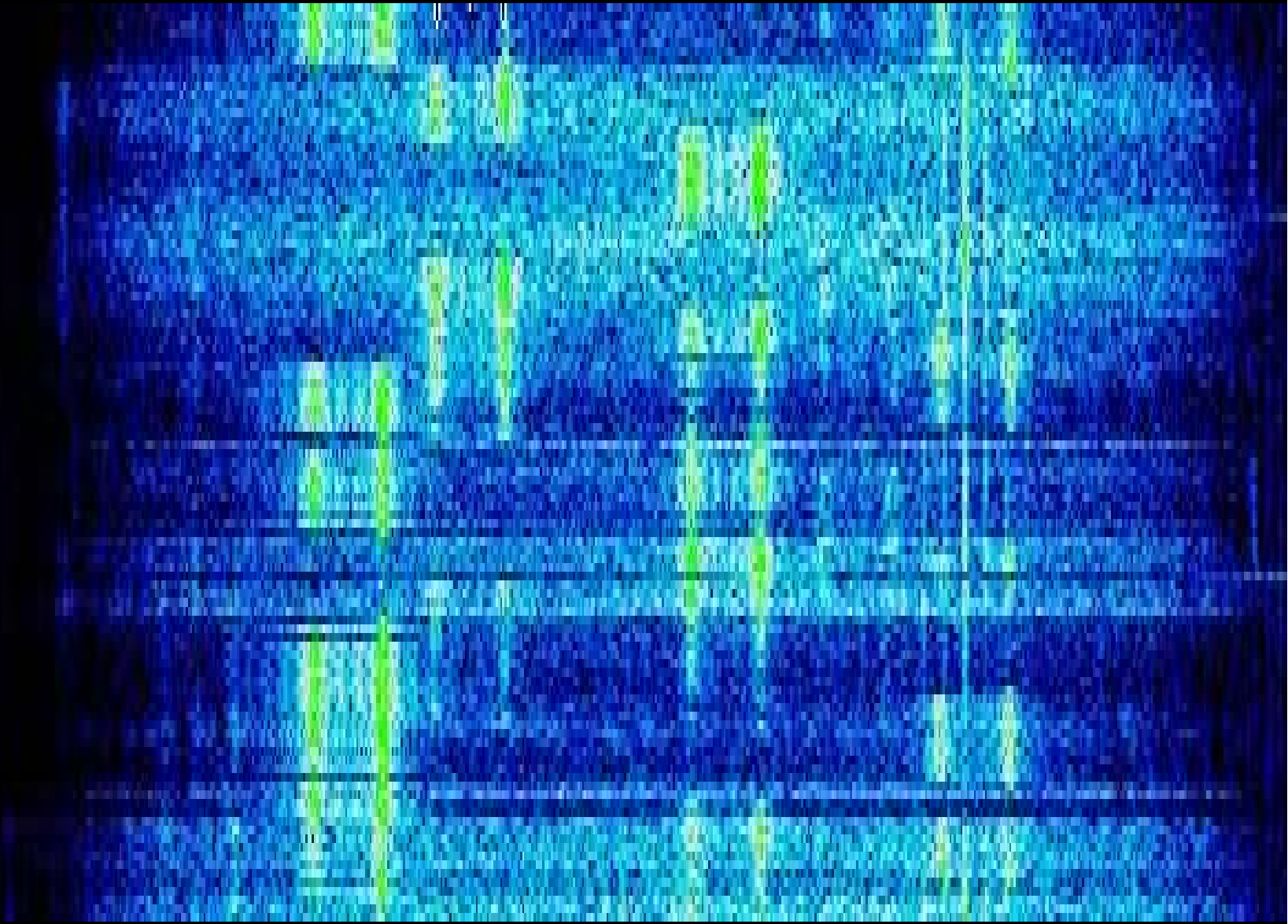


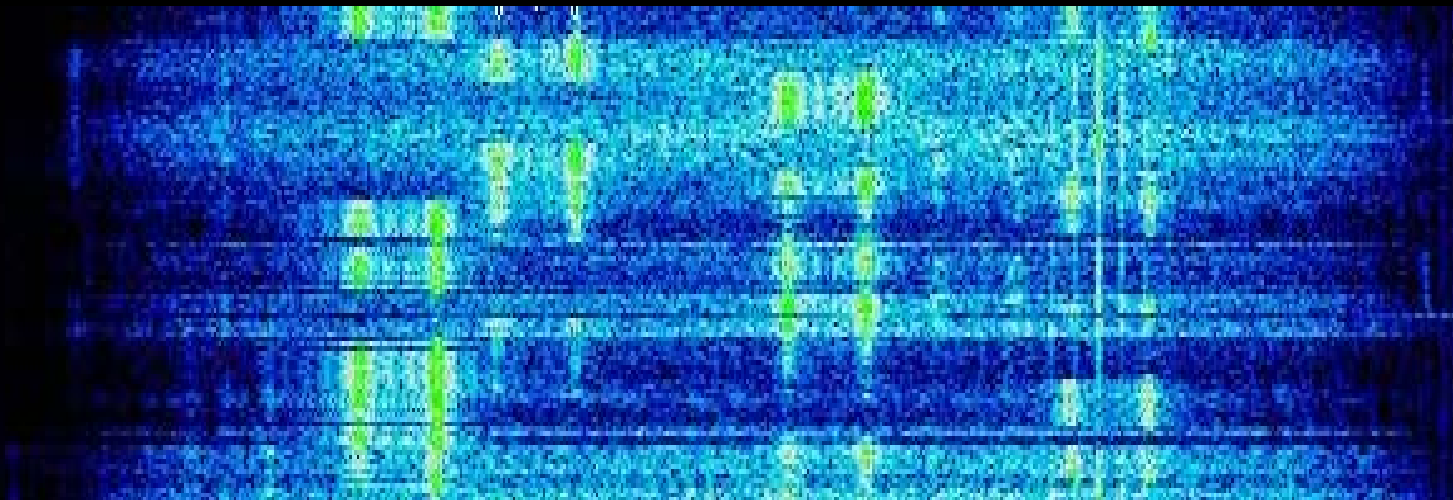
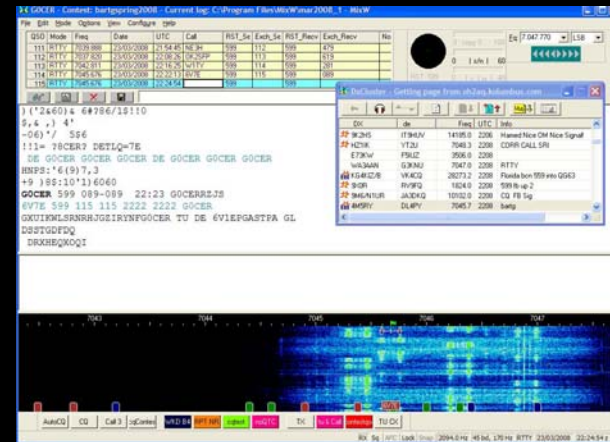
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By Dave G0CER & Richard M1RKH

DIGIMODES

- What is the interface?
- Why an interface?
- Why an interface?
- Where to find digi.
- Examples of Digimodes
- Digimode software
- Summary

