BASIC OPERATION: RECEIVING ON AMATEUR BANDS

OPERATION ON 60-METER (5 MHz) BAND (U.S. AND U.K. VERSION ONLY)

The recently-released 60-meter band is covered, in the **FT DX 3000**, by fixed memory channels. These channels are set to USB, and they appear between the "last" PMS channel ("P9U") and the first "regular" memory channel (Channel 1):

1. Press the [**V/M**] button once to enter the "Memory" mode; the "**MCH**" icon will appear in the display and a memory channel number will appear on the display.

    ADVICE:

    If you can not enter the "Memory" mode, check to see if the transceiver is in VFO-B mode (the green [(**VFO-B**)**RX**] Indicator/Switch is illuminated). If so, press the [(**VFO-A**)**RX**] Indicator/Switch to return operation to VFO-A. Now, press the [**V/M**] button to enter the "Memory" mode.

2. Press the [**MCH**] button located on the bottom right of the [**CLAR/VFO-B**] knob. The LED imbedded in the button will glow orange to signify that rotation of the [**CLAR/VFO-B**] knob will allow selection of the memory channel.

3. Memory channels ("5M-01" through "5M-10") are pre-programmed, at the factory, with the permitted frequencies in the 5 MHz band, and the USB mode is automatically selected on these channels.

4. To exit from 60-meter operation and return to the VFO mode, just press the [**V/M**] button.

NOTE:

The frequencies and operating mode for 5 MHz band operation are fixed, and may not be changed.

[VFO-A(RX)] Button [CLAR/VFO-B] Knob
[VFO-B(RX)] Button
Main Tuning Dial Knob [MCH] Button
[V/M] Button
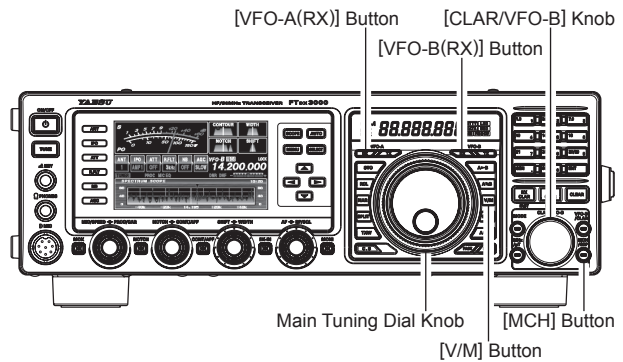
CHANNEL NUMBER	FREQUENCY
5M-01	5.332000 MHz
5M-02	5.348000 MHz
5M-03	5.358500 MHz
5M-04	5.373000 MHz
5M-05	5.405000 MHz
5M-06	5.332000 MHz
5M-07	5.348000 MHz
5M-08	5.358500 MHz
5M-09	5.373000 MHz
5M-10	5.405000 MHz

CLAR (CLARIFIER) OPERATION

The [**RX CLAR**], [**TX CLAR**], [**CLEAR**] buttons and [**CLAR/VFO-B**] knob are used to offset the receive frequency, the transmit frequency, or both, from their settings on the VFO-A frequency. Four small numbers on the Multi-Display Window show the current Clarifier offset. The Clarifier controls on the **FT DX 3000** are designed to allow you to preset an offset (up to ±9.999 kHz) without actually retuning, and then to activate it via the Clarifier's [**RX CLAR**] and [**TX CLAR**] buttons. This feature is ideal for following a drifting station, or for setting small frequency offsets sometimes utilized in DX "Split" work.

Here is the technique for utilizing the Clarifier:

1. Press the [**RX CLAR**] button. In the Multi-Display Window, the "**RX**" notation will appear, and the programmed offset will be applied to the receive frequency.

2. Rotation of the [**CLAR/VFO-B**] knob will allow you to modify your initial offset on the fly. Offsets of up to ±9.99 kHz may be set using the Clarifier.

To cancel Clarifier operation, press the [**RX CLAR**] button. The "**RX**" notation will disappear from the display.

ADVICE:

❐ Turning the Clarifier off simply cancels the application of the programmed offset from the receive and/ or the transmit frequencies. To clear the Clarifier offset, and reset it to "zero," press the [**CLEAR**] button. The programmed offset is displayed in the small multi-channel window of the frequency display.

