iRaddy GM-4/5/6

User Manual
Function symbol description
The LCD display symbols of this unit are as follows:
indicates that it is transmitting.
L indicates that the transmission is in low power.
H indicates that the emission is in high power.
S indicates that the power save switch is ON.

indicates that the beep switch is ON.
QT indicates that there is currently an analog sub audio.
DQT indicates that there is currently a digital sub audio.

indicates the battery charge status and serves as an indicator for charging the battery.
indicates that the unit is currently being used as a power bank.

**Power bank function and charging operation instructions**
This machine has a built-in battery and can serve as a powder bank. When you need to charge the mobile phone, you can use the dedicated USB charging cable to connect the USB port of the machine and the USB port of the mobile phone to realize the charging function. At this time, the “ ⚡ ” symbol will appear on the screen of the mobile phone; when the machine is out of power, use USB cable to connect 5V to the USB port of the unit to charge the battery.

**Basic operation**

**Power on/off**
Press and hold the “ strugg " key until you hear the “ didu " sound and the screen lights up, indicating that the power of the interphone is turned on; in the power-on state, press and hold the “ strugg " key until you hear the “ didu " sound and the screen goes out, indicating that the power of the interphone is turned off;

**Call**
While holding a call, hold the [PTT] key and speak into the microphone with normal tone. Keep the distance between the microphone and the lips 3-8 cm when speaking. When the [PTT] key is pressed, the screen displays `TX:·······`, indicating that the transmission starts.

**Receipt**
When receiving, release the [PTT] key to enter the receiving state. When the channel you are using is called, you can hear the other party's voice. If the signal is weak and you set a high squelch level for your radio, you may not be able to hear the call.
In the power-on state, press the [V/M] key to switch between the above three modes.

Menu function settings
Operating mode
- Memory frequency mode (MR)
- Memory channel mode (CH)
- Full-frequency display mode (VFO)

In the power-on state, press the (V/M) key to switch between the above three modes.

Menu function settings
This machine has a total of 14 menu options. In the power-on state, press the [FUN] key to enter the menu selection and then use the [UP] or [DOWN] key to find the menu option to be set. When the menu option is found, press the [FUN] key again to enter the value function options of menu option and use [UP] or [DOWN] key to change the value function until it meets our requirements, press [FUN] key to confirm and return to the previous menu. If you do not want to set other menus, you can press [V/M] key to quit menu setting mode. The following is a functional value description of each menu.

1. VOLUME
Enter this option following previous menu operating mode. The VOLUME range is 0–15, the smaller the value is, the smaller the speaker output volume is. In addition, you can adjust the volume by pressing and holding the [UP]/[DOWN] buttons.

2. SQLNUM
Enter this option following previous menu operating mode. The SQLNUM range is 0–9. You can use [UP] or [DOWN] key to select. The lower the SQL value is set, the stronger the ability to receive weak signals and the weaker the ability to resist external interference. The higher the SQL value is set, the weaker the ability to receive weak signals and the greater the ability to resist external interference; you can choose based on your environment and your requirements.

3. C-CTC
Enter this option following previous menu operating mode. The C-CTC is to change the setting OFF, 67.0, D023N, D0231 by pressing PTT and then change the value of each option with the UP or DOWN keys.

4. R-CTC
Enter this option following previous menu operating mode. The C-CTC is to change the setting options OFF, 67.0, D023N, D0231 by pressing the
PTT and then change the value of each option with the UP or DOWN keys.

5. T-CTC
Enter this option following previous menu operating mode. The C-CTC is to change the setting options OFF, 67.0, D023N, D0231 by pressing PTT and then change the value of each option with [UP] or [DOWN].

6. TX-POWER
Enter this option following previous menu operating mode. TX-POWER has two options: HIGH (high power) and LOW (low power). You can use the [UP] or [DOWN] key to select. When the communication distance allows, use the low power (LOW) as much as possible to extend the battery life.

7. CH-BAND
Enter this option following previous menu operating mode. The CH-BAND has wideband WIDE and narrowband NARROW; when it is set to WIDE, it means that it is in broadband working state; when it is set to NARROW, it means that it is in narrowband working state.

8. SAVE
Enter this option following previous menu operating mode. The power save switch (SAVE) range is ON and OFF. You can use the [UP] or [DOWN] key to select. When you select the power saving function ON, the standby time of your machine is longer, which means that you will use the machine for a long time after it has been fully charged. When you select the power saving function OFF, the use time will be shortened each time the battery is charged, but the real-time communication effect will be better.

9. BEEP
Enter this option following previous menu operating mode. The beep switch setting (BEEP) range is ON and OFF. You can select with the [UP] or [DOWN] key. When you select OFF, it means that this function is off. There will be no beep for any operation of this machine. When you select ON, it means that this function is on. Any operation of this machine will beep.

10. STEP
Enter this option following previous menu operating mode. The step frequency selection function (STEP) range is 5 kHz, 6.25 kHz, 10 kHz, 125 kHz, and 25 kHz, which you can select with the [UP] or [DOWN] key.

