

Setup Guide

Read this to connect and configure the product

Speed Wi-Fi HOME 5G L12

Technically Certified

Preface

Thank you for buying the Speed Wi-Fi HOME 5G L12 (simply called the "product" from here on). Before using the product, be sure to read the "Setup Guide" (this manual) to ensure correct use.

List of Packaged Items

Before you start using the product, make sure that you have all the following items packaged with the product.

- Speed Wi-Fi HOME 5G L12 main unit
- Speed Wi-Fi HOME 5G L12 AC adapter



つなぎかたガイド (保証書)*Setup Guide*(with warranty) (Japanese)

- *Keep the packaged items, including the warranty, in a safe place.
- *Ethernet cable is not included. Use one that is commercially available.
- *The illustrations of the product used in this manual are simulated images. They may differ from the actual product.

About the Instruction Manual

"Setup Guide" (this manual): Explains information you need before using the product for the first time and just the main functions, operations, and settings of the product.

- *"取扱説明書 詳細版 (Full Instruction Manual)" (Japanese): Explains various functions, operations, and settings in detail.
- *In this manual, the "Setup Guide" (this manual) and "取扱説明書 詳細版 (Full Instruction Manual)" (Japanese) are collectively referred to as the "Instruction Manual".
- *The "Instruction Manual" (this manual) can be downloaded from the WIMAX Support Information website.
- *https://www.necplatforms.co.jp/support/wimax/v12/index.html (in Japanese only)
- *Can be downloaded from the au website.
- *https://www.au.com/support/service/mobile/guide/manual/ (in Japanese only)

About the Notations in This Manual

Notes on Illustrations / Screenshots

- *In this manual, the "au Nano IC Card 04 LE" (for au contracts) and the "au Nano IC Card 04 LE U" (for contracts with WIMAX operators other than au) are referred to as a "SIM card".
- *In this manual, both au and WIMAX operators other than au are referred to as "telecommunication carriers", unless specifically mentioned otherwise.
- *The explanations, such as screenshots and methods of operation in this manual, are those when a SIM card is inserted, unless specifically mentioned otherwise.
- *The illustrations and screenshots in this manual are simplified and may look different from the actual illustrations and screens. Also, a part of a screen may be omitted.
- *In this manual, the "Speed Wi-Fi HOME 5G L12 AC adapter" is referred to as an "AC adapter".
- *The illustrations and screenshots in this manual are simplified and may look different from the actual illustrations and screens. Also, a part of a screen may be omitted.
- *Company names and product names referred to in this manual are trademarks or registered trademarks of their respective companies. TM and the ® mark may be omitted in this manual.

Before using the product

About Communication Modes

The product can transmit data to a wireless base station by using the 5G system, LTE system, and WIMAX 2+ system.

You can select from the following communication modes to use this.

- * For an explanation of how to select and set the communication modes, see "Button Operations" in this manual or "4-2 通信モードを切り替え" (Switching Communication Modes)" in "取扱説明書 詳細版 (Full Instruction Manual)" (Japanese).

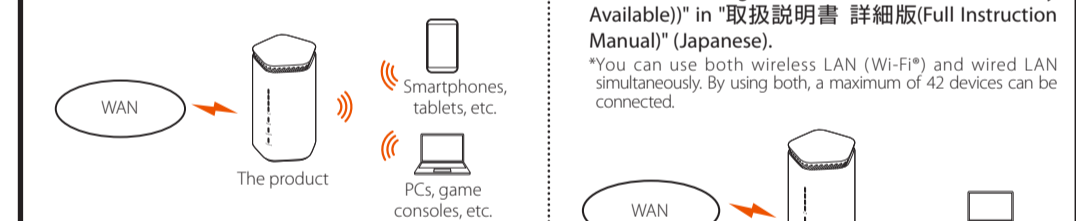
Standard Mode	Connect via the 5G, LTE, or WIMAX 2+ network.
Plus Area Mode	Connect via the 5G, LTE, or WIMAX 2+ network. Communication is possible in a wider area than in "Standard Mode".

*The default setting is "Standard Mode". Note that an additional charge, depending on your billing plan, may be incurred when you switch to using "Plus Area Mode".

Possible Uses for the Speed Wi-Fi HOME 5G L12

Connect via Wireless LAN (Wi-Fi)*

This manual explains how to connect the product to a smartphone or computer using wireless LAN (Wi-Fi). A maximum of 40 devices can be connected.



