



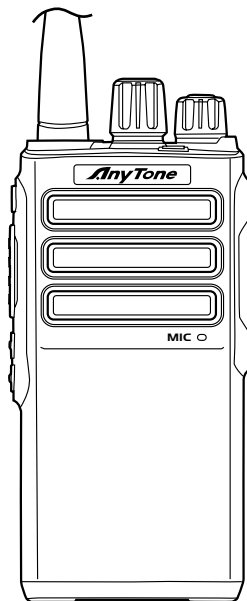
Qixiang Electron Science & Technology Co., Ltd.  
[www.anytone.net](http://www.anytone.net)

***AnyTone***<sup>®</sup>

# **AT-D269**

**Digital DMR and Analog  
VHF/UHF Two Way Radio**

## **Operating Manual**



**DMR**  
DIGITAL MOBILE RADIO ASSOCIATION



# THANK YOU!

Thank you very much for choosing our *AnyTone* Digital DMR and Analog two way radio.

This radio adopts the latest advances in technology, providing reliable communication in today's demanding communication environment.

This radio offers both DMR digital and analog communication, introduces innovative DMR digital processing system to achieve high-audio quality and digital encryption. It offers great stability, and reliability, together with long distance communication as well as fashionable design and compact exterior lines. AT-D269 has Recording, Voice Message, Digital Encryption, Emergency Alarm, Man Down Alarm, Work Alone, Vibration, Analog DTMF, 2TONE, 5TONE, CTCSS/DCS encode/decode functions.



» **When programming the radio, start by reading the factory software data, and then rewrite this data with your frequency etc., to a new saved code plug, otherwise errors may occur.**

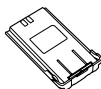
» **You can use the programming cable with a PC to program the frequency, channel type, power etc. your programming must comply with your FCC (or other country) license certification.**

# 1. ACCESSORIES

## 1.1 Standard Accessories



Antenna



Li-ion Battery Pack



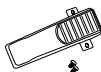
Charger



AC Adaptor



USB Cable



Belt Clip



Hand Strap

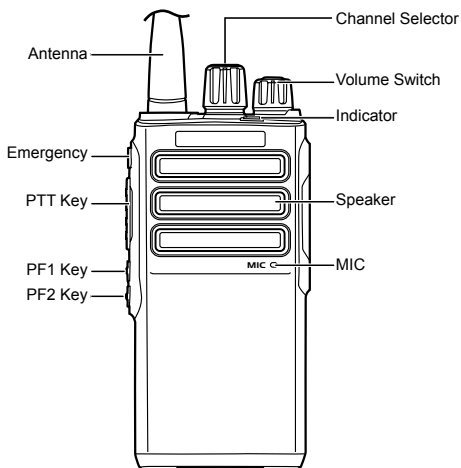


Instruction Manual

## 1.2 Charger Indication

STATUS	LED
Self-Examine	Red (for 1 second)
No Battery	Green
Charge Normally	Red
Fully Charged	Green
Trouble	Red and Green light twinkles

## 2. GETTING ACQUAINTED



### Indicator Status:

1. Red light flashes: battery need charged
2. Red light on: Transmit
3. Green light flashes: Scan mode
4. Green light on: Receive matched carrier.
5. Blue LED on: Receive matching digital signal.
6. Purple light on: Programming start.

## 3. BASIC OPERATIONS

### 3.1 Turn on/off the radio

**Turn on the radio:** When the radio is off, turn the [Power/Volume] switch clockwise. After the radio makes a "click", the power of the radio is turned on, and the orange indicator light of the radio lights up. Prompt the current channel number, channel type, power, etc. in a voice prompt mode.

**Turn off the radio:** When the radio is on, turn the [Power/Volume] switch counterclockwise until the radio makes a "click" sound, which means the power of the radio is turned off.

**Note:** *Do not remove the battery immediately when the power is turned off to prevent errors in saving data.*

### 3.2 Volume adjustment

When the radio is on, turn the [Power/Volume] switch to adjust the volume. Turn clockwise to increase volume; turn counterclockwise to decrease volume.

**Note:** *In analog mode, you can press the [PF2] key to monitor the background sound (programmed to monitor), and rotate the [Power/Volume] switch to adjust the volume. When the radio is in communication, the desired volume can be adjusted more accurately.*

### 3.3 Selecting Zone

Press programmed Zone key to change Zone.

