

NEC^{PRO}

USER MANUAL

MODE D'EMPLOI

BENUTZERHANDBUCH

MANUALE D'USO

MANUAL DE USUARIO

KÄYTTÖOHJE

BRUKERHÅNDBOK

BRUKSANVISNING

取扱説明書

ARVA



Congratulations on purchasing a new ARVA transceiver. This user manual will provide all of the key information you need on how to operate your new device. This manual is also available on our website on the “downloads” page.

Register your ARVA transceiver on our website www.arva-equipment.com to receive an additional 3-year warranty (you must register your device within 2 years of the date of purchase).

OPERATING INSTRUCTIONS

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- 6/ WARRANTY - MAINTENANCE - LIFECYCLE
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1/ GETTING STARTED

1.1/ TECHNICAL FEATURES

- Digital 3-antenna device
- Frequency: 457 kHz
- Search strip width: 70m
- Maximum range in analog mode: 80m
- Active interference management
- Automatic revert to transmit by motion sensor
- Power supply: 3 AAA/LR03 alkaline batteries
- Battery life in transmit mode: 350 hours
- Operating temperature range: -20°C to +45°C
- Weight: 240g (battery included)



SEND/SEARCH
SELECTOR

MARKING BUTTON

DECREASE GAIN “-” IN ANALOG MODE / SCROLL
“DOWN” IN MENU

INCREASE GAIN “+” IN ANALOG MODE / SCROLL
“UP” IN MENU

ON/OFF BUTTON



HOLSTER

ELASTIC ATTACHMENT
LANYARD

The information contained in this user manual is for reference purposes only and may be modified at any time. The technical and product specifications may change without prior notice for future versions of this and other devices.

ARVA is not liable for any incorrect use, non-compliance with user manual instructions, unauthorized modifications to the device, continued use of the device in spite of clear signs of wear or malfunctions, or any unauthorized or incorrect repairs.



1.2. MANUAL/DEVICE PICTOGRAM DEFINITIONS

Do not dispose of this device with general household waste: this symbol indicates that the product is not allowed to be disposed of with general household waste. It is your responsibility to bring your waste to a designated recycling center to properly recycle or dispose of your electrical and electronic devices. Separate disposal and recycling of your waste will contribute to preserving our natural resources and ensure an environmentally-friendly disposal that is safe for public health. For more information regarding the

closest recycling center to your residence, contact your local city or county government, waste management company, or the store where you purchased the product.



Pictogram encouraging users to recycle old or used products

1.3/ PRACTICE - RESPONSIBILITY

Practice makes perfect, and knowing how to properly use your device is essential in an avalanche search. Off-piste skiing / snowboarding, touring, and ski/snowboard mountaineering are activities with inherent risks, and wearing a transceiver should not influence your decision making in risky situations. Know when to turn around.

1.4/ STORAGE - BATTERY

Store your transceiver in a cool and dry place, away from direct sunlight. Remove the battery when storing the device for long periods of time. Your transceiver is no longer under warranty if the batteries malfunction or leak. Check your device on a regular basis to make sure that the SEND/SEARCH selector switch and display screen function properly, and that there are no traces of corrosion in the battery compartment.

The NEO PRO operates exclusively with three AAA/LR03 alkaline batteries. Do not use lithium or rechargeable batteries. The label in the battery compartment is important for customer service, do not remove it. When you change batteries, change all 3 batteries at the same time. After changing the batteries, make sure that the cover is closed properly.

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

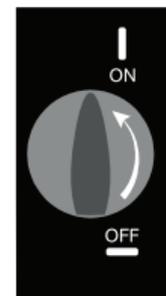
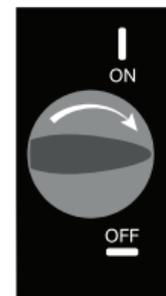


CAUTION: There is a risk of explosion if the batteries are thrown into a fire or replaced by the wrong type of battery. Follow the instructions on how to properly dispose of used batteries.

1.5/ DEVICE SETTINGS

To program the settings on your device, please use the following procedure:

1. Turn off the device.



2. Push the SEND/SEARCH selector into the SEARCH position.



3. Turn on the device while keeping the marking button pressed down until the first setting to appears: the automatic revert-to-transmit time without movement (the number "4" blinks on screen).

