

## FT-3DR

### Setting a Maximum Transmit Time (TOT)

Press **[DISP] 1 Sec → CONFIG → 20 TOT → [DIAL]** to select **OFF** (no TX inhibit), or a maximum time of **0.5—10** minutes. (3 minutes is the default setting.)

① As a reminder, a series of beeps sounds 10 seconds before TOT times out.

### Brightness Setting

**[DISP] → [DISPLAY] → 6 LCD DIMMER → LEVEL 1-6.**

### Display Backlit Time

**[DISP] → [DISPLAY] → 4 LAMP → KEY: Off** – Continuous, **SAVE:** Off-display drops to Dimmer 1 after timer expires, **ON**-display turns off after timer expires.

**[BACK]** to save and exit.

### Display Battery Voltage

Press **[DISP] 1 Sec → DISPLAY → 8 SENSOR INFO → LIT = Battery, DRY = Battery Pack, EXT = External Power**

### Activating the White LED / Flashlight

1. Press **[F MW]** then **[LED LIGHT]** to turn on the light.
2. Press **[LED LIGHT]** again to extinguish the LED.

### Mono or Dual Receive

#### Mono Receive

When both A Band and B bands are displayed, use **[A/B]** to select either frequency, press **[A/B] 1 Sec**, only one frequency should be displayed. The HT will only receive that frequency/channel.

#### Dual Receive

Press **[A/B] 1 Sec**, HT will return to dual receive/display

### Display Memory Tag

Only the Operating Band will display the Memory Tag

Touch and hold **1 Sec** onto the **VFO** directly on the touchscreen, the Memory Tag should be displayed in the upper left corner of the display.

The Sub Band only displays the Memory Tag when that band is selected.

### Band Scope

In **VFO Mode**, **[F/MW] → SCOPE**, Scope should be displaying, you can touch to select the band scope width. 79 Channels, 39 channels, or 19 channels. Use **[DIAL]** to change frequencies as you monitor the scope

### Simplex Operations

#### Step 1 - Automatic Repeater Shift (set to OFF & SIMPLEX)

**[DISP] → [CONFIG] → 14 RPT ARS → OFF** (for simplex) **→ [BACK] → 15 RPT SHIFT → +, -, SIMPLEX**

#### Step 2 - Squelch Type (set to OFF)

**[F/MW] → SQTYP → 11 SQL TYPE** > Select **OFF** (**OFF**, TONE, TONE SQL, DCS, REV TONE, PR FREQ, PAGER)

[PTT] or [BACK] to exit

### Step 3 - Enter Simplex Frequency

Press [V/M] to go to **VFO Mode**, when frequency is displayed, turn [DIAL] to desired frequency, or touch the touchscreen directly on the displayed frequency, and the manual entry screen should appear. Enter in your desired frequency. When you are finished, the HT should switch back to the home screen and your frequency should be displayed.

## Repeater Operations

### Step 1 - Select A or B Band

Press [A/B] to select which band you want to program, Press [V/M] to go to **VFO Mode**, frequency should be displayed

### Step 2 - Automatic Repeater Shift (set to ON & TONE)

Press [DISP] 1 Sec to go to **SetMode** screen, → **CONFIG** → **14 RPT ARS** → **ON**. [BACK] to exit.

(This should automatically select + or – repeater shift)

### Step 3 - Select Squelch Type

[F/MW] → **SQTY** → **11 SQL TYPE** > Select **TONE** (OFF, **TONE**, TONE SQL, DCS, REV TONE, PR FREQ, PAGER). [BACK] to exit.

### Step 4 - Select CTCSS Tone

[F/MW] → **CODE** → **12 TONE SQL FREQ**, Select CTCSS tone using [DIAL], [BACK] to exit.

## APRS

### Step 1 - Setting APRS Callsign and SSID

Press [DISP] 1 Sec → **APRS** → **23 CALLSIGN (APRS)** → Enter Callsign including SSID (**HT-7**, **Vehicle/Mobile-9**) [BACK] to save and exit.

### Step 2 - Select Symbol

Press [DISP] 1 Sec → **APRS** → **25 MY SYMBOL** → [DISP] → [DIAL] to select **ICON 1- PERSON**, **2-BICYCLE**, **3-AUTOMOBILE**, **4-RADIO** OR press [DISP] again and select from numerous Icons. [BACK] to save and exit.

### Step 3 - Setting the APRS Frequency

#### 144.390 mHz on the B Band (Lower Band)

Go to **VFO Mode** on the **B Band**, use [DIAL] or press VFO on touchscreen and manually enter **144.390 mHz**

### Step 4 - Turning on the GPS

#### A – Turn on GPS Power

Press [DISP] 1 Sec → **APRS** → **20 GPS POWER** → [DIAL] to select **GPS ON**. [BACK] to exit to **APRS** menu.

