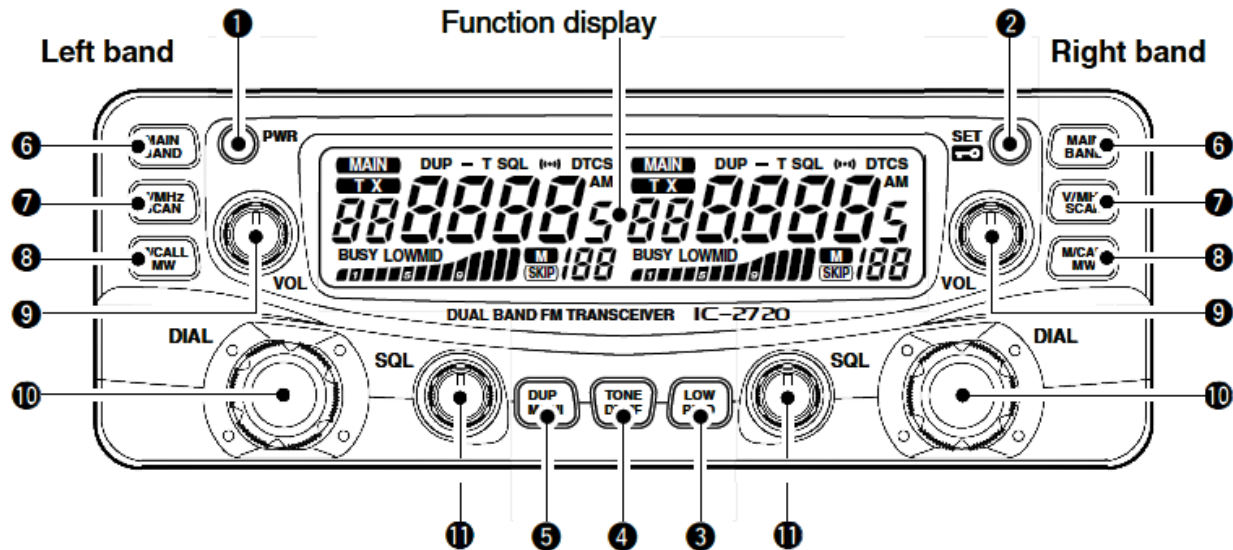# Icom IC-2720H VHF/UHF Radio
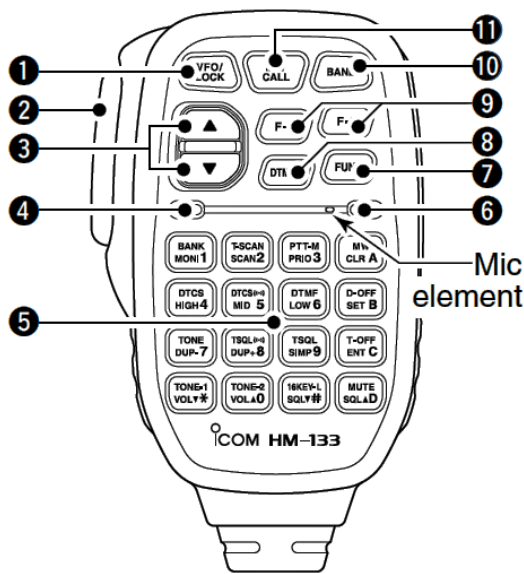
Mini–Operating Guide by W5JCK

1   [PWR] Power Switch
Press and hold 1 sec. to turn power On/Off.

2   [SET•LOCK] Set, Lock Switch
● Press to enter Set mode.
● Press and hold for 1 sec. to switch the Lock function On or Off.

3   [LOW•PRIO] Output Power, Priority Switch
● Press to change the power output level.
● Press and hold for 1 sec. to start the Priority Watch operation.

4   [TONE•DTMF] Tone, DTMF Switch
● Press to select a Tone function.
● Press and hold for 1 sec. to turn DTMF memory encoder On or Off.

5   [DUP•MONI] Duplex, Monitor Switch
● Press to select between DUP-, DUP+, and Simplex operation.
● Press and hold for 1 sec. to switch the Monitor function On or Off.

6   [MAIN•BAND] L/R Band Switches
● Press to select the main band for L/R side.
● Press and hold for 1 sec. to select operating frequency band for L/R side.

7   [V/MHz•SCAN] L/R VFO/MHz Tuning, Scan Switches
● Press to select between VFO mode and 1 MHz Tuning mode for L/R side.
● Press and hold for 1 sec. to start scan for L/R side.
● Press to stop a scan for L/R side.

