OPERATION MANUAL

UV VIDEOSCOPE SYSTEM
Model 128306

TABLE OF CONTENTS

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.

⚠ WARNING: Read this manual completely.

SAFETY INFORMATION DEFINITIONS

- ⚠**DANGER:** Indicate[s] a hazardous situation which, if not avoided, will result in death or serious injury. The signal word "DANGER" is to be limited to the most extreme situations. DANGER [signs] should not be used for property damage hazards unless personal injury risk appropriate to these levels is also involved.

- ⚠**WARNING:** Indicate[s] a hazardous situation which, if not avoided, could result in death or serious injury. WARNING [signs] should not be used for property damage hazards unless personal injury risk appropriate to this level is also involved.

- ⚠**CAUTION:** Indicate[s] a hazardous situation which, if not avoided, could result in minor or moderate injury.

  CAUTION: [Signs] without a safety alert symbol may be used to alert against unsafe practices that can result in property damage only.

- **NOTICE:** [this header is] preferred to address practices not related to personal injury. The safety alert symbol shall not be used with this signal word. As an alternative to "NOTICE" the word "CAUTION" without the safety alert symbol may be used to indicate a message not related to personal injury.

1.0   IMPORTANT SAFEGUARDS AND OPERATING RECOMMENDATIONS

⚠**DANGER:** **This product emits ionizing ultraviolet radiation in the UVA range, peak at 365nm wavelength, which will injure eyes, skin, and tissue. Prevent all exposure with adequate radiation blocking eyewear and clothing to prevent injury.**

⚠**DANGER:** **UV radiation is not visible and cannot be detected by the human eye. Always assume the dangerous UV radiation is emitting from the UV LED whenever the main power switch is in the ON position. Never look at light emitting from a light source.**

⚠**DANGER:** **Do not allow instrument to contact live or exposed wiring. It is an excellent conductor.**

⚠**WARNING:** **Do not immerse instrument in liquid. Electrical components could cause shock.**

⚠**WARNING:** **Light sources emit light energy capable of heating and igniting combustible materials. Keep combustible and unapproved materials away from light source output opening.**

CAUTION: **The UV Videoscope is a delicate instrument with fragile glass parts, handle and operate accordingly. Only trained operators should handle this equipment. Do not apply unnecessary stress. A sudden shock or fall is likely to damage your instrument.**

CAUTION: **Do not use beyond recommended temperatures: operation range is 32°F (0°C) to 114°F(45°C); storage range is 0°F (-18°C) to 150°F (65°C)**

NOTICE: **Do not immerse the control box into any liquids.**

CAUTION: **It is important the user reads this entire operation manual prior to handling, using, or maintaining this product. Failure to do so may contribute to personal injury or property damage.**

2.0   PRODUCT OVERVIEW

The **UV Videoscope System** was created for Fluorescent Penetrant Inspection (FPI) and Magnetic Particle Inspection (MPI) at standard 365nm wavelength.

The system is designed to be used with an ITI UV Videoscopes, which are long, small diameter, flexible tubes containing a high resolution color camera chip with lenses at the distal tip. The chip camera carries video signals by wires that terminate in a multi-pin connection incorporated into the Videoscope end connector.

The flexible tube also contains:

1) 4-way articulation wires enabling distal tip movement.
2) Wires for powering the illumination UV LED and White Light LED.

Videoscopes are normally used to view or inspect into inaccessible or hazardous environments when only limited access is available. The articulation control enables the operator to move the tip around for general observation and/or inspection.

The Videoscope is connected to the Control Box, which controls the system main power, UV and White Light illumination selection, light output level, and controls to operate the Videoscope camera. The Control Box is connected to a tablet or laptop by its USB output cord. The tablet is required to display the video output. Required viewing and capturing software is available for download from www.scopes.com; software is preloaded on tablet or laptop purchased with this system.

FIG. 1: UV VIDEOSCOPE SYSTEM OVERVIEW

FEATURES

The viewing tip of the scope features a passively convection cooled configuration which holds the optics surrounded with UV and White Light LED.
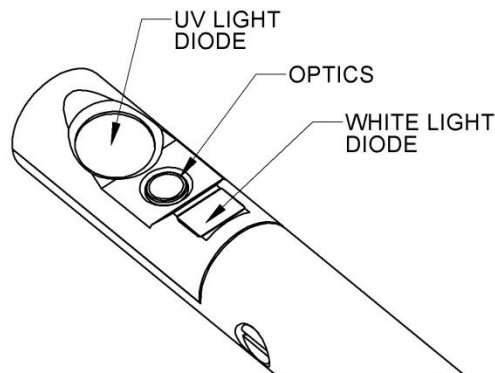
FIG 2: VIEWING TIP FEATURES

The Control Box acts as the system's primary connection hub, all peripheral components connect to it. The box controls the mains power. The UV and White Light LED have output driver circuits which are user controlled via separate potentiometer knobs. Operation is simple and intuitive once the system is connected.

