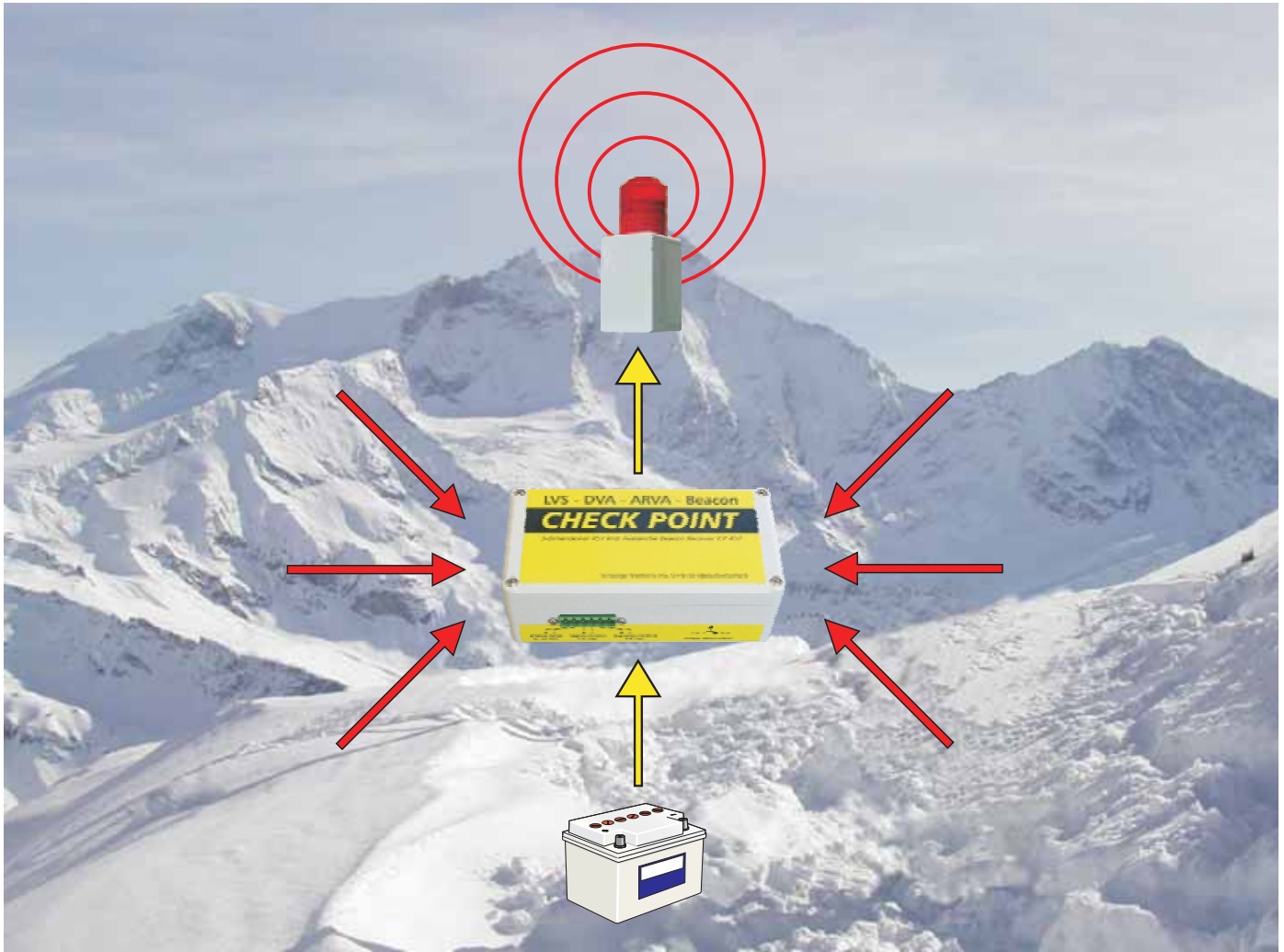


# Beacon Checkpoint CP 457



Today, avalanche beacons are an important part of the equipment of any skier or snowboarder leaving the marked trails. Per default, the beacons are in the transmit mode. In case of an avalanche, the persons that have not been buried can switch their beacons to receive mode for locating their buried companions.

**It must therefore be ascertained that the beacons carried by all persons that are leaving the marked trails are in transmit mode.** Avalanches come as a surprise, and controlled manipulations on the beacon are not possible in such a situation. For this reason, it is very important that all beacons be checked for proper mode setting before entering avalanche terrain. The usual way to do this is that one member of a party sets his/her beacon to transmit mode and verifies that all other beacons receive properly. Then, the party switches the beacons to transmit mode and inserts them into a harness which is usually worn under the top layer of clothing. One beacon in receive mode is then used to verify that all other beacons are transmitting by having the entire party walk past the receiving beacon with due intervals. Finally, the last beacon is switched to transmit mode. This procedure has some drawbacks:

Beacons must be removed from the harness, switched to receive mode and then back to transmit mode. At least the last one of these manipulations can not be checked any more. If it was not done properly, the bearer of that beacon carries the risk of not being locatable in case of an avalanche.

