



Use a PC to Control an iOptron Mount

Most planetarium software can be used to control iOptron's products via ASCOM. In general you need the followings to use a PC to control an iOptron mount, including the Cube™, CubePro™, MiniTower™, MiniTower Pro™, SamrtSatr® PR or GOTONOVA® Kit. For SamrtSatr® (9000 series) and AstroBoy computerized telescope, a hand controller upgrade is needed.

1. ASCOM Platform 6. Download and install it from <http://www.ascom-standards.org>.
2. iOptron Telescope ASCOM Drive. Download and install it from <http://www.ioptron.com>, under Support directory.
3. Buy/download planetarium software and install it.
4. A GOTONOVA® Hand Controller with USB port, such as 8401 or 8402G Hand Controller.
5. A USB cable
6. A virtual com port (VCP) driver that converts the USB port into a serial port, or COM port (USB2COM Driver), which can be downloaded from iOptron website <http://www.ioptron.com>, or chip manufacture's website:
 - ◆ For GOTONOVA® 8401 hand controller, download cp2102.zip or CP210x VCP driver depends on your windows operation system;
 - ◆ For 8402G hand controller, download PL-2303 VCP driver.

Install USB2COM driver to establish the connection between the mount and the PC. You may find the instruction in your telescope manual. They are also available on-line as a part of the firmware upgrading procedure.

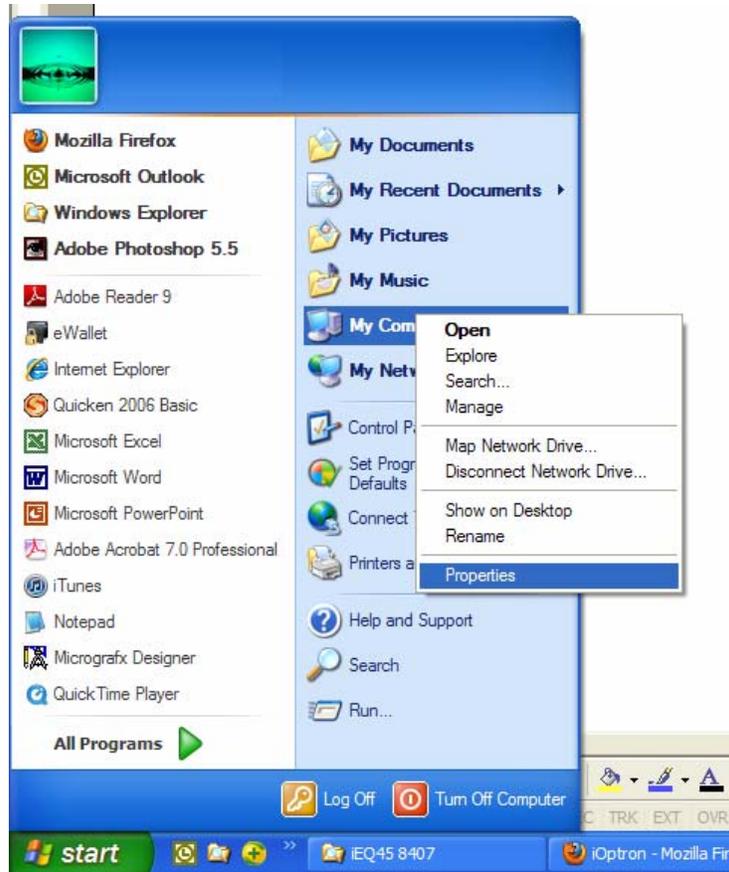
Some company has integrated iOptron's products into their planetarium software, such as Voyage and The Sky X Pro. Therefore, an ASCOM plug-in will not be needed. iOptron mount may also be directly or wirelessly controlled by other third party software and accessories, such as iPhone, iPad, Android operated smart phone or iMac. Please contact them for more information. Please note, some of iOptron's new products have some new control commands and may not be controllable at this time.

