# INSTRUCTION MANUAL
## Wireless Inspection Camera

- **1080p HIGH-RESOLUTION CAMERA**
- **FISH ROD MOUNTABLE**
- **ATTACHMENT CAPABLE (HOOK, MAGNET, MIRROR)**
- **WIFI CONNECTION* TO iPHONE® AND MOST ANDROID® PHONES**
- **IP67 RATED**
- **RECHARGEABLE LITHIUM-ION BATTERY VIA USB-C**

*App is optimized for:
- Apple® iOS version 12 or higher
- Android® versions 11 or higher

**2 m   IP67/42***

*Camera is rated IP67 only when USB-C is over charge port.

## GENERAL SPECIFICATIONS

Klein Tools ET30 is a WiFi-connected borescope with a 1080p camera. The video output is displayed on Android® and iOS® powered phones by a WiFi signal transmitted from the Borescope. The camera output can only be displayed on an iOS® and/or Android® device using the Klein Tools ET30 Borescope App, available on Google Play® and the App Store®.

- **Operating Altitude:** 6562 ft. (2000 m)
- **Relative Humidity:** <85% non-condensing
- **Operating/Charging Temperature:** 14°F to 122°F (-10°C to 50°C)
- **Storage Temperature:** -4°F to 140°F (-20°C to 60°C)
- **Dimensions:** 7.31" x 2.3" x 1.5" (185 x 58 x 38 mm)
- **Weight:** 20 oz. (567 g)
- **Camera Output:** 1920 x 1080 (Image), 1280 x 720 (Video)
- **Camera Frames per Second:** 30
- **Battery:** Li-Ion, XXV / 500mAh (XXWh) (internal)
- **Battery Life:** Approx. 1.2 hours
- **Charging Requirements:** 5V DC (maximum), 1A (minimum)
- **Conformance/Compliance:** CE, UKCA, FCC, IC, DOE/CEC, NRCan
- **Ingress Protection: Body:** IP67 dustproof & waterproof when USB-C port cover is closed.
- **Drop Protection:** 6.6 ft. (2 m)

*Specifications subject to change.*

### *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 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 immerse in water or liquids. DO NOT use the borescope for underwater inspections.

  • Properly seal the charging port cover to achieve specified water & foreign object ingress protection. Keep seal free of dirt, oil, sand, or other material that interferes with proper sealing. Failure to do so can result in risk of fire or electric shock.

  • DO NOT open the charging port cover if wet or in a wet environment. Thoroughly dry the unit and the seal around water-resistant cover completely before opening water resistant cover.

• DO NOT subject to impacts or drops greater than 9.8 ft. (3m) Drops larger than this may not show signs of damage, but internal components may have been compromised. It is advisab to replace the unit if any such severe events occur.

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

• 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.

### FCC 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. This equipment should be installed and operated with a minimum distance of 5mm between the radiator and your body or nearby persons.

### 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. This equipment should be installed and operated with minimum distance 5mm between the radiator and your body.

### 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. The complete declaration of conformity can be found on this product's page at **www.kleintools.com**.

### UKCA DECLARATION OF CONFORMITY

Hereby, Klein Tools declares that this product is in compliance with the relevant statutory requirements. The complete declaration of conformity can be found on this product's page at **www.kleintools.com**.

| | | <.1% w/w SVCH | |
|---|---|---|---|
| Certification | REACH | | |
| | RoHS | x | |
| | CE | x | EMC compatibility testing, RED, LVD |
| | UKCA | x | Same as CE ( EMC, Radio Equipment, Electrical Safety) |
| | NR Can | x | Energy Efficiency of Battery Chargers |
| | FCC / IC | x | FCC Part 15/ICES-003, FCC ID/ IC ID for Wifi, SAR report |
| | DOE / CEC | x | Energy Efficiency of Battery Chargers |
| | ETL Listed, UL/IEC 62368-1, UL 61010-1/61010-2-30 | x | And CSA Equivalents |
| | UN 38.3 | x | Rechargeable battery shipping, SDS, certification for safe transport. |
| | TSCA - Attestation of conformity | x | |

