# HD Wi-Fi Internet Microscope

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## Welcome

Thank you for your choice of our product - it is a high-tech while easy to use HD Wi-Fi Internet Digital Microscope. With this unit you will see a unique and "bigger" world on iOS/Android devices either by AP mode or via Internet. It's easy to zoom in on stamps, coins, paper currency, plants, insects, skin, fabrics, rocks and minerals, and so much more.

We recommend reading this manual first to get the best out of this unit.

## 1. Precaution

Before using the Wi-Fi Digital Microscope, please ensure that you read and understand the safety precautions described below. Always ensure that the Wi-Fi Digital Microscope is operated correctly.

- The Microscope is not waterproof, so keep it dry.
- Do not use it in a humid place like bathrooms. A dry environment will maintain its life to maximum.
- Use the Microscope only at -5℃-50℃.
- Sudden temperature change may form dew inside the Microscope like entering a warm room in cold winter. Put it inside a handbag or plastic bag to slow down temperature changes.

- Do not point Microscope lens to the sun or strong light for a long time. Powerful light may hurt the light-sensitive electronics.
- Avoid touching the lens.
- The white LEDs which illuminate the Microscope target field are very bright. Do not stare directly into these LEDs as it may damage your eyes.
- The clear plastic distance shell sometimes picks up dirt or toxic material from a microscopically observed surface. Be careful that this doesn't get in contact with the human skin. Always wash carefully or disinfect as needed.

# 2. Preparation

## Standard accessories

Wi-Fi Microscope

Stand (optional)

DC adaptor

User manual

## Parts Names & Functions
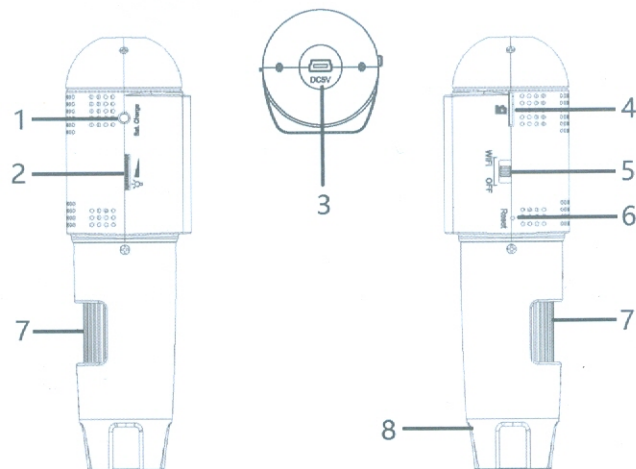
| Part# | Meaning | Part# | Meaning |
|-------|---------|-------|---------|
| 1 | Charge indicator | 5 | ON/OFF |
| 2 | LED dimmer | 6 | Reset |
| 3 | DC-in (5V) | 7 | Focus wheel |
| 4 | Micro-SD slot | 8 | LED |

## ■ System Requirements

   * iOS: 5.1 and later
   * Android: 4.3 and later

## ■ Technical Specifications

| | |
|---|---|
| Magnification Ratio | 10x~180x |
| Still capture resolution | 1280x720, 640x480, 320x240 |
| Video capture resolution | 1280x720, 640x480, 320x240 |
| Focus Range | Manual focus from 0mm to 50mm |
| Video format | AVI |
| Photo format | JPEG |
| Light source | 6 LED (brightness adjustable) |
| Power source | Rechargeable Li-ion battery<br>Working time: 100mins,<br>Charging time: 120mins<br>Charging power: 5V DC |
| iOS/Android interface | Wi-Fi |
| App | iOS: TinyCapture at App Store<br>Android: TinyCapture at play.google.com |
| Size | Microscope: 154mm (L) x 44mm (R) |

## 3. Connect Microscope to iOS/Android Device

### 1)   Download App

**iOS:** Search and install **TinyCapture** from App Store.

**Android:**

Search and download **TinyCapture** from play.google.com or the download link provided by seller and install it.



iOS                    Android

### 2)   Connect the Wi-Fi Microscope to iOS/Android device. (here we take iOS device as an example)

(1)  Power on the microscope by sliding the WIFI/OFF switch to WIFI position. The camera's hotspot will be shown on the Wi-Fi list of your smart phone in around 30 seconds.

