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NEC Corporation of America

NeoScan 45

User Guide

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NeoScan 45 User Guide
Revision Number 2015.01.30

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Introduction

Scope and Purpose

NeoScan 45 is a compact mobile biometric collection device (BCD) with a built-in biometric capture attachment (BCA). Its primary purpose is to capture fingerprints from subjects, but it may also be used to read credentials from magnetic stripes found on drivers' licenses, identification cards, credit cards, etc. After capturing a subject's data, NeoScan 45 can readily exchange this data with compatible mobile smart devices and applications.

The NeoScan 45 device is depicted in the following illustration:

Figure 1: NeoScan 45 Handheld Device

NeoScan 45 was designed to collect biometric data using an FBI IQS certified FAP Level 45 fingerprint sensor and an ARM processor. Its unique combination of features enables the device to capture forensic quality fingerprints, including a real-time image quality check per NIST standards. Detailed specifications for the NeoScan 45 are included in the Appendix section.

This user guide describes how to capture fingerprints and magnetic stripe data using NeoScan 45. It also describes basic startup and shutdown procedures and provides instructions for wireless networking.

Functionality and the User Interface

NeoScan 45 allows you to capture rolled prints, one- and two-finger slaps, and encoded data from magnetic stripes found on credential cards, such as drivers' licenses, identification cards, credit cards, etc. It can connect to wireless networks, both Bluetooth and Wi-Fi, to exchange captured data with other compatible devices, including smart phones and tablets.

The user interface provides clearly labeled buttons and LEDs that indicate current statuses (such as battery life and wireless connectivity) and prompt user actions (such as which finger should be scanned next). The following illustration depicts the user interface.

Figure 2: NeoScan 45 User Interface

The following table describes the features of the NeoScan 45 user interface:

Feature	Description
Power Button	Powers the device on and off, or suspends the device (sleep mode).
Add New Button	Begins fingerprint capture for a new subject. Also used to place the device in Bluetooth discovery mode when used in combination with the Scan button.
Flat/Roll Type Indicators	Indicate the type of fingerprints to be captured.
Finger Capture Indicators	Indicate which finger(s) to capture.
Scan Button	Captures a specific fingerprint(s) or resets the capture sequence. Also used to place the device in Bluetooth discovery mode when used in combination with the Add New button.
Skip Button	Skips to the next finger(s) to capture.
Magstripe Reader and Indicator	Allows you to swipe credential cards (driver's licenses, identification cards, credit cards, etc.) and indicates whether magnetic stripe data has been successfully read.
Battery Power Indicator	Indicates the level of battery power available.

Feature	Description
Wireless Networking Indicator	Indicates the status of wireless networking.

