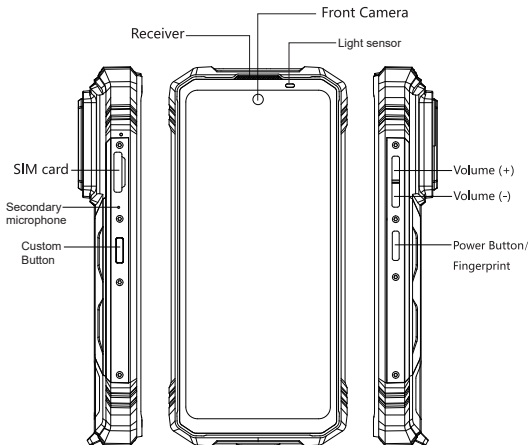


HOTWAV

Connect Passion with Life

USER MANUAL

WWW.HOTWAV.COM



Vent hole

Antenna slot



Main Camera

Flash

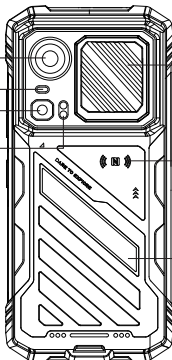
Night vision

Infrared light

Speaker Hole

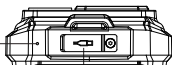
NFC

Camping light



Main Microphone
Hole

Type-C Port



Use the corresponding U/V external antenna according to the software settings.
when the intercom function is not enabled, no external antenna needs to be installed.



Multimedia Messages

- Tap the camera icon next to the text field
- Tap the photo or video you want to attach or you can take a new picture or video.
- After your message is finished, Tap ►

Language settings

- Open the Settings app, then tap "System"
- Tap "Language & input" → Tap "Languages"
→ Tap "Add Languages"
- Once your preferred language has been added, make it your Android's default language by pressing firmly on the two horizontal lines and moving it to the top.

SAR

- The maximum electromagnetic radiation absorption ratio(SAR) of this product is ≤ 2.0 W/kg .
- In line with the requirements of national standard GB 21288-2007.

Safety - In order to ensure safely using the product you must strictly abide by the following rules

- The phone should be at least 15 cm away from any medical implant rhythm adjuster and never put the device in your coat pocket.
- Do not expose the device or the battery to a high-temperature environment such as sunlight, heaters, microwave ovens, ovens, or water heaters, etc. Overheating of the battery may cause its explosion.

- When charging is complete or not in use, disconnect the charger from the device and unplug the charger from the electrical socket.
- Use of an unapproved or incompatible power source, charger or battery may cause fire, explosion or other hazards.
- Do not disassemble or reset the battery and avoid battery contact with water or other liquids so as to prevent battery leakage, overheating, fires or explosions.
- Do not drop, crush, scratch or puncture the battery so as to avoid subjecting the battery to excessive external pressure and the resultant short-circuit and overheating of the battery.
- The battery or the phone manufacturer does not bear responsibility for accidents caused by the use of non-standard charging equipment.
- For more information, please visit "www.hotwav.com".

Maintenance

- Proper use is important for the phone to work safely and effectively, also can extend the service life to the greatest extent.
- Please avoid dropping, knocking or violently handling of the phone. Rough treatment can damage the screen, the internal circuit board or other components.
- Do not use any strong cleaning agent or solvent cleaner to clean your phone. Wipe the phone case with a soft cotton cloth dampened with water or mild water solution.
- Clean the camera lens with clean, dry, soft and non-abrasive cloth.

- When the battery charger is not in use, please unplug it from the electrical socket. If the battery is fully charged, please disconnect the charger from your phone as it may affect the battery life in the long term.
- If phone calls can not be connected, check if you have accessed the right cellular network. Check if you have not set call barring for the phone number you are dialling. Check if you have not set call barring for the incoming phone number.
- If your voice can not be heard or heard well on the other end of a phone call, check if you are covering the built-in microphone. Check if the microphone is close enough to your mouth. If you are using an earphone, check if it is properly connected.

HOTWAV Warranty Information

Thank you for using HOTWAV mobile phone. We will provide our product with comprehensive warranty services in accordance with applicable national laws and regulations.

