

REPEATER OPERATION

The **FTdx1200** may be utilized on 29 MHz and 50 MHz repeaters.

1. Rotate the Main Tuning Dial knob to the output frequency (downlink) from the repeater.
2. If CTCSS Tone operation is desired/needed, press the **▲/▼/◀/▶** button to select “TONE”, then press the **[SELECT]** button to engage the CTCSS mode.
3. Press the **[SELECT]** button to select the desired CTCSS mode. If you just need to send the uplink encoding tone, select “ENC.” For encode/decode operation, choose “T.SQL” instead. The available choices are

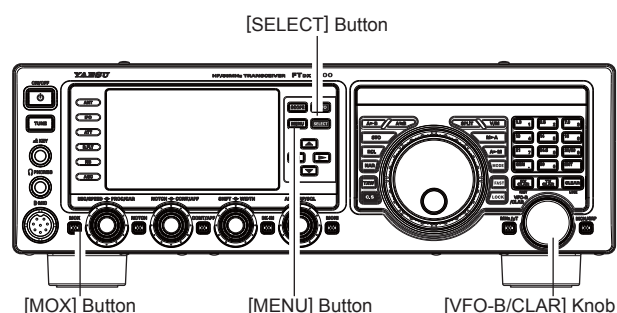
“OFF” → “ENC (Tone Encoder)”

→ “T.SQL (Tone Squelch)” → “OFF”

4. Press and hold in the **[SELECT]** button to enter the Menu item “088 TONE FREQ”.
5. Press the **[SELECT]** button, then rotate the **[VFO-B/CLAR]** knob (or press the **▲/▼** button) to select the desired CTCSS Tone to be used. A total of 50 standard CTCSS tones are provided (see the CTCSS Tone Chart).
6. Press the **[SELECT]** button, then press the **[MENU]** button to save the new settings and exit.
7. Press the **▲/▼/◀/▶** button to select “RPT”, then press the **[SELECT]** button to select the desired repeater shift direction. The selections are:
“SIMP” → “+” → “-” → “SIMP”
where “SIMP” represents “Simplex” operation (not used on a repeater).
8. Close the microphone **PTT** switch (or press the **[MOX]** button) to begin transmission. You will observe that the frequency has shifted to correspond to the programming you set up in the previous steps, and a “t” notation will appear on the “10 Hz” frequency digit while transmitting. Speak into the microphone in a normal voice level. Release the **PTT** switch or **[MOX]** button to return to the receive mode.

ADVICE:

- The Repeater operation will be memorized independently on each VFO stack of VFO-A and VFO-B.
- The conventional repeater shift used on 29 MHz is 100 kHz, while on the 50 MHz band the shift may vary between 500 kHz and 1.7 MHz (or more). To program the proper repeater shift, use Menu items “086 RPT SHIFT (28MHz)” (28 MHz) and “087 RPT SHIFT (50MHz)” (50 MHz), as appropriate.



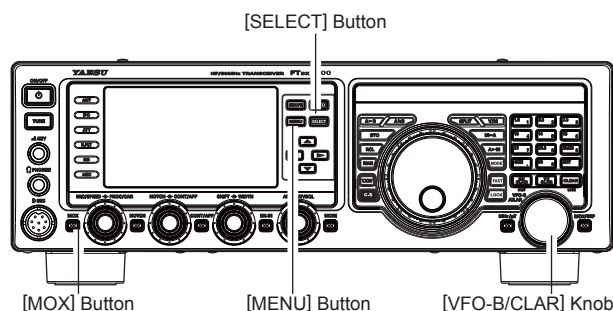
CTCSS TONE FREQUENCY (Hz)							
67.0	69.3	71.9	74.4	77.0	79.7	82.5	85.4
88.5	91.5	94.8	97.4	100.0	103.5	107.2	110.9
114.8	118.8	123.0	127.3	131.8	136.5	141.3	146.2
151.4	156.7	159.8	162.2	165.5	167.9	171.3	173.8
177.3	179.9	183.5	186.2	189.9	192.8	196.6	199.5
203.5	206.5	210.7	218.1	225.7	229.1	233.6	241.8
250.3	251.4	-	-	-	-	-	-

FM MODE OPERATION

TONE SQUELCH OPERATION

You may also use “Tone Squelch” whereby your receiver will be kept silent until an incoming signal modulated with a matching CTCSS tone is received. The receiver squelch will then open in response to the reception of the required tone.

