

HD 7 Inch WIRELESS BACKUP CAMERA SYSTEM

User Manual



FROG Group – Camera Demo Project

TABLE OF CONTENTS

FOREWORD	02
1 What Comes in the Box?	03
2 Introduction and Specifications	05
2.1 Specification	05
2.2 Camera Description	05
2.3 Monitor Description	05
3 Installation Guide	07
3.1 Create an Installation Plan	07
3.2 Monitor Installation	07
3.3 Camera Installation	09
3.4 Power Monitor & Camera	09
4 System Operation	10
4.1 MENU Description	10
4.2 PAIRING Operation	11
4.3 PICTURE Operation	12
4.4 MIR-FLIP Operation	13
4.5 P-LINE Operation	13
4.6 SYSTEM Operation	14
4.7 PLAY Operation	15
4.8 RECORD Operation	16
5 Trouble Shooting	17
6 Product Warranty	19

FOREWORD

Thank You for **Evaluating** Our Product!

We are committed to delivering your product in top condition and ensuring it performs to your satisfaction. It is our honor to have your trust and support.

To achieve the best performance, please read the manual thoroughly before operating the product and keep it for future reference. If you are not confident in installing the **HD 7" Wireless Backup Camera System**, we recommend contacting us for professional installation assistance.

Before operating the backup system, please read these instructions carefully.

- We recommend keeping this manual for future reference.
- If you encounter any issues while using the product, please contact us immediately. We are dedicated to resolving any problems with the best service and technical support.

1 What Comes in the Box?

Please inspect the shipping box for any signs of rough handling. Unpack the box carefully to ensure that each item is intact and shows no signs of shipping damage.

The images below provide an overview of all the items included in this system. If any items are damaged or missing, please contact us immediately.



Monitor



Camera



Suction Cup Mount



Sunshade



U-shaped Bracket
with Adhesive Tape



Installation Kit



Power Cord



Car Charger



Antenna

2 Introduction and Specifications

2.1 Specification

For proper operation, this backup system requires the monitor and camera to be connected to a 12-32 Volt Direct Current (DC) power source with current limited of 2A.

2.2 Camera Description

The lens of this camera is adjustable, allowing you to tilt it up or down to achieve your desired view. The camera features four mounting holes on its base, designed for installation on your vehicle.

For vehicles equipped with a pre-wired bracket, simply connect the wires directly without removing the existing ones. For vehicles without a backup camera system, connect and power the camera using the provided power cord.

Refer to **Part 3 - Installation Guide** for specific installation instructions.

2.3 Monitor Description

- ① Power Light
- ② Power ON/OFF Button
- ③ Function Up Button
- ④ Function Down Button
- ⑤ Channel Switch Button
- ⑥ Menu Button
- ⑦ Confirm Button(Start Recording)
- ⑧ SD Card Slot
- ⑨ Recording Status Marker
- ⑩ Signal Marker
- ⑪ Camera Number
- ⑫ Recording Marker



2.3.1 SD Card Slot

The SD card slot is located on the upper left side of the monitor. The SD card door and screws are packaged separately and need to be secured by the user.

The system supports high-speed SD cards ranging from 16GB to 128GB. The SD card serves as the primary storage device on the monitor, capturing video footage from the cameras.

Before inserting the SD card, please format it using your system or computer. Note that the SD card is not included with the system; if you require one, please contact us.

To prevent damage caused by electrical shock or improper installation, we recommend consulting a professional installer for assistance

2.3.2 Green Tag

There is a protective film on the screen that can be removed. Please handle it carefully during removal.

2.3.3 Monitor Buttons

(1). **POWER**: Power ON/OFF Button

Press the button once to power on the monitor. Press the button again to power it off.

(2). **▲**: Function Up Button

No effect on the main interface. In the **MENU**, press it to select between these 8 menu options. In the parameter, press it to increase, for example, if the “**PICTURE/Brightness**” control is selected, then press this button can increase the brightness of the screen.

(3). **▼**: Function Down Button

No effect on the main interface. In the **MENU**, press it to select between these 8 menu options. In the parameter, press it to decrease, for example, if the “**PICTURE/Brightness**” control is selected, press this button can decrease the brightness of the screen. No effect on the main interface.

