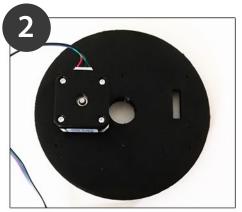


MK1 ASSEMBLY INSTRUCTIONS



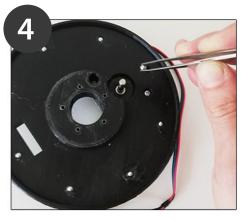
Unpack the kit and make sure all parts are present



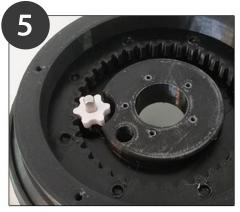
Fasten a stepper motor to the "top plate" with 2pcs screws (M3x6)



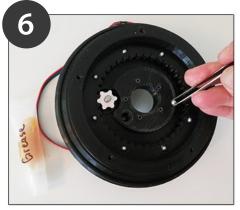
Apply a dab of grease in each of the 8 bearing slots on the bottom



Put a single metal bearing ball in each of the slots



Add the "turntable" and slide the "cogwheel" down on the motor axle



Apply a dab of grease in the 8 slots of the turntable and add 8 bearing balls



Add the "bottom plate" and fasten gently with 5pcs screws (3x10mm)

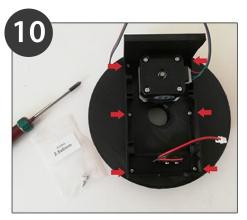


Gently test the turntable by rotating it manually, if its very tight you can loosen the bottom screws a little



Fasten the limit switch with a short cable to the "bottom mount" with 2pcs screws (2x10mm)

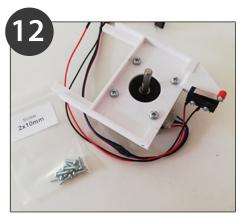
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Mount the bottom mount to the top plate with 6pcs 2,5x6mm screws



Add the stepper motor to the "motor mount" and fasten with M3x6 screws



Fasten the limit switch with long cable to the motor mount with 2x10mm screws



Mount the "bearings" to the smooth side of the "sides" with M3x8 screws and nuts



Fasten the left "side" to the assembly with 3pcs 3x10mm screws



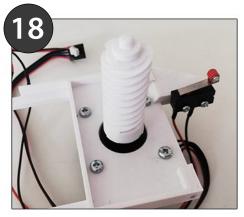
Prepare the threaded rod with 2 lock nuts, 1 hex nut and 1 flange nut like this



Fasten the large wormgear tight since this will support a lot of weight later



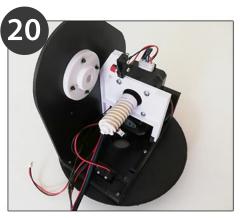
Sand both the gears to remove imperfections



Push the "small wormgear" onto the motor axle



Apply grease evenly on both the worm gears



Put the motor assembly in the slots of the bottom mount



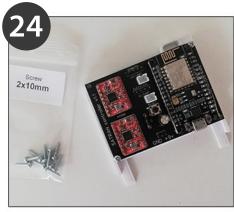
Fasten to the side with a 3x10mm screw



Put the threaded rod through the bearing and on top of the wormgear



Fasten the other "side" to the asssembly, adjust the lock nuts to center the gear



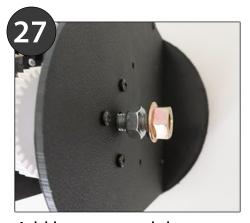
Mount the control board to the "circuit holder" with 2x10mm screws



Put the circuit holder in the slots of the bottom mount and bring the cables under, fasten with 3x10mm screws



Plug in the cables. The red motor wire should be facing the red drivers to the left



Add hex nuts and then a flange nut to each side of the threaded rod



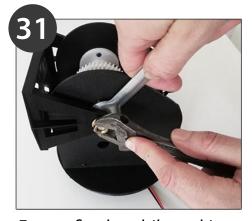
Use your fingers to turn the wormgear into position, where you will hear a "click"



Fasten an antenna of your choice to the antenna mount



Add the antenna to the threaded rod in an exact vertical position



Fasten firmly, while making sure the gears don't move out of position



With your finger move the gears to bring the antenna down about 20 degrees



Finished! Proceed with the wifi setup, and when everything works you can fasten the top housing.

Wifi Setup Process

- 1. Open your smartphone or computer and connect to the wifi named "SATRAN_setup".
- 2. Open your browser and enter 192.168.4.1 as the address.
- 3. Choose your local wifi network from the list, enter your password and save.
- 4. Now the rotator starts to move, make sure it can move without hitting something.
- 5. Login to your router and find out what IP-address the Satran has received. It can be a good idea to assign a static IP to the Satran so it doesn't change when you reboot.
- 6. Download and install the Android app "Satran Control" from Google Play
- 7. Go to the tab "settings" and enter your GPS position and the IP of your satran, save.

Great work! Your Satran is now ready to be activated and start tracking satellites.

If it didnt work or you need to change the wifi, press and hold the "reset" button on the control board until the LED-light turns on. Then start over the setup process.