1. Find the serial port (COM port) number from your computer:

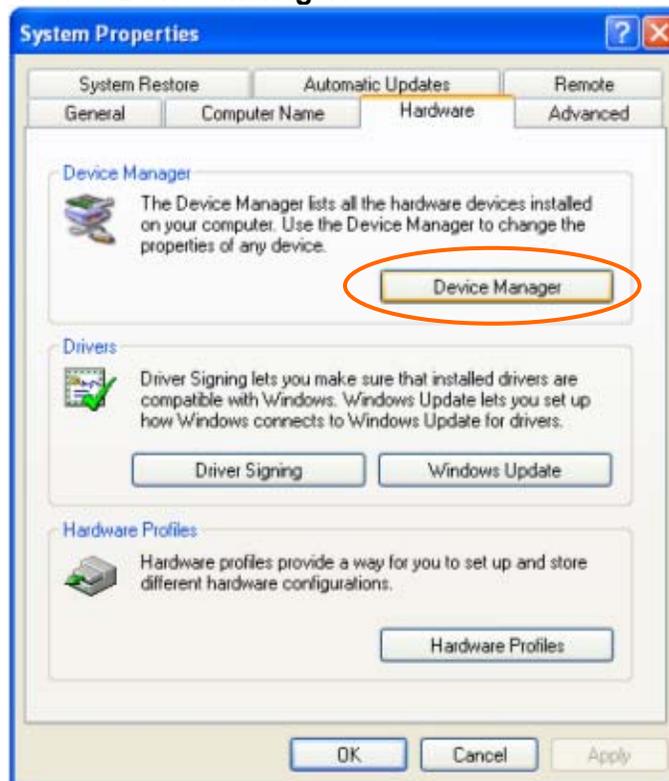
In order to enable planetarium software to control the mount, the communication between the PC and the mount has to be established.

Install the USB2COM driver according to your hand controller.

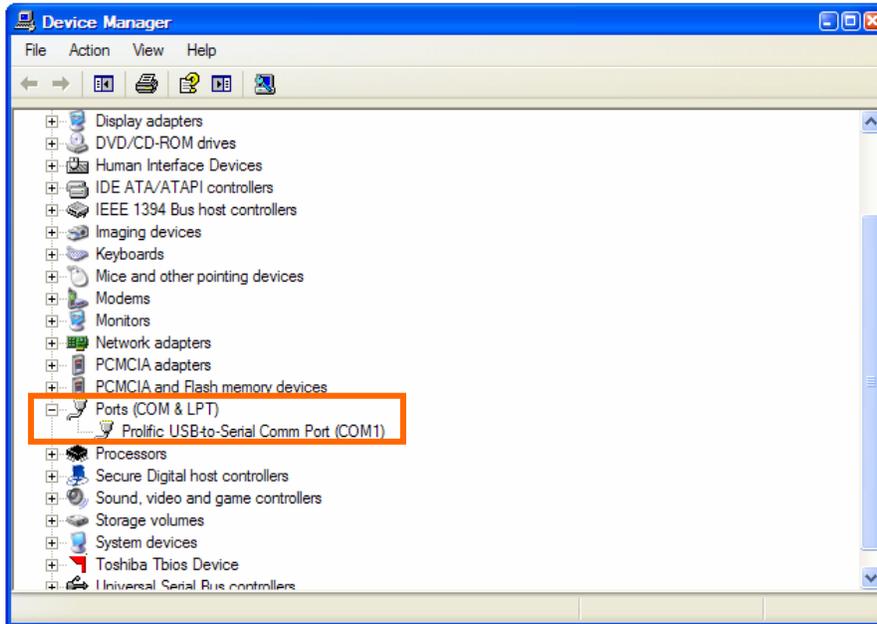
Connect the hand controller and PC using a USB cable and turn the mount power on. Click on **Start** located on the left bottom corner of your compute screen. Move the mouse to **My Computer** and right click on it. Move the mouse down and click on **Properties** (Windows Vista or 7 operation system may differ from here):



Click on **Hardware** and select **Device Manager**.



