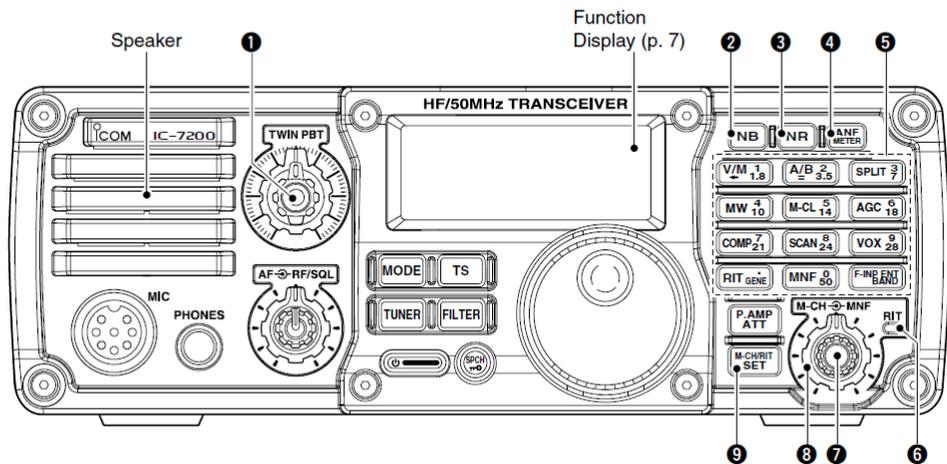


## ■ Front panel

# IC-7200

HF/50 MHz  
TRANSCEIVER  
Quick Reference Manual



### 1. PASSBAND TUNING CONTROLS [TWIN PBT] Adjust the receiver's DSP filter passband width.

- The limit of the variable range depends on the passband width and mode. The limit of the variable range is half of the passband width, and PBT is adjustable in 200 Hz (AM) or 50 Hz (other models) steps.
- Rotate both [TWIN PBT] controls (PBT1 and PBT2) to the same position shifts the IF.

### 2. NOISE BLANKER KEY [NB]

→ Push to turn the noise blanker function ON or OFF.;

**[NB]** appears on the display.

→ Push and hold for 1 sec to enter the noise blanker set mode for setting the noise blanker level and return to normal operation.

- When entering the noise blanker set mode, the noise blanker function is automatically turned ON.

### 3. NR KEY [NR]

→ Push to turn the noise reduction function ON or OFF.;

**[NR]** appears on the display.

→ Push and hold for 1 sec. to enter the noise reduction level set mode; push again to return to normal operation.

- When entering the noise reduction set mode, the noise reduction function is automatically turned ON.

### 4. ANF/METER KEY [ANF] METER

→ Push to turn the Automatic Notch Filter function ON or OFF.;

**[ANF]** appears on the display.

→ Push and hold for 1 sec. to toggle the meter function:

PO → SWR → ALC

- **PO** : indicates the relative RF output power.
- **SWR** : indicates the SWR over the transmission line.
- **ALC** : Indicates ALC level.

### 5. KEYPAD

### 6. RIT CONTROL INDICATOR

Lights orange when **[M-CH]** control (7) acts as the RIT control.

### 7. M-CH/RIT CONTROL [M-CH] (inner control)

→ While in the set mode/quick set mode, rotate to select the set mode item.

→ This control can act as the memory channel control or RIT control.

- The RIT function should be turned ON in advance to activate this control as RIT control.
- **[RIT]** appears when the RIT function is turned ON.
- The RIT control indicator (6) lights orange when this control is activated as the RIT control.

→ **During [M-CH] acting as the M-CH control:**

- Rotate to select a memory channel.

↳ **During [M-CH] acting as RIT control:**

Rotate to shift the receive frequency.

- Rotate the control clockwise to increase the frequency, or rotate the control counterclockwise to decrease the frequency.
- The shift frequency range is +/- 9.999 kHz in 1 Hz steps or +/- 9.99 kHz in 10 Hz steps.

