

# USER MANUAL



## WiFi-USB DIGITAL DEVICE

DM 93/42/CEE (MODIFIED BY DIRECTIVE 2007/47/CE) MEDICAL DEVICE IN CLASS 1

### MODELS

FEDMEDMICFI



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**Rev. 07**

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**WARNING! USERS SHOULD READ THIS MANUAL VERY CAREFULLY BEFORE USING THE DEVICE.**

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## **1. UNPACKING**

We kindly remember that the packaging element (paper, cellophan, staples, tape and so on) can cut the skin or injure if handled careless. It is important to handle them carefully and by using proper equipments; do not let equipments and packaging elements near people who are not responsible.

Once you have opened the packaging, please check properly its content to be sure that all parts are inside it and that they are in perfect condition.

## **2. PACKAGING CONTENTS**

### **The packaging contains:**

One Mic-Fi device

One CD with software+ manual

One Charger

One USB cable

One quick guide

Accessories: depending on the intended use

### 3. SYMBOLS

The symbols shown on the following pages can be found on the WiFi Mic-Fi Device, on the packaging, on the box or in this manual.

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#### WARNING SYMBOLS

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**WARNING** This symbol shown on this manual indicates that some condition or procedures, which are not respected, could cause injuries or damages to the user or to the patient if occurs a misuse of the device.



**WARNING** Read the instructions

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#### SYMBOLS FOR MAINTENANCE, TRANSPORT AND ENVIRONMENT

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High



Fragile



Keep dry

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#### CERTIFICATION SYMBOLS

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Indicates that the product satisfy the essential requirements of the EU directive for medical devices 93/42/CEE



Indicates a part of B type which goes in contact with the patient.



**ITALECO SRL**

Via Pavia 105/i,  
10098, Rivoli (To),  
ITALY

Indicates the name of the manufacturer.

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## IDENTIFICATION SYMBOLS

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Followed by an alphanumeric code indicates the lot code.



Followed by an alphanumeric code and date indicates the serial number and the production Year

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## OTHER SYMBOLS

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Indicates that the product meet the directive 2011/65/CE related to the reduction of the use of dangerous substances in electrical and electronic devices



Indicates that the product at the end of its life must be separately collected. Thus the user must bring it to the specific collecting point dedicated to the collection of electronic and electric devices, or bring it back to the reseller in case of the purchase of a new one. The adequate separate collection contributes to a correct environment policy which allows the reuse of dismissed devices. The illegal collection will be strictly punished according to the related laws and norms.



Batteries are considered as a special waste. Do not throw them away together with domestic waste. You have to bring them to specific collection points. The illegal collection will be strictly punished according to the related laws and norms



FCC, Federal Communications Commission It is a USA commission; the symbol indicates that the product won't interfere with other devices present in your household or office

## 4. WARNINGS

**Please read carefully these warnings before start using the Mic-Fi device.** The following warnings are related to the generic use of the Mic-Fi device. A different use of Mic-Fi device could put patient's health and device's users in risk.



The device is suitable for external use only.



The device does not make diagnosis.



**The size that can be viewed from Mic-Fi SW and App are indicative and must not to affect to the final judgment borne by the doctor.  
The Mic-Fi devices are not devices with a measuring function**



**DO NOT INSERT THE DEVICE IN HUMAN OR ANIMAL'S ORIFICE. DANGER OF HEAVY INJURIES.**



Keep out of reach of children.



The Mic-Fi Device is not sterile. Make sure that the covers is disinfected before and after each use.



Before using the digital device please wear disposable gloves in order to keep a suitable hygienic level.



Do not direct the beam of light toward the eyes.



Do not use the Mic-Fi device for capture images or videos of eyes.



Do not use the Mic-Fi device on open wounds or on painful parts of the body.



Do not use the device in close proximity to high heat, magnetic fields.



Do not use the device in contact with lenses, glasses or other surfaces that can change the perceptions of the images.



Do not use the device in WiFi mode during the charging.

## 5. INTRODUCTION

Thank you for purchasing a Mic-Fi device. This product is designed to assist in improving the accuracy of analysis.

Only a well-documented image allows the examiners to compare their analysis with the result of other forms of investigation. In addition, a series of images derived from comparative tests repeated in a certain period of time allows an assessment of possible diseases and a more timely verification of the effectiveness of treatment prescribed or implemented to the patient. The Mic-Fi device is capable of attaching to the visual image (magnification, photos, video) a detailed verification.



Mic-Fi device despite being extremely easy to use is a medical device, and we therefore recommend reading this book before using the equipment.

## 6. DESTINATION OF USE

The Mic-Fi device is intended exclusively for medical personnel. It can use in ambulatory, hospital, private medical offices.

