

FM RADIO MONITORING RECEIVER WITH TCP/IP CONNECTIVITY **MONITORING – LOGGING – ALERTING – CONTROLLING – MEASURING**

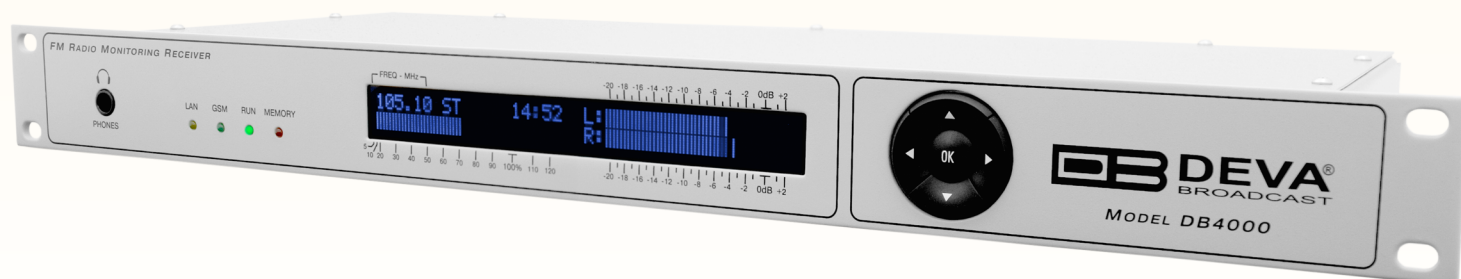
DB4000 is the most cost effective unit for permanent monitoring of the quality and continuity of up to 50 FM Radio Stations with innovative features such as TCP/IP connectivity, audio streaming and automatic alerts on out of predefined ranges in regards with the ITU-R. In case of any faults in the transmission the maintenance staff will be immediately alerted via E-mail or SMS which allows to the technicians to restore a normal service as soon as possible. This tool enhances the radio stations' quality control management .

DB4000 allows you through its TCP/IP and GSM (optional external GSM Modem) Connectivity to monitor all the RDS/RBDS and some other signal parameters from anywhere. You can easily receive the channel status or listen to the audio from anywhere, using your mobile phone. With the external Audio Stream Server option you can even listen to, skim and record the audio from any station.