• About the [M-CH] control:

|                             |            |                                   |                                    |
|-----------------------------|------------|-----------------------------------|------------------------------------|
|                             |            | RIT control indicator (6 on p. 2) |                                    |
|                             |            | Lights                            | OFF                                |
| [RIT] indicator (6 on p. 8) | Appears    | Acts as the RIT control           | Acts as the memory channel control |
|                             | Disappears | N/A                               |                                    |

**8. MANUAL NOTCH FILTER CONTROL [MNF] (outer control)**

Rotate to adjust the notch filter frequency to reject an interfering signal while the manual notch function is ON.

- The filter width can be set to narrow, middle or wide in the manual notch filter set mode accessed by push and hold the **[MNF 50]** button for more than 1 Second. Push it again to exit notch filter set mode.

**9. M-CH/RIT-SET KEY** **[M-CH/RIT SET]**

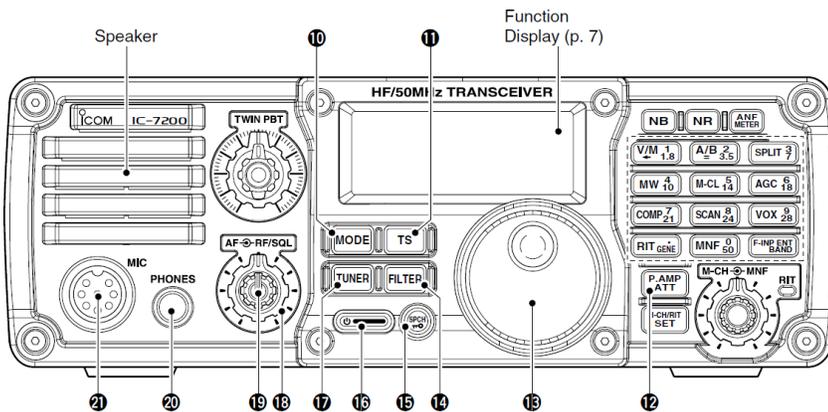
↳ Push to toggle the [M-CH] control activation between memory channel control and RIT control.

- The RIT function should be turned ON in advance.
- The RIT control indicator (6) lights orange when the [M-CH] control functions as the RIT control.

↳ Push and hold for 1 sec. to enter the quick set mode.

↳ During quick set mode, push and hold for 1 sec. to enter the set mode.

↳ During quick set mode or set mode, push to return to normal operation.



**10. MODE KEY** **[MODE]**

↳ Push momentarily to cycle through the operating modes:

USB/LSB → CW/CW-R → RTTY/RTTY-R → AM

↳ Push and hold for 1 sec. to toggle the following operating modes:

USB ↔ LSB; CW ↔ CW-R (Reverse);  
RTTY ↔ RTTY-R (Reverse)

- “CW-R” or “RTTY-R” appears on the display when reverse mode is selected. *Note: Unused modes can be inhibited in set mode.*

**11. TUNING STEP KEY** **[TS]**

↳ Push to turn the programmable tuning step ON or OFF.

- “▼” appears above the 1 kHz indicator when the programmable tuning step is turned ON and the frequency can be changed in programmed kHz steps.

↳ While the programmable tuning step is turned ON (“▼” appears), push and hold for 1 sec. to enter tuning step set mode; push again to return to normal operation.

- 0.1, 1, 5, 9 and 10 kHz programmable tuning steps are available.

↳ While the programmable tuning step is turned OFF, push and hold for 1 sec. to turn the 1 Hz step ON and OFF.

- 1 Hz indication appears, and the frequency can be changed in 1 Hz steps.

**12. REAMP/ATTENUATOR KEY** **[P.AMP ATT]**

↳ Push to turn the preamp ON or OFF.

- “**[P.AMP]**” appears on the display.

↳ Push and hold for 1 sec. to turn the 20 dB attenuator ON; “**[ATT]**” appears on the display.

- Push momentarily to turn the attenuator OFF.

**13. MAIN DIAL [DIAL]**

Changes the displayed frequency and selects values for selected set mode items, etc.

