



## CT Digital Borescope Systems

Includes Product#:

INS 7000-10 INSPEKTOR®CT Monitor

INS 7000-11 INSPEKTOR®CT Monitor

INS 7004 INSPEKTOR®CT DUO

INS 8007 INSPEKTOR®CT Digital Borescope

INS 8008 INSPEKTOR®CT Mini Digital Borescope

INS 8009 INSPEKTOR®CT Digital Borescope

INS 2001 INSPEKTOR®CT Digital Borescope Replacement

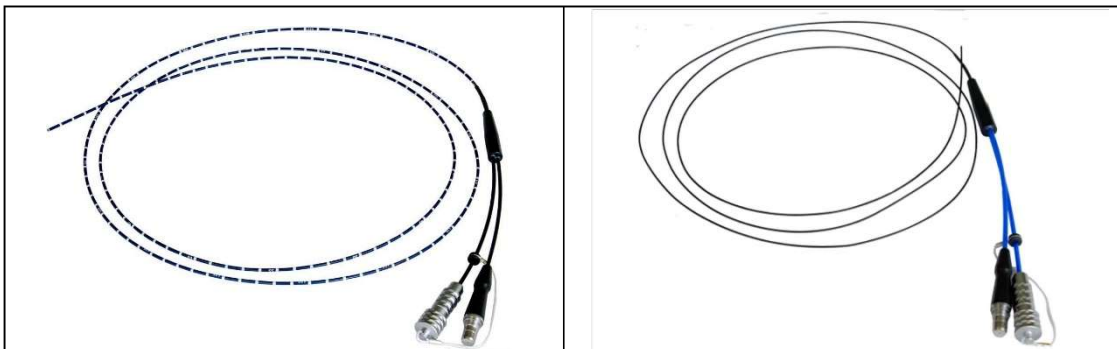
INS 2002 INSPEKTOR®CT Digital Borescope Replacement

INS 2003 INSPEKTOR®CT Digital Borescope Replacement

### INSPEKTOR®CT and CT DUO Monitors



### INSPEKTOR®CT Borescopes



CT 1.9mm

CT 1.2mm

# Owner Manual

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**Instructions for Use - are applicable to both the INSPEKTOR®CT & INSPEKTOR®CT Mini Digital Borescope Systems.**

**Including Models:**

**INS7000, INS7000-10, INS7000-11, INS7001, INS7004.**

### **Intended Use**

The INSPEKTOR®CT 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 channels 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.

### **Contraindications for Use**

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

### **GENERAL WARNINGS**

1. The INSPEKTOR®CT Borescopes are polymer coated flexible devices. Avoid sharp metal edges when either inserting or retracting the INSPEKTOR®CT Borescope.
2. Follow the cleaning, disinfecting, and sterilization 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 emits 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®CT 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 120Q F, as the materials of construction are not designed to operate under these conditions.
13. Marginal INSPEKTOR®CT Borescope light Leaks are common and may exist on new scopes. This does not affect the function of the INSPEKTOR®CT Digital Borescope System.
14. Disinfectants may cloud the monitor screen. Wipe any disinfectant fluid from the screen with a damp soft cloth and water.
15. INSPEKTOR®CT Borescopes should not be exposed to temperatures more than 212 degrees F.
16. If the INSPEKTOR®CT is used in a manner not specified in the instructions for use, the protection provided by the equipment may be impaired.

## Product Description

Both the INSPEKTOR®CT and INSPEKTOR®CT Mini Digital Borescopes are comprised of two components. The INSPEKTOR®CT Monitor houses an LED light source, camera control board and the monitor, in a waterproof compartment. \* The INSPEKTOR® CT Scopes plug into their respective monitors.

Do not plug the INSPEKTOR®CT Mini Borescope (Prod #8008) into the INSPEKTOR®CT Monitor (Prod. #7000-10). The INSPEKTOR®CT Mini Scope (prod. #8008) will only work when plugged into the INSPEKTOR CT DUO Monitor (Prod. INS7004 and INS7005).

\* INSPEKTOR®er Monitor's waterproof status, as defined by the International Electro Technical Commission is IP65 and INSPEKTOR®CT Borescopes are IP67.

**Caution:**

Turn off the INSPEKTOR CT or CT DUO 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®CT or CTC Controller Box in any fluid.

**Inspection of the INSPEKTOR®CT Borescope (Prod.# 8007, 8008, 8009, 2001, 2002 & 2003.)**

It is important to visually inspect INSPEKTOR CT 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® CT Digital Borescope System Cleaning and Disinfection of the INSPEKTOR® CT Monitor (Prod. # 7000-10, INS7000-11, & 7004)**

**Cleaning and Disinfection** -To remove debris, wipe the INSPEKTOR®CT Controller Monitor with a soft, 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®CT Controller Monitor without the INSPEKTOR®CT Borescope connected and the micro-USB protective cover in place.

