



***Intelligent Transport  
Critical Communication  
Emergency & Security***



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# PAA2171

## PUBLIC ADDRESS AMPLIFIER PAA2171



The Public Address Amplifier PAA2171 is ErvoCom's newest developed digital audio amplifier for railway rolling stock. By using modern IP technology the device provides high end audio quality in an extremely compact design. The incoming VoIP streaming audio signals are converted into analog and finally amplified. As an additional fallback layer the PAA2171 also provides a traditional UIC Interface for redundancy purposes.



With the development of the digital amplifier module PAA2171 ErvoCom was able to achieve a big innovative step forward in comparison to systems provided by other Passenger Information System vendors in the market. The PAA2171 can be installed in de-centralized manner, evenly distributed in the railway cars via ETHERNET. In this way there is no need to bring analog audio signals by using 100 VDC technologies through the trains. Thanks to the digital signal distribution the audio quality is significantly better.

The amplifier input is a digital VoIP stream that is converted by the internal processor unit to an analog signal for amplification. Since the audio signal is digitally distributed within the train at no need to go with analog signals from car to car the audio quality is much improved in comparison to other systems.

Additionally better noise cancellation and filter approaches can be used in digital signal processing that improve audio quality. The control of those features is based on a powerful ARM processor that is embedded within the audio amplifier module. In case of an ETHERNET malfunction the UIC interface is available for fallback and redundancy purposes.

### Technical Data

- Dimension: 160 x 120 x 25 mm
- Audio power output 25W
- 4 individually controllable audio channels
- Short-circuit proof and overheat protection
- Separately controlled UIC interface as redundancy
- Internal processor: CPU 2x 850 MHz, 1GB RAM, 8GB Flash
- Software Update via USB interface or ETHERNET

The PAA2171 is a part of Ervocom's Passenger Announcement System. In connection with the module RCSS2170 the PAA2171 is a modern PA system for trains.

## Advantages

- High end audio performance thanks to digital data transmission and processing
- Compact housing for passenger cars
- Digital audio filtering
- Two audio streams can be played at the same time
- Redundancy via UIC- interface
- Status feedback of the amplifier over ETHERNET
- EN50155 & EN45545-2 conformity



## Contact

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