### 3.4 Selecting Channel

In standby, turn the channel knob to adjust the channel, clockwise increase channel and counter clockwise to decrease channel.

### 3.5 Receive and answer digital calls

Use the band switch to select the channel you want to receive digital calls, then you can receive and answer calls from users with matching group call IDs or matching individual call IDs.

**Note:** *When the user uses the key function, the transmitter and receiver must have the same key to talk to each other.*

※ **To receive/answer digital calls:**

- (1) If the radio has a programmed group call/individual call tone, when a call is received, the radio will make a short tone, indicating that the radio is receiving.
- (2) In the receiving state, the light blue LED indicator will light up.
- (3) When the transmitter ends the call, press and hold the [PTT] key, the

### 3. BASIC OPERATIONS

radio will switch to the transmitter state, and the mouth will speak with a normal tone 2.5~5cm into the microphone to answer the call.

**Note:**Users can edit the group call prompt tone and individual call prompt tone through the PC software.

#### 3.6 Make a call

※ **Select the pre-programmed channel to initiate a call**

(1) Rotate the band switch in standby mode to select the relevant pre-programmed channel, including frequency, channel type (digital or analog), contact, call type (single call/group call/all call), etc.

(2) Keep a distance of 2.5~5 cm between your mouth and the radio

(3) Press and hold the [PTT] key, the red LED indicator will light up in this state, if the radio has a programmed call tone, after the radio sends a call tone, speak with a normal tone.

(4) Release the [PTT] key to wait for the receiver to answer.

**Note:**When the call hold time is not reached after the call is over, press the PTT button again to call again. When the call hold time arrives, the current channel will return to the pre-programmed call contact.

#### 3.7 Monitor

Press and hold the [PF2] key in the standby state to enter the monitoring state. When the radio receives a valid carrier but the signaling or ID does not match or the signal is weak and cannot be successfully decoded, this function can be used to monitor. After releasing this key, the radio will turn off the speaker and return to standby.

**Note:**If no signal is received and on an analog channel, press and hold this key to emit noise. Press and hold this key in digital channel without sound.

#### 3.8 Battery level query

In the standby state, press the [PF1] button, the radio will broadcast the current battery level in the form of voice prompts.

#### 3.9 Alarm function

Press and hold the [Top] key to activate the alarm function, and press this key in the alarm state to exit the alarm function.

**Note:**Combined with the emergency alarm setting of PC software, a variety of alarm modes can be realized.



## 3. BASIC OPERATIONS

### 3.10 Mandown alarm

After turned on Mandown alarm, if the radio falls to the ground, it can automatically start the alarm function, and when the radio is straightened, the alarm function can automatically stop the backward alarm.

***Note: If the GPS positioning is successful, the GPS positioning information can be sent to the designated contact or group when the alarm or r Mandown alarm is activated. (GPS is an optional function).***

## 4. PROGRAMMABLE FUNCTIONS

The [Top] key, [PF1] key, and [PF2] key of the radio are programmable keys, which can be programmed through the PC software.

The operation method is as follows.

- (1) Short key operation: Press the programmable key once to operate the function programmed by the key.
- (2) Press and hold for one second: Press and hold the programmable key, release it when the radio makes a beep sound, and then operate the key to program the function of holding down for one second.
- (3) Long key: Press and hold the programmable key, when the radio makes a beep sound, continue to hold down to realize the long key function of the key programming.
- (4) Function description.

### 4.1 Power query

Press the button programmed as "Power Query" in the standby state, and the radio will broadcast the current battery power in the form of voice prompts.

### 4.2 Power

In standby mode, press the button programmed as "power", the radio will give a voice prompt to the power after the current channel is switched. Repeated operation of this button can select super-high power, high power, middle power or low power.

### 4.3 Talk around

Press the button programmed as "Talk around" in the standby state, the radio will turn on the Talk around function and prompt "Talk around open" with a voice prompt. Repeat the above operation, the radio will turn off the Talk around function and prompt "Talk around off" by voice.

**»»If the current channel is using the repeater frequency, after this function is turned on, the communication with the repeater will be disconnected.**

### 4.4 Reverse

In standby, press the key programmed as "**Revers**" to turn on frequency revers function, press this key again to turn off revers function.

