

OPERATION MANUAL

MODEL 174702

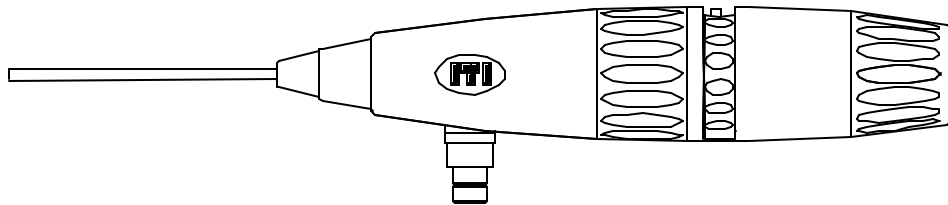
MODEL 174704

MODEL 174706

MODEL 174708

MODEL 174712

**NON-CONDUCTIVE
SEMI-FLEXIBLE FIBERSCOPES**



ITI | INSTRUMENT
TECHNOLOGY, INC.

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INTRODUCTION

Thank you for selecting Instrument Technology, Inc. (ITI) to fulfill your remote viewing needs.

Since 1967, ITI has been the Leader in Remote Viewing. The only company of its type doing all its manufacturing in the United States, ITI consistently provides cutting edge technology to customers world-wide.

ITI specializes in the design, development and manufacture of Remote Viewing Instruments (RVI) and systems including Borescopes, Fiberscopes and Videoscopes.

ITI offers over 2,000 standard products as well as products custom designed for unique applications. No matter which ITI product is used, our customers find they are able to observe hostile and difficult to reach environments never dreamed possible before. Though ITI products can solve many remote viewing problems, it is always best to select the proper instrument for any given application. Only then can success be assured.

Your satisfaction is guaranteed with all products purchased from Instrument Technology, Inc. Feel free to contact ITI or your local ITI Representative with any questions.

WARRANTY

Instrument Technology, Inc. warrants that the equipment is fit for the purposes described herein for a period of one year after the date of shipment when used in accordance with the directions for use, and agrees to repair or replace any such defective component part at no cost to the customer.

There are no other express or implied warranties. ITI's sole obligation and purchaser's exclusive remedy for breach of any warranty shall be limited to repair or replacement of the product at the option of ITI. This warranty does not cover, and ITI will not be liable for any resulting direct, proximate, incidental or consequential damages. This warranty does not apply if the product has been subject to misuse, negligence, accident or improper application, nor shall ITI be responsible for work done or repairs made by others.

PRODUCT SPECIFICATIONS

| <u>FEATURE</u> | <u>174702</u> | <u>174704</u> | <u>174706</u> | <u>174708</u> | <u>174712</u> |
|-----------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Probe Diameter | 2mm (0.08") | 4mm (0.16") | 6mm (0.25") | 8mm (0.33") | 12mm (0.47") |
| Working Length | 0.5M (19") 1M (39") | 0.5M (19") 1M (39") | 0.5M (19") 1M (39") | 0.5M (19") 1M (39") | 0.5M (19") 1M (39") |
| Line of Sight | Forward (0°) | Forward (0°) | Forward (0°) | Forward (0°) | Forward (0°) |
| Field of View | 20° - 45° - 60° | 20° - 60° - 80° | 20°-40°-60°- 100° | 20°-40°-60°- 100° | 20°-40°-60°- 100° |
| Min Bend Radius | 4" | 8" | 8" | 8" | 8" |

Kit includes:

*Nonconductive Semi-Flexible Fiberscope
Model 125060 AC/DC Light Source, AC Power Supply & DC Battery, 115VAC Charger
Model 125500/6 Fiber-optic 6' Light Guide
Model 126500 Eyeguard
P/N 408-078 Spare Lamp*

OPERATING INSTRUCTIONS

OVERVIEW OF APPLICATION

Nonconductive Semi-Flexible Fiberscopes for Bomb Inspection and Contraband Search. Designed with nonconductive probe jackets specifically to promote safety in EOD investigations, these tiny flexible scopes deliver clear, bright images from spaces nothing else could reach.

These instruments are also very effective for covert surveillance applications.

