



# User Manual

## D6000E Mobile Repeater

Operating Instructions

# INTRODUCTION

Thank you for purchasing the D6000E Mobile Repeater. We hope you will appreciate its quality and reliability.

By using the radio station, you will be able to operate the device correctly and efficiently.

## **The product meets the requirements specified in the documents.**

- GB/T 9254.1-2021 "Electromagnetic Compatibility of Information Technology Equipment, Antennas, and Radio-Electronic Products."
- GB 4943.1-2022 "Audio/Video, Information and Communication Technology Equipment - Part 1: Safety Requirements."
- GB/T 26572-2011 "Requirements of Concentration Limits for Certain Restricted Substances in Electrical and electronic Products" (China RoHS).

## **Purpose and Field of Application**

The D6000E Mobile Repeater is designed for establishing voice, digital, and simplex radio communications in both direct and retransmitted signal formats within UHF-band mobile radio networks.

## Utilization

This product poses no danger to human life, health, or the environment; therefore, no special preparation or disposal procedures are required.

## Main Technical Specifications

### Characteristics of the Radio Station

Frequency range (MHz)	400 - 470
Number of channels	16
Power Supply Voltage (Volts)	12-24V DC ( $\pm 15\%$ )

## Unboxing and Inspection

### Comprehensiveness

Carefully remove the radio from the box and check that all components are included.

## List of the Set

D6000E Mobile Repeater	1 PCS
Fitting hook	1 PCS
Microphone holder	1 PCS
The portable microphone – the tangent line	1 PCS
The power cable operates at 12-24 volts and comes with a plug designed for use with the cigarette lighter.	1 PCS
A package containing a set of mounting accessories.	1 PCS
Operation Manual	1 PCS

## Recommendations for Operating a Radio Station

- Do not adjust the radio station while you are moving.
- When installing a radio station, avoid areas that are dusty.
- Position the radio in a location where it will not come into contact or collide with occupants during sudden braking of the vehicle.

- The mounting location of the radio must be outside the deployment area of the vehicle's airbags.

- Before connecting the radio, check the power supply voltage, which should be within the range of 13.8–27.6±15%13.8–27.6±15% Volts.

- Use a fuse no larger than 3A in the power supply circuit of the radio. Do not attempt to replace the fuse with pieces of wire, as this will ultimately lead to significantly higher repair costs or make the device irreparable.

- When operating the radio, use only the original remote microphone. Do not attempt to connect a microphone from other radios.

- The station shall not be operated if the antenna is not properly connected. Doing so may damage the internal power amplifier.

- Limit the continuous transmission time of the radio to prevent overheating.

- If any unusual odor or smoke appears, immediately turn off the radio and contact a service center.

## **Installation and Connection**

### **Radio stations in cars**

At the selected location, attach the station mounting bracket and the microphone mounting bracket.

Secure the radio by placing it in the installed mounting

bracket.

If connecting directly to the battery or to the fuse box, use a wire with a cross-section no smaller than that of the radio's original wiring harness. Route the wire along the shortest possible path, keeping it protected from external influence. If the vehicle is equipped with a battery master switch, do not connect the negative (black) power wire directly to the negative terminal of the battery — doing so may damage the radio.

## **Automobile Antenna Installation**

The range and quality of radio communication depend largely on the quality of the antenna, as well as the location and method of its installation.

### **Recommendations for installing antennas:**

- Where possible, install the antenna in the highest position inside the vehicle.
- The best location for installation is the center of the surface; for example, the center of the roof.
- Avoid installing the antenna on the trunk lid of passenger cars, on the mirror brackets of trucks, on car doors, or on ventilation vents.
- It is prohibited to install antennas on wind deflectors or on the plastic surfaces of truck roofs.
- When installing a built-in antenna via an intermediate

bracket, ensure that there is a reliable metal connection between the bracket and the vehicle's body.

- Be sure to configure the antenna according to the instructions provided with the device.

Remember that using a faulty, untuned, or disconnected antenna will damage the radio and void the warranty.

## Controls and Connectors

### Front Panel and Tangent



#### 1. PTT button (Push to Talk).

-Press and hold to transmit.

-Release it for intake.

#### 2. Volume regulator.

By turning the knob, adjust the sound volume through

the speaker.

