

Qixiang Electron Science & Technology Co., Ltd www.anytone.net

Any Tone®

AT-5289 II

10 Meter Amateur Radio

User Manual



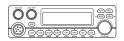
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1. FUNCTIONS & FEATURES

- 1. LCD display with 7 color, with back light dimming
- 2. FM, AM modes
- 3. Frequency Tuning Steps: 1KHz, 10KHz, 100KHz, 1MHz
- 4. Flexible menu functions
- 5. RX and TX NRC Noise Reduction
- 6. SQ. ASQ Function
- 7. RF GAIN Adjustment
- 8. VFO / BAND / Memory Channel Modes
- 9. Repeater Shift / Offset Frequency Function
- 10. CTCSS/DCS with RX/TX Split functions
- 11. SCAN Function
- 12. NB/ANI Function
- 13. DUAL-WATCH Function
- 14. SWR. S/RF meter Function
- 15. TOT function
- 16. HI-CUT Function
- 17. SWR Protection
- 18. Power Supply Voltage Protection
- 19. Key-Lock Function
- 20. BEEP Prompt
- 21. VOX Function
- 22. FCHO Function
- 23. RB Function
- 24. User Defined (PF) key on microphone
- 25. Recording function
- 26. Clock function
- 27. Alarm function
- 28. Compression and expansion function

2. STANDARD ACCESSORIES



Radio



Microphone



Install bracket



Screws



Pads



Adjusting screws



Microphone . Hanger





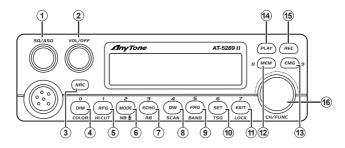
Adhesive Case **Protectors**



Fuse (15A 250V)

3. GETTING ACQUAINTED

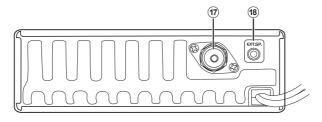
4.1 Front Panel



No.	Key	Functions
1	SQ/ASQ	Squelch Control
2	VOL/OFF	Power On/Off; Volume Control
3	NRC	Activate / deactivate the NRC function
4	DIM	Backlight brightness /color control
5	RFG	RF Gain /HI-CUT Control
6	MODE	FM, AM Switch Mode;NB,VOX function
7	ECHO	Activate / deactivate the ECHO/RB function
8	DW	turn on Dual watch /SCAN function
9	FRQ	Switch Band: A-I / VFO mode
10	SET	Function menu settings/ CTCSS/DCS function
11	EXIT	Clock/Date Display/Back Button; Keypad lock
12	MEM	Use, Store memory channels
13	EMG	Emergency Channel
14	PLAY	recording playback menu
15	REC	recording menu
16	CH/FUNC	Channel Switch; FUNC key

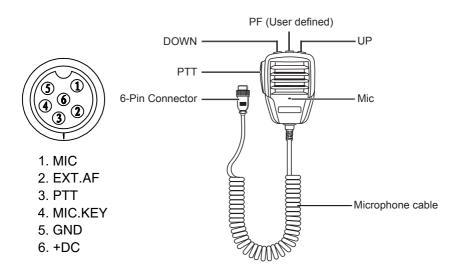
3. GETTING ACQUAINTED

4.2 Rear Panel



No.	Functions	
17	Antenna Jack	
18	External Speaker Jack	

4.3 Microphone



4. MODIFY MENU

- 1. Long press the [PF] key on the microphone to enter thefunction menu.
- Rotate the channel switch or press the [UP/DN] key on the microphone to select the defined [PF] key function.
- 3. Short press the [PUSH] key to enter the settings, and rotate the channel switch to select the custom [PF] key function.
- 4. Press any other key or wait for 5 seconds to save and exit the settings.

No.	LCD Display	Function (Short Press)
1	ASQ	ASQ function on/off
2	NRC	NR function on/off
3	ECHO	ECHO function on/off
4	RFG	Quickly enter the RFG function menu
5	ВР	BEEP function on/off
6	MIC GAIN	Quickly enter the MIC GAIN function menu
7	VOX	VOX function on/off
8	NB	NB function on/off
9	HI-CUT	HI-CUT function on/off
10	SCAN	Scan function on/off
11	RB	RB function on/off
12	CT/DCS	Quickly switch to CT/DCS menu
13	R.COMP	R. COMP function on/off
14	DISP	Quickly switch the DISP menu
15	FM.DEV	Quickly switch 2K/4K frequency offset
16	VFO	Quickly switch VFO mode (VFO mode is effective)
17	STEP	Switching frequency step in VFO mode (VFO mode is effective)

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5.1 Power on and off

When the radio is in the shutdown state, rotate the [VOL/OFF] knob clockwise, and the radio will emit a prompt sound. When the LCD displays channel information, it indicates that the radio has been turned on; When the radio is in the power on state, rotate the [VOL/OFF] knob counterclockwise until the VOL knob emits a "click" prompt sound, indicating that the radio power has been turned off.

