



**BEXT**

# COVERAGE DOCTOR

PC based  
FM Broadcast Signal  
Analyzer & Recorder



Your secret weapon  
for Radio Signals  
analysis, keeping  
track of stations in  
your market, RF  
modulation readings,  
coverage studies &  
comparisons (PC req.)

- Shows Signal Strength & Modulation/Deviation of one or multiple signals
- Shows Multipath component of FM Signals
- Shows 19 kHz Pilot Injection Level of FM signals
- Shows SCA Injection Level of FM signals
- Shows RDS/RBDS Injection Level of FM signals
- Visualizes sound processing on any given signal
- Gives visual representation of noise floor present
- Gives visual representation of RF carriers' characteristics
- Compares signals of different stations in a given market
- Scans & records Signal Strength of one or multiple signals over time
- Decodes and compiles statistical errors on RDS/RBDS information on FM signals
- Optional Extended Package allows Signal Strength Analysis on signals between 0.1 MHz and 1.3 GHz
- Logs and records all the information for later analysis
- Compiles all parameters on map format for a given territory (GPS Receiver & Winmis 2 software req.)
- Logs & sends alerts when parameters on selected signal(s) change beyond user-specified thresholds
- The Coverage Doctor can operate on AC or 12 V. DC for field use
- Options: Calibrated Ref. Antenna, GPS System, Winmis 2 mapping software, carrying case w/ accessories



### Windows control software:

Advanced hardware control software via RS232 allows direct hardware control running under Windows. A continuous stream of RDS, RSSI, signal deviation, 19 kHz pilot, RDS subcarrier, multipath & tuning data is sent back to the PC. Any window displaying data can be instantly copied to the clipboard, from where can be pasted to any application. Compatible with Windows 95/98

Controls include: RF Antenna attenuator up to -30 dB; Frequency Setting; Scanning & Auto Tune; Audio Level setting; Audio Bass lift; IF Input; MPX Input

### Data logging:

RDS and scan data can be logged with a single mouse click. The captured data can be saved to hard disk as a standard text file. These files can be edited by a word processor

### Scanning:

The Spectrum can be scanned and displayed graphically. A fine tune window allows for accurate station location in 10kHz steps.

### Frequency deviation:

A continuous scrolling chart displays frequency deviation. A user adjustable timebase can be applied to the signal. A deviation histogram window shows a distribution of modulation.

### Signals measured:

Deviation, 0 to 100kHz; RSSI, 0 to 83dB; Pilot 19kHz; RDS 57kHz; Subcarriers; Multipath

### Signals monitored via BNC:

Pilot 19kHz; RDS 57kHz subcarrier; MPX Output; MPX Input; IF input; Limiter output; Deviation Output; Multipath Output; AF

### Tuner:

Frequency band: 87.5 MHz to 107.9MHz  
Input impedance: 50 ohms  
Noise figure: 5.5dB; IF rejection: 87dB  
Image rejection: 58dB; Sensitivity: 1.5uV;  
IF bandwidth: 240kHz

### Multipath:

Multipath distortion is displayed graphically & digitally with a mean value once every second

### Audio:

Balanced line 4.0 volts RMS  
LS class B into 8 ohms 4.0 watts  
Digital volume and line level 6 bit  
Balanced line and loudspeaker 3 pin XLR fem.

### Interfacing:

Antenna: BNC 50 ohms  
Serial data: 9 pin 'D' type female  
DC supply: 4 pin DIN female  
Balanced line & loudspeaker:  
3 pin XLR female  
Headphones: 6.25mm jack

### Power requirements:

AC line: 120 V or 220 V, 50/60 Hz  
Standby power consumption: 8 watts  
Maximum power consumption: 15 watts  
DC supply: 12 V. (11 to 15 V acceptable)  
Standby current: 350 mA  
Maximum current: 1000mA

### Dimensions:

11 1/2" x 8" x 2 1/2" / 290mm x 200mm x 62mm  
Weight: 2.42 Lbs / 1.1 Kg