

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



# **BT01**



User Guide

Bluetooth Microphone

Thank you for purchasing the Anytone BT01 Bluetooth Microphone. This product uses a dedicated master–slave Bluetooth module to realize wireless talk and wireless operation settings for all functions of the AT–D578UV DMR mobile radio. Combined with the noise reduction function, it can effectively reduce background noise and ambient noise to achieve high–definition intercom.

#### Precautions

Please read the following regulations carefully before using this product. The following regulations will help you understand and fulfill your obligations in the warranty terms.

- Without permission, please do not try to disassemble or modify the BT01 Bluetooth Microphone. The handling of the Bluetooth Microphone by non-professionals may cause damage.
- Please don't put the Bluetooth Microphone in a dusty or damp place.
- Please abide by the walkie-talkie usage rate of 1 minute for transmission and 4 minutes for reception. Long-term transmission or continuous use in high-power mode will cause the AT-D578UV mobile radio to heat up.
- 4. Please charge the BT01 Bluetooth Microphone before using it.
- Do NOT insert a micro SD card into the SD-card slot. BT01 microphone doesn't support the SD card use.

#### APPLICABLE MODELS

	BT MODE	CABLE MODE
AT-D578UV/ AT-D578UVIII No GPS, No BT	×	<b>/</b>
AT-D578UV PRO/ AT-D578UVIII PRO With GPS and BT	<b>/</b>	<b>/</b>
AT-D578UV PLUS/ AT-D578UVIII PLUS With GPS and BT	<b>/</b>	<b>/</b>

When you receive the BT01 microphone, please access the AT–D578UV Menu–Setting–Device Info to check the version first, make sure the radio is upgraded to the latest version to get the BT–01 microphone working correctly. Reset must be done to the radio after the firmware upgrade.

Latest firmware is available for download on https://www.anytone.net/download page.

	Model Name	Firmware	SCT3258	BT module Software	APRS+BT board
AT-D578UV/ AT-D578UVIII No GPS, No BT	D578UV	Ver1.17 or higher	V2.01.07BF or higher	N/A	N/A
AT-D578UV PRO/ AT-D578UVIII PRO With GPS and BT	D578UV	Ver1.17 or higher	V2.01.07BF or higher	ET12_AQQX_ V10043 or higher	N/A
AT-D578UV PLUS/ AT-D578UVIII PLUS With GPS and BT	D578UVII	Ver2.04 or higher	V2.01.07BF or higher	ET12_AQQX_ V10043 or higher	V1.06 or higher

## **CONTENTS**

1.Accessories	1
1.1 Supplied Accessories	1
1.2 Optional Accessories	1
2.Charge The Battery	1
3. Getting Started	2
Indicator Instructions	2
4. Basic Operation	3
4.1 Power ON	3
4.2 BT MODE connect to AT-D578UV	3
4.3 CABLE MODE connect to AT-D578UV	4
4.4 Power Off	4
4.5 Adjust The Volume	4
4.6 Set Up VFO Frequency	5
4.7 Select a Channel	5
4.8 Select a Zone	6
4.9 Make a Call	6
4.10 Receive a Call	6
4.11 Noise Reduction function	6
4.12 Menu Operation	7
4.13 Programmed Key	8
5.Technical Specifications	12
ELL DECLADATION OF CONFORMITY	12

## 1.Accessories

#### 1.1-Standard Accessories



Belt Clip wwzz-0005



USB-C charge cable



4m Cable SMX-0037



User's Manual

#### 1.2-Optional Accessories



Adaptor 5V/1A KGDY-0106



Cigarette lighter charger (output 5V/1A, input 12V-48V)

## 2. Charge The Battery

#### **Charging Instructions**

- Insert the USB plug of the charging cable into the power adapter.
- 2. Plug the power adapter into the AC power outlet.
- Insert the other end of the charging cable into the charging/ upgrade interface of the radio.
- 4. The red charging indicator of the BT01 Bluetooth Microphone is on.
- When the red charging indicator of the BT01 Bluetooth microphone goes out, the charging is completed.

## 3.Getting Started



#### Indicator Instructions

Indicator Color	Status
Left light red	Transmit
Right light red	Charge the battery
Right light green	Receive
Right light red blinking	Battery voltage is low

## 4.Basic Operation

#### 4.1-Power ON

Press the top **[POW]** button on microphone, the right green indicator light on, later the screen displays "Select Port", press ♠ or ♥ to choose the connect mode:

BT MODE: Connect the BT01 microphone to AT-D578UV mobile radio through Bluetooth.

CABLE MODE: Connect the BT01 microphone to AT-D578UV mobile radio through 4m cable.

