

*AnyTone*<sup>®</sup>

Qixiang Electron Science & Technology Co.,Ltd.

**[www.anytone.net](http://www.anytone.net)**

# AnyTone®

## AT-5100

### 10 METER AMATEUR RADIO



## Operating Instructions



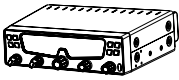
# CONTENTS

1. FUNCTIONS & FEATURES.....	1
2. STANDARD ACCESSORIES.....	2
3. INSTALLATION.....	2
4. GETTING ACQUAINTED.....	5
5. HOW TO USE YOUR RADIO .....	8
6. BACKGROUND FUNCTION / MAIN MENU OPERATION.....	11
7. PUBLIC MENU OPERATION .....	14
8. CHANNEL MENU OPERATION .....	14
9. BT MENU OPERATION(OPTIONAL).....	16
10. SPECIFICATIONS.....	17
11. CTCSS/DCS CHART .....	18

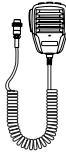
# 1. FUNCTIONS & FEATURES

- ◆ Large LCD display with backlight dimming
- ◆ FM / AM / USB / LSB / CW / PA modes
- ◆ Frequency Tuning Step:  
10Hz / 100Hz / 1KHz / 5KHz / 10KHz / 100KHz / 1MHz
- ◆ ±500Hz/5KHz CLARIFIER Adjustment (R/T/R+T selectable)
- ◆ Flexible Menu Functions and PC CPS Software option
- ◆ TX and RX Noise Reduction
- ◆ VFO / BAND / Memory Channel modes
- ◆ CTCSS/DCS with RX/TX Split functions
- ◆ VOX Function
- ◆ SQ, ASQ Function (FM and AM mode only)
- ◆ RF GAIN Adjustment
- ◆ RF PWR Adjustment
- ◆ SCAN Function
- ◆ NB/ANL Function
- ◆ Repeater Shift / Offset Frequency Function
- ◆ SIG / PWR / SWR Meter Functions
- ◆ TOT Function
- ◆ HI-CUT Function
- ◆ SWR Protection
- ◆ Power Supply Voltage Protection
- ◆ Key-Lock Function
- ◆ Band Name Customization Function (via PC CPS)
- ◆ Compatible with electret and dynamic MIC types
- ◆ ECHO Function
- ◆ Programmable RB Function
- ◆ Keypad Beep Function
- ◆ +10KHZ Function
- ◆ DW Dual-Watch Function
- ◆ EMG Channel Function

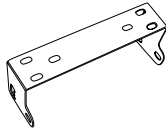
## 2. STANDARD ACCESSORIES



Radio



Microphone



Mounting Bracket



Microphone Hanger



Non-slip Mat



Pads for bracket



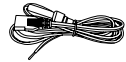
Adjusting screws



Spare Fuses  
(10A, 125V)



Self-tapping  
Screws

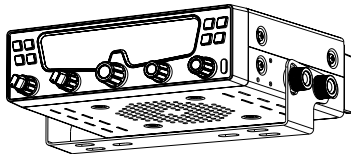
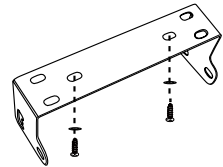


Power cord

## 3. INSTALLATION

Choose the most appropriate location from a simple and practical point of view. If installed in a vehicle, care should be taken to ensure your radio does not obstruct the driver or passengers.

1. Use the Self-tapping Screws and Pads to fix the Bracket to a suitable location.
2. Attach the Adhesive Case Protectors to the inside ends of the Mounting Bracket and insert the Radio. Fit the Adjusting Screws loosely, and choose a suitable angle by moving the Adjusting Screws to one of the 3 positions on the Mounting Bracket.
3. Tighten the Adjusting Screws firmly by hand. Make sure the radio and all accessories are securely mounted.



### 3.1 Microphone Connection

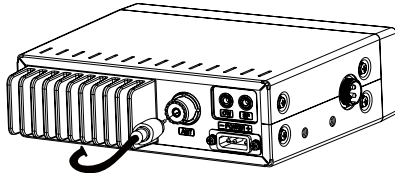
1. Insert the microphone connector into the microphone jack.
2. The microphone connector will "click" into place.

## 3.2 Antenna Installation

Before using this radio, please install an efficient and resonant antenna. Using an antenna that is correctly installed and tuned will enable excellent communication performance.

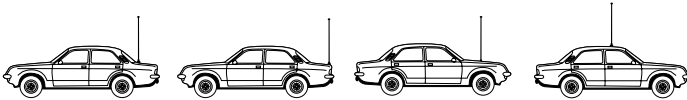
This radio requires an antenna impedance of 50 ohms, unbalanced.

