AnyTone®

Qixiang Electron Science & Technology Co., Ltd

www.anytone.net

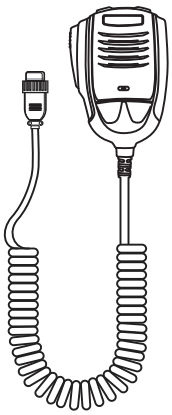
AnyTone®

AT-505PRO

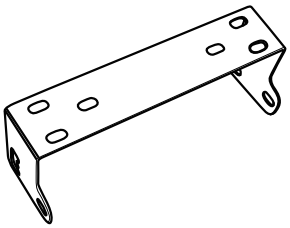
CB RADIO

Instruction Manual

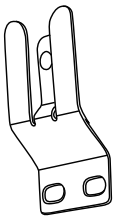
1. ACCESSORIES



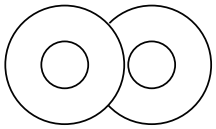
Microphone



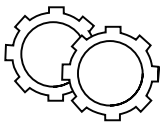
Mobile Bracket



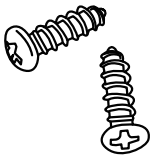
Microphone Hanger



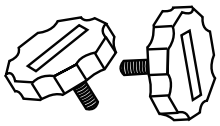
non−slip mat



Pads

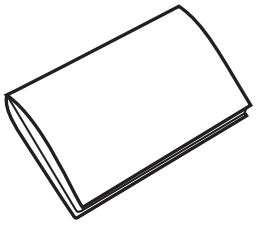


Tapping screws

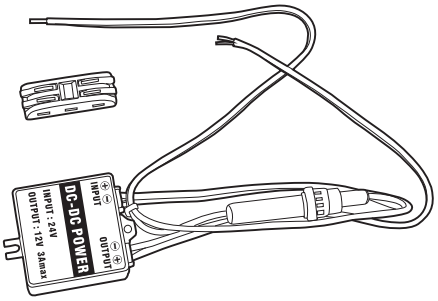


Adjusting screws

Spare Fuses
3A 250V

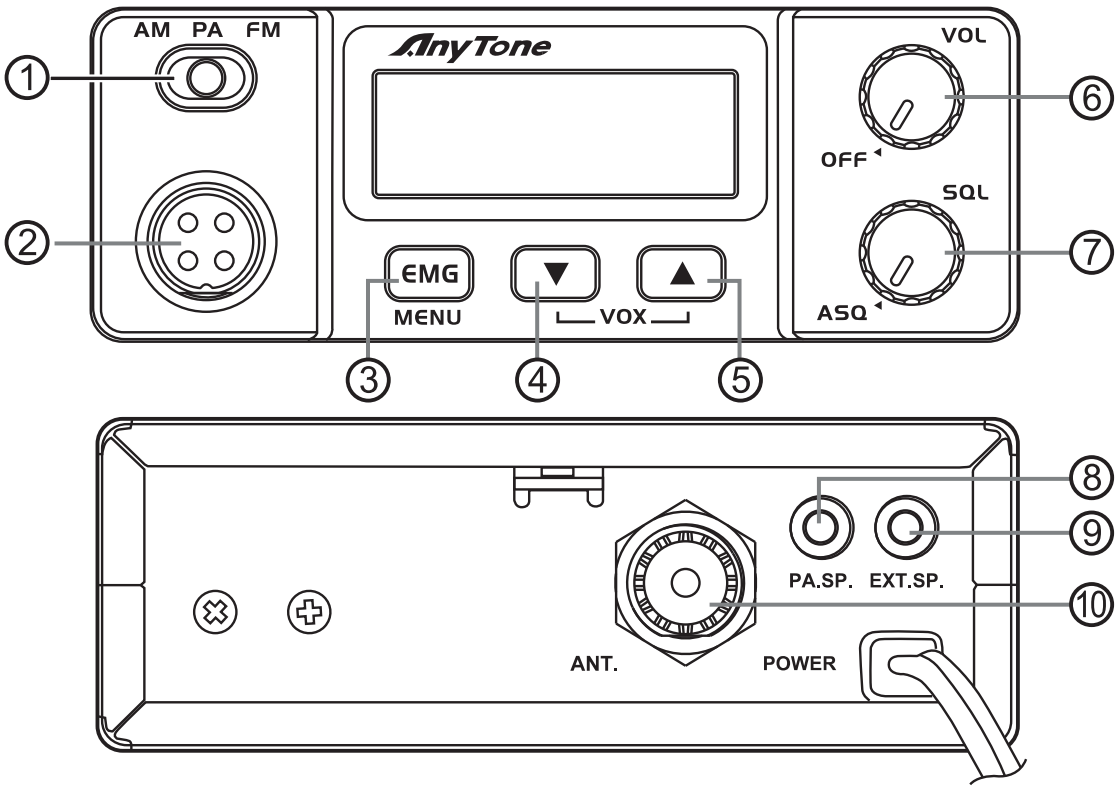


User Manual

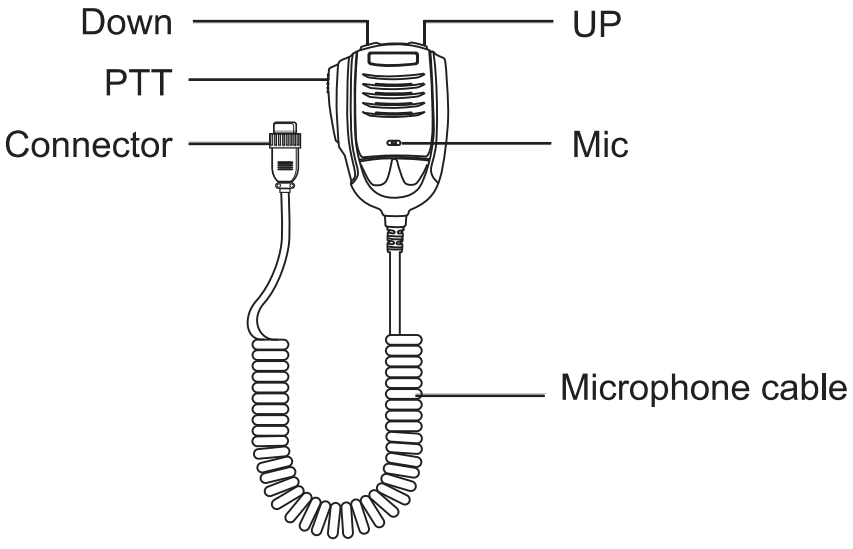


24V DC~12V DC Power
(option)

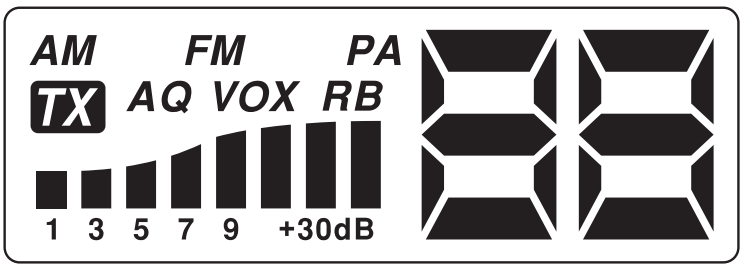
2. KNOW ABOUT THIS RADIO



1	3 Position Switch : AM, FM and PA
2	Microphone Plug
3	Emergency Channel ~ Menu
4	Channel Down Selector ~ Scan On ~ VOX On/Off
5	Channel Up Selector ~ Scan On ~ VOX On/Off
6	Power On/Off ~ Volume Control
7	ASQ ~ Squelch
8	PA Optional Speaker Jack
9	External Optional Speaker Jack
10	Antenna Jack



3. LCD



AM AM mode selected

FM FM mode selected

PA PA mode selected

Indicates the active channel

TX or RX bargarph

TX Indicates transmission

AQ ASQ control activated

VOX VOX function activated

RB ROGER BEEP function activated

4. HOW TO USE THIS RADIO

4.1 Power On/Off the Radio

Turn the **VOL** knob clockwise to power on the radio, the LCD displays the Norms and then displays channel number.

Turn the **VOL** knob anti-clockwise, until hear Ka Ta, the radio is powered off.

4.2 Volume Control

Turn the **VOL** knob clockwise to increase the volume, turn it anti-clockwise to decrease the volume.

