



MONTGOMERY COUNTY AMATEUR RADIO EMERGENCY SERVICE

FEBRUARY MONTHLY NEWSLETTER

Weekly MCARES Net: Tuesday Night - 20:00 – on 147.020 repeater
Digital Check-In (Packet & PSK-31) Tuesday Night 19:00 – 20:00

Monthly Meeting: Second Thursday of the month at the Lone Star Convention Center

South Texas ARES Net: Monday Night – 19:30 on 3.873 Mhz – (we are in Area 1)

Emergency Frequencies:

Montgomery County ARES Simplex: 146.560 Mhz

Montgomery County ARES SSB Local: 28.380 Mhz

Montgomery County ARES Digital: 145.030 Mhz Packet - 28.120 Mhz PSK-31

Texas State & Area Emergency:

7.235 Mhz

7.290 Mhz

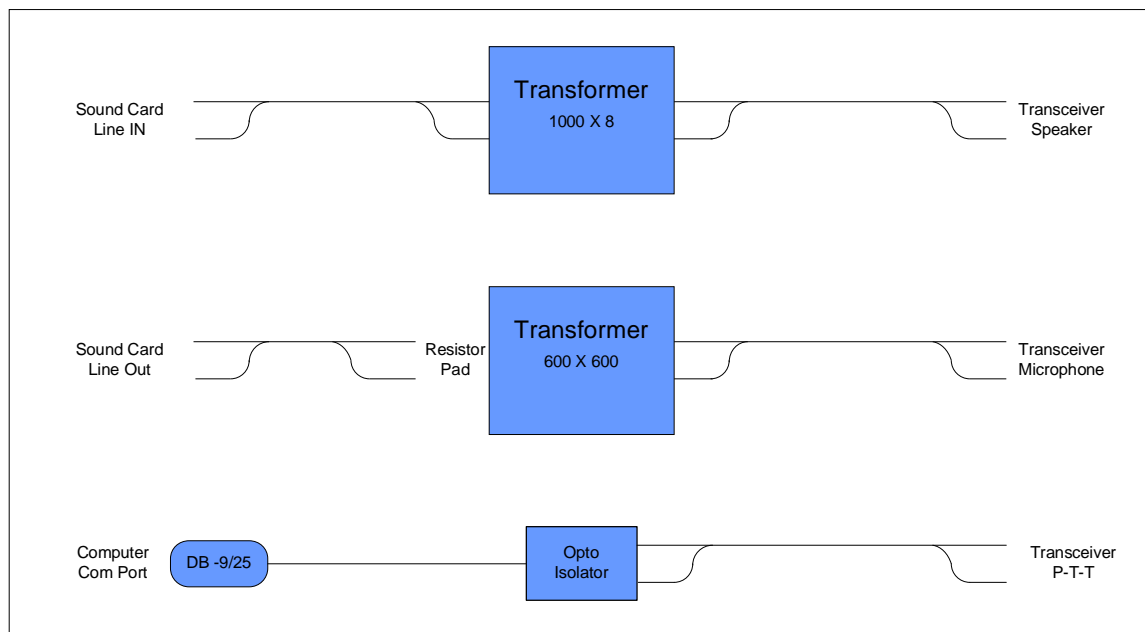
3.873 Mhz

PSK-31 Digital Mode

PSK-31 is primarily an HF band digital mode. It is usually sound card based. The sound card decodes the tones and the computer makes it into letters/numbers etc.

