MD-658 User Manual

US T/Rx: 400-470Mhz, 2W Max

Spacing: 12.5K

Basic operations

Led indicator

It lights when transmitting and lights green when receiving.

Power on/off

Rotate the power/volume knob clockwise, a "click" sound is heard and a "Du" tone sounds, it powers on. Rotate the power/volume knob counter-clockwise, a "click" tone sounds and it powers off.

Adjusting the volume

Rotate the power/volume knob clockwise, when it powers on, continue to rotate the knob to adjust the volume.

Note: You can monitor the background sound and adjust the volume.

Selecting channels

Rotate the channel-selecting knob directly to select your desired channel from 1 to 16.

Please refer to the channel numbers or symbols at the bottom of the knob to select the channel, or operate based on the voice annunciation.

Transmitting

To transmit, please press the [PTT] switch and speak to the microphone in a normal voice. Keep the mouth about 5cm away from microphone

Notice: 1. Press [PTT]switch, the indicator lights red, it transmits.

2. If the red indicator blinks, it indicates low power, and the radio may not be able to transmit.

Multifunctional side-key assignment

User can define the functions of this key via programming software

Software operation manual

Channel capacity: totally have the 256 channels (including the digital and analog)

16 zone, 16 channels

ACH means the analog channel

DCH means the digital channel

Channel add: to add channel ,MAX is 256 Channels

Channel delete: for delete the channel

Channel edit: for edit the channel setting

Channel alias: for set the alias

CC: Color codes can mark a system. Users who need to communicate with each other must set the same color code; the host does not respond to channel activities that do not match the preset color code because it determines it as communication between other systems. However, when you want to monitor multiple systems (set different color codes on multiple digital channels), you can enable the host to monitor the activities of multiple systems by starting the scan function. Available options: 0-15. Default value: 1. Note: This function is only supported in

digital mode.

Talk around: You can use this option to set whether the radio can communicate offline when the repeater is unavailable. After checking this function, when the user activates this function through the programmable button, the radio transmits using the receiving frequency, so the radio in repeater mode can receive the signal of the offline radio .

  . Note: Only handheld and vehicle terminals support this function; this function can be used when the receiving and transmitting frequencies are different in digital channels.

RX only: You can use this option to set whether the radio only RX, not transmit.

Auto scan: You can use this option to set whether the radio to start scan automatically

Scan list: can be set to the list which need to scan

Frequency synchronizes: can be set to the offset, default is the 0, which means the TX and RX is same frequency

analog channels setting only

RX CTCSS/CDCSS: Used to select the CTCSS or DCS decoding for the current channel. Default value: None.

TX admit: Transmit permissions limit the transmission when there is activity on the channel. The available options are: Always Allow: The radio transmits directly when PTT is pressed regardless of whether there is activity on the channel;

Digital channels setting only

RX group list: This option can relate receiving group list with the current channel. When a call is detected from a group ID that matches the receiving group list, the radio turns on the speaker and the user can respond or call back within the group call hold time. The available options are None and the receiving group list option turned on in the receiving group list.

Emergency call prompt: This function can be set to give a prompt tone when an emergency call is received.

Encryption: it has the basic and enhance ,included ARC4, AES128 AES256. It has 2 format: Motorola and other
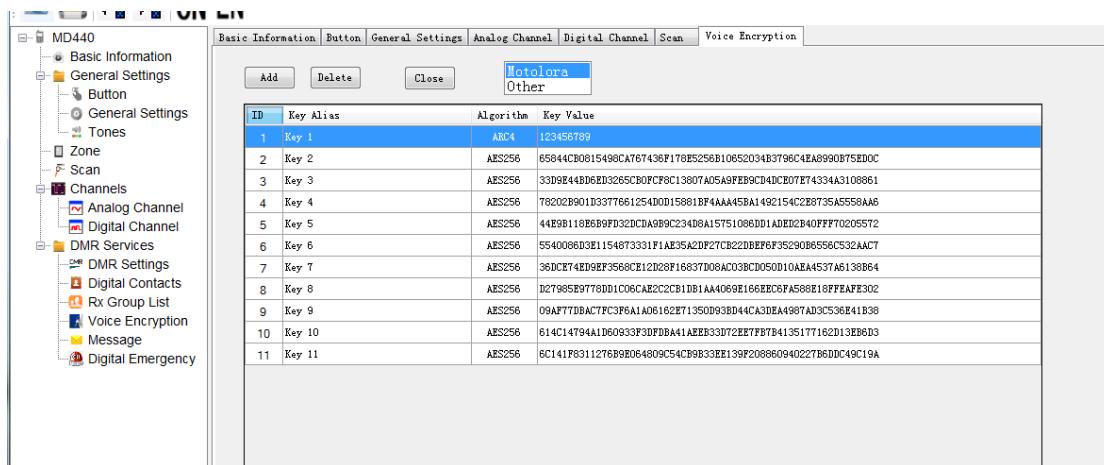
TX admit: Transmit permissions limit the transmission when there is activity on the channel. The available options are: Always Allow: The radio transmits directly when PTT is pressed

regardless of whether there is activity on the channel;

  Channel free: Transmits when the channel is free;

  Color Code free: Transmits when the channel is free or the color code does not match.

