



iE1300 Electronic Eyepiece # 8429

Instruction Manual

Introduction

With the **iE1300 Electronic Eyepiece** now you can experience astro-video and astrophotography for yourself! The **iOptron Electronic Eyepiece** allows you to view real-time images from your telescope on a computer screen. The iOptron iE Electronic Eyepiece 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.

Parts List

- iE1300 Electronic Eyepiece
- USB Cable
- Instruction manual for download from iOptron website

System Requirement

- Windows 2000/XP/VISTA/7
- Pentium IV 1.4GHz or equivalent, or high
- 300 MB free hard drive space for program installation and image/movie saving
- 512 MB RAM (1.0 GB DDR RAM recommended)
- 16-bit color display at 1280x1024 (32 MB video memory with DirectX 3D support recommended)
- DirectX 9.0C or higher

iE1300 Driver Installation

The iE1300 is a Plug-N-Play device. Plug each end of the USB cable into the iE1300 and your computer. Your computer will detect the electronic eyepiece as new hardware and start to install the driver. Follow the instructions on your computer for any driver installation.

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

Image Capture Software Installation

In order to bring an object to your computer monitor, an image/video capture program is needed. Most PCs come with preinstalled programs, such as Window Movie Maker, Arcsoft Webcam Companion, or other webcam program. If your PC does not have one installed, you may download one from the following website: VirtualDub 32-bit or 84-bit from www.VirtualDub.org or Future Winjoe at www.ioptron.com/v/Support/future.rar.

Use iE1300

The iE1300 can be used with almost any telescope that is compatible with 1.25" format eyepieces. The camera is inserted into a focusing tube 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 1.25" Barlow lens (not included) to extend the telescope's focal plane to the camera's imaging plane.

Aim and focus your telescope to an observing target using a regular eyepiece. Always start with a large number eyepiece, such as a 25mm one. Remove the eyepiece and insert the iE1300 camera into the telescope focuser. Slowly adjust the focuser knob to bring the image to focus. Use the capture function of the program to capture the image or movie. Practice your system during the daytime first.



Specifications

Sensor Parameter	1/3" 1.3MP CMOS
Resolution	1280*1024
USB port	USB 2.0
Frame rate	16 fps @ 1280*1024
Preview Model	1280*1024, 640*480, 320*240
Pixel size	3.6 μ m*3.6 μ m
Sensitivity	1.0 V/lus-sec @550nm
Spectrum response	400nm-1000nm
White Balance	AUTO
USB Cable Length	1.5m
O/P compatibility	Win2k,WinXP,Vista and Windows 7

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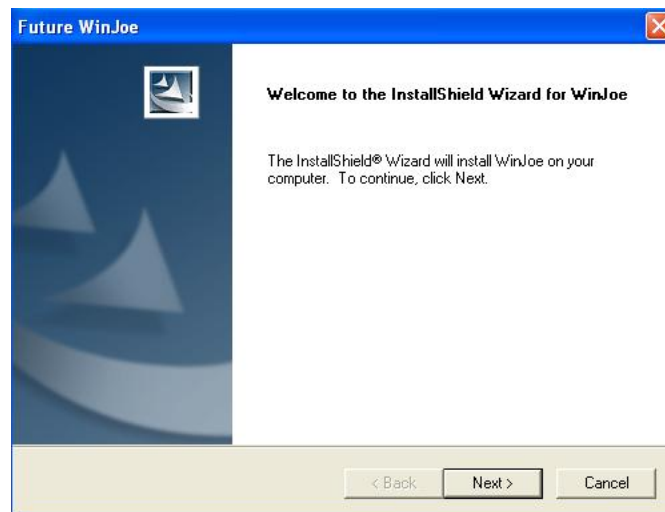
Example: Using Future WinJoe For Image and Video Capture

Install software of Future WinJoe

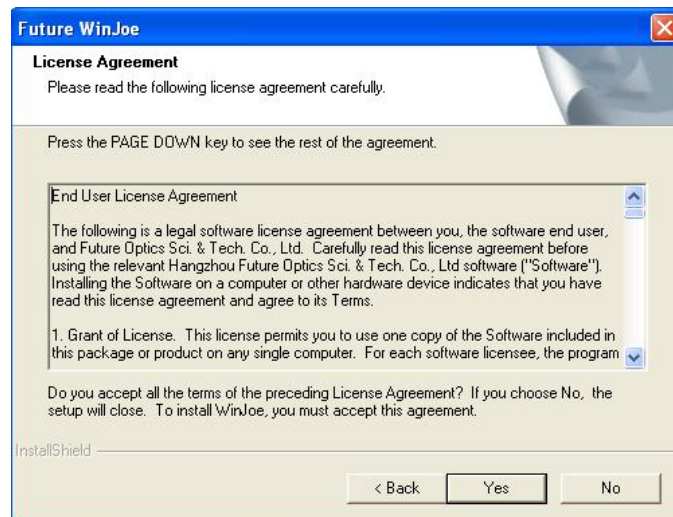
1. Download Future WinJoe from <http://www.ioptron.com/v/Support/future.rar> and save on your desktop
2. Double click on “future.rar” to open the compressed file package and double click on “setup.exe” to start install the software
3. Select your language, then click “OK” to confirm



