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health care products

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Instructions for Use: USB Microscope

Brand Name of Product	USB Microscope
Generic Name of Product	USB Microscope
Product Code Number(s)	MICR008, MSTN-001
Intended Use	To visually inspect items after decontamination. The microscope allows magnification up to 230x (depending on working distance) with natural color technology providing colors true to their original appearance to ensure items have been cleaned/are in good working order.
Range of Applications for Product	To visually inspect items after decontamination.

Key Specifications of Product	**USB Microscope**
	• Body material: ABS plastic
	• LEDs: Eight (8) White
	• Magnification range: 10–50x, 230x
	• Working distance: Standard
	• Lens type: Glass
	• Image save formats
	    o (Windows)- WiBMP, GIF, PNG, JPG, TIF, RAS, PNM, TGA, PCX, MNG, WBMP, JP2, JPC, PGX
	    o (Mac OS)- JPEG, PNG
	• Video save formats: (Windows) WMV, FLV, SWF
	• Compatible with FIS-007 software.
	• Software Operating Systems
	    o Windows XP, Vista, 7, 8, 10, 11
	    o Mac OS 10.5+.
	• Connection: USB 2.0
	• Imaging standards: DirectShow, UVC
	• Sensor type: CMOS
	• Megapixels: 0.3 MP
	• Resolution: 640- x 480 pixels
	• Frame rate: 30 FPS
	• Dimensions (L x D): 10.5- x 3.2 cm (4.13- x 1.26 inches)
	• Weight: 105 g (3.7 ounces)
	• USB cable length: 182 cm (71.65 inches).
	
	Microscope Stand
	• Compact, portable dual fine adjustment stand.
	• Dimensions
	    o Base: 5.6- x 3.5 inches
	    o Assembled: 5.5- x 4.2 inches
	• Material: Metal
	• Provides smooth, vertical adjustment positioning.
	• Anti-slip base
	• Stable ergonomic design.

Shipping & Storage	
Shipping Conditions & Requirements	N/A
Storage Conditions	**MICR008** • Keep out of direct sunlight and moisture. • Storage temperature range: < 70 ℃. • Internal electronic components: −10- to 55 ℃ (14 ℉ to 131 ℉). • External housing: −10- to 70 ℃/80 ℃ (14- to 158 ℉/176 ℉). • USB cable: −20- to 80 ℃ (−4- to 176 ℉).

Packaging Contents	Microscope, cables
Shelf Life	MICR008: Two (2)-year warranty.
	Microscope stand: One (1)-year warranty.

