

EYE SCOPE

SCIENCE SCIENTIFIC ENQUIRY

PRODUCT GUIDE

IP 116359

THIS PRODUCT GUIDE MAY BE PHOTOCOPIED FOR CLASS USE ONLY

FOR TEACHERS

This hand-held Eye Scope is a fun and powerful tool that can help students explore the hard-to-see world of very small dimensions.

Help students get the most out of this Eye Scope by reviewing the Starting Up instructions first and then guiding them as they begin to use it.

Younger children may need help positioning samples on the Eye Scope.

Encourage students to think of objects to study. Ordinary things like leaves, dead insects and even paper seem very strange and unusual, and reveal their secret side when viewed with an Eye Scope.

If the Eye Scope is being used to look at live insects in the viewing cup, show students how to get the insects without hurting them, and then how to release them when done.



ABOUT THE EYE SCOPE

This Eye Scope magnifies about 60x which means the image on the computer screen is about 60 times as large as the object being viewed. This high magnification will show features that the naked eye cannot see.

It is possible to focus the image so that it is very clear and then save it to a computer. If imaging software is available, like Picasa $^{\text{TM}}$ the images that are collected can be edited and enhanced to highlight different features.

Explore plants, rocks, clothing and other materials in amazing close-up! Try looking at skin and hair as well.

The Eye Scope is a tool and there are ways to use tools to get the most out of them. Read the tips and hints in this product guide to find out how to become an expert at exploring the microscopic world!

EYE SCOPE 2

INSTALLING THE SOFTWARE

Supported Operating System:

- Microsoft Windows XP
- Microsoft Windows 2000 SP4, DirectX 9.0 or up(USB Driver needed)
- Microsoft Windows VISTA or 7.0 (USB Driver for windows 2000 and image viewing software for Windows Vista or 7.0 such as AMCAP.EXE could be downloaded via website http://www.invictaeducation.com)

Downloading Software

1) Connect your Eye Scope to a USB port on your PC or Mac, a new USB image device should be detected by the operating system.

2) Go to www.invictaeducation.com. Select "Science", then "Discovering the



world around us", then "Eye Scope", or use the search facility by typing in "Eye Scope" and selecting the product shown.

3) When you are on the Eye Scope product page, click HERE to begin the

download of the software.

File Download

Do you want to open or save this file?

Always ask before opening this type of file

save this file. What's the risk?

Name: Eye Scope Driver.zip

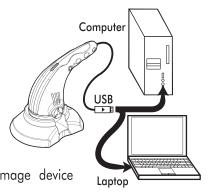
From: www.invictaeducation.com

Save

While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or

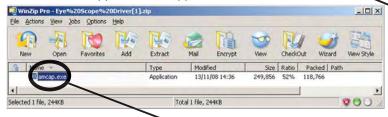
Cancel

Type: WinZip File, 116KB





Using the Eye Scope on a PC



- **PC 5)** Double click on the file, then select "Run".
- **PC 6)** An "AMCAP" window will appear. There may be an image on screen from a built in webcam.
- **PC 7)** Select "Devices" from the window menus, then select "USB 2.0 VGA Video Device".

PC 8) The image on screen will now be from your Eye Scope. Should the image not appear, click "Options" and ensure that

"Preview" is ticked.

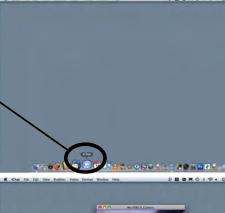
Using the Eye Scope on a Mac

Mac 4) Wait until the USB image device driver is installed properly.

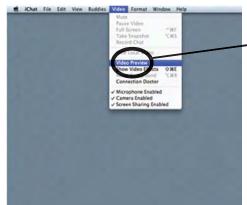
Mac 5) Please click the "iChat" icon.

Mac 6) Select the "Video Preview" menu.

Mac 7) Then you are ready to view images with your Eyescope.





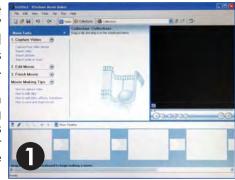


VIDEO CAPTURE

Objective: Other than the digital still screen capture feature, video also can be captured using special 3rd party video capture software which supports USB2.0 video

capture device or Microsoft Windows XP / Vista provided "Windows Movie Maker".

Here is an example using W in dows Movie Maker to capture the video.



- 1) Open the Windows Movie Maker from the program menu (diag' 1).
- 2) Select "Capture Video" from the File menu.