11. STOR-CH
First, in the VFO mode, select the frequency and sub-audio parameters and then enter this option according to previous menu operating mode, select the channel number to be stored by [UP] or [DOWN] key, select the channel number and use [FUN] key to confirm storage.

12. DEL-CH
Enter this option following previous menu operating mode. Use the [UP] or [DOWN] key to select the channel number you want to delete. Select the channel number and confirm with [FUN].
13. TOT
Enter this option following previous menu operating mode. The emission limit time setting (TOT) range is OFF, 30S~270S and the step is 30S. You can select by the [UP] or [DOWN] key.

14. Language
Enter this option following previous menu operating mode. Language options are English/German/Spanish/Italian/French/Portuguese/Chinese. You can select by [UP] or [DOWN].

Manual setting of talkback frequency operation

This machine supports setting the talkback frequency manually. The specific operation is to press and hold the [FUN] key in the full-range mode until the 10MHz bit on the screen flashes. At the same time, the machine will make a "click" sound. Use the [UP] and [DOWN] keys to change the ten megabits. Then press the [FUN] key to jump to the MHZ bit flashing and jump to the setting of 100 MHz and +KHz through the [FUN] key. Set the desired value with the [UP] and [DOWN] keys. After selecting the desired frequency, press the [FUN] button again to confirm the exit. Press the [V/M] key to cancel the exit during setup.

**Troubleshooting guide**

<table>
<thead>
<tr>
<th>Problems</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>No sound and reaction</td>
<td>The battery pack may be exhausted. Replace it with a new one or recharge it. The battery pack may not be installed correctly. Remove the battery pack and reinstall it.</td>
</tr>
<tr>
<td>The battery will not last long after it is fully charged.</td>
<td>The battery pack has reached its limit. Please replace the new battery pack.</td>
</tr>
<tr>
<td>Fail to talk to other members in the group.</td>
<td>Verify that the frequency and sub-audible signal you are using are the same as other members in the group. Other members in the group may be too far apart. Please confirm that you are within valid communication distance.</td>
</tr>
<tr>
<td>Other (non-member) sounds appear on the channel.</td>
<td>Please change the sub audio signal. At the same time, change the sub audio signals of all interphones in the group.</td>
</tr>
<tr>
<td>Near call distance</td>
<td>Check whether the antenna is in good contact. Check whether the antenna is original. Check whether the battery voltage is normal. Adjust the squelch level.</td>
</tr>
</tbody>
</table>
Maintenance and cleaning
- Do not directly lift the antenna or external microphone;
- Use a lint-free cloth to wipe dirt on the interphone to prevent poor contact;
- When the interphone is not in use, please cover the earphone jack;
- After long-term use, the buttons, control knobs, and case are easily dirty. You can use neutral detergents (do not use strong corrosive chemicals) and wet clothes for cleaning.

Technical indicators

<table>
<thead>
<tr>
<th>Whole machine part</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency range</td>
<td>400-470MHz</td>
</tr>
<tr>
<td>Rated voltage</td>
<td>DC3.7V</td>
</tr>
<tr>
<td>Use temperature range</td>
<td>-20℃-+70℃</td>
</tr>
<tr>
<td>Group frequency</td>
<td>Phase-locked loop frequency synthesis</td>
</tr>
<tr>
<td>Memory channel</td>
<td>16 channels</td>
</tr>
<tr>
<td>Antenna configuration</td>
<td>Rubber antenna</td>
</tr>
<tr>
<td>Antenna resistance</td>
<td>50Ω</td>
</tr>
<tr>
<td>Working mode</td>
<td>same-frequency simplex or different-frequency simplex</td>
</tr>
<tr>
<td>Grounding</td>
<td>negative electrode</td>
</tr>
<tr>
<td>Dimensions</td>
<td>145×71×18mm(excluding antenna)</td>
</tr>
<tr>
<td>Weight</td>
<td>About 200g(including antenna)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emission part</th>
<th>Value</th>
<th>Receipt part</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output power</td>
<td>0.5/2 W</td>
<td>Sensitivity</td>
<td>&lt;0.20μV (12dB SINAD)</td>
</tr>
<tr>
<td>Modulation</td>
<td>FM (F3E)</td>
<td>Quieting sensitivity</td>
<td>&lt;0.20μV</td>
</tr>
<tr>
<td>Maximum frequency deviation</td>
<td>≤2.5KHz</td>
<td>Intermodulation interference resistance</td>
<td>50dB</td>
</tr>
<tr>
<td>Spurious radiation</td>
<td>≤-60dB</td>
<td>Audio power</td>
<td>≥500mW</td>
</tr>
<tr>
<td>Pre-emphasis character</td>
<td>6dB</td>
<td>Current receipt</td>
<td>≤350mA</td>
</tr>
<tr>
<td>Emission current</td>
<td>600mA</td>
<td>Squelch waiting</td>
<td>≤20mA</td>
</tr>
</tbody>
</table>