

# FTX-1 series

## Firmware Upgrade Manual

### Important

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This firmware is provided for the FTX-1 series.

Before downloading the software, please read the "Important Notes" carefully.

Downloading this firmware will indicate your agreement with the contents of the "Important Notes".

"Transceiver" is used hereafter to refer to the FTX-1 series transceiver.

### Important Notes

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- All responsibility in using this firmware lies with the customer. We cannot be held responsible in any way for damages or losses which may be incurred by the customer as a result of using this firmware.
- The transceiver settings must be reset immediately after updating the firmware. Resetting the transceiver will clear all memories and the setting data in the setting menu.  
Before updating the firmware, it is recommended to back up the memory data saved in the memory channels and the setting data of the setting menu. Refer to "Saving Memory data and setting Menu data" described in the Operation Manual for the backup process.
- Copyrights and all other intellectual property rights for the firmware, as well as the manual, are the property of YAESU MUSEN CO., LTD.
- The revision and modification of this firmware is prohibited. Redistribution, transfer, and resale of downloaded files are also prohibited.
- Downloaded files are for personal use only.
- If assistance is needed to perform the firmware upgrade, please consult with one of our sales sites or service centers.

The transceiver settings must be reset immediately after updating the firmware. Resetting the transceiver will clear all memories and the setting data of the setting menu.

It is recommended the memory data saved in the Memory Channels, and the setting data of the Setting Menu be backed up before updating the transceiver firmware. Refer to "Saving Memory data and setting Menu data" described in the Operation Manual for the backup procedure.

## Regarding this Firmware

“DISPLAY”, “MAIN”, “DSP” and “SDR” firmware are available for the FTX-1 field head, and “OPT” firmware is available for the FTX-1 optima (or SPA-1). Check the firmware version, and perform firmware upgrades when needed.

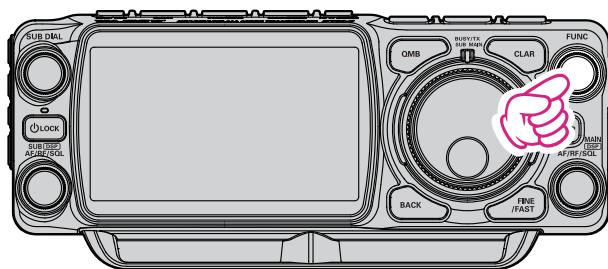
## microSD card preparation

Format (initialize) the microSD card in advance with the transceiver, before updating the firmware.

For information about microSD cards that can be used, and the formatting procedure, refer to “Using the microSD Card” described in the Operation Manual.

## How to Confirm the Firmware Version

1. Press and hold the [FUNC] knob.



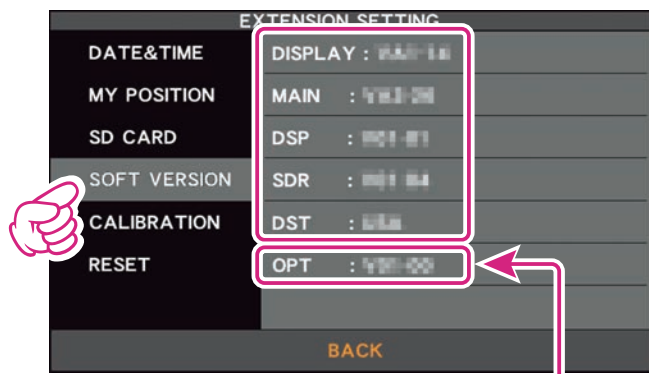
2. Touch [EXTENSION SETTING].

If [EXTENSION SETTING] is not displayed, touch [FWD →] to display [EXTENSION SETTING] and then touch it.



3. Touch [SOFT VERSION].

The versions of each firmware will be displayed on the TFT screen.