4.3 ASQ ~ SQ Control

※ASQ (Automatic Squelch Control)

Turn the **SQL** knob anti-clockwise into **ASQ** position. " ***AQ*** " appears on the LCD. No repetitive manual adjustment and a permanent improvement between the sensitivity and the listening comfort when **ASQ** is active. This function can be disconnected by turning the switch clockwise. In this case the squelch adjustment becomes manual. " ***AQ*** " disappears from the LCD.

※SQ (Manual Squelch Control)

Turn the **SQL** knob clockwise to the exact point where all background noises disappear. This adjustment should be done with precision as, if set to maximum (fully clockwise), only the strongest signals will be received.

4.4 Channel Selector ~ SCAN

※Channel Selector

Short press ▼ / ▲ keys on the unit or **UP/DN** keys on the microphone to change channels by one step.

Hold ▼ / ▲ keys on the unit or **UP/DN** keys on the microphone can fast changed channels.

※Channels Scan (very long press)

Press and hold ▼ / ▲ keys on the unit or **UP/DN** keys on the microphone for 7 seconds or until a beep sounds activate the 40 channels scan function. The scanning stops as soon as there is a busy channel and the channel number flashes.

In scanning mode, press ▼ / ▲ keys on the unit or **UP/DN** keys on the microphone to change scan direction.

Press **PTT** switch to exit channels scan.

4.5 VOX

Press simultaneously the ▼ and ▲ keys on the unit in order to activate the VOX function, " ***VOX*** " is appears on the LCD. A new press on these keys disables the function, " ***VOX*** " disappears form the LCD.

4.6 AM/FM ~ PA

※**AM/FM**

Toggle the **AM/PA/FM** switch to modify the modulation mode ***AM*** or ***FM***.

Corresponding mode is appears on the LCD.

※**PA**

An external loud speaker can be connected to the unit by the PA jack plug located on the back panel **PA.SP.**

Toggle the **AM/PA/FM** switch to **PA**, " ***PA*** " is appears on the LCD.

When the PA mode is activated, the modulation of the microphone and the received signal are transmitted to the internal loudspeaker or external optional loudspeaker connected to jack EXT.SP. " ***PA*** " blinks alternate with the modulation mode (***AM*** or ***FM***).

Turn the **VOL** knob to adjust the **PA** volume.

4.7 Emergency Channels ~ MENU

※**Emergency Channels (short press)**

Press the EMG key, the radio automatically tune to channel 9.

Press the EMG key again, the radio automatically tune to channel 19.

Press the EMG key third time to return to the previous channel.

※**MENU (long press)**

Long press EMG key to enter the memu.

4.8 Frequency Band Selection

Hold the EMG key to power on radio, the symbol corresponding to the current configuration is blinking.

Press the ▼ / ▲ keys on the unit or **UP/DN** keys on the microphone to change the configuration.

When the configuration is selected, long press EMG key, the symbol corresponding to the configuration is continuously displayed and a confirmation tone beep sounds.Confirm the selection by switching off the transceiver and then switching it on again.

4.9 Transmitting

Press and hold the **PTT** switch on the microphone to transmit a message, " TX "is appears on the LCD. Release the switch to listen to an incoming communication, " TX " disappears form the LCD.

4.10 Install External Speaker

Choose a 8Ω external optional speaker with 3.5 mm mono connector.

4.11 Resume Factory Default

Turn on the power while pressing the EMG key and the ▲ key on the unit to reset to the factory settings.

4.13 Menu Operations

Long press EMG key to enter the menu function setting.

Short press EMG key to select the menu to set, the parameter appears on the LCD.

You can set the following:

4.13.1. VOX sensitivity

4.13.2. VOX delay time

4.13.3. Roger beep

4.13.4. Key beep

4.13.5. Backlight brightness

4.13.6. TOT (Time out timer)

4.13.7. PA−RX path

Short press ▼ / ▲ keys on the unit or **UP/DN** keys on the microphone to modify the value of the parameter.