(2)  Turn on the Wi-Fi of your iOS/Android device; search the Wi-Fi Digital Microscope from the Wi-Fi Device list.

The Wi-Fi Microscope name is **WIFI Microscope_xxxxxx** (xxxxxx is the last 6 digits of the camera ID), as follows:

The password to connect the device is **12345678**.

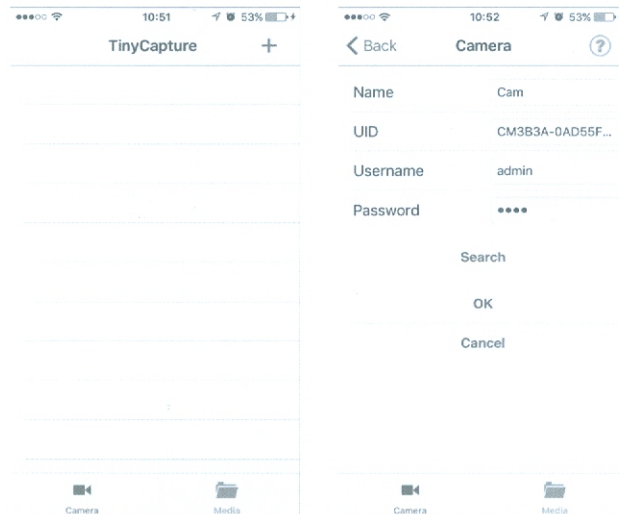Please see page-21 on how to change the password.
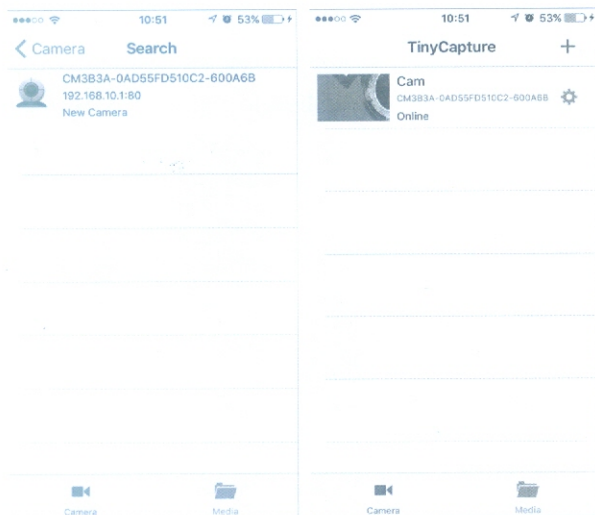


## 4. Add Camera to App and Start Preview

1) Start the app, click **+** at the right corner, then click **Search**, finally click OK to confirm.

Input password, it is 8888 by default.
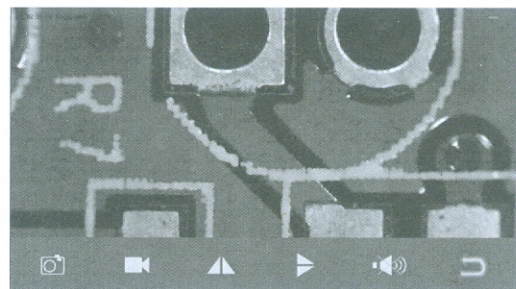
Please see page-20 on how to change the password.

2) The camera will be listed as follows. After clicked, it will list as online.



