Your Barryvox® will not protect you against avalanches!
As a winter outdoor enthusiast, you must consider all possible avalanche prevention measures and plan your trips carefully. Companion rescue – the worst case – must be practiced frequently.

Barryvox Service Centers, Registration and Additional Resources
For additional information on avalanche rescue, avalanche theory, the registration of your Barryvox and the official Barryvox Service Centers please visit **www.mammut.ch/Barryvox**.

The following documents are available for the Barryvox Transceivers at
www.mammut.ch/BarryvoxManual

- Barryvox Legal and Regulatory Guide
- Barryvox Emergency Plan
- Barryvox User Manual
- Barryvox Application Safety Guide
- Barryvox Reference Handbook (Contains all information about the advanced profile for advanced and professional users)

It is absolutely necessary that you read this safety relevant information and familiarize yourself with the device before you use it in avalanche terrain!

Technical Data Digital-analog device with 3 antennas / Transmit frequency: 457 kHz / Maximum range: > 60 m / Search strip width: 50 m / W-Link communication channel / Alkaline or Lithium batteries: 3 x AAA 1,5 Volt / Battery life: typical 250 h SEND, min 200 h in SEND mode followed by 1 h in SEARCH / Dimensions: 113 x 75 x 27 mm / Weight: 210 g (incl. batteries). Type/Model: PULSE Barryvox® 462001-10000 (W-Link 868 MHz), 462002-10000 (W-Link 915 MHz), 462003-10000 (W-Link off). Technical data and specifications are subject to change without notice.

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MAMMUT

Version 3.2 2012

PULSE Barryvox®

USER MANUAL

Find the Barryvox Reference Handbook at:
www.mammut.ch/BarryvoxManual

MADE IN SWITZERLAND

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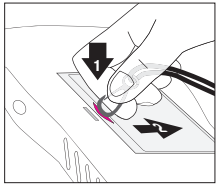
Setup

Batteries, Handling and Maintenance

Only use alkaline LR03/AAA batteries **or** lithium (LR92/AAA) batteries of the same type. **Never use rechargeable batteries** and always replace all the batteries at the same time. When storing or not using the transceiver for an extended period of time (summer), remove the batteries. Lithium Batteries do not need to be removed. When reinserting the batteries, use the same 3 batteries or 3 new batteries.



Handle your Barryvox with care. Do not drop it on the ground and avoid mechanical shocks.

Avoid having other **electronic devices** (e.g. mobile phones, radios, headlamps, cameras), **metal objects** (pocket knives, magnetic buttons), or other transceivers close to your running avalanche transceiver.

To ensure the proper performance of the transceiver, it is highly recommended that you send your device to an official Barryvox service center once **every three years** for a functional test. The recommended date of the next check can be viewed under «Maintenance» in the start menu.

Setup, Choice of Profile and Calibration

When turning the device on for the first time and switching to SEND, the user language and profile must be selected. Afterwards, the user will be prompted to calibrate the device. All settings may be modified later at any time. Press the ◇-key to change the current selection and confirm by pressing the ○-key.

The **profiles** allow to adapt your PULSE Barryvox® quickly and easily to your user profile. If one of the statements below applies to you, then the ***Basic Profile*** **is the best choice** for you:

- I am **novice** or I did **not much familiarize myself with this topic** up to now. I start with the **basic search mode** which **uses only one-button and does not have any additional functions**. After some exercise, I may switch to the more sophisticated «Advanced Profile».
- I use this device only for my **rudimentary trained participants/guests**

If none of the above statements apply to you, use the more sophisticated ***Advanced Profile***. In this case, please consult the comprehensive Reference Handbook on www.mammut.ch/BarryvoxManual. The functions and search modes of the ***Advanced Profile*** are only described in the Reference Handbook.

Calibrate device:
Hold the device horizontally and press any key to start the calibration procedure. Rotate the horizontally held transceiver slowly and with constant speed clockwise until the message «Device calibrated!» appears.

To access the **start menu**, switch the transceiver from OFF to SEND and press any key. The start menu opens by showing its first entry «Group Check». Immediately press the ◇-key, to access the different functions.

The **contrast of the screen** may be adjusted in the start menu. Optimize the contrast of the screen by pressing of the ◇-key. Confirm the best setting by pressing the ○-key.

