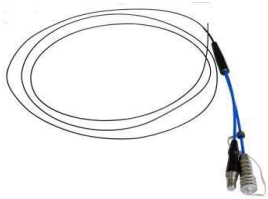
CTC Digital Borescope System

Includes:

INS7005 INSPEKTOR® CTC Controller Box
INS8007 INSPEKTOR® CT Standard 1.9mm x 1.8-meter Borescope
INS8008 INSPEKTOR® CT Mini 1.2mm x 1.0-meter Borescope
INS8009 INSPEKTOR® CT Borescope 1.9mm x 1.0-meter Borescope
INS2001 INSPEKTOR® CT Digital Borescope 1.9mm x 1.8-meter Replacement
INS2002 INSPEKTOR® CT Digital Borescope 1.2mm x 1.0-meter Replacement
INS2003 INSPEKTOR® CT Digital Borescope 1.9mm x 1.0-meter Replacement

INSPEKTOR® CTC Flexible Borescope System

	
INSPEKTOR® CTC Controller (INS7005)	INSPEKTOR® CT Borescope (Prod. #8007) 1.9 mm x 1.8 meters

INSPEKTOR® CT Mini Borescope (Prod. # 8008) 1.2 mm x 1.0 meter	INSPEKTOR® CT Borescope (Prod. #8009) 1.9 mm x 1.0 meter

Owner Manual

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The following instructions for use are applicable to the INSPEKTOR® CTC DUO Flexible Borescope Systems.
Including Models: INS7002, INS7003 and INS7005

Intended Use

The INSPEKTOR® CTC 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.

Contraindications for Use

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

GENERAL WARNINGS

1. The INSPEKTOR® Borescopes are polymer coated flexible devices. Avoid sharp metal edges when either inserting or retracting theINSPEKTOR® CTC 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 manualbefore using the INSPEKTOR® Borescope.
6. The INSPEKTOR® Borescope 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 surface of the INSPEKTOR® Borescope to assure it is 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. Over bending may cause damage to the device and render the INSPEKTOR® 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 scope 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® CTC Controller Box in excessively high temperatures above 120º 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 even be noticeable on new scopes. This does not affect the function of the INSPEKTOR® CTC Digital Borescope System.
14. Do not submerse the CTC Controller Box in any fluid.
15. INSPEKTOR® CT Borescopes should not be exposed to temperatures in excess of 212 degrees F.
16. If the INSPEKTOR® CTC 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® CTC DUO Controller and INSPEKTOR® CT Digital Borescopes are comprised of two components. The INSPEKTOR® CTC DUO Controller houses an LED light source and camera control board in a waterproof (IP65) compartment. The INSPEKTOR® CT Borescopes plug into the CTC DUO Controller individually.

The INSPEKTOR® CTC Systems are 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 processing technicians to determine whether their surgical equipment is visually free from foreign matter.

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

Caution:
Turn off the INSPEKTOR CTC 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 submerse the INSPEKTOR® CTC Box in any fluid.

Inspection of the INSPEKTOR® CT Borescope (Prod. # 8007, 8008 & 8009 or 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 Instructions

Cleaning and Disinfection of the INSPEKTOR® CTC Controller Box (Prod. # 7005)

Cleaning and Disinfection – To remove debris, wipe the INSPEKTOR® CTC Controller Box with a soft, nonabrasive cloth using a hospital approved cleaning agent such as alcohol (70% Isopropyl). Allow proper contact time.

Caution:
Do not wipe down the INSPEKTOR® CTC Controller Box without the INSPEKTOR® CT Borescope connected and the 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 for end of day cleaning (2 ways)**

   High level disinfection may be achieved by:

   - submersing the INSPEKTOR® Borescope in a Cidex® OPA or like solution 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. (See Caution below.) 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 for end of day cleaning (2 ways)**

   High level disinfection may be achieved by:
   - submersing the INSPEKTOR® Borescope in a Cidex® OPA or like solution 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

- 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.

