

Performance and user friendly

*/Simple et performant  
/Käyttäjystävällinen ja tehokas  
/高性能で操作が簡単*

*/Einfach Leistungsstark  
/Ytelses- og Bbrukervennlig*

*/Semplice ed efficace*

*/Simple y competitivo  
/Enkel och effektiv*

**SEARCH / TRANSMIT BUTTON**

*BOUTON ÉMISSION / RÉCEPTION  
SENDER / EMPFÄNGERTASTE  
PULSANTE TRASMISSIONE/ RICEZIONE  
BÓTON EMISIÓN/ RECEPCIÓN  
ETSINTÄ / LÄHETYSAINIKE  
SØK- / OVERFØRKNAPP  
SØK / SÅND KNAPP  
搜索/送受信切り替えスイッチ*

**MARKED VICTIM BUTTON**

*BOUTON MARQUAGE  
MARKIERUNGSTASTE  
PULSANTE MARCATURA  
BÓTON MARCADO  
UHRIN MERKKAUSAINIKE  
MARKERINGSKNAPP  
MARKERINGSKNAPP  
マーキング/フラッグボタン*

**ON /OFF BUTTON**

*BOUTON ON/OFF  
TASTE EIN/ AUS  
PULSANTE ON/OFF  
BÓTON ON/ OFF  
ON / OFF KYTKIN  
PÅ- /AV KNAPP  
PÅ / AV KNAPP  
ON/OFFスイッチ*



# NEO+

**USER MANUAL**

*GUIDE DE PRISE EN MAIN*

*INBETRIEBNAHME*

*GUIDA INTRODUTTIVA*

*GUÍA DE UTILIZACIÓN*

*KÄYTTÖOHJE*

*BRUKERMANUAL*

*ANVÄNDARMANUAL*

取扱説明書

**ARVA**<sup>®</sup>  
snow safety equipment



## TECHNICAL SPECIFICATIONS

/CARACTÉRISTIQUES TECHNIQUES  
/ARATTERISTICHE TECNICHE  
/TEKNISET OMINAISUUDET  
/TEKNISKA DATA

/TECHNISCHE MERKMALE  
/CARACTERÍSTICAS TÉCNICAS  
/TEKNISKE FUNKSJONER  
/テクニカルデータ

### • 100% digital

- 100% numérique
- 100% digital
- 100% digitale
- 100% numerica
- 100% digitaalinen
- 100% digital
- 100% digital
- 100% デジタル

### • 3 antennas

- 3 antennes
- 3 Antennen
- 3 antenne
- 3 antenas
- 3 antenna
- 3 antenner
- 3 antenner
- 3 本アンテナ

### • User friendly

- Très facile d'utilisation
- Einfachste Bedienung
- Molto facile da usare
- Muy fácil de utilización
- Käyttäjystävällinen
- Brukervennlig
- Användarvänlig
- 容易な操作性

### • Weight: 240 g

- Poids : 240 g
- Gewicht 240 g
- Peso : 240 g
- Peso : 240 g
- Paino : 240g
- Vekt: 240 g
- Vikt: 240 g
- 重量: 240 g

### • 70 m search band width

- Largeur de bande de recherche 70 m
- Suchstreifenbreite 70 m
- Ampiezza banda di ricerca 70 m
- Ancho de banda de búsqueda de 70m
- Etsintäkaistanleveys 70m
- 70 meter søkebandbredde
- 70 m sökbredd
- 70 m の搜索受信幅

### • Distance and direction indicator

- Indicateurs de direction et de distance
- Distanzzahlen, Richtungweisung und Ton führen in der Suche
- Indicatori di direzione e distanza
- Indicación de dirección y distancia
- Etäisyys- ja suuntaosoittimet
- Avstands- og retningsindikator
- Distans och riktningvisare
- 距離と方向の指示矢印

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### • Marking function for multiple burialssituations