4. The time lapse for the device to automatically revert to transmit function is set to 4 minutes by default. To modify the default setting, press on the marking button and then scroll through different options using the ▲ and ▼ buttons (0 = deactivate the automatic revert-to-transmit function / 2 min / 4 min / 8 min) and then make your choice by pressing on the marking button.

5. Press the ▲ button for the second setting: the distance when you can mark a victim.

6. The marking distance is set at 3 meters by default. To modify the default setting, press on the marking button and then scroll through different options using the ▲ and ▼ buttons (3 meters away / 5 meters away) and then make your choice by pressing on the marking button.

7. Press the ▲ button for the third setting: activating the GROUP CHECK function (see paragraph 3.1. GROUP AND FREQUENCY CHECK).

8. The GROUP CHECK function is activated by default. To modify the default setting, press on the marking button and then scroll through different options using the ▲ and ▼ buttons (1 = GROUP CHECK on / 0 = GROUP CHECK off) and then make your choice by pressing on the marking button.

9. Press the ▲ button for the fourth setting: turning on the active interference management function.

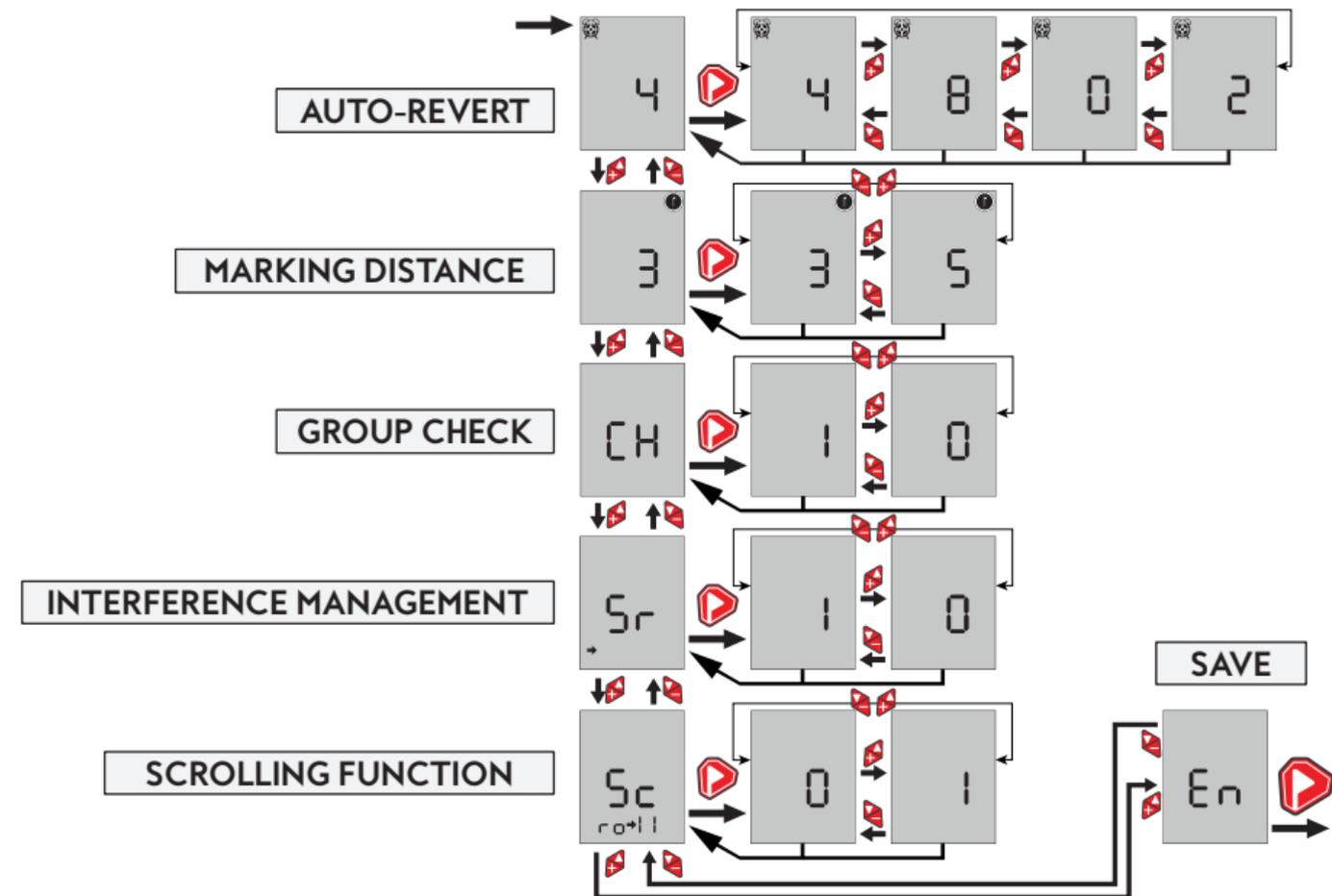
10. The active interference management function is turned on by default. To modify the default setting, press on the marking button and then scroll through different options using the ▲ and ▼ buttons (1 = active interference management on / 0 = active interference management off) and then make your choice by pressing on the marking button.

