## WSJT, TX-500, Digirig setup notes

Mac - install silicon labs driver for USB to UART. USB cable not plugged into Mac

## https://www.silabs.com/developers/usb-to-uart-bridge-vcp-drivers

Attach Digirig Module to radio and Mac, make sure the cable is a data capable USB-C cable not a charging only cable.

On Mac - Apple —> About this Mac —> System Report —> USB check that USB devices are recognized

		MacBook Pro			
Hardware	USB Device Tree				
ATA	Apple T2 Bus				
Apple Pay	VUSB 3.1 Bus				
Audio	▼ Hub				
Bluetooth	CP2102N USB to	ART Bridge Controller			
Camera	USB PnP Sound D	vice			
Card Reader	USB 3.1 Bus				
Controller					
Diagnostics					
Disc Burning	Host Controller Driver:				
Ethernet Cards					
Fibre Channel	Touch Bar Back	ht:			
Firewire	Des dust ID.				
Graphics/Displays	Vendor ID:	x8102 x05ac (Apple Inc.)			
Nemory	Version:	.01			
NVIVIEXPIESS	Serial Number:	000000000000			
PCI Darallal SCSI	Manufacturer:	pple Inc.			
Parallel SCSI	Location ID:	x80/00000			
Printers	Touch Bar Displa	*			
SAS					
SATA/SATA Express	Product ID:	x8302			
SPI	Vendor ID: Version:	xU5ac (Apple Inc.)			
Storage	Version: 2.01 Serial Number: 00000000000000				
Thunderbolt	Manufacturer:	pple Inc.			
USB	Location ID:	x80600000			
Network	Apple Internal K	/board / Trackpad:			
Firewall					
Locations	Product ID:	0x027e			
Volumes	Vendor ID:	0x05ac (Apple Inc.)			

USB device list

## Open WSJT , configure radio

Rig Kenwood TS-2000 (or similar)

Serial port details depend on your setup

Baud 9600

Hardware 8-1-None

Mode - Data/Pkt (you will still need to set this manually on the rig to DIG)

Split - Fake it on None (Rig split not supported yet by Lab599)

General Radio Audio I	x Macros Reporting	Frequencies	s Colors	Advanced
Rig: Kenwood TS-2000			<b>\$</b>	Poll Interval: 1 s
CAT Control	PTT	Method		
Serial Port: /dev/cu.usbserial-14220 Serial Port Parameters		/OX CAT		rr rs
Baud Rate: 9600	<b>O</b> Port	USB		~
Data Bits	Trans	smit Audio Sou	irce	
🔿 Default 🔷 Seven 💽 Eigh	nt O F	Rear/Data	• Fr	ont/Mic
Stop Bits	Mode	9		
🔿 Default 🔹 One 💦 Two	1	lone	USB	💿 Data/Pkt
Handshake				
Default ON/	Split	Operation		
		None	Rig	Fake It
Force Control Lines				
DTR: ᅌ RTS:		Test CAT		Test PTT
				Cancel

WSJT Radio

	General	Radio	Audio	Tx Macros	Reporting	Frequencies	Colors	Advanced	b
Soundca	rd								
Input:	USB Pr	P Sound D	Device						Mono ᅌ
Output:	USB Pn	P Sound D	Device						Mono ᅌ
Save Dire	ectory								
Location	n: /Users/	marc/Libra	ry/Applica	tion Support/V	VSJT-X/save				Select
AzEl Dire	ctory								
Location	n: /Users/i	marc/Libra	ry/Applica	tion Support/V	VSJT-X				Select
Rememb	er power s	ettings by	band						
Tranc									
Trans	SITIIL				Tune				
Trans	SIIIL				Tune				
Trans	51111				Tune				
Trans	51111				Tune				
Trans					Tune				
Trans	SIIIL				Tune				
Trans	STIIL				Tune				
Trans	511111				Tune				
Trans	511111				Tune				
Trans	51111				Tune				
	51111				Tune				

WSJT Audio

Next Configure the Radio

Set Mode to DIG , WSJT will not set the mode for the TX-500 as Kenwood command set does not support a digital mode as per Lab599

There are 3 main controls that effect output power on the radio through the Mac and WSJT.

Menu 09 Gain, submenu DIG mine is set to 45

WSJT Main Window Power Slider (all the way up)

Mac Output Volume control

Set these so the output power on the rig is what you want, too high and you may see spurious spikes on the radio's pan adapter, too low and nobody will spot you



Gain

Next Set the Input Volume/Signal Strength , 2 controls effect this this will determine how well the signal is for decodes

Rig: RF Menu 07 submenu DIG , mine is set to -19

The Input sound volume control in sound prefs on the Mac

Set these so the Volume dB meter on the left side of the main WSJT window is in the green range. the settings may differ by band and antenna etc...



