ET16

INSTRUCTION MANUAL
Borescope for Android®* Devices

- **10' (3.05 m) ARMORED GOOSENECK**

- **0.35" (9 mm) CAMERA WITH 6 ON-BOARD LED LIGHTS**

- **CONNECTS TO MOST ANDROID®* DEVICES AND PCs WITH WINDOWS® XP**

*Android® versions 4.0 or higher

2 m   **IP67**
(Camera only)

KLEIN TOOLS

CE

GENERAL SPECIFICATIONS

Klein Tools ET16 is a borescope with a 0.35 in. (9 mm) camera surrounded by 6 LEDs and attached to a 10 ft. (3.05 m) armored gooseneck. ET16 has USB Type C and micro-USB connections for most Android® smart phones and devices. The camera output is displayed on the Android® device using the Klein Tools Borescope App

- **Operating Altitude:** 6562 ft. (2000 m)
- **Relative Humidity:** <85% non-condensing
- **Operating/Charging Temperature:** 32°F to 122°F (0°C to 50°C)
- **Storage Temperature:** 14°F to 140°F (-10°C to 60°C)
- **Controller Dimensions:** 3.7" x 1.2" x .94" (94 mm x 30 mm x 24 mm)
- **Weight:** 1.12 lbs (0.51 kg)
- **Camera Output:** 640 x 480 pixels
- **Camera Frames per Second:** 25
- **Camera Gooseneck Length:** 10 ft. (3.05 m)
- **Pollution degree:** 2
- **Ingress Protection: Camera:** IP67 dustproof & waterproof
- **Drop Protection:** 6.6 ft. (2 m)

Specifications subject to change.

⚠ WARNINGS

To ensure safe operation and service of the instrument, follow these instructions. Failure to observe these warnings can result in serious personal injury, fire, or electrical shock.

- The borescope, including the camera end, is NOT insulated. Avoid probing areas where energized conductive elements may be present. Shut off power to nearby work areas before starting work.

- DO NOT probe moving machinery that could catch the borescope and/or camera end, and cause harm to the operator and the Borescope.

- NEVER completely immerse the camera in water or liquids. DO NOT use the borescope for underwater inspections.

- Avoid probing areas where chemicals may be present.

- NOT intended for use on people or animals.

- DO NOT use near sources of heat.

- Keep steady footing at all times, following ladder safety procedures when necessary.

NOTE

- DO NOT use if the USB Type-C connector, Micro-USB connector/ adapter, or borescope housing is damaged in any way.

- No user-serviceable parts inside. DO NOT open or attempt to repair.

FEATURE DETAILS

BACK

FRONT

1. Camera LED Brightness Control
2. 10 ft. (3.05 m) Gooseneck
3. Camera
4. Camera LEDs
5. USB Type-C Connector
6. Micro-USB Connector/Adapter

NOTE: There are no user-serviceable parts inside.

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SYMBOLS ON BACK OF INSTRUMENT

⚠️	Warning or Caution	🥽	Wear approved eye protection
	NOT insulated - Will NOT protect against electric shock	📖	Read Instructions
	Do not probe moving machinery	CE	**Conformité Européenne:** Conforms with European Economic Area directives
🗑️	**WEEE** – Electronics disposal		

OPERATING INSTRUCTIONS

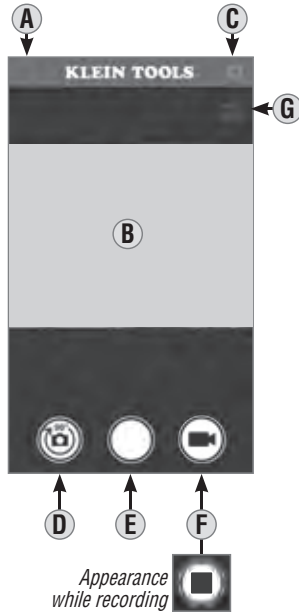### CONNECTING YOUR DEVICE TO THE BORESCOPE

1. Turn on your device.

2. Connect the appropriate USB connector on the borescope to your device, i.e., if your device uses a USB-C connector, insert the USB-C connector ⑤ directly into your device. If your device uses a Micro-USB connector, make sure the Micro-USB Connector/Adapter ⑥ is fully seated over the USB-C connector ⑤, then insert the Micro-USB connector ⑤ into your device. See FEATURE DETAILS section.

3. Select the Klein Tools Borescope app on your device. The ET16 will be recognized and begin drawing power from the device's battery. At this point the Camera LEDs ④ will become operational. Rotate the Camera LED Brightness Control ① to control the brightness and/or turn the LEDs off.

NOTE: The app will open in Display mode, with the camera displaying an image.

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OPERATING INSTRUCTIONS

DISPLAY MODE BUTTON/ICON DETAILS

A. Photo/Video screen icon
B. Camera image
C. Settings icon
D. Rotate Image button
E. Photo button
F. Video start/stop button
G. Elapsed Time (Video)
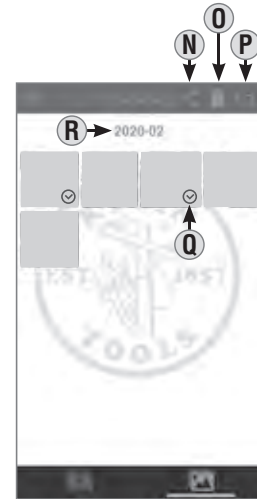
Appearance while recording

PHOTO/VIDEO FILE MENU BUTTON/ICON DETAILS

H. Previous Screen
I. Select Items
J. Video Menu
K. Photo Menu
L. Active Menu (Photo or Video)
M. Files

OPERATING INSTRUCTIONS

FILE MANAGEMENT MODE BUTTON/ICON DETAILS

N. Copy or send selected file
O. Delete selected file
P. Exit Edit Mode (when in Edit Mode only)
Q. File Selected Indicator
R. Review Mode: File name
  Manage Mode: Files selected

ROTATING THE CAMERA IMAGE ON THE APP SCREEN

Sometimes it may be necessary to rotate the camera image relative to the app screen. Each tap of the Rotate Image button (D) will rotate the image clockwise in 90° increments. This does not affect the rotation of the entire app screen, just the camera image.

TAKING PHOTOS

While in Display mode, aim the camera (6) at the subject to be photographed and tap the Photo button (E) to take a photo.

CAPTURING VIDEO

While in Display mode, aim the camera (6) at the subject to be recorded and tap the Video Start/Stop button (F). While recording video, the elapsed time will be shown (G), and the Video Start/Stop button (F) will turn red and display the square Stop symbol. To end the recording, tap the Video Start/Stop button (F) again. The Video Start/Stop button (F) will return to its normal appearance.

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