



iE5100 Digital Camera # 5250

Quick Start Guide

With the iOptron® iE5100 Digital Camera, now you can experience astro-video and astrophotography for yourself! The iE5100 allows you to view real-time images from your telescope on a computer screen. It transmits live video images of the Moon, Sun, planets and terrestrial objects through a USB cable to your computer. Images can be recorded for later playback or frame imaging.

Package Contents

- iE5100 Digital Camera with C-mount
- 1.25" telescope adapter
- USB Cable
- Software CD (also downloadable from iOptron website)

Online Contents

- Manual
- Accessories
- Tips for set up and use
- Driver and software updates
- Reviews and feedback from other customers

System Requirement

- PC running either Windows® (32-bit & 64-bit) XP , Vista , 2008, 7 and 8 ; Mac OS X and Linux (Kernel 2.6 or above)
- 2.0 GHz minimum processor (Recommend dual core 2.8GHz or more)
- 200 MB free hard drive space for program installation and image/movie saving
- 2GB RAM or more
- 16-bit color display at 1280x1024 (32 MB video memory with DirectX 3D support recommended)
- DirectX 9.0 or higher installed

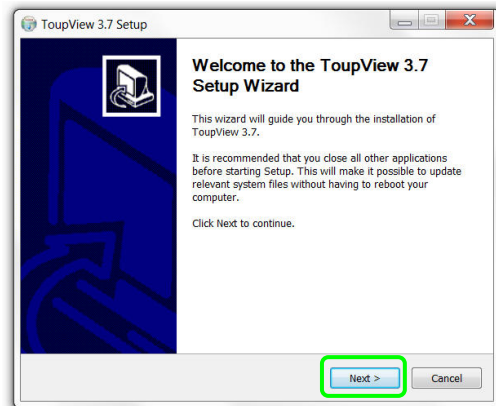
iE5100 Driver and Software Installation:

Do not plug in the iE5100 digital camera before you have installed the driver.

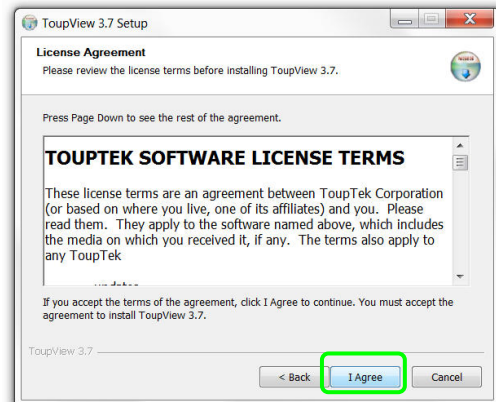
1. Insert CD into CD-ROM drive, the CD Autorun will pop up the start interface. If Autorun does not pup up, go to CD-ROM drive and click on AutoRun.
2. Select "Install Application" This will install both camera driver and application software TopView.



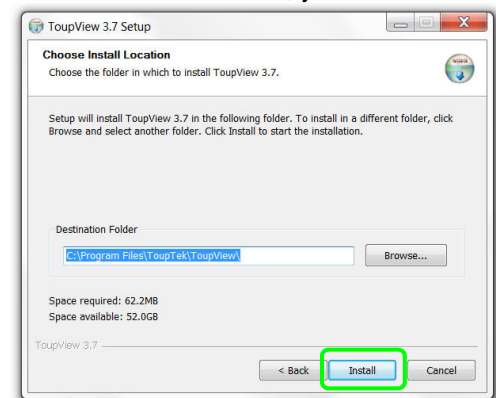
3. Select "Next".



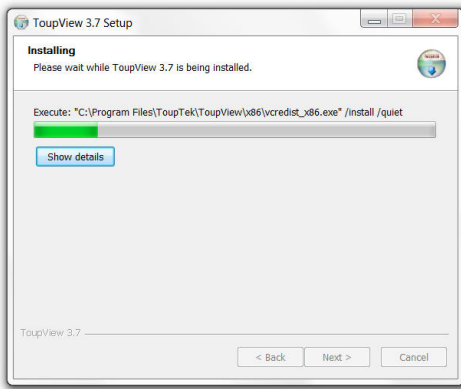
4. Select "I Agree".



