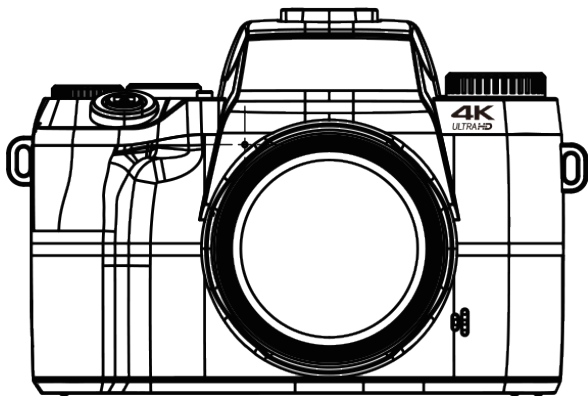


Digital Camera

Instruction Manual



Preface

Thank you for purchasing this digital camera. Please read this manual before operating this product. After you finish reading this manual, store it in a safe place for future reference.

Contents covered in this user manual refer to the latest information in preparation of this user manual. Screen displays, illustrations, etc. adopted in this manual are intended to explain operation of the camera in detail.

Due to differences in technological development and production batches, they may be slightly different from digital cameras you actually use.

Disclaimer notice: Considerable effort has been made to ensure that this manual is free of inaccuracies and omissions. However, there is no guarantee that there will be no errors or omissions in this manual.

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Getting Started

Battery Installation and Battery Charging

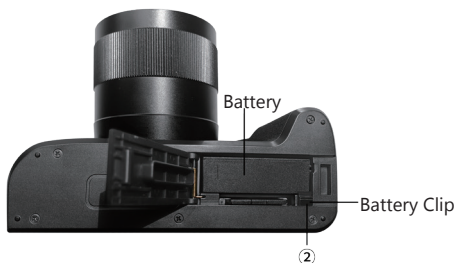
Ⓢ Installing the battery

Push the battery compartment cover to the direction of ①, and the battery compartment cover will pop up automatically when you release your hands.



Battery Cover

Push the battery buckle to the direction ②, put the battery into the battery compartment according to the correct direction, until it clicks into place.



Note: The camera uses a high-capacity rechargeable external lithium battery (SX-90).

⦿ Battery charging

(1) When using the camera to charge, connect the power adapter and the camera with a USB data cable. The red light is always on when charging, and the red light turns off when fully charged.



Warm tips: camera when charging It will turn on automatically. In closed state When charging, the battery will be fully charged faster.

(2) Battery charging time Under normal environment, it takes 4-5 hours to fully charge about

(3) Continuous working hours When [system] are factory default settings, it can work for 190min.

■ Battery precautions

10 ° C to 30 ° C. In a lower temperature, the battery may not be able to or need more time to be fully charged. When charging in a high temperature, it may shorten battery life.

A fully charged battery will naturally drain. To ensure sufficient power, it is recommended to charge the battery in advance.

When the camera is not used for a long time, please charge the battery every 3 months. Then let the battery discharge to maintain battery life.

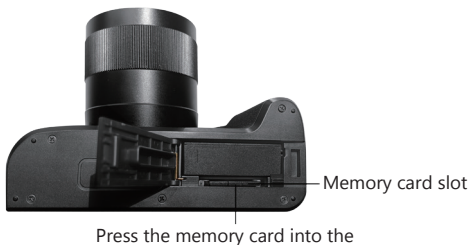
Turn off the camera before removing the battery or cutting off the power. Do not unplug the camera power adapter or remove the battery when the camera is on, or when recording or deleting images. In this case, if you forcibly cut off the camera power supply, it will cause data loss, and may also damage the camera memory or internal circuit. To prevent sudden power failure, do not move the camera when the camera uses the power adapter.



Memory card

⦿ Installation of memory card

Open the battery compartment cover and put the memory card into the memory card slot until you hear a click .



Before installing the memory card into the camera, make sure that its orientation is correct. If the memory card is inserted in the opposite direction, the camera will not recognize the card or cause failure.

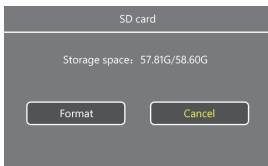
⦿ Usable memory card

This camera supports SD Card (Class10). Supports up to 256G.

