SharpCap 4.0 Installer and QHY Driver Installation Guide (v2021-08-31)

Purpose of this guide

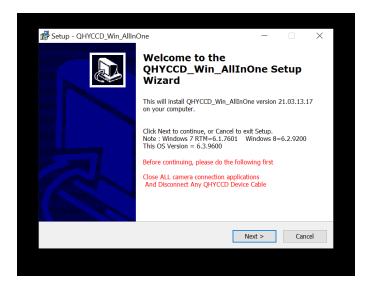
- The purpose of this guide is instruct users how to properly install and setup the latest QHY driver and SharpCap 4.0 installer on laptops whose most up to date version of SharpCap is SharpCap 3.2

Obtaining the Files

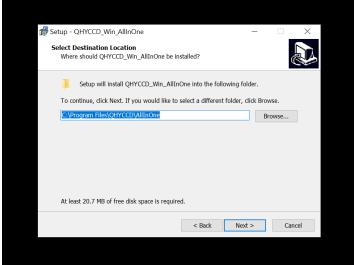
- Download the following files:
 - The latest QHY driver, QHYCCD Win AllInOne.21.03.13.17.exe
 - Expand the 1. General Driver & SDK Download tab, then expand 1.1
 Driver & SDK Download for Windows
 - Scroll down to "Stable Version" and then select "Ver.20210313"
 - The latest SharpCap installer, SharpCapInstall-4.0.8042.0.exe
 - Scroll down to "Previous Versions"
 - Scroll until you see "Download Version 4.0.8042.0 (32-bit)"
 - Select "Download Verison 4.0.8042.0 (32-bit)"
 - Regardless of the bit of the computer ALWAYS use the 32-bit version unless we instruct otherwise
- Copy these files into the SharpCap folder within Documents

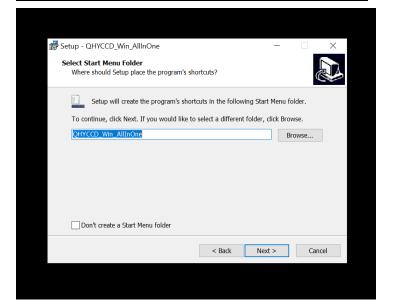
QHY Driver Installation

- Run installation for the driver by double clicking on "QHYCCD Win AllInOne.21.03.13.17.exe"
- Select "Yes" when prompted with the message "Do you want to allow this app from an unknown publisher to make changes to your device?"
- Select "Next" up through the window labeled "Select Additional Tasks." This will include the following windows: Welcome to Setup, Notice, Select Destination Location, and Select Start Menu Folder

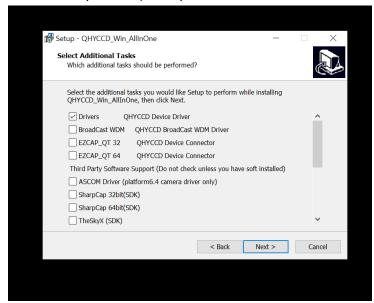




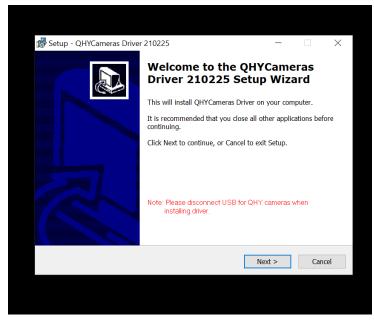


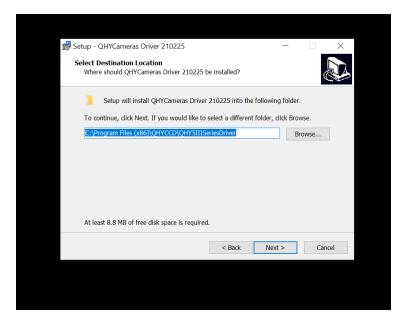


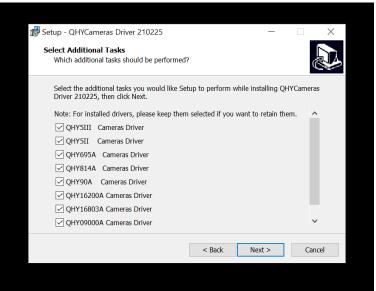
 In Select Additional Tasks, uncheck everything (make sure to scroll all the way down to see the complete list) except "Drivers QHYCCD Device Driver", then select "Next"



