Manuals+ — User Manuals Simplified.

YANTON DM310 DMR Two Way Radio User Manual

Contents

YANTON

YANTON DM310 DMR Two Way Radio

User Safety Information

Before use

- Do not use damaged antennas. Damaged antennas may cause minor burns if they come into contact with the skin.
- Do not use the radio or charge the battery in an explosive environment (such as gas, dust, steam, etc.).
- Turn off the radio when refuelling or parking at a gas station.
- Do not modify or adjust this unit for any reason.
- Do not expose the radio to direct sunlight for a long time, and do not place it near heating appliances.
- Do not place the radio in extremely dusty, humid and splashy places, and do not place it on an unstable surface.
- Repairs may only be carried out by professional technicians.
- If you notice a strange smell or smoke from the radio, immediately turn off the power of the radio, remove the rechargeable battery pack from the radio, and contact the supplier.

Safety:

- The user must have knowledge and awareness of the general dangers of using a walkie-talkie.

Unboxing and Configuration Checks

Accessories

- Carefully take out the transceiver from the box. We recommend that confirm the below goods before getting rid of the packing.

Supplied Accessories

Item	Qty.
Radio	1
L.MonBatllrypaokS.7V	1
Ct.gar /Mapa	1
BeltCllp	1
UeerManual	1
Hlng8trlp	1

Preparation

Charging Instruction
The note of Li-ion battery charging is below:

- The battery pack did not charge when came out of the factory, please charge first when you want to use it. After the purchase or long-term storage (more than two months), the first charge of the battery pack can not make the battery pack up to its saturation use of capacity. In repeated charging and discharging two, or three times,
- The effect can be achieved the normal charging and battery power.
- Before charging, turn off the transceiver power. If the transceiver is while its battery is charging, it would badly influence on battery normally charging.
- The Battery is under normal charging many times, The time of using time is not adding any more, it means that the life of the battery is close to over, should be replaced with a new one; As calculated, The average time of the battery pack is about 13 hours. The average use time is 5% receive time, 5% transmit time, and 90% standby time.

CAUTION

- Do not charge the battery pack again, when it's already fully charging before. otherwise, it would cause the life of the battery pack to shorten, even if it may be damaged.
- When it's charging fully, please remove it from the away charger cup.
- Do not short the battery terminal or dispose of the battery by fire.

Charge Steps

- The charger plugs into the mains of the 110V power outlet, and the charger indicator green light flashing
- The battery pack or the transceiver- er with the battery pack inserted into the charger card slot. (as the picture shows).
- The charger's red light flashes to start charging. Charging fully then the charger's green light flashes, and charging ends.

Install/Remove Battery Pack

- When installing the battery pack, should match the corresponding location of the aluminium frame of the transceiver's backside, then push into the battery towards the direction.
- The Buckles on the tail of the battery would fasten the battery pack until can hear a "clicking" sound;
- To remove the battery pack, please turn off the transceiver first. Then press the buckles of the battery, at the same time, the battery will be pushed back, take the battery away;
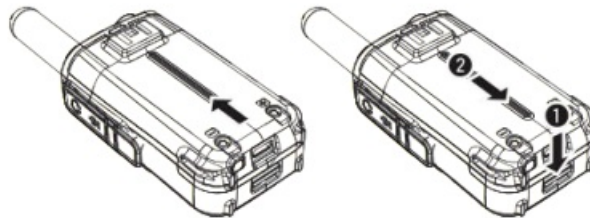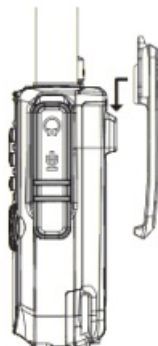

NOTE

- Please do not antenna as a handle. the keys or external type loudspeaker microphone hanging on the antenna, which can damage the antenna and lower the transceiver's performance.

Install Belt Clip

- Push the back clip along the battery back clip slot.