1. Rotate the Main tuning Dial to the output frequency (downlink) from the repeater.
2. If CTCSS Tone operation is desired/needed, press the ▲/▼/◀/▶ button to select “TONE”, then press the **[SELECT]** button to engage the CTCSS mode.
3. Press the **[SELECT]** button to choose “T.SQL” from the available choices of
 “OFF” → “ENC (Tone Encoder)”
 → “T.SQL (Tone Squelch)” → “OFF”
4. Press and hold in the **[SELECT]** button to enter the Menu item “088 TONE FREQ”.
5. Rotate the **[VFO-B/CLAR]** knob or press the ▲/▼ button to select the desired CTCSS Tone to be used. Fifty standard CTCSS tones are provided (see the CTCSS Tone Chart).
6. Press the **[SELECT]** button to exit from the CTCSS Tone setup mode.
7. A “d” notation on the “1 Hz” frequency digit in the display will indicate that the Tone Decoder is engaged. A “t” notation on the “1 Hz” frequency digit while transmitting will indicate that the Tone Squelch is engaged.



MEMORY OPERATION

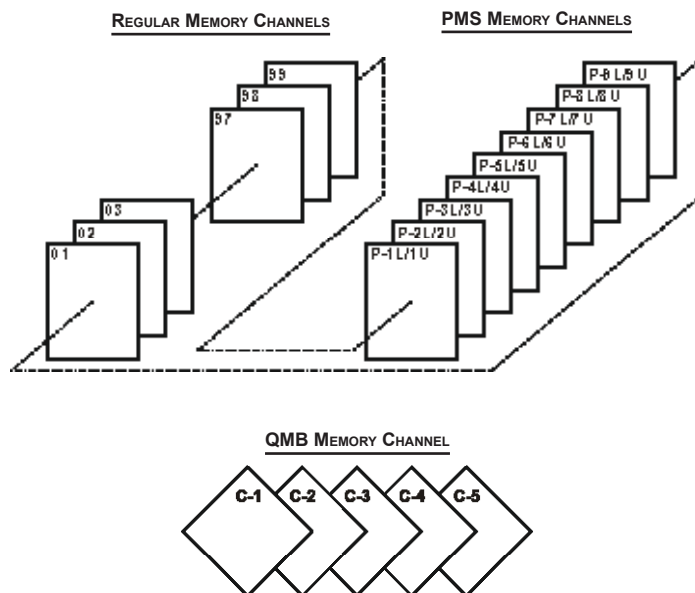
CONVENIENT MEMORY FUNCTIONS

The **FTdx1200** contains ninety-nine regular memories, labeled “01” through “99”, nine special programmed limit memory pairs, labeled “P-1L/P-1U” through “P-9L/P-9U”, and five QMB (Quick Memory Bank) memories, labeled “C-1” through “C-5”. Each stores various settings, in addition to the VFO-A frequency and mode (See below). By default, the 99 regular memories are contained in one group; however, they can be arranged in up to six separate groups, if desired.

QUICK POINT:

The **FTdx1200** memory channels store the following data (not just the operating frequency):

- VFO-A Frequency
- VFO-A Mode
- Clarifier status and its Offset Frequency
- ANT status
- IPO status
- Roofing filter status and its Bandwidth
- Attenuator status
- Noise Blanker status
- IF SHIFT and WIDTH status
- CONTOUR status and its Peak Frequency
- DSP Noise Reduction (DNR) status and its Reduction algorithm selection.
- DSP Notch filter (NOTCH) status
- NAR bandwidth status
- DSP Auto Notch filter (DNF) status
- Repeater Shift Direction and CTCSS Tone Frequency



QMB (QUICK MEMORY BANK)

The Quick Memory Bank consists of five memories (labeled “Q-1” through “Q-5”) independent from the regular and PMS memories. These can quickly store operating parameters for later recall.

QMB Channel Storage

1. Tune to the desired frequency on the VFO-A.
2. Press the blue **[STO]** button. The “beep” will confirm that the VFO-A contents have been written to the currently available QMB memory.