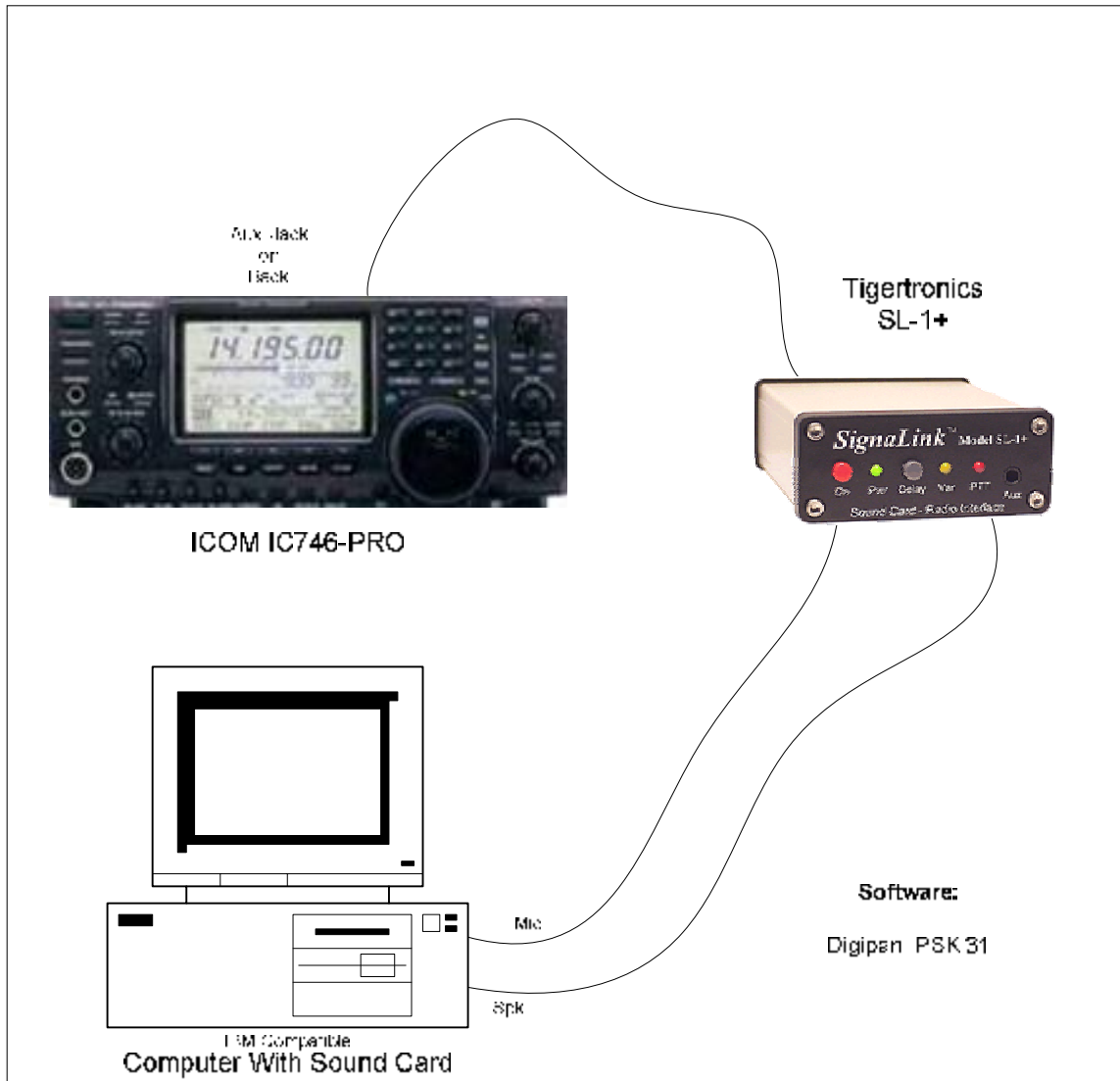
You will need an Interface unit. To get started you can build one or purchase one.

Here is a simply one that you can build.