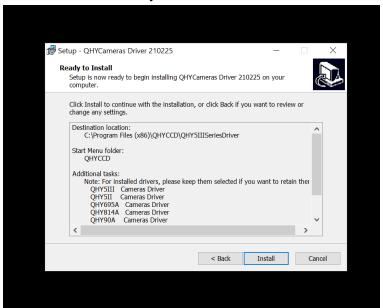
- Select "Install" at Ready to Install (No picture available)
- Select "Next" at Welcome to the QHYCameras Driver 210225 Setup Wizard, Select Destination Location, and Select Additional Tasks



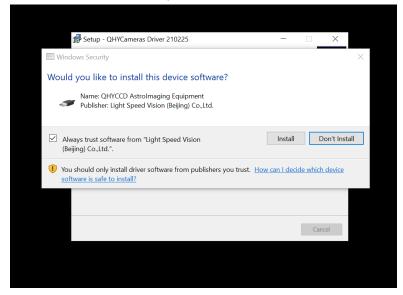




- Select "Install" at Ready to Install



- Select "Install" at Would you like to install this device software?



- Select "Finish" in the QHYCameras Driver 210225 Setup Wizard window



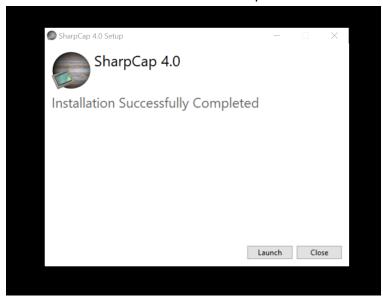
- You might be prompted with another window that has two checked boxes. Uncheck all checked boxes in the Completing the QHYCCD_Win_AllInOne Setup Wizard window, then select "Finish" again (*No picture available*)
- Restart the computer now
- After the reboot, a shortcut for "QHYCCD SDK" will be present on the Desktop. Delete it by selecting and pressing SHIFT+DELETE.

SharpCap 4.0 Installer Installation

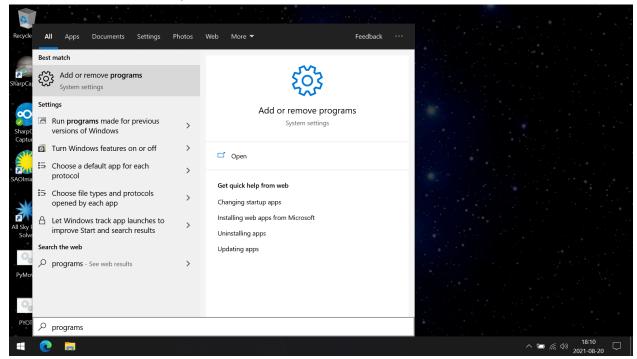
- Double click on the "SharpCapInstall-4.0.8042.0.exe"
- Agree to license terms and conditions then select "Install"