Flexible Workflow

The overall workflow for NeoScan 45 is depicted in the following diagram:
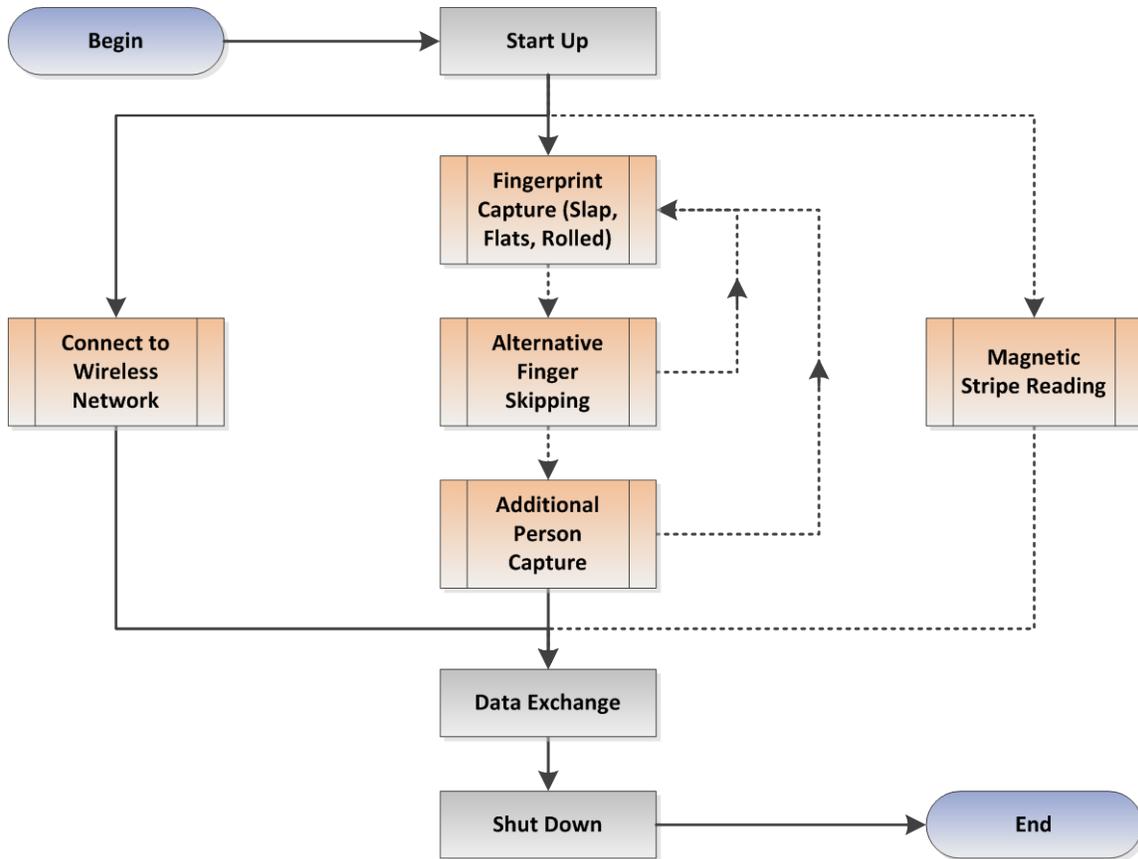
Figure 3: NeoScan 45 Overall Operational Workflow

Please note that the NeoScan 45 workflow is flexible, so certain operations may be performed out of sequence while others must be performed in a particular order. With NeoScan 45, you may capture a subject's fingerprints in a standalone mode for later upload; however, if you are connected to a smart device via wireless network, the data you capture will be exchanged automatically in real time. You can capture a subject's fingerprints one at a time for discrete processing or in groups for batch processing. Magnetic stripe reading is optional.

C H A P T E R   2

Using NeoScan 45

Overview

NeoScan 45 allows you to capture a subject's fingerprints and optionally swipe and read encoded data from magnetic stripes on credential cards, such as drivers' licenses, identification cards, credit cards, etc. NeoScan 45 can connect to smart phones or tablets via wireless network using either Bluetooth or Wi-Fi, in order to exchange data with compatible mobile applications installed on those smart devices.

The following subsections describe how to use NeoScan 45.

Starting Up

To start up NeoScan 45:

♦   Press and hold the power button for two seconds.

NeoScan 45 will begin the following startup sequence, which should take less than 45 seconds:

♦   The battery power indicator will illuminate fully **blue** (full power), partially **blue** (medium power), or **red** (low power).

♦   The wireless networking indicator will illuminate either **blue** (Bluetooth mode enabled) or **red** (Wi-Fi mode enabled).

♦   The flat or roll type indicator will be illuminated in **red** according to the programmed capture profile.

♦   Specific finger capture indicators will be illuminated in **red**, and the first finger(s) to be captured will be **blinking red** to indicate the first capture.

When the startup sequence is complete, the device will be ready for fingerprint capture operations.

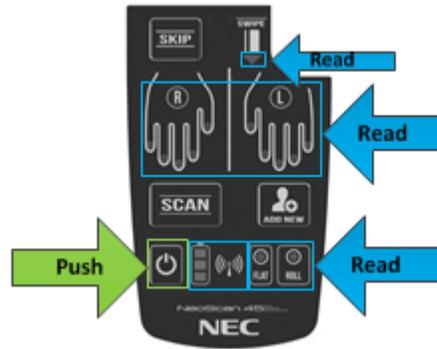The following figure illustrates the startup sequence:

Figure 4: Starting Up NeoScan 45

Capturing Fingerprints

For fingerprint capture, NeoScan 45 supports different types and different modes or exceptions.

