DB9000-RX

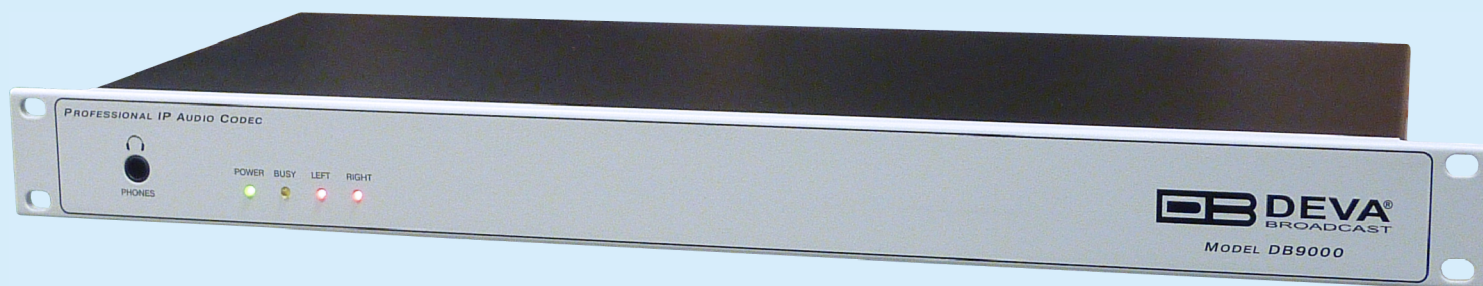## PROFESSIONAL IP AUDIO DECODER WITH STEREO & RDS/RBDS ENCODER MODULE*

DB9000-RX is an integrated client for IP transmitted digital audio signal. This is a device designed to support HE-AAC and MPEG-1 Layer 3 compressed audio streams and PCM uncompressed stream for audio transmission without quality loss. Decoding takes place in real time by a powerful DSP processor and the output signal is both in digital and analog form. DB9000-RX have built-in backup player for continuous audio play in case of signal loss or server connection loss. With the optional Stereo and RDS Encoders, DB9000-RX becomes complete tool for audio rebroadcast. The Stereo Encoder has its own DSP processor which allows generation of fully digital composite MPX signal with high stereo quality. With its RS-232 port, DB9000 could be transformed into Ethernet to RS-232 Redirector, allowing to control any other existing equipment over Internet.

DB9000-RX allows you to quickly and painlessly integrate existing audio systems to the Internet.

Developed with the thought of easiness of use, DB9000-RX can be managed through a standard Web browser, PC, PDA or other device, making it the best choice for professional and consumer use.

APPLICATION

- Audio transmission over IP-based networks
- Point-to-Point Audio Transfer
- Ethernet to RS-232 Redirector
- Suitable for Professional and Consumer use
- Audio Backup on connection or audio loss
- Audio Rebroadcast

* The Stereo & RDS/RBDS Encoder Module is optional

FEATURES

- High Quality HE-AAC (v.1 and v.2) and MPEG-1 Layer 3 Codecs
- 32 kHz, 44.1 and 48 kHz sample rates support
- Support of all standard bitrates and VBR as well
- Shoutcast / Icecast compatible TCP/IP stream
- Support of all standard bitrates and VBR as well
- Auto switching to another server in the event of a connection loss
- 4 LEDs and Phones output for quick diagnostics
- IP address pronunciation at startup (through the headphones)
- Full Control and easy setup with any web browser

- Entirely Digitally Generated Composite MPX Stereo Signal
- Digital stereo encoder with pre-emphasis, AGC and equalizer
- Fully Dynamic RDS encoder
- UPnP for easy discovery in Local Networks
- Audio Backup on connection or audio loss
- SD Card for Audio Backup Storage
- Ethernet to RS-232 Redirector
- MPX Limiter

SPECIFICATIONS

Audio codec

Codec	HE-AAC (v.1 & 2), MPEG-1 Layer 3 or PCM
Sample rates	32, 44.1 and 48 kHz
Bitrates	All standard bit rates, including VBR

Streaming Client

Type	Shoutcast / Icecast compatible TCP/IP Client
Codec Support	AAC, MP3, PCM
Clients	Up to 3 with auto-switch on failure

RTP Receiver

Type	Unicast RTP/UDP compatible receiver
Codec	AAC, MP3
Count	1

Audio backup

Trigger	Connection loss or audio silence
Threshold	Adjustable, -90dBFs to 0dBFs
Trigger time	Adjustable, 1s to 240s
Storage	SD Card, up to 2GB
Supported encoders	HE-AAC (v.1 and v.2), MPEG-1 Layer 3
Supported file types	*.MP3, *.AAC, *.M4A, *.M3U
Playback modes	Alph Asc. or Desc., Shuffle, Playlist
File management	Build-in FTP server

Analog audio output

Connector	2 x XLR
Type	Balanced
Frequency response	±0.5dB, 5Hz÷20kHz
Distortion	<0.01% THD
Level	+12dBu, user selectable
Sample rate	Same as the source stream
Dynamic range	>100 dB

Digital audio output

Connector	XLR
Type	AES/EBU (IEC 60958)
Sample rate	48 kHz
Resampling	Thru build-in sample rate converter

RS-232

Type	TCP/IP to RS-232 Redirector
Connector	DB-9
Baud rates	9600-115200
Password protection	Yes

Stereo encoder

Type	Fully DSP stereo encoding
Pre-emphasis	0, 50, 75μs
AGC	5 presets, 2 user defined
Equalizer	3-Band, ±12dB range
Stereo separation	>55dB (typically >60dB)
Phase Adjust	Pilot, L-R, RDS
Injection Levels Adjust	Pilot, RDS
Output Connector	BNC, Unbalanced
Output Level Adjust	Digitally, up to +12dBu
Composite MPX Limiter	6 presets, 3 user defined

RDS encoder

Supported RDS Applications	PI, PS, Dynamic PS AF, RT, TP, TA, DI, M/S, PIN, PTY, PTYN
Configuration	Web Interface
Automation control	Remote TCP console
Output Connector	BNC, Unbalanced
Output Level Adjust	Digitally, up to +6dBu

Phones audio output

Connector	6.3mm jack, stereo
Type	Headphones

User interface

Indicators	4 LEDs on front panel, 2 LEDs on rear panel
Web interface	Full control and status information

Network

Connector	Ethernet - RJ-45
Device discovery	UPnP support

Operating conditions

Temperature	10°C - 45°C
Humidity	< 75%, non-condensing

Power requirements

Connector	IEC320, rear panel
Power supply	115/230V AC, 18VA

Size and weight

Dimension (W x H x D)	1U, 19" x 1.7" x 6.9"
Weight	8 lbs

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