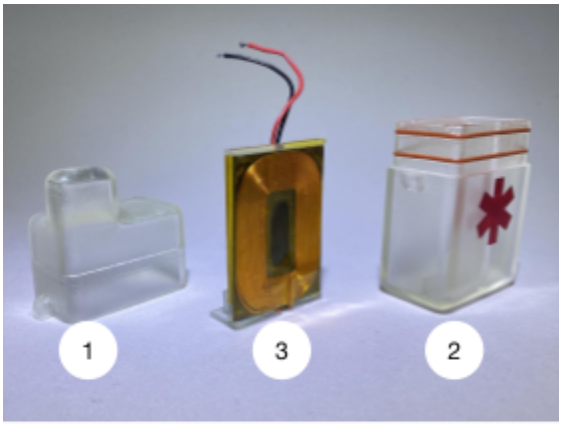
This guide is to serve as an assembly and user guide for the RileyLink W2 Case. For questions, please contact user support at https://getrileylink.org/contact

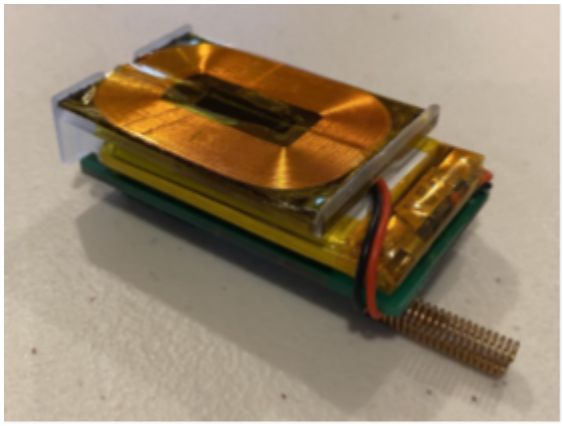
W² Case Kit Assembly Instructions

If you purchased your W² Case as an unassembled kit. Please follow the directions below to solder and assemble your kit.

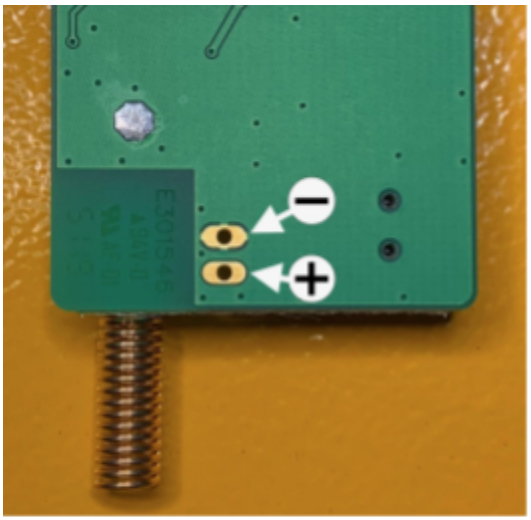
Before you can use your Wireless Charging Case, some assembly is required. The leads of the *Wireless Charging Insert* must be soldered to the Alternate Power Pads of your RileyLink, and a "sandwich" will be constructed of your RileyLink, Battery, and Wireless Charging Insert. The sandwich will be inserted into the *Bottom Case*, and finally the *Top Case* will be put on.



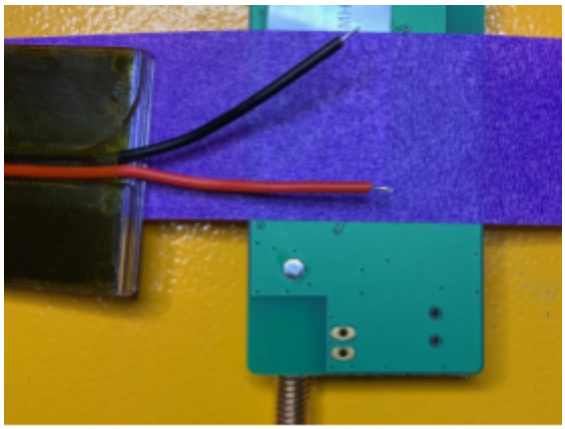
1.1 Your kit will include a *Top Case* (1), a *Bottom Case* (2), and a *Wireless Charging Insert* (3)