- *Fonction marquage de victimes*
- *Markieren bei Mehrfachverschüttung*
- *Funzione marcaggio delle vittime*
- *Función de marcado de víctimas en caso de sepultamientos múltiples*
- *Merkkausominaisuus useiden hautautuneiden uhrien varalta*
- *Merkefunksjon for flere begravningstilfeller*
- *Markeringsfunktion för situationer med flera saknade*
- *複数の埋没状況に応じたマーキング機能*

### • Multiple victims icon (1, 2 or 3, 4 and more)

- *Indication multi victimes*
- *Anzeige für Mehrfachverschüttung*
- *Indicazione più vittime*
- *Indicación multi víctimas (1,2,3 o 4 y más)*
- *Kuvakeet useammalle uhrille (1, 2, 3, 4 tai useampi)*
- *Ikon for flere offer (1, 2, 3 eller 4 eller fler)*
- *Ikon för flera saknade (1, 2, 3 eller 4 och fler)*
- *複数埋没者アイコン (1人、2人、3人、4人以上)*

### • Dynamic interference Management

- *Gestion dynamique des interférences*
- *Dynamische Kontrolle der Störgeräusche*
- *Gestione dinamica delle interferenze*
- *Gestión dinámica de las interferencias*
- *Dynaaminen häiriönhallinta*
- *Dynamisk forstyrrelsesstyring*
- *Dynamisk störningshantering*
- *電波干渉の最適化*

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### • Configurable automatic return to transmit mode with a movement sensor

- *Retour automatique en émission paramétrable par détecteur de mouvement*
- *Automatische Rückkehr in den Sendemodus, einstellbar durch den Bewegungsmelder.*
- *Ritorno automatico in emissione configurabile da sensore di movimento.*
- *Retorno automático configurable al modo de transmisión con sensor de movimiento.*
- *Automaattinen lähetystilaan paluu liiketunnistimella.*
- *Automatisk tilbakestilling til sendemodus med bevegelsesdetektor*
- *Automatisk återgång till sändläge med rörelsedetektor*
- モーションセンサー付きの設定可能な送信モードへの自動復帰。

### • Battery life: more than 250 Hours (Emitting)

- *Autonomie + de 250 h*
- *Sendeleistung 250 Stunden*
- *Durata della batteria 250 ore*
- *Autonomia + 250 horas*
- *Virrankesto: 250+ tuntia (lähetystilassa)*
- *Batterilevetid: mer enn 250 timer (sender)*
- *Batteritid: mer än 250 timmar (sändläge)*
- 電池寿命:250 時間以上 (発信)

### • Requires 3 alkaline batteries AAA/LR03

- *Alimentation 3 piles alcalines AAA/LR03*
- *S3 Alkali Batterien AAA/LR03*
- *3 batterie alcaline LR03*
- *Alimentación 3 pilas alcalinas AAA/LR03*
- *Vaatii 3 alkali AAA/LR03 paristoa*
- *Krever 3 alkaliske batterier AAA/LR03*
- *Kräver 3 alkaliska AAA/LR03 batterier*
- 単4形アルカリ電池3本が必要

**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. The device is no longer under warranty if the batteries leak.

**WARRANTY :**

Your device has a 5-year warranty. 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 AND UPDATES :**

Every ARVA transceiver has a unique identification number. Registering your device on [www.arva-equipement](http://www.arva-equipement) allows us to link your contact information your device to for optimal tracking (maintenance, customer service, software updates, 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.

**➔ INITIAL START-UP**

- 1-** To switch on your device, turn the ON/OFF button 90°.
- 2-** After switching on your device, place it in the holster with the screen facing out so that the ON/OFF button fits into the safety notch. This notch locks the ON/OFF button in place and prevents it from turning the device off unexpectedly.
- 3-** Place the black strap over your shoulder with the ARVA logo facing out.
- 4-** Place the red elastic strap around your waist, clip the red buckle, and adjust as needed.