### **3. Channel switching buttons (CH+ and CH-).**

## **Rear Panel**



### **4. Antenna connection socket.**

The wave resistance of the antenna and the coaxial cable must be 50 ohms; the antenna must operate within the frequency range of 400–520 MHz.

### **5. Power connector.**

Power supply via direct current (DC) at a voltage of 12-24 volts.

### **6. Power on/off button (ON/OFF).**

## Special Functions of the Radio Station

The D6000E Mobile Repeater is equipped with a function for retransmitting identical signals, which allows for a significant expansion of the radio communication network's coverage area.

Radio station operating modes: Main mode – reception and transmission; + Intelligent retransmission.

The automatic detection function is active to determine whether a device of the same type is nearby and whether a signal retransmission is required.

## Main Management Operations

### Power On/Off

To turn on the transceiver, press the power-on/off button.

### Volume Control

Turn the volume control clockwise to increase the sound level, and counterclockwise to decrease it.

### Choosing a Working Channel

The working channel is selected using the [CH+] / [CH-] buttons located on the front panel of the radio.

## Transfer

1. To transmit, hold the microphone about 5 cm from your mouth, then press and hold the [PTT] button. Speak into the microphone in your normal voice.

2. After completing the transmission, release the [PTT] button.

## Main Technical Specifications

Parameter	Significance
Working frequency range, MHz	400-470
Number of channels	16
Antenna impedance, Ohms	50
Power Supply Voltage	12-24V DC $\pm$ 15%
Working temperature, °C	-30 to +60

## Guarantee Certificate

Warranty period  
of the product

**12** months from  
the date of purchase

Product type	Mobile Repeater
Name	D6000E
Serial number	

If the factory seals are broken or the original packaging is missing, no claims will be accepted and warranty repair will not be performed.

If a defect is found in the product during the warranty period, the Seller will repair it free of charge within a maximum of five (5) weeks from the date the product is received by the Seller at the company's service department.

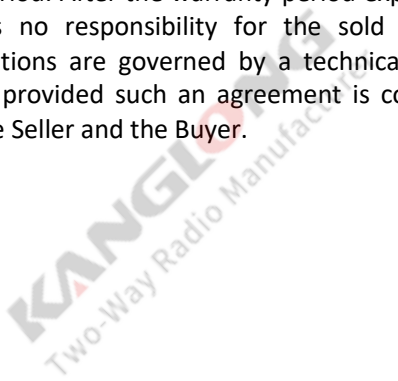
Without presentation of this warranty card, or if it is filled out incorrectly, or if the factory seals are broken, or if the original packaging is missing, no claims will be accepted and warranty repair will not be performed.

Within 14 days, the Buyer has the right to exchange the product for an identical model or for another product, provided the product has not been used and

the original packaging, warranty card, and cash receipt are preserved.

It should be noted that identical radios, like any radio electronic device, may not produce identical radio performance characteristics. Inferior parameters of one radio compared to another sample do not constitute grounds for returning the radio.

The shelf life set by the Seller corresponds to the warranty period. After the warranty period expires, the Seller bears no responsibility for the sold product. Further relations are governed by a technical service agreement, provided such an agreement is concluded between the Seller and the Buyer.



## **The product warranty becomes void if:**

1. The product has external or internal mechanical damage.

2. There is damage to the accessories and parts included in the delivery set (cables, connectors, antennas, power supplies, etc.), as well as power cords.

3. The product has damage caused by ingress of liquid, dust, insects, etc.

4. The product has damage caused by failure to comply with the power supply rules.

5. The product has undergone unauthorized repair or structural modifications.

6. The product shows natural wear of parts with a limited service life, namely: CONTROLS, PTT BUTTON, as well as consumables.

7. The product has been used together with devices not intended for its operation.

8. The product has damage caused by exposure to high temperatures.

For repair and service matters, you should contact the department where the product was purchased, or the KANGLONG RADIO company service center. All information is available at [www.kanglongradio.com](http://www.kanglongradio.com).

This warranty does not affect the consumer rights granted by the legislation of China.

I agree to the warranty terms; I have been informed that the brand packaging will remain intact throughout the warranty period, and I have inspected the completeness of the package.

**I agree.**

Signature  \_\_\_\_\_

Full name  \_\_\_\_\_

Contact number  \_\_\_\_\_

Company  \_\_\_\_\_



Recycled Packaging