

# **Digital CoreScope 2**

Instruction Manual T-17541C

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### Introduction

Thank you for purchasing the Digital CoreScope 2. This <sup>3</sup>/<sub>4</sub>-sized digital compound microscope is specifically designed to have all the components of our full-sized digital microscope powered by a USB 2.0 cable that is ideal for classroom and field use. The Digital CoreScope 2 allows users to view microscopic specimens with a 1.3 megapixel digital camera with our high-quality objective lenses that will magnify 40-400 times. Combined with Ken-A-Vision's Applied Vision™ Software, this microscope is a powerful product allowing the user to take digital pictures, annotate images, to make measurements, and record full length or time-lapse videos that add to the classroom and educational experience.

# Instruction Manual Warranty Sheet Microscope Cover Vision Vision

### **Packing Contents**

Digital CoreScope 2

Slide Micrometer

## Microscope Set-up Guide

The Digital CoreScope 2 compound microscope can be set up in a matter of minutes. To get the most out of this amazing teaching tool, follow these step-by-step instructions:

1. After unpacking the box, take the Applied Vision<sup>™</sup> Software CD and insert it into your computer to install.

**NOTE:** For a complete instruction manual of Applied Vision Software, refer to the .pdf version on the Applied Vision CD.

- 2. Follow the directions to install the software. Once completed, an Applied Vision icon should appear on your desktop.
- 3. Remove the Applied Vision CD from your computer.
- 4. Remove the Digital CoreScope 2 from the plastic bag and remove the protective coverings from the objective lenses and the eyepiece.
- 5. Place the microscope on a flat, firm surface next to the computer with the installed Applied Vision Software.
- 6. Check the coarse focus knob on either side of the main body support. The coarse focus knobs should turn easily.

**NOTE:** The stage should move freely up and down the main body support when focusing. When you release the knob, the stage should remain stationary, and not slide down the post on its own.

7. The Digital CoreScope 2 is powered two (2) ways:

- a. by the USB 2.0 cable when plugged into a computer's USB port.
- b. by the USB power adapter that fits on the end of the USB plug inserted into an electrical outlet or a Ken-A-Vision<sup>®</sup> multicharger.

**NOTE:** The microscope batteries will not charge when connected to a computer via USB. To recharge the batteries, connect the USB cable to the USB power adapter and plug the adapter into a power outlet.

- c. Once finished charging, store the USB cord and the USB power adapter in the charging docking area on the back of the microscope.
- 8. Reboot your computer and take the USB plug of the digital microscope and insert it into the USB port of the computer with Applied Vision<sup>™</sup> Software installed.
- 9. Place a prepared slide on the stage and move it into position for viewing.
- 10. Start with the 4x objective by raising the stage with the coarse focus knobs until it will go no higher.
- 11. Lower the stage slowly to bring it into focus using the coarse focus knobs
- 12. To sharpen the image, adjust with the fine focus knobs.
- Once the computer is rebooted, launch the Applied Vision Software.
- 14. The image that is being viewed through the eyepiece of the microscope should be displayed on the computer screen.
- 15. Once the image appears on the computer screen, simply turn the nosepiece to the next higher objective lens and do minor adjustments with the fine focus knobs.

**NOTE:** If the image on the screen is flickering, reduce the amount of light entering through the iris diaphragm and rheostat (light dimmer).

16. After obtaining focus of the specimen on the computer screen, adjust the diopter on the eyepiece tube for individual eye correction when viewing through the microscope.

# **Specifications**

| Product configuration                           |   | T-17541C                        |
|---|---|---------------------------------|
| Stand/Frame                                     |   |                                 |
| SC601C<br>SC1002C<br>SC1022C                    | PrepScope 2 - Coarse focus stand 3 hole nose piece<br>CoreScope 2 - Coarse and fine focus stand 3 hole nose piece<br>CoreScope 2 - Coarse and fine focus stand 4 hole nose piece  | х                               |
| Standard Features                               |   |                                 |
|   | Charger Docking Area<br>Built-in Handle<br>Green Battery™<br>Cordless Rechargeable<br>COOL LIGHT™ illumination<br>3/4 size Microscope<br>3 hole reversed nose piece<br>4 hole nose piece                                      | ×<br>×<br>×<br>×<br>×<br>×<br>× |
| Heads   |   |                                 |
| SC1002MH<br>SC1002DH<br>SC1002BH<br>SC1002CMH   | Monocular Head with 10x eyepiece Student Proofed<br>Dual Viewing Head 10x eyepieces Student Proofed<br>Binocular Head with 10x eyepieces Student Proofed (slide)<br>Monocular Head with built in digital 1.3 megapixel camera | x                               |
| Stage   |   |                                 |
| SC601SS<br>SC1001FS<br>SC1001MS                 | Prep/Core Standard Stage with 5 hole disc Diaphram<br>Prep/Core Floating Stage with built in Condensing Lens<br>Prep/Core Mechanical Stage with Abbe Condenser  | x                               |
| Detail Individual Configurations                |   |                                 |
| Eyepieces                                       |   |                                 |
| SC100EP5<br>SC100EP10<br>SC100EP15<br>SC100EP20 | 5x<br>10X<br>15x<br>20x   | X                               |
| Objectives                                      |   |                                 |
| SC1001OB4                                       | 4x  | Х                               |
| SC1001OB10                                      | 10x   | Х                               |
| SC1001OB40                                      | 40x   | Х                               |
| SC1001OB60                                      | 60x   |                                 |
| SC1001OB100                                     | 100x  |                                 |
| Optional  |   |                                 |
| SCGN061   | Multicharger 2  |                                 |
| KAVCOVER  | Dust Cover<br>AV NET  |                                 |

## Troubleshooting

This section provides many useful tips on how to solve common problems while setting up or using the Digital CoreScope 2 compound microscope:

I can't see an image. I can only see a partial image.

- Check to see if the USB plug is in the USB port of the computer with Applied Vision<sup>™</sup> Software, the power supply is plugged into an outlet, or the battery is charged if using cordless.
- Check to see if the objective lens is clicked into place.
- Check to see if the LED lights are turned on by switching the power button on the back of the microscope. A red indicator light should glow if the LED lights are on.
- Check to see if the dimmer switch (rheostat) is turned clockwise to allow the intensity of light to increase.
- Close Applied Vision and then reboot Applied Vision to activate the camera.

It is difficult to get an image in focus.

- Adjust the coarse focus knobs slowly.
- Turn the objective lens until you hear it click into place.
- If the image is focused on the computer screen, adjust the diopter on the eyepiece tube to focus for the user's individual vision when viewing through the eyepiece.
- Check to see if the there has been damage to the objective lenses and eyepiece. If the lens/eyepiece is dirty, use lens paper and distilled water to rub gently clean.

**NOTE:** Never rub the lens/eyepiece when it is dry. This can cause static charge that will attract dirt.



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