Instructions for Using Product	
Description of Use(s)	To help ensure quality control for the Central Service Sterile Department (CSSD) by enhancing visual inspection of decontaminated items.
Preparation for Use	Software Installation *(Note: Perform this section only once when connecting the scope to the computer for the first time.)* • System Requirements: MS Windows 10 • Install the Flexible Inspection Scope™ software from the USB flash drive on a computer. *Note: Contact your IT Dept if any IT policies may block the installation for the Healthmark Scope Viewer.* 1. Insert the USB Flash drive into your computer, and double click on the *Healthmark Scope Viewer* installer package to begin installation. 2. Click *Next* on the "Welcome…" pop up. 3. Select *Typical* or setup type of your choice, and click *Next*.
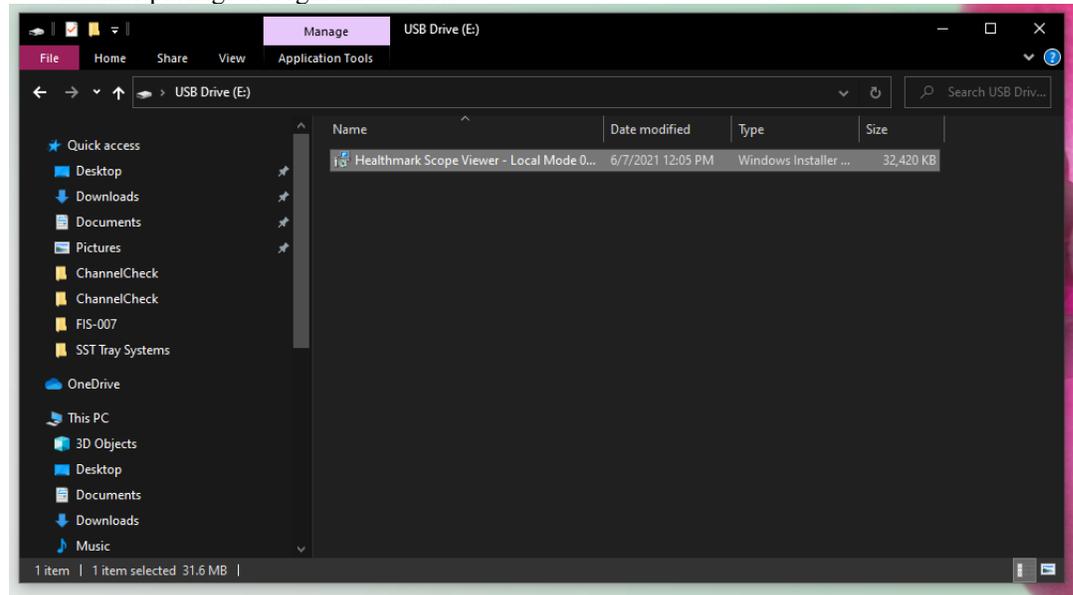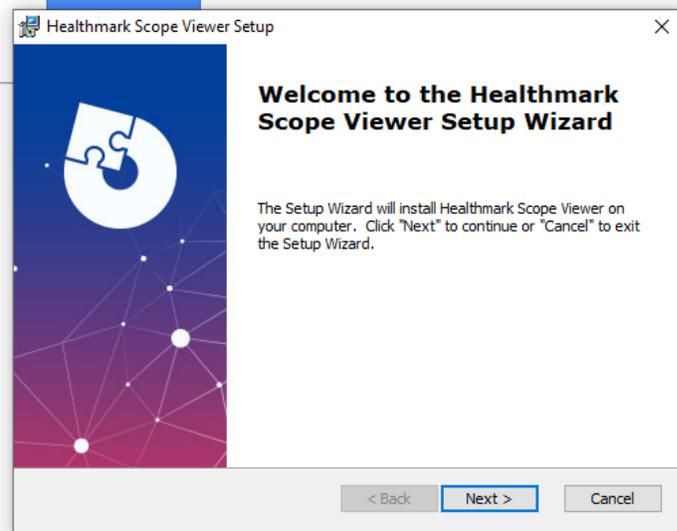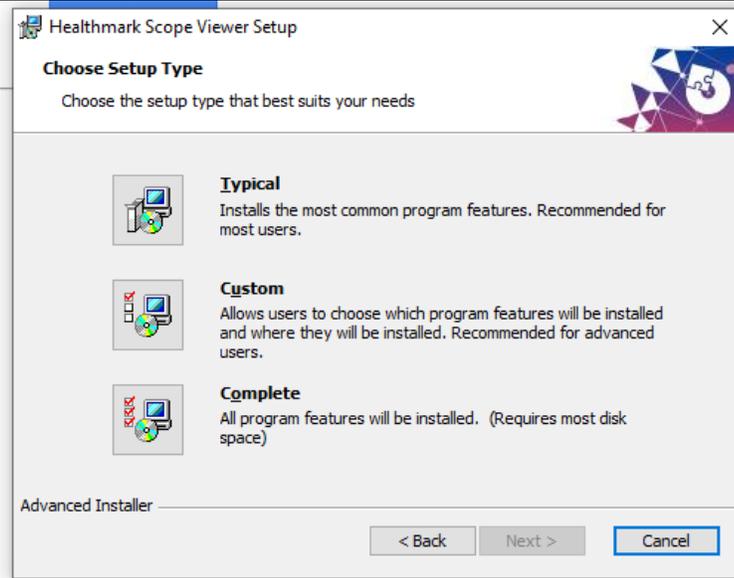
4. Click *Install* and wait for installation to complete.

