

# TMRA Q&A Net Digital Mode Topic - Spring 2010

The TMRA Q&A Net will be spending the Spring of 2010 discovering the world of digital communications.

## **Our purpose for this topic is multi-faceted.**

1. Digital is here to stay.
2. It is an alternate and fun way to communicate.
3. It provides an alternative to our current EMCOMM voice capabilities.

## **We are using a crawl, walk, run approach to reach our destination. Ultimately we would like to:**

1. Establish a local net running digital communications.
2. Establish protocol for traffic handling on digital communications.
3. Establish and practice setting up a net on a timely basis for EMCOMM purposes.

## **We have selected fldigi (freeware) as the software of choice.**

For training purposes, fldigi allows everyone to be looking at the same screen. In actuality, the operator may use any digital communications software he/she chooses. Software assistance would be limited in that case.

fldigi is available at:

<http://www.w1hkj.com/Downloads.html>

Most users will choose the 3rd item (Windows XP / W2K / Vista installer)

*For more information on getting FLDigi installed, please see **APPENDIX 1**.*

## **Hooking up your transceiver for receive**

Simply hook up an appropriate audio cable from transceiver speaker/headphone jack to line in/mic in on your computer. You may also hook up a microphone to you computer and put it near your radio.

In the initial stages, a computer with a microphone and an HT will suffice.

## **Recommended interface (hardware) for transmitting**

Signalink USB

The interface has a built in sound card which:

Greatly simplifies the computer to radio cable hookup

Uses a USB port to eliminate the complication of multiple com ports

Only 2 cables required for most setups

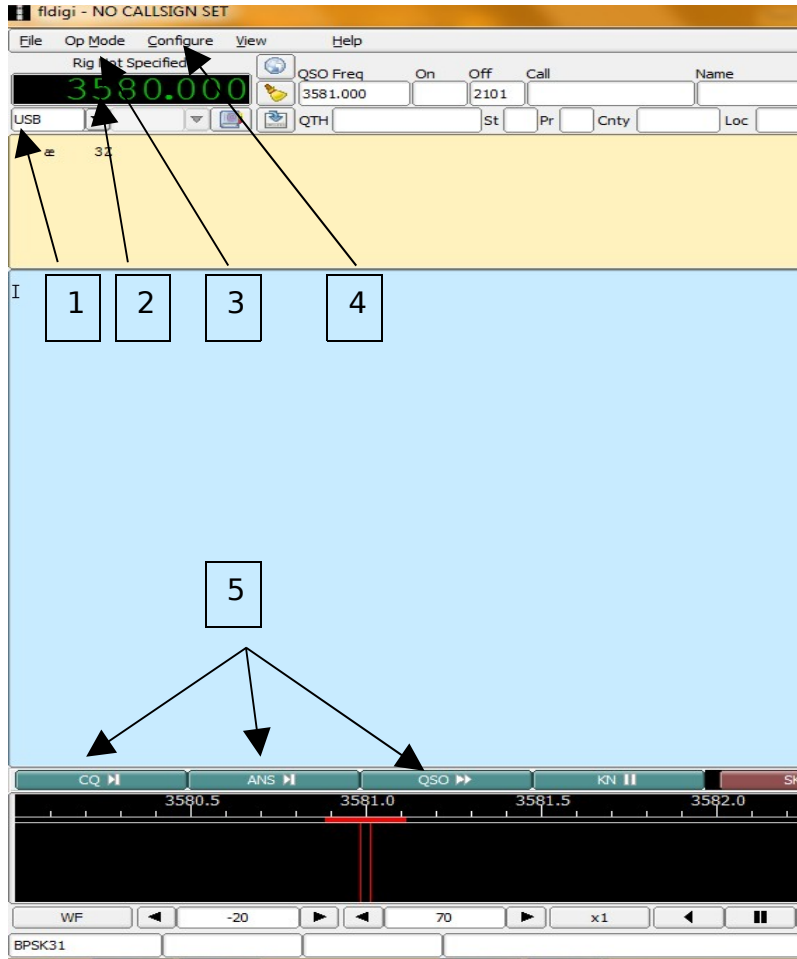
Cables supplied with the Signalink

Choice of Mic cable or data port cable if radio has one

About \$100

Available at: <http://www.tigertronics.com/>

We are starting with PSK31. We will branch out as the group gains more experience. The following are the items that need to be taken care of to get in sync with the group.



1 . Modulation Type  
Click to choose  
FM (**use this for repeater use!**)  
USB  
LSB  
etc.