11. Press the ▲ button for the fifth setting: activating the SCROLLING function.

12. The SCROLLING function is deactivated by default. To modify the default setting, press on the marking button and then scroll through different options using the ▲ and ▼ buttons (1 = SCROLLING mode on / 0 = SCROLLING mode off) and then make your choice by pressing on the marking button.

13. Press the ▲ button to access the end of the menu ("END" blinks on screen).

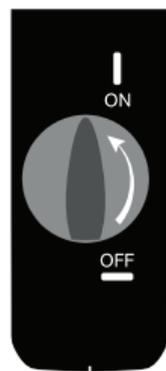
14. Press the marking button to save your changes and exit the menu.



2/ TRANSMIT MODE

2.1/ TURNING ON THE DEVICE

The device is off when the ON/OFF switch is in the "OFF" position. To turn on the device, turn the ON/OFF switch 90°; the switch should point to "ON". The switch is properly locked when it points towards "ON" and you have heard it click into place.



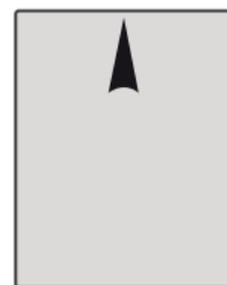
When the device turns on, it automatically checks that all main functions are working properly. Verify that the auto-test runs correctly and pay close attention to any error messages that display when turning on your device.



The device then displays the software version installed and remaining battery life. We recommend that you replace the batteries as soon as it drops below 50%. Holding down the marking button in transmit mode will allow you to check battery life left at any time.



Once the start-up phase is complete, the device prompts the user to conduct a GROUP CHECK (see paragraph 3.1. GROUP AND FREQUENCY TEST) and then automatically switches to transmit mode. A blinking arrow in the upper middle of the screen confirms that your transceiver is in transmit mode.



2.2/ WEARING THE DEVICE

Make sure that the carabiner on the elastic attachment lanyard is connected to the holster's waist belt (2 positions, left or right), position the device in the holster with

the screen facing out, and then buckle the holster closed. The NEO PRO should always be worn over a base layer and as close to your body as possible.



2.3/ TURNING OFF THE DEVICE

To turn off the device, turn the ON/OFF switch 90°. The switch should be parallel to the "OFF" hash mark. The switch is properly locked when it is parallel to the "OFF" hash mark and you have heard it click into place.



3/ SEARCH MODE

In the event of an avalanche, to switch from search to transmit mode, take the device out of your pocket or holster and push the "SEND/SEARCH" selector switch into the "SEARCH" position.



3.1/ GROUP AND FREQUENCY CHECK

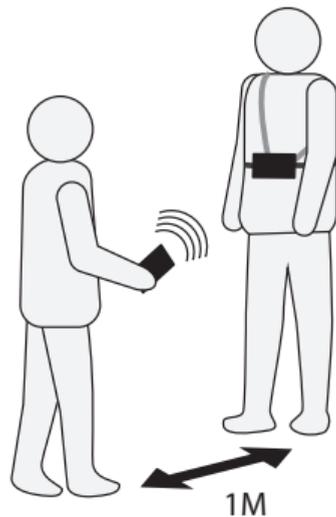
Before starting your outing, check to make sure that everyone's device is in transmit mode and working properly. The group leader should switch their device into GROUP CHECK mode to check the devices of the other

members in the group.

When turning the NEO PRO on in transmit mode, it will prompt you to switch to GROUP CHECK mode. To enter GROUP CHECK mode, push on the marking button when the letters "CH" start blinking on the screen.