*Depending on the ambient reception environment, the number of connected devices may not reach the limit.

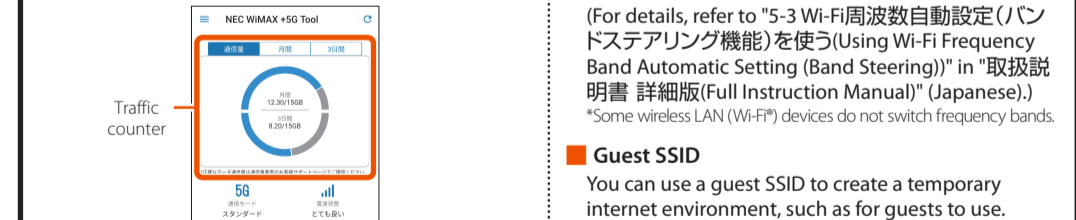
*Depending on the connection environment, communication speeds may not reach the maximum. Furthermore, depending on the connected devices or games, some online competitive games may not operate normally.

Main useful functions*

Traffic Counter

You can check the monthly or daily traffic counter by using Quick Setting Web or the "NEC WIMAX +5G Tool" application for your smartphone.

- *The Tull lamp on the front of the product also notifies you when the data communication volume set with this function is exceeded. (For details, refer to "5-2 通信量カウンターを確認する" (Confirming the Traffic Counter)" in "取扱説明書 詳細版 (Full Instruction Manual)" (Japanese).)
- *The "NEC WIMAX +5G Tool" smartphone application has a Japanese user interface.



*Main screen of smartphone application

Wi-Fi Frequency Band Automatic Setting (Band Steering)

The product supports a band steering function that identifies signal conditions, such as the signal strength of wireless LAN (Wi-Fi) devices, and automatically switches to the appropriate frequency band, either 2.4GHz or 5GHz, for the wireless LAN (Wi-Fi) devices that are connected to the product. (Default setting: "ON")

This helps to maintain optimal high-speed transmissions.

- (For details, refer to "5-3 Wi-Fi周波数自動設定 (バンドステアリング機能) を使う" (Using Wi-Fi Frequency Band Automatic Setting (Band Steering))" in "取扱説明書 詳細版 (Full Instruction Manual)" (Japanese).)
- *Some wireless LAN (Wi-Fi) devices do not switch frequency bands.

Guest SSID

You can use a guest SSID to create a temporary internet environment, such as for guests to use. A guest SSID cannot be used with the product's default settings. Open Quick Setting Web and go to "Wi-Fi Settings" - "Wi-Fi Settings (Guest SSID)" - "Wi-Fi Access Point Settings", and set "Wireless Function" to "ON".

You can also set the times that the guest SSID is enabled. (Refer to "Wi-Fi設定 (ゲストSSID) (Wi-Fi Settings (Guest SSID))" in "8-4 Wi-Fi設定 (Wi-Fi Settings)")

How to Read This Manual

When you want to connect the product to a smartphone or PC using Wi-Fi*
⇒ Refer to **STEP1** to **3**

How to optimize usage
Placing the product for good signals
⇒ Refer to **POINT1**

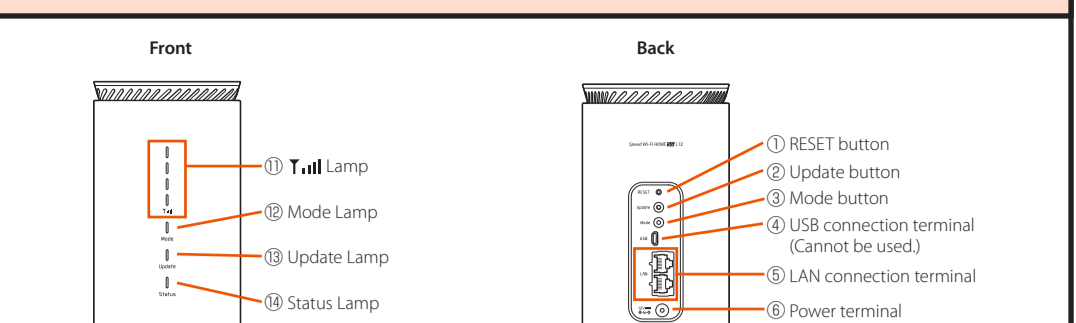
Changing the initial password to improve security
⇒ Refer to **POINT2**

