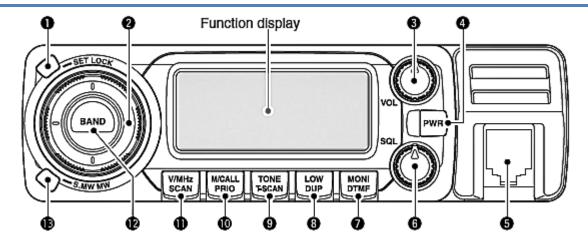
# Icom IC-208H VHF/UHF Radio

# Mini-Operating Guide by W5JCK



### 1 [SET-LOCK] Set, Lock Switch

- Press to enter Set mode.
- Press and hold for 1 sec. to switch the Lock function On or Off.

#### 2 [DIAL] Tuning Dial

Turn to select operating frequency, memory channel, setting for Set mode item, or scanning direction.

# **3 [VOL] Volume Control** Turn to adjust audio.

# 4 [PWR] Power Switch

Press and hold for 1 sec. to turn power On or Off.

### Microphone Connector Connects the HM-133 microphone.

# 6 [SQL] Squelch Control

Turn to adjust squelch level.

## 7 [MONI•DTMF] Monitor, DTMF

- Press to switch the Monitor function On or Off.
- Press and hold for 1 sec. to turn DTMF memory encoder On or Off.

### 8 [LOW•DUP] Output Power, Duplex Switch

- Press to change the power output level.
- Press and hold for 1 sec. to select between DUP-, DUP+, and Simplex operation.

## 9 [TONE•T-SCAN] Tone, Tone Scan Switch

- Press to select a Tone function.
- Press and hold for 1 sec. to start the tone scan.

# 10 [M/CALL•PRIO] Memory/Call, Priority Switch

- Press to select between memory, Call, and Weather Channel modes.
- Press and hold for 1 sec. to start the Priority Watch operation.

# 11 [V/MHz•SCAN] VFO/MHz Tuning, Scan Switch

- Press to select between VFO mode and 1 MHz Tuning mode.
- Press and hold for 1 sec. to start or stop scan.

#### 12 [BAND] Band Switch

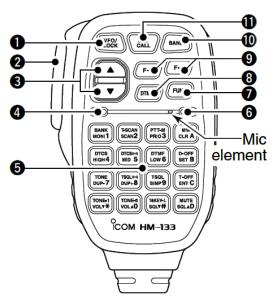
- During VFO op., press to select the operating frequency.
- During Call Channel op., press to select between call channels 1 or 2.
- Press and hold for 1 sec. then turn to select operating mode.

#### 13 [S.MW•MW] Memory Write Switch

- Press to select a memory channel for programming.
- Press and hold for 1 sec. to program a memory channel.

# **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.



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

## 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

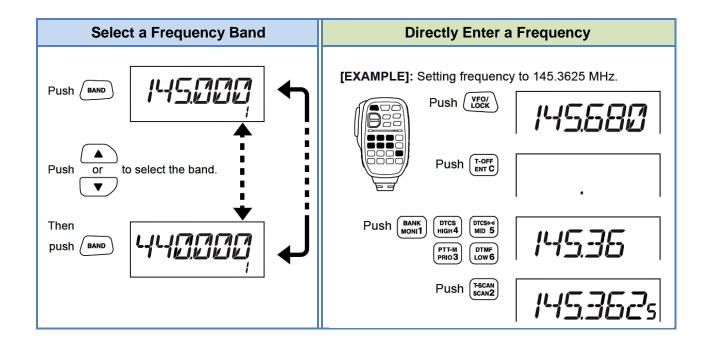
Press ▲ or ▼ to cancel the scan.

#### Select a Band

Press [BAND] then press

▲ or ▼ to select band.

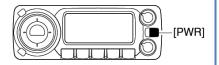
Press [BAND] again to
activate the desired band.



# **Basic Operation**

## **Turning the power On or Off**

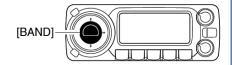
Press and hold [PWR] for 1 sec. to turn the power On or Off.



### Selecting a Frequency Band

- 1. Press [BAND].
- 2. Rotate the **Dial** to select the band.
- 3. Press [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.

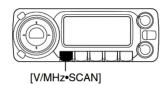


Alternatively: See "Using the HM-133 Microphone" section for instructions on using the microphone to select a band.

#### **Activating VFO Mode**

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

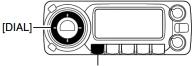
Alternatively: Press the HM-133 microphone button [VFO/LOCK] to activate VFO mode.





