

# POWER SUPPLY

Insert 2 batteries 1.5 V in the back compartment of the SnowBip RT3, by respecting the marked polarities. Then close with care the battery door, by tightening the closing knob. Use only alkaline batteries of primary brand (Duracell or similar), "AA" (LR6) size (14 mm diameter, 50 mm length).

# SWITCH ON - SELF TEST - SEND MODE

Switch-on the SnowBip RT3 to the ON position, by rotating anti-clockwise and thoroughly the knob placed on the back of the unit. A self-test cycle starts automatically, during which you can read on the display, by few seconds, the charging state of the batteries expressed in % (per-cent). With new batteries, the reading can change from 95 to 99%. At the end of the self-test cycle, with successful result, the "Ok" message appears followed by a short acoustic signal. Then the beacon sets automatically into the SEND MODE, which is confirmed by a flashing led and by a "bip-bip" pacifier tone, repeated every 10 minutes (exclusive feature of the SnowBip RT3). When, at the selftest cycle, the charging state of the batteries is detected lower than 10% (down to 6%), then a repeated display flashing of the battery icon and the "Cb" (Change battery) message recommend to the user of changing the batteries as soon as possible. If the user should not do that, he would then risk of reaching a threshold (5%), under which the energy reserve required by official standards for considering the battery check as positive (at least 20 hours on SEND MODE plus 1 hour on SEARCH MODE), would no more be guaranteed. The failure of the battery check is shown on the display through the flashing of the value "0%" and of the message "no", together with the battery icon (of course the beacon's working would be however allowed, until the residual stored energy could make it possible).

If, by chance, the self-test cycle should detect a beacon's damage (e.g. the break of an antenna) then the flashing message "**Er**" (Error), followed by "**no**", would warn the user not to trust anymore on his own beacon. The beacon working would be nevertheless enabled (even if with the weakening due to the kind of damage) in case this event should occur just during a tour, but back to home the user shall have to consider it as no more working and he shall avoid to use it again on a tour before having it repaired.

# FROM SEND MODE TO SEARCH MODE

For switching the SnowBip RT3 into the **SEARCH** mode, please press shortly and consecutively **3 times** the **MODE** key. The SnowBip RT3 gives out a short acoustic signal, then it displays again the charging state of the batteries (as %) and finally it sets on listening eventual radio-signals, at its maximum sensitivity, corresponding to volume step **9**.

Note: the sensitivity of volume step **9** is very high and it has the purpose of detecting radio-signals at a great distance from the transmitting beacon; such a high sensitivity must be however used just on open field, and not inside or around of buildings, which are always seat of polluting and unbearable radio noise, which would wrongly affect the displayed readings on the unit.

# VOLUME STEPS IN SEARCH MODE (1 TO 9)

The SnowBip RT3 has as many as 9 standard sensitivity steps (represented by the figure of the volume, 1 to 9, which appears on the display), each step corresponding to a different distance range from the transmitting beacon. At its switching into the **SEARCH** mode, the beacon sets automatically at volume 9 (max. sensitivity), step that then decreases automatically, step by step, together with the progressive increasing level of the received radio-signals, according to the progressive approaching to the transmitting beacon. Inside each one of the volume steps, the intensity of the acoustic "bips" generated by the SnowBip RT3 increases following the approaching to the transmitting beacon. Once the highest acoustic intensity has been reached ("saturation" value, beyond which the intensity cannot rise any more), the automatic reduction of one volume step springs up, together with a sharp intensity drop of the acoustic signal (and of the circular bargraph, which is visually reproducing the intensity value), to allow the detection of new increases of the acoustic signal, as a consequence of further approachings.

# **PRIMARY SEARCH PHASE**

You must detect the first, even weak, acoustic signals. In the lack of useful signals, the SnowBip RT3 sets its sensitivity volume automatically on the step **9**. In order to make the first detections easier, move slowly your beacon from the left to the right and from up to down. If there are more rescue people, all equipped with their SnowBip RT3, then draw up them fan-wise, spaced out up to 40 m each other, distance to be halved for the rescuers at the avalanche borders. In this phase using the supplied earphone can be useful.

Note: the self-test cycle, even carefully made, cannot however be considered as exhaustive; the user is therefore invited to return the beacon to factory, in case he should find out some anomalies, even if the self-test should end with the message "OK".

# Snowbip

# EXTRA VOLUME STEP IN SEARCH MODE (9+)

In addition to the 9 standard volume steps (1 to 9), the SnowBip RT3 has an additional sensitivity step, called 9+, just manually controlled, enabling a further extension of the search range when, even at volume 9, no signal coming from transmitting beacons is detected. When your SnowBip RT3 is set on volume 9, you can switch to volume 9+ by pressing the  $\bigcirc$  key and by checking the displaying of the **MANUAL** icon alone. The opposite switching, from 9+ to 9, can be instead got by pressing the  $\bigcirc$  key up to the appearing of the digit 9 on the display.