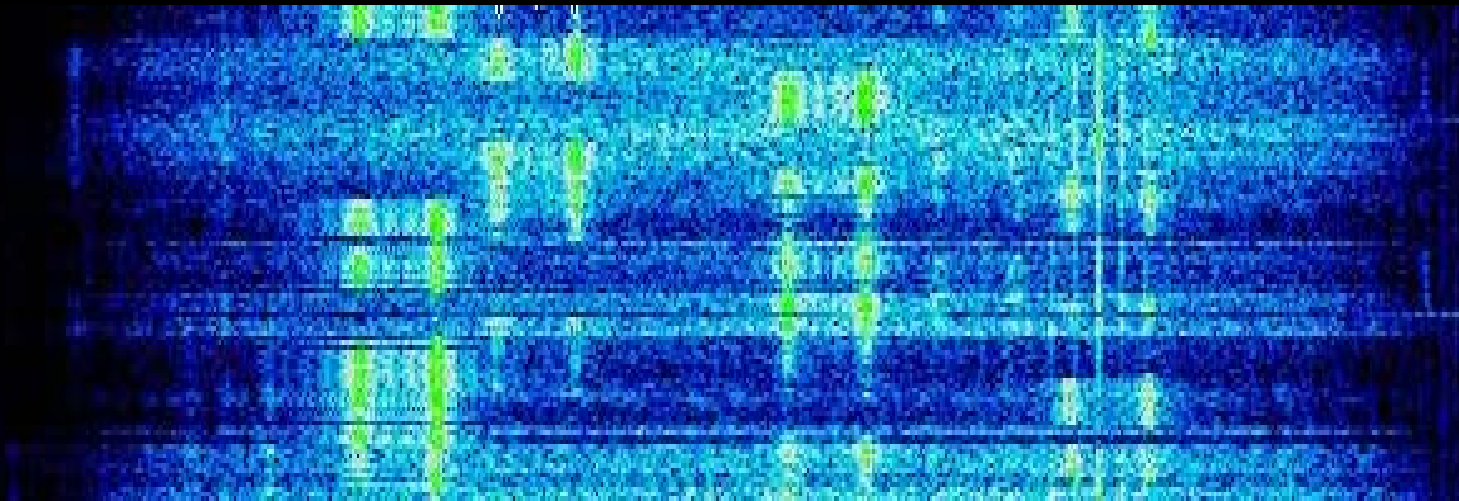


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What is the interface

Two parts

1. Switching transmit PTT Opto isolating, on/off tx/rx
2. Audio Isolation Uses transformers – as with modems to protect circuits from line voltages. & maintain electrical separation.

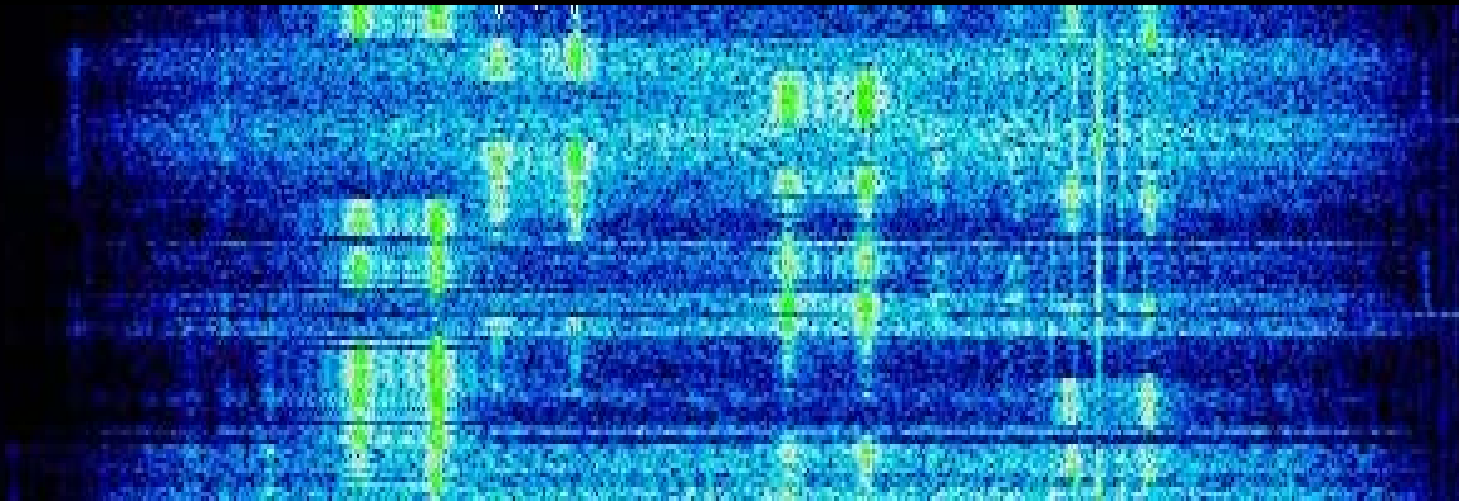


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Why an interface?

Computers to radios

- Computers can give out plenty of noise and hum and have a different earth.
- Providing electrical break is safer than a solid link.

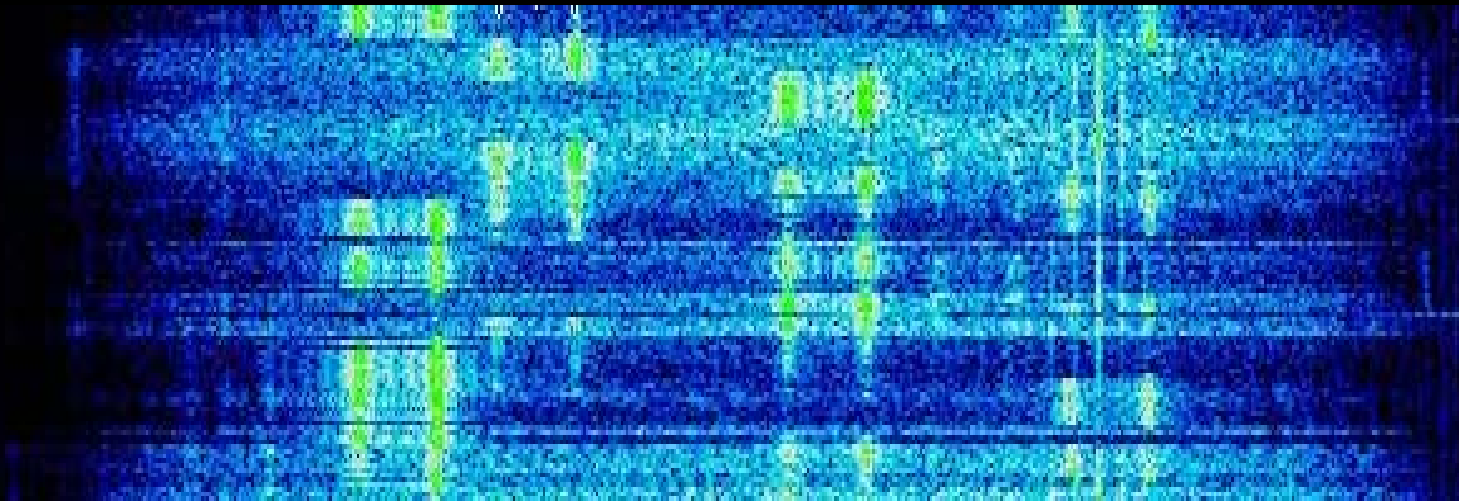


DIGIMODES

Why an interface?

Radio to computers

As before & possibility that poor antenna setting or failures could send RF into the PC possibly damaging sound card or other parts as well.