Click on "confirm" to select the connect mode.

#### 4.2-BT MODE connect to AT-D578UV

#### » In BT mode, DO NOT attach the 4meter cable to connect the radio and BT01 microphone, it might cause strange behaviour.

After select "BT MODE" on microphone, it will display BT NAME and "NO DEVICE CONNECTED" when no radio is connected. In this state, the BT pairing shall be done on AT-D578UV.

- a.Enter into AT-D578UV radio Menu → Bluetooth → BT On/Off, set it ON.
- b.Switch to AT-D578UV radio Menu ⇒ Bluetooth ⇒ BT Pairing, select "Seek BT".
- c.AT-D578UV radio displays "Seeking BT", it will take some time to do the pairing.
- d.AT-D578UV radio displays "ALL DATA CHECKING", the display content of the AT-D578UV radio will be mapped to the Bluetooth microphone.
- e.AT-D578UV radio displays "EXTERNAL BT MODE" on the screen, the pairing is done. BT icon is showed on the BT01 display to indicate it is at BT mode.

BT01 microphone is able to access the radio menu and do communications now.

- ♠ » Once the BT pairing is done, the BT microphone will automatically connect to AT-D578UV radio after reboot.
  - » In BT mode, the cross band repeater function is not available, as the audio path is occupied by the BT function.

#### 4.3-CABLE MODE connect to AT-D578UV

After select "CABLE MODE" on microphone, it will display "NO DEVICE CONNECTED" when no radio is connected.

Use the 4m cable to connect the microphone to radio, AT-D578UV displays "ALL DATA CHECKING", the display content of the AT-D578UV radio will be mapped to the Bluetooth microphone.

AT-D578UV radio displays "EXTERNAL CABLE MODE" on the screen, BT01 microphone is able to access the radio menu and do communications now.

In Cable mode, the BT01 microphone is being charged when the channel is free.

#### 4.4-Power Off

Press and hold the top **[POW]** button on microphone to turn off the microphone.

#### 4.5-Adjust The Volume

In standby state, press the top **[POW]** button to switch the **[CH-]/[CH+]** button for volume adjust use.

When screen shows "UpDn Key: Vol Set", press [CH-] to reduce the volume, press [CH+] to increase the volume.

The [VOL] or [CH] icon shows the current setting.

- **A** » If the volume is adjusted to the maximum and you still consider it is not loud enough.
  - » In BT MODE, you can enter into Menu ->Bluetooth->RfBT SPK Gain to adjust the Bluetooth gain level and increase the volume.
  - » The RfBT SPK Gain will return to default level 3 after reboot the radio, as the level 3 has best effect.

#### 4.6-Set Up VFO Frequency

In Menu->Setting->Radio Set->Key Func, assign a key function to [VFO/MR].

Press the assigned **[VFO/MR]** key to switch the radio into VFO frequency mode, and then press the  $\triangle$  or  $\checkmark$  key to change the frequency in MHz steps. The frequency steps shall be set in CPS  $\Rightarrow$  Optional Setting  $\Rightarrow$  Other  $\Rightarrow$  Frequency step or in radio menu.

And it allows input the frequency by keypad on microphone to change the frequency rapidly, for example, input 4,5,0,1,2,5,0,0 or 4,5,0,1,2,5,# to obtain 450.125MHz.

Normally you shall input 8 digits to change the frequency, in case the end of the frequency is 0, you can press # key to confirm the valid frequency instead of input several 0.

#### 4.7-Select a Channel

Press the assigned [VFO/MR] key to switch the radio into channel mode, and then press the top [POW] button to switch the [CH-]/[CH+] button for channel adjust use.

In BT mode, if you press the **[CH-]/[CH+]** button rapidly to switch the channel, the BT01 display reacts more slowly than the button press. It is recommended to input the channel number by keypad on microphone to access the channel rapidly, for example, input 0,0,9,9 a total of 4digits will switch to channel 99. In case the input channel number is not in the current zone, the microphone will emit "du" beep and stay at the current channel.

And in BT mode, when BT microphone is receiving signal, the channel switch speed is slow, it is difficult to improve due to the limitation of bluetooth communication.

#### 4.8-Select a Zone

Press the assigned [VFO/MR] key to switch the radio into channel mode first.

Operation 1: Press the or key to change the zone.

Operation 2: Go to Menu → Zone, select a zone from the zone list.

Operation 3: In Menu → Setting → Radio Set → Key Func, assign a key function to [Zone Select]. Press the assigned [Zone Select] key, and input the zone number and confirm.