## → DEVICE CARRYING

The holster must always be worn against your inner layer of clothing (underwear or next to skin). The ARVA should preferably be covered by a garment to prevent cold and impacts.

## → BATTERY CHECK

Just after turning on your device, it will indicate the battery level. We recommend that you replace the batteries as soon as they drop below 50%.

## → GROUP CHECK WITH FREQUENCY CONTROL

After switching on your device, the NEO startup mode offers a group check. To conduct a group check, press the center button when ""CH"" appears on the screen. Check your partners' beacons by positioning your device 0.5m to 1.5m from theirs.

- If the device being checked works properly, your beacon will display the distance between your device and the device being checked and emit a standard search beep.
- If you are more than 1.6m from the device being checked, your beacon will display the distance without emitting a beep.

- If you are less than 0.5m from the device being checked, your beacon will display the distance and emit a double beep.

- If the device's frequency is too weak relative to the standard, your transceiver will display an ""Er""/""02"" and emit a double beep.

- If the device's frequency is too strong relative to the standard, your beacon will display an ""Er""/""03"" and emit a double beep.

- If you are <0.5m from the device being checked, your beacon will display an ""Er"" and emit an error beep. Begin your check again, this time standing between 0.5m and 1.5m from the other device.

- If you do not detect a signal, verify that your partner's beacon is switched on. If it is, then have their device inspected.

## → SEARCH MODE

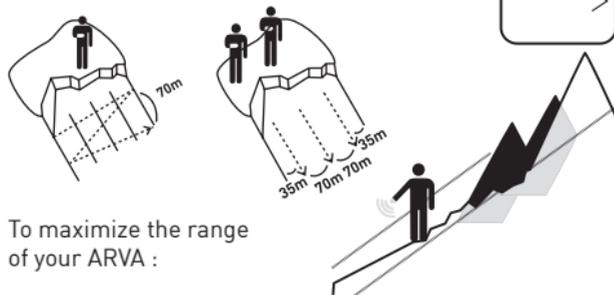
### SWITCHING TO SEARCH MODE

In avalanche situation, to switch in search mode, open the holster and take off the device which will stay attached by the elastic leash and the black strap. To switch in search mode, push the side button up.



## → SIGNAL SEARCH

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



To maximize the range of your ARVA :

It is important to point your ARVA in the direction of the avalanche, parallel to the slope and not pointing upwards towards the sky.



Slowly rotate back and forth to try to detect the signal(s).

## → COARSE SEARCH

During the coarse search :

- Carefully follow the distance and direction indicators on the screen



## → FINE SEARCH

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



- 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
- 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.

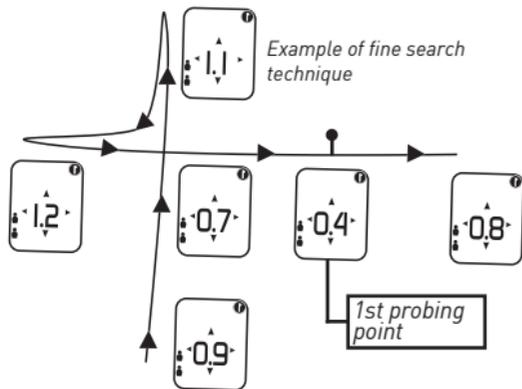


DURING THE SEARCH, PAY ATTENTION TO VISUAL CLUES SUCH AS POLES, SKIS, CLOTHING, ETC.



1. Lower your device to near snow level
2. 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-meter range

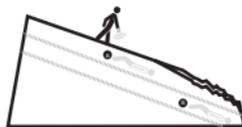


## → MULTIPLE VICTIMS INDICATED

Victims appears on the left part of your screen. When a victim is marked a flag appears close to it. The + indicate that there is 4 or more victims.



## → MARKING



When within 3 (or 5) meters of a victim the flag icon will Flash in the upper right corner of the screen. Pressing the center button will mark this

signal. The transceiver then searches for the next closest signal, without returning to a marked victim.

