

### → COARSE SEARCH

During the coarse search:

- Carefully follow the distance and direction indicators on the screen.
- Point the device in the direction of the signal.
- Search in a calm and focused manner.
- Slow down as you approach the fine search.
- If the displayed distance starts to increase even though you are moving in the direction indicated by the arrow, turn around. A specific return arrow appears.
- In a complex situation with multiple victims, the device may have trouble analyzing the signal. In this case, move a few steps away and then return towards the critical point by following another direction.



DURING THE SEARCH, PAY ATTENTION TO VISUAL CLUES SUCH AS POLES, SKIS, CLOTHING, ETC.

### → FINE SEARCH

Once within 3 steps of the victim, your ARVA no longer indicates a direction and you must start bracketing (searching in a cross pattern).

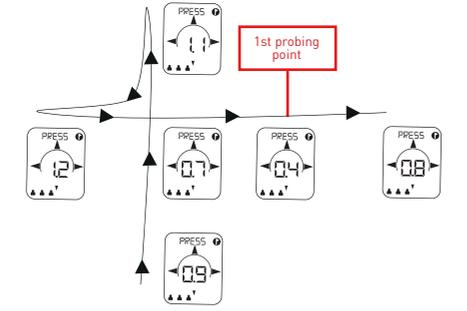
- Position your device to near snow level.



- Move your device in a cross pattern to locate the point where the distance reading is the lowest.

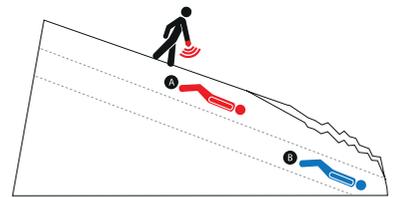
It is then much quicker to start probing once you have defined the probable burial zone within a less than one-step range.

Example of fine search technique:

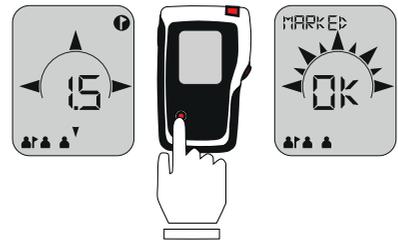


### → MARKING FUNCTION

When you are less than 3 m (or 5 m based on the chosen setting) from the first victim you have the option of marking the location in order to continue searching for another signal. In the illustration example, you can mark victim A. It is possible to set this distance to 5 m in the settings menu.

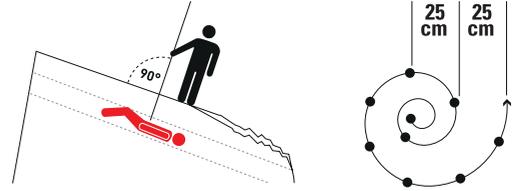


To mark the victim, press on the "marking" joystick. The device will switch to victim B.



### → PROBING

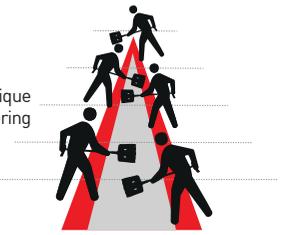
Search for the victim by probing in concentric spirals progressively away from the minimum distance point detected by your ARVA. Probe perpendicular to the slope.



### → SHOVELING

Statistically, shoveling takes at least as much time as the ARVA search. It is important to take a methodic approach to shoveling.

The V-shaped conveyor technique allows you to optimize uncovering the victim.



Start shoveling downhill from the victim 1.5 times the burial depth as indicated on the probe, and create a platform.

We recommend switching your device to STANDBY when probing and shoveling to avoid disrupting other searches in progress.

### → INTERFERENCE

Certain electronic devices as well as electrical and electromagnetic installations can significantly interfere with transceiver signals.

These sources are:

- carried: smart phone - analog radio - camera - heart rate monitors - GPS - etc.
- permanent: relay towers - power lines / electrical generating equipment - ski lifts, etc.

In order to reduce the risk of signal deterioration, we recommend that you keep your transceiver as far as possible from sources of electrical and electromagnetic activity.

IN SEARCH MODE:

Move all metallic and electronic devices at least 50cm away from your transceiver.

During an active search, we recommended turning off all devices except:

- Analog radio
- Headlamp without dimmer
- Watch without a radio function
- Backup devices in the event of a secondary avalanche

Means of communication:

We recommend turning off all digital telephones and radios during the active search phase. All calls should be made at least 25m away from the individuals conducting the active search.

IN TRANSMIT MODE:

Move all metallic and electronic devices at least 20cm away from your transceiver.