In the **MENU**, press the button to navigate through the 8 menu options. In the parameter settings, press it to decrease values. For example, if the "PICTURE/Brightness" control is selected, pressing this button will reduce the screen brightness.

(4). **CH**: Monitor Channel Selection Button

(5). **MENU**: Monitor System Menu Button

Press this button to access the menu settings. When in the menu or other option states, pressing it will exit and return to the previous panel.


Attention: The **MENU** button can only be used to access the menu interface when the screen is in full-screen mode. Please switch to full-screen mode first.

(6). **SEL**: Toggle recording on/off and confirm selections.


In the main interface: Press the SEL button to toggle recording on or off. If an SD card is inserted, a "●" symbol will appear in the top left corner of the screen to indicate recording is active. Recording will only begin when the **SEL** button is pressed.

In the menu options: Press the SEL button to confirm your selection.

2.3.4 Main Screen Interface

(1).  **Camera** : Each display shows its number and signal strength in the upper left corner.

(2).  **REC**: When recording video, a red "●" will appear in the upper middle-left of the display. If you encounter any SD card issues, please format the SD card using the **RECORD** menu.

(3).  **Signal**: Indicates the signal strength of the camera. If "NO SIGNAL" appears on the screen, please try re-pairing the camera with the screen.

(4).  **SD CARD**: This icon appears when the rewrite function is enabled. You can disable it through the **RECORD** panel.

3 Installation Guide

3.1 Create an Installation Plan

We recommend spending a little time testing the system to ensure it functions properly before installation.

- (1). Attach the antennas to both the monitor and the camera.
- (2). Use a power supply (12-32V, 1-2A) to power both the monitor and the camera for testing. (Refer to **Part 3.4** for instructions on connecting power.)

Our cameras and monitors are pre-paired at the factory. If the screen displays “No Signal,” please:

- (1). Ensure the antennas are securely tightened.
- (2). Verify that the voltage is within the 12-32V range.
- (3). Re-pair the camera and monitor if necessary (refer to **4.2 PAIRING** for detailed instructions).

Once the system is confirmed to be working correctly, you can begin the installation. We recommend following this sequence:







- (1). Install the monitor.
- (2). Install the camera.
- (3). Connect the monitor and camera to their respective power supplies.
- (4). Adjust the camera lens to suit your needs.

3.2 Monitor Installation

The monitor comes with a metal U-shaped bracket and a suction cup mount. You can choose the option that best suits your needs.







For detailed installation instructions, please refer to the next page.

U-shaped Bracket Installation:

1.Attach the sunshade following the alignment indicated by the white dotted lines.	2.Secure the sunshade in place.	3.Remove all the components from the package.
		
4.Place the screw retainer in the screw hole on each side, ensuring that the convex side faces downward.	5.Place the screen face-up and position the bracket according to the fixed directions indicated by the white dotted lines.	6.Tighten the knob bolts to secure the screen or adjust its angle as needed.
		

*The sunshade is detachable, and can be removed if not needed.

Suction Cup Mount Installation:

Option 1: Mounted in the recess on the back of the monitor.		
		
Option 2: Remove the iron sheet, mounted on the bottom of the monitor		
		

3.3 Camera Installation (Our camera is designed to fit the existing bracket on most Forest River RVs)




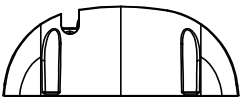



Installation for Vehicles with a pre-wired mount:

- (1). Align the screw holes of the camera and plastic pad with the screw holes of the pre-wired mount, and fix them in the screws.
- (2). Connect the camera to the pre-wired connector, and install the antenna. (Note: The base of the antenna is black.)

*Before securing the camera, adjust the lens as needed.

3.4 Power Monitor & Camera

Recommendations: Test the system with temporary mounting and wiring before proceeding with the installation

For Monitor: Attach the antenna, then connect the monitor to a power supply		Use Car Charger 
		Use Power Cord 
For Camera: Remove pre-wired bracket cap, and then connect camera to the pre-wired connector.		Connect to the pre-wired Connector 
For Camera: Install the camera into the pre-wired bracket on the vehicle, then attach the antenna.		

