Radioddity GA-5WB Bluetooth Programming Air Band

Radioddity GA-5WB Bluetooth Programming Air Band Instruction Manual

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Product Usage Instructions

Introduction to Basic Functions

Turn On/Off the Radio

To 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. To 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.

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.

Split Screen Display

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

- Electronic compass Sensor prompt icon.
- The = icon in the middle of the electronic compass means that it is disturbed by the external environment.
- If it is sometimes close to a strong magnet, perform calibration operations in the [Compass] menu.

Main and Sub Channel Switching

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

VFO/Channel Switching

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

Set the VFO Frequency

Set the VFO frequency of the radio through the keyboard when in VFO mode by inputting the frequency of the main channel using number keys.

FAQ

- **Q:** How do I adjust the volume on the radio?
- **A:** When the radio is turned on, use the [Power/Volume] switch to adjust the volume by turning it clockwise to increase and counterclockwise to decrease.
- **Q:** How do I switch between the main and sub-channels?
- **A**: In standby mode, press and hold the [Back key] to switch between main and sub-channels. The channel with large fonts displayed on the screen is your current channel.

Introduced to basic functions

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.
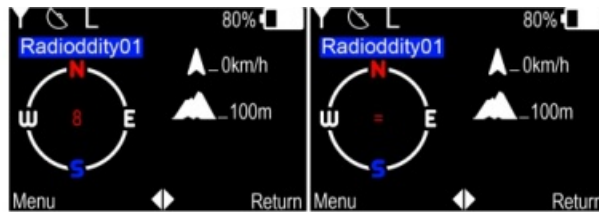
Volume adjustment
When the radio is turned on, turn the [Power/Volume] switch to adjust the volume and the screen will indicate the current volume level through the progress bar. Turn clockwise to increase the volume; counterclockwise to decrease the volume.

Split screen display

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

Electronic compass

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 correction 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.

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 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.

1. The user's name or call sign is displayed in a single standby.
2. Display the last contact information received. Such as the name or call sign of the other party plus location information and location direction. (2,756 m)
3. Display a list of recently received contact information. Press the key to select the list of information to be viewed Press the [Select] key to enter to view the detailed location information and location direction of the other party when communicating. Press up/down arrows to scroll the page.

(only the latest 10 lists to be displayed, it will disappear when is turned off, and will not be saved)
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).
VFO/Channel switching
In standby mode, press and hold the * key to switch between VFO and channel.

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) (41 (6) (21 [51 [01 101.
Press the * 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.

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 channel", and select a blank channel to save.

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.

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

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.

Tone Scanning
Set the frequency to be scanned on the standby page, open the Tone scan menu, it starts working.
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 other radios.

Signalling 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 fed back to the partner's device.
- **Signalling Preamble:** When sending signaling, add a preset code to make the end tone sound more rounded
- Send Message: Send a 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 receiver to allow CHECK to be effective, and 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 to ALLOW CHECK to be effective.

Digital Mode

- **Enable:** Turn On/Off the digital mode.
- **Share Location**: Set the transmission time of the shared
- **location.** When the sharing time is turned off and Enable is turned on, 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 transmitting data.

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

Disable	No function
Alarm	According to the current frequency, the alarm warning will be issued, and the speaker of this equipment will also issue an alarm sound

Alarm& Mute	According to thceurrent frequency, the alarm warning will be issued, and the speaker of this equipmen will be mute
Toggle Scan	In standby mode, press the butto programmed as ” Toggle Scan ” to quickly turn on/off the scanning function.
Toggle Talk Around	In standby mdoe, press the button programmed as “ToggTlaelk Around” to quickly switch betwee the talk-around mode and the repeater mode.
Toggle Radio TX Enable	In standby mode, press the butto programmed as “ Toggle Radio TX Enable” to quickly limit the transmissionor enable the transmission function.
Transmit Power Switch	In standby mode, press the butto programmed as “Transmit Power Switch” to select ult-rhaigh power, high power, or low power.
Radio Switch	In standby mode, press the butto programmed as “Radio Switch” to quickly turn on/off the radio function.

Prev Channel	In standby mode, press the button programmed as "previous channel" to quickly switch to the previous channel
Next Channel	In standby mode, press the button programmed as "nextchannel" to quickly switch to the next channel
Prev Channel Group	In standby mode, press the button programmed as "Prev Channel Group" to quickly switch to previous Channel Group
Next Channel Group	In standby mode, press the button programmed as "Next Channel Group" to quickly switch to 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 toquickly transmit the Sub channel.

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.

	Nearby People	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	Speaker
		Mic Gain
		BT Mic Gain
		Keep Connected
		Tone

		Language
	Display Settings	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 figure-of-eight rotation	
Status	Firmware Version, batteryinformation	

Pairing	Select pairing, the red and green lights flash alternately, and enter the pairing mode
FM Radio	enter FM radio mode

Technical Specifications

General	
Frequency Ranges:	VHF:136-174MHz UHF:400—470MHz
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°CTo 60°C
Size	56(W)x125(H)x39(D) (mm) (not include antenna)
Weight	Radio Body 158g Battery 120g
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%

Documents / Resources

GA-5WB Manual	**Radioddity GA-5WB Bluetooth Programming Air Band** [pdf] Instruction Manual GA-5WB Bluetooth Programming Air Band, GA-5WB, Bluetooth Programming Air Band, Programming Air Band, Air Band, Band

References

- **User Manual**