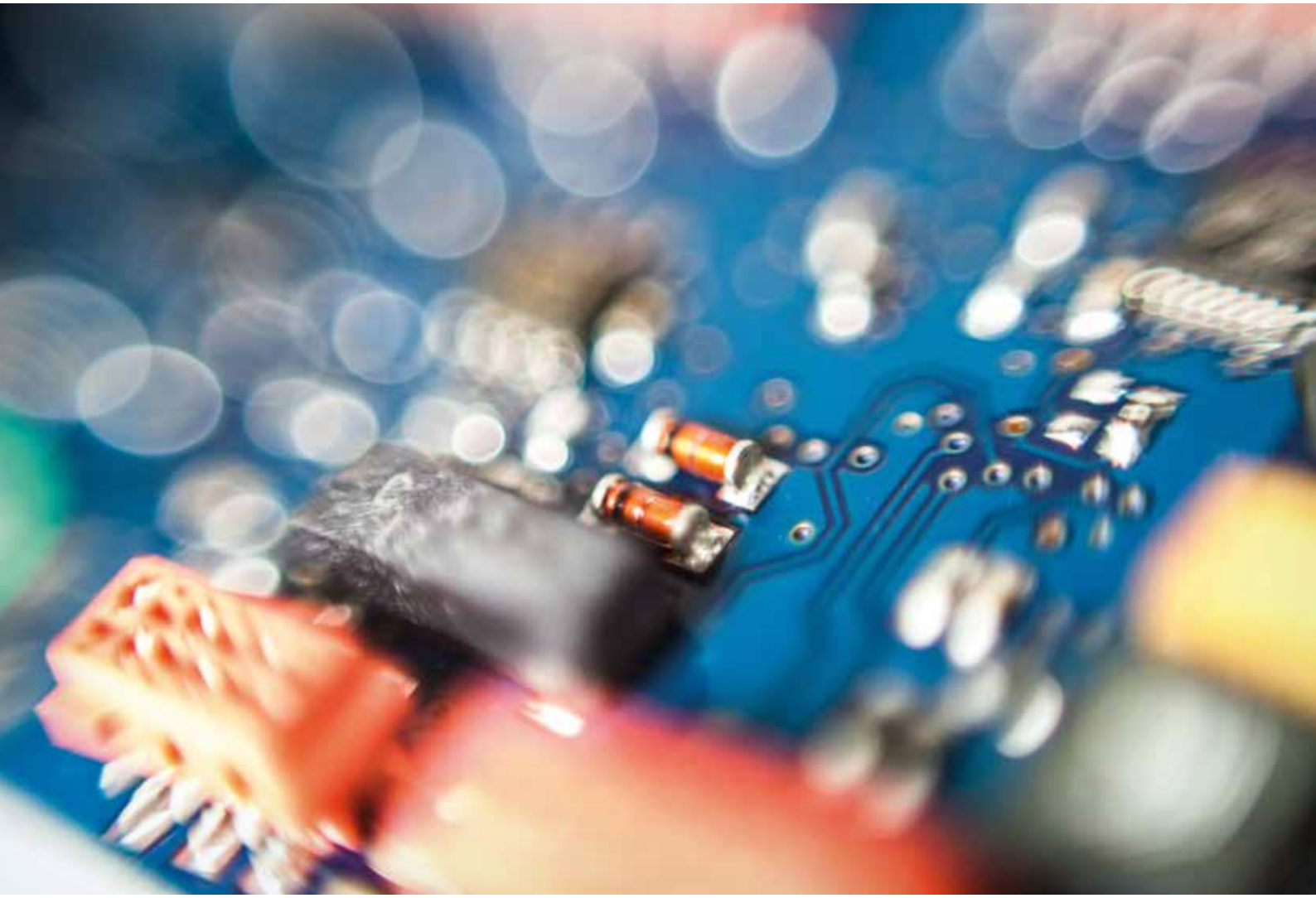
PAN ACOUSTICS



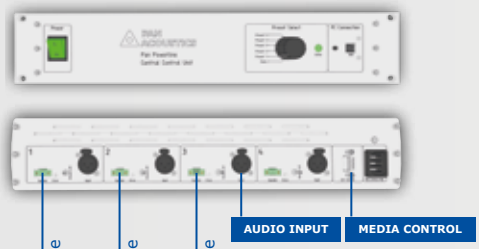
PAN POWERLINE – TRANSMISSION TECHNOLOGY BASED ON TWO-WIRED CONCEPT

Unique.
Flexible.
User-friendly.