#### 14. FILTER KEY FILTER

- ↳ Push momentarily to cycle the IF filter settings between wide, middle and narrow for the selected operating mode.
- ↳ Push and hold for 1 sec. to enter the filter set mode.

#### 15. SPCH•LOCK KEY SPCH LOCK

- ↳ Push to announce the selected frequency and S-meter level by the speech synthesizer.
  - The parameters to be announced can be selected in the set mode.
- ↳ Push and hold for 1 sec. to turn the dial lock function ON or OFF.
  - The dial lock function electronically locks the main dial.
  - **LOCK** " appears while the dial lock function is ON.

#### 16. POWER KEY ⏻

- ↳ Push to turn power ON. (*Turn the DC power supply ON in advance.*)
- ↳ Push and hold for 1 sec. to turn power OFF.

#### 17. TUNER KEY TUNER

- ↳ Push to turn the automatic antenna tuner function ON or OFF.
  - An optional antenna tuner must be connected.
  - **TUNE** appears on the display.
- ↳ Push and hold for 1 sec. to manually tune the antenna tuner.
  - An optional antenna tuner must be connected.
  - When the tuner cannot tune the antenna, the tuning circuit is bypassed automatically after 20 sec.

#### 18. RF GAIN/SQUELCH CONTROL RF/SQL

- ↳ Adjusts the RF gain and squelch threshold level.
- ↳ The squelch removes noise output from the speaker (closed condition) when no signal is received.
  - The squelch is available for all modes.
  - The control can be set as the squelch plus RF gain controls, squelch control only (RF gain is fixed at maximum) or Auto (RF gain control in SSB, CW and RTTY; squelch control in AM) in set mode:



| MODE            | SET MODE SETTING |     |               |
|-----------------|------------------|-----|---------------|
|                 | AUTO             | SQL | RF + SQL      |
| SSB, CW<br>RTTY | RF GAIN          | SQL | RF GAIN + SQL |
| AM              | SQL              | SQL | RF GAIN + SQL |

#### 19. AF CONTROL AF

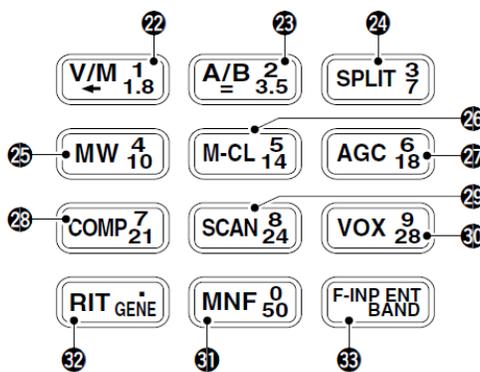
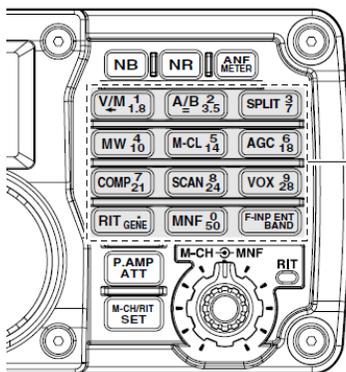
- ↳ Varies the audio output level from the speaker.

#### 20. HEADPHONE JACK PHONES

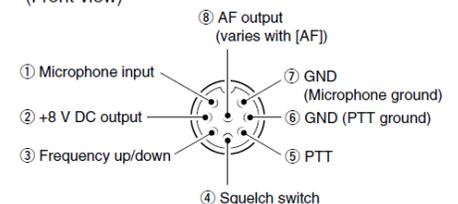
- ↳ Accepts headphones with 8–16 Ω impedance.
  - Output power: 5 mW with an 8 Ω load.
  - When headphones are connected, no receive audio comes from the speaker.

#### 21. MICROPHONE CONNECTOR MIC

- ↳ Accepts supplied or optional microphone.