3) Click the online camera, you can then start preview.



| | |
|---|---|
| | HD/VGA/QVGA |
| | Crossing |
| | Brightness |
| | Contrast |
| | Camera settings (P14) |
| | Photo capture |
| | Video capture |
| | Mirror |
| | Flip |
| | Speaker |

# 5. Capture and Playback

## 1) Capture photo

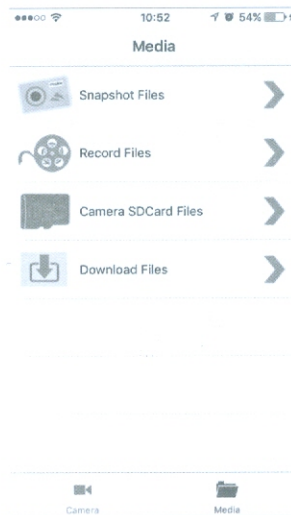Click  and then a photo will be taken!

## 2) Record video

Click , and there will be a red dot in the icon

, which means video is on recording. Press again

to finish the recording (then the red dot will disappear).

## 3) View recorded files

From the main page, click Media at the bottom.



**Snapshot Files:**

Photos captured. You can save photo to album by pressing it for 2 seconds.

**Record Files:**

Videos captured.

For Android, the files are stored under album.

For iOS, you can access the files by iTunes (see Page-22).

**Camera SDCard Files:** video captured and stored on Micro-SD card.

**Download Files:** Videos downloaded from Micro-SD card to Smart phone.

## 6. Camera Settings

When a camera is online, click ⚙ to enter the setting page as follows:
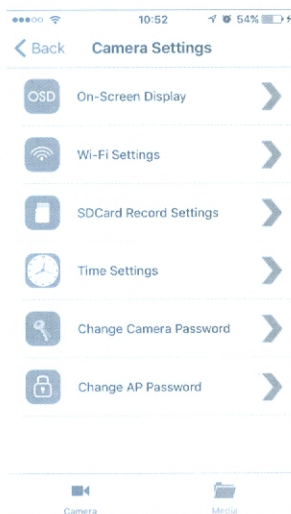


## 1) On-Screen Display

Here you can choose whether to display the on-screen info including time/date at the left-top corner and camera name at the left-bottom corner.

## 2) Wi-Fi Settings

Here you can configure the camera to connect to a router (network) and then you smart phone can access to the camera via Internet, which means you can visit the camera anywhere in the world so long your phone has access to Internet.
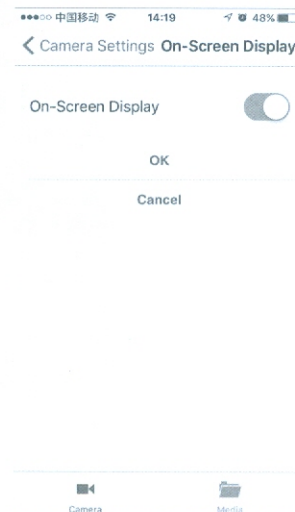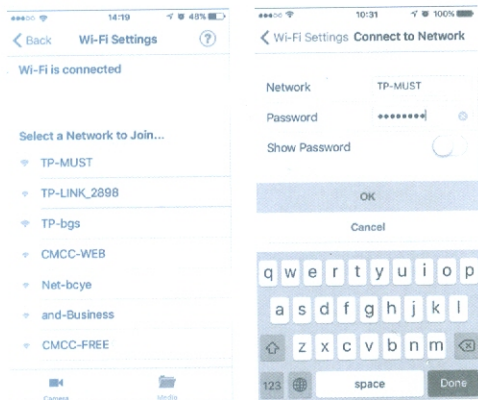
Choose a new network (router) to join, for example, TP-MUST. And then input password of the network, and then click OK.



Confirm the input; the camera will reboot to join the new network. The rebooting process will need around 40-60 seconds.

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After rebooting successfully, the camera will connect to the router (new network) and can access to Internet if the router has Internet access. Then your Smartphone can access to the camera via Internet. Even your Smartphone is far away from the camera, it can still access the camera so long your phone has Internet access. Now the camera is an Internet Microscope.
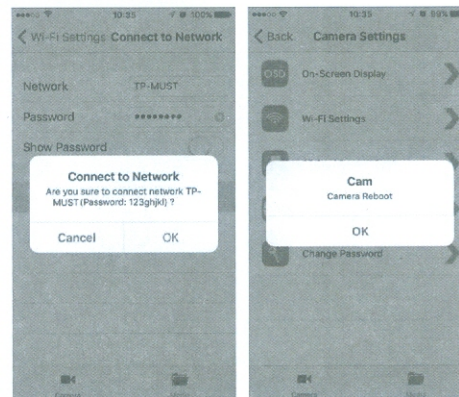


