DVGC®

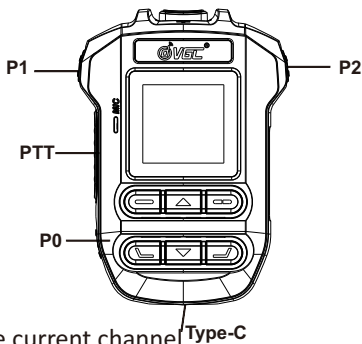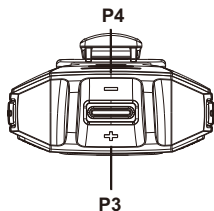# BHM-88

USER MANUAL

1. CUSTOM KEY DEFAULT DEFINITIONS

1, P0 Key

Short Press: Voice prompt the current channel
Long Press: Power On/Off
Double Click : Enter pairing mode

2, P1 Key

Short Press: Volume -
Long Press: A/B Band Switch
Double Click : Mute/ UnMute

3, P2 Key

Short Press: Volume +
Long Press : Talk Around ON/OFF
Press P1+P2 : Send 1750Hz Brust Tone

4, P3 /P4 Key

Short Press: + /- Channel
Long Press:Contnuously +/- channels
Double Click :Pre / Next song(When playing music)

When the speaker microphone is connected to the Bluetooth system of the mobile phone and a call comes in.

**To Answer a Call:** Short press the P0 button.
To End a Call: Double-click the P0 button.

Note: This speaker microphone is not optimized for call audio quality. For better sound, we recommend answering calls directly from your mobile phone.

2.LED STATUS

STATE	LED BEHAVIOR
Device Not Connected	Red Flashes Slowly
Low Voltage Alarm	Flashes Quickly & Audio Tone
Enter Pairing Mode	Red and Green Alternating
Successful Pairing	Green Double Flash
Disconnected From Device	Red Double Flash
Mute State	Green Breathing Light
Radio TX (Transmit)	Red Solid Light
Radio RX (Receive)	Green Solid Light
Charging	Red Solid Light
Fully Charged	Green Solid Light

3. REMOVE BELT CLIP
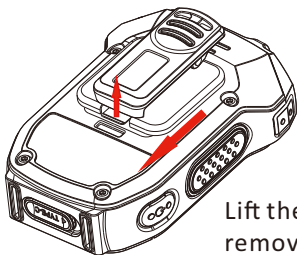
Lift the buckle and push down to remove the belt clip

4. POWER ON/OFF

Power On: While the microphone is off, press and hold the microphone **P0 key** for 3 seconds with a startup tone, indicating successful activation.

Power Off: While the microphone is operational, press and hold the **P0 key** for 3 seconds until the device shuts down.(**The microphone will automatically power off after 3 minutes of connection loss.**)

5. PROGRAMMABLE BUTTONS

The [P1], [P2], [P3], and [P4] keys can be programmed to perform different shortcut operations. This function is only available through the APP.
Some functions may conflict with each other. After configuration, please verify that all desired functions are working correctly.

STEPS:

1.For Android Devices:

①Open the HT App, select PTT/Speaker Microphone in the "Bind Device" section.

②Power on the Microphone by long-pressing the P0 button, then double-click P0 to enter pairing mode.

③The device list will display "BHM-88"—select the model to connect. Once the status shows "Connected", exit the device list.

④Tap the three-dot menu (⋮) in the top-right corner, choose "BHM-88 Settings",and customize the Speaker Microphone's button functions.

2.For IOS Devices:

①Open the BS HT App.

②Power on the Microphone by long-pressing the P0 button, then double-click P0 to enter pairing mode.

③The BHM-88 will appear in the left-side device list—select it to connect.

④Choose "BHM-88 Settings" to customize the microphone's button functions.

Note: After configuring the keys, you may need to disconnect and then re-establish the connection between the microphone and your radio/transceiver for the new settings to take effect.

Disable	No function
Alarm	Broadcasts Alarm on preset frequency with local audio alarm
Alarm &Mute	Broadcasts alarm signal without speaker output
Mute Switch	Press assigned mute key(standby) to enable/disable mute.
Send Location	Press assigned location key (standby) for single APRS position report
Toggle Scan	Press assigned scan key (standby mode) to toggle
Toggle Dual CH	Switch between single watch and double watch status
Main CH Swicth	Switch Main Band between A/B Band
Toggle Talk Around	Press assigned direct key (standby) to toggle simplex /repeater
Toggle radio tx enable	Press assigned radio tx enable (standby) to restrict/allow transmission
Transmit Power Switch	Press assigned power key (standby) to toggle output levels
Radio switch	Press assigned radio key (standby) to enable/disable

