

Qixiang Electron Science & Technology Co.,Ltd.

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AT-5555N 10 METER RADIO



Operating Instructions

We only do best radio!

CONTENTS

FUNCTIONS & FEATURES	1
STANDARD ACCESSORIES	2
INSTALLATION	2
GETTING ACQUAINTED	5
HOW TO USE YOUR RADIO	7
KEYPAD FUNCTION	9
BACKGROUND FUNCTION MENU OPERATION	12
SPECIFICATIONS	13

FUNCTIONS & FEATURES

- Big LCD displays frequency and all kinds of information
- ◆ FM、AM、USB、LSB、PA mode
- ◆ Frequency Tuning Step 100Hz、1KHz、10KHz、100KHz、1MHz
- ◆ ±1.5KHz CLARLFILER Adjustment
- Flexible Menu Function and PC Program Software
- ECHO Function
- SQ, ASQ Function (FM and AM mode only)
- RF GAIN Adjustment
- RF PWR Adjustment
- SCAN Function
- Programmable RB Function
- NB/ANL Function
- DW DUAL-WATCH Function
- Offset Frequency Function
- ♦ BEEP Voice Prompt
- +10KHZ Function
- ◆ SIG、PWR、SWR Function
- TOT function
- HI-CUT Function
- EMG Channel Function
- SWR Protection
- Power Supply Voltage Protection
- Key-Lock Function
- Six(6) Groups Memory Channel
- Model Name Customized Function

1

CTCSS/DCS Code(Optional)

STANDARD ACCESSORIES











Radio

Microphone

Mounting Bracket

 \mathcal{O}

Microphone Hanger

Non-slip Mat



Screws for

bracket



Pads for

bracket



Adiustina

screws

Spare Fuses Self-tapping Screws (15A,250V) 10A

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Pads

INSTALLLATON

Choose the most appropriate setting from a simple and practical point of view. Your radio should not interfere with the driver or crash the driver's knee or leg when rush brake



- 1. Using the self-tapping screws and pads(2 sets) to fix the bracket
- 2. Put the Non-slip mat on the 2 ends of the bracket and put in the radio. Then insert the adjusting screws and check careful each screws, make sure the screws and machine will not loose when the car shaking.
- 3. Choose suitable angle by the 3 screw holes in the two ends of bracket.



Microphone connection

- 1. Plug microphone connector into jack.
- 2. Pull on the screw for microphone connector.



ANTENNA INSTALLATION

Before using this radio, please install a high efficent and harmonious adjusted CB antenna, suitable antenna type and correct installation will bring excellent communication.

To match with the radio, the antenna and cable shall with characteristic impedance of 50ohm, or the antenna system will not efficient enough and will disturb TV, radio or other electronics.

- 1. Screw the antenna connector into the antenna jack.
- 2. Grounding the antenna system to ensure best performance of this radio.



WARNING:

- ▲ Connect antenna firstly before transmiting, or it might damage the radio.
- ▲ To avoid the risk of fire, electric shock, radio damage, all base station shall equip of lightning protector
- ▲ Be sure choose a matching antenna, you may enquiry our dealers.
- 3. The position of antenna can be put as following example:



POWER CONNECTION

This radio adopt 13.8V power supply, never connect it to 24V battery, And the 13.8V car battery shall with sufficient current, or the LCD will become dark and Transmit power will drop down.

- 1. Connect positive red power cable with the + terminal of the battery.
- 2. Connect negative black power cable with the terminal of the battery.
- 3. Connect the DC power cable to the transceiver's power supply connector.
 - ▲ We suggest not use cigar lighter as it often bring down the voltage.
 - ▲ Locate the power cable away from high temperature, moisture, portfire and cable insulator.
 - ▲ Use a full power cable even it is longer than need, do not take off the fuse holder from the cable.



🕏 Replacing Fuse

This radio adopt 15A, 250V fuse.

If the fuse blows, determine the reason, then correct the problem.

After the problem is resolved, replace the fuse. If newly installed fuses continue to blow, disconnect the power cable and contact your autho-rized dealer or an authorized servicecenter:

1. Pull the two fuse cover in difference direction and open it.



- 2. Replace the broke fuse with good one, and close the fuse holder.
- 3. Be sure to use suggested fuse, or it might damage the radio.



🕷 Install Microphone Hanger

Choose a ideal location which will not interfere the driver. Using supplied self-tapping screws and pads(2 sets) to fix the hanger.



