

INSPEKTOR® HD Digital Borescope Systems

Includes Product #:

INS9900 INSPEKTOR HD Monitor (15-inch HD monitor)

INS9901 INSPEKTOR HD Borescope (1.9mm X 2m HD Borescope)

INS9902 INSPEKTOR HD Borescope (1mm X 1m HD Borescope).

INS9903 INSPEKTOR HD Borescope (1.9mm X 1m HD Borescope)

INSPEKTOR® is a registered trademark of Thomas Scientific



INS9900 Inspektor HD Monitor



INS9901 Inspektor HD Borescope 1.9mm x 2m



INS9902 Inspektor Borescope HD 1mm x 1m



INS9903 Inspektor HD 1.9mm x 1m

Owners Manual

Table of Contents

Page 3-4	Intended Use Indications for Use Contraindications or Use
	General Warnings
Page 4-5	Product Description
Page 6	Inspection of the INSPEKTOR [®] HD Borescope Cleaning and Disinfection on of the INSPEKTOR Monitor (Product # INS9900)
Pages 6-8	Cleaning and Disinfection of the INSPEKTOR [®] HD borescope (Product # 9901, 9902 & 9903).

Page 9	Compatible Sterilization on Methods for the INSPEKTOR® HD Borescopes (Product # 9901, 9902 & 9903)
Page 10-12	INSPEKTOR® HD System Set Up Moun ng Instructions
Page 12	Software Installs
Page 13	INSPEKTOR® HD Environmental Conditions and Electrical Requirements. Warranty
Page 14	Thomas Scientific Address

The following - Instructions for Use - are applicable to the INSPEKTOR® HD Borescope Systems. Including Model: INS9900

Intended Use

The INSPEKTOR® HD Digital Borescope Systems are waterproof and are patented and designed to work in wet and dry environments. They are used to provide visualization of working channels and lumens in surgical instruments and endoscopes larger than 1.2 mm. The systems allow the technician to inspect the lumens during and after the cleaning process to visually confirm that they are void of foreign material.

Indications for Use

Visual Inspection of endoscope working channels and surgical instrument lumens to confirm they are cleaned to the technician's expectations.

Contraindication Use

The INSPEKTOR® HD Borescopes are not intended for use in human patients.

GENERAL WARNINGS

1. The INSPEKTOR® HD Borescopes are polymer coated flexible devices. Avoid sharp metal edges when either inserting or retracting the INSPEKTOR® HD Borescope.
2. Follow the cleaning, disinfecting, and sterilization on instructions provided in this manual.

3. Do not autoclave INSPEKTOR® devices.
4. Do not attempt to service any part of this product. **
5. To ensure operator safety, read and understand this manual before using the INSPEKTOR® Borescope and monitor.
6. The INSPEKTOR® Borescopes emit visible light energy from its distal end. Avoid looking directly at this emitted light or directing it toward others.
7. Carefully inspect the external surfaces of the INSPEKTOR® Borescopes to assure they are smooth and free of any protrusions or sharp edges.
8. Do not bend device below a 20 mm radius or to the point of kinking. Excessive bending may cause damage to the device and render the INSPEKTOR® HD Borescope inoperable.
9. Applying excessive force to push an INSPEKTOR® Borescope past an obstacle could result in damage to the device. If the INSPEKTOR® Borescope requires significant push force, observe the monitor and attempt to avoid the obstacle by manipulating the flexible scope.
10. Avoid rubbing the borescope against sharp edges. This can cause damage to the device.
11. Store between 60° – 90°F. Keep away from magnetic fields while storing.
12. Do NOT use the INSPEKTOR® Controller Monitors in excessively high temperatures above 120° F, as the materials of construction on are not designed to operate under these conditions.
13. Marginal INSPEKTOR® HD Borescope light Leaks are common and may exist on new scopes. This does not affect the function of the INSPEKTOR® Touch Digital Borescope System.
14. Disinfectants may cloud the monitor screen. Wipe any disinfectant fluid from the screen with damp cloth and water.
15. INSPEKTOR® HD Borescopes should not be exposed to temperatures in excess of 212 degrees F.
16. If the INSPEKTOR® HD is used in a manner not specified in the instructions for use, the protection on provided by the equipment may be impaired.

Product Description

INSPEKTOR® HD are comprised of two components. The INSPEKTOR® Monitor houses the camera control board and the monitor, in a waterproof (IP65)* compartment and the Inspektor HD borescopes. **The INSPEKTOR® HD scopes only work with the Inspektor HD monitor**

The INSPEKTOR® HD Systems are patented and designed to work in wet and dry environments and are used to inspect small lumens and working channels of surgical instruments and endoscopes for foreign matter. This allows the cleaning/sterilization on processing technicians to determine whether their surgical equipment is visually free from foreign matter.

