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

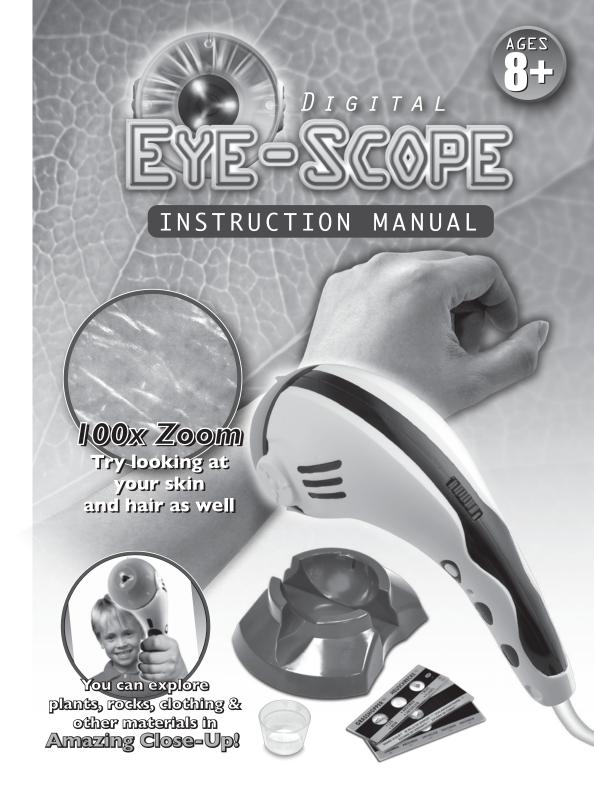
# **WARNING:**

The LED and holder become hot during operation. Avoid touching surface of LED or holder.



The light intensity of LED is strong. It might cause eyes uncomfortable if looks to the LED directly. Please switch off LED before accessing sunscreen or Northern/Southern hemisphere.







#### **For Parents**

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

You can help your child get the most out of this microscope by reviewing the **Starting Up** instructions first and then guiding your child as they begin to use the microscope.

Younger children may need help positioning samples on the microscope. Small movements are necessary since the microscope magnifies so much. Your help with this will allow your child to enjoy seeing micro-images as they learn from you how to better use the microscope.

You can encourage your child to think of objects to study. Ordinary things seem very strange and unusual when seen through a microscope. Leaves, dead insects, even paper show their secret side when viewed

with a microscope.

If you use the microscope to look at live insects in the viewing cup, show your child how to get the insects without hurting them, and then how to release them when done. Dead insects can sometimes be found on window sills.

#### **About Your Microscope**

This microscope magnifies about 100 x which means the image on the computer screen is about 100 times as large as the object you are viewing. This high power will show features that your eye cannot see.

You can focus the image so that it is very clear and then save it to your computer. If you have imaging software, like Picasa™ the images you collect can be edited and enhanced to highlight different features.

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

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





#### **Installation**

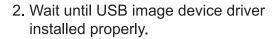
#### **Supported Operating System:**

- 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.edu-science.com)

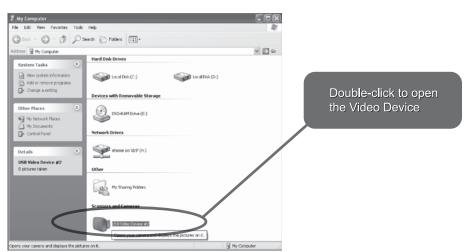
### **Accessing Procedures for Windows XP**

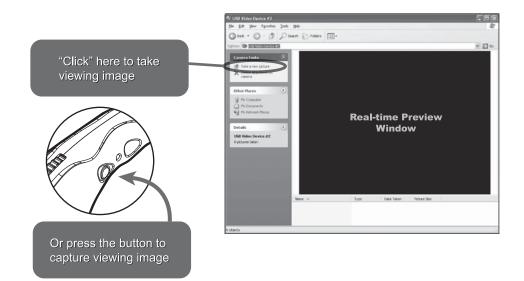
1. Connect to USB port, a new USB image device should be detected by OS.