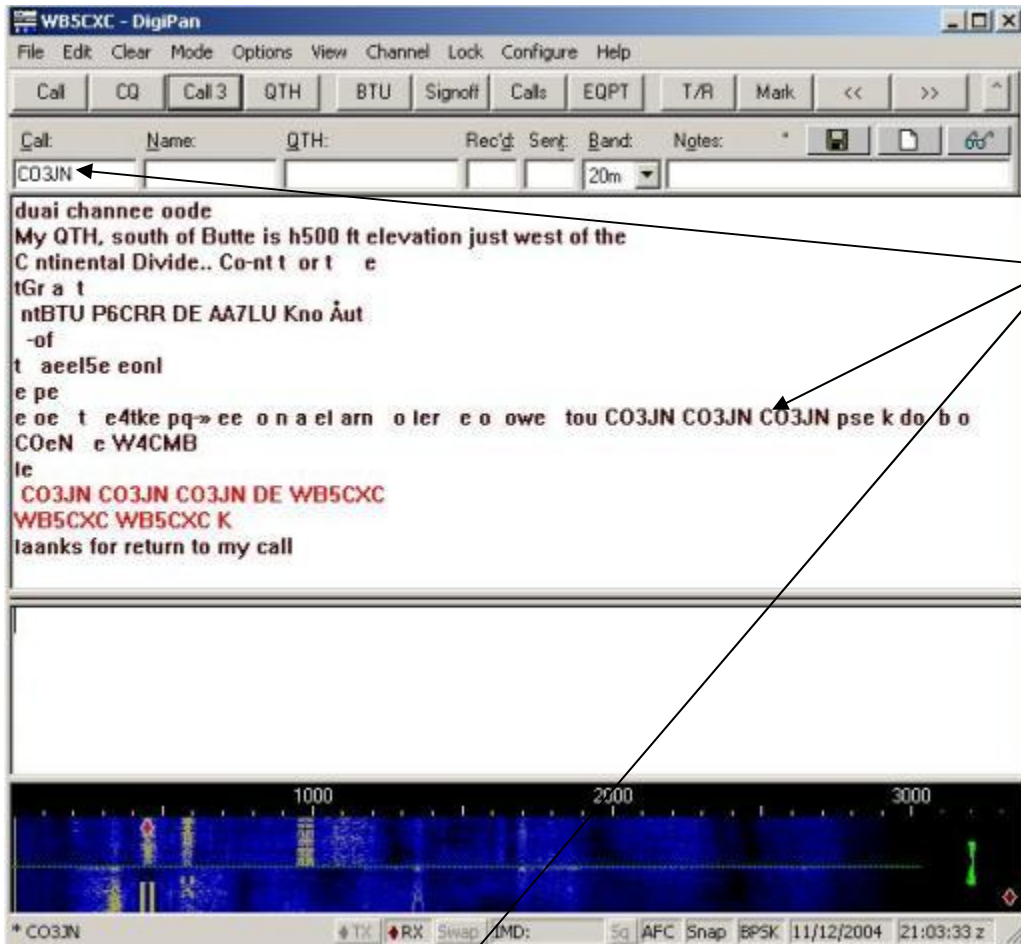
You can just connect the sound card directly into your radio to try out the mode. The transformer provides 2 functions. The first is to match the impedances and the second is to provide electrical isolation (no squealing). The last circuit is to provide a P-T-T function (key up the radio).

Commercial units can be found from \$ 50 to \$ 150. Some of the units interface with your transceiver's Data Plug while others interface using your microphone and speaker. Commercial units are manufactured by MFJ, West Mountain Radio, and Tigertronics. The Tigertronic unit is unique in that it doesn't require a serial interface to key the radio. The new Tigertronics unit has a built-in sound card and interfaces with the computer using a USB port. The Tigertronics unit also interfaces with the radio using a data port on the back of the radio. If you are using an older radio without a data port then you might want to choose a different interface unit (MFJ, or West Mountain Radio, Tigertronics has a cable without terminations).