INSPEKTOR® HD's waterproof status, as defined by the International Electro Technical Commission is IP65 and INSPEKTOR® Touch Borescopes are IP67.

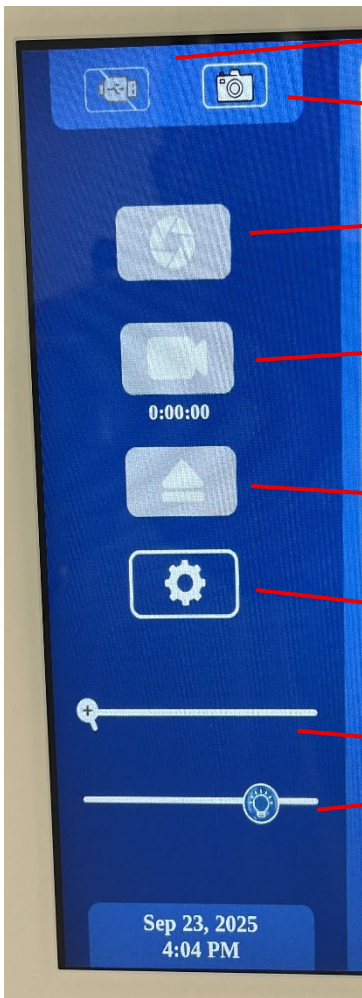
Caution:

Turn off the INSPEKTOR HD® Monitor when unplugging either INSPEKTOR borescope or when plugging in a borescope. Turn the monitor on again after exchanging the borescope.

Warning:

Do not submerge the INSPEKTOR HD® Box in any fluid.

Screen Operation



USB Engaged/Not Engaged

Camera Active

Camera button. USB must be plugged in to activate

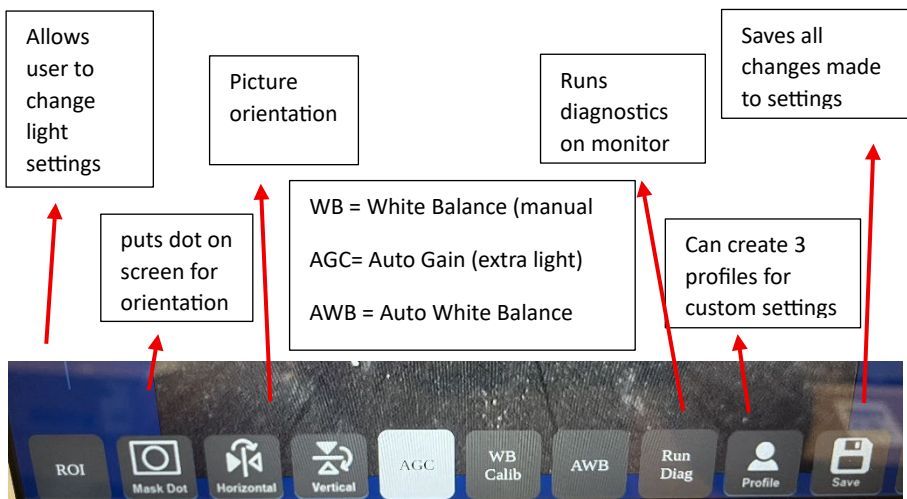
Video button. USB must be plugged in to activate