You will then be able to test your partners' devices one by one by positioning your device 1m away from each device you check. It is important to remain 1m away from each device for the GROUP CHECK to work properly, otherwise your device will start "double beeping" to indicate that you are too close or too far away.



In GROUP CHECK mode, the NEO PRO starts by analyzing the transmit frequency. If the frequency does not comply with current standards, a "no" message will appear indicating that the device being checked is not functioning properly and should be sent to customer service. If the frequency meets the standard, a distance reading will display on your screen and you may then proceed to checking transmit power.

Please follow these instructions:

- If the distance displayed alternates between 0.5m and 1.5m, and you are positioned 1m from the device being checked, your device will emit a standard search beep indicating that the transmit power meets standard requirements.



- If the distance displayed seems strange, this means that the transmit power might be faulty and that the device should be sent to customer service for further inspection and maintenance.

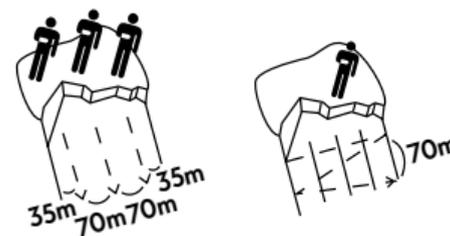


Once the group check is finished. Push on the marking button to switch to transmit mode. Make sure that you also check the group leader's device using one of the other devices already checked.

3.2/ RESCUE

3.2.1/ STEP 1: SIGNAL SEARCH

Take your NEO PRO out of its holster and switch the device into search mode. Start your search for a signal by moving through the avalanche debris using one of the two techniques illustrated in the diagrams below.



It is important to point your transceiver in the direction of the avalanche, parallel to the slope. Listen carefully for the first signs of a signal while also paying attention to any visual clues (poles, skis, and clothing). As soon as you receive a signal, a victim pictogram appears on the screen.

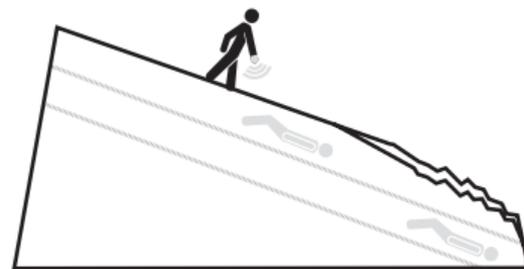
The victim pictograms are located on the bottom left of your screen. The "+" symbol indicates that there are more than three burials.



3.2.2/ STEP 2: COARSE SEARCH

When one of the "victim" pictograms starts to blink, it means that your device has locked onto the signal being transmitted by this victim and you can begin your coarse search. Place the device in the palm of your hand, parallel to the slope, and pointing in the direction indicated on the screen. Pay close attention to the distance and the direction indicated on screen. The victims are ranked by signal strength, from strongest to weakest. If you come close to

another burial during your search, the pictogram corresponding to this victim will also start to blink.



If you are not heading in the right direction, an alarm will sound and a "u-turn" arrow will appear on screen indicating that you should turn around to head in the correct direction.



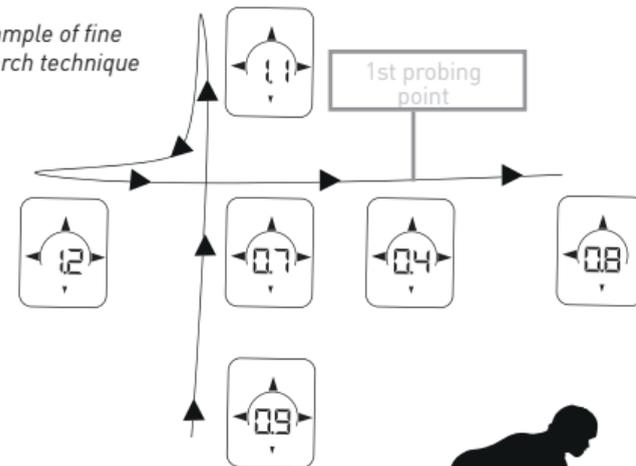
Scrolling function: when using the scrolling function (see paragraph 1.5. DEVICE SETTINGS), you have the option of selecting the victim to search for. Use the "+" and "-" buttons to select the victim you would like to target (the selected victim's pictogram will blink). Caution, this function is reserved for expert users with solid skills, training,

and experience conducting avalanche victim searches and rescues.