❐ You may also activate the clarifier on the VFO-B frequency. In this case, the offset frequency is set using the Main Tuning Dial knob, instead of the [**CLAR/ VFO-B**] knob.

❐ The Clarifier operation (including the offset frequency) will be memorized independently on each VFO stack of VFO-A and VFO-B.

[CLEAR] Button
[TX CLAR] Button
Multi-Display Window [RX CLAR] Button
[CLAR/VFO-B] Knob
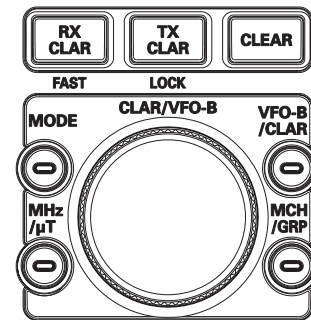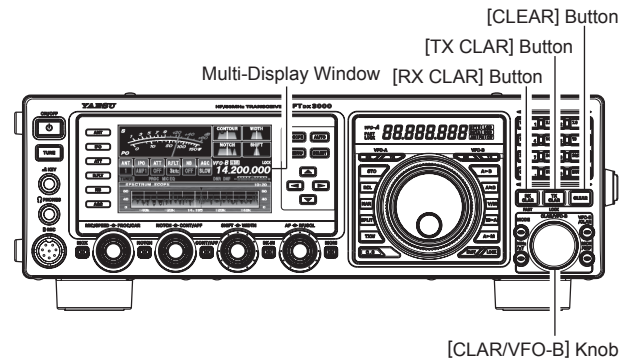
TXCLAR

Alternately, You may apply the Clarifier offset to the transmit frequency, without changing the receive frequency (typically, for "split" DX pile-ups).

The Tuning Offset Indicator provides a graphical representation of the Clarifier offset.

In the factory default setting On CW, the Tuning Offset Indicator is used for CW Center Tuning, instead of Clarifier Offset. If you wish to change this so that the Clarifier Offset is also displayed on CW, use the following procedure:

1. Press and hold in the [**MENU**] button for one second to enter the Menu mode.

2. Rotate the [**CLAR/VFO-B**] knob or ▲/▼ button to select Menu item "011 DISPLAY BAR DISPLAY SELECT".

3. Press the [**SELECT**] button then rotate the [**CLAR/VFO-B**] knob or ▲/▼ button to select "CLAR (Clarifier)" (replacing the default "CW TUNE (CW TUNING)" selection).

4. Press the [**SELECT**] button, then press the [**MENU**] button to save the new setting and exit to normal operation.

[Plus (+) Offset]

[Zero Offset]

[Minus (−) Offset]

[MENU] button [SELECT] button

[▲/▼] Button [CLAR/VFO-B] Knob
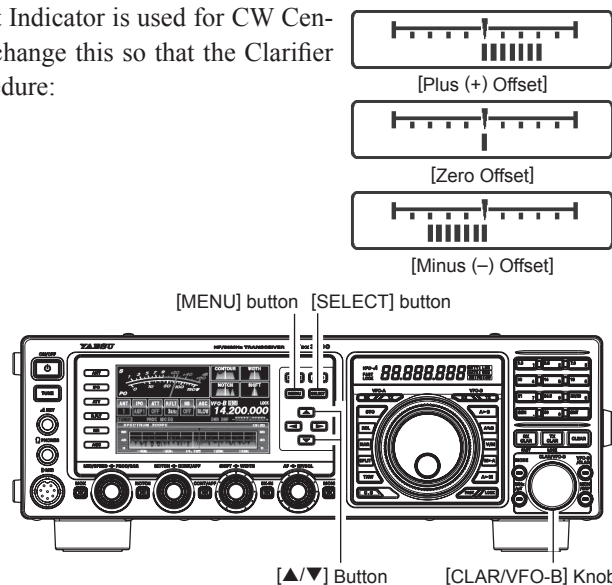
BASIC OPERATION: RECEIVING ON AMATEUR BANDS

LOCK

You may lock the setting of the Main Tuning Dial knob (for VFO-A frequency tuning) and the [**CLAR/VFO-B**] knob (for VFO-B frequency tuning), to prevent accidental frequency change.