FIG 3: CONTROL BOX

ITI UV Videoscope Inspection Kit includes:

- (1) ITI Model 128306 Ø6mm UV Videoscope
- (1) Control Box, P/N 123009
- (1) DC Power Supply, P/N 550-075
- (1) Protective Carrying Case & Foam
- (1) Operation Manual

Optional Items:
- (1) Laptop, PN 710-027

3.0   SYSTEM SETUP

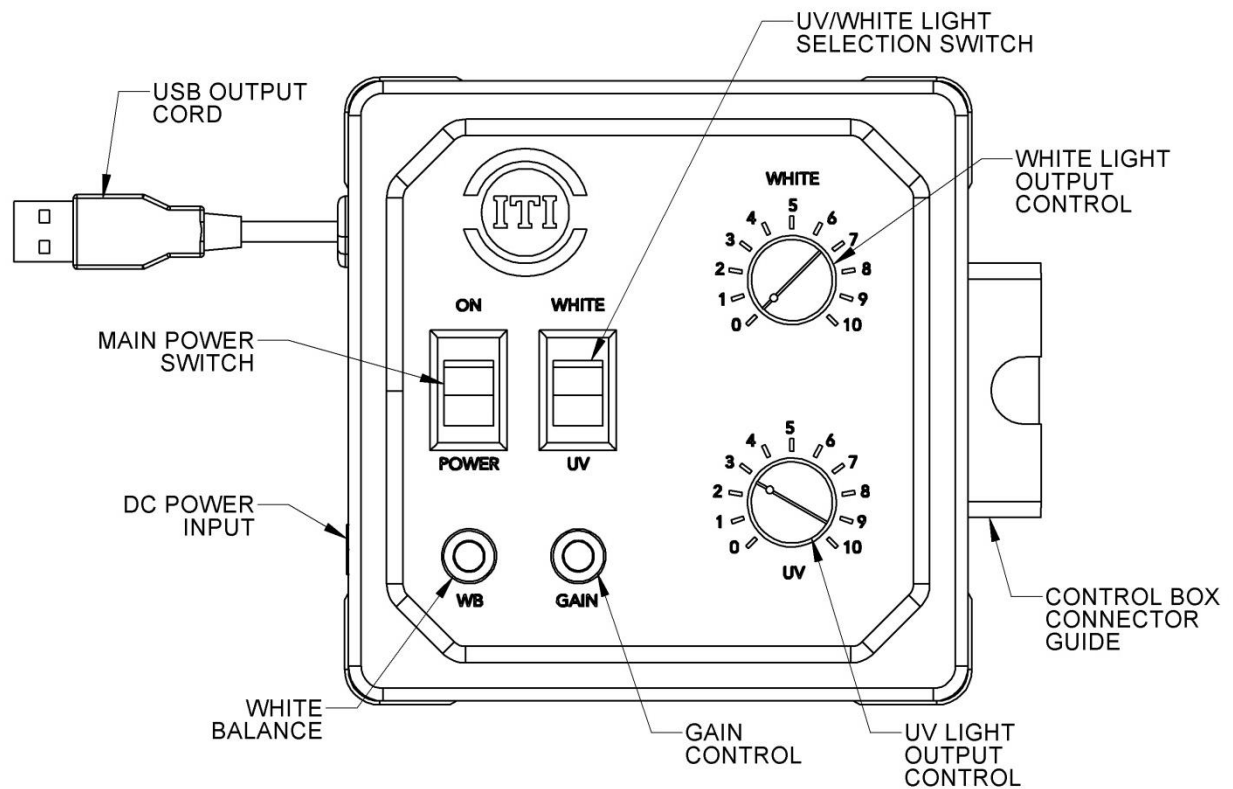**CAUTION:** Never attach or remove the Videoscope portion of the system from the control box when powered (ON) as the camera system will be damaged. The system must always be shut off, and preferably removed from main power connection, prior to setup or disassembly.

The lightweight **UV Videoscope System** is quick to set up.

1. Connect the Videoscope End Connector to the Control Box connector located on the side panel of the Control Box, as shown in Fig. 4.
2. Connect the control box USB output cord to the tablet.
3. Configure the tablet with the correct camera driver (refer to the Computer and Software section of this operation manual for instructions).

   NOTE: Software is preloaded on tablet or laptop purchased with this system.

4. Connect the equipment end of the power supply to the DC power input located on the side panel opposite to the Videoscope connector panel. Next, plug the supply end of the cord into the proper voltage supply. The assembly is set and ready for operation. See Control Box, Computer and Software, and Operating Instructions sections for operation instructions.