### 5-YEAR WARRANTY FOR THIS DEVICE REGISTER YOUR DEVICE ON WWW.ARVA-EQUIPMENT.COM

#### R&TTE Declarations of Conformity

Hereby, Name of manufacturer: AsteelFlash France. Adress: 43, rue du Vieux Chêne. Zip Code: 38240. City: Meylan. Country: France. Declares that the avalanche beacon. Type designation: AXIO. Trademark: ARVA, is in compliance with the essential requirements and other relevant provisions of directive. 1999/5/EC. The compliance of the device has been evaluated according to the Electromagnetic compatibility standard test: FCC CFR 47 part 15, Subpart C. The complete declaration of conformity is available at the address above. Name: DUVAL. Fonction: Establishment Development Director. Date: 30/06/2016. Signature:

#### FCC requirements: - FCC ID: 09BARVANANO

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- Information to user: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC & IC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Disposal of electronic instruments by users from private households in the European Union.** This symbol stamped on the product or its packaging indicates that the product is not allowed to be disposed of with household waste. It is your responsibility to bring your electronics waste to a designated recycling office for proper disposal. Separate disposal and recycling of your waste will contribute to preserving our natural resources and ensure an environmentally-friendly disposal safer for public health. For more information regarding the closest recycling center to your residence, contact your local city hall, waste management company, or the store where you purchased the product.



### → TECHNICAL FEATURES

- 2 search modes: analog and digital
- 3 antennas
- Distance and direction indicator
- Marking function for multiple burials
- An icon for 1, 2, 3, 4, 5 or more victims
- 60 m search bandwidth
- Spheric search
- Weight: 230 g
- Battery life: 250 hours in transmit mode and 40 hours in receive mode
- Requires 3 alkaline AAA/LR03 batteries
- Frequency check
- Active interference management
- Movement sensor to automatically switch to transmit mode

457 kHz International Frequency Fréquence internationale	3 Antennas	Digital Numerique	Analog Analogique
60m Bandwidth Bande de recherche	5+ Multiple burried indication Indication multi-victimes	Scrolling & marking function Choix et marquage de victimes	Groupcheck Groupcheck
Automatic switch back to transmit Retour automatique en émission	U-turn alarm flèche de demi-tour	Interference management Gestion des interférences	Standby function Fonction standby
Updatable Mises à jour	3d Isotech technology Technologie 3disotech		



POWER BUTTON

DEPLOYABLE ANTENNA

MARKING JOYSTICK

JACK



# AXIO

Digital and analog

CDF16AEN

USER MANUAL

## → GETTING STARTED

**PRACTICE:**  
Practicing and being well-trained in using your transceiver is essential in order to conduct a successful search in the event of an avalanche.

**RESPONSABILITY:**  
Skiing off trail or skiing in the backcountry are activities that present inherent risks. Wearing a transceiver should in no way influence your decision making when in avalanche terrain. Know when to turn around.

**STORAGE:**  
Store your device in a cool and dry place. Remove the batteries when storing for long periods of time (in summer). The device is no longer under warranty if the batteries leak.

**WARRANTY:**  
Your device has a 5-year warranty starting at the date of manufacture. We recommend sending your transceiver in for maintenance on a regular basis: once every 3 years for amateurs, and once every two years for professionals.

**REGISTRATION:**  
Every ARVA transceiver has a unique identification number. Registering your device on [www.arva-equipement.com](http://www.arva-equipement.com) on the "warranty" page allows us to link your contact information to your device to for optimal tracking (maintenance, customer service, etc.).

**BATTERIES:**  
The ARVA transceiver only operates with 3 standard Alkaline AAA/LR03 batteries. Do not use rechargeable or lithium batteries. The batteries should all be replaced at the same time. The label in the battery compartment is important for all servicing procedures, do not remove it.

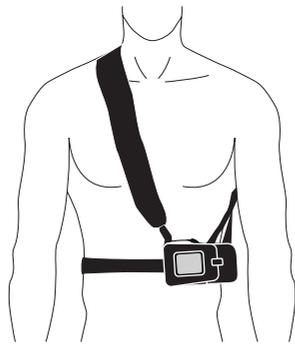
### IMPORTANT FOR SWITZERLAND: APPENDIX 4.10 FOR STANDARD SR 814.013 APPLIES TO BATTERIES

**CAUTION:** There is a risk of explosion if the battery is thrown into a fire or replaced by the wrong type of battery. Follow instructions on how to properly dispose of used batteries.

## → SETTINGS / TURNING ON THE DEVICE

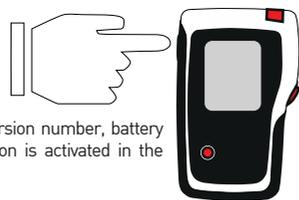
**WEARING THE DEVICE:**  
Your ARVA must always be worn on top of your base layer. Your ARVA should always be covered by at least one layer of clothing to protect it from the cold and impacts.

Wear the device in its holster and in the following manner :



You can conduct a search with your transceiver still in its holster.

**INITIAL START-UP:**  
To turn on your device press the POWER button located on the edge of the device. This will launch a self-checking start-up process and then display the version number, battery level, group check (if the function is activated in the menu).

