Extech HDV600

Extech HDV600 High Definition VideoScope
Instruction Manual

1. INTRODUCTION

The Extech HDV600 High Definition VideoScope is an advanced inspection camera designed for detailed visual inspections in various environments. This device features a large LCD screen, high-resolution imaging, and the capability to record images and video with audio annotations. Its robust design ensures reliable performance in demanding industrial settings.

Key features include:

- 5.7-inch color LCD TFT display with 640 x 480 resolution.
- SD memory card for storing over 14,600 images or up to 4 hours of video.
- Video recording with voice annotation capability.
- AV output for external monitor viewing.
- Optional wireless transmitter (HDV-WTX) for remote video transmission up to 100ft (30m).

2. SAFETY INFORMATION

Please read and understand all safety instructions before operating the Extech HDV600 VideoScope. Failure to follow these instructions may result in injury or damage to the device.

- Do not use the device in explosive atmospheres.
- Ensure the device is clean and dry before connecting or disconnecting components.
- Avoid bending the camera probe beyond its specified flexibility limits.
- Keep the device away from strong magnetic fields.
- Use only approved accessories and power adapters.

3. PRODUCT OVERVIEW

3.1 Main Display Unit

The main unit features a 5.7-inch LCD screen for clear viewing of inspections. It includes intuitive controls for navigation, image/video capture, and light adjustment. The unit is designed to be rugged, waterproof to IP67 standards, and drop-proof up to 2 meters.

Image: The Extech HDV600 main display unit with a camera probe connected, displaying an inspection view.

Image: The HDV600 main unit with water droplets, highlighting its waterproof and rugged construction.

3.2 Ports and Connections

The main unit includes various ports for connectivity and data management:

- Mini-USB port for data transfer.
- SD card slot for storage.
- AV output for connecting to an external monitor.
- Power input for charging and operation.

Image: Side view of the HDV600 main unit, detailing the USB, SD card, AV output, and power ports.

3.3 Camera Probes and Handsets

The HDV600 supports various camera probes, including semi-rigid, flexible, and long-length fiberglass scopes. Articulated controller handsets are available with 6mm scopes and a glove-friendly articulation control knob for precise tip movement. All camera tips are equipped with bright, adjustable LED lighting.

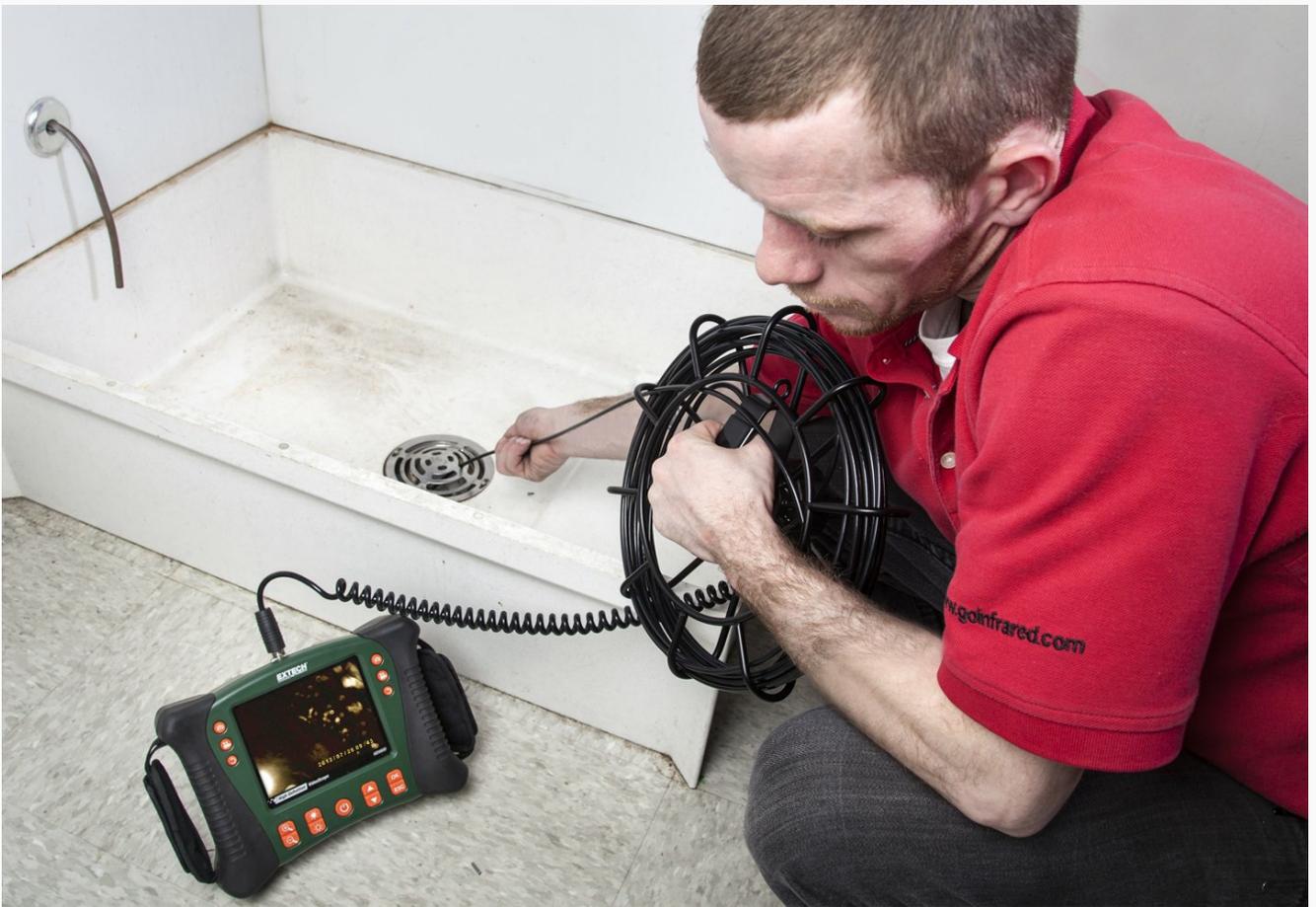Image: A camera probe with a coiled cable, ready for connection to the main unit.