#### B – Enter GPS Location

**APRS** → **24 MY POSITION** → [DIAL] to select **GPS** (GPS will find your position automatically), or **MANUAL** (input your location manually).

#### C – Turn on APRS Modem

**APRS** → **4 GPS MODEM** → [DIAL] to select **1200bps**. [BACK] to **APRS** menu

#### D – Silence APRS Beep (Optional)

**APRS → 8 APRS MUTE → [DIAL]** to select ON. **[BACK]** to exit  
**E – Select Beacon Interval**

**APRS → 14 BEACON INTERVAL → [DIAL]** to select: 30 sec, 1 min, 2 min, 3 min, 5 min, 10 min, 15 min, 20 min, 30 min, 60 min.

*(Everyone is using the same frequency. The more often you send out packets, the more it clutters everyone else's unit. Use only what you need. Possible 10 min when you are driving, 2 Min if you are walking)*

## **WX, VHF Marine and Short Wave Reception**

### **NOAA Weather Broadcast Reception**

Select the A Band. Press **[A/B] → [F MW] → [P.RCVR] → [BAND]** repeatedly to select the **WX CH** memory bank. Rotate **[DIAL]** to select one of the ten weather channels.  
To return to normal operation, touch **[F MW]** then **[P.RCVR]**.

### **International VHF Marine Channels Reception**

Select the A Band. Press **[A/B] → [F MW] → [P.RCVR] → [BAND]** repeatedly to select the **INTVHF** memory bank. Rotate **[DIAL]** to select a desired VHF marine frequency.  
To return to normal operation, touch **[F MW]** then **[P.RCVR]**.

### **Pre-set Short Wave Frequencies Reception**

*\* Short wave reception generally requires connecting to a large antenna \**

Select the A Band. Press **[A/B] → [F MW] → [P.RCVR] → [BAND]** repeatedly to select the **SW** memory bank. Rotate **[DIAL]** to select a desired short wave frequency.  
To return to normal operation, touch **[F MW]** then **[P.RCVR]**.

## **AM / FM Broadcast Reception**

### **Listening to AM/FM Broadcast Frequencies in VFO mode**

1. If necessary, press **[A/B]** to set Band-A as the operating band
2. If necessary, press **[V/M]** to select VFO mode.
3. Press **[BAND]** as required to step through the bands and select either **AM** or **WFM**
4. Tune using the **[DIAL]** Or to scan, touch **[F MW]** and **[SCAN]**.

### **Listening to AM/FM Broadcasts while Monitoring for Ham Band Activity**

1. Set Bands A & B to monitor the desired ham bands or other VHF / UHF frequencies that you might want to monitor.
2. Touch **[F MW]** then **[A.DUAL]** to enable AF-DUAL operation.  
*\*LCD will display a broadcast band frequency and 2 VFO's for ham/ VHF/ UHF, thus showing three frequencies on the screen\**
3. To return to normal operation, touch **[F MW]** then **[A.DUAL]** again.

## **Using Memory Banks**

### **Recalling Memory Channels in Memory Bank Mode**

1. If in VFO mode, press **[V/M]** to enter Memory Mode.
2. Touch **[F MW]** and then **[BANK]** to enter Memory Bank Mode.

*\*The MR indicator is replaced with one of the Memory Bank numbers: B1-B24. Only active banks show\**

3. To select a different bank, press the **[BAND]** key and then rotate **[DIAL]**.
4. Once the desired band has been selected, press the **[BAND]** key again.
5. Now rotate **[DIAL]** to select from channels assigned to the selected Bank.

## Scanning

### VFO Scanning

1. If necessary, press **[V/M]** for VFO mode, press **[BAND]** for the desired band.
2. To select how much to scan, access **SetMenu SCAN → 5 SCAN WIDTH → VFO** and rotate **[DIAL]** to select one of the following:
  - **BAND** Scans the currently selected band
  - **ALL** Sweeps all frequencies covered by Band-A or Band-B.
3. Touch **[F MW]** and then **[SCAN]** to start scanning.
4. To cancel scanning, press **[PTT]** or touch **[STOP]**

### Scanning Memory Channels

1. If necessary, press **[V/M]** to select **MR** mode.
2. Touch **[F MW]** and then **[SCAN]** to start scanning.
3. To cancel scanning, press **[PTT]** or touch **[STOP]**.

### Scanning only the Channels within a Memory Bank

① When a Memory Bank has been enabled, scanning will occur as described above, except only memories that are in the currently selected Memory Bank will be scanned. See page 7 for how to select Memory Banks and how to add channels to a Memory Bank.