



Active Digitally Steerable Column-Speaker

Pan Beam® PB 248 – Features



- Integral Signal Processing and Digital Amplification
- Vertical coverage pattern adjustable to fit the audience area
- Dual-Lobe-Technology
- Internal Audio-DSP-Control for:
 - control of Vertical Beam
 - opening angle
 - elevation angle
 - focus distance
 - 4 band Parametric Equalizer
 - Volume Control
 - Delay up to 370 ms
- Build-in Electronic Driver Protection
- twelve 6,5" HiQuality low frequency drivers and thirtysix HiQuality 1"-Neodym Drivers
- High Speech Intelligibility even in highly reverberant or noisy environments
- Slim Compact Design
- Lightweight: 55 kg
- Wide Horizontal Dispersion
- RS-485-Networking
- User-Friendly Windows-Software to control all parameters
- Media-Bus-Control, Electronic Surveillance
- Mounting options for fixed installation and portable use
- Other products available in the PanBeam®-Family:
PB 08, PB 16, PB 16-C, PB 24, PB 32, PB 40, PB 224,
P 8-1, PB-S 208
- Engineered and manufactured in Germany



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Pan Beam® PB 248 Technical Data

Configuration	2-Way-System, 12 x 6,5" HiQ cone, 36 x 1" HQ HF-Neodym Driver
Operating Mode	self-powered, 16 x digitally amplifier
Acoustical Performance	
Operating range:	85 Hz to 20 kHz (+3 / -10 dB)
Nominal beamwidth:	horizontal: 150° vertical: 5° to 40°, digitally variable aiming angle: -45° to +45°, digitally variable focus distance: 5 m to 75 m typical throw: 50 m
SPL-Limit (avg):	106 dB A-weighted with pink noise at 25 m
SPL-Limit (peak):	110 dB SPL at 25 m
Dynamik range:	> 92 dB
Electronic Performance	
Amplifier output:	20 x 60 Watt max. (4 Ohm) high frequency, 12 x 100 Watt max. (4 Ohm) low-mid
Amplifier type:	digital PWM
Input:	transformer-balanced, Line-Level +4 dBu
AC mains:	230 or 110 Volt (+5 / -10%)
Power consumption:	20 VA (idle), 1200 VA (max.)
Temperature range:	-10°C to +50°C ambient
Mechanical Performance	
Enclosure:	rear extruded aluminium
Grill:	powder-coated perforated steel
Colour:	aluminium RAL 9006
Dimensions:	2230 x 244 x 210 mm
Weight:	55 kg

Pan Acoustics reserves the right to make changes without prior notification.



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Pan Beam® PB 248 Technical Data

The PanBeam® offers an all-in-one self-powered DSP-controlled solution in nearly every architecturally demanding sound-installation.

The important benefit of PanBeam® is the possibility to focus the audio-output to where it should go: **to the audience.**

The PanBeam® PB 248 is ideally suited for smaller environments with unfavourable acoustical circumstance, where improved speech intelligibility is required.

A single PanBeam® PB 248 is capable of covering an audience-area of up to 75 m, giving a constant sound pressure and clarity over the complete distance.

The PanBeam® PB 248 is equipped with twelve custom-made 6,5"-woofers, thirtysix by DNH custom-made 1"-drivers, full digitally processor-boards and thirtytwo digital power-amps to achieve an

optimized result in sound and directivity. The included DSP-System offers a wealth of useful audio processing features including: volume control, parametric EQ and delay.

As a special feature the vertical coverage can be focused in opening angel, elevation angle and focus distance.

Using the feature of the dual-lobe technology it is possible to build up two audience-areas covered by two different beams.

The PanBeam® 248 can be controlled by a special user-friendly Windows Control software for set up the beam steering parameters, audio processing and surveillance features. Also the implementation of existing media-control systems is possible.

The PanBeam® 248 gives the ideal solution for easy and unobtrusiv implementation in even the most architecturally sensitive environment.

The PanBeam® 248 is built

from two cascaded Pan-Beam® PB 224 to increase frequency-range, beamwith and steerability.

The effort will be a more shortened throw down to lower frequencies combined with a higher sound pressure level.

Wall mounting hardware included.



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Pan Beam® PB 248 Technical Data

PanBeam® Product-Family

PanBeam® is a family of several intelligent models: PB 08 with eight channels, PB 16 and PB 16-C with 16 channels, PB 24 with 24 channels, PB 32-C and the big PB 232 with 32 channels. Every type included amplifiers and maximum DSP-power. More PanBeam®-Products will be released in the near future.

Typical Applications

churches, museums, railway-stations, conference facilities, lecture halls, shopping malls, A/V presentation rooms, fill or delay system in larger installations

Available Options

extended delay, dual line level audio, inputs with priority, automatic ambient noise, levelling, full range of mounting accessories, colour matching service

User-Friendly PC-Software

PanBeam®-Setup to control all parameters

The beam parameters, the EQ, gain, delay, to set up a network, build up audience areas and check the status of each electronic device.