5. Next, Click *Finish.*

The Healthmark Scope Viewer Setup Wizard was interrupted

Healthmark Scope Viewer setup was interrupted. Your system has not been modified. To install this program at a later time, please run the installation again.

Click the "Finish" button to exit the Setup Wizard.

< Back   Finish   Cancel
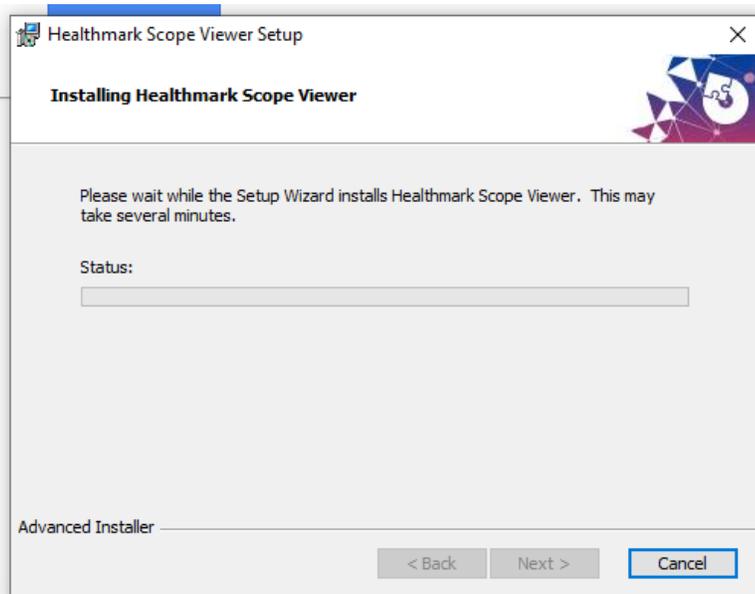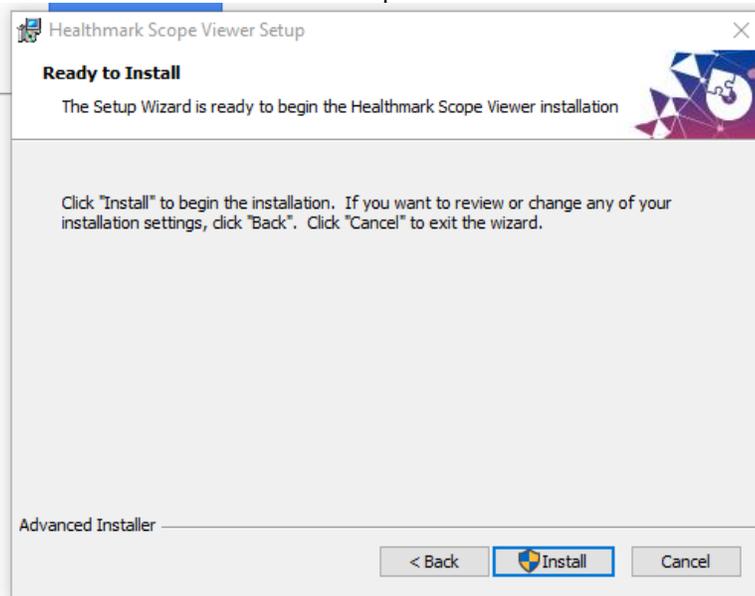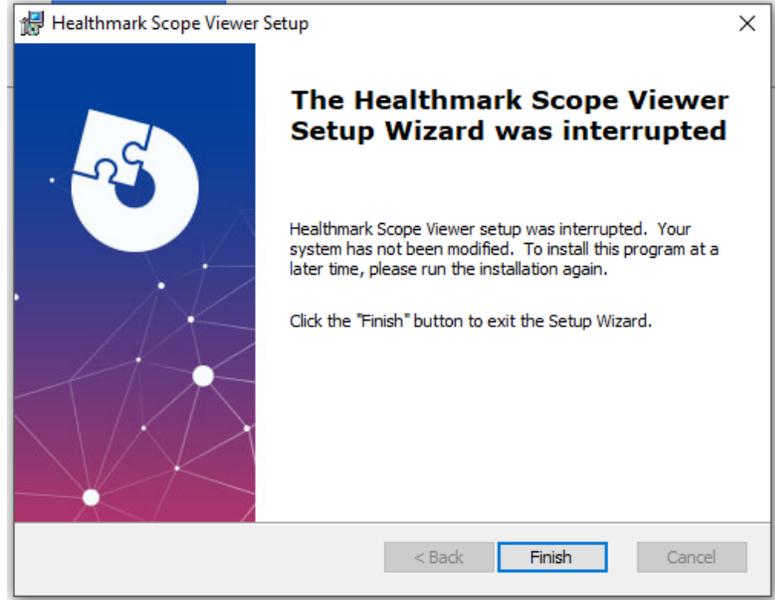
STARTING SOFTWARE & CONNECTING SCOPE TO PC:
1. Open the Windows PC viewer software.
2. Connect the MICR008 to the PC using the USB Cable.
3. In the viewer software:
    a. Click *Settings* and Select *USB Video Device*
    b. Choose desired resolution
        i. Select the preferred Video Output Format
        ii. Click *OK.*
4. Now you can start using the MICR008.

