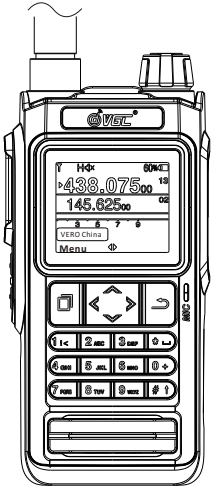


VR-N76

User Manual

Table Of Contents

English

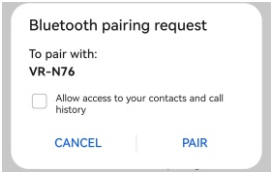
1. Download The APP

For Android users, please go to Google play to search for **HT** to download the APP.

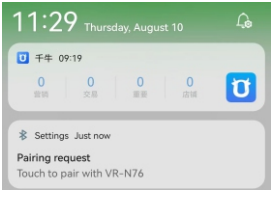
For IOS users, please go to Appstore to search for **BS HT** to download the APP

2. Radio Connect With The APP

2.1,installed APP， Open the APP, Selected [Pairing] on the VR-N76 main menu, App will show"**Detected new device VR-N76,do you want to link now**", Click **[Yes],**App is connecting the radio. a dialog box will pop up to requiring Bluetooth authorization.(as shown in Figure 1) Click **[Pair]** Then connect succussfully.



(Figure 1)



(Figure 2)

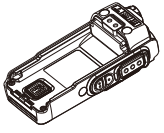
OR Click “Bind new device", Then let the radio enter Pair Status, pop up (walkie talkie, wireless PTT) to select the device you want to bind, after confirmation, the system prompts to turn on the Bluetooth function and click **[Allow]** to pair the device(Figure 1), some mobile phones do not **[Allow]** pairing prompt will pop up, please pull the phone from the top down to the mobile phone system notification bar (Figure 2), open the **[Allow]** pairing prompt and allow it.

2.2，Open The APP,enter the main page click ☰ to open the main Menu，Click VR-N76 to switch device interface and main menu，Swipe left to collapse the menu。

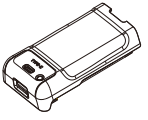
For more APP operations, please read the APP operation instructions. You can check the paper manual that comes with the product, or you can go directly to our website to download the electronic version and save it for review at any time. www.vero-china.cn

3.What's In The Box

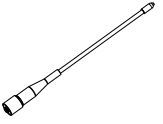
Please carefully remove the radio from the packaging box. We recommend that you verify that the items listed in the table above are in the box before discarding the packaging materials. If any items are lost or damaged during transportation, please contact your dealer immediately.。



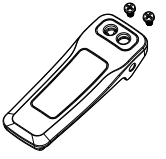
Radio Body



Battery



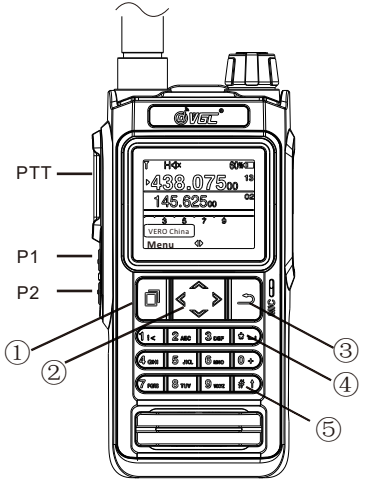
Antenna



Belt Clip

Power Cable

4.Product Overview



Button definition

① Menu/Confirm key;

② In standby mode, press the left and right buttons to switch the screen display state. Press the up and down buttons to switch frequencies or channels up and down;

③Return button. In the dual-watch state, pressand hold the return button to switch between the main band and the sub-band;

④* key, in standby mode, long press the * key to switch between VFO and channelmode;

⑤# key, in standby mode, press and hold the # key to lock the keyboard.

Press and hold the # key again to unlock the keyboard.

5.Introduction to basic functions

5.1 Turn on/of the radio

Turn on the radio: When the radio is off, turn the [Power/Volume] switch clockwise. After the radio makes a "click", the power of the radio is turned on The screen displays the model of the radio. After a few seconds, the radio emits a beep.

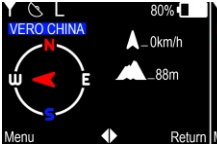
Turn off the radio: When the radio is turned on, turn the [Power/Volume] switch counterclockwise until the radio makes a "click" and the information displayed on the screen disappears, that is, turn off the power of the radio.

5.2 Volume adjustment

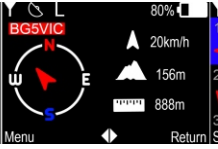
When the radio is turned on, turn the [Power/Volume] switch to adjust the volume and the screen will indicate the current volume level through the progress bar.

