

## How to use a computer to control an iOptron mount



In general you need the followings to use a PC to control the mount,

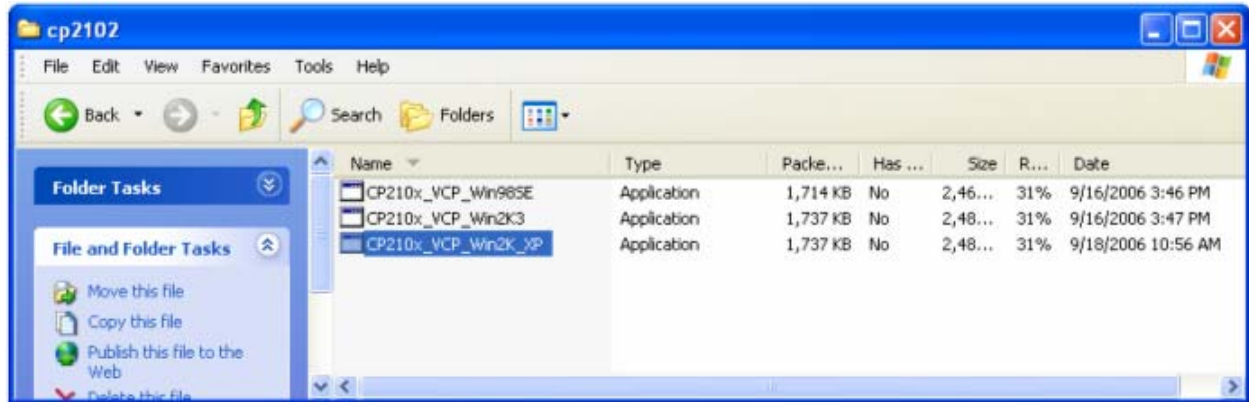
1. Download USB2COM driver (cp2102.zip file for 8401 and 8402A, or pl2303.zip for 8402G) <http://www.ioptron.com/support.aspx?catalog=28>;
2. Install USB2COM and establish the connection between the mount and the PC;
3. Download and install ASCOM platform (download from <http://ascom-standards.org/>);
4. Download and install iOptron ASCOM drive (download it from iOptron website <http://www.ioptron.com/Files/File/iOptronAscomSetupV1.02.rar>); and
5. Planetarium software.

Some company integrated iOptron's products into their planetarium software, such as Voyage and The Sky X Pro. Therefore ASCOM plug-in will not be needed. Most planetarium software can be used to control iOptron's product via ASCOM.

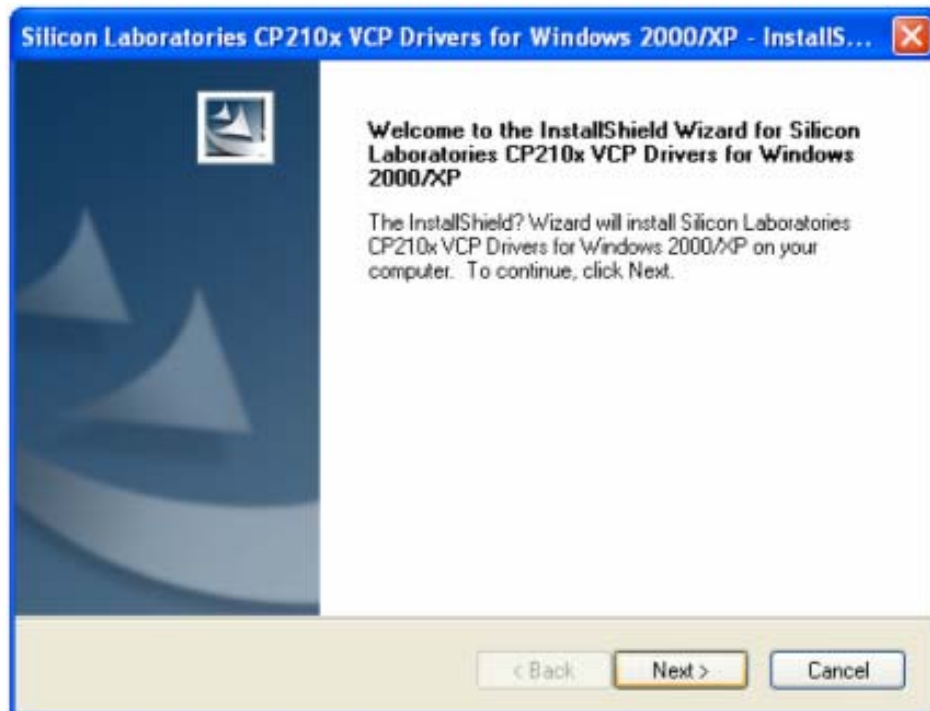
Some other ASCOM drivers, such as LX200 Generic ASCOM driver and AstroPhysics GTO driver, are also compatible to SmartStar<sup>®</sup> mount.