Useful things to know
Things you can do with smartphone applications
⇒ Refer to **POINT3**

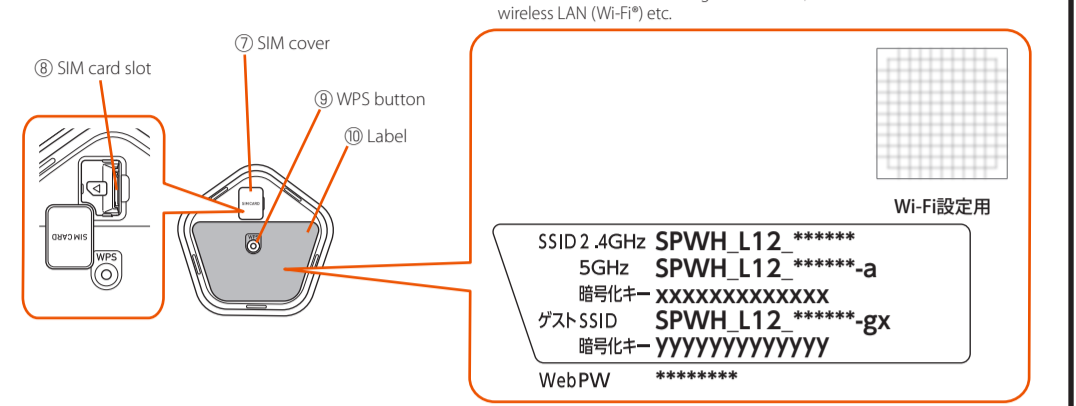
What are these?
Learn about lamps
⇒ Refer to **CHECK2**

Learn about button operations
⇒ Refer to **CHECK2**

Part Names and Functions



This label lists the following information, which is used to connect to wireless LAN (Wi-Fi) etc.



Name	Function
① RESET button	Returns the settings to their factory settings.
② Update button	Use to update the firmware.
③ Mode button	Use to switch communication modes.
④ USB connection terminal	Cannot be used. Do not connect this.
⑤ LAN connection terminal	Connect computers and other devices to this terminal using an Ethernet cable (commercially available).
⑥ Power terminal	Connect the AC adapter to this terminal.
⑦ SIM cover	Open the SIM cover to access the SIM card slot. This cover is normally closed during use.
⑧ SIM card slot	Insert the SIM card into this slot.
⑨ WPS button	Use to connect WPS compatible devices to wireless LAN (Wi-Fi)*.
⑩ Label	You can check the SSID (network names), 暗号化キー "Encryption key" (Password), Web PW, QR Code for Wi-Fi Settings, etc. Do not remove this label.

*For lamp displays ① to ⑩ and how to use the buttons, refer to "CHECK2 Lamp Displays and Button Operations" on the next page.

Setting up the product

STEP 1 Inserting a SIM Card

1 Confirm that the product is turned off.

Also, disconnect the Ethernet cable, if one is connected to the product.

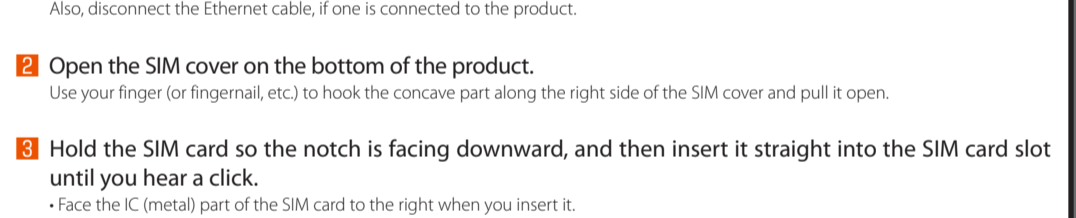
2 Open the SIM cover on the bottom of the product.

Refer to "3-2 Ethernetケーブル (市販品) で接続する" (Connect Using an Ethernet Cable (Commercially Available))" in "取扱説明書 詳細版 (Full Instruction Manual)" (Japanese).

*You can use both wireless LAN (Wi-Fi) and wired LAN simultaneously by using both, a maximum of 42 devices can be connected.

