

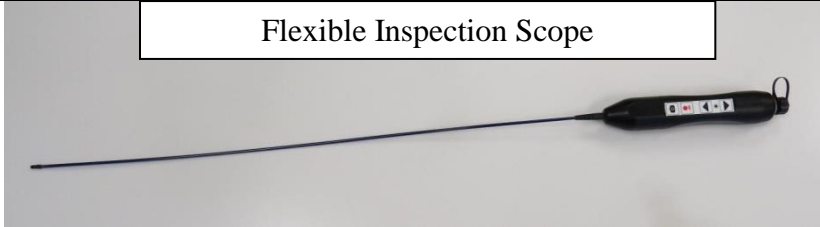


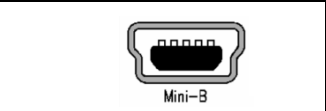
Instructions for Use: Flexible Inspection Scope Camera

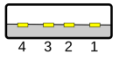
Brand Name of Product	Flexible Inspection Scope Camera
Generic Name of Product	Inspection Camera
Product Code Number(s)	FIS-S001, FIS-003
Intended Use	For visually inspecting instruments. Combined with the integrated USB Camera, can capture and document the internal condition using the software.
Range of Applications for Product	Instruments that require visual inspection.
Key specifications of product	<ul style="list-style-type: none"> • Inspection Scope Camera • USB 2.0 Cable: A standard, RoHS Compliant, USB2.0 Cable, with Type A to Mini B connections, is the only device accessory. Standard cable length is 6ft (2m). • Flash drive with installation software • Field of view: 100 degrees • Nominal working distance: 5mm • Degree of magnification: 17X at 5mm • Illumination max: 400 Lux at 2mm and 100% • Resolution: 2.4 lp/mm USAF Resolution Target • FIS-S001 <ul style="list-style-type: none"> ○ 50 cm in length ○ 3.3 mm diameter ○ Shaft submersible • FIS-003 <ul style="list-style-type: none"> ○ 110 cm in length ○ 2.3 mm diameter (Designed for instruments 2.4 or larger in diameter) ○ Shaft wipe able, but not submersible

Shipping & Storage

Shipping Conditions & Requirements	
Storage Conditions	Keep stored in be stored in 60° – 78°F. Keep away from liquids, dust and magnetic fields while storing.
Packaging Conditions	

Instructions for Using Product

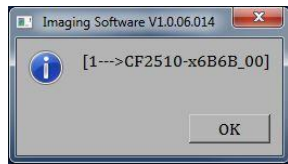
Description of Use (s)	Use the Inspection scope to directly inspect internal channels. The camera will allow you to capture and document the internal condition.		
Preparation for Use	<div style="text-align: center;">  <p>Flexible Inspection Scope</p> </div> <ul style="list-style-type: none"> • There is a screw hole for mounting handle on a tripod or flex arm (not included) that can be utilized. A metric M6 x 1 screw can be used to mount handle. (See Figure 1) • Turn on the PC the software is installed on. Plug the type Mini-B (See Figure 3) side of the provided USB 2.0 cable (See figure 2) to the camera handle. • Plug the Type A side of the provided USB 2.0 cable to the computer where software is installed (See figure 4) 		
	 <p style="text-align: center;">1</p>	 <p style="text-align: center;">2</p>	 <p style="text-align: center;">3</p>



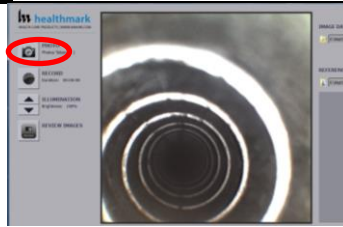
Type A

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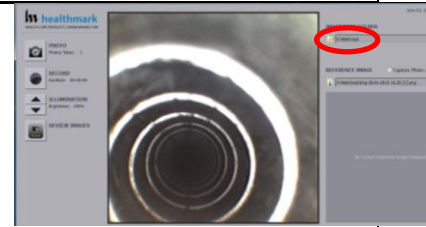
Diagrams (drawings, pictures):



