R·D·S RADIO DATA SYSTEM

GPS

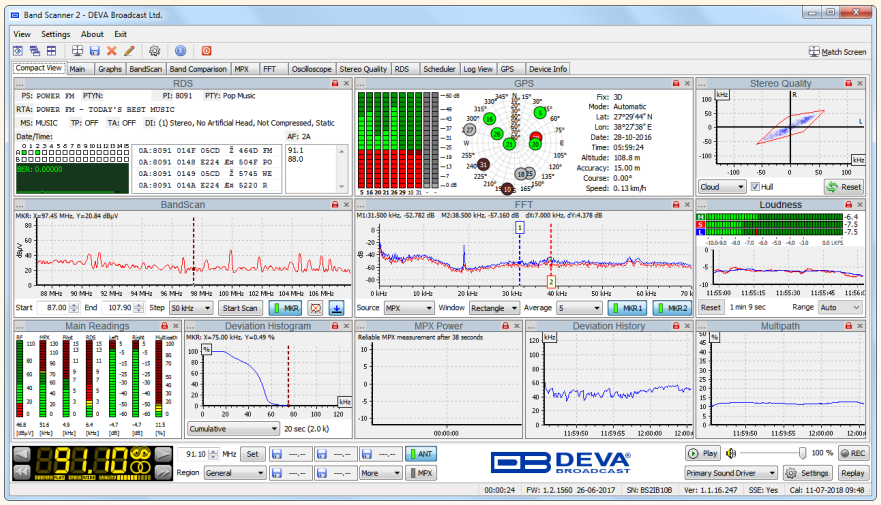
Band Scanner 2

FM & MOD Analyzer, RDS Decoder, built-in GPS receiver for signal coverage survey

The Band Scanner 2 is a revolutionary device that builds on the features of the legendary Band Scanner to provide you with the ultimate tool to assess FM broadcast band congestion and log station identification parameters. In keeping with the characteristics of its famous predecessor, this impressive tool can measure RF level, MPX deviation, Left & Right Audio Levels, RDS and Pilot injection levels. During a campaign, measurements are stored in a log file, after which they can be easily converted into KMZ format and visualized in Google Earth.

To power the system, all you need is the USB port of a Windows PC. Once the Band Scanner 2 hardware converts the raw FM signal into digital form, it will forward it to the Band Scanner 2 Software for digital post-processing. As any common software, the Band Scanner 2 Software is dependent on the computer/laptop running it. It is recommended for the processor to be at least from the rank of "Intel Core i5-5200U @ 2.2GHz" up.

The free-of-charge Windows software sweeps the receiver across the FM band and generates a spectrum display of carrier level versus frequency. Each carrier is analyzed and a station list is created. This sophisticated product further refines stations with an RDS presence to show all radio data groups transmitted. It allows for manual tuning through the receiver screen or by double-clicking a point on the spectrum plot or an entry on the station list. There are two ways to save spectrum plots - as jpeg or bmp files. A separate window on the receiver screen displays the RDS data error level. With the Band Scanner 2 you can also view playlists of the competitive stations, as well as save and export them into and Excel file.



FEATURES

- Compare the signal strength to competitors and other stations
- Pocket size USB powered box. No external power supply required
- Tracking all the detailed histories saved in the RDS Data Log
- Measurement results visualization in Google Earth
- Saving and exporting the playlists to Excel file
- View playlists of the competitive stations
- FM Band 64 – 108.0 MHz Spectrum Analyzer
- External composite MPX and RDS input
- Built-in Stereo decoder
- RDS/RBDS Data Logger
- LEFT and RIGHT level meters
- RDS/RBDS Stream BER meter
- Built-in 12-channels GPS Receiver
- Full feature RDS and RBDS decoder
- MPX, PILOT & RDS deviation meters
- RDS/RBDS Groups Detector & Analyzer

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Band Scanner 2

SPECIFICATIONS

FM Radio Tuner	
Tuning Range	64 to 108.0 MHz, Frequency Agile
Tuning Step	50, 100, 200 (odd), 200 (even) kHz
Tuner Sensitivity	30 dBµV
Antenna Port	BNC Connectors, 50Ω
Dynamic range	100 dB

FM Demod	
IF Filter Bandwidth	100kHz, 200kHz, Wide; User selectable
Frequency Response	10Hz - 70kHz; ±0.01dB, 100Hz - 60kHz;
Dynamic range	90 dB

Stereo Decoder	
Frequency Response (L & R)	±0.1 dB, 10 Hz to 15 kHz
SNR (Stereo)	60 dB, 50 µs de-emphasis
THD	0.1%, 10 Hz to 15 kHz, Wide IF filter
Stereo Separation	50dB typical, 50 Hz to 10 kHz, Wide IF filter

Metering Accuracy	
RF Level	±2 dB, 0 to 110 dBµV
Total, Pos, Neg	±2 kHz, 10 to 100 kHz, 0.1 kHz resolution
Pilot, RDS	±0.5 kHz, 1 to 12 kHz, 0.1 kHz resolution
Audio	±1 dB, -60 dB to +5 dB, 0.1 dB resolution
MPX Power	±0.2 dBr, -12 to 12 dBr, 0.1 dBr resolution

FM Antenna Input	
Connector	BNC on rear panel
Impedance	50 Ω

MPX (Composite) Input	
Connector	BNC on rear panel
Impedance	10 kΩ
Frequency Range	10Hz - 70kHz; ±0.01dB, 100Hz - 60kHz;
Sensitivity	3.5 Vp-p @ 100%

GPS Receiver	
Number of channels	12
Antenna	Pre-amplified, 5m of cable, magnetic
Connector	SMA, rear panel

User interface	
Indicators	4 LEDs, front panel

RDS data decoding	
Standards	European RDS CENELEC; United States RBDS NRSC
Error Correction	Yes
Group counting	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
EON (Enhanced Other Networks information)	Yes
PTYN (Program TYpe Name)	Yes
SLC (Slow labelling Codes)	Yes
ODA (Open Data Applications)	Yes
RT+	Yes
TMC	Yes

Frequency program memories	
GPS Scheduler Capacity	Unlimited
FM Tuner Presets	Unlimited

Measurement storage	
Storage	Database
Data formats	Microsoft Excel compatible format (csv), Google Earth compatible KMZ

Communication	
Type	USB 2.0 compatible
Connector	Mini USB, front panel

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

Power Requirement	
Power supply	USB powered
Connector	Mini USB, front panel

Size and Weight	
Dimensions (W;H;D)	86 x 25 x 125 mm
Shipping Weight	230 x 70 x 172 mm / 0.5kg

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

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