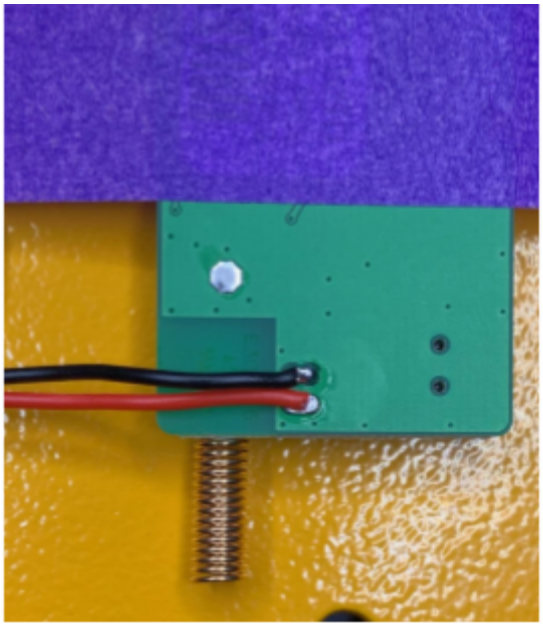
1.2 What the "sandwich" will look like when completed



1.3 On the backside of the board Locate the Alternate Power in the left quadrant of the *RileyLink board* next to the Antenna. Depending on your orientation the Lower ALT.PWR pad is the (+). The Upper ALT.PWR pad is the (-).

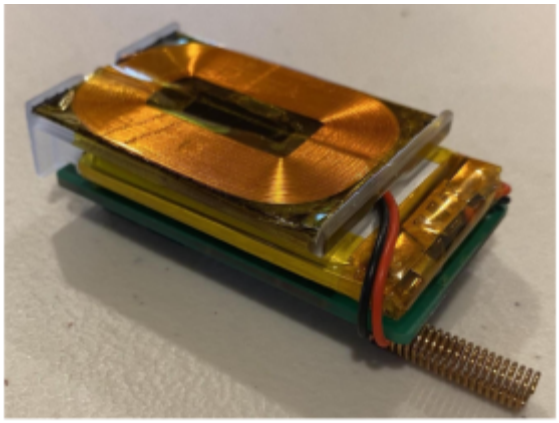


1.4 Position the *Wireless Charging Insert* next to the board with black oriented to the negative terminal and red to the positive terminal to match the image. Use a piece of masking tape to hold down the RileyLink while soldering.

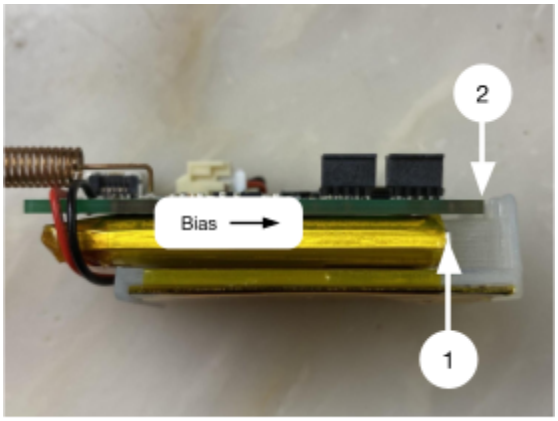


1.5 "Tin" the solder pads on the board with solder, and then reheat and solder the Black Lead to the Negative (-) pad, and Red Lead to the Positive (+) pad.

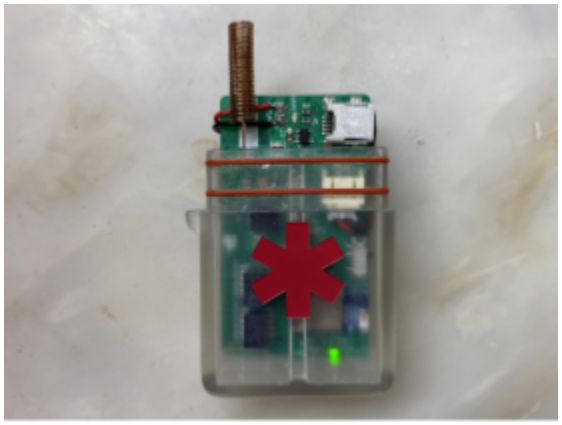
1.6 Plug the Battery into the *RileyLink* and place your *RileyLink* face down with the battery stacked on top of the back of the board. Bias the battery towards the top (antenna end) of the *RileyLink* board for now.