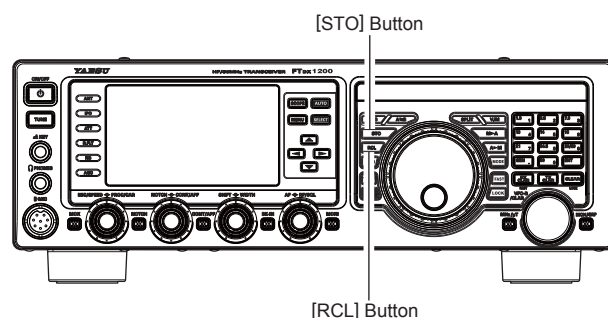
If you repeatedly press the **[STO]** button, the QMB memories will be written in the following order:

Q-2 → Q-3 → Q-4 → Q-5 → Q-1.

Once all five QMB memories have data on them, previous data (starting with channel Q-1) will be over-written on a first-in, first-out basis.

QMB Channel Recall

1. Press the blue **[RCL]** button. The current QMB channel data and the QMB memory channel number will be shown on the frequency display field. The “**QMB**” and “**RX**” or “**TX**” icons will also appear.
2. Repeatedly pressing the **[RCL]** button will toggle you through the QMB channels:
Q-2 → Q-3 → Q-4 → Q-5 → Q-1.
3. Press the **[V/M]** button to return to the VFO or Memory mode.



ADVICE:

Rotating the Main Tuning Dial knob, or changing the operating mode, will place the transceiver in the “Memory Tune” mode, which is a temporary “pseudo-VFO” method of tuning off of a stored memory channel. If you do not over-write the contents of the current memory channel, the original contents will not be disturbed by the initiation of Memory Tune operation.

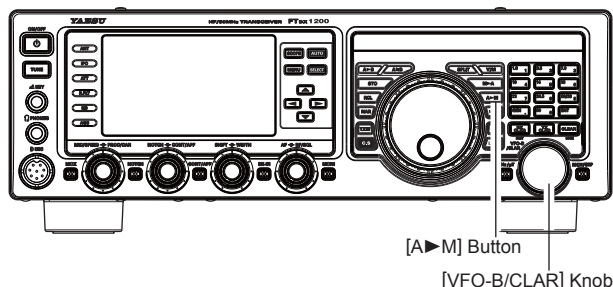
MEMORY OPERATION

STANDARD MEMORY OPERATION

The Standard Memory of the **FTdx1200** allows storage and recall of up to 99 memories, each storing frequency, mode, and a wide variety of status information, detailed previously. Memories may be grouped into as many as six Memory Groups, and additionally you get nine pairs of band-limit (PMS) memories along with five QMB (Quick Memory Bank) memories.

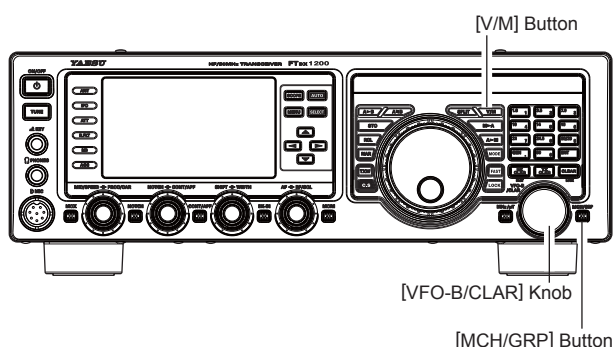
Memory Storage

1. Set VFO-A up with the frequency, mode, and status, the way you want to have it stored.
2. Press the **[A►M]** button momentarily; the current channel number will start blinking in the VFO-B frequency display and the “**MCK**” icon will appear.
3. Rotate the **[VFO-B/CLAR]** knob to select the memory channel that you wish to store the data on.
4. Press and hold in the **[A►M]** button for one second to store the frequency and other data into the selected memory channel. A double beep will confirm that you have held the **[A►M]** button in long enough.



Memory Channel Recall

1. Press the **[V/M]** button, if necessary, to enter the “Memory mode”. A memory channel number and the “**MCH**” icon will appear in the VFO-B frequency display.
2. Press the **[MCH/GRP]** button.
3. After pressing the **[MCH/GRP]** button, you may rotate the **[VFO-B/CLAR]** knob to select the desired memory channel.



ADVICE:

To work within a particular Memory Group, press the **[GRP]** button (the “**GRP**” icon will appear on the display), then rotate the **[VFO-B/CLAR]** knob to select the desired Memory Group. Now press the **[MCH/GRP]** button (the “**MCH**” icon will appear instead of the “**GRP**”); you may now choose the memory channel within the selected Memory Group.