 Make sure the Eye-Scope device has been plugged to the USB port of the computer properly (diag' 2).
- 3) Press "NEXT" to go into another menu where the video file and folder can be renamed (diag' 3).
- 4) Press "NEXT" to select the setting that will be used to capture the video. The chosen setting determines the quality and size of the captured video (diag' 4).
- 5) Then start to capture the video by pressing the "Start Capture" button and then the "Stop Capture" button when the required action has finished (diag' 5).







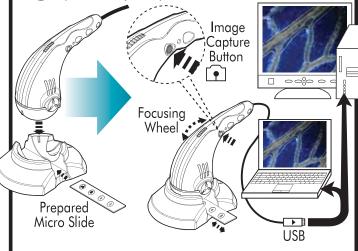


EYE SCOPE 3

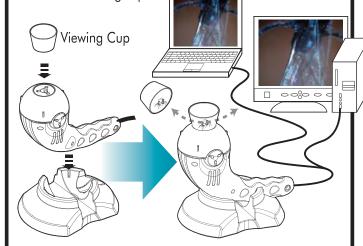
STARTING UP

The hand-held Eye Scope can be used in several ways:

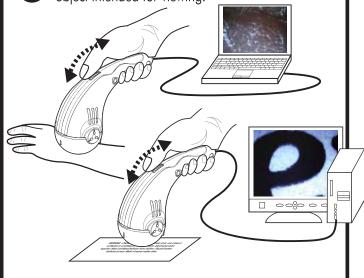
A Put a sample or microscope slide on the stand and place the Eye Scope over it.



Stand it up and place samples directly on top or in the viewing cup.



Hold the Eye Scope in the hand directly over the object intended for viewing.



HERE ARE SOME TIPS AND HINTS

COUNT TO THREE! The camera automatically adjusts to the light. After aiming the Eye Scope at something, count to three to let the adjustment finish. An image should appear on your computer – and it will probably be blurry.

FOCUS! Focusing some lettering on a newspaper. When the image appears, slowly turn the focusing wheel a little one way to see if it sharpens up. If not, turn a little more. If it is still blurry, turn the wheel slowly in the other direction until the image sharpens. When a sample is moved, or a new sample is selected to view, it is likely that the focus will need adjusting.









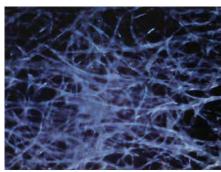
In focus

Out of focus

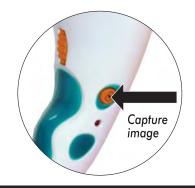
- PRACTICE FIRST! View a piece of cloth, a piece of paper towel or a tea bag. These materials have texture that will be easy to focus on. Understand how the image changes if the item is moved slowly. Each time a sample is moved, it is likely that the focus will need adjusting. Practice on these items before looking at other samples.
- **MAKE SLOW MOVEMENTS!** If the Eye Scope is being held in the hand while an attempt is being made to view something, move it slowly. It magnifies small things many times and a slight movement will seem like a big jump when seen on a computer screen. If the Eye Scope is placed in the stand so that it faces up, move samples on top of it slowly for the same reason. Small movements look like big jumps!



CAPTURE AN IMAGE The button on the side of the handle saves the image on the computer screen. Once the image is saved, it can be viewed later, or edited or enhanced with imaging software.



Fibres of a tea bag



LOOKING AFTER THE EYE SCOPE

- Keep the lens free of debris. Avoid inserting objects beyond the lens attachment or touching the lens.
- Avoid getting the EYE SCOPE wet and do not immerse in liquid.
- Use a soft, lint-free cloth moistened with water to clean the outer surfaces of the EYE SCOPE.
- **WARNING:** Do not shine LED in eyes as prolonged exposure may impair vision.

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WARNING: NOT SUITABLE FOR CHILDREN UNDER 36 MONTHS BECAUSE SMALL PARTS MAY CAUSE A CHOKING HAZARD. MICRO SLIDES MAY HAVE SHARP EDGES AND COULD BE POTENTIALLY HARMFUL IF MISUSED. TO BE USED ONLY UNDER ADULT SUPERVISION. Prior to use, an adult must read the product guide carefully and ensure that children follow all safety, warnings and cautionary procedures. Please retain the information from this pack for future reference. We reserve the right to alter designs and specifications (including colours and materials) if and when such changes are unavoidable. This product

materials) if and when such changes are unavoidable. This product conforms to the safety requirements of EN71, ASTM, 16 CFR and The Canadian Hazardous Products (Toys) Regulations. MADE IN CHINA.