⦿ Format memory card

It is recommended to format the memory card used in this camera for the first time, otherwise failures such as failure to record and blue screen may occur.

When a new memory card is used on this camera for the first time, the format window will pop up automatically. As shown in the figure:



You can also enter the "Format" submenu set in the camera system menu. Press the "MENU" button to enter the menu setting, press the "Left/Right" button to enter the system menu setting, press the "Up/Down" button to find the "Format" submenu, and press the "OK" button again to enter the format window above for formatting. You can also format the memory card on your computer.

ⓈRecording time of the memory card

The estimated recording time is for reference only, the specific time May vary depending on memory card and battery condition.

	16G	32G	64G	128G	256G
720P/30FPS	160	300	620	1320	2460
720P/60FPS	160	300	620	1320	2460
720P/120FPS	80	170	350	720	1440
1080P/30FPS	160	300	620	1320	2460
1080P/60FPS	80	170	350	720	1440
2.7K/30FPS	80	170	350	720	1440
4K/30FPS	45	90	180	360	720
4K/60FPS	35	70	140	280	560

Unit: Min

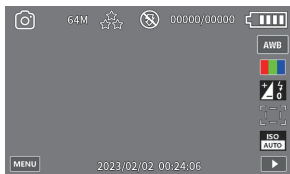
Note: If there is documents not recorded by this camera or saved by PC in the memory card, the recording time may be reduced or data may be unable to recorded properly.



Change camera settings

Turn on the camera

Press power button, working indicator lights up, screen lights up, and the camera is turned on.



Note: Press and hold the power button for the first time when the camera is put into the battery.

Set date/time

Press the "MENU" button, press the "Left/Right" button to enter the system menu setting, and press the "up/down" button to find the "time setting/date setting" submenu, as shown in Figure 1.

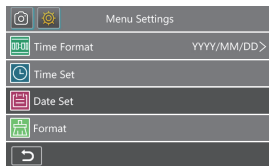


Figure 1



Figure 2

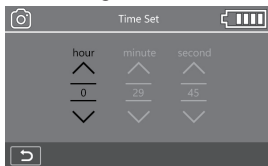


Figure 3

Press the "OK" button to enter, use the "left" or "right" button to select the category, and use the "up" or "down" button to set the value as shown in Figure 2 and Figure 3. After setting, press the "OK" button again to exit.

Language setting

Enter the system setting, press the "Up" or "Down" button to find the "Language" submenu, and press the "OK" button to select the appropriate language.

Submenu catalog of system setting

Sub-menu	Menu content
Image Rotation	Turn On/Turn Of
Icon display	Turn On/Turn Of
Video focus Mode	Auto focus/Manual focus
Wi-Fi	Turn On/Turn Of
Reset Wi-Fi	Confirm / Cancel
Light Source Frequency	Auto/50Hz/60Hz
LED Indicator	Turn On/Turn Of
Auto Screen Saver	Turn Off/30s/1min/2min
Auto Power Of	Turn Off/3min/5min/10min
Display Brightness	High/Middle/Low
Button prompt	High/Middle/Low/Turn Of
Startup Music	Turn On/Turn Of
Language	Simplified Chinese/traditional Chinese/ English/ Japanese/Korean/Russian/ German/French/ Italian/Spanish/Portuguese/Thai
Time Format	YYYY/MM/DD MM/DD/YYYY DD/MM/ YYYY
Time Set	hour minute second
Date Set	Year month day
Format	(Micro SD Card)Format/Cancel



Device Info Card)Format/Cancel	Product model and version number
Factory Reset	Confirm/Cancel

Note: When the prompt tone setting is turned off and the switch sound setting is turned on, there is no sound when the camera is turned on/off. This is not the problem of the camera itself.

Take still images

This section explains how to automatically recognize the situation to determine the exposure, etc. in normal photo mode.

Rotate the mode dial, select normal photography, and press the capture button to take a photo.

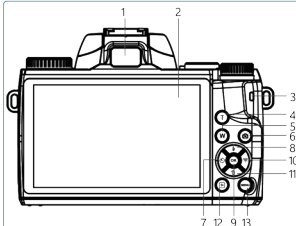
Shooting video

This section explains how to automatically recognize the situation to determine the exposure, etc. in the normal video recording mode.

