

THE WORLD'S MOST WIDELY USED DAB SYSTEM

Broadcast-grade DAB+ head-end.

Built to never go silent.

Appreciated by customers worldwide, Paneda is the first choice for clients with high demands on reliability and technical performance.

200+
head-end systems on air

 **docker** CONTAINERIZED



200+

Head-end systems in operation world-wide

10

Complete DAB head-ends on one standard server

300

Audio encoders per server installation

100%

Seamless SMART content-aware switching

Description SYSTEM OVERVIEW

— Complete system

Paneda offers the most advanced DAB system on the market, designed for ease of operation and delivering a cost-efficient solution. A Paneda DAB Head-End system includes **DAB multiplexers, DAB/DAB+ encoders, data inserter** and a comprehensive **management system**. The system is fully compliant with the DAB standard ETSI EN 300 401.



Paneda 1U hardware

Fully containerized system using Docker with Fedora CoreOS as the execution environment.



Server platform

Fully containerized system using Docker with Fedora CoreOS as the execution environment.

— Efficiency

On standardized server hardware it is possible to install multiple head-end systems — up to **10 complete DAB head-end systems** with a total of **300 audio encoders**.

— Redundancy

Paneda is well known for its unique redundancy implementation featuring **SMART content-aware switching**. It ensures both 100% seamless switching between components and a continuous “best-possible-output” principle across all system elements.

— Audio

Compatible with the most common AoIP and streaming formats. The Paneda 1U hardware also provides **4 × AES/EBU inputs** on rear-mounted XLR connectors for direct integration with professional audio equipment.

AOIP	LiveWire	AES67	Dante	Ravenna	ST 2110-30	MP-TS
STREAMING	MP3	AAC	HLS	FLAC		
HARDWARE	4 × AES/EBU · XLR					

What's new

V2026-08-27



ASA compliant

AUTOMATIC SAFETY ALERT

Supports the latest DAB standard for emergency warning, ASA — successfully tested together with our customers in live transmissions.

NEW



SRT support

SECURE RELIABLE TRANSPORT

In addition to standardized EDI, the system now supports SRT encapsulation — further enhancing robustness over public IP networks.

NEW

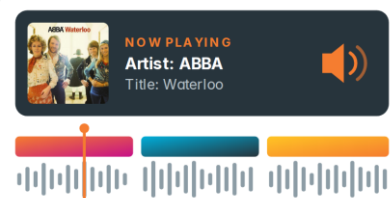


Synchronized SLS

WHAT YOU SEE IS WHAT YOU HEAR

SlideShow images are synchronized with the audio content for an enhanced listener experience.

NEW



Slides follow the audio timeline, track by track.

PANEDA 1U ALL-IN-ONE HARDWARE

One unit. Every product.

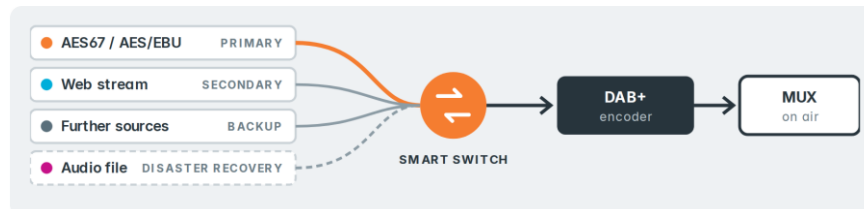
For smaller deployments, the Paneda 1U is a generic hardware platform that can host any Paneda DAB Head-End product, such as multiplexer and encoders.

FORM FACTOR 19" · 1U	AUDIO IN 4 × AES/EBU (XLR)	NETWORK 4 × Ethernet
POWER Dual PSU · 86–264 V	SYNC 10 MHz reference	RUNTIME  docker + CoreOS



— Advanced audio input redundancy

Each audio service can be configured with source redundancy — multiple audio inputs with seamless switching between them. The primary source may use AES67 or AES/EBU, while a secondary source is a web stream. In a redundant encoder setup, **SMART content-aware subchannel switching** delivers the “best possible output” from all sources. Uploaded audio files act as a disaster-recovery source, so silence never reaches the air.



— Advanced API

Paneda uses the **OpenAPI v3** standard for interacting with the system. The well-documented API is built for both monitoring and controlling the complete platform.

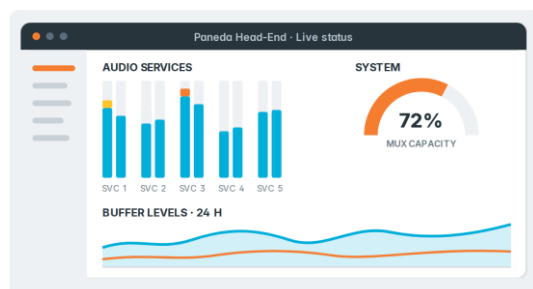
— Security

All internal and external connections are encrypted. The operating system is **Fedora CoreOS** — a minimalist, container-optimized platform on a lightweight Linux kernel, designed according to the “all ports closed” principle.

TLS / HTTPS **Two-factor authentication** **Custom certificates** **All ports closed**

— User interface

All information in real time — VU meters, statistics, metadata and buffer levels — plus advanced schedule management, audit logs and event history.



Station logo

BUILT-IN

NEW

Add station logos directly in the Paneda web interface. No external systems required.



Language

MULTILINGUAL

NEW

Multilingual web interface and support for the latest DAB standards for Arabic and Asian languages (DLS and service names).



Support

OPTIONAL 24/7

Superior support agreements, including optional 24/7 support for customers who require around-the-clock assistance.



Development

AGILE · 2-4 WEEK SPRINTS

Developed by experienced specialists in agile sprints, each ending in a release — test-driven, with continuous integration.

— Advanced EDI outputs

EDI outputs are fully synchronized for seamless redundancy. Built-in switches enable 100% seamless switching, so an EDI receiver such as a transmitter can freely select any output without affecting the SFN. All outputs are **PFT-aligned**, enabling Paneda’s unique **EDI Timeshift**.

