

NEOBT **PRO**

USER MANUAL

MODE D'EMPLOI

INBETRIEBNAHME

GUIDA INTRODUTTIVA

GUÍA DE UTILIZACIÓN

KÄYTTÖOHJE

BRUKERMANUAL

ANVÄNDARMANUAL







取扱説明書

ARVA





CONNECTING TO THE ARVA APP

-  Flash the QR code with my camera
-  Download the ARVA app
-  Register my transceiver product
-  Switch on the transceiver by pressing marking to activate Bluetooth
-  Connect my transceiver to the app
-  Configure my transceiver

For more information, visit:

Profile > My Registered Devices > Settings



1/ GETTING STARTED

1.1/ TECHNICAL CHARACTERISTICS

- 3-antenna digital device
- Search strip width in digital mode: 80 m
- Maximum range in analog mode: 90 m
- Dynamic interference management
- Automatic revert-to-transmit by motion detector
- Power supply: 3 AAA/LR03 alkaline or lithium batteries
- Battery life in transmit mode: 350 hrs with alkaline / 450 hrs with lithium
- Storage temperature range: -20°C to +70°C
- Operating temperature range: -20°C to +45°C
- Maximum operating altitude: 10 000 m
- Avalanche beacon / Frequency band: 456.9 - 457.1 kHz
- Avalanche beacon / Maximum power: H-Field < 2.23 μ A/m @ 10 m
- Bluetooth 2.4 GHz / Frequency band: 2.400 - 2.4835 GHz
- Bluetooth 2.4 GHz / Maximum power: ERP < 100 mW
- Weight: 214 g (batteries included)

Congratulations on purchasing a new ARVA transceiver; this manual contains all the information you need to use it. This manual is available on our website in the "downloads" section.

Register your ARVA device on our website www.arva-equipment.com or on the ARVA app and enjoy an additional 3 years of warranty (registration must be completed within 2 years of the date of purchase).

INSTRUCTIONS FOR USE

- 1/ GETTING STARTED
- 2/ TRANSMIT MODE
- 3/ SEARCH MODE
- 4/ PROBING - SHOVELING
- 5/ INTERFERENCE
- 6/ WARRANTY - CHECKS
- 7/ DECLARATION OF CONFORMITY (at the end of the manual)



GAIN BUTTON "-" IN ANALOG MODE / NAVIGATION BETWEEN VICTIMS SCROLLING MODE

GAIN BUTTON "+" IN ANALOG MODE / NAVIGATION BETWEEN VICTIMS SCROLLING MODE

OFF/SEND/SEARCH SELECTOR

UNLOCK BUTTON / EXIT SEND MODE



MARKING FUNCTION

Holster

ELASTIC ATTACHMENT LANYARD



The information in this manual is for guidance only and is subject to change at any time. The technical features and product specifications may be changed without notice for future versions of our devices.

No liability is accepted for improper use, failure to follow the operating instructions, unauthorised modifications to the device, continued use despite signs of wear and tear or faults of any kind, or unauthorised or improperly performed repairs.

1.2/ MEANING OF MANUAL / DEVICE PICTOGRAMS



Pictogram encouraging users to read instructions and warnings



Waste disposal for users in private households: this symbol indicates that this product should not be disposed of with your other household waste. It is your responsibility to dispose of your waste by taking it to a designated collection point where electrical and electronic devices are recycled properly. Collecting and recycling your waste

will help conserve natural resources and protect the environment and people's health. For more information on the nearest recycling centre to your home, contact your local authority, the household waste disposal service or the shop where you purchased the product.



Pictogram inviting users to take end-of-life products for recycling

1.3/ TRAINING - RESPONSIBILITY

Training and practicing so you understand your device comprehensively is essential for a successful avalanche search. Off-piste skiing/snowboarding and ski touring/splitboarding are risky activities, and wearing a transceiver should never affect your decision making in risky areas. Know when to turn round and go back.

1.4/ STORAGE - BATTERIES

You must store your device in a cool, dry place away from direct sunlight. If you plan to store it for a long period, remove the batteries, as the warranty does not cover damage

caused by battery failure (including loss of waterproofing). We recommend that you check your device regularly, including the operation of the OFF/SEND/SEARCH selector and the condition of the display. Also, ensure there is no trace of corrosion in the battery compartment.

The NEO BT PRO works exclusively with 3 AAA/LR03 alkaline or lithium batteries (specify the type of batteries in the app settings). Do not use rechargeable batteries. The label at the bottom of the battery compartment is essential for our after-sales service procedures; please do not remove it. You must replace all 3 batteries at the same time. After changing the batteries, make sure that the compartment lid is closed properly.