5.2 Volume Adjusting

When the radio is turned on, rotate the VOL knob to adjust the volume. Turning the VOL knob clockwise increases the volume, while turning it counterclockwise decreases the volume.

Note: Rotating the VOV (volume) during a call can more accurately adjust the desired volume.

5.3 Channel Selection

When the radio is in channel mode, the desired channel can be selected by rotating the channel knob, with clockwise increasing and counterclockwise decreasing.

5.4 Squelch Adjustment

Short press the [SQ/ASQ] conversion key, and the LCD will display the "SQ" character. Then rotate the [SQ/ASQ] knob to adjust the mute level. The higher the value, the deeper the mute level.

Note: The deeper the static noise level, the stronger the signal needs to be received in order to turn on the speaker and hear the other device's call.

5.5 Automatic Noise Reduction Adjustment.....

Short press the [SQ/ASQ] conversion key, and the LCD will display the "ASQ" character. Then rotate the [SQ/ASQ] knob to adjust the automatic mute level. The higher the value, the deeper the mute level.

Note: The deeper the static noise level, the stronger the signal needs to be received in order to turn on the speaker and hear the other device's call.

5.6 [NRC]

- Short press the NRC button to turn on or off the NRC reception function, and the LCD will display RNR.
- Press the PTT+NRC key to turn on or off the NRC emission function, and the LCD will display TNR.
- 3. Press and hold the NRC button to enter the NRC function menu settings. There are 1-5 levels of reception and transmission available for selection.

5.7 [DIM/COLOR].....

- Short press the DIM button to adjust the backlight brightness, with a total of 6 levels to choose from.
- Press the PUSH+DIM key to select the backlight color, and repeat the key operation to choose different backlight colors.

5.8 [RFG/HI-CUT]

- 1. Short press the RFG button, rotate the channel switch or press the UP/DN button on the microphone to adjust the receiving gain. The larger the value displayed on the LCD, the higher the attenuation gain, and the smaller the value, the smaller the attenuation gain. When the LCD displays the 'RF MAX' character, it means that there is currently no attenuation. When the LCD displays the 'RF AU' character, it means that the automatic gain function is currently enabled.
- 2. Press the FUNC+RFG keys to turn on or off the HI-CUT function.

5.9 [MODE/NB/VOX].....

- Short press the MODE key to switch between communication modulation modes AM/ FM, and the corresponding modulation mode will be displayed on the LCD.
- 2. Press the FUNC+MODE key to turn on or off the NB function.
- 3. Press the PTT+MODE key to turn on or off the VOX function.

5.10 [ECHO/RB].....

- 1. Short press the ECHO button to turn on or off the ECHO function.
- Press the FUNC+ECHO keys to enter the RB function menu, rotate the channel switch or press the UP/DN keys on the microphone to select the desired RB sound.

5.11 [DW/SCAN]

- 1. Short press the DW button to turn on or off the DW function. When pressing the DW button for the first time, select the first channel that needs to be scanned. Rotate the channel switch or press the UP/DN button on the microphone to select the second channel, and then press the DW button again to start DW scanning.
- Press the FUNC+DW key to activate the scanning function, and then press any key to exit.
- ${\bf 3.}\ {\rm Long}\ {\rm press}\ {\rm the}\ {\rm DW}\ {\rm key}\ {\rm to}\ {\rm enter}\ {\rm the}\ {\rm scanning}\ {\rm function}\ {\rm settings}.$
- a. SKIP: Set the current channel to add or remove scans
- b.MODE: Set the scanning type, SQ for quiet scanning, 5S/10S/15S for time scanning.
- c.RANGE: Set the channel/BAND scanning range, and in VFO mode, the scanning frequency range can be set.

5.12 [FRQ/BAND]

- 1. Short press the FRQ key to switch frequency or channel number display.
- Press the FUNC+FRQ key to enter BAND switching, the LCD flashes the current BAND name, rotate the channel switch or press the UP/DN key on the microphone to select the desired BAND, and press any key to exit.

5.13 [SET/TSQ].....

- 1. Short press the SET key to enter the function menu, rotate the channel switch or press the UP/DN key on the microphone to switch menu items, press the PUSH key to enter menu item settings, press the EXIT key to save and exit the menu.
- Press the FUNC+SET key to enter the CTCSS/DCS menu settings, and press the EXIT key to exit the menu.