3.2.3/ STEP 3: FINE SEARCH

When the screen indicates that you are "3 meters" from a burial, your device will no longer indicate a direction. At this point you need to conduct a fine search using a "cross pattern".

Example of fine search technique



1. Position your device near snow level.



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

Marking function: When you are less than 3 meters from the burial(s), a marking icon blinks in the upper right-hand corner of the screen. Press the marking button to mark the victim. The device will start searching for the next victim without any previously marked burial(s) interfering.



In a multi-burial situation, as soon as you mark a victim, step 1 meter away to prompt the device to more quickly start searching for the next buried victim. When you mark a victim, a flag appears next to that victim's icon.

3.3/ ANALOG SEARCH MODE

In certain situations, switching your device into analog search mode may prove more useful. Once your device is already in search mode you can activate the analog search mode by pressing on the "+" and "-" buttons at the same time (use your thumbs).

In analog search mode, the rescuer must calibrate the sensitivity of the signal during the search using the "+" and "-" buttons.



The left and right arrows blink in turn to help the rescuer calibrate the sensitivity correctly.



Analog search mode is recommended for expert rescuers only (and not novice or inexperienced users). The analog search mode allows the rescuer to listen to the raw sig-

nal transmitted by the burial victims' devices and to more easily evaluate a complex situation.

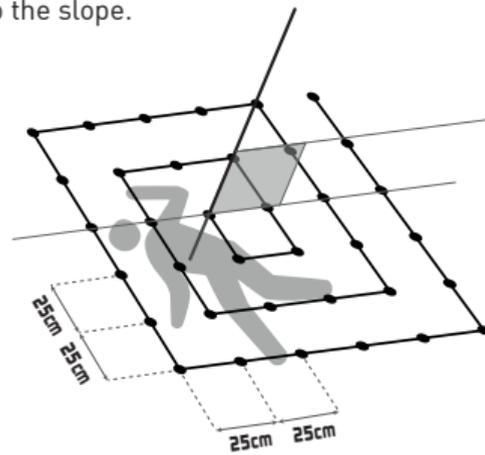
3.4/ AUTOMATIC REVERT-TO-TRANSMIT MODE

In the event of a secondary avalanche, the automatic revert-to-transmit mode allows the device to automatically switch back to transmitting a signal. The NEO PRO is equipped with a movement sensor that allows it to detect if the rescuer is immobilized and buried. The time lapse to automatically revert to transmit mode can be set to 2, 4, or 8 minutes through the device settings menu, or simply deactivated altogether (see paragraph 1.5. DEVICE SETTINGS). The default setting is 4 minutes for the device to automatically revert to transmit mode. If the device detects no movement during a 4-minute period, it will beep and ask the rescuer to confirm that they would like to continue in search mode. Press on the marking button to confirm that you are not buried. If no action on your part is detected, the device automatically reverts to transmit mode.



4/ PROBING - SHOVELING

Before you start probing, make sure that you place your device in the holster to keep it out of the cold and well-protected from impacts. As soon as you have defined the zone where the victim is likely buried, it is quicker to start probing. Search for the victim by probing in concentric spirals progressively away from the minimum distance point detected by your transceiver. Probe perpendicular to the slope.



Standby mode: when probing-shoveling, we recommend that you switch your device into standby mode. This mode corresponds to a neutral function where the device is

neither in search nor transmit mode, but remains on to provide the rescuer with the possibility of reverting automatically to transmit mode if needed. Standby mode can be turned on while in search mode by pushing the SEND/SEARCH selector into the SEND position while holding down the marking button. Once in standby mode, it is possible to place your device back into the holster without running the risk of switching back into transmit mode and disrupting the search in progress. To exit standby mode, push the SEND/SEARCH selector into the SEARCH position.

Statistically, shoveling takes at least as much time as the transceiver search. It is important to take an organized approach to shoveling.

The V-shaped conveyor technique is the most efficient and effective way to dig. As soon you uncover the person, it is important to turn off their transceiver as quickly as possible.



5/ INTERFERENCE

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

These sources are:

- Carried: smart phones, radios, cameras, heart rate monitors, GPS, etc.
- Permanent: relay towers, power lines / electricity generating equipment, ski lifts.

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.