Using Software
Healthmark Scope Viewer Software (Fig. 1).
1. *Capture button*: Captures a Reference Image and saves it to the Reference Image folder.
2. *Main Image Window*: Displays the image from the camera.
3. *Reference Image Window*: Displays a reference image.
4. *Clear Button*: Removes the image from the Reference image window.
5. *Open Reference Image button*: Allows you to select a reference image from the Reference Image folder.
6. *Settings Button*: Click to select the video camera and resolution settings.
7. *File Location Button*: Click to change location where captured images are being saved.
8. *File Location Window*: Shows the file path where captured images are being saved currently.
9. *Capture Image Button*: Captures images and adds them to the File Location selected by the user (as shown in the File Location Window).
10. *Capture Video button*: Click to record video. Click again to stop recording video.
11. *File Prefix*: Type in text that you would like included in the file name of Captured Images.
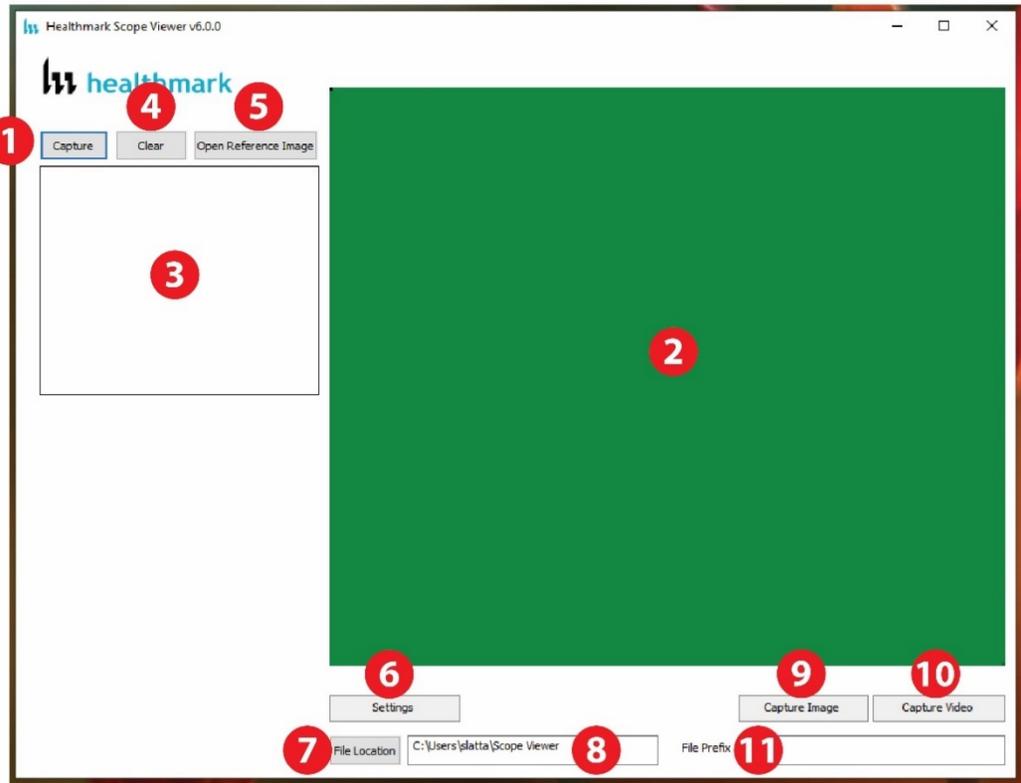
Figure 1