   NOTE: The supplied power supply is of a switching universal type (90-264 VAC).
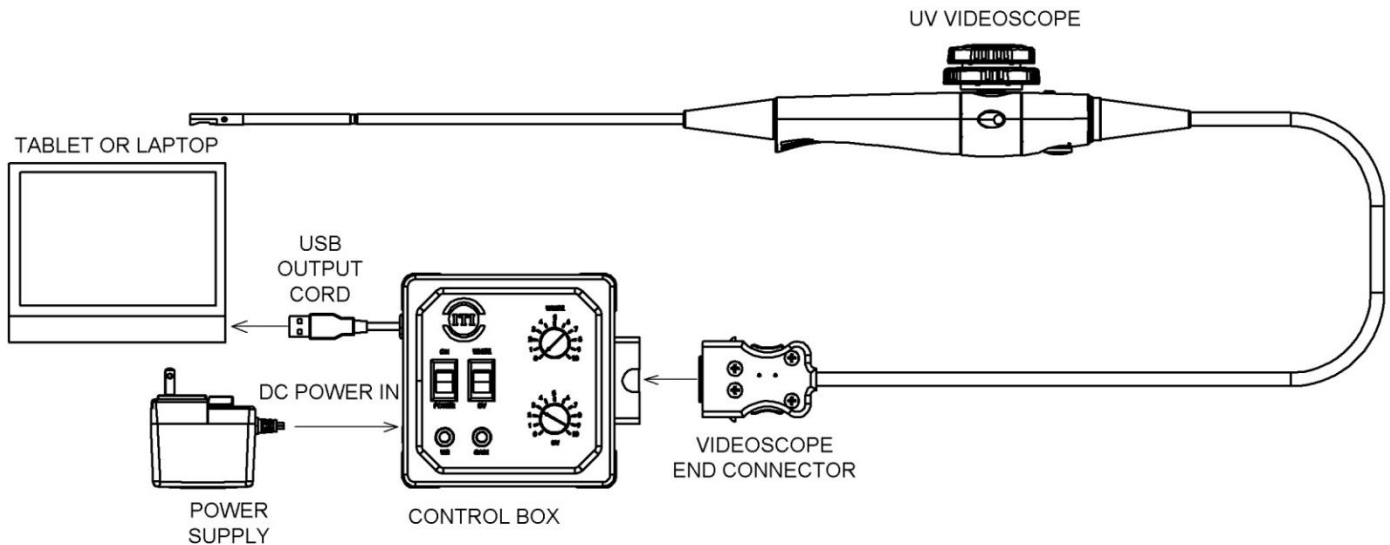

FIG 4: SYSTEM SETUP

4.0   VIDEOSCOPE

4.1 ARTICULATION

The Videoscope has four-way articulation (up, down, left and right) knobs on the handpiece control articulation (see Fig. 5). Rotate one knob to articulate up/down, and rotate the second knob to articulate left/right.

The Videoscope articulation system is considered at its "neutral position" when the distal end is lying in line with the working length. When neutral, the neutral dots on the Articulation Knobs should be in line with each other and the white neutral indicator line on the rear body housing. **The scope should always be returned to this position prior to withdrawal from area being viewed.**

CAUTION: Do not attempt to articulate Videoscope in the coiled state, catastrophic failure to the articulation system will occur from added stresses placed on the system. The working length of the instrument should be in the elongated state at-all-times when articulating the instrument.
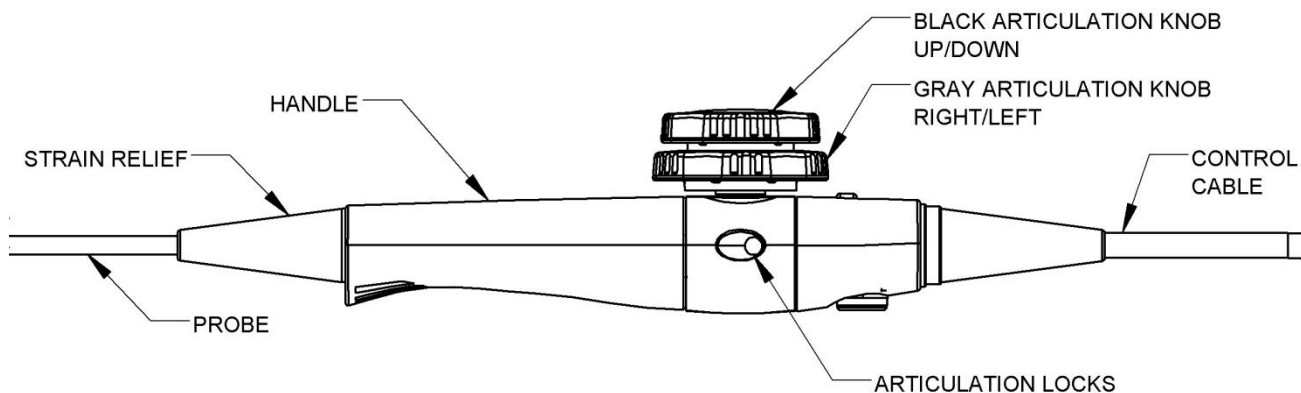

FIG. 5: VIDEOSCOPE HANDLE FEATURES

4.2 ARTICULATION LOCKS

Once an object has been acquired in the field of view, line of sight may be maintained by using articulation locks. Locks are oval rocking levers located to the side of knobs. Each knob has its own color-coded lock to switch on or off.

When "ON", the ratchet style locking system engages, while the "OFF" position allows Videoscope to articulate freely. The ratchet system holds the line of sight. It can also be overpowered by turning the knob to the next locking position. The operator will hear an audible click as the knob is advanced from position to position. This is the ratchet mechanism at work.

4.3 FOCUS

The objective lens in the Videoscope is fixed and cannot be adjusted. For the best image, move the end of the probe to the proper distance from the object to be viewed.

