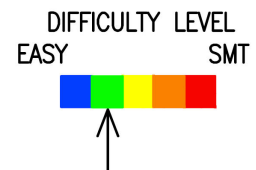
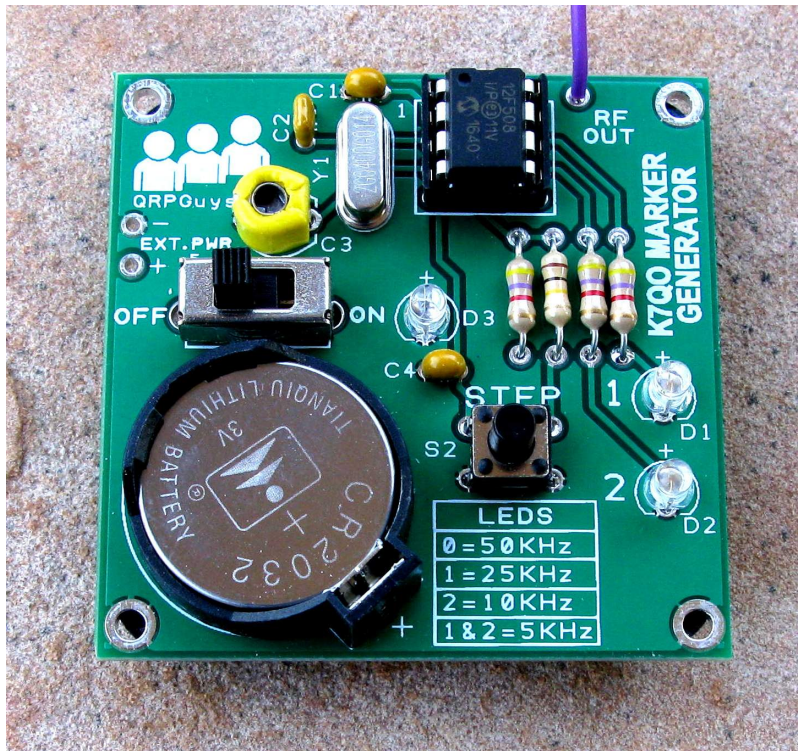




QRPGuys K7QO Marker Generator

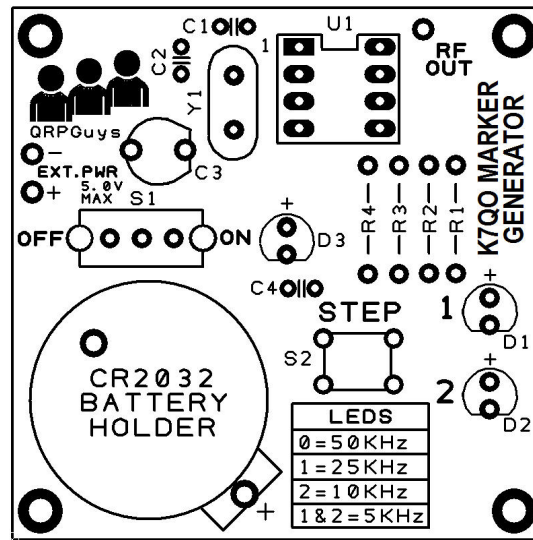


First, familiarize yourself with the parts and check for all the components. If a part is missing, please contact us and we will send one. You must use qrpguys.parts@gmail.com to request a part.

Parts List

- 1 – QRPGuys K7QO Marker Generator PCB
- 1 – U1, PIC 12F508 MPU, 8pin DIP
- 1 – Y1, 4.000 MHz crystal
- 2 – D1, D2, Green LED
- 1 – D3, Red LED
- 3 – R1,R2,R4, 4.7k ohm resistor, (yellow-violet-red-gold)
- 1 – R3, 100k ohm resistor, (brown-black-yellow-gold)
- 2 – C1,C4 .1uF capacitor, marked 104
- 1 – C2, 33pF, NPO capacitor, marked 33
- 1 – C3, 50pF trimmer capacitor
- 1 – S1, slide switch
- 1 – S2, push button switch
- 1 – 8 pin dip socket
- 1 – PCB CR2032 coin battery holder
- 6” – Hook-up wire
- 4 – Self adhesive rubber foot
- CR2032 battery not supplied

We will assemble the smallest components first. All the components mount on the front of the board. Refer to the graphic below for the component placement.

