# USB Interface III with fldigi

## Router setup:

Note: The absolute port numbers do not matter. The key is consistency - the same port number must be used for a specific function every time it is used.

- 1. Assign a virtual port for radio control.
- 2. Use a different port for PTT than you used for radio control.
- 3. FLdigi does not support computer generated CW. Leave the CW Port set to None audio derived q-CW can be selected later.

Ports	
Radio:	COM4 v open 19200 8N1
CW: PTT:	none V DTR I Test
SQL:	none v CTS
	Sound Card

4. Save the settings to a preset by selecting **Preset | Save as.** Choose a position and name it FLdigi.

## FLDIGI setup:

1	Fldigi c	onfiguration	-
perator UI Waterfall	Modems Rig Audio : Hamlib XML-RPC	ID Misc Web Autost	art
1	🕑 Use Ha	mlib	
Rig: Icom IC-70	5MkIIG (Stable) 💌	Device: COM	45
Retries 3	Retry Interval (ms	) Baud r	ate: 19200 🗘
Write delay (ms) 0	Post write delay (r 0	ns) Sto	pbits 1
		Sidel	pand:
🗍 PTT via Hamli	b commanid	Rig	mode 😫
ODTR +12		□RTS +12	
CRTS/CTS flow	control	OXON/XOFF flow	control
Advanted staffer and			
Auvanced configurate	2012		Initialize
			1
Restore defaults	Ì	Save	Close /

- 7. Select Hardware PTT
- 8. Check "Use Separate serial port PTT"
- 9. Set Device to the port you selected for PTT in Router
- 10. Check "Use RTS"
- 11. Set PTT delays appropriate for your transceiver and amplifier if used. 10 ms at the start and 20 ms at the end are suitable for most transceivers without an amplifier.
- 12. Click Initialize and Close

Fldigi configuration	
Operator UI Waterfall Modems Rig Devices Settings	Audio ID Misc Callsign DB
Ooss	Device:
Capture:	Microphone (4- USB Audio CODEC )
Playback:	Speakers (4- USB Audio CODEC )
PulseAudio Serve	er string;
□File I/O only	
Restore defaults	Save Close

- 1. Click Configure | Rig Control ...
- 2. Select the Hamlib tab
- 3. Select your rig
- 4. Set Device to the port you selected for CAT in Router and set the data rate as needed for your rig.
- 5. **Uncheck** check "PTT via Hamlib command"
- 6. Click Initialize

Fldigi configuration – 💌									
perator UI Hardware PT	Waterfall	Modems Hamlib >	Rig (ML-R	Audio PC	ID   M	flisc Web	Autos	tart	
DPT	IT tone on n	ight audio c	hanna	el					
h/w ptt De	device-pin :e separate evice: COM	serial port I 5	गा		-	Use RT	5 R	©RTS = +V ©DTR = +V	
PTT dela	avs valid for	all CAT/PT	T type	5				Initialize	
44	] 10 ) 20 )	Start o	if tran	ismit PTT transmit d	delay Ielay				
Resto	ore defaults	Ĩ			Î	Save		Close	7-]

- 13. Click Configure | Sound Card ...
- 14. Select "PortAudio"
- 15. Set Capture (Audio Input) to USB Audio CODEC
- 16. Set Playback (Audio Output) to USB Audio CODEC.
- 17. Click Save Config and Close.

### **CW** Operation

In normal CW operation in FLDIGI generates an audio tone on the soundcard output which is used to modulate the transceiver in SSB mode. FLDIGI provides an alternative to modulated CW called

Fldigi configuration

General Timing and QSK

€ 50 € Weight (%)

Edge decreases pulse width

Timing

Hanning

Operator UI Waterfall Modems Rig Audio ID Misc Callsign DB

CW DominoEX Feldhell MT-63 Olivia PSK RTTY Thor

Edge shape

"OSK CW" which places the tone on the soundcard right channel. USB Interface III detects that tone and converts the pulses to normal closures on the CW output which allows the transceiver to be operated in the normal CW mode with narrow filtering.

- 1. Click Configure | Modems | CW | Timing & QSK ...
- 2. Che
- 3. Set
- 4. Set
- 5. Click

2. Check "QSK on righ	Check "QSK on right audio channel"				
3. Set Pre-keydown ti	Set Pre-keydown timing to 0.0				
4. Set Post-keydown t	0.0 Post-keydown timing (ms)				
5. Click Save	Restore defaults				
<u>SK RTTY</u>					
Fldigi configuration     Operator   UI   Waterfall   Modems   Rig   Aud     CW   DominoEX   Feldhell   MT-63   Olivia   PSH     170   Carrier shift	lio ID Misc Callsign DB	Normal RTTY opera However, USB Inte "Pseudo-FSK on rig provide an FSK shif			
45 ◆   5 (baudot) ▲   Bits per character	after:	acters 1. Click <b>Configur</b> e			
none Parity   1.5 Stop bits	Unshift On Space	2. Check the "Pseu channel" option			
Use cross hair scope Pseudo-FSK on right audio channel	Normal 🗘 AFC	3. Click save.			
Dessive filter bandwidth					

Close

15

Save

### FSK RTT

Restore defaults

305

ation in FLDIGI is AFSK. rface III can detect the ht audio channel" option to ft signal.

Save

4 3.0 Dash to dot ratio

E 🖨 Test char

OSend continuous

Close

4.0 Edge timing

- e | Modems | RTTY ...
- udo-FSK on right audio

**Note:** for q-CW and p-FSK to operate correctly, the right channel level must be set to 100% in Windows Control Panel | Playback | Speaker (USB Audio CODEC) | Levels.