

DATASHEET

**PAN BEAM PB 15-D**  
**PAN BEAM PB 15-AES/EBU**  
**PAN BEAM PB 15 | IP65 | 100 V | DC INPUT**

*ACTIVE DIGITALLY STEERABLE  
 COLUMN SPEAKER*



The **Pan Beam PB 15** slim-line column speaker in an appealing design that was developed for high-quality voice applications. The **PB 15** can generate a highly directed sound beam which can be modified using various optimizers (max. SPL, SPL + min. sidelobes, min. sidelobes). The speakers are operated via user-friendly Windows software and connected to the computer via an RS 485 network or DANTE. Digital signal processing can be used to enter and control the vertical and tilt angle, volume, sound and delay times.

The **Pan Beam PB 15** is equipped with 15 specially manufactured 2.1" drivers, DSP modules and eight digital amplifiers with a power of up to 50 watts each. A single **Pan Beam PB 15** can cover a listening area of up to 20 meters, with speech intelligibility and sound pressure remaining constant over the entire distance. **The Pan Beam series can be integrated into voice alarm / electroacoustic emergency warning systems according to EN 50849.**

**FEATURES:**

High efficiency, integrated protection circuits, high speech intelligibility even in acoustically demanding environments, sleek and unobtrusive design, remote monitoring, two audio inputs

**INTEGRATED DSP CONTROL FOR:**

- Adjustment of vertical radiation (Beam width / tilt angle)
- 5-band parametric equalizer
- Volume control
- Internal delay up to 370 ms
- Connection to media controller possible
- Two independent line inputs with automatic priority switching
- Integration into voice alarm systems according to EN 50849

A wide range of mounting accessories is available for fixed installation and mobile use of the **Pan Beam** series.

**ADDITIONAL OPTIONS**

**APPLICATIONS**

Churches, museums, live PA, train stations, airports, sports facilities, legislative buildings, conference rooms, lecture halls, shopping centers, A/V presentation rooms

In order to improve the lower limit frequency, the sound pressure and the range, the PB 15 can be cascaded to a **Pan Beam PB 30**.

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



## TECHNICAL DATA PAN BEAM PB 15-D (DANTE)

### ACOUSTIC CHARACTERISTICS

<b>Configuration:</b>	15 x 2.1" drivers
<b>Frequency range:</b>	110 kHz - 18 kHz (+3/-10 dB)*
<b>Horizontal beam:</b>	150° (3 kHz), 90° (10 kHz)
<b>Vert. beam angle:</b>	5° - 40°, digitally steerable
<b>Number of beams:</b>	1
<b>Acoustic focus adjustable according to room length</b>	
<b>Tilt:</b>	-70° - +70° (digitally steerable)
<b>Focus distance:</b>	1 m up to 20 m
<b>Typical distance:</b>	15 m
<b>SPL-limit (peak):</b>	122 dB SPL* @ 1 m (calc.)   91 dB SPL @ 15 m
<b>Dynamic range:</b>	>105 dB

\*under anechoic half-space conditions

### ELECTRONIC CHARACTERISTICS

<b>Amplifier output/type:</b>	up to 8 x 50 watts max (4 Ohm) / digital PWM
<b>DSP:</b>	24 bit / 96 kHz sample rate
<b>Network I/O</b>	1 x RJ 45 (etherCON) primary 1 x RJ 45 (etherCON) secondary 1 x RJ 45 (etherCON) Pan Net-Link
<b>Audio input via Dante:</b>	44.1 / 48 / 96 up to 192 kHz sample rates
<b>Nominal power consumption:</b>	10 VA (normal), 270 VA (max)
<b>Ambient temperature range:</b>	0 °C - +40 °C (optionally -30 °C - +50 °C)
<b>AC input:</b>	90 V - 264 V AC (+5/-10 %), 50 Hz to 60 Hz
<b>Connection:</b>	IEC socket (IEC-60320 C13)

### MECHANICAL PROPERTIES

<b>Enclosure:</b>	aluminium profile
<b>Grille:</b>	powder-coated perforated panel sheet
<b>Color:</b>	Aluminium RAL 9006
<b>Dimensions (H x W x D)</b>	906 x 107.2 x 117.9 mm
<b>Weight:</b>	5.5 kg (incl. electronics)
<b>Mounting accessories:</b>	extensive mounting accessories available

Dante™ is a trademark of Audinate Pty Ltd.



All products are designed, developed and manufactured by Pan Acoustics in Germany.  
Pan Acoustics reserves the right to modify products without prior notice.