8   [M/CALL•MW] L/R Memory/Call, Memory Write Switches
● Press to select between Memory, Call, and Weather Channel modes for L/R side.
● Press and hold for 1 sec. to select a memory channel for L/R side for programming.

9   [VOL] L/R Volume Control Switches
Turn to adjust audio for L/R side.

10   [DIAL] L/R Tuning Dials
Turn to select operating frequency, memory channel, setting for Set mode item, or scanning direction for L/R side.

11   [SQL] L/R Squelch Control Switches
Turn to adjust squelch level for L/R side.

Using the HM-133 Microphone

You can use the keypad and buttons on the HM-133 microphone to perform many of the common tasks required for operating the radio, including selecting a frequency band and directly entering a frequency. (*Note: Microphone keys only function for the main band.*)

1   VFO/Lock Switch
2   PTT Switch
3   Up/Down Switches →
4   Activity Indicator
5   Keypad
6   Function Indicator
7   2nd function Switch
8   DTMF Select switch
9   Function Switches
10   Band Switch   →
11   Memory/Call Switch

Mic element

Using the ▲/▼ Keys

Select a Frequency
Press ▲ or ▼ to select a frequency (in VFO mode) or memory channel (in Memory mode).

Start a Scan
Press and hold ▲ or ▼ for 1 sec. to activate the scan mode.

Stop a Scan
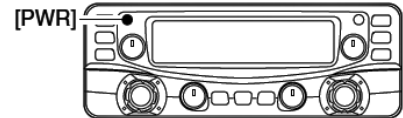Press ▲ or ▼ to cancel the scan.

Select a Band
Press [BAND] to toggle main band between left and right sides of radio.

Select a Frequency Band	Directly Enter a Frequency
Push BAND Push FUNC Push BANK MONI 1 Push ▲ or ▼ to select the band. push MW CLR A 145.000 440.000	[EXAMPLE]: Setting frequency to 145.3625 MHz. Push VFO/LOCK → 145.680 Push T-OFF ENT C → Push BANK MONI 1 / DTCS HIGH 4 / DTCS(·) MID 5 / PTT-M PRIO 3 / DTMF LOW 6 → 145.36 Push T-SCAN SCAN 2 → 145.362s

Basic Operation

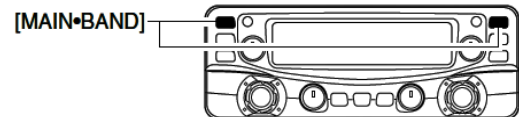## Turning the power On or Off

[PWR]

Press and hold **[PWR]** for 1 sec. to turn the power On or Off.

Selecting a Frequency Band in VFO Mode

[MAIN•BAND]

1. Press L/R **[MAIN•BAND]** for 1 second.
2. Rotate **[DIAL]** to select the band.
3. Press **[MAIN•BAND]** to activate the desired band.

You can select between 2m and 70cm bands for transmission, and 127 MHz, 2m, 220 MHz, 350 MHz, 70cm, 500 MHz, and 900 MHz bands for reception.
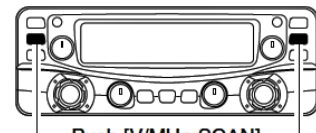
Alternatively: See "Using the HM-133 Microphone" section for instructions on using the microphone to select a band.

Activating VFO Mode

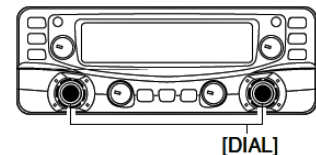Press L/R **[V/MHz•SCAN]** to activate the VFO mode.

*Alternatively: Press the HM-133 microphone button **[VFO/LOCK]** to activate VFO mode on the main band.*

Push [V/MHz•SCAN] to select VFO mode

Operating in VFO Mode

- If necessary, press L/R **[V/MHz•SCAN]** to activate the VFO mode.

- To change the frequency using 1 KHz steps, rotate **[DIAL]**.

- To change the frequency using 1 KHz, 1 MHz, or 10 MHz steps:

  1. Press **[V/MHz•SCAN]** one or more times to toggle between 1 KHz, 1 MHz, and 10 MHz tuning steps.
  2. Rotate **[DIAL]** to change the frequency.

- To start a scan, press and hold **[V/MHz•SCAN]** for 1 second.

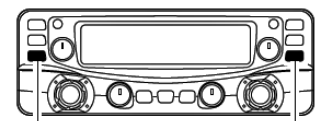- To stop a scan, press **[V/MHz•SCAN]**.

