

# Starrett Inspection Scope

## Instructions for the Starrett 679 Series Video Inspection Scope

Thank you for purchasing this product. We take pride in manufacturing to a high standard, and if used in accordance with these instructions, this product will provide you years of trouble free performance

**STOP** **IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS AND CAUTIONS. USE THIS PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO COULD CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP THESE INSTRUCTIONS FOR FUTURE USE.**

### General Safety Instructions

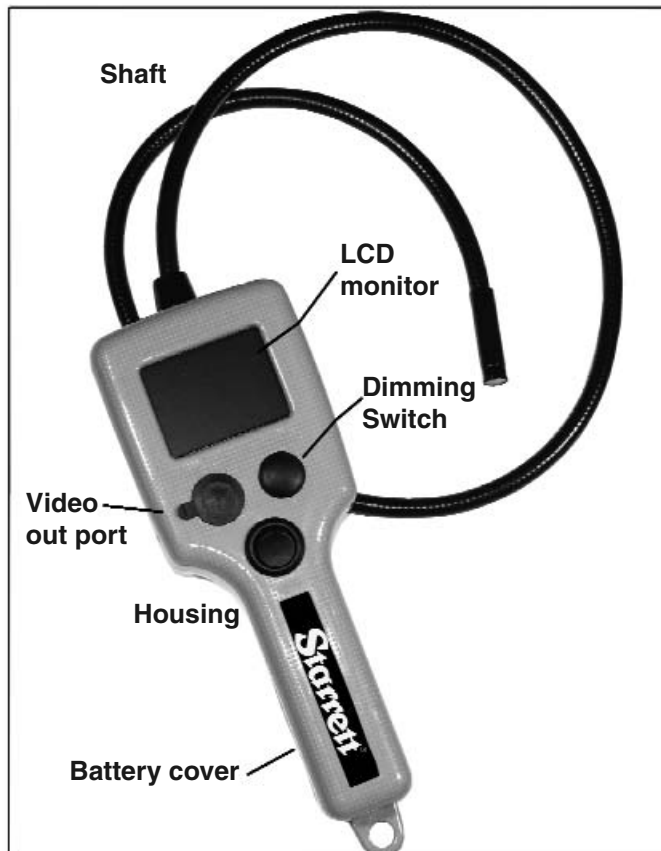
- x DO NOT use video inspection scope if dropped and damaged
- x DO NOT operate near live electrical wires.
- x DO NOT operate near moving parts such as pulleys, motors, gears, fans, etc.
- ✓ Be aware of your surrounding environment while using your inspection scope
- ✓ Wear suitable clothing and be aware of hand placement and body position during inspection.

### Introduction

The new Starrett Inspection Scope is ideal for remote inspection of areas inaccessible to the naked eye. It includes a digital video camera with three light intensity settings attached to either a 3' or 6' flexible, water resistant shaft. A full color image sensor and dual solid state LEDs provide imaging and illumination. The 2.5" full color LCD screen displays live video from the digital camera. Applications include viewing critical but hard-to-see areas during machining operations, inspection of internal parts of engines and machinery, A/C systems, and interior structures of walls. The Inspection Scope comes with a mirror that allows viewing 90° to the axis of the shaft, a magnet that can pick up about a quarter pound, and a rugged, protective case.

### Specifications

<b>Shaft Length:</b>	3' or 6'
<b>Distal Top Diameter:</b>	0.42" maximum
<b>with Accessories:</b>	0.46" maximum
<b>Viewing Angle:</b>	55°
<b>Viewing Distance:</b>	0.4" to Infinity
<b>Viewing Monitor:</b>	Color 2.5" LCD
<b>Resolution:</b>	320 x 240 pixels
<b>Video Out Port:</b>	RCA – NTSC signal
<b>Lighting:</b>	Off/Low/Medium/High
<b>Shaft Radius:</b>	2.5" minimum
<b>Power:</b>	Four alkaline AA batteries
<b>Battery Life:</b>	Four hours (average)
<b>Storage Temperature:</b>	-4°F – 158°F (-20°C – 70°C)
<b>Operating Temperature:</b>	32°F – 113°F (0°C – 45°C)
<b>Accessories:</b>	Mirror and Magnet
<b>Warranty:</b>	One year



## Operating Instructions

**CAUTION:** Do not use excessive force to insert or retrieve shaft from the equipment or areas under inspection

**CAUTION:** Never use the distal tip to push against objects or to clear a path. This instrument is for remote viewing only.

