

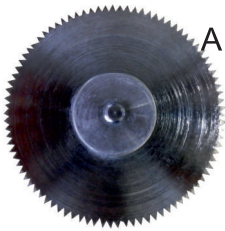
Instruction manual

Quartz-controlled R.A. Motor Drive M5 with Hand Controller

For doing Astrophotography it is necessary to expose the faintest discernable objects as long as possible. For that purpose the 'Right Ascension of the telescope has to be repositioned to counter the rate of earth's rotation.

Contents of delivery motor M5:

Big gear



Battery box



Motordrive unit



Hand Controller Unit



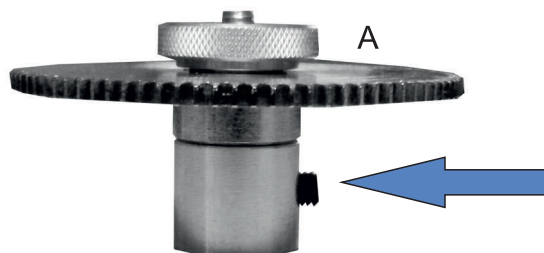
Tools required for assembly: small screwdriver, small allen key

How to attach the motor drive to the mount:

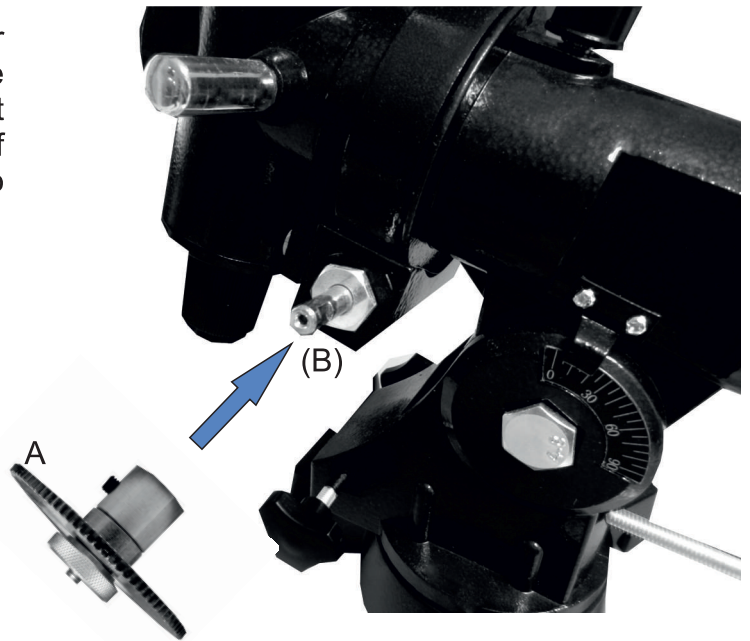
1. Take out of the box the big gear, the motordrive unit, the hand controller unit and the battery box. Verify that all parts are complete.



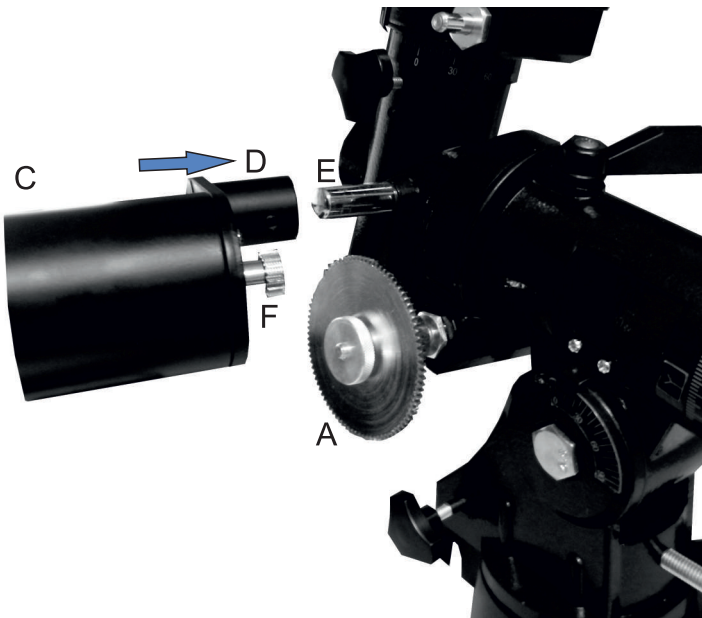
2. Unscrew the small screw situated on the side of the big gear (A) with the allen key in order to be able to attach it on the gear easily.