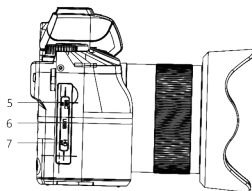
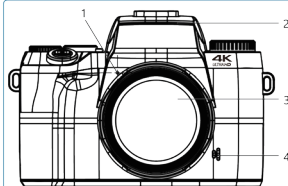
Rotate the mode dial, select normal recording, press the shooting button to start recording, press the shooting button again to end the recording.

Basic operation of this camera

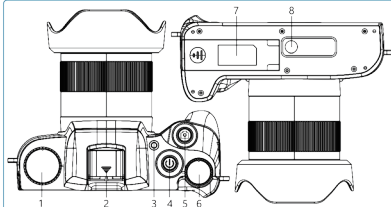
Camera button function introduction



- 1: rear lens
- 2: 4.0 inch LCD display
- 3: Charging indicator/working indicator
- 4: T-Zoom in
- 5: W-Zoom out
- 6: Front and rear camera switch button
- 7: Left
- 8: Up
- 9: OK
- 10: Right
- 11: Down
- 12: Playback button
- 13: menu



- 1: Sound receiving hole
- 2: Fill light
- 3: Front lens
- 4: Speaker
- 5: MIC interface
- 6: USB interface
- 7: HD interface



- 1: Mode Dial
- 2: hot shoe
- 3: Built-in fill light button
- 4: Power
- 5: Shoot button
- 6: Exposure adjustment dial
- 7: Battery compartment/
memory card slot
- 8: Tripod hole



Name	Function
Power	Power on / of
	Shoot video Pause/Resume
Shoot button	Take photo
	Shoot video start/end
	Manual focus
Exposure adjustment dial	Adjust exposure value
Built-in fill light button	Turn on/off the built-in fill light
Hot Shoe	Install the connection base of external microphone and fill light
Mode dial	Toggle Mode Menu
Fill light	Flash
Charging indicator/ working indicator	When the camera is charged, the red light will be on, and the light will be off when fully charged. After the machine is turned on, the blue light of the work indicator lights up
W/T	Zoom out / Zoom in
Front and rear camera switch	conversion lens
OK	confirm
Up	Upward
	Short press to turn on/off the fill light
Right	Rightward
	Long press to turn on/off WIFI
DOWN	Downward
	Delete videos or photos

Left	Leftward
	In the automatic photo mode, short press to change the photo interval
	In the timing photo mode, short press to change the countdown
	In the time-lapse recording mode, short press to change the recording interval
	In loop recording mode, short press to change the video length
	Short press in video + photo mode to change the capture interval
Menu	Set shooting menu and system menu
Playback button	play video or photo or slideshow
Memory slot	Card slot for inserting mirco SD card
USB	USB cable charging
	Connect the computer with USB cable
MIC	External microphone interface(3.5mm)
HD	TV HDMI cable interface
Sound receiving hole	MIC input
Speaker	MIC out



Mode dial



Rotate the mode dial to select the corresponding mode. The corresponding reference of this mode is as follows.

Icon	Mode	illustrate
	Photo	Take a single photo normally
	Auto	Automatically cycle take photos after a specified number of seconds
	Burst	Take a specified number of photos in succession
	Timer	Take a single photo after a specified number of seconds
	Video	Normal recording mode
	Slowly	Slow motion shooting
	Loop	recording infinite loop
	Lapse	Fast action shooting
	Video+Photo	During video recording, you can capture a single photo according to the set capture interval

Shooting function of camera

Shooting menu settings

After selecting the corresponding mode, press the menu button to enter the shooting mode setting menu.