Installing the Optional Speaker/Microphone

- Outward apart the moisture-proof rubber of the headphone mouth, Insert the speaker/microphone plugs into the speaker/microphone jacks.
  - **NOTE:** The transceiver is not fully water resistant while using the speaker/microphone.
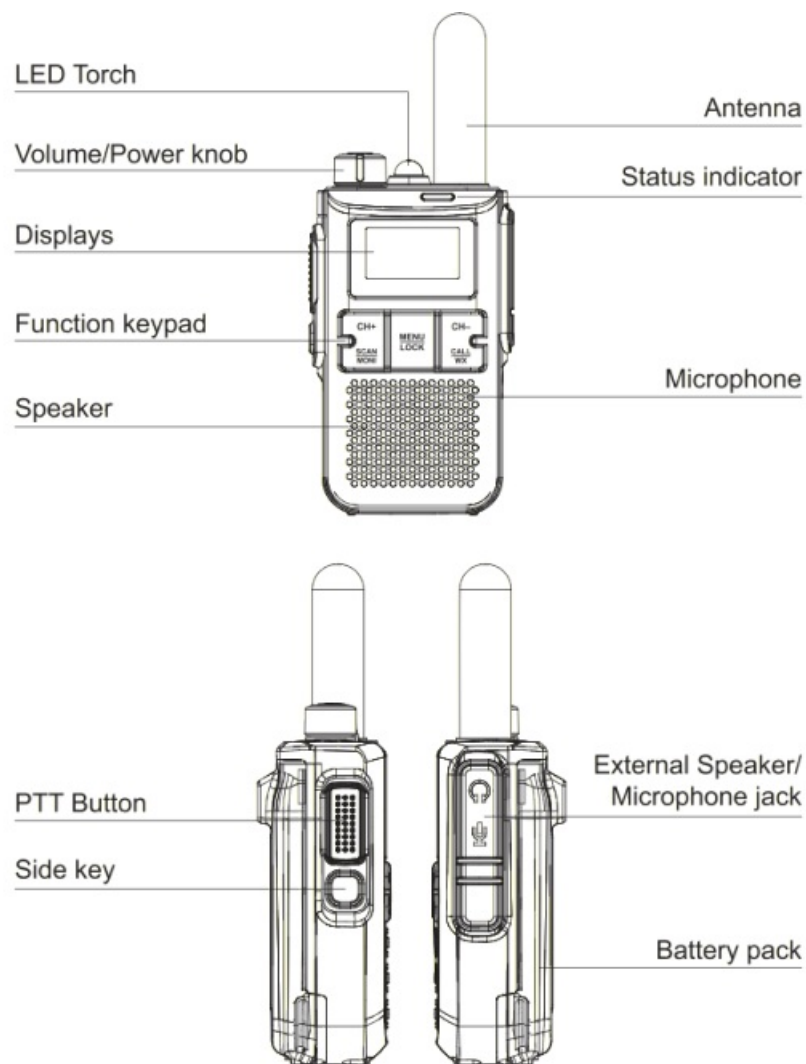
Main Function Description

- **UHF:** 400MHz-480MHz

- **Channel spacing:** 12.5KHz

- **RF output power:** H: 2W

- CTCSS 38, CDCSS 83/CDCSS Inverse 83

- TOT (OFF, 30, 60 ….. 150, 180S)

- VOX (OFF/1/2/3)

- **Scan:** channel scan

- Record

- **Color Code:** 0-15

- Encryption AES256

- Backlight ON/OFF

- Power Saving Function

- Monitor

- Low battery alarm

- Beep

- Prompt (Chinese/English)

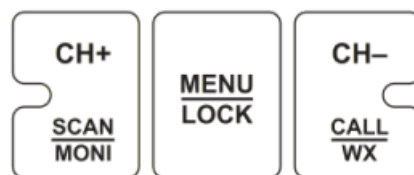- Tall voice cancellation

- Scrambler

Getting Started

Guide

LED Torch

Antenna

Volume/Power knob

Status indicator

Displays

Function keypad

Speaker

Microphone

PTT Button

Side key

External Speaker/
Microphone jack

Battery pack

Key Operation Instructions

Keyboard

CH+

SCAN
MONI

MENU
LOCK

CH–

CALL
WX

Key Function

- On/off knob, turn it clockwise and hear a "beep", that is, it is turned on, turn it counterclockwise and hear a "beep", that is, it is turned off, and the channel number will be broadcast when it is turned on.
- Launch button, press this switch when launching, and release it after launching.
- Volume knob, the same knob as the on/off knob, clockwise increases the volume, counterclockwise decreases the volume.
- Short press or long press the programmable button to configure scanning on/off, VOX on/off, high/low power, monitoring, emergency alarm, one-key call and other functions through CPS.
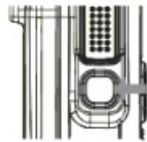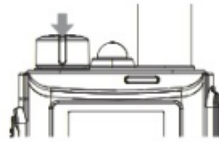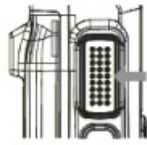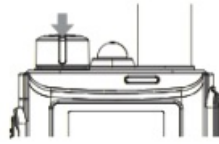
- **[CH+/ CH-]:** Function or channel switching key, press the key continuously to increase the channel number and press the key continuously to decrease the channel number. During scanning, press the up/down key to exit the scan.
- **(MENU/LOCK]:** Short press the function setting and selection key to select various functions, and long press to lock the keypad.
- **[SCAN/MONI]:** Scanning on the button, short press to turn on/off the scan, and long press on the analog channel to turn on the monitoring mode.
- **[CALL/WX]:** Short press the back button, and long press to return to the standby interface.

Menu Content

Digital Channel

ITEM	Display and Description		Set content
01	Contact		Contact1 / Contact2 /Con- tact3 / Group1 /Group2 / Group3 / Group4 / ALL CALL
02	Message	1. Quick Text	
		2.inbox	inbox List/ Delete ALL
		3. Outbox	Outbox List / Delete All
03	Scan		Off/On
04	Zone		Zone1
05	Record	1. On-Off	Off/On
		2. Record File	1…49
06	Setting	01 Power Level	High **power**
		02 Tone Set	Off/On
		03VOX	On/ Off
			Level 11 Level 2/ Level 3
		04 Power Save	off
			Level 1/Level 2/Level 3
		OS TOT	Off
			30s / 60s / 90s 1120s / 150s / 180s
		06 Brightness	Level 11 Level 2/ Level 3

ITEM	Display and Description		Set content
06	Setting	07 Backlight	Infinite
			Ss / 1Os I 15s / 30s / 45s I 60s / 120s / 180s / 240s / 300s
		08 Language	Chinese/ English
		09 Boot Screen	Picture
			Information
		10 Vibration	Off *I* On
		11 Man down	Off *I* On
		12 Factory set	Reset All?
		13 Firmware version	
		14 Radio ID	

Analog Channel

ITEM	Display and Description		Set content
01	Scan		Off *I* On
02	Zone		Zone1
03	Setting	01 Power Level	High power
		02 Tone Set	Off *I* On
		03VOX	On/ Off
			Level 1/Level 2/Level 3
		04 Power Save	off
			Level 1/Level 2/Level 3

ITEM	Display and Description		Set content
03	Selllng	05TOT	Off
			808/ **808**/ **908**/ 1208/ 1808/1808
		08 Brlghlne88	LIMII1/Level*2J* L8V8I 3
		07Eleckllght	Intlnlte
			58/ 101/188/301/ 488/ IIIOe / 1208 / 1808 / 2408 *I* 300a
		08Lquage	ChIMN/Englllh
		09 Boot Boreen	PIOlure
			lnbmdon
		10'Vlbrdon	Off/On
		11Man down	Off/On
		12 **Faolory NI**	**RNItAll?**
		13 Flffl1Vl118 WIIIDn	
		14**RadIO ID**	

Menu Function Description

Menu Function Description and Setting

View

- **Select [Menu]—->[Contacts]** to enter the contact interface, select the target contact, press and hold the [PTT] to initiate a call, the indicator light is always red, release the [PTT] to stop the call, and enter the call hold time, The orange light is always on, and at this time press and hold the [PTT] again to initiate a call to the contact again. If you press and hold the [PTT] on the main interface, it will initiate a call to the default contact.

Disable

- **Select [Menu]—->[Contacts],** select a contact for individual calls, and select remote kill, after successful remote kill, a prompt "remote kill successful" will pop up. If after 15 seconds, the remote kill is still not

successful, a prompt "Failed to send" will pop up. After the receiver is successfully remote-killed, it will always be on the remote-killed interface, and any operation will have no effect. After restarting, it will still stay on the remote-killed interface, and it will return to normal after being activated.