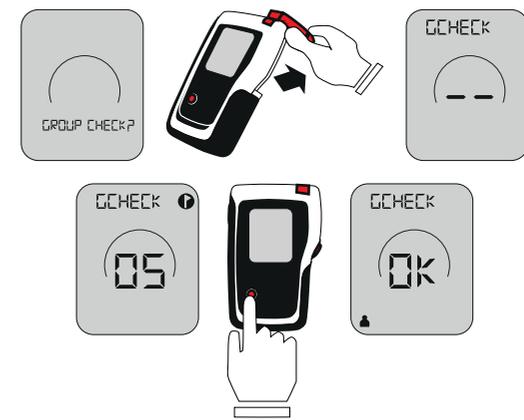


### BATTERY CHECK :



The battery check occurs every time the device is turned on. We recommend that you replace the batteries once their power level drops below 50%.

### GROUP CHECK :



- The device proposes conducting a Group Check if the function is activated in the menu. This function allows the group leader to test one-by-one that every group member's device is functioning properly.

- To conduct the test, open the deployable antenna and let the device check every other transceiver in the group.

- The emitting device must be at least 1m from the transceiver conducting the group check to properly measure the frequency. Otherwise, the device conducting the group check will display an error. If the transceiver checked by the AXIO has a frequency deviation, the deviation will appear on the screen.

- Once the device has been checked, you can mark it with a center press of the joystick and then check the next transceiver.

- To exit Group Check mode, fold the antenna. The device then switches back to transmit mode.

**POWER-OFF:**  
To turn the AXIO off, press and hold the POWER button for 2s, then validate by pressing the joystick in the center position.

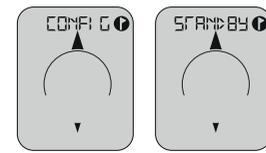
## → SETTINGS

Access the menu when the device is turned on by pressing the POWER button in transmit mode. Navigate through the menus using the joystick.

When navigating through the menu, the POWER button allows you to return to the prior menu and to transmit mode.



You have two choices when entering the menu: CONFIG (1) and STANDBY (2).



Select the CONFIG menu to access the different settings.

To switch to STANDBY mode, navigate with the joystick to STANDBY and then validate with a center press of the joystick. To exit STANDBY mode, press on the POWER button.

To turn the AXIO off, navigate to OFF (3) with the joystick and then validate with a center press of the joystick.



FINAL defines the distance from which it is possible to mark a victim. It is possible to set this distance to approximately 3m or 5m.

GCHECK allows you to activate the option of launching the Group Check procedure when turning on the device.

BACKSEND allows you to deactivate or to set the time delay after which the device automatically switches back to transmit mode from receive mode.

STANDBY allows you to deactivate or to set the time after which, without any intervention on the part of the user through detection by a movement sensor, the device switches to transmit mode.

This mode corresponds to the device's neutral state in which the transmitting and receiving modes are on standby to allow the user to work on the avalanche without disrupting the search.

The countdown starts when the movement sensor detects that the user is no longer moving. Once the set time delay is up, the device will request validation to remain in STANDBY mode. If the user does nothing, the device automatically switches into transmit mode.

BAND SR allows you to activate the automatic bandwidth reduction in case of interferences.

SCROLL allows you to activate the manual victim selection function. Caution, the manual selection function should only be used by experts.

RESET allows you to reset the device to the default settings.

## → SWITCHING TO SEARCH MODE

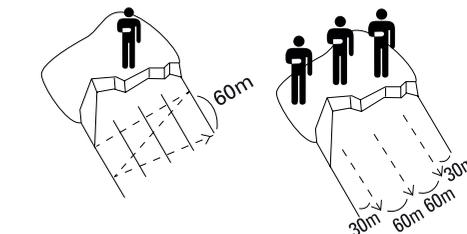
To switch to receive mode once the device is turned on, open the deployable antenna. Folding the antenna switches the device back to transmit mode. Two additional choices are available in the menu in receive mode: ANALOG and SEND. SEND mode allows you to switch to transmit mode from receive mode via the menu. The ANALOG mode allows you to activate an analog search.

In ANALOG mode the device provides a sensitivity indication allowing you to adjust receiver sensitivity based on distance. To better hear the signal it is possible to use earphones; plugging them into the jack automatically switches the device to ANALOG mode. An analog search is only recommended for expert users.



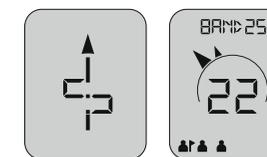
## → SIGNAL SEARCH

Start searching for a signal based on one of the two diagrams below.



## → MANAGING INTERFERENCES

If interferences (see paragraph INTERFERENCE) disrupt the device, the AXIO will automatically reduce the search range to 25m and display BAND 25. It is important to take this information into consideration when conducting the search.



## → MULTIPLE VICTIMS INDICATOR

Victims icons appear at the bottom of your screen. When a victim is marked a flag appears close to it. The + indicates that there are more than 5 buried victims.