

**RG230**  
**4G PoC Mobile Device for**  
**fleet communication**  
**USER MANUAL**

## **Preface**

Thank you for purchasing this product. This manual includes a description of the functions and step-by-step procedures for use.

To avoid bodily injury or property loss caused by incorrect operation, please carefully read the user manual before use.

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Power Idea Technology (Shenzhen) Co., Ltd.

## Contents

<b>Contents</b> .....	<b>1</b>
<b>Packing List</b> .....	<b>2</b>
<b>Product Overview</b> .....	<b>2</b>
Product Layout .....	2
Mobile Device .....	2
Palm Microphone .....	2
<b>Installation</b> .....	<b>3</b>
Instrutions .....	3
Tools .....	3
Parts .....	3
Main Device Installation .....	3
Power Cable Connection .....	3
<b>Basic Operations</b> .....	<b>6</b>
Turning the Device On of Off .....	6
Adjusting the Volume .....	6
Keypad Functions .....	6
Operation Gesture .....	7
Install SIM/Memory Card .....	7
<b>Care and Cleaning</b> .....	<b>7</b>
Product Care .....	7
Product Cleaning .....	8
<b>Troubleshooting</b> .....	<b>9</b>

## Packing List

Please unpack carefully and check that you have received the following items. If any item is missing or damaged, please contact your dealer.

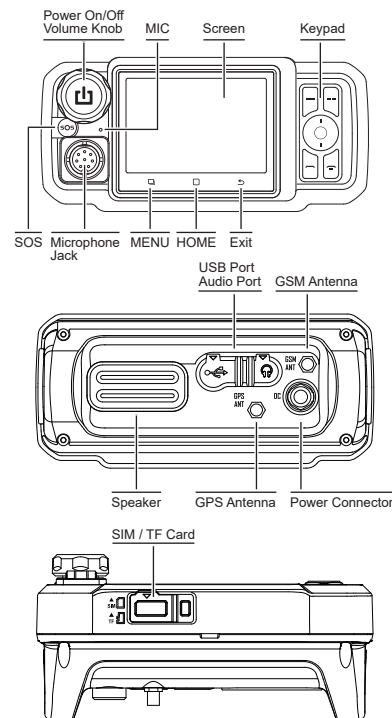
Item	Quantity (PCS)
Device	1
Mounin Bracket	1
Mounting Bracket Screw	2
GPS Antenna	1
Antenna	1
Palm Microphone	1
Power Cord	1

### NOTE:

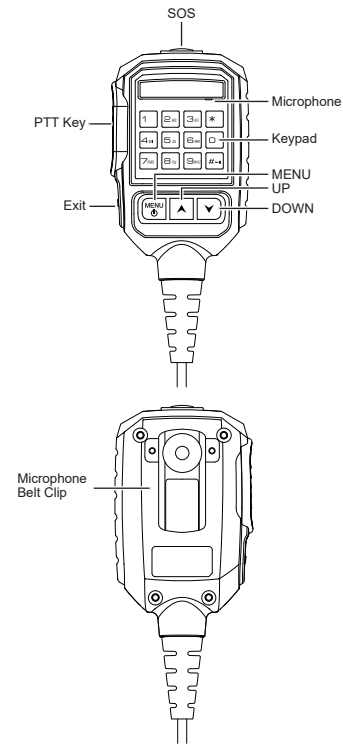
Optional Accessories: Car Charge, Adaptor

## Product Overview

### Product Layout Mobile Device



### Palm Microphone



## Installation

### Instructions

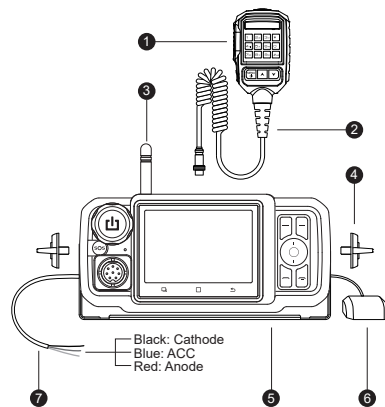
Before installing the device in a vehicle, read the following instructions carefully:

- The device must work with a 13.6V±15% negative ground electrical system only. Ensure to check the polarity and voltage of the vehicle power supply.
- Check how long the screws will extend from the bottom surface of the device. Drill the mounting hole cautiously to avoid damage to the vehicle wiring and other parts.
- Connect the antenna and power cord to the device before you install the device in the bracket. Use the antenna and power cord authorized by the Company only.
- Install the device with the mounting bracket supplied by the Company to avoid device looseness in case of accidents. The loose device may cause bodily injury.
- Install the device in a location where you can reach the front panel conveniently.
- Keep sufficient clearance at the back of the device for wiring.
- Be sure to use the fuse with the same specification for the DC power cord upon replacement.