Main Tuning Dial knob Lock

To lock the Main Tuning Dial knob, press the [(**VFO-A**) **RX**] Indicator/Switch to illuminate the imbedded green LED, then press the [**LOCK**] button that is located to the right of the Main Tuning Dial knob. To unlock the Dial setting, and restore normal tuning, press the [**LOCK**] button once more.

[CLAR/VFO-B] knob Lock

To lock the [**CLAR/VFO-B**] knob, press the [**VFO-B**/ **CLAR**] button that is located to the right of the [**CLAR/ VFO-B**] knob. Indicator/Switch to illuminate the imbedded orange LED, then press the [**TX CLAR (LOCK)**] button that is located to the top of the [**CLAR/VFO-B**] knob. To unlock the [**CLAR/VFO-B**] knob, and restore normal tuning, press the [**TX CLAR (LOCK)**] button once more.

ADVICE:

The lock feature will be memorized independently on each Main Tuning Dial knob and the [**CLAR/VFO-B**] knob.

[TX CLAR(LOCK)] Button

[LOCK] Button

[VFO-B/CLAR] Button
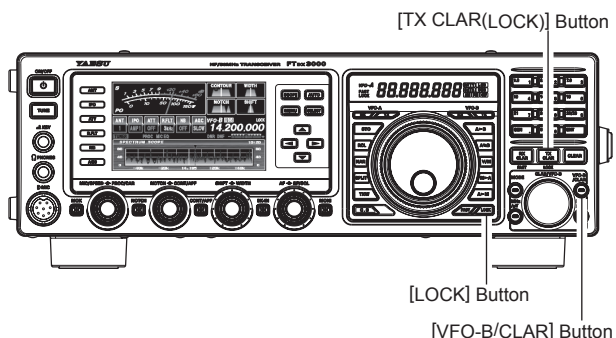
DIMMER

The illumination level of the display may be adjusted via Menu item "005 DISP DIM VFD".
To adjust the illumination level:

1. Press and hold in the [**MENU**] button for one second to enter the Menu mode.
2. Rotate the [**CLAR/VFO-B**] knob or ▲/▼ button to select Menu item "010 DISPLAY DIMMER TFT".
3. Press the [**SELECT**] button then rotate the [**CLAR/ VFO-B**] knob or ▲/▼ button to select the desired illumination level.
4. Press the [**SELECT**] button, then press the [**MENU**] button to save the new setting and exit to normal operation.

[MENU] button [SELECT] button
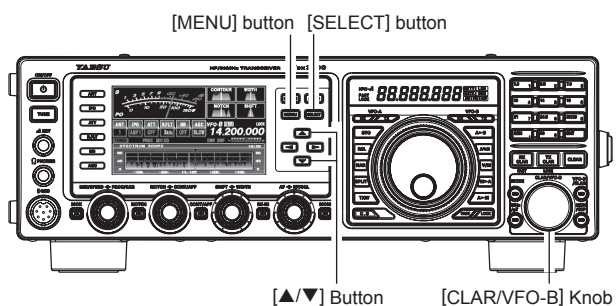
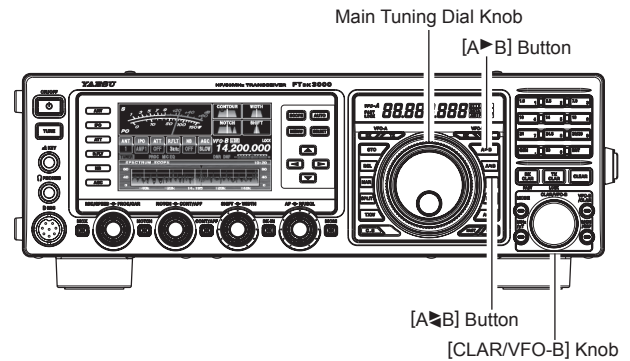[▲/▼] Button   [CLAR/VFO-B] Knob

USING THE VFO-B

VFO-B operates similar to VFO-A, which you should be familiar with by now. However, the [**CLAR/VFO-B**] knob, instead of the Main Tuning Dial knob selects the frequency for VFO-B (See box below for tuning rate). The two VFOs make simple transmit/receive split frequency operation possible. Use various combinations of the four VFO red and green transmit and receive switches to set up split frequency operation. The [**SPLIT**] button also sets up split frequency operation. See page 69 for details about Split-Frequency Operation.