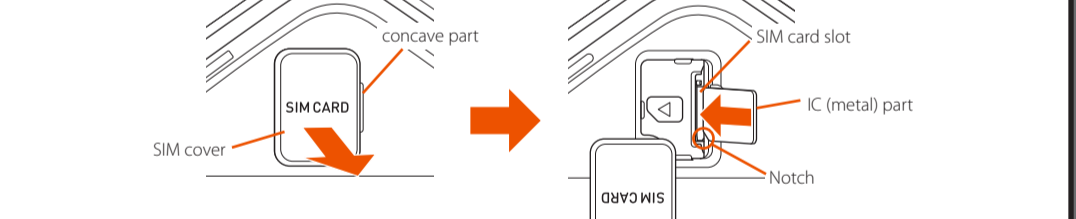
3 Hold the SIM card so the notch is facing downward, and then insert it straight into the SIM card slot until you hear a click.

- *Face the IC (metal) part of the SIM card to the right, when you insert it.
- *The SIM card locks.



4 Close the SIM cover.

- *Refrain from inserting an SD card or IC card with a conversion adapter. Doing so might cause failure.
- *Confirm the correct inserting direction of the IC card. Failure to do so might cause a malfunction or damage.
- *Do not insert or push the IC card forcefully. Doing so might cause a malfunction or damage.
- *Be careful not to touch or damage the IC (metal) part of the SIM card.
- *Data communication via a Wide Area Network (WAN) cannot be done if the SIM card is not inserted.
- *The Status Lamp flashes red (slowly) if the SIM card is not properly inserted, or if there is an abnormality with the SIM card when the product is turned on (STEP 2).
- *Your telephone number and other details are stored on the SIM card, however, the product cannot be used to make or receive voice telephone calls, etc.



To remove the SIM card, press the SIM card slowly inward until it clicks, when you hear the sound, slowly withdraw your finger with the SIM card.

STEP 2 Turn the Power On

1 Connect the DC plug of the AC adapter to the power terminal of the product, and then plug the power plug into a power outlet.

Insert it straight and securely all the way in.

2 Plug the power plug of the AC adapter into a 100V AC power outlet.

- *During startup, the Status Lamp lights orange, and then changes to flashing orange (slowly). (Startup takes about 75 seconds.)
- *When startup is normal, the Tull lamp, Mode Lamp, and Status Lamp on the front of the product light green.

If the Status Lamp flashes red, check whether the SIM card is properly inserted. Also, refer to "CHECK1 Configuring Connection Points" and "Troubleshooting" on the next page.

The latest firmware is available when the Update Lamp lights orange. Update the firmware. (Refer to "Button Operations" on the next page.)

To turn off the power, pull the AC adapter's power plug out of the power outlet, and pull the AC adapter's DC plug out of the product.

To turn off the power, pull the AC adapter's power plug out of the power outlet, and pull the AC adapter's DC plug out of the product.

STEP 3 Connecting to Wireless LAN (Wi-Fi)*

There are four connection methods, as shown below. Connect using one of these methods.

- Copy the settings of the router that the product has used in the past (settings of wireless LAN (Wi-Fi) device do not need to be changed)
- Wi-Fi Settings Moving
- Separately set connections from each wireless LAN (Wi-Fi) device
- Manual connection
- QR Code for Wi-Fi Settings*
- WPS Function**

Types of wireless LAN (Wi-Fi)* devices (examples)	(b) Manual connection	(c) QR Code for Wi-Fi Settings*	(d) WPS function**
Smartphones/tablets (Android** devices)	○	○*	○*
iPad/iPhone/iPod touch (iOS/iPadOS devices)	○	○**	-
PC (Windows OS)/game consoles	○	-	○
PC (macOS)	○	-	-

- *1 Supported on Android 10 and later.
- *2 Supported on iOS 11 and later, and iPads 13 and later.
- ** WPS function is not available on some Android versions.

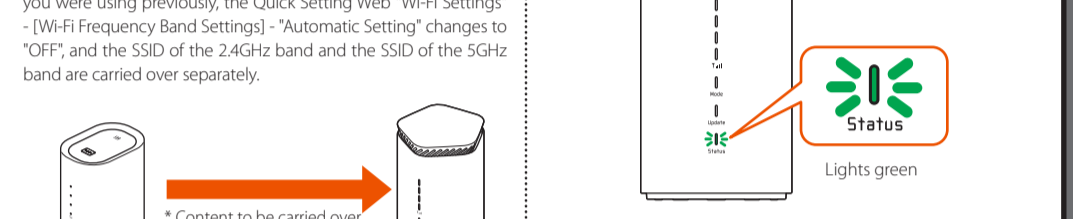
Refer to "POINT3 Useful Things to Know about Smartphone Applications" for how to connect to a wireless LAN (Wi-Fi) by using a QR Code for Wi-Fi Settings.

