

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 Reference Handbook
- Barryvox Emergency Plan
- Barryvox Application Safety Guide
- Barryvox User Manual

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

© Copyright by Mammut Sports Group AG and Genswein. All rights reserved.

Technical Data Digital device with 3 antennas / Transmit frequency: 457 kHz / Maximum range: > 60 m / Search strip width: 50 m / W-Link communication channel / Alkaline 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: ELEMENT Barryvox® A10010-10000 (W-Link 868 MHz), A10012-10000 (W-Link 915 MHz), A10013-10000 (W-Link off).

Technical data and specifications are subject to change without notice.

Head Office:
Mammut Sports Group AG
Birren 5
5703 Seon, Switzerland
Tel. +41 (0)62 769 81 81
info@mammut.ch

North America:
Mammut Sports Group Inc.
135 Northside Drive
US-Shelburne, VT 05482
Tel. +1 802 985 5056
info@mammutusa.com



Version 1.0 2012

ELEMENT Barryvox®



USER MANUAL

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

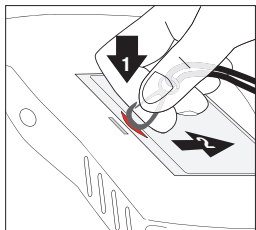
MADE IN SWITZERLAND +



Setup and Carrying Positions

Batteries, Handling and Maintenance

Only use alkaline LR03/AAA batteries. Always replace all 3 batteries and use new batteries of the same type. **Never use rechargeable batteries** and always replace all the batteries at the same time. When not using the transceiver for an extended period of time (summer), remove the 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. Press the key on the side during shut-down to view the recommended date of the next check.

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

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.** Using the red hook on the wrist loop the device should always remain anchored to the base plate of the carrying system.

Carrying the Transceiver in a Pocket

If you carry the Barryvox in a secure 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.

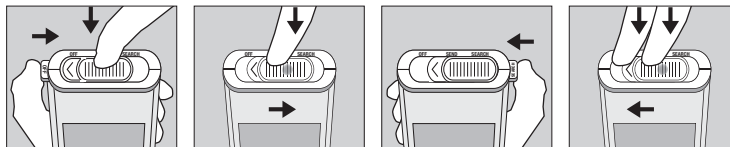
Touring

Personal Rescue Equipment

Avalanche 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

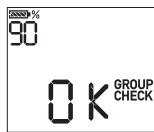
SEND -> SEARCH

SEARCH -> SEND

SEND -> OFF

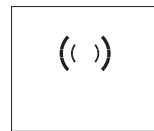
Always make sure that the switch locks into position mechanically to avoid an undesired change of mode.

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!

Mode SEND



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 (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 the lateral 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.

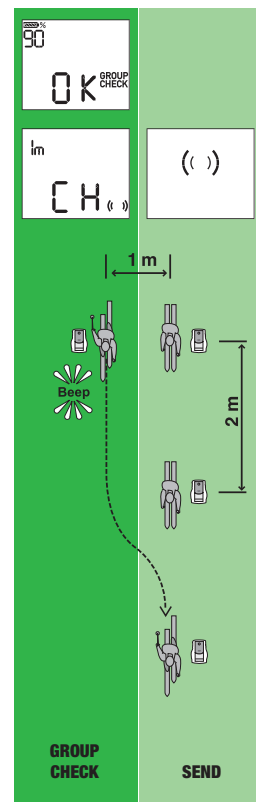
The **test distance is 1 m**, the **spacing between the participants is 2 m**. The **indicated test distance must not be shortened**. In case the device discovers that the distances are too short a distance warning and alarm sound warns the user.

