Model DB5000

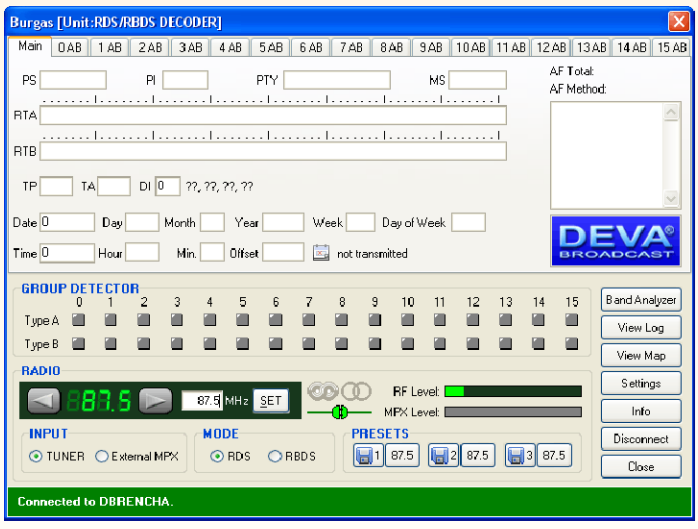
RDS / RBDS Radio Data Decoder with TCP / IP, COM & USB Connectivity

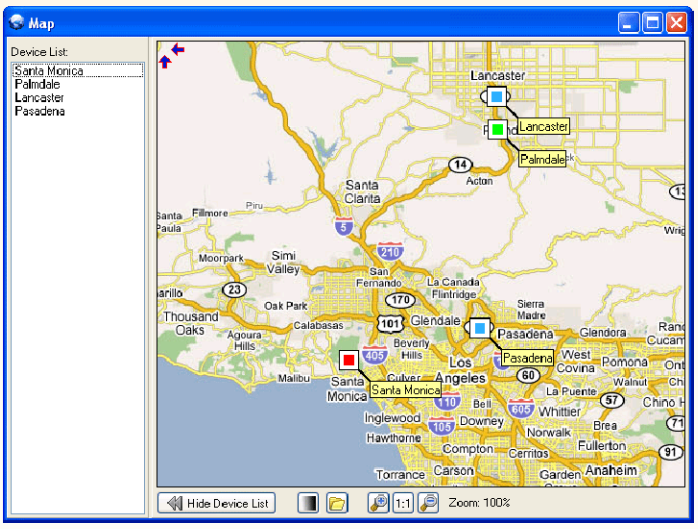
The DB5000 recovers the additional inaudible RDS information which is transmitted by FM radio broadcasting stations and operates in accordance with all the European RDS and The American RBDS standards and specifications. The device is made up of two sections: Purely digital RDS demodulator module with cascaded antialiasing and 8th order bandpass filter for precise RDS band selection and a demodulating section that performs the extraction of RDS data stream coming from the MPX composite and direct 57kHz input and built-in FM Stereo tuner module with own RDS/RBDS decoder for off-air reception. The DB5000 can be used like very simple spectrum analyzer for remote investigating the FM Band via Internet. The composite port is suitable for connecting to any MPX output of any FM receiver or modulation monitor.

The RDS data is displayed on a superb 2x40 character LCD. It shows program service name, format and program IDs, alternative frequencies, RDS clock, TP and TA flag status, scrolling 64 characters long radio texts and in-house messages, traffic and emergency alerts. A rear-panel TCP/IP port allows remote using the unit and further analysis or archiving of received data. The DB5000 meets all the European CENELEC and American NRSC standards.

FEATURES:

- Full feature RDS and RBDS decoder
- FM Band 87-108 MHz Basic Spectrum Analyzer
- Very high RDS Demodulation Quality
- High Performance 8th order 57 KHz Bandpass Filter
- Accurate digital readout of subcarrier injection level
- E-mail Notifications on low RDS/RF Level
- COM & USB Connectors for Local Connectivity
- TCP/IP Connector for Remote Connectivity
- Front-panel Keyboard for Local Setup
- External composite MPX and RDS input
- Built-in Tuner
- Any Web Browser becomes a remote station





DEVA BROADCAST

P.O.Box 353, 8000 Bourgas, Bulgaria
Phone: +359 56 820027, Fax: +359 56 836700
www.devabroadcast.com, info@devabroadcast.com

R·D·S RADIO DATA SYSTEM

Model DB5000

SPECIFICATIONS

FM Antenna Input	
Connector	BNC on rear panel
Impedance	75 Ω
External attenuator	No
FM frequency	87 5 108 0 MHz
RDS sensitivity	0 error at Vrf =90dBµV, 4KHz RDS deviation, no modulation
Strong fields	AGC
RF level evaluation	±4dB from 20°C to 30°C, from 20dBµV to 60dBµV without modulation
Dynamic	0 to 60dBµV
Attenuator	6dB built-in

MPX & RDS levels	
Multiplex level	Peak level displayed, 1000 samples over 1 second
RDS level	Mean peak level, 1000 samples over 1 second
Accuracy of MPX deviation display	±5KHz, ±2KHz typ
Accuracy of RDS sub-carrier level display	±10% typical and not guaranteed

RDS/MPX Input	
Connector	BNC on rear panel
Amplitude	max 10Vp-p

User interface	
Indicators	Monochrome LCD display, 2 lines with 40 characters each - front panel; 4 LEDs - front panel; 1 LED - rear panel
Keyboard	5 buttons, front panel

Communication	
Type:	Connector:
USB 2.0	B-type, rear and front panel
RS-232	DB-9 female, rear panel
Ethernet	RJ-45, rear panel

Operating conditions	
Equipment operational between	10° and 40°C
EMC immunity	6V/m

Power Requirement	
Power supply	105–130VAC or 210–255VAC 50/60Hz; 10W
Connector	IEC-320

Size and Weight	
Dimensions (W x H x D)	483 x 45 x 160 mm, 1U
Weight	3 kg

RDS data decoding			
Standards Supported: European RDS CENELEC; United States RBDS NRSC			
Error Correction	Yes	Traffic Announcement (TA)	Yes
Group counting	Yes	Traffic Program (TP)	Yes
Error counting	Yes	Radio Text (RT)	Yes
Alternative Frequencies (AF)	Yes	Program Service (PS)	Yes
Clock Time and Date (CT)	Yes	Enhanced Other Networks (EON)	Yes
Program Identification (PI)	Yes	Program Type Name (PTYN)	Yes
Program Type (PTY)	Yes	Slow Labeling Codes (SLC)	Yes
Decoder identification (DI)	Yes	Open Data Application (ODA)	Yes
Music Speech Switch (MS)	Yes	Traffic Message Channel (TMC)	Yes

We never spare efforts and resources to turn our ideas into successful products.

DEVA® BROADCAST

P.O.Box 353, 8000 Bourgas, Bulgaria
Phone: +359 56 820027, Fax: +359 56 836700
www.devabroadcast.com, info@devabroadcast.com