**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
- **Clients**: Up to 3 with auto-switch on failure

#### Audio backup
- **Trigger**: Connection loss or audio silence
- **Threshold**: Adjustable, -90dB to 0dB
- **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**: Alphabetically ascending or descending, Shuffle, Playlist and Shuffled 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**: 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

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