

V10MR User Programming Guide

Your new V10MR, in its default state, works correctly with other new (no programming changes) V10MR radios. Please refer to your instruction manual for basic steps to operate the radio with no programming changes.

Should you want to change channel assignments, tones, or special features, your V10MR radio has a number of advanced radio features that can be enabled through its software (CS-V10MR).

To program the radios, you will need the following:

- CS-V10MR Cloning Software. Available for free download on the Icom America website (Products >Landmobile >V10MR).
- OPC 478UC Cloning Cable (“B” version only). Available from an Icom America Landmobile Dealer in your area.
- PC running Windows 10 operating system. Note: Apple and Android software is not available.

Default Channels/Frequencies and Tone

Channel	Frequency	Bandwidth	CTCSS tone
1	151.820MHz	Narrow	67Hz
2	151.880MHz	Narrow	67Hz
3	151.940MHz	Narrow	67Hz
4	154.570MHz	Wide	67Hz
5	154.600MHz	Wide	67Hz

CS-V10MR Software Modes

The CS-V10MR software has two modes, **Simple** and **Full**.

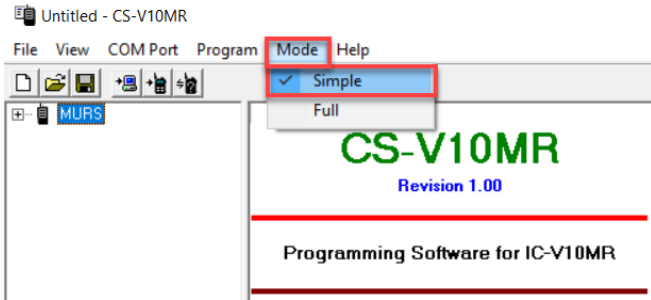
Simple Programming Mode: Allows adding duplicates of the 5 MURS frequencies for the purpose of using different CTCSS or DTCS tones.

Full Programming Mode: Allows adding duplicates of the 5 MURS frequencies and the addition of a larger suite of features.

Note: Incorrect Settings in the Full Programming Mode can cause incorrect operation of the radio. Icom suggests these features be programmed by an Icom dealer only.

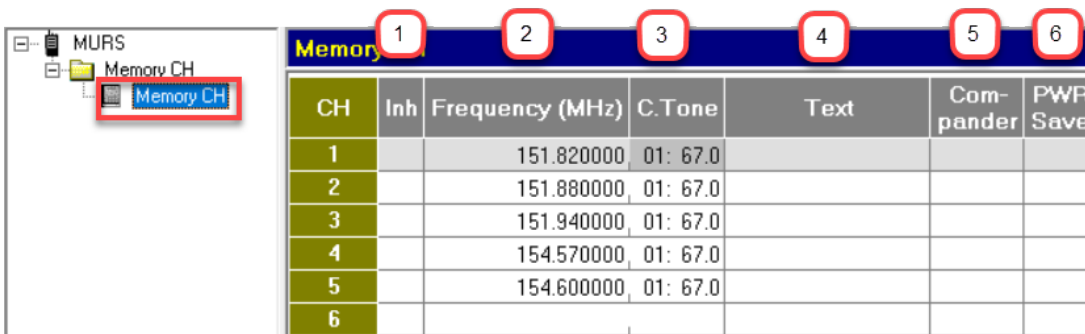
Selecting Simple or Full Mode

1. Open the CS-V10MR software.
2. Click **Mode**, then select **Simple** or **Full**.



Programming in Simple Mode

Memory Channel programming is shown below.



CH	Inh	Frequency (MHz)	C.Tone	Text	Com-pander	PWR Save
1		151.820000	01: 67.0			
2		151.880000	01: 67.0			
3		151.940000	01: 67.0			
4		154.570000	01: 67.0			
5		154.600000	01: 67.0			
6						

1 Inh	Do not use. For use in radios with Displays only.
2 Frequency (MHz)	Contains the 5 MURS frequencies. Only these frequencies can be entered in the 16 channel slots. Extra Channel slots are provided if you need to duplicate frequencies using different CTCSS or DTCS tones.
3 C. Tone	This shows the CTCSS or DTCS tone. You can program tones for each channel in both simple and full modes. On any given channel/frequency, radios must have matching tones if they are to decode each other's audio.
4 Text	Do not use-For use in other model radios with Displays only.
5 Com-pander	The Com-pander compresses the signal to reduce background noise. If this setting is enabled, all radios must have it enabled for it to work properly on that channel. This feature may not work effectively with non-Icom radios.
6 PWR Save	This feature saves power by allowing the radio to go into a partial sleep mode during times when there is no RX or TX traffic.

