

# MRP40 – or how I rediscovered the joys of CW!

By Mike, G8CKT

Many years ago I was keen to learn Morse Code and would drive around town translating road signs, advertising hoardings and street names into code before tapping them out on the steering column of my rusty Ford Escort. Then I bought an ancient teleprinter and it was goodbye to Morse Code. The Creed Model 7B was rather like a recalcitrant girlfriend that went on to dominate my life for nearly five years until I found a real girlfriend, got married and moved into a small flat where there was just no room for a burgeoning array of hot, noisy and generally antisocial teletype equipment. In that five year period RTTY had come and gone and it was time to move on!

Thirty years later, and following Bryn’s appeal for more CW operators, it occurred to me that it was time to think about Morse Code again. What’s more, it appeared that advances in technology have now made it eminently possible for the clueless and codeless (like me!) to take part. However, the problem remained: how to actually do it?

Now I’m a strong advocate of the KISS approach and don’t generally like heavyweight software. I tried several (if not all) of the contenders but very quickly decided that what I needed was a very simple no-frills program that would do the business. Enter MRP40.

MRP40 is deceptively simple but its real power lies well hidden behind a very straightforward and uncluttered user interface (see Figure 1). The software is compatible with several of the most popular PC interfaces including Signalink, Rigblaster and the Microham USB Interface II. So, if you are running BPSK or RTTY through a sound card you are probably going to be able to make good use of this software.

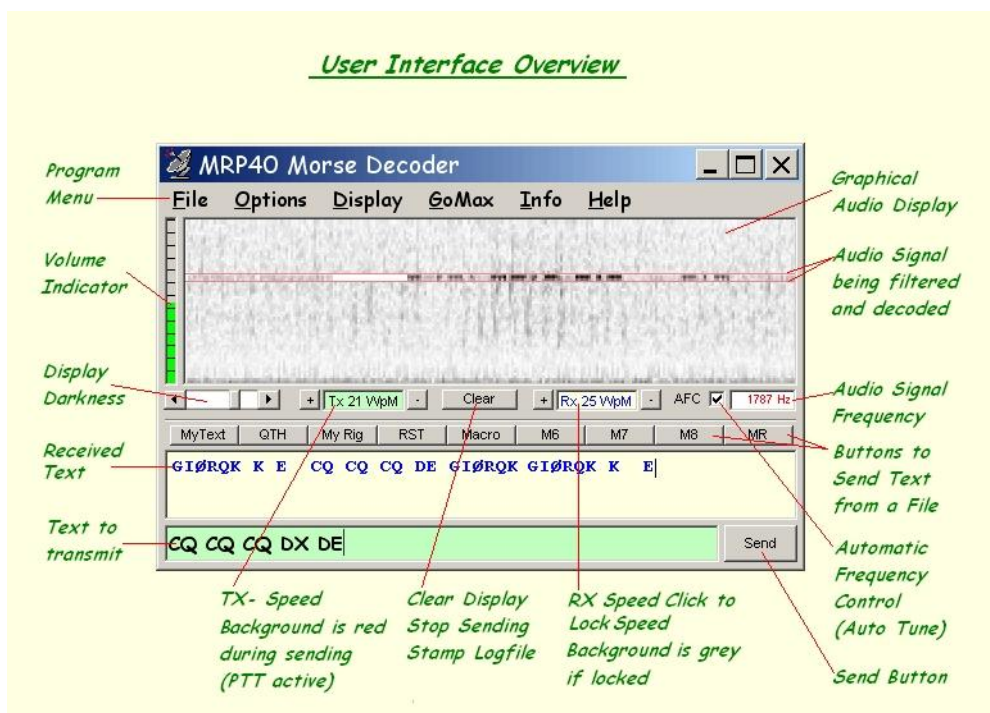


Figure 1 MRP40’s user interface

My first CW QSO on 80m was made with an output power of 10W into a modest loaded vertical whip unceremoniously planted in the centre of our small back lawn. This arrangement immediately yielded a 449 signal report from a station in Scarborough. At last, I'd made it onto CW!