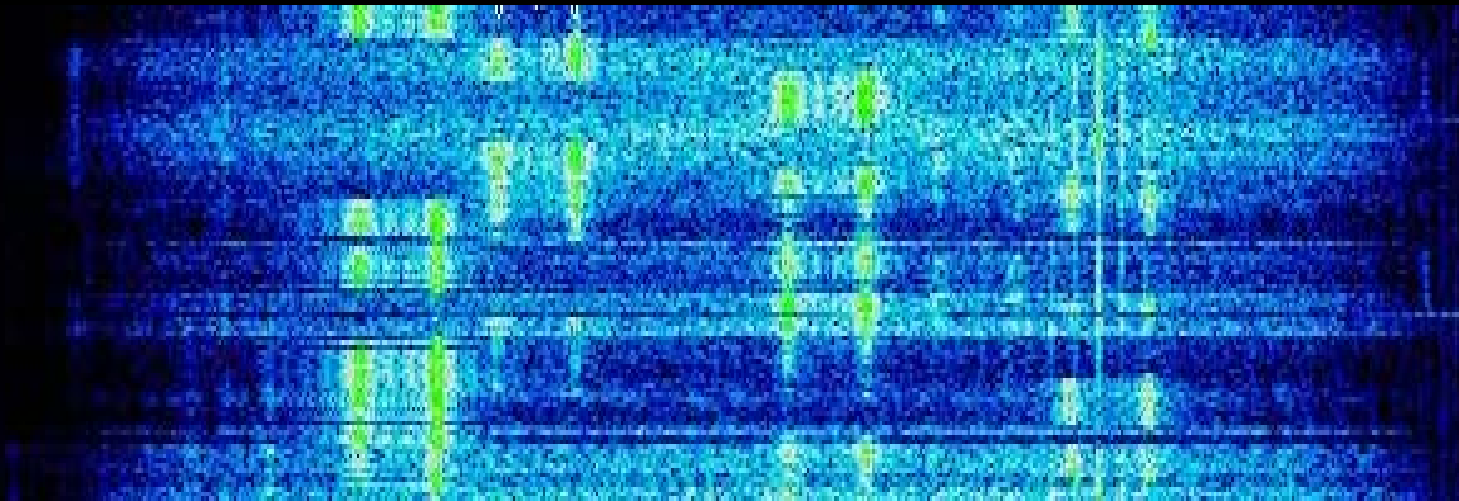
DIGIMODES

Types of digimodes

Psk31, 63, 125, etc.

Developed by g3plx, narrow/efficient for QRP. PSK
QRO=45w, 3w is good for plenty of contacts.

RTTY & Fax (both ham and maritime), very popular.



DIGIMODES

Types of digimodes

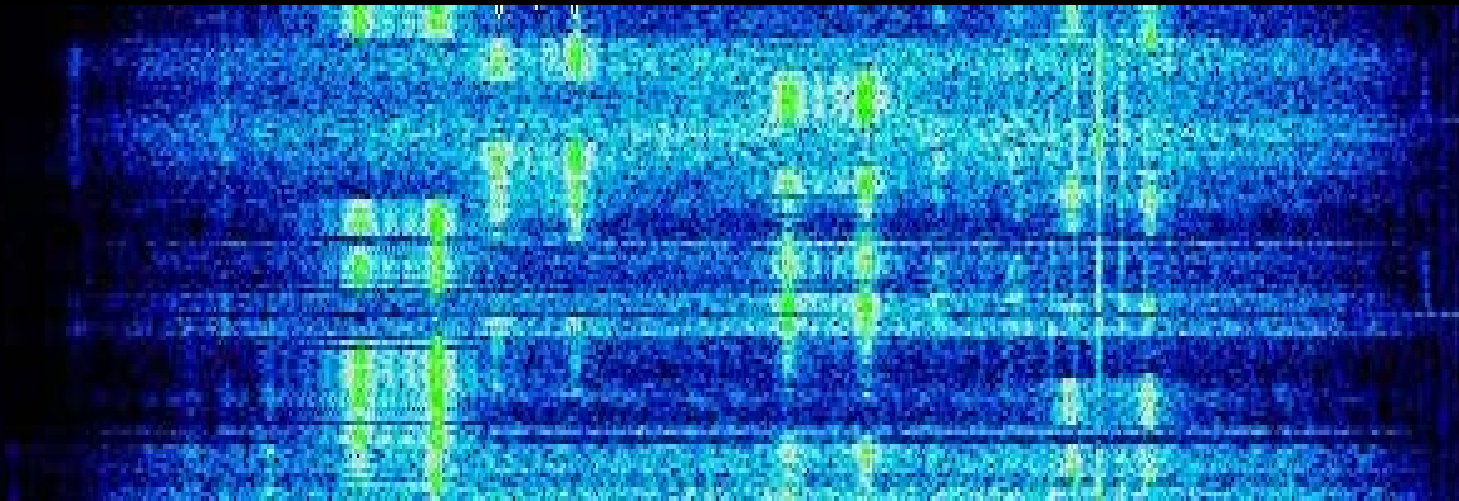
Hell

- graphical output. MT63 - multi-tones, sounds like hum.

SSTV

- tx/rx photos, popular on 20m. Digital TV - popular on 80m.

There are plenty more but..

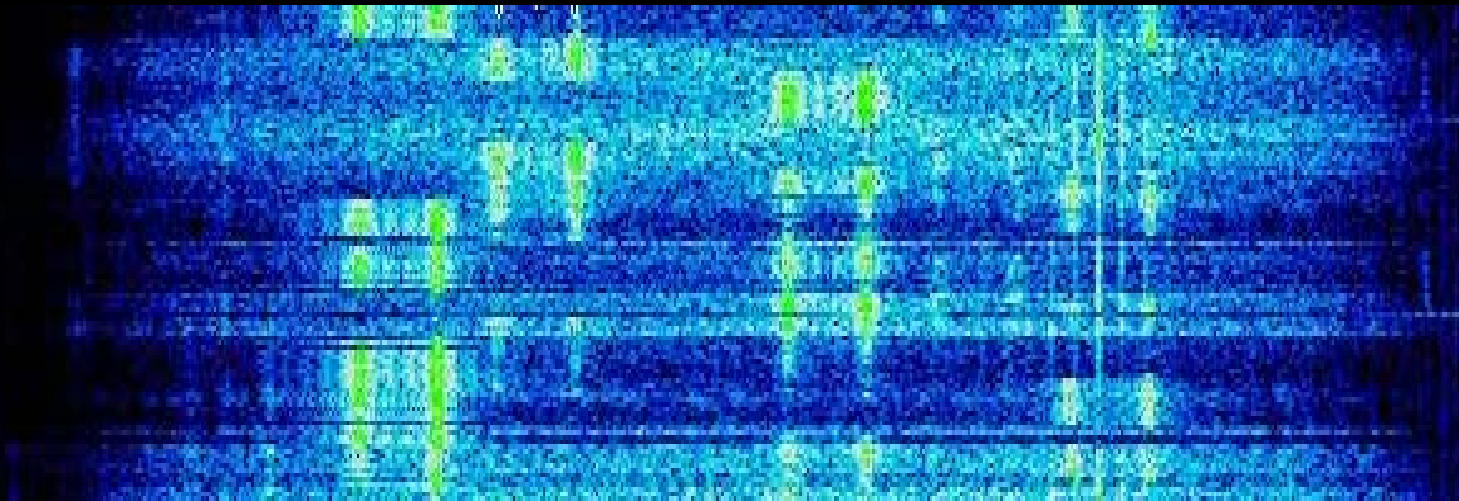


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Using the software

.. Now the software.

While your waiting or building, install some software and have a play.