Primary Capture

To capture fingerprints with NeoScan 45:

1. Read the indicators to determine what type and which finger(s) to capture:

   ◆ Fingerprint Type (Flat or Roll) – The default type indicator will be illuminated in **red**.

   ◆ Fingers (1–10) – Finger capture indicators will be illuminated in **red** and the initial fingers to be captured will be **blinking red**.

2. Have the subject place the appropriate finger on the sensor, ensuring that their finger is also touching the sensor bezel.

3. Press [SCAN] to activate scanning mode.

   Fingers to be captured will change to **blinking orange**.

   ◆ For flat (slap) fingerprint capture, finger(s) must remain on the sensor until the print(s) have been validated against a preconfigured quality threshold.

   ◆ For rolled fingerprint capture, begin by placing the finger off center as usual, then roll the finger slightly in the wrong direction to indicate you are ready to begin. When the LED starts **blinking faster** in **orange**, roll the finger completely in the proper direction.

4. When a fingerprint of sufficient quality has been captured, the LED indicator will be illuminated in solid **green**.

5. To capture additional fingers according to the programmed capture profile:

   a. The remaining fingers to be captured will be illuminated in **blinking red**.

   b. Repeat steps 2, 3, and 4.

   c. Repeat steps 5a and 5b until all fingers have been captured according to the programmed capture profile.

The following figure illustrates the buttons and LED indicators involved in primary capture:
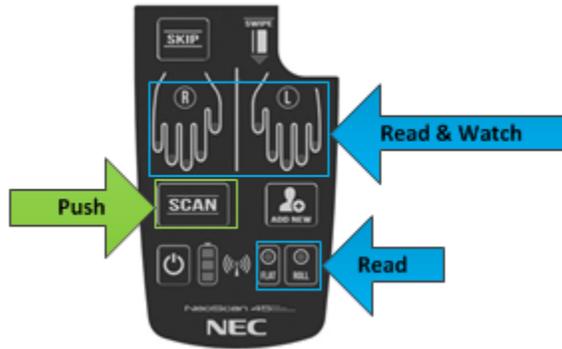

Figure 5: Capturing Fingerprints – Primary Capture

NeoScan 45 can capture the following fingerprints:

Finger Position(s)	Type	NIST Code
Right Thumb	Flat or Rolled	1
Right Index Finger	Flat or Rolled	2
Right Middle Finger	Flat or Rolled	3
Right Ring Finger	Flat or Rolled	4
Right Little Finger	Flat or Rolled	5
Left Thumb	Flat or Rolled	6
Left Index Finger	Flat or Rolled	7
Left Middle Finger	Flat or Rolled	8
Left Ring Finger	Flat or Rolled	9
Left Little Finger	Flat or Rolled	10
Left & Right Thumbs	Slaps	15
Right Index/Middle Fingers	Slaps	40
Right Middle/Ring Fingers	Slaps	41
Right Ring/Little	Slaps	42
Left Index/Middle Fingers	Slaps	43
Left Middle/Ring Fingers	Slaps	44
Left Ring/Little	Slaps	45

NOTE: If there is an operator error while capturing fingerprints in the middle of a programmed capture profile sequence, press the **Scan** button to reset and restart the sequence from the first finger.

Alternative Capture

Sometimes it may be necessary to capture a different finger because the subject's finger has been amputated, bandaged, or scarred. This is known as a fingerprint capture exception. NeoScan 45 allows the selection of alternative fingers as needed to complete a capture sequence.

To capture an alternative finger:

1. Begin capturing fingerprints as described in Primary Capture on page 5.

2. When you encounter a capture exception, press **SKIP** .

    NeoScan will automatically advance to the next finger on the same hand, allowing you to continue capture. The alternative finger to be captured will be illuminated in **blinking red**.

3. Have the subject place the alternative finger on the sensor, as always ensuring that their finger is also touching the sensor bezel.