### Tools

- Electric drill
- Cross head screwdriver
- T20 torx screwdriver

## Parts



NO.	Part Name
1	Palm Microphone
2	Palm Microphone Cord
3	Antenna
4	Mounting Bracket Screws
5	Mounting Bracket
6	GPS Antenna
7	Power Cord

## Main Device Installation

1. Install the bracket to the vehicle using self-tapping screws and flat washers;
2. Place the main device inside the bracket and secure it with the included bracket screws. Check carefully to ensure that all screws are tightened to avoid loosening of the main device due to vehicle vibration;
3. Install GPS antenna and LTE antenna;
4. Connect the power cable to the power interface of the main device and tighten it, then connect the vehicle power supply (red wire: positive pole, black wire: negative pole, blue wire: ACC);
5. Install the hand microphone, connect the hand microphone plug to the hand microphone interface on the front of the main device, and tighten the fixing nuts;
6. Open the SIM card cover at the bottom of the main device, insert the SIM card/TF card, and the installation is complete.

## Power Cable Connection

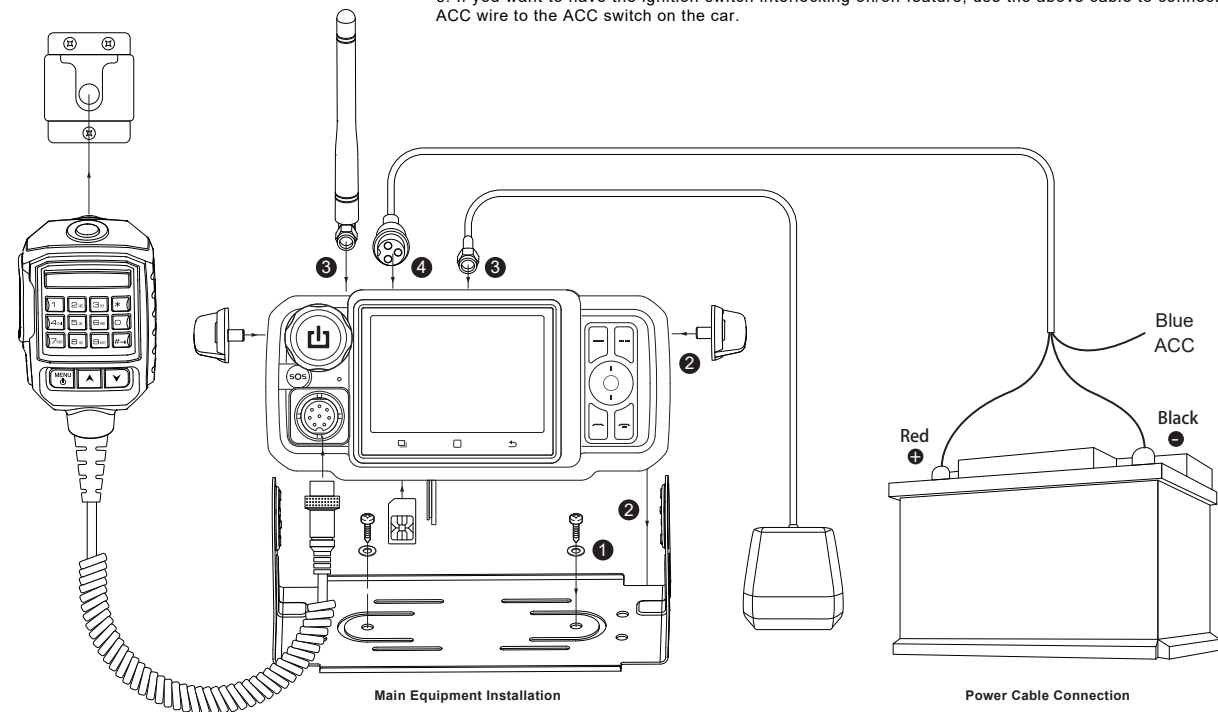
1. Determine the routing of the DC power cable (provided with this device) and lead it directly from the device to the terminal of the vehicle battery (do not connect it yet), making sure that the route of the cable is the shortest. Route the entire cable to avoid high temperature, moisture, and isolation from the secondary (high voltage) phone system/cable of the engine.
2. After laying out the cables, secure them.
3. To avoid the risk of short circuit, please disconnect other connecting wires from the negative battery terminal before connecting this device.