# iOptron SmartStar® USB PC Connection For Controllers #8401 and #8402A Step-By-Step Instruction

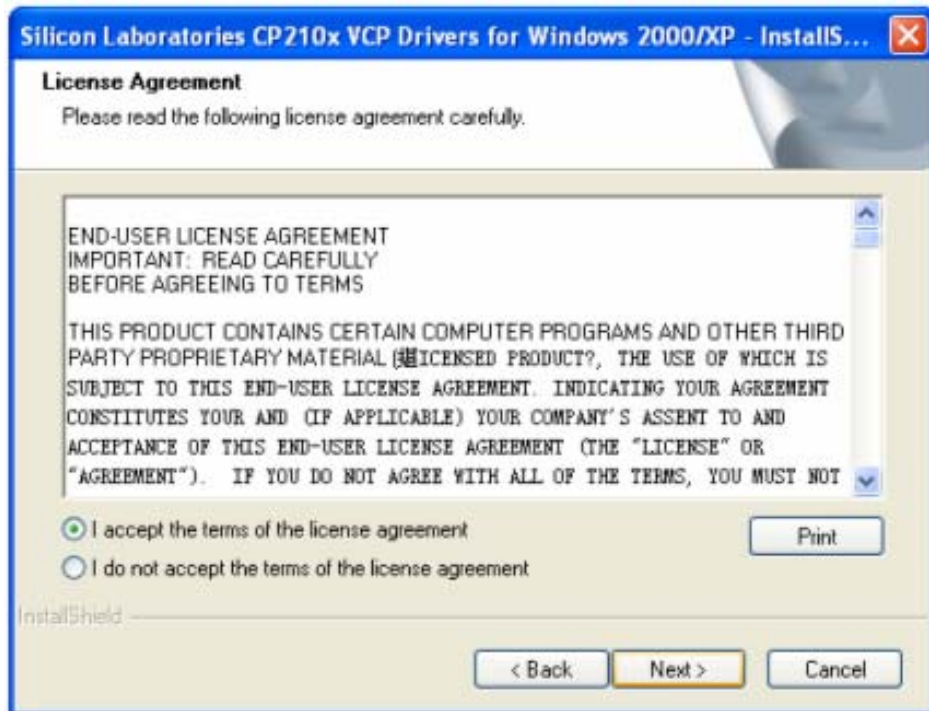
## 1. Install cp2101(usb2com) driver



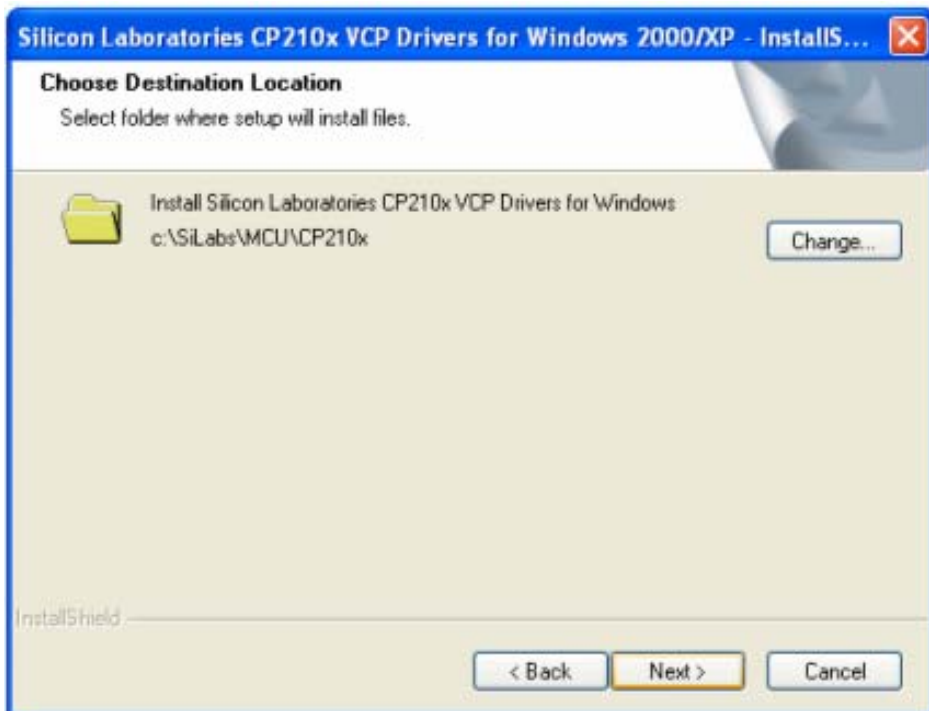
Choose the appropriate driver for your OS. In this case is a Windows XP operation system. Double click on it, and you will see:



Click "Next".



Select "I accept the terms of license agreement", and click "Next"



Using the default installation path, c:\SiLabs\MCU\CP210x, or specify your own path by click "Change". Click "Next". Then click "Install".

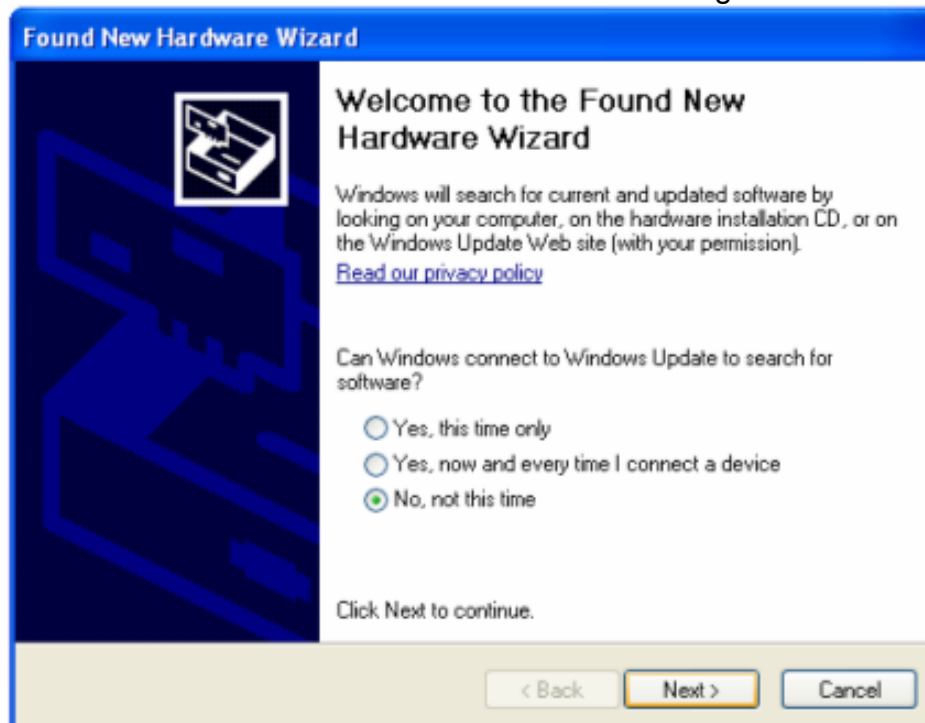


When finished installation, click “Finish”

2. **Plug the USB cable to the USB port on your PC, plug the other end of the USB cable to hand controller. Turn on the power on the mount.**

