

Emergency Beckon

First we researched all the reviews and then studied all the material one could find on the different manufacturers of Personal Location Beacons (PLB). Here is why we chose ACR:

1. ACR is one of the few companies that is Non-HAZMAT compliant (hazardous materials)
2. ACR offers smaller, lighter, and more compact PLB's
3. They are very well designed with a 360 degree wrap-around antenna that folds out to any position
4. With all the benefits above, they were very competitively priced!

Responsible Use – Use PLB's as a signal of last resort and only after all other possibilities of self help are exhausted. There must be a threat of imminent loss of life, serious injury or property damage requiring assistance to justify using one of these devices. Misuse of a PLB is a serious federal offense in the United States and is subject to a hefty fine.

There are 2 PLB's we recommend & offer - Be careful if you research PLB's on-line. Many websites do not label the GPS correctly, so you may be looking at a PLB for a great price, but not realise the important differences between them. We found it very confusing from site to site to determine which PLB's they offered and their differences! Here are the basics of what we feel are important traits needed in your PLB:

1. 2-button activation - this helps you keep from accidentally activating a distress call. Once the PLB is activated, they are coming to rescue; there is no cancelation device
2. Floats - you may find yourself in different locations besides where one sport takes you. This device can travel with you anywhere in the world. Not only is it a plus to have your PLB float, but that also means it's water proof.
3. 406 MHz - 406 MHz is the most powerful transmission available. At 5 watts, the 406 is a strong transmission that can punch through weather making detection more accurate. The 121.5 is 1 watt making it difficult for satellites to detect. 406 MHz is a global low-orbiting satellite transmission where 121.5 MHz is ground station dependant with more obstacles can block transmission. Most importantly, the 406 MHz allows transmission of personal data set up with your beacon allowing rapid verification and a faster rescue with GPS capability whereas the 121.5 MHz alerts are anonymous analog technology that is not capable of transmitting data and has no GPS capability.

OUR CHOICE PLB'S:

ACR: TerraFix 406 I OR TerraFix 406 I/O

The only difference between the two devices is price and the 406 I has a data cable that runs to your GPS (no on-board GPS) and the 406 I/O has a GPS on board with the capability to connect with the data cord if needed (safety backup). If you plan to always have your GPS with you as well as the PLB, save the money difference. If there may be occasions that you will travel wanting to only carry the PLB, spend the extra bucks to have it on board. You cannot use the GPS like a handheld GPS with the PLB - it is built into the system without personal use options.

How PLB Works:

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Distress is signaled from an activated PLB 406 MHz beacon

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ACR 406 MHz PLB's or EPIRB's send uniquely coded distress signal to COSPAS-SARSAT satellite system.Â If GPS coordinates are present, the are then transmitted to GEOSAR (stationary satellite) and immediately forwarded to the Mission Control Center (MCC).

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The satellite determines the PLB location within 2.3 ml and re-transmits to a ground station (LUT) with your unique ID (UIN).

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MCC then combines the location information with other satellite receptions and transmits this to the appropriate rescue coordination center (RCC) based on the geographic location of distress.

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The RCC uses the UIN to identify the registered beacon and call the emergency contacts associated with the registered owner to verify the emergency.Â The RCC notifies local search and rescue (SAR). *in remote Baja areas this is often the Coast Guard which also has helicopters and other land rescue equipment.

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Local SAR forces are deployed and use the 121.5 MHz homing signal for pinpoint location

---406 MHz distress signal: 2.6 miles accuracy 60 min. worldwide avg.

---406 MHz distress signal with GPS: 0.06 miles accuracy 15 min. worldwide ave.