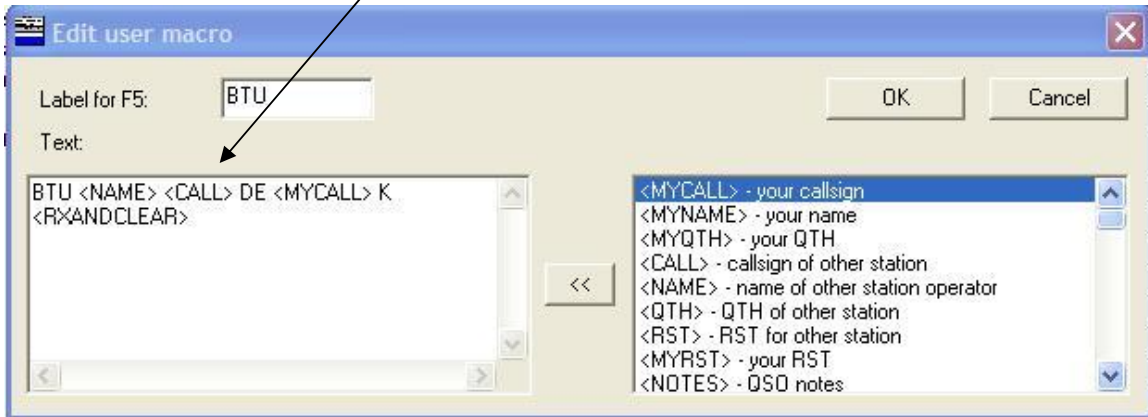
There are several software programs you can use for PSK-31. One of the more popular programs is Digipan. It is free so you can do a search and download it.

Older Version of Digipan – only decodes one signal at a time. Revision 2.0 decodes 16 + signals at a time.

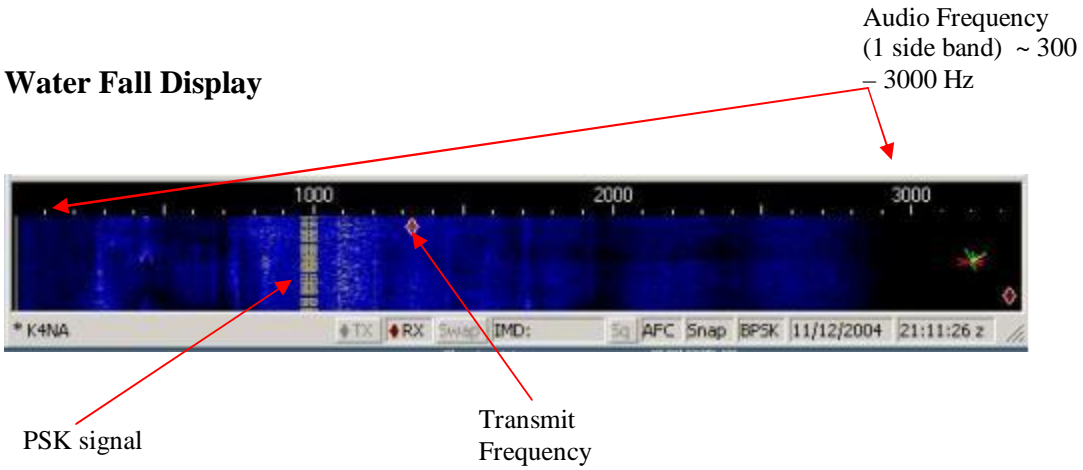


Highlighting a call will place it in the Call were it can be used in Macros

Highlighting a call will put it in the Call box. It will then be used in the Macros.



Water Fall Display



The Water Fall display is a display of Audio frequencies vs Time. The current time is at the top and some time ago is down the graph.

Digipan Rev. 2.0

WB5CXC - DigiPan

File Edit Clear Mode Options View Lock Configure Help

Name CQ Call 3 ANS. BTU Signoff Equip Other T/R Squelch Clear Multi

Call: Name: QTH: Rec'd: Sent: Band: Notes: * [Save] [Copy] [Paste]

20m

x nAuatn ehethnør ½oQeifannle spoheeoelū
eæ{
t ateot-iJb- vn 2 o
eeY
k 33e o tit
e owgei e,Fei+âa Pa
β Ae o ea ot e
lol -l β exc l tem.xlsl eiSsee o
nonn oe ltaxe ro Mne.i w eee\$ s o sn nakor

A:
B:
C:
D:
E:
F:
G:
H:
I:
J:
K:
L:
M:
N:
O:
P:
Q:
R:
S:

Individual signals are decoded in this area – each line is a signal

1000 2000 3000

TX RX IMD: Sq AFC Snap BPSK31 12/10/2008 15:04:09 z

This is another PSK program called WinPsk. Notice it has a similar type of Water Fall display but also displays frequency and amplitude (green line). It also has Macros that can be configured.