4. Press **SCAN** to activate scanning mode and continue capturing as usual.

The following figure illustrates the buttons and LED indicators involved in alternative capture:

Figure 6: Capturing Fingerprints – Alternative Capture

The following table lists alternative finger combinations when using the **Skip** button:

Original Finger Position(s)	Next Finger Position after Skip
Right Thumb	Right Index Finger
Right Index Finger	Right Middle Finger
Right Middle Finger	Right Ring Finger
Right Ring Finger	Right Little Finger
Right Little Finger	Right Thumb
Left Thumb	Left Index Finger
Left Index Finger	Left Middle Finger
Left Middle Finger	Left Ring Finger

Left Ring Finger	Left Little Finger
Left Little Finger	Left Thumb
Left & Right Thumbs	Not Available
Right Index/Middle Fingers	Right Middle/Ring Fingers
Right Middle/Ring Fingers	Right Ring/Little Fingers
Right Ring/Little Fingers	Right Index/Middle Fingers
Left Index/Middle Fingers	Left Middle/Ring Fingers
Left Middle/Ring Fingers	Left Ring/Little Fingers
Left Ring/Little Fingers	Left Index/Middle Fingers

NOTE: It may not be possible to use the **Skip** button for some fingerprint capture profiles where all the fingerprints are captured, for example, all ten flat fingers, ten rolled fingers, or five two-finger slaps, as well as where the prior fingers were previously captured.

Additional Subjects

NeoScan 45 has the ability to capture fingerprints from multiple persons using the default or programmed capture profile.

To capture fingerprints for an additional subject:

1. Capture the first subject's fingerprints as described in Primary Capture on page 5.

IMPORTANT! Be sure to complete the programmed capture sequence for the first subject before proceeding. Using the Add New button before completing an entire capture sequence may result in an incomplete transaction and will falsely increment in the transaction case number.

2. When you are ready to capture another subject's prints, press the **Add New** button [ADD NEW].

   NeoScan will automatically initiate a new capture transaction, and the fingers to be captured will be illuminated in **red**.

3. Capture the new subject's fingerprints as described in Primary Capture on page 5.

IMPORTANT! Be sure to complete the programmed capture sequence for the current subject before proceeding. Using the Add New button before completing an entire capture sequence may result in an incomplete transaction and will falsely increment in the transaction case number. Be sure to only press the Add New button a single time.

4. For additional subjects, repeat steps 1–3.

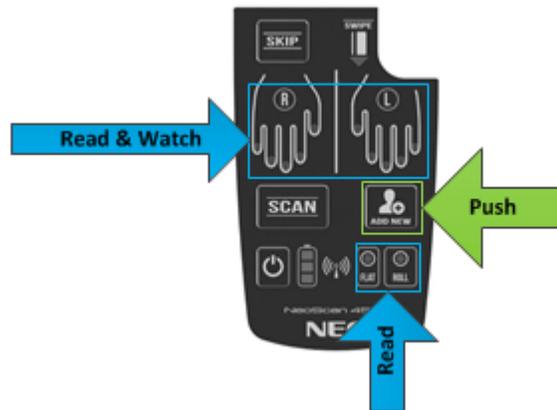The following figure illustrates the buttons and LED indicators involved in capturing additional subjects:

Figure 7: Capturing Fingerprints – Additional Subjects

Capturing Magstripe Data

Although you can use NeoScan 45 to read and process magnetic stripe data from credential cards (driver's licenses, identification cards, credit cards, etc.), you can only use this feature when you are also capturing the subject's fingerprints.

To capture magstripe data using NeoScan 45:

1. Swipe a credential card with the magnetic stripe upward through the magstripe reader.

2. When the data is successfully read, the magstripe indicator will change from **orange** to **green**.

3. If the indicator does not change, repeat the first step.

NOTE: If successive attempts fail, the magnetic stripe may be unreadable.

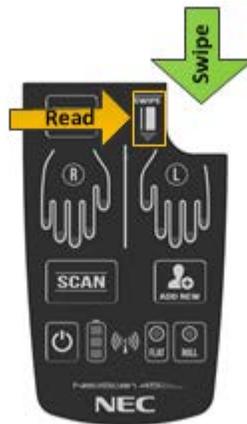The following figure illustrates the LED indicators involved in capturing magstripe data:

Figure 8: Capturing Magstripe Data

Wireless Connectivity

To connect NeoScan 45 to a smart phone or tablet via Wireless network:

1. Go to the smart phone or tablet's settings and follow the applicable steps to connect via either Bluetooth or Wi-Fi.

   ◆ NeoScan 45 networking is determined by the software configuration.