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

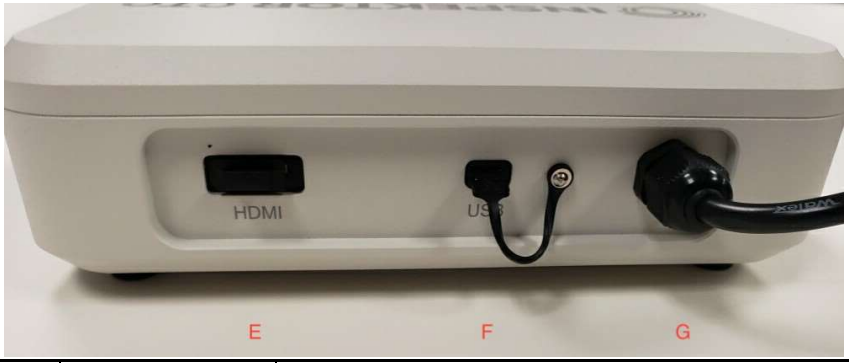
WARNING: Do not reprocess the INSPEKTOR® CT Borescope using steam sterilization, autoclave, or dry heat. Do not place the INSPEKTOR CT Borescope into an automatic washer disinfector. Use of these processes will result in damage to the instrument and void its warranty.

INSPEKTOR® CTC System Set Up

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

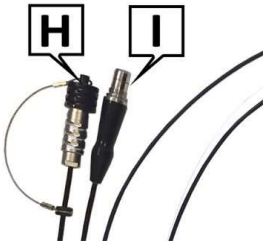
A **B** **C**

A	Camera On/Off Button	Push the button to turn the Camera on or off.
B	Scope Illumination 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	Scope Camera Port	Push the INSPEKTOR® CT Scope illumination connection into this port.



E	HDMI Connection	Remove protective cap, connect supplied HDMI cable to a monitor with an HDMI input.

F	USB micro-B 1.2m port	Allows connection to a computer to capture video and photos if needed. When not in use, always have the USB protective cap installed.
G	Electrical Power Connection	Connect to any 120V and 60Hz AC outlet. If using around a wet field; the INSPEKTOR® CTC Box must be connected to a Ground Fault Interrupter (GFI) electrical outlet.
H	INSPEKTOR® CT Scope Camera Connector with Cap on.	To connect with the INSPEKTOR® CTC Controller Box, remove the cap and line up the red dots and insert into INSPEKTOR® CT Camera Port (C)
I	INSPEKTOR® CT Scope Illumination Connector	To connect with the INSPEKTOR® CTC Controller Box, insert into INSPEKTOR® CT Scope illumination Port (B). Do not twist the connector when inserting or removing.



Mounting Instructions

Mounting the INSPEKTOR® Monitor (product 7005) onto the Wall Mount (product 6005):

- Remove the four screws on the posterior of the INSPEKTOR® CTC Box
- Place the Wall Mount on the back and secure it to the INSPEKTOR® CTC Box 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® CTC Box's power adapter is accessible when it is connected and disconnected.

Mounting the INSPEKTOR® Boxes (product 7005) onto the Flex Arm (product #6006)

- 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® CTC Box.
- 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® CTC Box 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

- Open INSPEKTOR® Specifications
- Open Download INSPEKTOR Software
- Open Compressed (zipped) Folder
- Open INSPEKTOR Software
- Open LYD Viewer Ver 1.0.2.0 or later
- Open setup.exe
- Follow the Wizard

- Return to INSPEKTOR® Software
- Open FIFB-160K-01_x64
- Open FIFB-160K_01) Driver_x64.msi
- Follow the Wizard to install

INSPEKTOR® CTC 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 INSPECTOR CTC 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 CTC needs service, obtain a Return Authorization Number by calling: 763-427-2907.

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

Myriad Fiber Imaging Tech,

Inc. 56 Southbridge Road

Dudley MA 01571

VPRO®- is a registered trademark of Steris plc
Sterrad® and Cidex®- are registered trademarks of Advanced Sterilization Products

NCI, an LLC of Thomas Scientific

7125 Northland Terrace N

Suite 100

Brooklyn Park, MN 55428

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