#### • MICROPHONE CONNECTOR (Front view)



## 22. VFO/MEMORY/1/1.8 MHz BAND KEY

- V/M** ↪ Push to toggle the operating mode between VFO mode or memory mode.
- ↪ Push and hold for 1 sec. to copy the memory contents to VFO.
- 1**  
**1.8** ↪ Push **F-INP ENT BAND**, then push this key to input the number '1.'
- ↪ Push and hold **F-INP ENT BAND** for 1 sec., then push this key to select the 1.8 MHz band.

## 23. VFO SELECT/EQUALIZATION/2/3.5 MHz BAND KEY

- A/B** ↪ Push to toggle between VFO A and VFO B.
- ↪ Push and hold for 1 sec. to equalize the frequency and operating mode of the two VFO's.
- The undisplayed VFO frequency and operating mode are set the same as the displayed VFO frequency and operating mode.
- 2**  
**3.5** ↪ Push **F-INP ENT BAND**, then push this key to input the number '2.'
- ↪ Push and hold **F-INP ENT BAND** for 1 sec., then push this key to select the 3.5 MHz band.

## 24. SPLIT/3/7 MHz BAND KEY

- SPLIT** ↪ Push to toggle the split function ON and OFF.
- **SPLIT** appears on the display.
- ↪ Push and hold for 1 sec. to activate the quick split function.
- The VFO B frequency and operating mode are set the same as the VFO A frequency and operating mode.
  - *Note: The quick split function can be turned OFF in the set mode.*
- 3**  
**7** ↪ Push **F-INP ENT BAND**, then push this key to input the number '3.'
- ↪ Push and hold **F-INP ENT BAND** for 1 sec., then push this key to select the 7 MHz band.

## 25. MEMORY WRITE/4/10 MHz BAND KEY

- MW** ↪ Push and hold for 1 sec. to store the displayed VFO frequency and mode into the selected memory channel.
- 4**  
**10** ↪ Push **F-INP ENT BAND**, then push this key to input the number '4.'
- ↪ Push and hold **F-INP ENT BAND** for 1 sec., then push this key to select the 10 MHz band.

## 26. MEMORY CLEAR/5/14 MHz BAND KEY

- M-CL** ↪ Push and hold for 1 sec. to clear the displayed memory channel contents in memory mode.
- **BLANK** appears above the memory channel number.
- ↪ Push and hold for 1 sec., to select a default condition or value when in set mode/quick set mode.
- 5**  
**14** ↪ Push **F-INP ENT BAND**, then push this key to input the number '5.'
- ↪ Push and hold **F-INP ENT BAND** for 1 sec., then push this key to select the 14 MHz band.

## 27. AGC/6/18 MHz BAND KEY

- AGC** ↪ Push to toggle the time constant for the AGC circuit fast and slow.
- **F.AGC** appears on the display when fast AGC is selected; no indication appears when slow AGC is selected.
- ↪ Push and hold for 1 sec. to turn the AGC function OFF. (**AGC-OFF** appears on the display.)
- 6**  
**18** ↪ Push **F-INP ENT BAND** then push this key to input the number '6.'
- ↪ Push and hold **F-INP ENT BAND** for 1 sec., then push this key to select the 18 MHz band.

## 28. SPEECH COMPRESSOR/7/21 MHz BAND KEY

- COMP** ↪ Push to turn the speech compressor function ON or OFF.
- **COMP** appears on the display.
- ↪ Push and hold for 1 sec. to enter speech compression level set; push again to return to normal operation.
- 7**  
**21** ↪ Push **F-INP ENT BAND**, then push this key to input the number '7.'
- ↪ Push and hold **F-INP ENT BAND** for 1 sec., then push this key to select the 21 MHz band.

### 29. SCAN/8/24 MHz BAND KEY

**SCAN** → Push to start/stop the programmed/memory scan in VFO/memory mode.

- **SCAN** appears on the display during scanning.

**8/24** → Push **F-INP ENT BAND**, then push this key to input the number '8.'

→ Push and hold **F-INP ENT BAND** for 1 sec., then push this key to select the 24 MHz band.

### 30. VOX/9/28 MHz BAND KEY

**VOX** → Push to turn the VOX function ON or OFF.

→ Push and hold for 1 sec. to enter VOX set mode; push again to return to normal operation.