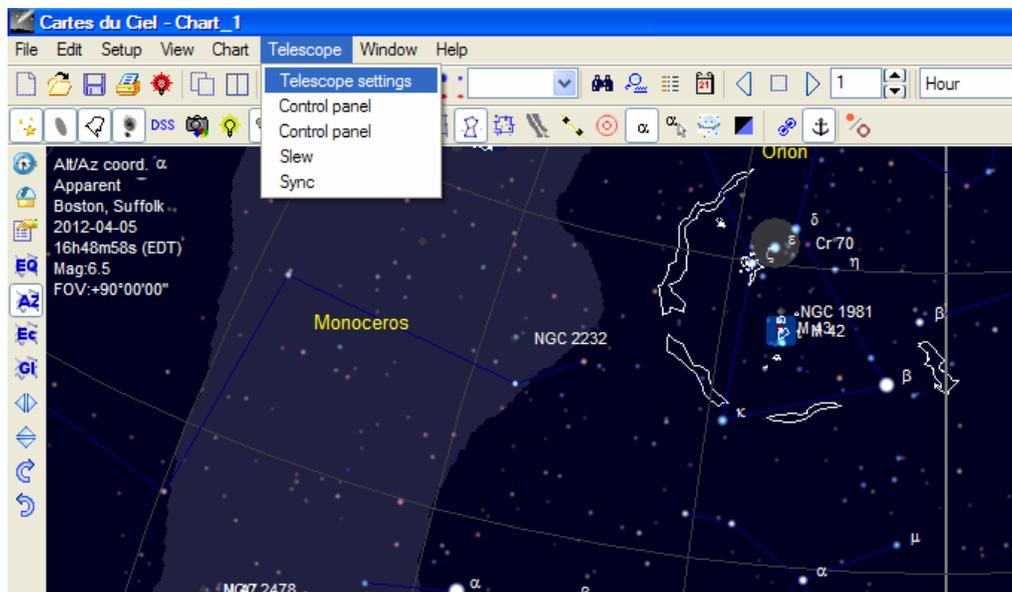
Double click on **Ports (COM & LPT)**, find out the COM number and write it down (in the following figure, the USB2COM converter uses a Prolific chipset and the assigned port number is COM1)



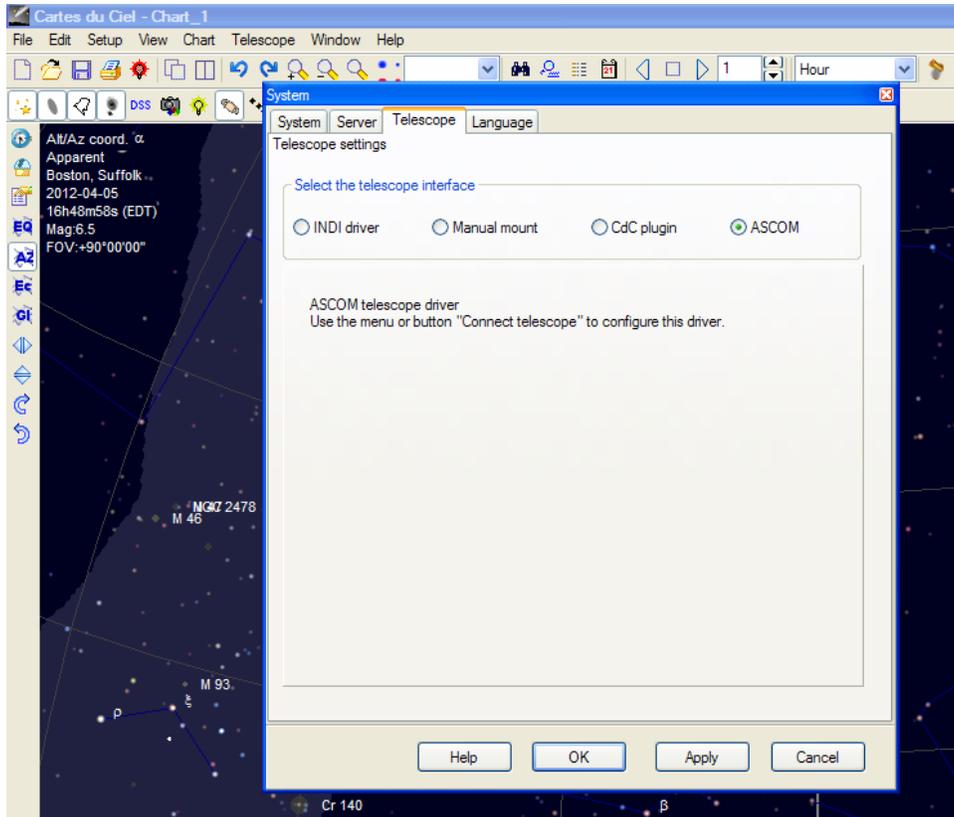
2. Establish the ASCOM connection between the mount and the planetarium software:

As a general instruction, a freeware planetarium software, *Cartes du Ciel*, is used as an example. Please refer to your own software manual for detailed operation.

