Manuals+ — User Manuals Simplified.

EXTECH HDV7C-55-3 Camera Probe User Manual

Contents

EXTECH®

EXTECH HDV7C-55-3 Camera Probe

Product Information: HDV7C-55-3 Probe

The HDV7C-55-3 Probe is a camera probe designed for use with the HDV700 High Definition VideoScope. The probe is controlled by its three physical buttons and touch-screen icons on the HDV700. It has a camera resolution of 640 x 480 pixels, and the camera head is 0.2 inches (5.5 mm) in diameter with a probe length of 9.8 ft (3 m).
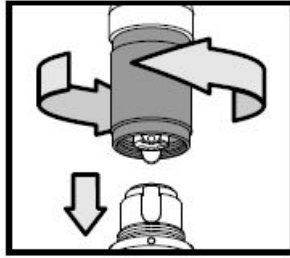
Button Descriptions

- **Boost Button:** Use the boost button to enhance the image lighting. The red LED on the button will glow when the boost function is enabled.
- **Rotation Button:** Use the rotation button to rotate the camera view.
- **Particle Filter Button:** Use the particle filter button to enhance the image, removing the effects of dust particles.

Connecting the Probe

To safely connect the probe to the HDV700, always turn the HDV700 power off before replacing the probe. Follow these steps:

1. Align the white dot on the probe connector with the white dot on the monitor connector.
2. Plug the probe into the monitor unit, ensuring proper alignment and full insertion.
3. Tighten the collar nut to secure the connection. Do not overtighten.

Product Usage Instructions

1. Before use, update the HDV700 firmware as explained in the HDV700 manual for optimal functionality and compatibility with your camera probe.
2. To enhance the image lighting, press the boost button. The red LED on the button will glow when the boost function is enabled. Hold the probe very steady for best results.
3. To rotate the camera view, press the rotation button.
4. To remove the effects of dust particles from the image, press the particle filter button.
5. To safely connect the probe to the HDV700, turn off the HDV700 power before replacing the probe. Align the white dot on the probe connector with the white dot on the monitor connector, plug the probe into the monitor unit, ensuring proper alignment and full insertion, and tighten the collar nut to secure the connection without overtightening.
6. Do not insert the probe into flammable liquid or gas. This product is designed for industrial use only. It is not intended for use in human or other biological inspection.
7. To clean the probe, wipe with a soft cloth dampened with a mild detergent and clean water. Do not use abrasives, corrosive (alcohol), or solvents to clean the probe. Use a high quality lens cleaning fluid and a lint-free swab to clean the camera and worklight lenses. Do not disassemble the product, damage to the product and electrical shock may occur. Avoid direct sun exposure. Store in a cool, dry, and well-ventilated area.
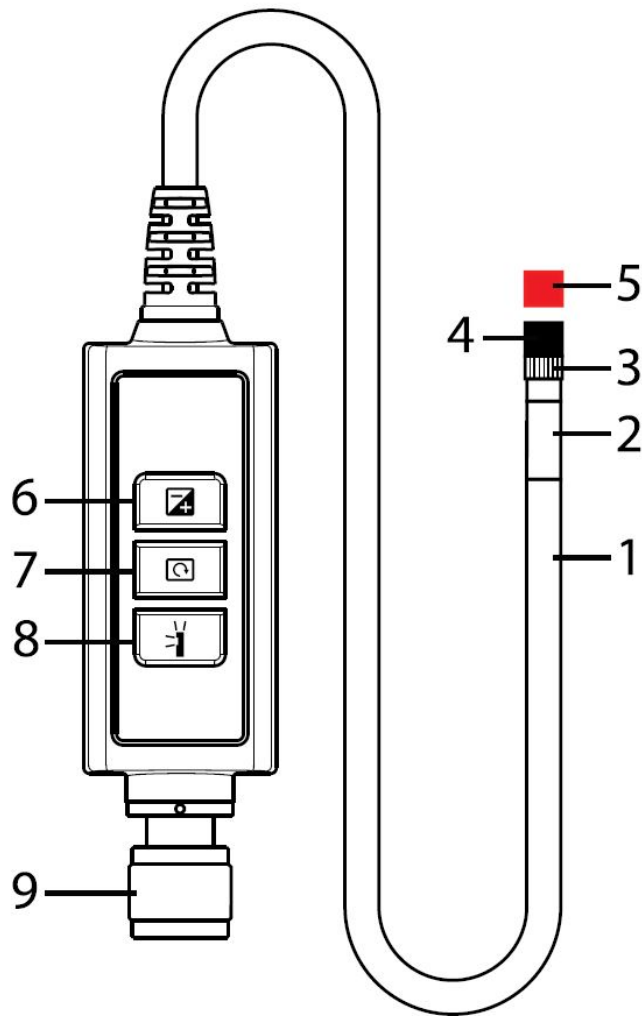
Introduction

