INSTRUCTION MANUAL

ET17 Utility Borescope

- HIGH-RESOLUTION 0.22" (5.5 mm) CAMERA
- HIGH-RESOLUTION 4.3" (109 mm) SCREEN
- IP67- Rated 9.8' (3 m) PVC GOOSENECK WITH 6 LED LIGHTS

ET18 Plumber's Borescope

- HIGH-RESOLUTION 0.22" (5.5 mm) CAMERA
- HIGH-RESOLUTION 4.3" (109 mm) SCREEN
- IP67- Rated 4.9' (1.5 m) ARMORED GOOSENECK WITH 6 LED LIGHTS

ET19 Pro Borescope

- HIGH-RESOLUTION 0.22" (5.5 mm) CAMERA
- HIGH-RESOLUTION 4.3" (109 mm) SCREEN
- IP67- Rated 9.8' (3 m) ARMORED GOOSENECK WITH 6 LED LIGHTS
- WI-FI CAPABILITY FOR SAVING/SHARING IMAGES/VIDEOS

KLEIN TOOLS

CE
UK CA

GENERAL SPECIFICATIONS

The Klein Tools ET17 Utility Borescope, ET18 Plumber's Borescope, and ET19 Pro Borescope are professional-grade instruments equipped with a 0.22" (5.5 mm) camera encircled by 6 powerful LEDs. The ET17 is equipped with a 9.8' (3 m) PVC gooseneck, the ET18 features a 4.9' (1.5 m) armored gooseneck, and the ET19 boasts a 9.8' (3 m) armored gooseneck with a dual lens. All models feature a 4.3" color LCD screen with auto-power off functionality.

- **Operating Altitude:** 6562 ft. (2000 m)

- **Charging Temperature:** 32°F to 113°F (0°C to 45°C)

- **Operating Temperature:** 14°F to 122°F (-10°C to 50°C)

- **Storage Temperature:** -4°F to 140°F (-20°C to 60°C)

- **Relative Humidity:** 85%

- **Battery Type:** Internal Li-Ion, 2000 mAh (7.4 Wh)

- **Battery Life:** 3 Hours (on full charge)

- **Charging Requirements:** Max 5V DC, Max 1.5 A

- **Screen Resolution:** 854 × 480 pixels

- **Camera Resolution:** 1280 × 720 pixels

- **Frames Per Second:** 15

- **Camera Diameter:** 0.22" (5.5 mm)

- **Storage:** 2GB (up to 20,000 images or 1.2 hours of video)

- **Dimensions: Unit:** 6.6" × 3.2" × 1.5" (168 × 81 × 38 mm)
  ET17 Gooseneck: 9.8' (3 m) long
  ET18 Gooseneck: 4.9' (1.5 m) long
  ET19 Gooseneck: 9.8' (3 m) long

- **Weight: Unit only:** 8.64 oz. (245 g)
  ET17 Gooseneck: 4 oz. (113 g)
  ET18 Gooseneck: 5.6 oz. (159 g)
  ET19 Gooseneck: 10.2 oz (289 g)

- **Drop Protection:** 6.6' (2 m)

- **Standards/Certifications:**
  CE, UKCA, ROHS, REACH, DOE/CEC, NRCan

Specifications subject to change.

⚠ WARNINGS

KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE.

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.

- **DO NOT** expose display unit to moisture, rain, or snow. 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.

- **DO NOT** use in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.

- **DO NOT** use the product if it is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion, or injury.

- Risk of fire and burns. **DO NOT** open, crush, heat above specified maximum temperature or incinerate. Prolonged exposure to direct sunlight can result in elevated temperatures.

- **DO NOT** subject to impacts or drops greater than 6.6' (2m). Drops larger than this may not show signs of damage, but internal components may have been compromised. It is advisable to replace the unit if any such severe events occur.

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

- **DO NOT** attempt to repair the product or charging cable. There are no user-serviceable parts.

SYMBOLS ON INSTRUMENT

⚠ Warning or Caution	Do not use on or near live electrical circuits	Wear approved eye protection
Read Instructions	Do not probe moving machinery	**WEEE** – Electronics disposal
Conformité Européenne: Conforms with European Economic Area directives		**UKCA -** United Kingdom Conformity Assessment

ET19 COMPLIANCE

⚠ This device complies with part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received,including interference that may cause undesired operation.

