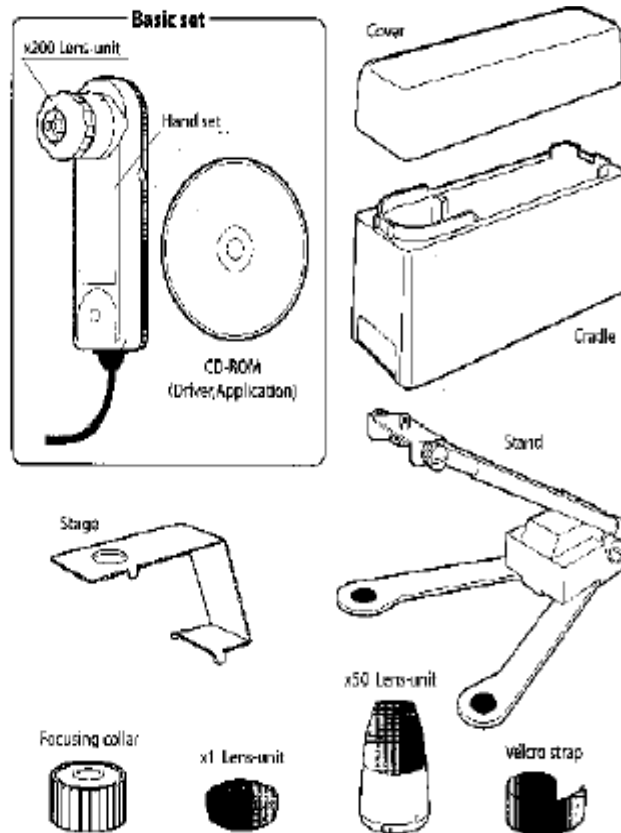


# USB MICROSCOPE M-1



The USB Microscope is used with either your desktop computer or laptop computer. The laptop computer offers easier access to the USB port and also mobility. The microscope gives an instant, in-focus magnified image of any object. Examples can include a crystal rock structure, a fingertip, skin cells, protozoan, plant leaves and/or standard prepared microscope slides. The microscope can also be used like a regular video camera, by using the basic “x1” lens to produce images on the computer screen.

## Microscope Parts Include:



**Installation Instructions (CTA's Only):** The following instructions should be completed by the CTA for each workstation that will be using the microscope.

1. Turn the computer on.
2. Log In as the CTA.
3. Run the USB M-1 install icon found in the Application Install folder.
4. Plug the USB Microscope into the USB port on the back of your desktop or laptop computer. Put the CD ROM in your computer CD ROM drive.
5. Select YES on the digital signature not found screen.

**To Run the USB Microscope (Teachers):**

1. Plug the USB Microscope into the USB port on the back of your desktop or laptop computer.
2. Turn the computer on.
3. Log In.
4. Launch the USB M-1 Run icon from the Science folder (this icon will only be displayed after the CTA has run the install icon on the workstation).

**Setup 1: Touch and View with x50 lens.**



This lens is recommended for the introductory USB Microscope touch demonstration. Attach the x50 lens to the handset. To attach the lens, match the thin line on the lens to the thin line on the handset and gently push down to meet the two together. Next, gently turn the lens clockwise until it clicks into place.



Thin line

Thin line

Hold the handset and touch the gray lens tip on any object to view. You will see an image of the object appear on the computer screen.

To remove the lens, turn counterclockwise until the two thin lines are lined up, then pull the lens and the handset apart.

**Image Capture:**

To capture a single image, click "SNAP" on the software screen or press the two blue buttons on the sides of the microscope. To begin recording a movie, click "REC" on the software screen. To end recording, click "REC" a second time.

**Additional Attachment:**

The x50 lens has a detachable tip.

Removal of the gray tip is ideal for samples that require protection from damage (such as historical documents or a student requires protection (such as a bee colony), and for thick, uneven surfaces.

**Setup 2: Touch and View with x200 lens.**



This lens is recommended when higher magnification is required and the object to be viewed is rather flat, such as fabric, paper, and leaves.