4 System Operation

The graphic below illustrates the interface of the Software Management System (SMS) panels and their associated sub-panels. You can use the monitor buttons to access or modify these panels. While the interface may seem complex at first glance, it is designed to be user-friendly.

4.1 MENU Description

There are eight main menu options.

Main Menu Panel:

- Selected items are highlighted in yellow.
- Press the ▲ or ▼ button to navigate through menu items.
- Press the SEL button to activate the selected item.

Sub-Menu Panel:

- Selected items are also highlighted in yellow.
- Use the ▲ or ▼ button to navigate through sub-menu items.
- Press the SEL button to activate the selected item.

To exit from any selection, press the MENU button or wait for the countdown to complete.



Software Management System Panels and Sub-panels

Main-panels	Functional Description
PAIRING	Pair the camera to the monitor
PICTURE	Brightness, Contrast, Hue, Saturation, Parameters
MIR-FLIP	Normal, Mirror, Flip, Mir-flip
MODE	Supports only one camera
P-LINE	P-LINE: ON/OFF, Astern ruler line set
SYSTEM	Time, Language
PLAY	Playback recorded videos
RECORD	Recording, SD card loop recording ON/OFF, SD

4.2 PAIRING Operation(your units are paired)

Note:

- (1). Keep the system powered during pairing and wait for the countdown clock. The system will pair automatically (this may take 20 seconds or longer).
- (2). The camera has already been paired with the monitor at the factory, so re-pairing is usually unnecessary. If pairing is required, follow the steps below:

Ensure both the camera and monitor are powered.

The vehicle may need to be running.

- ① Keep the camera and monitor within 3 feet of each other during pairing.
- ② Press the **POWER** button to turn on the monitor.
- ③ Press the **MENU** button to bring up 8 icons on the screen. The **PAIRING** icon will now be highlighted in yellow.

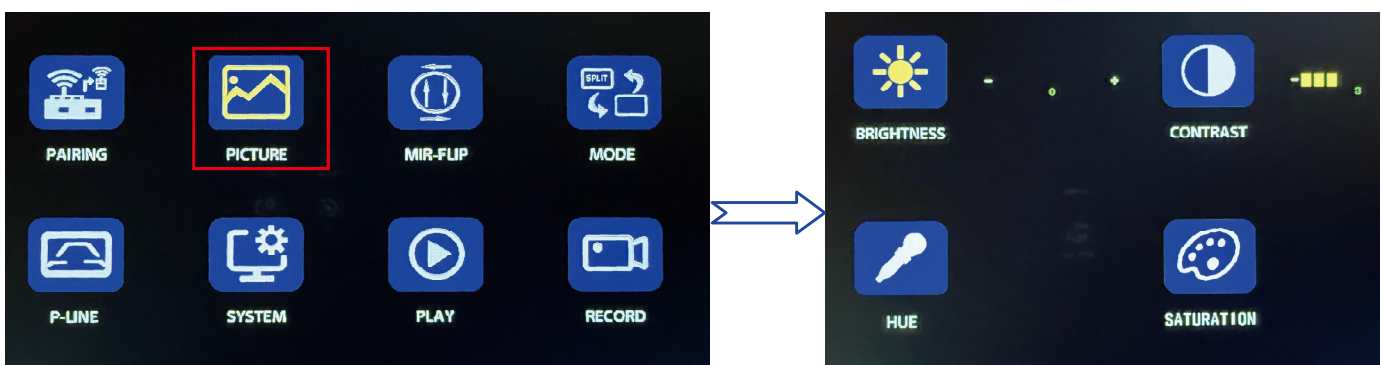


- ④ Press the **SEL** button to start pairing.
- ⑤ The screen will appear “**PAIRING START**” and begin to counting down.
- ⑥ The system will pair automatically.(this may take 20 seconds or more until the countdown finishes)
- ⑦ Once pairing is successful, the screen will automatically display the image, and the 8 icons will disappear shortly after.

4.3 PICTURE Operation

You can adjust the screen parameters as needed, such as Brightness, Contrast, and Hue.