Toggle Monitor	Press assigned monitor key (standby) to toggle
Toggle VOX	Press assigned VOX key (standby) to activate/deactivate
Toggle KISS	Press assigned KISS key (standby) to activate/deactivate
Prev Channel	Press assigned previous key (standby)to revert channel
Next Channel	Press assigned next key (standby) to next channels
Prev Group	Press assigned group key (standby) to previous group
Next Group	Press assigned group key (standby) to next group
Volume -	Press assigned volume key (standby) to decrease volume
Volume +	Press assigned volume key (standby) to increase volume
T-CALL	Press assigned T-CALL key (standby) for 1750Hz burst
Pairing	Press assigned pairing key (standby) to initiate connection

6. PAIR TO THE RADIO/TRANSCEIVER
Method 1: Automatic Pairing
1,Enter Pairing Mode:
①Double-click the P0 button on the microphone
(while powered on).

②Double-click the pairing button on your radio/
transceiver (while powered on).

2,Pairing Status:
①The LEDs on both devices will blink red and green
alternately, indicating pairing mode.

②After a moment, the microphone will emit a"beep"tone.

③If the radio has a display, a headset icon will appear,
confirming a successful connection.

Method 2: Pairing via App
1,Go to **Connection Management:**

①In the device settings (for the connected radio),
select "Connection Management."

2,Enter Pairing Mode:

①Double-click the P0 button on the mirophone.

3,Complete Pairing:

①Scan for "BHM-88" in the device list and select it.

②Once the status changes to "Connected," pairing is
successful.

Method 3: Pairing with Smartphone
(Functions as Bluetooth speaker for music playback while serving as wireless speaker microphone for HT APP's network intercom)
Enter Pairing Mode:
①Long press the P0 power button to turn on the microphone.Then Quickly double-click P0:
  ・ Alternating red/green LED flashing
  ・ "Beep" tone confirms pairing mode
②Smartphone Bluetooth Connection:
  ・ Open phone's Bluetooth settings.
  ・ Search for "BHM-88" in available devices.
 Note: Ensure LEDs alternate flash (red-only flash requires re-double-clicking P0 key).
③Complete Pairing:
  Select "BHM-88" from the list.Tap connect only after the headset icon appears before the device name.
Critical: Wait for full icon display to prevent connection failure.
Paired Status: "BHM-88" will show as "Paired" in your device list.
①Functionality for smartphone:
  ・ Bluetooth speaker for music playback
  ・ Double-click "+"/"-" to skip tracks
②Network Intercom:
 Open HT APP and select a network channel.
  ・ Press PTT to talk directly
  ・ Press "+"/"-" to switch network channels
(the microphone will vocally announce the current channel.)

7. SPEAKER MICROPHONE OPERATE

7.1 Mobile Radio Control

When successfully paired with a mobile radio unit, the device's power menu will display an active "ON" status. (Note: This option does not appear when paired with handheld radios.)

To Power Off:

Tap the device's power menu on this unit to switch the status to "OFF" – the mobile radio will simultaneously power down.

To Restart:

Tap the device's power menu again to switch the status to "ON" – the mobile radio will automatically reboot.

Note: When using this device to turn off the radio's power, the connection between this device and the radio remains active. Therefore, this device will not automatically power off – manually shut it down to prevent battery drain.

7.2 Standby Interface Toggle

In standby mode, briefly press the [▣] key to cycle through the following three display interfaces. From any interface, briefly press [▣] to return to the main screen.
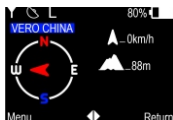
7.3 Keypad Function
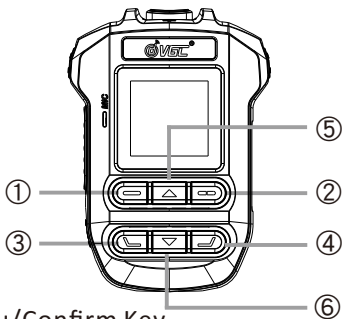
① ⬚ Menu/Confirm Key

② ⬚ In Standby screen, Toggle display pages /
   Return to previous menu

③ ⬚ **Click :** Channel edit

④ ⬚ In-menu press, Return to standby screen
   Long press: Lock/Unlock keyboard

⑤ ⬚ **Up Key**: Switch to **Channel A**

⑥ ⬚ **Down Key**: Switch to **Channel B**

7.4 Text Input Editing Instructions

In all text-editing areas (e.g., channel names, signaling
messages, SMS), use the following operations:

Button 1 ⬚ : Confirm Input

Button 2 ⬚ : Delete Character

Button 3 ⬚ : Toggle Character Display Mode

Button 4 ⬚ : Exit

Button 5 ⬚ : Cycle Characters Upward

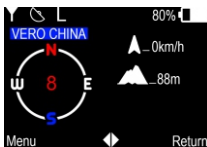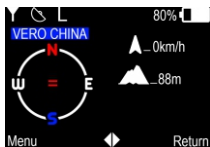**Button 6** ⬚ : Cycle Characters Downward

7.5 Electronic Compass Calibration

① Sensor Prompt Icon "="

When the "=" icon appears in the center of the electronic compass, it indicates the device is affected by external interference. Follow the on-screen instructions to complete calibration:

- ● Enter the [Compass] menu
- ● Place the device horizontally (screen facing up)
- ● Press the [OK] key in the upper-left corner of the keypad to confirm

(Note: Keep away from magnetic interference sources during calibration.)

② Sensor Prompt Icon "∞"

When the "∞" icon appears in the center of the electronic compass, it indicates the device is affected by external interference. Follow these steps:

- ● Enter the [Compass] menu
- ● Follow the on-screen prompt: "Rotate the device in an ∞-shaped pattern for sensor calibration"
- ● Hold the microphone straight forward
- ● Quickly trace an infinity-shaped (∞) pattern in the air. (like the "∞" symbol)
- ● Recommended: Complete 1-8 full motions within ~2 seconds

Special Conditions
- **Strong Magnetic Interference:**
  - If icons appear briefly when near strong magnets but disappear after moving away, no calibration is needed.
  - If the compass responds sluggishly during use, immediately enter the [Compass Calibration] menu for sensor recalibration.

Precautions
- Before calibration, keep away from the following interference sources:
  - Permanent magnets
  - Electronic devices
  - Metal-containing structures

(This calibration corrects temporary deviations caused by ambient magnetic interference.)

7.6 GPS/BDS Positioning

"Positioning" refers to calculating the current location based on satellite orbital data and radio wave transmission time. A minimum of 3 satellites is required for successful positioning. If positioning fails, move to an open area away from buildings.

About Measurement Errors
- Environmental factors may cause errors of several hundred meters. Under ideal conditions, positioning can succeed with just 3 satellites. However, accuracy degrades or may fail entirely in these scenarios:
- Narrow roads between high-rise buildings

- Indoors or near large structures
- Under elevated roads or high-voltage power lines
- Among dense trees (forests/wooded areas)
- Inside tunnels or underground
- Near heat-reflective glass or strong magnetic fields

Initial/Extended Use

After purchase or prolonged GPS/BDS inactivity, allow several minutes for satellite acquisition. Similarly, if the function has been disabled for hours, reacquisition may take minutes.

⚠ **Important Notes:**

GPS/BDS Built-in Antenna

1, Screen Requirement
 - During satellite positioning, keep the screen always on for N-series devices.
2, Antenna Orientation
 - When mounting the microphone holder, ensure the GPS/BDS antenna faces upward for optimal signal reception.
 - Avoid metal obstructions or placing it tilted inside a case, as this degrades accuracy.
3, Microphone Holder Placement
 - Fix the holder away from interference sources (e.g., motors, power lines) to prevent signal degradation.
4, Magnetic Mount Restrictions
 - Do NOT modify or use strong magnetic mounts—they disrupt the internal e-compass, causing direction errors.

Precautions:

1. The effective communication distance of speaker microphones is less than 10 meters. Use beyond the range will cause the speaker microphone to transmit and receive abnormally.
2. After the wireless microphone is turned on, it will automatically search for the last paired radio. When the paired radio fails to connect, the wireless mic -rophone will automatically turn of f after 3 Minutes to save power. If the connection is normal, it will prompt that it is connected and can be used. During use, the paired radio goes offline, and the speaker microphone prompts that the connection has been disconnected.
3. When the speaker microphone prompts that the battery is low, please charge the speaker microphone in time. Continued use will cause the speaker mic -rophone voltage to be lower than the protection value and shut down. While charging, the indicator light shows red and turns blue when fully charged.

Specifications

Model:BHM-88 Wireless Speaker Microphone
TX&RX Frequency:2.4~2.485GHz ISM Band
Effective Distance: <10 meters
Power Supply Mode:Built-in 1200mA Lithium Battery
Voltage: 3.7V (Use a 5V@1A Rated Output Power
            Adapter To Charge)
Weight :133g
Size:98.5(L)x69.5(W)x30(D)