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



### WARNING:

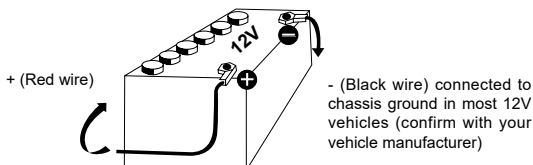
- ▲ NEVER transmit without a connected resonant antenna, or a suitable 50 ohm load being connected. Damage to the radio may result.
  - ▲ To reduce the risk of electric shock, or radio damage, base station installations should include lightning protection devices.
  - ▲ Ask your Anytone dealer for available antenna options.
3. A mobile antenna can be mounted in various locations, for example:



## 3.3 Power Connection

This radio requires a 13.8V (12V) DC power supply. Never connect the radio directly to a 24V DC battery system, as can be found in some vehicles. Please refer to the radio Specifications to ensure your 13.8V DC power supply can provide enough current (amps), otherwise poor performance may occur.

1. Connect the positive (red) power cable to the + terminal of the battery.
  2. Connect the negative (black) power cable to the - terminal of the battery.
  3. Connect the DC power cable to the transceiver's power supply connector.
- ▲ Locate the power cable away from high temperature, moisture, and other electrical systems. Ensure it is installed where it cannot be damaged.
  - ▲ It is not recommended to use a vehicle cigar/cigarette lighter socket to power the radio, as it may not supply the correct voltage or current.
  - ▲ Do not remove the fuse holder from the cable.



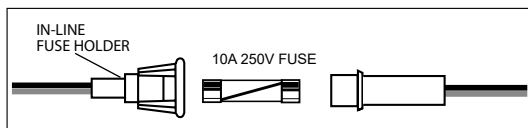
### 3.4 Replacing Fuses

This radio requires a 10A, 250V fuse.

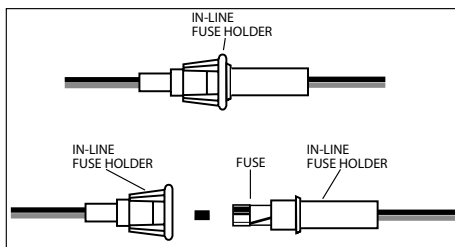
If the fuse blows, determine the reason, then correct the problem.

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

1. Twist the two fuse covers in opposite directions, and open it.

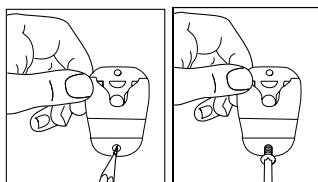


2. Replace the blown fuse with new one, and close the fuse holder.
3. Be sure to only use the correct fuse type, otherwise damage may occur.



### 3.5 Install Microphone Hanger

Choose a location which will not interfere with the driver. Use the supplied self-tapping screws and pads to install the hanger.



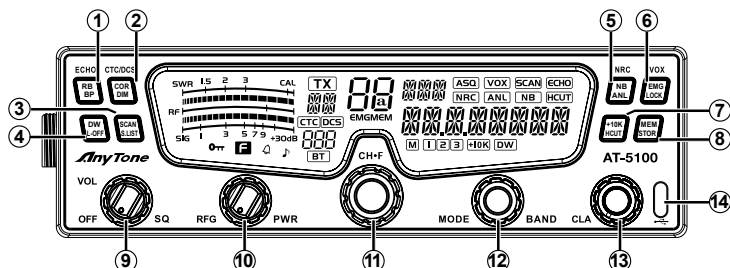
### 3.6 Install External Speaker (Optional)

If using an external speaker, please choose an 8 ohm speaker with a 3.5mm mono (double cable) TS type plug.