- (1). Press the **MENU** button.
- (2). Press the ▲ or ▼ button to select the parameter you want to adjust.
- (3). Press the **SEL** button to confirm your selection.
- (4). Use the ▲ or ▼ button to adjust the parameter.
- (5). Finally, press the **SEL** or **MENU** button to save and exit.



Attention: Volume has no operational effect. Since the system doesn't have a microphone, it cannot pick up sound.

4.4 MIR-FLIP Operation

You can flip or mirror the image of a specific camera as needed:

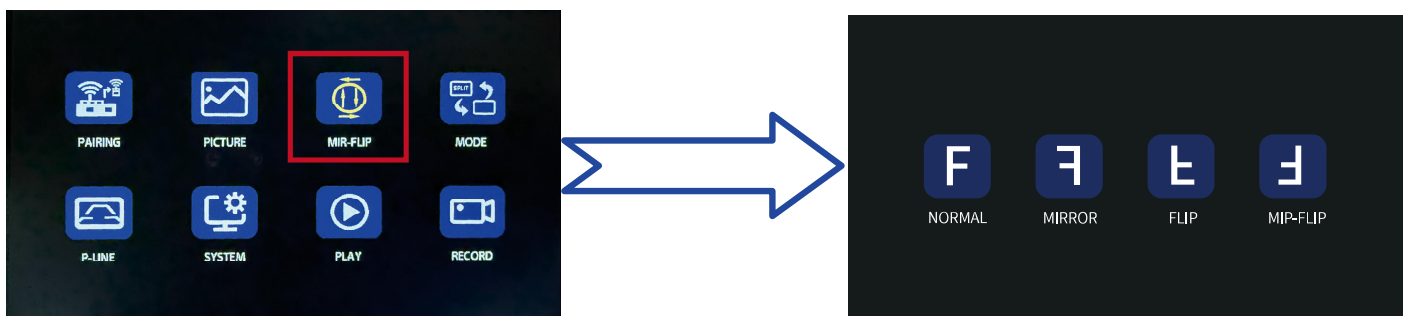
NORMAL: The screen remains normal.

MIRROR: The image is flipped left and right.

FLIP: The image is flipped upside down.

MIR-FLIP: The image is first flipped left and right, then flipped upside down
To adjust:

- (1). Press the ▲ or ▼ button to select your desired flip mode.
- (2). Press the **SEL** button to confirm your selection.
- (3). Press the **MENU** button to save and exit.



4.5 P-LINE Operation

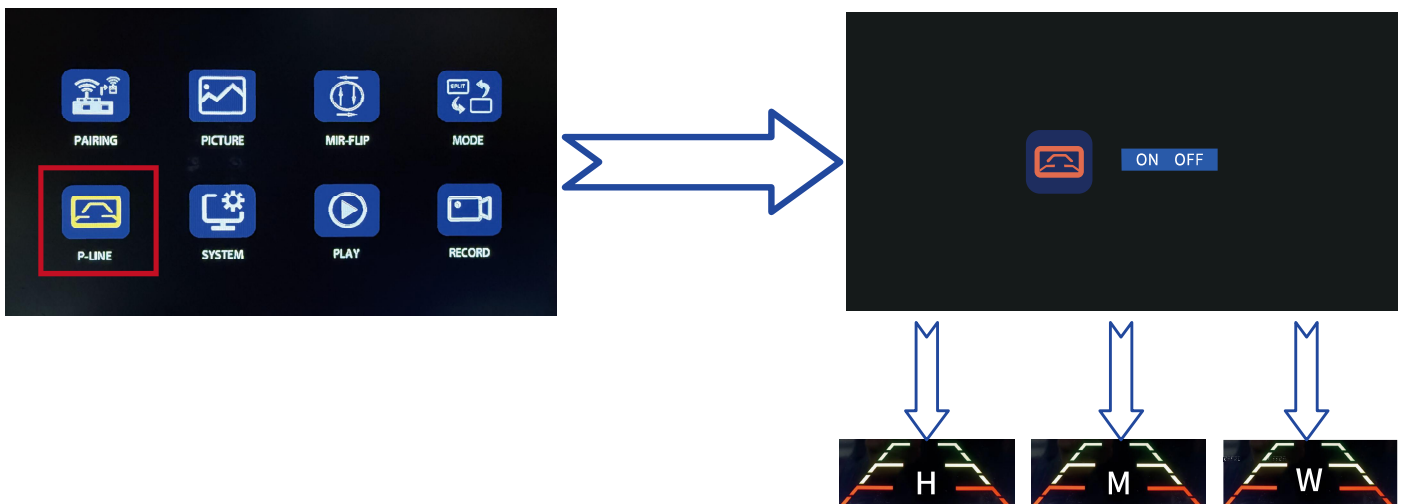
You can enable or disable the P-line based on your needs.

