

OMNI

Dual-Spectrum Binocular



User Manual

OMNI H35R / OMNI L19R

V1.0

IMPORTANT SAFETY INFORMATION

Environmental influences

- Never point the lens of the device directly at intense heat sources such as the sun or laser equipment. The objective lens and eyepiece can function as a burning glass and damage the interior components.
- Avoid touching the metal surface (cooling fins) after exposure to sunlight or cold.

Ergonomics notes

Take breaks after longer periods of use to avoid wrist pain.

Risk of swallowing

Do not place this device in the hands of small children. Incorrect handling can cause small parts to come loose which may be swallowed.

Safety instructions for use

- Handle the device with care: rough handling can damage the internal battery.



- Do not expose the device to fire or high temperatures.
- Install the batteries correctly according to the instruction on the device. Reverse connection is prohibited.

- The battery capacity decreases when operated in a cold ambient temperature. This is not a fault and occurs for technical reasons.
- The recommended temperature for using this product is -20° to +50°. Otherwise, it will affect the service life of the product.
- Do not store the device for long periods at temperatures below -20°C or above 50°C, or it will permanently reduce the battery capacity.
- Always store the device in a dry, well-ventilated space.
- If the device has been damaged or the battery is defective, send the device to our after-sales service for repair.

Safety instructions for the power supply unit

- Check the power supply unit, cable and adapter for visible damage before use.
- Do not use any defective parts. Defective components must be replaced.
- Do not use the power supply unit in wet or humid environments.
- Only charge the device at temperatures ranging between 0°C and 50°C.
- Do not make any technical modifications.

Disposal of batteries

Directive 2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. For battery details, refer to the documentation of the specific product.

The battery is marked with this symbol, which may include Cd (indicating cadmium), Pb (indicating lead), or Hg (indicating mercury). For proper recycling, please return the battery to your supplier or send it to a designated collection point. For more information, visit www.recyclethis.info.

User information on the disposal of electrical and electronic devices (private households)



2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.

For business customers within the European Union

Please contact your dealer or supplier regarding the disposal of electrical and electronic devices. He will provide you with further information.

Information on disposal in other countries outside of the European Union

This symbol is only applicable in the European Union. Please contact your local authority or dealer if you wish to dispose of this product and ask for a

disposal option.

Intended use

The device is intended for displaying heat signatures during nature observation, remote hunting observations and for civil use. This device is not a toy for children.

Use the device only as described in this operating manual. The manufacturer and the dealer accept no liability for damages which arise due to non-intended or incorrect use.

Function test

- Before use, please ensure that your device has no visible damage.
- Test to see if the device displays a clear, undisturbed image.
- Check that the settings for the Dual-Spectrum Binocular are correct. See the notes in the section **Usage**.

Installing/Removing the battery

The OMNI Dual-Spectrum Binocular is equipped with three power supply systems - one built-in battery pack and two replaceable 18650 batteries.

1 Specifications

Model	OMNI L19R	OMNI H35R
Thermal Detector Specifications		
Resolution & Pixel Size	384 × 288 & 12μm	640 × 512 & 12μm
NETD, mK	≤ 15	≤ 15
Frame Rate, Hz	50	50
Digital Detector Specifications		
Resolution & Pixel Size	8192 × 6144@1.2μm	
Thermal Optical Specifications		
Objective Lens, mm	19 F0.9	35 F0.9
Field of View (H×V), °	13.8 × 10.4	12.5 × 9.4
Linear Field of View (H×V), m @ 100m	24.3 × 18.2	21.9 × 16.5
Magnification, x	1.5 ~ 12	2.0 ~ 16
Detection Range, m (Target Size: 1.7m×0.5m, P(n)=99%)	1000	1800
Digital Optical Specifications		
Objective Lens, mm	50mm F1.8	
Field of View (H×V), °	8.8 × 6.6	

Linear Field of View (H×V), m @ 100m	15.4 × 11.5	
Magnification, x	3.0 ~ 18	
Eyepiece		
Eye Relief, mm	25	
Exit Pupil Diameter, mm	12	
Diopter, D	±4	
Display Specifications		
Type	AMOLED	
Resolution	1600 × 1200	
Battery Power Supply		
Battery	Built-in battery + Replaceable 18650 × 2 batteries	
Max. Operating Time (22°C), h*	7.5	7.5
External Power Supply	5V (Type C)	
Physical Specifications		
Wi-Fi / APP	Support	
Photo / Video Recorder	Support	

Gallery	Support
Memory Capacity, GB	64
IP Rating	IP67
Operating Temperature, °C	-20 ~ +50
Weight, g	<900g (without batteries)
Dimension, mm	<198 × 144 × 75
LRF	
Safety Class for Laser Rangefinder	Class 1
Measuring Range, m	1000
Ballistic Calculation	Support

★ The actual battery life depends on the use frequency of functions like Wi-Fi, video recording, IR illuminator etc.

➤ Improvements may be made to the design and software of this product to enhance its features without prior notice.

➤ The newest user manual can be downloaded at our official website:

www.nocpix.com.

2 Package Contents

- OMNI series Dual-Spectrum Binocular
- Portable bag (only for H35R)
- Data cable
- 2-in-1 neck and shoulder strap
- Lens cleaning cloth
- Quick start guide
- Lens cap × 2
- 18650 Battery × 4
- 18650 Battery charger
- Tripod Adapter
- 850nm IR illuminator (only for H35R)

3 Description

The OMNI series Dual-Spectrum Binocular redefine all-weather observation by integrating high-sensitivity thermal imaging with ultra-low-light digital night vision. Engineered for seamless transition between day and night, OMNI delivers exceptional image clarity even in the most challenging

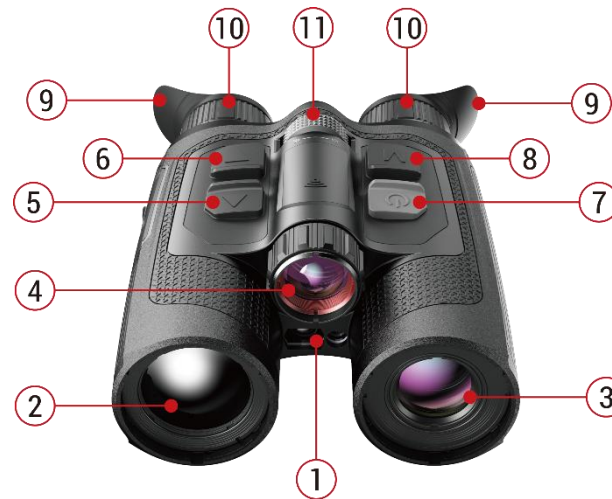
environmental conditions, including fog, heavy rain, and snow, while effectively revealing targets obscured by dense foliage, tall grass, and branches.