Important for Switzerland: appendix 4.10 of standard SR814.013 applies to batteries.



Disposing of a battery in a fire or furnace or mechanically crushing or cutting a battery can cause an explosion. Keeping a battery in a very high-temperature environment can cause an explosion or the escape of flammable liquid or gas. A battery subjected to extremely low air pressure may cause an explosion or leakage of flammable liquid or gas. An explosion may result if the wrong type of battery is used.

1.5/ SETTING UP YOUR DEVICE

During the start-up phase, press and hold the marking button. The Bluetooth pictogram appears. You can then connect your transceiver to your smartphone. The ARVA application offers a number of services, including the opportunity to register, set up and maintain your transceiver.



Turn on the transceiver by pressing on marking to activate Bluetooth



Connect my transceiver to the app



Configure my transceiver

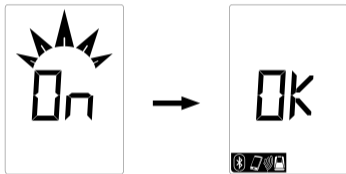
2/ TRANSMIT MODE

2.1/ TURNING ON THE DEVICE

The device is off when the side selector is in the OFF position. Move the OFF/SEND/SEARCH selector to the SEND po-

sition to turn the device on. The selector is locked properly when you hear it click into place, indicating that the selector has been moved to the SEND position.

The device carries out an automatic test during the start-up phase to check the main functions. Be sure to verify that the auto-test is running correctly and pay close attention to any error messages appearing on the screen. The device should display "On", then the software version installed, and finally "OK".



The device then displays the remaining battery life. We advise you to replace the batteries as soon as the battery life indicator drops below 50%. Press and hold the marking button in transmit mode to check the battery life at any time.



Once the start-up phase is complete, the device prompts the user to carry out a GROUP CHECK (see paragraph 3.1/ GROUP AND FREQUENCY TEST) and then automatically switches to transmit mode without any further action from the user. A blinking arrow then appears at the top of the screen to confirm that the transceiver is in transmit mode.



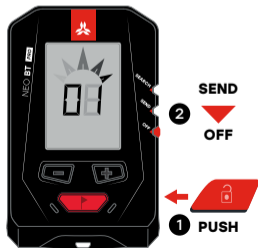
2.2/ WEARING THE DEVICE

Make sure that the carabiner of the elastic attachment lanyard is properly connected to the waist belt of the holster (2 positions available left and right), then position the device in the holster with the screen facing your body and fasten the buckle of the holster. The NEO BT PRO should always be worn over the base layer of clothing closest to your body.



2.3/ TURNING OFF THE DEVICE

Press the unlock button and move the selector to OFF to turn the device off.



3/ SEARCH MODE

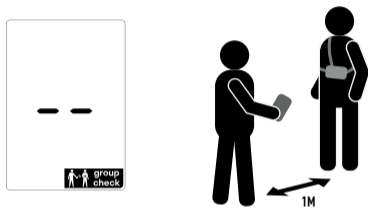
In the event of an avalanche, switch to search mode from transmit mode. Take the device out of its holster, press the release button and move the OFF/SEND/SEARCH selector to the SEARCH position.



3.1/ GROUP AND FREQUENCY TEST

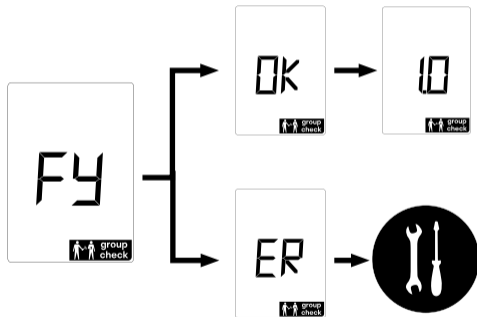
Before you begin your outing in the mountains, it is important to test the group member's devices to ensure that they are in transmit mode and working properly. The group leader must switch their device to GROUP CHECK mode to test the devices. When it is switched on in transmit mode, the NEO

BT PRO prompts you to choose GROUP CHECK mode. To enter GROUP CHECK mode, press the marking button when the GROUP CHECK pictogram is blinking on the screen.



In this mode, you can test your partners' devices one after another by positioning your device 1 m away from each device to be checked. It is imperative you stay 1 m away for the GROUP CHECK to work properly; if you do not, the device will inform you that you are too close or too far away with repeated "double beeps".