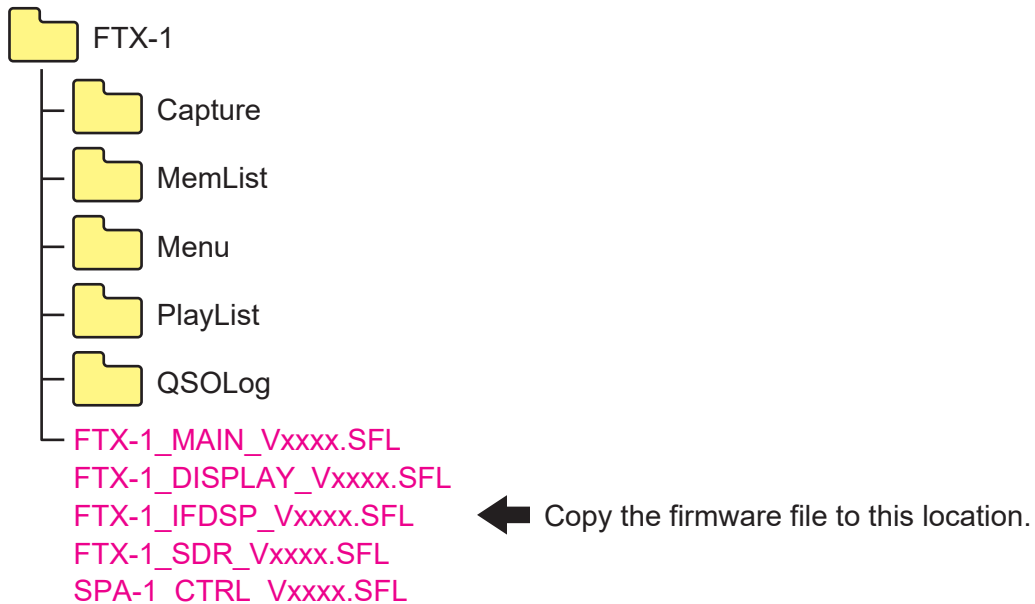
Displayed only when the Field head is connected to the SPA-1.

## Downloading the Firmware

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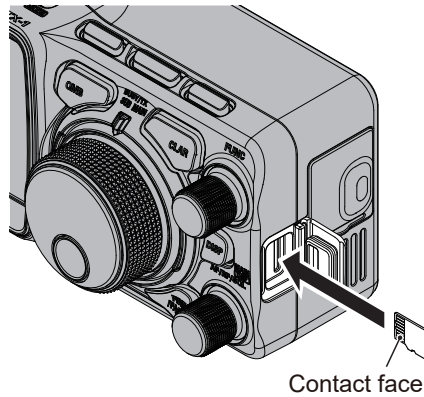
1. Download the “FTX-1\_Firmware\_update\_XXXXXX.zip” compressed file from the YAESU website.
2. Unzip the downloaded file.
  - Using a PC with Windows OS, right click on the downloaded “zip” file. The “**Extract All Contents Menu**” will extract the contents of the zip file into a new folder, and then open the new folder.
  - The firmware file (extension is SFL) is in the “FTX-1\_Firmware\_update\_XXXXXX” folder that is generated at the time of extraction.
  - Firmware File Name:  
DISPLAY: FTX-1\_DISPLAY\_VXXXX.SFL  
MAIN: FTX-1\_MAIN\_VXXXX.SFL  
DSP: FTX-1\_IFDSP\_VXXXX.SFL  
SDR: FTX-1\_SDR\_VXXXX.SFL  
SPA-1: SPA-1\_CTRL\_VXXXX.SFL  
(“XXXX” refers to the version number.)
3. Copy the firmware to an microSD card that has been previously formatted in the FTX-1.  
**Note:** Copy the file directly under the “FTX-1” folder. Do not copy it into the “Capture”, “MemList” “Menu”, “PlayList” or “QSOLog” folder. If the file is copied to a location other than under the “FTX-1” folder, the FTX-1 cannot be updated, as it will not recognize the file.