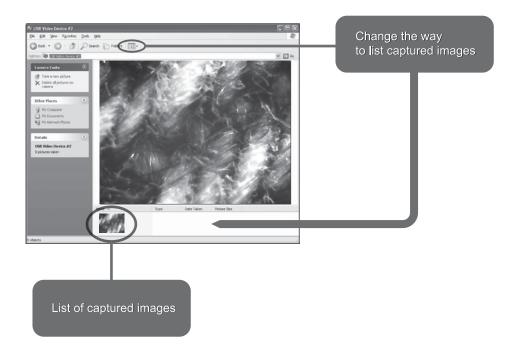


3. Locate My Computer " then double-click the icon.

4. You should see icon of "USB Video Device".







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Computer

USB

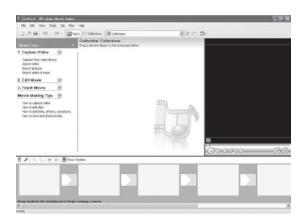


#### **Advanced supplementary information - Video capture**

Objective: Other than the digital still screen capture feature, video also can be captured using special 3<sup>rd</sup> party video capture software which support USB2.0 video capture device or Microsoft Windows XP / Vista provided "Windows Movie Maker".

Here is an example using Windows Movie Maker to capture the video.

1. Open the Windows Movie Maker from program menu.



2. Select "Capture Video..." from File menu. Make sure you have proper plugged the Eye-Scope device to the USB port of computer.



3. Press next to go into another menu which can rename the video name and folder.





4. Press next to select the setting you want to use to capture your video. The capture setting you select determines the quality and size of the captured video.

Then you can start to capture the video by pressing Start Capture and Stop Capture when finished.







## **Starting Up**

Your hand-held digital microscope can be used several ways:

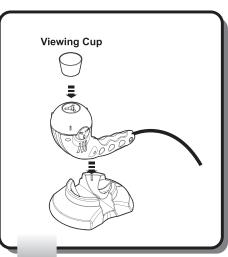


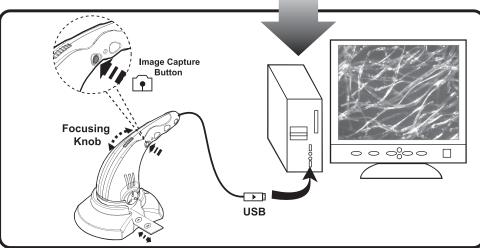
Put a sample or microscope slide on the stand and place the microscope over it.

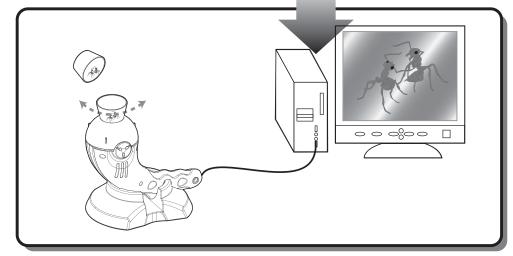




Stand it up and place samples directly on top or in the viewing cup.