Selecting Video Device or Camera

Follow the directions below to select the video device or camera used to capture images using the Healthmark Scope™ Viewer Software. (**Fig. 2).**

1. **Click** *Settings* button in the lower left of the Scope Viewer software to display a list of video devices or cameras being detected by your computer.
2. Select a device for capturing images using the Scope Viewer:
   a. Select the *Dino-Lite Premier* for the MICR008.
   b. Select your preferred Video Output Format from the dropdown box.
3. Click *OK* to view the selected Video Device.
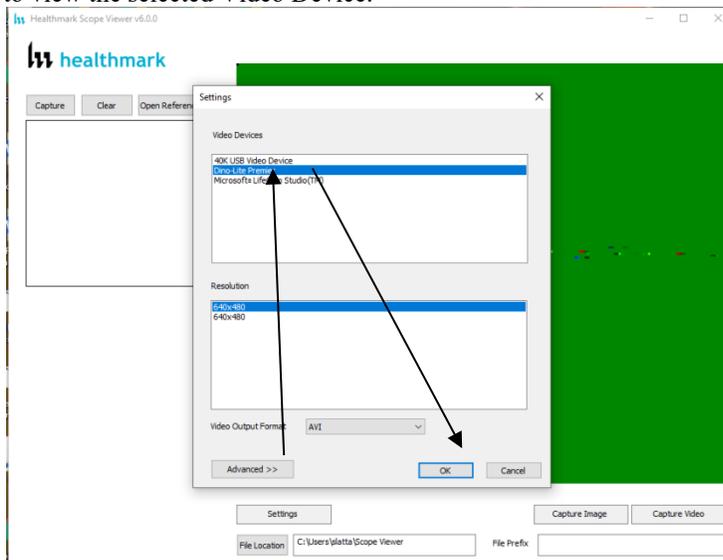
Figure 2

Capturing Still Pictures

Follow the instructions for capturing still pictures from the Main Image Window.

Select the *Capture Image* button. **(Fig 3).**
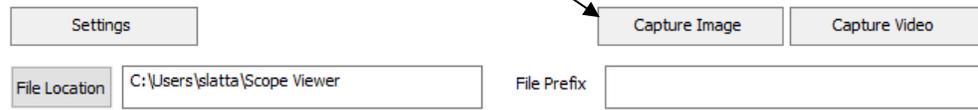
Figure 3

Note: When an image is captured, "Image Captured" in red text will flash on the lower portion of the screen and a new file will appear in the Files Location.

Capturing Video Images

Follow the instructions below for capturing video from the Main Image Window.