In GROUP CHECK mode, the NEO BT PRO displays the status of the transmit frequency and transmit power in a loop. If the frequency is correct, "FY" / "OK" will be displayed. If it is not correct, then "FY" / "ER" will appear on the screen, meaning that the device being checked is defective and must be taken care of by our after-sales service.



To test the transmit power, you should check the distance displayed on the screen:

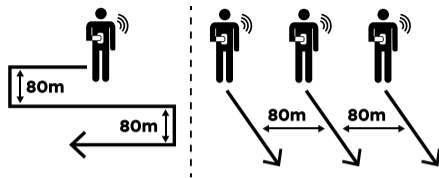
- If the displayed distance fluctuates between 0.5 m and 1.5 m and you are positioned correctly 1 m from the device being checked, the transmit power is correct, and your device will emit a standard search "beep."
- If the distance displayed seems to be inconsistent, this means that the transmit power may not be correct and that the device being checked should be taken care of by the after-sales service

When the group check is complete, press the marking button to switch to transmit mode. Be sure to test the group leader's device using one of the devices previously tested. GROUP CHECK mode can be accessed again at any time from transmit mode by pressing the "+" and "-" buttons simultaneously. The device automatically switches to transmit mode after 8 minutes for safety reasons.

3.2/ RESCUE

3.2.1/ STEP 1: SIGNAL SEARCH

Take your NEO BT PRO out of its holster and put it into search mode. Then, proceed across the avalanche in search of a signal using the techniques shown in one of the 2 diagrams below. The screen displays the signal search icon.



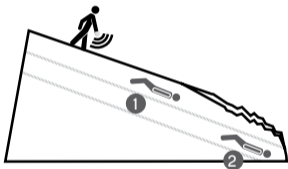
It is important to point your transceiver in the direction of the avalanche, parallel to the slope. Listen carefully for the first signals, paying attention to external visual clues (poles, skis, clothing) at the same time. As soon as the first signal is detected, a "VICTIM" pictogram will appear on the screen automatically.

The "VICTIM" pictograms are located on the left of your screen; the "+" pictogram indicates that there are more than 4 burial victims.



3.2.2/ STEP 2: COARSE SEARCH

When one of the "VICTIM" pictograms starts blinking, your device has locked onto the signal from this burial, and you are in the coarse search phase. Position the device on the palm of your hand parallel to the slope and pointing in the direction indicated on the screen. Pay close attention to the distances and directions displayed. The signals from the victims are ranked from the strongest to weakest (from top to bottom).



If you come closer to another burial during your search, this burial's pictogram will, in turn, begin to blink.



If you are not going in the right direction, an audible alarm accompanied by the appearance of the U-TURN pictogram will tell you to turn around to find the fastest route.

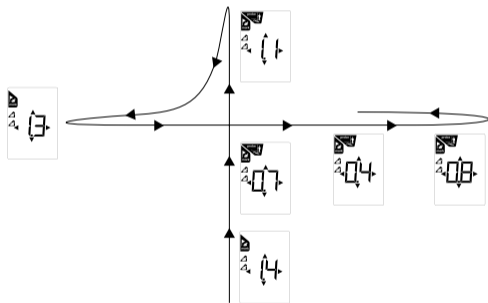


SCROLLING MODE: when scrolling mode is activated (see paragraph 1.5/ SETTING UP YOUR DEVICE), you have the option to select the burial you want to target. Use the "+" and "-" buttons to select the burial you want to target (the pictogram corresponding to this burial will blink). **Please note that this mode is reserved for expert users with advanced avalanche rescue skills.**



3.2.3/ STEP 3: FINE SEARCH

When the screen indicates you are 3 m from the burial(s) location (or 5 m depending on the settings), your device will no longer give any direction, and you will begin the cross-search phase. Move your device in a criss-cross pattern until it is vertically above the point where the distance reading is lowest.



Marking function: when you are less than 3 m distance from the burial(s) location (or 5 m depending on the setting), the MARKING pictogram blinks at the top right-hand side of the screen. Press the marking button to mark the burial. The

device then searches for the next burial without returning to the previously marked burial(s). When you mark a burial, a flag appears next to their pictogram.



3.3/ ANALOG SEARCH MODE

It may be more useful to switch your device to analog search mode in some situations. You can activate the analog search mode from the search mode by briefly pressing the "+" and "-" buttons simultaneously using your left and right thumbs (repeat the operation to return to the digital search mode).

By default, in analog mode, sensitivity calibration is performed automatically. To switch to manual mode, press either the "+" or "-" button and then adjust the sensitivity according to your progress using the same buttons.