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

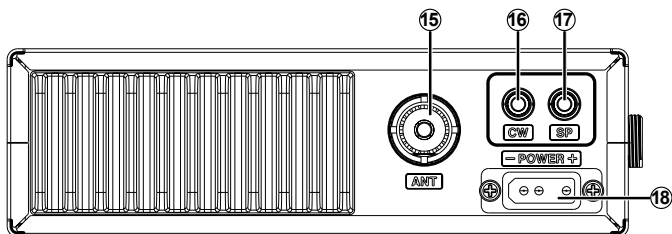
## 4. GETTING ACQUAINTED

### 4.1 Front Panel



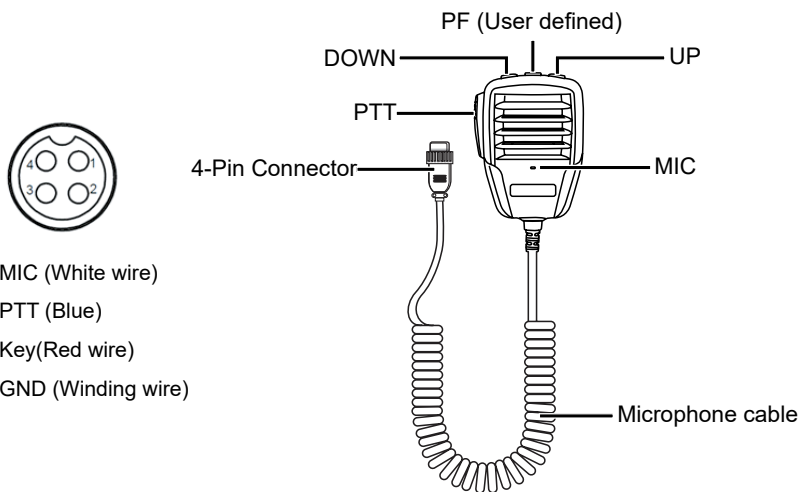
No.	Key	Functions
1	Echo RB/BP	Roger beep, Key beep and Echo on/off control
2	CTC/DCS COR.DIM	CTCSS/DCS control Backlight color and Dimmer control
3	DW/L-OFF	Dual watch and LCD off control
4	SCAN SLIST	Turn on/off scan, or add/delete scan channel
5	NRC NB/ANL	NRC function on/off control NB/ANL on/off control
6	VOX EMG/LOCK	VOX on/off control Emergency channel and key lock on/off control
7	+10K HICUT	+10KHz on/off control Hi-Cut on/off control
8	MEM STOR	MEM channel control Memory channel add/delete
9	VOL/OFF SQ	External knob: Volume control, Power on/off radio Internal knob: ASQ/SQ control
10	RFG PWR	External knob: RF gain control Internal knob: Power level control
11	CH.F	Channel / frequency control knob
12	MODE BAND	Working mode AM/FM/USB/LSB/PA/CW control Working band control
13	CLA	SSB Clarifer Control
14		Type C jack for programming (Special cable required )

## 4.2 Rear Panel

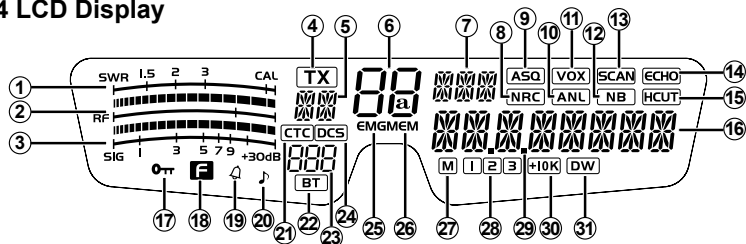


No.	Functions
15	Antenna Jack
16	CW Jack
17	External SP Jack
18	Power Supply Jack

## 4.3 Microphone



## 4.4 LCD Display



1		SWR indicator
2		TX Signal strength indicator
3		RX Signal strength indicator
4		Transmit indicator
5		Working band indicator
6		Working channel indicator
7		Displays the modulation mode
8		Appears when Noise Reduction function is ON
9		Appears when using ASQ
10		Appears when ANL function is ON
11		Appears when VOX function is ON
12		Appears when Noise Blanker is ON
13		Appears when Scan function is ON
14		Appears when Echo function is ON
15		Appears when Hi-Cut function is ON
16		Display of frequency
17		Appears when the Keypad lock function is ON
18		Appears when MENU key is short-pressed
19		Appears when Beep is ON
20		Appears when RB function is ON
21		Appears when CTCSS is enabled
22		BT function indicator(Optional)
23		CTCSS/DCS code
24		Appears when DCS is enabled
25		Appears when using Emergency channel
26		Appears when enter memory mode
27		Appears when enter frequency band setting
28		Clarifier setting, 1: RX, 2: TX, 3: TX+RX
29		Appears when the channel is excluded from the Scan List
30		Appears when the +10KHz function is ON
31		Appears when Dual-watch function is ON

## 5. HOW TO USE YOUR RADIO

### 5.1 Power OFF/ON

1. Turn VOL clockwise to switch the radio ON. (The radio may emit a beep if the KEY.BEEP function is enabled in the Main Menu). The LCD display will show a frequency or a channel number.
2. Turn VOL control fully anti-clockwise to switch the radio OFF.

### 5.2 Volume Control

When the radio is turned on, turning VOL clockwise will increase the Volume level. Turning VOL anti-clockwise will reduce the Volume level. Adjust the volume during communication to achieve a suitable level.

### 5.3 Squelch Control

When the radio is receiving, turn SQ knob clockwise to adjust the Squelch level. Turn SQ switch anti-clockwise to the end position to enable ASQ function.

**NOTE:** ASQ can be enabled or disabled from the Main Menu.

### 5.4 RF Gain Control

When the radio is receiving, turn RFG control to adjust the RF Gain. Turn the control clockwise to increase RF Gain, and anti-clockwise to reduce RF Gain.

### 5.5 RF Power Control

Valid for AM/FM/LSB/USB/CW modes. Turn PWR control to adjust the TX Output Power. Turn the control clockwise to increase Power, and anti-clockwise to reduce Power.