The folder configuration on the microSD card formatted with FTX-1 is shown below.



## How to Update the Firmware

1. Turn the transceiver **OFF**.
2. **Updating the Field head only;**  
Remove the battery “SBR-52LI”, then connect to an external power source.  
**Updating the FTX-1 optima (SPA-1) ;**  
Connect the Field head to the SPA-1, then connect to an external power source.
3. Insert the microSD card, written with the firmware, into the microSD card slot.



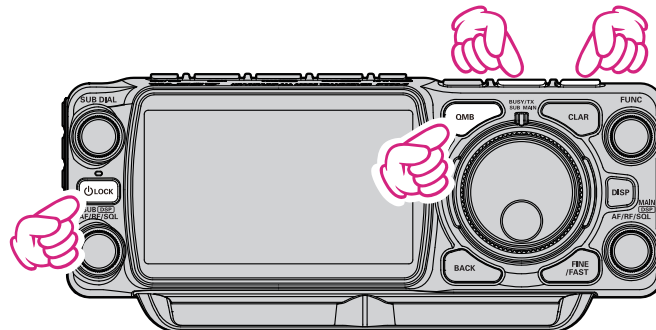
### Important: Do Not Skip this Section

If the current MAIN Firmware version is V01.00, proceed to step 4.

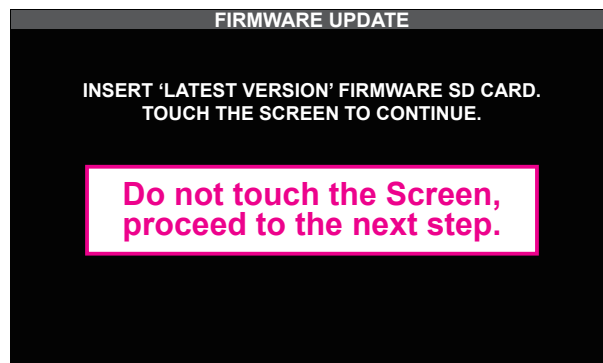
If the current MAIN Firmware version is different than V01.00, proceed to step 11.

To confirm the current firmware version, Refer to page 2.

4. While pressing the [QMB], [VM **MW**] and [M►V **MT**] keys simultaneously, then turn the transceiver ON.



- The “FIRMWARE UPDATE” screen appears.

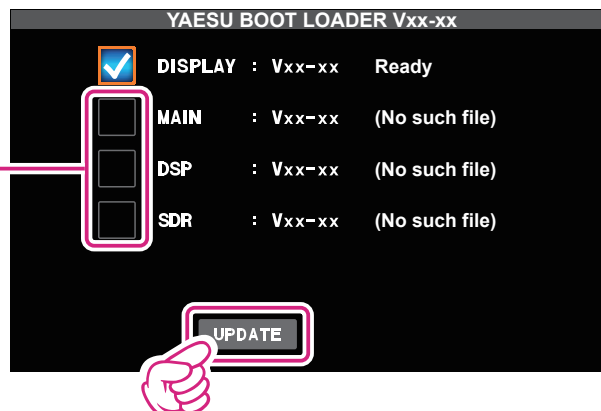


5. Turn the [FUNC] knob clockwise 5 clicks or more.
  - The “YAESU BOOT LOADER Vxx-xx” screen appears.

6. Make sure that the [DISPLAY] shows the mark “✓”, then touch [UPDATE].

**Do not mark “✓” other than [DISPLAY].**

**Do not mark “✓”  
on the boxes indicated**



7. The update progress indicator is displayed when the firmware transfer begins.
- Please wait until the process has been completed.

