



Qixiang Electron Science & Technology Co., Ltd.
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AnyTone®



AT-6666

FC CE 0700! RoHS COMPLIANT

USER'S MANUAL

10 METER RADIO



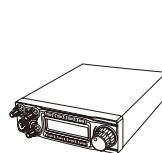
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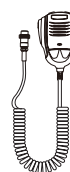
FUNCTIONS & FEATURES

1. Big LCD displays frequency and all kinds of information
2. FM、AM、 USB、 LSB 、 PA mode
3. Frequency Tuning Step 100Hz, 1KHz, 10KHz, 100KHz, 1MHz
4. $\pm 1.5\text{KHz}$ Clarifier
5. Flexiable menu function and PC programming software
6. ECHO Function
7. SQ, ASQ Function (FM and AM mode only)
8. RF GAIN Adjustment
9. RF PWR Adjustment
10. SCAN Function
11. Programmable RB Function
12. NB/ANL Function
13. DW DUAL-WATCH Function
14. BEEP Voice Prompt
15. +10KHZ Function
16. SWR、 S/RF function
17. TOT function
18. HI-CUT Function
19. EMG CALL
20. SWR PROTECTION
21. Power Supply Voltage Protection
22. Key-Lock Function
23. Seven (7) Color LCD Display
24. Six(6) Groups Memory Channel
25. CTCSS/DCS Code(Optional)
26. DTMF Function

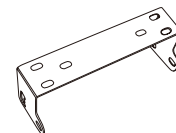
STANDARD ACCESSORIES



Radio



Microphone



Install bracket



Screws



Pads



Adjusting screws



Microphone Hanger



non-slip mat



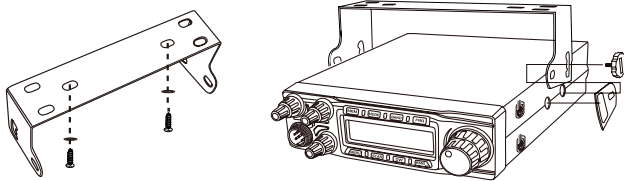
Fuse(15A 250V)



INSTALLATION

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 carefully each screw, 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.



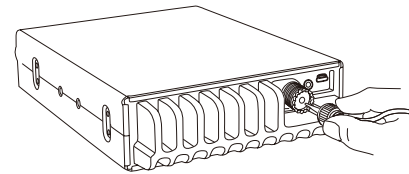
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⚡ ANTENNA INSTALLATION

Before using this radio, please install a high efficient 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 transmitting, 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.
- ▲ 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.

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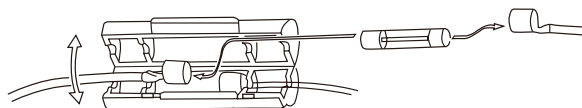
✘ Replacing Fuse

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.



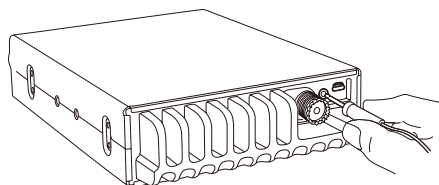
✘ Install Microphone Hanger

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

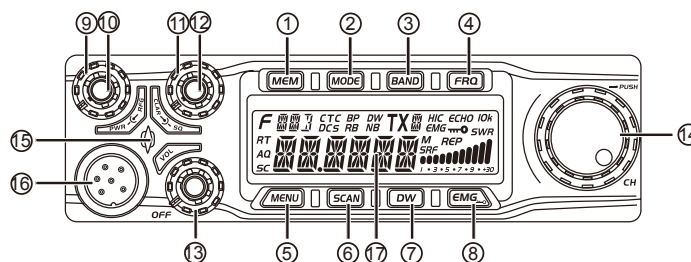
If use an external speaker, please choose 8 ohm speaker with 3.5mm mono band (doulbe cable) plug.

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



■ GETTING ACQUAINTED

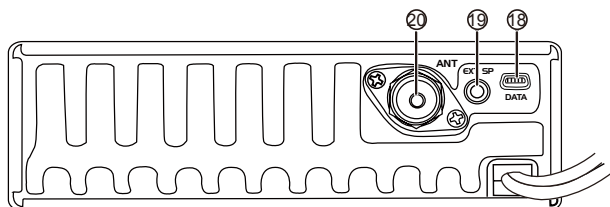
✘ Front Panel



No.	Key	Functions
1	MEM	Use, store or delete memory channel
2	MODE	Switch mode: FM、AM、USB、LSB、PA
3	BAND	Switch band: A-I
4	FRQ	Switch between channel mode and frequency mode
5	MENU	Function Menu key
6	SCAN	Scan, Scan add, Scan delete
7	DW	Dual-watch scan, Dual-watch setup
8	EMG	Emergy Channel; Keypad lock.
9	PWR	RF Power Control
10	RFG	RF Gain Control
11	SQ	Squelch Control
12	CLAR	SSB Clarifier switch
13	VOL/OFF	Power On/Off; Volume Control.
14	CH	Channel Switch, Push key.
15		RX/TX Indicator
16		Microphone Jack
17		LCD Display

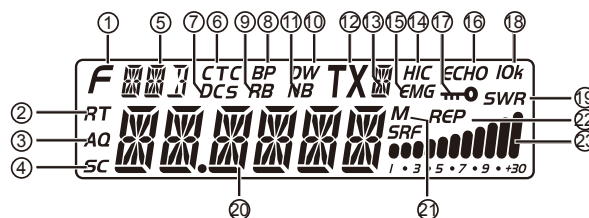
We only do the best radio!

