Electro-Resales

Mini Keyer - Quick Start Guide

For kit building instructions, download the Kit builders Guide, this document is just about setting up the Keyer for the first time.

Quick Start

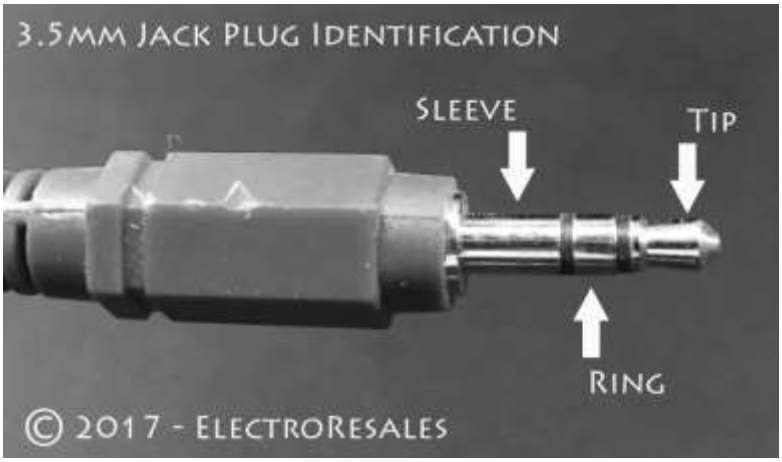
The Keyer unit if supplied ready built or built up from a kit is easily deployed. By following the steps below you can utilize the key unit quickly.

Battery Install

First, the unit needs a battery to operate, a CR2032 coin cell is required, insert the cell with the positive side (+) facing you or up. It is best to angle the battery in at the top of the holder and then push home. Please note: Some coin cells now have a protective warning label on one side; remember to remove this before inserting.

Keyer wiring

After installing the battery the key needs to be attached – a 3.5mm jack socket is provided for this and the key to be used needs a matching plug wired to the Tip and Ring for the paddles and the sleeve for the common as shown in the photo here:

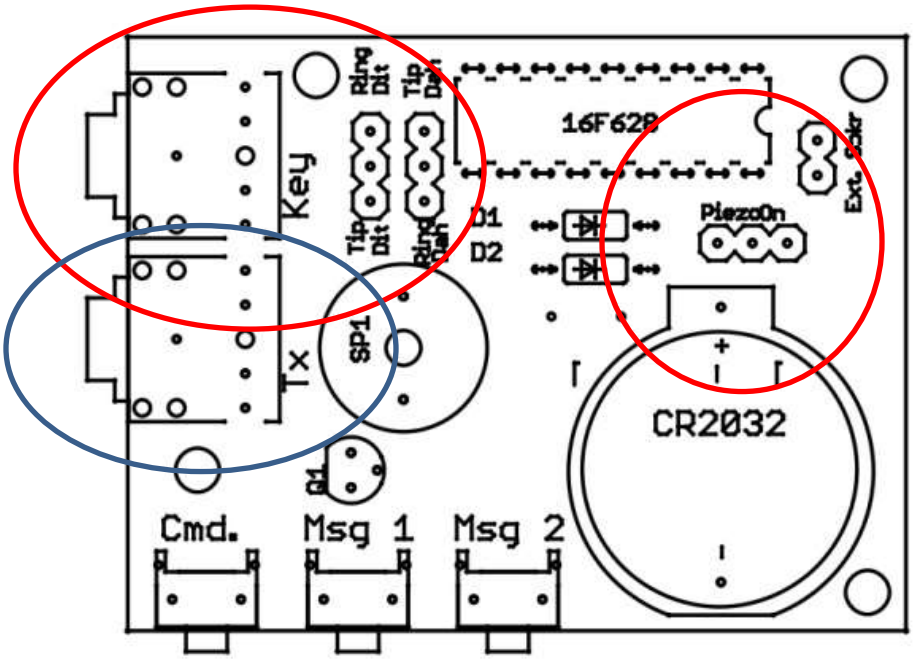


It does not matter which paddle is connected to Tip or Ring as the headers on the PCB can be set to accommodate your configuration, as shown below.