Channel Squelch

In Simple Mode, the Squelch setting can only be changed using the push buttons as described in the Operating Guide.

Programming in Full Mode

The full suite of features is available in Full Mode.

Memory Channel Programming

See instructions for Simple Mode-Memory Channel Programming

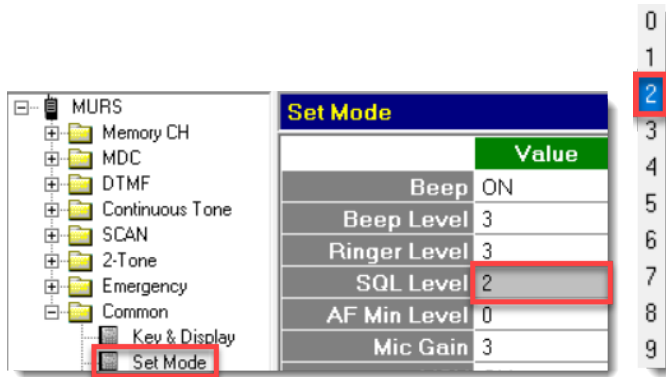
Channel Squelch

The squelch setting allows you to adjust the sensitivity of your radio's receiver.

In Full Mode, the squelch setting can be changed in 2 different ways:

- Using the buttons on the radio, by default. Please refer to your instruction guide for steps.
- Using the programming software in Full Mode, using the **Common > Set Mode** window.

1. Go to **Common > Set Mode**.



2. Click **SQL Level** and select the desired number. Note: A setting of **2** is optimal.

Scan Programming

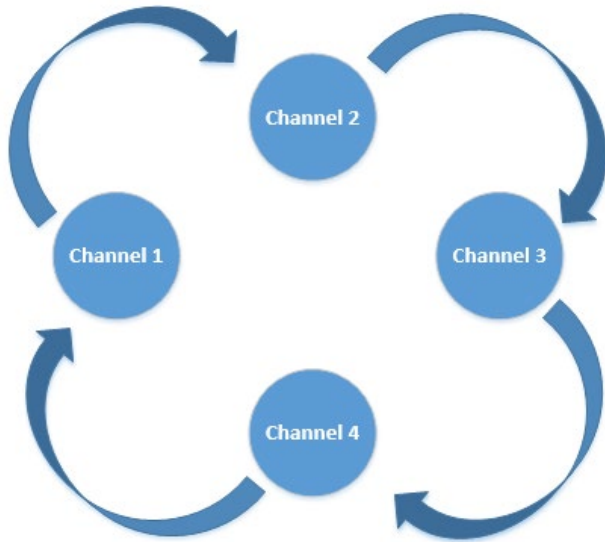
Assumptions:

- Software is in Full Mode
- SQL Level is set correctly
- Frequencies and sub-audible tones have been programmed in and tested for correct communication.

Note: For complete descriptions of these settings, please refer to the Help files in the programming software.

1. **Scan Settings screen**- Set Power-On Scan to one of the following choices:
 - **Off**- User will have to press the Scan Start/Stop button to start a scan after power up.

- **Resume-** Upon Power Up, the radio resumes scan *if the radio was scanning when the power was turned off.*
 - **On-** Radio begins scanning upon Power Up.
2. **Scan List screen.** Select **Normal Scan**. It scans, in sequence, all selected channels in a “round robin” fashion, starting with the channel set on your rotary knob.



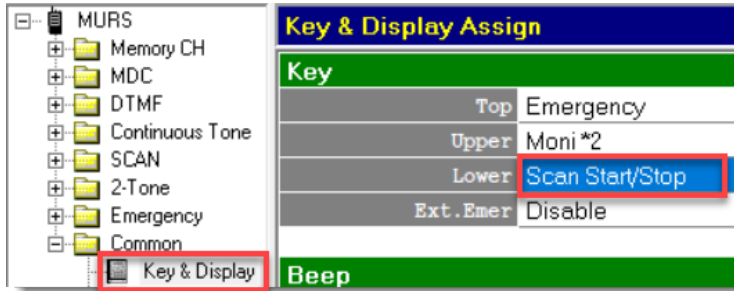
Scan List		List	Scan Type	Primary CH	Secondary CH	TX CH
MURS	Memory CH	1	Normal	---	---	Last
MDC	DTMF	2	Normal	---	---	Last
Continuous Tone	SCAN					
Scan List						