[DIAL]

Note: The digit associated with each tuning step (1 KHz, 1 MHz, or 10 MHz) disappears when that step is selected.

Activating Memory Mode

Press L/R **[M/CALL•MW]** to activate Memory mode.

The [M] indicator icon appears on the appropriate side of LCD display when Memory mode is activated for that side.

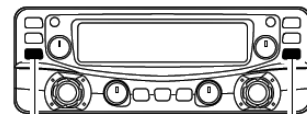*Alternatively: Press the HM-133 microphone button **[MR/CALL]** to activate Memory mode on the main band.*

Push [M/CALL•MW] to select memory mode.

Operating in Memory Mode

- Press L/R **[M/CALL•MW]** one or more times to activate Memory mode.

- To change the Memory channel, rotate **[DIAL]**.

- To start a scan, press and hold **[V/MHz•SCAN]** for 1 second.

- To stop a scan, press **[V/MHz•SCAN]**.

Alternatively: *See "Using the HM-133 Microphone" section for instructions on using the microphone ▲/▼ and/or keypad buttons to perform these operations.*
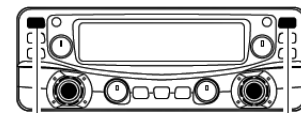
Push [M/CALL•MW] to select memory mode.

Memory Bank Selection

The IC-2720H has 10 Memory Banks (A to J), each of which can contain up to 200 Memory channels. To select a Memory channel within a Bank:

1. Press L/R **[M/CALL•MW]** one or more times to activate Memory mode.
2. Press and hold **[MAIN•BAND]** for 1 sec. to activate the Memory Bank selection. (The Bank initial blinks on the LCD display.)
3. Rotate **[DIAL]** to display the desired Memory Bank.
4. Press **[MAIN•BAND]** to select the Memory Bank. (The Bank initial stops blinking.)
5. Rotate the **Dial** to select a Memory channel within the bank.

To return to regular Memory mode, press and hold **[MAIN•BAND]** for 1 sec. then momentarily press **[MAIN•BAND]** again.

Push [MAIN•BAND] for 1 sec. to select memory bank.

Bank initial appears

Using the Monitor Function

[DUP•MONI]

This function is used to listen to weak signals without disturbing the squelch setting.

- To activate, press and hold L/R **[DUP•MONI]** for 1 sec. to open the squelch. (The "Busy" icon blinks on the LCD display`.)

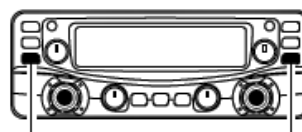- To cancel, press and hold **[DUP•MONI]** for 1 sec.

Alternatively: *Press the HM-133 microphone button* **[BANK•MONI•1]** *to activate or cancel the Monitor function.*
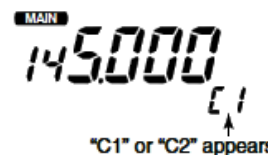
Selecting the Call Channel

Call channel is a pre-programmed Memory channel accessed by pressing the Call channel button.

1. Press L/R **[M/CALL•MW]** one or more times to activate Call Channel mode.
2. Rotate **[DIAL]** to select the desired call channel. (In Memory mode, the "C1" or "C2" icon appears. In VFO mode, the "c" icon appears.)
3. To cancel Call Channel mode, press **[M/CALL•MW]** one or more times.

Push [M/CALL•MW] several times to select call channel.

"C1" or "C2" appears

Alternatively: *Press and hold the HM-133 microphone button* **[MR•CALL]** *for 1 sec. to activate the Call Channel mode, then press ▲ or ▼ to select the desired call channel in the main Band. To cancel, press* **[MR•CALL]** *to return to Memory mode.*

Operating through a Repeater

Normally, you will operate the IC-2720H through repeater frequencies that you have already programmed into the radio's Memory channels. However, the occasion may arise in which you need to operate through a repeater that has not been programmed. This section instructs you in setting up the IC-2720H to operate through a repeater.
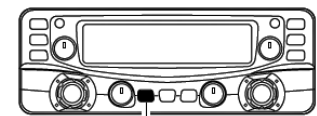
1. *Activate VFO mode:* Press L/R **[V/MHz•SCAN]** to activate the VFO mode.

2. *Select the Frequency Band:* See "Selecting a Frequency Band" for instructions.