**Note:** This function is only valid in analog mode, when frequency revers function is on.

The TX frequency and RX frequency will reversed, the CTCSS/DCS will also reversed.

## 4. PROGRAMMABLE FUNCTIONS

### 4.5 Digital Encryption

In standby, press the key programmed as **"Digital Encryption"**, the radio will announce encryption status or encryption group. repeat press this key again to choose encryption group or turn off encryption.

**Note:** *This operation is only valid on digital channels. Both sides of the communication must use the same encrypted characters, otherwise only a garbled sound will be heard.*

### 4.6 Analog Call

In standby, press the key programmed as **"Ana Call"**, the radio will transmit the DTMF/2TONE/5TONE code in current channel.

**Note:** *This operation is only valid on analog channels.*

### 4.7 VOX Level

In standby, press the key programmed as **"VOX Level"**, the radio will announce current VOX level. Repeated operation of this button can adjust the VOX level or off.

**Note:** *After setting the VOX level, the user can activate the radio transmission by voice.*

### 4.8 Scan

In standby, press the key programmed as **"Scan"**, the radio will start scan the list in which the current channel located. Repeat the above operation to exit the scan function.

**»»For detailed settings, please refer to the scanning function of the PC software.**

### 4.9 Emergency alarm

In standby, press the key programmed as **"Emergency Alarm"**, the radio will start alarm by programmed method. Repeat the above operation to exit the emergency alarm.

**»»For detailed settings, please refer to the alarm function of the PC software.**

### 4.10 Record switch

In standby, press the key programmed as **"Record Switch"**, the radio will announce "Record on" and start voice recording, repeat press this key to turn of recording, the radio will announce "Record off".

**Note:** The standard version support 30 hours voice recording for DMR channels. Optional 500 hours or 1000 hours of digital and analog call recording.

### 4.11 Monitor

In standby, press the key programmed as **"Monitor"** function, the radio will

## 4. PROGRAMMABLE FUNCTIONS

turn off signaling and squelch level, to direct monitor weak signal or ID not matched signal. Repeat press this key to turn off monitor.

**Note:** In analog mode, the radio will emit white noise.

### 4.12 Alarm sending

In standby, press the key programmed as **"Send Alarm"** function, the radio will announce **"Alarm"** and Alarm Number 1-5 plus alarm sound. Repeat press this key can choose Alarm Number, then press PTT to send choosed alarm sound to contact list or group members in current DMR channel.

**Note:** This function only valid for DMR channel.

### 4.13 Hot key 1-6

In standby, press the key programmed as **"Hot Key X"** function send signaling for 5TONE, DT MF, 2TONE, remote kill, activation, SMS, remote monitoring, prompt and other signaling.

*»»For detailed settings, please refer to the one-key operation settings of the PC software.*

### 4.14 Work alone

In standby, press the key programmed as **"Work Alone"** to turn on this function, the radio will announce.

**Note:** After turn on work alone function, the radio will send out alarm after preset time. For detailed settings, please refer to the Work alone settings of the PC software.

### 4.15 Local recording

In the standby state, press the button programmed as **"local recording"** to enter the phrase recording mode, the radio will prompt "recording" and the sequence number (1-25) of the current phrase to be recorded in the form of voice prompts. Increase from 1.

After selecting the serial number you want to record, press and hold the PTT key to speak to the MIC. Release the PTT key and the radio will use a voice prompt to complete the recording.

**Note:** This function only works in digital mode.

### 4.16 Local recording playback/deletion

In standby mode, press the button programmed as **"local recording playback/deletion"**, the radio will prompt **"recording playback"** and the serial number (1-25) by voice. The radio will jump directly to the recorded entry and play the recorded voice directly. When the user is listening to the playback voice, press the PTT key to send the current voice to the contact or group called by default on the current channel. If you want to delete the

## 4. PROGRAMMABLE FUNCTIONS

currently playing recording, just press and hold the PTT key until the radio announces **"recording deleted"**.

**Note:** *This function only works in digital mode.*

### 4.17 Communication recording replay

In standby mode, press the button programmed as **"communication recording replay"** to broadcast the last call recording.