## Cleaning and Disinfection of the INSPEKTOR®CT Borescope {Prod.# 8007, 8008, 8009, 2001, 2002, 2003}

The INSPEKTOR®CT 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®CT Borescope should be cleaned in the manner described below to prevent cross contamination of instruments or endoscopes with foreign debris or bioburden. **Note: It is recommended that the INSPEKTOR®CT Borescopes should be quickly wiped between each individual instrument inspection with a water moistened fiber-free cloth to remove any adherent foreign debris.**

### Cleaning- Dirty Side

- 1) **Clean and Disinfection** - Begin by cleaning the INSPEKTOR CT Borescope fiber. The INSPEKTOR®CT Borescope may be wiped with a 70% isopropyl alcohol wipe. Follow the manufacturer's cleaning agent's instructions for use. Then, wipe with a water moistened fiber-free cloth. (See Caution below.) Follow this process after each set of instruments is cleaned at the sink.
- 2) **High Level Disinfection (2 ways)**

High level disinfection may be achieved by:

- **submersing the INSPEKTOR® Borescope in a Cidex® OPA solution or like product and then mixed according to the manufacturer's Instructions. (Note: The Connector Cap must be securely snapped into place before submersion.) Rinse and wipe with a fiber free cloth.**
- **Wiping the INSPEKTOR CT Borescope with a hospital approved Tuberculocidal wipe with appropriate contact time, followed by wiping down with a water moistened fiber free cloth.**

Note: High level disinfection should be done weekly, or at a regular

interval, determined by the facility, to prevent microbial growth.

3) **Sterilize** - **Note: Low Temperature Sterilization of the INSPEKTOR® Borescope is not required if high level disinfection is utilized.**

- The INSPEKTOR®CT Borescope may be sterilized once per month. **Compatible Sterilization Methods for the INSPEKTOR®CT {see below}.**

## **Cleaning- Clean Side** (Pack and Prep)

**1) Clean and Disinfection** - Begin by cleaning the INSPEKTOR CT Borescope fiber. The INSPEKTOR®CT Borescope may be wiped with a 70% isopropyl alcohol wipe. Follow the manufacturer's cleaning agent's instructions for use. Then, wipe with a water moistened fiber-free cloth. If the INSPEKTOR® If the Borescope comes in contact with 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 below, to prevent any cross contamination prior to reusing on the clean side. (See below or HD Disinfection)

## **2) High Level Disinfection (2 ways)**

High level disinfection may be achieved by:

- **submersing the INSPEKTOR® Borescope in a Cidex® OPA solution or like product and then mixed according to the manufacturer's Instructions. (Note: The Connector Cap must be securely snapped into place before submersion.)** Rinse and wipe with a fiber free cloth.
- **Wiping the INSPEKTOR CT Borescope with a hospital approved Tuberculocidal wipe with appropriate contact time, followed by wiping down with a water**

moistened fiber free cloth.

Note: High level disinfection should be done weekly, or at a regular interval, determined by the facility, to prevent microbial growth.

**3) Sterilize - Note: Low Temperature Sterilization of the INSPEKTOR® Borescope is not required if high level disinfection is utilized.**

- The INSPEKTOR®CT Borescope may be sterilized once per month. **Compatible Sterilization Methods for the INSPEKTOR®CT (see below).**

**Caution:**

If the INSPEKTOR®CT Borescope is disconnected from the INSPEKTOR®CT Monitor, the INSPEKTOR®CT Borescope protective cap must be placed securely on the proximal electronic end of the connector prior to wiping or submersing the INSPEKTOR®CT Borescope. This is accomplished by lining up the red dots on the connector and the connector cap and pushing until they click together.

**Compatible Sterilization Methods for the INSPEKTOR®CT Borescopes (Prod.# 8007, 8008, 8009, 2001, 2002, 2003)**

**STERIS V-PRO® Low Temperature Sterilization Systems**

- V-PRO® max Low Temperature Sterilization System
- V-PRO® max 2 Low Temperature Sterilization System
- V-Pro® 60 Low Temperature Sterilization System
- V-PRO® s2 Low Temperature Sterilization System

**Table 2: Verify Validated V-PRO® Low Temperature Sterilization Systems/Cycles**

Sterilizer/Cycle	Lumen	Non Lumen	Flexible	Fast Non	Fast
				Lumen	
V-PRO® max					
V-PRO® max 2					
IV-PRO® 60					
IV-PRO® s2	I				

Compatible Cycle



\* Materials Test Sterilizer/Cycle

### STERRAD® non-lumen cycles

- 100S,
- S0
- 200
- NX, and 100NX systems.