4 Features

- 640 × 512 or 384 × 288 @ 12μm thermal detector & 8192 × 6144 @ 1.2 μm digital detector
- F0.9 thermal objective lens
- NETD≤15mK
- 50Hz high frame rate
- Built-in LRF
- Electronic image stabilization
- Accepts batteries in either direction
- AMOLED 1600×1200 display
- Ballistic Calculation
- Gallery function
- Built-in memory, supporting photographing, video recording
- Built-in Wi-Fi module, supporting APP connection
- PIP (picture-in-picture) function
- Pixel defect correction
- Smooth digital zoom: 1×~8×
- Convenient operation interface
- Custom palettes
- Custom button through APP

5 Components and Controls

1. LRF
2. Thermal lens
3. Digital lens
4. Removable IR Illuminator
5. UP button
6. Down button
7. Power button
8. Menu button
9. Eyeshade
10. Eyepiece diopter adjustment ring
11. Digital zoom ring
12. Type C
13. Neck Strap Attachment Point
14. Digital lens focus ring
15. Thermal lens focus ring
16. Battery compartment
17. Tripod Adapter Socket



6 Button Operation

Button	Device Status	Press	Long press
Power Button 	Powered off	--	Power on the device
	Home screen	Standby the device	Power off the device
	Standby mode	Wake up the device	Wake up the device
	Shortcut menu screen	Return to the upper menu without saving changes	Power off the device
	Menu screen	Return to the upper menu without saving changes	Power off the device
M Button 	Home screen	Enter the shortcut menu	Enter the main menu
	Shortcut menu screen	Enter the parameters selection state	Return to the home screen without saving changes
	Menu screen	Enter the submenu/Switch and confirm selection	Return to the home screen without saving changes
Up Button 	Home screen	Switch thermal and digital mode	Turn on/off laser rangefinding
	Shortcut menu screen	Scroll up the menu	--

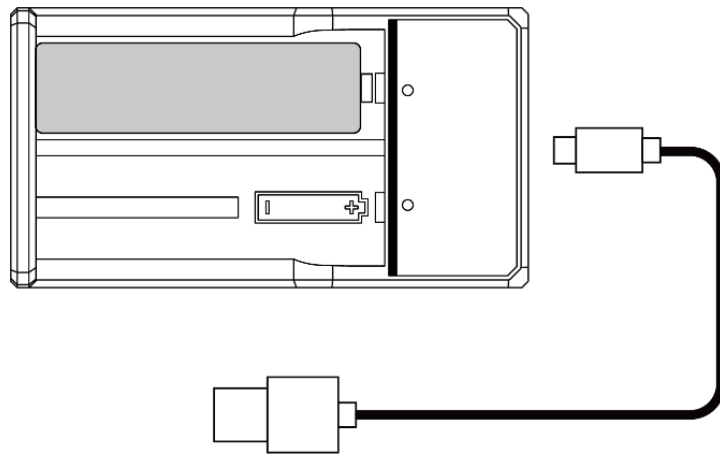
	Menu screen	Scroll up the menu	--
Down Button 	Home screen	Photograph	Record video
	Video recording	Photograph	End the recording and save the video
	Shortcut menu screen	Scroll down the menu	--
	Menu screen	Scroll down the menu	--
Up + Down Button 	Thermal screen	Shutter calibration	Background calibration
	Digital screen	Turn on/off IR illuminator	--
Knob	Device Status	Clockwise Rotation	Counterclockwise Rotation
Digital Zoom Ring	Home screen	Zoom in	Zoom out

* All keys except the power button and the M button are customizable through the app, so you can assign your own preferred functions to each button.

7 Battery charging

The OMNI series uses the replaceable 18650 batteries and Built-in battery.

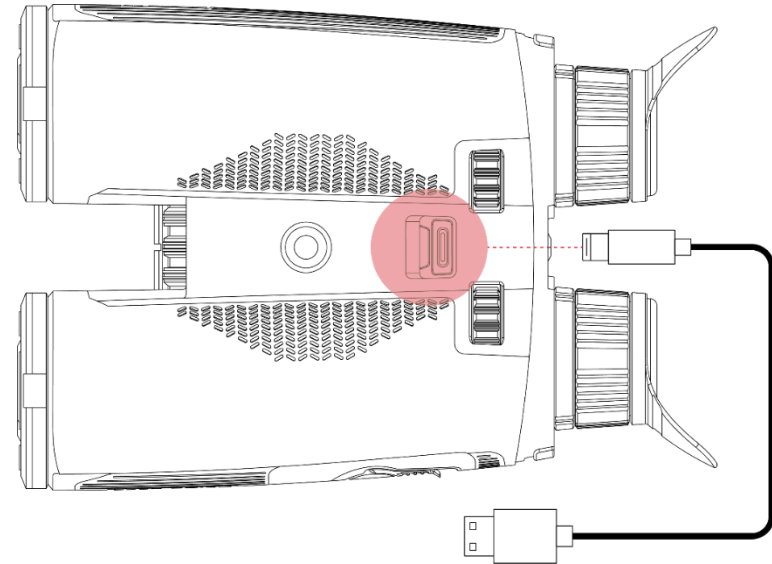
Please charge the Battery before use.



Charging the 18650 Battery

- Insert the Type-C plug of the data cable into the charger port
- Insert the other end of the data cable into the USB port of the power adapter
- Insert the power adapter into a 100V-240V power socket to charge the battery
- During the charging process, the LED indicator on the charger will light up red. When the LED indicator on the charger turns green, it indicates that the battery is fully charged.