USB eject Button

Settings Button – Supervisor Password will be required to access

Zoom setting

Brightness setting



Brightness = Adjust brightness of picture

Contrast = Helps with clarity

HUE = adjust green, red, blue, and picture

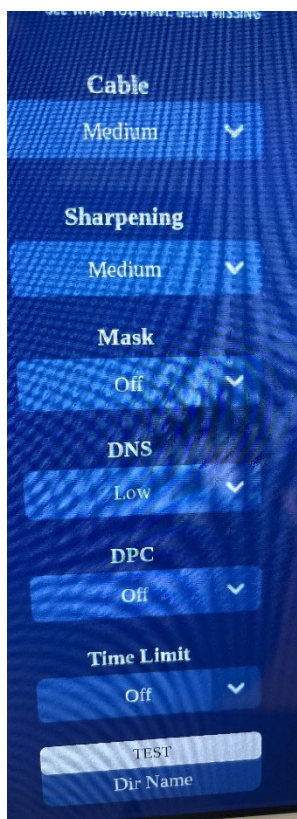
SAT = Intensity

LED = Adjust brightness of picture

Gamma = adjust the brightness of dark and light objects

Rotate = rotates picture

Zoom = zoom pictures in or out for enlarging or making pictures smaller



Setting for custom longer/shorter scopes if needed

Increases sharpness of picture

Changes image square to circle

Noise suppression

Dead pixel correction

Time before screens goes to sleep

Name of file holding pictures on USB

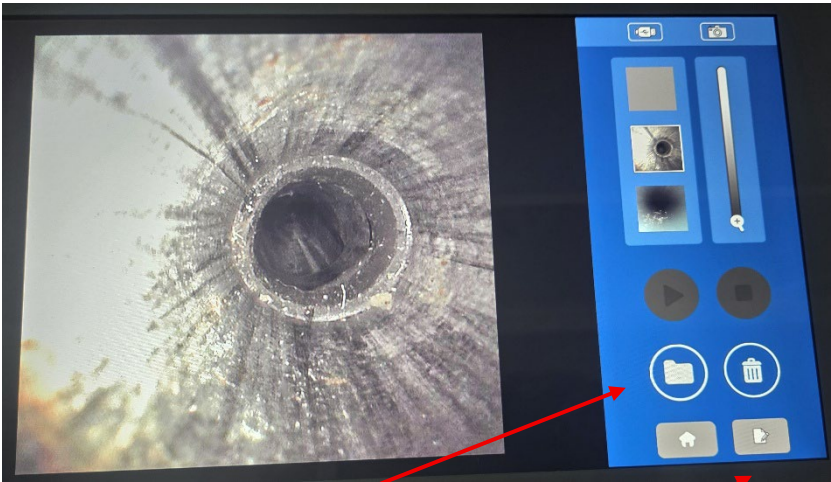
Inspection of the INSPEKTOR® HD Borescope

NOTE: Profile has a Default option – This option will bring all setting back to manufacturer specifications

How to Label a Picture on the Inspektor HD



Click on Picture on Right side of screen. This will pop up the below screen



Labels the Folder in the USB Drive

Allows you to name the Image

(Product# 9901, 9902 & 9903)

It is important to visually inspect INSPEKTOR® Borescopes for signs of excessive wear or deterioration. Inspect Borescope Daily. Possible indications of wear that would require replacement would include:

- ☐ Unacceptable or poor image quality
- ☐ Cracking, tears or degradation of the sheathing or epoxy joints

INSPEKTOR HD Digital Borescope System

Cleaning Instructions

Cleaning and Disinfection of the INSPEKTOR HD® Monitor

Cleaning and Disinfection – To remove debris, wipe the INSPEKTOR® HD Controller Monitor with a nonabrasive cloth using 70% isopropyl alcohol. Allow proper contact time. Wipe the screen with an appropriate 70% isopropyl alcohol wipe.

Caution: Do not wipe down the INSPEKTOR® HD Controller Monitor without the INSPEKTOR® Borescope connected.

Cleaning and Disinfection of the INSPEKTOR® Touch Borescope (Product # 9901, 9902 & 9903)

The INSPEKTOR® HD Digital Borescope is used to inspect surgical instrument lumens and endoscope channels in the sterile processing department or in endoscopy. The inspection of these inner surfaces aids in the visualization of foreign debris and bio-burden and further assures their removal before the sterilization of instruments or high-level disinfection of endoscopes. The INSPEKTOR® Borescopes may be used on either the dirty side or the clean side of the Sterile Processing Department or in the Endoscopy reprocessing area. The INSPEKTOR® Borescope should be cleaned in the manner described below to prevent cross contamination of instruments or endoscopes with foreign debris or bioburdens.

Cleaning – Dirty Side

1. Clean and Disinfection – Begin by cleaning the INSPEKTOR HD Borescope fiber. The INSPEKTOR® HD Borescope may be wiped with a 70% isopropyl alcohol wipe. Follow the manufacturer's cleaning agent's instructions for use. Wipe with water moistened a fiber-free cloth. Follow these processes for all instruments to be cleaned
2. High Level Disinfection

High level Disinfection on may be achieved by:

- High level disinfection may be achieved by submersing the INSPEKTOR® Borescope in a Cidex ® OPA solution or like product and mix according to the manufacturer's Instructions. Rinse and wipe with moistened fiber free cloth

* Follow your facilities requirements and steps before submerging your borescope in a Cidex ® OPA solution or like product.

Note: Sterilization of the INSPEKTOR® Borescope is not required if high level disinfection is utilized.