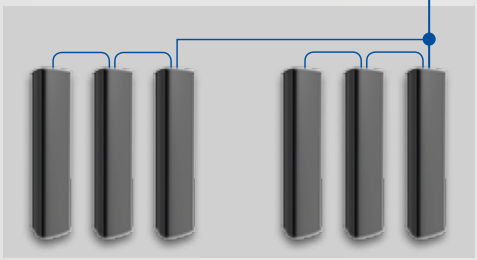
PAN POWERLINE PAN SPEAKER PAN BEAM

PAN POWERLINE TECHNOLOGY - PERFORMANCE OVERVIEW

PAN POWERLINE WIRING SCHEMATICS

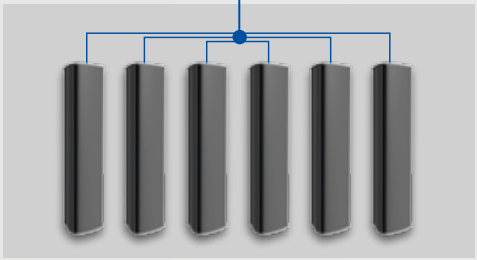


DAISY-CHAIN-STAR-WIRING



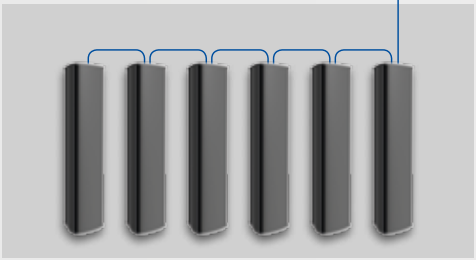
2-Wire, eg. J-Y(ST)Y 2 x 2 x 0,6 mm²

STAR-WIRING



2-Wire, eg. 2 x 1,5 mm²

DAISY-CHAIN-WIRING



2-Wire, eg. existing 100 V wiring

THE TECHNOLOGY

The worldwide unique system **Pan Powerline** is a technology created by **Pan Acoustics** GmbH.

With groundwork and innovative spirit as well as the credo **„Made in Germany"**, Pan Acoustics has developed its own Powerline system based on two-wired system. This innovation has revolutionized the use of active speakers in audio installations.

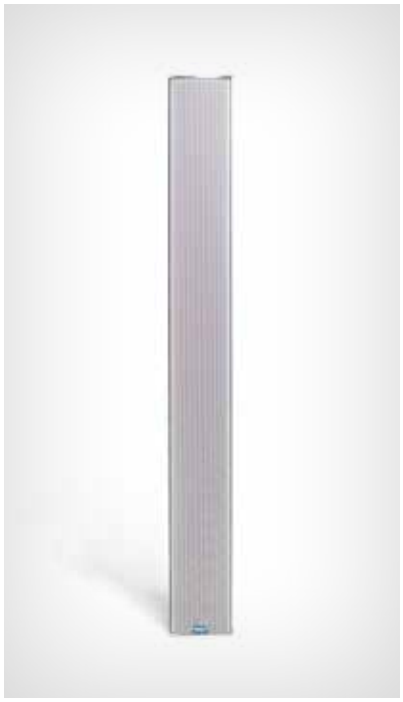
Pan Powerline is a technical innovation. The function combines the latest transmission technology with already existing wiring. In case of renewals, there is no need for new wires to be set-up. Outdated audio system can be easily brought to the latest technology without that existing cables are being removed or replaced.

Pan Powerline means the transmission of audio signals, control data and power supply via **two electrical wires**. The two-wires-system in its capacity as transfer medium can almost be applicable for any purposes. Only the ohmic resistance should allow the electricity power. This means that old cables such as bell-wire or 100V-cable can be used further.

The active loudspeakers from the series **Pan Beam** can be perfectly operated with the Pan Powerline technology.

THE SYSTEM

A Pan Powerline system consists of a master unit called **Central Control Unit (CCU)**. This central unit mixes the audio input signals with control data and the power supply together. A CCU can manage up to four Powerline. Several types of speakers such as PB 08-PPL or PB 04-PPL can be connected to a line and while each speaker can be adjusted through various parameters e.g. frequency response, beam steering and delay. An integration of the system in a media control is also possible. The speaker can be arranged and operated in star-shaped system, in a meshed system or in a daisy chain cabling.



BENEFITS

The **Pan Powerline** offers several advantages for example there is no need of laying a power cable for the installation of active loudspeakers. Almost every **existing two-wire system** can be used.
A 2x2 YSTI line with 0,6 mm² can provide a PB 04-PPL with power and audio signals over a cable length of 270 m, without problems. Costly procedures for power supply and signal transmission during the installation of active loudspeakers are omitted.

EASIEST INSTALLATION

The installation of the **Powerline system** should be carried out quickly and easily. The CCU just needs to be connected to a voltage source. The operated Powerline speakers are connected to the CCU via a corresponding line pair. The Pan Beam software for configuring the loudspeaker from a PC is connected via USB to the CCU.
For the conversion of an already existing 100V-installation to a Powerline, a few steps are required.
After verifying that one of the applications fulfills the minimum line quality required, an exchange can take place then within a very short time.

USABILITY

Many applications are suitable for the Pan Powerline system. Wherever new cables can't be installed, but new features and technology are required, the new Pan Powerline can be used for. The **Pan Powerline** technology can also be used in **exhibition constructions** and temporary audio installations.

AREAS OF APPLICATION

Museums, exhibitions, AV-media-installations, renewals of historical buildings, exhibition constructions, cruise ships, outdoors sound events, railway stations, sport facilities, refitting and expansion of the existing 100V-installations.

PAN ACOUSTICS

PAN BEAM — ACTIVE DSP COLUMN SPEAKER

Shapely. Versatile. Functional.
Cascadable. Multibeamtechnology. Constant Soundcoverage.
Sidelobe-Optimising. Applications: Live and Installation.

PAN SPEAKER — PASSIV COLUMN SPEAKER

Shapely. Versatile. Functional.
Solid. Different performance levels.
Applications: Live and Installation.

PAN ACOUSTICS COMBINES EXPERTISE AND KNOW-HOW

We create products with unique sound performances.
We create solutions for acoustic challenges.
We create products with **weatherproof** (IP 54 / IP 65), **seawater proof** and **temperature-resistant** (-30°C - 80°C).

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

QUALITY – MADE IN GERMANY

CONTACT:
Pan Acoustics GmbH | Lindener Straße 15 | D-38300 Wolfenbüttel | Germany
Tel: +49 (0) 5331 9009570 | Fax: +49 (0) 5331 9009579 | Mail: contact@pan-acoustics.de
www.pan-acoustics.de

PAN ACOUSTICS PRODUCTS: PAN BEAM | PAN SPEAKER | PAN POWERLINE