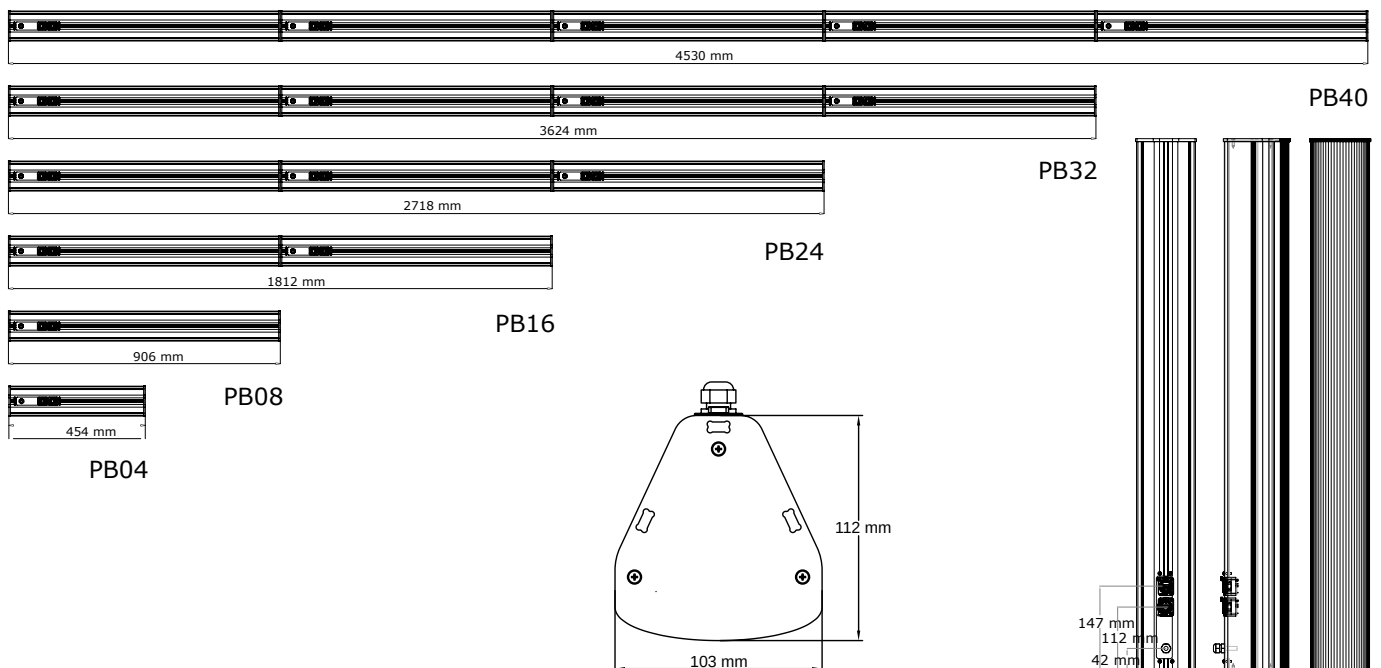
### ELECTRONIC SPECIFICATION

|   |   |
|---|---|
| <b>Output Power:</b>                      | up to 16 x 80 Watt max (4 Ohm)                                  |
| <b>Type:</b>                              | Digital PWM   |
| <b>Pan Beam-Netzwerk I/O:</b>             | 2 x RJ 45 (EtherCon)  |
| <b>Audio-Input via Pan Beam-Netzwerk:</b> | 2 x Transformer-balanced Line-Level +4dBu, Samplerate 96.000 Hz |
| <b>AC Input Operating Range:</b>          | 230 oder 110 Volt (+5/-10%), 50 Hz bis 60 Hz                    |
| <b>Nominal Power Consumption:</b>         | 20 VA (normal), 540 VA (max)                                    |
| <b>Maximum Ambient Temperature:</b>       | 0° - +40° C (optional -30°C - + 50°C)                           |

### GENERAL SPECIFICATION

|                            |   |
|----------------------------|---|
| <b>Enclosure:</b>          | Aluminium-Profil, consisting of two modules |
| <b>Grille:</b>             | Powder coated perforated steel              |
| <b>Colour:</b>             | Aluminium RAL 9006                          |
| <b>Dimensions (HxWxD):</b> | 1812 x 112 x 103 mm                         |
| <b>Weight:</b>             | 11 kg (incl. Electronic)                    |

## TECHNICAL DRAWING PAN BEAM 04, 08, 16, 24, 32, 40



**MADE IN GERMANY** - All products are developed and manufactured by Pan Acoustics in Germany.

Pan Acoustics reserves the right to change product specification without notice.

[www.pan-acoustics.de](http://www.pan-acoustics.de)

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## PAN BEAM PB 16 - HOUSING OPTION



### PB 16 / PB 16-C (STANDARD)

PB 16 consists of two modules with internal cable loom.



### PB 16 / PB 16-C (OPTION)

PB 16 consists of an enclosure with internal cable loom.