## **ASCOM Installation Guide**

## Purpose of this Document

- The purpose of this document is to guide team members through a *complete* installation of ASCOM.
- If you have any instance of ASCOM on your laptop, use the 'ASCOM Upgrade and ASPS Install Guide'.
- If you are unsure whether ASCOM is on your laptop or not, follow these steps to check:
  - 1. Press the Windows key and begin typing "programs"
  - 2. When it appears, click on "Add or remove program"
  - 3. In the search bar on the right-hand side type "ascom platform". If nothing appears then you do not have ASCOM installed. If 'ASCOM Platform' appears, then proceed to the above mentioned document.

Step 1: Enable .NET 3.5 Service Pack 1

- Click the Windows icon in the lower left corner of the screen or press the Windows key on your keyboard to open the Start Menu.
- Scroll down to the folder titled 'Windows System'
- Click on 'Control Panel'
- Click on 'Programs'
- Under 'Programs and Features', click on 'Turn Windows features on or off'
- Click the box next to ".NET Framework 3.5 (includes .NET 2.0 and 3.0), filling it in

Step 2: Download and Install ASCOM Platform 6.5SP1

- Navigate to <u>https://ascom-standards.org</u>.
- On the homepage, click the 'Download' button on the right-hand side of the webpage in the box titled 'Platform 6.5SP1.' This downloads an extension titled 'ASCOMPlatform65SP1.exe'
- In either your downloads folder on your laptop or in the Downloads pop-up, double click on "ASCOMPlatform65SP1.exe'
- When prompted with the pop-up saying 'Do you want to allow this app to make changes to your device?' Click 'Yes'
- In the pop-up titled 'Welcome to ASCOM Platform 6.5 SP1 Setup'
  - Under "ASCOM Platform Options", click on the box next to "Install Diagnostics shortcut on Desktop" and "Install Profile Explorer shortcut on desktop" and change them to the X.
  - Click 'Install'
- After installation is complete, click 'Finish'

Step 3: Download and Install ASCOM Celestron Unified Telescope & Focuser extension

- Navigate to <a href="https://ascom-standards.org/Downloads/ScopeDrivers.htm">https://ascom-standards.org/Downloads/ScopeDrivers.htm</a>
- Scroll down approximately a third of the webpage until you see the box with Celestron Unified (6.1.7350, Feb 2020) Telescope & Focuser
- Click the box labeled 'Download'. This downloads an extension named 'Celestron Telescope and Focuser Setup (6.1.7350).exe'
- In either your downloads folder on your laptop or in the Downloads pop-up, double click on 'Celestron Telescope and Focuser Setup (6.1.7350).exe'
- When prompted with the pop-up saying 'Do you want to allow this app from an unknown publisher to make changes to your device?' Click 'Yes'
- A pop-up titled 'Setup ASCOM Celestron Telescope and Focuser Driver' will appear. Click 'Next >', then 'Install', then 'Finish'
  - Note: uncheck the boxes next to 'View ReleaseNotes.txt' and 'View Celestron Telescope and Focuser.pdf' if you don't wish to view these things.

## Step 4: Connect Telescope to Laptop

- Connect the telescope to power, and turn on.
- Connect the hand paddle on the telescope to your laptop via RS232 to USB cable or equivalent method of connection and insert the USB end to the USB port on the right hand of the laptop closest to the screen.

## Step 5: Set-up driver

- In the Windows startup menu, search for "ASCOM Diagnostics"
- In the pop-up titled 'Do you want to allow this app to make changes to your device?', click 'Yes'
- A pop-up titled 'ASCOM Diagnostics' will appear. In the top toolbar, click 'Tools', then 'Telescope Chooser (using .NET)'
- In the drop down menu, choose 'Celestron Telescope Driver', then click 'Properties'.
- In the 'Celestron Setup' pop-up, click on 'Advanced Setup,' and enter the following information:
  - Track Mode: AltAz
  - Optics
    - Aperture (mm) : 279
    - Focal Length (mm) : 530
    - Obstruction (mm) : 105
  - Site:
    - Latitude: *Enter your latitude value*
    - Longitude: Enter your longitude value
    - Elevation (m): Enter your elevation value in meters
  - Check "Show Hand Control"
  - Change "Slew Settle Time" if desired.
  - Uncheck 'Show all COM ports'
- After entering the properties, Click 'OK'

Celestron Setup	? ×
COM Port COM3 ~ Advanced Setup	Track Mode EQ N → Has GPS
Optics Aperture (mm) 280 - Focal Length (mm) 2800 - Obstruction (mm) 95 -	Site Latitude 40° 00' 12'' N Longitude 04° 00' 59'' W Elevation 1567
Show Hand Control Slew Settle time Show All COM Ports Minimal Mode Version: 6.1.7350.35104	
ASCOM Trace Help	Cancel OK

\*\*\*The above Latitude/Longitude/Elevation is for LOHQ only, and will vary depending on the site location.

\*\*\*The Optics information is for the Celestron CPC 1100, and will differ with different telescopes.

Step 6: Set Up ASCOM Device Hub

- In the Windows start-up menu, search for 'ASCOM Device Hub'
- In the ASCOM Device Hub, select "Tools" then "Setup"
- You should now be in the "Device Hub Application and Driver Setup" window
  - Go to the "Telescope Setup" then select "Choose" located beneath "Telescope Device"
- You should now be in ASCOM Telescope Chooser
  - Click the arrow to the right of "Properties" to expand the drop down window
  - Select "Celestron Telescope Driver" then select "OK"
- In Device Hub Application and Driver Setup select "OK"
- In ASCOM Device Hub, click "Connect Telescope" in the upper left of the window
- Telescope has been connected when the red text underneath Telescope State reads "Connected"