# SECONDARY SEARCH PHASE

After having detected the first acoustic "bips", then move yourself in the direction their intensity increases. If your SnowBip RT3 is set on the volume 9+, (for having pressed the  $\bigcirc$  key when being on 9), then as soon as the acoustic "bips" have reached a good intensity, go back to 9(look at the display) by long pressing the  $\bigcirc$  key.

Going on to approaching the buried beacon, from now on, watch the display for checking:

- the progressive reduction of the distance, once this reading appeared;
- the constant reduction of the volume step (from 9 to 1);
- the progressive increasing of the circular bargraph, within a same volume step;
- the arrow indication suggesting the direction to keep in order to approach the transmitting beacon (go on by pointing your beacon so as to get the central arrow switched on, with the warning that, if the reading of the distance increases, then you must turn your beacon of 180 degrees and proceed in the opposite direction).

# FINAL SEARCH PHASE

When approaching below 10 metres the transmitting buried beacon, then your SnowBip RT3 starts giving out some additional acoustic "bips", more and more frequent as approaching goes on. In the last phases of the search, keep your beacon close to the snow, in order to reduce the distance from the buried beacon and to enhance the accuracy of the detection. Watch the reading of the distance and evaluate the frequency of the acoustic "bips". The displayed volume step digit must decrease further on (towards the volume 1, which however can be reached only at condition that the transmitting beacon is not buried at excessive depth), so to get the reduction, step by step, of the distance range within which the acoustic "bips" are detected. When, by a cross shifting of the beacon, both in any direction and its opposite, you get a worsening of the acoustic signals (as well as of the distance reading and of the circular bargraph shown on the display), then you are located exactly on the vertical of the transmitting beacon.

# SEARCH OF FURTHER BURIED BEACONS

Once having located the first transmitting beacon, it's necessary to shovel fast the snow away from the buried person and then to switch off his beacon quickly, to the aim of avoiding that its no more useful radio-signals could trouble the search of the other buried beacons. Before that could be done, press shortly, at a same time, the • and • keys of the SnowBip RT3 you're using in **SEARCH** mode, in order to get the barring of the automation which has quickened the finding of the first buried beacon, but which now could trouble the detection of the further ones, being the found one still the closest one. From now on, the sensitivity volume can be changed just manually, through the O or O key, and this operating mode is warned by the displayed icons MANUAL and barred circle. In the presence of more transmitting beacons, your beacon reproduces now accurately, by its loudspeaker, with different intensity according to the distance, the only radiosignals coming from each transmitting beacon located within the range allowed by the set volume step. Likewise your display will show bargraph, direction arrow and distance reading concerning each transmitting beacon. By acting properly on the O or O keys, you can now extend (by stepping up to volume 9) or reduce (by stepping down to volume 1) the range of your SnowBip RT3, so to single out the acoustic "bips" coming out from the radio-signals of a second buried beacon, towards which then to move, even following the displayed information. And so on for the further beacons. While approaching to a new transmitting beacon, choose the lowest possible (still audible) volume step and therefore the lowest possible distance range (at volume 1 this is just a little more than 1 meter). So you can select, and look at, a single transmitting beacon at a time (time by time, the nearest one), by isolating it from all the others. In the same way more rescuers can split up the task of searching more buried beacons, by proceeding in parallel, at the same time, towards more targets.

### FROM SEARCH MODE TO SEND MODE

After having located the last one buried beacon, then please switch back again to the **SEND** mode your beacon, in the event of a second avalanche. The same action must be immediately carried out, while being in the **SEARCH** process, whenever you realize that a new avalanche is coming. The action consists in pressing, for at least 2 seconds, till an acoustic signal, the **MODE** key. In order to make up to possible lacks of that, a proper watch circuit of the SnowBip RT3 takes care of switching automatically the beacon into the **SEND** mode, in case no key pressing should be detected for a time of 4 minutes. A special acoustic signal forewarns the user about such impending event, giving then him the possibility to break off, for further 4 minutes, the pending operation, through the short pressing of any key.