🕷 Install External Speaker

If use an external speaker, please choose 80hm speaker with 3.50mm mono band (doulbe cable) plug.

- 1. Locate the external speaker in a suitable place.
- 2. Plug into the speaker jack.



GETTING ACQUAINTED

🗰 Front Panel



No.	Кеу	Functions
1	FRQ	Switch between channel mode and frequency mode、offset setup
2	BAND	Switch band: A-I、ECHO setup
3	MENU	Function Menu key
4	MODE	Switch mode(FM、AM、USB、LSB、PA)、TSQ setup
5	DW	Dual-watch scan、Frequency+10K function
6	RB	RB function、Beep voice prompt function
7	NB	NB function、HI-CUT function
8	SCAN	Scan、Scan add、Scan delete
9	MEM	Use, store or delete memory channel
10	EMG	Emergency Channel; Keypad lock.
11	PWR	RF Power Control
12	RFG	RF Gain Control
13	SQ	Squelch Control
14	CLAR	SSB Clarifier switch
15	VOL	Power On/Off; Volume Control.
16	СН	Channel Switch, Push key.
17		Microphone Jack
18		LCD Display

🗮 Rear Panel



No.	Functions	
19	External SP Jack	
20	External PA Jack	
21	Antenna Jack	
22	Power Supply Jack	

Ricrophone



🕷 LCD Display



1	MI 3 5 7 9 40 40 40 40 40 40 40 40 40 40 40 40 40	RX Signal strength indicator.	
2	PMR 0 20 40 60 40 404	TX Signal strength indicator.	
3	Sin Li	SWR strength indicator.	
4	NNNNN NNNNNN	Model name Indicator.	
5	0	Appears when the Keypad lock function is ON.	
6	FUNC	Appears when press MENU key.	
7	EMG	Appears when using Emergency channel.	
8	FIN RT	Appears when adjust SSB clarifier frequency.	
9	AQ	Appears when use ASQ.	
10	SC	Appears when scan function is ON.	
11		Appears when modulation mode is ON.	
12	СТС	Appears when set with CTCSS code.	
13	DCS	Appears when set with DCS code.	
14	HIC	Appears when Hi-cut function is ON.	
15	BP	Appears when Beep voice is ON.	
16	RB	Appears when RB function is ON.	
17	REP	Appears when repeater function is ON.	
18	DW	Appears when Dual-watch function is ON.	
19	NB	Appears when adjust Noise Blanker is ON.	
20	lOk	Appears when add 10k function is ON.	
21	ЄСНО	Appears when Echo function is ON.	
22	X	Working band indicator.	
23	•	Appears when scan list is ON.	
24		Display of frequency and channel.	

HOW TO USE YOUR RADIO

∺ OFF/ON Radio

- Turn VOL clockwise to switch on the radio, the radio emit a beep. When the LCD displays frequency or channel, the radio is on.
- **2.** Turn VOL anti-clockwise to switch off the radio, the radio is OFF when hear Ka Ta from the switch.

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When the radio is turned on, turn VOL clockwise will increase the volume, turn VOL anti-clockwise will reduce the volume. The LCD displays **VOL: XX** (XX stands for the volume level, total 1-36 levels).

Note: Adjust the volume during communication to get suitable level.

RF Power Control

When the radio is transmitting, turn PWR outer shaft to adjust power. Turn it clockwise to increase power, anti-clockwise to reduce power.

🗮 RF Gain Control

When the radio is receiving, turn RFG inner shaft to adjust RF gain. Turn it clockwise to increase gain, anti-clockwise to reduce gain.

SQUELCH Control

When the radio is standby, turn SQ outter shaft clockwise to adjust squelch level. The LCD displays **SQ: XX**. (XX stands for the squelch level, total 1-36 levels).

🛪 SSB Clarifier control

When the radio is transmitting or receiving, turn CLAR inner shaft to adjust USB/ LSB TX or RX frequency. Turn it clockwise to increase frequency, anti-clockwise to reduce frequency.

Channel Selection

When radio is in channel mode, turn channel knob to select desired channel. Clockwise to increase, anti-clockwise to reduce channel.

Note: In channel display mode, each press [PUSH] key will increase the frequency by 10 times of channel step size.

Frequency control

- 1. In frequency mode, press [PUSH] key, then you can adjust frequency for present channel.
- 2. When the frequency is flashing, turn CH clockwise to increase frequency, anticlockwise to reduce frequency.
- 3. When the frequency is flashing, press [PUSH] again to adjust frequency step size.