### 3. Install the Hardware

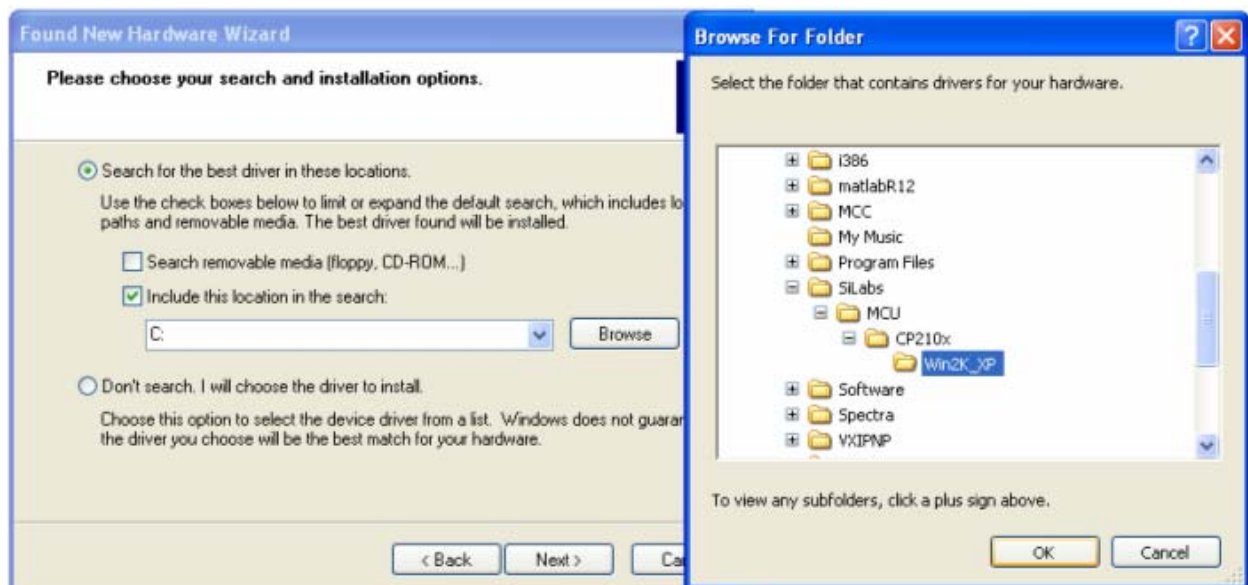
The computer will find a new hardware and show the following screen



Select “No, not this time” and click “Next”.

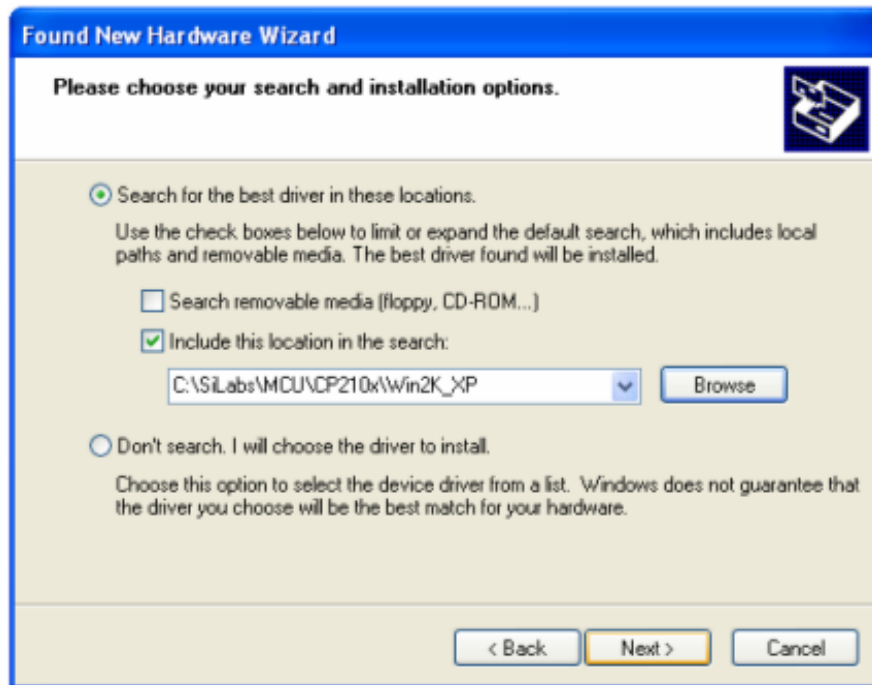


Select “Install from a list or specific location” and click “Next”.



Select “Search for the best driver in these locations,” and check “Include this location in the search.”

Click on “Browse” and select the cp210x driver from directory c:\SiLabs\MCU\CP210x\Win2K\_XP, click OK.



Click “Next”. The computer will start to install the driver for the USB2COM. When the installation is done, click “Finish”.



Then another window popped up saying there was new hardware to find a driver for. Repeat step 3 again to finish the installation.

