1 Finish assembly (blank enclosure)

- 1. Use drilling jig to drill holes into housing
- Make cutout for micro USB connector.
- 3. Use PCB to drill holes for LEDs next to micro USB connector (D101, D102)
- 4. Install LEDs long pin (positive) into square pad
 - Red LEDs at D101 and D205/D301 with 3mm spacers
 - Green LEDs at D102, D206/D302 and D207/D303 with 3mm spacers
 - White LEDs at D208/D304 and D209/D305 choose where and how long they should stick out of housing
- 5. Install potentiometer and loco selection switches
- Install direction selection switch and connect pins to PCB with short wires or cutoffs from LEDs
- 7. Make cut-outs in housing fit slide switches and flashlight LEDs
- 8. If push button switches are not installed: Place them on PCB (red at SW204, yellow at SW215) screw PCB into housing so they fit into the holes and solder them to the PCB
- 9. Connect battery to P101 BATT-connector

10. Arrange battery so it fits between direction selection switch and PCB screws and glue into back housing



Warning

Make sure red wire is connected to + and black wire connected to GND. Reversing the connection may destroy the wiFred.



Warning

Make sure nothing pinches the battery. Lilon batteries are susceptible to mechanical damage. == First startup

- 1. Charge device with a micro USB charger until charging LED switches to green
- Turn on device with charger still connected (calibrates low battery threshold)
- 3. Wait for red LED on top to stop flashing and stay lit
- 4. Use any WiFi device to search for and connect to network wiFred-configXXXX
- 5. Connect to http://config.local and configure device

More information can be found at https://newHeiko.github.io/wiFred.