  Default: Always Allow.

TX contacts: Used to select the default   contact for the current channel.

The available options are None and the contact alias existing in the digital contact interface.

The default value is: None.

Power level: can set the TX power, for hi or Low power

Emergency system: You can relate any defined digital alarm system with this channel.

Available options: None: prohibit users from starting the alarm function on this channel; all available digital alarm systems listed in the digital alarm system under the alarm system.

Default value: None.

  Note: You must first configure the alarm system in the digital alarm interface before you can select it here, otherwise the system uses the default value.

Channel No [1 ▼]

Channel Alias [DCH 1]

Color Code [1 ▼]

Slot [1 ▼]

Scan List [Scan 1 ▼]

☑ Auto Start Scan

☐ TDMA Direct Mode

TDMA Mode [Ineligible ▼]

Rx

Frequency(MHz) [400.100000 ⇵]   ☑ Talkaround

Rx Group List [GroupList 1 ▼]   ☐ RX Only

☐ Emergency Call Prompt

☐ Emergency Alarm Prompt

☐ Emergency Alarm Reply

☐ Frequency Synchronize

Offset(MHz)

[Offset TX] [0.125000 ⇵] [Offset RX]

Tx

Frequency(MHz) [400.125000 ⇵]

Tx Contact [Group 1 ▼]

☐ Private Call Confirmed

Power Level [High ▼]

Tx Admit [Always Allow ▼]

TOT(s) [180 ▼]

TOT Pre-Alert Time(s) [0 ⇵]

TOT Re-Key Time(s) [0]

[Add]   [Delete]

No.	CH Alias	Rx Freq.	Tx Freq.	Power	CC	Tx Contact	Rx Group
1	DCH 1	400.125000	400.125000	High	1	Group 1	GroupList 1
2	DCH 2	410.125000	410.125000	High	1	Group 1	GroupList 1
3	DCH 3	420.125000	420.125000	High	1	Group 1	GroupList 1
4	DCH 4	430.125000	430.125000	High	1	Group 1	GroupList 1
5	DCH 5	440.125000	440.125000	High	1	Group 1	GroupList 1
6	DCH 6	450.125000	450.125000	High	1	Group 1	GroupList 1
7	DCH 7	460.125000	460.125000	High	1	Group 1	GroupList 1
8	DCH 8	469.975000	469.975000	High	1	Group 1	GroupList 1

Basic information

User can set Frequency range here and check latest programmed

date, Model name, CPS(Computer Programming software) version, MCU version .

General setting

Button setting: user can set the short and long press for the side-key 1 and side key 2
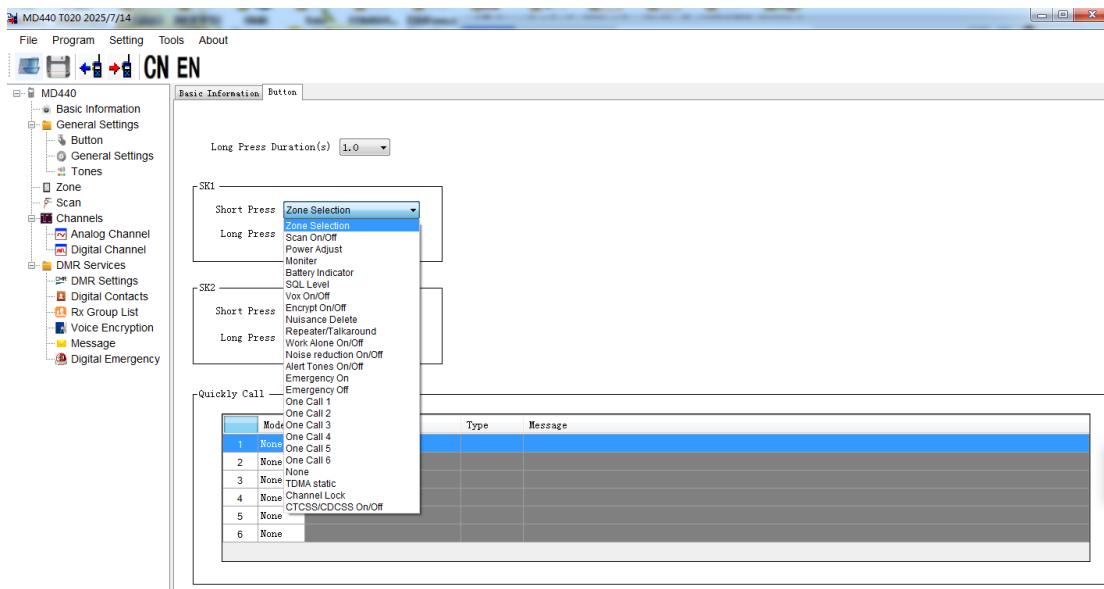
FCC Warning Statement

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 condition that this device does not cause harmful interference.

Note: 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 Statement:

SAR tests are conducted using standard operating positions accepted by 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 an available for sale to the public, it must be tested and certified to the FCC that is 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 and accessory designated for this product or when used with and accessory that contains no metal. To maintain compliance with FCC RF exposure guidelines, hold the transmitter and antenna at least 1 inch (2.5 centimeters) from your face and speak in a normal voice, with the antenna pointed up and away from the face.