# USER MANUAL

## *Industrial Inspection Tool*

## 720P HIGH-DEFINITION
## SIDE VIEW RIGID WIFI INSPECTION CAMERA

## Model:TW4908-HD

INSCAM

Version 1.0
Please read this user manual carefully and thoroughly before using this product.
Failure to understand operation procedures may result in injury.

# Contents

# GENERAL SAFETY INFORMATION

WARNING! Read and understand all the instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

## SAFETY INSTRUCTIONS

☞Prevent object and liquid entry. Never spill liquid of any kind on the unit. Liquid increases the risk of electrical shock and damage to the product.

☞The unit is not shock-resistant. Do not use this camera as a hammer and avoid high impact resultant from things such as dropping the unit from height.

☞Do not immerse video handle in water. Avoid moisture, and store the product in a dry place. Such measures reduce the risk of electric shock and damage. The lens and tube are water resistant when the unit is fully assembled, but the handle part is not.

☞Do not use the camera if condensation forms inside the lens. Let the water evaporate before using again.

☞Do not use the unit to inspect environments known or suspected to contain exposed electrical wiring.

☞Do not use the unit in the presence of flammable or explosive gases.

☞The unit is designed for industrial inspections.Never use to perform medical inspections.

☞Turn off the system if it is not in use.

☞This product can only be completely disconnected from its power source by unplugging the power adapter.

☞Do not cut the DC power cable off provided with this product to fit with another power source.

☞Properly dispose of batteries. Exposure to high temperatures can cause batteries to explode, so do not dispose in a fire.

☞Use power adapter provided by vendor only.

☞Some countries have regulations concerning batteries disposal. Please follow all applicable regulations.

# WELCOME

Thank you for purchasing our 720P HIGH-DEFINITION SIDE VIEW RIGID WIFI INSPECTION CAMERA. This product is designed as a 720P HD real-time inspection camera and to unveil the internal objects and/or structures with the illumination of the highlight LEDs, it is specially designed for cavity wall tie, dry rot and insulation inspection, inspection of spaces under floors, above ceilings and behind panels and ducts, and many more where a rigid side view endoscope is required.

# FEATURES

- 720P HD side view camera head
- Mini stainless steel insertion tube with outer diameter 9mm
- Insertion tube length 300mm
- 2 high intensity LEDs on camera head, providing light up to 1.5 meters
- Waterproof level: IP67 (camera tube only)
- Support ISO or Android mobile device
- Photo and video recording function
- Image still function in PHOTO status to pause to observe/select the best picture to save

# PACKING LIST

| | | |
|---|---|---|
| 1 X Camera Probe | 1 X USB Cable | 1 X Power Adapter |
| 1 X User Manual | 1 X Tool Case | Stainless Steel Protective Sleeve (Optional) |

# STRUCTURE



Stainless Steel Insertion Tube
Dia. 9mm
Lenth 300mm

On/Off Switch
LED Brightness Control

Video Out
(Disable)

Indicator

Side View Camera
LEDs Lighting Distance Up To 1.5m

Side View Camera

2 High Intensity LEDs
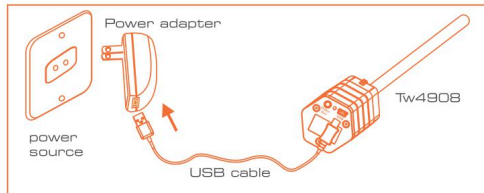Lighting Distance: 1.5m

USB Charging

\* Notice: The Video Out port is disabled in this product.
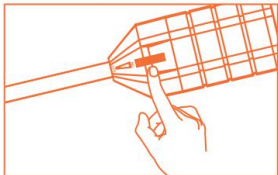
# INSTALLATION

**To Connect Camera Power**

Plug the USB cable into the power adapter, and the other end into the camera to charge the camera.

Notice: You must use the original power adapter provided by the vendor.



# BASIC OPERATION

As you roll the power switch to turn on the camera, the power indicator on the camera handle will light GREEN. The rolling switch then acts as a dimmer for LEDs on the end of the tube.

# APP OPERATING INSTRUCTIONS

**INSTALL APP**
1. **Open GOOGLE Play Store/APPLE Store**
2. Search and download the app "**INSCAM**"
3. Install the APP, a new icon will be displayed on you mobile device.