- Attach the x200 lens to the handset. To attach the lens, match the thin line on the lens to the thin line on the handset and gently push down to meet the two together. Next, gently turn the lens clockwise until it clicks into place.
- Touch the clear dome to a flat object. The x200 lens is provided with a fine focus adjustment ring, which allows you to focus carefully on interesting parts of the object. Rotate the blue fluted ring around the lens to achieve proper focus while you maintain contact with the object. If the focus does not improve while turning the ring in one direction, switch directions. Do not rotate the entire lens or it will come off the handset.

**Image Capture:**

To capture a single image, click "SNAP" on the software screen or press the two blue buttons on the sides of the microscope. To begin recording a movie, click "REC" on the software screen. To end recording, click "REC" a second time.

### Setup 3: Stand and View with x200 lens.



Prepared slides can be viewed more efficiently using the stand and microscope. Mount the microscope with the x200 lens on the stand. Place the slide or other thin object on a smooth white or black piece of paper.

#### **Image Capture:**

To capture a single image, click "SNAP" on the software screen or press the two blue buttons on the sides of the microscope. To begin recording a movie, click "REC" on the software screen. To end recording, click "REC" a second time.

### Setup 4: Motion and View with x1 lens.



Focus

This lens is like a regular video camera lens.

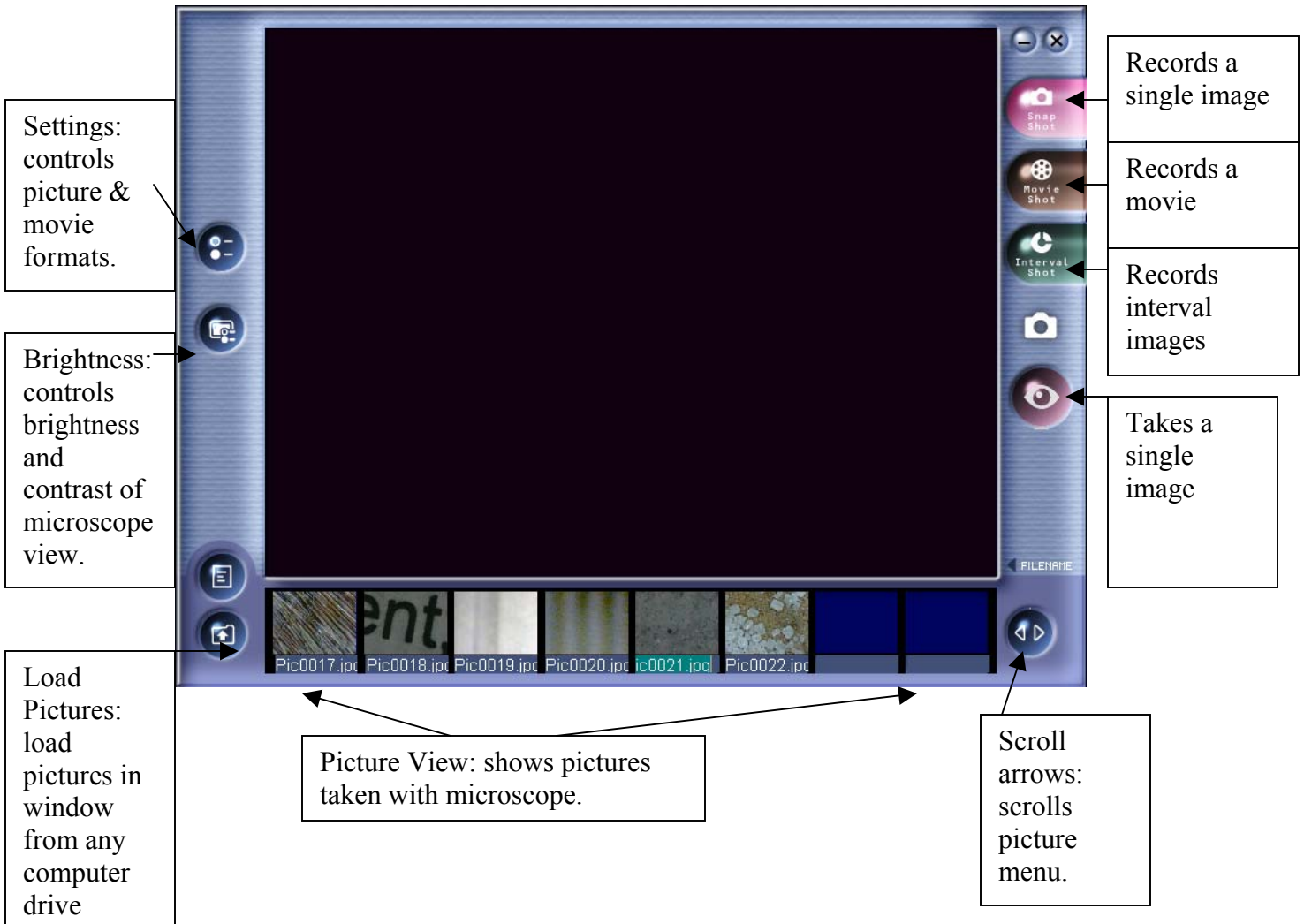
- Attach the x1 lens to the handset. To attach the lens, match the thin line on the lens to the thin line on the handset and gently push down to meet the two together. Next, gently turn the lens clockwise until it clicks into place.
- Hold the microscope in your hand to video. To focus, turn the black tube around the lens.

