

Your Barryvox® will not protect you against avalanches!

As a winter outdoor enthusiast, you must consider all possible avalanche conditions and plan your trips carefully to avoid being caught. A successful rescue requires companions to practice rescue techniques 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!

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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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PULSE Barryvox®



USER MANUAL

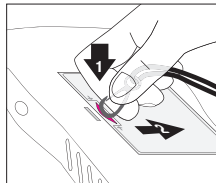
Find the Barryvox Reference Handbook at:
www.mammut.ch/BarryvoxManual

MADE IN SWITZERLAND +



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.

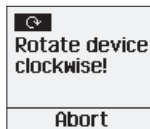
Setup, Choice of Profile and Calibration

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 \diamond -key to change the current selection and confirm by pressing the \bigcirc -key.

Profiles allow you to adapt the 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 a **Novice**, or I am **not familiar with this topic**, or I prefer the basic search mode which uses only one button and does not have additional functions.
- This device is used by **guests/participants with minimal avalanche training**.

If none of the above statements apply, or from practice you desire more search features, use the **Advanced Profile**. The functions and modes of the **Advanced Profile** are only described in the Reference Handbook, available at www.mammut.ch/BarryvoxManual/



rotate it clockwise slowly with constant speed until the message "Device calibrated!" appears.

To access the **start menu**, switch the transceiver from OFF to SEND then quickly press any key. The start menu opens by showing its first entry «Group Check». Immediately press the \diamond -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 \diamond -key. Confirm the best setting by pressing the \bigcirc -key.

Enter **your name and contact information** in the "owner" tab of the start menu: By pressing the \diamond -key briefly, the cursor on the bottom line moves to the right. By pressing the \diamond -key longer, the cursor moves to the left. Pressing the \bigcirc -key confirms your selection.

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

Calibrate device:

Hold the device horizontally and press any key to start the calibration procedure. Keeping the transceiver horizontal,

Carrying System and Carrying Positions

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

Chest Harness (recommended carrying system)

This carrying system should be worn over your clothing base layer (see illustration on the base plate of the harness) for the duration of the trip. **The transceiver should always be covered by at least one layer of clothing.** The device itself slips into the harness with the display hidden and the mode switch on top (per the illustration). It should always be anchored to the harness 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 pocket must be zipped closed AND the wrist loop clipped to a belt loop or secured with a belt running through the loop.

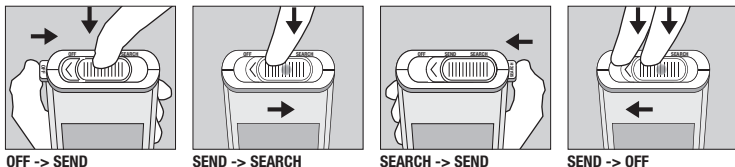
Touring

Personal Rescue Equipment:

Transceiver + Shovel + Probe

The additional use of a Mammut or Snowpulse Airbag Pack is recommended as it reduces the risk of a complete burial if deployed immediately after being caught.

Main Switch OFF / SEND / SEARCH



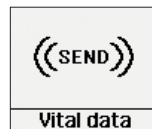
Always make sure the switch locks into position mechanically to prevent an undesired change of mode.

Start-Up / Self- and Battery Test



While starting the device conducts a self-test. If the self-test fails, an error message is displayed for 20 seconds along with an audible 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 to SEND and pressing any key within 5 seconds.

Now the group leader checks each participants transceiver. **The test is successful** if the leader can **clearly hear beeps from each members device** within the group check 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.

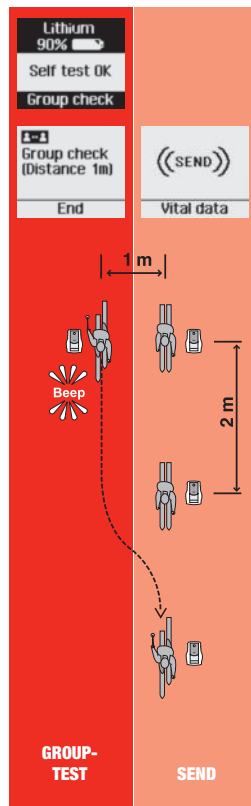
If your PULSE Barryvox® detects that the transmit frequency of the tested device is not within the acceptable specifications, a warning message will be shown. In this case, repeat the test with 5m distance between the participants to identify the defective transmitter. Such devices must be checked/repaired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