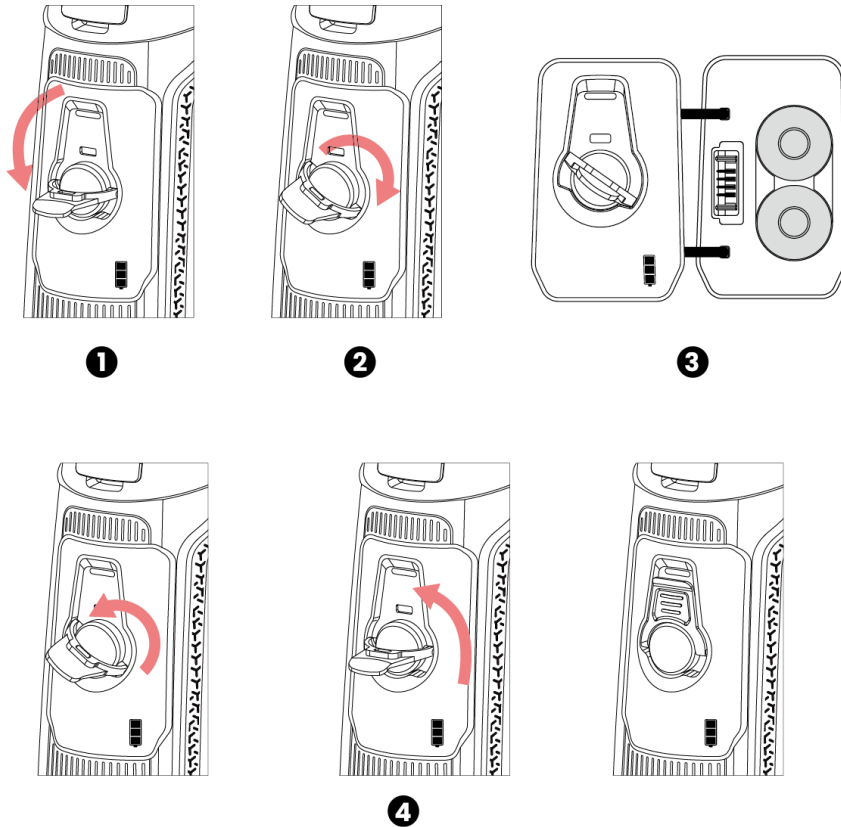
Charging the Built-in Battery of the Device



- Open the Type-C port cover on the bottom of the OMNI series.
- Insert the Type-C end of the data cable into the Type-C port.
- Connect the other end of the data cable to the power adapter.
- Insert the power adapter into a 100V-240V power socket for charging.
- The battery icon will change to a charging icon on the display.
- During battery charging with the Type-C port, the status indicator on the OMNI series will also change to indicate the battery status.
 - The indicator stays red, indicating that the battery is charging.
 - The status indicator turns green, indicating the battery is fully charged.

* The Type-C port can only charge the built-in battery. The replaceable battery needs to be removed from the device and charged using the power adapter.

Installing the replaceable 18650 battery



- Rotate the handle to unlock the battery compartment.
- Pull the handle to open the battery holder.
- Insert two 18650 batteries (non-polarity design - no need to distinguish positive and negative poles).

- Close the battery cover, then rotate the handle to lock the battery holder securely.

Note: The replaceable 18650 battery should be charged using a separate battery charger and cannot be charged via the OMNI's Type C interface.

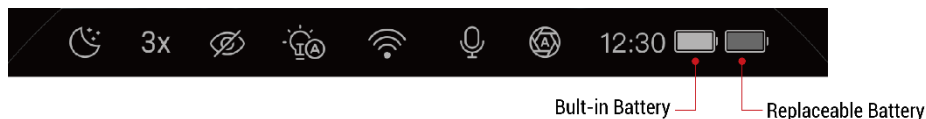
Safety precautions

- When charging, please use the 5V2A power adapter compatible with the device. Using any other type of adapter may cause irreversible damage to the battery or the adapter itself.
- If the device is not used for a long time, the battery should be partially charged, not fully charged or discharged.
- Do not charge the device immediately after it is moved to a warm environment from a cold environment. Wait for 30 to 40 minutes for preheating.
- Do not use the charger if it is modified or damaged.
- The device should be charged at a temperature of 0°C to +40°C. Otherwise, the battery life will be significantly reduced.
- When charging, please do not leave the battery unattended.
- Do not connect the battery to the power supply for more than 24 hours after it is already fully charged.
- It is not recommended to connect third-party devices that consume more energy than the allowed value.

- The device is equipped with a short circuit protection system, but conditions that may lead to a short circuit should be avoided.
- Use the device at the recommended operating temperature from -20°C to +50°C. Do not use the device beyond this temperature range, or otherwise, the use may shorten the battery life.
- When the device is used under sub-zero temperature, the battery capacity drops. This is normal and does not indicate a defect.

8 External Power Supply

- The OMNI series can be powered by external power sources such as a 5V power bank.
- Connect an external power source to the Type-C port on the bottom of the OMNI series.
- The device will switch to being powered by the external power source while simultaneously charging the built-in battery (the 18650 battery cannot be directly charged through the device).



- The battery icon will change to the charging icon.
- When the external power source is disconnected, the OMNI series will automatically switch to being powered by the battery pack without

powering off.

9 Usage

Powering on and off

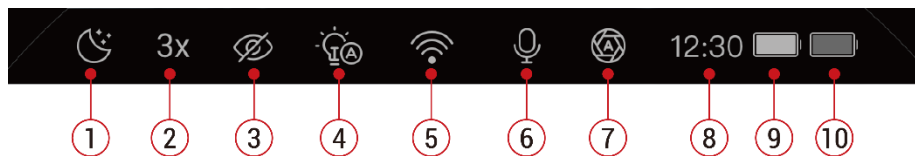
- **Power On:** Remove the lens cap. Press and hold the **Power button** to power on the device. Then, the home screen is displayed after several seconds.
- **Interpupillary Distance adjustment:** Move the eyepieces horizontally to adjust the IPD until both eyes can comfortably see the display;
- **Diopter Adjustment:** Close one eye and rotate the eyepiece diopter ring until the image in the eyepiece becomes clear, and then switch to the other eye and repeat those steps. After adjustment, there is no need to readjust for the same user.
- Rotate the left focusing wheel (digital channel) or the right focusing wheel (IR channel) on the back of the device to focus on the target.
- To adjust image settings, use the shortcut menu. The options shown depend on which channel is currently active on the main screen:
 - **Digital channel:** image palette, brightness, saturation, exposure, IR illuminator
 - **Thermal channel:** image palette, brightness, sharpness, ultra-clear,

image hue

- The settings for the digital and thermal channels are stored independently.