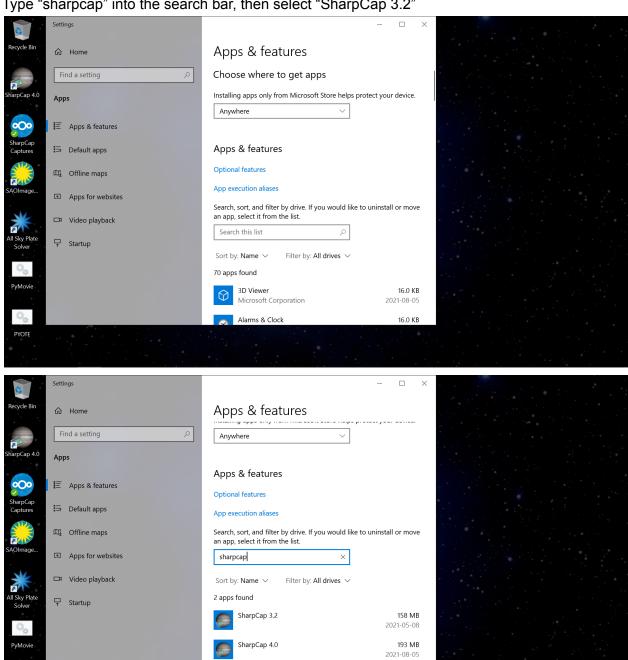
- Select "Yes" when prompted with the message "Do you want to allow this app to make changes to your device?"
- Select "Close" when installation is completed



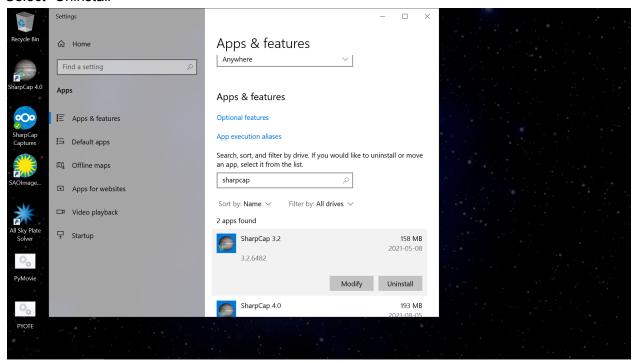
- A new shortcut for SharpCap 4.0 will appear on your desktop and you can already use this to get started. But a little more cleanup is important to get rid of the old version.
- Delete SharpCap 3.2 shortcut as it's not needed anymore (Shift + Delete when the shortcut is highlighted will permanently delete it)
- Click the Windows button on the keyboard, type in "Programs"
- Select "Add or remove programs"



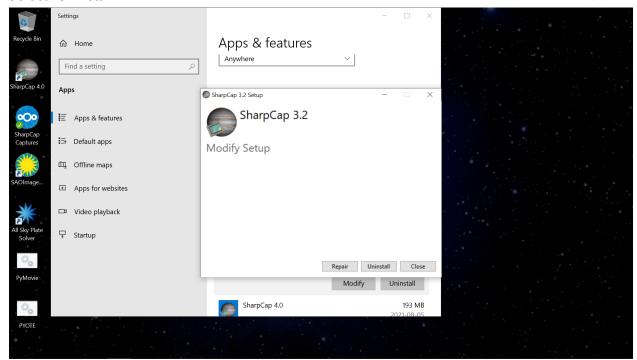
Type "sharpcap" into the search bar, then select "SharpCap 3.2"



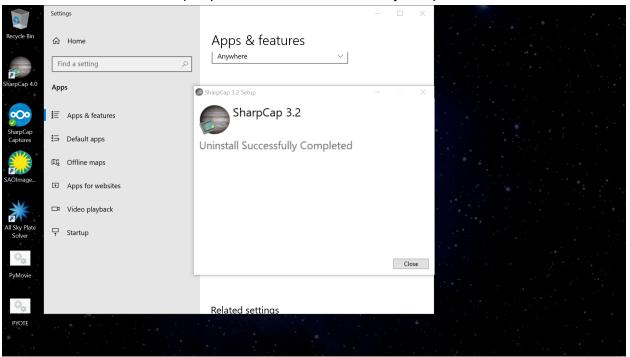
- Select "Uninstall"



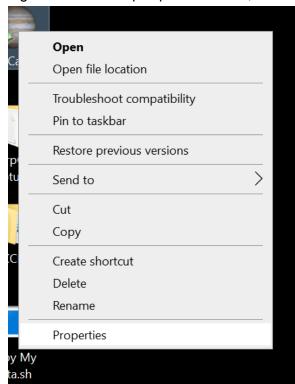
- When prompted with the window "Do you want to allow this app to make changes with your device?" select "Yes"
- Select "Uninstall"