KEYPAD FUNCTION

😸 【 FRQ/REP 】

Short press [$\ensuremath{\mathsf{FRQ}}$] to switch between frequency display mode and channel display mode.

Offset Direction Function

- Long press [FRQ] for 2 seconds to enter offset direction function, LCD displays "REP";
- 2. Press [PUSH] to select offset, turn channel switch to select; REPOF: Turn off offset direction function;

REP+: Turn on offset direction function, TX frequency>RX frequency;

REP-: Turn on offset direction function, RX frequency>TX frequency;

3. Press [PUSH] to store and exit.

🔆 【 BAND/TONE 】

Band Selection Function

Short press [BAND] to choose band A-B-C-D-E-F-G-H-I.

Echo Function

- Long press [BAND] for 2 seconds to enter ECHO function, LCD displays "ECHO";
- 2. Long press [BAND] for 2 seconds to turn off ECHO function.

🛠 【 MENU 】

Long press [MENU] for 2 seconds to enter menu list.

🕷 【 MODE/TSQ 】

Modulation Mode

Short press [MODE] to choose mode FM-AM-USB-LSB-PA.

9

CTCSS/DCS Function

- Long press [MODE] for 2 seconds to enter CTCSS/DCS function, LCD displays "CTCSS" or "DCS";
- Press [PUSH] to set CTCSS/DCS, turn channel switch to select CTCSS/ DCS, then Press [PUSH] to store and exit.

OFF: Turn off CTCSS/DCS function;

CTCSS: 67.0~250.3Hz, Total 38 groups;

DCS: D023N~D754N, Total 104 groups;

Note: This function is available only when install Optional CTCSS board.

🔆 [DW/+10K]

Dual-Watch function

- 1. Short press [DW] to turn on Dual watch, LCD displays "DW";
- 2. Short press [DW] again or press PTT to exit DW mode;

Frequency+10KHz function

- Long press [DW] for 2 seconds to turn on frequency +10KHz function, LCD displays "10K";
- 2. Long press [DW] for 2 seconds again to turn off frequency +10KHz function.

🛞 【 RB/BEEP 】

RB function

- 1. Short press [RB] to turn on RB function, LCD displays "RB";
- Press [PUSH] to select RB frequency, turn on channel switch to select. OFF~5, total 6 groups.

OFF: Turn off RB function;

3. Press [PUSH] to store and exit.

BEEP Voice Prompt function

- Long press [RB] for 2 seconds to enter BEEP voice prompt function, LCD displays "RB";
- 2. Long press [RB] for 2 seconds again to turn off BEEP voice prompt function.

🔆 【 NB/HCUT 】

NB function

- 1. Short press [NB] to enter NB function, LCD displays "NB";
- 2. Short press [NB] again to turn off NB function.

HI-CUT function

- 1. Long press [NB] for 2 seconds to enter HI-CUT function, LCD displays "HIC";
- 2. Long press [NB] for 2 seconds again to turn off HI-CUT function

— [10] —

🔆 [SCAN/SKP]

Scan function

- 1. Short press [SCAN] to enter scan function, LCD displays "SC";
- 2. In scan mode, Turn channel switch will change scan direction.
- 3. Short press [SCAN] again to exit.

Add/delete scan list function

- 1. Long press [SCAN] for 2 seconds to add or delete the current channel from scan list;
- When LCD displays "•", current channel is not added to scan list; When LCD does not display "•", current channel is added to scan list.

* [MEM/STOR]

Using memory channel:

- 1. Short press [**MEM**] to enter memory channel, turn channel switch to choose memory channel. M1-M6, Total 6 memory channels.
- 2. Short press [MEM] again to exit memory channel mode.

Store/Delete memory channel:

1. Store memory channel

When the radio is not in memory channel mode, choose the channel to be stored, and hold [**MEM**] enter storage mode, the channel number flashes, Turn Channel switch to choose the location to be stored (M1-M6), then hold [**MEM**] until the flashing channel number disappear, the storage is done.

2. Delete memory channel

In channel mode, hold [MEM] for over 2 seconds, the memory channel number flashes, turn the CH switch to choose the memory to be deleted. Then hold [MEM] until the flashing channel number disappear, the delete is done.

🕷 【 EMG/LOCK 】

Choose EMG channel:

Short press [EMG] to use Emergency channel, LCD displays "EMG".

- 1. Short press [EMG] once to choose CH9;
- 2. Short press [EMG] again to choose CH19;
- 3. Short press [EMG] thrice to return to last normal channel.