The left and right arrows blink alternate-



ly to help the user choose the correct calibration. If you press the marking button, you return to automatic sensitivity calibration management. At sensitivity level 10 (the highest), the screen switches itself off to limit the level of interference and provide maximum detection performance.

Analog search mode is not recommended for novice or inexperienced users. In analog search mode, the rescuer can listen to the raw signals transmitted by the burial victims' devices, making it easier to analyse complex situations.

3.4/ AUTOMATIC REVERT-TO-TRANSMIT MODE

In the event of a secondary avalanche, the automatic revert-to-transmit mode allows the device to switch into transmit mode automatically. The NEO BT PRO has a motion sensor that detects if the rescuer is immobilised and buried. The automatic revert-to-transmit time can be set via the configuration menu to 2 mins, 4 mins, or 8 mins, or it can be deactivated (see paragraph 1.5/ SETTING UP YOUR DEVICE). The default automatic revert-to-transmit time is 2 minutes. If the device does not detect any movement within 2 minutes, an audible signal will be emitted asking the rescuer to confirm they wish to remain in search mode. Press the marking but-

ton briefly to signal to your device that you are not buried. If the device detects no action on your part, it switches to transmit mode.



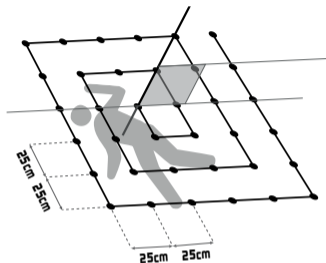
4/ PROBING - SHOVELING

The probe pictogram (probing) appears when the device is less than 1.2 m from the burial (or 2 m if the user has set the fine search distance to 5 m).



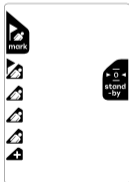
Before you start the probing - shoveling phase, make sure you place your device properly in the holster, well-protected from the cold and impacts. As soon as you have defined the area where the victim is likely to be buried, it is quicker to start probing. Search for the burial by probing perpendicular

to the slope. Move out gradually in a spiral from the minimum distance point detected by your transceiver.



STANDBY mode:

We recommend switching your device to standby mode while you are probing-shoveling. This mode is a neutral position (pause) in which the device is neither in search mode nor in transmit mode, allowing the rescuer to concentrate fully on extricating the burial. In STANDBY mode, the device stays on, ensuring the rescuer can activate automatic revert-to-transmit mode if necessary. Standby mode can be activated from search mode by pressing and holding



the "-" button. Press and hold the "-" button again to exit STANDBY mode.

Shoveling takes at least as long as searching with the transceiver. A methodical approach to the shoveling phase is essential. Using the V-shaped conveyor technique is the most effective way of shoveling and clearing. You must turn off the burial victim's transceiver as soon as they are uncovered.



5/ INTERFERENCE

Some electronic devices and electrical and electromagnetic installations can interfere significantly with the operation of transceivers. These sources can be:

- Embedded: smartphone, digital radio, camera, heart rate monitor, GPS

- Fixed: relay antennas, high voltage lines, power supplies, ski lifts

We recommend that you keep sources of electrical and electromagnetic activity away from your device as much as possible to minimise the risk of signal interference.

5.1/ RECOMMENDATIONS IN SEARCH MODE

Keep all metal and electronic devices at least 50 cm away from the transceiver.

5.2/ RECOMMENDATIONS IN TRANSMIT MODE

Keep all metal and electronic devices at least 20 cm away from the transceiver.

5.3/ DYNAMIC INTERFERENCE MANAGEMENT

With the proliferation of electronic devices people are carrying, instances of electromagnetic interference that can disrupt a signal search are becoming more frequent. This phenomenon has been mainly observed near resorts and ski areas. Dynamic interference management is activated by default on the NEO BT PRO. This allows your device to detect areas of interference and reduce the search strip width if necessary, allowing users to adapt their search strategy accordingly.

The theoretical search strip width in a normal environment is 80 m. The INTERFERENCE pictogram appears on the screen when interference is detected, and the device reduces the strip width to 30 m. When this happens, change your search technique by narrowing your search strip to 30 m.

6. WARRANTY - MAINTENANCE



Your device (excluding batteries) is guaranteed for 2 years from the date of purchase. ARVA devices are identified by a unique traceability number. When you register on www.arva-equipement.com or on the ARVA app, we can associate this number with your contact information and give you the

benefit of an additional 3 years of warranty. The warranty does not cover damage due to misuse. The warranty is no longer valid if the user or an unauthorised third party has opened the device. If you require after-sales service, please bring proof of purchase and a detailed description of the defect observed to your point of sale. We advise an equipment check every 3 years for individuals and every 2 years for professionals.



