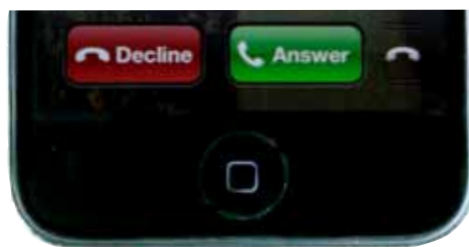


# BVS PRODUCT OVERVIEW

## PocketHound Sniffs Out Cell Phones

Many people carry their phones with them wherever they go, but there are some areas where cell phone use is prohibited. Prisons, closed courtrooms, movie theaters, confidential meetings and educational institutions all have restrictions on when and how cell phones can be used.



The PocketHound is a cellular signal detector that helps the user locate cell phones and other devices that use a cellular signal. This includes smartphones, feature phones and cellular modems for computers. It helps the user catch cheaters and find contraband devices. But how does the PocketHound work? In order to explain the process, it's important to understand how cellular devices work.

### **How Cellular Devices Give Themselves Away**

When a feature phone, smartphone or cellular modem is in active use, it is constantly sending and receiving an RF signal that is picked up by the PocketHound. Devices from North America use different frequency bands than most of the rest of the world, so the PocketHound includes PC software allowing the user to switch between U.S. and international bands (Euro, Asian, Australia, New Zealand, Canada & Israel) all with one unit. That covers a lot of phones. But what about devices in standby mode?

The cellular transmitter sucks up a lot of juice, which is one of the reasons cell phone talk time is so much shorter than the standby time. When the device is in standby mode, the transmitter is off much of the time to conserve battery power. Eventually the transmitter will wake up and communicate briefly with the tower to check for incoming calls or messages. If it doesn't find anything waiting, the transmitter shuts down again. The exact time frame varies depending on the device, but in most feature phones it's around five to ten seconds.

Cellular modems and smartphones

communicate much more often and for longer periods, since they usually have programs or apps running that initiate frequent updates from the Internet. Examples include social messaging apps like Facebook, weather updates and email programs.

Now that you know how cellular devices work, let's take a look at the PocketHound itself and how to use it.

### **PocketHound Impressions**

As the name would indicate, it's easy to conceal in a pocket or small handbag. The unit is small, about the size and shape of a deck of playing cards or pack of cigarettes. The construction is solid and rugged, with no screen or external parts to break.

There is no noise or give when you try to squeeze or flex the unit. The plastic housing has a textured surface and scooped sides that make it easy to grip.

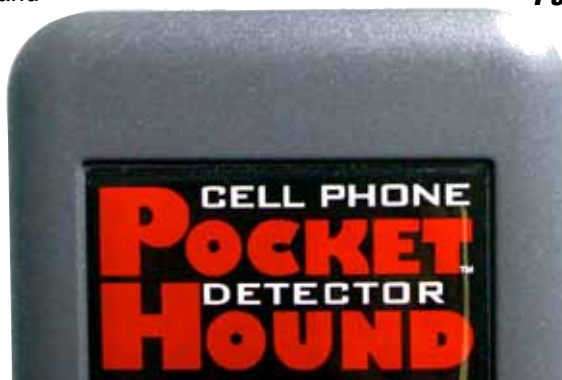
The front has a puffy label with the name and logo, and the back has four rubber feet to keep it from sliding around on your desk. Also on the back is a quick reference guide that gives instructions on how to turn the unit on, the meaning of the status LEDs, and how to adjust the sensitivity. If you need help, the support number and email address are also listed.



There are five colored indicator LEDs located on the top edge of the PocketHound that tell you the power state and approximately how close you are to the device emitting the signal. The left side edge has the USB charging port and a toggle wheel switch that serves to turn the unit on and off and adjust the sensitivity.

### **PocketHound Setup**

The PocketHound uses an internal battery, so you'll need to charge the unit when it arrives. It comes with a retractable USB cable and a charger with a USB port. The charger is very flat and has a pivoting plug. You can use it flat against the wall, and when plug it into a power strip, it won't block other outlets. You also have the option of charg-



ing the PocketHound directly from a USB port on your PC. A full charge takes approximately nine hours, but a quick charge will get it up and running within two hours.

The PocketHound comes with an SD card that contains the drivers and instruction manual, so no Internet connection is required to install it on your PC. If your PC doesn't have an SD card reader, there's no need to worry. An SD-to-USB adapter is included with the packaging. The driver installation is simple, straightforward, and takes less than a minute.

### **Sniffing Out Cellular Signals**

There are very few living places without some level of background RF noise from radio and cell phone towers, airports, Wi-Fi networks and other sources. When you turn on the PocketHound by holding in the toggle switch, it will automatically scan the RF activity in the surrounding area to establish a "baseline" noise level. You can adjust the sensitivity by briefly pushing in the toggle switch and adjusting it up or down.

The antenna in the PocketHound is semi-directional and is located under the front label. This means you can read the instructions on the back while you scan for sources. The indoor range of the PocketHound varies depending on the number of walls and the construction of the building, but in an open area the detection range can extend as far as 75 feet in front of the unit.



When the PocketHound picks up a cellular signal, it will vibrate and the blue LEDs on the top will light up. During a test of the PocketHound's capabilities, it reacted almost instantaneously when accessing the Internet or making a call.

The stronger the signal, the more LEDs will appear. It's important to note that some devices have more transmitting power than others, so the number of LEDs don't necessarily indicate how close you are. By simple triangulation, it's possible to home in on the nearest source.

A word of warning specific to smartphones... They have a mode intended for use on airplanes where the cellular antenna is off, but they can still be used as a PDA. Since the devices aren't transmitting or receiving an RF signal, the PocketHound will not detect them. If cheating is a concern, it's still important to watch users closely so they don't try to access information previously stored on their devices.



### **Why the PocketHound?**

While BVS offers cellular detectors with greater range and the ability to identify individual phones, the PocketHound fills a unique niche in being small, unobtrusive and relatively inexpensive. The user can locate a cellular transmission source simply by following the PocketHound's vibration alerts, without the owner of the device even realizing they're being tracked.

The cost for the PocketHound is under \$500, much less than other cellular detection devices. This puts them in the cost range of smaller businesses and educational institutions. Check it out if you need a way to control the use of cellular devices on your premises.

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