### 5.6 Channel Selection

When the radio is in Channel Mode, turn channel knob to select desired channel. Turn clockwise to increase the channel number, and anti-clockwise to reduce the channel number.

### 5.7 VFO Mode (uF) Frequency Control

Push CH.F knob, LCD displays **F**, then push MODE knob to enter VFO Mode.

Turn CH.F knob to adjust frequency.

Push CLA knob to toggle the "quick" frequency step.

**NOTE:** The default STEP size is set in the Main Menu (long press PF key for shortcut).

### 5.8 Mode Control

Turn MODE knob to change the working mode FM-AM-USB-LSB-PA-CW.

**NOTE:** Modes can be disabled using the PC CPS Programming Software (optional).

## 5.9 Band Control

Push MODE knob, the LCD displays **[M]**, then turn MODE knob to change band.  
Push MODE knob again to exit.

## 5.10 SSB Clarifier Control

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

## 5.11 RB/BP/ECHO

Press **[RB/BP]** to turn on/off Roger beep, LCD displays "♪" when turn on RB function.

Push CH.F knob, the LCD displays **[F]**, then press **[RB/BP]** key to turn on/off key beep.

The LCD displays "🔔" when turn on key beep function.

Hold and press **[RB/BP]** key to turn on/off Echo function, the LCD displays **[ECHO]** when turn on Echo function.

## 5.12 COR/DIM/CTC/DCS

Press **[COR/DIM]** to change backlight color.

Push CH.F knob, the LCD displays **[F]**, then press **[COR/DIM]** key to change dimmer level.

Press and hold **[COR/DIM]** key to turn on/off CTCSS/DCS function, the LCD displays **[CTC]** or **[DCS]** when turn on CTCSS/DCS function.

## 5.13 DW/L-OFF

Press **[DW/L-OFF]** to turn on/off dual watch function, the LCD displays **[DW]**.

Push CH.F knob, the LCD displays **[F]**, then press **[DW/L-OFF]** key to turn on/off LCD.

When the LCD is off, push [CH/F] knob and then press **[DW/L-OFF]** key to turn LCD on.

## 5.14 SCAN/S.LIST

Press **[SCAN/S.LIST]** to turn on/off scan function, the LCD displays **[SCAN]**.

Push CH.F knob, the LCD displays **[F]**, then press **[SCAN/S.LIST]** key to add current channel to scan list. Repeat this operation to remove current channel from scan list.

## 5.15 NB/ANL/NRC


Press **[NB/ANL]** to turn on/off NB function, LCD displays **[NB]** when turn on NB.



Push CH.F knob, the LCD displays **[F]**, then press **[NB/ANL]** key to turn on/off ANL.

The LCD displays **[ANL]** when turn on ANL.


Hold and press **[NB/ANL]** key to turn on/off NRC function, the LCD displays **[NRC]** when turn on NRC function.


## 5.16 EMG/LOCK/VOX

Press  to enter CH9, repeat press to enter CH19, third press returns to normal channel, the LCD displays "EMG" when enter CH9 or CH19.



Push CH.F knob, the LCD displays , then press  key to turn on/off Key Lock.



The LCD displays "0-1" when turn on the Key Lock function.


Hold and press  key to turn on/off VOX function.

The LCD displays  when turn on VOX function.

## 5.17 +10K/HCUT

Press  to turn on/off +10Khz function, the LCD displays .

Push CH.F knob, the LCD displays , then press  key to turn on/off HICUT.




The LCD displays  when turn on HI-CUT function.

## 5.18 MEM/STOR

Press  to enter Memory channel mode, the LCD displays "MEM".

**NOTE:** If no Memory channel is stored, the radio will not respond.

### To store or delete a Memory channel:

Choose a channel from channel mode, press and hold  to enter memory channel store status, the channel number behind MEM -- flashes, turn CH knob to choose the memory channel number, hold and press  key to store it. In memory channel mode, choose a channel, hold and press  for over 3 seconds to delete current memory channel.

## 6. BACKGROUND FUNCTION / MAIN MENU OPERATION

1. Push and hold **CH** knob to enter the Main Menu function list;
2. Turn the **CH** knob or press microphone **UP/DN** key to select the required Menu item;
3. Push **CH** knob to enter menu value setup;
4. Turn the **CH** Channel switch to select wanted setting;  
Push **CH** to return to last menu item.
5. Press any other key or wait 5 seconds, the setting will be stored.

