OPTICSTAR

Opticstar PL-131 COOLAIR Quick Start Guide

The minimum computer requirement for the PL-131 is Microsoft Windows (32-bit or 64-bit) 7/8/10/11 or later and a USB2.0 port. This document describes how to install the camera on your computer. For more comprehensive instructions please refer to the Setup Guide on the CD (**Opticstar_PL-131_Setup_Guide.pdf**).

> ⚠️ The camera does not incorporate any optics and therefore it cannot reach focus by itself. A C-mounted lens must be used with the camera or it must be attached to a telescope with the nosepiece adapter that is included with the camera. To attach it to a microscope, please use an appropriate attachment.

> ⚠️ Please note that for solar photography, the camera should be used only with an appropriate solar telescope and/or solar filters.

DirectShow Software

The bundled DirectShow software allows the camera to work with software applications such as **EtAMCAP** which is bundled with the camera.

> ⚠️ The installation of the software should be carried out by a user with *Windows administrator permissions.* Otherwise, the installation may fail.

> ⚠️ Please ensure that the camera is **not** connected to the computer yet.

Navigate to the **DirectShow** folder on the CD and open the appropriate program for your camera. There are two options:
- **PL-131M-setup.exe** for the monochrome camera.
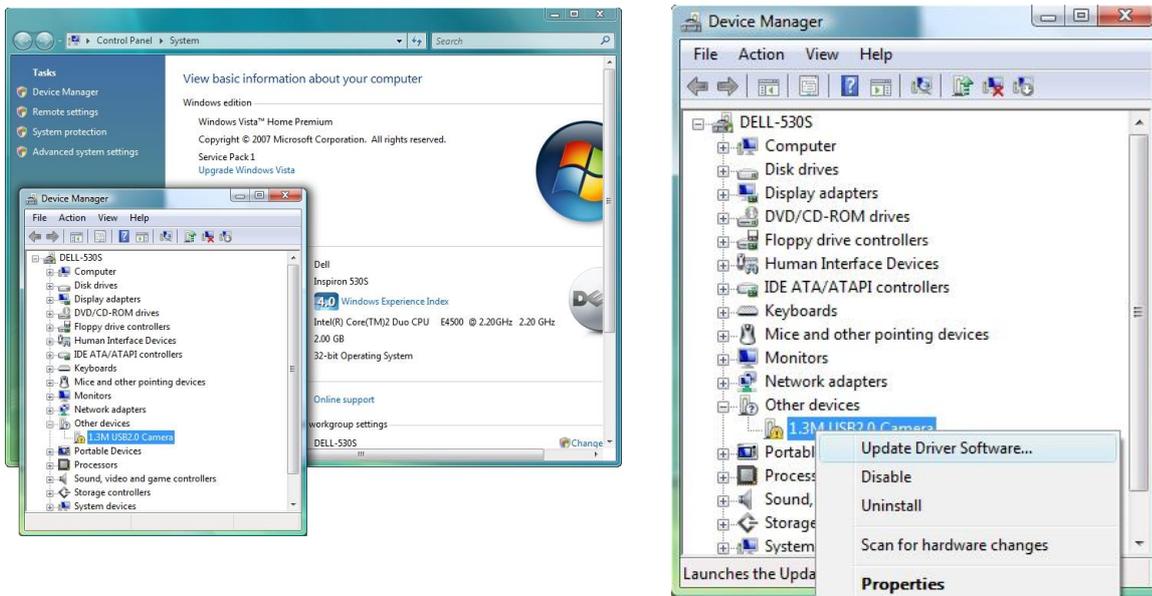- **PL-131C-setup.exe** for the colour camera.

When the DirectShow software has been installed, Windows will ask permission to restart the computer, select "Yes".

Once the computer restarts proceed by installing the software drivers described in the next section.

Installing the PL-131 Driver Software (32-bit or 64-bit)

Please follow the instructions below in order to install the Windows drivers for the camera.

1. Connect the camera to a USB 2.0 port on your computer.

2. A window will appear with the heading **Found New Hardware**, giving three options. Select "**Locate and Install Driver Software**". Windows will search for the camera drivers.

3. Windows will ask for the CD that came with camera (insert the CD if not present). Select, **Browse my computer for driver software**.

4. Navigate to the folder on the CD where the appropriate drivers are located. For 64-bit Windows the drivers can be found at "**\Drivers\PL-131M\64-bit**". For 32-bit Windows the drivers can be found at "**\Drivers\PL-131M\32-bit**".

5. The drivers will now be installed and you can proceed with the installation of the software applications (**EtAMCAP** and **View**). Otherwise, if Windows fails to find the drivers, it will display that **Windows failed to find the driver software** and prompt for action.

6. Alternatively, the drivers can be installed directly from the Windows Device Manager while the camera is attached to the computer as shown on the screenshots below.

Once the drivers have been installed correctly, please continue with the installation of the application software (**EtAMCAP** and/or **View**).
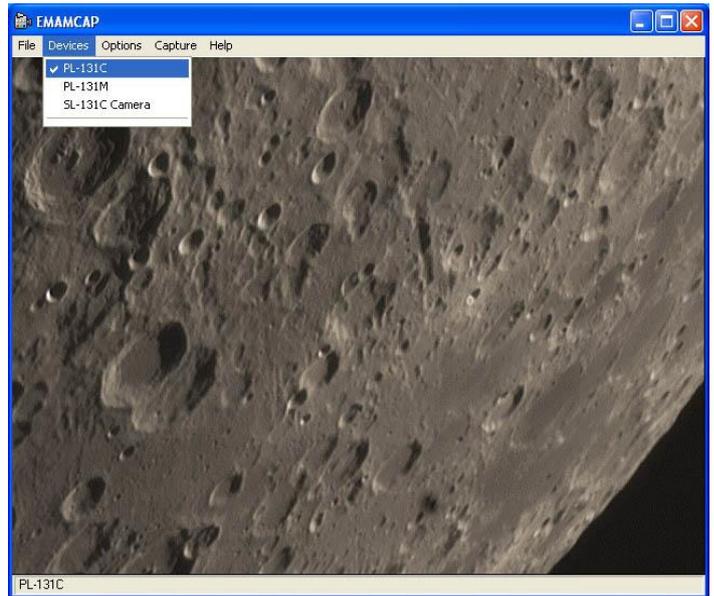
Installing etAMCAP

The **EtAMCAP.EXE** is situated on the CD inside the **etAMCAP** folder. Copy this to your computer's desktop by dragging it from the CD folder.