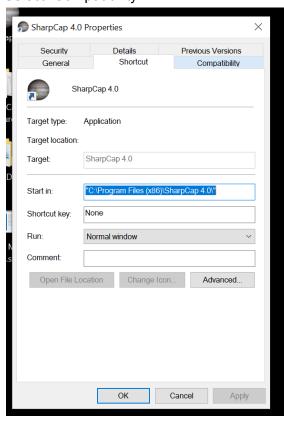
Close the window after SharpCap 3.2 Uninstall is successfully completed



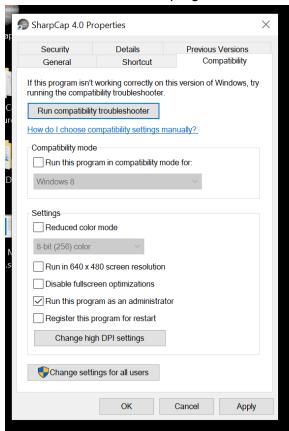
- SharpCap 3.2 is now uninstalled and SharpCap 4.0 should be the only SharpCap software on your laptop
- The only change to the Desktop should be the addition of the SharpCap 4.0 shortcut
- Right click the SharpCap 4.0 shortcut, select "Properties"



- Select "Compatibility"

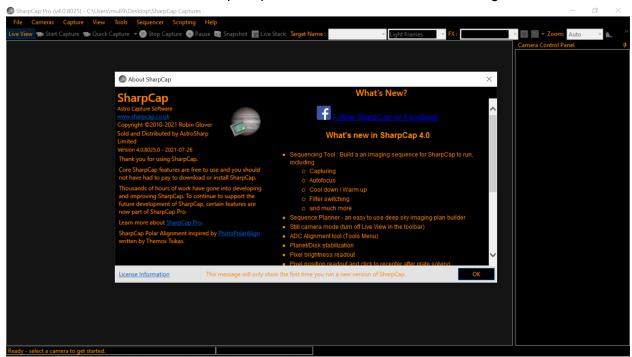


- Then check the "Run this program as an administrator" box, select "Apply" then "OK"

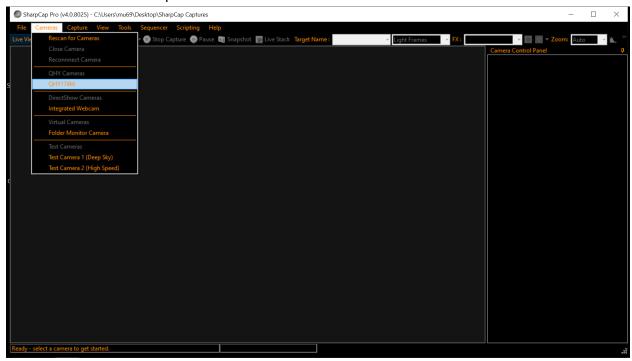


- **Before** launching SharpCap 4.0, make sure a QHY camera is turned on and connected to the laptop (if you do not hear a fan running from inside of the camera then it isn't turned on). You do not need a valid GPS lock for this step.
- Launch SharpCap 4.0
- A window will pop up asking "Do you want to allow this app to make changes to your device?". Always select "Yes" (you should be asked every time SharpCap is opened)

- Once launched, select "OK" when prompted with the "What's New?" message

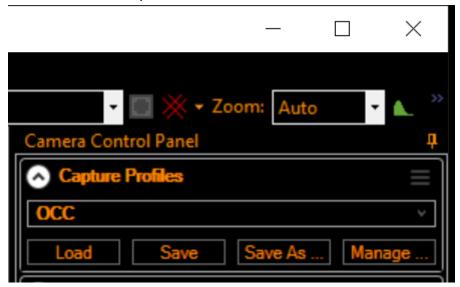


Click "Cameras" in the top tab then select "QHY174M"