**9/28** → Push **F-INP ENT BAND**, then push this key to input the number '9.'

→ Push and hold **F-INP ENT BAND** for 1 sec., then push this key to select the 28 MHz band.

### 31. MANUAL NOTCH FILTER/0/50 MHz BAND KEY

**MNF** → Push to turn the manual notch filter function ON or OFF.

- **MNF** appears on the display.

→ Push and hold for 1 sec. to enter the manual notch set mode; push again to return to normal operation.

*Note: Before entering the set mode, the manual notch filter function is turned ON.*

**0/50** → Push **F-INP ENT BAND**, then push this key to input the number '0.'

→ Push and hold **F-INP ENT BAND** for 1 sec., then push this key to select the 50 MHz band.

### 32. RIT/\*/GENERAL BAND KEY

**RIT** → Push to turn the RIT (Receiver Incremental Tuning) function ON or OFF.

- **RIT** appears on the display.
- RIT frequency can be adjusted with [M-CH] control when RIT mode is selected.

→ Push and hold for 1 sec. to add the RIT shift frequency to the operating frequency.

• *Note: Available only when the XFC (transmit frequency check function) is turned OFF.*

**GENE** → Push **F-INP ENT BAND**, then push this key to input the number '\*' (decimal point).'

→ Push and hold **F-INP ENT BAND** for 1 sec., then push this key to select the general coverage band.

### 33. FREQUENCY INPUT/ENTER/BAND KEY

**F-INP ENT BAND** → Push to enter the direct frequency input condition.

→ Push and hold for 1 sec., then push a key on the keypad to select the operating band.

*Note: **GENE** selects the general coverage band.*

#### ◇ About 5 MHz band operation (USA version only)

Operation on the 5 MHz band is allowed on 5 discrete frequencies and must adhere to the following:

- USB mode
- Maximum of 50 watts ERP (Effective Radiated Power)
- 2.8 kHz bandwidth

It is the operator's responsibility to set all controls so that the transmission in this band meets the stringent conditions under which we may use these frequencies.

**NOTE:** We recommend that you store these frequencies, mode and filter settings into the memory channel for easy recall.

| IC-7200 Display Frequency* | FCC Channel Center Frequency* |
|----------------------------|-------------------------------|
| 5.33050 MHz                | 5.33200 MHz                   |
| 5.34650 MHz                | 5.34800 MHz                   |
| 5.36650 MHz                | 5.36800 MHz                   |
| 5.37150 MHz                | 5.37300 MHz                   |
| 5.40350 MHz                | 5.40500 MHz                   |

\*The channel center frequencies that are specified by the FCC, show the center frequency of their passband. However, the IC-7200 displays carrier point frequency, so set 1.5 kHz below from FCC channel center frequency.

To assist you in operating the 5 MHz band correctly within the rules specified by the FCC, transmission is impossible on any 5 MHz band frequency other than the 5 frequencies indicated in the table above.

## ■ Quick set mode

| Mode | Set mode item     | Default setting |
|------|-------------------|-----------------|
| SSB  | RF POWER          | 100%            |
|      | MIC GAIN          | 50%             |
|      | DATA MODE         | OFF             |
| CW   | RF POWER          | 100%            |
|      | KEY SPEED         | 20WPM           |
|      | CW PITCH          | 600Hz           |
|      | SIDE TONE LEVEL   | 30%             |
|      | SIDE TONE LIMIT   | ON              |
| RTTY | RF POWER          | 100%            |
|      | TWIN PEAK FILTER  | OFF             |
|      | RTTY MARK TONE    | 2125Hz          |
|      | RTTY SHIFT        | 170Hz           |
|      | RTTY KEY POLARITY | NORMAL          |
| AM   | RF POWER          | 100%            |
|      | MIC GAIN          | 50%             |
|      | DATA MODE         | OFF             |

