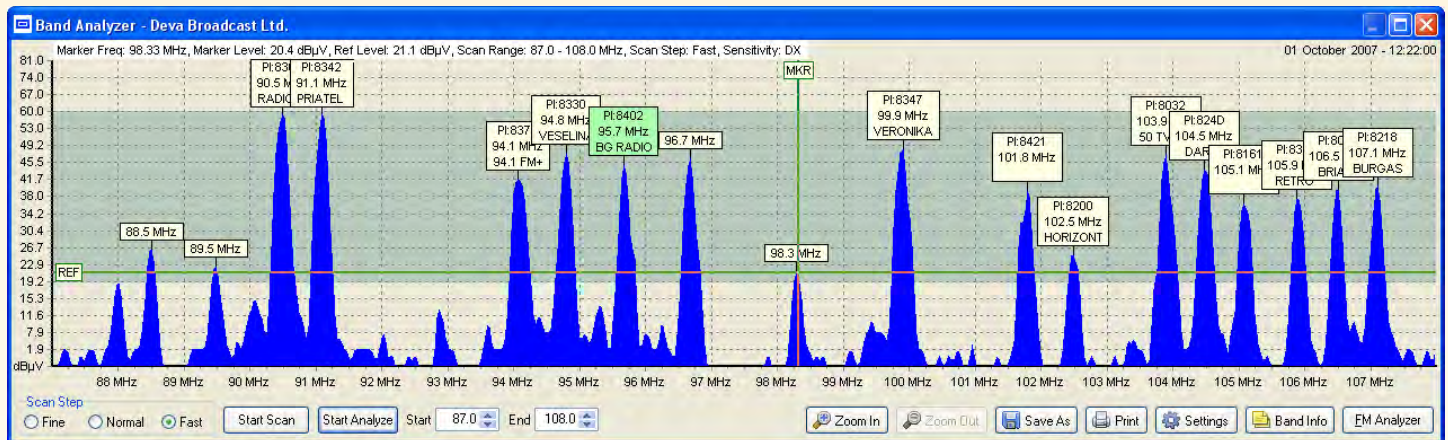


FM BAND SPECTRUM AND MODULATION ANALYZER RDS/RBDS DECODER-READER



"Band Scanner Pro" is a tool to evaluate FM broadcast band congestion and to log station identification parameters. The "Band Scanner Pro" can measure RF level, MPX deviation, Left & Right Audio levels, RDS and Pilot injection levels. The system is powered by the USB port of any Windows PC. Supplied free of charge Windows software sweeps the receiver across the FM band, logging every carrier and generating a spectrum display of carrier level vs. frequency. It then analyzes each carrier and creates a station list. Stations with an RDS presence are further refined to show all the radio data groups being transmitted. Its interface is like a portable radio: It may be tuned manually through the receiver screen or by double-clicking a point on the spectrum plot or an entry on the station list. Spectrum plots may be saved as jpg or bmp files. The RDS data error level is graphed in a separate

window on the receiver screen. The program can be monitored with headphones plugged into a standard 1/8" jack. Originally, the Radio Data System developed for use in the U.S. was called the Radio Broadcast Data System, or "RBDS," to differentiate it from the European RDS standard. Differences between the two systems were gradually reconciled, and the term "RDS" can be legitimately applied to the system as practiced worldwide.



FEATURES:

- FM Band Spectrum analyzer
- Built-in Stereo decoder
- MPX, PILOT & RDS deviation meters
- LEFT and RIGHT level meters
- Auto search tuning
- Headphones audio output
- RDS/RBDS Groups Detector & Analyzer
- RDS/RBDS stream BER meter
- RDS/RBDS Data Logger
- Pocket size USB powered box
- Full feature RDS and RBDS decoder
- External composite MPX and RDS input
- View playlists of the competitive stations
- Saving and exporting the playlists to CSV file
- Compare the signal strength to competitors
- Tracking all the histories saved in the RDS Data Log
- TCP/IP Remote management and control via Internet
- Remote audio listening and logging via Internet

SPECIFICATIONS:

FM receiver

FM frequency	87.0 - 108.0 MHz
Strong fields	AGC
RF level evaluation	± 4dB from 20°C to 30°C; 20-60dBµV without modulation 0 to 54.6(60 with int. Att)dBµV
Dynamic Attenuator	6dB built-in, manual operation
Stereo separation	>20dB
Typical separation	Approximately 26dB to 35dB
Measurement validity	RF level preferably > 50dB
Multiplex level	1000 samples over 1 second
Audio level	1000 samples over 1 second
Pilot level	1000 samples over 1 second
RDS level	1000 samples over 1 second
Accuracy of MPX	± 5KHz, ± 2KHz typ
Accuracy of audio	± 5%
Accuracy of sub-carrier	±10% typ. not guaranteed