**CAUTION:** Mirror and magnet accessories may detach if snagged or bumped abruptly.

**CAUTION:** The handheld monitor unit is not water resistant. The shaft and distal tip are water resistant ( refer to cleaning and storage .

**DO NOT** bend any part of the shaft tighter than a 2.5 inch radius ( 5 inch diameter).

**DO NOT** insert the scope shaft and tip into locations where the temperature is greater than 113 deg F ( 45 deg C).

**DO NOT** vibrate, bang, or drop your scope. It is not shock resistant.

**Operation** - Hold the unit by the housing and turn the rocker switch on. This turns the distal camera, lighting, and monitor on for viewing. Simply manipulate the shaft toward the area under investigation while viewing the monitor. The shaft can be formed to maneuver into more complex paths. For light off or dimming, press light switch in and release for light level control.

**Mirror and Magnet Accessories** - To attach accessories, tilt clip end of accessory against recess of distal tip and press into place. Rotate 90 deg. mirror for best view. **Fig 5**

**Video out port** - The VS37 provides an NTSC video signal via an RCA phono jack located on the front of handle - **Fig 4**. **Make sure to replace protective cap after use.** This output can be utilized by a compatible monitor or recording device.

## Maintenance Instructions

### BATTERY REPLACEMENT

**WARNING !** Make sure switch is in the off position prior to maintenance and/or battery replacement.

Use caution when removing and re-inserting battery pack so as to not strain or pinch the connecting leads. See **Fig 2**.

1. Remove the battery housing door with a Phillips screwdriver.
2. Tilt the battery pack up from the bottom and remove
3. Un-clip the connector - if required - and replace batteries in the pack. Use 1.5v alkaline AA type batteries only.
4. Observe polarity as marked in battery holder
4. Re-attach connector and re-insert battery pack into bottom of handle.
5. Re-assemble battery door. Do not over tighten screw.

### CLEANING AND STORAGE

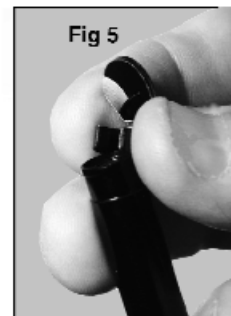
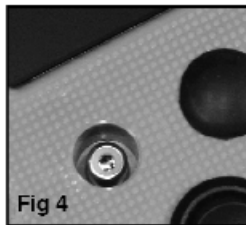
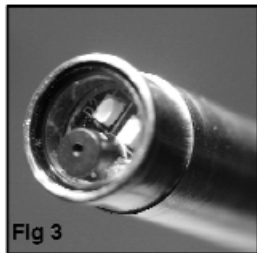
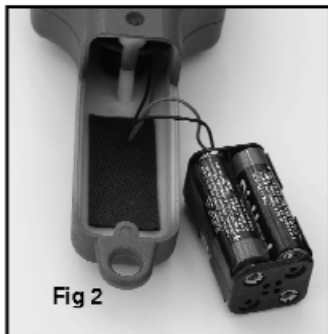
After each use:

- a. Wipe down the distal tip and shaft with a clean, dry cloth to remove fluids and residue.
- b. Gently use a cotton swab lightly dampened with isopropyl alcohol to clean glass distal window - **FIG 3**
- c. Gently clean the LCD screen with a dry cloth. Only use a cloth lightly damped with isopropyl alcohol if necessary. **NEVER** rub hard and **NEVER** press on the monitor surface with a sharp object.
- d. Remove batteries when cleaning and if scope is to be stored for long periods of time.

**NOTE:** Your inspection scope **MUST** be completely dry before returning it to the storage case.

### TROUBLESHOOTING

1. If images tend to be blurry and not in focus, clean the distal tip window as described above
2. If the display monitor shifts in color, loses color, or goes blank, change the batteries



NOTE: It is our policy to continually improve our products and we reserve the right to update data, specifications, and component parts without notice.

IMPORTANT: No liability is accepted for incorrect use of this product. \*WARRANTY: 1 year from date of purchase against defects and workmanship when used in accordance with instructions. Warranty is void if unit is opened or tampered with other than stated in these instructions. For any questions or suggestions, please give us a call.