Follow instructions provided with STERRAD® equipment for sterilization processing.

**Sterilize** - The INSPEKTOR®CT Borescope may be sterilized once per month but is not required if HD disinfection is being utilized.

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

## INSPEKTOR®CT System Set Up

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



A B C D E

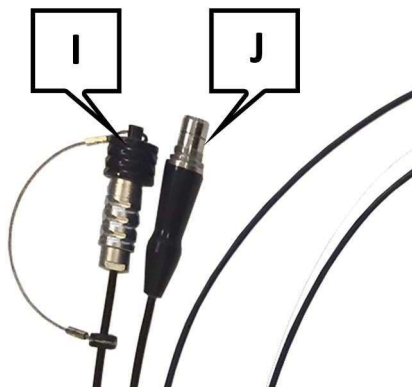
Bottom of INSPEKTOR CT Monitor

A	INSPEKTOR™CT Scope illumination port	To connect INSPEKTOR®CT light cable.
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B	INSPEKTOR®CT Scope Camera port	Remove the protective cap from the INSPEKTOR®CT Scope camera connection. Line up the red dots and securely push the connector into this port.
C	Flex Arm connection port	Socket to screw optional Flex Arm distal end into this hole.
D	USB micro-B port	For use when exporting images or video to a computer. Keep protective cap on when not in use to maintain waterproof integrity.
E	Electrical Connector	Connect to any 120V and 60Hz AC outlet. If using around a wet field, the INSPEKTOR®CT Monitor must be connected to a Ground Fault Interrupter (GFI) electrical outlet.



Power Button on side of monitor.



	INSPEKTOR®CT Scope Camera Connector	To connect with the INSPEKTOR®CT Monitor, remove the cap and line up the red dots and insert into INSPEKTOR®CT Camera Port <b>(F)</b>
J	INSPEKTOR®CT Scope Illumination Connector	To connect with the INSPEKTOR®CT Monitor, insert into INSPEKTOR®CT Scope illumination Port <b>(G)</b> . Do not twist the connector when receiving or removing

## Mounting Instructions

Mounting the INSPEKTOR® Monitors (product 7000-10, 7000-11, & 7004) onto the Wall Mount (product INS6005):

- ▶ Remove the four screws on the posterior of the INSPEKTOR®CT Monitors
- ▶ Place the Wall Mount on the back and secure it to the INSPEKTOR®CT Monitor with the four screws in their respective screw holes (follow the Wall Mount Instructions).
- ▶ Confirm that all four of the screws are tight
- ▶ Confirm the INSPEKTOR®CT Monitor's power adapter is accessible when it is connected and disconnected.)

Mounting the INSPEKTOR® Boxes (product 7000-10, INS7000-11, & 7004) onto the Flex Arm (product INS6006)

- ▶ If unassembled, screw together flex arm base to flex arm.
- ▶ Screw the threaded end of the Flex Arm into the Connection Port located on the bottom of the INSPEKTOR®CT Monitor.
- ▶ Confirm that the Flex Arm is screwed in tight prior to mounting the Flex Arm to any surface per the Flex Arm instructions for use.
- ▶ Confirm the INSPEKTOR®CT Monitor power adapter is accessible when it is connected and disconnected.

## Software Installation

To capture images or videos, install the software with the following instructions:

Go to: [www.inspektor.com](http://www.inspektor.com)

- ▶ Open INSPEKTOR® Specifications
- ▶ Open Download INSPEKTOR Software
- ▶ Open Compressed (zipped) Folder
- ▶ Open INSPEKTOR Software
- ▶ Open LYD Viewer Ver 1.0.2.0
- ▶ Open setup.exe
- ▶ Follow the Wizard
- ▶ Return to INSPEKTOR® Software
- ▶ Open FIFB-160K-0I\_x64
- ▶ Open FIFB-160K\_0I) Driver\_x64.msi
- ▶ Follow the Wizard to install

## INSPEKTOR®CT Environmental Condition & 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®CT 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. NCI Inc. 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 NCI,

Inc. after receiving a Returned Material Authorization Number from NCI, Inc. 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 CT 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 CT needs service, obtain a Return Authorization Number by calling: 763-427-2907.**

The INSPEKTOR®CT is manufactured to NCI, Inc's.  
exclusive specifications by:

Myriad Fiber Imaging Tech,  
Inc. 56 Southbridge Road  
Dudley MA 0151

NCI, a LLC of Thomas Scientific  
7125 Northland Terrace N  
Suite 100  
Brooklyn Park, MN 55428

INSPEKTOR®- is a registered trademark of NCI, Inc.

VPRO®- is a registered trademark of Steris pie

Sterrad®and Cidex™- are registered trademarks of Advanced Sterilization Products