   ◆ When Bluetooth is enabled, the wireless networking indicator (((°))) will be illuminated in **blinking blue**.

   ◆ When Wi-Fi is enabled, the wireless networking indicator will be illuminated in **red**.

2. Select the NeoScan 45 device by its SSID Name.

3. Enter the particular Passcode for the NeoScan 45 device.

   The smart device will indicate success for either Bluetooth or Wi-Fi. For Bluetooth, the NeoScan wireless networking indicator will be illuminated in **solid blue**.

The following figure illustrates the LED indicators involved in wireless networking:

Figure 9: Setting Up Wireless Networking

Discovery Mode

IMPORTANT! When you place NeoScan 45 into discovery mode, the connection to the existing device will be lost along with all data currently in transmission.

To pair NeoScan 45 with a new device:

1. Press and hold both **SCAN** and **ADD NEW** for 8 seconds.

   NeoScan 45 will disconnect from the previously connected device and become available for reconnection.

2. Follow the instructions in "Wireless Connectivity" on page 10 to establish a connection to a new device.

The following figure illustrates the new device discovery and pairing sequence:
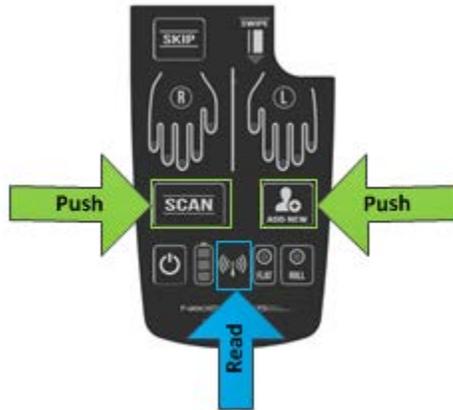
Figure 10: Pairing NeoScan 45 with a New Device

Sleep Mode

IMPORTANT! When you put NeoScan 45 into sleep mode, all operations will be suspended and existing data will be stored.

To put NeoScan 45 into sleep mode:

◆ Press and hold the power button [⏻] for 1 second.

NeoScan 45 will begin the following suspension sequence, which should take less than 5 seconds:

◆ All indicators will turn off.

◆ The battery power indicator [▯] will illuminate in **blinking blue** (medium power).

The following figure illustrates the sleep mode activation sequence:

Figure 11: Placing NeoScan 45 into Sleep Mode

To take NeoScan 45 out of sleep mode:

- Press and hold the power button ⏻ for 1 second.
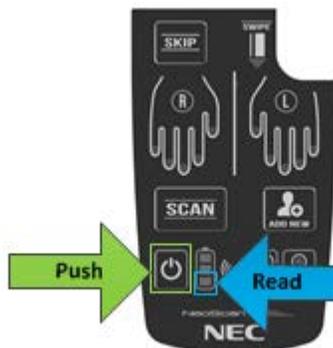
  NeoScan 45 will begin the following wake-up sequence, which should take less than 10 seconds:

  - The battery power indicator 🔋 will illuminate **fully blue** (full power), **partially blue** (medium power), or **red** (low power).

  - The wireless networking indicator 📶 will illuminate either **blue** (Bluetooth mode enabled) or **red** (Wi-Fi mode enabled).

  - The flat or roll type indicator 🔘🔘 will be illuminated in **red** according to the programmed capture profile.

  - Specific finger capture indicators ✋ will be illuminated in **red**, and the first finger(s) to be captured will be **blinking red** to indicate the first capture.

  When the wake-up sequence is complete, the device will be ready for fingerprint capture operations.