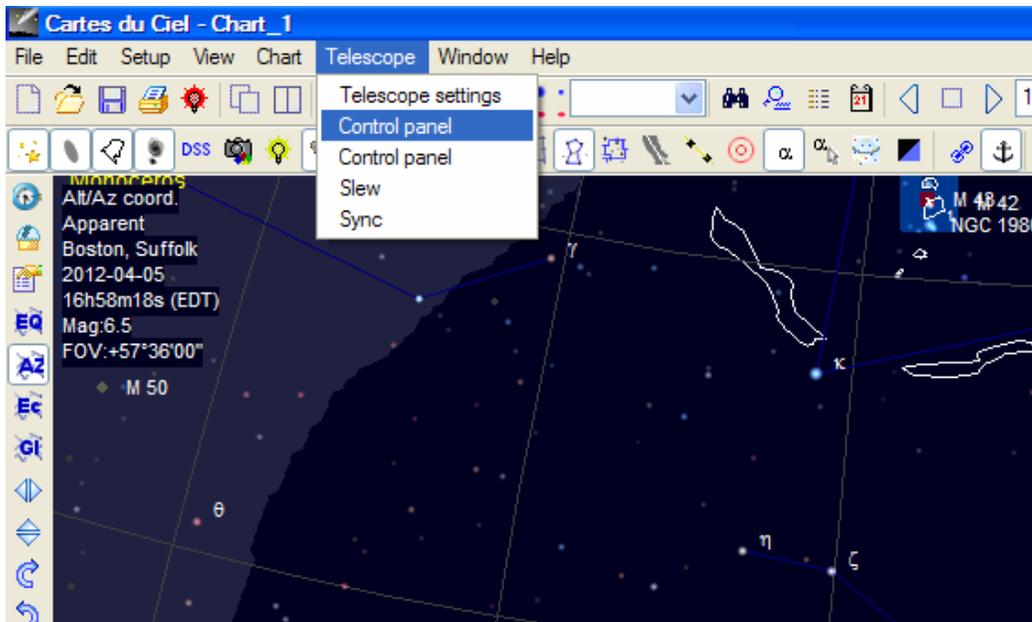
1. Open *Cartes du Ciel*. Select **Telescope settings** in **Telescope** pull-down manual.



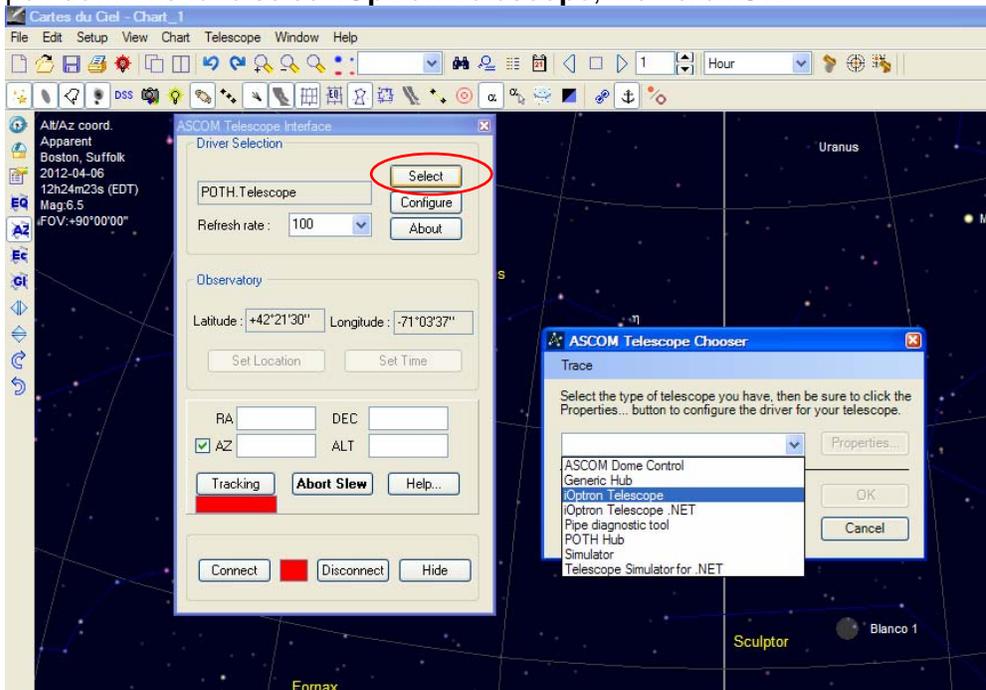
2. Select **ASCOM** as the telescope interface and click **OK**.