STANDARD MEMORY OPERATION

Labeling Memories

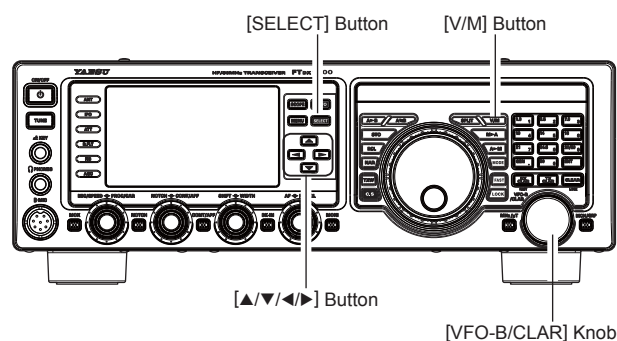
You may wish to append an Alphanumeric “Tag” (label) to a memory or memories, to aid in recollection of the channel’s use (such as a club name, etc.). To do this:

1. Press the **[V/M]** button, if necessary, to enter the “Memory Mode”. A memory channel number will appear in the VFO-B frequency display.
2. Press and hold in the **[V/M]** button.
The data stored in the currently selected memory channel will be displayed on the TFT.
3. Rotate the **[VFO-B/CLAR]** knob to recall the memory channel that you wish to append a label.
4. Press the **[SELECT]** button.
A blinking cursor will appear on the first digit.
5. Use the **[◀]** and **[▶]** keys to set the cursor position and use the **[▲]** and **[▼]** keys to choose the letters, numbers, or symbols of the desired label.

ADVICE:

You may also use the **[VFO-B/CLAR]** knob to program the label.

6. Repeat step 5 to program the remaining letters, numbers, or symbols of the desired label. 16 characters may be used in the creation of a label.
7. When you have completed the creation of the label, press the **[SELECT]** button.
8. Press and hold the **[V/M]** button for one second to save the new setting and return to normal operation.



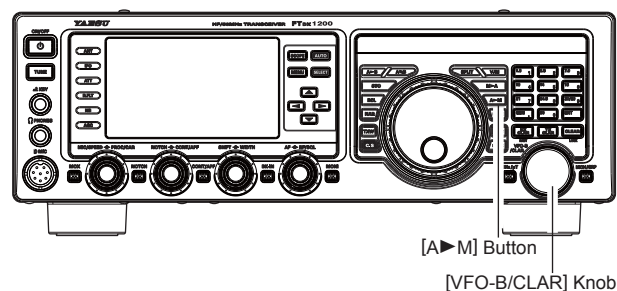
Checking a Memory Channel Status

Before programming a channel into memory, you can check the current contents of that channel without the danger of over-writing the channel accidentally.

1. Press the **[A▶M]** button momentarily.
The data stored in the currently selected memory channel will be displayed on the TFT. However, since you are only checking the contents of the memory channel, your radio will not have moved to the memory channel frequency.
2. Rotate the **[VFO-B/CLAR]** knob to select a different memory channel. To exit from the Memory Check mode, press the **[A▶M]** button momentarily once more.

ADVICE:

- While the Memory Check function is engaged, the memory channel number will blink in the VFO-B frequency display.
- While operating in the VFO mode, using Memory Check, you may store the current VFO frequency into the selected memory by pressing and holding in the **[A▶M]** button for one second (until the double beep). Conversely, if you wish to write the contents of the current memory into the VFO-A register, press and hold in the **[M▶A]** button for one second.

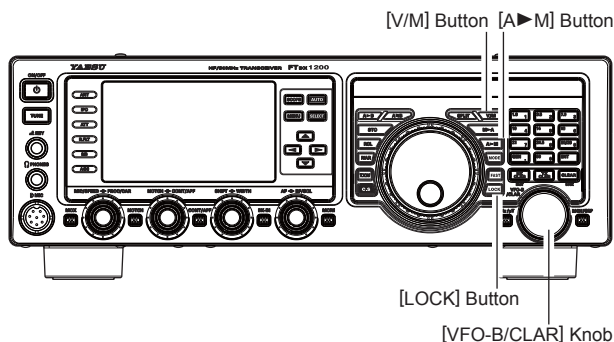


MEMORY OPERATION

STANDARD MEMORY OPERATION

Erasing Memory Channel Data

1. Press the [V/M] button, if necessary, to enter the VFO mode.
2. Press the [A▶M] button. The data stored in the currently selected memory channel will be displayed in the frequency field.
3. Rotate the [VFO-B/CLAR] knob to select the memory channel that you would like to erase. The memory channel number appears in the VFO-B frequency display.
4. Press the [LOCK] button to erase the contents of the selected memory channel.