#### 4.9-Make a Call

Press and hold the **[PTT]** button to start a call at the current channel, the left red indicator lights on and the radio is transmitting. Release the **[PTT]** button to stop the transmitting.

#### 4.10-Receive a Call

When the radio receives a call, the right green indicator lights on and the radio is receiving.

#### 4.11-Noise Reduction function

Enable the noise reduction function can reduce background noise and ambient noise effectively, and make calls between users clearer.

Noise reduction works basing on the noise intensity, when the noise is strong, noise reduction reduces more noise and the audio has more distortion.

When the noise is slight, noise reduction reduces less noise and the audio has less distortion, it may not noticeable for noise reduce.

And set the noise reduce level higher, the noise will be reduced more and the audio has more distortion.

You can set suitable noise reduce level to get acceptable noise and audio effect.

Go to Menu → Settings → Radio Set → Voice Func → Noise Reduce(RX), set the noise reduce level for receiving use, recommend setting is level 3. Noise reduce for analog RX only.

Go to Menu  $\Rightarrow$  Settings  $\Rightarrow$  Radio Set  $\Rightarrow$  Voice Func  $\Rightarrow$  Noise Reduce(TX), set the noise reduce level for transmit use, recommend setting is level 3. Noise reduce for both analog TX and digital TX.

#### 4.12-Menu Operation

The menu operation on BT microphone is mapped from AT–D578UV radio, the functions are fully same as AT–D578UV radio.

Bluetooth menu function as below

BT Menu	Sub menu	Description
BT Pairing		Disconnects to the radio.
BT Names		The BT name of BT01 microphone.
Paired Names		The BT name of BT device connected to the AT- D578UV radio.
BT Hold Time	OFF	The BT01 microphone disconnects to the radio at once when signal drops. It takes time to rebuild the connection when new signal come in.
	1-30S	The BT01 microphone stays connecting to the radio within the set time after signal drops, after the set time dispired, the BT device will disconnect to the radio. It takes time to rebuild the connection when new signal come in.
	infinite	The BT01 microphone stays connecting to the radio after singal drops.lt will pick up the signal at once when new signal come in.
BT RX Delay	30ms-5.5s	The radio will ignore the RX signal if the duration of the signal does not exceed the set time. It helps to prevent the interfere signal being heard.

BT + int	Off	The audio comes out from the speaker on BT01 microphone.		
spk	On	The audio comes out from the speaker on AT-D578UV radio.		
RfBT Mic Gain	Level 1-5	Adjust the transmit audio level on AT-D578UV radio.		
RfBT SPK Gain	Level 1-5	Adjust the receive audio level on AT-D578UV radio.		
H-BT Mic Gain	Level 1-5	Adjust the transmit audio level on BT01 microphone.		
BT Pin Code		Allows entry of BT Pin Code During Pairing.  Majorly for the use of pairing to Car Audio System.		
	PTT Pair	Pair the small BP-02 BT PTT button.		
	PTT Hold	ON:Click on BP-02 PTT button, the radio starts transmitting, click on the BP-02 PTT button again to end transmitting.  OFF: Hold pressing BP-02 PTT button to transmit, release the button to end transmitting.		
BT PTT	PTT Name	The BT name of BP-02 PTT button.		
Pair	PTT Sleep	Infinity: The BP-02 PTT button will not go into dormant mode.  1-4min: The BP-02 PTT button will go into dormant mode in the set time. It requires to hold pressing the BP-02 PTT button to activate it when it is in dormant mode.		
	PTT BatVolt	Shows the BP-02 PTT button battery level.		

### 4.13-Programmed Key

It is possible to set different functions for [P1], [P2], [P3] side keys on microphone.

Method 1: In radio Menu → Settings → Radio Set → Key Func

Method 2: In PC software → Public → Optional Setting → BT →

Bluetooth handset.

Each [P1], [P2], [P3] key allows to assign different functions for short press, long1 press and long2 press.

Short: Function takes effect after click on the button.

Long1: Function takes effect after "du" beep, it needs approx 1.5s for the press.

Long2: Hold pressing the button until function takes effect, it needs approx 3s for the press.

OFF	No Function
Volt	Check the current battery capacity voltage
Tx Power	Switch the power between super high, high, middle and low power.
TalkAround	Switch between Talk Around and Repeater mode
Reverse	Turn on/off the frequency reverse function.
Digi Encrypt	Choose the digital encryption group for digital channel
Call	In Analog mode, send the DTMF/5TONE/2TONE encode. This function is only valid for analog channel.
VFO / MR	Switch between VFO mode and memory channel mode.
Scan	Scan on/off
AM air/FM	Turn on/off AM air band receive or FM radio receive
Alarm	Long press the key to start alarm, short press again to exit the alarm.
Record Switch	Enable/disable the recording function
Record	Start/stop recording. When stop recording, the radio will remind repeat or send the record.
Messages	In digital mode, press to enter into SMS messages
Dial	Start the manually dial
GPS Info	Check the GPS position information
Monitor	Monitor the weak signal or the signal with unmatched ID.