Keypad Lock Function:

- 1. Long press [EMG] to lock keys, LCD displays " --- o ";
- 2. Long press [EMG] again to unlock the keys.

Note: When this function is turned on, only PTT button is valid.

11

BACKGROUND FUNCTION MENU OPERATION

- 1. Press [MENU] for 2 seconds to enter menu list;
- 2. Turn Channel switch to select menu No.1 to No.10;
- 3. Press [PUSH] to enter the menu setup;
- 4. Turn channel switch to select wanted setup;
- 5. Press any other key or wait 5 seconds, the setting will be stored and exit.

No.	Function	LCD Display	Values and Descriptions
1	Mic Gain	$\begin{bmatrix} \frac{w_{1,1}+1+u_{1}-w_{1}-w_{1}}{w_{1}} \\ \frac{w_{1}+u_{2}-u_{1}-w_{1}-w_{1}}{w_{1}} \\ \frac{w_{2}-u_{2}-u_{2}-w_{1}}{w_{1}} \\ M_{1}T \end{bmatrix} a_{0} = \begin{bmatrix} 1 & w_{1} \\ 1 & w_{2} \end{bmatrix}$	1-36, Total 36 levels available; Default: 30.
2	Monitor Gain	The second secon	1-32, OFF, Total 33 levels available; Default: OFF. (Shut NOG function)
3	тот		1-600s, OFF, Total 10minutes available; Default: 180S. (Shut TOT function)
4	SWR Protection	100 - 100 -	OFF: Shut SWR function; ON: Open SWR function; Default: ON.
5	Scan Type	<u> <u> </u> <u></u></u>	SQ: SQ scan function; TI: Time scan function; Default: SQ.
6	SSB Clarifier switch		OFF: Shut frequency adjustment; R: Open RX frequency adjustment; T: Open TX frequency adjustment; RT: Open TX/RX frequency adjustment; Default: R.
7	Channel Frequency switch	FR-EN	CHAN: Channel adjust; FREQ: Frequency adjust; Default: FREQ.
8	ASQ Control	restances RS0 ". I	01~09: Total 9 Levels; Default: 05.
9	Offset frequency	TXREP	Frequency range: 100Hz~5MHz; Default: 100KHz.
10	Reset	entration of the second	OPT: All function setup resume default; ALL: All channels and setup resume default; Default: OPT.

■ SPECIFICATIONS

GENERAL		
Frequency Range	28.000-29.700MHz(Programmable)	
Frequency Band	A/B/C/D/E/F/G/H/I	
Channel	40channels(programmable)in each band	
Frequency Control	Phase-Locked-Loop Synthesizer	
Frequency Step	100Hz、1KHz、10KHz、100KHz、1MHz	
Frequency Tolerance	± 5.00ppm	
Frequency Stability	0.001%	
Temperature Range	-20℃to +50℃	
Microphone	with push-to-talk /UP/DN and coiled cord	
Input Voltage	13.8V	
Dimensions (in mm)	250(W) x 280(L) x 60(H)	
Weight	1.5kg	
Antenna Connector	UHF, SO239	

TRANSMITTER		
Power Output	AM: 12W / FM: 30W / SSB: 30W(PEP)	
Drain	8A(with modulation)	
Modulation	AM/FM/USB/LSB	
Inter-modulation Distortion	SSB: 3rd order, more than -25dB; 5th order, more than -35dB	
SSB Carrier Suppression	55dB	
Unwanted Sideband	50dB	
Frequency Response	AM/FM: 300 to 3000Hz SSB: 450 to 2500Hz	
Output Impedance	50ohms, unbalanced	

RECEIVER		
	SSB: 0.25µV for 10dB(S+N)/N at greater than 1/2-watt of audio output	
Sensitivity	AM:1.0 μ V for 10dB(S+N)/N at greater than 1/2watt of audio output FM: 1.0 μ V for 20 dB (S+N)/N at greater than 1/2 watt of audio output	
Adjacent-Channel Selectivity	AM/FM: 60dB SSB: 70dB	
Image Rejection	More than 65dB	
IF Frequency	AM/FM: 10.695MHz 1st IF, 455KHz 2nd IF SSB: 10.695MHz	
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(only AM/FM)1.0µV	
Audio Output Power	3 watts into 8 ohms	
Frequency Response	AM/FM: 300 to 3000Hz SSB: 450 to 2500Hz	
Built-in Speaker	8 ohms, round.	
External Speaker(Not Supplied)	8 ohms; disables internal speaker when connected.	

<u> 14 </u>