FM Antenna input

Connector	'F' on rear panel
Impedance	75Ω

FM Multiplex input

Connector	BNC, Impedance = 50 kΩ
Max input level	5000mV p-p

User interface

Indicators	3 LEDs
Headphone output	1/8" (3.5mm) phone jack

Operating Conditions

Temperature	10° and 40°C
EMC immunity	6V/m

Power Requirement

Power supply	USB powered
Connector	B-type, front panel

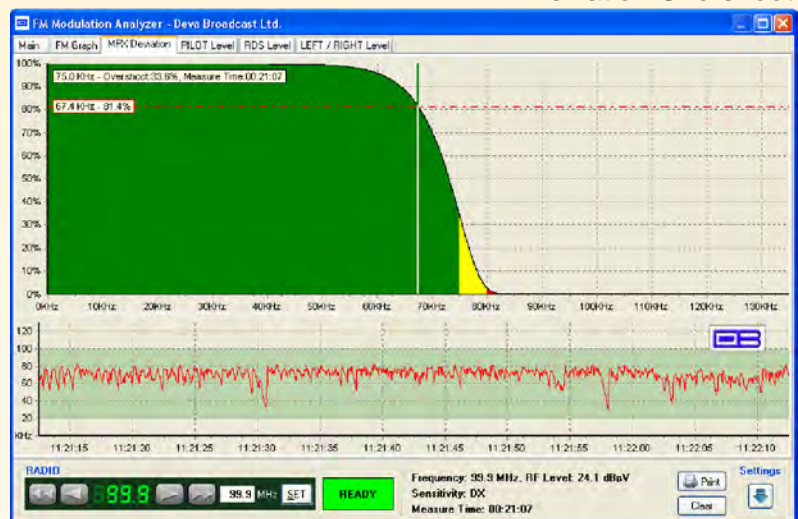
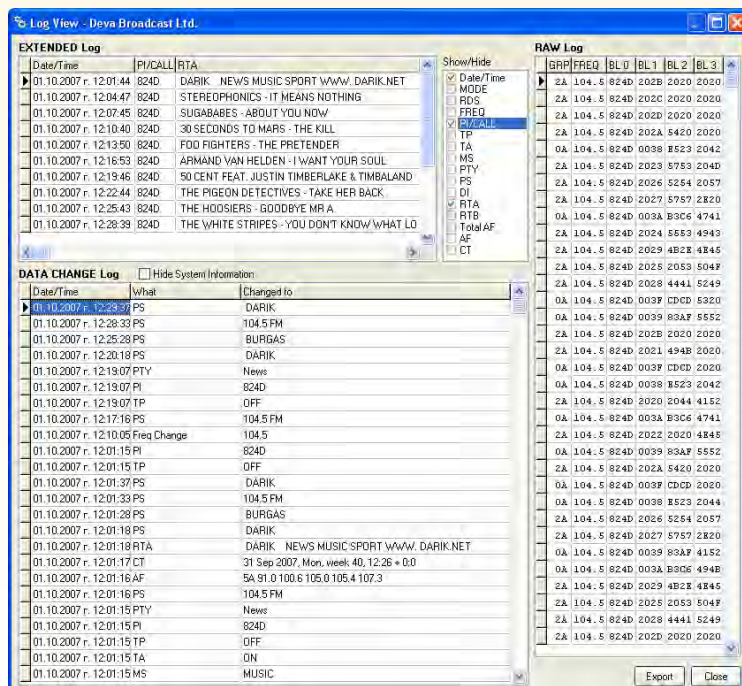
Size and Weight