No.	LCD Display	Values and Descriptions
1	<b>KEY.BEEP</b>	<b>ON:</b> Turn on key beep <b>OFF:</b> Turn off key beep <b>Default:</b> ON
2	<b>INDIC</b>	<b>OFF:</b> Displays TX frequency when in TX; <b>SWR:</b> Displays SWR value when in TX; <b>TOT:</b> Displays TOT remaining time when in TX; <b>DC:</b> Displays DC voltage when in TX; <b>Default:</b> OFF
3	<b>STEP</b>	Adjust the default step size in VFO mode. <b>Options:</b> 10Hz, 100Hz, 1KHz, 5KHz, 10KHz, 100KHz, 1MHz; <b>Default:</b> 1KHz.
4	<b>MIC.GAIN</b>	1-45, Total 45 levels of Microphone Gain available. <b>Default:</b> 35
5	<b>MIC.TYPE</b>	<b>ELCE:</b> Electret Microphone <b>DYNA:</b> Dynamic Microphone <b>Default:</b> ELEC
6	<b>NOG.SET</b>	1-32, OFF, Total 33 levels available; <b>Default:</b> OFF (Disable NOG function)
7	<b>ECHO-L</b>	1-32, Total 32 levels available; <b>Default:</b> 28
8	<b>ECHO-T</b>	1-32, Total 32 levels available; <b>Default:</b> 28
9	<b>TOT.SET</b>	1-600s, OFF, Total of 10 minutes available; <b>Default:</b> 180s
10	<b>TX.SWR</b>	<b>OFF:</b> Disable the SWR Protection function; <b>ON:</b> Enable the SWR Protection function; <b>Default:</b> ON
11	<b>TDC.SET</b>	<b>OFF:</b> Disable the Voltage Protection function; <b>ON:</b> Enable the Voltage Protection function; <b>Default:</b> ON

No.	LCD Display	Values and Descriptions
12	<b>SCN.TYPE</b>	<b>SQ:</b> Squelch based scan function; <b>TI:</b> Time based scan function; <b>Default:</b> SQ
13	<b>CLA.SET</b>	<b>OFF:</b> Disable clarifier adjustment <b>R:</b> Enable RX frequency adjustment; <b>T:</b> Enable TX frequency adjustment; <b>RT:</b> Enable both RX and TX frequency adjustment; <b>Default:</b> R
14	<b>CLA.FRQ</b>	<b>500Hz:</b> adjustable range $\pm 500\text{Hz}$ ; <b>5KHz:</b> adjustable range $\pm 5\text{KHz}$ ; <b>Default:</b> 500Hz
15	<b>DIM.SET</b>	1-9, 9 backlight dimmer levels available; <b>Default:</b> 9
16	<b>COLOR</b>	WHITE, BLUE, GREEN, YELLOW, RED, PURPLE, CYAN, OFF <b>Default:</b> WHITE
17	<b>DW.SET</b>	Set the Dual Watch channel, mode and band
18	<b>EMG.CH1</b>	Set Emergency Channel 1 and its mode
19	<b>EMG.CH2</b>	Set Emergency Channel 2 and its mode
20	<b>TX.REP</b>	<b>100Hz-5MHz,</b> Frequency Shift/Offset range. <b>Default:</b> 100KHz
21	<b>ASQ</b>	<b>OFF:</b> Turn off ASQ function; <b>ON:</b> Turn on ASQ function; <b>Default:</b> ON
22	<b>VOX</b>	<b>OFF:</b> Turn off VOX function; <b>ON:</b> Turn on VOX function; <b>Default:</b> OFF
23	<b>VOX-L</b>	<b>01-09,</b> Total of 9 VOX sensitivity levels <b>Default:</b> 03
24	<b>VOX-T</b>	<b>01-09,</b> Total of 9 VOX Delay Time levels; <b>Default:</b> 04
25	<b>RX NR</b>	<b>01-05:</b> Total of 5 levels for RX noise reduction; <b>Default:</b> 03
26	<b>TX NR</b>	<b>01-05:</b> Total of 5 levels for TX noise reduction; <b>Default:</b> 03
27	<b>FM.DEB</b>	<b>2K:</b> 2KHz FM deviation <b>4K:</b> 4KHz FM deviation <b>Default:</b> 2K