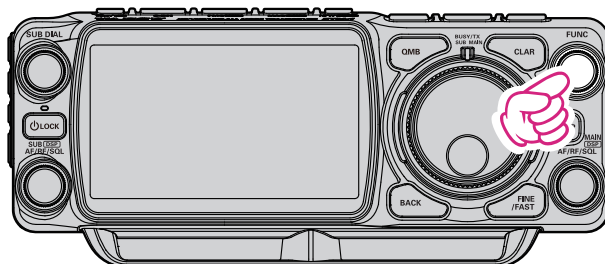
## Caution!

**Do not remove the microSD card or turn the transceiver OFF while updating. If the update is interrupted the transceiver will not operate properly.**

8. When the update is complete, the power is automatically turned OFF.
9. Unplug the DC power cord, then reconnect the DC power cord.
- The power is automatically turned ON.
10. Proceed to step 12.

**If the current main firmware version is different than V01.00, start from step 11.**

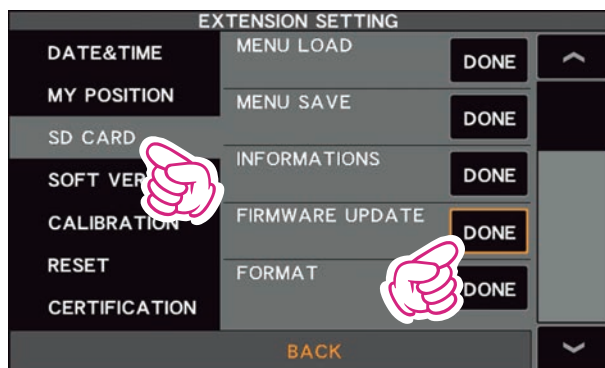
11. Turn the transceiver **ON**.
12. Press and hold the [FUNC] knob.



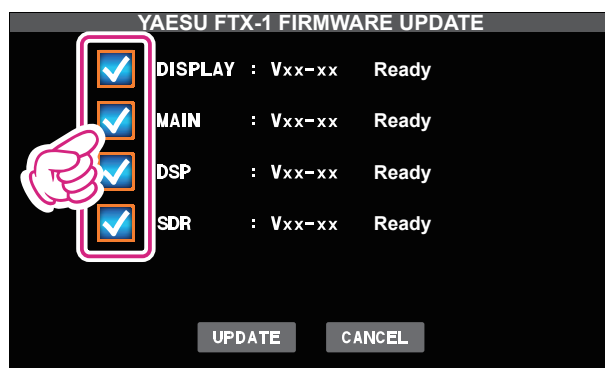
13. Touch [EXTENSION SETTING].
- If [EXTENSION SETTING] is not displayed, touch [FWD →] to display [EXTENSION SETTING] and then touch it.



14. Touch **[SD CARD]**, then touch **[DONE]** on the **[FIRMWARE UPDATE]** item.



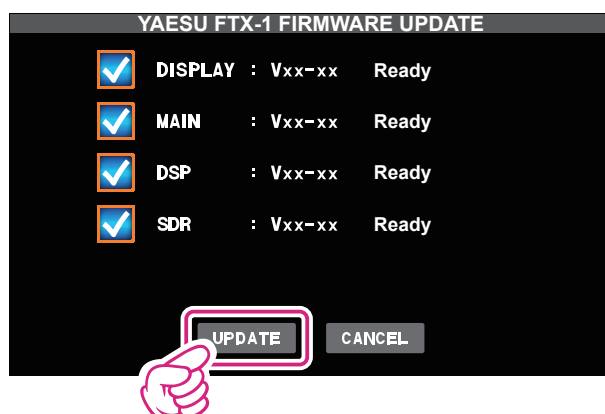
15. A list of firmware stored on the microSD card is displayed.