CONNECTING TO THE ARVA APP



Flash the QR code with my camera



Download the ARVA app



Register my transceiver product



Switch on the transceiver by pressing marking to activate Bluetooth



Connect my transceiver to the app



Configure my transceiver

For more information, visit:

Profile > My Registered Devices > Settings

7. DECLARATIONS OF CONFORMITY

7.1. DECLARATION OF CONFORMITY - EUROPE

FR	Par la présente, NIC-IMPEX SAS déclare que l'équipement radioélectrique ARVA NEO BT PRO est conforme à la directive RED 2014/53/EU. Le texte complet de la déclaration UE de conformité est disponible sur notre site www.arva-equipment.com à la rubrique téléchargements.
EN	NIC-IMPEX SAS hereby declares that the ARVA NEO BT PRO radio electronic device complies with directive RED 2014/53/EU. The full text of the EU declaration of conformity is available on our website, www.arva-equipment.com , on the downloads page.
DE	Hiermit erklärt NIC-IMPEX SAS, dass das Funkgerät ARVA NEO BT PRO der Funkanlagenrichtlinie (RED) 2014/53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist auf unserer Website www.arva-equipment.com in der Rubrik Downloads verfügbar.
IT	NIC-IMPEX SAS dichiara con la presente che il dispositivo elettronico radio ARVA NEO BT PRO è conforme alla direttiva RED 2014/53/UE. Il testo completo della dichiarazione di conformità UE è disponibile sul nostro sito internet www.arva-equipment.com sulla pagina dei downloads.
ES	NIC-IMPEX SAS declara que el dispositivo radioeléctrico ARVA NEO BT PRO cumple con las disposiciones de la Directiva RED 2014/53/UE. El texto completo de la declaración de conformidad UE está disponible en nuestro sitio web, www.arva-equipment.com , en la página de descargas.
FI	NIC-IMPEX SAS vakuuttaa, että ARVA NEO BT PRO -radioelektronikkalaitte on direktiivin RED 2014/53/EU mukainen. Vaatimustenmukaisuusvakuutus-teksti kokonaisuudessaan löytyy verkkosivustostamme: www.arva-equipment.com , kohdasta lataukset.
NO	NIC-IMPEX SAS erklærer herved at det radioelektroniske apparatet ARVA NEO BT PRO er i overensstemmelse med direktivet RED 2014/53/EU. Den fullstendige teksten i EU-erklæringen om overensstemmelse er tilgjengelig på vår nettside, www.arva-equipment.com , på nedlastingsiden.
SV	NIC-IMPEX SAS förklarar härmed att ARVA NEO BT PRO radiokommunikationsenhet överensstämmer med Direktiv 2014/53/EU (direktivet om radioutrustning). Den fullständiga texten till EU-försäkran om överensstämmelse kan laddas ned från vår webbplats, www.arva-equipment.com .
JA	NIC-IMPEX SAS は、ARVA NEO BT PRO 無線電子機器が無線機器指令 (RED) 2014/53/EU を遵守していることをここに宣言します。EU適合宣言書の全文は弊社ウェブサイト www.arva-equipment.com のダウンロードページにてご覧いただけます。

7.2. DECLARATION OF CONFORMITY - CANADA

CANADA - IC requirements - IC: 22008-ARVANE0BT / Contains IC: 11306A-ISP1907

This device complies with Industry Canada's licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules.

7.3. DECLARATION OF CONFORMITY - USA

USA - FCC requirements - FCC ID: 09BARVANE0BT / Contains FCC ID: 2AAQ-ISP1907

This device complies with part 15 of the FCC 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.

Caution: Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 residual installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, 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

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65.

7.4. PICTOGRAMS DESCRIPTION



ELECTRONIC DISCHARGES - Warning: electrostatic discharges, use the product only when battery cover is closed.



INSTRUCTION MANUAL - Please read and follow the instruction manual carefully before using your new ARVA beacon for the first time.

Manufacturer / Fabricant :

ARVA NIC-IMPEX
8 RUE DES BOUVIÈRES
74940 ANNECY-LE-VIEUX
FRANCE
Tél : +33(0) 450 571 351

www.arvaequipment.com

ARVA US Service Center
399 W. 1200 N.
SUITE A
Orem, UT 84057
Tel : +1 (844) 636-2782