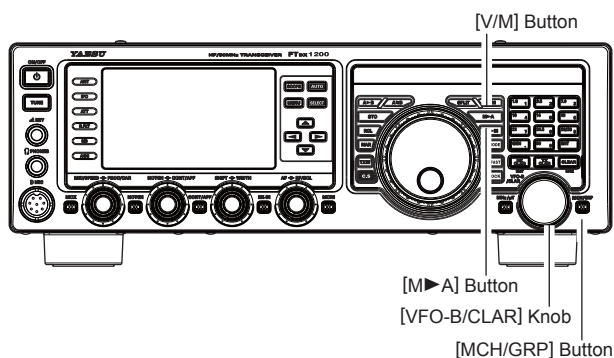
ADVICE:

- ❑ The FTDX1200 can not erase the memory channels “01” (and “5M-01” through “5M-10”: U.S. version).
- ❑ If you make a mistake and wish to restore the memory’s contents, just repeat steps (1) through (4) above.

Moving Memory Data to the VFO-A register

You may transfer the contents of the currently selected memory channel into the VFO-A register, if you like.

1. Press the [V/M] button, as necessary, to go to the “Memory” mode. The memory channel number will appear in the VFO-B frequency display.
2. Press the [MCH/GRP] button.
3. Rotate the [VFO-B/CLAR] knob to select the memory channel the contents of which you wish to transfer to VFO-A.
4. Press and hold in the [M▶A] button for one second, until you hear the double beep. The data in the selected memory channel will now be transferred to VFO-A.



ADVICE:

This transfer of data to VFO-A does not affect the original contents of the memory channel; this is a “copy” function that leaves the memory contents unchanged.

MEMORY OPERATION

STANDARD MEMORY OPERATION

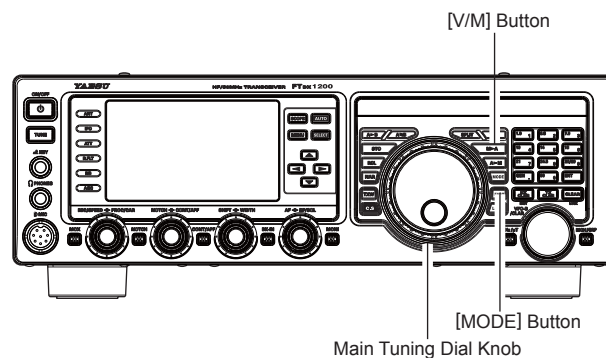
Memory Tune Operation

You may freely tune off from any memory channel in a “Memory Tune” mode, this is similar to VFO operation. So long as you do not over-write the contents of the current memory, Memory Tune operation will not alter the contents of the memory channel.

1. Press the **[V/M]** button to recall any memory channel.
2. Rotate the **[VFO-B/CLAR]** knob to select the memory channel.
3. Rotate the Main Tuning Dial knob or press the **[MODE]** button; you will now observe that the memory channel frequency is changing.

ADVICE:

- During Memory Tune operation, you may change operating modes, and engage the offset Clarifier, if desired.
4. Press the **[V/M]** button momentarily to return to the originally memorized frequency of the current memory channel. One more press of the **[V/M]** button will return to VFO operation.



NOTE:

Computer software programs utilizing the CAT system interface port may presume that the transceiver is operating in the VFO mode, for certain features like “band mapping” and/or frequency logging, because the “Memory Tune” mode so closely resembles the VFO mode. Be sure that you have the **FTDX1200** operating in a control mode compatible with your software’s requirements. Use the VFO mode if you’re not sure.

MEMORY OPERATION

MEMORY GROUPS

Memory channels may be grouped into as many as six convenient batches, for easy identification and selection. For example, you might want to designate memory groups for AM BC stations, short-wave broadcast stations, contest frequencies, repeater frequencies and PMS limits, or any other groupings you like.