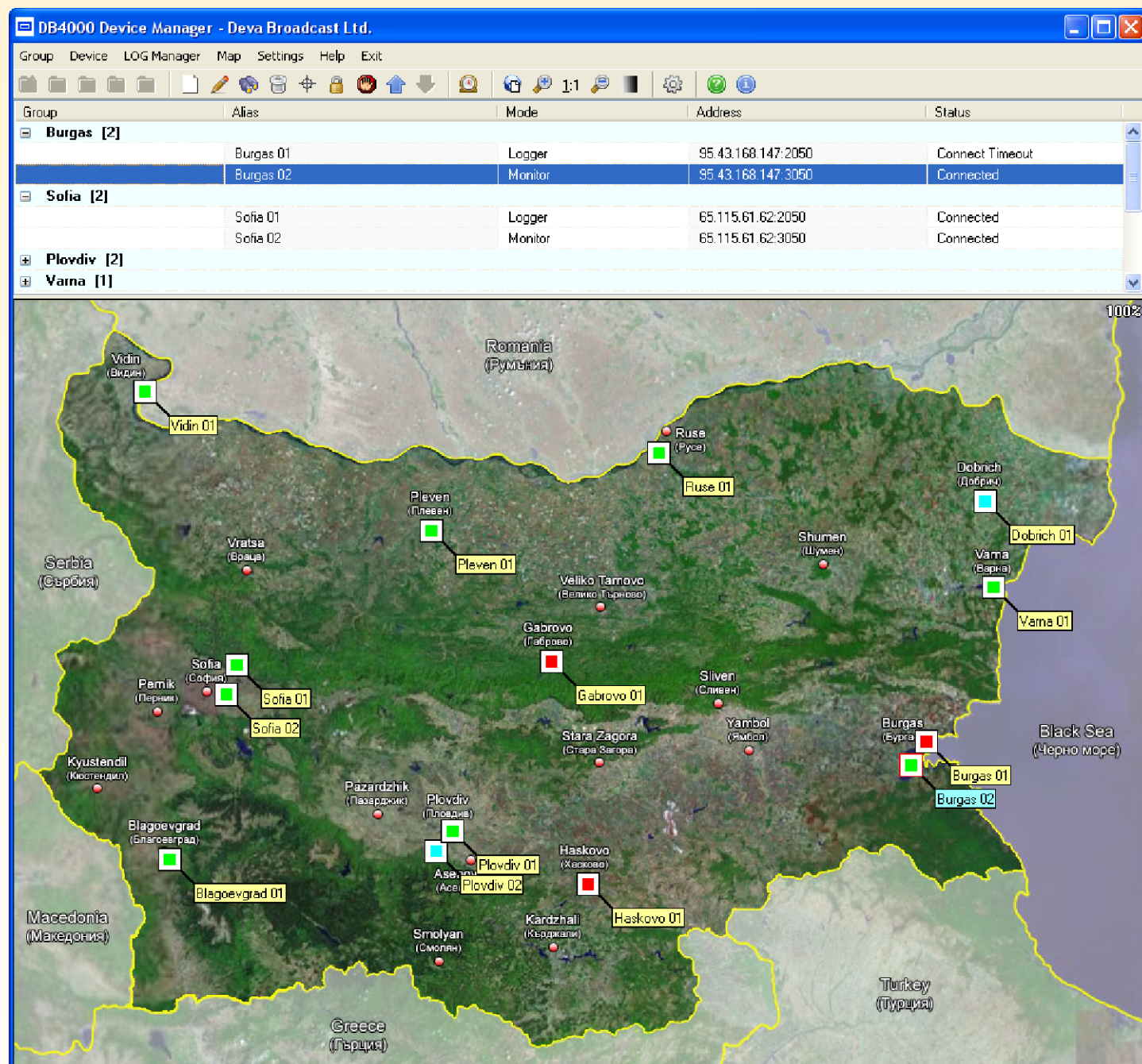
DB4000 enables you to monitor your own frequency continuously and at the same time to be informed about your neighbouring stations. The included PC software “DB4000 Device Manager” allows you to control unlimited number of field installed units, to observe from the monitoring sites all the parameters and measurement values of your network. “DB4000 Device Manager” is a total control solution for remote monitoring networks. The map interface enables getting immediate and clear view of the monitoring location or to the whole network. Due to the universal cartographic interface any kind of maps can be used. Using the map interface the user is allowed, by a flashing red light, to see quickly which site has an alarm on it. He can access the equipment and the alarm directly from this map just with a click on the desired location.

FEATURES:

- FM Band 87 – 108 MHz Basic Spectrum Analyzer
- Selectable wide/narrow IF bandwidth
- MPX, PILOT & RDS deviation meters
- Built-in Stereo Decoder; Stereo Presence Detection
- LEFT and RIGHT demodulated audio level meters
- Accurate front-panel metering for local use
- Headphones audio output
- RDS and RBDS decoder with BER meter
- 19" Professional Case for high RF immunity
- Tracking all the detailed histories, saved in Database
- TCP/IP Remote management and control via Internet
- Very Intuitive Application Interface
- Alarm dispatch via E-mail and/or SMS
- Complete status reporting with SMS
- RF and RDS Measurements
- Remote Listening via optional GSM modem
- Optional Audio Program MP3 Streaming
- Archived readings for unlimited time
- Alarm centralization
- Cartographic interface with site location
- Remote Site configuration
- Separate Database for each site

