

FT-891 Digital Setup

Wednesday, September 21, 2022 10:35 AM

When switching to digital traffic, confirm the following settings.

Radio Settings

1. Quick Menu

- a. NAR: off
- b. DNF: off
- c. WDH: 3000 Hz (This setting will revert to 500 Hz when radio changes to digital mode. Change the setting **AFTER** switching to digital mode. Change to 3000 Hz or ARDOP will work very slowly, and VARA will not work.)
- d. MTR: ALC

2. Radio Settings for Data

- a. 05-06 Cat Rate: make sure app and port settings match radio
- b. 08-01 Data Mode: others
- c. 08-02 PSK Tone: 1500
- d. 08-03 Other Disp: 1500
- e. 08-04 Other Shift: 1500
- f. 08-06 Data LCUT Freq: 300
- g. 08-07 Data HCUT Freq: 2800
- h. 08-09 Data In Select: Rear
- i. 08-10 Data PTT Select: DAKY
- j. 08-11 Data Out Level: 50
- k. 08-12 Data BFO: USB
- l. 16-01 HF SSB Power:
- m. 16-03 HF PWR:
- n. 16-10 Data Mic Gain: 50

Winlink Settings

The screenshot shows the 'Vara HF Winlink Settings' dialog box. It is divided into three main sections: 'Radio Selection', 'Radio Control Port', and 'PTT Port (Optional)'. At the bottom are 'Update' and 'Close' buttons.

Radio Selection:

- Select Radio Model: Yaesu FT-891
- Antenna Selection: Default
- Icom Address: 00
- USB:
- USB Digital:
- FM:
- Use Internal Tuner:
- Codan login and optional password:

Radio Control Port:

- Serial Port to Use:
- Baud: 19200
- Enable RTS:
- Enable DTR:
- TTL:

PTT Port (Optional):

- Serial Port to Use:
- Baud: 19200
- Enable RTS:
- Enable DTR:

Buttons: Update, Close

[FT-891 Digital Settings from groups.io member \(not tested by Lee\)](#)

05-06 19200
05-07 10ms
05-08 DISABLE
07-12 DAKY
11-01 100
11-02 6
11-03 3000
11-04 6
11-05 REAR Important
11-06 6 Adjustable AF OUT
11-07 USB Important
11-08 DAKY
11-09 100-3000
16-11 30 Adjustable SSB DATA GAIN AF IN to the MOD section
16-14 50 Adjustable

11-05 is a select for the MOD input, REAR is the 6 pin DIN jack (DATA), 11-07 is a select for the SSB BFO, USB is used for WSJT-X modes.

From <https://groups.io/g/FT-891/topic/ft_891_and_ft8/83756409?p=,,20,0,0,0::recentpostdate/sticky,,20,2,0,83756409,previd%3D1672502280417204534,nextid%3D1669819334541463603&previd=1672502280417204534&nextid=1669819334541463603>

That is because the 891 has a major firmware bug.

The DATA HI/LO cut filters are not turned on when in DATA mode.

You must use the WDH quick setting in order to widen the RX bandwidth which is totally incorrect.

This is why I DO NOT USE the DATA mode but instead use the regular USB mode.

This solves the problem bug entirely, I use the Commander program to switch between one setup and the other with programmed macros buttons.

These macros buttons switch the MOD input between the front and the rear and switch the SSB BFO between AUTO and USB and switches the RX HI/LO cut bandwidth from 2.9 KHz (DATA) to 2.6 KHz (SSB).

I have reported this bug to Yaesu but they do not seem interested in fixing this bug.

The top area of the waterfall is what I see with my configuration otherwise in DATA mode the waterfall has very little signals like you have observed.

<http://www.dxlabsuite.com/commander/>

I can send to you my config files that are put into the sequences folder to activate those two macros buttons. My setup, WSJT-X>Commander>FT891 with a DigiRig interface for audio I/O, the PTT is via the USB CAT connection.

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