Each memory group is capable of holding up to 20 memory channels (except Memory Group 01: it is 19 memory channels, and the Group size is fixed). When a memory channel is grouped, the channel numbers change to correspond to the chart below:

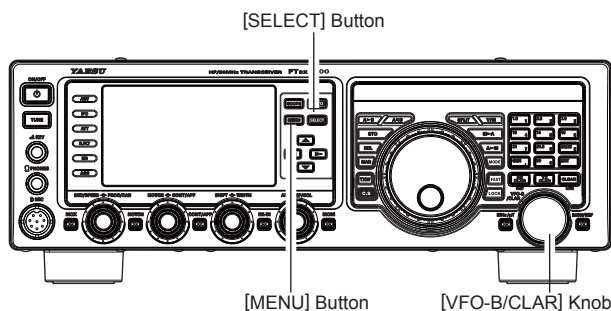
Memory Group Assignment

1. Press the **[MENU]** button to enter the Menu mode.
2. Rotate the **[VFO-B/CLAR]** knob (or press the **▲/▼** button) to select Menu item "041 MEM GROUP".
3. Press the **[SELECT]** button, then rotate the **[VFO-B/CLAR]** knob (or press the **▲/▼** button) to set this Menu item to "ENABLE" (the default setting is "DISABLE").
4. Press the **[SELECT]** button, then press the **[MENU]** button to save the new setting and exit. Operation will now be restricted to the six Memory Groups.

To cancel Memory Group operation, repeat steps (1) through (4) above, choosing "DISABLE" in step (3).

ADVICE:

To avoid confusion, note that the PMS memory group and the PMS memories "P-1L" through "P-9U" will be so designated.



MEMORY CHANNEL NUMBER	
GROUP MEMORY "OFF"	GROUP MEMORY "ON"
01 ~ 19	1-01 ~ 1-19
20 ~ 39	2-01 ~ 2-20
40 ~ 59	3-01 ~ 3-20
60 ~ 79	4-01 ~ 4-20
80 ~ 99	5-01 ~ 5-20
P-1L/1U ~ P-9L/9U	P-1L/1U ~ P-9L/9U
5M-01 ~ 5M-10	US-1 ~ US-5

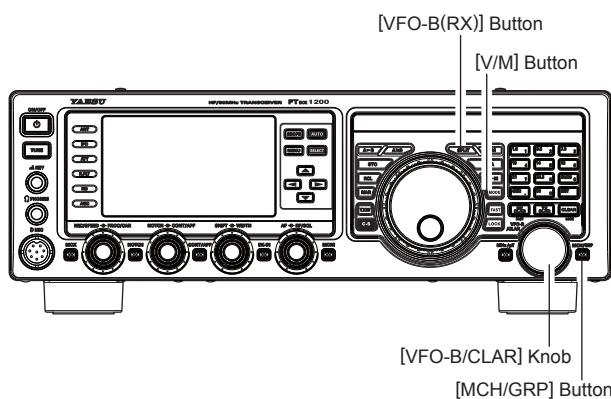
Choosing the Desired Memory Group

You may recall memories just within a particular Memory Group, if desired.

1. Press the **[V/M]** button, if necessary, to enter the "Memory" mode.
2. Press and hold in the **[MCH/GRP]** button for one second (located to the Lower right of the **[VFO-B/CLAR]** knob). The "GRP" icon will appear on the display.
3. Rotate the **[VFO-B/CLAR]** knob to select the desired Memory Group.
4. Press the **[MCH/GRP]** button. The "MCH" icon will appear on the display.
5. Rotate the **[VFO-B/CLAR]** knob to select the desired Memory Channel within the Selected Memory Group.

ADVICE:

If no channels have been assigned to a particular Memory Group, you will not have access to that Group.