The following figure illustrates the wake-up sequence:
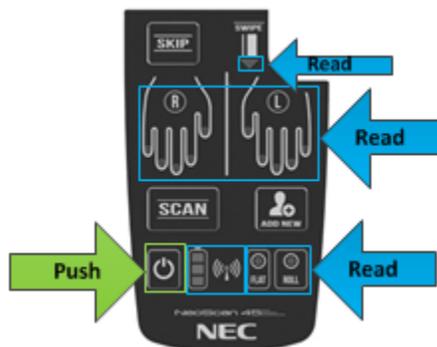
Figure 12: Taking NeoScan 45 out of Sleep Mode

Shutting Down

IMPORTANT! When you shut down NeoScan 45, all captured data stored within the device will be lost.

To shut down NeoScan 45:

- Press and hold the power button ⏻ for three seconds.

  NeoScan 45 will begin the following shutdown sequence, which should take less than 15 seconds:

  - All indicators will turn off.

  - Unless the device is plugged in for charging, there should be no illuminated indicators as soon as the device powers off.

  All captured data stored within the device will be erased.

The following figure illustrates the shutdown sequence:

Figure 13: Shutting Down NeoScan 45

A p p e n d i x

Technical Specifications

The appendix contains the system specifications for NeoScan 45:

Specification	Details
Overall Configuration	Wireless Handheld Biometric Capture Attachment
Central Processing Unit	ARM® Cortex®-A5 536 MHz
Operating System	Linux V4.2
Memory	768 MB
Wireless Interface	Wireless LAN 802.11b/g/n
	Bluetooth Class 1 Version 2.1 + EDR
Wired Interface	Micro USB 2.0 (for power and configuration control)
OS Compatibility	Android V4 or Newer Apple iOS V7 or Newer (Made for iPhone and iPad) Microsoft Windows 7, 8 and Phone 8
Power Requirements	6.0 V_{DC} and 2.4 A (via Micro USB)
Power Consumption	Sleep < 12 ma Idle 140 ma
	Full Scanning 600 ma (at 5.0 Volts)
Battery Capacity	2040 mA-hr
Battery Recharging Time	7.5 Hours (Nominal Time with Standard Micro USB Charger)
Operating Temperature	32° F to 105° F (0° C to 40° C)
Storage Temperature	-10° F to 140° F (-23° C to 60° C)
Humidity	10~95% RH (Non-condensing)
RoHS Compliant	RoHS Directive 2002/95/EC
Enclosure	IP 41
API Interface	Capture Single Finger Direct - Multi-device / Multi- thread support
	HTML 5

Specification	Details
User Interface	OS Membrane: Status LEDs: Battery, Wireless, Capture Type & Finger Digit, Read Command Touch Buttons: Power, Scan, Add New Person & Skip
BCA Physical Size	6.9" (L) x 3.3"(W) x 0.7" (H) [175 mm (L) x 83 mm (W) x 18 mm (H)]
BCA Physical Mass	9 oz. (254 g)
Fingerprint Sensor	Integrated Biometrics Sherlock Sensor
Sensor Resolution	500 ppi
Sensor Image Platen Area	1.6" (W) x 1.5" (H) [41.0 mm (W) x 38.4 mm (H)]
Sensor Image Size	500 (W) x 400 (H) pixels
Sensor Speed	12 FPS
Image Quality	FBI Appendix F IQS Certified FAP Level 45

General Information

NeoScan 45 User Guide (PDF), go to www.necam.com/support/biometrics/neoscan

Disposal and Recycling Information

You must dispose of NeoScan 45 properly according to local laws and regulations. Because NeoScan 45 contains electronic components and a battery, it must be disposed of separately from household waste.

Battery Replacement

The lithium-ion battery in NeoScan 45 should only be replaced by NEC, and must be recycled or disposed of separately from other waste.

Operational Precautions

Your NeoScan 45 device is a high quality piece of equipment. Before operating, read all instructions and cautionary markings on the product. Failure to follow the directions below could result in serious bodily injury and/or property damage due to battery liquid leakage, fire, or rupture.

- DO NOT use or store the device in a place where it will be exposed to high temperatures, such as near an open flame or heat-emitting equipment. It may cause an explosion or fire.

- DO NOT drop the device or subject it to severe shock. When not using, place the device on a solid, flat surface to avoid possible damage due to instability.