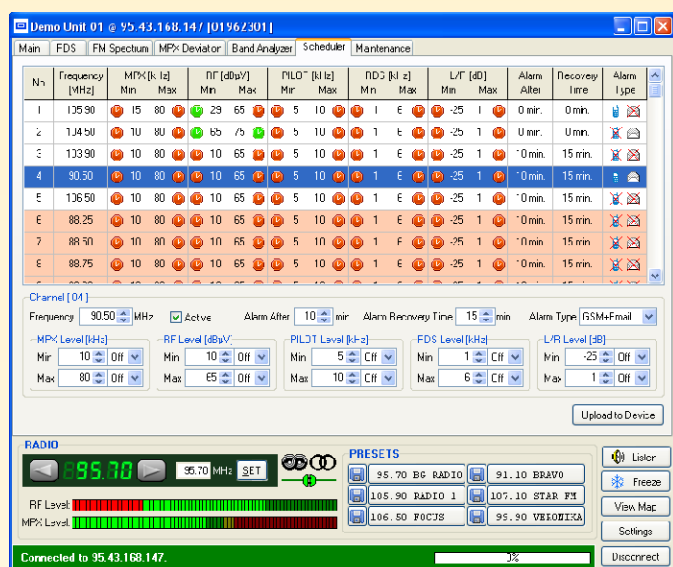


DB4000's Device Manager Software is the best solution for the management of multi-site remote DB4000 devices. It is a server-based system that can manage alarms, measurements, event logs and data from field units. The controlling software offers a very intuitive interface for creating of schedule for full control of single or big number of monitored radio stations. All the local measurements and logs are saved in an internal device memory. Built-in FTP client downloads the files by a preliminary assigned schedule. All the collected information is centralized in a database and can be revised, played back and dispatched automatically to the qualified staff in case of need. An interactive Log Viewer tool allows the very detailed control and analysis of any station from the list of the monitored channels.

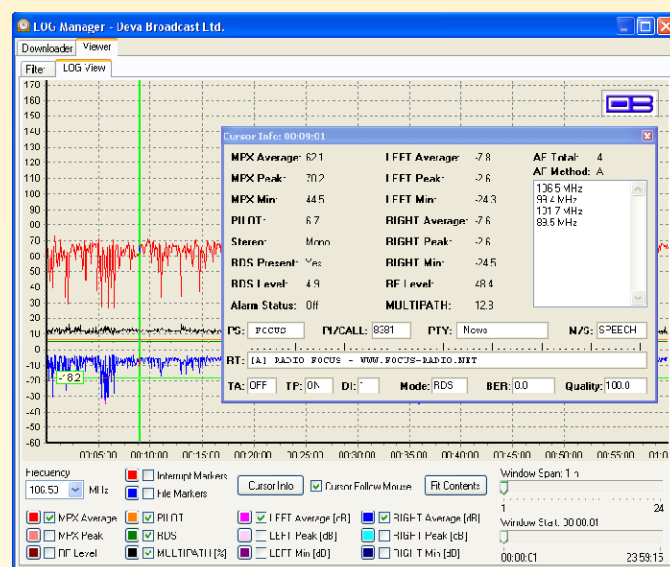


Our product DB4000 is a powerful monitoring system, built on our long-standing expertise in the broadcasting equipment industry. We have created this product in the spirit of innovation and the latest technologies. This is a very important project to us, developed to meet the needs of the most demanding professional radio broadcasting operators and regulatory authorities.

The Deva Broadcast's DB4000 is a superb controlling system, a solution designed as a powerful tool for permanent off-air monitoring of your stations.