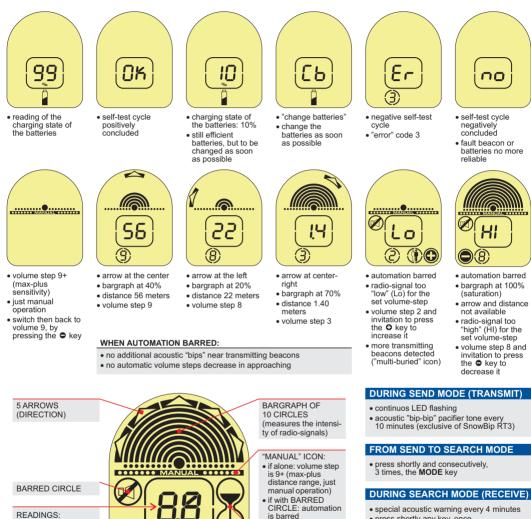


Note: intentionally just the reduction of the volume steps has been automated, to reduce step by step the distance range within which it is possible getting the acoustic "bips"; going out of this range, mainly on the lower volume steps, the "bips" decay very quickly and it is so very intuitive of going back to where they were stronger and starting again searching further acoustic increments.

Note: by repeating the same action which excluded the automation (short pressing, at the same time, of the  $\bigcirc$  and  $\bigcirc$  keys), the automation itself can be turned on again, if it is useful or preferred; the detection of more buried people (more transmitting beacons) is warned out by the SnowBip RT3 with a special displayed icon.

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# **EXAMPLES OF DISPLAY MESSAGES**



- DISTANCE DIGITS (0,1 m to 99 m) % BATTERY (6% to 99%)
- MESSAGES

INVITATION TO PRESS THE KEY to reduce the volume

VOLUME STEP (1 to 9): distance range MIN to MAX

- BATTERY ICON (% of charging state): • if flashing with Cb → change batteries as soon as possible
- if flashing with no
  → batteries no more reliable
- USER MANUAL

SAND-GLASS ICON: DON'T MOVE

WHEN LIT

INVITATION TO PRESS THE KEY O to increase the volume

MULTI-BURIED ICON

- FROM SEARCH TO SEND MODE press for at least 2 seconds
  - the MODE key, up to an acoustical signal

- · press shortly any key, once,
- to get further 4 minutes of search mode
- otherwise, with further acoustic warning, SnowBip RT3 switches to SEND MODE

# AUTOMATION BARRING ("multi-buried")

- . when just located the first buried beacon (having not yet switched it off), press shortly together the O and O keys for barring automation
- same operation for turning on automation again

# Snow



# **BEACON DESCRIPTION**

#### **GIFT-BOX CONTENTS**

- ARVA beacon SnowBip RT3
- body harness system
- twin-set earphone
- 2 alkaline batteries 1.5V AA size
- storing cloth-bag
- this user manual

### **TECHNICAL DATA**

- battery life: 450 hours in SEND mode, plus 10 hours in SEARCH mode
- operating temperature: -30 to +55 °C
- storing temperature: -40 to +70 °C

VOLUME STEP-DOWN KEY • to reduce the distance range (min step = 1: see the display window)

LIGHT SENSOR for driving the display back-light (in SEARCH mode)

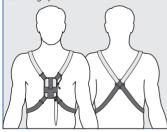
ELASTIC HAND STRAP with clip hook fastening to the body harness system

NAME LABEL sticking area

ROTARY SWITCH to turn ON and OFF the unit

### HARNESS WEARING UP

Wear the harness system with the light grey straps over your shoulders and adjust the length of the upper and lower straps; the beacon hand strap must be fastened by its clip hook to a shoulder strap buckle, so avoiding the risk of losing the beacon itself when using it out from its sheath for searching operations.



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# Fitre

	LIMITED WARRANTY
	Your SnowBip RT3 is warranted for 3 years from the purchase date against damages to the product due to manufacturing defects. This warranty does not then cover damages to the product due to uncareful use or to normal wear and tear. Batteries and accessories (including earphone and carrying items) are excluded from this warranty.
	LCD DISPLAY wide size, with automatic back-light (see display readings at page 3)
	VOLUME STEP-UP KEY <b>O</b> to increase the distance range (max step = 9: see the display window)
	"MODE" KEY for setting the operation mode • SEARCH mode: press shortly 3 times • SEND mode: press for at least 2 seconds, up to the acoustical signal
	LOUDSPEAKER with automatic compensation of the atmospheric pressure
	WARNING LED to testify the SEND mode operation
	SERIAL NUMBER indelibly engraved
	EARPHONE waterproof OUTLET
/	COMPARTMENT for 2 alkaline BATTERIES 1.5V ("AA" or "LR6" size)
/	BATTERY DOOR with waterproof protection
	DOOR SCREW with D-ring and coin-groove means for hand operation
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## **IMPORTANT WARNING**

Just the fact of carrying with you the powerful SnowBip RT3 can't protect you against the avalanche risk! The maximum care is always recommended when facing avalanche hazard areas.

Always carry with you a probe and a shovel, in addition to your ARVA, to shorten the rescue operation.

Outside detail of the battery door, with RESCUE PROCEDURE memo label

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