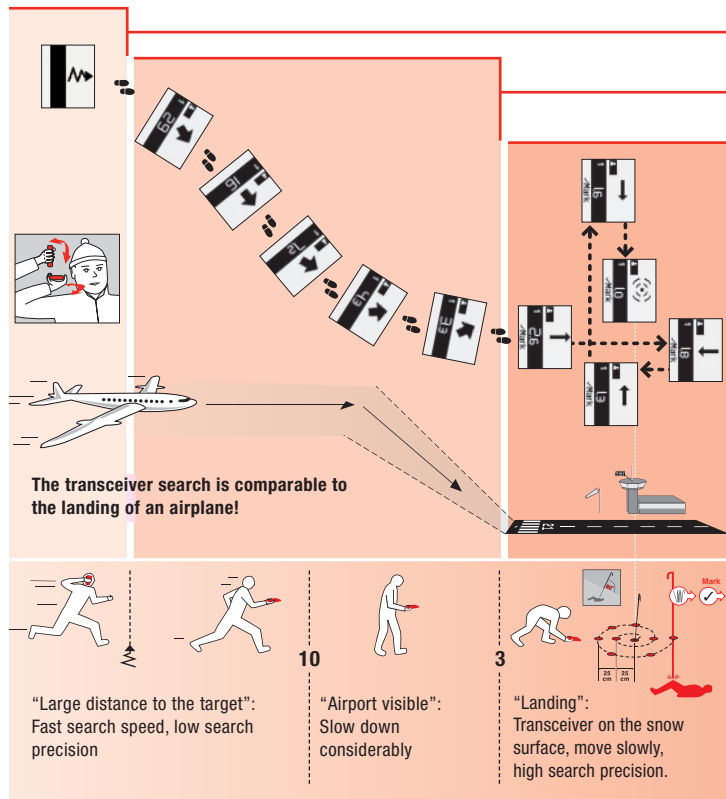
When all devices of the participants have been tested, the group check is finished. The group leader switches his device back to SEND.

How to solve the problem:

If no tone is heard within the indicated range, the device must not be used.

1. Confirm the device is switched to SEND.
2. Replace the batteries.
3. Have the device checked by the manufacturer.





Signal Search

- Emergency plan, search strategies and search strip widths: please see back side of device.
- Search avalanche surface systematically.
- During signal search, remember to look at the surface of the debris to see body parts or objects protruding from the snow surface. Detection of the first signal is indicated by a distinct double-beep sound.

Optimization of Range

To optimize long range reception rotate the transceiver slowly in all axes. Hold the device to one side with the loudspeaker near your ear.

Coarse Search

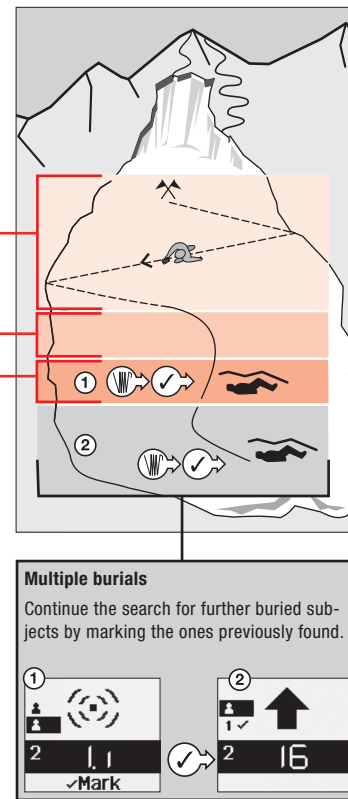
- Use the device in a calm and concentrated manner. Avoid jerky movements.
- Hold the beacon horizontally in front of you.
- Watch the distance and direction information on the display.
- Move in the direction indicated by the arrow.
- If the distance increases, then you are moving away from the buried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

Fine Search

Hold the transceiver just on the snow surface! Follow the arrows until the probe symbol ☼ is indicated. Move in a grid pattern forward, backwards, and sideways. When the transceiver indicates a backwards, move it backward, when it indicates left or right, step to that side without turning yourself or the transceiver. Double arrow ↔: Slowly repeat the search for the lowest number on the respective axis, hold device directly on the snow surface. Probe Symbol ☼: Use a ski pole to mark this spot as a visual reference for the probing spiral.

Pinpointing

Use a probe to confirm the buried subject's exact location. If the buried subject is hit with the probe pole, leave the pole there until the victim is dug out. Do not use the ✓-Mark function until the location of the buried subject has been confirmed by a probe hit! Press any key to mark. Do not put the receiver on the snow to properly mark the found unit.



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 until the word "Stop" disappears from the screen. Then you can continue searching.

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 found subjects as soon as possible to improve identification of 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 so low, over a 4 minute period, it equates to being buried by a secondary avalanche. To activate the Rescue Send Mode, switch the device to SEARCH and revert to SEND. Wait 5 seconds until "Rescue-SEND" is shown at the bottom of the screen. As soon as you hear 3 ascending beeps, immediately press any key. The activation of the Rescue-Send Mode is confirmed by 3 descending beeps and a double flashing of the red SEND-Control LED. To return back to normal SEND mode turn the device off, then back on.

Rescue

Excavating the Buried Subject

Digging must be practiced since, by far, it uses the largest 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 spaced one shovel length apart. Additional diggers are two shovel lengths apart.
- Length of «V»:
 - Flat terrain: 2x burial depth
 - Steep terrain: 1x burial depth
- Number 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) clockwise 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 subsequent half-moons pull the shovel shaft gently backwards to pop the block loose. Step backwards towards the probe to cut successive blocks and to avoid stepping on pre-cut blocks.

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