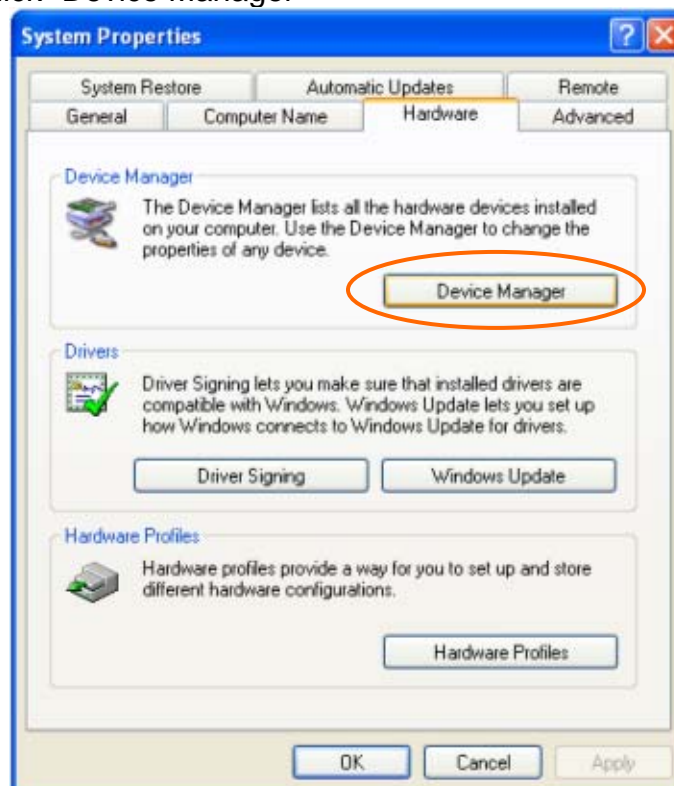
Now your computer should be ready for Firmware Upgrading, computer communication with the mount via ASCOM platform and planetarium software applications. However,



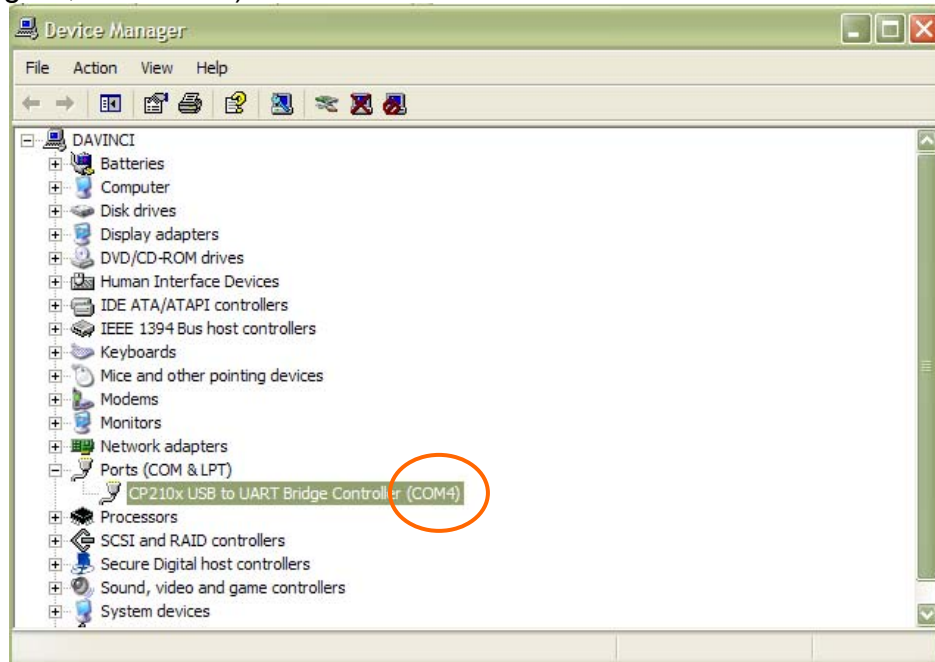
you need to find assigned COM port number for the USB connection. To do so, right click “My Computer”, and click “Properties”



Click “Hardware”, click “Device Manager”



Double click “Ports(COM & LPT)”, find out the COM number and write it down (in the following figure, it is COM4)