3. *Set the Receive Frequency:* See "Operating in VFO Mode" for instructions. This is the frequency on which your radio receives the repeater's transmissions. (For example, you will receive the Tarrant County R.A.C.E.S. repeater on 146.940 MHz.)

4. *If necessary, Set the Repeater Shift:*

Push [DUP•MONI] once or twice

"DUP–" or "DUP" appear

> *Note:* If the Auto Repeater Function is set to On and the repeater uses a standard repeater shift, this step will not be necessary as the IC-2720H will automatically set the shift.
>
> **To manually set the repeater shift:**
>
> Press L/R **[DUP•MONI]** once or twice to select minus duplex or plus duplex shift.
>
> ● For minus duplex, "DUP–" appears on the LCD screen. The repeater's receive freq. is set lower than its transmit frequency.
>
> ● For plus duplex, "DUP" appears on the LCD screen. The repeater's receive freq. is set higher than its transmit frequency.
>
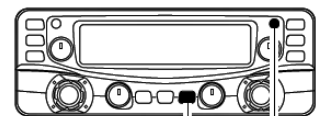> ● If the repeater uses an offset frequency amount other than 0.6 MHz for 2m band or 5 MHz for 70cm band, manually set the offset in Step 5.

Example: Set the 146.940 repeater shift to minus duplex "DUP–". This sets the repeater's receive frequency to 146.340 MHz.

5. *If necessary, Set the Repeater Offset Frequency Amount:*

[LOW•PRIO] [SET•🔒]

"DUP" and offset frequency appear

> *Note:* This step is only necessary if the repeater's offset frequency is an amount other than 0.6 MHz on the 2m band or 5 MHz on the 70cm band.
>
> a. Press **[SET•LOCK]** to activate Set mode.
> b. Press either **[SET•LOCK]** or **[LOW•PRIO]** one or more times until "DUP" and offset frequency appear.
> c. Rotate **[DIAL]** to select the offset frequency.
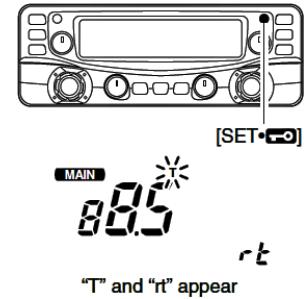> d. Press **[TONE•DTMF]** to set the offset and exit Set mode.

6. ***Set the Repeater Tone Encoder Type and Tone Frequency:***

a. Press **[SET•LOCK]** to activate Set mode.

b. Press **[SET•LOCK]** one or more times until "T" and "rT" appear.

c. Rotate **[DIAL]** to select the subaudible tone frequency.

   Example: Set tone frequency to 110.9 for the 146.940 repeater.

d. Press **[TONE•DTMF]** to set the tone frequency and exit Set mode.
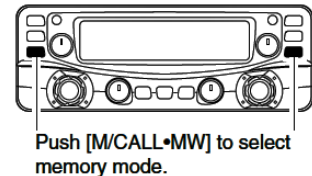
[SET•🔒]

MAIN
885
rt

"T" and "rt" appear

You can now operate through the repeater. To ensure you do not lose these settings, you can save this information to a Memory channel.

Programming a Memory Channel

VFO settings, including the set mode contents such as subaudible tone frequency or offset, can be programmed into a memory channel.

1. Press and hold L/R **[M/CALL•MW]** for 1 sec. to activate memory channel programming mode. Three beeps sound and the ▣ indicator icon appears on the LCD display.

2. Rotate **[DIAL]** to select a blank Memory channel in which to program the current settings. Be certain you select a blank channel so as to not overwrite any existing channels.

3. Press and hold **[M/CALL•MW]** for 1 sec. to program the channel. Three beeps will sound indicating the channel was programmed.

Push [M/CALL•MW] to select memory mode.

Assigning a Memory Channel to a Memory Bank

Each memory channel and the call channel can be programmed with an alphanumeric name for easy recognition. Names can be a maximum of six characters.

1. Press L/R **[M/CALL•MW]** one or more times to activate Memory mode, then rotate **[DIAL]** to select the Memory channel.

2. Press and hold **[MAIN•BAND]** for 1 sec. The "– –" icon starts blinking.

3. Press **[MAIN•BAND]** again. The "– –" icon stops blinking.

4. Press and hold **[M/CALL•MW]** for 1 sec., then rotate **[DIAL]** to select the desired Memory bank. The bank initial starts blinking.

5. Press **[M/CALL•MW]** again to program the channel into the bank. The bank initial stops blinking.

MAIN
144600

MAIN
144600