

Inrico®

SINCE 2004

3G WCDMA

Network radio, global communication
Enhanced Encryption—higher security level

Inrico PTT



T199
NETWORK RADIO



T199 is the smart radio without display ,which can push to talk globally under coverage of GSM/3G WCDMA/WIFI. Louder audio output, 4000mah larger battery capacity, professional Android system, portable design, which provides your company with a secure network radio , with excellent connectivity for professionals working in environments where first class communication is essential.



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T199

FCC ID: 2AIV6-T199
NETWORK TWO WAY RADIO

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SHENZHEN INRICO ELECTRONICS CO.,LTD

RADIO FEATURES

- Intercom globally
- Operation on cellular data card
- Guard Patrol function can be mapped
- WIFI / Bluetooth-supported
- GPS – supported
- Exceptional audio output
- Buttons are programmable for emergency.
- Longer talk time 4000mAh battery
- Compact size , reliable performance

TECHNICAL SPECIFICATIONS

Main Frequency	1.0Ghz
Network	2G: GSM 850/900/1800/1900 MHz 3G: WCDMA 850/900/2100 MHz(1900MHz optional)
Country	Global
Platform	MTK 6572A
System	Android
Speaker +Mic	Diameter of 40 big trumpet
Jack of earphone	3.5mm
GPS	Support
Battery capacity	4000mAh
Size	117*59*37mm
Weight	~240g

SYSTEM FEATURES

1.Basic function

Support group call, individual call, GPS

2.Special feature

Support priority call, video call, monitoring and recording function, playback function, scan function and SOS function

Enhanced Encryption–Voice Encryption & Data Encryption

APPLICATION SCENARIO SCHEMATIC



Digital trunking radio network



DIGITAL TRUNKING RADIO NETWORK



Instructions

Model T199
FCC 2A199-T199

Please read this instruction book carefully before you use the radio.

Gretitude!

Thank you very much for your purchase! Our radios have a newly developed function menu and humanism operation design, making it easy to use.

Safety: It is important that users are informed of the general safety issues related to these radios.

Warning

- Flammable environment (gas, dust and fog, etc)
- Please turn off the radio before getting close to the blasting zone or detonator areas.

General information before use

Please observe the following instructions to prevent fire, injury or damage to the radio.

- Prohibit to modify this product in any case.
- Please do not expose the radio to long-time direct sunlight, neither to close any heat source.
- Please do not expose the radio to dust, damp and spill, and over object that is unstable.
- If abnormal odor or smoke noted from the radio, please shutdown immediately, remove the battery unit, and contact our local authorized service provider.

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Unpacking and checking equipment

Note: following instructions is only suitable for authorized retailers and service providers. Carefully unpack the radio. We recommend you check the items listed in the following table before discarding the package. If any item is missing, please contact local dealer immediately.

Accessories:

Items	Number
Radio	1
Lithium battery	1
AC adapter	1
Antenna	1
Sling	1
Belt clip	1
Instruction manual	1

Preparation work

Warning

- ⚠ Do not overcharge with the battery
 - ⚠ Please stop to charging if it is uncompleted in normal time. The battery may flame, smoke or crack due to abnormal charging process.
 - ⚠ Do not put battery into the microwave or high pressure container
 - ⚠ The battery may flame, smoke or crack.
 - ⚠ Do not expose broken battery to any flame.
 - ⚠ If the battery is seen broken (or with abnormal odor), please remove it from inflammable condition immediately. The fluid in battery is really inflammable, which may cause flame or smoke.
 - ⚠ Do not use abnormal battery
 - ⚠ If the battery is abnormal in odor, color, shape or any other form, please remove it from charger or radio and do not use it anymore.
 - ⚠ Please use exclusive adapter
- The adapter in accessories is designed exclusively for the bought radio. It ensures the safety and reliability of battery charging.