OPTIONAL LIGHT SOURCE EQUIPMENT

For applications that require more light than the Light Source can provide, ITI offers a full range of Light Source equipment:

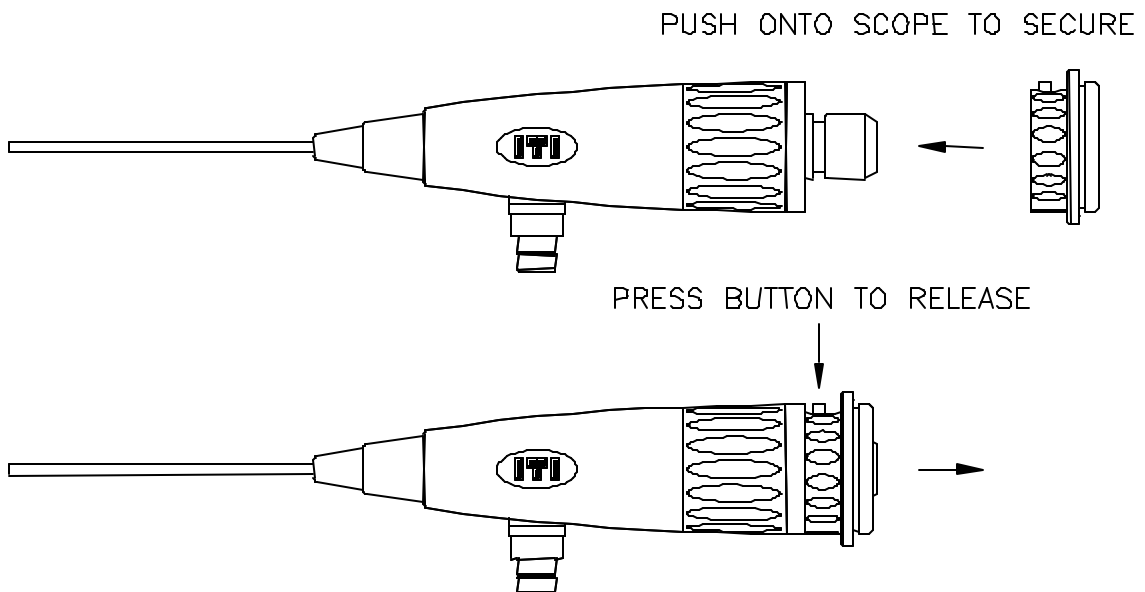
| <u>ITI Model No</u> | <u>Description</u> |
|---------------------|--------------------------------------|
| 125010 | Standard 150W Light Source |
| 125030 | Hi Intensity Xenon 300W Light Source |
| 125510/6 | Liquid Light Guide, 6 Ft |

QUICK DISCONNECT VIEWING MODE ADAPTERS

Several Viewing Mode Adapters are available for ITI's Semi-Flexible Fiberscopes - all have the quick disconnect mechanism for easy interchange. All adapters attach and detach in the same manner.

To attach any Viewing Mode Adapter to the Fiberscope, simply push it onto the bare back end of the scope. The spring loaded lock will automatically engage. The adapter is free to rotate, to allow for proper image orientation.

To remove any Viewing Mode Adapter from the Fiberscope, press down on the adapter's release button and slide the adapter off the scope.