For the procedure to connect to wireless LAN (Wi-Fi) using the WPS Function, refer to "3-1 無線LAN (Wi-Fi) で接続する" (Connecting via Wireless LAN (Wi-Fi))" in "取扱説明書 詳細版 (Full Instruction Manual)" (Japanese).

(a) Using the Wi-Fi Settings Moving Function

The initial setting for the product's SSID is the same SSID for both the 2.4GHz band and the 5GHz band. (Band Steering function)

If you used the Wi-Fi Settings Moving Function to move each of the SSIDs for the 2.4GHz band and 5GHz band from the router you were using previously, the Quick Setting Web "Wi-Fi Settings" - "Wi-Fi Frequency Band Settings" - "Automatic Setting" changes to "OFF", and the SSID of the 2.4GHz band and the SSID of the 5GHz band are carried over separately.



2 Wi-Fi Settings Moving for the other frequency band.

Refer to step 1 to step 3. The product automatically restarts after about 5 seconds when you finish Wi-Fi Settings Moving for 2 frequency bands.

Step 2 is not necessary if you are doing Wi-Fi Settings Moving for 1 of the frequency bands. Turn the power off and then on again.

The router you have used in the past needs to have supported WPS. In addition, some of the wireless LAN (Wi-Fi) settings may not carry over, depending on the functions and settings (such as unusable text or encryption mode) of the router you were using in the past.

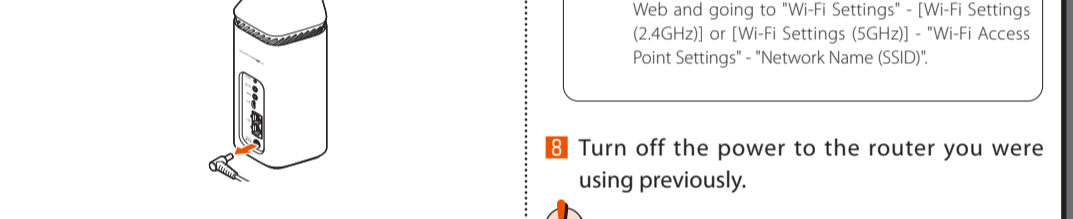
For details, refer to "5-4 Wi-Fi 設定お引越し機能を使う" (Using the Wi-Fi Settings Moving Function)" in "取扱説明書 詳細版 (Full Instruction Manual)" (Japanese).

1 Turn the product off.

Pull the DC plug of the AC adapter straight out of the power terminal on the back of the main unit.

Wi-Fi Settings Moving has failed if the Status Lamp flashes orange (fast) for about 5 seconds in step 1. If you do the settings again and they still fail, the WPS function, which is used for Wi-Fi Settings Moving, may not be compatible, so connect the wireless LAN (Wi-Fi) manually.

You can confirm if the SSID is the SSID of the router you have used until now, by opening Quick Setting Web and going to "Wi-Fi Settings" - "Wi-Fi Settings (2.4GHz)" or "Wi-Fi Settings (5GHz)" - "Wi-Fi Access Point Settings" - "Network Name (SSID)".



2 Press the WPS button on the bottom of the main unit as you turn on the power to the product, and keep pressing the WPS button (for about 25 seconds).

Make a note of the SSID and the encryption key that you moved using the Wi-Fi Settings Moving function. Initializing the product returns the settings to the initial settings.

Frequency band	SSID	Encryption key
2.4GHz band		
5GHz band		

*Write the items down in the location described in the enclosed つなぎかたガイド "Setup Guide" (Japanese).

(b) Connecting manually

Refer to the user manual, etc., for your wireless LAN (Wi-Fi) device for how to connect your wireless LAN (Wi-Fi) device. When you do this, refer to the following to select the SSID (network name) of the product, and then enter the 暗号化キー "Encryption key" (Password).

*The factory set SSID (network names) and 暗号化キー "Encryption key" (Password) for the product are on the label on the bottom of the product.