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Using the Lithium Battery

Charge before use

To reduce electrical emission in battery, please remove the battery from device if not in use within long time. Please keep the battery in cool and dry places. When keeping battery for long time:

1. Remove battery from device;
2. If possible, please fully charge for the battery before store;
3. Store the battery in places that are cool and dry (with the temperature lower than 25 Celsius);

Feature of the Lithium Battery:

- ⚠ After repeated charging process, the capacity will decrease.
- ⚠ The battery degenerates gradually even without being used.
- ⚠ More time will be required when Lithium battery is being charged in cool condition.
- ⚠ Charging and storage of Lithium Battery in relatively warm condition will jeopardize its service life. Please do not keep them inside the vehicle or near heating equipment.
- ⚠ If the duration of battery shortens significantly, please replace the battery immediately to prevent fluid leak.

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Charging Lithium battery

After the AC adapter is connected and the battery is well placed, the indicator will show red which means the charging is in progress. Green will indicate that the battery is fully charged. The indicator will go off if the temperature is not proper, the battery is damaged or the connection is poor.

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Installing accessories

Installing/Removing battery

- ⚠ Do not short out the battery terminal, or set the battery in fire.
- ⚠ Do not attempt to remove the shell of battery.
- ⚠ Do not install battery in any dangerous condition, since the possible flame may cause explosion.

Aim the four dents of battery to the corresponding guides on the back of radio. Push the battery along the guides until the latch on the back of radio clicks.



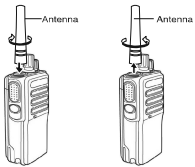
When removing the battery, pull down the latch, then push the battery backwards along the guides.



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Installing antenna

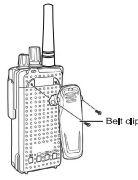
Hold the antenna pedestal, revolve the antenna in clockwise until it is tightened.



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Installing belt clip

If needed, screw the belt clip onto the back of radio by two screw holes located on the back of radio to facilitate portability.



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Installing sling

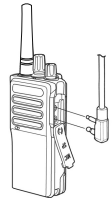
Take the tail of sling across the oval hole on the back of radio to install.



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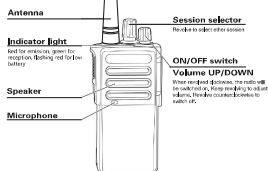
Installing headset

Open the cover from the top of device to show the headset sockets, Headset will work immediately after being plugged in.

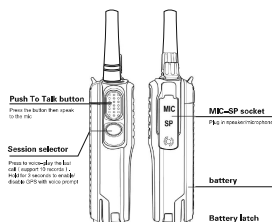


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Knowing the device well



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Unit structure

1. Volume selector/ ON/OFF switch

- A: Clockwise for switch ON, counterclockwise for switch OFF.
B: Clockwise for volume UP, counterclockwise for volume DOWN.

2. Push To Talk button PTT

- A: Press PTT button to initiate a call (red light goes on) when radio is standing by.
B: If not in reception, hold PTT to apply for turn to talk (red light goes on). Release the PTT button to quit talk and go back to standing by.

3. Session selector

- Revolve the selector for last/next session, and confirm to enter the current session with voice prompt.

4. Recorder Playback/GPS enable/disable

- Press to voice play the last call (support 10 recorders), Hold for 3 seconds to enable/disable GPS with voice prompt.

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5. Indicator light status

The green light goes on after the device is switched on. The green light flashes fast to indicate network searching. In standing by, the green light flashes for every 5 seconds, the green light remains on for reception, and the red light remains on for emission.

Introduction

1. Installing battery and SIM card

Please insert effective USIM card before use, make sure the USIM card can be effective in any selected WCDMA cellphone.

- (1) Revolve the volume button to switch ON/OFF device.
- (2) Remove the battery cover by pushing backwards.
- (3) Put USIM socket cover, place the USIM card in the socket well in right direction.
- (4) Replace the battery and cover.

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2. Basic use:

Switch ON: Revolve the volume button clockwise to switch ON device. After the device is successfully switched ON, the green light goes on first then flash to indicate network searching. After the network is connected, there will be voice prompt.

Switch OFF: Revolve the volume button counterclockwise to switch OFF device, the light will go off.

Note: Do not frequently switch between ON and OFF, it may affect the switch function.

Volume adjustment: Revolve clockwise to volume UP, counterclockwise to volume DOWN.

Headset: Plug in headset, press the PPT button on headset if there is one to initiate a call, release the button to cancel the call.