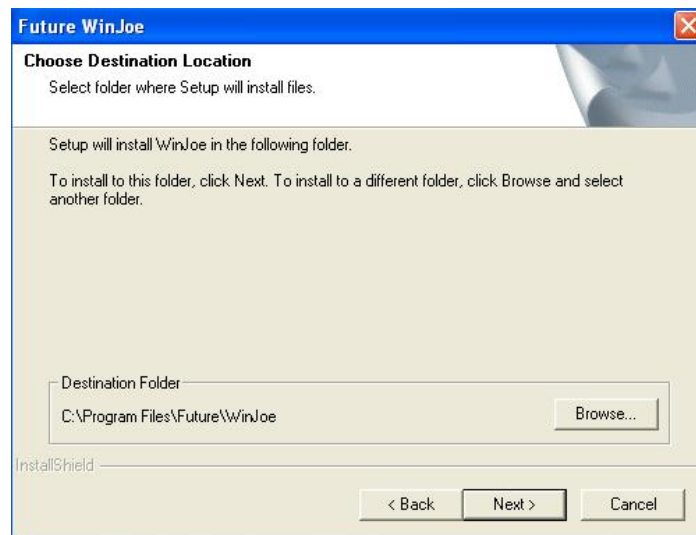
4. Click on Next when an InstallShield Wizard window displayed.



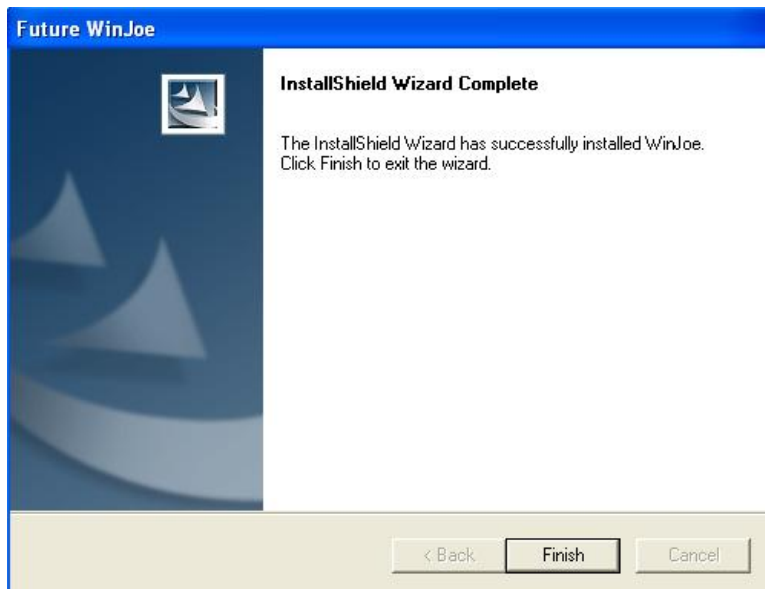
5. Click on “Yes” to accept the License Agreement.



6. Select the destination folder to install Future WinJoe. The default location is "C:\Program Files\FutureWinJoe". Click on "Next". You may change it to the destination folder you want by click on "Browse".