3. Then put the gear (A) on the slim lower bolt on the mount (B) and push it until the screw of the gear is situated on the flat part of the bolt. Turn the gear, if necessary. Now use the allen key to tighten the screw on the gear.



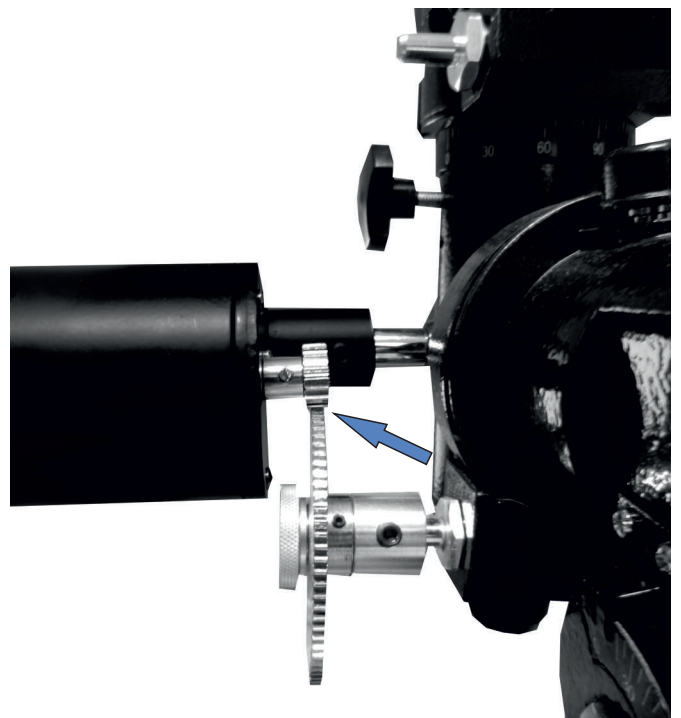
4. Put the motordrive (C) with the aperture (D) on the free bolt (E) on the mount. Slide the motor drive mounting on the bolt until the pinion is engaging with the big gear. Now tighten the screw up.



5. Make sure that the gear of the motor and the gear of the telescope mounting are engaging properly.

The motor drive is now ready to us and all that has to be done is to connect it to the battery box and hand controller.

The worm gear of the motor drives the 'Right Ascension' shaft and the rate of earth's rotation will be countered. If the motor is switched on, stars, moons and planets stay centered. Comfortably observation for a longer time is possible now as your observation targets will not drift out of the field of view of your telescope.



So funktioniert die Handsteuerung:

1. Please choose whether you want to use the motor drive in the northern (N) or southern (S) hemisphere.
2. Turn the motor drive on (ON).
3. If you don't press any of the four buttons after turning the motor drive on, the motor drive will turn with 1x sidereal tracking speed. The movement is very slow and can hardly be observed. The rate of earth's rotation is exactly countered.
4. If you press „8x“ (top right + top left) or „2x“ (bottom right) tracking speed is accelerated accordingly. The arrows below the buttons indicate the direction of the movement.
5. If you press pause (bottom left), the motor drive stops driving.
6. If you press none of the four buttons, the LED will be green.



7. If you press any of the four buttons, the LED turns red.
8. If the green LED is blinking, you'll have to change batteries soon.
9. The bottom left cord (R.A. motor) connects the hand controller to the motor drive. The bottom right cord (DC power) connects the hand controller to the battery box.
10. You need to insert 6x D cells into the battery box. Please insert batteries only when the motor drive is turned off. Minus (-) needs to be faced to the battery spring.