INSCAM

**CONNECT WIFI**
1. Power on the camera and wait for about 7 seconds, then it will generate a WiFi signal named INSCAM-XXXX (Notice: XXXX reference to the name of the camera, each camera has a different name.)
2. Connect your mobile device to the WiFi signal from the corresponding camera, then type in the password(default password: 12345678).

3. Click the 🔘 icon on mobile device.

**VIEW REAL TIME IMAGE**

Open the app 🔘 . If the connection between the WiFi of the tool and the mobile device is successful, the live image will be displayed in the APP.



**File Folder** ←

**Camera/Video Button** ←

→ **Camera/Video Switch**
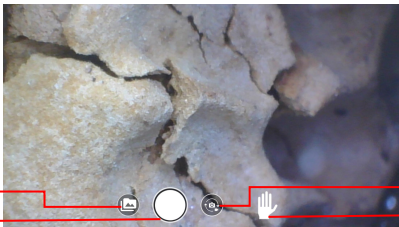
→ **Image Still Button**

**TAKING PHOTO/IMAGE STILL**

In **Photo Mode**, press the **Camera Button**, the image will be flashed and saved in the album of the mobile device.

Press the **Image Still Button**, the image is frozen, you can press "**Save**" to save the frozen image or press "**Cancel**" to release the image and return to **Photo Mode**.

In **Photo Mode**, press the **Photo/Video Switch**, you will enter the **Video Mode**.
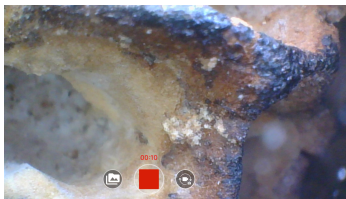


**VIDEO RECORDING**

In **Video Mode**, press the **Video Button**, the red circle will turn to square and the time stamp(Format: MM:SS) is displayed on the top of the **Video Button**, press the **Video Button** again to stop recording and the video will be saved in the album of the mobile device. Press the **Photo/Video Switch** to return **Photo Mode**.
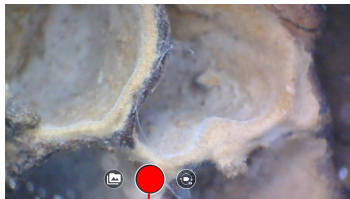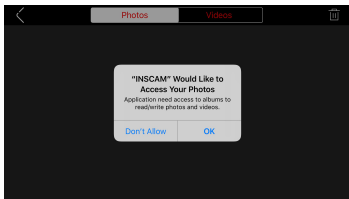


Video Button

**PHOTOS/VIDEOS PLAYBACK**
In **Photos/Videos Mode**, press the **File Folder**, you will enter the **Playback Photos/Videos Mode**.

Notice: At the first time to playback, it will pop up a prompt to further confirmation to allow the app access your albums, if you agree, press **OK** to continue the operation, if not, press **Don't Allow** to give up the operation.



The **Potos/Videos Playback Mode** could be switched easily, only choose the **Photos** or **Videos**, the black background will turn white and the corresponding photos/videos will be in preview state.
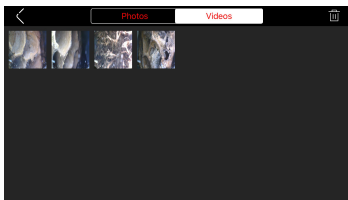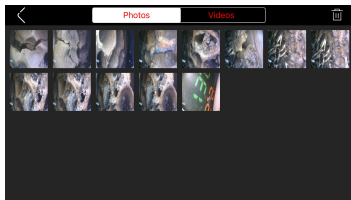


**DETETE/EDIT PHOTOS/VIDEOS**
Press the Delete icon 🗑, the icon will be turn to 🗑, then choose the target photos/videos, press the 🗑 again to delete. Before the deletion, it will pop up a prompt to further confirmation, if you agree, press **Delete** to continue the operation, if not, press **Don't Allow** to give up the operation. Press the target photo/video to play back.