Cleaning – Clean Side

1. Disinfection - If the INSPEKTOR HD® Borescope encounters any visible foreign matter, it should be cleaned with a hospital

approved disinfectant wipe as noted in Cleaning Dirty Side. The scope should then be cleaned using High Level Disinfection, instructions listed above, to prevent any cross contamination prior to reuse on the clean side

2. High Level Disinfection

- See HD Disinfection Dirty side

Note: Sterilization of the INSPEKTOR Borescope is not required if high level disinfection is utilized.

Compatible Sterilization on Methods for the INSPEKTOR® HD Borescopes (Product# 9901, 9902 & 9903)

The Inspektor Borescope may be sterilized once per month. See below for compatible methods

✓ STERIS V-PRO® Low Temperature Sterilization Systems

- STERIS SYSTEM 1E
- V-PRO® 1 Standard Cycle
- V-Pro® 1 Plus Lumen & Non-Lumen Cycles
- V-PRO® max Lumen, Non-Lumen & Flexible Cycles
- V-PRO® 60 Lumen & Non-Lumen Cycle.

Follow the instructions provided with the STERIS equipment for sterilization processing.

☐ STERRAD®

- ☐ 100S,
- ☐ 50
- ☐ 200
- ☐ NX, and 100NX systems.

Follow instructions provided with STERRAD® equipment for sterilization processing.

WARNING: Do not reprocess the INSPEKTOR® HD Borescope using steam sterilization, autoclave, or dry heat. Do not place the INSPEKTOR Borescope into an automatic washer disinfecter. Use of these processes will result in damage to the instrument and void its warranty.

INSPEKTOR HD System Set Up

When using the INSPEKTOR® Systems around a wet field, the INSPEKTOR® Touch Monitor must be plugged into a Ground Fault Interrupter (GFI electrical outlet)



A B C D

Bottom of INSPEKTOR HD® Monitor

A	INSPEKTOR® HD Scope Power Button	When lit blue power is on
B	Waterproof USB type B Port	

C	Waterproof USB Port	USB Thumb drive must be inserted for user to take pictures and record video
D	Borescope Plug	Make sure arrow is facing you plugging in borescope

Mounting Instructions

Mounting the INSPEKTOR® Monitors (product INS9900)

Wall Mount: INS6005

Tabletop Stand: INS6008

Ergo Flex Arm: INS6007

Mobile Cart: INSCRT1000

- ☐ Remove the four screws on the posterior of the INSPEKTOR® HD Monitors
- ☐ Place the Vesa mount on the back and secure it to the INSPEKTOR® HD Monitor with the four screws in their respective screw holes (follow Mounting Instructions).
- ☐ Confirm that all four of the screws are ght
- ☐ Confirm the INSPEKTOR® HD Monitor's power adapter is accessible when it is connected and disconnected.)

INSPEKTOR® HD Environmental Condi on & Power Requirements:

- ☐ Indoor use only
- ☐ Power requirements: 100-240V~, 1.0A, 50/60Hz
- ☐ Maximum altitude up to 2000 m
- ☐ Temperature range 5°C to 40°C
- ☐ Maximum relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 40°C

Warranty

The INSPEKTOR® HD Digital Borescope System is warranted, when new, to be free of defects in material and workmanship and to perform in accordance with the manufacture's specifications when subject to normal use and service for a period of one year from the date of purchase. Thomas Scientific, at its option, will either repair or replace any components found to be defective or at variance from manufacturer's specifications within this time at no cost to the purchaser. It shall be the purchaser's responsibility to return the device directly to Thomas Scientific, after receiving a Returned Material Authorization Number from Thomas Scientific, Customer Service Department. Prior to returning the device, it shall be the purchaser's responsibility to clean and disinfect the device and to package it in a manner that minimizes the possibility of shipping damage. Repair or replacement of the device as provided above shall be the sole and exclusive remedy for any breach of the warranty.

****Opening or servicing of the INSPEKTOR® HD Monitor by anyone other than the manufacturer affects the water-resistant nature of the monitor and will void the warranty. If any component of the Touch needs service, obtain a Return Authorization Number by calling: 7634272907.**

The INSPEKTOR® HD is manufactured to Thomas Scientific, exclusive specifications by:

Myriad Fiber Imaging Tech,
Inc. 56 Southbridge Road
Dudley MA 01571



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Sterrad® and Cidex® are registered trademarks of Advanced Sterilization Products Oxivir® is a registered trademark of Diversey, Inc.

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Sani Cloth® Sani-HyPerCide® is a registered trademark of PDI, Inc.

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