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

Pan Acoustics GmbH | Lindener Str. 15 | D-38300 Wolfenbüttel | Germany | Tel.: +49 (0) 5331 900 95 70 | Email: [contact@pan-acoustics.de](mailto:contact@pan-acoustics.de)

## TECHNICAL DATA PAN BEAM PB 15 | AES/EBU

### ACOUSTIC CHARACTERISTICS

<b>Configuration:</b>	15 x 2.1" drivers
<b>Frequency range:</b>	110 kHz - 18 kHz (+3/-10 dB)*
<b>Horizontal beam:</b>	150° (3 kHz), 90° (10 kHz)
<b>Vert. beam angle:</b>	5° - 40°, digitally steerable
<b>Number of beams:</b>	1
<b>Acoustic focus adjustable according to room length</b>	
<b>Tilt:</b>	-70° - +70° (digitally steerable)
<b>Focus distance:</b>	1 m up to 20 m
<b>Typical distance:</b>	15 m
<b>SPL-limit (peak):</b>	122 dB SPL* @ 1 m (calc.)   91 dB SPL @ 15 m
<b>Dynamic range:</b>	>105 dB

\*under anechoic half-space conditions

### ELECTRONIC CHARACTERISTICS

<b>Amplifier output/type:</b>	up to 8 x 50 watts max (4 Ohm) / digital PWM
<b>DSP:</b>	24 bit / 96 kHz sample rate
<b>Pan Beam network I/O</b>	2 x RJ 45 (etherCON)
<b>Audio input via Pan Beam network:</b>	digital 44.1 / 48 / 96 / 192 kHz (sample rates /SRC) 1 x analog audio
<b>Nominal power consumption:</b>	10 VA (normal), 270 VA (max)
<b>Ambient temperature range:</b>	0 °C - +40 °C (optionally -30 °C - +50 °C)
<b>AC input:</b>	90 V - 264 V AC (+5/-10 %), 50 Hz to 60 Hz
<b>Connection:</b>	IEC socket (IEC-60320 C13)

### MECHANICAL PROPERTIES

<b>Enclosure:</b>	aluminium profile
<b>Grille:</b>	powder-coated perforated panel sheet
<b>Color:</b>	Aluminium RAL 9006
<b>Dimensions (H x W x D)</b>	906 x 107.2 x 117.9 mm
<b>Weight:</b>	5.5 kg (incl. electronics)
<b>Mounting accessories:</b>	extensive mounting accessories available

**TECHNICAL DATA PAN BEAM PB 15 | 100 V | DC INPUT**

**ACOUSTIC CHARACTERISTICS**

<b>Configuration:</b>	15 x 2.1" drivers
<b>Frequency range:</b>	110 kHz - 18 kHz (+3/-10 dB)*
<b>Horizontal beam:</b>	150° (3 kHz), 90° (10 kHz)
<b>Vert. beam angle:</b>	5° - 40°, digitally steerable
<b>Number of beams:</b>	1
<b>Acoustic focus adjustable according to room length</b>	
<b>Tilt:</b>	-70° - +70° (digitally steerable)
<b>Focus distance:</b>	1 m up to 20 m
<b>Typical distance:</b>	15 m
<b>SPL-limit (peak):</b>	122 dB SPL* @ 1 m (calc.)   91 dB SPL @ 15 m
<b>Dynamic range:</b>	>105 dB

\*under anechoic half-space conditions











**ELECTRONIC CHARACTERISTICS**

<b>Amplifier output/type:</b>	up to 8 x 50 watts max (4 Ohm) / digital PWM
<b>DSP:</b>	24 bit / 96 kHz sample rate
<b>Pan Beam network I/O</b>	2 x Buccaneer 8-pole
<b>Audio input via Pan Beam network:</b>	2 x 100 V
<b>Nominal power consumption:</b>	10 VA (normal), 270 VA (max)
<b>Ambient temperature range:</b>	0 °C - +40 °C (optionally -30 °C - +50 °C)
<b>AC input:</b>	90 V - 264 V AC (+5/-10 %), 50 Hz to 60 Hz
<b>Connection:</b>	powerCON TRUE1 powerCON TRUE1 / Buccaneer 3-pole (DC)

**MECHANICAL PROPERTIES**

<b>Enclosure:</b>	aluminium profile
<b>Grille:</b>	powder-coated perforated panel sheet
<b>Color:</b>	Aluminium RAL 9006
<b>Dimensions (H x W x D)</b>	906 x 107.2 x 117.9 mm
<b>Weight:</b>	5.6 kg (incl. electronics)
<b>Mounting accessories:</b>	extensive mounting accessories available