4. Confirm that the connection poles are correct, connect the power cable to the battery connection terminal, the red wire to the positive terminal, and the black wire to the negative terminal.

**NOTE:** Please use the entire cable and do not cut off the excess even if the cable is longer than required.

5. Reconnect the wires previously removed from the negative terminal.

6. If you want to have the ignition switch interlocking on/off feature, use the above cable to connect its ACC wire to the ACC switch on the car.

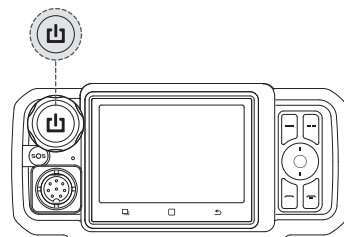


Wiring Method	Achievable Functions	Note
The positive pole is connected to the battery, the negative pole is connected to ground, and ACC is connected to the igniter.	Start engine to automatically turn on the equipment (9-36V)	Can only turn on when a 9-36v voltage is detected autotatically.
	Can manually turn on and off the equipment at any time through the front power button during use.	The equipment is unable to restart automatically when it's manually turned off.
	Turn off engine to automatically turn off the equipment.	
The positive pole and ACC are connected to the battery, and the negative pole is connected to ground.	Start engine to automatically turn on the equipment (9-36V)	Can only turn on when a 9-36v voltage is detected autotatically.
	Can manually turn on and off the equipment at any time through the front power button during use.	
	Turn off engine to automatically turn off the equipment.	
The positive pole is connected to the battery, and the negative pole and ACC are connected to ground (wrong wiring method)	Unable to turn on the equipment, may damage the equipment.	

## Basic Operations

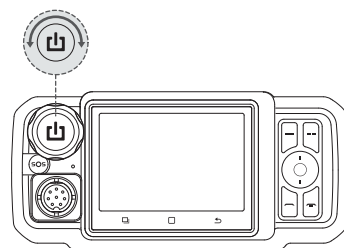
### Turning the Device On or Off

To turn the device on or off, long press the **Power Knob**.



### Adjusting the Volume

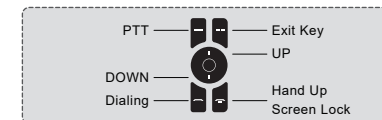
To increase or decrease the volume, Rotate the **Volume Knob**.



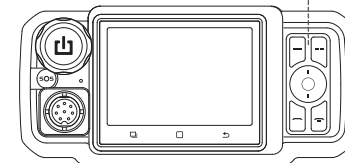
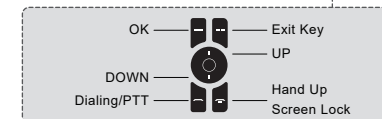
## Keypad Functions

Due to different sales areas, there are two versions of button definitions:

### Version 1



### Version 2



Key	Function
PTT	Shot press to send voice message, release to stop sending
Exit Key	Return to previous screen/Exit current function
Dialing	Short press to make a call
Hang Up / Screen Lock	Short press to hang up/turn off screen
UP	Short press to select the last item in the menu
DOWN	Short press to select the next item in the menu

## Operation Gesture

Operate icons, buttons, menus, virtual keyboards and other items through gestures.



**Tap:** Lightly touch the screen once with your finger.



**Long press:** Press and hold the icon to enter edit mode or pop-up menu on the desktop, list, etc areas.



**Swipe:** Tap and hold the screen lightly and slide, the target area will follow the direction of the finger.



**Two-finger zoom:** In some programs such as pictures, you can zoom in or out with two fingers on the screen



**Drag:** Hold down the icon with your finger and move your finger to drag the icon.



**Double tap:** Tap the screen twice in succession.

## Install SIM / Memory Card

1. Open the bottom card cover of the device
2. Align the SIM/memory card with the corresponding socket and insert

### NOTE:

Please safely uninstall or shut down and then remove the memory card, Otherwise it may cause system problems.

## Care and Cleaning

To guarantee optimal performance as well as a long service life of the product, please follow these tips.

### Product Care

- Do not pierce or scrape the product.
- Keep the product far away from substances that can corrode the circuitry.
- Do not hold the product by the antenna or earpiece cable.
- Close the audio accessory connector cover when no accessory is in use.

## Product Cleaning

### Caution:

Turn the product off before cleaning.

- Clean up the dust and fine particles on the product surface and charging piece with a clean and dry lintfree cloth or a brush regularly.
- Use neutral cleanser and a non-woven fabric to clean the keys, knobs, and front case after long-time use. Do not use chemical preparation such as stain removers, alcohol, sprays or oil preparations, so as to avoid surface case damage.
- Make sure the product is completely dry before use.

