NEW!

16ch Encoder!

PANEDA 1U ALL-IN-ONE HARDWARE

The Paneda 1U hardware platform is designed as a versatile, generic system that can run all Paneda DAB Head-End applications, such as multiplexers and encoders.
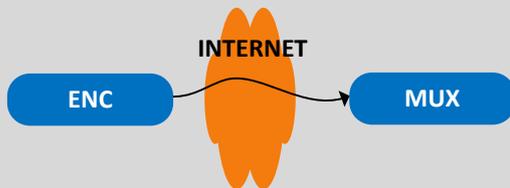
AES/EBU

Paneda has developed a high-performance, professional-grade AES/EBU audio interface featuring four inputs, equipped with XLR connectors on the rear panel

FRONT PANEL

The frontpanel (touch OLED) shows status information and VU meters

NEW!

UNIDIRECTIONAL

INTERNET

ENC → MUX

Only a unidirectional connection from the remotely installed encoder to the multiplexer is required.

POWERED BY:

docker
CONTAINERIZED

DESCRIPTION

A Complete system in 1HU size
ETSI 300 401 Compliant

The system can be configured as a complete all-in-one solution, integrating the multiplexer, encoder, data server, and management system into a single hardware unit. It can also be deployed as a stand-alone multiplexer or as a remote encoder.

The Paneda DAB architecture is fully modular, providing clear separation of components to ensure maximum flexibility, scalability, and interoperability. Paneda uses Docker containers to achieve high robustness, simplified updates, and optimal deployment flexibility.

Each encoder can connect to multiple multiplexer systems, using individual and independent audio settings per destination. The unique Paneda TCP-RTP protocol enables contribution of encoded audio over public networks without requiring a private or bidirectional link.

Cost Efficient
The unit is developed with low cost and efficiency in focus.

16ch Encoder
The Encoder supports up to 16 independent encoder instances within the same hardware platform. It is compatible with the most common AoIP formats, including:

LiveWire, AES67, Dante, Ravenna, ST 2110-30, MP-TS

In addition, the system supports a wide range of streaming formats, such as:

MP3, AAC, HLS, FLAC

The hardware also provides 4 × AES/EBU inputs, available on rear-mounted XLR connectors, enabling direct integration with professional audio equipment.

Power consumption efficient
The unit consumes only approximately 30 W of power

Rev 1.11

Made in Sweden

world dab
MEMBER

ISO®
ISO 9001 CERTIFIED

NEW!

16ch Encoder!

PANEDA 1U ALL-IN-ONE HARDWARE

The Paneda 1U hardware is a generic hardware that can host any of the Paneda DAB Head-End products, such as multiplexer and encoders.
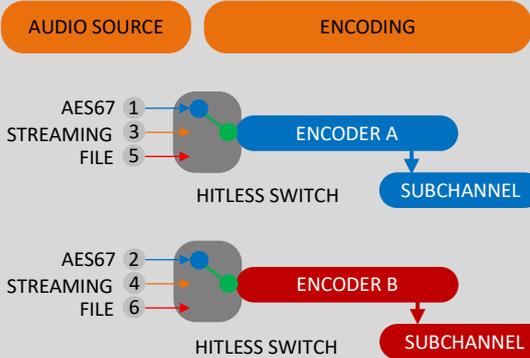
FRONT PANEL

REAR PANEL

AUDIO SETUP EXAMPLE

AUDIO SOURCE	ENCODING

AES67 1
STREAMING 3
FILE 5
ENCODER A
HITLESS SWITCH
SUBCHANNEL

AES67 2
STREAMING 4
FILE 6
ENCODER B
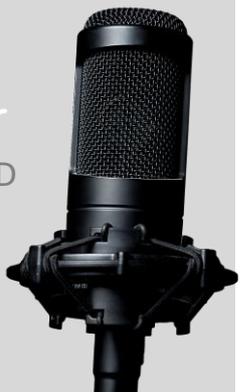HITLESS SWITCH
SUBCHANNEL

docker
CONTAINERIZED

Advanced audio input redundancy

Each audio service can be configured with source redundancy, allowing multiple audio input sources to be defined with seamless switching between them. For example, the primary source may use AES67 or AES/EBU, while a secondary source may be configured as a web stream. In a redundant encoder setup, the system uses the unique Paneda SMART content aware subchannel switching, enabling the principle of "best possible output" from all sources.

Additionally, it is possible to upload and use audio files as a disaster-recovery source, ensuring that silence is avoided on air in the event of a source failure.

TECHNICAL

DIGITAL INPUTS		EXTERNAL SYNCHRONIZATION	
Input type	4x AES/EBU	Reference	NTP
Connector	XLR	Audio	AES3, Internal or 10MHz
AoIP	AES67, PCM, LiveWire ST2110-30, RAVENNA		
Streaming	MP3, AAC, HLS, FLAC		

FRONT PANEL		MECHANICAL DATA	
Type	OLED touch	Temp range	+5° to +50°
Status	State, IP settings	Housing	19" 1HU
		Depht	250mm
		Weight	4kg

OUTPUT		STANDARDS	
Type	ETI over TCP-IP	DAB ETSI 102 563	
Max Encoders	16	DAB ETSI 300 797	

OTHER		POWER SUPPLY	
DISC	SSD-M2	Mains	100-240VAC
Dual power supply hot swap		Freq	48-64 Hz
Power Supply	Dual	Power consumption	30W
HDMI	Yes		
Display port	Yes		
Network ports	4x Ethernet	VLAN	YES

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