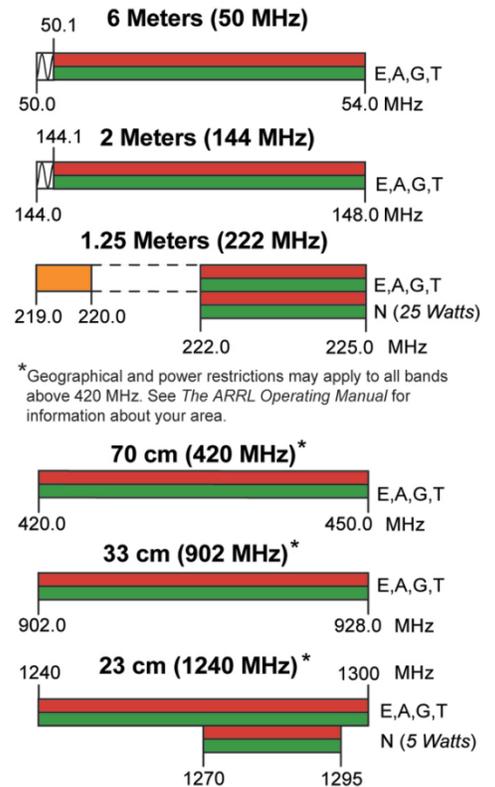
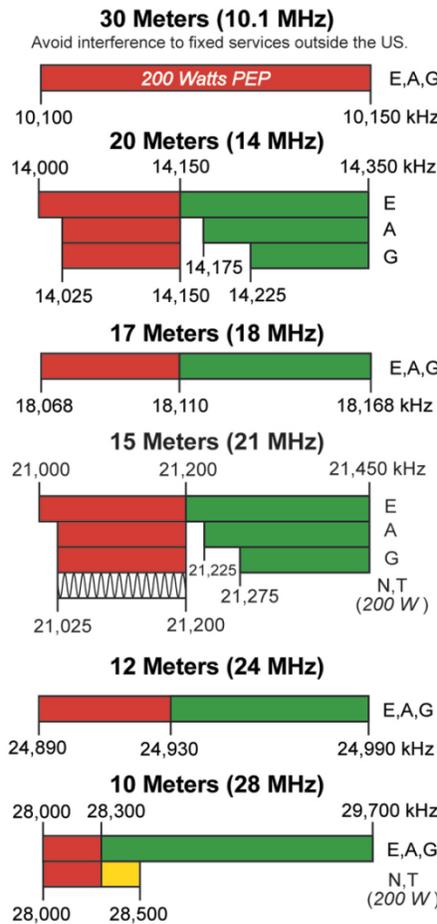
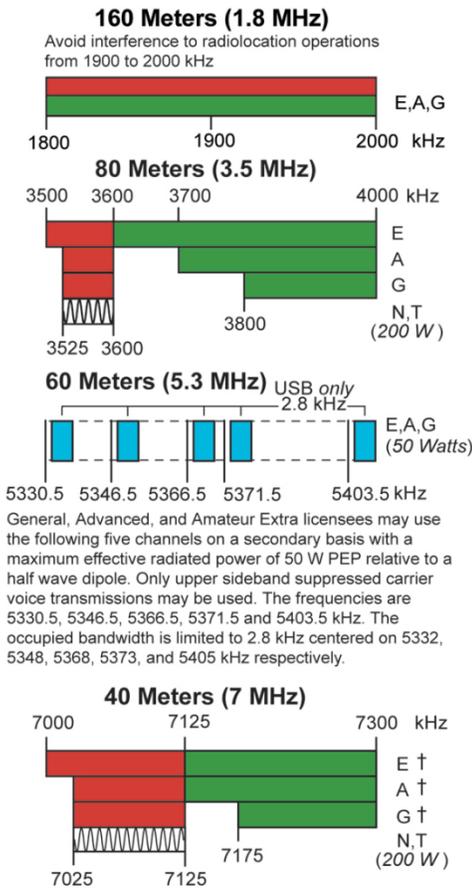
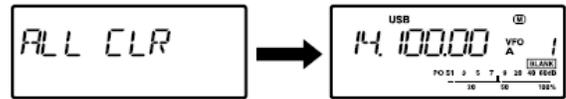
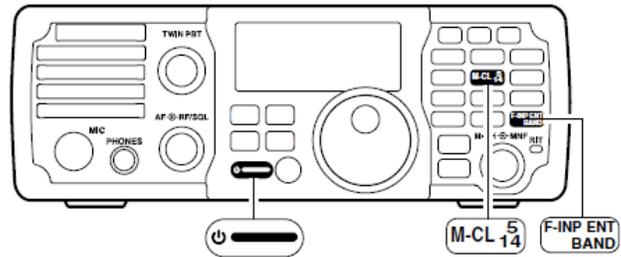
## ■ Set mode