Turn clockwise to increase the volume;
Counterclockwise to decrease the volume.

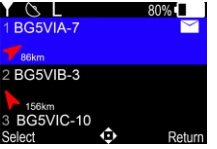
5.3 Split screen display



(Figure 3)



(Figure 4)



(Figure 5)

In standby mode, press the left and right arrows to switch the standby display.

1.After turning on GPS positioning and receiving satellites, the speed and altitude information of the aircraft will be displayed on this interface. The second icon in the upper left corner is the satellite icon and satellite signal strength.(Figure 3)

VERO CHINA is The ID name set for this device.

2,This interface displays the latest call records.

BG5VIC is the name of the other party's device in the latest call

The speed is the opponent's current running speed.

The altitude is the altitude of the other party.

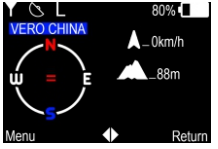
The distance is the distance between the other person and me.

3.This interface displays a list of recent calls. You can use the up and down arrow keys to select the information you want to view, and then press the

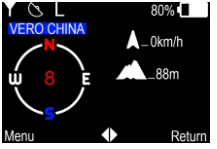
select key to view the caller's detailed information.

Please note: The call history displays the last 30 entries and **will not be saved after shutting down.**
Only the latest one with the same ID is displayed.

Electronic compass



(Figure 6)



(Figure 7)

*This radio has a built-in electronic compass sensor, please do not approach strong magnets. If an 8-character symbol appears, please perform correction operations in the menu.

① **Sensor prompt icon.**
The "=" icon in the middle of the electronic compass means that it is disturbed by the external environment.You need to enter the menu [Compass] and perform correct ion operations according to the on-screen instructions. At this time, after entering the menu [Compass], the screen will prompt "Please place the device on a level surface (screen facing up), and then press the [OK] button in the upper left corner of the keyboard.

② **Sensor prompt icon.**

The "8" icon in the middle of the electronic compass indicates that it is disturbed by the external environment.

You need to enter the menu [Compass] and perform correction operations according to the screen prompts.At this time, after entering the menu [Compass], the screen will prompt "Please calibrate the sensor according to the figure 8 rotating device".At this time, please hold the device and stretch it forward, and draw the figure eight (ie " ") quickly and forcefully. It is better to complete one to eight characters in about 2 seconds

If it is sometimes close to a strong magnet, the screen will prompt an icon, and the icon will be restored immediately after it is far away, and no correction is required at this time. If the electronic compass is found to be unresponsive during use, please enter the menu [Compass] to calibrate the sensor to avoid being misled by the strong external magnetism.

5.4 Main and sub channel switching

In standby mode, press and hold the [Back key] to switch between the main and sub-channels, and the channel with large fonts displayed on the screen is the currently operable channel(main channel).

5.5 VFO/Channel switching

In standby mode, press and hold the * key to switch between VFO and channel.

5.6 Locked the Keypad

In standby mode, long press the # key to lock the keyboard,
long press the # key again to unlock the keyboard.

5.7 Set the VFO frequency

※ Set the VFO frequency of the radio through the keyboard:
When the radio is in VFO mode, you can input the frequency of the main channel through the number keys, if you want to input 434.62500MHz, just input【4】【3】【4】【6】【2】【5】【0】【0】. Press * key to set step frequency, press # key to switch AM/FM mode.

※ Adjust the VFO frequency/channel by the up and down arrow buttons:

When the radio is in VFO mode, click the up and down arrows to adjust the frequency/channel by increasing/decreasing the step value. Up adjustments increase frequency values/channels, and down adjustments decrease frequency values/channels.

5.8 Storage frequency

In VFO mode, enter the frequency you want through the number keyboard, such as 438.500, press OK to confirm, press the menu "save tochannel", select a blank channel to save.

5.9 Saving frequencies with CTCSS/DCS

In VFO mode, input the frequency you want through the number keyboard, such as 438.500,press OK to confirm,Open the radio setting menu, enter the transmit TX/RX subtone menu, select the required subtone frequency. press OK to exit,press the menu "save to channel", select a blank channel to save.

Tips:In the CTCSS selection interface, use the keyboard to input the corresponding CTCSS number within 1 second, and you can quickly adjust to the corresponding CTCSS value.
For example: **754N.** You only need to enter 75, 754N will be displayed. Select it to set it successfully.

5.10 Edit channel

Open the channel list menu, click Edit, edit the channel content, and save it.

5.11 Frequency Scanning

Open the frequency scan menu, input the start frequency that you want, * key to switch the input frequency step, # key to switch the scan step, press the left and right arrows to start scanning, left to scan the frequency down, and right to scan the frequency up.