- **Power Off:** After use, press and hold the **Power button** and the power-off countdown screen appears. Then release your finger. During the process, press any button to cancel the shutdown.

10 Status Bar Icons



- Image Mode:** Auto mode , Day mode , Night mode , Dusk mode , Infrared mode , Green mode , and Yellow mode 
- Magnification:** Shows the current zoom magnification value which equals optical magnification × electronic zoom, with the value rounded to a 0.5 multiple
- Ultra-clear mode:** Has two states: ON  and OFF 
- IR illuminator status:** ( : IR illuminator is OFF;  : Low illumination;  : Medium illumination;  : High illumination)

- Wi-Fi icon:** Supports ON  and OFF  states. When devices are connected to the local WiFi hotspot, the WiFi icon will change to show 1 , 2 , 3 , or more than 3  connections based on the number of connected devices. If the device enables N-LINK and connects to another device's WiFi hotspot, the WiFi-NI  icon will be displayed instead.
- Microphone icon:** Has two states: ON  and OFF 
- Shutter calibration mode:** There are two modes: Auto Calibration Mode  and Manual Calibration Mode . The auto shutter will show a 5-4-3-2-1 shutter countdown      corresponding to five distinct icons respectively.
- Time:** Displays the current time in 24-hour format
- Power status of the built-in battery pack:** Displayed in accordance with the battery level display logic:
 - 80% ~ 100% ()
 - 60% ~ 80% ()
 - 40% ~ 60% ()
 - 20% ~ 40% ()
 - 10% ~ 20% ()
 - 3% ~ 10% ()

When the remaining battery level reaches 3%, a pop-up interface will prompt: "Low battery, automatic shutdown ".

10. Power status of the Replaceable battery (18650 battery)

11 Laser Rangefinder

OMNI support 1000m laser rangefinder.

On the main interface, press and hold the Up button to activate the ranging function. The ranging type is determined by the ranging option in the main menu.

- Under the Single Ranging mode, press the button once more to perform a ranging operation. "SGL" and the ranging value will be displayed in the upper right corner, which will disappear automatically after 30 seconds.
- Under the Continuous Ranging mode, "CONT" and the ranging value will be displayed in the upper right corner.

The color of the laser ranging reticle is consistent with the main UI color and will be saved accordingly. The ranging unit is determined based on the PN code: it is set to "m" (meter) for the standard version, and "yd" (yard) for the US version. The unit can also be adjusted through the unit setting function. When the distance is not successfully measured, "----m" will be displayed; when the distance is measured, the specific numerical value will be shown.

12 Update and NOCPIX APP

Client Software Connection

The OMNI series Dual-Spectrum Binocular supports control with **NOCPIX** App, which allows you to transmit images in real time, operate the device, and update the program by connecting a smartphone or laptop via Wi-Fi.

You can download and install the NOCPIX App In the official website

(www.nocpix.com) or the app

store. Alternatively, you can scan the QR code below to download it for free.



The OMNI series has a built-in Wi-Fi module. The device can connect to an external apparatus (computer or mobile phone) via Wi-Fi or Bluetooth.

WIFI Connection

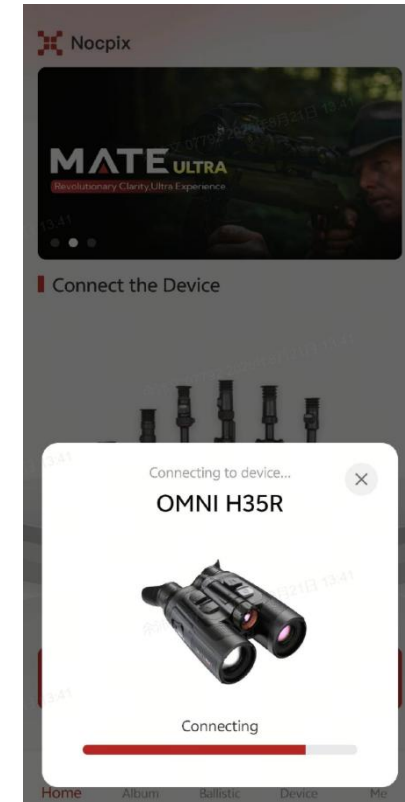
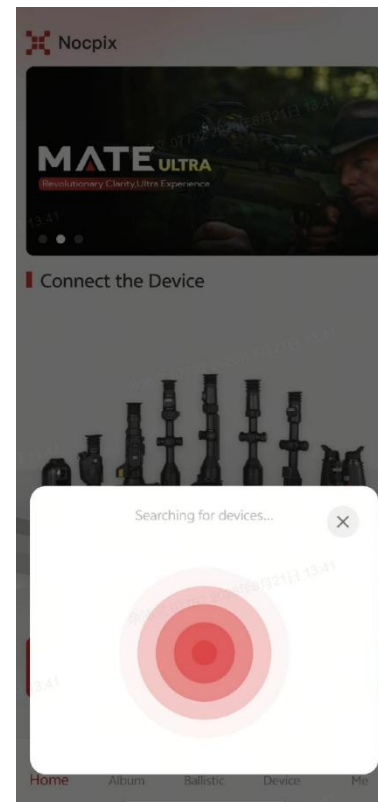
- In the home screen, press and hold the **M button** to go to the main menu. enable the Wi-Fi on the device.
- After the Wi-Fi is enabled, search for the Wi-Fi named **OMNI_XXXX_XXXXXXXX** on the external device, among which XXXXXXXX is the serial number of the device. Select the Wi-Fi, enter the password and connect. The initial password is shown beside the Wi-Fi

switch on the screen.

- After the Wi-Fi connection is established, you can control the device via the mobile app.
- Through the APP, many functions can be achieved, such as upgrade device、real-time image transmission、device file and date&time calibration.