## An Example on How to Setup GOTONOVA ASCOM Driver in a Planetarium Software (Cartes du Ciel)<sup>1</sup>

1. Install the planetarium software, such as Cartes du Ciel (CDC).
2. Click on the software to open it.

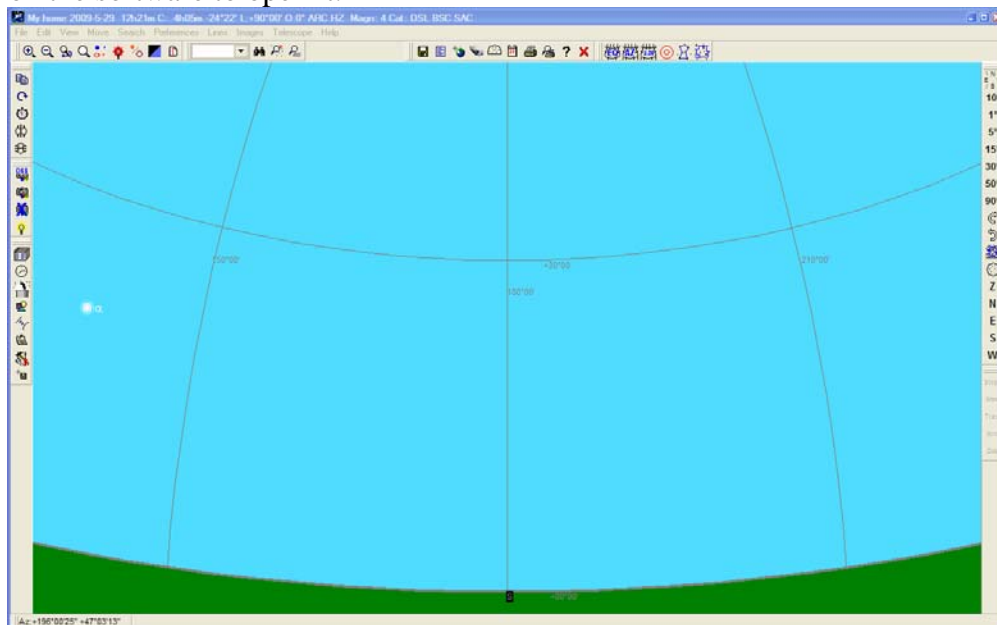


Fig.1

3. Click on Telescope. A drop down menu will open. Move the cursor to Select Scope Interface and select Ascom.

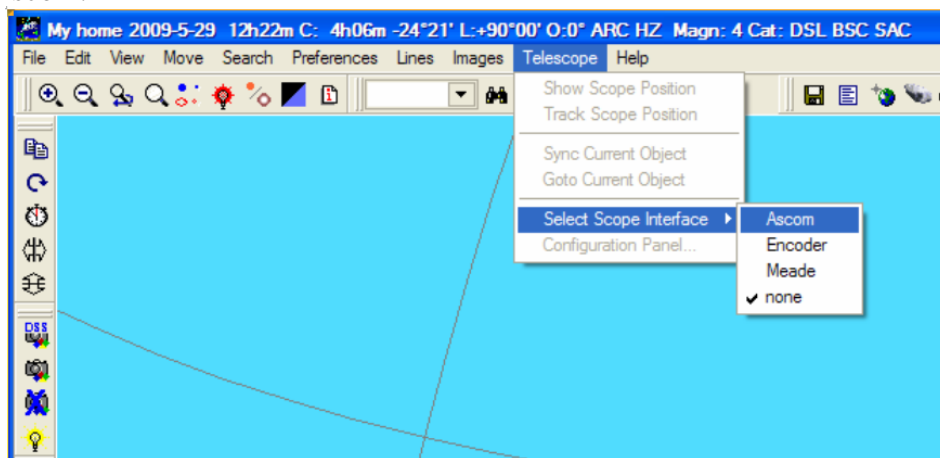


Fig. 2

<sup>1</sup> This is not for commercial release. There is no guarantee it will work for any software or on any computer, nor all the software function will be supported.

