

## Digital Mode PSK-31 - Shut-Up and Start Typing

by Ed Poccia KC2LM

edwardpoccia@aol.com

New Hams or Hams who are only familiar with VHF/UHF repeater operations but thought about communicating with exotic DX locales may want to consider the popular digital mode know as PSK-31 (phase shift keying @ 31Hz).

This digital mode functions as a keyboard to keyboard exchange that is easy to use and can communicate with stations world wide using only low power, typically 10 watts and simple antennas. Even older equipment can be used with this mode. I am using an HF SSB rig that is 35 years old. This mode can accomplish long distance contacts because it concentrates all the signal power into a bandwidth of 31 Hz while SSB requires about 3,000 Hz. "But I want to TALK, NOT TYPE", I hear you cry. Actually, keyboard QSOs with DX stations are most enjoyable.

Consider a recent contact I made with a Ham on Easter Island. We chatted for 30 minutes about the statues and conditions on the island. Having such a contact on 20 meters SSB may have filled hundreds of hams with a desire to shoot out my porch light.

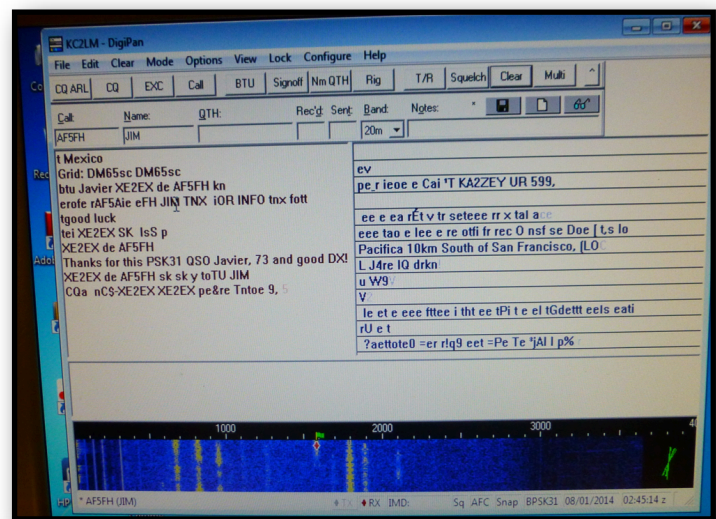
"But I can't type". That's OK! The software that controls PSK-31 contacts allows you to preset a series of messages, so you can just click a button on the screen to: send a CQ, send your name, QTH and grid square, provide a contest exchange .... or give a sign-off message. If you'd like to work some DX, give PSK-31 a try.

*Conducting a YouTube search will bring up many, many choices, but I have found those listed below to be extremely helpful in getting you on the air.*

### Getting Started

1. Take a look at the **YouTube** video posted below to just see what it is all about.
  - a. [Introduction to PSK31 and Digipan \(the free software used to operate in this mode\):](#)  
<https://www.youtube.com/watch?v=cxb0HTMjX7o>

2. Download the software, "Digipan" free, from the web site below. Install it on your computer. Place the computer near your HF radio and view the action on HF. Use the **YouTube** video at the web site below to show you how to download, install and use the software..
  - a. [Introduction to PSK-31 - Receiving:](#)  
<https://www.youtube.com/watch?v=jQpBGh9RMEQ>



The screen shot above reflects a typical PSK-31 contact. Text on the left represents the information sent and received. The text column on the right allows you to monitor other activity on the frequency. The blue "waterfall" at the bottom illustrates the positions of other stations on the frequency. The row of buttons at the top of the screen are your, "macros", preset messages that minimize the amount typing you have to do.

**PSK-31 Frequencies:**

20 meters: 14.076      15 meters: 21.076      10 meters: 28.120 (*not very active*)

3. **If you do not have an HF rig** you may want to look at a **YouTube** video at the web site below as it has about 20 minutes of sound that your computer can convert to text.

a. Sample of 20 meter Activity for PSK31:

<https://www.youtube.com/watch?v=qHNvp7FfP6E>

Some of the more modern rigs have a built-in interface, but for an older HF rig, you will need an interface to transmit/receive on PSK-31. There are many reliable units out there. **Signalink** sells for about \$100 and their tech support staff were extremely helpful in getting my station on the air. This interface also works with CW, RTTY, and JT-65 & JT-9 with appropriate software.