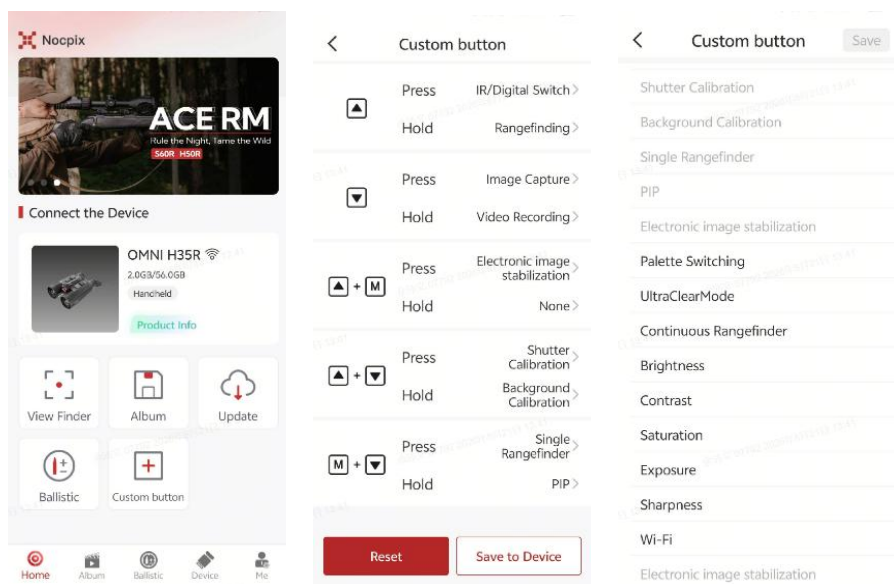
Bluetooth Seamless Connection

- Make sure the device is powered on.
- Open the NOCPIX app and enter the home screen. The app will silently scan for nearby OMNI devices in the background.
 - If only one device is found, the app connects to it automatically via Bluetooth.
 - If multiple devices are found, select your device from the list that appears.
- Once connected over Bluetooth, the app will automatically enable the device's Wi-Fi. A pop-up will then appear asking if you want to join the network "**OMNI_XXXX_XXXXXXX**" (where XXXXXXXX is your device's serial number). Tap **Join**.
- Your phone will now connect to the device's Wi-Fi network. After a few moments, the app interface will automatically switch to the device control screen.



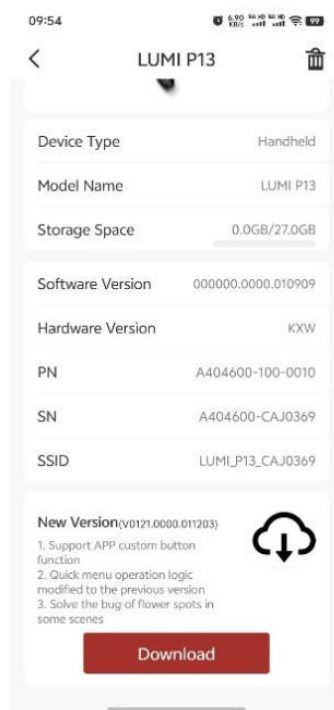
Custom button

- Through the APP, click the custom button option to enter the function setting interface, where you can see the default functions of each button short press and long press.
- Click the button operation that needs to be adjusted, and the function that can be set will pop up. Select the function you want and click Done. Finally, click Save to Device.



Upgrade Device

- When installation completed, open NOCPIX application.
- If your device has been connected to a mobile device, please switch on the mobile data in mobile device. After connection, an update prompt will be displayed automatically in the APP. Click **Now** to download the latest version immediately or click **Later** to update later.
- **NOCPIX** can store the last connected device automatically. Therefore, once you



have connected with **NOCPIX** before, it will automatically detect the update even when the scope is not connected to a phone or laptop.

- If an update is available and the mobile device accesses the internet, you can download the update first. Then when the device is connected with the mobile device, it will be updated automatically.
- After the update is installed, the device will restart automatically.

13 Shortcut Menu

On the shortcut menu, you can quickly adjust basic configurations of commonly used functions. The available options depend on the currently displayed main image channel.

- When the main view is the thermal image, the menu includes: Image palette, Image brightness, Image sharpness, and Image contrast, Ultra Clear mode, Image hue.
- When the main view is the digital image, the menu includes: Image palette, Image brightness, Image saturation, Image exposure and IR illuminator.

Operation

- In the home screen, press the M button to enter the shortcut menu. Press the M button to cycle through the following options.

Thermal Shortcut Menu

Image palette 	● Short press the M button to enter the shortcut Menu options. ● Press M button to switch between different color palettes. ● The Image palette include: White Hot, Black Hot, Red Hot, Rainbow, Violet, Crimson, and Viridian.	
Image brightness 	● Short press the M button to enter the shortcut Menu options. ● Press M button to switch to Image Brightness options. ● Image brightness has 10 levels to choose from, we recommend a image brightness of 5.	
Image sharpness 	● Short press the M button to enter to the Image Sharpness options. ● Press M button to switch to Image Sharpness options. ● Image Sharpness has 10 levels to choose from, we recommend a sharpness level of 5.	
Image contrast 	● Short press the M button to enter to the Image Contrast options. ● Press M button to switch to Image Contrast options. ● Image Contrast has 10 levels to choose from, we recommend a contrast level of 5.	

Ultra Clear mode 	● Short press the M button to set the Ultra-Clear as ON or OFF; ● We recommend setting Ultra-Clear to OFF on sunny days, and to ON in rainy or snowy weather.	
Image hue 	● Short press the M button to set the Image-Hue as Cool or Warm; ● Cool mode delivers a cleaner image, while Warm mode is more comfortable for the eyes. You can set it according to your preference.	
Digital Shortcut Menu		
Image palette 	● Short press the M button to enter the shortcut Menu options0 ● Press M button to switch between different digital palettes. ● The digital modes include: Day, Dusk, Moon, Green, Yellow, Auto.	
Image brightness 	● Short press the M button to enter the shortcut Menu options. ● Press M button to switch to Image Brightness options. ● Image brightness has 10 levels to choose from, we recommend a image brightness of 5.	