Enter **your address** in the “owner” tab of the start menu: By pressing the ◇-key briefly, the cursor on the bottom line moves to the right. By pressing the ◇-key longer, the cursor moves to the left. Pressing the ○-key confirms your selection.

Stick the **emergency plan** on the back of the battery compartment lid.

Carrying Positions

Carrying System and Carrying Positions

Regardless of the carrying position, the display should always face your body!

Carrying System (Recommended Carrying Position)
The carrying system has to be put on your innermost layer of clothing prior to beginning the trip (see illustration on the base plate of the carrying system) and has to be worn on your body for the duration of the trip. **The transceiver shall always remain covered by one layer of clothing**. The device itself is inserted into the carrying system according to the illustration. It should always remain anchored to the base plate of the carrying system using the red hook on the wrist loop.

Carrying the Transceiver in a Pocket
(without vital data detection)

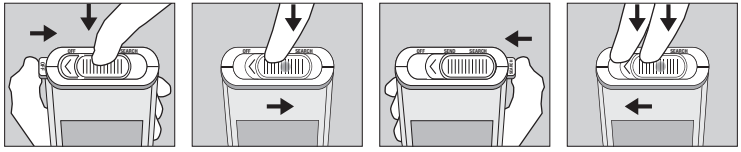
If you carry the Barryvox in a pant pocket, the zipper must remain closed for the duration of the trip. If possible, attach the wrist loop to your pants or secure it around your belt.

Personal Rescue Equipment:

Transceiver + Shovel + Probe

The additional use of a Mammut or Snowpulse Airbag increases the chance to stay on the surface and therefore considerably reduces the risk of a complete burial.

Main Switch OFF / SEND / SEARCH



OFF -> SEND | SEND -> SEARCH | SEARCH -> SEND | SEND -> OFF

Always make sure that the switch locks into position mechanically to avoid an undesired change of mode.

Start-Up / Self- and Battery Test

While starting, the device conducts a selftest. If the self-test fails, an error message is displayed for 20 seconds along with an acoustic warning. If the battery power falls below 20% or the battery icon is displayed, the batteries must be replaced as soon as possible!

SEND Mode

The SEND mode is the normal operating mode outdoors or in all other situations in which there is a risk of avalanches. Each time the SEND mode has been activated, this is confirmed by a triple beep sound. Each individual signal pulse is tested. If the test is successful, this is confirmed by a blink of the red SEND-Control LED. The LCD display is automatically deactivated in the SEND mode

Single Group Check

Before a party takes off, the transceivers of all party members must be checked. The group members switch their transceivers to SEND.

The group leader switches his device to “group check” by turning it from OFF into the SEND and presses any key within the first 5 seconds.

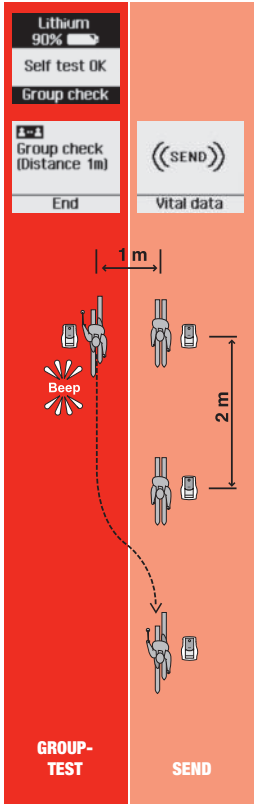
Now, the group leader checks the device of each participant: **The test is successful** if you can **clearly hear beep sounds** from each participant's transceiver within the range indicated on the display.

The test distance is indicated on the screen, the spacing between the participants is twice the test distance. **The indicated test distance must not be shortened**. In case the device discovers that the distances are too short a distance warning and alarm sound warns the user.