3. In **TX CH**, select the channel you would normally transmit on while in scan, or when scan is paused. In this example it is set to **Last Ch**.
- **TX Action** setting either cancels scan or allows scan to resume automatically. If set to **Cancel Scan**, restarting requires pushing the Scan Start/Stop button (see *To Start a Scan* following) If set to **Pause Scan**, scan resumes after the resume timer (**Scan Setting** screen) has expired.

Scan List		List	Scan Type	Primary CH	Secondary CH	TX CH	Talk Back	TX Action	Cancel CH
MURS	Memory CH	1	Normal	---	---	Last	---	Pause	TX CH
MDC	DTMF	2	Normal	---	---	Last	---	Pause	TX CH
Continuous Tone	SCAN	3	Normal	---	---	Last	---	Pause	TX CH
Scan List									
Scan Setting									

4. In **Cancel Channel**, set the channel that you will return to when scan is cancelled using the Scan Start/Stop button, assigned in the Key and Display screen as described below.

5. Go to the **Common** folder and select **Key & Display**.
6. Set a programmable key to **Scan Start/Stop**. The following example uses the lower side key.



To start a scan:

1. Switch on the radio power.
2. Press momentarily (do not hold) the Scan Start/Stop key once to start or stop scan. The radio LED will blink green while actively scanning.

MDC Signaling

MDC contains signals that enable specific functions, such as PTT ID and Radio Check. It is not used unless these radios are used in conjunction with a higher-tiered radio with a display and the applicable functions already programmed.

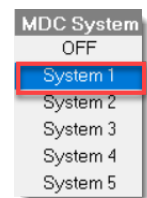
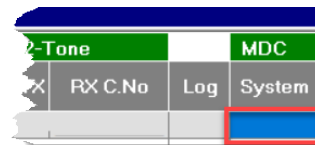
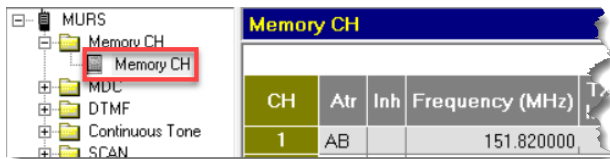
Assumptions:

- Software is in Full Mode
- Squelch is set
- Any tones are set
- All participating radios are also programmed for MDC emergency functions.

PTT ID

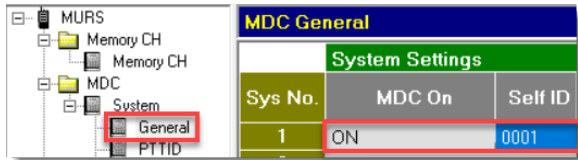
PTT ID allows your V10MR radio to send its own ID to another radio that has a display. Note: Icom does not make MURS radios with displays.

1. Go to **Memory Ch.**



2. Click **MDC** and select **System 1**.

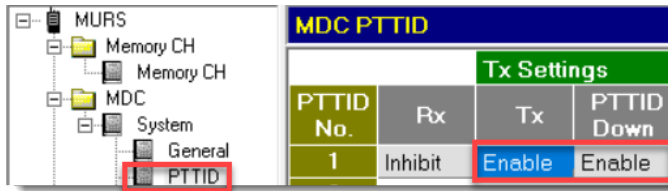
3. Go to **MDC > System > General**.



4. In **System Settings**, set **MDC On** to **ON**.

5. Set the **Self ID** to the ID of this radio.

6. Go to **PTTID**.



7. Set **Tx** and **PTTID Down** to **Enable**.

Once programmed, PTT ID will automatically be sent every time the PTT button is pressed.

Emergency

Emergency signals are only applicable when adding these radios to an existing system with an Emergency Dispatch decoder. Please see your Emergency system administrator for details on how your Emergency settings should be programmed. Icom makes no MURS-rated radios with this feature.

2-Tone Signaling

2-Tone Signaling and Muting is used only in specialized systems such as those in Fire Departments. If this radio is approved to operate on such a system, please contact the administrator for the programming parameters for that system.