#### **Image Capture**

To capture a single image, click "SNAP" on the software screen or press the two blue buttons on the sides of the microscope. To begin recording a movie, click "REC" on the software screen. To end recording, click "REC" a second time.

## USB Shot Software for the USB Microsoft

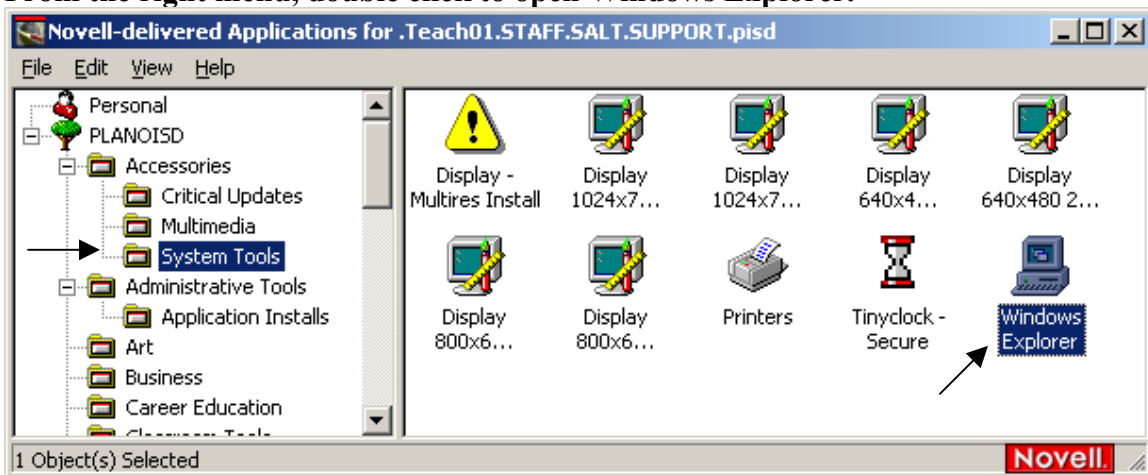
To open, click on the USB Microscope M-1 Run icon in the Science folder.



