

CW Keyer

The CW Keyer uses JackYack (yet another cw keyer) version of the yack code. This code is used with permission and also falls under GNU usage.

The kit has a built in standard 6-pin ISP for the adventurous user who wants to play with the code, add features or make your own software. 6-pin ISP pin out can be found in the diagram, and on the board.

All links to software and kit info will be available on the Shop.Kit-Projects.com website.

Parts will be placed in labeled bags for ease of identifying, I strongly suggest take them out as needed one at a time to avoid mixing values.

If you purchased a assembled kit you may skip to the ***Final Assembly*** section.

Parts:

.1uf : C1
.01uf : C2, 3, 4
4.7k : R1*, R2 (labeled: 472)
Attiny85 : U1
5v Regulator : U2 (labeled: 2T1)
2n3904 : Q1 (labeled: 1AM)

Hardware:

1 x Case Mount Jack
1 x Push Button Red
1 x 9v Battery Terminal
1 x Buzzer w/leads
1 x Low profile Jack

*A 220ohm resistor will be included for R2.

I have noted some home-brew and qrp rigs do not like the 4.7k here and will not key. Start with the 4.7k and if it does not work properly replace with the included 220ohm labeled 2200. Most modern rigs will key just fine with the 4.7k.

Build instructions:

For the advanced builder you may skip this section, this is only a suggested build order. Please read U2 instructions.

Bottom:

Q1: 2n3904 (labeled: 1AM)
R1*: 4.7k (labeled: 472) also see above notes
C2: .01uf
C3: .01uf
U2: 5v reg (labeled: 2T1) For some reason the silk screen didn't make it but it is the only other sot23-3 left on the bottom of the board to the lower left of C3.

At this time check all joints for good solder and no bridged connections

Top:

U1: Attiny85 will be installed and programmed

C4: .01uf

C1: .1uf

R2: 4.7k (labeled: 472)

At this time check all joints for good solder and no bridged connections

Final Assembly:

J4: 8-13.8 vdc in following polarity

LS1: Buzzer piezo again follow polarity, you may also tie this into a speaker/phone jack of a homebrew rig.

SW1: Command button used for all the options found in the operation manual, polarity doesn't matter here.

J1: Connection for provided case mount jack to your rigs key input. The connection here may be different for some rigs. My IC-7300 is Shield and Tip as labeled but the mcHF is Shield and Ring.

If you connect the keyer and nothing happens you may need to check to see how yours is wired. I used a small wire to short from shield to ring and tip to find the right connection.

As noted above if you cannot get the keyer to key the rig you may have to switch out R2 with the supplied 220ohm replacement. Again most modern rigs will use the 4.7k.

Please note if you replace this value the current draw of the keyer will rise.

J3: Input for your paddle as labeled S:Shield, T:Tip-Dit, R:Ring-Dah using the low profile case mount jack.

You are finished enjoy!

All commands and features can be found in the user manual listed on the site.

If you have any questions or need a replacement part that took flight please contact Kit-projects at:

Info@Kit-Projects.com