SSID: 2.4GHz SPWH L12 *****
5GHz SPWH L12 *****-a
暗号化キー: xxxxxxxxxxxxxxx
ゲストSSID: SPWH L12 *****-gx
暗号化キー: yyyyyyyyyyy

Label on the bottom of the product

3 Decide the frequency band (2.4GHz band or 5GHz band) for Wi-Fi Settings Moving.

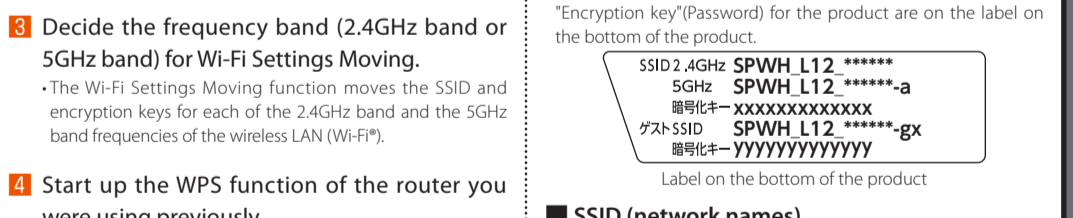
The Wi-Fi Settings Moving function moves the SSID and encryption keys for each of the 2.4GHz band and the 5GHz band frequencies of the wireless LAN (Wi-Fi).

4 Start up the WPS function of the router you were using previously.

*Refer to the user manual of the router you have been using so far, for the method to start up the WPS function.

5 Press and hold the WPS button on the product again (select the frequency band by how long you press the button).

Release the button when the Status Lamp starts flashing green (fast) or flashing green (slowly).



6 SSID (network names)

The network name of the product that is selected from the wireless LAN (Wi-Fi) device you are using.

暗号化キー "Encryption key" (Password)

The password used for connections may also be called a security key, pass phrase, or network key.

Enter the 暗号化キー "Encryption key" (Password) that is being used for the selected SSID (network names). The factory settings value is 13 characters using single-byte alphanumeric (0-9, a-f).

*All of the letters used in the factory set 暗号化キー "Encryption key" are lowercase (abcdef). The letters "G", "I" (uppercase I), "l" (lowercase l), "O", and "o" are not used.

*When you change the initial encryption key, enter the changed value.

Connecting to wireless LAN (Wi-Fi)* is complete.

Open a web browser on a device that is connected to the product by wireless LAN (Wi-Fi) and open a website to verify connection to the internet.

If you want to change the administrator password in Quick Setting Web, go to POINT2.

How to get optimal usage

POINT 1 About the Installation Location

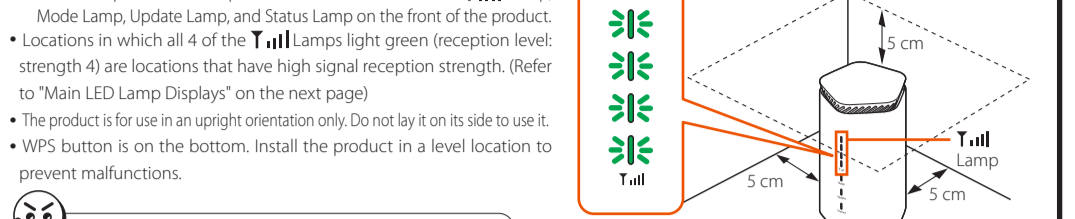
Install the product in a location where there is nothing, such as walls or other devices, within 5 cm of the front, back, right, or left, or within 5 cm of the top of the product.

*Install the product so it is possible to see the state of the Tull Lamp, Mode Lamp, Update Lamp, and Status Lamp on the front of the product.

*Locations in which all 4 of the Tull lamps light green (reception level: strength 4) are locations that have high signal reception strength. (Refer to "Main LED Lamp Displays" on the next page)

*The product is for use in an upright orientation only. Do not lay it on its side to use it.

*WPS button is on the bottom. Install the product in a level location to prevent malfunctions.



We recommend installing the product in a location that has the highest signal reception strength for good communication.

POINT 2 Changing the Initial Password to Improve Security

Doing Initial Settings from Quick Setting Web

To ensure security, change the initial password (administrator password and encryption key) that had been set at time of purchase.

(Initial Setting: The "Web PW" and 暗号化キー "Encryption key" on the label on the bottom of the product)

Administrator Password: Password you are requested to input to log in to Quick Setting Web and to use the "NEC WIMAX +5G Tool" application for your smartphone. (The "Web PW" is noted on the label on the bottom of the product.)

暗号化キー "Encryption key" (Password): Password to use with SSID when connecting to wireless LAN (Wi-Fi)*.