## FEATURE DETAILS

1. Power Button
2. Camera
3. LEDs
4. Attachment Collar
5. 8/32 Threaded Insert
6. Charging Port Cover
7. USB-C Charge Port
8. Rear 8/32 Threaded Insert
9. Flex Rod
10. Hook
11. Magnet
12. Mirror
13. 8/32 M to 8/32 M Thread Adapter
14. 8/32 M to ¼-20 M Thread Adapter
15. 90 Degree Adapter
16. Carrying Case

## 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 |
| ▬▬▬ | DC voltage/ current | 🗑 | WEEE – Electronics disposal | UK CA | **UKCA:** UK Conformity Assessment |

## INDICATORS

### WiFi INDICATOR

When turning on the borescope, the Power Button (1) will illuminate solid blue for a few seconds, then begin to slowly blink when transmitting a WiFi signal. Other behaviors detailed below:

| INDICATOR COLOR | STATUS INDICATED |
|---|---|
| Blinking-Blue | The device is actively transmitting a WiFi signal, labeled as "KT ET30" |
| Solid Blue | Unit is connected to a phone and is active |

### BATTERY INDICATOR

During initial power-up of the borescope, the power button (1) will illuminate blue or red depending on remaining charge level. Other behaviors detailed below:

| INDICATOR COLOR | STATUS INDICATED |
|---|---|
| Blinks Blue | Battery has 20% or less charge remaining |
| Blinking Blue | Unit is charging |
| Solid Red | Fully charged |

### ACCESSORIES

To use Hook (10), Magnet (11), or Mirror (12) Accessories the Attachment Collar (4) must be inserted around the camera. The Attachment Collar (4) can be attached in two orientations, either above or below the Camera (2). To attach the collar, line up the slots of the ring on the outside diameter of the Camera (2) and rotate clockwise. To remove the Attachment Collar (4), rotate counterclockwise.

To attach Camer (2) to the Flex Rod (9) or Fish Rods (sold separately), insert the Flex Rod (9) into the Rear 8/32 Threaded Insert (8).

To attach Camera (2) to Fish Rods (sold separately), insert the male end of the Fish Rod into the Rear 8/32 Threaded Insert (8) into the Camera (2). Depending on the fish rod, a thread adapter (13 or 14) may need to be used.

### CHARGING THE BORESCOPE BATTERY

*NOTE: Fully charge borescope before use.  First-time charge should be at least X hours.*

Connect USB-C cable (included) to USB charging port (7). Plug the other end into a computer, USB AC adapter, or other USB power supply (not included). When charging, the Power Button (1) will blink green. Normal charging time is 1 to 2 hours.

*NOTE: Only use USB adapters/power supplies that meet specified charging requirements (see GENERAL SPECIFICATIONS section).*

### DOWNLOADING THE APP

The ET30 app is required for functionality. The app is available for free from Google Play or the App Store.



### CONNECTING YOUR PHONE TO THE BORESCOPE VIA WiFi

1. Press the Power Button (1) for approximately 3 seconds to power-on the borescope. The Power Button (1) will flash on. The Power Button (1) will flash blue when the borescope is actively transmitting a Wi-Fi signal. Wait for this to occurr before trying to connect the phone to the borescope.

2. On your phone, turn on the wireless networks, and enter the menu that displays available networks (menu location will vary based on phone being used).

3. Once the WiFi indicator begins to flash slowly, select "KT ET30" from the phone menu. If unavailable, wait 10 seconds to ensure the borescope is fully powered on.

4. Select the Klein Tools ET30 app on the phone.

The app will open in Display mode with the camera displaying an image (see APP BUTTON/ICON DETAILS section).

*NOTE: Phone must be disconnected from the borescope's WiFi signal if an internet connection is required on the phone.*

## DISPLAY MODE BUTTON/ICON DETAILS

**A.** Borescope Battery Status
**B.** Minimize/Maximize Options
**C.** Camera Image
**D.** Photo Button
**E.** Video Start/Stop Button
**F.** LED Brightness Adjustment Button
**G.** Auto Focus/Manual Focus Toggle Button
**H.** Options Button