5.14 [EXIT/LOCK]

- 1. Press the EXIT key to turn on or off the clock/date/voltage display mode.
- Press the FUNC+EXIT button to turn on or off the button lock function, and the LCD will display the "lock button" icon.

5.15 [MEM].....

- 1. Short press the MEM key to enter the storage channel mode, rotate the channel switch or press the UP/DN key on the microphone to select the storage channel, and short press again to exit the storage channel.
- 2. Long press the MEM key to save the storage channel. After selecting the desired channel in the regular channel, long press the MEM key again. The LCD will flash the current channel number. Rotate the channel switch or press the UP/DN key on the microphone to select the channel to be saved (MEM01~MEM99). Long press the MEM key to save.

5.16 [EMG].....

Short press [EMG] to use the emergency channel, and the LCD displays 'EMG'

- 1. Short press the [EMG] key once and select CH9.
- 2. Short press [EMG] again to select CH19.
- 3. Short press [EMG] three times to return to the previous normal channel.

5.17 [FLAY].....

- 1. Short press PLAY to enter the recording playback menu, rotate the channel switch or press the UP/DN button on the microphone to select the recording list, press the REC button again to play the recording. During the recording playback process, press PLAY to stop the recording playback.
- 2. Long press the PLAY key to enter the launch recording menu.

- a.When the LCD displays AUTO PLAY, turn on or off the automatic transmission of recording information. If there is currently no recording information, this function cannot be turned on
- b.When LCD displays PLAYLIST, select the recording to be transmitted. If there is currently no recording information, it will display NULL.
- c. When the LCD displays TIME, set the automatic transmission recording time to 5 minutes per step, with a total of 120 minutes to choose from. If the current setting is 5MIN, it means that the next automatic transmission playback recording time will be 5 minutes.

5.18 [REC].....

- Short press REC to enter the recording menu, rotate the channel switch or press the UP/DN button on the microphone to select the recording list.
- Press the REC button again, the recording time will flash, and then press PTT to start recording. Release PTT to stop recording, and press PLAY to play the current recording.

Note: If there is already recording information in the current recording list, short press the REC button and the LCD will prompt DELETE?Press the PUSH key again to delete the current recording information.

5.19 Clock Settings.....

Enter clock settings: In the shutdown state, hold down the SET key and do not release it to enter the clock settings interface.

Adjust date and time: Short press the PUSH key to switch between setting the year, month, day of the date and the hour, minute, and second of the time, and rotate the channel switch to modify the values.

Screen saver settings: POWER OFF This menu provides users with display settings after shutting down. When set to ON and the VOL/OFF knob is turned off, the radio will enter screen saver display mode.

Save Settings: Press the EXIT key to save and exit the clock settings menu.

5.20 Clock Settings

Enter alarm mode: In the shutdown state, press and hold the DIM button to turn on the device and enter the alarm setting interface. The device provides two sets of alarms for users to set. Short press the PUSH button to switch between setting the alarm time, minute, and whether to turn on/off the alarm, set the interval between alarms, and rotate the channel switch to modify the value.

Note: When the alarm clock rings, if no key is pressed, the alarm will ring for 30 seconds and then stop ringing. If the alarm is set to ring again, it will ring again after a specified time. During the ringing process, press any key to stop ringing.

6. MENU

- 1. Short press the SET key to enter the function menu.
- Rotate the channel switch or press the UP/DN button on the microphone to switch menu items.
- 3. Press the PUSH key to enter the menu item settings, press the EXIT key to save and exit the menu.

No.	LCD Display	Function Description
1	ВР	BEEP function is enabled or disabled. When the character displays black background and white text, it indicates that BEEP prompt function has been enabled.
2	VOX	VOX: VOX function on or off. LEVEL: VOX sensitivity level settingCharacter modification. TIME: VOX Delay Time SettingCharacter modification.
3	EMG	Set EMG1/EMG2 channels and modes.
4	RB	RB function setting, when characters are displayed with black background, white text, and numbers, it indicates that the RB function has been enabled. There are 1-6 groups available for selection.
5	ЕСНО	ECHO: Enable or disable ECHO function VOLT: ECHO volume setting, with a total of 01~32 levels to choose from. TIME: ECHO delay time setting, with a total of 01~32 levels to choose from.
6	PWR	PWR: Set the transmission output power. SWR: Set the standing wave protection function, OFF to turn off the standing wave holding function. TOT: TOT function setting, available in OFF and 1-9 minutes for selection.
7	DISP	COLOR: Backlight color selection. BRIGHT: Backlight brightness adjustment. CONTRAST: LCD contrast adjustment
8	MIC	GAIN: Microphone Sensitivity Selection. TYPE: Microphone type selection.