1 Open the web browser on the wireless LAN (Wi-Fi) device (such as a smartphone) connected to the product in STEP3.

2 Open Quick Setting Web for the product.

Type "http://192.168.179.1/" into the address bar in the web browser and either tap (実行 [Execute]) or (開く [Open]), or press the Enter key on the keyboard.

3 In the Login screen, enter the administrator password (Web PW)*, in "Password", and then tap or click [Login].

*For the "Web PW", refer to the label on the bottom of the product.

4 In the Login screen, enter the administrator password (Web PW)*, in "Password", and then tap or click [Login].

*For the "Web PW", refer to the label on the bottom of the product.

5 Change the administrator password.

Enter the current administrator password in the "初期パスワード (Initial Password)" field, and enter the new administrator password (*) in the "新しいパスワード (New Password)" and "新しいパスワード再入力 (Re-Enter)", and tap or click (変更 [Set]).

*Numbers 0-9, letters a-z and A-Z, hyphens (-) and underscores (_) may be used in the password. A password must be from 8 to 64 single-byte characters.

This password will be required every time you open "Quick Setting Web" for the product. Make sure that you do not lose this password.

Administrator Password Memo:

*Write it down in the location described in the enclosed つなぎかたガイド "Setup Guide" (Japanese).

6 If you agree to the request in "本製品をご利用にあたってのお願い (We kindly ask for your cooperation)", tap or click [はい (Yes)].

7 Change the network name (SSID) and encryption key (password).

In the Wi-Fi設定 (Wi-Fi Settings) screen, enter a new network name (SSID) (*) and new encryption key (*2), and then tap or click (変更 [Set]).

*1 Network name (SSID): Input a maximum of 32 single-byte English alphanumeric (A-Z, a-z, 0-9, hyphens (-), and underscores (_)).

*2 Encryption key (Password): Enter 8 to 63 alphanumeric digits (0-9, a-z, A-Z, and symbols), or enter 64 hexadecimal digits (0-9, a-z, A-Z).

*If "WPA3-SAE(AES)" or "WPA2-PSK/WPA3-SAE(AES)" is set for Encryption Mode, then 64 digits of hexadecimal cannot be input.

*For details, refer to "8-4 Wi-Fi設定 (Wi-Fi Settings)" in "取扱説明書 詳細版 (Full Instruction Manual)" (Japanese).

*Make a note of the changed network name (SSID) and encryption key (password), so you do not forget them.

Network Name (SSID) Memo:

Encryption Key Memo:

*Write the items down in the location described in the enclosed つなぎかたガイド "Setup Guide" (Japanese).

8 The Wi-Fi* connection is cut off, so refer to *STEP3 Connecting to Wireless LAN (Wi-Fi)* and connect to wireless LAN (Wi-Fi) again.

*Note that you cannot connect to wireless LAN (Wi-Fi) with the network name (SSID) and encryption key (password) from the label on the bottom of the product.

*When doing the manual connection procedure, use the network name (SSID) and encryption key (password) you changed in step 7.

If you connected the product to wireless LAN (Wi-Fi) in STEP3 then you need to input a password the first time you start the "NEC WIMAX +5G Tool" application.

The "NEC WIMAX +5G Tool" smartphone application has a Japanese user interface.

In the (Menu) - (設定ウィザード) (Setup Wizard), input an administrator password, and then tap (次へ [Next]).

(Skip steps after step 3 in the 設定ウィザード) (Setup Wizard).

If you changed the administrator password in Quick Setting Web, the "装置情報の取得に失敗しました (Failed to acquire device information)" screen appears.

In the (Menu) - (ログイン管理) (Login Management), input a new administrator password, and then tap (保存 [Save]).

POINT 3 Useful Things to Know about Smartphone Applications

Things you can do with applications

You can do the following things with the "NEC WIMAX +5G Tool", which is an application designed especially for this product.

- *Check signal strength of 5G/WIMAX 2+ (LTE connections)
- *Switch communication modes
- *Check firmware version
- *Check contracted phone number
- *Check traffic counter
- *Restart the product
- *Launch Quick Setting Web (For details, refer to "5-1 スマートフォンアプリを使う" (Using Smartphone Applications)) in "取扱説明書 詳細版 (Full Instruction Manual)" (Japanese).
- *The "NEC WIMAX +5G Tool" smartphone application has a Japanese user interface.

Downloading the "NEC WIMAX