RF Gain

At this point you should see incoming signals on the waterfall in WSJT and be able to transmit an outbound signal and see the power meter react on the rig

UTC      dB      DT      Preq      Message        UTC      dB      DT      Message      UTC      Message        UTC      dB      DT      Message      UTC	Band Activity		Rx Frequency					
22360 - 0    0.19    7.19    7.19    0.19    7.19    0.1125    0.125 <t< th=""><th>UTC dB DT Freq Message</th><th></th><th>UTC dB I</th><th>T Freq M</th><th>lessage</th><th></th><th></th><th></th></t<>	UTC dB DT Freq Message		UTC dB I	T Freq M	lessage			
CQ only    Log QSO    Stop    Monitor    Erase    Decode    Enable Tx    Halt Tx    Tune    Monitor      40m    7.074 000    Tx even/1st    Abd Tx Freq    Generate Std Msgs    Next    Now      40m    7.074 000    Tx even/1st    Abd Tx Freq    Generate Std Msgs    Next    Now      60    Ac: 180    Add    Rx 200 Hz    Ka9VRX KC9WIB EN61    Tx 1      40    Cokup    Add    Auto Seq    Call 1st    Tx 5      74 dB    2021 Oct 28    22:36:44    Tx 6	23600 -1 0.5 1309 - KCSVDS KAWY +16 23600 -2 1.0 1002 - KCSVDS KAWY +16 23600 -2 1.0 1002 - KCSVDS KAWY +16 23600 -2 1.0 1002 - KCSVDS KAWY +16 23601 -2 1.0 1002 - KCSVDS KAWS KE99 23601 -6 0.5 1158 - <> VSIGAR R-18 23615 -2 0.5 1308 - KGWY KCSVDS R+9 23615 -1 0.5 1307 - KP415 N370 K1VT R-18 23615 -2 0.5 107 - KP415 N370 K1VT R-18 23615 -2 0.5 1544 - N370M K1VT R-18 23615 -1 0.5 1549 - KCSVDS KA9THI EM69 23630 1 1.0 1002 - KCSVDS KA9THI EM69 23630 1 1.0 1002 - KCSVDS KA9THI EM69 23630 -14 0.5 1399 - KCSVDS KA9THI EM69 23630 -14 0.5 1399 - KCSVDS KA9THI EM69 23630 -15 199 - KCSVDS KA9THI EM69 23630 -15 0.9 129 - KCSVDS KA9THI EM69 23630 -14 0.5 1399 - KCSVDS KA9THI EM69 23630 -15 0.9 129 - KCSVDS KA9THI EM69 23630 -17 0.9 129 - KCSVDS KA9THI EM69 23640 -17 0.9 129 - KCSVDS KA9THI EM69 23640 -17 0.9 128 - KCSVDS KA9THI EM69 23650 -17 0.9 129 - KCSVDS KA9 -10 -10 -10 -10 -10 -10 -10 -10 -10		4815 -9 -0. 4845 -10 -0. 11615 -8 -0. 11715 -15 -0. 2015 -12 -0.	3 1265 - 0 3 1265 - 0 4 1269 - P 1 1269 - P 1 1269 - W	Q KD9TJH EN60 U.S. Q KD9TJH EN60 U.S. D9TJH KEOCSH RRR D9TJH KEOCSH RRR B0DHB KEOCSH -11	Α. Α.		
B0    DX Call    DX Grid    Image: Coll of the state	CQ only Log QSO Stop Monito 40m ⊻	r Erase to Verticate the transmitted of the transmi	Decode	Enak	herate Std Msgs	Tune	Now	Vlenu P <sup>.</sup>
80    60    60    60    74    60    74    60    74    75    75    75    75    75 <td< td=""><td>- DX Call DX Grid</td><td></td><td>KA9VRX</td><td>KC9WIB E</td><td>N61</td><td></td><td>Tx 1</td><td>D</td></td<>	- DX Call DX Grid		KA9VRX	KC9WIB E	N61		Tx 1	D
60    KA9VRX    EMO/    Report -15 °    KA9VRX KC9WIB R-15    Tx 3      40    Lookup    Add    Auto Seq    Call 1st    KA9VRX KC9WIB R73    Tx 4      -20    2021 Oct 28    Tx 5    CQ KC9WIB EN61    Tx 6	►-80 Rx 200 Hz	٠	KA9VRX	KC9WIB -1	5		Tx 2	
A2. 180    444 Kill      40    Lookup    Add    ✓ Auto Seq    ✓ Call 1st      -20    -20    -20    Tx 4      -20    -2021 Oct 28    ✓ Tx 5      -20    -2021 Oct 28    ✓ Tx 5      -20    -2021 Oct 28    ✓ Tx 6				KC9WIB R	-15		Tx 3	
20  2021 Oct 28    74 dB  22:36:44	- KA9VRX EM67 -60 A7: 180 444 km Report -15	(Ü)	KA9VRX				Tu 4	
2021 Oct 28      CQ KC9WIB EN61      Tx 6        74 dB      22:36:44      Tx 6	- KA9VRX EM67 - 60 - Az: 180 444 km Report -15 - 40		KA9VRX KA9VRX	KC9WIB R	R73		1X4	
74 dB 22:36:44	KA9VRX  EM67    60  Az: 180  444 km    40  Lookup  Add    20  Add  Auto Seq	Call 1st	KA9VRX KA9VRX	KC9WIB R	R73 3		Tx 5	
	KA9VRX  EM67    -60  Az: 180  444 km    40  Lookup  Add    20	Call 1st	KA9VRX KA9VRX KA9VRX	KC9WIB R KC9WIB 7	R73 3		Tx 5	

WSJT Main

comments to: KC9WIB@gmail.com