

Spartan Spectrum Analysis

Wi-Spy 2.4i is a straightforward, powerful spectrum analyzer for real-time troubleshooting of 2.4 GHz band interference. Like all Wi-Spy models, the 2.4i is easy to use, quick to set up, and small enough to fit in your pocket. Wi-Spy 2.4i sees all RF activity in the band, including Wi-Fi and non-Wi-Fi sources.

Bundled with MetaGeek's Chanalyzer Lite software, Wi-Spy 2.4i is loaded with fundamental spectrum analysis features needed for troubleshooting wireless interference. Optional Wi-Fi features included with the software provide an extra layer of information, if used with a supported wireless NIC, to guide in troubleshooting network dropouts, slowness, etc.

Wi-Spy 2.4i allows up to 60 minutes of spectrum and Wi-Fi data to be captured during each session. Collected data can be paused, played back and viewed in much the same way as a DVR machine. This functionality offers excellent control of session timeframes, so users can easily view and quickly identify and troubleshoot interference events.

Key Features

- **2.4 GHz (802.11 b,g, and 2.4 GHz n)**
- **Wi-Fi Info (when used with NIC)**
- **Internal Trace Antenna**
- **Real-Time Troubleshooting**
- **Bundled with Chanalyzer Lite**
- **DVR-like Timeframe Navigation**
- **Full 64-bit Support**



Technical Specifications

Frequency Range:	2.400 to 2.492 GHz
Rolling Data in Session:	Past 60 Minutes
Antenna:	Internal Trace
Amplitude Range:	-102 to -6.5 dBm
Amplitude Resolution:	0.5 dBm
Resolution Bandwidth:	375 KHz
Sweep Time:	406 msec

Supported Software

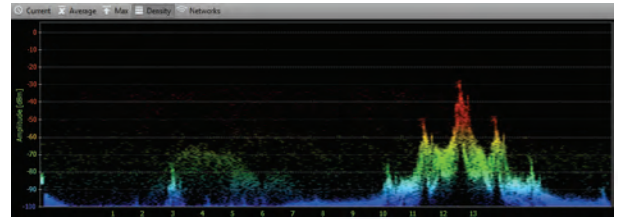
Chanalyzer Lite

Requirements

OS	Windows 7, Vista or XP (SP3)
Mac OSX Virtualization	VMware Fusion, Parallels
Framework	Microsoft .Net 3.5
Screen Resolution	1024 x 768 (or greater)
RAM	1 GB (Rec. minimum)
Processor	1 GHz (Rec. minimum)
Wireless NIC (optional)	WZC Compatible 802.11b, g, or n

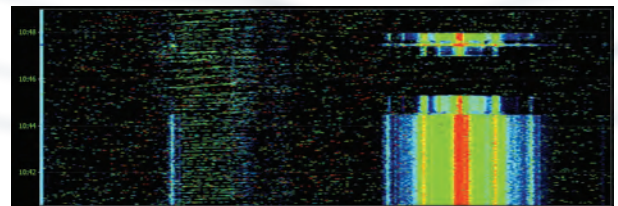
Density View

The Density View displays raw spectrum data by frequency and amplitude point over a user-defined timeframe. The brighter the color, the more RF activity present. Density View is great for catching transmitters over time, and for finding interference trends.



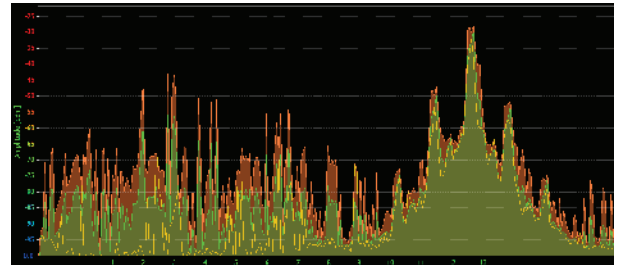
Waterfall View

The Waterfall View displays RF activity over a defined timeframe in a rolling “waterfall.” The brighter, or more red the color, the noisier the frequency. The Waterfall View shows when interference occurred and its duration.



Planar View

The Planar View graphically displays the maximum, average and current RF activity on a Density graph. The Planar View is a staple of traditional spectrum analyzers, and is included in Chanalyzer Pro with user-defined colors for complete customization.



Wi-Fi Channels Table

The Wi-Fi Channels Table plots average, current and maximum values, as well as the Noise Floor reading and number of placed Access Points to calculate a “grade” for each Wi-Fi or ZigBee channel.

Channel	Grade	Data Cycle	Average	Current	Noise Floor	Access Points	Max
1	75.0	8.2%	-65.5	-62	-66.0	2	-65.5
2	75.9	8.2%	-64.5	-62	-66.5	0	-65.5
3	80.1	8.5%	-65.0	-69	-66.0	0	-65.5
4	75.5	8.5%	-64.0	-72	-65.5	0	-65.5
5	75.7	8.5%	-63.0	-68	-65.5	0	-65.5
6	75.9	9.4%	-63.0	-70	-65.5	1	-65.5
7	74.2	9.5%	-63.5	-70	-64.0	1	-65.5
8	46.1	23.6%	-64.5	-75	-66.0	0	-65.5
9	38.8	24.1%	-65.0	-75	-63.5	0	-65.5
10	38.5	22.5%	-65.0	-72	-63.5	0	-65.5
11	47.2	21.1%	-65.0	-72	-66.0	0	-65.5
12	60.2	14.1%	-65.5	-72	-63.5	0	-65.5
13	50.8	2.2%	-77.5	-72	-61.0	0	-65.5

Wi-Fi Overlays

Using the wireless NIC in the computer, Chanalyzer Pro collects Wi-Fi data such as SSID, RSSI and channel of networks in the area. Data is overlaid on a Density View to provide a correlation between known Wi-Fi sources of RF and everything else (non-Wi-Fi) transmitting in the band.