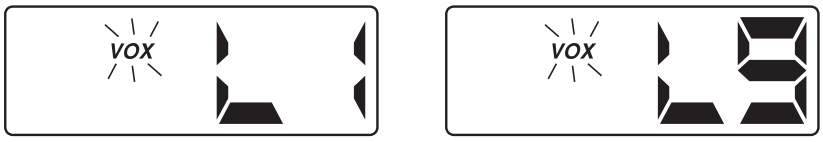
Press **PTT** switch or long press EMG key or wait for 10 seconds to store and exit MENU.

4.13.1. VOX Sensitivity

VOX sensitivity allows the adjustment of the microphone for an optimum transmission quality.

At VOX sensitivity menu, " ***VOX*** " blinks, the current setting and its value appear on the LCD.

Adjustable level from L 1 (high level) to L9 (low level). Default value is: L3.

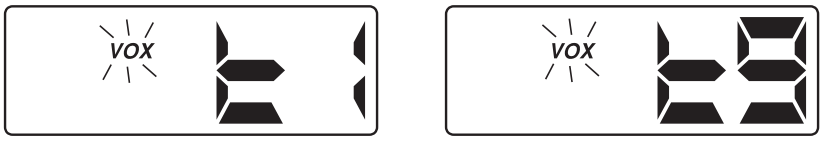


4.13.2. VOX Delay Time

VOX delay time allows avoiding the sudden cut of the transmission by adding a delay at the end of speaking.

At VOX delay time menu, " ***VOX*** " blinks, the current setting and its value appear on the LCD.

Adjustable level from t 1 (short delay) to t9 (long delay). Default value is: t4.



4.13.3. Roger Beep

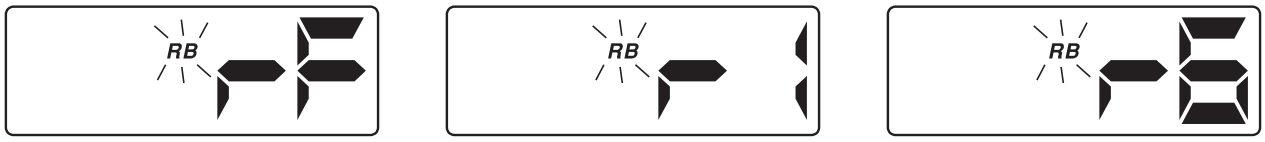
The Roger Beep function signals the receiver that the other end has ended the radio message.

At Roger Beep menu, " ***RB*** " blinks, the current setting appear on the LCD.

Use the ▼ / ▲ keys on the unit or **UP/DN** keys on the microphone to activate (r 1 to r6) 6 roger tones / deactivate (rF) the function.

Default setting is: rF.

When the function is active, " ***RB*** " appeears on the LCD.

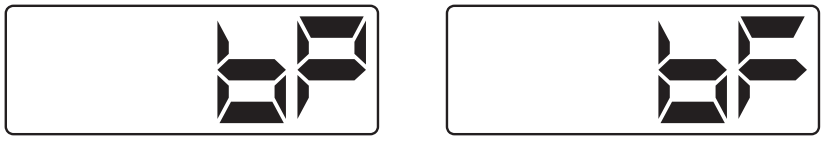


4.13.4. Key Beep

When the function is activated, a beep sounds when a key is pressed.

At key beep menu, press the ▼ / ▲ keys on the unit or **UP/DN** keys on the microphone to activate (bP) / deactivate (bF) the function.

Default setting is: bP.



4.13.5. Backlight Brightness

This function allows adjusting the brightness of the lighting.

At backlight brightness menu, press the ▼ / ▲ keys on the unit or **UP/DN** keys on the microphone to change the value of the backlight brightness. 3 steps from d1 to d3. Default value is: d3.

4.13.6. TOT (Time Out Timer)

If the PTT switch is pressed for more than "TOT" time, the display starts blinking and the transmission ends. A beep will sound unit the PTT switch is released.

At TOT menu, press the ▼ / ▲ keys on the unit or **UP/DN** keys on the microphone to set the TOT, tOF disable the function. Time range t1 to t5, time stepping is: 1 minute. Default value is: t5.

4.13.7. PA-RX Path

This function allows to select the operating mode of the PA.

At PA-RX Path menu, " ***PA*** " blinks, the current setting appear on the LCD.