**PHOTO/VIDEO FILE MENU BUTTON/ICON DETAILS**

I. Photos
J. Videos
K. Select/Select All Button
L. Return

**FILE MANAGEMENT MODE BUTTON/ICON DETAILS**

**M.** Cancel
**N.** Share
**O.** Delete
**P.** Return
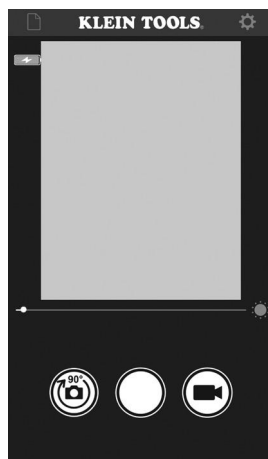
## APP SCREEN ORIENTATION

The app will display in Portriat or Landscape view, depending on the rotation of the phone.
To change the orientation of the app screen, simply rotate the phone 90 degrees.

*Portrait View*



*Landscape View*

**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 Ⓕ 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 ⑩ at the subject to be photographed and tap the Photo button Ⓖ to take a photo.

**CAPTURING VIDEO**

While in Display mode, aim the camera ⑩ at the subject to be recorded and tap the Video Start/Stop button Ⓗ. While recording video, the elapsed time will be shown Ⓘ , and the the Video Start/Stop button will turn red and display the square Stop symbol. To end the recording, tap the Video Start/Stop button again. The Video Start/Stop button will return to its normal appearance.

**VIEWING AND MANAGING PHOTOS AND VIDEO FILES**

To access photo and/or video files, tap the Settings icon Ⓔ , then select the Video Ⓛ or Photo Ⓜ menu.

Tap on a file Ⓞ to view.

To manage files, tap the Select Items icon Ⓚ to select file(s). Once selected, files can be copied, sent externally Ⓟ or deleted Ⓠ .
*NOTE: WiFi to the borescope must be disconnected in the phone's Settings menu in order to send files.*

To exit File Management mode, tap the Exit File Management mode icon Ⓡ .

## CLEANING

Be sure unit is turned off and wipe with a clean, dry lint-free cloth. ***Do not use abrasive cleaners or solvents.***

## STORAGE

Do not expose to high temperatures or humidity. After a period of storage in extreme conditions exceeding the limits mentioned in the General Specifications section, allow the unit to return to normal operating conditions before using.

## WARRANTY

### www.kleintools.com/warranty

## DISPOSAL / RECYCLE

Do not place equipment and its accessories in the trash. Items must be properly disposed of in accordance with local regulations. Please see **www.epa.gov/recycle** for additional information.

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App Store and iPhone are registered trademarks of Apple Inc., registered in the U.S. and other countries.
IOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used by Apple, Inc. under license.

## CUSTOMER SERVICE

**KLEIN TOOLS, INC.**
450 Bond Street   Lincolnshire, IL 60069
1-800-553-4676
**customerservice@kleintools.com**
**www.kleintools.com**

**FCC Caution:**

This device complies with part 15 of the FCC Rules. 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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

# ISED Statement

English:This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

The digital apparatus complies with Canadian CAN ICES-3 (B)/NMB-3(B).

French: Cet appareil contient des émetteurs/récepteurs exempts de licence qui sont conformes aux RSS exemptés de licence d'Innovation, Sciences et Développement économique Canada.

L'exploitation est soumise aux deux conditions suivantes :

(1) Cet appareil ne doit pas provoquer d'interférences.

(2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

l'appareil numérique du ciem conforme canadien peut  - 3 (b) / nmb  - 3 (b).

This device meets the exemption from the routine evaluation limits in section 6.3 of RSS 102 and compliance with RSS 102 RF exposure, users can obtain Canadian information

on RF exposure  and compliance.
cet appareil est conforme à l'exemption des limites d'évaluation courante dans la section 6.3 du cnr - 102 et conformité avec rss 102 de l'exposition aux rf, les utilisateurs peuvent obtenir des données canadiennes sur l'exposition aux champs rf et la conformité.
This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment.
Cet équipement est conforme aux limites d'exposition aux rayonnements du Canada établies pour un environnement non contrôlé.

This equipment should be installed and operated with minimum distance 5 m m between t he radiator & your body.
Cet équipement doit être installé et utilisé à une distance minimale de 5 m m entre le radiateur et votre corps.