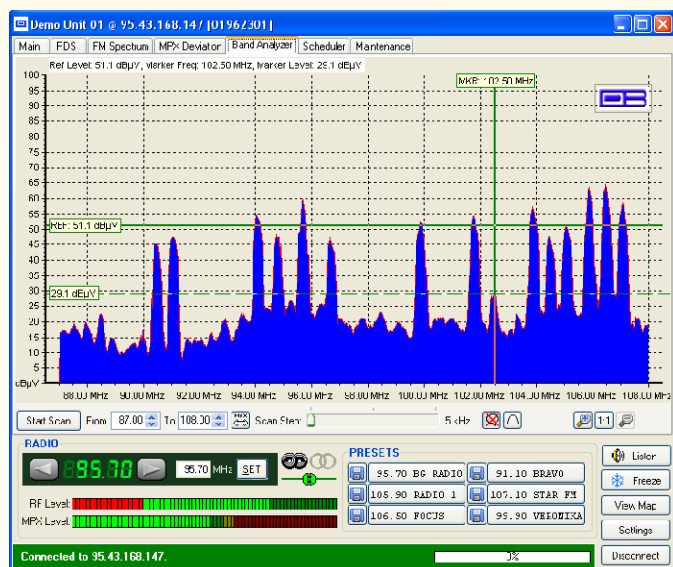
Monitoring Configurator



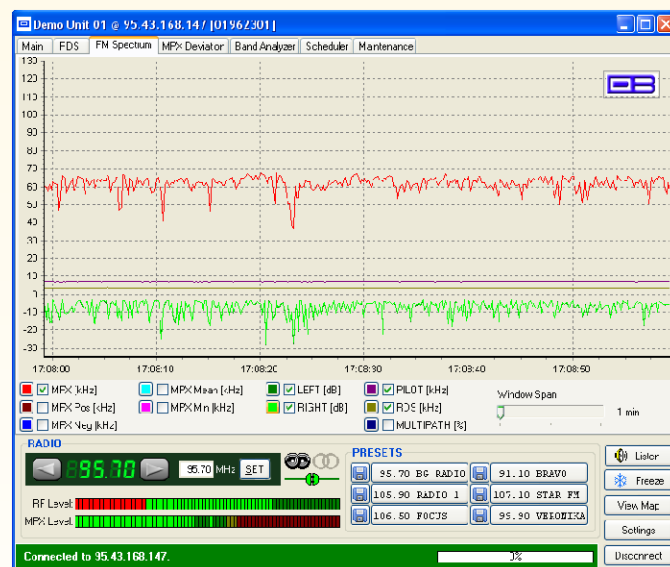
LOG Viewer

The Band Analyzer function in DB4000 presents an overview of all the FM parameters together with the RF signal strength of the station. The Band Scanning is possible within FM band limits. The generated spectrum diagram shows the RF Level vs. the Frequency.

Together with the included RDS decoding software the "DB4000 Device Manager" can create detailed play list reports for any station that is broadcasting the artist and the song title information through its Radio Text. Managers and Program Directors can compare their own RDS text rotations to other stations' in the market within a minute. Using the software the device sweeps the FM band and logs every signal it comes across. An easy-to-read spectrum display shows carrier level vs. frequency.



Band Analyzer



FM Radio Analyzer

SPECIFICATIONS

FM Receiver	
Frequency range	87.0 to 108.0 MHz
Step increment	50 KHz
RDS sensitivity	0 error at Vrf=-90dBμV, 4KHz RDS deviation, no modulation
RF level evaluation	± 4dB from 20°C to 30°C, 20 to 60dBμV without modulation
S/N	60dB
Dynamic	0 to 90dBμV 20 dBμV (-87 dBm) for monaural 43.5 dBμV (-63.5 dBm) for stereo

Audio, MPX, Pilot, RDS levels	
Measurement validity	RF level preferably > 50dBμV
Multiplex level	Peak level displayed, 1000 samples over 1 second
Audio level	Peak level displayed, 1000 samples over 1 second
Pilot level	Mean peak level, 1000 samples over 1 second
RDS level	Mean peak level, 1000 samples over 1 second

Accuracy	
MPX Deviation	± 10%, ± 5% typically
Audio Level	± 5%
Sub-Carrier Level	± 10% typical and not guaranteed

FM Antenna Input	
Connector	'BNC' on rear panel
Impedance	50 Ω
External Attenuator	No

Stereo Decoding	
Stereo Separation	>40dB
De-emphasis	50 or 75μs, Selectable
Audio Frequency Response	±0.5dB, 20 Hz to 15 kHz; follows selected de-emphasis curve
Typical Separation	approximately 26dB to 35dB

RDS Data Decoding	
Standards	European RDS CENELEC; United States RBDS NRSC
Error Correction	Yes
Error counting	Yes
AF decoding	Yes
CT (Time/Date)	Yes
PI, PTY, DI, MS	Yes
TA/TP	Yes
RT (Radio Text)	Yes
PS (Program Service name)	Yes

Measurement Storage	
Storage	2GB Built in Memory Card
Data formats	Textual and proprietary

User interface	
Indicators	4 LEDs and Navigation Buttons (on front panel)
Headphone output	1/8" (3.5mm) phone jack (on rear panel)
Display	Superb 2x40 characters, LCD

Operating conditions	
Equipment operational between	10° to 60°C
EMC immunity	6V/m

Front Panel's Headphones Output	
Connector	Stereo, 1/8" (3.5mm) phone jack
Volume	Fixed

TCP/IP Communication	
Type	RJ45 Ethernet 10/100M Base-T Port
Connector	RJ45, rear panel

Power Requirement	
Power supply	110/220 V (internal switch)
Connector	IEC320, rear panel

Size and Weight	
Dimensions (W x H x D)	19" x 1.7" x 6.9"
Weight	6.5 lbs

Included Accessories:

Power cable, User's manual, CD-ROM with DB4000 Device Manager Software for MS WINDOWS®

Hardware Options Available:

GSM Modem (recommended: Fastrack GO), TCP/IP Audio Streamer – (recommended: Barix Instreamer 100)



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