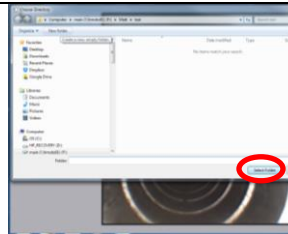
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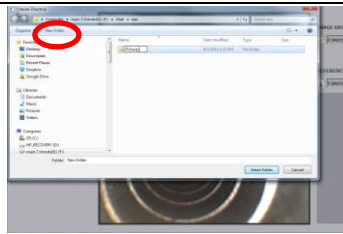
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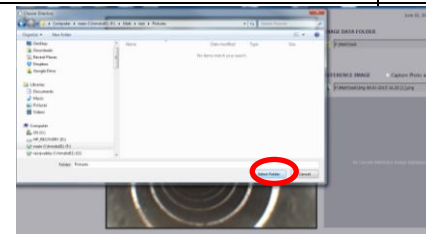
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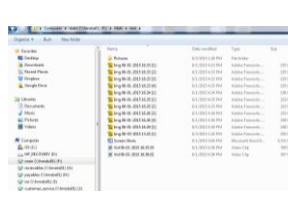
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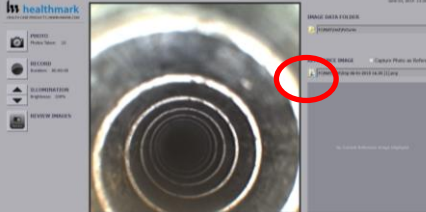
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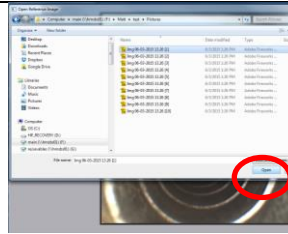
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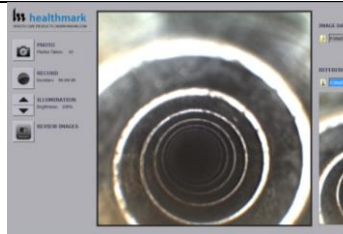
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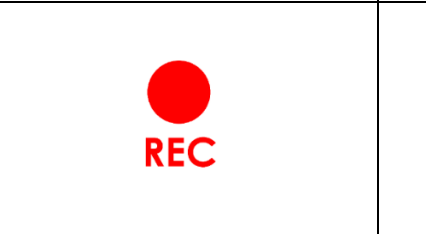
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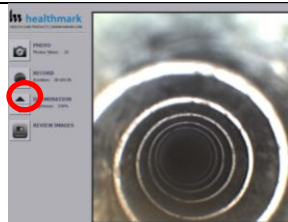


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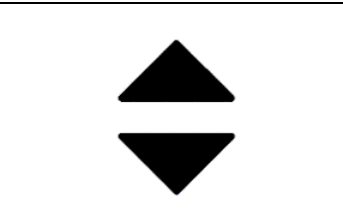


REC

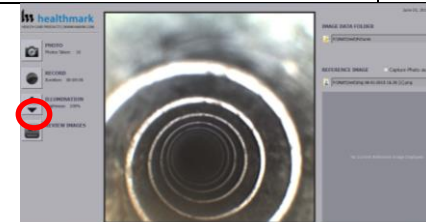
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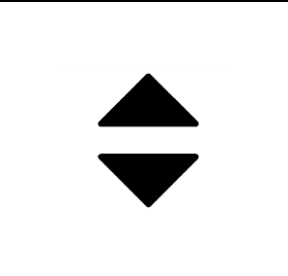
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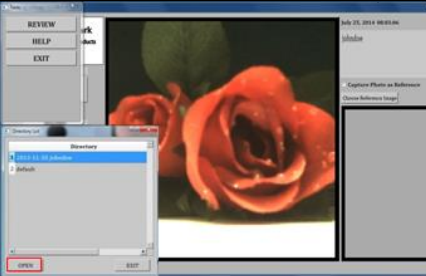
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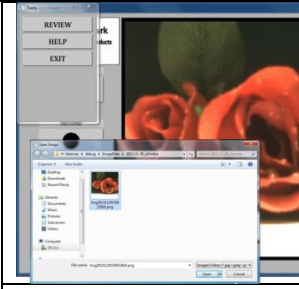
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Steps for Use of Product

1. To run the Healthmark software, locate and double-clicking on the Healthmark program icon on the Windows desktop. If the shortcut is not available, the application file should be in a folder named C:\Sanovas\ It can also be executed from this folder. The information pop up window will appear in figure 1. (If the Information Popup Box does not come up, try restarting the application or reinstalling the software. If the popup still does not come up, the Hardware (Device) may be damaged and/or not plugged in properly. When the Information Popup Box comes up, continue by selecting the “**OK**” button. The User Graphical User Interface (GUI) will display on the screen. If you have a problem with installing the software contact Healthmark support at (800) 521-6224 ext 6657 or e-mail hmit@hmark.com
2. If the Software and Hardware are both operational and compatible the following program window will appear on the screen (video will be live). Date & Time are reported on the top right corner. To take still shot photo(s), click “Photo” button once. Repeat for multiple photo’s. A capture count will be incremented under the photo button for each photo you take.
3. Select “Image Data Folder” to save images to a folder.
4. If saving to existing folder click “Select folder”.
5. If creating a new folder select “New Folder”. Then enter the name that you’re giving the folder.
6. Click “Select Folder” to save images to the new folder.
7. Continue to take pictures, they will automatically save to the new folder or default to the last folder pictures where saved to.
8. Selecting the “Record” icon will video record and save to the last files images where last saved.
9. In order to select a reference image. Select the “Reference Image” icon.
10. Select image you would like to appear in the reference image window. Then click “Open”
11. Reference image will now appear in the reference image window.
12. To record video using the Control Handle, press the “**REC**” **button** once. This will be equivalent to using the PC, and the results will be the same. Record Button on handle as shown in fig 8. To stop the recording, press the “**REC**” **button** once again.
13. The “**Up Arrow**” next to “**Illumination**” button can be clicked to increase the brightness of the camera light (LEDs).
 [100%] would indicate highest level possible. [000%] would indicate lowest level possible.
 (LEDs Turned OFF) The LED brightness is increased by 10% every time the button is pressed.
 The will have a different representation of each level selected. Once 100% is reached if the increase button is pressed again, the LEDs will be turned OFF.