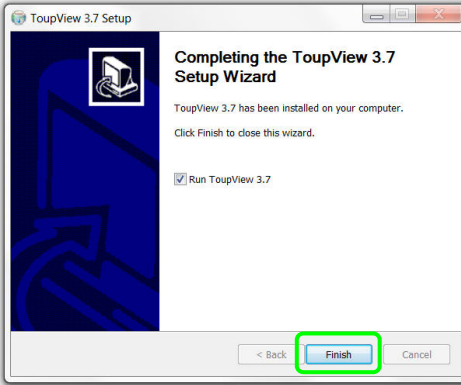
5. Select the installation path. If the installation path in the default one, just click the "Install".



The progress of installation.....



6. Click “Finish”, the end of the installation.



Connect iE5100 Camera to Computer:

Next, plug one end of the USB cable into the iE5100 and the other end into a free USB slot on the computer. The computer will detect the camera as a new hardware and start to install the driver, while “New Hardware Found” or “Installing device driver software” displays at the bottom right corner of your PC screen.

The found new hardware wizard would start, Select “Install the software automatically”. The computer will start installing the driver for the camera. If “Unidentified publisher/ Windows Logo Testing” warning windows appear, select continue.

Now the camera is ready for use after the driver is installed.

Use the iE5100 for Observation

The iE5100 can be used with almost any telescope that is compatible with 1.25" format eyepieces. Simply insert the camera into a focuser in the same way as a standard eyepiece, with or without a diagonal, if you use a star diagonal. If your telescope does not have enough inward focus travel, you will need to use an optional 1.25" Barlow lens (not included) to extend the telescope's focal plane to the camera's imaging plane.

Open TopView software to begin viewing a live feed from the telescope.

Aim and focus your telescope to an observing target, such as Moon using regular eyepiece. Remove the eyepiece and insert the iE5100 camera into the telescope focuser. Slowly adjust the focuser knob to bring the image to focus. Use the on screen adjustment function to adjust the image property or flip the image orientation. Then click SNAP to capture images or RECORD to record movies. Refer to TopView's Help file or operation manual for more details.



Specifications

HARDWARE CONFIGURATION	
Image Pickup Device	Aptina MT9P001 CMOS(Color)
Scan Mode	Progressive
Max. Resolution	2592 x 1944 (Approx.5,040,000 Pixels)
Sensor Size (Diagonal)	1/2.5" (5.70mm(H) x 4.28mm(V), Diagonal 7.13mm)
Pixel Size	2.2µm x 2.2µm
G Sensitivity	0.53v/lux-sec(550nm)
Dynamic Range	66.5dB
A/D Converter	12-bit Parallel, 8-bit R.G.B to PC
SN Ratio	40.5dB
Spectral Range	380-650nm (with IR-filter)
Video Format & Frame Rate	5fps @2592 x 1944, 18fps @1280 x 960, 60fps @640 x 480
Binning	1 x 1, 2 x 2, 4 x 4
Exposure	0.21~2000ms, ROI Auto & Manual
White balance	ROI White Balance/ Manual Temp-Tint Adjustment
Color Rendering Technique	Ultra Fine Color Engine
Capture/Control API	Native C/C++, C#, Directshow, Twain, Labview
Recording System	Still Picture and Movie
Cooling System	Natural
Warranty	One year limited
OPERATING ENVIRONMENT	
Operating Temperature	-10°C~ 50°C
Storage Temperature	-20°C~ 60°C
Operating Humidity	30~80%RH
Storage Humidity	10~60%RH
Power Supply	DC 5V over PC USB Port
SOFTWARE ENVIRONMENT	
Operating System	Support Microsoft Windows XP / Vista / 7 / 8 (32 & 64 bit) OS X (Mac OS X), Linux
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or higher
	Memory: 2GB or more
	USB port: USB2.0 high-speed port
	Display: 16 bit color display
	CD-ROM

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