



## QUICK REFERENCE GUIDE

### HR652 COMPACT DMR REPEATER

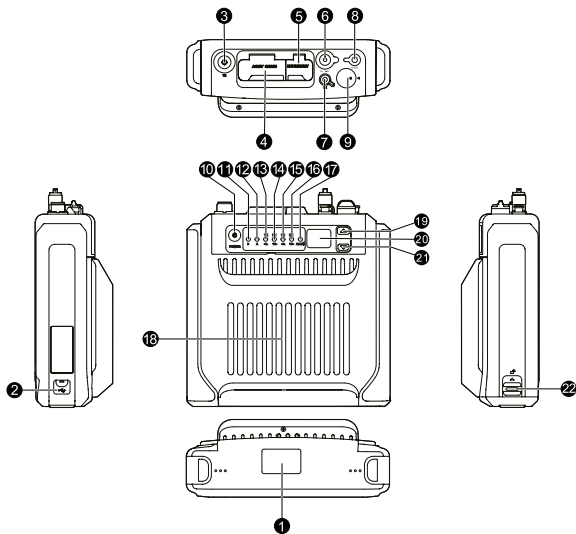


**COMM-TECH, INC.**

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## Product Layout



No.	Part Name	No.	Part Name
1	Bottom cover	12	Analog mode indicator
2	USB port	13	Timeslot A TX indicator
3	TX/Duplex antenna connector (UHF female)	14	Timeslot A RX indicator
4	Accessory connector	15	Timeslot B TX indicator
5	Ethernet port	16	Timeslot B RX indicator
6	Power inlet	17	Alarm indicator
7	RX antenna connector (SMA female)	18	Fan
8	GNSS antenna connector (SMA female)	19	Volume/Channel up key
9	Aviation port	20	Seven-segment LED
10	On-Off key	21	Volume/Channel down key
11	Digital mode indicator	22	Battery latch

## Precaution

Before installation and use, read the following instructions carefully.

- Install the repeater in a dry and well-ventilated place.
- Use the repeater in an environment where the temperature is between  $-30^{\circ}\text{C}$  and  $+60^{\circ}\text{C}$  and the relative humidity is equal to or lower than 95%.
- Ensure that the operating voltage is 12–16.8 V DC.



### NOTE

For more information, refer to the *Safety Information Booklet*.



### NOTE

Except that the low-power HR652 features no fan but the high-power HR652 features one, the other hardware of the two types is the same.

## Installation

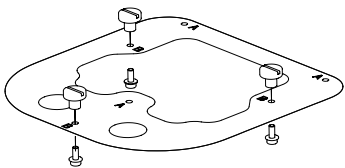
You can place the repeater on the desk, or install the repeater on the wall.

### Tools

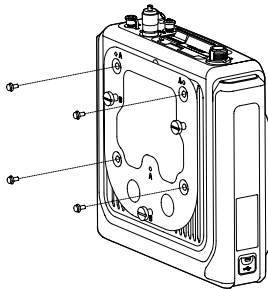
- Electric drill
- Screwdriver
- Wrench
- Anti-static gloves

### Procedure

1. Install the three pegs onto the fixing plate with three M3 screws at holes marked "B".



2. Fix the fixing plate to the back of the repeater with four M4 screws.



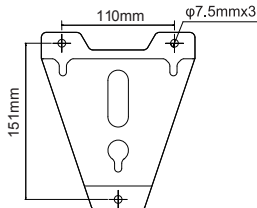
3. Install the repeater on the wall.



#### NOTE

Before installation, make sure the weight of the repeater is within the load bearing capacity of the wall.

- a. Hold the bracket horizontally to a proper position on the wall, and then mark the locations of the three holes ( $\Phi = 8\text{ mm}$ ,  $h = 60\text{ mm}$ ) as anchor points.



- b. Drill three holes at the anchor points with an electric drill.
- c. Fix the bracket onto the wall with three M6 expansion bolts.
- d. Dock the three holes on the bracket with the three pegs on the back of the repeater.

## Basic Operation

### Turning On or Off the Repeater

- **Automatically Turn On**  
When connected to external power supply, the repeater automatically turns on.
- **Manually Turn On or Off**  
When connected to external power supply, long press the **On-Off** key to turn on or off the repeater.

### Switching the Channel

In the standby mode, press the **Volume/Channel Up** key or the **Volume/Channel Down** key.

The seven-segment LED displays the current channel number.

## Adjusting the Volume

1. To switch the **Volume/Channel Up** key to the volume mode, press the key for five seconds.



#### NOTE

If you do not have any operation or you long press the **Volume/Channel Up** key within five seconds, the key will switch to the channel mode.

2. Press the **Volume/Channel Up** key to increase or the **Volume/Channel Down** key to decrease the volume.

## (Optional) Transmitting

1. Connect the remote speaker microphone (RSM) to the repeater.
2. Press the push-to-talk (PTT) key on the RSM.  
You can learn about the repeater status from LED indicators. For details, see **Status Indication**.



#### NOTE

- The RSM is optional.
- Use the RSM specified by Hytera.
- **PTT TX Channel Type** and **TX Contact Name** are configured by the dealer.
- The repeater gives no indication or response if it detects no TX contact name on the current channel (digital or hybrid) after **PTT** is pressed.

## Status Indication

### LED Indicator

Indicator	Status	Description
Digital mode indicator	Glows blue	The repeater is in the digital mode.
Analog mode indicator	Glows orange	The repeater is in the analog mode.
Alarm indicator	Glows red	An exception occurs (The seven-segment LED displays the corresponding alarm code).
Timeslot A TX indicator	Glows red	<ul style="list-style-type: none"><li>Analog mode: transmitting</li><li>Digital mode: Timeslot A is transmitting.</li></ul>
Timeslot A RX indicator	Glows green	<ul style="list-style-type: none"><li>Analog mode: receiving</li><li>Digital mode: Timeslot A is receiving.</li></ul>
Timeslot B TX indicator	Glows red	Timeslot B is transmitting in the digital mode.
Timeslot B RX indicator	Glows green	Timeslot B is receiving in the digital mode.

## Seven-Segment LED

### Alarm Code

Alarm Code	Description	Alarm Code	Description
E3	External power under-voltage alarm	EE	Repeater disabled alarm
E4	TX unlocked alarm	Eb	Low forward power alarm
E5	RX unlocked alarm	EH	External power over-voltage alarm
E6	Over-temperature alarm	H3	Network IP conflict alarm
E7	Voltage standing wave ratio (VSWR) alarm	H5	Invalid network IP alarm
E8	Off-lease alarm	bP	Backup alarm
E9	Slave unregistered alarm	/	/

### Channel Code

Channel Code	Description
N	Indicates the current channel number, for example, 1, 2, 3, or more.



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