# IC-7800 Firmware update information— Ver. 1.20

Thank you for using the Icom Download Service.

The following functions will be added to your IC-7800 when firmware updating is performed with the downloaded firmware (Ver. 1.20).

The functions that added with the firmware version 1.10 are also included with this firmware (Ver. 1.20). If no firmware update has not been performed, see the information for the firmware version 1.10.

- ➡ AFC and NET functions for the PSK decoder (New feature; p. 1)
- ➡ FFT scope averaging function for both PSK and RTTY decoder (New feature; p. 2)
- → Color setting for FFT scope waveform for both PSK and RTTY decoder (New feature; p. 2)
- → Improved SSB transmission passband width setting (Selections are added; p. 3)
- → Meter response selection for standard and edgewise meters (New feature; p. 3)
- ➡ Addition of narrower adjustment steps for both APF and CW pitch (p. 3)

# About the new features AFC and NET functions



"AFC" and "NET" indicators

Frequency difference

#### • Old menu (Ver. 1.10 or before)



Changed

#### • New menu (Ver. 1.20)

AGC MID	***** PSK Encode/Decode Monitor PSK31 BPSK/OPSK	SK DECODE	MAIN BPSK	BFO 14.098.500 500
1/4 OFF	Keyboard TX or Memory TX suppo Max.70 Characters x 8ch TX Mem Data Saving to CF CARD support	ted yry built-in ed	850	2150
VSC	_		THRESHOLD	3:QSLUR599
(MENU1)	HOLD/CLR AFC/NET	MEM ADJ	2:MYCALLx3 MAIN/SU	4:DE+UR599

The AFC (Automatic Frequency Control) function is convenient when tuning into the desired PSK signal critical tuning is not necessary. And the NET function is also available for transmitting a PSK signal onto the tuned frequency without changing the displayed frequency.

- ① While in the PSK decoder screen, select "<MENU1>."
- 2 Push [F-3•AFC/NET] to turn the AFC function ON.
  - "AFC" appears.
  - If a PSK signal is received within the AFC tuning range, the decoder automatically tunes into the signal and the offset frequency is displayed.
  - The AFC tuning range is set to ±15 Hz as the default. Optional ±8 Hz setting is available in PSK decode set mode. (p. 2)

**NOTE:** The AFC function may not tune the signal properly when a weak PSK signal is received.

③ Push [F-3•AFC/NET] again to turn the NET function ON.

• "NETT" appears additionally.

④ Push [F-3•AFC/NET] for 1 sec. to add the offset frequency to the displayed frequency.

As the "AFC/NET" functions are assigned to [F-3], the displayed character clearing operation has been changed as follows.

- Push [F-2•HOLD/CLR] for 1 sec. to clear the displayed characters.
  - The hold function is automatically released if used.
  - Push [F-2•HOLD/CLR] momentarily to turn the hold function ON and OFF.

# ♦ New items for PSK decode set mode

The following items are added into PSK decode set mode.

PSK FFT Scope Averaging	OFF
Set the FFT scope waveform averaging function from 2 to 4 and OFF. (default: OFF)	<b>Recommendation!</b> If you use the FFT scope waveform for tuning, using the default or smaller number setting is recom- mended.
PSK FFT Scope Waveform Color	<b>— —</b> 51 <b>—</b> 153 <b>—</b> 255
Set the color for the FFT scope waveform.	<ul> <li>The color is set in RGB format.</li> <li>Push [F-3•◀ ▶] to select R (Red), G (Green) and B (Blue), and then rotate the main dial to set the ratio from 0 to 255.</li> <li>The set color is indicated in the box beside the RGB scale.</li> </ul>
PSK AFC Range	±15Hz
Select the AFC (Automatic Frequency Control) func- tion operating range from $\pm 15$ Hz (default) and $\pm 8$ Hz.	<b>NOTE:</b> The AFC function may not tune the signal properly when a weak PSK signal is received.

### ♦ New items for RTTY decode set mode

The following items are added into RTTY decode set mode.

RTTY FFT Scope Averaging	OFF
Set the FFT scope waveform averaging function from 2 to 4 and OFF. (default: OFF)	<i>Recommendation!</i> If you use the FFT scope waveform for tuning, use the
	default or smaller number setting is recommended.

RTTY FFT Scope Waveform Color	<b>E 5</b> 1 <b>1</b> 53 <b>2</b> 55
Set the color for the FFT scope waveform.	<ul> <li>The color is set in RGB format.</li> <li>Push [F-3•◀ ▶] to select R (Red), G (Green) and B (Blue), and then rotate the main dial to set the ratio from 0 to 255.</li> <li>The set color is indicated in the box beside the RGB scale.</li> </ul>

#### • Old menu (Ver. 1.10 or before)



The key assign of the RTTY decoder screen, menu 1, has been changed as at left. Therefore, the displayed character clearing operation has been changed as follows.

- Push [F-2•HOLD/CLR] for 1 sec. to clear the displayed characters.
  - The hold function is automatically released if used.
  - Push [F-2•HOLD/CLR] momentarily to turn the hold function ON and OFF.

#### ♦ SSB transmission passband width setting

200 Hz for lower and 2800 Hz for higher frequencies have been added to the SSB transmission passband width selections. ("SSB TBW (WIDE)," "SSB TBW (MID)," and "SSB TBW (NAR)" items in level set mode.) A total of 16 ways of combinations can be made.

#### ♦ Meter response selection

The meter response selection is added in display set mode as follows.

Meter Response	MID
Set meter needle response from SLOW, MID and FAST. (default: MID)	This setting is effective for the standard and edge- wise meter type selections only. *The "FAST" setting is the same response as the previous firmware versions, Ver. 1.10 or older.

## ♦ About the APF and CW pitch variable steps

Currently, the APF and CW pitch can be adjusted in 25 Hz steps only. However, the APF can be adjusted in 10 Hz steps and the CW pitch can be adjusted in 5 Hz steps with this firmware update.