



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. For added convenience and control flexibility, the device supports remote access via HTTPS, FTP, NMS, and SNMP protocols empowering engineers to manage systems from virtually anywhere.

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
- SNMP v2c agent permitting full device management
- 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	
SNMP	ver.2c, ver.3
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