5.1/ RECOMMENDATIONS IN SEARCH MODE

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

5.2/ RECOMMENDATIONS IN TRANSMIT MODE

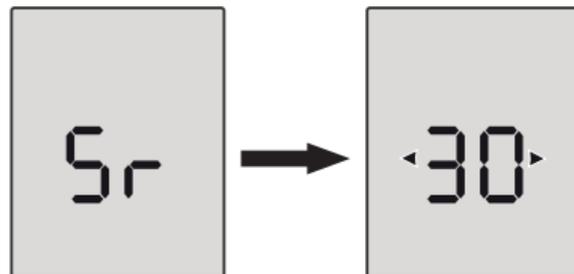
Move all metallic and electronic devices at least 20cm

away from your transceiver.

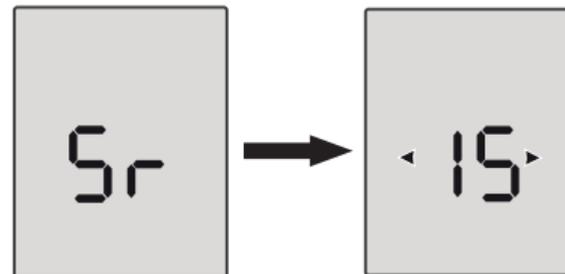
5.3/ ACTIVE INTERFERENCE MANAGEMENT

With the huge increase in the use of wearable electronic devices, the potential has increased for electromagnetic interference with the search signal. These incidences have primarily been observed near ski areas. Active interference management is a default setting on the NEO PRO, allowing your device to detect interference zones and, if necessary, reduce the search strip width. The user can then adapt their search strategy accordingly.

With no interference, the theoretical search strip width is 70m. If there is any interference, the device will reduce the search strip width to 30m and display an "Sr30" message.



If the interference increases and reaches a second threshold, the device will reduce the search strip width to 15m and display an "Sr15" message.



In the event of interference, it is important to adapt your search technique by narrowing your search strips to 30m or 15m based on the level of interference.

6/ WARRANTY - MAINTENANCE - LIFECYCLE

Your device (without batteries) has a 2-year warranty starting from the purchase date. All ARVA transceivers have a unique identification number.

Registering your device on www.arva-equipement.com allows us to link your contact information to your device to for optimal tracking and to add another 3 years to your

warranty.

Any damage caused by improper use is not covered by the warranty. The warranty is void if the device was opened by the user or an unqualified third party. For all repairs or customer service requests, please provide the point of sale (on or offline retailer) with proof of purchase as well as a detailed description of the problem. We recommend sending us your device once every 3 years for servicing and maintenance (and once every 2 years for professionals).

7. DECLARATIONS OF CONFORMITY



7.1. DECLARATION OF CONFORMITY - EUROPE

FR	FR - Par la présente, NIC-IMPEX SAS déclare que l'équipement radioélectrique ARVA NEO 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	EN - NIC-IMPEX SAS hereby declares that the ARVA NEO 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	DE - Hiermit erklärt NIC-IMPEX SAS, dass das Funkgerät ARVA NEO 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	IT - NIC-IMPEX SAS dichiara con la presente che il dispositivo elettronico radio ARVA NEO 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	ES - NIC-IMPEX SAS declara que el dispositivo radioeléctrico ARVA NEO 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.
SU	FI - NIC-IMPEX SAS vakuuttaa, että ARVA NEO PRO -radioelektronikkalaitte on direktiivin RED 2014/53/EU mukainen. Vaatimustenmukaisuusvakuutus-teksti kokonaisuudessaan löytyy verkkosivustostamme: www.arva-equipment.com , kohdasta lataukset.
NO	NO - NIC-IMPEX SAS erklærer herved at det radioelektroniske apparatet ARVA NEO 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 nedlastingssiden.
SV	SV - NIC-IMPEX SAS förklarar härmed att ARVA NEO 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	JA - NIC-IMPEX SAS は、ARVA NEO 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-ARVANE0

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This device complies with Industry Canada 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.

7.3. DECLARATION OF CONFORMITY - USA

USA - FCC requirements - FCC ID : O9BARVANEOPRO

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.
- 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 complies with the 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.

7.4. DECLARATION OF CONFORMITY - USA & CANADA

This device complies with ISSED and FCC radiation exposure limits set forth for general population. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

Le présent appareil est conforme aux niveaux limites d'exigences d'exposition RF aux personnes définies par ISDE et FCC. L'appareil ne doit pas être installé à proximité ou être utilisé en conjonction avec une autre antenne ou un autre émetteur.