4.4 PROBE

The flexible tube is composed of an internal coil for crush resistance, braided wall reinforcement for torsional strength, and a plastic external layer as a flexible and environmental resistance seal. A tungsten metal exterior braid is also employed for durability in sharp edged and abrasive environments.

4.5 PICTURE QUALITY

Adjust light output to accommodate inspection area. Highly reflective surfaces require minimal illumination.

4.6 VIDEOSCOPE END CONNECTOR

The Videoscope control cable terminates with the end connector. Just slide the Videoscope end connector into the Control Box Connector Guide by pressing the two side latches.
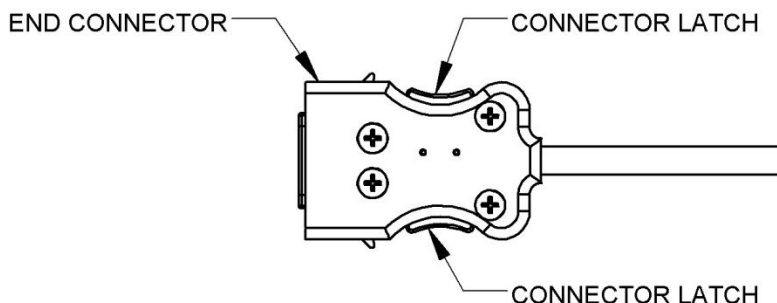
NOTICE: Pressing the two latches found on the Videoscope switchable connector disconnects the power to the CCU. This acts as a safety feature to protect the camera in case of accidentally unplugging the connector from the control box while the main power is ON. If the latches are pressed while the Videoscope is ON then no video image is displayed. If the latches are released then a corrupt video image is displayed. Power cycle the control box to return to normal operation.

5.0 CONTROL BOX

The Control Box manages the overall operation of the video system. It contains the controls to operate the Videoscope's camera, as well as the illumination selection and light output level controls for the UV and White Light (see Fig. 3)

CAMERA ADJUSTMENT CONTROLS

WB (White Balance) – The camera needs a color reference to accurately display all other colors; white is typically the reference color used.

To set the WB do the following:
- Point the distal tip camera toward a white piece of paper illuminated with the same light to be used for viewing
- Hold this position throughout this process, then push and hold the WB button for a second until the camera adjusts. Releasing the button will hold this setting.

Upon powering down, the white balance will return to its default.

Gain Control - Gain is a digital camera setting that controls the amplification of the signal from the camera sensor.

Press the gain control switch to toggle the automatic gain (AGC) between the AGC max High and AGC max Low.

6.0   COMPUTER AND SOFTWARE

6.1 COMPUTER

All required software is provided either pre-loaded when the computer is purchased with this system or is available for download from the company's website: **www.scopes.com** (under Help Center select Software Downloads and 6mm UV Videoscope).

- AMCAP
- FrameGrab (should include one .dll file and one .ini file to operate FrameGrab)
- Driver for camera

Once properly setup, the computer's desktop will show three items to maintain and operate this system:
1. Folder containing a copy of this manual, viewing software, video clip software, and driver for the camera
2. Shortcut to viewing and video clip software (amcap.exe)
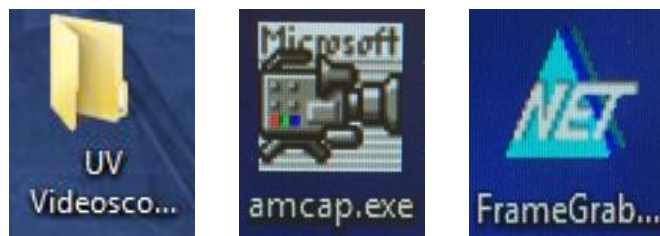3. Shortcut to frame grabber

FIG. 6: DESKTOP SOFTWARE SHORTCUTS

If the software files were downloaded from the website, install as follows:

1. The Driver must be installed on computer first.
    a. Open folder named "UV Videoscope"; should be downloaded and saved to desktop.
    b. Open "Camera Driver" folder
    c. Open "Install_NTSC" folder, NTSC is the video standard of the scope's camera; do not use "PAL" for this product.
    d. Open "X32" for single core processor computer or "X64" for dual core processor computers.
    e. Double click "Setup_NTSC_3.0.1.5.exe" to begin installation of Driver, and then select RUN.
    f. Select NEXT in the Setup Wizard window
    g. The next step is to choose the file location, select BROWSE and choose "Program Files" as the destination folder. (DO NOT select "Program Files (X86)" folder.)
    h. Select NEXT in all subsequent windows and then INSTALL to finish driver installation process.
2. Setup the system according to section 3 of this operating manual.
3. Power up the system and wait for new hardware to be recognized.
4. To verify that the driver has been correctly installed, follow these steps.
    a. Open computer's Device Manager by going into Control Panel and selecting Device Manager to open and view the installed device tree.
    b. In the device tree locate the "Imaging Device" branch and click to expand and view all installed imaging devices. The UV Videoscope should be listed as "NET 2860" device. If the device is not found in "Imaging Device" branch, it is likely to be incorrectly located in the "Sound, Video, and Gaming Controller" branch; and named "USB 2860 Device." NOTICE: if incorrectly located the device installation must be corrected by following these steps.
        i. Right Click on "USB 2860 Device" and select UPDATE DRIVER SOFTWARE.
        ii. Select BROWSE MY COMPUTER
        iii. Select LET ME PICK FROM A LIST OF DEVICE DRIVERS ON MY COMPUTER.
        iv. Select HAVE DISK

v. Select BROWSE and locate the "<u>NET_2860.inf</u>" file from the folder (x32 or x64). Select file "<u>NET_2860.inf</u>" and click to open (install) file.

vi. Select OK in the Install from Disk window

vii. Select "*NET-2860 Device"* in the Device Manager window and select NEXT.

viii. Select INSTALL the device driver

ix. The UV Scope should now be found in "Imaging Device" branch of device tree as "NET 2860 Device."

