

# Sweepmaster F2800 Plus - Professional Counter Surveillance System

RF Detector 0-8000MHz - Mains Carrier / LF Detector - Infrared Detector

Telephone RF/AF Analyser - Frequency Counter 0-2800 Mhz - Digital Signal Analyser



- 8 GHz (8000 Mhz) Wide Frequency Response RF Detector
- Built in Frequency Counter up to 2800 MHz
- Infrared/Laser Detection Probe
- Mains Carrier/LF Detection Probe
- Telephone Analyser (RF and AF Modes)
- Digital and Analogue signal detection with indicator
- Highest Sensitivity to locate the weakest signals
- Custom Backlit LCD display
- VOX Voice Activation Trigger
- Audible Signal strength 'Beep'
- Digital 'Burst' Signal Detection
- Audio Demodulation
- Internal Li-ion Battery Pack and Charger
- Supplied in ultra-protective carry-case



#### **DETECTION MODES**

- 1. Antenna RF
- 2. Telephone RF
- 3. Telephone AF
- 4. Infrared
- 5. Mains Carrier/LF



The Sweepmaster F2800 Plus is the latest version of our fully integrated Professional Counter Surveillance System. Now with even more sensitivity, increased frequency counter range and a new custom display the F2800 Plus offers more power than ever to help locate the presence of covert surveillance devices.

It uses the very latest digital technology to provide increased ultra high sensitivity across a wide frequency range that ensures detection and location of even the weakest radio, infrared, and LF transmissions such as those used in covert surveillance devices.

LF, HF, VHF, UHF and Microwave transmitters will be detected by the F2800 Plus; in fact anything that transmits a radio signal between 0.1 MHz and 8.0 GHz (8000 MHz). Such devices include miniature room transmitters, mains powered transmitters, telephone transmitters, video transmitters, mobile telephones, tracking devices, walkie talkies etc. It can also detect the presence of Mains Carrier/Low Frequency devices and Infrared/Laser emitting devices by using the supplied MCD1 Mains Carrier & IRD1 Infrared Probes.

The F2800 Plus also features a digital 'peak pulse' detector. This enables it to detect signals from devices that only transmit momentarily and to 'latch' a LED and notify you 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'.

As well as locating signals swiftly and easily, the F2800 Plus will display the frequency of the signal detected up to 2800 Mhz. This valuable feature enables the user to quickly verify whether the detected signal is from a genuine innocent radio device or something more suspicious. It will also analyse received signals to help distinguish between Analogue and Digital types.

The F2800 Plus also features a telephone interface so it can be connected directly to a telephone line to check for the presence of radio transmitting devices or other types of hard-wired listening devices attached to the line such as infinity bugs.



## **SUPPLIED ACCESSORIES**

- Antenna Wand with Whip Antenna
- MCD1 Mains Carrier / LF Detector Probe
- IRD1 Infra Red Detector Probe
- Earphones
- Telephone Connection Cables x 2
- Mains to 10V DC Charger
- Soft Protective Carry Case
- Shoulder Strap
- Protective 'Storm' Carry Case





## **TECHNICAL SPECIFICATIONS**

8GHz

Typical Performance Characteristics - at 20 degrees C

#### **Antenna Input**

Connector BNC Socket - 50 Ohm

Input Frequency Range 1MHz – 8GHz

Sensitivity 100MHz -52dBm

 200MHz
 -52dBm

 500MHz
 -49dBm

 1GHz
 -43dBm

 2GHz
 -41dBm

 5GHz
 -19dBm

Demodulation Sensitivity for 50mW Audio -30dBm (measured at 500MHz 50% AM 1kHz)

-5dBm

Frequency Response 400Hz – 5kHz +/-2dB

## **Telephone Input**

Connector FCC68 6/4
Input Frequency Range 1MHz – 8GHz

Sensitivity 100MHz -42dBm

 200MHz
 -35dBm

 500MHz
 -33dBm

 1GHz
 -28dBm

 2GHz
 -19dBm

 5GHz
 -5dBm

 8GHz
 +1dBm

Demodulation Sensitivity for 50mW Audio -24dBm (measured at 500MHz 50% AM 1kHz)

Frequency Response 400Hz – 5kHz +/-2dB

Line Audio Sensitivity for 50mW Audio 10mV RMS

Frequency Response 200Hz – 15kHz +/-1dB

Line Isolation 500V DC

### **Instrument Display**

Type 16 x 2 Alpha-Numeric OLED

RF Signal Strength 10 element bargraph

RF Carrier Frequency 2800.0MHz (2.8GHz) maximum

#### **Internal Audio Amplifier**

Output Power 0.25W

Frequency Response 300Hz – 15kHz +/-1dB

Headphone Connector 3.5mm Jack

### **VOX Trigger**

Number of Bursts4Burst Duration40msBurst Frequency12.5HzTone Frequency3.2kHz

Loudness 90dB SPL @ 1m



#### Miscellaneous

Internal Battery
Operating Duration – fully charged battery
Charge Time – using supplied charger
Operating Temperature Range
Relative Humidity
Dimensions
Main Unit Weight

7.2V 1300 mAH Li-Ion rechargeable 8 hours 3 hours maximum -10 – +50 degrees C < 90% 170 x 165 x 52 mm <1 kg

#### Mains Carrier / LF Detector Probe - MCD1

Input Frequency Range 100 – 300Khz
Power Supply 9V Battery PP3
Current Consumption 10 mA max
Weight 200g inc. battery
Dimensions 92 x 66 x 28mm

#### Infra Red Detector Probe - IRD1

Power Supply
Current Consumption
10 mA max
Wavelength
850nm - 1050nm
Field of View
100 degrees
Half Angle
+/- 38 degrees
Weight
200g inc. battery
Dimensions
92 x 66 x 28mm