Operation Steps:

- (1). Press the ▲ or ▼ button to select the P-line you want to turn ON or OFF.
- (2). Press the **SEL** button to confirm your selection.
- (3). Press the **MENU** button to save and exit.
- (4). Reverse Scale Shortcut Adjustment Settings;
Short press the ▼ decrease key to select --> H/W/M --> Off, cycling through the options.
 - ① When the H scale is on, move up and down to set, press the ▲ increase key to adjust through 9 levels, cycling through;
 - ② When the W scale is on, move left and right to set, press the ▲ increase key to adjust through 9 levels, cycling through.

- ③ When the M scale line is activated, the width adjustment setting is enabled. Press the ▲ increase key to shift horizontally for adjustment. When the scale line is on the left side, it can be moved to the right with 18 adjustable levels, operating in a cycle.

(Note: The adjustment will only take effect when in the imaging state. After selection, press the menu confirmation key to save the current scale mode.)



4.6 SYSTEM Operation

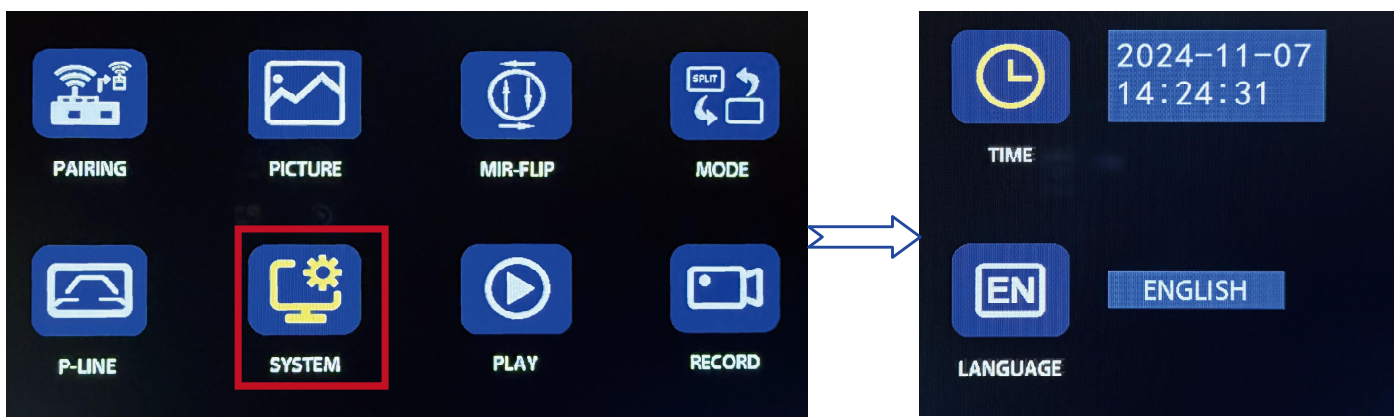
Set System Parameters (e.g., TIME, LANGUAGE):

Time Setting Steps:

- In this panel, select the **TIME** setting and press the **SEL** button to confirm.
- Use the ▲ or ▼ button to adjust the numbers for **Year, Month, Day, Hour, Minute, or Second**.
- After selecting a number, press the **SEL** button to confirm and proceed to the next field (e.g., Year → Month → Day, etc.).
- Once all fields are set, press the **SEL** button to confirm and exit.