Image: Close-up of the camera probe tip, showing the integrated LED lighting for dark environments.

3.4 Accessories

The HDV600 comes with an SD memory card. Additional accessories like mirror, magnet, and hook attachments for the camera tip are also included to assist in various inspection scenarios.

Image: Small accessories such as a mirror, magnet, and hook for attaching to the camera probe tip.

4. SETUP

4.1 Unpacking and Initial Inspection

Carefully unpack all components and inspect for any damage. Ensure all items listed in the packing list are present.

4.2 Battery Installation and Charging

The HDV600 uses a Lithium Ion battery (included). Install the battery into the designated compartment. Connect the power adapter to charge the unit before first use.

4.3 Attaching the Camera Probe

Align the connector of the camera probe with the port on the main display unit or handset. Gently push and twist to secure the connection. Ensure a firm connection to prevent signal loss.

4.4 Inserting the SD Card

Locate the SD card slot on the side of the main unit. Insert the provided SD card with the contacts facing down until it clicks into place.

5. OPERATING INSTRUCTIONS

5.1 Powering On/Off

Press and hold the power button (**red circle with line**) to turn the device on or off. The LCD screen will illuminate upon startup.

5.2 Basic Viewing and Light Adjustment

Once powered on, the live video feed from the camera probe will appear on the screen. Use the brightness control buttons (**sun icon**) to adjust the intensity of the LED lights on the camera tip for optimal visibility.

5.3 Capturing Images and Recording Video

- To capture a still image, press the camera button (**camera icon**).
- To start video recording, press the video record button (**video camera icon**). Press again to stop recording.

5.4 Audio Annotation

During video recording, the built-in microphone allows for audio annotations. This feature helps in documenting observations without the need for separate note-taking.

5.5 Using Articulated Probes

For articulated probes, use the control knob on the handset to precisely maneuver the camera tip. This allows for 320-degree articulation, enabling inspection around corners and in complex geometries.

Image: A user inspecting a drain using the HDV600 with a long probe, demonstrating its application in confined spaces.

5.6 Data Transfer and Playback

Images and videos stored on the SD card can be reviewed directly on the HDV600's screen. For larger viewing, connect the device to an external monitor via the AV output. Data can also be transferred to a computer using the Mini-USB port.

Video: An overview of the Extech HDV600 High Definition VideoScope, demonstrating its features, ruggedness, various probes, and applications in industrial inspections.

6. MAINTENANCE

6.1 Cleaning

Wipe the main unit and camera probes with a soft, damp cloth. Do not use abrasive cleaners or solvents. Ensure the camera tip is free of debris for clear imaging.

6.2 Storage

Store the HDV600 and its accessories in the provided carrying case in a cool, dry place when not in use. Avoid extreme temperatures and direct sunlight.

6.3 Battery Care

To prolong battery life, charge the battery regularly and avoid fully discharging it. If storing for extended periods, charge the battery to approximately 50% capacity.

7. TROUBLESHOOTING

- **No Power:** Ensure the battery is properly installed and charged. Check the power adapter connection.
- **No Image on Screen:** Verify the camera probe is securely connected. Check if the camera tip LEDs are illuminated.
- **Poor Image Quality:** Clean the camera lens. Adjust the LED brightness. Ensure the focus is correct (if applicable to the probe type).
- **Cannot Record/Store:** Check if an SD card is inserted and has sufficient free space. Ensure the SD card is not write-protected.
- **Wireless Connection Issues:** Ensure the optional wireless transmitter is properly connected and within range. Check for interference.

8. SPECIFICATIONS

Feature	Specification
Product Dimensions	17.8 x 7 x 24.1 inches
Item Weight	3.26 pounds
Manufacturer	Extech Instruments
Item Model Number	HDV600
Batteries	1 Lithium Ion battery (included)
Date First Available	August 1, 2011

9. WARRANTY AND SUPPORT

Extech Instruments provides a limited warranty for the HDV600 VideoScope. For detailed warranty information, technical support, or service inquiries, please refer to the official Extech Instruments website or contact their customer service department.
Please retain your proof of purchase for warranty claims.