NOTE: The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help

FCC RF EXPOSURE STATEMENTS:

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

ET19 COMPLIANCE

IC NOTICE TO CANADIAN USERS
This device complies with industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation of the device.

This device complies with RSS-247 of Industry Canada. Operation is subject to the condition that this device does not cause harmful interference. This Class B digital apparatus complies with Canadian ICES-003.

IC RADIATION EXPOSURE STATEMENT:
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment.
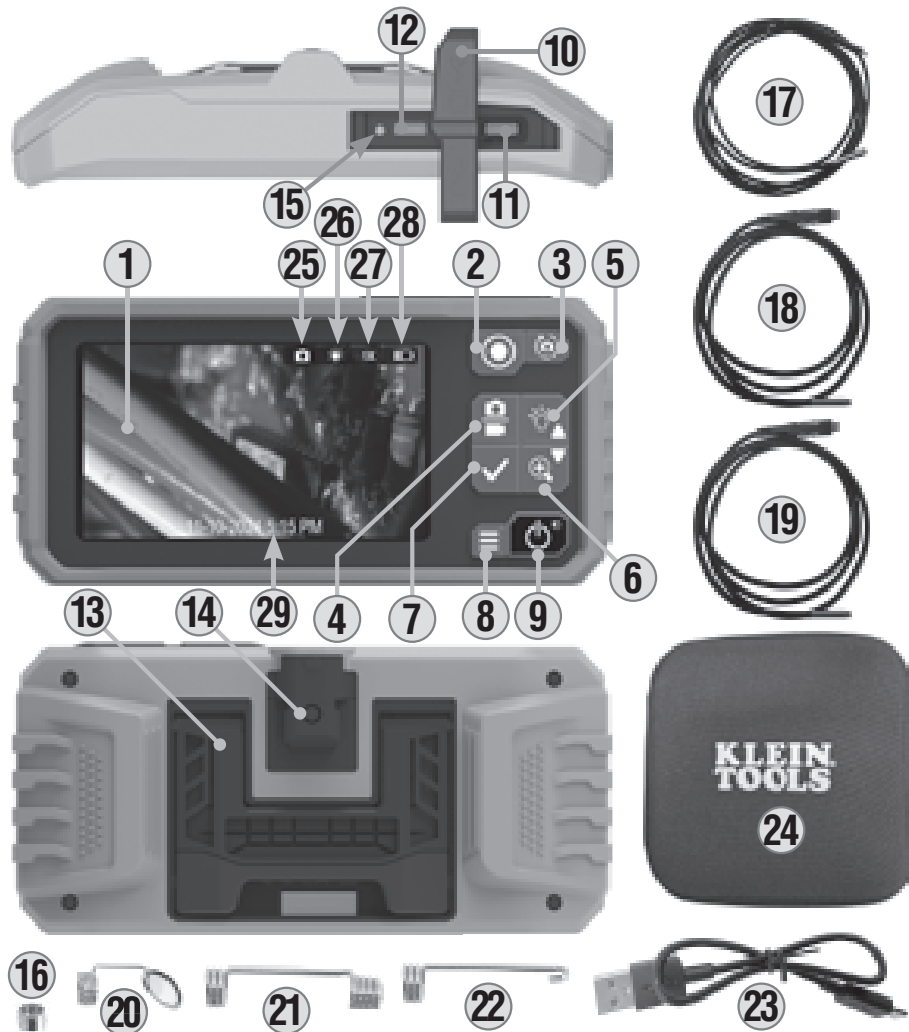
EU DECLARATION OF CONFORMITY
Hereby, Klein Tools declares that this product is in compliance with Directive 2014/53/EU and all other applicable EU requirements

UKCA DECLARATION OF CONFORMITY
Hereby, Klein Tools declares that this product is in compliance with the relevant statutory requirements.

FEATURE DETAILS

1. 4.3" LCD Screen
2. Capture Image / Record Button
3. Rotate Image Button
4. Image / Video Button
5. Camera Light Adjust / Up Button
6. Digital Zoom / Down Button
7. Enter Button
8. Menu Button
9. Power / LCD Brightness Button
10. Port Cover
11. Camera Gooseneck Input
12. USB-C Charging / Data Port
13. Kickstand
14. Mount for Magnetic Hangers Cat. Nos. 69417 and 69445 (sold separately)
15. Charging Indicator
16. Threaded Camera Housing Cap
17. ET17 Gooseneck Camera 9.8' (3 m) (Cat. No. 69462)
18. ET18 Gooseneck Camera 4.9' (1.5 m) (Cat. No. 69464)
19. ET19 Gooseneck Camera 9.8' (3m) (Cat. No. 69473)
20. Mirror Attachment
21. Magnet Attachment
22. Hook Attachment
23. USB-A to USB-C Charging Cable
24. Carrying Case
25. Image / Video Mode Indicator
26. Camera LED Brightness Indicator
27. Digital Zoom Indicator
28. Battery Level Indicator
29. Date / Time

