



Product size and connectors may vary depending on configuration.

TrainWise® Public Address Amplifier

The TrainWise® Public Address (PA) Amplifier (PC07) has four separate, independently controlled output channels to drive multiple speaker arrays.

High fidelity and clarity is achieved by dynamically adjusting for ambient noise and matching the output impedance of the audio speaker lines. A built-in gateway bridges the Ethernet Car Network and the Ethernet Communications Ring.

Key benefits

Versatile PA amplifier. The PA amplifier has four independently controllable outputs that each continuously drive 10 Watts (50 Watts peak) into load impedances from 4 – 16 Ohms, with a Total Harmonic Distortion of <1%. Four additional output channels are available as an option.

Background noise compensation. PC07 dynamically and independently adjusts the power to the output channels to compensate for background noise in the passenger cabin, as measured by an Ambient Noise Sensing Microphone. It also matches the output impedance of the speaker wires to increase fidelity and remove the need for the bulky 70V transformer found in most train speakers.

Ethernet enabled. Ethernet Layer 3 router provides a gateway between Ethernet Consist Network (ECN) and Passenger Information System (PIS) components situated on an Ethernet Communications Ring. The gateway provides application-layer functions, such as system synchronization, time services, fault monitoring, and protocol translations.

Analog audio gateway function. The PC07 can act as a gateway between analog audio trainlines and the Ethernet networks.

Flexible. Addresses a broad range of train types and electrical systems through configurable packaging and interfaces.

Main characteristics

- » Up to eight audio output channels, each driving 10 Watts into a speaker array
- » Low distortion audio outputs, THD<1%
- » Compliant with IEEE and IEC rail design standards
- » Secure web server providing remote access (PTE/BTE, operations, etc.)
- » Configuration ID inputs for encoding equipment location, car number, or other identification
- » Easily integrates with other TrainWise components