Radio Enable

- **Select [Menu]—->[Contacts],** select the personal call contact that has been blocked by remote control, and select Activate. After the activation is successful, a prompt "Activation successful" will pop up. If the activation is still not successful after 15 seconds, a prompt "Failed to send" will pop up.

Call Alert

- **Select [Menu]—->[Contacts],** select a private call contact, and select call notification, after the call notification is successful, a prompt "Call notification successful" will pop up. If after 15 seconds, there is still no successful call notification, a prompt will pop up saying "Failed to send". After the receiver is successfully called, it will always sound the "Dididi" prompt tone, press the PTT button to directly reply to the transmitter.

Radio Check

- Select [Menu]->[Contacts], select a personal call contact, select walkie-talkie check, after the walkie-talkie check is successful, a prompt will pop up saying "walkie-talkie check is successful". If the walkie-talkie has not been checked successfully after 15 seconds, a prompt "Failed to send" will pop up.
- If the receiver has business, the transmitter will fail to transmit. The transmitter can only send successfully when the receiver is idle.

Remote Monitor

- Select [Menu]->[Contacts], select a personal call contact, and select remote monitoring. After the remote monitoring is successful, a prompt "remote monitoring successful" will pop up. If the remote monitoring is not successful after 15 seconds, a prompt "Failed to send" will pop up.
- After the receiver is successfully monitored remotely, press any key to exit the monitored state.

Scan

- There are two ways to start scanning. The first one is to select [Menu]->[Scan], and select Open, the voice will announce "Scan On", and it will automatically return to the main interface, the scan icon will appear on the top, and the scanned channels will be scrolled and displayed, and the orange light will flash.
- The second is to configure the programmable button and configure the short press or long press of the programmable button as scanning on/off.
- During scanning, you can enter the menu. After entering the menu, it will stay on the channel where it was when entering the menu, and the orange light will no longer flash. After exiting the menu, re-enter the scanning state.
- There are three ways to turn off scanning. The first is to directly press the up or down key, and it will automatically exit the scan. The second is to enter the menu to turn off scanning. The third is to turn off the

scan by short-pressing or long-pressing the programmable button.

Zone

- **Select [Menu]-[Zone]** to select the target zone. After the selection is successful, it will automatically return to the main interface and stay on the first channel in the selected zone.

Record

- **Select [Menu]—-+[Record)->[On-Off],** select On. After the recording is turned on successfully, the voice will announce "On". The voice transmitted or received by the walkie-talkie will be completely recorded and saved to [Recording File).
- **Select [Menu]-[Record]—-+[Record File],** and select a recording to play. During playback of the recording, press the [Play] key to start playback, and press the [CALL] key to exit the playback.

Tone Set

- **Select [Menu]-[Settlng]-[Tone Set],** select On or Off. After the selection is successful, the voice will announce "on· or "off'. After the prompt sound is turned off, both the button sound and the prompt sound will be turned off.

vox

- **Select [Menu]–+[Setting]–+[VOX]–+[Level],** the default is level 2, and the sensitivity gradually increases from level 1 to level 3. Go back to the previous level, enter [On-Off], and select On. After the voice control is turned on successfully, the voice will announce ·on·, and the ·v- icon will appear on the top.

Power Save

- **Select [Menu]–+[Setting]–+[Power Save],** there are three levels of power saving mode.

TOT

- **Select [Menu]->[Setting]–+[TOT],** choose to turn off the launch time limit, and there is no limit to the launch time. When the transmission time is selected as 30 seconds/60 seconds/90 seconds/120 seconds/150 seconds/180 seconds, when the transmission time reaches the time limit, the transmission will be stopped forcibly, and the receiver will also stop receiving.

Brightness

- **Select [Menu]–+[Setting]–+[Brightness],** press the [Menu] key to select different levels of brightness.

Backlight

- **Select [Menu]–+[Setting]–+[Backlight], select [Infinite],** and the display will be always on. When the backlight duration is set to 5 seconds/10 seconds/15 seconds/30 seconds/45 seconds/60 seconds/120

seconds/180 seconds/240 seconds/300 seconds, the screen will automatically turn off after the time of no operation is reached.

Language

- **Select [Menu]–+[Setting]–+[Language],** press [Menu] to select Chinese/English.

Firmware Ver

- **Select [Menu]->[Setting]->[Firmware Ver]** to view the current software version.