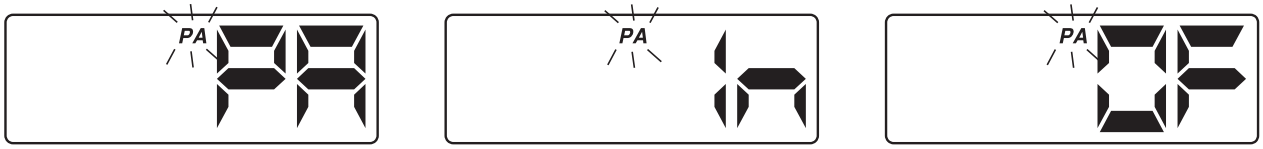
Press the ▼ / ▲ keys on the unit or **UP/DN** keys on the microphone to select the operating mode of the PA : PA, IN, OF.

PA : the modulation of the microphone and the received signal are transmitted to the PA loudspeaker connected to jack **PA.SP.**

IN : the modulation of the microphone is transmitted to the PA loudspeaker connected to jack **PA.SP.**; the received signal is transmitted to the internal loudspeaker (or external optional loudspeaker connected to jack **EXT.SP.**).

OF : The reception is no more functional. Only the modulation of the microphone is transmitted to the PA loudspeaker connected to jack **PA.SP.**

Default setting is: PA.



5. SPECIFICATION

GENERAL		
Modulation Mode		AM/FM
Frequency Range		FM:26.565−27.405MHz (EU) 26.965−27.405MHz (EU/USA/Canada)
Frequency Tolerance		±5.0ppm
Input Voltage		13.8V
Dimensions		125x192x45mm
Weight		620g
Operating Temperature Range		−20℃ to +50℃
Current Drain	Transmit	3A MAX
	Receive	Squelched 0.3A
	VOL Max	0.7A
Antenna Connector		UHF, SO−239
TRANSMITTER		
Power Output		4 Watts FM/AM
Transmission interference		inferior to 4nW
Frequency Response		300−3000Hz
Modulated signal distortion		inferior to 5%
Output Impedance		50 ohms
RECEIVER		
Sensitivity		Less than 1uV for 10dB(S+N)/N
Image Rejection		70dB
Adjacent Channel Rejection		60dB
IF Frequencies		1st 10.695MHz
		2nd 455KHz
Automatic Gain Control(AGC)		Less than 10dB change in audio
		Output for inputs from 10 to 50000uV
Squelch		less than 1uV
Audio Output Power		2Watts at 8Ω less than 10% distortion
Frequency Response		300−3000Hz

FCC compliance statement

FCC 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 1**:** The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

Replacement of any transmitter component (crystal, semiconductor, etc.) not authorized by the FCC equipment authorization for this radio could violate FCC rules.

Note 2: 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.

FCC RF Exposure and Separation Distance:

This radio transmitter has been approved by FCC 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 lmpedance: 50 Ohms

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment shall be installed and operated with minimum distance 51.2 cm between the radiator& body.

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.

ISED compliance statement

ISED Warning Statement

ENGLISH: This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

FRANCE: L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) L' appareil ne doit pas produire de brouillage;

(2) L' appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d' en compromettre le fonctionnement.

ISED RF Exposure Statement:

ENGLISH: 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

FRANCE:Cet émetteur radio a été approuvé par Industrie Canada pour fonctionner avec les types d'antennes listés ci-dessous, avec le gain maximum autorisé et l'impédance d'antenne requise pour chaque type d'antenne indiqué. Les types d'antennes qui ne figurent pas dans cette liste et dont le gain est supérieur au gain maximal indiqué pour ce type d'antenne ne peuvent pas être utilisés avec cet appareil.

Antenne externe :

Gain maximal de l'antenne : 3 dBi

Impédance de l'antenne : 50 Ohms

ENGLISH: This equipment complies with RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 43.1 cm between the radiator & your body.

FRANCE:Le présent équipement est conforme aux limites d'exposition aux rayonnements RF fixées pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 43.1 cm entre le radiateur et votre corps.

CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

Hereby, We, declare that the radio is compliance with Radio equipment Directive (RED)2014/53/EU. The device in the environment with the temperature between -10 to 55℃ and operating under 2000m, otherwise, it may damage your radio.