## Troubleshooting

Phenomena	Analysis	Solution
You cannot turn the device on.	The power cord may be disconnected or not securely connected to the outlet.	Properly connect the power cord and ensure secure connection.
During receiving, the voice is weak or intermittent.	The volume level may be low.	Increase the volume.
	The communication signal strength may be weak.	Make sure the device is within the network coverage.
	The speaker may be blocked.	Clean the surface of the speaker.
You cannot use the keys.	The keypad may not work temporarily.	Restart the device.
	The keypad is broken.	Contact the dealer or our Company for customer service.
The LCD does not display any information.	The palm microphone of the transmitting device is not connected properly.	Remove and reattach the palm microphone.
	The display is broken.	Contact the dealer or our Company for customer service.
The GPS does not work.	The GPS antenna is not connected properly.	Properly connect the GPS antenna.
	You may be in an unfavourable position where the GPS signal is too weak to receive.	Move to an open and flat area, restart the device, and try again.

## Troubleshooting

Phenomena	Analysis	Solution
The device fails to connect to the cellular network.	The SIM card fails to function properly or is out of service because of unpaid charges.	Make sure the SIM card functions properly or pay the charges.
	The cellular network is not enabled for the SIM card.	Contact the carrier to enable the cellular network.
	The communication signal strength may be weak.	Make sure the device is within the network coverage.
	Both the cellular network and WLAN are turned on, but the WLAN connection is unstable.	Turn the WLAN off.
The terminal fails to detect the SIM card.	The SIM card may be installed improperly.	Remove and reattach the SIM card.
	The SIM card may suffer from poor contact caused by dirty or damaged metal contacts.	Clean the metal contacts.

### ● MAINTENANCE / REPAIR

The device itself has no user-serviceable parts. It is recommended to perform inspections according to the safety regulations and advises. If there is a problem with the device, please contact your vendor or consult the service center. If your device is in need of repair, you can either contact the service center or your vendor.

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● RECYCLING

The crossed-out wheelie-bin symbol on the product, battery, literature, or packaging is a reminder that all electrical and electronic products, batteries, and accumulators must be taken to separate collection points at the end of their working life. This requirement applies in the European Union. Do not dispose of these products as unsorted municipal waste. Always return used electronic products, batteries, and packaging materials to dedicated collection points. This helps prevent uncontrolled waste disposal and promotes the recycling of materials. More detailed information is available from the product retailer, local waste authorities, national producer responsibility organisations, or your local Power Idea Technology (Shenzhen) Co., Ltd. representative.

● WARRANTY

You can find the warranty conditions at <https://www.ruggear.com/support.html>

## REMARK

In the constant effort to improve our product,  
we reserve the right to make construction or design changes  
without notice or obligation.

● EU DECLARATION OF CONFORMITY

The EU declaration of conformity can be found at the end of this manual.



RugGear

## EU – Declaration of Conformity

according to directives 2014/53/EU and 2011/65/EU (2015/863/EU)

The company Power Idea Technology (Shenzhen) Co., Ltd. declares under its sole responsibility that the product to which this declaration relates is in accordance with the provisions of the following data, directives and standards:

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Description of the device:	Product Name: Mobile Phone Marking Name: RG230 Model Name: RG230
Trademark:	RugGear
Conformity statement 2014/53/EU issued by	PHOENIX TESTLAB GmbH Königswinkel 10 D-32825 Blomberg Germany
Conformity statement 2015/863/EU amending 2011/65/EU issued by	Huarui 7Layers High Technology (Suzhou) Co., Ltd Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province

Applied harmonized standards

EN IEC 62311:2020; EN IEC 62368-1:2020+A11:2020; EN 50332-1:2013;EN 50332-2:2013; EN 301 489-1 V2.2.3 (2019-11); EN 301 489-3 V2.3.2 (2023-01); Final draft ETSI EN 301 489-17 V3.3.0 (2024-07); EN 301 489-19 V2.2.1 (2022-09); Draft ETSI EN 301 489-52 V1.2.5 (2024-08); ETSI EN 300 328 V2.2.2 (2019-07); ETSI EN 301 893 V2.1.1 (2017-05); ETSI EN 300 440 V2.2.1(2018-07); EN 301 908-13 V13.2.1 (2022-02); ETSI EN 301 908-1 V15.2.1(2023-01); ETSI EN 301 908-2 V13.1.1(2020-06); ETSI EN 301 511 V12.5.1 (2017-03); ETSI EN 303 413 V1.2.1(2021-04).

Signed for and on behalf of:

Shenzhen, 27/12/2024

Place and date of issue

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