Sub-menu	Menu content
Video Resolution	4K 60FPS/4K 30FPS/2.7K 30FPS/1080P 60FPS/ 1080P 30FPS/720P 120FPS/720P 60FPS/ 720P 30FPS
White Balance	Auto/Sunny/Sloudy/Fluorescent/Tungsten lamp
Fillter	None/Gray/Negative/Antique/Red/Green/Blue
Metering Mode	Average Metering/Center Metering/ Spot Metering/Matrix Metering
Sharpness	High/Medium/Low
Video Quality	High/Medium/Low
ISO	Auto/100/200/400/800/1600/3200/6400
Time Watermark	Turn On/Turn Off
Rec Audio	Turn On/Turn Off

Take still images menu

Sub-menu	Menu content
PixellInset	64M/56M/48M/30M/24M/20M/12M/8M/5M/3M
White Balance	Auto/Sunny/Sloudy/Fluorescent/Tungsten lamp
Filter	None/Gray/Negative/Antique/Red/Green/Blue
Metering Mode	Average Metering/Center Metering/Spot Metering/Matrix Metering
Image quality	Ultra high quality/high quality/standard
Sharpness	High/Medium/Low
ISO	Auto/100/200/400/800/1600/3200/6400
Time watermark	Turn On/Turn Off



Slow Motion/Time Lapse Video

Used to record moments that cannot be captured by the naked eye (slow photography shooting), shortening long-term phenomena To record for a short period of time (time-lapse video capture). Can record intense sports scenes, The moment a bird takes off, the way a flower bud blooms, the way the clouds and the starry sky change, etc. no sound is recorded.

Rotate the mode dial to select slow motion/time-lapse video, press the video button to start shooting. When you're done shooting, press the video button again.





Video+photo















During video recording, this mode can capture a single picture in sequence according to the set capture interval. It is suitable for outdoor sports, tourism, parties and other scenes.

Select the mode turntable, select Video+Photo, select the interval you want to capture in the setting menu, and press the Video button to start shooting. When the shooting is over, press the video button once again.

Touch function

The display screen can touch the operation icon, and the corresponding functions are as follows.

Icon	illustrate
	Switching White Balance (Auto/Sunny/Cloudy/Fluorescent/Tungsten lamp)
	Switch Filter (None/Gray/Negative/Antique/Red/Green/Blue)
	Switch Metering Mode(Average Metering/Center Metering/Spot Metering/Matrix Metering)
	Switching ISO(Auto/100/200/400/800/1600/3200/6400)

	Enter menu settings
	Enter Media Library
	Enter system menu setting
	Return/Exit
	Open video file
	Open photo file
	Open Slide
	View the previous photo/video/page
	View next photo/video/page
	Delete photos/videos
	Start/pause playing video
	Start Slide Show
	Pause/resume slide show
	Exit Slide

Touch the blank area of the display screen to hide all icons, and touch again to display all icons. All “sub menus” in menu settings can be operated by touch.



Focus function

This camera includes two focusing modes: auto focus and manual focus. Press the menu button once, press the "Left" or "Right" button once to enter the system setting menu, find the video focus mode, and press the OK button to enter choose.

Auto focus mode

In this mode, you only need to keep steady when taking pictures or recording, and the camera will automatically focus. After the focus is completed, press the shooting button.

Manual focus mode

In this mode, when taking pictures or videos, press the shooting button halfway, and a focus mark frame will appear on the display until the camera is in focus. Press the capture button all the way down for the best sharp photo or to start recording.

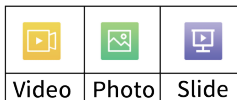
Video pause function

This camera supports video pause. During recording, press the power key to pause recording, and then press again to continue recording. If you press the capture button again, the recording will end.

Tip: The recorded video takes too long The system will automatically save it in segments in the memory card. The file name is * * * 0000 - * * * 000X

Media library and delete files

(1) Press the playback button to enter the media library, and press the "left/right" button to select the view video folder, photo folder or slide folder.



Note: Slides can only play photos and video previews automatically, and cannot display video files.

(2) Delete files: click on the corresponding photo or video, press the button to choose whether to delete.

Power OFF

In the power-on state, press and hold the power button to turn off the camera.

If the camera is idle and exceeds the set automatic shutdown time (off/3 minutes/5 minutes/10 minutes), and the camera is not operated, it will automatically shut down to save power.

Use method of fill light

☉Turn on the built-in fill light:

gently press the built-in fill light button, and the built-in fill light will pop up automatically.




☉Turn off the built-in fill light:

press and hold the built-in fill light button, and press down the built-in fill light until a click sound is heard, the built-in fill light is turned off successfully.



