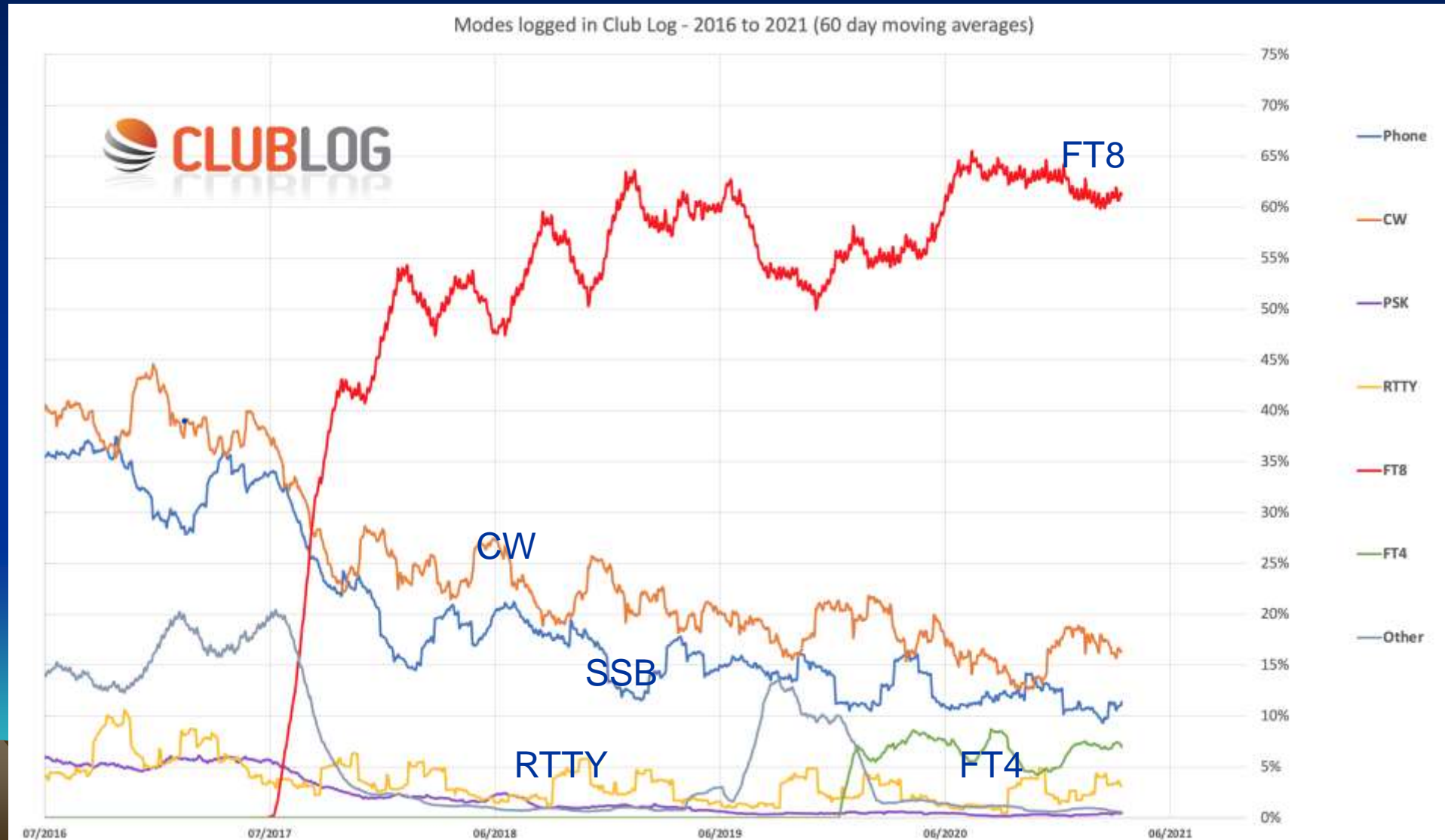


Mode Usage Evaluation



What do you need?

- Transceiver for the band desired*
- Laptop/Desktop with sound card*
- Hardware interface between computer and radio (usually USB)
- Software – Readily available & free



Transceiver

- Just about any modern Transceiver...