No.	LCD Display	Values and Descriptions
28	<b>TONE</b>	<b>HI-4K:</b> 4K audio response; <b>LO-3K:</b> 3K audio response; <b>Default:</b> HI-4K
29	<b>CW.BEEP</b>	<b>01-63:</b> Adjusts the CW Sidetone level (volume); <b>OFF:</b> CW Sidetone disabled; <b>Default:</b> 31
30	<b>CW.FREQ</b>	<b>300Hz-3KHz:</b> This menu is to select CW Sidetone frequency. The frequency step is 10Hz; <b>Default:</b> 1050Hz
31	<b>CW.RX Setting</b>	<b>CW-U:</b> select USB for CW RX; <b>CW-L:</b> select LSB for CW RX; <b>Default:</b> CW-U
32	<b>CW.BKIN</b>	<b>10-1000MS:</b> TX delay (CW break-in); <b>OFF:</b> No TX delay; <b>Default:</b> 500MS
33	<b>CW.SHIF</b>	<b>ON:</b> CW RX Shift ON (RX Shift = +/- "CW.FREQ"); <b>OFF:</b> CW RX Shift OFF; <b>Default:</b> OFF
34	<b>AGC.SET</b>	<b>SLOW:</b> AGC SLOW response; <b>FAST:</b> AGC FAST response; <b>Default:</b> SLOW
35	<b>PF.KEY</b>	Customize menu settings for the microphone, press the PUSH key to enter and select the desired function; <b>Default:</b> VOX function
36	<b>TX.DRC</b>	<b>OFF:</b> Turn off Dynamic Range Compression TX function; <b>ON:</b> Turn on Dynamic Range Compression TX function; <b>Default:</b> ON
37	<b>Factory Reset</b>	<b>MENU:</b> Settings/Functions reset to defaults; <b>ALL:</b> Channels and Settings/Functions reset to defaults; <b>Default:</b> ALL

## 7. PUBLIC MENU OPERATION

1. Push and Hold the **MODE** knob to enter Public menu list;
2. Turn the **CH** knob or press microphone **UP/DN** key to select the required Menu item;
3. Push **CH** knob to enter menu value setup;
4. Turn the **CH** Channel switch to select wanted setting;  
Push **CH** to return to last menu item.
5. Press any other key or wait 5 seconds, the setting will be stored.

No.	LCD Display	Values and Descriptions
1	<b>HI-CUT</b>	<b>OFF:</b> Disable HI-CUT function; <b>ON:</b> Enable HI-CUT function; <b>Default:</b> OFF.
2	<b>NB</b>	<b>OFF:</b> Disable NB function; <b>NB:</b> Enable NB function; <b>Default:</b> OFF
3	<b>ANL</b>	<b>OFF:</b> Disable ANL function; <b>NB:</b> Enable ANL function; <b>Default:</b> OFF
4	<b>ECHO</b>	<b>OFF:</b> Disable ECHO function; <b>ON:</b> Enable ECHO function; <b>Default:</b> OFF
5	<b>10KHz</b>	<b>OFF:</b> Disable +10KHz function; <b>ON:</b> Enable +10KHz function; <b>Default:</b> OFF
6	<b>Roger Beep</b>	<b>OFF- 5,</b> Total 6 options. <b>Default:</b> OFF, (RB Disabled)

## 8. CHANNEL MENU OPERATION

1. Push **CH** knob and then push and hold the **MODE** knob to enter Channel menu list;
2. Turn the **CH** knob or press microphone **UP/DN** key to select the required Menu item;
3. Push **CH** knob to enter menu value setup;
4. Turn the **CH** Channel switch to select wanted setting;  
Push **CH** to return to last menu item.
5. Press any other key or wait 5 seconds, the setting will be stored.

No.	LCD Display	Values and Descriptions
1	<b>BUSY</b>	<b>OFF:</b> Disable Busy Channel Lockout function; <b>ON:</b> Enable Busy Channel Lockout function; <b>Default:</b> OFF
2	<b>REP</b>	<b>RPE+:</b> Enable offset + direction function, TX frequency > RX frequency; <b>REP-:</b> Enable offset - direction function, TX frequency < RX frequency; <b>OFF:</b> Disable offset direction function. <b>Default:</b> OFF
3	<b>R-CDC</b>	<b>CTCSS/DCS:</b> RX setup <b>OFF:</b> Turn off CTCSS/DCS function; <b>CTCSS:</b> 67.0Hz~250.3Hz, Total 38 tones; <b>DCS:</b> D023N~D754N, Total 104 codes; <b>Default:</b> OFF
4	<b>T-CDC</b>	<b>CTCSS/DCS:</b> TX setup <b>OFF:</b> Turn off CTCSS/DCS function; <b>CTCSS:</b> 67.0Hz~250.3Hz, Total 38 tones; <b>DCS:</b> D023N~D754N, Total 104 codes; <b>Default:</b> OFF
5	<b>RT-CDC</b>	<b>CTCSS/DCS:</b> RX+TX setup <b>OFF:</b> Turn off CTCSS/DCS function; <b>CTCSS:</b> 67.0Hz~250.3Hz, Total 38 tones; <b>DCS:</b> D023N~D754N, Total 104 codes; <b>Default:</b> OFF
6	<b>SCAN</b>	<b>ADD:</b> When the second decimal point on the LCD display does not show, it indicates that the current channel has been added to the scan list. <b>DEL:</b> When the second decimal point appears on the LCD display, it indicates that the current channel has LCD display Value and description been added to the scan list. <b>Default:</b> ADD
7	<b>PUBLIC</b>	<b>OFF:</b> Choose independent channel menu; <b>ON:</b> Choose public channel menu; <b>Default:</b> ON <b>NOTE:</b> When OFF is selected, additional hidden Public channel menu items will appear, allowing channels to be individually configured with individual settings.