Language Setting Steps:

- In this panel, select the **LANGUAGE** setting and press the **SEL** button to confirm.
- Use the ▲ or ▼ button to select your desired language.
- Press the **SEL** button to confirm your selection, then press the **MENU** button to exit.
- Several languages available (English, French, German, Japanese, Spanish, Portuguese, Russian), press the ▲ or ▼ button to select English, then press the SEL button to save the Settings.



4.7 PLAY Operation

You can playback recorded videos either on the monitor or on a computer by accessing the memory card data.

Steps to Play Recorded Videos on the Monitor:

- Press the **SEL** button to open the video file list.
- Use the ▲ or ▼ button to select the video you want.
- Press the **SEL** button to confirm and play the selected video.

While Playing the Video:

- Press the **SEL** button to pause or resume playback.
- Press the **MENU** button to exit and return to the main panel.

Note: The **MENU** button acts as a back button. You can press it multiple times to return to the main panel.

4.8 RECORD Operation

Memory Card Settings:

REWRITE:

When enabled, the system will automatically overwrite older videos when the SD card is full. If you choose to enable this feature, ensure you save any important video files in time to prevent them from being overwritten.

FORMAT:

This option deletes all data on the SD card. **THIS STEP IS IRREVERSIBLE.** When using a new SD card, format it first, even if it appears blank.

Recording Details:

- The system only records what is displayed on the screen.
- Recording does not start until the SD card is inserted, and the **ENTER** button is pressed.

5 Trouble Shooting

If you encounter any issues while operating this product, please refer to this section. Then most common problems are listed below, along with likely causes and solutions.

5.1 Is the screen blurred or abnormal?

- (1). Check if the lens or monitor is dusty. If so, gently clean them.
- (2). Verify if the camera is foggy. If it is, please contact us.
- (3). If the issue persists, please reach out to us for further assistance.

5.2 Are pictures overexposed/wash out?

- (1). Check if the camera is pointed directly at the sky or a strong light source. If so, adjust the camera angle to avoid direct exposure to the light source.
- (2). If the issue persists after adjustment, disable auto-dimming and try adjusting the screen brightness through:
Menu → PICTURE → Brightness.
- (3). If there is no improvement after these adjustments, please contact us for further assistance.

5.3 Monitor Has No Power

- (1). The car engine may not be started. Start the car engine.
- (2). Wiring connection may be incorrect. Check the wiring.
- (3). The monitor may be off. Press the POWER button to turn it on.
- (4). There may be no 12-14V DC output. Try using a different power source.
- (5). Check the fuse in the cigarette socket adapter.

5.4 Camera No Power

- (1). Car engine has not been started, start the car engine;
- (2). Incorrect wiring connection, check the wiring;
- (3). Cover the camera lens and check if the IR lights turn on. If not, check the wiring or try using a different power supply.
- (4). If it still does not work, please contact us.

5.5 Monitor displays “No signal”

- (1). Confirm whether the camera is receiving power.
- (2). Re-pair the camera to the monitor. Refer to **4.2.1** for the pairing method.
- (3). Install the extended antenna if necessary, or contact us for further assistance

5.6 Screen Flickers

- (1). Improper voltage and current: Ensure the voltage is within 12-32V and the current does not exceed 2A.
- (2). Camera switching between normal and night vision modes: Check if there is an object in front of the camera causing the mode to toggle

5.7 Camera & Monitor won't pair

- (1). Reduce the distance between the camera & monitor during pairing;
- (2). Ensure the camera antenna is properly fitted and secured; it should be positioned vertically.;
- (3). Check for interference from overhead power lines, as this may affect the signal.
- (4). Try unpairing the devices and then re-pairing them

6 Product Warranty

For Customers purchasing cameras, we offer a comprehensive 12-month warranty and replacement policy, as well as technical support to ensure you enjoy your modern backup camera for years to come.

If you need warranty support, are dissatisfied in any way, or encounter any issues with your purchase, please don't hesitate to contact us for assistance rather than returning the product or leaving negative feedback.

We are committed to providing the best service and will do our best to help you resolve any concerns.

FROG DEMO PROJECT PARTICIPANTS

Please feel free to contact us at +1 (248) 561-4795 – We can help!
Your input is valuable, let us know what you think.

FCC Warning

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.

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

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 in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.