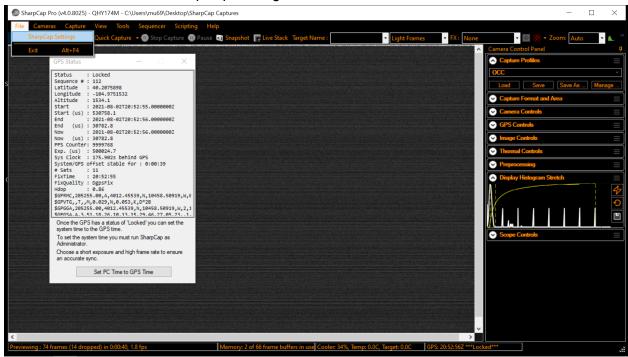
- Once the camera has been opened, go to the top right-hand side of the screen. There should be a tab in the Camera Control Panel called "Capture Profiles"
- Press the downward facing to the left of "Capture Profiles" to expand the tab

- Make sure the OCC profile is loaded. The tab will look like this if it is loaded:

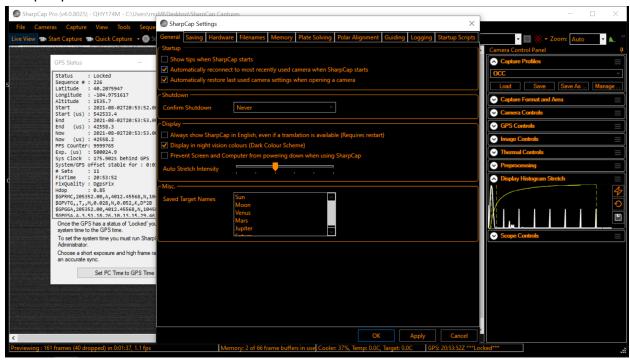


- If the space where it reads "OCC" is instead blank then no profile is loaded
- Load the profile by selecting the down arrow and then selecting "OCC" (this tiny arrow shows in the above image just above the ... at the end of Manage...
- Expand the "Capture Format and Area" tab and make sure Colour Space is set to MONO16 and the Output Format to FITS
- Expand the "Camera Controls" tab
 - Change the exposure time to something different (eg., 400 ms)
 - Reset the Exposure to 500 ms (check to make sure Gain is set to 300, and Offset is set to 100 but they should already be there)
 - Under "Camera Controls", set USB Traffic to 40 (click the box to the right of the slider, delete the current value, type 40, then hit the Enter key)
- Expand the "GPS Controls" tab and make sure GPS is set to "On"
- Click "Save" in the "Capture Profiles" tab

- Next, select "Files" then "SharpCap Settings"

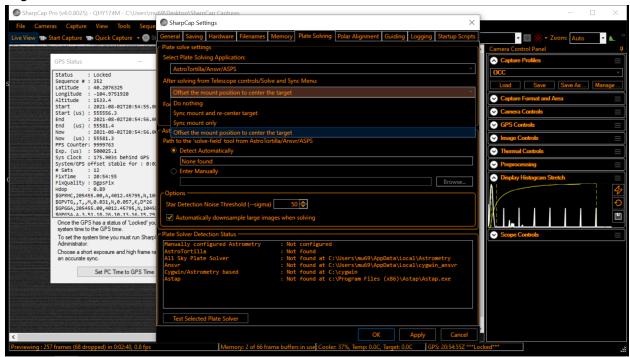


- In the "General" tab, check "Automatically reconnect to most recently used camera when SharpCap starts



- Go to "Plate Solving" tab click the arrow under "After solving from Telescope controls/Solve and Sync Menu:" and select "Offset the mount position to center the

target"



- Select "Apply" in the bottom right corner, then "OK"

FAQs

- There is a flare in my video feed. How do I get rid of this?
 - Go to either Exposure or USB Traffic and change the value, then hit the Enter key. This should get rid of the flare. Now set the value you changed back to the original value, hit the Enter key, and Save the profile. Close SharpCap, then re-open it to check that the new profile was saved and that the flare is still gone.