1. Select the *Capture Video* Button. **(Fig 4).**
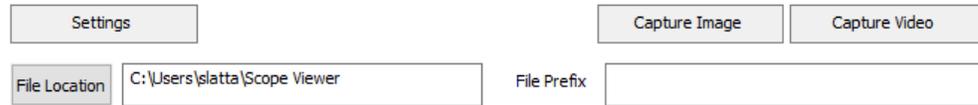
Figure 4

2. When the video is recording "Recording…" in red text will appear toward the bottom of the software window.
3. To stop recording, click *Stop Capture.* **(Fig 5).**
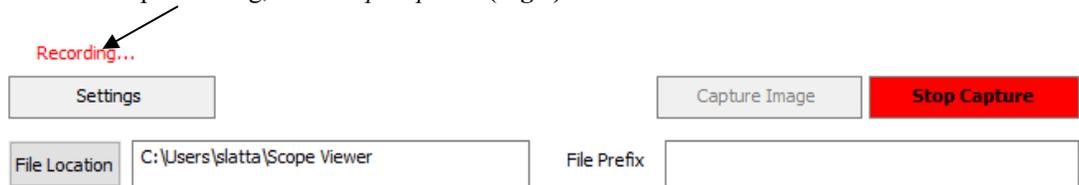
Figure 5

Setting File Prefix

Following the steps below allows you to create a *file prefix* that will appear after the underscore of image file names save to the File Location specified by the user.

1. Click the field next to File Prefix.
2. Enter the characters you would like to be included in the file name. **(Fig 6).**
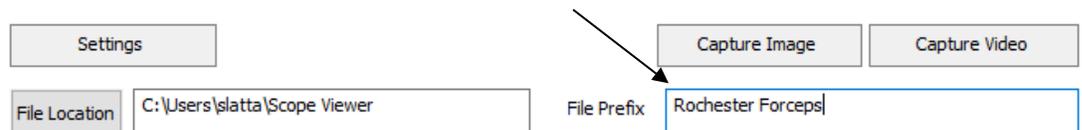
Figure 6

Setting Location for Saved Files

Following the steps below allows you to set the file location of saved images using the Scope Viewer software.

1. Click the *File Location* button.
2. Select the file location you want to save captured images. **(Fig 7).**

Figure 7

Displaying Reference Image

There are two ways to display a still image in the Reference Image Window on the Scope Viewer software.

1. To display an image currently being displayed in the Main Image Window, click the *Capture* button

*Note: The images will be saved in a file folder titled **Reference Images** in the user designated File Location specified in the **File Location** field. (**Fig 8**).*
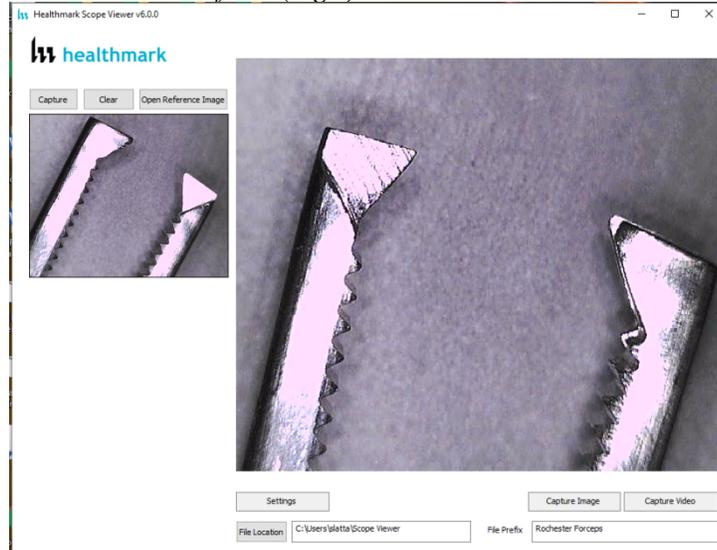
Figure 8