Radio ID

- **Select [Menu]–+[Setting]–+[Radio ID]** to view the radio ID.

Other Function Descriptions

Other Function Descriptions and Settings

- **Emergency alarms on digital channels**
  - After the transmitter configures the analog alarm system through the [programmable button], long press the [programmable button] to initiate an emergency alarm.
- **The emergency alarm on analog channels**
  - After the transmitter configures the analog alarm system through the [programmable button], long press the [programmable button] to initiate an emergency alarm.
- **Encryption**
  - Configure the secret key value through CPS. The secret key value supports pure numbers, pure letters and mixed alphanumeric characters, and the maximum length can be 8 or 64 characters.
  - The key values of the transmitter and receiver must be consistent to communicate normally.
  - If the key values of the transmitter and receiver are inconsistent, or one of them does not enable the encryption function, the content of the call will become a sound similar to noise.
- **Remote monitoring**
  - The receiver is in an idle state, and the transmitter initiates remote monitoring of the receiver. After the remote monitoring of the transmitter is successful, it enters the receiving state, and automatically ends the receiving after reaching the duration of remote monitoring.
  - The maximum duration of remote monitoring is 120 seconds, and the default is 1 0 seconds. If the receiver presses the [PTT key] or other keys during the monitoring process, the remote monitoring will be interrupted.
- **Man Down**
  - After tilting a certain angle to detect that the walkie-talkie has fallen to the ground, it will detect the alarm time of the fall. If the time is up, the handset is still in the state of the fall, and an emergency alarm will be activated (emergency alarm needs to be configured.
  - The alarm type is: regular, which is a remote alarm, and the rest are local alarms). If the man-down alarm is activated/during the man-down alarm, if the hand platform is detected to be upright, the emergency

alarm will not be activated/turned off.

- **Vibration**
  - **Vibrate when booting**
    - After standby for more than one minute (the time can be configured), it will vibrate when a call comes in.
    - CPS can be configured (1-10 minutes, step 1 minute. It can also be configured without vibration).

Troubleshooting

Question	Solve
can not boot	• The baby may be totalled, plus with a new **one** or charged It • **The batl8ry** may not **be Installed**– remotely, **PINN remove the** b lllery and reinstall It
Elellery power doeln't **last long** after charging	• The ltre or the ballery peck tau ex- plred, p1… 19p1ace the beller y.
cannot oh lt with o111er rebel ofthe grou p	• Conftnn **whether the** frequency and dumb audio signal you are u sing are the same • lhoN or o1her member1 Inthe group • Other members In the tile group may be too far away, outlook whe ther you are within the effective range of other wal tall
Olhlr Graupner. **the** channel	• **PIHH** changed the CTCSS/DCB. *N.* this time, be sure to change the CTCBSIDCS the group.

FCC

FCC Statement:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. 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 received, including interference that may cause undesired operation.

SAR tests are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. Before a new model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the exposure limit established by the FCC. Tests for each product are performed in positions and locations as required by the FCC. For body-worn operation, this device has been tested and meets the FCC RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that contains no metal. To maintain compliance with FCC RF exposure guidelines hold the transmitter and antenna at least 1 inch (2.5 centimetres) from your face and speak in a normal voice, with the antenna pointed up and away from the f ce. The equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.
To comply with the FCC RF exposure requirement, the antenna installation must comply with the following:

Users must be fully aware of the hazards of the exposure and able to exercise control over their RF exposure to qualify for the higher exposure limits. Your wireless hand-held portable transceiver contains a low-power transmitter. This product sends out radio frequency (RF) signals when the Push-to-Talk(PTT) button is pressed. The device is authorized to operate at a duty factor not to exceed 50%.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, under 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 following 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 the receiver.
- Connect the equipment to 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.

To Customer

- Thank you for purchasing our handheld FM transceiver,
- This model is novel design, has stable performance, is easy to operate and with a variety of sophisticated functions, so we are using the most advanced technology.
- We are deeply confident that its quality and functionality will make you feel satisfied!

Documents / Resources

	YANTON DM310 DMR Two Way Radio [pdf] User Manual DM310 DMR Two Way Radio, DM310, DMR Two Way Radio, Two Way Radio, Way Radio, Radio

References

- **User Manual**