Low battery notification: When the battery is lower than 10%, there will be voice prompt to indicate charging need.

3. Session selection:

Before switching ON, user needs to revolve the selector to Channel 1 (The default session is Channel one, revolve to select other sessions. If the session is not available, there will be voice prompt: No Channel).

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FAQ

If your radio shows following problem in use, please check the instruction below, and if the issue still persists, please contact local authorized service.

1. Poor reception: Possible reasons: signal over your current location is weak (such as basement or next to a blocking building), or the network is busy (such as during rush hours). Solutions: 1. Please move somewhere with improved signal. 2. Please avoid use in such hours or wait for a while before another attempt.

2. Echo or noise: Possible reason: the quality of network service provider is flawed. Solution: Restart the radio will let it automatically search for available network with better quality.

3. Less duration: Possible reasons: the duration depends a lot on the settings by network service provider. Use and charging under condition with high temperature will also jeopardize the battery duration. Searching for network constantly in weak-network area will also lower the duration. Solution: if you are at place with weak signal, please temporarily switch OFF the radio.

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4. Unable to connect to network: Possible reasons: USIM card not effective, poor signal, out of network service area. Solutions: replace another USIM card, move to somewhere open and flat, if you are in the building, move near the window.

Indicator light interpretation

Device Status	Indicator Status	Frequency
ON/Setting	Green on	
Searching for network	Green flashes fast	Flash every 1 sec
Standing by	Green flashes slow	Flash every 5 secs
Initiating call	Red on	
Receiving call	Green on	

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Brief technical data

Voltage	3.7V
Frequency band	GSM850/PCS1900/WCDMA Band 1/WCDMA Band V
Size	62*36*190mm (width*length*height)
Weight	~240g
Working temperature	-10~+55celsius
Storage temperature	-40~+85celsius
Transmit power	230Bm - 300Bm @-104dBm
Receive sensitivity	WCDMA : ≤-106,7dBm GSM : ≤-102dBm
Sound output power	2W @ 10% distortion

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This device is not radio circuit of traditional walkie talkie or mobile phone. It uses 2G/3G network to transmit data (i.e. audio file). When in use, equipment suppliers will built local network according to the customer actual usage scenarios. Users push the button to record voice, the audio file will be sent to other match device in the form of data. This function is similar as software function such as WeChat or Facebook Messenger.

User depress button of the device to record user's voice. After the user release its button to finish recording user's voice, the voice become audio file and sending the file to another user thru connection of GPRS/EDGE/WCDMA network.

T199 has no ear loudspeaker and does not support the GSM dial and call function. It only supports GPRS/EDGE/WCDMA network function. It has no display. It could not be installed Skype or other network software. The device does not have any instant verbal talking and does not have any verbal dialing function thru connection of network.

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There is not any voice communication or FM transmitter on the device.

T199 is Push-to-Talk radios. It need to be tested with Held-To-face position and no need for Head SAR testing.

According to KDB 643646 A2, all sides of the radio that may be positioned facing the user when using a body-worn accessory must be considered for SAR compliance.

When user operates the product using a body-worn accessory, users only operates the front and rear sides of the product and face the user. The product is fixed to the waist, through a microphone and a headset to communication. It is because this is face-to-talk product. Thus, we only tested the front and rear sides of body-worn positions of the product. The other four sides of body-worn positions (top, bottom, left and right) were not tested. Therefore, the product complies with SAR requirement.

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Federal Communications Commission (FCC) Interference Statement

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 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.

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

This mobile device meets guidelines for exposure to radio waves. Your mobile device is a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves recommended

by international guidelines.

The SAR limit adopted by USA and Canada is 1.6 watts/kilogram (W/kg) averaged over one gram of tissue. The highest SAR value reported to the Federal Communications

Commission (FCC) and the Industry Canada (IC) for this device type when it is tested for use at the body is 1.086 W/kg.

The device complies with the RF specifications when the device is used at a distance of 1.0 cm from your body. Ensure that the device accessories such as a device case and a device holster are not composed of metal components. Keep your device 1.0 cm away from your body to meet the requirement earlier mentioned.