Besides that, there are situations where a single person enters avalanche terrain, so the usual checking procedure can not be carried out. The check for the transmit mode is also error-prone, because the signal from the transmitting beacon may be very weak depending on the mutual orientation of the beacon's antennas. So, even a near-by transmitting beacon may not be detected properly.

The new **CP 457 avalanche beacon checkpoint** solves these problems and provides a flawless check of the transmitting beacons.

## The main features of the CP 457 are:

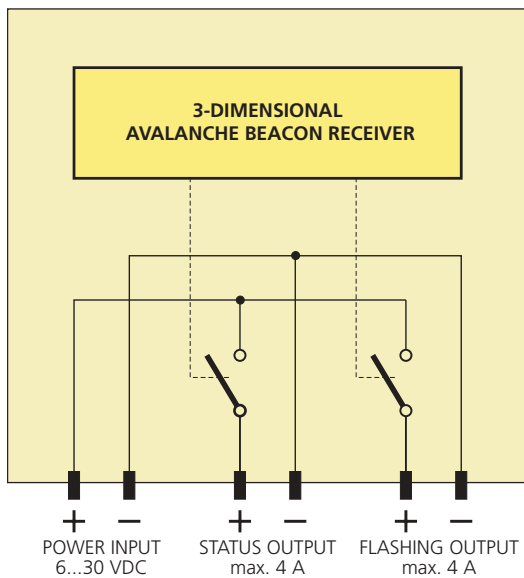
- Acoustic or optical indication (e.g. a flashlight or a siren) as soon as there is a transmitting beacon in close vicinity of the CP 457.
- Three-dimensional receiver characteristic, which makes the indication independent of the transmitting beacon's antenna orientation.
- Compatible with all brands of avalanche beacons (compatible with the EN 300718 standard).

For the first time, critical spots such as freeride checkpoints, summit stations or entry points to the backcountry can be provided with a means for a simple and efficient avalanche beacon transmit check.

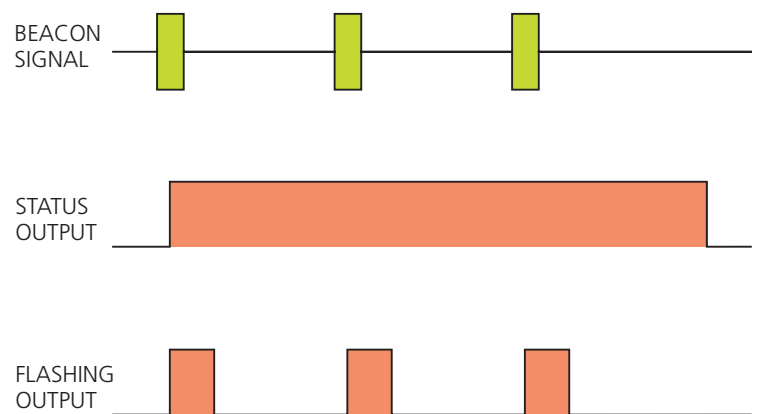


## Block Diagram

BEACON CHECKPOINT CP 457



## Input/Output Waveforms



## Note

**Carefully** adjust the receive level (RANGE ADJUSTMENT) by means of a small screwdriver. When done, close the dial opening with a piece of tape or a small sticker, in order to keep humidity out of the case.

All connections to the CP 457 **must not be used in other ways than described.**

Metallic objects within an area about 5 cm around the case **may have some influence on receiver performance.** For the same reason, do not use any metal coated tape on the case.

## Technical Data

Receiver type	3-dim avalanche beacon receiver
Frequency	457 kHz +/- 100 Hz
Range	approx. 1 m ... 5 m (adjustable)
Supply voltage	6...30 VDC
Load current	4 A max. (each output)
Supply current	approx. 35 mA (no load)
Case	white plastic, splash waterproof
Dimensions	approx. 160 x 80 x 60 mm
Temperature range	-30 to +50 deg C (operating)



**Girsberger Elektronik AG**

Mettlenstrasse 33b  
 CH-8193 Eglisau/Switzerland  
 Phone: +41 44 867 00 49  
 Fax: +41 44 867 31 12  
 E-Mail: info@girsberger-elektronik.ch  
 Internet: www.girsberger-elektronik.ch