DIGIMODES

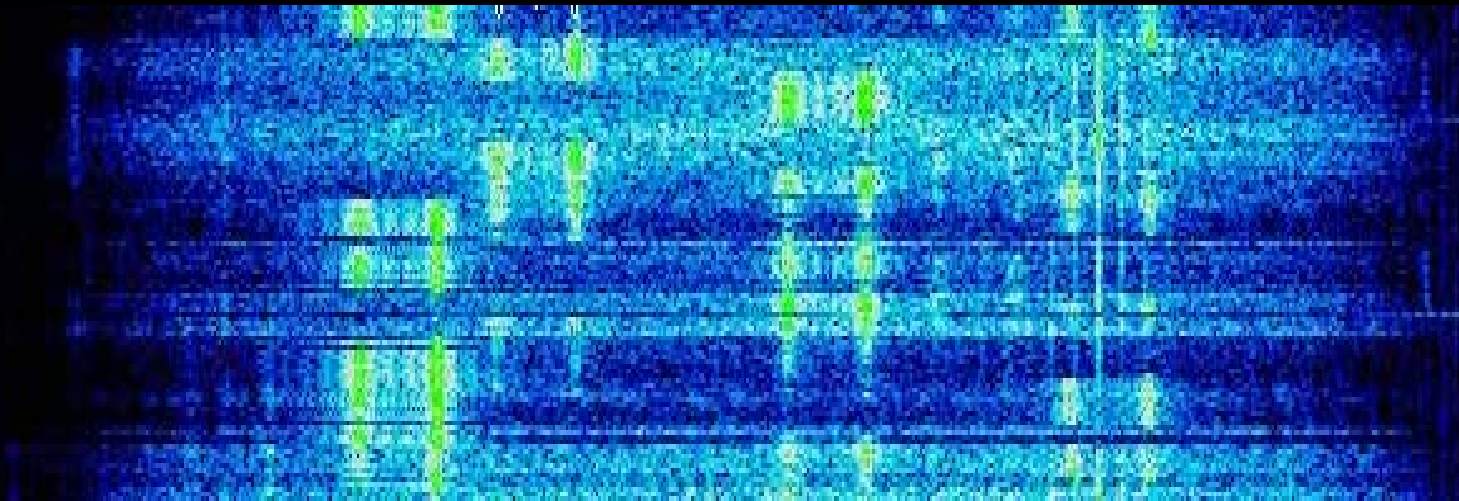
Using the software

Things to do. 3 things to make happen.

Sound in & out and PTT

Find out where settings are and put in your call, name, location and any other settings.

Note the COM ports.



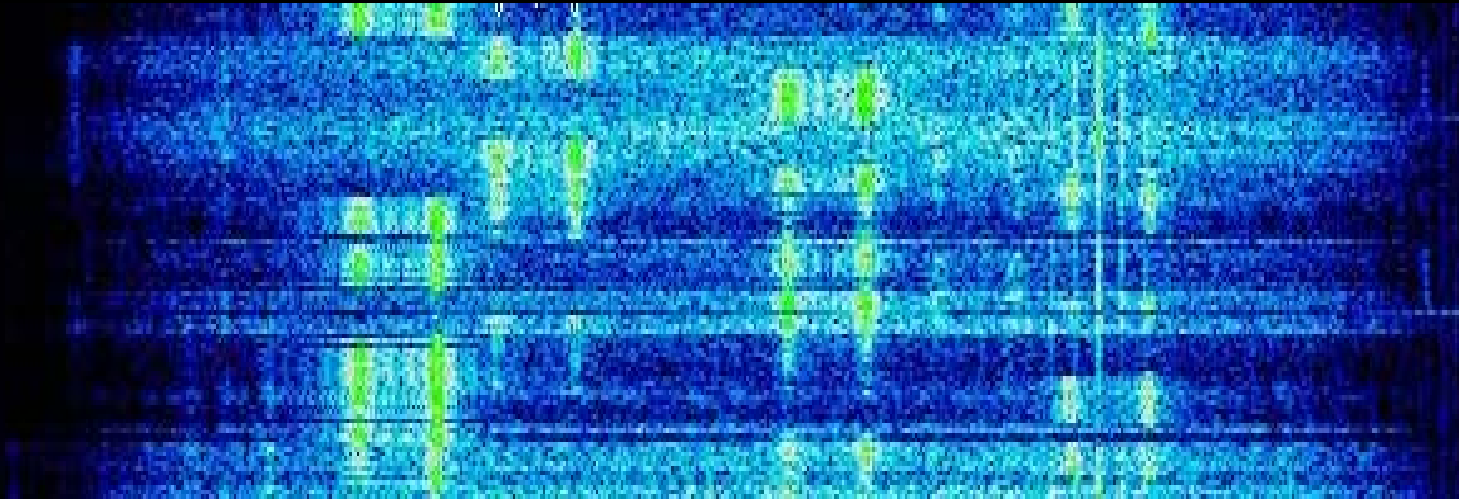
DIGIMODES

Using the software

Ways to make sure the computer side is ok

Play wav files in & learn how to decode

Make it key up – play the output into headphones.



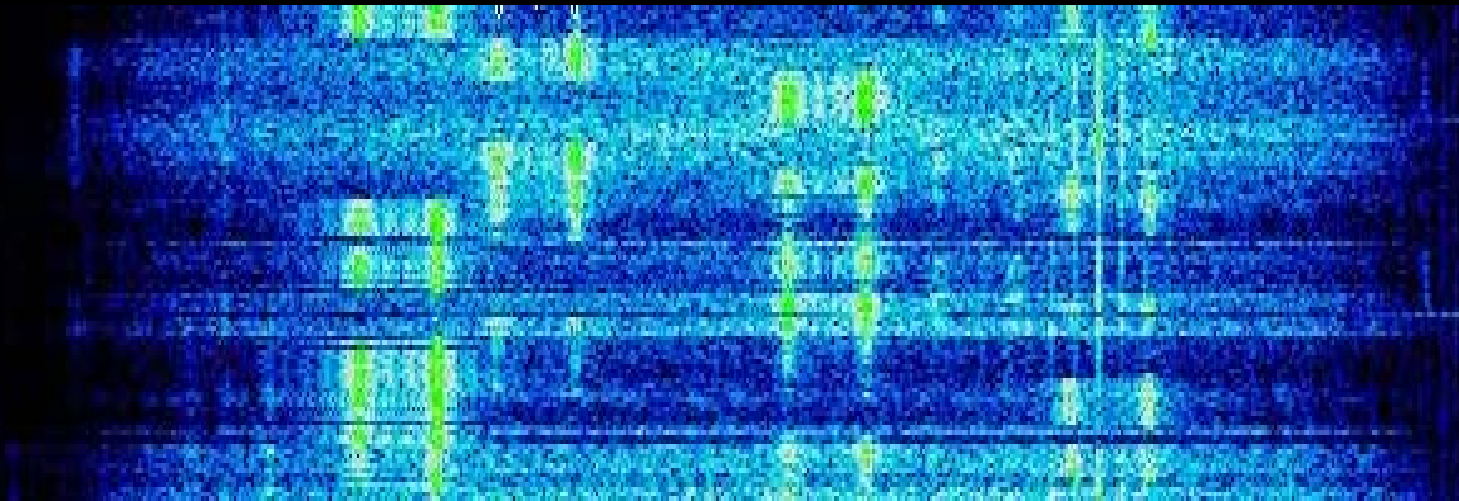
DIGIMODES

Using the software

Setup Macros.

