



Model DB94-SFN

COMPACT MPX OVER IP DECODER WITH MICROMPX & SFN SUPPORT

The DB94-SFN is a next-generation, compact MPX over IP Decoder engineered to deliver reliable and efficient audio transmission for professional FM broadcasting. Utilizing the purpose-built μ MPX (MicroMPX) algorithm developed by Thimeo, the DB94-SFN ensures high-quality audio reproduction with remarkably low network bandwidth starting from just 320 kbps. Designed specifically for FM MPX transport, μ MPX preserves the integrity of the stereo signal and RDS data while significantly reducing IP requirements, making the DB94-SFN ideal for applications over narrowband or public IP links.

In addition to its advanced decoding capabilities, the DB94-SFN introduces full Single Frequency Network (SFN) support, enabled through ultra-precise GPS timing synchronization. By aligning audio and MPX output timing with sub-micro-second accuracy, the unit ensures perfectly phase-coherent transmissions across multiple synchronized transmitters. This eliminates interference in overlap regions and guarantees seamless coverage extension, an essential requirement for modern SFN-based broadcast networks. The GPS-locked timing reference allows the DB94-SFN to deliver deterministic delay, stable long-term synchronization, and highly reliable operation, even in complex multi-transmitter deployments.

Compact yet powerful, the DB94-SFN fits seamlessly into any broadcast infrastructure. LED indicators on the front panel provide instant system status, while an intuitive HTML5-based web interface allows complete configuration and monitoring from any desktop or mobile browser.

Engineered with DEVA's hallmark attention to detail and reliability, the DB94-SFN delivers pristine audio quality thanks to top-grade DAC components and precision signal processing. It supports both Digital AES192 and Analog MPX outputs, ensuring compatibility with a wide range of FM transmitters and studio setups. Whether deployed at a single transmission point or within a larger network, the DB94-SFN guarantees low-latency, uninterrupted signal decoding across all environments.

The DB94-SFN stands as a testament to DEVA's commitment to innovation and customer-driven design, offering an advanced, cost-effective solution for MPX over IP distribution. Its support for μ MPX sets it apart as a future-ready decoder that meets the growing need for efficient, high-performance broadcast tools.

Choosing DEVA's DB94-SFN means choosing reliability, flexibility, and the confidence that comes with decades of expertise in broadcast technology.



FEATURES

- High quality FM MPX decoding function
- High end DAC converter for optimal quality
- Ultra low latency, all-digital DSP based design
- Remotely upgradable firmware to ensure improved operation
- Headphone audio output
- Intuitive Embedded WEB server for interactive supervision
- Full online remote control of all parameters via IP
- Configuration via web user interface for easy setup
- Quick view status page for a fast overview
- Forward Error Correction to reduce bit errors in data stream
- USB flash drive for Audio Backup Storage
- Apple and Android devices support
- SNTP for automatic synchronization of the built-in clock
- Protected access to the device settings
- LAN port for full TCP/IP remote control and monitoring
- Attractive price and very good price-performance ratio
- Proved and reliable hardware for 24/7/365 operating
- Compact and Robust Aluminum Case for high RF immunity
- Easy Installation and Setup

SPECIFICATIONS

Audio Decoder	
Codec	μMPX or raw PCM
Sample rates	192 kHz and 216 kHz, 24 bits
Signal Processing	24 Bit AD/DA conversion

PCM	
Bit depth	12 - 16, 20, 24 bit
FEC	RIST, ProMPEG FEC #3, release 2
Bandwidth	2.4 - 4.6 Mbps (no FEC)

μMPX	
Bitrates	320, 384, 448, 576, 800 kbit/s
FEC	μMPX FEC, RIST, Pro-MPEG FEC #3 release 2
Bandwidth	320 - 800 kbps (no FEC)

Analog MPX Output	
Connector	BNC
Type	Unbalanced
Level	+14 dBu (max. +16 dBu)
Sample rate	192 kHz and 216 kHz, 24 bits
Dynamic range	121 dB

Digital MPX AES192 Output	
Connector	RJ-45, balanced, EMI suppressed
Standard	AES3
Sampling Rate	up to 192kHz, 24 bits

GPS Port	
Connector	DB15, Male
Protocol	NMEA 0183, 9600bps
Sync	1 PPS, Square Wave, TTL Compatible

Front panel	
Status Indicators	4 LEDs
Headphones	1/8" (3.5mm) phones jack
USB	Type A for Backup audio player

User interface	
Web interface	Full control and Status information

Network	
Connector	RJ-45
Type	Ethernet, 1000Mbps
Device discovery	UPnP support

Operating conditions	
Temperature	-15°C to 55°C
Humidity	< 95%, non-condensing
Altitude	0 to 5000m above sea level

Power	
Voltage	12V DC, 1A; External PSU, wall-mount 100-264 V
Power Consumption	10VA
Connector	Power Jack 5.5mm

Size and Weight	
Dimensions (W;H;D)	125 x 31 x 160 mm
Shipping Weight	270 x 54 x 230 mm / 1.1kg



WE NEVER SPARE EFFORTS AND RESOURCES TO TURN OUR IDEAS INTO SUCCESSFUL PRODUCTS