

Celestron NexStar 6SE Telescope

Set-up/Start-up Instructions:

0. Make sure that Celestron Power Tank is charged (takes 8-10 hr), if it will be needed.
1. Tripod Assembly and Leveling:
 - a. Spread tripod legs; then extend legs to desired length by first loosening wing nuts on each leg, extending each telescoping leg, and re-tightening wing nuts. (Celestron Quick Setup Guide Pictures 2 & 3)
 - b. Assemble eyepiece storage tray by removing knob and washer from the metal rod on the underside of the tripod surface. Slide on storage rack and fit the three points of the triangle against the three tripod legs. Add washer back on metal rod and screw knob back on until snug. (Celestron Quick Setup Guide Pictures 4 & 5)
 - c. Set bubble level (from small clear accessory storage container) on surface of tripod and adjust height of legs until tripod is level. (Celestron Quick Setup Guide Pictures 6)
2. Telescope Assembly:
 - a. Remove telescope from case, holding most of the weight by the fork arm and providing support on the optical tube.
 - b. Line up the holes on the bottom of the telescope with the screws on the surface of the tripod platform and tighten screws to secure telescope to the platform. (Celestron Quick Setup Guide Pictures 7 & 8)
 - c. Plug either Power Tank or AC wall adapter into telescope just above where the telescope mounts to the tripod platform, below the hand control paddle. (And turn on Power Tank)
 - d. Slide the finderscope onto the finderscope mount with the power knob closest to the eyepiece assembly side of the telescope. Tighten with screwdriver from accessories box. (Celestron Quick Setup Guide Picture 10)
3. Setting up the Telescope for Use:
 - a. Turn on the telescope by flipping the toggle switch to (|).
 - b. Use arrow buttons on hand control paddle to move telescope in the ALT (altitude; up/down direction) so that you can access the eyepiece assembly to add eyepieces.
 - c. Remove the covers from the telescope eyepiece assembly and the “Diagonal” eyepiece, and insert barrel of the Diagonal into the end of the eyepiece assembly; tighten screws to secure. (Celestron Quick Setup Guide Pictures 11 & 12)
 - d. Remove covers from a wide field of view lens (e.g., 25mm or 32mm) and insert it into the diagonal; tighten screws to secure.
 - e. Remove the large lens cap at the end of the optical tube.
 - f. Check the finderscope alignment.
 - i. Turn on the finderscope laser by turning the knob with the white dot on the side of the finderscope.
 - ii. Point telescope to a distant object on the horizon, like the top of a building or tree, etc. or the moon if it’s dark enough and visible.
 - iii. Find and focus (with small knob extending out of the back of the telescope near the eyepiece; Quick Setup Guide picture 18) on object with telescope 25mm or 32mm eyepiece by slewing the telescope with the arrows on the hand paddle control.
 - iv. Now use the ALT and AZ (azimuth; left/right) adjustment knobs on the finderscope to align and center the finder laser on the target.
 - v. Turn off the finderscope (only turn on when using to conserve battery)

You are now ready to observe – or you can follow the alignment procedures in the Celestron Quickstart guide to align the telescope for automatic slewing to and tracking of objects.

Quick Set-up/Start-up Check-List

- Day before: check Power Tank charge and/or charge Power Tank.
- Assemble tripod (open and extend legs, attach eyepiece tray).
- Level tripod.
- Attach telescope to mount (hold with fork arm, align and secure with mount screws).
- Plug telescope into Power Tank or AC adapter.
- Attach finderscope to side of telescope optical tube; secure with Philips screwdriver.
- Turn telescope on with toggle switch near power cord.
- Move telescope in ALT to access eyepiece end of telescope and remove lens covers.
- Assemble eyepiece with Diagonal and additional eyepiece; secure with screws.
- Check finderscope alignment by pointing to easily found object on horizon or moon.
- Go observe something by slewing telescope with arrows on hand paddle OR
- Follow Quickstart instructions for aligning telescope to bright stars for auto-slew/guide.

Observing Tips:

- 1.) The larger the lens diameter in millimeters (mm), the wider the field of view but the smaller the magnification. It's often easier to find objects in the eyepiece with a larger field of view eyepiece, and then switch eyepieces to one with higher magnification (smaller in mm) to see more detail (like zoom on your camera).
- 2.) The diagonal eyepiece can be loosened and rotated to facilitate looking through the eyepiece, depending on how the telescope is pointed. Just remember to retighten!
- 3.) The finderscope may not be able to be perfectly aligned. If not, make sure the object is centered in the telescope eyepiece, then look for its location in the finderscope and remember this location relative to the laser dot. Next time, align the next object in the finderscope to this (off center) location, rather than the center, and the object is more likely to be seen immediately in the telescope eyepiece.
- 4.) If your object is not in the telescope eyepiece, systematically scan in small amounts in a pattern by moving the telescope with the hand paddle to try to find it. Change the slew speed (how fast the telescope motor drive moves it) if necessary (see Quick Start Hand Control Guide picture 5).
- 5.) If not tracking an object (i.e., having the motor drive on to keep up with an object as it moves across the sky because of the earth's rotation; it's necessary to align the telescope for this option to work), make sure to check back in the eyepiece often to adjust the telescope position to keep the object in the field of view. Depending on the eyepiece field of view, it could move out of the field as quickly as every couple of minutes or so.
- 6.) Don't touch the telescope while viewing objects! Just lean in and look through eyepiece.

Quick Close-down/Pack-up Check-List

(Follow Set-up Instructions in reverse for detailed instructions)

- Make sure finderscope is turned off.
- Remove eyepiece and Diagonal, replace all caps, and stow all eyepieces in case.
- Replace large telescope lens cover and cap over eyepiece assembly at back of telescope.
- Remove finderscope by loosening Philips head screws and store in eyepiece case.
- Slew telescope to stow position (optical tube vertical, eyepiece assembly on top)
- Turn off telescope (toggle switch to "O") and Power Tank; unplug cord from telescope.
- Carefully unscrew telescope from mount and stow telescope in case.
- Disassemble eyepiece storage tray from tripod.
- Retract and close tripod legs, making sure wing nuts are securely tightened.
- Return all accessories, instruction books, and Planispheres to accessories box.