Example – to switch to transmit, then call another station then return to receive.

```
<TX> <CALL> de <MYCALL> <MYCALL> kn <RX>
```



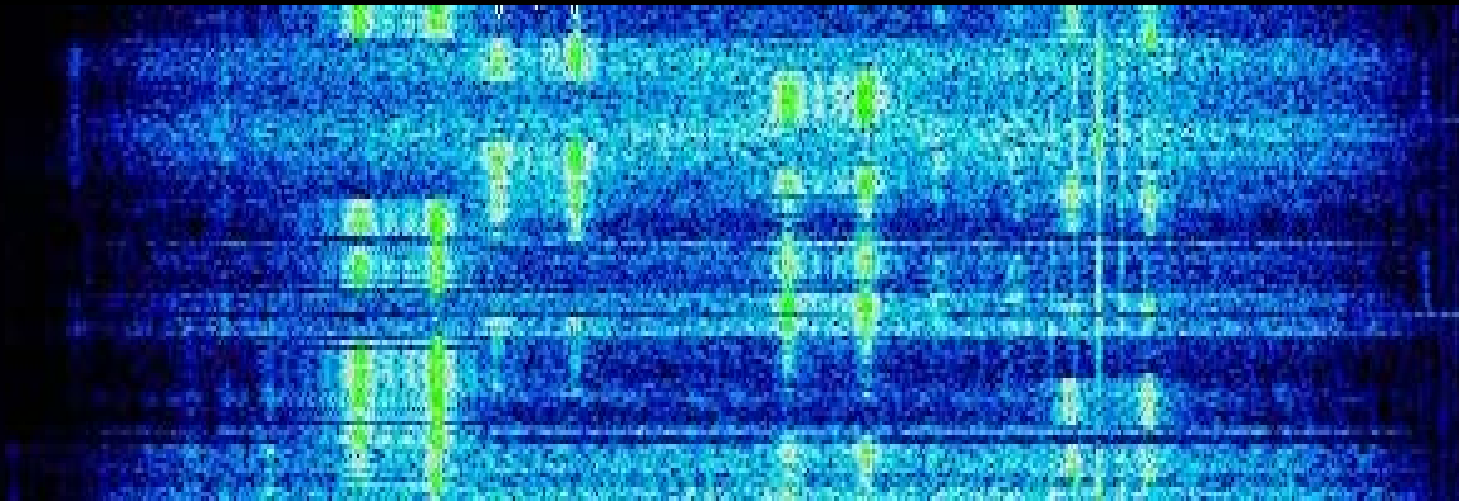
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Using the software

Decoding WAV files and live demo (hopefully).

Note wav files to be left with TDARS for members use.

A few modes require soundcard calibration, help files step you through the process.



DIGIMODES

Where to find digimodes

80 meters - 3580/2 PSK & variation - 3582-3600 all other modes

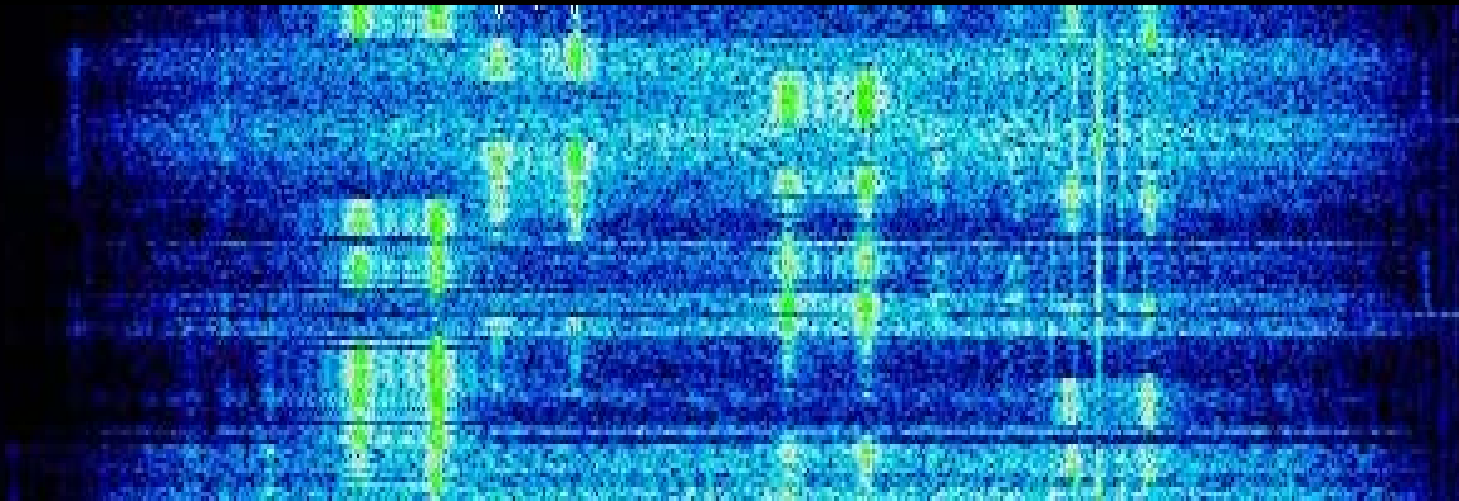
40 meters - 7038/7043 psk & rtty & other modes

- Note JA rtty stations use about 7026KHz

30 meters - 10140 psk, rtty, pactor (.145 aprs)

20 meters -14070/2 psk types

-14075 Hell, 14077 WSJT -14075-14125 rtty, 14105 Olivia



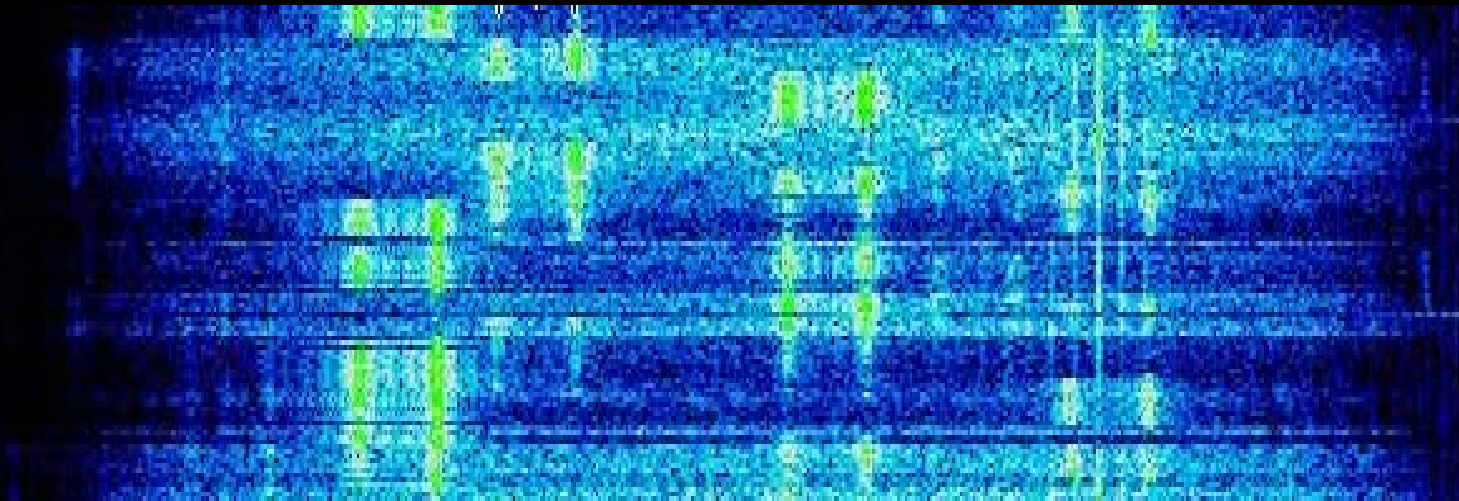
DIGIMODES

Where to find digimodes

17 meters - 18100 psk, rtty & other modes

12 meters - 24920/40 psk, rtty & others

10 meters - 28070-100 rtty 28120 psk (varies)