Dimensions (WxHxD)	2.9" x 1" x 4.3"
Weight	2 lbs

FM Modulation Analyzer

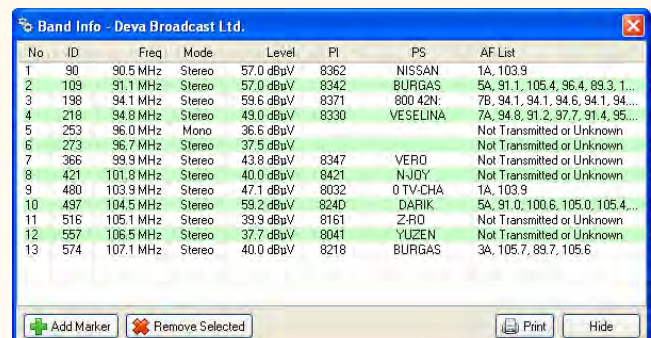


MPX Deviation Overshoot

Date/Time	PI/CALL	RTA
01.10.2007 12:01:44	824D	DARIK - NEWS MUSIC SPORT WWW.DARIK.NET
01.10.2007 12:04:47	824D	STEREOPHONICS - IT MEANS NOTHING
01.10.2007 12:07:45	824D	SUGARABES - ABOUT YOU NOW
01.10.2007 12:10:40	824D	30 SECONDS TO MARS - THE KILL
01.10.2007 12:13:50	824D	FOO FIGHTERS - THE PRETENDER
01.10.2007 12:16:53	824D	ARMAND VAN HELDEN - I WANT YOUR SOUL
01.10.2007 12:19:46	824D	50 CENT FEAT. JUSTIN TIMBERLAKE & TIMBALAND
01.10.2007 12:22:44	824D	THE PIGEON DETECTIVES - TAKE HER BACK
01.10.2007 12:25:43	824D	THE HOOSIERS - GOODBYE MR. A
01.10.2007 12:28:39	824D	THE WHITE STRIPES - YOU DON'T KNOW WHAT LO

Date/Time	What	Changed to
01.10.2007 12:28:39	PS	DARIK
01.10.2007 12:28:39	PS	104.5 FM
01.10.2007 12:28:39	PS	BURGAS
01.10.2007 12:28:39	PS	DARIK
01.10.2007 12:19:07	PTY	News
01.10.2007 12:19:07	PI	824D
01.10.2007 12:19:07	TP	OFF
01.10.2007 12:17:16	PS	104.5 FM
01.10.2007 12:10:05	Freq Change	104.5
01.10.2007 12:01:15	PI	824D
01.10.2007 12:01:15	TP	OFF
01.10.2007 12:01:37	PS	DARIK
01.10.2007 12:01:33	PS	104.5 FM
01.10.2007 12:01:28	PS	BURGAS
01.10.2007 12:01:19	PS	DARIK
01.10.2007 12:01:19	RTA	DARIK - NEWS MUSIC SPORT WWW.DARIK.NET
01.10.2007 12:01:17	CT	31 Sep 2007, Mon, week 40, 12:26 + 0.0
01.10.2007 12:01:16	AF	5A 91.0 100.6 105.0 105.4 107.3
01.10.2007 12:01:16	PS	104.5 FM
01.10.2007 12:01:15	PTY	News
01.10.2007 12:01:15	PI	824D
01.10.2007 12:01:15	TP	OFF
01.10.2007 12:01:15	TA	ON
01.10.2007 12:01:15	MS	MUSIC



No	ID	Freq	Mode	Level	PI	PS	AF List
1	90	90.5 MHz	Stereo	57.0 dBµV	8362	NISSAN	1A, 103.9
2	103	91.1 MHz	Stereo	57.0 dBµV	8342	BURGAS	5A, 91.1, 105.4, 96.4, 89.3, 1...
3	198	94.1 MHz	Stereo	59.6 dBµV	8371	800 42N	7B, 94.1, 94.1, 94.6, 94.1, 94...
4	218	94.9 MHz	Stereo	49.0 dBµV	8330	VESELINA	7A, 94.8, 91.2, 97.7, 91.4, 95...
5	253	96.0 MHz	Mono	35.6 dBµV			Not Transmitted or Unknown
6	273	96.7 MHz	Stereo	37.5 dBµV			Not Transmitted or Unknown
7	366	99.9 MHz	Stereo	43.8 dBµV	8347	VERO	Not Transmitted or Unknown
8	421	101.8 MHz	Stereo	40.0 dBµV	8421	NJOY	Not Transmitted or Unknown
9	480	103.9 MHz	Stereo	47.1 dBµV	8032	0 TV-CHA	1A, 103.9
10	497	104.5 MHz	Stereo	59.2 dBµV	8240	DARIK	5A, 91.0, 100.6, 105.0, 105.4...
11	516	105.1 MHz	Stereo	39.9 dBµV	8161	Z-RO	Not Transmitted or Unknown
12	557	106.5 MHz	Stereo	37.7 dBµV	8041	YUZEN	Not Transmitted or Unknown
13	574	107.1 MHz	Stereo	40.0 dBµV	8218	BURGAS	3A, 105.7, 89.7, 105.6