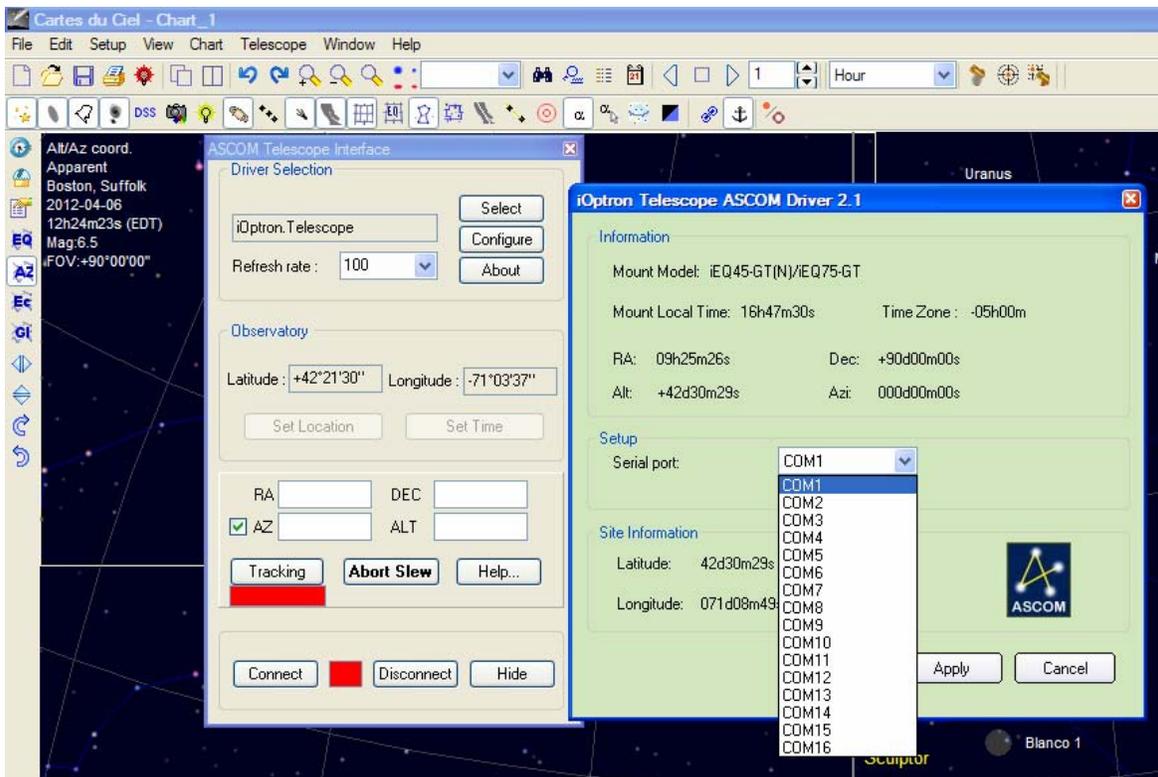
3. Select **Control panel** in **Telescope** pull-down manual.



- Click on **Select** button, an **ASCOP Telescope Chooser** window will pop-up. Click on the pull-down menu to select **iOptron Telescope**, then click **OK**.



- Click on **Configure**. In **iOptron Telescope ASCOM Driver 2.1** pop-up window, select **COM1** port from the **Serial Port** pull-down menu. Then click **OK**.



- Click **Connect** button. The **RED** status square will change to **GREEN**. Now you are ready to GOTO and tracking.