Header Selection

Several headers need to be set on the PCB. First the Piezo speaker on/off header, for built units this header is set correctly for you, if you built the PCB, place a header shorting block over the center and right side pins to turn on the piezo, or center and left side pins to silence the piezo. Silencing the piezo buzzer is useful when operating with a side tone enabled rig or if a speaker has been attached to the PCB.

The other header that needs setting is to select how the paddles are connected. On the PCB between the IC and the jacks are two rows of three way header. For each row, the center is common and you will need to short the center pin, using a shorting block, to either end pin depending on how the paddles are connected. For example if the Dit paddle is wired to the Tip, then the Dah paddle is wired to the Ring. Set the Tip Dit jumper and Ring Dah jumpers and if wired the other way, set the jumpers in the opposite way.



See the diagram for help in locating the headers and key jack (circled in Red).

Initial Tests

With your key wired and the headers set, it's now a good idea to test the Keyer. Insert the key into the correct jack and try sending some code. The speed maybe a little slower than you are used to, this is easily changed by a command (see later). Once you are happy with the Keyer operation, you can then connect to your rig

A second 3.5mm Jack socket next to the key jack is for activating the PTT on your rig (circled in Blue).

A jack plug with common going to the sleeve and the other wire going to the TIP and RING are all that are required on the Keyer end. Your particular rig manual will outline the plug needed for the other end.

Note as supplied the Keyer is only suitable for keying transmitters made with IC's and transistors, not tube (valve) transmitters. An additional relay may be needed for that. See your rig manual for details on what is exactly required.

With the Keyer connected to your paddles and the transmitter, test that the transmitter is operated by the key.

That concludes the initial set up. See the next section on entering commands and setting the Message memories.

Commands

To enter Command mode press the command button for a second, it will return a Morse “C”, meaning it is ready to accept commands, use your paddles to enter Morse characters to access and set Commands.

- Command A – Send a Morse “A” -Turn off the Dot Dash memory, this is Iambic Mode A
- Command B – Send a Morse “B” - Turn on Dot Dash Memory, this is Iambic Mode B
- Command D – Send a Morse code “D” – This will end command mode
- Command E – Send a Morse “E” - Decrease CW Speed
- Command T – Send a Morse “T” – increase CW speed
- Command F – Send a Morse “F” – Memory playback forever; terminate by sending another “F”
- Command L – Send a Morse “L” – Lists memory contents
- Command U – Send a Morse “U” – Tune the transmitter –sets TX on for 30 seconds

After entering a command press CMD again (or send a Morse ‘D’ -..) and it will respond with a Morse D (-..) meaning it is done

Message Memories

The Keyer provides two message memories, marked as MSG 1 and MSG2 on the PCB. Memory one is non-volatile, meaning its content is unaffected by the battery removal, memory two is volatile meaning it is lost if the battery is removed.

To set a message in Memory one, press and hold the MSG 1 button for a second or so, the Keyer will respond with a Morse M (__) Set your message using the attached key and when complete press the button once more – it will respond with a Morse S(…) meaning the message is saved. Multiple messages can be saved in the message memory.

Message memory two operates in the same way. To play back a message, press the message button briefly. To erase a message press the message button until the M is heard, then press again until the S is heard.

More commands including how to set contest numbers and Macros can be found at this web site:

http://www.strozzi.it/users/carlo/hamradio/iz4kbs-keyer/

Simple Problem Solving

While your Keyer has been designed with care and should work well for a long time issues can occur. This short guide is designed to help solve common problems. Try these first, if no luck, please contact us at; resalese@gmail.com

Symptom:

1. Unresponsive - No sound, Keyer appears dead – Press and hold Cmd. key for 2 seconds then release. Does Keyer now operate?
2. If the first step does not solve the issue, try a new or fresh battery
3. If the Keyer is still unresponsive, check the key wiring to make sure that the issue is not the key connection.
4. If these steps have not solved the issue please contact us at the above email address.

The small Print

DISCLAIMER

Any person who constructs or works on electronic equipment may be exposed to hazards, including physical injury, the risk of electric shock or electrocution.. These hazards can result in health problems, injury, or death. Only qualified persons who understand and are willing to bear these risks themselves should attempt the construction of electronic equipment. By purchasing this item, the buyer acknowledges these risks.

There is a risk of electric shock, electrocution, burns, or fires that is inherent in the construction and use of electronic equipment. By purchasing this item, the buyer acknowledges these risks.

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