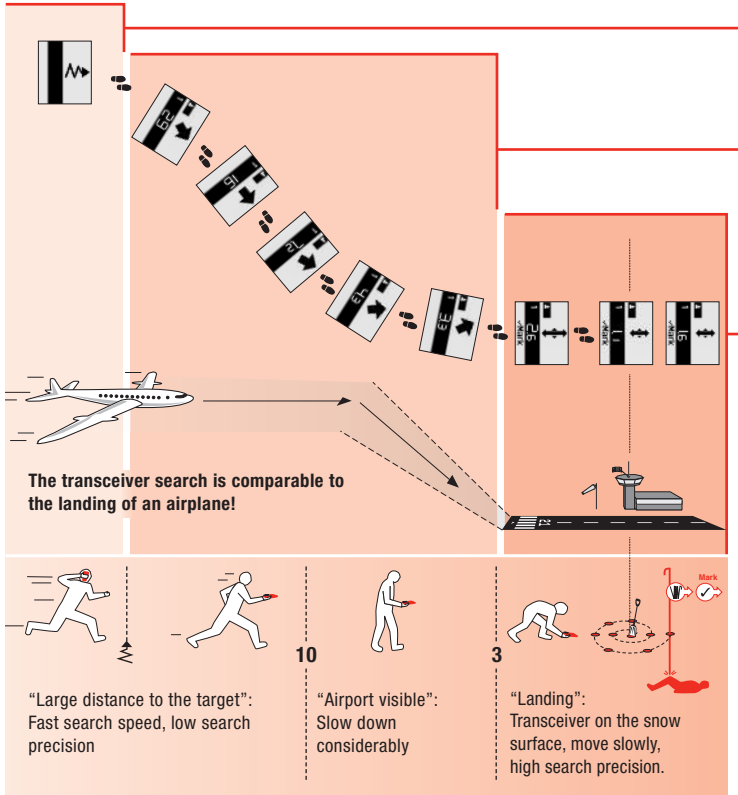
If your PULSE Barryvox® detects that the transmit frequency of the tested device is not within the normative regulations, a warning message will be shown. In this case, repeat the test with 5m distance between the participants to identify the defective transmitter. Such devices must be checked/repaired by the manufacturer.

When all devices of the participants have been tested, the group check is finished. The group leader switches his device not as well to SEND.

How to solve the problem:
If no tone is heard within the indicated range, the device may not be used.
1. Check if the device is switched to SEND.
2. Replace the batteries.
3. Have the device checked by the manufacturer.



Search



Signal Search

- Emergency plan, search strategies and search strip widths: please see back side of device.
- Search avalanche surface systematically.
- During signal search, the rescuer has the visual focus on the surface of the debris in order to be able to see body parts or objects protruding the snow surface. The first signal is indicated by a distinct double beep sound.

Optimization of Range

To optimize the range, rotate the transceiver slowly around all axes. Hold the device with the loudspeaker facing your ear sidewise of your head.

Coarse Search

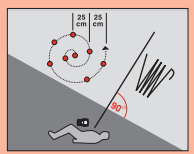
- Use the device in a calm and concentrated manner. Avoid jerky movements.
- Hold the beacon horizontally in front of you.
- Watch the distance and direction information on the display.
- Move in the direction indicated by the arrow.
- If the distance increases, then you are moving away from the victim. Continue the search in the opposite direction.
- The closer you approach the victim, the slower and more concentrated your movements should be.

Fine Search

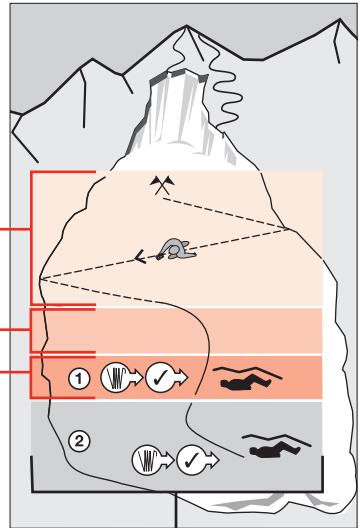
During fine search hold the transceiver directly above the snow surface! Proceed in a straight line until you reach the point of the smallest distance reading and use the shovel to mark this spot as a visual reference for the probing spiral.

Pinpointing

Exact pinpointing with the avalanche probe. If the buried subject is hit with the probe pole, the pole is left in the snow.

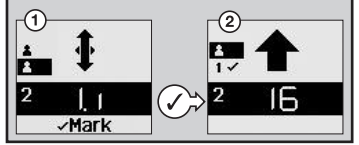


Don’t use the function ✓-Mark until the location of the buried subject has been confirmed by a probe hit! Press any key to mark and do not place the Barryvox on the snow surface again for this purpose!



Multiple burials

Continue the search for further buried subjects by marking the ones previously found.



Search Suspension / “Stand still!”

During the search for multiple subjects, signals may overlap making it impossible to analyze the signal of a single buried subject. Stand still, and do not move until the word “Stop” disappears, at which time you can continue to search.