## → AUTOMATIC RETURN TO TRANSMIT MODE

When probing/shoveling, you do not want your beacon to switch back to transmit mode and interrupt searches for other buried victims. This is why the new NEO+ holster allows you to wear your device in search mode when probing.

In the event of a secondary avalanche, your device will automatically switch back into transmit mode. The default setting for the NEO+ is to revert to transmit mode after 4 minutes without movement.

After 4 minutes without detecting any movement, an alarm will sound and you will be asked to press on the marking button on your device to confirm that you are not buried. If no action is taken, the device will return to transmit mode.

## → 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 the excavation phase of shoveling. As soon as the person is uncovered, it is important to turn their transceiver off immediately.

## → 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.

## → DYNAMIC INTERFERENCE MANAGEMENT

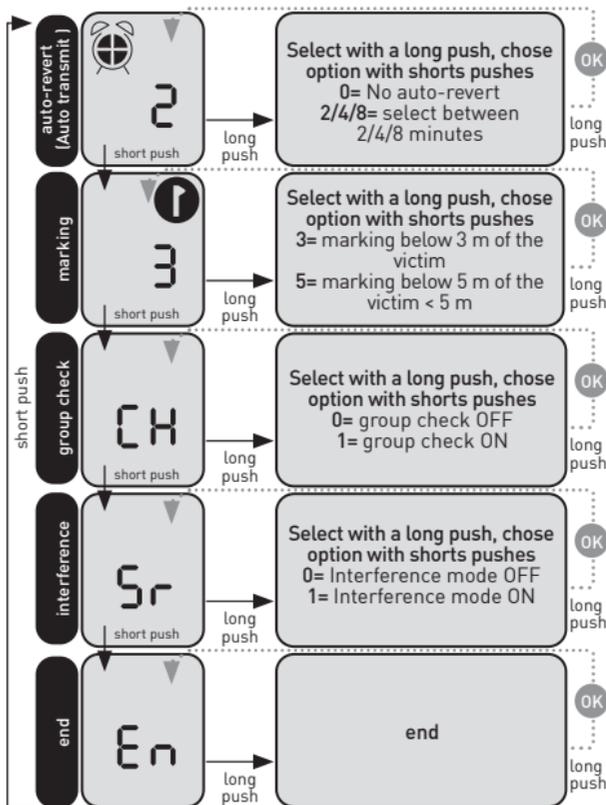
Beacon users are carrying more and more electronic devices that can cause interference during the primary search.

This has been observed in mountain resorts and in rare cases in backcountry. You can activate in the menu a specific mode that prevents the device from additional electronic noise by reducing the search band, depending on the level of interference there are three selections.

- The search band in normal environment is 70m => the device will display SR 70 when you switch to search.
- If the interference is at a minimum level select SR 30=> device will reduce the search band to 30m.
- If the interference is at a maximum level select SR 15 => device will reduce the search band to 15 m.
- Pay attention, use good judgment, and adapt your search scenario to the best option for your needs.

## → MENU CONFIGURATION (Experienced users)

With the beacon switched off, go into the search mode by sliding search button up. Turn beacon on while holding the center button until the batteries status. The only button used to manage the menu is the central one.



## 5-YEAR WARRANTY FOR THIS DEVICE

### REGISTER YOUR DEVICE ON [WWW.ARVA-EQUIPMENT.COM](http://WWW.ARVA-EQUIPMENT.COM)

#### R&TTE Declarations of Conformity

Hereby, Name of manufacturer: AsteelFlash France. Address: 43, rue du Vieux Chêne. Zip Code: 38240. City: Meylan. Country: France. Declares that the avalanche beacon. Type designation: NEO. 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: TORRES. Fonction: Establishment Development Director. Date: 30/04/2013. Signature:



**FCC requirements: - FCC ID: O9BARVANE0** 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.