If the Wi-Fi setting is failed (for example, the password is wrong), please reset the camera (see Page-23).
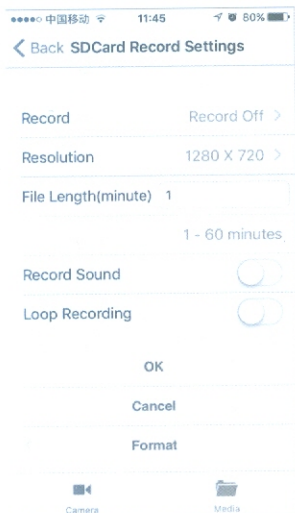
Under Internet connection mode, if you power on the camera again, it will take around 90s for it to search and connect the router. If the router does not exist, the camera will switch to AP (point to point connection) again in 90s. You can remove Internet connection mode by reset.

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## 3) SD Card Record Settings

You can setup whether to start recording video by the inserted Micro-SD car.

File Length means the video length of each clip.

Loop Recording means when the SD card is full, recording will overwrite the card from the earliest file.

| | |
|---|---|
| ●●●●○ 中国移动 � | 11:45　　　🡕 ▼ 80% ▰▱ |
| ❮ Back **SDCard Record Settings** | |
| Record | Record Off ❯ |
| Resolution | 1280 X 720 ❯ |
| File Length(minute) | 1 |
| | 1 - 60 minutes |
| Record Sound | ⬭ |
| Loop Recording | ⬭ |
| | OK |
| | Cancel |
| | Format |
| ▪◀ Camera | 📁 Media |

Here you can format the Micro-SD card.

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## 4) Time Settings

You can sync the camera time with your phone time.

| | |
|---|---|
| ●●●○○ � | 14:20　　🡕 ▼ 48% ▱ |
| ❮ Camera Settings **Time Settings** | |
| **Current Time** | |
| Dec 23, 2016, 10:18:00 PM | |
| **Time Zone** | |
| (GMT) England | ❯ |
| **Time Server** | |
| time.nist.gov | ❯ |
| **Daylight Saving Time** | ⬭ |
| | OK |
| | Cancel |
| | Sync With Phone Time |
| ▪◀ Camera | 📁 Media |

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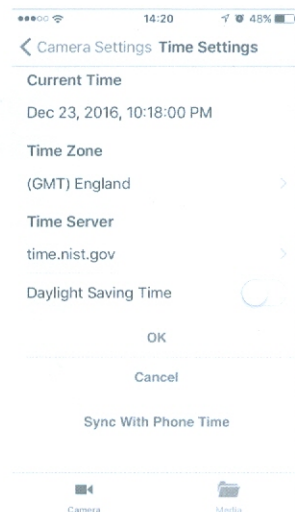
## 5) Change Camera Password

This enables you to change the password that is used on the adding camera page as follows (the left one).

| | |
|---|---|
| ●●●○○ 🛜 | 11:03 ⚡ 🔋 94% 🔋 |
| ‹ Back | **Cam** ? |
| Name | Cam |
| UID | CM3B3A-0AD55F... |
| Username | admin |
| Password | •••• |
| | Search |
| | OK |
| | Cancel |
| 📹 | 📁 |
| Camera | Media |