	<p>14. To increase the brightness of the camera LEDs using the device handle, press the “Up Arrow” on the Control Handle. This will be equivalent to using the PC, and the Illumination change results will be the same.</p> <p>15. Decreasing the Illumination Level using the PC. The “Down Arrow” next to “Illumination” button can be clicked to decrease the brightness of the camera light (LEDs).</p> <p>16. Decreasing the Illumination Level using the device handle by clicking the “Down Arrow” next to “Illumination” button can be clicked to decrease the brightness of the camera LEDs. The results will be the same.</p> <p>17. To review previously stored images or recorded video select “REVIEW IMAGES” button with a single click.</p> <p>18. A new window with all working folders will be displayed. Select the folder to be opened. Click on “OPEN” button to select the folder for review.</p> <p>19. A file managing/selecting window will popup, enabling user to select an image or video to replay. Select the file to be reviewed by double-clicking on it. The image/video will be displayed in a new window. To quit, select the “x” button in the Setup Box and “EXIT” button in the Tools Box. This will take the user to the startup interface.</p> <p>When device is NOT connected to your computer you can access past images and videos at this location: C:\Sanovas\Healthmark1.0.6.14\ImageData</p>
Documentation	Warranty: 6 months
Special Warnings and Cautions	<ul style="list-style-type: none"> • Use the FIS-S001 device only in spaces 3.3mm or larger in diameter. The FIS-003 only in spaces 2.4mm or larger. • Do NOT make rapid hand motion with the device as the flexible shaft section may whip and cause eye-injury or abrasion on impact with body parts. • Do NOT use the device to poke or attempt to pierce any object as it may cause serious eye-injury or abrasion on impact with body parts in addition to device damage. • Do NOT subject the device to excessively high temperatures above 120°F as the materials of construction are not designed to operate under these conditions. • Do NOT grasp and handle the device from the distal tip as a residual risk of fatigue damage to the device remains in this scenario. • Do NOT use the device handle to strike or hit any object. Serious harm to body and/or device may result. • Do NOT over bend the flexible device shaft to a point of kinking. It may cause damages to electronic components and render the camera inoperative. • Do NOT plug the USB cable into any port other than a USB2.0 port on a computer. • Use only the USB cable provided with the inspection scope. Using other cables may lead to interference with surrounding electronic devices and potential performance deterioration. • Do NOT attempt to disassemble or repair the inspection scope yourself. Doing so voids the limited warranty and could cause harm to the user and/or the inspection scope. • The device does NOT have Field-Wiring Terminal Boxes. • The device does NOT produce Ionizing Radiation. • The device is RoHS Compliant. • The device handle may get warm to the touch. This is normal. • The device has NOT been tested with MAC OS, older Windows operating systems, or any Virtual Machine and the results are not guaranteed in terms of functionality and performance. • Plugging the device to a non-compliant USB port (i.e. USB 1.0 or USB 1.1 capable

	<p>only) will not damage the inspection scope; however it will NOT function as intended.</p> <ul style="list-style-type: none"> • Training is required for end users to use this inspection scope. • If not used for 3 hours or more, unplug (if the PC is not to be shut down).
Disposal	

Reprocessing Instructions	
Point of use:	
Preparation for use:	Pre-clean by using a lint free wipe or dry cloth on shaft
Disassembly Instructions:	
Cleaning – Manual:	<p>Cleaning of inspection scope.</p> <p>FIS-003</p> <ul style="list-style-type: none"> • Can be cleaned with pre-moistened alcohol or disinfectant (i.e., bleach, hydrogen peroxide, etc.) wipe. • The FIS-003 is not waterproof. It should not be soaked or dunked into any solution. The unit will stop working if submerged in liquid. <p>FIS-S001</p> <ul style="list-style-type: none"> • Can be cleaned with pre-moistened alcohol or disinfectant wipe (i.e., bleach, hydrogen peroxide, etc.). • FIS-S001 shaft is submersible in water or solution. Do not submerge the handle.
Cleaning – Automated:	
Storage:	Keep stored in be stored in 60°F to 78°F. Keep away from liquids, dust and magnetic fields when stored.
Additional Information:	If upon inspecting a medical device it is determined not to be clean, reprocess that medical device according to the medical device manufacturer’s instruction for use.

Related Healthmark Products	USB Microscope, optical inspection products
Other Product Support Documents	Prosys Price List, Prosys Brochure
Customer Service contact:	<p>Healthmark Industries Company, Inc 33671 Doreka Fraser, MI 48026 1-586-774-7600 healthmark@hmark.com hmark.com</p>

2017-07-20 Matt Smith