In the status of playing back the target photo, you can choose to **EDIT/DELETE** current photo or **RETURN** to **Photos Playback Mode**.
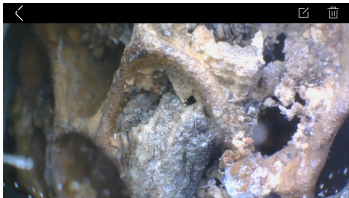


Notice: The **EDIT** operations include: Discoloring (This function is invalid.), Watermark,Text editing, Manual blurring, Filtering, Picture clipping. The corresponding icon is shown as below:



In the status of playing back the target video, you can press **3D** for 3D watching, press **STOP** icon to stop the video, press the **PLAY** icon to continue playing the video, press **Done** to end playing and return to **Videos Playback Mode**.
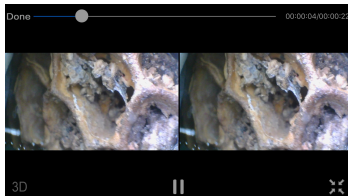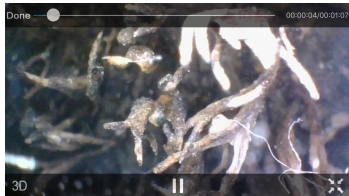
# SPECIFICATIONS

| Items | Product Standard | HD4908 |
|---|---|---|
| **Camera Probe** | Camera Lens | CMOS |
| | Resolution | 1280*720 |
| | Viewing Angle | 55° |
| | Focal Distance | 4CM |
| | Depth of Field(DOF) | 1.5CM~30CM |
| | Light Source | 2LEDs |
| | LED Light Irradiation Distance | 150CM |
| | Camera Probe Outer Diameter | 9.0MM |
| | Insertion Length | 30CM |
| | Overall Length | 40CM |
| | Waterproof Level | IP67(Probe Only) |
| | Battery | 3.7V-1430mAh |
| | Working Time | 3 Hours |
| | Charging Time | 4 Hours |
| | Working Temperature | -10°~60° |
| **WiFi** | Transmitting frequency | 2400MHz-2483.5MH |
| | Modem mode | 802.11b: DSSS(CCK, DQPSK,DBPSK) 802.11g/n: OFDM(BPSK, QPSK,16QAM,64QAM) |
| | Transmission distance in line of sight | >150m |
| | Frame rate | 30fps |
| | Video compression | H.264 |
| | Wireless protocols | IEEE 802.11b, IEEE 802.11g IEEE 802.n(1T1RModes) |
| | Encryption mode | WPA2 |
| | Support System | Android 7.0 or above iOS Version 9.0 or above, compatible with iPhone, iPod and iPod touch |
| **Image** | Image Format | .PNG |
| | Image Resolution | 1280*720 |
| **Video** | Video Format | .MP4 |
| | Frame(Width*Height) | 960*544 |

* Actual transmission range of wireless monitoring may vary according to the weather, location, interference or building construction.

# TROUBLESHOOTING

| Problem | Possible Causes | Likely Solutions |
|---|---|---|
| Tool will not start | Camera not charged | Charge camera |
| No Image | WiFi connection failed | Change mobile device's WiFi connection to tool camera's WiFi |
| Image too dark or light | LEDs near camera need to adjustment | Use dial on control handle to adjust brightness of LEDs. |

⚠ Follow all safety precautions whenever diagnosing or servicing the tool.

# WARRANTY INFORMATION

We warrant its instruments and accessories against defects in material or workmanship for one year from the date of purchase. We will replace or repair the defective unit, at its option, subject to verification of the defect.

This warranty does not apply to defects resulting from abuse, neglect, accident, unauthorized repair, alteration, or unreasonable use of the product.

Any implied warranties arising from the sale of a product, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. We shall not be liable for loss of use of the product or other incidental or consequential damages, expenses, or economic loss, or for any claim of such damage, expenses, or economic loss.

State laws vary. The above limitations or exclusions may not apply to you.

# RETURN FOR REPAIR POLICY

Every effort has been made to provide you with a reliable product of superior quality. However, in the event your instrument requires repair, please contact our Sales to obtain an RGA (Return Goods Authorization) number before forwarding the unit via prepaid/collect freight to us.

All the graphics and specifications included in this user manual are subject to minor change without prior notice.