## 9. BT MENU OPERATION(OPTIONAL)

1. Hold and push **CLA** knob to enter the BT menu list;
2. Turn the **CH** knob or press microphone **UP/DN** key to select the required Menu item;
3. Push **CH** knob to enter menu value setup;
4. Turn the **CH** Channel switch to select wanted setting;  
Push **CH** to return to last menu item.
5. Press any other key or wait 5 seconds, the setting will be stored.

No.	LCD Display	Values and Descriptions
1	<b>BT.CON</b>	<b>OFF:</b> Turn off BT wireless function; <b>ON:</b> Enable BT wireless function; <b>Default:</b> OFF
2	<b>BT.PAIR</b>	<b>CONNECT:</b> Pair BT device <b>DISC:</b> Disconnect BT device
3	<b>HOLD-TIM</b>	BT wireless hold time setting, this product has OFF, 1S~120S, and infinity options to choose from.
4	<b>BT.DELY</b>	BT wireless delay time setting, this product has 30ms, 1s~5.5s to choose from.
5	<b>BT +INT</b>	Local speaker switch settings in BT wireless mode <b>OFF:</b> Turn off the local speaker; <b>ON:</b> Turn on the local speaker; <b>Default:</b> OFF
6	<b>BT.MIC</b>	BT wireless MIC gain adjustment, this product has 1-5 levels to choose from
7	<b>BT.SPK</b>	BT wireless earphone gain adjustment, this product has 1-5 levels to choose from.
8	<b>PTT.PAIR</b>	BT wireless PTT pairing menu, this product supports BP- 02 BT wireless PTT <b>Connect PTT:</b> BT wireless PTT pairing <b>Disconnect PTT:</b> Disconnect BT wireless PTT pairing
9	<b>PTT.HOLD</b>	BT wireless PTT hold settings <b>OFF:</b> Turn off BT wireless PTT hold; <b>ON:</b> Enable BT wireless PTT hold; <b>Default:</b> OFF
10	<b>PTT.SLEEP</b>	BT wireless PTT sleep setting, this product has infinity and 1min-4min options to choose from.
11	<b>PTT.BAT</b>	BT wireless PTT battery level query, displaying the current BT wireless PTT battery level.

## 10. SPECIFICATIONS

GENERAL	
Modulation Mode	AM/FM/USB/LSB/CW/PA
Frequency Range	28.000-29.700MHz
Frequency Band	A/B/C/D/E/F/G/H/I + VFO
Channel	40 channels (programmable) in each band
Frequency Control	Phase-Locked-Loop Synthesizer
Frequency Step	10Hz,100Hz,1KHz,5KHz,10KHz,100KHz,1MHz
Microphone	With Push-to-Talk / UP / DN / PF and coiled cord
Frequency Tolerance	± 5.0ppm
Input Voltage	12V
Dimensions(in mm)	187(L)x175(W)x53(H)
Weight	about 1.0kg
Operating Temperature Range	-20° C TO + 55° C
Antenna Connector	UHF,SO-239
TRANSMITTER	
Power Output	AM=10W(PEP=35W),FM=30W,SSB=30W(PEP)
Drain	10A (with modulation)
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
Modulated signal distortion	inferior to 5%
Output Impedance	50 ohms
RECEIVER	
Sensitivity	AM:1.0μV for 10dB(S+N)/N at greater than 1/2 watt of audio output. FM: 1.0μV for 20dB (S+N)/N at greater than 1/2 watt of audio output. SSB: 0.25μV for 10dB(S+N)/N at greater than 1/2 watt of audio output.
Selectivity	AM/FM:6dB@3kHz,50dB @9kHz SSB: 6 dB@2.1kHz,60dB @3.3kHz
Image Rejection	65dB
Adjacent Channel Rejection	60dB
IF Frequencies	AM/FM: 10.695MHz 1st IF, 455 KHz 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 10μV to 100,000μV

## 11. CTCSS/DCS CHART

### 10.1 38 SETS ANALOG FRQ LIST(CTCSS)

No.	Freq.(Hz)	No.	Freq.(Hz)	No.	Freq.(Hz)	No.	Freq.(Hz)
01	67.0	11	97.4	21	136.5	31	192.8
02	71.9	12	100.0	22	141.3	32	203.5
03	74.4	13	103.5	23	146.2	33	210.7
04	77.0	14	107.2	24	151.4	34	218.1
05	79.7	15	110.9	25	156.7	35	225.7
06	82.5	16	114.8	26	162.2	36	233.6
07	85.4	17	118.8	27	167.9	37	241.8
08	88.5	18	123.0	28	173.8	38	250.3
09	91.5	19	127.3	29	179.9		
10	94.8	20	131.8	30	186.2		