The **+ symbol** indicates that signals are received from additional buried subjects that cannot be isolated and entered in the list of buried subjects yet. Turn off the transceivers of the buried subjects already found as soon as possible to simplify the isolation of the remaining signals.

Rescue-Send Mode (Rescue-SEND)

The rescue send mode is used by all rescuers who are involved in the rescue operation, but do not perform a transceiver search themselves. The rescue send mode monitors the motions of the rescuer and only activates the transmitter, when the activity level of the rescuer is during 4 min. on such a low level that it has to be assumed that this is caused by a secondary avalanche. To activate the rescue send mode, switch the device to SEARCH and revert to SEND. Wait until the 5 sec. count-down has completed, “Rescue-SEND” is now shown at the bottom of the screen. As soon as you hear 3 ascending beep-sounds, immediately press any key. The activation of the rescue send mode is confirmed by 3 descending beep sounds and the double flashing of the red SEND-Control LED. Turn the device off and on to return back to the normal send mode.

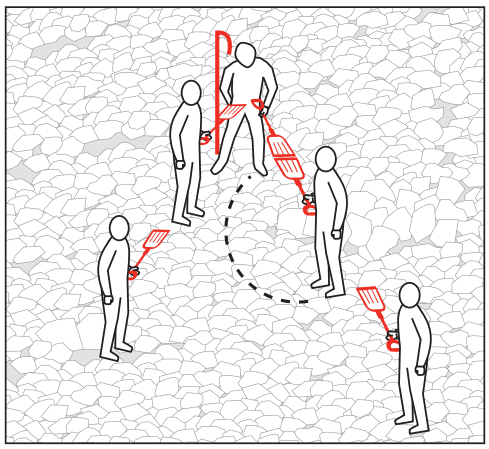
Rescue

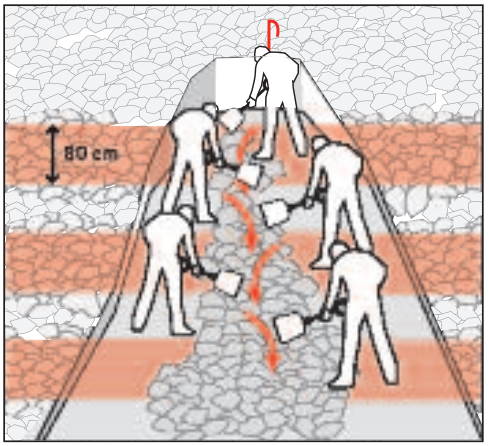
Excavating the Buried Subject

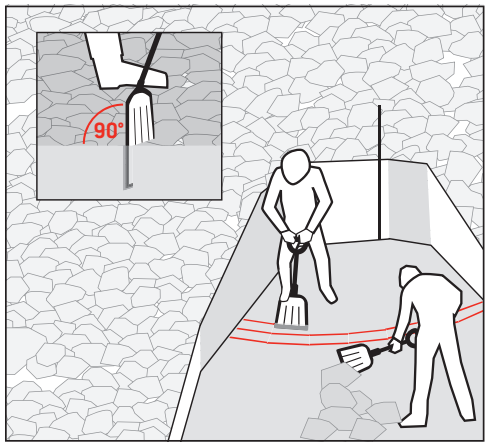
Digging must be practiced, as it uses by far the biggest amount of time.
Cut out blocks of snow with the shovel.

The V-Shaped Snow Conveyor Belt:

- Position diggers in a «V» formation
- The first two rescuers are in a distance of one shovel length from each other, all additional rescuers are in a distance of two shovel lengths from each other.
- Length of «V»:
  · Flat terrain: 2x burial depth
  · Steep terrain: 1x burial depth
- Amount of rescuers: 1 per 80 cm length of «V»
- Rescuer at the tip of the " V" digs alongside the probe to the buried subject
- Diggers rotate frequently (approx. every 4 min) clock-wise on command of the rescuer at the tip of the «V».
- Cut out blocks of snow with the shovel by stepping on the shovel blade which is held perpendicular to the surface. Apply a half-moon shaped cutting pattern. Position yourself facing the open end of the "V", cut the first half-moon without pulling back on the shovel shaft. When cutting the second and subsequent half-moons, pull the shovel shaft gently backwards after you have cut the block so that it pops out. To cut the next half-moon, step backwards toward the probe, like this, you do not step on the pre-cut blocks.







In multiple burial situations, the transceiver of a rescued subject should be turned off as soon as possible.