



**CG-5 Equatorial Mount** 

Model #91517

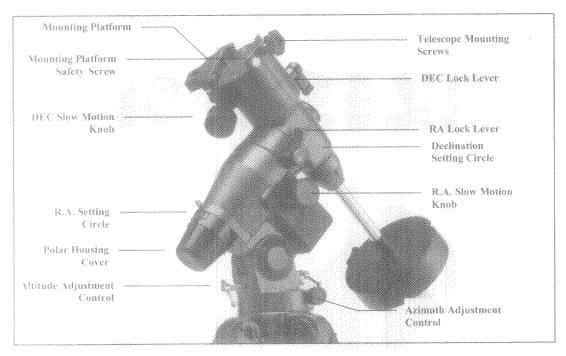


Figure 2-1 - The CG-5 Equatorial Mount

## Setting Up the Tripod

The CG-5 tripod comes fully assembled with the metal plate, called the tripod head, that holds the legs together at the top. To set up the tripod:

Stand the tripod upright and pull the tripod legs apart until the top of each tripod leg is flush against the side of the tripod head. The tripod will now stand by itself.

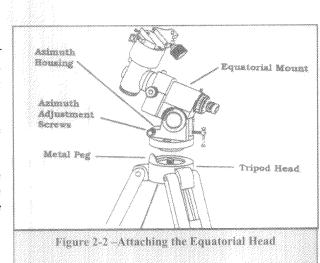
Once the tripod is set up, you can adjust the height at which it stands. To do this:

- Let Loosen the knob on the leg clamp so that the tripod leg can be adjusted.
- 2. Slide the center portion of the tripod leg away from the tripod head until it is at the desired height.
- 3. Tighten the knobs on each leg clamp to hold the legs in place.

# Attaching the Equatorial Mount

The equatorial mount allows you to tilt the telescope's axis of rotation so that you can track the stars as they move across the sky. The CG-5 mount is a German equatorial mount that attaches to the tripod head (i.e., metal plate on the tripod).

- 1. Locate the azimuth adjustment screws on the equatorial mount. See Figure 2-1.
- Retract the screws so they no longer extend into the azimuth housing (rectangular extrusion) on the mount. Do NOT remove the screws since they are needed later for polar alignment.



- 3. Hold the equatorial mount over the tripod head so that the azimuth housing is above the metal peg located on the of the tripod head.
- 4. Place the equatorial mount on the tripod head so that the two are flush.
- 5. With the accessory tray removed, use the mounting knob to thread the central rod into the hole at the bottom of the equatorial mount.
- 6. Slide the accessory tray over the central rod so that each arm of the tray is pushing against the inside of the tripod legs.
- 7. Thread the accessory tray knob on to the central rod and tighten.

### Attaching the R.A. Slow Motion Knob

With the mount securely in place, you are ready to attach some of the. Start with the Right Ascension (R A.) slow motion knob. The R.A. slow motion knob allows you to make fine pointing adjustments in the direction the telescope is aiming (once it is attached to the mount). To install the knob:

- 1. Locate the hard plastic shell under the R.A. shafts.
- 2. Remove either of the two oval tabs by pulling tightly.
- 3. Line up the flat area on the inner portion of the R.A. slow motion knob with the flat area on the R.A. shaft (see Figure 2-4).
- 4. Slide the R.A. slow motion knob onto the R.A. shaft.

The knob is a tension fit, so sliding it on holds it in place. As mentioned above, there are two R.A. shafts, one on either side of the mount. It makes no difference

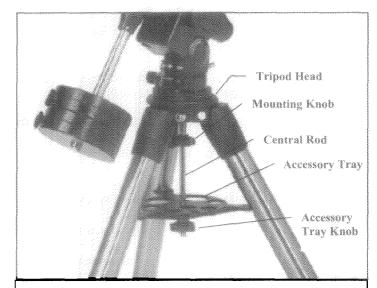


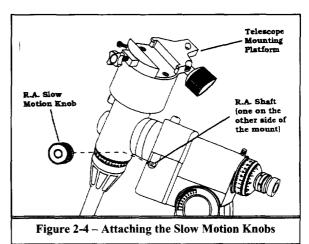
Figure 2-3- Setting up the tripod requires nothing more than pulling the tripod legs away from the tripod head. The height at which the tripod stands can be adjusted by sliding the slats in the center of each leg toward or away from the tripod head.

which shaft you use since both work the same. Use whichever one you find more convenient. If, after a few observing sessions, you find the R.A. slow motion knob is more accessible from the other side, pull firmly to remove the knob, then install it on the opposite side.

# Attaching the Declination Slow Motion Knob

Like the R.A. slow motion knob, the DEC slow motion knob allows you to make fine pointing adjustments in the direction the telescope is pointed.

The DEC slow motion knob attaches in the same manner as the R.A. knob. The shaft that the DEC slow motion knob fits over is toward the top of the mount, just below the telescope mounting platform. Once again, you have two shafts to choose from. Use the shaft that is pointing toward the ground. This makes it easy to reach while looking through the telescope,



something which is quite important when you are observing.

- 1. Line up the flat area on the inner portion of the DEC slow motion knob with the flat area on the DEC shaft.
- 2. Slide the DEC slow motion knob over the DEC shaft (see figure 2-4).