Image saturation 	● Short press the M button to enter to the Image Saturation options. ● Press M button to switch to Image Saturation options. ● Image Saturation has 10 levels to choose from, we recommend a saturation level of 5.	
Image exposure 	● Short press the M button to enter to the Image Exposure options. ● Press M button to switch to Image Exposure options. ● Image Exposure has 10 levels to choose from, we recommend a exposure level of 5.	
IR illuminator 	● Short press the M button to enter the IR illuminator selection mode. ● There are four statuses: Off, Low, Medium, and High.	

14 Main Menu

- In the home screen, press and hold the **M button** to go to the main menu.
- Press the **M** button to switch the menu options.
- The function options in the main menu are cyclical: when the arrow > reaches the last option on the first page, it will turn to the first menu option on the

second page. When the arrow > is on the first option of the first page, press the **Up** button to switch to the last option of the second page.

- Press the **M button** to modify the parameter settings of the current menu option or to open the submenu.
- In the second and third-level submenu, press the **Up / Down** button to choose a parameter or function; press the **M button** to confirm the selection. An icon flashes, indicating the changes are being saved, and then the upper menu or the submenu is displayed.
- In any menu interface, press the **Power button** to return to the upper menu without saving the changes, and hold the **M button** to return to the home screen without saving the changes.
- In any menu interface, the device will automatically return to the home screen without saving the changes when there is no operation within 15s.
- During the continuous operation of the binoculars, when you exit from the main menu, the cursor > remains at the position before exiting. When you restart the binoculars and go to the main menu for the first time, the cursor stays at the first menu option.

Main Menu Options and Descriptions

Wi-Fi 	Turn the Wi-Fi on/off ● Press and hold the Controller to enter the Main Menu interface. ● Press M button to switch to the WIFI option, within the WIFI option, you can select the Wi-Fi or N-link option ● Select the WIFI option, press the M button to enable or disable WIFI. ● After the Wi-Fi function is on, search for the Wi-Fi signal with the name "OMNI H35R_XXXXXXX" on the mobile device. ● Select the Wi-Fi and enter the password to connect. ● When Wi-Fi is successfully connected, it supports to control the scope via the NOCPIX APP downloaded in the mobile device. ● Select the N-link option, press the M button to enable or disable N-link.
PIP	Turn the Picture-in-Picture (PIP) function on/off

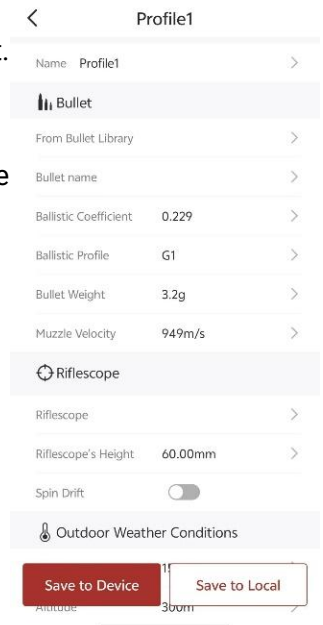
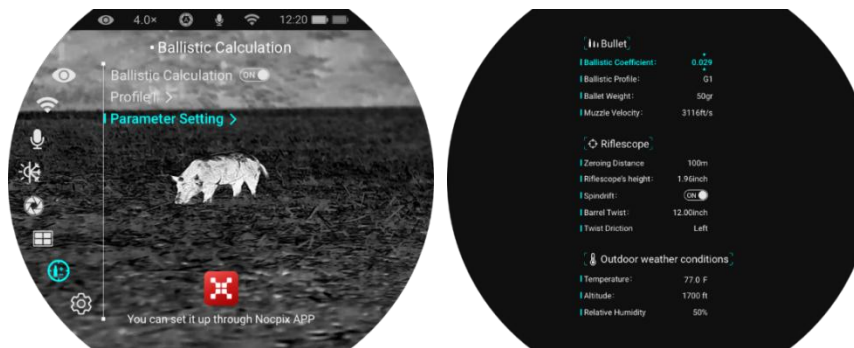
	● Press and hold down the M button to enter the main menu. ● Press the Up / Down button to select the PIP menu option. ● Short press the M button to turn the PIP function on/off. ● After the PIP function is enabled, you can quickly switch the optical channels of the main image and PIP by short pressing the Up button, and the switching follows the cyclic order below: ● Main image infrared + PIP infrared → Main image infrared + PIP digital → Main image digital + PIP digital → Main image digital + PIP infrared → (back to the starting point) ● This function is off by default. After the PIP function is turned on, the 200×150 central area of the display is extracted for zooming, with an indicator box marking the selected area. The PIP window sized 400×300 is located at the upper part of the screen, closely attached to the UI with a white border, and the zoom magnification is displayed at the bottom right corner of the PIP window. ● Both PIP zoom and electronic zoom magnify the image centered on the image center; the ranging reticle will change accordingly along with the zoom magnification.
EIS 	Turn Digital / Thermal Electronic Image Stabilization On/Off ● Press and hold down the M button to enter the main menu. ● Press the Up / Down button to select Digital EIS or Thermal EIS. ● Press the M button to turn the selected EIS on/off. ● When EIS is turned on, the image will be slightly enlarged. ● When the laser rangefinder is turned on, both Digital EIS and Thermal EIS are turned off by default.
Ballistic calculation	Ballistic calculation



- Press and hold the Menu button to enter the Main Menu. Select the Ballistic Calculation option. Within the Ballistic Calculation
- option, you can set the Ballistic Calculation feature to ON or OFF.
- Within the Profile option, select the bullet profile from 1 to 5. You can also customize the bullet name through the NOCPIX APP.
- Set the unit to MOA or mil, cm or inch.

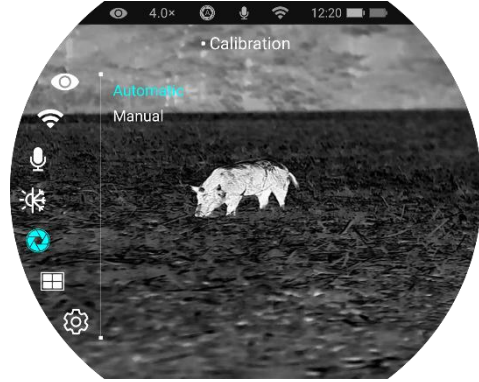


- Within the Parameter Setting option, you can set parameters for bullets, rifles, and the environment. Parameter settings can also be adjusted through the NOCPIX APP.
- Once the settings are completed and the Ballistic Calculation is ON, a single ranging will prompt the recommended point of impact.