#### **Operating in VFO Mode**

- If necessary, press [V/MHz•SCAN] to activate the VFO mode.
- To change the frequency using 1 KHz steps, rotate the Dial.
- To change the frequency using 100 KHz, 1 MHz, or 10 MHz steps:
  - 1. Press [V/MHz•SCAN] one or more times to toggle between 100 KHz, 1 MHz, and 10 MHz tuning steps.
  - 2. Rotate the **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].



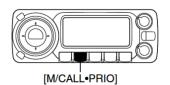
[V/MHz•SCAN]

**Note:** The digit associated with each tuning step (100 KHz, 1 MHz, or 10 MHz) disappears when that step is selected.

## **Activating Memory Mode**

Press [M/CALL•PRIO] to activate Memory mode.

The Im indicator icon appears on the LCD display when Memory mode is activated.



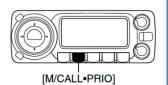


Alternatively: Press the HM-133 microphone button [MR/CALL] to activate Memory mode.

#### **Operating in Memory Mode**

- If necessary, press [M/CALL•PRIO] 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.

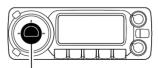


### **Memory Bank Selection**

The IC-208H has 10 Memory Banks (A to J), each of which can contain up to 500 Memory channels. To select a Memory channel within a Bank:

- 1. If necessary, press [M/CALL•PRIO] to activate Memory mode.
- 2. Press [BAND] one or more times 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 [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 [BAND] twice.



[BAND]

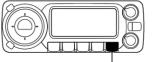


Bank initial blinks

### **Using the Monitor Function**

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

- To activate, press [MONI•DTMF] to open the squelch. (The "Busy" icon blinks on the LCD display`.)
- To cancel, press [MONI•DTMF] again.





[MONI•DTMF]

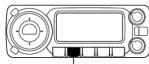
Blinks

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 [M/CALL•PRIO] one or more times to activate Call Channel mode.
- 2. Press [BAND] to select the desired call channel. (In Memory mode, the "C1" or "C2" icon blinks. In VFO mode, the "c" icon blinks.)
- 3. To cancel Call Channel mode:
  - To return to Memory mode, press [M/CALL•PRIO] one or more times.
  - To return to VFO mode, press [V/MHz•SCAN].







"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 [BAND] to select the desired call channel in the main Band. To cancel, press [MR•CALL] to return to Memory mode, or press [VFO/LOCK] to return to VFO mode.

# **Operating through a Repeater**

Normally, you will operate the IC-208H through repeater frequencies that have been pre-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 pre-programmed. This section instructs you in setting up the IC-208H to operate through a repeater.

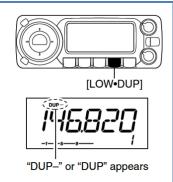
- 1. Activate VFO mode: Press [V/MHz•scan] to activate the VFO mode.
- 2. Select the Frequency Band: See "Selecting a Frequency Band" for instructions.
- 3. **Set the Receive Frequency:** See "Operating in VFO Mode" for instructions. This is the frequency on which your radio receives the repeater's transmissions. (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:

**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-208H will automatically set the shift.

#### To manually set the repeater shift:

Press and hold **[LOW•DUP]** for 1 sec., 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.

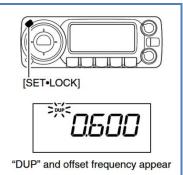


**Example:** Set the 146.940 repeater shift to minus duplex "DUP-". This sets the repeater's receive frequency to 146.340 MHz.

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

**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.

- Press [SET-LOCK] to activate Set mode.
- b. If necessary, rotate [DIAL] to select SET.
- c. Press [SET·LOCK] one or more times until "DUP" and offset frequency appear.
- d. Rotate [DIAL] to select the offset frequency.
- e. Press [TONE•T-SCAN] 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. If necessary, rotate [DIAL] to select SET.
- c. Press [SET-LOCK] one or more times until "T" and "rT" appear.
- d. Rotate [DIAL] to select the subaudible tone frequency.

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

e. Press [TONE•T-SCAN] to set the tone frequency and exit Set mode.



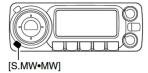
"T" and "rT" appears

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 [S.MW•MW] to activate memory channel programming mode. The M 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 [s.mw•mw] for 1 sec. to program the channel. Three beeps will sound indicating the channel was programmed.



# **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 [M/CALL•PRIO] to activate Memory mode, then rotate [DIAL] to select the Memory channel.
- 2. Press [SET-LOCK] to activate Set mode.
- 3. Press [SET-LOCK] several times until BAK is displayed.
- 4. Rotate [DIAL] to select the desired Memory bank.
- 5. Press [V/MHz•SCAN] to exit Set mode.



Bank's initial blinks