DIGIMODES

Where to find digimodes

50Mhz

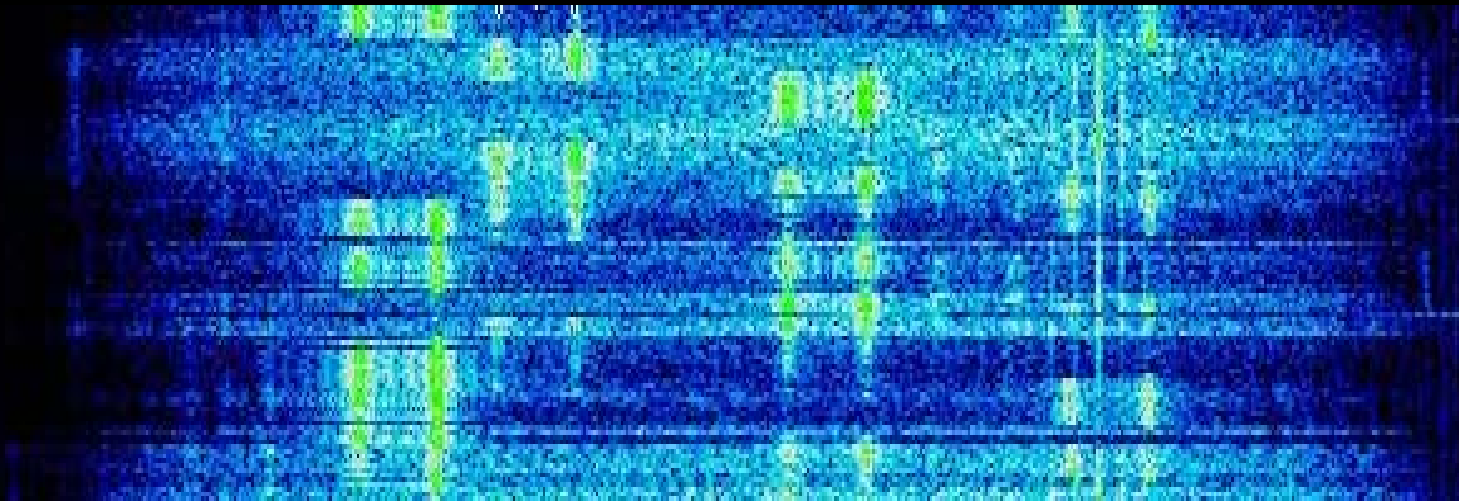
50.230 MHz JT65, 50.260 - 80 MHz FSK441

50.285 MHz PSK31 Centre of Activity

50.510 MHz SSTV (AFSK)

50.550 MHz Fax working frequency

50.600 MHz RTTY (FSK)



DIGIMODES

Where to find digimodes

70MHz

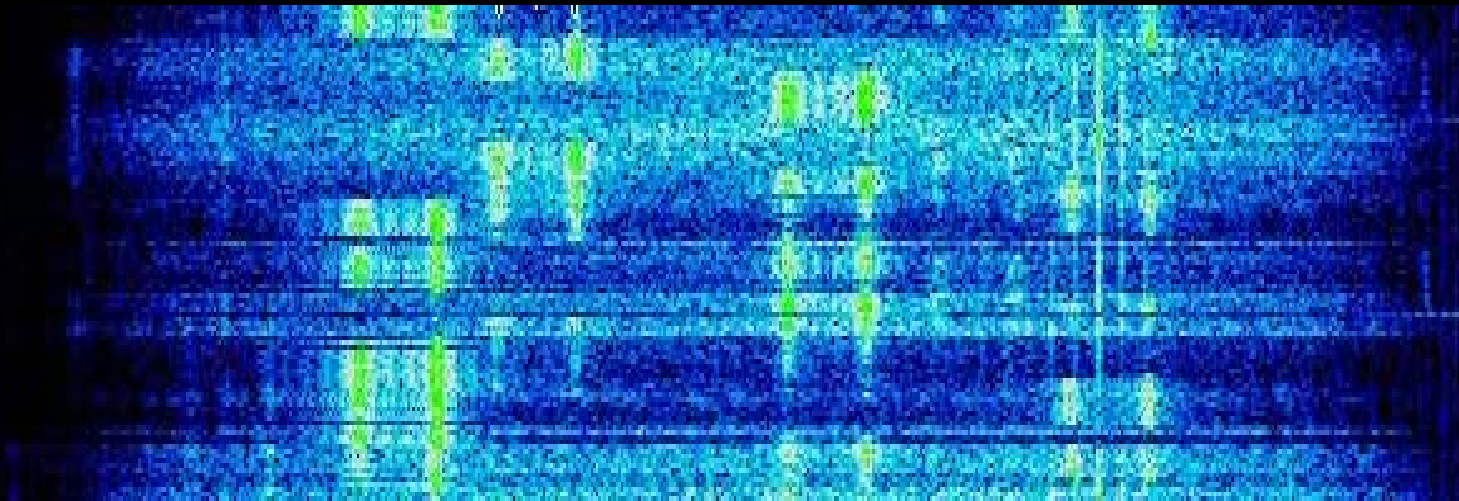
70.085 MHz PSK31 centre of activity

70.3000 MHz RTTY/fax calling/working

70.3125 MHz Digital modes

70.3250 MHz DX Cluster

70.3375 MHz Digital modes



DIGIMODES

Where to find digimodes

144Mhz

144.050 MHz Telegraphy calling, 144.100 MHz Random MS telegraphy calling

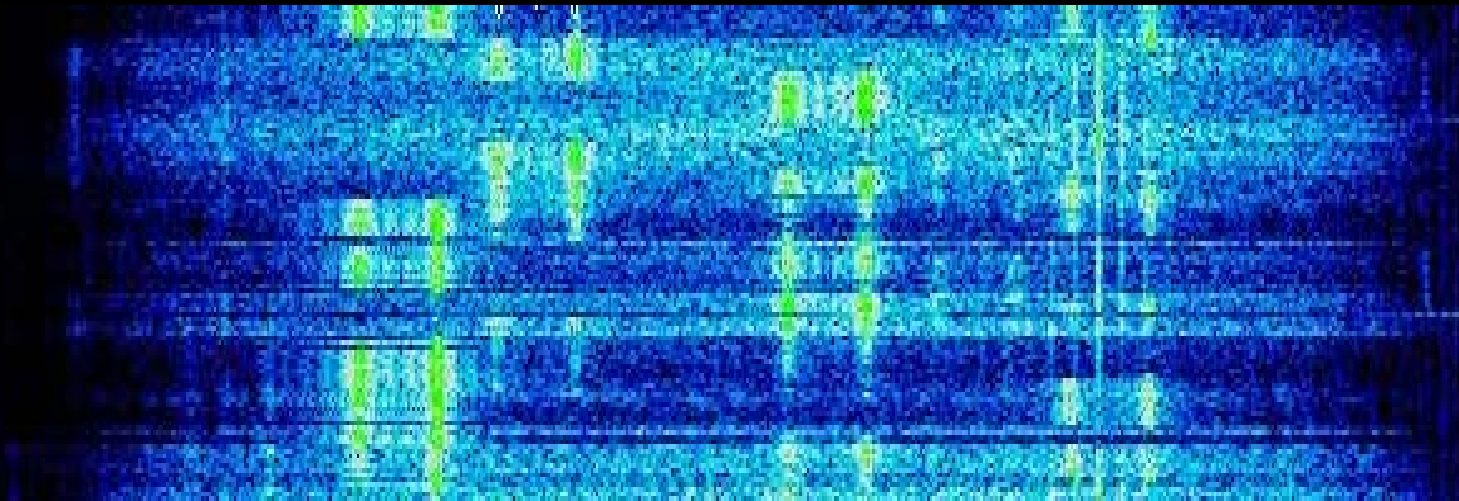
144.138 MHz PSK31 centre of activity

144.120-50 MHz Moonbounce (EME) MGM (JT65)

144.500 MHz SSTV calling 144.600 MHz RTTY calling/working

144.600 MHz RTTY working (FSK)

144.800-144.9875 MHz - Digital modes (including unattended)