Gallery 	View video/photo files in the device ● Press and hold down the M button to enter the main menu. ● Press the Up / Down button to select the Gallery option. ● Press the M button to enter the submenu of the Gallery function. ● Press the Up / Down button to select the folder you want to view; folders are arranged from the most recent to the oldest by date ● Press the M button to enter the folder; video files are arranged from the most recent to the oldest by recording time.. ● Press the Up / Down button to select the file you want to view; you can see a preview of the file on the right side. ● Press the M button to view the file.
Custom Palettes 	Custom Palettes ● Press and hold down the M button to enter the main menu. ● Press the Up / Down button to select the Custom Palettes option. ● Press the M button to enter the submenu of the Custom Palettes function. ● We provide 7 color palettes. You can determine which color palettes can be switched in the shortcut menu mode by toggling the on/off switch of each color palette. After a certain color palette is turned off, it will no longer be displayed when you switch color palettes in the shortcut menu. ● At least one infrared color palette will be retained, which means when there is only one infrared color palette left enabled, it cannot be turned off. ● When you are in the White Hot mode, enter the corresponding function and turn off the White Hot color palette, the infrared screen will automatically switch to the next enabled color palette screen after exiting the function. ● In the digital mode, both the Single Green and Single Yellow color palettes are allowed to be turned off.

Pixel Defect Correction 	When using the binoculars, you may see pixel defects, such as visible light spots or dark spots with stable brightness. To address this problem, use the Pixel Defect Correction function to remove the pixel defects. ● Press and hold down the M button to enter the main menu. ● Press the Up / Down button to select the Pixel Defect Correction option. ● The PIP function is automatically turned on, and display on the top of the screen by default. The moving directions (X-axis and Y-axis) and the numbers of corrected pixels are shown on the left side of the screen. ● In the Pixel Defect Correction interface, the reticle is instead by a small cross cursor. ● Press the Up / Down button to move along the direction selected. When the X or Y direction is selected, the icon will flash continuously. ● Press the M button to save moving data and select the  icon to add and correct it. The value of  will be changed from "0" to "1". At the same position, press the M button again to revoke the defect pixel correction and the value will be changed from "1" to "0". ● Press the Up / Down button to select 'Yes' to save and exit, or select 'No' to cancel saving and exit.
Calibration 	Set the calibration mode

	In rare cases, once the image is degraded or uneven, it can be improved by calibration. There are two calibration modes: Automatic and Manual. Regardless of which mode you are in, you can manually operate Shutter calibration and background calibration. ● Press and hold down the M button to enter the main menu. ● Press the Up / Down button to select the Calibration option. ● Press the M button to enter the submenu of the Calibration function. ● Press the Up / Down button to switch the selection between Automatic and Manual. - Automatic Calibration: It is defined by software algorithms. When the Image quality deteriorates, it will be calibrated automatically in this mode. - Manual Calibration: Images are calibrated by the user according to the image effect. You need to press the Up button + Down button at the same time to perform the calibration. ● Press the M button to confirm your selection. The icon on the status bar changes accordingly.	
Laser Rangefinder 	Turn LRF on/off ● Press and hold down the M button to enter the main menu. ● Press the Up / Down button to select the LRF option. ● Press the M button to select Single Ranging, 15s Continuous Ranging, 30s Continuous Ranging, 60s Continuous Ranging, 10min Continuous Ranging, Always-on Continuous Ranging.	

Microphone 	Turn MIC on/off ● Press and hold down the M button to enter the main menu. ● Press the Up / Down button to select the MIC option. ● Press the M button to turn MIC on/off. ● After MIC is on, the device will record sound during video recording. 	
Auto Display Off 	Set the standby mode to Auto or Manual ● In the Settings submenu, select the Auto Display Off menu option with the Up / Down button. ● Press the M button to switch between Automatic and Manual. ● In Automatic mode, the device will automatically enter standby after a period of inactivity. ● In Manual mode, the device remains active until manually turned off.	
Settings 	Setting the general settings ● Press and hold down the M button to enter the main menu. ● Press the Up / Down button to select the Settings option. ● Briefly press the M button to enter the submenu. ● This menu item allows you to configure the following settings.	
	Date 	Setting the system date ● In the Settings submenu, select the Date menu option with the Up / Down button. ● The date is in the format of YY/MM/DD.

		● Briefly press the M button to active the Date submenu. Two triangle icons will appear above and below the value. ● Switch among the year, month, and day with a short press of the M button. ● Set the correct year, month, and day with a short press of the Up / Down button. ● Press and hold down the M button to save and exit.
	Time 	Setting the system time ● In the Settings submenu, select the Time menu option with the Up / Down button. ● The time format is displayed as HH:MM in 24-hours format. ● Press the M button to active the Date submenu. Two triangle icons will appear above and below the value. ● Select the correct value for the hour and minute with a short press of the Up / Down button. ● Short press the M button to switch between hour and minute. ● Press and hold down the M button to save and exit. And the time in the status bar changes accordingly.
	Language 	Setting the system language ● In the Settings submenu, select the Language menu option with the Up / Down button. ● Enter the Language submenu with a short press of the M button. ● Select the desired language with a short press of the Up / Down button. ● Press the M button to confirm the selection. At the same time, it will save setting and exit to the Settings submenu automatically.
	Unit 	Distance measurement unit ● In the Settings submenu, select the Unit menu option with the Up / Down button.

		You can choose units of m or yr
	Status Bar 	Setting UI ● In the Settings submenu, select the Status Bar menu option with the Up / Down button. ● When Select Hide, UI only retains time 、magnification and battery level icons, When Show is selected, all icons are displayed.  Show  Hide
	Factory Reset 	Restoring factory default settings ● In the Settings submenu, select the Factory Reset menu option with the Up / Down button. ● Press the M button to enter the Factory Reset submenu. ● Press the Up / Down button to select Yes or No. Yes means to restore factory settings and No means to cancel the operation. ● Confirm your selection with a short press of the M button. ● If Yes is selected, the DUAL-SPECTRUM Binocular will reboot automatically. ● If No is selected, the operation is canceled and the screen returns to the upper menu. After the Factory Reset is selected, the following functions will be restored to default settings: - Image mode: white hot/Day - Display brightness: level 5 - Image sharpness/ saturation: level 5 - Ultra-clear mode: off - Wi-Fi: off - Image Hue: C

		- Image contrast/ exposure: level 5 - Digital zoom: 1× - Status Bar: Show - IR illuminator: Off - MIC: off - Calibration mode: M - Unit: m
	Info 	Showing the system information ● In the Settings submenu, select the Info menu option with the Up / Down button. ● The relevant information of device will be shown by a short press of the M button. ● This item allows the user to view the following information of the current thermal imaging monocular: product model, Firmware, PN, SN, hardware version number, etc. ● Press and hold the M button to return to the General Settings submenu.