Fill light function

It can be used to fill in light in a dark environment. In the four modes of normal photography, automatic photography, continuous photography and timed photography, press the "Up" button to quickly set the following three corresponding flash modes.

	No flash
	Auto flash
	Mandatory flash

Note: Under the four modes of normal video recording, slow photography, circular video recording and reduced time video recording, only two flash modes can be switched: no flash and forced flash.

Operations with smartphones and computers

WiFi function

The WiFi function of the camera is mainly used to connect smart devices such as mobile phones, so that the camera can be controlled by the mobile phone to take pictures and record videos. In addition, the files in the camera can be downloaded directly with the mobile phone, without using a computer for transfer.

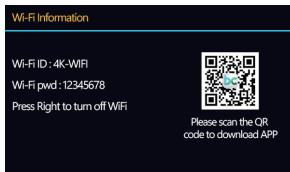
How to connect camera WiFi with mobile phone

(1) First, please use your smartphone to scan the following QR code to download the APP, and select a domestic download channel.



Note: This WiFi cannot connect to the Internet network.

(2) After powering on, long press the right button to quickly open the camera WiFi, or enter the system setting menu, find the wireless hotspot submenu, and press the confirmation button to open it. To turn off WiFi, press the right button again. After WiFi is turned on, the camera screen displays as follows:

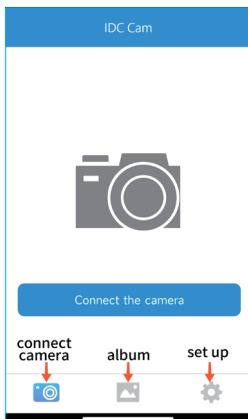




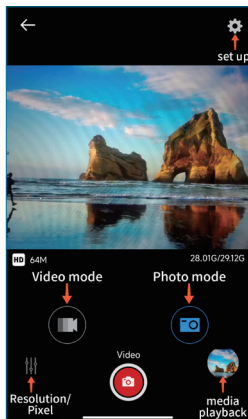
(3) Open the settings ----- WLAN on the mobile phone or tablet computer to find the WIFI name of the camera, enter the WIFI password, and connect the mobile phone or the camera to the WiFi.

Note: At this time, it is recommended to turn off the data network of the mobile phone and only open the WiFi to avoid the mobile phone constantly prompting that it cannot connect to the network.

(4) Enter the downloaded The APP interface is shown in the figure:

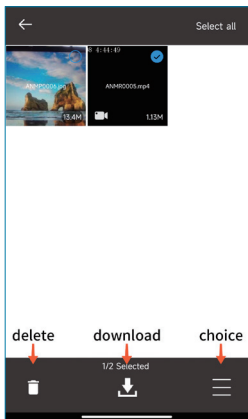


(5) Click to connect the camera and enter Operate the camera page, as shown in the figure:

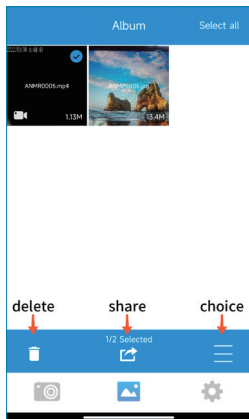


Select the corresponding shooting mode, and then click to take a photo or record a video. Tap Playback to view all photos or videos in the camera memory card.

(6) How to download/delete photos or videos Click playback to enter the corresponding photo or video and click the delete/download button below.



(7) How to share downloaded files to social software After downloading the file, turn off the camera WIFI and connect to the Internet.



Then open the APP home page again, click the picture button, select the corresponding file, and click share to social software.

MIC function

The camera supports an external microphone with a 3.5mm connector. Please note that this interface does not support headphone connection.



Connect HDTV

The HD interface of this camera is limited to connecting to HDTV, not to computer. Please insert the public port of the HD cable into the HD interface of the camera, and connect the other end of the port to the HD input interface of the HD TV. Note Before connecting/unplugging the high-definition cable, please stop recording/playing the recording. (The TV source should be adjusted to HD mode)

Note: After connecting to the TV, the camera display content automatically switches to the TV, and the camera's screen automatically goes black, it is not a malfunction.
High-definition cable is suitable for mini HDMI cable.