### 10.2 104 SETS DIGITAL FRQ LIST(DCS)

Code No.	DSC (Octal)	Code No.	DSC (Octal)	Code No.	DSC (Octal)	Code No.	DSC (Octal)
001	023	027	152	053	311	079	466
002	025	028	155	054	315	080	503
003	026	029	156	055	325	081	506
004	031	030	162	056	331	082	516
005	032	031	165	057	332	083	523
006	036	032	172	058	343	084	526
007	043	033	174	059	346	085	532
008	047	034	205	060	351	086	546
009	051	035	212	061	356	087	565
010	053	036	223	062	364	088	606
011	054	037	225	063	365	089	612
012	065	038	226	064	371	090	624
013	071	039	243	065	411	091	627
014	072	040	244	066	412	092	631
015	073	041	245	067	413	093	632
016	074	042	246	068	423	094	654
017	114	043	251	069	431	095	662
018	115	044	252	070	432	096	664
019	116	045	255	071	445	097	703
020	122	046	261	072	446	098	712
021	125	047	263	073	452	099	723
022	131	048	265	074	454	100	731
023	132	049	266	075	455	101	732
024	134	050	271	076	462	102	734
025	143	051	274	077	464	103	743
026	145	052	306	078	465	104	754

# EU Declaration of Conformity

In accordance with EU Directives and Regulations

Qixiang Electron Science & Technology Co., Ltd

ADD: Qixiang Building, Tangxi Industrial Zone, Luojiang, Quanzhou, Fujian, 362011 China

as the manufacturer, hereby declares under our sole responsibility that

product(s): 10 Meter Amateur Radio

Model name: AT-5100

is in conformity with the essential requirements of the Radio Equipment Directive 2014/53/EU:

Radio ETSI EN 301 783 V2.1.1 (2016-01)

Article 3.2

EMC ETSI EN 301 489-1 V2.2.3 (2019-11)

Article 3.1(b) ETSI EN 301 489-15 V2.2.1 (2019-04)

Safety EN IEC 62368-1:2024+A11:2024

Article 3.1(a)

Health

Article 3.1(a) EN IEC 62311:2020

Signed on behalf of Qixiang Electron Science & Technology Co., Ltd

---

(Signature of authorized person)

Name: Ken Xu

Title: Manager

Date: 2026-07-30



**ATTENTION: conditions of use!**

The band of frequencies on which this device operates is administrated by limitations and/or permissions for their usage. Consequently, in the EU countries mentioned in the sheet, operators must consult the entrusted authorities. In particular, they must possess a license or a frequency assigned to them by their respective competent authority.

**ACHTUNG: informativ zur Benutzung!**

Das Frequenzband, auf dem dieses Gerät arbeitet, wird durch Einschränkungen und/oder Berechtigungen für deren Verwendung verwaltet. Folglich müssen die Betreiber in den in der Tabelle aufgeführten EU-Ländern die zuständigen Behörden konsultieren. Insbesondere müssen sie über eine Lizenz verfügen, oder eine Frequenz besitzen, die ihnen von ihrer jeweiligen zuständigen Behörde zugewiesen wurde.

**ATTENTION : conditions d'utilisation!**

Certaines bandes de fréquence sur lesquelles cet appareil fonctionne sont régies par des limitations et/ou il faut des autorisations pour les utiliser. Par conséquent, dans les pays de l'UE indiqués dans le tableau, les opérateurs doivent d'abord consulter les autorités appropriées. Les opérateurs utilisant cet appareil doivent donc posséder une licence ou une fréquence qui leur est attribuée par les autorités compétentes.

**ATENCIÓN: información sobre el uso!**

La banda de frecuencias en la que opera este aparato está gestionada por limitaciones y/o permisos para su uso. Por lo tanto, en los países de la UE que se muestran en la tabla, los operadores deben consultar a las autoridades correspondientes. En particular, deben poseer una licencia o una frecuencia asignada por su respectiva autoridad competente.

**ATTENZIONE: informativa all'uso!**

La banda delle frequenze sulle quali opera questo apparato è amministrata da limitazioni e/o permessi al loro uso. Quindi, nei paesi UE riportati nella tabella, gli operatori devono consultare le autorità preposte. Segnatamente, devono possedere una licenza oppure una frequenza assegnata a loro dalla rispettiva autorità competente.



AT	BE	BG	CY	CZ	DE
DK	ES	EE	FI	FR	UK
EL	HR	HU	IE	IT	LT
LU	LV	MT	NL	PL	PT
RO	SK	SI	SE	CH	IS
LI	NO	-	-	-	-

**Qixiang Electron Science & Technology Co., Ltd.**

**Add: Qixiang Building, Tangxi Industrial Zone,  
Luojiang District, Quanzhou 362011, Fujian, China**