

## Wireless Mouse modification for SDR tuning

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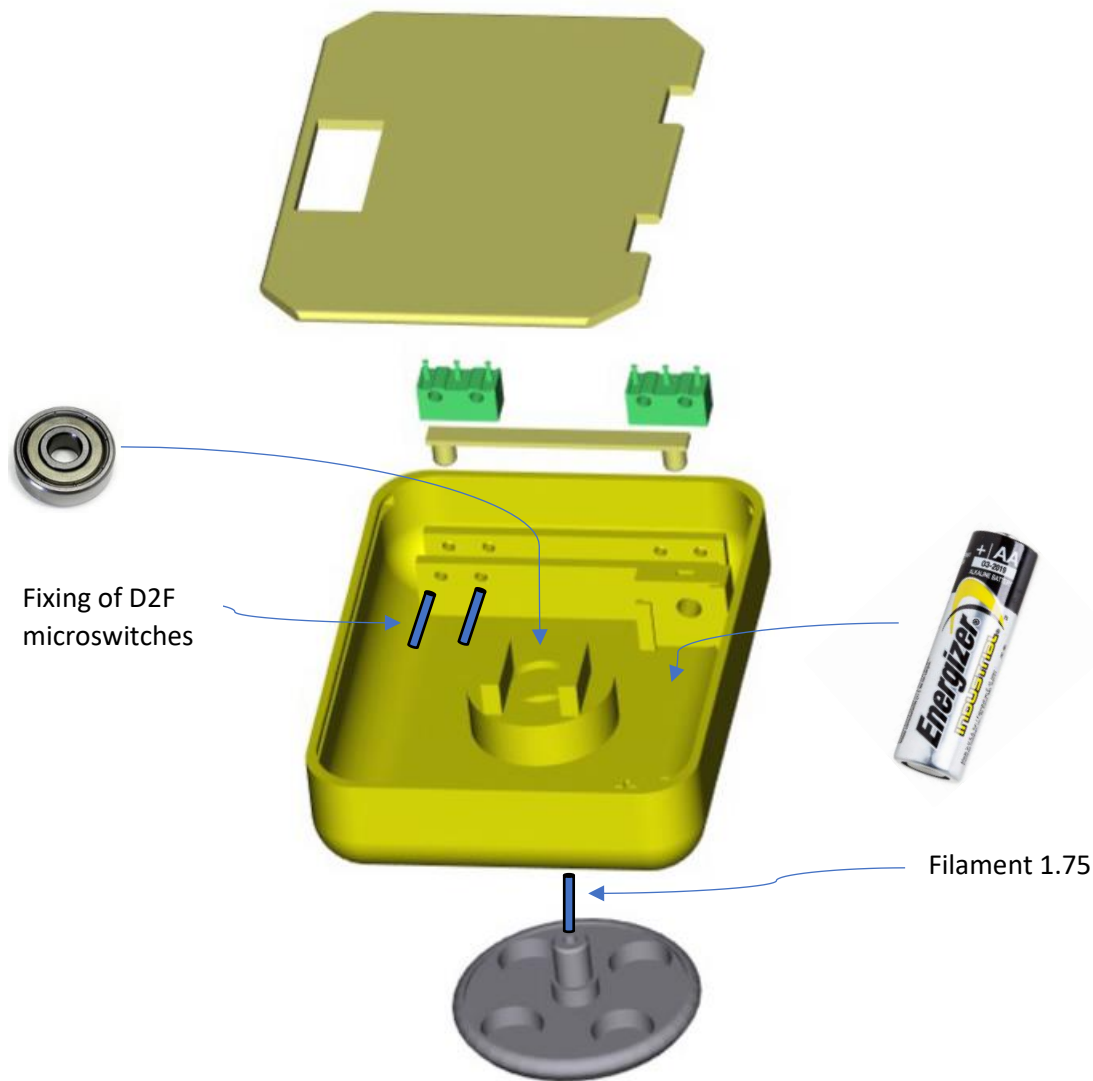
1. Buy Yankee YMS 900AH wireless mouse (price only up to 5 EUR)
2. Buy bearing: outside diameter  $D = 19\text{mm}$ , height = 6mm, inside diameter  $d = 7\text{mm}$   
I have used online shop such as dimensor.cz and bought 20pcs of these bearings. Using them for other projects such as wind propellers.



3. Disassemble the Yankee YMS 900AH wireless mouse
  - a. Desolder/remove D2F switches (all three; in modified mouse we will need only two)
  - b. desolder/remove rotational encoder, originally used for scrolling wheel (three terminal black component with green center on right)



4. Print all parts of new wireless mouse on 3D printer
  - a. Bottom
  - b. Buttons
  - c. Base housing
  - d. Knob



5. Assemble together all parts as depicted above
  - a. Insert bearing into center slot
  - b. Insert and fix D2F microswitches. Use short wires to connect microswitches to original PCB
  - c. Insert tuning knob into center of bearing
  - d. Insert short length of 1.75mm filament into center of tuning knob, fix it.
  - e. Insert rotation encoder in center, filament 1.75mm from knob gets through center of encoder. Use short wires to connect microswitches to original PCB
  - f. Fix battery contacts, insert battery

6. Attach bottom part, mouse is ready.

I have disconnected the IR emitting LED, since I use this mouse only for tuning. In this case I wake it up from low power mode by pressing any of two buttons.

