

# IC-7800

## Firmware update information— Ver. 2.20

Thank you for using the Icom Download Service.

Version 2.20 of the firmware will provide the following additional functions to your IC-7800.

- User programmable band edge warning beep with/without transmission inhibit capabilities (Upgraded)
- RTTY memory transmission (RT1 to RT4) with an external keypad (New feature)
- PSK memory transmission (PT1 to PT4) with an external keypad (New feature)
- TX VOICE transmission with the connected keyboard's [F1] to [F4] keys (New feature)
- KEYSER memory transmission with the connected keyboard's [F1] to [F4] keys (New feature)

Before updating, see Section 16 UPDATING THE FIRMWARE in the IC-7800 instruction manual, for details.

### IMPORTANT!

Make a backup file of the transceiver's settings, such as stored memory channels, filter settings, before updating the firmware.

The CPU is reset when the firmware update is performed; the transceiver's memory contents will be lost and ALL settings will be returned to their default settings.

## About the upgraded features

### ◇ User programmable band edge warning beep with/without transmission inhibit



These functions are added to the band edge warning beep options in the Miscellaneous (Others) set mode, as shown below.

A different beep tone sounds when you tune in or out of an amateur band's frequency range. A regular beep sounds when you tune into a band, and a lower tone error beep will sound when you tune out of a band.

Also, the TX indicator shows if the selected frequency is in or out of an amateur band, when an option other than "OFF" is set.

- A TX indicator with dotted oval, "TX" is displayed, instead of the regular "TX" TX indicator, when a frequency outside of an amateur band frequency range is selected.

### Beep (Band Edge)

When you tune into or out of an amateur band's frequency range, a beep sounds. This functions independently of the confirmation beep setting.

The beep output level can be set in the level set mode. (see page 12-5 of the IC-7800 instruction manual.)

When "ON (User)" or "ON (User) & TX Limit" is selected, [BAND] appears in the display above the function switch (F-5). Up to 30 band edge frequencies can be programmed in the band edge screen. (see the next page for programming details.)

### ON (Default)

- OFF : Band edge beep is OFF.
- ON (Default) : When you tune into or out of the default amateur band's frequency range, a beep sounds. (default)
- ON (User) : When you tune outside of, or back into a user programmed amateur band's frequency range, a beep sounds.
- ON (User) & TX Limit : When you tune outside of, or back into a user programmed amateur band's frequency range, a beep sounds. Transmission is also inhibited outside the programmed band.

## • Band edge frequency programming



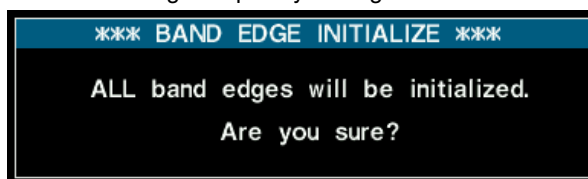
Appears when "ON (User)" or "ON (User) & TX Limit" is selected.

### - Band edge screen



- ① Select the Miscellaneous (Others) set mode and select the "Beep (Band Edge)" option.
- ② Rotate the main dial to select either the "ON (User)" or "ON (User) & TX Limit" setting.
  - [BAND] appears above [F-5].
- ③ Push [BAND] (F-5) to open the band edge screen.
- ④ Push [▲] (F-1) or [▼] (F-2) to select the desired band edge.
  - Push [◀▶] (F-3) to select the upper and lower band edge frequency entry cell.
  - Push [INS] to insert a new blank band edge line.
  - Push and hold [DEL] for 1 sec. to delete the selected band edge line.
- ⑤ Push [F-INP•ENT], and then input the desired frequency with the keypad.
  - Push [GENE •] to input decimal point (".") between the MHz and kHz digits.
  - Program each channel from left to right and each frequency must be higher than the preceding frequency.
  - The frequency that is duplicated, or out of an amateur band, cannot be programmed.
  - If you want to return the band edge frequencies to their default (initial) value, push and hold [DEF] (F-4) for 1 sec.

The band edge initialize screen appears as shown below, then push and hold [OK] (F-6) for 1 sec. to initialize all band edge frequency settings.



- ⑥ Push [EXIT/SET] to exit the set mode.

## ■ About the new features

### ◇ RTTY/PSK memory transmission (RT1 to RT4/ PT1 to PT4) with an external keypad

Both RTTY and PSK memory transmission (RT1 to RT4/PT1 to PT4), with an external keypad capabilities, are added. These functions can be turned ON or OFF in the Miscellaneous (Others) set mode as follows.

External Keypad (RTTY)	OFF
Sets the external keypad for RTTY memory transmission capability ON or OFF.	<ul style="list-style-type: none"> <li>• ON : In the RTTY mode and while the RTTY decode screen is active, pushing one of the external keypad switches transmits the desired RTTY memory contents.</li> <li>• OFF : External keypad does not function. (default)</li> </ul>
<p>NOTE: Only RTTY memory channels RT1, RT2, RT3 and RT4 can be transmitted using with the external keypad.</p> <p>See page 2-6 in the IC-7800 instruction manual for the equivalent circuit of an external keypad and connection details.</p>	

External Keypad (PSK)	OFF
Sets the external keypad for PSK memory transmission capability ON or OFF.	<ul style="list-style-type: none"> <li>• ON : In the PSK mode and while the PSK decode screen is active, pushing one of the external keypad switches transmits the desired PSK memory contents.</li> <li>• OFF : External keypad does not function. (default)</li> </ul>
<p>/// <b>NOTE:</b> Only PSK memory channels PT1, PT2, PT3 and PT4 can be transmitted using with the external keypad.</p> <p>See page 2-6 in the IC-7800 instruction manual for the equivalent circuit of an external keypad and connection details.</p>	

## ◇ TX VOICE/KEYER memory transmission with the keyboard

Both TX VOICE and KEYER memory transmission (T1 to T4/M1 to M4) with the connected keyboard capabilities are added. These functions can be turned ON or OFF in the Miscellaneous (Others) set mode as follows.

Keyboard [F1]–[F4] (VOICE)	OFF
Sets the voice message transmission capability ON or OFF when one of the [F1] to [F4] keys of the connected keyboard is pushed.	<ul style="list-style-type: none"> <li>• ON : Pushing one of the [F1] to [F4] keys transmits the desired voice message contents during phone mode operation.</li> <li>• OFF : [F1] to [F4] keys do not function. (default)</li> </ul>

Keyboard [F1]–[F4] (KEYER)	OFF
Sets the keyer memory transmission capability ON or OFF when one of the [F1] to [F4] keys is pushed.	<ul style="list-style-type: none"> <li>• ON : Pushing one of the [F1] to [F4] keys transmits the desired keyer memory contents during CW mode operation. And while pushing the [SHIFT] key, push [F1] to [F4] keys to transmit the desired keyer memory contents repeatedly.</li> <li>• OFF : [F1] to [F4] keys do not function. (default)</li> </ul>