DIGIMODES

Where to find digimodes

430Mhz

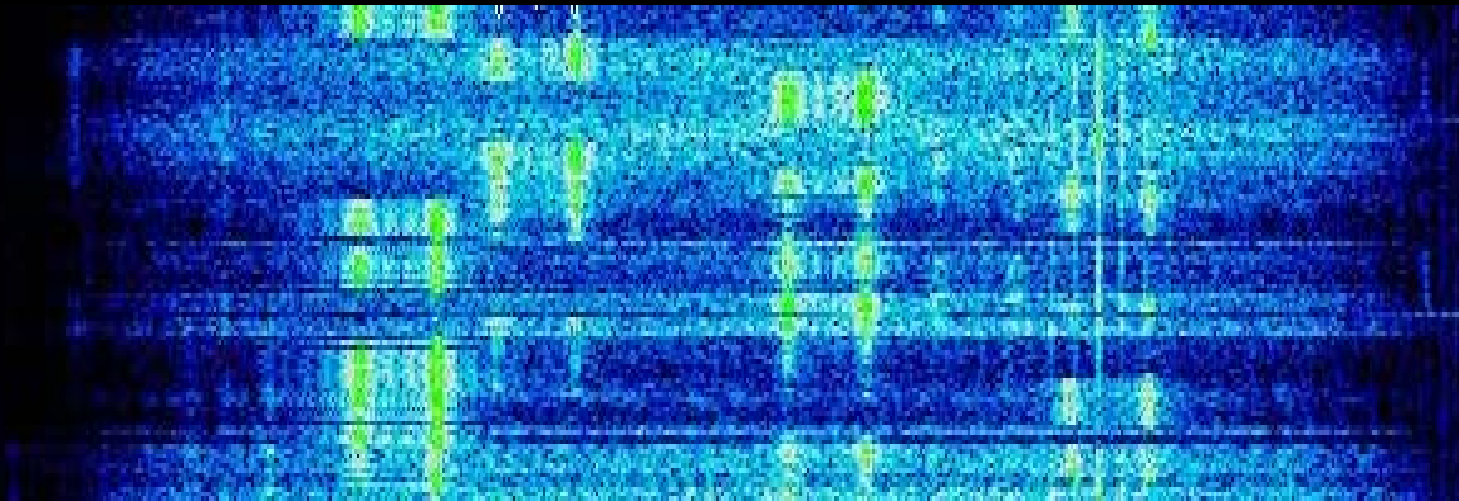
432.0880 MHz PSK31 centre of activity

432.3700 MHz FSK441 calling frequency

432.6000 MHz RTTY (ASK/PSK) centre

432.6250-432.6750 MHz Digital comms

- & Various other digital sections higher.



DIGIMODES

Where to find digimodes

1296Mhz

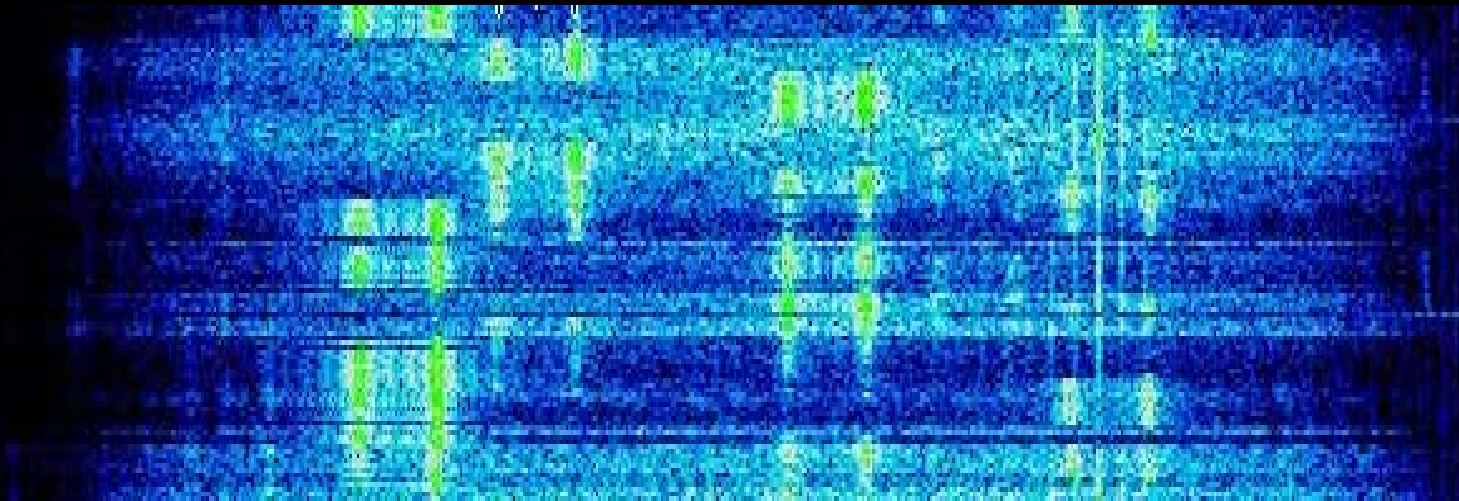
1296.138 MHz PSK31 Centre of activity

1296.370 MHz FSK441 MS calling

1296.500 MHz SSTV

1296.600 MHz RTTY

1296.700 MHz FAX



DIGIMODES

Where to find digimodes

Simple qsos – easy once setup macros.

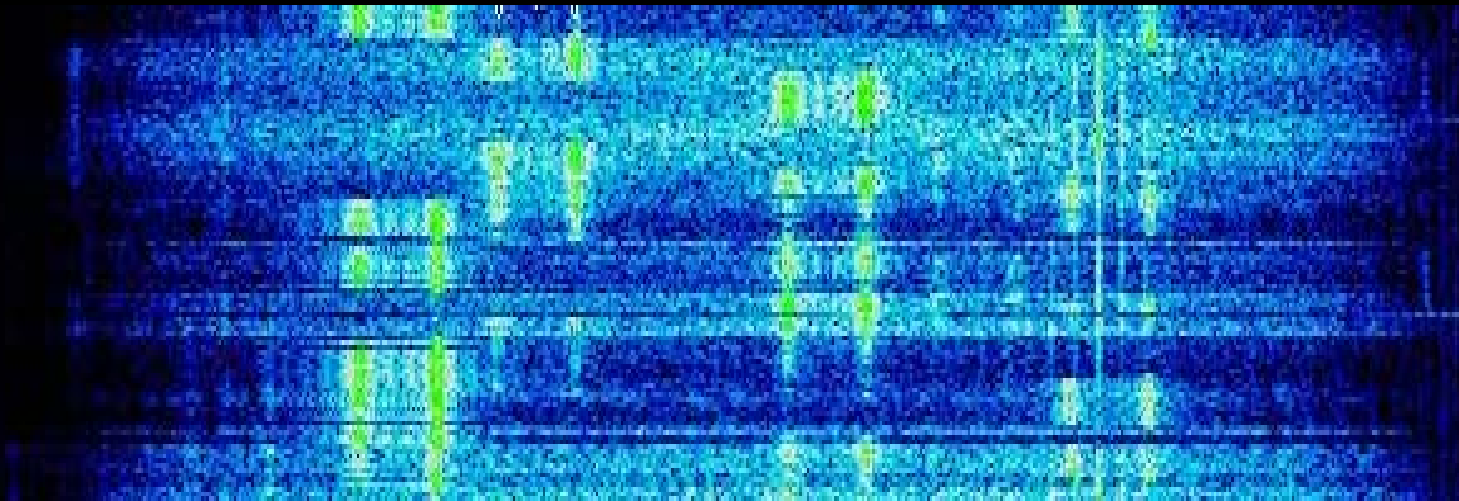
Good way to work plenty of stations.

Compare your last effort and learn to improve.

Send your log in as a check log even if you only work a few.