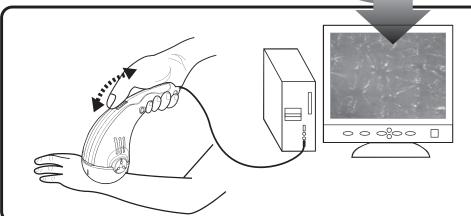


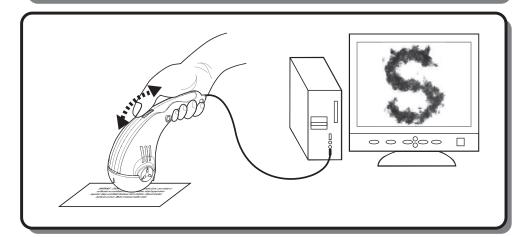




Hold the microscope in your hand directly over the object you want to view







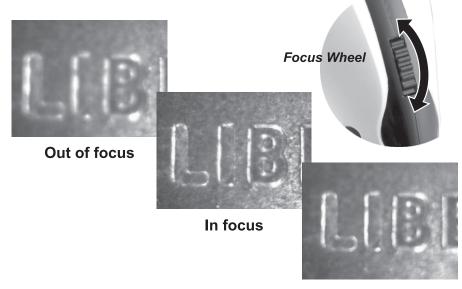
#### **Here Are Some Pointers**

#### **COUNT TO THREE!**

The camera automatically adjusts to the light. After you put something on the microscope, count to three to let the adjustment finish. An image should appear on your computer – and it will probably be blurry.

#### **FOCUS!**

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 the other direction until the image sharpens. When you move a sample, or put a new sample on the microscope, you will probably have to adjust the focus.



Out of focus

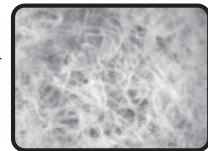
Focusing the word "LIBERTY" on a penny



#### **LOOK AT THIS FIRST!**

View a piece of cloth or a piece of paper towel. These materials have texture that will be easy to focus on. If the cloth is moved slowly you will

get a sense of how the image changes. You will probably need to refocus each time you move the sample. Practice on the cloth or towel before looking at other samples.



Fibers in a paper towel

#### MAKE SLOW MOVEMENTS!

If you hold the microscope in your hand, move it slowly.

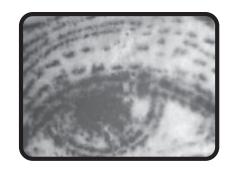
This magnifies small things many times and a slight movement will seem like a big jump on your computer.

If you put the microscope in the stand so that if faces up, move samples on top of the microscope slowly for the same reason.

Small movements look like big jumps!

#### **LOOK AT THIS SECOND!**

Fold a dollar bill so that the picture of George Washington is the only part showing. Place that on the microscope and focus.



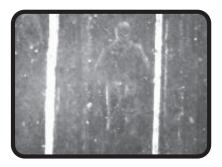
George Washington's eye on the dollar bill

#### LOOK AT THIS THIRD!

Place a penny on the microscope. This won't show much until you gently move the penny around and find the edge. Now focus and see how rough the surface of a penny is! This is a good way to practice moving samples.

#### FIND THE TINY LINCOLN!

The back of the penny shows the Lincoln Memorial. Lincoln is sitting inside the memorial, near the center. He is hard to find but move the penny slowly and you just may see where he is!



Lincoln sitting inside the building on the back of a penny

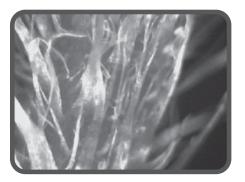
#### **CAPTURE AN IMAGE**

The button on the side of the handle saves the image on the computer screen. Once you have the image saved, you can view it later, or edit or enhance it with imaging software.

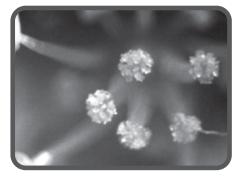




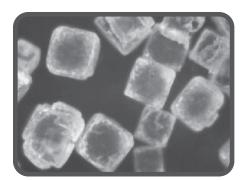
### Some Of The Objects You Can View With Your Microscope



**Fuzzy plant stem** 



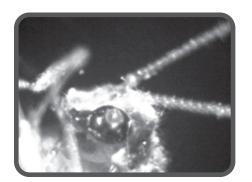
Parts of a clover flower



Salt



String



Insect head and eye



Stars on the back of a dollar bill

### **More Fun With Your Microscope**

Play a game of "What Is It?"

Make a collection of images of everyday things that are not easy to recognize when they are magnified. See if your friends and family can tell what they are.

Try this: Can you identify these images? Answers at the bottom.