4. An ASCOM Telescope Interface window will pop up.

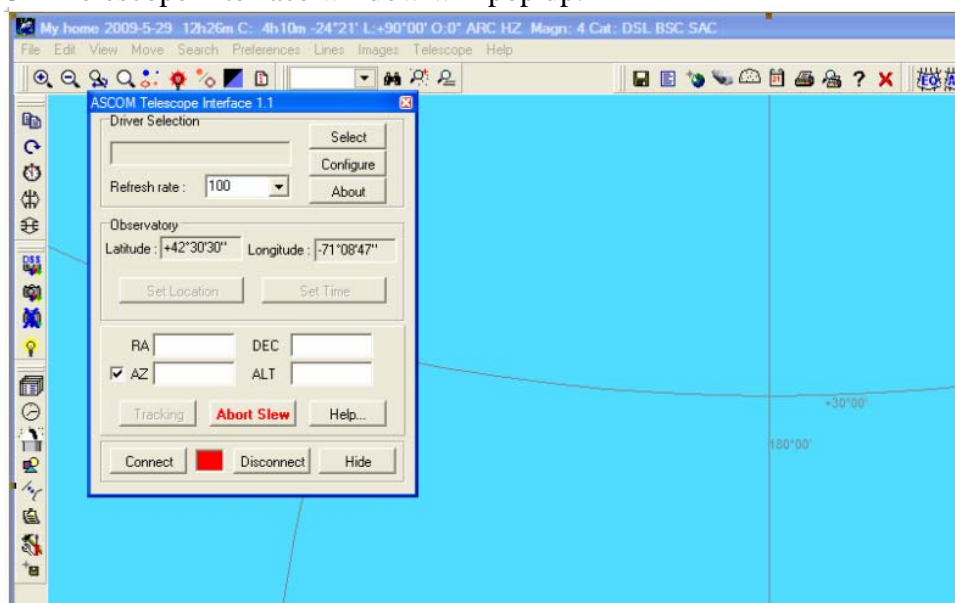


FIG.3

5. Click on Configure and select GTOTONOVA(GOTOSTAR) in ASCOM Telescope Chooser.

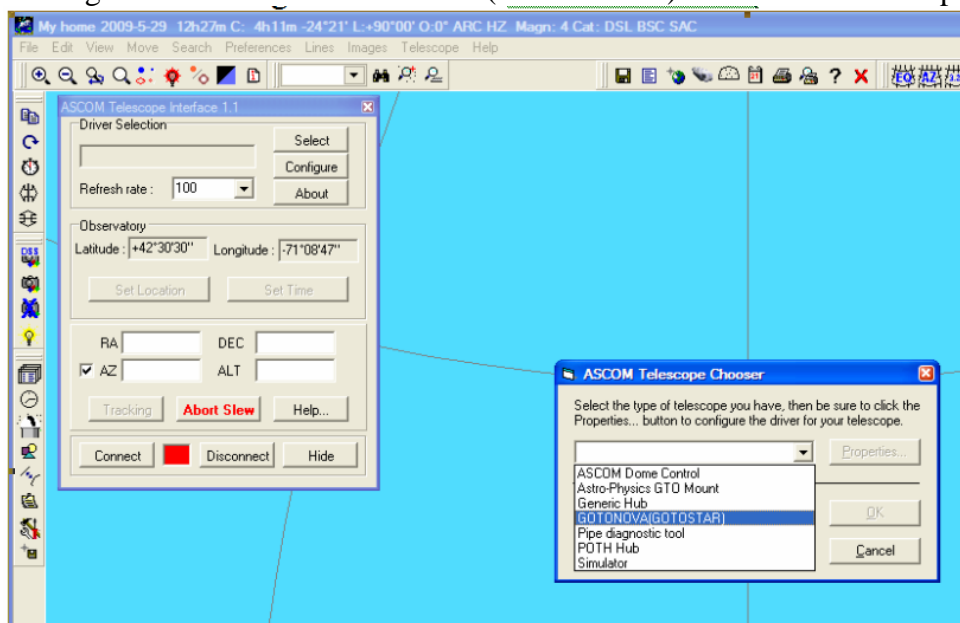


Fig. 4

6. Click on Properties...

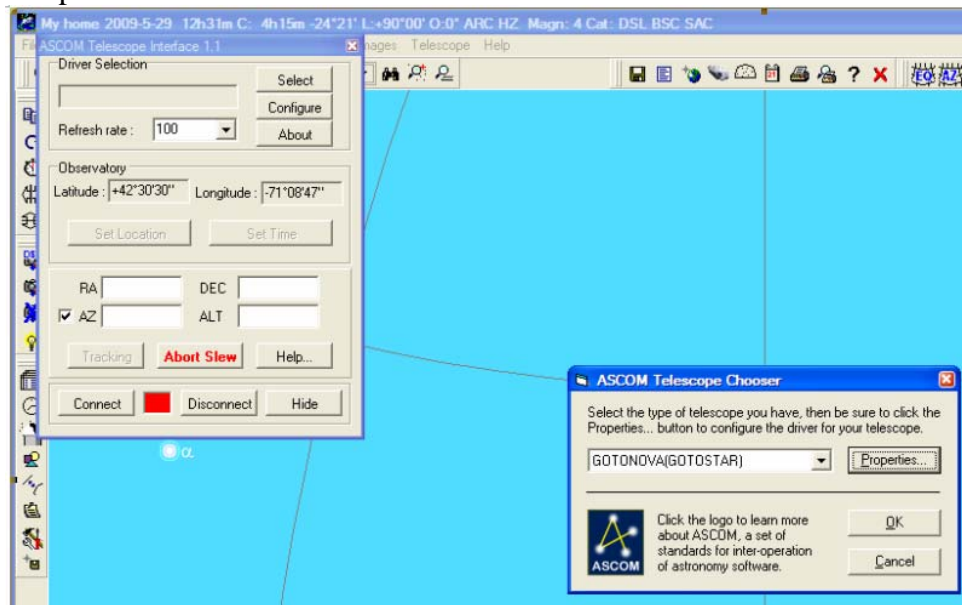


Fig. 5

7. A GOTONOVA(GOTOSTAR) ASCOM Driver window will display. Select a correct Serial Port as you find in USB2COM setup (Here is COM4). Leave the other part as is. Click Apply button. If the ASCOM is installed right and talking to the hand controller, Current Status and Site Information should be same as those displayed on the hand controller. Click OK.