Connect to computer (Charging Mode/Mass Storage Mode /PC Camera)

Use the USB data cable to connect the camera to the available USB port of the computer, plug in the USB to automatically power on, press the up and down keys to select the charging mode, mass storage mode or PC camera, press the OK key to confirm the input.

Note: The computer systems compatible with this camera are: Windows XP/Windows7/Windows8/Windows10/MAC.

Charging mode

Select the charging mode to use all functions of the camera normally. This camera supports recording while charging.

Mass Storage Mode

Select the mass storage mode, and a mobile storage device "UDISK" will be added in the "My Computer" window, and photos and video files can be transferred to the PC through this mobile device.

Note: Do not disconnect the USB connection during the file download process, and the memory card cannot be inserted or removed during the USB connection to avoid data loss.



PC Camera

Select this mode to use the camera as a computer webcam. It can be widely used in video conferencing, online teaching and webcasting, etc.

Note: When the camera is used as a PC camera, only the digital zoom function can be operated on the camera, other functions cannot be used.

Usage notice

Safety Precautions

- (1) Do not disassemble and modify this product.
- (2) If any part emits smoke or an unpleasant smell, stop operating the camera immediately. Failure to do so may result in fire or electric shock. Turn off the camera immediately, and remove the camera's batteries or unplug the power cord from the electrical outlet. Make sure the camera has stopped smoking or emitting an unpleasant smell.
- (3) Do not expose the camera to water or other liquids, or immerse the camera in water or other liquids. This camera is not waterproof. If the case gets liquid or salt water, wipe it dry with a soft cloth. If water or other foreign matter enters the camera, please turn off the camera immediately, and take out the battery of the camera or unplug the power cord from the power outlet.
- (4) When using the flash, please keep a distance from the eyes of people or animals. When the distance is too close, facing strong light source may cause damage to eyesight. Please pay special attention to keep a distance of more than 1 meter (39 inches) from the baby when using the flash.
- (5) Please store the camera and batteries out of the reach of children.
- (6) Do not heat the battery or expose it to fire (otherwise it may explode).



Camera cleaning and maintenance

- (1) If the camera is not used for a long time, please take out the camera battery and place it in a dust-free, dry environment with a temperature not higher than 30°C.
- (2) In order to prolong the battery life, please fully discharge it before storage.
- (3) Please fully charge the battery at least every 3 months and then fully discharge it once.
- (4) If there is dust or dirt on the lens or display screen, please wipe it gently with a clean and soft lens cleaning cloth.
- (5) Since this machine is a precision instrument, please do not drop it or subject it to strong impact or vibration.

Trouble removal

⊙1.Unable to charge

- (1) If the charging indicator light is off, it means that the charger is not plugged in, please check whether the charger is connected properly.
- (2) The battery is recommended to start charging within the temperature range of 10°C to 30°C.

⊙2.Battery life is too short

- (1) Check whether the battery is fully charged.
- (2) If the ambient temperature is lower than 10 ° C , the battery will run out quickly.
- (3) Depending on the usage mode, the battery life will vary.



⦿3.Memory card not recognized

(1)Please check whether the memory card conforms to SD Card (class 10), up to 256G.

(2)Please check whether the memory card is inserted incorrectly.

(3)The memory card was used on the camera for the first time without formatting.

⦿4.Memory card can't be formatted

(1) If the camera can't be formatted, you can try to format the mirco SD card on the computer before inserting it into the camera.

(2)You can try to replace the memory card.

⦿5.Can't focus

(1)Don't keep shaking the camera and keep it steady. The camera will focus automatically in 1-3 seconds.

(2) If you choose manual focus mode, you need to press the shooting button halfway.

⦿6.Unable to connect to computer

(1)Please check whether the USB data cable is connected correctly.

(2)Please check whether the USB interface of computer is working properly.

(3)Please check the compatibility of the computer system.



Other

- (1) Except for the memory card, do not insert other objects into the card slot.
- (2) A few seconds after the power is turned on, the camera may display unstable images, but this is not a malfunction.
- (3) Due to the optical performance of the lens, there may be color dispersion at the edge of the image (magnified chromatic aberration rate), which is not a malfunction of the camera.
- (4) The memory card will become hot after prolonged use. This condition is normal.
- (5) If used for a long time, the screen of the camera will become hot. This condition is normal.



FCC Warning

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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.

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