

K1EL Systems RigPi CW Board 2 Product Brief – 2/1/24

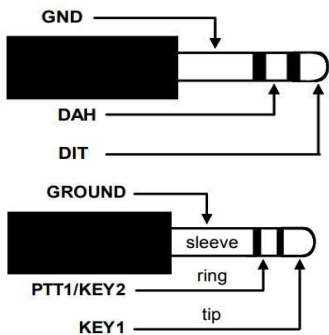
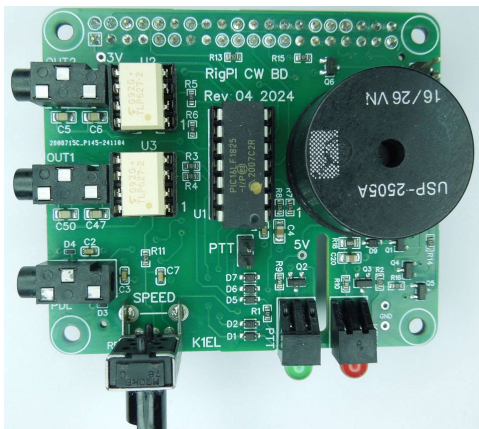
Thank you for purchasing a RigPi CW Board 2. Additional information can be found here:

<https://www.k1elsystems.com/RigPi2.html>

Specific information about RigPi can be found here: <https://rigpi.net/>

CW Board 2 Features

- Designed to mate directly with Raspberry Pi 4
- Fits into K1EL Designed 3D Enclosure
- Iambic A, B, Ultimatic & “Bug” paddle modes
- Speed Control Adjustable 5-99 WPM
- Two separate keying outputs each with PTT
- Powered from Raspberry Pi
- Solid state relay keying: +/- 300V max at 200 mA
- Outputs are optically isolated (5000V)
- Internal Sidetone Speaker
- Key and PTT activity LEDs
- Utilizes K1EL's latest WK3.1 IC
- Firmware can be updated over USB
- PTT Option jumper
- Keying state is sent directly to RaspberryPi
- ESD protection on Paddle inputs
- Variable speed fan driven by RaspberryPi PWM
- Adjustable Weighting and dit/dah ratio
- Adjustable Keying Compensation
- Adjustable PTT lead in and tail delays
- Enclosure Size: 4.0" W by 3.0" D by 1.4" H



The rotary control on the side of the unit adjusts the Morse transmit speed. There are three 1/8" connectors on the end of the unit; Paddle In, Key Out 1 and Key Out 2. The Paddle connector is an 1/8" stereo jack which accepts a paddleset input wired as shown. The paddle type can either be an iambic or single lever, a bug is not acceptable. The paddle inputs are activated when switched to ground (GND).

The Key Output connectors use the same 1/8" style connector as the paddle input. Wired as shown, each connector provides both Key and PTT outputs. These outputs are isolated from Rig Pi ground and all other internal signals by an optically coupled solid state relay. The outputs can switch voltages up to +/- 300 V at up to 120 mA.

Schematics for CW Board 2 and a [link to the Rig Pi 3D .stl enclosure files](#) can be found on the K1EL CW Board 2 website.

A parts kit contains: Four each: .72" board screws, .25" lid screws, plastic spacers, rubber feet, fan screws & fan nuts. One each: Cooling fan and Speed control knob. Note: the fans screws and nuts are quite small and easily lost.

Enclosure assembly pictures are here: https://www.k1elsystems.com/RigPi2_assy.html

It works best to assemble the two boards with screws and spacers first and then insert that assembly into the enclosure. Pulling the screws out slightly helps clear the standoffs on the bottom inside of the enclosure so assembly can 'slide in'.

Warranty Information

CW Board 2 is fully warranted to the original purchaser against defects in materials and workmanship for one year after purchase. This warranty does not cover damage caused by accident, improper care, or lightning damage. Please contact us and we will issue an RMA. Please submit questions by e-mail: k1el.kitsinfo@gmail.com.

Product Liability

While every effort has been made to insure that CW Board 2 is safe and documentation is clear and accurate, it is still possible to cause equipment damage or incur personal injury if CW Board 2 is not used as intended, is connected incorrectly, safety guidelines outlined in the User Guide are not followed, or CW Board 2 is modified in any way. K1EL cannot be held responsible for damages in these or other similar events.