2. Waterfall Frequency  
Click on any number.  
Change by entering frequency  
using numeric keypad and  
pressing **ENTER**.  
Frequency is in KHz  
Club repeater would be  
147270.000

3. **Op Mode**  
Choose **PSK > BPSK-31**

4. Configure  
Choose Operator  
Fill in Call Sign and Name  
Fill in other boxes if desired

5. Macro (Function) keys 1 to 12  
Shortcuts for repetitive transmissions  
Left click or press Function Key x to transmit  
Right click to view or edit

Example: Default F1 (CQ) right click to view or edit

```
<TX>
CQ CQ CQ de <MYCALL> <MYCALL> <MYCALL>
CQ CQ CQ de <MYCALL> <MYCALL> <MYCALL> pse k
<RX>
```

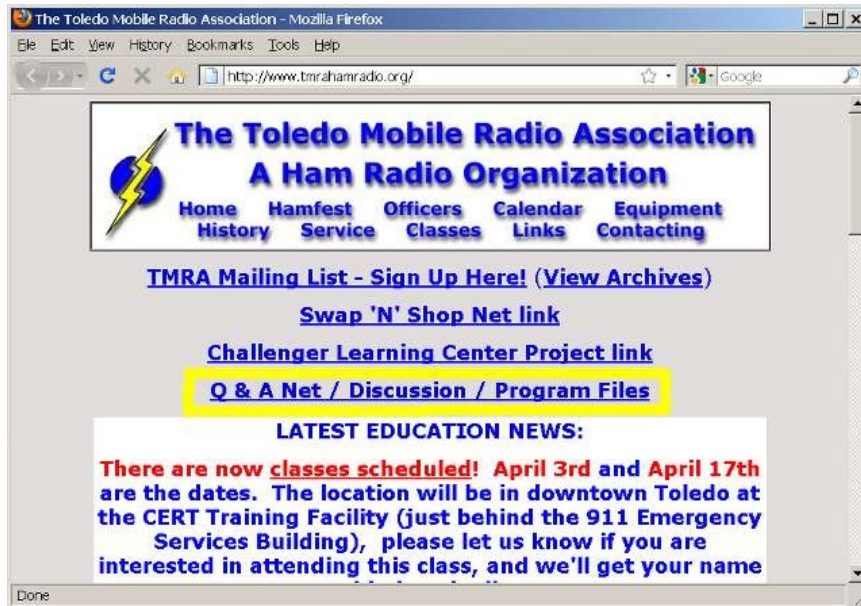
<TX> puts transceiver in transmit mode  
<MYCALL> send your call sign if you configured operator in step 4 Call Sign  
<RX> puts transceiver back into receive mode  
Anything not in <> will get sent as is

See you on Sundays @ 7:30 p.m. on 147.270  
Steve & Steve  
KC8TVW & W8TER

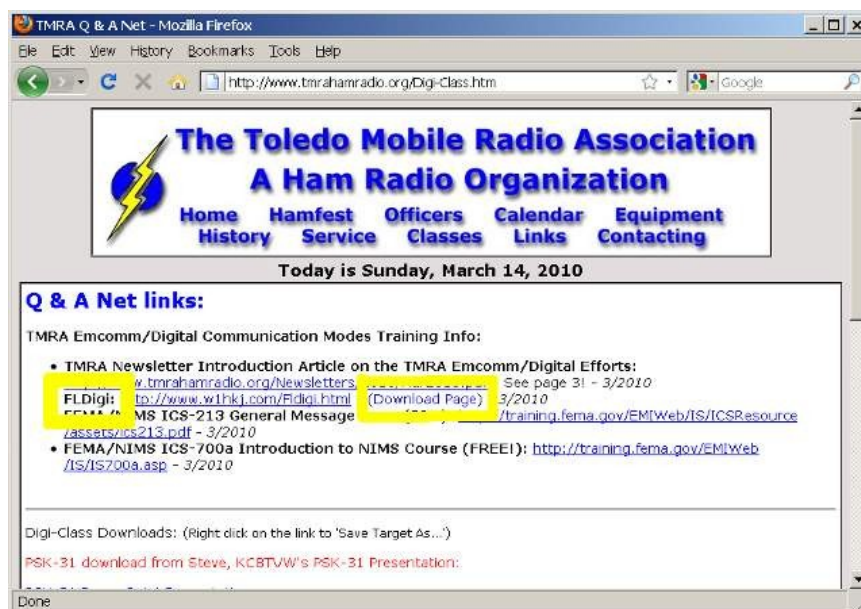
# APPENDIX 1 – Installing FLDigi

To find the FLDigi download site, follow these steps:

Using a web browser, go to the [www.tmrhamradio.org](http://www.tmrhamradio.org) website and click on the “**Q & A Net / Discussion / Program Files**” link.



