1   Finish assembly (blank enclosure)

1. Use drilling jig to drill holes into housing

2. 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 D301 with 3mm spacers
   - Green LEDs at D102, D302 and D303 with 3mm spacers
   - White LEDs at D304 and D305 — you can choose if you want them on top or bottom and how long they should stick out of housing

5. Install potentiometer and loco selection switches

6. 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. Connect battery to P101 - BATT-connector

9. 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. LiIon batteries are susceptible to mechanical damage.

2   First startup

1. Charge device with a micro USB charger until charging LED switches to green

2. 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.