This probe is designed for use with the HDV700 High Definition Vid-eoScope. The probe is controlled by its three physical buttons and the touch-screen icons on the HDV700. The HDV700 user manual and additional translations of this probe manual are available from the support site (see the Support section). Please update the HDV700 firmware before use, as explained in the HDV700 manual. This will ensure optimal functionality and com-patibility with your camera probe. The HDV700 offers many useful and convenient features including capturing still images and video, changing camera views, and con-trolling worklights. Please refer to the HDV700 user manual for complete information.

Probe Description

The camera probe head is 0.2 inches (5.5 mm) in diameter and its probe length is 9.8 ft (3 m). The camera resolution is 640 x 480 pixels.

1. Probe body
2. Camera head
3. Accessory attachment ring (un-used in this model)
4. Protective threaded ring
5. Camera lens cap

6. BOOST button

7. ROTATE button

8. PARTICLE FILTER button

9. Connect to HDV700

Button Descriptions

Boost Button

Use the boost button to enhance the image lighting. The figure below, on left, shows an image without boost; the figure on right shows the same image with boost.

The red LED on the button will glow when the boost function is en-abled. For best results, hold the probe very
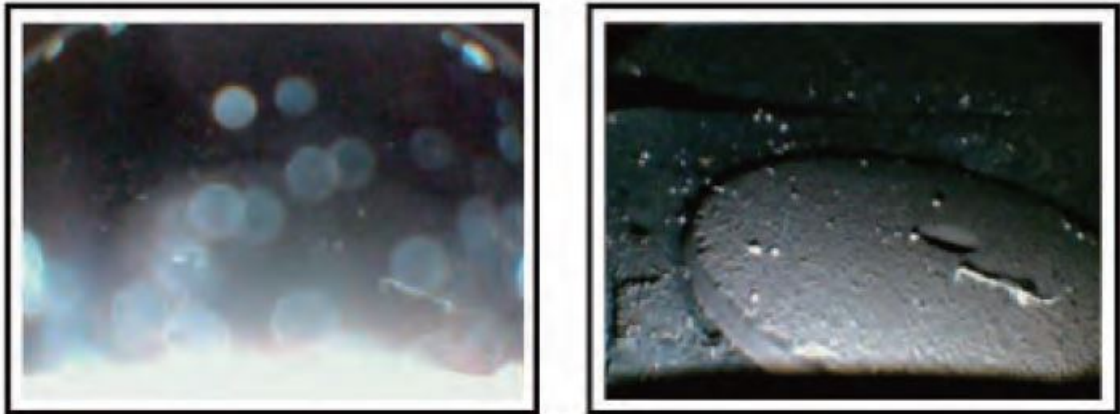
steady when using this feature.

Rotation Button

Use the rotation button ⟳ to rotate the image 90° up to four times, as shown in the figure below.

 ▶ ▶ ▶

Particle Filter Button

Press the filter button ▮ to enhance the image, removing the effects of dust particles. The image on left, below, shows an image with no filtering; the image on right shows the same image with filtering.