OPERATING INSTRUCTIONS

CHARGING
NOTE: Fully charge before first use.
Open the Port Cover ⑩ from the small end with the battery symbol to access the charging port. Connect the USB-C side of the included USB cable ㉓ to the USB-C Charging Port ⑫, and connect the other end into a USB-A computer port, AC adapter, or other USB power supply (not included.) The Charging Indicator ⑮ will illuminate red while charging and illuminate green when unit is fully charged. Normal charge time is about 4 hours. *NOTE: DO NOT submerge main unit. For best protection, keep the Port Cover ⑩ closed when not in use.*

POWER ON / OFF
Press the Power / LCD Brightness Button ⑨ to power-on. Press and hold the Power Button for 2 seconds to power-off.

LIVE VIEW MODE
Connect the Camera Gooseneck (⑰, ⑱ or ⑲) into the Camera Gooseneck Input ⑪. Press the Power / LCD Brightness Button ⑨ to power-on the unit. The LCD Screen ① will display a live image. *NOTE: If the unit is powered on before the Camera Gooseneck (⑰, ⑱ or ⑲) is inserted, the LCD Screen ① will display an icon ([⊘🔲]) indicating that the Camera Gooseneck (⑰, ⑱ or ⑲) needs to be inserted into the Camera Gooseneck Input ⑪.*

IMAGE / VIDEO CAPTURE MODE
Press the Image / Video Button ④ to cycle between Image Capture mode and Video Capture mode. The Image / Video Mode Indicator ㉕ will indicate which mode is selected.

Press the Capture Image / Record Button ② to capture a still image or begin recording video. If recording a video, press the Capture Image / Record Button ② again to stop recording.

ROTATE IMAGE
Press the Rotate Image Button ③ to rotate the image 180°.
NOTE: Press and hold the Rotate Image Button ③ to switch between front and side cameras when using optional dual lens camera (Cat. No. 69473 9.8' (3 m) Armored Gooseneck included with ET19 or sold separately).

LED BRIGHTNESS
The brightness of the camera's LED light can be adjusted to 4 levels or turned off. Press the Camera Light Adjust / Up Button ⑤ to adjust brightness. Camera LED Brightness Indicator ㉖ will indicate brightness level.

DIGITAL ZOOM
The camera can zoom in on the image 1×, 2× or 3×. Press the Digital Zoom / Down Button ⑥ to cycle through zoom levels. The Digital Zoom Indicator ㉗ will indicate the level of zoom displayed.

SCREEN BRIGHTNESS
The screen can be set to 100% brightness, or dimmed to 75%. Press the Power / LCD Brightness Button ⑨ to toggle between brightnesses. *NOTE: Do not hold the Power / LCD Brightness Button ⑨, doing so*

OPERATING INSTRUCTIONS

MENU

NOTE: While in Menu mode, press the Menu Button ⑧ to return to live view.

Press the Menu Button ⑧ then use the Up ⑤ and Down ⑥ Buttons to navigate to the following items:

Gallery: Press the Menu Button ⑧ then use the Up ⑤ and Down ⑥ Buttons to navigate to GALLERY. A list of captured (and saved) still images and videos will be displayed in chronological order. Use the Up ⑤ and Down ⑥ Buttons to navigate to the desired image or video and press the Enter Button ⑦ to view:

To view image options:

Press the Enter Button ⑦ again to display the options menu. Use the Up ⑤ and Down ⑥ Buttons to navigate to the desired option, then press the Enter Button ⑦ to execute:

- **Go Back:** Closes the Options menu. Press the Menu Button ⑧ to return to the gallery.
- **Info:** Displays image/video details.
- **Delete:** Asks to delete the selected image. Use the Up ⑤ and Down ⑥ Buttons to select the green checkmark next to the file, then press the Enter Button ⑦ to confirm deletion. *NOTE: This action CANNOT be undone.*

Press the Menu Button ⑧ to return to the main menu screen.

