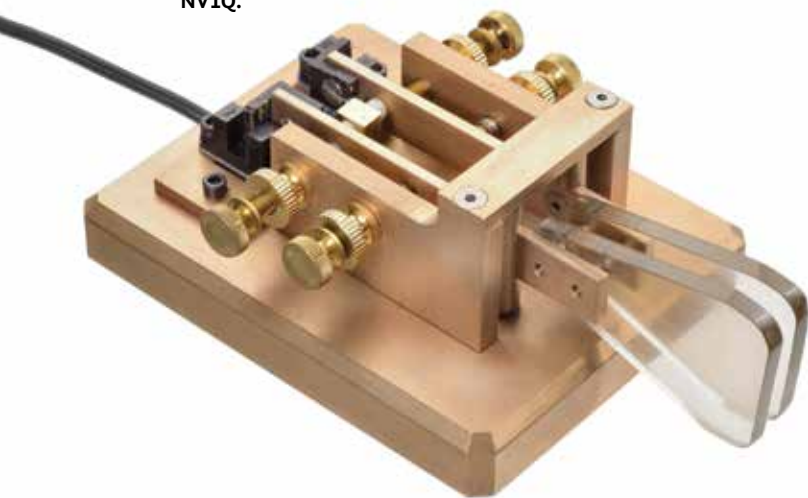


THE TOP 10 REASONS TO TRY

MORSE CODE

Morse code — otherwise known as CW (for *continuous wave*) — has been an integral part of amateur radio from the start, and some stalwarts still consider it the essence of ham radio. A substantial segment of the world's ham radio community still enjoys CW, and you can too.

Hams' love of the tools used to send Morse code is evident in this beautiful handmade paddle by Juergen Malner, NV1Q.



If you hold a Technician-class license, you can join the fray on 80, 40, 15, and 10 meters. You'll meet new friends and enjoy a special sense of accomplishment in the bargain. To help spread the enthusiasm, we offer our Top 10 reasons to try Morse code.

10. IT'S A NEW WAY TO COMMUNICATE.

And we bet it's very different from all the other ways that you currently communicate! A CW chat is a welcome diversion at the end of a day filled with meetings, emails, power lunches, phone calls, and other forms of hard work.

9. AGE IS NO BARRIER. While many old-time hams enjoy Morse code, younger hams seem to have a particular fascination for it. They love hearing the dits and dahs and learning how to send their names. As with most languages, it's easier for younger people to learn Morse code.

8. IT'S A MINIMALIST MODE. CW is simplicity itself. All you need is a basic transceiver and antenna, and some way to turn the transmitted signal on and off to create Morse characters. It's also the preferred mode for low-power (*QRP*) aficionados, who transmit using no more than 5 watts. Radio amateurs send CW using *keys* or *keyers*. A key is simply an on-off switch. A *straight key* is often the first Morse instrument for beginners. After they've gotten some experience, most CW operators graduate to an electronic keyer and an instrument called a *paddle*. An electronic keyer and a paddle can send an infinite series of perfectly spaced dits and dahs. Many modern transceivers have built-in keyers.



7. YOU'LL KNOW SOMETHING THAT MOST OTHER PEOPLE DON'T.

If you think you'll have trouble learning the code, you're not alone. Even some hams who passed their CW tests long ago were reluctant learners. You can operate CW without learning Morse code (there are products on the market that decipher CW characters on a built-in display, and some hams use computers to receive and send CW) but you'll miss out on an important part of the CW experience. Learning to copy code doesn't happen overnight — a potential downside in this era of immediate gratification. Like other skills from singing to skateboarding, perfecting CW takes practice.

6. IT'S LIKE TEXTING WITHOUT THE MONTHLY BILL.

Morse code is yesterday's texting, but better. A lot of the shorthand is even the same. Ham radio doesn't require any infrastructure, and typical CW speeds far exceed texting throughput. During a May 2005 face-off between Morse code and text messaging on *The Tonight Show with Jay Leno*, two ham radio operators using CW won hands down.

The Cric-Key kit from Four State QRP group comes together in about 2 hours to give you a paddle and keyer all in one.



5. MORSE MAKES YOU USE YOUR HEAD.

Most people start copying code by writing down every letter they hear, gradually advancing, along with code speed, to copying in their head. It becomes second nature, and you may find yourself even thinking in Morse code!

4. CW HAS A LOW PROFILE. You don't need a big, fancy, powerful station to have fun with CW. The most complicated thing you might need is an additional IF (intermediate frequency) filter for your transceiver. Equipped with a set of headphones, you needn't worry about disturbing the entire household. CW operation can be very quiet, which is often an asset to domestic tranquility. You can also get away with less-than-optimal antennas.