- DO NOT use unauthorized accessories or smart devices (phones, tablets, and computers) with the device.

- DO NOT disassemble the device or its accessories. If service or repair is required, return the device to an authorized NEC service center. Disassembly may result in electric shock or fire.

- ◆ DO NOT place the device inside a microwave oven or pressurized container. It may cause an explosion, product failure, or fire.

- ◆ DO NOT short the battery terminals. Prevent conductive objects such as metal and pencil lead from touching or becoming caught in the terminals. It may cause a fire or product failure.

- ◆ To avoid the risk of electric shock, do not use this device during a lightning storm.

- ◆ The device is not waterproof. Submersion or direct exposure to water or other liquids, especially for an extended duration, will cause irreparable damage and void the warranty.

- ◆ Stop charging the device after the specified time frame has elapsed, even if the device does not finish recharging. Excessive charging may cause leakage, heat generation, explosion, or fire.

- ◆ If the device is damaged and internal parts are exposed, do not touch the exposed parts. You may be electrocuted or injured. Call customer service for assistance.

- ◆ DO NOT place the device near small children. The internal parts from a broken or dismantled device may be swallowed accidentally, resulting in injury or suffocation.

- ◆ Stop using this device if it starts to smoke, emit an odor, make abnormal sounds, or generate heat. If any abnormality occurs while recharging, remove the USB/wall charger from the electrical outlet, check that the device has cooled down, turn off the power, and call customer service for assistance.

- ◆ If the device has been damaged (for example, due to impact or exposure to fluids), discontinue use and call customer service.

- ◆ DO NOT attempt to repair the device by yourself. It is potentially hazardous and will void the warranty.

- ◆ To avoid damage to the device's sensor, DO NOT apply excessive pressure with your finger or any other object. Avoid scratches, impact injuries, and other damage by storing it safely when not in use.

NEC Limited Warranty Summary

NEC warrants the included hardware product and accessories against defects in materials and workmanship under a limited warranty. NEC does not warrant against normal wear and tear, nor damage caused by accident or abuse. To obtain service, call NEC within your country or region. Available service options depend on the country in which service is requested. Repair or support service may be restricted to the original country of sale. Call charges and international shipping charges may apply. Full terms and detailed information about obtaining service are available at www.necam.com/support. You may read and email a copy of the warranty to yourself during activation. Warranty benefits are in addition to rights provided under local consumer laws.

Frequently Asked Questions about the Limited Warranty

1. **What products may be covered by this definition of warranty?**

   The following products (the "Products" or the "Product") purchased through an NEC Corporation of America (NEC) authorized reseller (the "Reseller") in the United States, may be covered by this warranty:

   - ◆ NEC NeoScan 45

   - ◆ Included Accessories

2. **What does this warranty cover?**

   NEC warrants to the original end-user product purchaser ("You") that the Products will reasonably conform to the applicable published specifications in effect at the time of shipment from NEC to the Dealer, and that the Products will be free from defects in materials or workmanship that result in product failure under normal use during the warranty period described in item #4.

3. **When does your warranty begin?**

   The warranty period will begin on the date when NEC ships and You receive the product. Dated proof of delivery is necessary to accompany any product returned for warranty service consideration. Alternatively, valid proof of purchase must identify the point of purchase, date of purchase, product model or trade name, and Electronic Serial Number.

4. **How long does the coverage last?**

   The basic warranty period for the product is: NINETY (90) DAYS

   The optional extended warranty period for the product is: NINE (9) TO TWELVE (12) MONTHS

   Any products repaired or replaced under the terms of this warranty are covered under the warranty for the remainder of the basic warranty period or optional extended warranty from the date of service return shipping.

5. **What will the manufacturer do if the product becomes defective in materials or workmanship during the warranty period?**

   If any product covered under this warranty becomes defective in materials or workmanship resulting in product failure during the applicable warranty period, NEC will, at its option, either repair the defective product without charge for parts and labor, or provide a replacement in exchange for the defective Product.

