

Lightweight Paddle Set for CW Operators

This article is a slight departure from my normal writing, in that the topic at hand here is a description and round-about endorsement of a product. On tap as the subject of this article is the *cwmorse.us* “**Red Lightweight Double Paddle With Steel Base**” (Figure 1). On their website, *cwmorse.us* describes this paddle by stating that it is an...

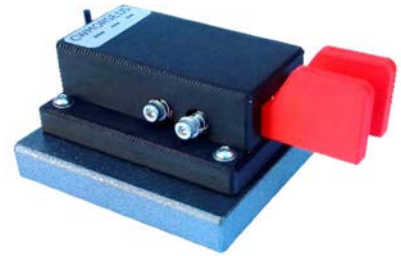


Figure 1 - *cwmorse.us* paddle set

“...Ultimate Lightning Fast Double Paddle Morse Code Key. Super Smooth Action With Dual Precision Self Lubricating Nylon Bearings. Solid Brass Contacts With Stainless Steel Fasteners & Nickel Plated Steel Spring. All Soldered Braided Copper Wire Connections.”

I was introduced to this paddle by fellow GCARC member **John Zaruba K2ZA**. It did not take me long to read through the small amount of literature available about the paddle set. I then made the decision to purchase one and to see what all the positive press was about.

Now... I am *not* very capable as regards CW. I am still only learning the requisite skills – both memory and physical – to be able to become competent. However, one of the factors in developing the physical muscle memory to permit Morse competency is having a good, solid, and consistent key system on which to learn. If the key environment is constantly changing, your muscle memory will develop much more slowly as you will be forced to continually re-acclimate yourself to the changing key conditions.

While each CW operator develops his or her own preference as to key type, the paddle system has become quite popular in today’s amateur radio CW circles. Part of the reason for this is the ability to quickly and easily inject opposite morse characters into the middle of a continuing stream of base characters. For example, if the operator is sending the string “091”, it would be coded as

----- ----- ● ● -----
or
dah dah dah dah dah dah dah dah dah dit dit dah dah dah dah

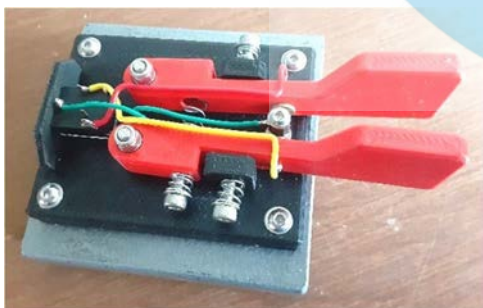


Figure 2 - paddle with cover removed

using standard International Morse Code. When sent via a paddle, this is accomplished by holding the right lever for the proper count to send the dahs, lifting as needed for the spaces. Then, when it is time to insert the two dits, simply tap the left lever twice with a lift between them.

Another example might be seen in sending the single character “Q” which consists of the code string dah dah dit dah, and is sent by holding the right lever for a four-count, while also tapping the left lever once at the count of three. This will inject a dit between the second and third dahs.

When the new paddle arrived, I immediately set about getting a “feel” for the new device. It is well-weighted, so it stays put on the desktop, using four rubber feet to help keep it from sliding around. The connection to the radio is via a 3.5mm (1/8”) TRS jack (Figure 3), so if your radio uses a 1/4” key jack, an adapting cable or a plug adapter will be required.



Figure 3 - Connection end view

The paddle is comfortable under the fingertips, and is fully adjustable as to travel and tension. Adjustment is made via a trio of stainless-steel socket-head machine screws (Figure 4). One of these screws is mounted through the left-hand lever and is the rear-most of the adjustment screws (when viewed from the lever end of the unit). That particular adjustment screw controls the spring tension exerted upon the levers. Tightening the screw increases the spring tension, making the lever action stiffer.

The remaining two screws are mounted, respectively, through the left-hand and the right-hand adjustment stop blocks, and their tips are directly in contact with the side of the lever toward which each screw is pointing. These screws adjust the lever travel by changing the at-rest positions of the levers. The looser the screw, the greater the travel. As a nod to “*attention to detail*”, the Allen wrench required to make adjustments to this paddle set is included with the unit, and it has a convenient storage location machined into the plastic upper base of the paddle, which is visible in the Figure 3 illustration.

Due to the nature of the paddle design, the three wires of the TRS jack are connected as follows:

- tip (T) to right lever (dah) via the RED wire;
- ring (R) to left lever (dit) via the YEL wire; and
- sleeve (S) to common via the GRN wire.

This is the standard configuration for a right-handed paddle setup. However, if your radio uses the opposite configuration, you will need to place your radio's paddle setting in reverse mode (if available) or else use an adapting cable that has the wires crossed to accommodate your radio's key/paddle circuit.

The base of this paddle is a steel plate 1/2" thick and three inches square. All edges and corners are killed so that there are no sharp aspects to this base. The remainder of the unit, apart from the TRS jack, the wire, and the hardware, is all of the 3-D print manufacturing process. Even the cover that snaps on over the works is a 3-D printed item. When we think of 3-D printing as a manufacturing method, we often think of the product as being of lesser quality somehow. That is clearly *not* the case as regards this paddle. All of the parts are cleanly made and they all fit – and work – together quite well.

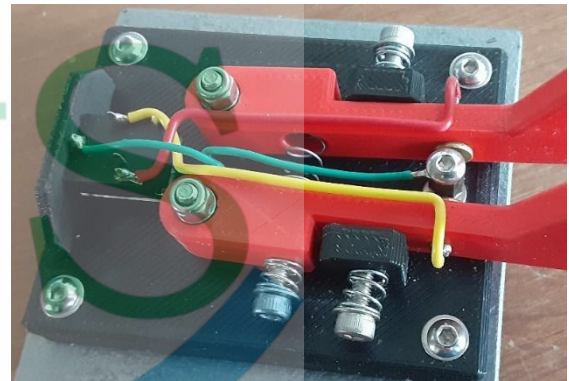


Figure 4 - Adjustment screw arrangement



Figure 5 - Label on unit

The paddle is available in several different colors, including army green, black, blue, green, grey, indigo, orange, purple, red, and yellow. The price for the basic paddle is \$42.95, while the price of the paddle with the steel base is \$64.95. The base is available as an accessory for \$24.95. The web address for the sales site is <https://cwmorse.us>.

For those who are able to interpret it, there is a message in the label (Figure 5) that is affixed to the top cover of each paddle sold by this company... only it is actually printed in Morse. It says “USA” – the location in which all of this company's products are proudly manufactured.