Find the “Download Page” link and click on it.

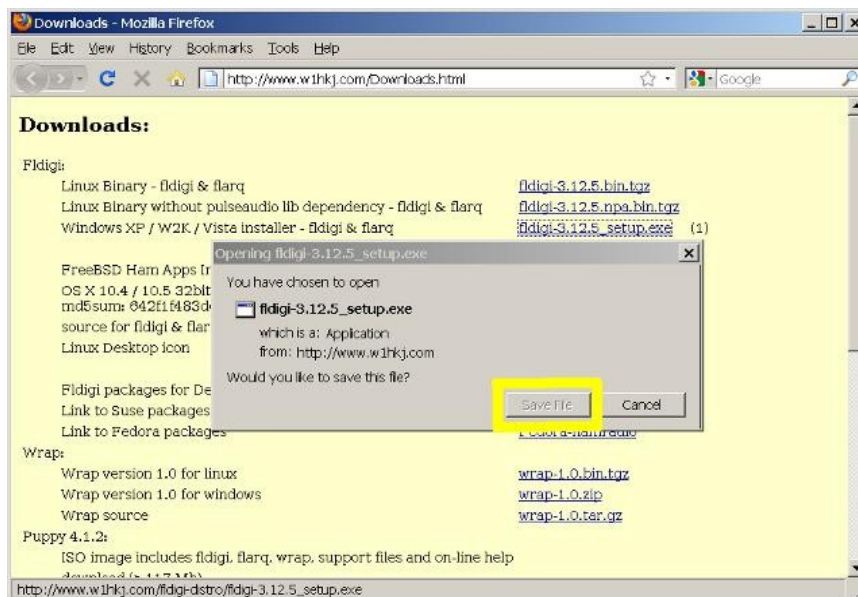


This will take you to the download page for FLDigi. This will show quite a bit of different things to download, and may be confusing. If you are using Windows XP or Vista (possibly even Windows 7), then you will want to download the third item labeled “**Windows XP / W2K / Vista installer – fldigi & flarq**”.



When you click on the link, you may be asked if you wish to Save the file, please do so (save it to your “**My Documents**” folder).

You may also be given an option to directly run the file. If so, go ahead and do so, this may save you a step.

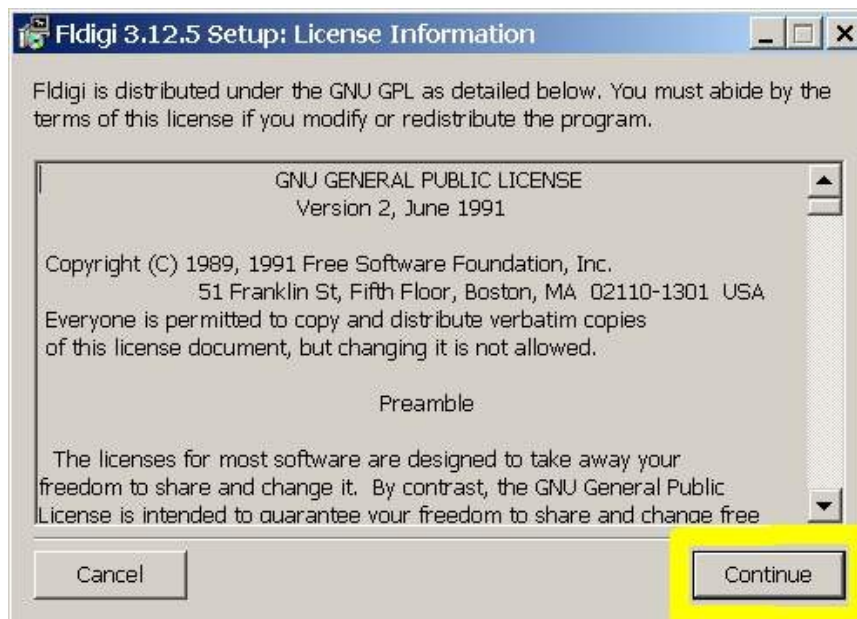


If you chose to save the file, you'll need to RUN it. You'll have to find the file where it is saved on your computer and double-click on it. Typically this would be in **"My Documents"** or even on the **Desktop** itself.

When you first run the file, you **may** see a warning. If so, click "Run" here.



This should start the FLDigi installation program.



From this point on, click **"Continue"** and **"Next"** to get through the rest of the screens. When finished, you should be able to access FLDigi either using an icon on your desktop, or by clicking on the Windows start button in the lower left-hand corner of the screen. If using Windows XP, you can click **"Programs"** then find the **"FLDigi"** program.

*Congrats! You are now running FLDigi!*