15

Digital Zoom

The OMNI series supports quick digital zooming in of images to enhance visual magnification.

- On the home screen, rotate the digital zoom ring clockwise to zoom in the image, and rotate it counterclockwise to zoom out the image.
- The corresponding zoom factor is displayed in the status bar.

16

Photographing and Video Recording

The OMNI series Dual-Spectrum Binocularis equipped with a built-in 64GB memory storage and supports photographing and video recording. The image and video files will be named after time, so it is recommended to set the system date and time in the Main Menu before using the photo and

video functions (refers to **Main Menu - Settings - Date/Time Setting** in this manual), or to synchronize the system date and time in the settings of the NOCPIX App. For details, refer to the Operating Instructions for the App in our official website (www.nocpix.com).

Photographing

- On the home screen, press the **Down button** to take a photo. The image freezes for 0.5 sec with a camera icon  flash on the upper left corner. After the image is taken, the icon disappears.
- The images taken are saved in the built-in memory storage.
- When the exclamation mark icon  appears on the right side of the camera icon, it prompts that the memory space is insufficient. Check and transfer your videos and images to other media to free up the space.

Video Recording

- On the home screen, press and hold the **Down button** to start the video recording.
- The recording icon  and recording time prompt are displayed on the upper left corner of the display, and the time is in the format of HH:MM:SS (hour: Minute: Second).

- The red dot on the left of the time prompt will flash continuously when recording.
- During recording, you can also take a photo by pressing the **Down button**.
- Press and hold the **Down button** to stop and save the video. Recording.
- All videos and photos will be saved in the built-in memory storage.
- OMNI series is built-in Microphone function, You can turn on the microphone function to record while recording.

Note

- You can enter and work on the menu during video recording.
- The image taken and the recorded video will be respectively saved in the names in the formats of IMG_yyyyMMddHHmmss.jpg and VID_yyyyMMddHHmmss.mp4 in the built-in memory card (yyyyMMddHHmmss-year, month, date, hour, minute, and second).
- Due to the limitation of the storage space, it is recommended that you clean the memory regularly or move the images and videos to other storage medium to release memory space of the device.

Memory Access

When the device is powered on and connected to a computer, it will be recognized by the computer as a flash memory card. Then, you can access the memory of the device and copy images and videos.

- Connect the device to a computer through the data cable.
- Power on the device.
- Double-click "My Computer" on the desktop - double-click to open the device named "NOCPIX"- then double-click to open the device name "OMNI" to access the memory.
- Files named by time will be displayed after you access the memory.

17 Technical Inspection

Perform a technical inspection to check the following items each time before you use the device:

- Exterior of the device (no crack on the enclosure).
- Lens and eyepiece (no crack, oil, stain, or other sediments)
- Status of the rechargeable battery (fully charged in advance) and electrical contact (no salinization or oxidation).

18 Maintenance

The maintenance should be carried out at least twice a year and includes the following steps:

- Wipe the surface of metal and plastic parts to clear off dust and dirt with a cotton cloth. Silicone grease may be used for cleaning process.
- Clean the electric contacts and battery slots on the device using a non-greasy organic solvent.
- Check the glass surface of the eyepiece and lens. If necessary, clear off the dust and sand on the lens (it is perfect to use a non-contact method). Use a specialized wiping tool and solvent to clean the optical surfaces.

19 Troubleshooting

The following table lists all problems that are likely to occur during device operation. Check and address problems by referring to this table. If faults not included in this table occur or you cannot fix the fault, return the device to the vendor or supplier for troubleshooting.

Faults	Possible Causes	Solutions
The device cannot start.	The battery is out of charge	Charge the battery
The device cannot be powered by an external power supply	The USB cable is damaged	Replace the USB cable
	The external power supply is insufficient	If necessary, check the external power supply
Images are too dark	The display is not bright enough	Adjust the display brightness
The image quality is poor or the detection range shortens	These problems are likely to occur when you use the device in harsh weather (such as snow, rain, and fog).	
The device cannot connect to a smartphone or computer	The Wi-Fi password is incorrect	The device cannot connect to a smartphone or computer
	There are too many Wi-Fi networks in the range of the device, which may cause interference	To enable stable network access, you are advised to move the device to an area with a limited number of Wi-Fi networks, or an area without Wi-Fi coverage
Wi-Fi signals are lost or interrupted.	The device is beyond Wi-Fi coverage. There is blocking (such as concrete walls) between the device and the receiver.	Wi-Fi signals are lost or interrupted.
When the device is used at a low temperature, the imaging quality is poorer than that at normal temperature.	At temperatures above 0°C, the temperature rise varies with the observed objects (environment and background) due to different heat conductivity coefficients. As a result, high-temperature contrast occurs and the image quality is better. At low temperatures, the observed targets (background) usually cool down to a similar temperature because of reduced temperature contrast. Therefore, the image quality (details in particular) is poor, which is a characteristic of thermal imaging devices.	

20 Legal and Regulatory Information

Wireless transmitter module frequency range:

WLAN: 2.400-2.4835 GHz, 5.150-5.850 GHz

Wireless transmitter module power < 20 dBm



We, Inlumen Technologies Co., Ltd. hereby declares that the radio equipment OMNI series is in compliance with the

Directives 2014/53/EU and 2011/65/EU

FCC Statement

FCC ID: 2BHFB-OMNI-00

Labeling requirements

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.

Information to the user

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

EMC: Class A

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

To comply with RF exposure requirements, a minimum separation distance of 0.00 cm must be maintained between the user's body and the handset, including the antenna.



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