Double-click the **etAMCAP** icon on the Windows desktop to run the program.

The camera will be identified as **PL-131C** for the colour model or **PL-131M** for the monochrome model. Select the camera from the **Devices** menu. **EtMAMCAP** can be used as a general-purpose program to capture video in AVI format.
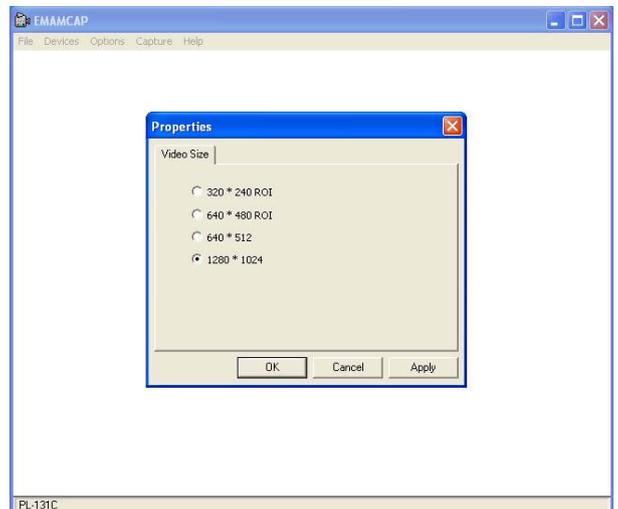
> ⚠️ **EtAMCAP** can be used to capture video in AVI format. It cannot capture single frames. In order to capture single frames as well as video please use **Opticstar View**.

Video with etAMCAP

ROI (region of interest) modes increase the rate at which the camera sends the data to the computer while preserving the full image quality of the selected region.

The camera mode can be selected from the menu by selecting **Options > Video Capture Pin**.

The maximum frame rate that the camera operates at depends on the mode selected.
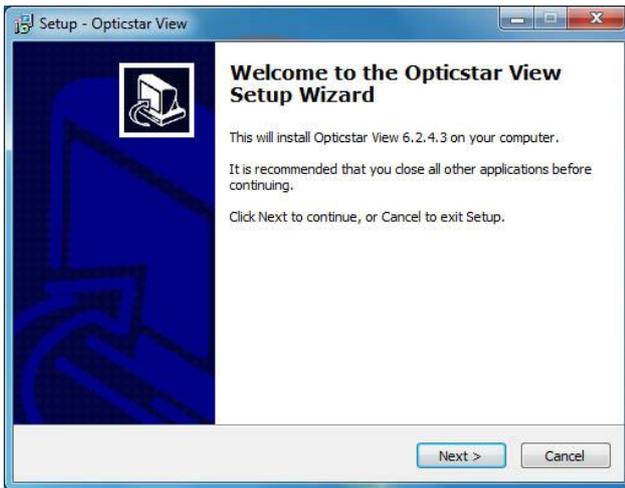
Selecting the camera mode and resolution.

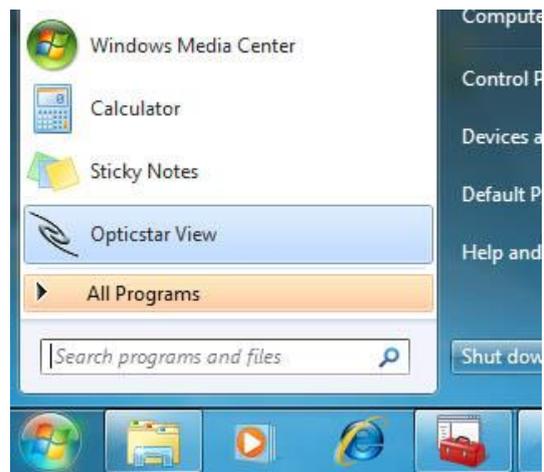| Mode	Frame Rate (max)
1280 x 1024	22 frames per second
640 x 512	70 frames per second
640 x 480 ROI	80 frames per second
320 x 240 ROI	220 frames per second

Installing Opticstar View

 Opticstar View is a more advanced software application that can be used to control the camera. It is situated on the CD inside the **View** folder. Run **Opticstar_View_setup.exe** to install the application.

Windows will display "**Welcome to the Opticstar View Setup Wizard**". Click the **Next** button to continue.

Installing Opticstar View.

Running Opticstar View.

After the installation has finished, **View** can be run by clicking on the Windows **Start** button and selecting **Opticstar View** from the programs list.

Caution

1. Please read the full Setup Guide on the CD for more comprehensive instructions.

2. Do not drop your camera as this can result in serious damage.

3. Do not point the camera to a bright light source like the Sun without the appropriate filters as this will damage the sensor.

4. Disconnect the camera from the computer when not in use.

5. Treat the camera glass window with the same care as you would of a photographic lens.

Manufacturer's Warranty
This product has a 12 month back to base warranty. For after sales support, please contact Opticstar at: info@opticstar.com

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