Open Up

- 1. **Open the Observatory** with the key found in the lock box. Put the key back.
- 2. Turn on the light and sign-in in the logbook.
- 3. Unhitch the **roof hold-down latches**.
- 4. Slide the **roof open**.
- 5. Remove the **bungie cord** and **plastic cover**.
- 6. Remove the telescope **dust cover**.
- 7. Turn on the **dew heater** (if necessary).
- 8. Insert a **dual band filter** (emission nebula) or a **UV/IR cut filter** (galaxies and star clusters), if necessary.

Power Up and Get Ready (Important: make sure the roof is now open!)

- 9. **Power up** the mount (wall and mount switch) and the ASiair device (switch).
- 10. Plug your **USB drive** into the ASiair device.
- 11. Use the handheld controller to **Align the Mount**.
 - a. Press BACK (if necessary) until the controller shows CGE Ready.
 - b. Press ENTER to go to CGE Ready / Press Enter to Begin Alignment.
 - c. Press ENTER to go to Set Switch Position.
 - d. Press ENTER and the Telescope will move. Wait until it stops.
 - e. Press Enter. Enter the **time (24-hour format), EST or EDT**, Easter Time Zone, **Current Date**. Press ENTER each time to go to the next option.
 - f. Press the [#9 SCROLL Down] key to scroll down to **Select Alignment/Last Alignment**. Press ENTER. (You do not have to align the mount to a target star.)

Connect and Pre-process

- 1. Open the ASiair app and proceed through to the Main Screen.
- 2. If necessary, connect to the ASiair device using your phone or tablet's Wi-Fi settings. Use the password "12345678".
- 3. Open the Storage settings . Click and **choose your USB Drive** rather than eMMC.
- 4. **Auto-Focus the telescope**. Click on the AF button over on the left.
- 5. Take your **flat and bias calibration** frames before taking images.
- 6. Tell the ASiair to use the flat and bias frames. Need more here.

Take Images

- 7. CHOOSE AN OBJECT
 - a. Click on the "Big Dipper" icon to choose an object to image.
 - b. Choose an object to image. If necessary, use your finger to adjust the view.
 - c. Wait for ASiair to plate solve and find your object.
 - d. Return to the previous screen.
- 8. PREVIEW YOUR IMAGE
 - a. Choose Preview from the drop down
 - b. Click [EXP] to choose an exposure time (say 3 sec)
 - c. Click on the Preview button
 - d. Return to the previous screen.
- 9. SET A GUIDE STAR

- a. Click on the graph in the top left to set a guide star.
- b. Click refresh and then the "target" button . ASiair will find a guide star.
- c. Wait for the graph at the bottom to track and show low numbers.
- d. If the guide scope is not tracking (high numbers), repeat from step b.
- e. Return to the previous screen.

10. START TAKING IMAGES

- a. Choose Live from the drop down
- b. Click on the Live button Live button
- c. Click on the menu button to choose your settings (Light, EXP, Save Every Frame).
- d. Click on the big white button to start taking images.

11. STOP TAKING IMAGES

- a. Click on the big white button to stop taking images.
- b. Click on the SAVE button to save the final stacked image.
- c. Click on the BRUSH button to clear images and start over.

12. STOP GUIDING

- a. Click on the graph in the top left to stop the guiding.
- b. Click the red stop button
- c. Return to the previous screen.

Shut Down

- 18. Take you dark calibration frames before shutting everything down.
- 19. From the app "Files" screen use to eject your USB drive.
- 20. From the app "Wi-Fi" screen use use use to shut off the ASiair device.
- 21. Use the handheld controller to **Home the Telescope.**
 - a. Press BACK (if needed) until the controller shows **CGE Ready**.
 - b. Press the [#7 Menu] Key.
 - c. You will see **Menu / Utilities ->** Press Enter.
 - d. Press the [#9 SCROLL Down] Key until you see Utilities / Home Position.
 - e. Press Enter and you will see Home Position / Goto.
 - f. Press Enter and the mount will go to the home (horizontal) position.
- 22. Turn off the **dew heater**.
- 23. Remove any filters.
- 24. Power off the ASiair device using the switch.
- 25. Remove your USB drive from the ASiair device.

Close Down

- 23. Turn off the power on the mount.
- 24. Turn off the power on the wall.
- 25. Place the **handheld controller** in its storage position.
- 26. Replace the main telescope dust cover.
- 27. Replace the **plastic bag** over the Telescope and secure it with the **bungee cord**.
- 28. Move the **roof to the closed position**.
- 29. Hook the **roof hold-down latches** on both sides.
- 30. Sign-out in the **logbook** and **turn off the light**.
- 31. Close the door to the observatory. Make sure it is locked.