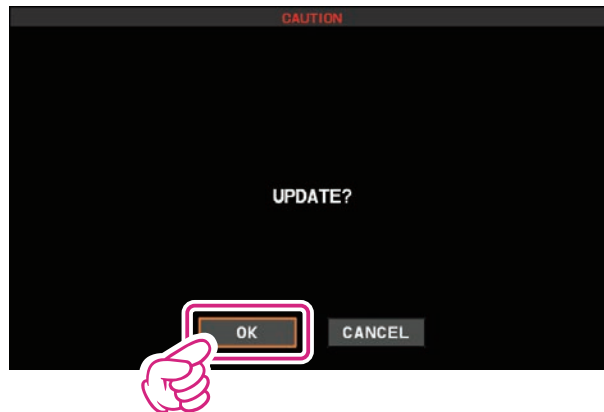
- “✓”: Indicates firmware to be updated.  
If the firmware is newer than the firmware in the transceiver and it is not marked “✓”, touch the ☐ box to mark “✓”.
- Ready: Indicates updateable files  
The same version as the firmware in the transceiver. Ready is also displayed when the update is not necessary.
- (No such file): There is no target firmware on the microSD card.
- (Broken file): Indicates the file is corrupted for some reason.  
Download the firmware file from the YAESU website again and try again from the beginning.

16. Touch **[UPDATE]** to display the update confirmation screen.

- To cancel the update, touch **[CANCEL]**.



17. Touch **[OK]** to update the firmware.
- To cancel the update, touch **[CANCEL]**.



18. The update progress indicator is displayed when the firmware transfer begins.
- Please wait until the process has been completed.

## Caution!

Do not remove the microSD card or turn the transceiver OFF while updating. If the update is interrupted the transceiver will not operate properly.

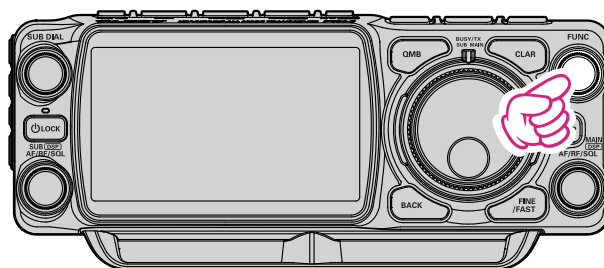
19. When the update is complete, the power is automatically turned OFF and then automatically turned ON.

## Important: Do Not Skip this Section

If upgrading the Field head only, reset (see page 9) and complete the firmware upgrading process.

If upgrading the FTX-1 optima (or SPA-1), proceed to step 20.

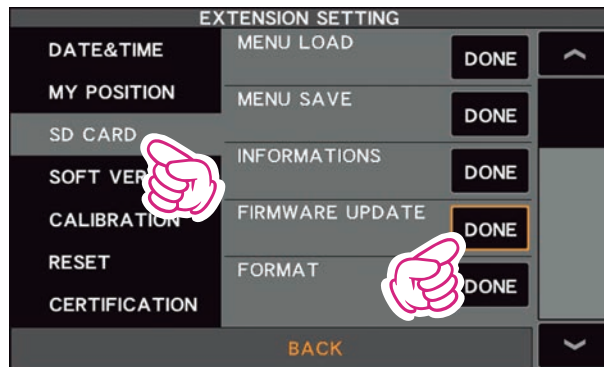
20. Reset the transceiver (see page 9).
21. Press and hold the **[FUNC]** knob.



22. Touch **[EXTENSION SETTING]**.
- If **[EXTENSION SETTING]** is not displayed, touch **[FWD →]** to display **[EXTENSION SETTING]** and then touch it.