Safety

Please read and understand all safety cautions before use.
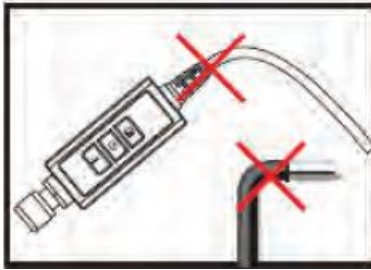
CAUTION
Do not insert the probe into flammable liquid or gas. This product is designed for industrial use only. It is not intended for use in hu-man or other biological inspection.
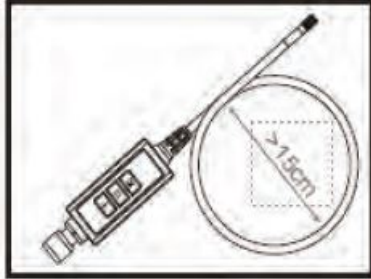
CAUTION
To clean the probe, wipe with a soft cloth dampened with a mild detergent and clean water. Do not use abrasives, corrosives (alcohol), or solvents to clean the probe. Use a high quality lens cleaning fluid and a lint-free swab to clean the camera and worklight lenses. Do not disassemble the product, damage to the product and electrical shock may occur. Avoid direct sun exposure. Store in a cool, dry, and well-ventilated area.
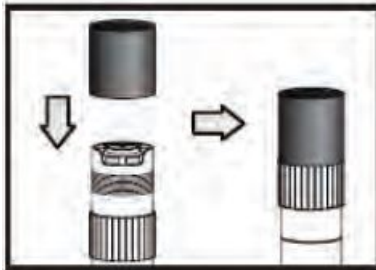
- Do not bend or force the probe end into a position 90°, damage to the probe could result.
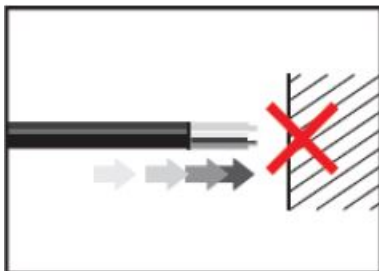
- Do not coil the probe to a diameter greater than 6 inches (15 cm) in use or when storing.
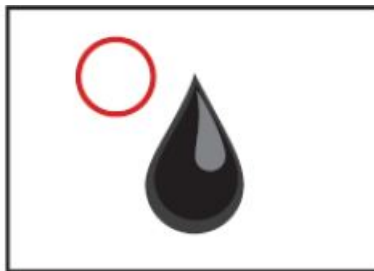

- Replace the protective cap and tighten the protec-tive ring when storing the probe.
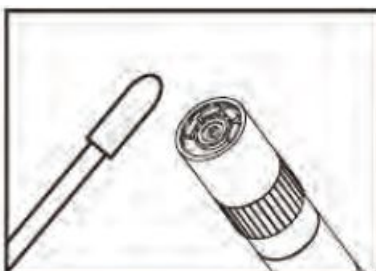

- The probe contains sensitive circuitry that controls the optics and electronics of the camera. Do not strike the probe or allow it to impact objects forcefully.

- Immerse probes only in approved liquids (see the Specifications section).

- Use a high quality cleaning fluid and swab to clean the camera head.

Specifications

- Camera resolution
    - 640 x 480 pixels
- Probe Diameter
    - 0.2 inches (5.5 mm)
- Field of View
    - 90°
- Depth of Field
    - 0.4 to 2.4 inches (10 to 60 mm)
- Probe tip length
    - 0.78 inches (20 mm)
- Probe length
    - 9.8 ft. (3 m)
- LED Worklights
    - Four (4) white LED lamps
- Operating and Storage temperature
    - 14 to 140℉ (-10 to 60℃)
- Relative Humidity
    - 10 to 95 % non-condensing
- Approved liquids
    - Approved for use in brake and transmission fluid, diesel fuel, unleaded gasoline, engine oil, and CPC hydraulic fluid (46AWS).
- Ingress rating
    - **Probe tip and body:** IP 67 (IEC 60529)
    - Protected from submersion in water up to 3.3 ft (1 m) for 30 minutes maximum.
    - **In use:** rain, splashes, and accidental submersion

Two-year Warranty

FLIR Systems, Inc. warrants this Extech brand instrument to be free of defects in parts and workmanship for two years from date of shipment (a six-month limited warranty applies to sensors and cables).

Calibration and Repair Services
FLIR Systems, Inc. offers calibration and repair services for the Extech brand products we sell. We offer NIST traceable calibra-tion for most of our products. Contact us for information on calibra-tion and repair availability, refer to the contact information below. Annual calibrations should be performed to verify meter perform-ance and accuracy. Product specifications are subject to change without notice. Please visit our website for the most up-to-date product information

#NAS100124; r. AB/87921/87926; en-US
1.888.610.7664
www.calcert.com
sales@calcert.com

Documents / Resources

EXTECH HDV7C-55-3 Camera Probe [pdf] User Manual
HDV7C-55-3, HDV7C-55-3 Camera Probe, Camera Probe, Probe

References

- **Calcert**