

**THANK YOU!**

**Thank you for your purchase of HYT portable repeater. We believe this easy-to-use repeater will provide you with clear and reliable communications at peak efficiency. Read this manual carefully prior to operating your repeater.**

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## **User Safety, Training, and General Information**

READ THIS IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION BEFORE USING YOUR HYT PORTABLE REPEATER.

### **Compliance with RF Energy Exposure Standards**

Your HYT portable repeater is designed and tested to comply with a number of national and international standards and guidelines (listed below) regarding human exposure to radio frequency electromagnetic energy. This repeater complies with the IEEE (FCC) and ICNIRP exposure limits for occupational/controlled RF exposure environment at duty cycles of up to 50% talk-50% listen and should be used for occupational use only. In terms of measuring RF energy for compliance with the FCC exposure guidelines, your repeater radiates measurable RF energy only while it is transmitting (during talking), not when it is receiving (listening) or in standby mode.

**Your HYT portable repeater complies with the following of RF energy exposure standards and guidelines:**

- United States Federal Communications Commission, Code of Federal Regulations; 47CFR part 2 sub-part J
- American National Standards Institute (ANSI)/Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992
- Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1999 Edition
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998

### **Operational Instructions and Training Guidelines**

To ensure optimal performance and compliance with the occupational/controlled environment RF energy exposure limits in the above standards and guidelines, users should transmit no more than 50% of the time and always adhere to the following procedures:

## **Transmit and Receive**

To transmit (talk), push the Push-To-Talk (PTT) button of the optional microphone; to receive, release the PTT button.

## **Approved Accessories**

For a list of HYT approved accessories, see the accessories page of this user manual or visit the following website which lists approved accessories: <http://www.HYT.com.cn>

## **FCC Compliance**

### Part 15 Compliance

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.

### **FCC Licensing Requirements**

Your repeater must be properly licensed Federal Communications Commission prior to use. Your HYT Wireless dealer can assist you in meeting these requirements. Your dealer will program each repeater with your authorized frequencies, signaling codes, etc., and will be there to meet your communications needs as your system expands.

## Precautions

READ THIS IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION BEFORE USING YOUR HYT PORTABLE REPEATER.

This equipment should be serviced by qualified technicians only.

Do not place the repeater in switchboard room or near high voltage facilities.

Do not place the repeater in excessively dusty, inflammable or explosive atmosphere.

Do not expose the repeater to direct sunlight for a long time or place it close to a heating source.

**Safety:** It is important that the operator is aware of and understands hazards common to the operation of any repeater.

## Product Inspection

Please carefully unpack the repeater. Before use, it is recommended that you inspect the product as follows.

First check the shipping carton for any signs of damage. Confirm the supplied product against the packing slip to assure accuracy. If any items are missing or have been damaged during shipment, please file a claim to the carrier immediately.

Item	Qty. (PCS)
AC Power Cord	1
DC Power Cord	1
Owner's Manual	1
Operating Frequency Label	1