Main CH Switch	Choose channel A or channel B as the main channel
Hot Key 1~6	Selects Hot Keys 1-6 Note: Hot key setup details on next page
Work Alone	Turn on/off the work alone function.
Nuisance Delete	During scanning, press the key to skip the unwanted channel
Digi Monitor	In DMR mode, press the key to turn on/off digital monitor
Sub CH On/Off	Turn on/ off the sub channel
Priority Zone	Switch to Priority Zone
Program Scan	Press the key to start the scan in VFO channel scan start and end frequency must be programmed in CPS.
Enhanced Sound	In digital channel, switch the microphone tone to normal or enhanced mode.
LastCall Reply	In digital channel, press the key to access the last call and press PTT to call back.
Switch ChType	Switch the channel type(Analog, Digital, Ana+Dgi, Dgi+Ana)
Ranging	When the radio receives a call and the suspension time is on, press the key programmed as "Ranging" to obtain the caller's position and distance. (Both party need GPS positioned, or will receive only GPS information)
Roaming	In standby, press the key programmed as "Roaming" to search and lock on the repeater with strongest signal. (Note: After lock on a repeater, the radio will return to last frequency only after channel or frequency is changed. The repeater frequency list must pre- programmed in CPS.)
CH Ranging	In standby, if the call contact type for a channel is "Single call", press the key programmed as "Channel Ranging" to turn on this function. The radio will automatically start ranging function when turn to this channel.

Max VOL Set	In standby, press the key programmed as" Max Volume", will enable users to set the maximum RX volume.
Slot Set	Choose Slot for current channel, this function is only valid in repeater mode.
Aprs Type	Choose analog or digital Aprs Type for current channel.
Zone Select	In standby, press the programmed "Zone Select" key, it will allow you input the zone number and then press confirm key will switch to the zone.
Roaming Set	Enter into Roaming menu quickly
APRS Set	Enter into APRS menu quickly
Zone Up	Switch the zone upwardly
Zone Dn	Switch the zone downwardly
Speaker Mode	Set the voice come out from speaker on microphone or radio.
Ch.Name	Switch between channel name display and frequency display for the current channel
GPS On/Off	Enable / disable the GPS.
CDT Scan	Enable / disable the CTCSS/DCS scanning for the analog channel. When the radio finds matched CTCSS/DCS for current channel, it will open the speaker and start receiving.  Only the analog channels with CTCSS/DCS signalling is able to start the CDT scanning.
TBST Send	Send the TBST Tone
Aprs Send	Manually transmit the APRS at the current channel.
Ana APRS Info	Fast access to the anglog APRS info menu
GPS Roaming	Enable/disable the GPS roaming function
NoiseReduc(R)	Set the noise reduce level for receiving audio
NoiseReduc(T)	Set the noise reduce level for transmitting audio

# 5.Technical Specifications

	GENERAL
BT version	BT version V5.0 +EDR
Protocol	HFP; HSP; A2DP; AVRCP; SPP
Transmit Distance	10 Meters
Maximum Transmission Power	Class2, 4dbm
Sensitivity	-80dBm
Audio performance	SBC Decoding
Speaker	1W/8R
LED	Green/Red
LCD screen	2.2inch
Charge	5V Type C USB
Battery capacity/Votage	1800mAh 3.7V
Interface	3.5mm
Dimension (H*W*D)	109x62x28mm
Weight	147g
Working Temperature	-20°C ~ 55°C

## **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): Bluetooth Microphone

Model name: BT01, BT02, BT03, BT04, BT05, BT06

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

Radio ETSI EN 300 328 V2.2.2 (2019-07)

Article 3.2

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

Article 3.1(b) DRAFT ETSI EN 301 489-17 V3.2.5 (2022-08)

Safety EN IEC 62368-1:2020+A11:2020

Article 3.1(a)

Health EN 50663:2017 Article 3.1(a) EN 62479:2010

The notified body Bay Area Compliance Labs Corp.(BACL) (EU Identification Number: 1313) performed a conformity assessment according to Annex III, Module B.

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

(Signature of authorized person)

Name: Ken Xu

Title: General Manager Date: 2022-11-15