5.12 Tone Scanning

Set the frequency to be scanned on the standby page, open the Tone scan menu,it start working.

5.13 Bulk air copy

Turn on the radios to be programmed one by one, switch the menu to " receive channels", open the programmed radio and switch the menu to "send channel ", when each radio to be programmed is displayed as completed, the frequency of the current list will be was copied to another radios.

5.14 FM Radio

Open the FM radio menu and press the up and down buttons to automatically search for FM radio frequencies. You can also enter your radio frequency directly using the keypad.

6.Signaling Settings

ID: Please input your call sign or your ID

Allow Check: Allow your partner to send instructions to check your current location, and your location will be feedback to the partner's device.

Signaling Preamble : When sending signaling, add a preset code to make the end tone sound more rounded.

Send Message: Send text message to partners

Call: When the receiving device receives the CALL command, the radio will ring, please enter the ID to be searched.

Check: When the receiving device receives the CHECK command, the radio will feed back the current location, This requires the receiverALLOW CHECK to be effective, enter the ID to be searched

Nearby People: This option sends the CHECK command at the current frequency, and all radios of the same frequency will feedback their current position option ,please after receiving the command.This option requires the receiver ALLOW CHECK to be effective.

7.APRS Settings

Call Sign: Please input your Call Sign.

Path: Choose the path for APRS .

Password: If you don't know the verification code for your call sign, please send an email to info@verotelecom.com and attach the call sign certificate.

7.1 Digital Mode

Enable: Turn On/Off the digital mode.

Share Location: Set the transmission time of the shared location.

When you need Transmit and Receive the APRS data,sharing time selected the time that you wanted and Enable selected.

When you need **ONLY Receive** the APRS data ,sharing time selected OFF and Enable selected. it means that only data is received at this time.

Digital Channel : The channel currently used for data transmission.

Format:

APRS: When using APRS protocol for transmission, the call sign must be obtained in advance before it can be used.

BSS: Use our own BSS protocol, suitable for people who have not obtained a call sign.

Digital Mute: The radio does not make data transmission sounds when transmit -ting data. Including but not limited to APRS, ID, location information etc.

8.Programmable Buttons Description

Programmable Buttons, different shortcut operations can be realized through programming [PF1] key/[PF2] key, this function can only be operated through APP,Some button states will restrict each other, so after setting, please confirm that all functions are available

Factory default settings are:

[PF1] key: Short Press Turn On /Off FM Radio
Long Press Sub Channel PTT

[PF2] key: Short Press Power Level Swicth
Long Press Turn On/off Monitor

Toggle Scan	In standby mode, press the button programmed as " Toggle Scan " to quickly turn on/off the scanning function.
Toggle Talk Around	In standby mode, press the button programmed as "Toggle Talk Around" to quickly switch between the talk-around mode and the repeater mode.
Toggle Radio TX Enable	In standby mode, press the button programmed as “Toggle Radio TX Enable” to quickly limit the transmission or enable the transmission function.
Transmit Power Switch	In standby mode, press the button programmed as "Transmit Power Switch" to select ultra-high power, high power, or low power.
Radio Switch	In standby mode, press the button programmed as "Radio Switch" to quickly turn on/off the FM Radio function.
Toggle Monitor	In standby mode, press the button programmed as "Radio Switch" to quicklyTurn on/off the squelch

Prev Channel/Next Channel	In standby mode, press the button programmed as " Prev Channel/Next channel" to quickly switch to the Prev/Next channel
Prev Channel Group/ Next Channel Group	In standby mode, press the button programmed as "Prev Channel Group/ Next Channel Group" to quickly switch to previous/ Next Channel Group
T-CALL	Transmit 1750Hz Tone
Main-PTT	Press the key programmed as "Main PTT" in standby mode to quickly transmit the main channel.
Sub-PTT	Press the key programmed as "Sub PTT" in standby mode to quickly transmit the Sub channel.
Send Location	Manually send APRS location once
Toggle Dual CH	Switch between singlewatch and double watch status
Dual CH Main Channel Swithc	Switch Main Band between A/B Band.