| Set mode item               | Default setting | Set mode item                  | Default setting                                    |
|-----------------------------|-----------------|--------------------------------|--|
| LCD BACKLIGHT               | HIGH            | SCAN RESUME                    | ON   |
| BEEP                        | ON              | MAIN DIAL AUTO TS              | HIGH   |
| BAND EDGE BEEP              | ON              | DIAL ¼                         | OFF  |
| BEEP LEVEL                  | 50%             | MIC UP/DOWN SPEED              | HIGH   |
| BEEP LEVEL LIMIT            | ON              | SSB/CW SYNCHRONOUS TUNING      | OFF  |
| RF/SQL CONTROL              | RF + SQL        | CW NORMAL SIDE                 | LSB  |
| METER PEAK HOLD             | ON              | BREAK-IN                       | OFF  |
| QUICK SPLIT                 | ON              | BREAK-IN DELAY                 | 7.5 DOTS   |
| SPLIT LOCK                  | OFF             | DOT/DASH RATIO                 | 1:1:3.0  |
| XFC                         | OFF             | PADDLE POLARITY                | NORMAL   |
| AUTO TUNE                   | OFF             | KEYER TYPE                     | ELEC-KEY   |
| PTT TUNE                    | OFF             | MIC UP/DOWN KEYER              | OFF  |
| MODULATION INPUT (DATA OFF) | MIC/ACC         | MODE SELECT (SSB)              | ON   |
| MODULATION INPUT (DATA ON)  | ACC             | MODE SELECT (CW)               | ON   |
| USB LEVEL                   | 50%             | MODE SELECT (RTTY)             | ON   |
| SPEECH LEVEL                | 50%             | MODE SELECT (AM)               | ON   |
| SPEECH LANGUAGE             | ENGLISH         | CI-V BAUD RATE                 | AUTO   |
| SPEECH SPEED                | HIGH            | CI-V ADDRESS                   | 76H  |
| SPEECH S-LEVEL              | ON              | CI-V TRANSCEIVE                | ON   |
| SPEECH [MODE] KEY           | OFF             | REFERENCE FREQUENCY ADJUSTMENT | Default setting is different for each transceiver. |
| SCAN SPEED                  | HIGH            |                                |  |

# Resetting the CPU

- Make sure the transceiver power is OFF.
- While pushing and holding **F-INP ENT BAND** and **M-CL**, push **POWER** to turn power ON.
  - The internal CPU is reset, and all memory data are cleared.
  - The transceiver displays its initial VFO frequencies when resetting is complete.
- All quick set mode/set mode settings are returned to default values. (p. 70)

Resetting **CLEARs** all programmed contents in memory channels and returns default values in quick set mode/set mode.



\*Geographical and power restrictions may apply to all bands above 420 MHz. See The ARRL Operating Manual for information about your area.

All licensees except Novices are authorized all modes on the following frequencies:

|               |                |                   |
|---------------|----------------|-------------------|
| 2300-2310 MHz | 10.0-10.5 GHz  | 122.25-123.0 GHz  |
| 2390-2450 MHz | 24.0-24.25 GHz | 134-141 GHz       |
| 3300-3500 MHz | 47.0-47.2 GHz  | 241-250 GHz       |
| 5650-5925 MHz | 76.0-81.0 GHz  | All above 275 GHz |

**Key:** ■ = RTTY and data ■ = phone and image ■ = CW ■ = SSB phone ■ = USB phone ■ = Fixed digital message