5. Make a shortcut on the computer desktop to file named "amcap.exe"

6. Execute the "<u>amcap.exe</u>" file to view the UV Videoscope camera output on the computer. If the image is not displayed, select "Preview" from "Options" on the menu bar.

Computer system minimum requirements to operate the camera and software are:

- PC System with 2.0 GHz. 256 MB RAM
- Windows XP SP2 Minimum
- Onboard Graphic Chip
- DirectX 9.0
- USB 2.0 interface

6.2 VIEWING AND RECORDING SOFTWARE

The AMCAP software is the primary viewer for live video. It should be started up prior to using FrameGrab shown in next section.

Table 1 below explains each menu command. The computer should recognize the UV Videoscope as attached hardware when connected. Then the program can be initiated. When open, the camera image should be displayed in the software window as shown in Fig. 7.

 NOTICE: The image preview should be enabled upon start up because it is a default condition. If the image is not present, select Preview from the menu options.

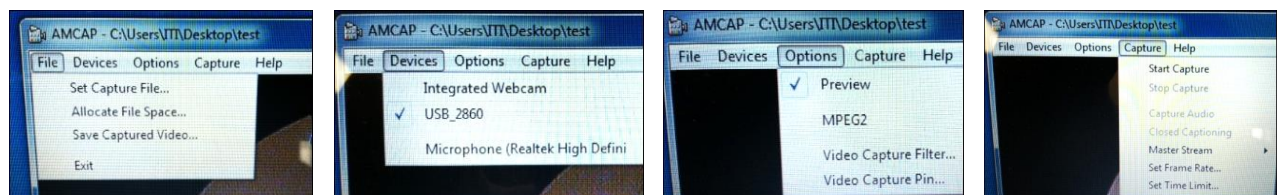### FIG. 7: AMPCAP WINDOW WITH PREVIEW IMAGE (MENUS BELOW)

TABLE 1, AMCAP MENU LIST

Menu		Function
File	Set Capture File	Set the filename of captured video; THE FILENAME MUST INCLUDE THE .AVI EXTENSION (otherwise it will not be associated with playback SW.)
	Allocate File Space	Enter the amount of disk space in MB to set aside for the capture file. Note: Free disk space is shown in MB and it is convenient for user to allocate the file size within the amount of free disk space.
	Save Captured Video	Save As the Set Captured Video filename; provides an opportunity to change name or add suffix to string of captures; FILENAME MUST HAVE .AVI EXTENSION TO BE RECOGNIZED BY PLAYBACK SOFTWARE.
	Exit	Exit the application program.
Devices	Integrated Webcam	(Not Applicable)
	2860 Driver	The connected device will be automatically detected and enabled
	Microphone	(Not Applicable)
Options	Preview	Enable/ disable preview. Note: This feature is enabled in default mode.
	MPEG2	(Not Applicable)
	Video Capture Filter	Configure the properties settings of Brightness, Contrast, Saturation, Hue, Sharpness, toggle interlacing, and set White Balance; NOTICE: recommended settings are shown in figure below.
	Video Capture Pin	Set frame rate, color space and the window size.
Capture	Start Capture	Start capturing video.
	Stop Capture	Stop capturing video.
	Capture Audio	(Not Applicable)
	Closed Captioning	(Not Applicable)
	Master Stream	Choose master stream from three selections: None, Audio, Video.
	Set Frame Rate	Set the frame rate for capturing video. Note: The highest the frame rate, the more smooth video will be captured
	Set Time Limit	Set the maximum number of seconds for capturing.
Help	About	Show the version of the application program.

AMCAP is also the primary software for capturing video clips.
The following steps should be taken when capturing a video clip:

- File → Save Capture File → In the File Name space type the name of the first file to be recorded including the .avi extension → Enter
- Capture → Start Capture → OK
- Capture → Stop Capture
- Go to your destination folder and play the video.