OPERATION ON ALASKA EMERGENCY FREQUENCY: 5167.5 KHz (U.S. VERSION ONLY)

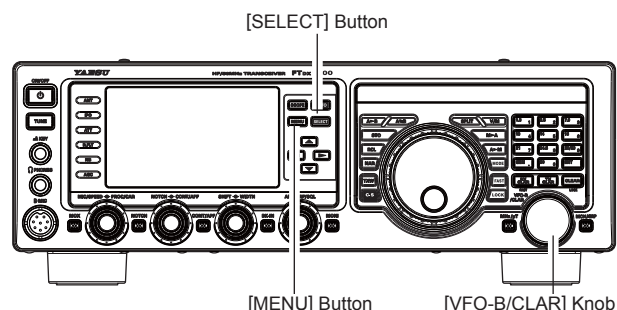
Section 97.401(d) of the regulations governing amateur radio in the United States permit emergency amateur communications on the spot frequency of 5167.5 kHz by stations in (or within 92.6 km of) the state of Alaska. This frequency is only to be used when the immediate safety of human life and/or property are threatened, and is never to be used for routine communications.

The **FTdx1200** includes the capability for transmission and reception on 5167.5 kHz under such emergency conditions via the Menu system. To activate this feature:

1. Press the **[MENU]** button to enter the Menu mode.
2. Rotate the **[SELECT]** knob (or press the **▲/▼** button) to select Menu item “183 EMERGENCY FREQ TX”.
3. Press the **[SELECT]** button, then rotate the **[VFO-B/CLAR]** knob (or press the **▲/▼** button) to select “ENABLE.”
4. Press the **[SELECT]** button, then press the **[MENU]** button to save the new setting and exit to normal operation. Emergency communication on this spot frequency is now possible.
5. Press the **[V/M]** button, as necessary, to enter the Memory mode. Press the **[MCH/GRP]** button, then rotate the **[VFO-B/CLAR]** knob to select the emergency channel (“EMERGENCY”), which is found between channels “5M-10” and “01”).

NOTE:

- ❑ The receive-mode CLARIFIER functions normally while using this frequency, but variation of the transmit frequency is not possible. Activation of “118 TGEN EMRGNCY” does not enable any other out of amateur band capability on the transceiver. The full specifications of the **FTdx1200** are not necessarily guaranteed on this frequency, but power output and receiver sensitivity should be fully satisfactory for the purpose of emergency communication.
- ❑ If you wish to disable operation capability on the Alaska Emergency Frequency, repeat the above procedures, but set “183 EMERGENCY FREQ TX” to “DISABLE” in step 3.
- ❑ In an emergency, note that a half-wave dipole cut for this frequency should be approximately 45’3” on each leg (90’6” total length). Emergency operation on 5167.5 kHz is shared with the Alaska-Fixed Service. This transceiver is not authorized for operation, under the FCC Part 87, for aeronautical communications.



VFO AND MEMORY SCANNING

You may scan either the VFO or the memories of the **FTDx1200**, and the radio will halt scanning on any frequency with a signal strong enough to open the receiver squelch.

VFO SCANNING

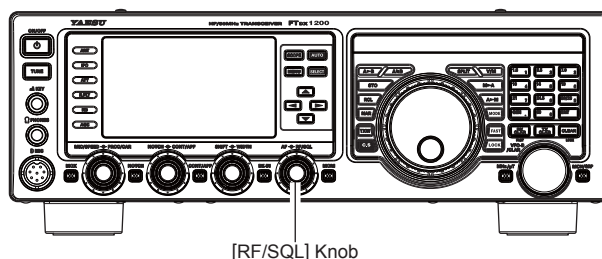
1. Set the VFO-A to the frequency on which you would like to begin scanning.
2. Rotate the **[RF/SQL]** knob so that the background noise is just silenced.
3. Press and hold in the microphone **[UP]** or **[DWN]** key for one second to start scanning in the specified direction on the VFO frequency.
4. If the scanner halts on an incoming signal, the decimal point between the “MHz” and “kHz” digits of the frequency display will blink.

ADVICE:

- If the incoming signal disappears, scanning will resume in about five seconds.
 - On the SSB/CW and SSB-based Data modes, the scanner will pause on a received signal, then will step across the signal very slowly, giving you time to stop the scan, if you like. In these modes on the VFO, the scanner does not stop, however.
5. To cancel scanning, press the **[PTT]** switch.

ADVICE:

- If you press the microphone **PTT** switch during scanning, the scanner will halt at once. However, pressing the **PTT** switch during scanning will not cause transmission.
- You may select the manner in which the scanner resumes while it has paused on a signal, using Menu item “047 MIC SCAN RESUME”. The default “TIME” (5 sec) setting will cause the scanner to resume scanning after five seconds; you may change it, however, to resume only after the carrier has dropped out.



[RF/SQL] Knob