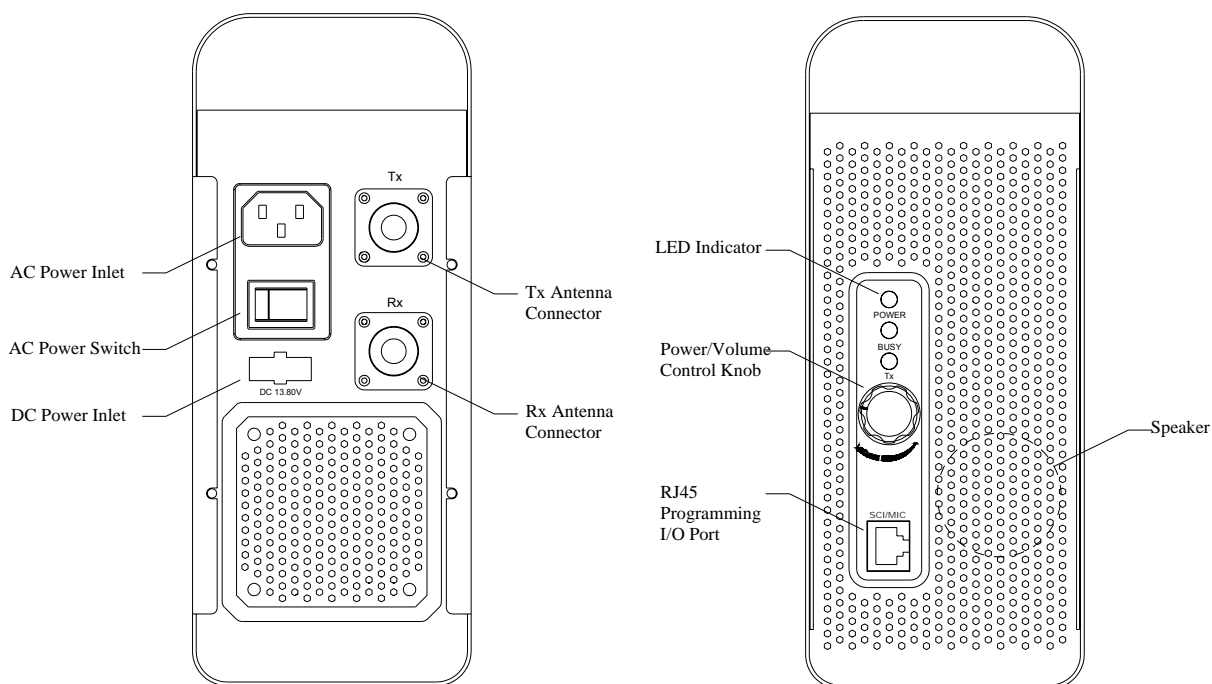
Connect DC Power Supply

Connect one end of the cord to the back-up battery or external DC power supply (12-15V DC), and the other end to the DC power supply inlet of repeater.

Connect AC Power Supply

Insert the plug of AC power cord into external AC power socket, and the other end into the AC power supply inlet of repeater.

## Radio Overview



### 1. LED Indicator

LED	Status
Glow red	Power on
Glow green	Receiving
Glow blue	Transmitting
Flash green	Power save

### 2. Power/Volume Control Knob

Rotate the Knob clockwise until a “click” sounds to switch the power on, red LED glows. Turn the knob counterclockwise until a “click” sounds to switch the power off. When the power is on, turn the knob to adjust the volume level. (Note: you are recommended to adjust the volume to the minimum level when monitoring is not required.)

### 3. Speaker

### 4. RJ45 Programming I/O Port

Used by your dealer to program the repeater.

#### 5. Rx Antenna Connector

N/F type RF connector.

#### 6. Tx Antenna Connector

N/F type RF connector can be used independently for both Tx and Rx antenna port when duplexer is installed.

#### 7. AC Power Inlet

Connect the AC power cord properly and switch the power on to enter AC power supply mode.

#### 8. AC Power Switch

#### 9. DC Power Inlet

In AC power supply mode, DC floating charging feature is available if connected with back-up battery; When AC power is switched off, it will auto-revert to DC power supply mode.

## Features and Operations

### Basic Operations

1. Switch the AC power on: properly connect the AC power cord and then switch the power on.
2. Turn the repeater on: rotate the Power/Volume Control Knob clockwise until a click sounds to turn the repeater on, LED glows red.
3. Enter Repeater Mode: turn on the repeater to enter standby mode. Transmitter and receiver LED glow simultaneously when a valid signal is detected.
4. Adjust the volume: rotate the Power/Volume Control Knob in Repeater Mode. Adjust the volume to the minimum level when monitoring is not needed.

### Time-out-Timer (TOT)

Time-out-Timer is used to prevent one from using the same channel for a long time and to prevent the transmitter from damage due to continuous transmission. If the transmission exceeds the preset time (it's set by your dealer, max. time is 10 minutes), transmission will be forbidden. Release the [PTT] key and press it again to resume transmitting.



### **CTCSS/DCS Signalling**

CTCSS/DCS may have been programmed on a channel to ignore unwanted calls from other parties on the same channel.

When CTCSS/DCS signalling is set, the user can only receive calls from other parties which are using the same CTCSS/DCS signalling on the same channel within communication range; otherwise, the user receives all the calls on the same channel within communication range.

CTCSS/DCS signalling can be preset by your dealer.

Note: Although using CTCSS/DCS enables you to avoid hearing unwanted calls, it doesn't mean all your calls will be private.

## Troubleshooting Guide

Trouble	Solution
Fail to turn the repeater on	Check if the AC/DC power supply cord is properly connected, or the AC switch fuse is blown.
Can't talk to or hear group members	<b><i>Make sure you are using the same frequency and CTCSS/DCS as the repeater.</i></b>
	Make sure you are within the coverage of repeater.
Other voices (Non-group members) appear on the channel	<b><i>Change CTCSS/DCS of the repeater.</i></b> <b><i>Make sure all the radios of your group are changed to the same signaling.</i></b>

## Care and Cleaning

Place the repeater in dry, ventilated and waterproof indoor environment;

Clean the repeater shell with wet cloth or neutral detergent.

## Optional Accessories



Remote Speaker Microphone SM-06R



Duplexer MO-DUP1



Transmitter Programming Cable PL-R50E2



Receiver Programming Cable PL-R50E3

HYT endeavors to achieve the accuracy and completeness of this manual, but cannot guarantee its accuracy at all times. All the above specifications and design are subject to changes by HYT without prior notice.

All the reproduction and translation of this manual without authorization of HYT is not allowed.