9	CT/DCS	MODE: TCSS/DCS function on or off T-CDT: CTCS/DCS coding settings R-CDT: CTS/DCS decoding settings
10	R.COMP	The expansion function is turned on or off. When the character displays black background and white text, it indicates that the expansion function has been turned on.
11	SPLIT	SPLIT: Enable or disable the transmission frequency offset functionInvalid function. FREQ: Transmission frequency offset setting

Use the Mobile Radio in the environment with the temperature between -10℃ and 55℃, otherwise, it may damage your Mobile Radio. It can be operating under 2000m.

Hereby, We, declare that the radio equipment type Mobile Radio is compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: www.xxxyyy.com

RF Exposure Warning Statements:

This equipment complies radiation exposure limits set forth for an uncontrolled environment. This equipment shall be installed and operated with minimum distance 46.2cm between the radiator & body.

Caution:

To prevent possible hearing damage, do not listen at high volume levels for long periods.



External Antenna:

Antenna Gain: 0dbi (Typical), 3dBi (Max)

Antenna Impedance:50 Ohms

7. SPECIFICATIONS

GENERAL				
Frequency Range	28.000-29.700MHz			
Frequency Band	A/B/C/D/E/F/G/H/I			
Channel	40 channels in each band			
Frequency Step	1KHz,10KHz,100KHz,1MHz			
Frequency Tolerance	±5.0 ppm			
Temperature Range	-20°C~ +50°C			
Microphone	With Push-to-Talk / UP / DN / PF and coiled cord			
Input Voltage	13.2V DC			
Dimensions (in mm)	169(L) x 159(W) x 48(H)			
Weight	1.02kg			
Antenna Connector	UHF, SO239			
	TRANSMITTER			
Power Output	AM: 60W; FM: 50W			
Drain	10A (with modulation)			
Modulation	FM/AM			
Emitted power in the adj.channe	inferior to 20uW			
Modulated singal distortion	inferior to 5%			
Frequency Response	AM/FM: 300 to 3000Hz			
Output Impedance	50ohms, unbalanced			
	RECEIVER			
	AM:1.0µV for 10dB(S+N)/N			
Sensitivity	FM: 1.0µV for 20 dB (S+N)/N			
	(All at greater than 1/2 watt of audio output)			
Adjacent-Channel Selectivity	AM/FM: 60dB			
Image Rejection	More than 65dB			
Intermodulation Rejection	AM/FM: 50dB			
IF Frequency	AM/FM: 10.695MHz 1st IF, 455KHz 2nd IF			
RF Gain Control	45dB adjustable for optimum signal reception			
Automatic Gain Control(AGC)	Less than 10dB change in audio output for inputs from 10 to 100,000 microvolt.			
Squelch	Adjustable; threshold less than 1.0μV. Automatic Squelch Control (AM/FM) 1.0μV			
Audio Output Power	3 watts into 8 ohms			
Frequency Response	AM/FM: 300 to 3000Hz			
Built-in Speaker	8 ohms, round.			
External Speaker(Not Supplied)	8 ohms; disables internal speaker when connected.			

WARNING STATEMENT

Use the Mobile Radio in the environment with the temperature between -10 $^{\circ}$ C and 55 $^{\circ}$ C, otherwise, it may damage your Mobile Radio. It can be operating under 2000m.

Hereby, We, declare that the radio equipment type Mobile Radio is compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: www.xxxyyy.com

RF Exposure Warning Statements:

This equipment complies radiation exposure limits set forth for an uncontrolled environment. This equipment shall be installed and operated with minimum distance 215 cm between the radiator & body.

Caution:

To prevent possible hearing damage, do not listen at high volume levels for long periods.



External Antenna:

Antenna Gain: 0dbi (Typical), 3dBi (Max)

Antenna Impedance:50 Ohms

WARNING STATEMENT

This device complies with part 15 of the FCC Rules. Operation is subject to the following two

conditions:

(1) This device may not cause harmful interference, and

(2) this device must accept any interference including received interference that may cause undesired

operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device,

pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection

against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used

in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be

determined by turning the equipment off and on, the user is encouraged to try to correct the

interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is

connected.

Consult the dealer or an experienced radio/TV technician for help.

Warning Statement

This radio transmitter has been approved by Industry Canada to operate with the antenna types listed

below with the maximum permissible gain and required antenna impedance for each antenna type

indicated. Antenna types not included in this list, having a gain greater than the maximum gain

indicated for that type, are strictly prohibited for use with this device.

External Antenna:

Maximum Antenna Gain: 3 dBi

Antenna Impedance: 50 Ohms

RF Exposure Statement

This equipment complies with RF radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 215cm between the radiator

& your body.