23. Touch [SD CARD], then touch [DONE] on the [FIRMWARE UPDATE] item.

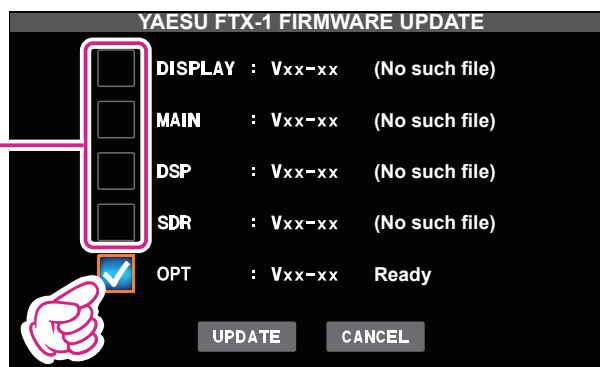


24. A list of firmware stored on the microSD card is displayed.

25. Touch the "[ ] OPT" to mark "✓".

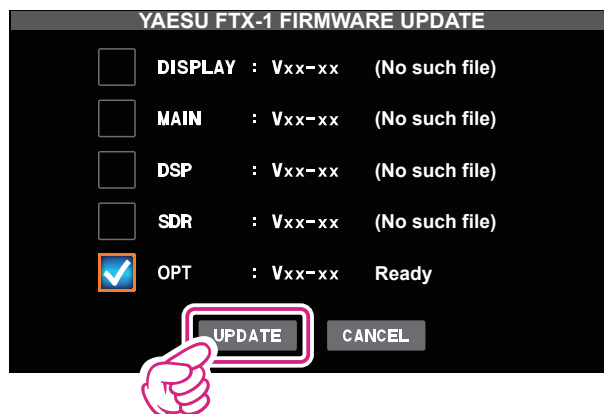
- Make sure that the [OPT] shows the mark "✓".
- **Do not mark "✓" other than [OPT].**

Do not mark "✓"  
on the boxes indicated



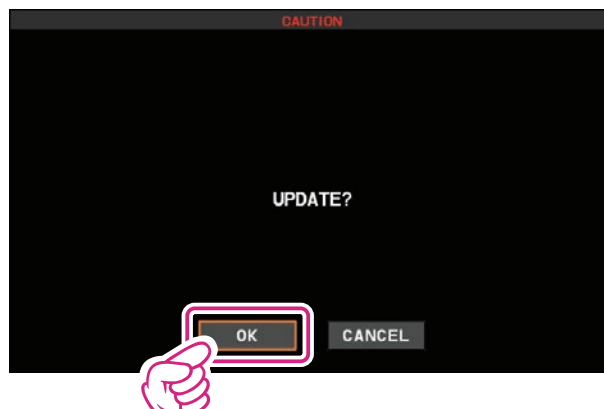
26. Touch [UPDATE] to display the update confirmation screen.

- To cancel the update, touch [CANCEL].



27. Touch [OK] to update the firmware.

- To cancel the update, touch [CANCEL].





28. The update progress indicator is displayed when the firmware transfer begins.

- Please wait until the process has been completed.

## Caution!

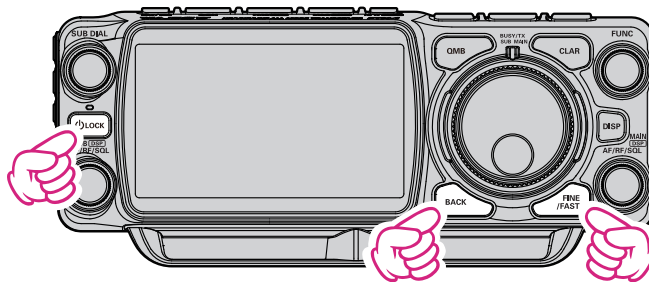
**Do not remove the microSD card or turn the transceiver OFF while updating. If the update is interrupted the transceiver will not operate properly.**

29. When the update is complete, the power is automatically turned OFF and then automatically turned ON.

30. Reset the transceiver (see below).

## Reset the transceiver

1. Turn the transceiver OFF.
2. While pressing the **[BACK]** and **[FINE/FAST]** keys simultaneously, then turn the transceiver **ON**.
  - The frequency display will return to "144.000.000" (SUB-side), "7.000.000" (MAIN-side).



This completes the firmware upgrading process.

# ***YAESU***

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***Radio for Professionals***

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