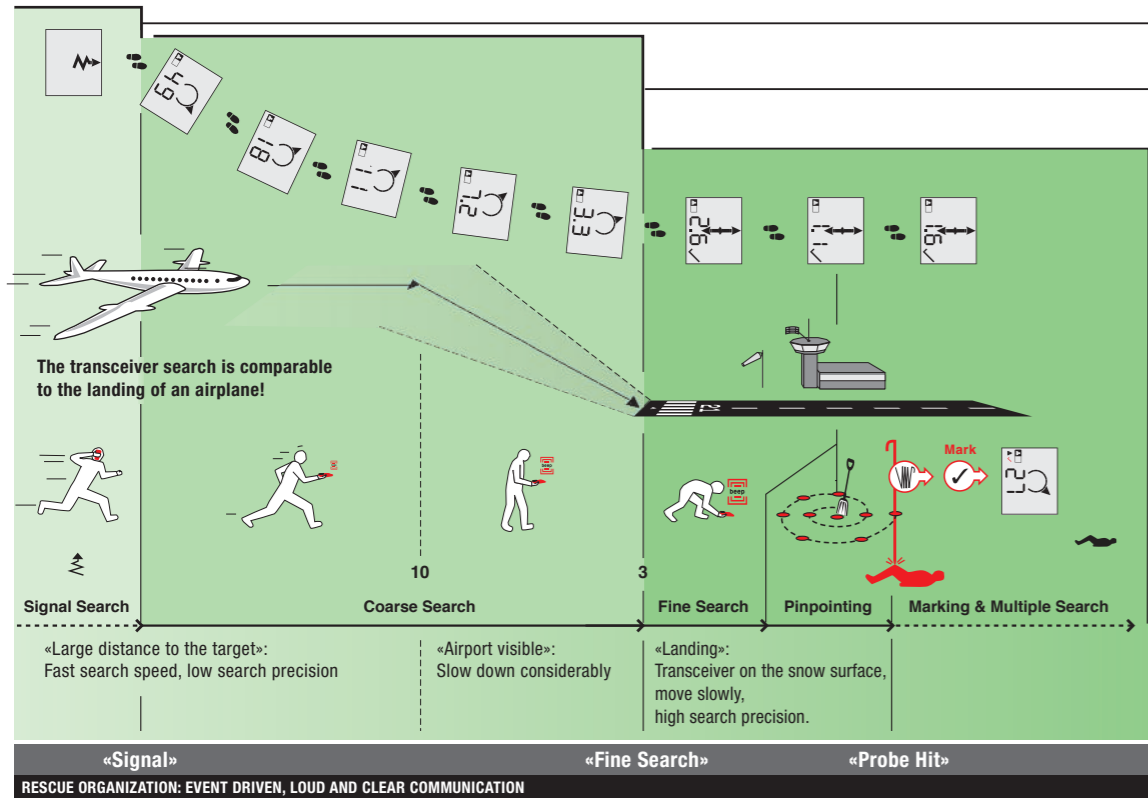
If your ELEMENT Barryvox® detects that the transmit frequency of the tested device is not within the normative regulations, an «E6» warning message will be shown. In this case, repeat the test with 5 m distance between the participants to identify the defective transmitter. Such devices must be checked/repared by the manufacturer.

When all devices of the participants have been tested, the group check is finished. The group leader switches his device now as well to SEND by pressing the key on the side.

How to solve a 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.





Emergency Plan

The emergency plan (klistermärke på enhetens baksida) shows the elementary steps for a successful companion rescue. Depending on the situation at hand, the procedure must be adapted.

1. Obtain an overview
2. Turn OFF all transceivers which are not used for the search
3. At least one rescuer conducts a transceiver search, while looking and listening at the same time
4. Transceiver search finished; all transceivers to SEND
5. Excavate – First Aid – Call for help

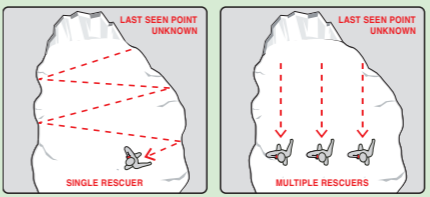
Signal Search

- 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.

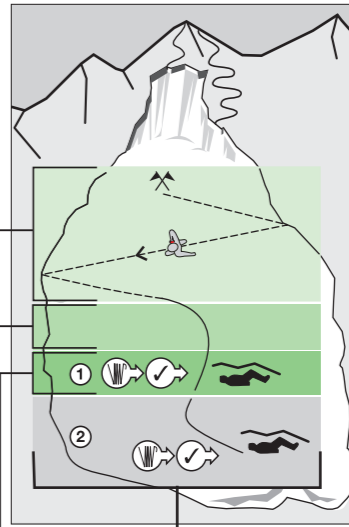
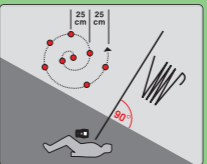
- The closer you approach the victim, the slower and more concentrated your movements should be.

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 and the buried subject marked as found by pressing the key. Do not use the ✓-Mark function until the location has been confirmed by a probe hit and do not hold the device on the snow surface to mark the buried subject.



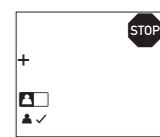
Auto-Revert to SEND



Without user interaction the device will automatically revert from SEARCH to SEND after 8 minutes. Prior to reverting, the device will sound an alarm.

Reverting can be avoided if the key is pressed within 30 seconds of the alarm. In case rescuers are buried in a second avalanche, this function allows them to be located using transceivers.

Search Suspension

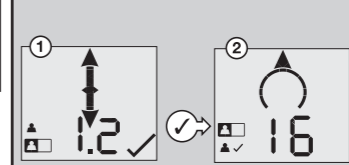


During the search for multiple subjects, signals may overlap making it impossible to analyze the signal of a single buried subject.

The rescuer has to interrupt the search process temporarily to avoid deviating from the optimal search path. The ELEMENT Barryvox® will indicate the necessity to suspend the search by displaying the «Stop» symbol. Stand still, and do not move until the word «Stop» disappears, at which time you can continue to search.

Multiple Burials

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



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

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) 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 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.