To view video:

While in the Gallery, use the Up ⑤ and Down ⑥ Buttons to navigate to the desired option, then press the Enter Button ⑦ to execute:

- **Go Back:** Closes the Options menu. Press the Menu Button ⑧ to return to the gallery.
- **Play:** Press the Enter Button ⑦ to play the selected video. and enter the Play Video menu. While in the Play Video menu, use the Up ⑤ and Down ⑥ Buttons select from the following options, and press the Enter Button ⑦ to execute:
  - **Go Back:** Returns to options menu.
  - **Pause:** Stops video and returns to play menu.
  - **Skip Back 5 Seconds:** Moves the video backward 5 seconds.
  - **Skip Forward 5 Seconds:** Moves the video ahead 5 seconds.
  - **Info:** Displays video details.
  - **Delete:** Unit asks to confirm deleting the selected video. Use the Up ⑤ and Down ⑥ Buttons to select the green checkmark, then press the Enter Button ⑦ to confirm deletion. *NOTE: This action CANNOT be undone.*

NOTE: Saved images and videos can also be exported to a computer via the USB port ⑫.

Date and Time: Press the Menu Button ⑧ then use the Up ⑤ and Down ⑥ Buttons to navigate to DATE + TIME. Use the Up ⑤ and Down ⑥ Buttons to select Date Format and choose the desired format to display, either MM/DD/YYYY or YYYY/MM/DD.
Use the Up ⑤ and Down ⑥ Buttons to select Time Format to choose the desired format to display either 12hr or 24hr.

OPERATING INSTRUCTIONS

Use the Up ⑤ and Down ⑥ Buttons to select Date + Time. Press the Enter Button ⑦ to enter Set Date + Time settings. Use Up ⑤ and Down ⑥ Buttons to navigate to the desired field and press the Enter Button ⑦ to select. Use Up ⑤ and Down ⑥ Buttons to change the value, then press the Enter Button ⑦ to confirm changes. When finished, press the Menu Button ⑧ to return to the Date + Time screen.

Press the Menu Button ⑧ to return to the main menu screen.

Auto-Power Off: Press the Menu Button ⑧, then use the Up ⑤ and Down ⑥ Buttons to navigate to Auto Power Off (APO), then press the Enter Button ⑦. Use the Up ⑤ and Down ⑥ Buttons to set the desired APO time to OFF, 30, 60, 90 or 120 minutes. Press the Enter Button ⑦ to confirm selection.

Language: Press the Menu Button ⑧ then use the Up ⑤ and Down ⑥ Buttons to navigate to LANGUAGE, then press the Enter Button ⑦. Use the Up ⑤ and Down ⑥ Buttons to select ENGLISH, SPANISH or FRENCH. Press the Enter Button ⑦ to confirm selection.

About: Press the Menu Button ⑧ then use the Up ⑤ and Down ⑥ Buttons to navigate to ABOUT. The screen will display the MODEL #, VERSION, and Battery Temperature. A QR code to download the instruction manual to a smart device will also be displayed. Press the Menu Button ⑧ to return to the main menu.

Delete All Media
To delete all saved images and videos, press the Menu Button ⑧ then use the Up ⑤ and Down ⑥ Buttons to navigate to DELETE ALL MEDIA, then press the Enter Button ⑦ to initiate deletion. Use the Up ⑤ and Down ⑥ Buttons to select Cancel or Confirm, then press the Enter Button ⑦.
NOTE: This action CANNOT be undone.

App Setup
Open Google Play or iOS App Store and search for "Wifi Borescope ET19". Download and install app.

To connect ET19 to mobile device
Power on ET19 Device. Press the Menu Button ⑧ then use the Up ⑤ or Down ⑥ buttons to navigate to WIFI MEDIA TRANSFER then press the Enter Button ⑦. On your mobile device, open the Wifi Borescope ET19 App. Select "Connect" and choose the "KT-ET19T" network to connect to the device. Note it may take a minute or two for network to appear.

To Download Images/Videos
Once devices are connected, use app to select Images or Video. Select which files you want to Save and select SAVE TO PHONE to download.

While connected, files can be remotely deleted from the ET19 device. To delete from the device, select the files and press the TRASH icon.
NOTE: This action CANNOT be undone.

To delete files from the ET19 app, select the files and then press the TRASH icon. It will prompt you to confirm. This action cannot be undone.

To deselect files, select the X icon in the bottom left corner.

To go back to the main menu of the app, select the ARROW icon in the bottom right corner.