

# PRO-M10FX Dual Mode Wideband RF and GSM 3G Bug Detector (DJJ-PRO-M10FX)

## FEATURES

- Two built in RF Detectors - 0 – 10 GHz and GSM/3G
- RF Detectors can operate independently or simultaneously for maximum flexibility
- Cellular Mode - Detects GSM900, GSM1800 and 3G(UMTS2100) devices
- Ultra Sensitive - Detects signals from up to 10 metres
- Detected Band/Frequency indicator to help identify device/network type
- Digital 'Burst' Signal Detect for GSM/3G Tracker/SMS(Text) detection
- Wideband Mode - Ultra Wide Frequency response 10,000MHz (10 GHz)
- Built in Frequency Counter (0 to 2800 MHz)
- Intelligent 'Digital' or 'Analogue' Indicator to determine signal type
- 10 Segment Signal Strength Meter
- Ultra High Sensitivity to locate even the weakest signals
- Backlit LCD Display for use in all conditions
- Audio Demodulation
- Silent Vibrate & Beep Modes for Signal Strength
- Internal Li-Ion Battery Pack and Mains Charger
- Machined Aluminium enclosure for ultimate durability
- Supplied in Heavy Duty Carry case



## RF Detectors

The PRO- M10FX has two independent RF Detectors - one that detects a Wideband range of 0 to 10,000 MHz (10 GHz) and another which detects only the Cellular GSM900, GSM1800 & 3G(UMTS) bands with much increased sensitivity.

These two independent detectors can operate simultaneously for maximum detection capability or separately to allow specific types of devices to be detected or filtered. The very latest digital RF and microprocessor technology are utilised to provide very high sensitivity across a wide frequency range that ensures detection and location of even the weakest radio transmissions.

**WIDE (Wideband 0-10 GHz) mode** is used to detect VHF, UHF and Microwave transmitters. Such devices include miniature room transmitters or bugs, mains powered transmitters, telephone transmitters, video transmitters, mobile telephones, fixed frequency tracking devices, walkie talkies etc.

**CELLULAR GSM & 3G mode** is used to detect transmissions from cellular mobile phone based devices. Such devices include mobile phones, GPS vehicle trackers, GSM listening devices (bugs) and covert wireless 3G cameras.

**'Peak pulse' detector** - This enables it to detect signals from devices that only transmit momentarily and to indicate that a signal has been detected. Such devices include vehicle trackers, GSM devices (SMS text messages), or 'Burst' transmitters that accumulate information and transmit it in short bursts.

**Built in Frequency Counter (0 to 2800 MHz)** - As well as locating signals swiftly and easily, the PRO- M10FX will display the frequency of the signal detected up to 2800 Mhz. This feature enables the user to quickly verify whether the detected signal is from an innocent Radio transmitting device or something more suspicious.

## Audio Demodulation

Wideband signals can also be demodulated and can be monitored using the supplied earphones to help establish whether any audio is being transmitted.

The PROM10FX is also supplied with an integral Lithium-Ion battery pack and charger. The complete system is supplied in a heavy duty carry case for ultimate protection.



## SUPPLIED ACCESSORIES

- Semi-Rigid Wideband Whip Antenna
- Semi-Rigid GSM/3G Whip Antenna
- Earphones
- 9V DC Charger - 110V to 240V AC input (Auto Switching) with International Adaptors
- Protective Heavy Duty Carry Case

## TECHNICAL SPECIFICATIONS

Typical Performance Characteristics - at 20 degrees C

### Wideband Antenna Input

Connector	MCX Socket - 50 Ohm
Input Frequency Range	1MHz – 10000MHz (10.0GHz)
Sensitivity	100MHz -49dBm
	200MHz -47dBm
	500MHz -46dBm
	1GHz -41dBm
	2GHz -36dBm
	5GHz -18dBm
	10Ghz -3dBm
	Sensitivity for 50mW -30dBm (measured at 500MHz 50% AM)
Demodulation	Audio 1kHz)
	Frequency Response 400Hz – 5kHz +/-2dB

### GSM/3G Antenna Input

#### 2G 900MHz

Centre Frequency:	897.50MHz
Band Width:	880 - 915MHz
Out-of-Band Attn:	>40dB typ
Min. Detection Level:	-35dBm typ
Peak Detect Threshold:	-31dBm typ
Response Time:	100ms

#### 2G 1800MHz

Centre Frequency:	1747.50MHz
Band Width:	1710 - 1785MHz
Out-of-Band Attn:	>40dB typ
Min. Detection Level:	-30dBm typ
Peak Detect Threshold:	-27dBm typ
Response Time:	100ms

**3G(UMTS) 1950MHz [WCDMA]**

Centre Frequency:	1950.00MHz
Band Width:	1925 - 1975MHz
Out-of-Band Attn:	> 70dB
Min. Detection Level:	-75dBm
Peak Detect Threshold:	-70dBm
Response Time:	100ms

**Instrument Display**

Type	LCD STN Backlit
RF Signal Strength	10 element bar graph
RF Carrier Frequency	2800.0MHz (2.80GHz) maximum

**Internal Audio Amplifier**

Output Power	0.25W
Frequency Response	300Hz – 15kHz +/-1dB
Headphone Connector	3.5mm Jack

**Miscellaneous**

Internal Battery	7.2V 1100 mAh Li-Ion rechargeable
Operating Duration – fully charged battery	5 to 6 hours
Charge Time – using supplied charger	4 hours maximum
Operating Temperature Range	-10 – +50 degrees C
Relative Humidity	< 90%
Dimensions	135mm x 84mm x 30mm
Weight	300 g
Signal Processing and Control	RISC Based Microcontroller