CAMERA CONNECTION

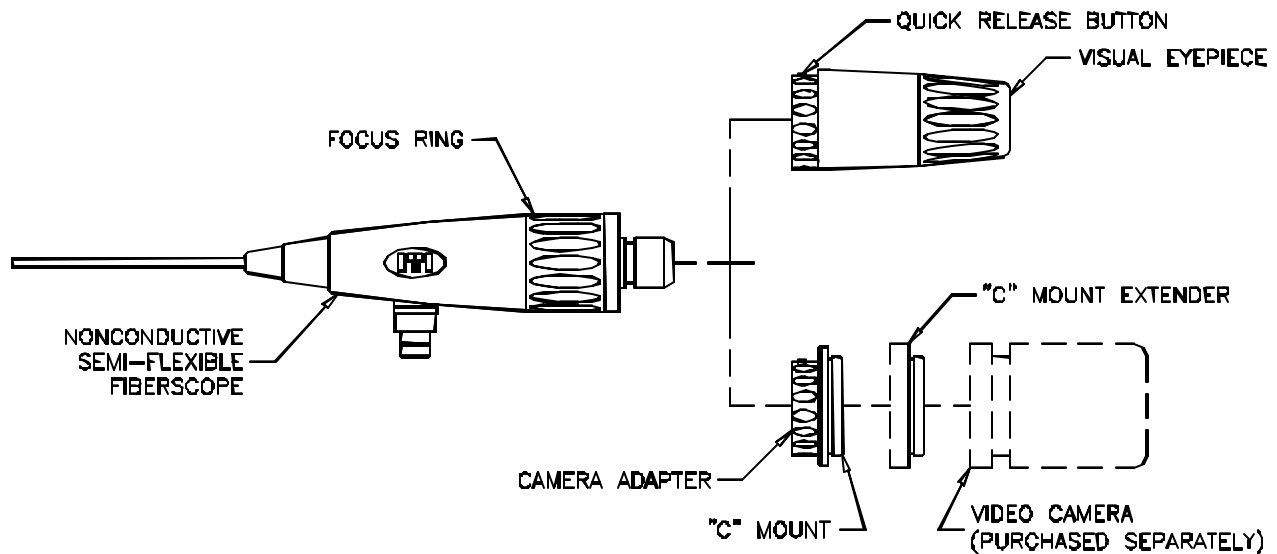
A standard "C" Mount Adapter is supplied with the Fiberscope. For use with 1/3" CCD cameras, use the "C" mount extender supplied with the camera. Screw camera onto the "C" mount or "C" mount extender until it bottoms out.

ITI recommends a 1/3" format CCD for use with this Fiberscope. A 1/2" format CCD can also be used, although the monitor image will be quite small.

To obtain an upright image on the monitor, hold Fiberscope stationary and rotate "C" Mount Adapter and camera together.

VISUAL EYEPIECE

The Visual Eyepiece attaches directly onto the backend of the Fiberscope.



INSERT FIBERSCOPE

Carefully guide Fiberscope through suitable opening into cavity to be inspected. **DO NOT FORCE FIBERSCOPE!** The recommended minimum bending radius for ITI Semi-Flexible Fiberscopes is noted in the product specifications table, located in the front of this manual. Forcing a Fiberscope to bend tighter may cause breakage of image fibers.

FOCUSING

Start with Fiberscope out of focus. Rotate Focus Ring so that focus is achieved and continue past clear focus. Rotate Focus Ring in opposite direction to re-establish clear focus. To obtain better object focus, the fiberscope tip can be brought closer or retracted further from the object being viewed.

INSTRUMENT CARE

CLEANING AFTER USE

Wipe instrument after use with a soft, clean cloth. If instrument is soiled, use a non-abrasive, neutral detergent on a damp cloth to clean it. Always store the instrument in a protective case.

NOTE: DO NOT IMMERGE INSTRUMENT IN LIQUID.

CLEANING OF OPTICS

Should cleaning of external surfaces be necessary, blow off dust with a triple-filtered, high pressure optical quality dusting spray. Wipe surface with a clean cotton swab moistened with laboratory grade alcohol. Excess alcohol can be blown away with the spray.

ITI Model 126110 RVI Cleaning Kit may be used.

PRECAUTIONS

Do not use beyond recommended temperatures:

Maximum 150° F (65° C)
Minimum 32° F (0° C)

Do not bend fiberscopes beyond their minimum bend radius - see product specifications table.

REPAIR POLICY

If your equipment requires factory attention, contact ITI's Customer Service Dept. at (413) 562-3606 for a Return Authorization Number. Please be prepared to furnish your model and serial numbers. Return the equipment to ITI, freight prepaid.

Ship to:

Instrument Technology, Inc.
33 Airport Road
Westfield, MA 01085-1357

Please note Return Authorization Number on Purchase Orders, and all shipping documents.

Upon receipt of your equipment, ITI will assess its condition to determine if repairs are needed. If repairs are required, we will quote repair costs and a schedule for repairs. Your options at this point are:

1) **Accept Repair**

To proceed with the repair, ITI will require a purchase order for the full quoted repair price.

2) **Decline Repair - Upgrade to a New Instrument**

Choosing this option requires a purchase order for the new equipment at its quoted price. ITI will ship out the next available unit.

3) **Decline Repair**

Please Note - Most repair evaluations require a partial or complete disassembly of the equipment. **Once disassembled, it is impossible to return it to the customer in "as received" condition.** At the customer's option, ITI will either return your equipment in its disassembled state, or dispose of it.