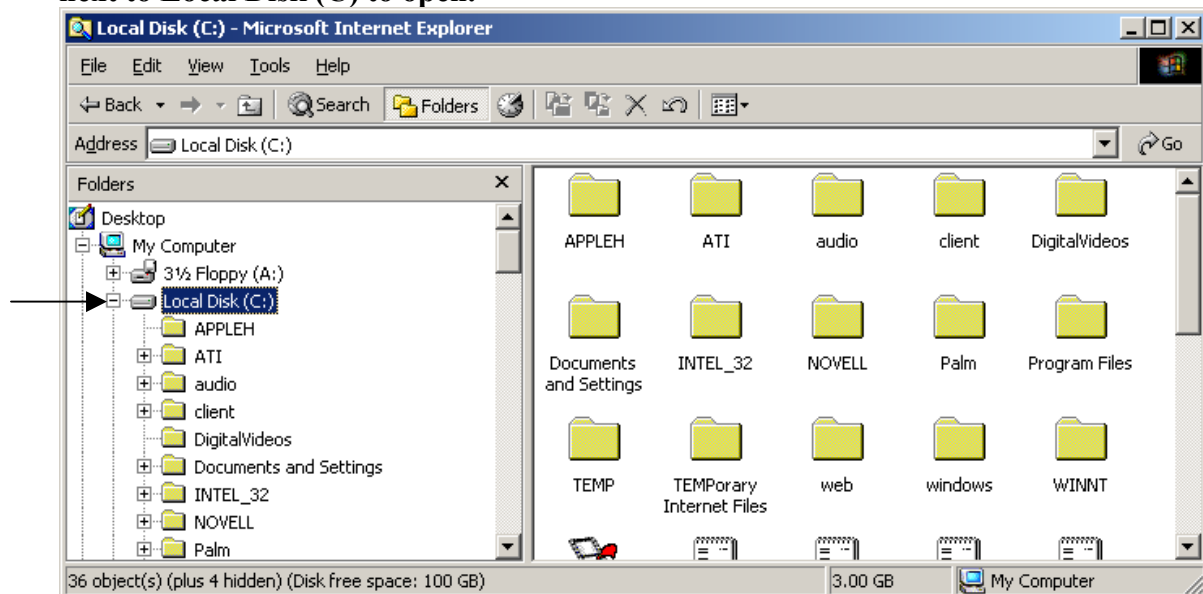
## USB Microscope: Retrieving and Deleting Captured Files

The image and movie files captured with the USB Microscope are saved on the local C drive that the microscope is connected to. These files do not automatically delete, therefore you should delete the old files. The process below shows how to navigate to the folder where these files are stored. Once you have located the files, you can insert them into other programs, such as MS Word or Power Point, delete the files, or save to another computer drive.

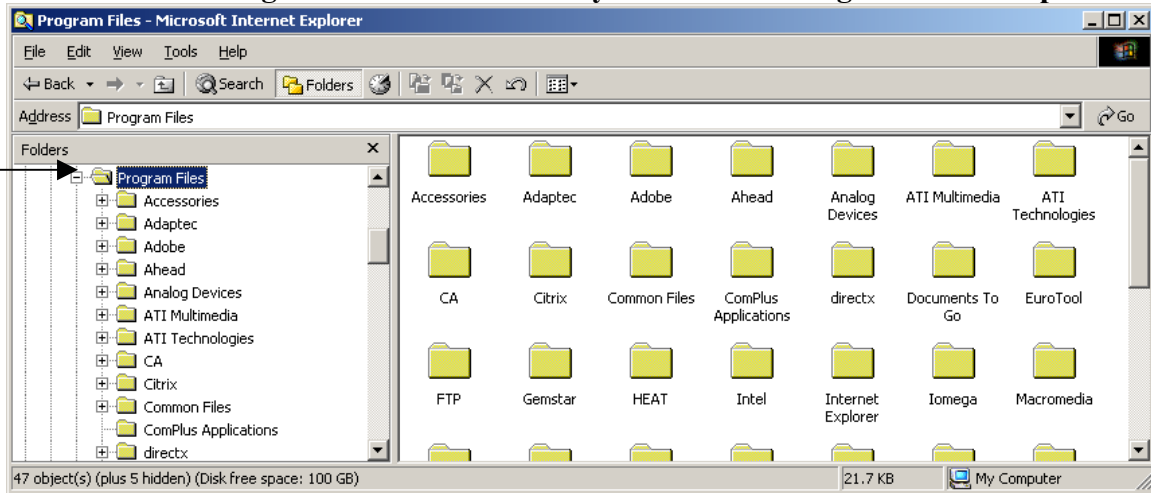
**Viewing from the left side of the applications window, click once on System Tools. From the right menu, double click to open Windows Explorer.**



**Viewing from the left side of the applications window, click once on the + symbol next to Local Disk (C) to open.**



**Scroll down to Program Files. Click the + symbol next to Program Files to open it.**



**Scroll down to Scalar. Click the + symbol next to Program Files to open it.**

**Next, click the + symbol next to USB Shot.**

**Next, double-click on the folder called "Images." On the right hand side of the screen you will see all of the images and movies that were captured by the microscope. From here you can retrieve, view, delete, or re-save the files.**