6. **What is not covered by this warranty?**

   a. THIS WARRANTY DOES NOT EXTEND TO:

      i. Product damaged from external causes such as fire, flooding, heat, dirt, sand, static electricity, weather conditions, battery leakage, blown fuse, theft, or improper usage of any electrical source, or;

      ii. Products which have been subjected to misuse, accident, physical damage, improper installation, abnormal operation or handling, neglect, inundation, improper installation or repair, or improper storage, or;

      iii. Damage from exposure to moisture, humidity, excessive temperatures, or extreme environmental conditions, or;

      iv. Damage caused by computer viruses, or;

      v. Products which have been damaged due to repairs, alterations, or modifications by anyone other than an AUTHORIZED service warranty component-level representative of NEC, or;

      vi. Defects caused by components, parts, or accessories not compatible with the warranted Product, or;

      vii. Products whose warranty/quality labels, product serial number plates, or electronic serial numbers have been removed, altered, or rendered illegible, or;

      viii. Accessory items such cases, etc., or;

      ix. Products shipped to NEC for repair from outside the United States, or;

      x. Defects in appearance, cosmetic, decorative, or structural items, including framing and non-operative parts.

b. ANY OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED TO THE DURATION OF THIS WARRANTY. OTHERWISE, THE FOREGOING LIMITED WARRANTY IS YOUR SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

c. NEC'S TOTAL LIABILITY FOR DAMAGES FOR ANY CAUSE RELATED TO OR ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT, WHETHER IN CONTRACT, NEGLIGENCE, STRICT TORT, OR BASED ON ANY OTHER LEGAL THEORY, SHALL NOT EXCEED THE ORIGINAL PRICE PAID FOR THE PRODUCT LESS A REASONABLE AMOUNT FOR USAGE.

d. IN NO CASE SHALL NEC BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES BASED UPON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL THEORY. SUCH DAMAGES INCLUDE, BUT ARE NOT LIMITED TO, LOSS OF PROFITS, LOSS OF SAVINGS OR REVENUES, INABILITY TO USE THE PRODUCTS OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF ANY SUBSTITUTE EQUIPMENT, FACILITIES OR SERVICES, CLAIMS BY THIRD PARTIES OTHER THAN YOU, AND INJURY TO PROPERTY. THESE LIMITATIONS DO NOT APPLY TO CLAIMS FOR PERSONAL INJURY. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

e. THE REMEDIES CONTAINED HEREIN ARE YOUR SOLE AND EXCLUSIVE REMEDIES FOR BREACH OF WARRANTY.

7. **How do you get warranty service?**

If your product requires warranty service, it must be returned to an NEC Distribution Center with shipping paid by you, along with a description of the Product malfunction or difficulty. You are required to substantiate warranty status with a dated proof of purchase (as explained in item #3), with returned mobile hand-held device.

You may contact NEC by calling (800) 637-5917 to obtain the address of the nearest NEC Distribution Center. NEC assumes no risk for damage or loss in transit. If, in NEC's sole opinion, the Product failure is not covered under this warranty, or proof of purchase does not meet the terms of this warranty, you will be notified and your authorization will be requested for any further repair activity. Products repaired under warranty will be returned to you, transportation prepaid. In all other cases, you will be required to pay return shipping costs.

8. **How does state law apply to this warranty?**

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

9. **Is this warranty the entire agreement?**

Unless modified in writing and signed by both you and NEC, this warranty is understood to be the complete and exclusive agreement.

FCC Compliance Statement

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.

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.

Canadian Compliance Statement

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

EU Compliance Statement

NEC hereby declares that this wireless device is in compliance with the essential requirements and other relevant provisions of the R&TTE and EMF Directive. A copy of the EU Declaration of Conformity is available upon request.

G l o s s a r y

Term	Definition
BCA	Biometric Capture Attachment
BMP	Bitmap
FAP	Fingerprint Acquisition Profile
FBI	Federal Bureau of Investigation
FPS	Frames per Second
IQS	Image Quality Standards
LED	Light Emitting Diode
NIST	National Institute of Standards & Technology
OS	Operating System
PNG	Portable Network Graphic
ppi	Pixels per Inch
SSID	Service Set Identification
USB	Universal Serial Bus