An upcoming date DARC 10 m Digital Contest "Corona"

8th Nov 11am to 5pm



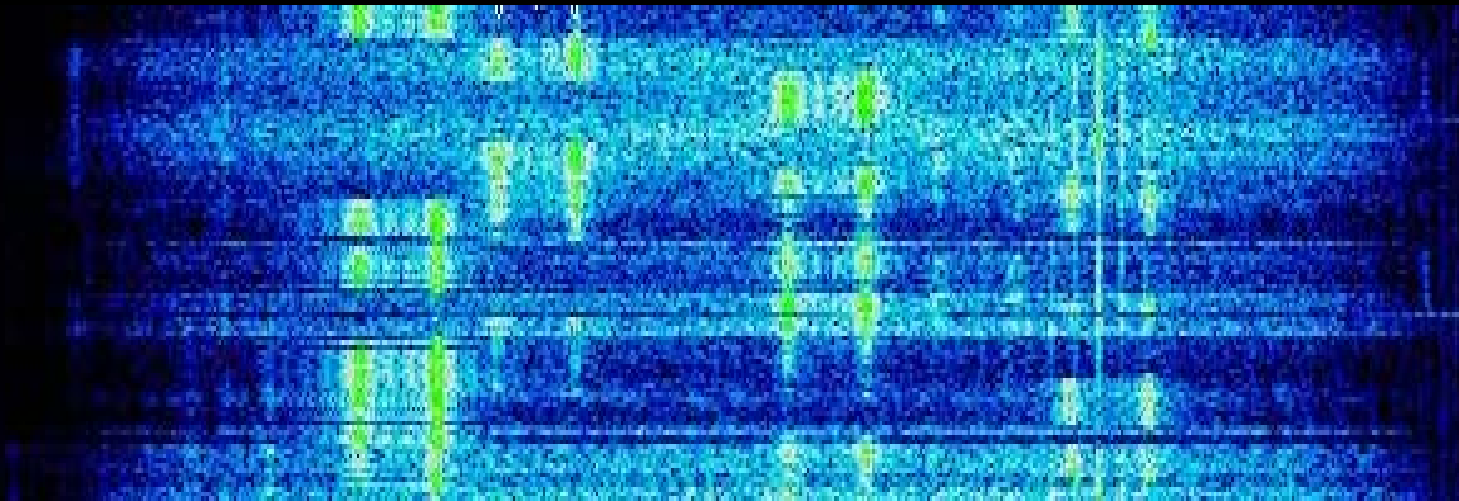
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Where to find digimodes info

<http://ultradx.com/Contesting/ContestsCalendar/tabid/84/ctl/Details/Mid/430/ItemID/236/Default.aspx?selecteddate=11/8/2009>

Keep an eye on RSGB's <http://www.rsgbcc.org/> for RSGB contests.

You can have a go, learning more each time.



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Where to find digimodes info

FT920 notes

<http://www.eham.net/articles/7007>

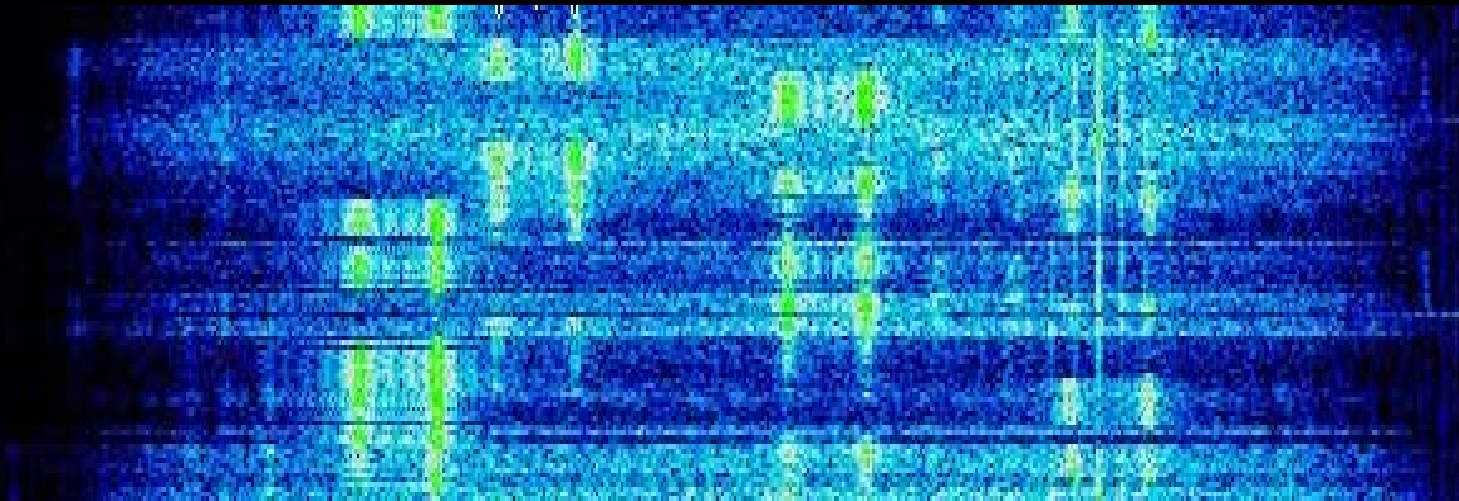
IC706

<http://www.eham.net/forums/Digital/515>

Sound card tips

<http://www2.arrl.org/news/features/1999/0701/2/?nc=1>

WSJT <http://www.pe2pe.eu/WSJT-English.htm>

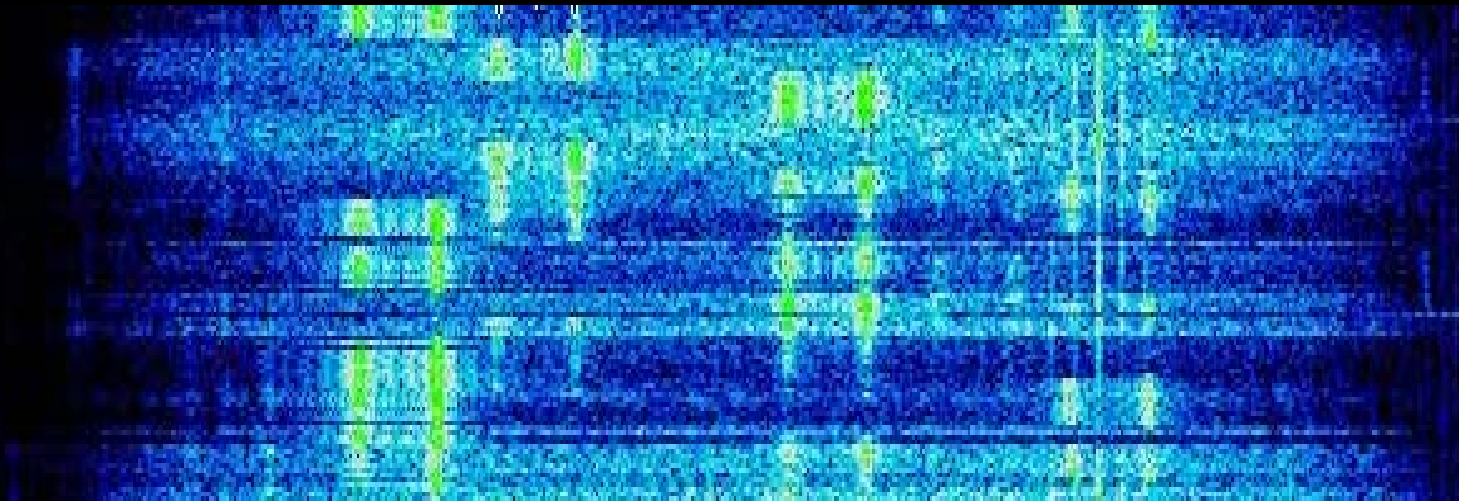


DIGIMODES

Where to find digimodes info

Google is your friend.

Hope you enjoy using Digimodes - and enjoy building your interface. Please share successes and problems via the TDARS email reflector.



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Thank You &
good DX-ing

