

# YELLOWJACKET®-B/G

802.11 B/G WI-FI ANALYSIS SYSTEM

**GPS ready**

**Yellowjacket®** is a calibrated wireless receiver module that interfaces with HP's iPAQ® PocketPC® in sweeping, analyzing and optimizing 2.4 GHz Wi-Fi Networks. The receiver measures all 14 OFDM/DSSS network channels which operate on the **IEEE 802.11b/g** standard allowing the user to determine the AP's MAC, SSID and RSSI signal levels for all access points on or off any 802.11b/g WISP or Hotspot. The **Yellowjacket®** system uses a custom receiver, custom software and interfaces with the iPAQ series giving **Yellowjacket®** the distinction of being the only true RF spectrum protocol analysis and direction finding tool accurate to within 1 dB. Berkeley's calibrated receiver sweeps and measures all RF energy in the 2.4 GHz range as well as on each of the 14 OFDM/DSSS channels for detailed network inspection of any nearby 802.11b/g APs or STAs.

**Yellowjacket®** is a passive, network independent device with the ability to see the "whole picture" as well as pinpoint channel interference and hackers that plague so many 802.11b/g WISPs and Hotspots.



**Berkeley's custom receiver hardware collects all 2.4 GHz RF energy distinguishing between spectral interference, rogue APs as well as all OFDM/DSSS network channels in the area.**



**Berkeley's custom PocketPC® software records and displays all received data packets according to their waveform pattern, usage, PER, MAC, SSID, absolute channel and more.**

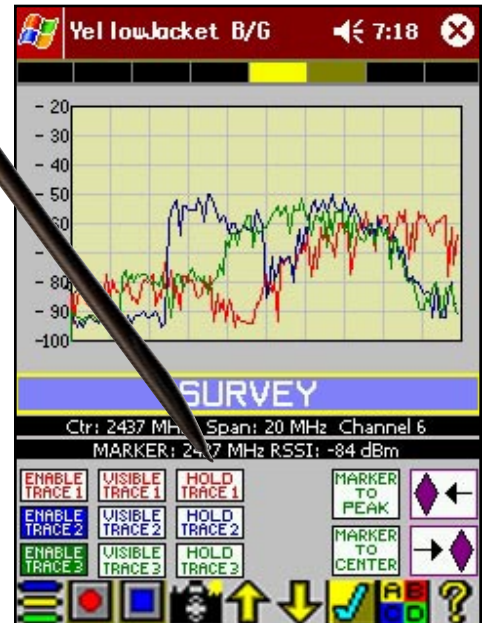
## FEATURES:

NUM	CH	MAC ADDRESS	SSID	TE	RSSI
1	10	00-40-33-AF-F3-36	Wireless	TE=1	-88
2	6	00-40-33-AF-F5-26	Wireless	TE=3	-81
3	8	00-40-33-AF-F1-C3	Wireless	TE=1	-58
4	2	00-40-33-AF-F6	Wireless	TE=7	-77
5	9	00-40-33-AF-F6-E9	Wireless	TE=1	-76
6	1	00-40-33-AF-F2-01	Wireless	TE=8	-75
7	11	00-40-33-AF-C3-FD	Wireless	TE=1	-70
8	7	00-40-33-AF-F5-D1	BVS Software	TE=1	-54

**SURVEY**  
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- 2.4 GHz Spectrum Analysis**
- SSID / WEP / PER**
- Direction Finding\***
- MAC Security Authorizations**
- Internal GPS Receiver Ready\***
- Total Channel Power**
- Hive™ Indoor Mapping Coverage\***
- 14-Channel Survey Sweep**
- Narrowband RSSI**
- Peak Search/Peak Hold**
- 802.11b/g Packet Analysis**
- Absolute Channel**
- JPEG Screen Snapshot**

\*Direction Finding designed for use with optional DF antenna (sold separately)  
 \*Optional internal GPS receiver & Dolphin mapping software available (sold separately)  
 \*Hive™ Indoor Mapping Software sold separately



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# YELLOWJACKET®-B/G



## 802.11B/G W-LAN ANALYSIS SYSTEM

### BANDS SUPPORTED

RF SENSITIVITY (Wide Band)

RSSI MEASUREMENT (Narrow Band)

TUNING INCREMENTS

ISM: 2.400-2.497 GHz

-20 to -90 dBm

-30 to -90 dBm @ 156.25 kHz (single channel) / 625 kHz (full spectrum)

Tunes 11 channels (US/Canada), 14 channels (EU)

### CORRELATED POWER MEASUREMENTS:

Correlated Power (dBm)

Total Channel Power Measurement

### RATIO

-30 dBm : -100 dBm

-20 dBm : -90 dBm

### RECEIVER GENERAL SPECIFICATIONS

IF Bandwidth:

Stability:

Antenna:

Power:

Weight:

Dimensions:

Runtime:

Recharge Time:

Wideband 22 MHz

± 2.5 PPM Temp range 32 to 120 degrees

SMA Female 50 ohm

Internal battery power (4 AA rechargeable Ni-MH batteries in receiver)

3 lbs.

4"H x 4"W x 6"L (water resistant, high impact ABS plastic case)

> 3 hours

< 1 hour



## DOLPHIN



Yellowjacket® contains and optional 12-channel internal GPS receiver that time stamps all 802.11 measurements. These measurements may then be exported into Berkeley's own Dolphin™ Mapping Software.

### YELLOWJACKET FEATURES:

#### DIRECTION FINDING GEIGER MODE:

Pinpoint "hackers"

Visual and aural indicator

Locate rogue APs

"Geiger Mode" for direction finding individual AP/STA

PER breakdown/usage for 1, 2, 5.5, 11 Mbps DSSS

6, 9, 12, 18, 24, 36, 48 & 54 Mbps OFDM

#### AP ANALYSIS:

Survey sweep of channels for all APs

Individual channel analysis of APs or STAs

Absolute channel

SSID

AP manufacturer's ID

WEP detection

RSSI for each AP/STA in true dBm

#### NETWORK SECURITY:

Authorize or Unauthorize up to 1000 MAC addresses

Generate valid AP list automatically

Upload AP list from PC

Flag invalid APs as "suspect"

## Hive™



Yellowjacket™ output data supports Microsoft Excel spreadsheets as well as Berkeley's own Hive™ Real-time Indoor/Outdoor Mapping solution on iPAQ PocketPC®. No GPS required.

Yellowjacket® includes the ability to perform true direction finding with an optional DF Antenna. This directional antenna provides a gain of 9 dBi for pinpointing specific sources of interference and hackers trying to gain access or take down your wireless network.