✕ Rear Panel



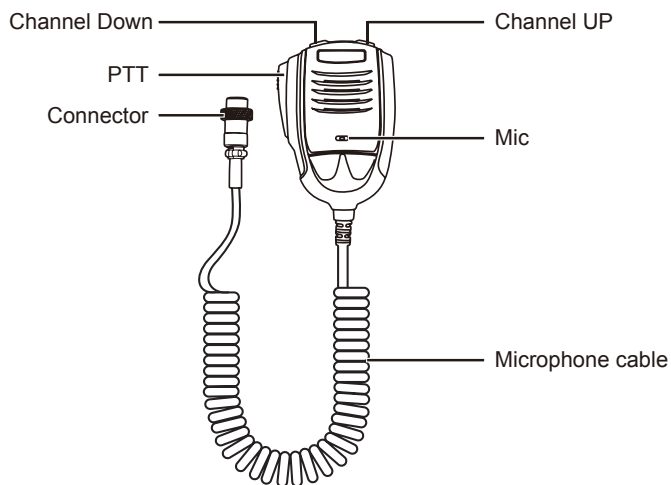
18	PC Cable Jack
19	External Speaker Jack
20	Antenna Jack

✕ LCD Display



1	F	Appears when press MENU key.
2	RT	Appears when adjust SSB clarifier frequency.
3	AQ	Appears when use ASQ.
4	SC	Appears during scan function.
5		Indication of working mode.
6	CTC	Appears when set with CTCSS code.
7	DCS	Appears when set with DCS code.
8	BP	Appears when Beep voice is ON.
9	RB	Appears when RB function is ON.
10	DW	Appears when Dual-watch function is ON.
11	NB	Appears when adjust Noise Blanker is ON.
12	TX	Appears during transmitting.
13		Indiation of working band.
14	HIC	Appears when Hi-cut function is ON.
15	EMG	Appears when using Emergency channel.
16	ECHO	Appears when Echo function is ON.
17		Appears when the Keypad lock function is ON.
18	IOk	Appears when +10Khz function is ON.
19	SWR	Indication of SWR level.
20		Display of frequency and channel.
21	M	Appears when using memory channels
22	REP	Appears when repeater function is ON.
23		Display of TX/RX Signal strength.

✕ Microphone



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HOW TO USE YOUR RADIO

✘ OFF/ON Radio

1. 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.

✘ Volume Control

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 outer 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 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, anti-clockwise to reduce frequency.
3. When the frequency is flashing, press [**PUSH**] again to adjust frequency step size.

KEYPAD FUNCTION

✘ [MEM]

Using memory channel:

1. Short press [**MEM**] to enter memory channel, turn CH 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.

※ [**MODE**]

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

※ [**BAND**]

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

※ [**FRQ**]

Short press [**FRQ**] to switch between frequency display mode and channel display mode.

※ [**MENU**]

1. Short press [**MENU**], the top left of LCD display "F", Press [**PUSH**] to enter channel function menu list.
2. Long press [**MENU**] for 2 seconds to enter Background Function menu.

※ [**SCAN**]

Scan function

1. Short press [**SCAN**] to start scan function, "SC" flashes in the LCD.
2. In scan mode, Turn Channel switch will change scan direction.
3. Short press [**SCAN**] again to exit scan.

Add/delete scan list

In channel mode, Long press [**SCAN**] for over 2 seconds will add or delete present channel from scan list.

1. When LCD displays "SC", present channel added to scan list.
2. When LCD does not displays "SC", present channel is not added to scan list.

Note: This function is equal the operation in Channel data function No.05 menu.

※ [**DW**]

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;

Dual-Watch channel setup

1. Choose first Dual-Watch channel.
2. Hold [**DW**] for 2 seconds, LCD displays "DW";
3. Turn Channel switch to choose second dual watch channel. Long press DW again to store and exit.


※ [**EMG**]

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 "  ";
2. Long press [**EMG**] again to unlock the keys.

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

CHANNEL FUNCTION MENU OPERATION

1. Press [**MENU**], the top left of LCD display "F", Press [**PUSH**] to enter menu list.
2. Turn Channel switch to find No.1- No.5 menus.
3. Press [**PUSH**] to choose the menu.
4. Turn Channel switch to choose wanted value.
5. Press [**PUSH**] to return to previous menu, press any other key or wait 5 seconds, the setting will be stored and exit.

