



Before you begin assembling your telescope, install the free Celestron SkyPortal app on your Apple or Android mobile device. The app is large, so we recommend downloading it while connected to Wi-Fi. To download, search for "Celestron SkyPortal" in the App Store or Google Play.



Unpack your telescope and verify that all parts are present. Your Astro Fi 127 MAK includes: a telescope tube, a tripod, a motorized fork arm mount, an accessory tray, two eyepieces, a 90° star diagonal, a finderscope, a battery pack, and a smartphone adapter.



To set up the tripod, spread the legs outward until they are fully extended and push down center leg brace.



Extend the legs of the tripod by loosening the three hand knobs on each leg. Pull each leg section all the way out and tighten the hand knobs down to secure them in place.



Thread the captive hand bolt in the center leg brace through the bottom of the accessory tray to secure it in place.



Place the motorized fork arm over the top of the tripod head and use the large captive knob between the tripod legs to lock the mount in place.



Attach the telescope optical tube by positioning the dovetail into the dovetail holder on the fork arm. Make sure the bottom of the dovetail is flat against the dovetail holder. Firmly tighten the thumb bolt.



Locate the 90° star diagonal and remove the plastic covers from both ends. Remove the plastic cap on the eyepiece holder on the telescope. Insert the barrel of the diagonal into eyepiece holder on the back of the telescope and secure it by tightening the setscrews.



Insert the barrel of the 25mm eyepiece into the top of the star diagonal. Tighten the setscrew.



Slide the finderscope bracket into the dovetail slot on the telescope tube near the focuser. The large window on the finderscope should be facing the front of the telescope. Secure the bracket by tightening the setscrew on the dovetail slot.



Install 8 AA batteries into the battery pack. Be sure to install the batteries in their correct polarity, matching the + and - terminals as shown on the battery holders.



You can place the battery pack on the accessory tray or you can hang it off of one of the bolts that holds the legs to the tripod head. Plug the battery pack's barrel connector into the power port on the base of the motorized fork arm.



Remove the lens cap from the front of the telescope.



Verify that the small Wi-Fi switch above the power switch is in the right position. Then, turn on the power switch at the base of the motorized fork.



Go to your device's Wi-Fi settings, and connect to the "Celestron-xx" network. Wait for your device to confirm that you have successfully connected.



Launch the Celestron SkyPortal app and select "Connect to Telescope." Arrows will appear on your screen for UP/DOWN and LEFT/RIGHT. Use these arrows to move your telescope. A slider near the bottom of the screen will adjust your motor speed. NOTE: The Astro Fi mount should be moved using the SkyPortal app. The up/down axis can also be moved manually using the slip clutch. This allows you to move the scope by hand to a downward-facing position for storage. The left/right axis does not have a slip clutch and cannot be moved manually. Damage to the gears may occur if this is forced.

Aligning the **Finderscope**

The finder is one of the most important parts of your telescope. It helps you locate objects and center them in the eyepiece. The first time you assemble your telescope, you need to align the finder to the telescope's main optics. It's best to do this during the day*.

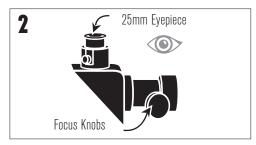


*SOLAR WARNING! Never attempt to view the Sun through any telescope without a proper solar filter!



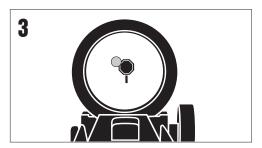
CHOOSE A TARGET

Take the telescope outside during the day and find an easily recognizable object, such as a streetlight, car license plate or sign. The object should be as far away as possible, but at least a quarter mile away.



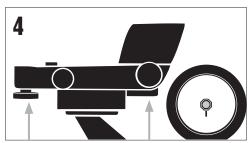
CENTER THE TARGET IN THE EYEPIECE

Look through the telescope using your lower powered eyepiece. Move the telescope until the object you chose lies in the center of the view. If the image is blurry, gently turn the focus knobs on either side of the telescope until it comes into sharp focus. NOTE: The image in your telescope may appear inverted. This is perfectly normal in an astronomical telescope.



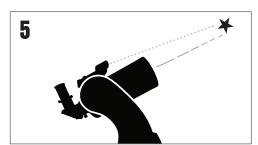
LOOK THROUGH FINDERSCOPE

Once the object is centered in your 25mm eyepiece, look through the finderscope and locate the red dot.



ADJUST THE FINDERSCOPE

Without moving the telescope, use the two adjustment knobs to move the finder around until the red dot appears over the same object you are observing in the telescope's 25mm eyepiece.



YOUR FINDERSCOPE IS NOW ALIGNED!

It should not require realignment unless it is bumped or dropped.

Using the **Smartphone Adapter**



Lift the bungee straps and slide your smartphone between the straps and the adapter body so that the camera is looking through the camera opening. The straps should give plenty of tension to hold the device against the adapter.



Loosen the set screws located on the eyepiece holder on the bottom side of the adapter. Place the black portion of the eyepiece into the eyepiece holder and tighten the screws to secure the eyepiece in place.



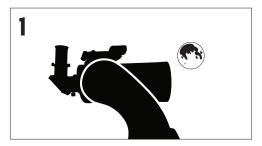
Now take the adapter with the phone and eyepiece attached and insert the chrome barrel of the eyepiece into the diagonal of the telescope. Secure it in place by tightening the set screws on the diagonal.



Activate your camera app on your smartphone and adjust the focus, just as you would the eyepiece, this time using the image that appears on your phone's screen. NOTE: Make sure the phone's flash is turned off.

Your First Night Out: The Moon

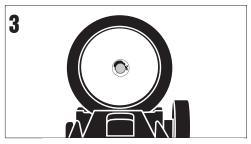
The best and easiest target for you to try to view first is the Moon. Try observing the Moon at different points in its phase cycle. The best time to view the Moon is from two days after a New Moon up to a few days before a Full Moon. During this period, you will be able to see the most detail in the craters and lunar mountain ranges.



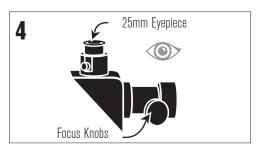
With the Moon visible in the sky, set up your telescope as described above with the 25mm evepiece installed.



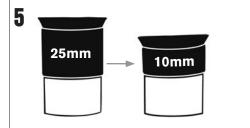
Move the telescope so that it is roughly pointing toward the Moon.



Look through the finderscope and locate the reddot. Continue moving the telescope until the red dot appears over the Moon.



Look through the telescope's 25mm eyepiece. Gently turn the focus knobs to adjust the sharpness of the image.



YOU HAVE NOW OBSERVED YOUR FIRST CELESTIAL OBJECT!

To get a closer view of the Moon, loosen the set screws on the focuser and remove the 25mm eyepiece. Replace it with your 10mm eyepiece and tighten the set screws to secure it in place. The 10mm eyepiece will give you significantly more magnification, making the Moon appear much larger.

NOTE: To make sure you are getting the sharpest image possible, you may need to adjust the focus knobs when you change eyepieces.

For more information on this product or to download the instruction manual, please visit the respective product page on celestron.com



SOLAR WARNING: Never attempt to view the sun through any telescope without a proper solar filter.

NEED ASSISTANCE?

Contact Celestron Technical Support celestron.com/pages/technical-support 08-19