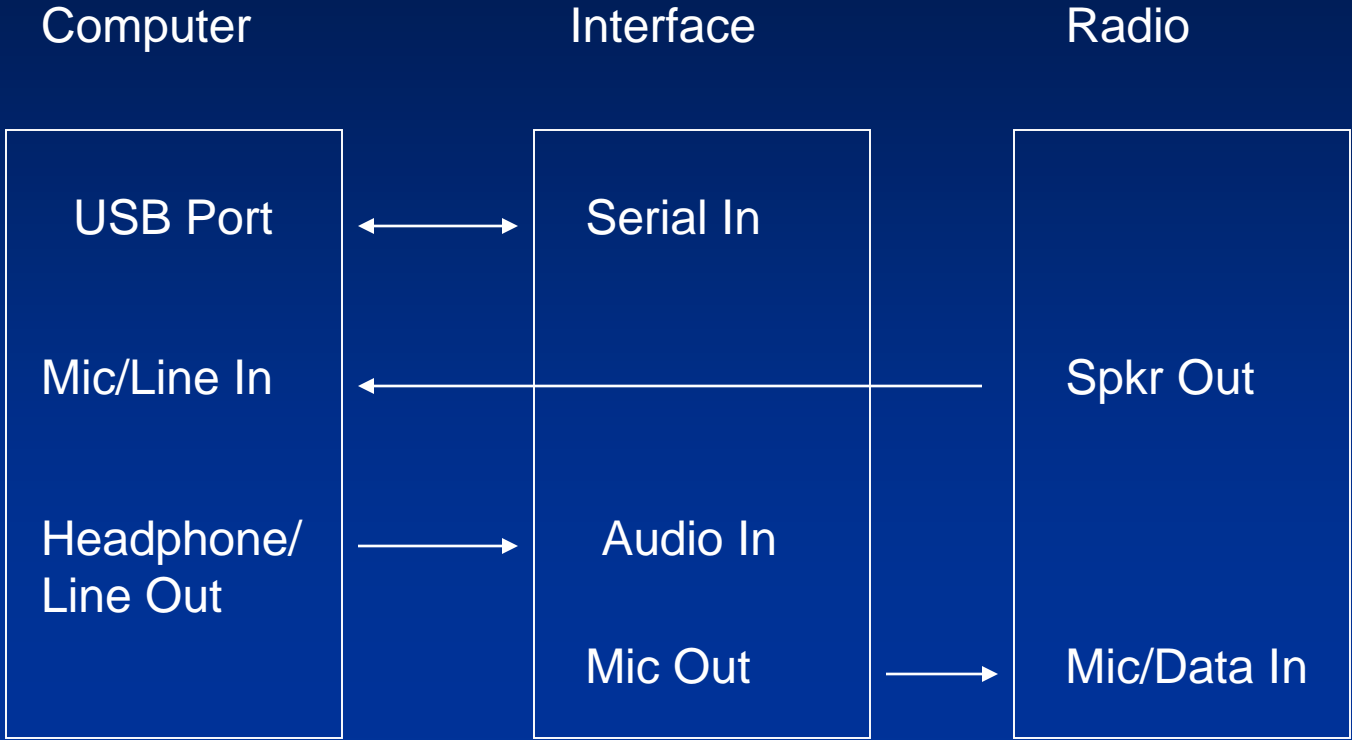
Hardware Interfaces



- <http://www.tigertronics.com>
- <http://www.westmountainradio.com>



Digital Audio Flowchart



Fldigi (Showing PSK31)

The screenshot shows the Fldigi software interface with the following details:

- Title Bar:** fldigi ver4.0.4 / RigCAT - IC-7410 - KK4SNO
- Menu Bar:** File, Op Mode, Configure, View, Logbook, Help
- Frequency Display:** 7070.000 (in green)
- Control Panel:** Frq 7071.306, Call, Qth, St, Pr, L, C, Spot, RxID, TxID, TUNE
- Text Chat Window:**

```
am working on getting mine in the next month or so, I have been listening to the audio cd's
gordon West puts out
AK4MK de KJ4IXG

Matthew, my station
Radio : K3S Elecraft, 40 Watts
Software : HRD + DM780 v6.4.0.787 Release 6.4.0.787
Antenna : GSRV
Operator : Created 1967, licenc
```
- Frequency List:** 7071.86, 7071.31 (highlighted)
- Waterfall Display:** Shows a signal at 7071.31 kHz. The x-axis is labeled from 500 to 2500 Hz.
- Bottom Panel:** CQ, ANS, QSO, KN, SK, Me/Qth, Brag, T/R, Tx, Rx, TX. Signal strength: s/n 23 dB, lmd -21 dB. Mode: BPSK31. Other controls: WF, -16, 36, x1, NORM, 1306, QSY, Store, Lk, Rv, T/R, -3.0, AFC, SQL.