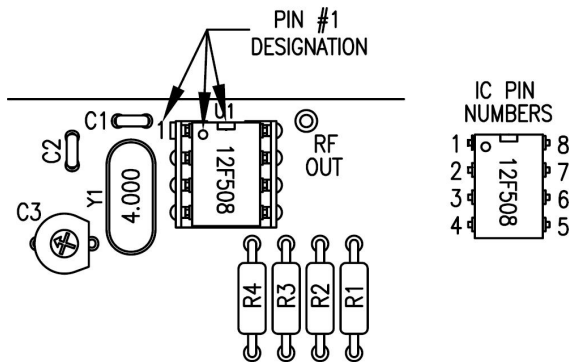


- [] Install R1,R2,R4, 4.7k ohm resistor, (yellow-violet-red-gold)
- [] Install R3, 100k ohm resistor, (brown-black-yellow-gold)
- [] Install C1,C4 .1uF capacitor, marked 104
- [] Install C2, 33pF, NPO capacitor, marked 33
- [] Install C3, 50pF trimmer capacitor, matching the outline.

Both color LED's have clear lenses. At this time the red LED has shorter leads overall. It is best to sort out the leds by color by just touching them to the coin cell momentarily to determine the color before you solder them in place.

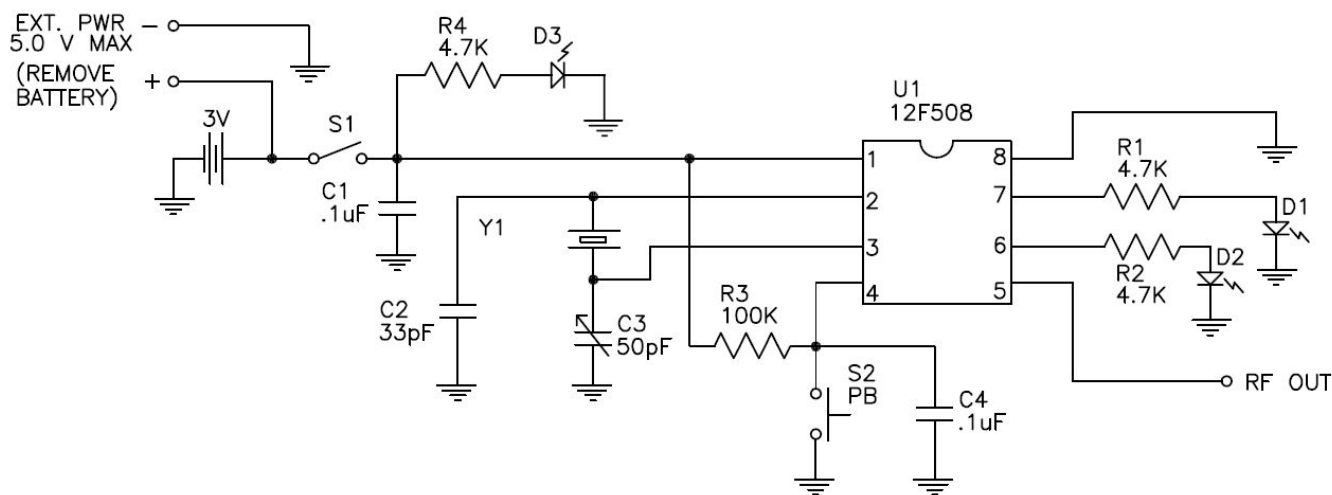
- [] Install D1, D2, Green LED, observe the outline, the longer lead is positive.
- [] Install D3, Red LED, observe the outline, the longer lead is positive.
- [] Install Y1, 4.000 MHz crystal
- [] Install S1, slide switch
- [] Install S2, push button switch
- [] Install 8 pin dip socket, with the notch to the top matching the outline.
- [] Install the CR2032 battery holder matching the outline.
- [] Strip one end of the hook-up wire and solder into the "RF OUT" pad.
- [] Install the four self adhesive rubber feet on the backside corners where indicated.

[] Carefully install U1 the 12F508 MPU into the 8 pin DIP socket taking care not to bend any pins, and placing pin 1 as shown below.



This completes the assembly. You will need to supply your own CR2032 battery. Refer to Chuck's guide for operating instructions and usage.

Schematic:



Notes:
