

## DSP-BASED STEREO GENERATOR WITH RDS/RBDS ENCODER

DB9000-STC is a high-performance, 32bits DSP based Stereo Generator with built-in RDS/RBDS encoder. It has been accurately designed to satisfy the most demanding requirements in FM Stereo generation and advanced RDS/RBDS encoding. This Stereo Encoder accept both of types, Analog and Digital AES/EBU audio sources. DB9000-STC comes with easy to use and password protected Web Server and a comprehensive remote control features. It supports SNMP, RS232, UDP, TCP/IP communication protocols. Its digital architecture guarantees long term reliability and easy firmware updates, directly on field or from remote.

The built-in RDS encoder can 'parse' scrolling text, automatically breaking phrases into word groups. It gives dynamic, on-the-fly programming access with its built-in USB, TCP/IP, UDP/IP interfaces. This connectivity permits full integration of RDS/RBDS transmissions with the station's other networked functions, including message streams for digital radio and Webcasting. It can be easily interfaced to various Automation Systems and offers an ASCII protocol for broadcast song/artist information.

Another great feature of the DB9000-STC is that it can fight the dreaded dead air problem. The DB9000-STC provides additional uncompromising security in case of loss of audio at the audio inputs. The audio backup is presented as an integrated built-in MP3 audio player. The basic principle of operation is that this unit can detect the silence and switch the output to the alternative MP3 Player. The MP3 backup audio files and play lists can be uploaded in the device from your PC using any FTP client. The audio storage capacity of DB9000-STC is 2 Giga Bytes.

Based on the latest DSP technology, the DB9000-STC is fully digital design for 24/7/365 operation. This product is the most cost effective, versatile and reliable solution designed for the broadcasters looking for a complete solution for a single, or a multiple transmitter sites.

### FEATURES

- Lots of Storage for over 24 hours of non-repeating audio playback
- Professional Balanced Stereo Analog Input on XLR connectors
- Always Fresh Backup Audio Tracks with Embedded FTP server
- Professional Digital AES/EBU Audio input on XLR connectors
- Professional 19 inches, 1U Professional rack mount chassis
- Alert Notifications via E-mail, SNMP in case of Audio Loss
- Headphones Jack for local monitoring of the Audio Signal
- Configuration and Monitoring via SNMP Ver.2C & WEB
- Remote Firmware Upgrade for future-proof operation
- Intelligent Silence Detector and Backup Audio Player
- Digitally adjustable Pilot & RDS injection levels
- 2 Years Warranty
- Excellent Audio Performances
- Easy installation and operation
- Adjustable Pilot, L-R, RDS phases
- Selectable pre-emphasis 0, 50µs, 75µs
- Protected access to the device settings
- Fully Digital 32 bits DSP Stereo Encoder
- Fully Digital Synthesis of the RDS Signal
- Digital Volume Control of all Audio Inputs
- UPnP for easy discovery in Local Networks
- Built-in MP3 Player with built in 2GB SD Card



## SPECIFICATIONS

Analog audio input	
Connector	2 x XLR, Stereo
Type	Balanced
Impedance	600Ω or High Impedance
Level	+6dBu / +12dBu, user selectable
Sample rate	96 kHz; Build-in sample rate converter used to produce lower sample rates
Dynamic range	>100dB

Digital audio input	
Connector	XLR
Type	AES/EBU (IEC 60958)
Resampling	Thru build-in sample rate converter

Audio backup	
Trigger	Audio Silence
Threshold	Adjustable, -90dBFs to 0dBFs
Trigger time	Adjustable, 5s to 240s
Storage	SD Card, up to 2GB
Supported file types	*.MP3, *.AAC, *.M4A, *.M3U
Playback modes	Alphabetical asc. & desc., Shuffle, Playlist and Shuffled playlist
Remote file management	Build-in FTP Server

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

Phones Audio Output	
Connector	1/4" (6.3mm) Phone Jack, Stereo
Type	Headphones

RS-232	
Type	TCP/IP to RS-232 Redirector
Connector	DB-9, female
Baud rates	9600 to 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 0dBu
Composite MPX Limiter	6 presets, 3 user defined

RDS Encoder	
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

Network	
Connector	RJ-45
Type	Ethernet

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

Power	
Voltage	115/230V AC (internal switch)
Power Consumption	10VA
Connector	IEC320, Fused and EMI-suppressed

Size and Weight	
Dimensions (W;H;D)	483 x 45 x 180 mm
Shipping Weight	540 x 115 x 300 mm / 2.670 kg



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