The frequency and mode data can be transferred from VFO-A to VFO-B by pressing the [**A►B**] button, don't forget that this will overwrite any settings that were in VFO-B previously. Also, the contents of the two VFOs can be swapped (with no loss of data) by pressing the [**A►◄B**] button.

Most of the interference reduction features, which are described later, can also be used on VFO-B.

Two things you cannot do with VFO-B that you can do with VFO-A, are store the contents of VFO-B directly into a memory, and set the Clarifier offset. For these functions you need to swap the VFO-B with the VFO-A by pressing the [**A►◄B**] button, then store the contents into the memory or set the Clarifier.

Main Tuning Dial Knob
[A►B] Button

[A►◄B] Button
[CLAR/VFO-B] Knob

[CLAR/VFO-B] KNOB TUNING RATE

OPERATING MODE	1 STEP NORMAL [FAST]	1 DIAL ROTATION NORMAL [FAST]
LSB/USB/CW/AM/ RTTY/PKT(LSB)	10 Hz [100 Hz]	2 kHz [20 kHz]
FM/PKT(FM)	100 Hz [1 kHz]	20 kHz [200 kHz]

[ ] : [**FAST**] switch set to "ON"

ADVICE:

It is possible to set the frequency change over one dial rotation, separately for the CW mode, using the Menu items "084 TUN DIALSTP" and "085 TUN CW FINE".

NOTE

BAND STACK OPERATION

The **FT DX 3000** utilizes a triple band-stack VFO selection technique, that permits you to store up to three favorite frequencies and modes onto each band's VFO register. For example, you may store one frequency each on 14 MHz CW, RTTY, and USB, then recall these VFOs by successive, momentary presses of the [**14**] MHz band button. Each Amateur band key may similarly have up to three frequency/mode settings applied. Both the VFO-A and VFO-B systems have their own, independent, band stacks.

A typical setup, for the 14 MHz band, might be arranged like this:

1. Program 14.025 MHz, CW Mode, then press the [**14**] MHz band button;
2. Program 14.080 MHz, RTTY Mode, then press the [**14**] MHz band button;
3. Program 14.195 MHz, SSB Mode, then press the [**14**] MHz band button.

With this configuration, successive momentary presses of the [**14**] MHz band button will allow you to step sequentially through these three VFOs.

[BAND] Button
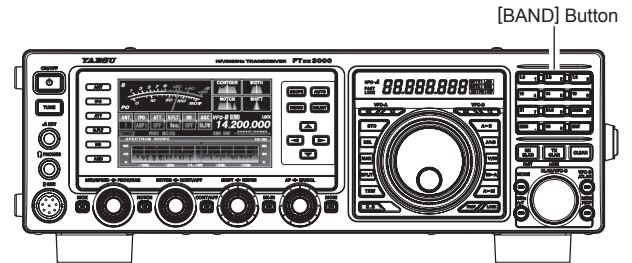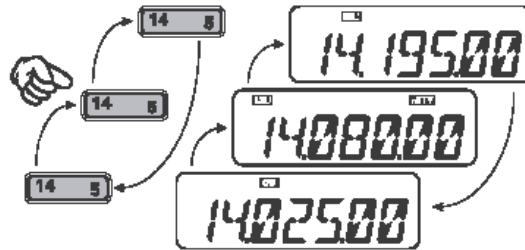
C.S (CUSTOM SWITCH)

The front panel [**C.S**] button may be programmed to directly access an often-used Menu Mode selection.

C.S Setup

1. Press and hold in the [**MENU**] button for one second to engage the Menu mode; the Menu list will appear on the display.
2. Rotate the [**CLAR/VFO-B**] knob or ▲/▼ button to select the Menu item you want to access with the front panel [**C.S**] button.
3. Press the [**C.S**] button to lock in your selection.
4. Press the [**SELECT**] button, then press the [**MENU**] button to save the new configuration and exit to normal operation.

Menu Selection Recall via [C.S] button

Press the [**C.S**] button.

The programmed Menu item will appear on the display. You may now rotate the [**CLAR/VFO-B**] knob to change the setting of this menu item. Press and hold the [**MENU**] button for one second, when you are done, to save the new configuration and exit to normal operation.

[MENU] Button [SELECT] Button

[C.S] Button   [CLAR/VFO-B] Knob