No.	Function	LCD Display	Values and Descriptions
1	Busy Channel Lockout		OFF: Shut busy channel lockout function; ON: Open busy channel lockout function; Default: OFF.
2	Offset Direction		REP+: Open offset direction function, TX frequency> RX frequency; REP-: Open offset direction function, RX frequency> TX frequency; OFF: Shut offset direction function Default: OFF.
3	CTCSS/DCS		CTCSS: 67.0~250.3Hz, Total 38 groups; DCS: D023N~D754N, Total 104 groups; OFF: Shut CTCSS/DCS code function. Default: OFF Note: This function is available only when install Optional CTC board.

4	Add/delete Scan list		ADD: LCD displays "SC", present channel is added to scan list. DEL: LCD does not display "SC", present channel is not added to scan list. Default: OFF
5	Public Data		OFF: Choose independent channel menu; ON: Choose public channel menu; Default: ON Note: If choose OFF, The hidden channel menu 6-11 will appear. This 6 menus are same as the 6 menus in Public data menus.

Note: Channel function menu is used to edit the setting for current channel.

PUBLIC DATA FUNCTION MENU OPERATION

1. Hold [**PUSH**] for 2 seconds to enter menu list;
2. Turn Channel switch to find menu 1-6;
3. Press [**PUSH**] to choose the menu;
4. Turn channel switch to choose wanted value.
5. Press [**PUSH**] to return to previous menu, press any other key or wait 5 seconds, the setting will be stored and exit.

We only do the best radio!

No.	Function	LCD Display	Values and Descriptions
1	Hi-cut		OFF: Shut HI-CUT function; ON: Open HI-CUT function; Default : OFF.
2	NB/ANL		OFF: Shut NB/ANL function; ON: Open NB/ANL function; Default : ON.
3	ECHO		OFF: Shut ECHO function; ON: Open ECHO function; Default : OFF
4	10KHz		OFF: Shut +10KHz function; ON: Open +10KHz function; Default: OFF
5	ROGER		OFF- 5, Total 6 groups. Default: OFF, Off means shut off Roger.
6	DTMF PTT ID		BOT: Press PTT to send DTMF encode; EOT: Release PTT to send DTMF encode; CALL: Hold PTT+EMG to send DTMF encode; Note: If the M1-M16 storage has no PTT ID, DTMF function is defaulted OFF. Users able to choose the DTMF group only when programmed with code.

Note: Public function menu offer one-time setting for all channels.

BACKGROUND FUNCTION MENU OPERATION

1. Hold [**MENU**] for 2 seconds to enter menu list;
2. Turn Channel switch to ind menu No.1 to No.15;
3. Press [**PUSH**] to choose the menu;
4. Turn channel switch to choose wanted value;
5. Press [**PUSH**] to return to previous menu, press any other key or wait 5 seconds, the setting will be stored and exit.

No.	Function	LCD Display	Values and Descriptions
1	BEEP		OFF: Shut BEEP function; ON: Open BEEP function; Default: ON.
2	LCD display in TX mode		OFF: Displays TX frequency when TX; SWR: Displays SWR value when TX TOT: displays TOT remain time when TX; DC: Displays voltage when TX; Default: OFF.
3	Mic Gain		1-36, Total 36 levels available. Default: 30.
4	Monitor Gain		1-32, OFF, Total 33 levels available; Default: OFF (Shut NOG function)
5	TOT		1-600s, OFF, Total 10minutes available; Default: 180S (Shut TOT function)
6	SWR Protection		OFF: Shut SWR function; ON: Open SWR function; Default: ON

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7	Voltage Protection		OFF: Shut voltage protection function; ON: Open voltage protection function; Default: ON
8	Scan Type		SQ: SQ scan function; TI: Time scan function; Default: SQ
9	Clarifier		OFF: Shut frequency adjustment R: Open RX frequency adjustment; T: Open TX frequency adjustment; RT: Open TX/RX frequency adjustment; Default: R
10	Backlight		WHITE,BLUE,GREEN, YELLOW, RED,PURPLE,CYAN Default: WHITE
11	REP frequency		Frequency Range: 100Hz-5MHz Default: 100KHz
12	Channel Switch Setup		CHAN: Choose to adjust channel FREQ: Choose to adjust frequency Default: FREQ
13	ASQ level		01-09, total 9 level available Default: 05

14	DTMF Encode		S TIME: DTMF transmit time; FDELAY: First digital time; C TIME: Pre-carrier time; *# TIME: *and # delay time; D CODE: D code setting time; TXDIS: Display setting for DTMF transmit; MEM: DTMF encode storage list; Note: In the DTMF encode storage list (M1-M16), press PUSH to edit DTMF code, then turn channel knob to choose desired value, press PUSH again to edit next list, after finish setting, hold PUSH to store it and back to main menu.
15	Reset		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	±5.0 ppm
Temperature Range	-20℃to +50℃
Microphone	with push-to-talk /UP/DN and coiled cord
Input Voltage	13.8V
Dimensions (in mm)	245(L) x 158(W) x 48(H)
Weight	1.5kg
Antenna Connector	UHF,SO239

TRANSMITTER

Power Output	AM: 15W / FM:45W / SSB: 60W(PEP)
Drain	12A(with modulation)
Modulation	FM/AM/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

Sensitivity	SSB: 0.25μV for 10dB(S+N)/N AM:1.0μV for 10dB(S+N)/N 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 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.