7. Click on "finish" to exit when InstallShield wizard has been completed.



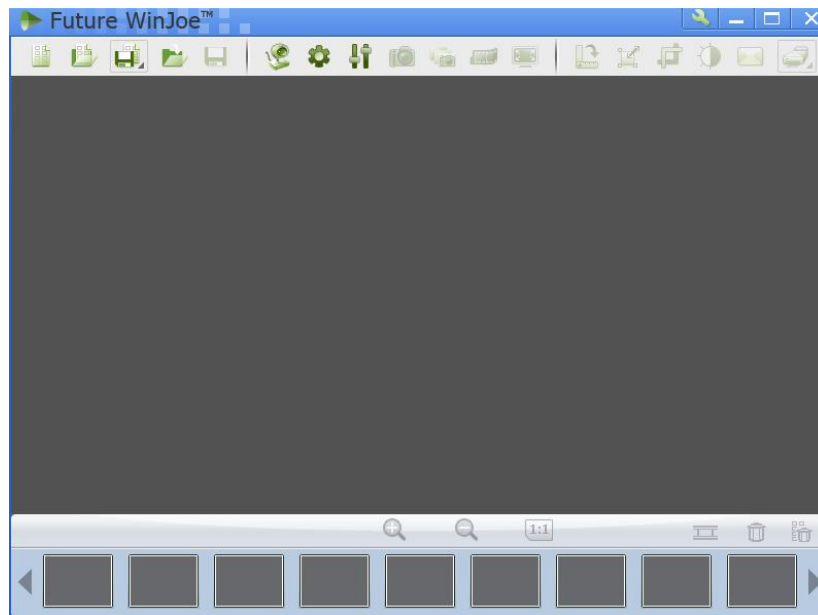
Operation of Future WinJoe


1. Connect the iE1300 to the USB port,

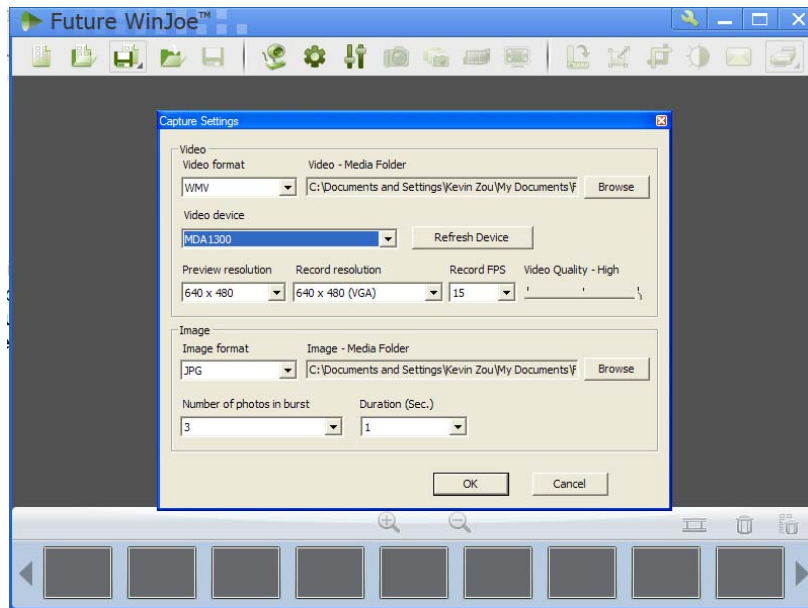



2. Double click on the Future WinJoe icon on desktop "Future WinJoe".

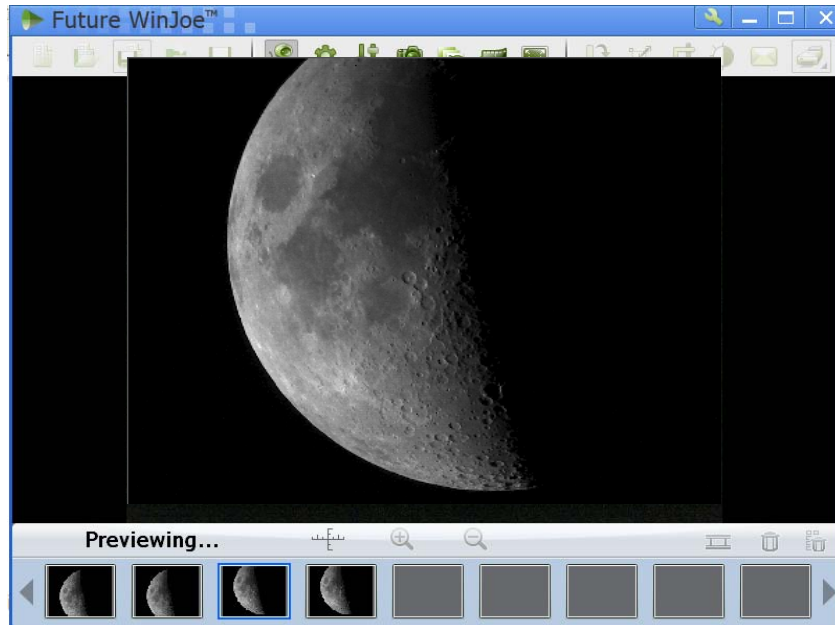
Or go to start→all programs→Future WinJoe. A preview window of Future WinJoe will be shown, with a large live image in the middle and captured image thumbnails at the bottom.



3. Click on " " to bring up the "Capture Settings" menu to select a camera, if your computer equipped more than one. In this case, select "MDA1300". You can select where to store the captured videos and images. You may also change other settings in this menu. Click "OK" when done.







4. Click on " " to connect the camera. An image (probably an unfocused one in most time) will be displayed. Adjust the focusing-knob to bring the image to focus.



5. Click on " " to set the attributes of images shown, such as brightness and contrast.

6. Click on " " to capture a photo.

7. Click on the image thumbnails to view the quality of the image. Click on " " or " " to adjust the settings if needed. Click on " " to connect the camera again and take more pictures if desired.

8. Click on "" to start video capturing, and click it again to stop.

9. For more detailed software functions, please click on "" or "F1"