9.Two Way Radio Menu List

First level menu	Second level menu	Third level menu
Channel	Edit	(the up and down buttons to switch the AB Band, and the left and right buttons to switch channels)
Signaling	Send Message:	(a paragraph of text needed)
	Call:	(Usename or Callsign needed)
	Check:	(Usename or Callsign needed)
	Nearby People	（Nearby people will use the current frequency to transmit a search code.If the device with the samefunction receives this code, it will feedback their location information back. For details, please click the APP settingspage

Radio Settings	Dual Watch	
	Scan	
	Talk Around	
	Power	
	TX Subtone	
	RX Subtone	
	Offset	
	Channel Group	
	Squelch Level	
	TX Time Limit	
	Tail Elimination	
	PTT Follow	
	PTT Release	

General Settings	Connection;	Pariring
		Scanning
		Paired Devices
	Signaling Settings;	ID
		Send ID
		GPS
		Allow Check
		Signaling Preamble
	APRS Settings;	Call Sign
		Path
		Password
	Digital Mode;	Enable
		Share Location
		Digital Channel
		Format

	Sound Settings；	Mid Gain
		BT Mic Gain
		Keep Connected
		Tone
	Display Settings；	Language
		Brightness
		Screen Timeout
		Time Zone
		Imperial Units
		Low Power Mode
	Reset Settings	
	Restore Factory Settings	
Sync Settings	Send Channels	
	Receive Channels	

Frequency Scan	* key to switch the step of the input frequency, # key to switch the scanning step
Tone Scanning	Enter and start working
GPS status	Click the menu button to switch the positioning system or turn off the positioning system
compass	Calibrate the compass with a figureof-eight rotation
Status	Firmware Version, battery information
Pairing	Select pairing, the red and green lights flash alternately, and enter the pairing mode
FM Radio	enter FM radio mode

*When performing GPS/BDS positioning, please confirm whether this function is turned on, and ensure that the positioning operation is performed outdoors in the open air. The GPS mark on the head of the machine must be in the open sky. (Note: The first positioning is a cold start, which will take a little longer. If you cannot receive it for a long time, please turn off the phone and re-enable this function to ensure that the first positioning is performed in an open environment.)

10.Technical Specifications

General	
Frequency Ranges:	VHF:136-174MHz （144-148 Ham Band） UHF:400-470MHz (430-440 Ham Band) 300-550MHz*(RX Only) FM :87-108MHz* AM:108-136MHz* *(RX Only)
Channel Steps:	2.5KHz/5KHz/6.25 KHz/ 10KHz/ 12.5 KHz/25 KHz/50 KHz/100 KHz
Channel Bandwidth	12.5/25 kHz
Frequency Stability:	±2.5ppm
Number Of Channels	16*12
Battery Voltage	7.4V
Battery Capacity	2600 mAh
Operating Temperature	－20℃To＋60℃
Size	60X40X130mm (not include antenna)
Weight	312 g
Antenna Impedance:	50Ω

Receiver	
Sensitivity:(12dB SINAD)	0.16uV
adjacent channel selectivity	≥68dB
Intermodulation Immunity	≥65dB
Spurious Response Immunity	≥65dB
Audio distortion	≤3%
audio output power	2W

Transmitter	
RF output power	≤5W
adjacent channel power suppression	≤-68dB
Clutter and Harmonics	≤-60dB
FM noise	45 dB
FM distortion	≤3%

Note: All specifications are subject to change without notice or responsibility.

EU Declaration of Conformity

We, hereby declare that the essential requirements set out in the **RED Directive 2014/53/EU**, have been fully fulfilled on our product with indication as below:

Product Name Two Way Radio

Brand Name / Model VGC / VR-N76

The following standards have been applied for the investigation of compliance:

☒ Safety	EN IEC 62368-1:2020+A11:2020
	EN 50566:2017
☒ Health	EN IEC/IEEE 62209-1528:2021
	EN 62479:2010
	EN 50663:2017
☒ EMC	ETSI EN 301 489-1 V2.2.3 (2019-11)
	ETSI EN 301 489-5 V2.2.1 (2019-04)
	ETSI EN 301489-17 V3.2.4 (2020-09)
	ETSI EN 301 489-19 V2.2.1 (2022-09)
☒ Radio	EN 55032:2015/A1:2020
	EN 55035:2017/A11:2020
	ETSI EN 303 413 V1.2.1 (2021-04)
	ETSI EN 300 086 V2.1.2 (2016-08)
	ETSI EN 300 219 V2.1.1 (2016-08)
	ETSI EN 300 328 V2.2.2 (2019-07)
	ETSI EN 303 345-1 V1.1.1 (2019-06)
	ETSI EN 303 345-3 V1.1.1 (2021-06)

The conformity assessment procedure referred to in Article 17 and detailed in Annex III of Directive 2014/53/EU has been followed with the involvement of the following Notified Body:
LGAI Technological Center S.A./Applus (Nr.0370)
and issued the EU-type examination certificate.
Furthermore, the ISO requirement for the in-process quality control procedure as well as the manufacturing process has been reached. The technical document as well as the test reports will be kept for a period at least 10 years after the last product has been manufactured at the disposal of the relevant national authorities of any Member State for inspection.
Detail contact information for this declaration has been listed below as the window of any issues relevant for this declaration.

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