

# **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 any Windows PC. With the Band Scanner 2 you

can view playlists of the competitive stations, as well as save and export them into and Excel file. The free-ofcharge 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.

#### S R H 🕁 🖬 X 🖉 🚳 0 Main Graphs Ban Dete/Time: AF: 2. Option: 01.809.5 Other Determine: 00.809.5 <tr 10 -50 • V Hull - 90.0 -50 -100 107.90 😁 Step 50 kHz 🔻 Start Scan 🚦 MKR 🔯 MKR1 MKR2 rce MPX ▼ Window Rectangle ▼ Average 5 20 sec (2.0 k) 91.10 🔆 MHz Set 😭 91.10 🔂 99.90 😭 -----( Play Volume 100 1 **DEVA** 91.488 on General 🔹 📻 95.70 📅 ---,-- More 💌 📗 MPX ▼ {9} Set Output Primary Sound Dr FW: 1.0.7 03-10-2016 11:01 SN: BS20 Ver: 1.0.5.145 SSE: Ye

#### 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







## 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 Bandwindth100kHz, 200kHz, Wide; User selectableFrequency Response10Hz - 70kHz; ±0.01dB, 100Hz - 60kHz;Dynamic range90 dB

Stereo Decoder		
Frequency Response	e (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 f	ilter
Stereo Separation	50dB typi	ical, 50 Hz to 10 kHz,
	Wide IF f	ilter

	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

 User interface

 Indicators
 4 LEDs, front panel

RDS data decoding		
Standards	European RDS CENELE	C;
	United States RBDS NRS	SC
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
ТМС		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
Туре	USB 2.0 compatible
Connector	Mini USB, front panel

Operating o	onditions
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

