

How do I?

An occasional series

This week: RTTY software roundup

RTTY - Radio Teletype is fun. CW-Morse Code is the original digital mode. RTTY is the second. Until about 30 years ago, in order to send or receive RTTY, one needed a rather large physical teletype machine connected to their radio. Needless to say, RTTY had very few amateur practitioners. About 30 years ago, hams discovered they could use a computer sound card and software to send and receive RTTY without a teletype machine. .

Makoto Mori JE3HHT created a software engine about 25 years ago. His **MMTTY** software became the de facto standard and today nearly all other RTTY software is built around his engine.

The MMTTY software is free. It is available from a variety of web sites, <https://hamsoft.ca/> being one. The current version 1.70 dates to 2017. Over the years the ARRL has bundled various software packages and articles into a CD and sold it as the ARRL software collection. It is still possibly the most common RTTY software, and is fairly easy to set up. There is an oscilloscope built in and you basically tune the radio until the shape of the signal on the oscilloscope is correct. For beginners, MMTTY is a simple, easy to use package.

More advanced users may want more features. The MMTTY software does not really work with CAT control and may not play well with some popular logging programs. It really works best as a stand alone, requiring the user to make the QSO via the MMTTY software and log it in their favorite contesting software such as N1MM Logger or any of the N3FJP logs.

Stepping up from MMTTY:

FLDIGI readily sends and decodes RTTY. It also includes the oscilloscope. FLDIGI plays well with CAT control using **FLRIG** and readily connects to logging programs such as the ones from N3FJP.

Personally I have always liked and used the **MMTTY** software and found the **FLDIGI** software not as satisfactory for RTTY. But things change and over the years I began to feel that MMTTY was maybe a little long in the tooth and there were better products. Many recommended Ham Radio Deluxe, but it seems expensive, so I kept using **MMTTY** or **FLDIGI** when I played in the occasional RTTY contest.

RTTY has become mostly a contesting mode. the ARRL, CQ magazine and others sponsor maybe a half dozen RTTY contests a year and RTTY is allowed in many other contests. It is found in the CW portion of the various HF bands, typically at the upper end. Most contesting is only allowed on 80, 40, 20, 15, and 10 meters and some contests include 160 and 6 meters. Contesting is rarely if ever allowed on the World Amateur Radio Congress (WARC) bands . 30 m, 17 m and 12 meters due to all kinds of rules and agreements, and never allowed on 60 meters.

There are other software programs out there and this weekend I tried two: the N7YG **DIGITAL ENGINE** is a scaled down version of the N7YG **PSKExpress**. Scott Davis N3FJP recommends the **DIGITAL ENGINE** as it easily interfaces with his software. It is easy to download and install from https://n7yg.net/pskexpress/N7YGDigitalEngine_setup.exe and interface with the N3FJP software. This weekend I was using the N3FJP CQ WW RTTY contest package. All I had to do was open it, set it up as a TCP/IP server, then open **DIGITAL ENGINE** and click on logging and select N3FJP logs and it will connect. **DIGITAL ENGINE** may be my new favorite RTTY software package. CAT control and logging via N3FJP is a breeze and the macros are very much like FLDIGI macros. I have not found a way to import **FLDIGI** macros into **DIGITAL ENGINE** but it may be possible.

PSK Express can be found at https://n7yg.net/pskexpress/pskexpressSE_setup.exe. I had issues getting it to run on Windows 10 and sort of gave up on it. It seems to be more like **FLDIGI** and I not only like **FLDIGI** but it runs well on Windows 10. You may have better luck or more patience, and I suspect on a pre Windows 10 machine it works very well.

Finally I tried **AIRLINK EXPRESS** from <http://www.airlinkexpress.org/>. This is yet another **MMTTY** based package. I like the interface but it was not as intuitively easy to connect to N3FJP so I mostly used **DIGITAL ENGINE**. Your mileage may vary though!

What do I like about **DIGITAL ENGINE**? The ease of setup. Once set up, simply point your mouse at a call sign in decoded text, right click and it will copy the call sign field IN **BOTH** **DIGITAL ENGINE** and your N3FJP software! When you complete the QSO (lots of macros, but set them up before the contest starts!) simply click log it and it will log your QSO in the N3FJP software!

What don't I like? The **DIGITAL ENGINE** I had is a beta version and it seemed to crash a lot. The waterfall window would wander off and it would stop decoding. It also does not have an oscilloscope. At one point I had **MMTTY** open and would tune with it, then try to make the QSO using **DIGITAL ENGINE**. For much of the day I used **FLDIGI**.

Hopefully this helps explain some of the RTTY software packages and maybe put another mode in your toolbox for radio fun.

Catch ~~y~~a on the air!