

# Learning Morse Code

2/20/2022

Learning Morse code is *not* hard. Don't let any of the "no-coders" on the internet tell you otherwise even if you've tried to learn it in the past and gave up for some reason! All it takes is 15 to 30 minutes a night for 4 to 5 nights a week for 4 to 6 weeks. But please don't depend on one night of practice a week to make you proficient - that's not enough. And three-hour marathon sessions are also counterproductive. Just devote short but regular effort and you *will* get it - I promise!

It's well worth the effort. Using Morse code you'll meet people who you will never hear on the voice modes. They don't speak English, or speak it poorly, or can't afford a more expensive single sideband (SSB) radio. Also, your radio's signal will go a lot farther and be heard more clearly using continuous wave, or CW, modulation when band conditions (*i.e.*, radio wave propagation) deteriorate because a 5-watt CW signal has the same "average power density" as a 100-watt SSB signal. Maybe you're a little shy? No problem - there's plenty of time to collect your thoughts in a Morse code chat. And it won't be too long before you'll have plenty to talk about! If you're interested in building your own radio, a CW transceiver is really pretty easy to construct. There's nothing more satisfying than telling someone on the air that "the rig here is homebrewed!" By the way, you'll see the terms "CW" and "Morse Code" used interchangeably - they're really two very different concepts but old habits die hard.

Just listen to good code with the letters sent quickly, at 20-22 words per minute (wpm), but with the individual letters spaced out at 6-8 wpm (a Morse code word is about 5 characters on average).<sup>1</sup> This is known as Farnsworth timing. You want to get to a point where you hear the sound of the letter and immediately write down the letter - *no* intermediate visualization of dots and dashes or using "cheat sheets". This is *very* important: do *not* "count" dots and dashes. Learning "fast" letters helps prevent counting, and they're actually easier to copy than letters sent slowly! 20 wpm sounds fast but it's not - trust me! Good receiving skills generally result in good sending skills. When you have the timing (letter and word spacing) ingrained, you will sound good on the air. This is important since there is nothing harder than trying to copy Morse code from someone who runs the letters or words together! If you've had any musical training (but certainly *not* a requirement) you'll find that learning to send Morse code comes pretty quickly.

If you have a shortwave radio you can listen to the American Radio Relay League's station W1AW on 7.0475 MHz (or 7047.5 kilocycles) at 7pm Eastern time (2300z) on Mon/Wed/Fri, or 4pm/10pm on Tues/Thurs.<sup>2</sup> The code is sent perfectly and starts off at 5 wpm! It speeds up from there. However, at 7pm on Tues/Thurs, or 4pm/10pm on Mon/Wed/Fri, the code practice starts off very *fast* and then slows down. Some people find this useful for "tuning" their brain to the sound and timing of Morse code even if they can't copy a single letter at 35wpm. However, as the code slows down they find that they can copy at much faster speeds than they thought possible. Try it!

There is a lot of material on the internet about Morse code so to save you some time, in no particular order, the next page lists some of the better resources. I periodically check these links so they should be valid URLs. Some of the training programs on the next page are older DOS programs that might not run on recent versions of Microsoft Windows. Try them on Linux using [Wine](#).

---

<sup>1</sup> See the K7QO Code Course link on the next page.

<sup>2</sup> Full schedule at <http://www.arrl.org/w1aw-operating-schedule>

- a. <http://www.fistsna.org/> is the premier CW club. They have the K7QO code course - 12 hours of listening fun on your MP3 player! K7QO is probably the fastest CW guy in North America.
- b. [http://www.n9bor.us/images/pdf/n0hff\\_3.pdf](http://www.n9bor.us/images/pdf/n0hff_3.pdf) is a lengthy but fascinating PDF by N0HFF (SK). A nice bound version (\$16) is at <http://www.lulu.com/shop/william-pierpont/the-art-and-skill-of-radio-telegraphy/paperback/product-20947390.html>.
- c. [http://www.qsl.net/ik0ygy/enu/ZART\\_r20101008m.pdf](http://www.qsl.net/ik0ygy/enu/ZART_r20101008m.pdf) is a lengthy PDF by IK0YGY, also excellent.
- d. <http://kb6nu.com/your-novice-accent/> is a classic 1956 article by W6DTY (SK) for beginners, updated by KB6NU.
- e. <http://www.qsl.net/n1irz/finley.morse.html> is another classic by N1IRZ.
- f. <http://www.g4fon.net/> for G4FON (SK) Koch Method CW Trainer for Windows. Popular but see “j” below.
- g. <http://www.g4ilo.com/morse-machine.html> is G4ILO’s “Koch Method” Morse code trainer for Windows.
- h. <http://www.qsl.net/n5lf/> has some great info on CW and “traffic handling” from N5LF (SK).
- i. <http://www.arrl.org/code-practice-files> are the ARRL’s practice files in MP3 format. Just download to your iPod or listen to them on your PC. But stay away from the slow stuff! Other resources are at <http://www.arrl.org/learning-morse-code>.
- j. <http://www.justlearnmorsecode.com/> This program does everything the G4FON trainer does, and it has an automatic text checker built in. No need to use a separate program, like "KochRX," to check the accuracy of your copy.
- k. <http://www.winmorse.com/> Paste in any text you want and convert it to code files which can be played on your MP3 player. Imagine having Morse code ringtones for each of your friends and family on your cell phone! Converts to .aif, .au, or .wav formats. iPods will play .wav files. Otherwise the files can be converted to .mp3 with a simple conversion program.
- l. <http://www.dxatlas.com/MorseRunner/> is an awesome simulation of a CW contest. Lots and lots of fun too.
- m. <http://www.rufzxp.net/> is great training for copying call signs faster and faster and faster. This is an evil program that cannot be beaten! Unless you can copy Morse code at over 200 wpm.
- n. <http://kb6nu.com/wp-content/uploads/2011/08/w0uce-method-for-teaching-cw.pdf> is a nice overview on learning and using Morse code as a language by W0UCE.
- o. <http://www.cwops.org/> is where to go if you’d like a mentor through the CW Academy. Excellent instructor/advisors.
- p. [https://www.youtube.com/watch\\_popup?v=NJGrIUXCZzc](https://www.youtube.com/watch_popup?v=NJGrIUXCZzc) - how *not* to learn Morse code!

Latest clickable version of this doc is at <http://n8ik.net/classes.php>