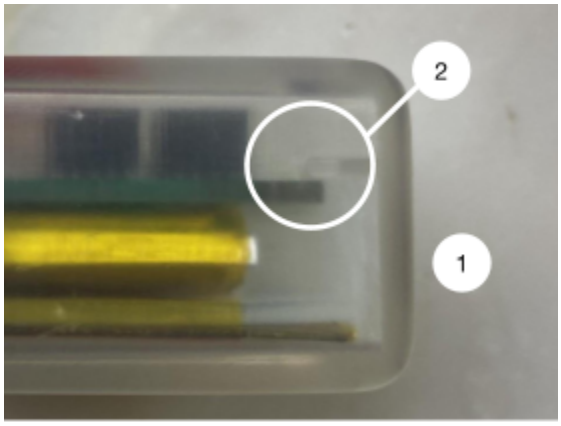
1.7 Route the wires from the *Wireless Charging Insert* as shown, around the side of the RileyLink board and battery (don't worry, the case has enough clearance for these wires). Stack the Wireless Charging Insert on top of the battery.



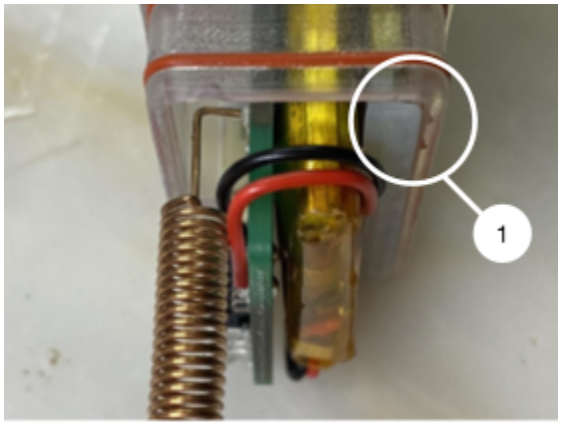
1.8 The finished "sandwich". Bias the battery and board towards the base of the *Wireless Charging Insert* so the battery is resting on the tall support ribs (1), and the board is resting on the short support ribs (2).



1.9 Switch on your RileyLink, and carefully slide the sandwich into the B*ottom Case*. There are internal ribs in the bottom case designed to keep the Wireless Charging Insert biased towards the back of the case to ensure charging reliability. Take note not to crash into these ribs when placing the sandwich into the bottom case.



1.10 The base of the *Wireless Charging Insert* should contact the base of the *Bottom Case* (1). Make sure the *RileyLink* board is sitting behind the internal rib (2) inside the Bottom Case.



1.11 The Wireless Charging Insert is designed to sit flush with the lip of the opening of the *Bottom Case*. Due to manufacturing tolerances and vestiges from the 3D printing process in the *Bottom Case*, it may sit slightly proud of of the lip (1). This is OK.

1.12 Assembled the *Top Case* and install a Lanyard if desired.

Note: The seal between upper and lower halves may be so good that the case builds pressure when assembling the top. It may try to push the top off.

Hold the top and bottom cases together for 10-15s to allow the pressure to bleed out of the Barometric Vent.

Compatibility:

This case is designed for RileyLink V1.0 Board with either a 433Mhz (Omnipod) or 916MHz (Medtronic Antenna)

Water Resistance:

This case will protect your RileyLink from splashing water from any direction (IPX64).

Warning: Do not go swimming with this case, set your basal rates correctly and leave it on shore. Prolonged submersion may result in water ingress and damage to your RileyLink.

Wireless Charging:

The wireless charging functionality is designed for use with Qi Wireless chargers. As with any Wireless Charger, you must place the device in the center of the charging pad for best results. The “Star of Life” is aligned with the center of the charge coil on your RileyLink Wireless Charging Case, and must be aligned directly above the center of your charging pad ±10mm for optimal results. You will notice the LED on the RileyLink shine brightest when you’ve found the “sweet spot”. If you place it too far outside of the “sweet spot”, the device will stop charging after 30s or so. It will take approximately 30 minutes to charge your RileyLink from 1 day of use.

Charger Recommendations

Charger	Power Adapter	Compatibility	Web Link
Anker PowerWave 10 Pad (A2503)	Purchase Separately [1]	Recommended	https://www.amazon.com/gp/product/B07THL8PP1
Yootech 10W (F500)	Purchase Separately [1]	Recommended	https://www.amazon.com/Wireless-Qi-Certified-Charging-Compatible-Qi-Enabled/dp/B079KZ49PJ
Mophie	Included	Not Recommended [2]	https://www.apple.com/shop/product/HN7V2ZM/A/mophie-wireless-charging-pad

Note[1] : Apple 5W USB Wall Adapter used for test (https://www.apple.com/shop/product/MD810LL/A/apple-5w-usb-power-adapter)

Note[2] : Charging pads with hard plastic or glossy smooth surfaces can have devices slide off while resting.