Ham Radio Deluxe

The screenshot shows the HRD Rig Control software interface. The main window displays the frequency 14.070.000 in the center, with a secondary frequency 14.038.098 shown below it. The interface includes various control buttons for ALC, PWR, SWR, VFO A, VFO B, A=B, A=B, M-CH, and others. The date and time are shown as Thursday, January 17, 2019, 16:18:15. The band is set to 160m - 10m (Region 2). The interface also shows a frequency scale and various gain and filter settings.

The screenshot shows the SuperSweeper software interface. A message window is open, displaying the following text:
BPSK-31*
XXXYVWVQXXFXI
xc do 7 18 eom
-
* THE MAGICAL KINGS*
QSL VIA LOTW,
LOOK AT FOR www.qrz.com
ZY7ERM ke. KSFSE KSFSE 699 ZY7ERM
*421 YEARS ANNIVERSARY OF FOUNDATION OF THE
FORTIFICATION OF THE MAGICAL KINGS*
QSL VIA LOTW,
LOOK AT #
Send (F4) Auto (F2) Pause (F3) Stop (F3) | 2 | Abort
Call CQ Reply Closing | CW*

The screenshot shows a software interface with a waterfall plot. The plot displays a signal at 14.070.000 MHz. The interface includes various controls and status indicators, such as "Add More My Station QSL Help", "CW Tag", "Waterfall", "160m 80m 40m 30m 20m 17m 15m 12m 10m 6m", "Faves Zoom", "Main", "Signal", "AFC", "Decode", "Options", "CW (WinKey) RTTY-45 (FSK) BPSK-31 BPSK-63 BPSK-125 MFSK-16 CW RTTY PSK QPSK CONTESTIA Heli MFSK MTS OLIVIA THOR Throb Voice Modes", and "14.070.000". The interface also shows a frequency scale and various gain and filter settings.

WSJT-X with JTAlert (FT8)

The image displays the WSJT-X software interface, which is used for digital voice communication in the amateur radio band. It is split into three main sections:

- Band Activity (Left):** A table showing the frequency and message of various stations. The current frequency is 7.074 000 MHz. The interface includes controls for logging, decoding, and transmitting.
- Wide Graph (Right):** A spectral display showing the frequency spectrum from 500 to 3000 kHz. It displays the signal strength of various stations and the current signal being received.
- JTAlertX (Bottom):** A window showing a grid of alert callsigns and their locations. The grid is organized by country and region. The current alert is for ON1AEY in Belgium.

JTAlertX 2.12.7 K0LB [~.40m,HRD6+,#1] (Updates!) | Alerts | Settings | View | Sound ON | ? |

W4KCM - NC	EA7GR	IK1VHR	ON1AEY	DC2TL	IW6DGJ	N1MDX - MA	K4ICQ - GA	F5ADE
U.S.A.	Spain	Italy	Belgium	F.R. Germany	Italy	U.S.A.	U.S.A.	France
AE7KI - TN	DM5TI	K1EDG - ME	W5ADD - LA	SV1JDX	K4CY - GA	DK5WJ	UA6AUA	W3ET - PA
U.S.A.	F.R. Germany	U.S.A.	U.S.A.	Greece	U.S.A.	F.R. Germany	Russia (EU)	U.S.A.
DL1AMW	N5OSK - OK	W4JNC - NC						
F.R. Germany	U.S.A.	U.S.A.						

KN4LTR Adam A M Fairhope EM60bl 2015 United States AL 4 8 NA Q
 New Band Name QTH Grid Comments PWR Time Country Name State CQ ITU Cont. QSL

JT65 Band : 160 80 60 40 30 20 17 15 12 10 6 2 # : FT8 Band : 160 80 60 40 30 20 17 15 12 10 6 2 # : ✓ Wrk
 Callsign : 0 : Callsign : 1 : ✓ Cfm