NOTICE: If the captured video file was not saved with a file extension, rename the file by adding ".AVI" to the end and it should be recognized and properly associated with Windows Media Player.
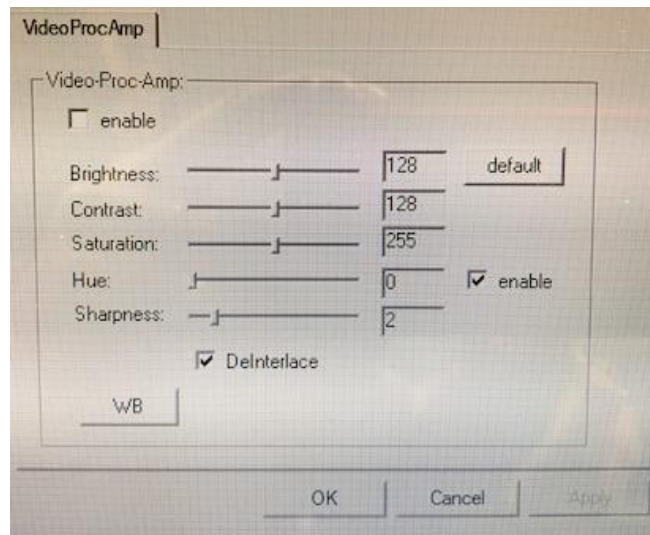
FIG. 8: RECOMMENDED "CAPTURE FILTER" SETTINGS

6.3 STILL PICTURE CAPTURE SOFTWARE

Stills are captured using FrameGrab. This software is easy to use. Simple choose to capture a still of the live video and then select the filename and location to store the file on the computer. Most important is to select the camera, then START the camera, and ensure the preview box is checked to view the video. Remaining features are intuitive and simply require use to master.
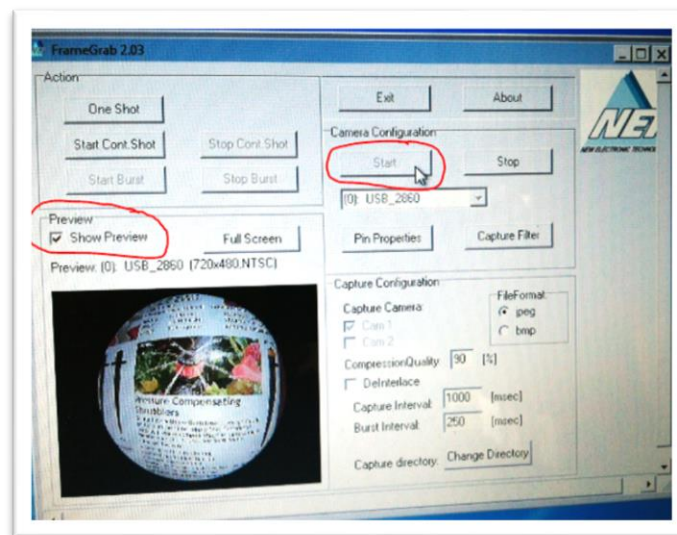

FIG. 9: FRAMEGRAB USER INTERFACE

To capture a still do the following in FrameGrab:

1. At the bottom of the FrameGrab window press the "Change Directory" button to select the destination folder for your captured stills
2. Choose the still file format (jpeg or bmp)
3. Press "Start"
4. Press "One Shot"
5. Press "Stop" when done

TABLE 2, FRAMEGRAB MENU LIST

Menu		Function
Action	One Shot	Snap a single picture
	Start/Stop Cont. Shot	Start and stop a continuous string of single pictures; time between is based on time interval set in Capture Configuration below.
	Start/Stop Burst	Start and stop a series of snapshots per time interval set in Capture Configuration below. (feature may not be active)
Preview	Show Preview	Toggle camera image displayed in same window
	Full Screen	Displays camera image in new large window
Camera Configuration	Start/Stop	Starts and stops processing of video output from camera.
	Drop down box	Select camera (pick "USB_2860")
	Pin Properties	Configure video stream settings: video standard, format, and resolution
	Capture Filter	Configure settings of video processing amp: brightness, contrast, saturation, hue, sharpness, toggle interlacing, set white balance
Capture Configuration	Capture Cam	Select camera stream to use
	File Format	Select captured stills file format (jpeg or bmp)
	Compression Quality	Set compression quality
	Toggle Interlacing	Toggle between interlacing and de-interlaced
	Capture Interval	Set time between captured stills.
	Burst Interval	Set time of burst interval (if feature is active)
	Change Directory	Set directory location in which captured files will be stored.

7.0   OPERATING INSTRUCTIONS

With the setup completed as described, the inspection can be operated in the following manner.

7.1 SAFETY FIRST

When in UV Mode, ionizing ultraviolet radiation will be emitted at a rate and intensity that is dangerous to the health of humans and other living things. The radiation can also cause property damage to items which are susceptible to ultraviolet wavelengths.

⚠**DANGER:** This product emits ionizing ultraviolet radiation in the UVA range, peak at 365nm wavelength. Prevent all exposure to living tissue. Use adequate radiation blocking eyewear and clothing to prevent injury.

⚠**DANGER:** UV radiation is not visible and cannot be detected by the human eye. Always assume the dangerous UV radiation is emitting from the UV LED whenever the mains power switch is in the ON position. Always shut unit off when possible.

7.2 WORKSPACE

Arranging the work space is an important first step. The system works best when the connecting cables to the UV Videoscope, Control Box and computer will not become caught on objects when in use.

7.3 OPERATION

Ensure power switch is in OFF position. Connect power supply to appropriate mains power source. Turn light attenuators to lowest setting. Turn system power switch to ON position.