1. Your warranty is only valid under normal use of your device. All man-made damages and any of the following conditions are out of free warranty.
 - A. The warranty period has expired;
 - B. Damage caused by human factors, including damages caused by usage under improper operating environment and failure to properly follow instructions on the user manual.
 - C. The customer disassembles, repairs or modifies the device without the company's authorization;
 - D. Damage caused by a force majeure (such as floods, fires, earthquakes, etc);
 - E. The user is unable to provide the warranty card and valid proof of purchase or the product model and barcode do not match or are altered;
 - F. Faults, damages or defects not caused by the company;
 - G. Natural wear and tear of the product (such as casing, keypad, display screen, antenna and other accessories);
 - H. Barcode and warranty labels are damaged and unrecognizable.

Others.

- A. A valid warranty card is pre-requisite for claiming warranty
- B. The warranty card contains important information related to your product. Please preserve it for your future reference.
- C. External damages (including wear, tear, and scratches) are not entitled to the warranty service;
- D. Our warranty does not cover services verbally promised by dealers that violate principles set forth on the warranty card.

Frequency Bands:

GSM 900: 880 MHz to 915 MHz
GSM1800: 1710 MHz to 1785 MHz
WCDMA Band I: 1920 MHz to 19780 MHz
WCDMA Band VIII: 880 MHz to 915 MHz
LTE Band 1: 1920 MHz to 1980 MHz
LTE Band 3: 1710 MHz to 1785 MHz
LTE Band 7: 2500 MHz to 2570 MHz
LTE Band 8: 880 MHz to 915 MHz
LTE Band 20: 832 MHz to 862 MHz
LTE Band 28: 703 MHz to 748 MHz
NR N1: 1920-1980 MHz (TX), 2110-2170 MHz (RX)
NR N3: 1710-1785 MHz (TX), 1805-1880 MHz (RX)
NR N8: 880-915 MHz (TX), 925-960 MHz (RX)
NR N28: 703-736 MHz (TX), 758-791 MHz (RX)
NR N77: 3400-4200 MHz (TRX)
NR N78: 3400-3800 MHz (TRX)
NSA B1+N78
WLAN 802.11b/g/n20: 2412 MHz to 2472MHz
WLAN 802.11n40: 2422 MHz to 2462MHz
WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5150 MHz to 5250 MHz
WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5250 MHz to 5350 MHz
WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5470 MHz to 5725 MHz
WLAN 802.11a/n20/n40/ac20/ac40/ac80: 5725 MHz to 5850 MHz
Bluetooth: 2402 MHz to 2480 MHz
GPS: 1575.42 MHz $\pm$ 1.023 MHz
FM: 87.5 MHz to 108 MHz
BDS: 1561.098MHz
GLONASS: 1602 MHz
NFC: 13.56MHz
DMR:
VHF: 136 ~ 174MHz
UHF: 400 ~ 480MHz

Max power:

GSM 900: 34.37dBm
GSM1800: 30.75dBm
WCDMA Band I: 24.41dBm
WCDMA Band VIII: 24.56dBm
LTE Band 1: 25.17dBm
LTE Band 3: 25.48dBm
LTE Band 7: 25.27dBm
LTE Band 8: 25.31dBm
LTE Band 20: 21.51dBm
LTE Band 28: 24.36dBm
2.4GHz WLAN: 16.56dBm
5GHz WLAN: 17.42dBm
5.8GHz WLAN: 13.83dBm
NR N1: 23.16dBm
NR N3: 23.26dBm
NR N8: 23.28dBm
NR N28: 23.14dBm
NR N77: 25.03dBm
NR N78: 25.29dBm
NSA B1+N78: 25.21dBm
Bluetooth: 4.77dBm
BLE: 4.32dBm
NFC: 6.42dBuA/m at 3m
DMR:
4FSK: VHF: 37.02dBm, UHF: 36.90dBm
FM: VHF: 37.02dBm, UHF: 36.73dBm

Modulation Mode:

GSM: GMSK for GSM/GPRS; GMSK and 8PSK for EDGE
WCDMA: QPSK; HSDPA: QPSK/16QAM; HSUPA: BPSK
LTE: QPSK/16QAM

NR: DFT-s-OFDM, CP-OFDM($\pi/2$ shift BPSK, QPSK, 16QAM, 64QAM, 256QAM)

2.4G WLAN: 802.11b(DSSS): CCK, DQPSK, DBPSK

802.11g(OFDM): BPSK, QPSK, 16-QAM, 64-QAM

802.11n(OFDM): BPSK, QPSK, 16-QAM, 64-QAM

5G WLAN: 802.11a/n(OFDM): BPSK, QPSK, 16-QAM, 64-QAM

802.11ac (OFDM): BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM

Bluetooth: BT(1Mbps): GFSK

BT EDR(2Mbps): $\pi/4$ -DQPSK

BT EDR(3Mbps): 8DPSK

BLE: GFSK

GPS: BPSK

FM: FM

BDS: QPSK

GLONASS: FDMA

NFC: ASK

DMR: 4FSK/ FM

Bluetooth V5.1 + EDR + BLE:

BDR + EDR: Channel Spacing: 1MHz

BLE: Channel Spacing: 2MHz

2.4G WIFI Channel Spacing: 5MHz

5G WIFI Channel Spacing: 10MHz

WCDMA Channel Spacing: 200KHz

GSM Channel Spacing: 200KHz

GSM/WCDMA/LTE/NR: PIFA Antenna, Gain(s): GSM 900: -1.63dBi, GSM1800: 0.14dBi;

WCDMA: B1: 0.85dBi, B8: -1.63dBi;

LTE: B1: 0.85dBi; B3: 0.14dBi; B7: 1.58dBi; B8: -1.63dBi; B20: -1.98dBi; B28: -2.58dBi;

NR: N1: 0.85dBi; N3: 0.14dBi; N8: -1.63dBi; N28: -2.58dBi; N77: 1.57dBi; N78: 1.57dBi;

Bluetooth: PIFA Antenna, Gain(s): 1.83dBi;

WLAN: PIFA Antenna, Gain(s): 2.4GHz: ANT 1: 1.83dBi, ANT 2: 1.83dBi;

5GHz : ANT 1: 0.48dBi, ANT 2: 0.48dBi

FM: Integrated Antenna;

GNSS: PIFA Antenna.

NFC: Coil Antenna, Gain(s): 0dBi;

DMR: External Antenna, Gain(s): VHF: 1.9 dBi; UHF: 2.15 dBi

CE Maintenance

1. Use carefully with the earphone maybe excessive sound pressure from earphones and headphones can cause hearing loss.



2. Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

3. The product shall only be connected to a USB interface of version Type-C.

4. Adapter shall be installed near the equipment and shall be easily accessible.

5. EUT Operating temperature range: 0° C to 40° C .

6. Adapter: The plug considered as disconnect device of adapter

Power supply and ADP(rating):

Input: 100-240V 50/60Hz 1.2A

Output: 5.0V, 3.0A 15.0W or 9.0V, 3.0A 27.0W or 12.0V, 3.0A 36.0W or 15.0V, 3.0A 45.0W or 20.0V, 2.75A 55.0W Max

7. The device complies with RF specifications when the device is used at 5mm from your body.

8. To prevent possible hearing damage. Do not listen at high volume levels for long periods.

This product may be used in the following European member states subject to the following restrictions. For products that operate in the frequency band 5.150 to 5.350 GHz, wireless access systems (WAS), including radio local area networks (RLANs), shall be restricted to indoor use.

	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES
	FI	FR	HR	HU	IE	IS	IT	LI	LT	LU	LV
	MT	NL	NO	PL	PT	RO	SE	SI	SK	TR	

Declaration of Conformity

SHENZHEN TUGAO INTELLIGENT CO.,LTD hereby declares that this Smartphone is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. In accordance with Article 10(2) and Article 10(10), This product is allowed to be used in all EU member states.



Federal Communication Commission Interference Statement

FCC ID: 2AOKUHYPER8

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.

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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Radiation Exposure Statement:

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard for wireless device employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. Tests for SAR are conducted using standard operating positions (10mm) accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.

The PTT SAR limit set by the FCC is 8.0W/kg. For hand-held operation, the radio should be held at least 25mm from the user's face.

This PTT is designed for and classified as "Occupational/Controlled Use"

Hand-held Mode

To control your exposure and ensure compliance with the Occupational/Controlled environment exposure limits, always adhere to the following procedure:

SAR tests are conducted using standard operating positions accepted by FCC with the device transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. Before a new model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the exposure limit established by the FCC.

Tests for each product are performed in positions and locations as required by the FCC.

For body worn operation, this device has been tested and meets the FCC RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that contains no metal.

To maintain compliance with FCC RF exposure guidelines hold the transmitter and antenna at least 25mm from your face and speak in a normal voice, with the antenna pointed up and away from the face. Use of non-approved antennas, batteries, and accessories may cause the radio to exceed the FCC RF exposure guidelines. Transmit no more than the rated duty factor of 50% of the time. To transmit (talk), push the Push-To-Talk (PTT) button. To receive calls, release the PTT button. Transmitting 50% of the time, or less, is important because the radio generates measurable.