In subsequent tests and extensive comparisons with other CW decoding software, MRP40 performed consistently well at decoding weak (and sometimes barely audible) CW signals, including those that were noisy, fading and susceptible to co-channel interference. This suggests that the software should be ideal both for chasing DX and for use in contests. It's also worth noting that MRP40 will decode CW over a speed range of less than 1 wpm to well over 50 wpm (more than adequate for me and most other human operators).

MRP40 has some useful text formatting options that will be particularly valuable for newcomers. Users can select various ways in which the received text can be formatted, including:

- No Word Formatting (e.g. TNXFERALLINFOQTHHORSHAM)
- Word formatting (e.g. TnxFerAllInfoQTHHorsham)
- Correct Word Spacing (e.g. Tnx Fer All Info QTH Horsham)
- Expand Abbreviations (e.g. Thanks For All Info QTH Horsham)
- Expand Q-Codes (e.g. Thanks For All Info My position Horsham)

Other useful features include graphic display of incoming code, built in oscilloscope with adjustable mark threshold, high performance software CW filter, automatic speed recognition, automatic gain control (AGC), automatic tracking of drifting signals (AFC). MRP40's software CW filter has a 3dB bandwidth of 30 Hz and is 20 dB down at  $\pm 35$  Hz (see Figure 2). Since faster sending rates will occupy greater bandwidth the filter bandwidth is dynamically adjusted to match the speed of received signals.

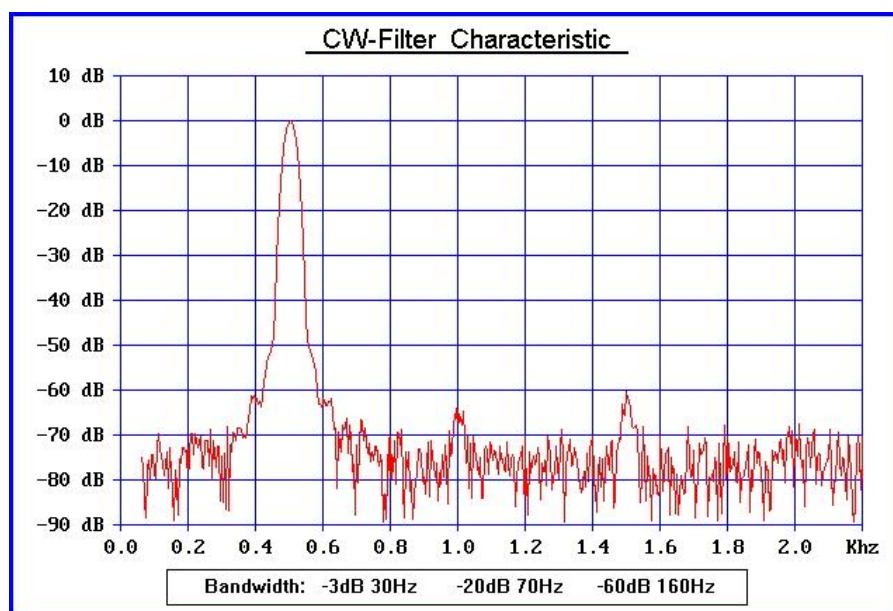


Figure 2 *MRP40's CW filter characteristic*

MRP40 will run on extremely modest systems and is compatible with Windows versions from Windows 95 to Vista and Windows 7. Guidance is provided on how to configure the software for different operating systems, e.g. XP Service Pack 2, Vista and Windows 7 where Administrator rights are required.

MRP40 is available for free 30-day evaluation from <http://www.polar-electric.com>. For continued use the software must be registered at a cost of 50 Euro (currently about £44). Note that, unlike some other software (e.g. CWGet) the evaluation version of MRP40 is fully functional. Norbert Pieper, MRP40's author, has done an excellent job and it's well worth investigating this software. So, what are you waiting for? Why not give it a go!