**Note:** *This radio comes standard with 30 hours of digital call recording. Optional 500 hours or 1000 hours of digital and analog call recording. If the radio is selected as standard, this operation is only valid in digital mode.*

### 4.18 Zone

In standby, press the key programmed as **"Next Zone"** or **"Prev- Zone"** to change zone.

**Note:** This radio has total 16 zone, each zone has 16 channels.

### 4.19 MIC level

In standby mode, press the button programmed as **"MIC level"**, the radio will prompt the adjusted MIC level by voice.

**Note:** *This product has 5 digital MIC levels for users to choose, the higher the level, the greater the gain of the MIC.*

### 4.20 MIC sound quality

In the standby state, press the button programmed as **"MIC sound quality"**, the radio will prompt the switched MIC status by voice.

**Note:** *Select the appropriate MIC sound quality according to the your own voice, allowing the receiver to listen to the voice more clearly. This function is only available in digital mode.*

### 4.21 Scene Mode

During receiving, press the key programmed as **"Scene Mode"**, to choose suitable mode to enable user able hear clear voice.

**Note:** This function valid only for DMR channels.

### 4.22 GPS Report

In standby, press the key programmed as **"GPS Report"** to turn on or turn off GPS report.

GPS report time, ID, call type, channel must programmed by PC software.

**Note:** This function valid only for DMR channels.

### 4.23 Status Info Report

In standby, press the key programmed as **"Status Info Report"** to turn on or turn off Status Report.

## 4. PROGRAMMABLE FUNCTIONS

Status report Character, time, ID, call type, channel must programmed by PC software.

**Note:** This function valid only for DMR channels.

### 4.24 Record Report

In standby, press the key programmed as "**Record Report**" to turn on or turn off Record Report.

Record report group, time, ID, call type, channel must programmed by PC software.

**Note:** This function valid only for DMR channels.

### 4.25 Resume factory default

Hold PTT and PF1 key while power on radio, release this 2 keys when the light blue LED indicator turn on, power off and power on radio, the radio already resume default value.

## 5. TECHNICAL SPECIFICATIONS

General		
Frequency Range	136-174MHz (VHF) 400-480MHz (UHF)	
Channel Capacity	256 channels	
Channel Spacing	25KHz (Wide Band) , 12.5KHz (Narrow Band)	
Phase-locked Step	5KHz, 6.25KHz	
Operating Voltage	7.4V DC $\pm 20\%$ /(2100mAh)	
Frequency Stability	$\pm 2.5$ ppm	
Operating Temperature	$-20^{\circ}\text{C} \sim +55^{\circ}\text{C}$	
Size	127×57×32mm (with battery pack)	
Weight	208g (with battery pack, antenna)	
Receiving Part		
	Wide band	Narrow band
Sensitivity(12dB SINAD)	$\leq 0.25\mu\text{V}$	$\leq 0.35\mu\text{V}$
Digital Sensitivity	0.3uV/-117.4dBm (BER 5%) 0.7uV/-110dBm (BER 1%)	
Adjacent Channel Selectivity	$\geq 70\text{dB}$	$\geq 60\text{dB}$
Intermodulation	$\geq 60\text{dB}$	$\geq 60\text{dB}$
Spurious Rejection	$\geq 70\text{dB}$	$\geq 70\text{dB}$
Blocking	84db	
Hum & Noise	$\geq 45\text{dB}$	$\geq 40\text{dB}$
Audio Distortion	$\leq 5\%$	
Audio Power Output	1000mW/16Ω	
Transmitting Part		
	Wide band	Narrow band
Power Output	5/2.5/1W (10W optional)	
Modulation limit	$\pm 5.0\text{KHz}@25\text{KHz}$	$\pm 2.5\text{KHz}@12.5\text{KHz}$
Adjacent Channel Power	$\geq 70\text{dB}$	$\geq 60\text{dB}$
Hum & Noise	$\geq 40\text{dB}$	$\geq 36\text{dB}$
Spurious Emission	$\leq -36\text{dBm}$	$\leq -36\text{dBm}$
4FSK Digital Modulation	12.5KHz ( data ) 7K60FXD 12.5KHz ( data+voice ) 7K60FXE	
Audio Distortion	$\leq 5\%$	
Error rate	$\leq 3\%$	