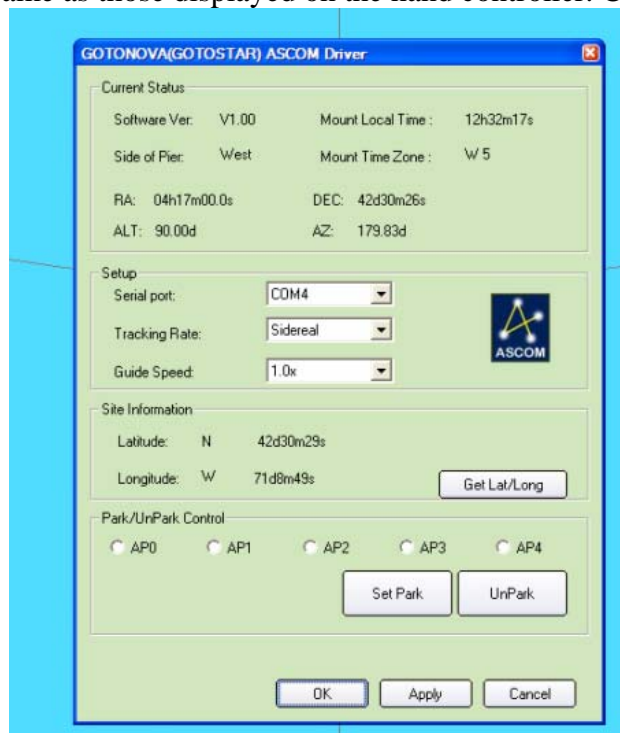


Fig. 6

8. Click on Connect button. The **RED** status square will change to **GREEN**. The previous inactive Tracking button will be active and in green. Now you are ready to GOTO and tracking.

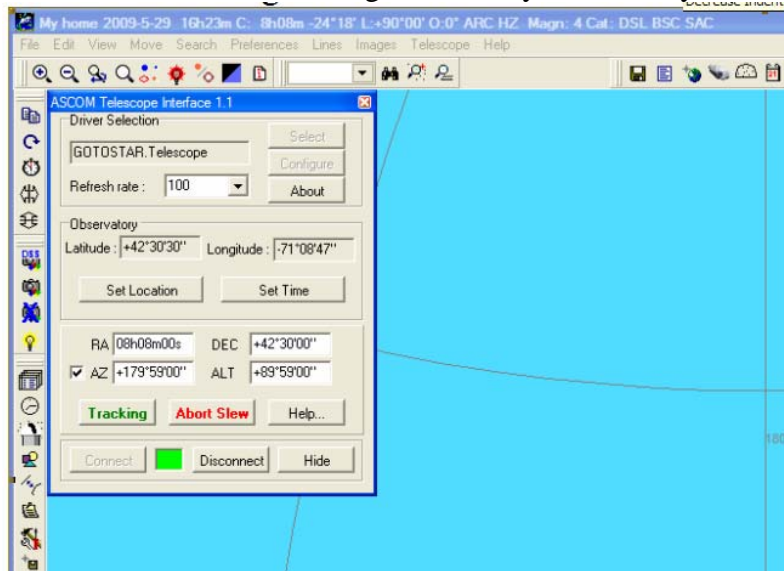


Fig.7

Note: As some users found out, some of the functions, such as Sync to Target, are only work using hand controller, even the mount is connected to a computer. Please check iOptron yahoo group for more information.

You may also try AstroPhysics GTO or Meade LX200 genetic ASCOM driver.