Select a light type using the UV/WHITE light mode selector switch. The attenuation knob for each light type is located at matching ends of mode selector switch. Adjust light output until best image results using the lowest setting possible.

NOTICE: The Control Box is equipped with a Gain Control Switch. When the object being viewed cannot be effectively illuminated, press the gain switch to increase the camera signal gain; while signal strength will increase so will the noise in the signal. Noise will appear as moving dots or short lines within the image. Reducing the object distance and/or increasing the illumination level will help reduce the need for signal gain and by association image noise if present. Conversely, if the illumination detected is too bright or a bright reflection is detected, press the gain switch to reduce the camera signal gain.

NOTICE: It is best to use the white light to locate a region of interest and then switch to UV. Whenever light is not required it is strongly recommended to attenuate light output to minimum level of controller.

7.4 INSERT VIDEOSCOPE

Carefully guide the Videoscope through suitable opening in the cavity to be inspected. Take extreme caution not to force the distal tip. Should you encounter resistance, remove the Videoscope and review your inspection procedure. Ascertain whether sufficient clearance exists for the probe diameter.

8.0   STORAGE INSTRUCTIONS

Upon opening the protective carrying case, the Videoscope is found stored in a soft case compartment, along with the Control Box and the DC Power Supply.
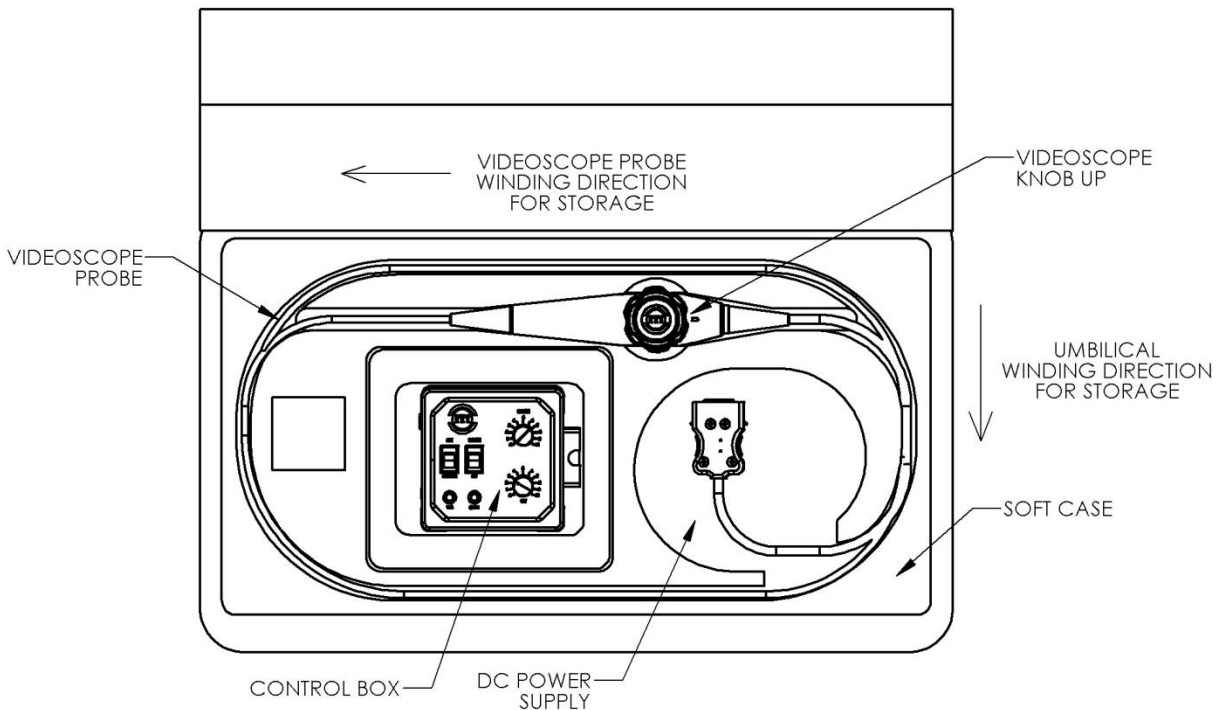

FIG. 10: VIDEOSCOPE STORAGE (KNOB UP)