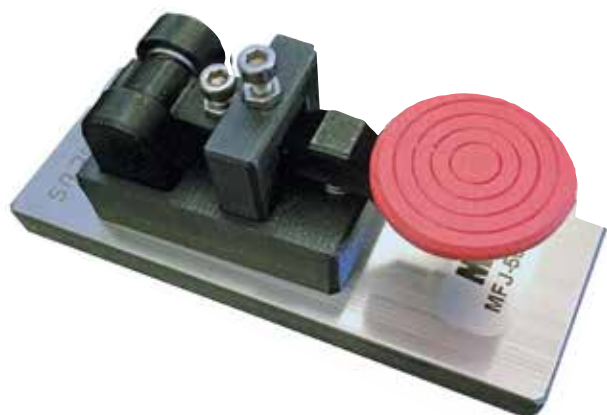
Tips for Getting Started On the Air with Morse Code

Once you've learned code, listen to contacts on the air that you can copy. Get a feel for what's being said. Contacts follow a pattern that you can learn to identify.

Schedule your first CW contact with a friend. This helps build confidence and overcome jitters.

Follow a contact "formula." Send your signal report (RST), location (QTH), and name, each just *once*, then hand the contact over to the other station, who will likely respond in kind.

Don't be afraid to ask the other station to slow down (QRS) if necessary. A good CW operator will be happy to comply — and be pleased to be your first contact!



A straight key is a little more than an on-off switch, but they come in many different sizes, weights, and styles. This smaller example is the MFJ-556M Micro Key.



WHY ADJUSTABLE?

SteppIR manufactures antennas that mechanically adjust to the exact length required on every frequency within its range.

Why is this important?

Fixed length antennas (Yagis, dipoles, verticals, wire antennas) are generally optimized for a very short frequency window, usually around 0.5 wavelength— this means compromises have to be made in order for the antenna to work over a wider frequency range, which can potentially cause significant degradation of performance.

Our patented principle of design involves taking a flexible, springlike, highly conductive indexed copper strip (imagine a tape measure with tiny holes in the middle of it) and driving this strip via sprockets, that are attached to shafts on stepper motors.

The stepper motors are connected via control cable to a remote electronic controller (usually located in the radio room), which “tells” the stepper motors to adjust each respective element to the exact length required. These elements are always adjusted to the resonant frequency length and are thus optimized for reliable, year-around peak performance—without the compromises that traditional fixed length antennas are faced with.



TWENTY YEARS OF SERVICE

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3. MORSE CODE REMOVES LANGUAGE BARRIERS. If there’s a “world language,” it’s Morse code. *Q-signals* or *Q-codes* are three-letter abbreviations that all (surprise!) start with the letter Q, and they’re widely used in Morse code and internationally recognized. For example, *QTH* means *location*. If someone sends you “QTH?” via CW, they’re asking you, “What’s your location?” It’s a convenient way to get around language barriers when you’re making contacts with people all over the world! See the article “Q-Codes” in the November/December 2021 issue for more.

2. IT’S A GREAT WAY TO CONTACT DISTANT STATIONS. Though voice contacts seem easier, they just don’t have the reach of CW. If you have a modest station, you may find that contacts that are out of reach on phone are within your grasp on CW.

1. YOU’VE ALREADY GOT CW PRIVILEGES. No matter what class of license you hold, *you now may operate on HF* using CW! The band chart in this issue spells out the operating privileges you have, depending on your license class. Even if you’re starting out as a Technician, you can operate CW on three HF bands. Take advantage of the opportunity. You’ll never look back!

Resources for Learning and Practicing Morse Code Michael Fluegemann, KE8AQW

Here are just a few of the online resources that can help you master Morse code.

- **morserino.info** The Morserino is a full-featured device that you can build from a kit. Learn and practice Morse code on the built-in paddle, or connect an external paddle or straight key.
- **qsobot.online** In conjunction with the Morserino, you can practice having real contacts with this website as the other end of the contact. It also has a number training game in which the site picks a number 1-100, and you have to guess it, based on clues of “higher” or “lower.” You have to be very good with your keying, or the site will ask you to send again. Many find this a great way to work on their sending, without the pressure of talking with someone else.
- **morsecode.ninja** Kurt Zoglmann, ADØWE, has made thousands of hours of practice sets at all speeds. You select the speed and the content and the site redirects you to a YouTube video for the practice. Many CW enthusiasts will listen to the phrase, pause the video, send the phrase on their key, and then resume the video. This is a good way to practice sending and receiving at the same time.
- **hamradio.solutions/vband** This is another great site. Multiple people who want to practice together can do it over the internet. Either use your computer keyboard as a straight key/paddle, or plug your key in with a USB adapter.
- **morse.mdp.im** Mark Percival, KC4T, has made this interactive game and news headline website. It pulls news headlines and plays them at different speeds. He has also made some games to make practicing more enjoyable.
- **longislandcwclub.org** The Long Island CW Club offers classes, podcasts, videos and articles. If you’re a beginner, they’ll teach you code, and if you already know code and want to increase your speed, they have classes for that too.
- **cwops.org** The CW Operators’ Club, CWops, offers classes and activities run by an international team of members.