2. To display a saved image in the Reference Image Window from your File Location:
   a. Click the *Open Reference Image* button
   b. Select the file you want to display
   c. Click the *OK* button to display the image in the Reference Image Window. (**Fig 9**).
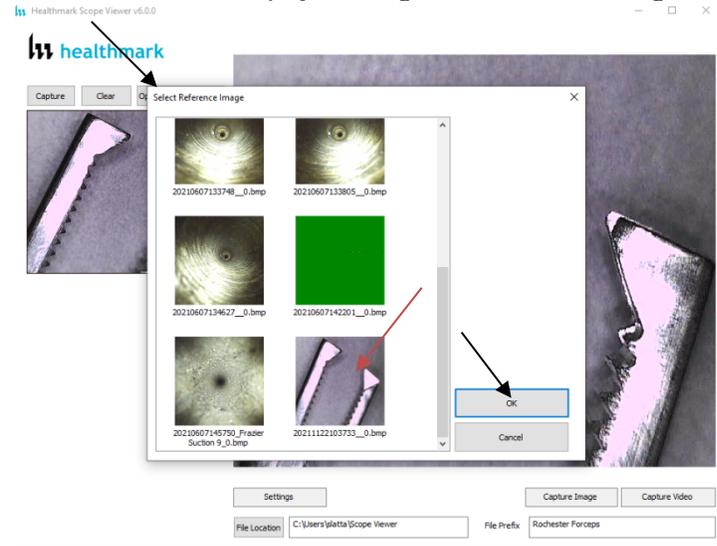
Figure 9

Diagrams (drawings, pictures)	

Steps for Use of Product	**Microscope Stand** 1. Loosen the bolt at the base of the stand.

2. Place the vertical stand pole into the base and secure the bolt.
3. Adjust via the fine adjustment (scope knobs) to the desired height.
4. Loosen the bolt, set the MICR008 into the holder ring to desired position, and secure the bolt.
Note: Do not over-tighten the bolts.

MICR008
1. Place the MIR008 into holder to the desired position (be sure not to block the adjustable magnification wheel area) and secure the bolt.
2. Use adjustable magnification wheel to view items accordingly.
3. Place item on the stand's base under the MICR008.
4. Adjust using the stand's fine adjustment knobs to the proper height and use the adjustable magnification (in increments of five [5]) for visualization of the item.

Interpretation of Test Results	N/A
Contraindications of Test Results	N/A
Documentation	N/A
Special Warnings and Cautions	**MICR008** Due to internal adhesive, it is not recommended to use in an environment over 70 ℃.
Disposal	N/A

Reprocessing Instructions	
Point of Use	N/A
Preparation for Decontamination	N/A
Disassembly Instructions	N/A
Cleaning – Manual	• Wipe the lens with an IPA wipe. • Wipe the stand with an IPA wipe. For Cleaning Compatibility click here:
Cleaning – Automated	N/A
Disinfection	For Cleaning Compatibility click here:
Drying	N/A
Maintenance, Inspection, and Testing	N/A
Reassembly Instructions	N/A
Packaging	N/A
Sterilization	N/A
Storage	**MICR008** • Keep out of direct sunlight and moisture • Storage temperature range < 70 ℃ • Internal electronic components: −10- to 55 ℃ (14- to 131 ℉) • External housing: −10- to 70 ℃/80 ℃ (14- to 158 ℉/176 ℉) • USB cable: −20- to 80 ℃ (−4- to 176 ℉)
Additional Information	N/A
Related Healthmark Products	N/A
Other Product Support Documents	ProSys™ Brochure, ProSys™ Price List
Reference Documents	N/A
Customer Service Contact	Healthmark Industries Company, Inc. 18600 Malyn Blvd. Fraser, MI 48026 1-586-774-7600 healthmark@hmark.com hmark.com