**LEGEND: AVAILABLE OPTIONS**

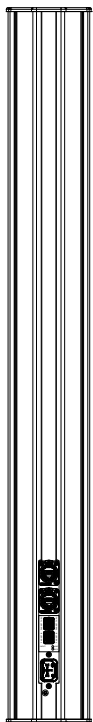
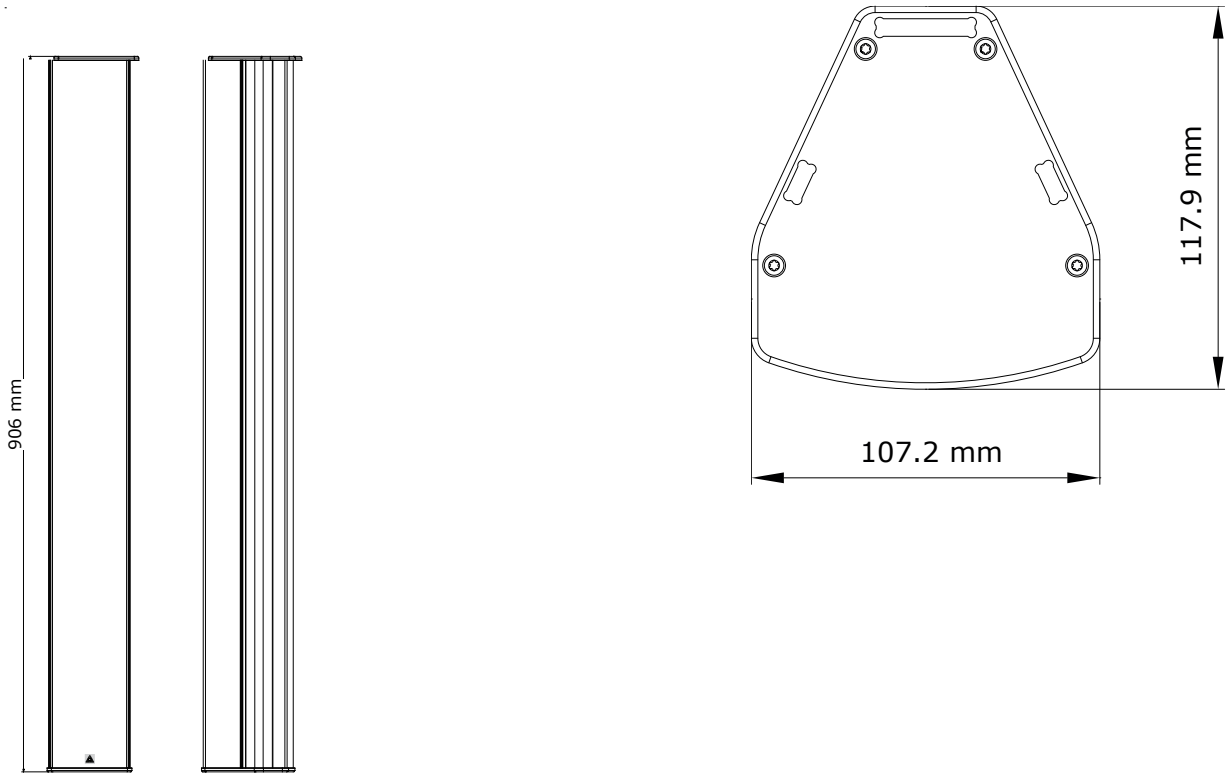
-  Comprehensive range of mounting accessories
-  Pan Beam Net control
-  Customized painting/coloring
-  Analog audio
-  Customized length of enclosure
-  Digital audio AES/EBU | DANTE
-  Pilot-tone monitoring
-  Priority switching
-  100 V Input
-  DC Input



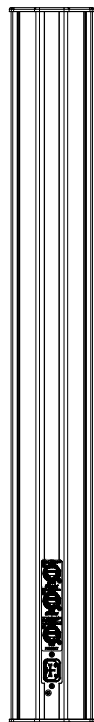
All products are designed, developed and manufactured by Pan Acoustics in Germany. Pan Acoustics reserves the right to modify products without prior notice.

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

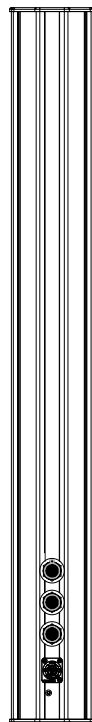
**TECHNICAL DRAWING PB 15 D | AES/EBU | 100 V**



PB 15 | AES/EBU



PB 15-D



PB 15 | 100 V | DC