NOTICE: To avoid probe memory retention, after each use alternate the storage of the Videoscope between knob up position (as seen in Fig 10) and knob down position (as seen in Fig. 11).
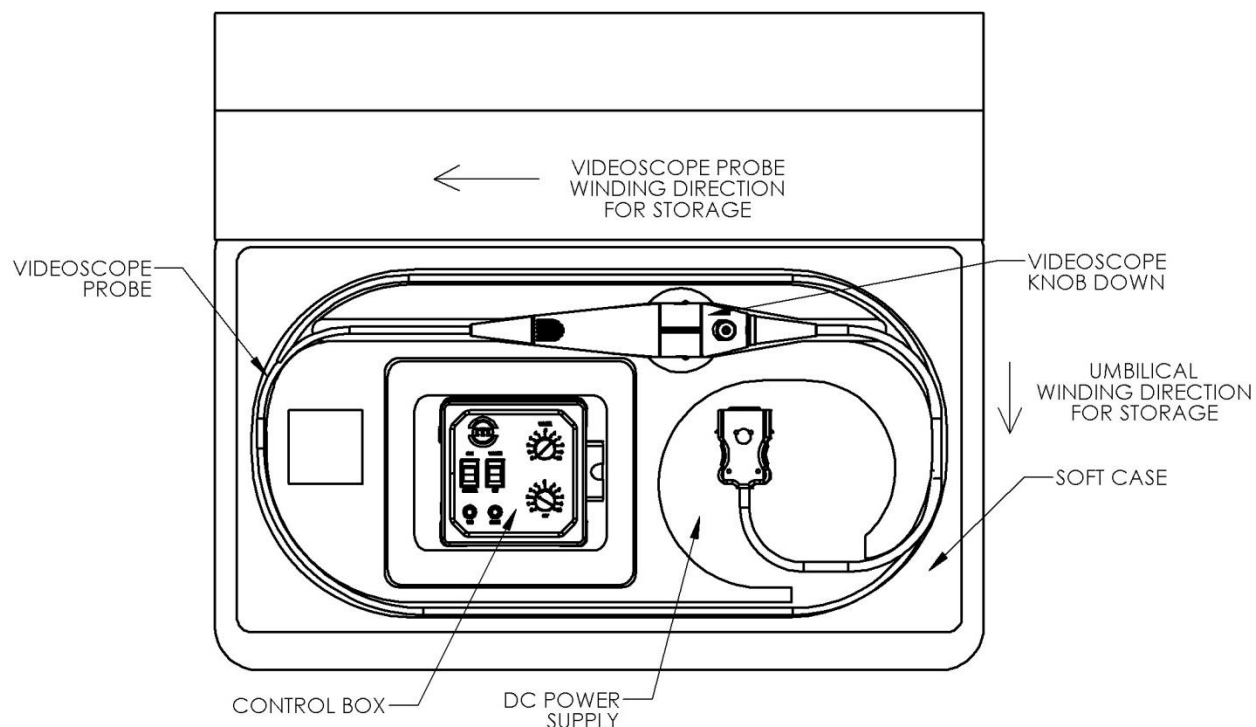
FIG. 11: VIDEOSCOPE STORAGE (KNOB DOWN)

9.0 TROUBLESHOOTING GUIDE

Please contact us immediately if you have any questions or concerns regarding these troubleshooting suggestions. Trouble shooting begins by ensuring all connections are correct and power is ON. If recommended action does not resolve the problem please notify us immediately for technical assistance.

PROBLEM	ACTION
Camera not recognized	• Ensure driver is not corrupt • Check USB port is functioning • Try another USB port
Camera image not stable	• Try another USB port (fastest)
Image washed out / too bright	• Decrease light output • Check light mode selection
Image too dark/ grainy	• Increase light output • Check light mode selection
Led (UV or White) not working	• Check LED for damage • Shut off and let cool for a period of time
Image out of focus	• Clean exterior of objective lens • Change object distance

10.0 PRODUCT SPECIFICATIONS

Videoscope

Physical Specifications

Diameter	6.0mm nominal
Lengths, Available	2, 3, 4, 5, and 6 meters
Articulation Angulation	120° minimum (Up, Down, Left, and Right)
	NOTE: Videoscopes with working lengths of 5m and longer have 90° minimum articulation.

Optical Specifications

Field of View	80°
Line of Sight	90°
Depth of Field	.30" (7.6mm) to 1.50" (38mm)

Video Specifications

TV System Format	NTSC
Image Sensor Size/Type	1/6"/CCD
Effective Pixels	379K NTSC, 438K PAL
S/N Ratio	56dB minimum
Electronic Shutter	Maximum 1/10,000 sec.
White Balance	Auto and Manual (3000°K to 6000°K)

Illumination

Ultraviolet	Ionizing UVA Radiation (365nm wavelength) @1.50" 1200mW/cm^2 (on edge of field)
White Light	@1.50" 100lm/Ft^2 (on edge of field)

General Specifications

Power Requirements

Direct Current	12 VDC, 500 mA

Environment

Operating Temp, Case	-5°F to 115°F (-20 to 46°C)
Operating Temp, Probe	-13°F to 176°F (-25°C to 80°C)
Operating Humidity	95% RH maximum
Storage Temp	-15°F to 140°F (-26°C to 60°C)

Physical

Weight, Videoscope	1.4 lbs. (0.64Kg) – 3 meters length
Weight, Control Box	1.2 lbs. (0.54 Kg)
Dimensions, Control Box	5.5" x 4.7" x 3.4" (140mm x 120mm x 88mm)

11.0 INSTRUMENT CARE AND RETURN POLICY

11.1 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.

NOTICE: DO NOT IMMERSE INSTRUMENT HANDLE OR PROXIMAL CONTROL CABLE IN LIQUID unless it has been specifically manufactured for underwater applications. See VIDEOSCOPE section for more information.

11.2 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.

CAUTION: Do not use beyond recommended temperatures, otherwise property damage to this instrument or collateral property may occur.

⚠ **DANGER:** Do not allow instrument to contact live or exposed wiring. It is an excellent conductor.

11.3 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

NOTICE: 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.