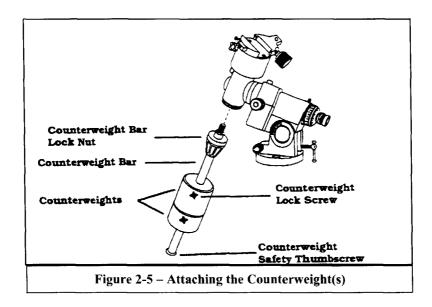
### Attaching the Counterweight Bar and Counterweights

The last item to be mounted before your telescope tube is the counterweight bar and counterweights. Used to balance the telescope, the counterweight bar attaches to the opposite side of the mount as the telescope. To install the counterweight bar:

- 1. Retract the counterweight bar lock nut by turning it counterclockwise. This will expose the threads on the end of the counterweight bar.
- 2. Thread the counterweight bar into the mount completely. Once again, it threads into the mount opposite the telescope (see figure 2-5).
- 3. Tighten the counterweight bar lock nut fully for added support.

The counterweight bar is now installed. With the counterweight bar in place, you are ready to attach the counterweights.

- 1. Lock the DEC clamp to hold the mount in place.
- 2. Remove the safety thumbscrew on the end of the counterweight bar.
- Loosen the set screw on the counterweight itself so that the central hole of the counterweight is unobstructed.
- 4. Slide the counterweight onto the counterweight bar. Move it high enough to allow room for the second weight (see figure 2-5).
- 5. Tighten the set screw on the counterweight to hold it in position.
- 6. Repeat this process for the second weight.
- 7. Replace the safety thumbscrew on the end of the counterweight bar. The thumbscrew will prevent the counterweights from sliding off the bar should they ever become loose.



With the mount fully assembled, you are ready to attach your telescope to the mount.

Before you attach an optical tube, fully tighten the right ascension and declination clamps. This will prevent the telescope from moving suddenly once attached to the mount.

- 1. Loosen the telescope mounting screw on the side of the CG-5 mount.
- 2. Slide the dovetail bar that is attached to the telescope onto the CG-5 mount.
- 3. Tighten the knob on the CG-5 mount to hold the telescope in place.

**NOTE:** Never loosen any of the knobs on the telescope tube or mount. Also, be sure that the corrector end of the telescope is pointing away from the ground at all times.

# **Optional Accessories**

#### Single Axis Models with Hand Control

Model #93518 — MDCG-5 (for CG-5 mounts) is a single axis (R.A.), DC motor drives. It powered by four D-cell batteries (not included). 2x and 4x sidereal speeds are available through the included hand controller.

#### **Dual Axis Models**

Dual Axis Motor Drives for CG-5 mounts [93523] - This dual axis motor drive, with drive corrector capabilities, are designed for Celestron's CG-5 mounts. They precisely control the telescope's tracking speed during long, timed exposures of celestial objects, producing the best possible image sharpness. Precision drive correctors are a must for those with a serious interest in astrophotography or CCD imaging. Four speeds are

available—1x (sidereal), 2x for guiding, 4x, and 8x for centering. These precision, state-of-the-art DC motor drives operate from 4 D-cell batteries (not included). The hand controller module is very compact and fits easily in the palm of your hand. Motors for both axes are included, along with brackets, clutches and hardware.

### CELESTRON TWO YEAR WARRANTY

- A. Celestron warrants this telescope to be free from defects in materials and workmanship for two years. Celestron will repair or replace such product or part thereof which, upon inspection by Celestron, is found to be defective in materials or workmanship. As a condition to the obligation of Celestron to repair or replace such product, the product must be returned to Celestron together with proof-of-purchase satisfactory to Celestron.
- B. The Proper Return Authorization Number must be obtained from Celestron in advance of return. Call Celestron at (310) 328-9560 to receive the number to be displayed on the outside of your shipping container.

All returns must be accompanied by a written statement setting forth the name, address, and daytime telephone number of the owner, together with a brief description of any claimed defects. Parts or product for which replacement is made shall become the property of Celestron.

The customer shall be responsible for all costs of transportation and insurance, both to and from the factory of Celestron, and shall be required to prepay such costs.

Celestron shall use reasonable efforts to repair or replace any telescope covered by this warranty within thirty days of receipt. In the event repair or replacement shall require more than thirty days, Celestron shall notify the customer accordingly. Celestron reserves the right to replace any product which has been discontinued from its product line with a new product of comparable value and function.

This warranty shall be void and of no force of effect in the event a covered product has been modified in design or function, or subjected to abuse, misuse, mishandling or unauthorized repair. Further, product malfunction or deterioration due to normal wear is not covered by this warranty.

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Some states do not allow the exclusion or limitation of incidental or consequential damages or limitation on how long an implied warranty lasts, so the above limitations and exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Celestron reserves the right to modify or discontinue, without prior notice to you, any model or style telescope.

If warranty problems arise, or if you need assistance in using your telescope contact:

#### Celestron

Customer Service Department 2835 Columbia Street Torrance, CA 90503 Tel. (310) 328-9560 Fax. (310) 212-5835 Monday-Friday 8AM-4PM PST

This warranty supersedes all other product warranties.

NOTE: This warranty is valid to U.S.A. and Canadian customers who have purchased this product from an Authorized Celestron Dealer in the U.S.A. or Canada. Warranty outside the U.S.A. and Canada is valid only to customers who purchased from a Celestron Distributor or Authorized Celestron Dealer in the specific country and please contact them for any warranty service



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