| | |
|---|---|
| ●●●○○ 🛜 | 14:20 ⚡ 🔋 48% 🔋 |
| ‹ Camera Settings | **Change Password** |
| | Username: admin |
| Current Password | Current Password |
| New Password | New Password |
| Confirm New Password | New Password |
| | OK |
| | Cancel |
| 📹 | 📁 |
| Camera | Media |
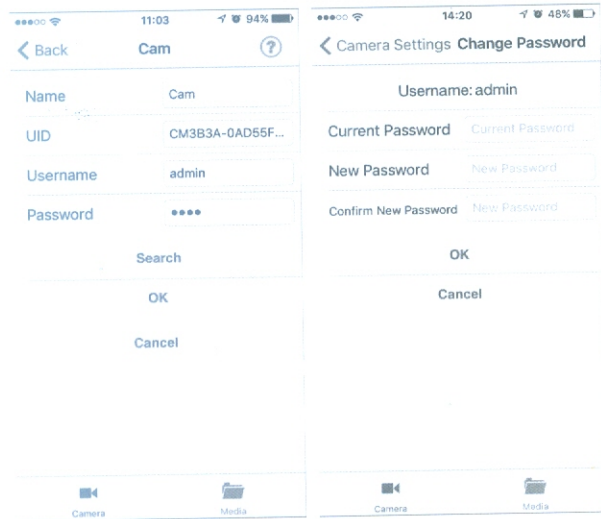
The new password will become valid when the camera is reconnected.

## 6) Change AP Password

This enables you to change the password used to connect your phone with camera by Wi-Fi (shown on Page-8).

| | |
|---|---|
| ●●●●○ 🛜 | 11:29 ⚡ 🔋 82% 🔋 |
| ‹ Back | **Change AP Password** |
| | Network: WIFI_Microscope_9F488F |
| Current Password | Current Password |
| New Password | New Password |
| Confirm New Password | New Password |
| | OK |
| | Cancel |
| 📹 | 📁 |
| Camera | Media |
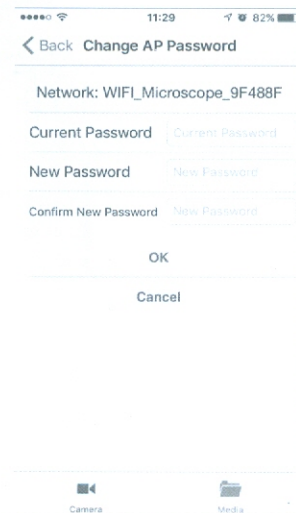
The password should be 8-digit.
The new password will become valid when the camera is powered again.

## 7. Download Recorded Video by iTunes

Connect your phone with computer by cable, start iTunes, choose TinyCaputre -> CameraFiles, and then choose **Save to** in order to download files to computer.
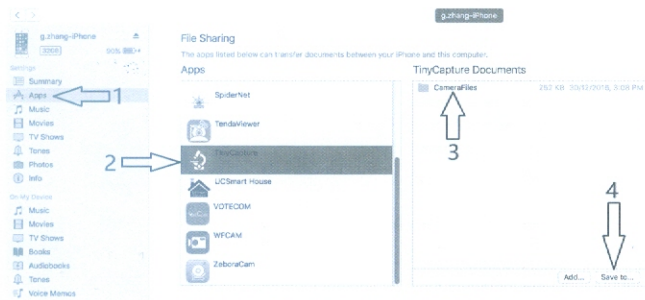


Open the saved CameraFiles from computer, the recorded video files will be listed as follows.



## 8. Reset the Camera

If you cannot find hotspot of the camera on the Wi-Fi list of your Smartphone, or the camera is somehow halted, you can reset it.

To reset the camera, please use a pin to press the Reset button for around 5 seconds. Release the pressing when the LEDs go off, and then the camera will reboot. The rebooting process will need around 40 seconds.

## 9. Troubleshooting

| Problem | Solution |
|---------|----------|
| After switched to WIFI position, the LED does not light. | 1) Rotate the LED dimmer to check if it is on. 2) Charge the battery. |
| The microscope is halted. | Reset the camera (see P23). |
| I cannot find the hotspot of the camera on the Wi-Fi list of my Smartphone. | Reset the camera (see P23). |
| There is small dot on the preview image. | Use a soft fabric to clean the lens of the camera. |

This symbol on the product or in the instructions means that your electrical and electronic equipment should be disposed at the end of its life separately from your household waste. There are separate collection systems for recycling in the EU. For more information, please contact the local authority or your retailer where you purchased the product.