The Mic-Fi device is a medical device can be observe, depends on the chosen product, capillaries, skin, oral cavity and ears. The technology of this device allows you to see in real time on a common PC/tablet/smartphone. The medical device is provided with a build-in leds lights. The medical device needs the installation of a Mic-Fi software/application. The medical device takes the energy directly from the lithium battery included and not removable.



**WARNING! THE DEVICE IS NOT INTENDED FOR CLINICAL INVESTIGATIONS**

## 7. GENERAL GUIDELINES FOR HANDLING

We would always recommend wearing disposable gloves when using the device, however this can reduce the perception while operating with the device. Use alcohol disinfectants.



Do not use the Mic-Fi device with wet hands.



Do not use the Mic-Fi device if damaged or if it does not work correctly.



Always ensure that the device is properly connected to the hardware on which you installed the software/application supplied.



Do not use the device during the charging of the battery.



Do not subject the Mic-Fi device to sudden shocks.



## 8. GENERAL MAINTENANCE

Check the product and accessories before use, even after it has been cleaned. Disinfection of the instrument is needed before use (the assessment has to be performed by the doctor). The product is made of materials resistant to corrosion and environmental conditions provided for normal use, and does not require specific attention, but it must be kept in a closed environment, clean and dry, avoiding exposure to light and protecting it from dust in order to ensure the hygiene conditions.



Do not place the device and accessories in direct sunlight, high temperatures or in humid or dusty places.



After using the device always separate from accessories and specula, cleaning them with a mild alcoholic disinfectant solution, then proceed with the procedures for cleaning and disinfection the rest of the equipment, put headsets and specula in the case provided, taking care to disconnect the Mic-Fi from power supply or USB port.



Do not immerse the device in liquids.



**DO NOT EVER DISASSEMBLE THE DEVICE.**

## 9. INSTRUCTION FOR USE

### 9.1 DERMATOSCOPE

- Fit the specific cover according to the enlargement that you want to display.
- Put the part to be observed below and in the centre of the illuminated area of your Mic-Fi device.
- Turn the focus wheel to have a clear image. With the 10mm cover you get two enlargements on contact: about 60x and 200x; with the 30mm cover you get a contact magnification of about 30x.



The FEDMEDMICFIP and FEDMEDMICFIP5M models allow to polarize the light: act on the transparent ring in order to obtain the desired visualization. The FEDMEDMICFIUVWP model also allows polarization: keep the button with the LED symbol pressed for two seconds.

Note: For optimal use of the device without support, grip the device between thumb and index accommodating it in the palm of the hand and using your thumb to rotate the wheel of focus. The tool can be rotated on its axis in order to achieve the rotation of the image on the screen.

Please ask to the patient to assume a comfortable position and not to move during the whole visit.

- Connect the device to the computer/tablet or smartphone
- Launch the Mic-Fi software (previously installed) See paragraph 13
- Place the device on the part to be observed
- Turn the wheel to get a clear picture
- Choose the “capture” button to get a photo or video.
- Move the device from the patient
- Tell the patient is able to move again



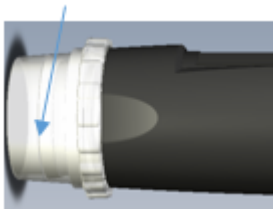
The device is intended for external use only Do not enter the device in the oral cavity



Do not use the device in contact with wounds or painful parts of the body.



The part of the device that needs to come into contact with the patient is made up of a transparent / opaque or black cover that must be disinfected after each use. If other parts of the Mic-Fi device should come into contact with the patient, it is sufficient to disinfect them. The Mic-Fi device is built with biocompatible materials. MICFICL30 and MICFICLOSEDCAP are disposable covers.



**The size that can be viewed from Mic-Fi SW and App are indicative and must not to affect to the final judgment borne by the doctor.**

## 9.2 CAPILLAROSCOPE

- Fit the specific cover according to the enlargement that you want to display and put a drop of cedar oil preferably or dermatological oil on periungual skin.
- Put the part to be observed below and in the centre of the illuminated area of your Mic-Fi device.
- Turn the focus wheel to have a clear image. With the 10mm cover you get two enlargements on contact: about 60x and 200x; with the 30mm cover you get a contact magnification of about 30x.



The FEDMEDMICFIP and FEDMEDMICFIP5M models allow to polarize the light: act on the transparent ring in order to obtain the desired visualization. The FEDMEDMICFIUVWP model also allows polarization: keep the button with the LED symbol pressed for two seconds. The FEDMEDMICFIT6 model allows viewing at high magnifications (about 500x). Use the flat 10mm, 4.5mm or the concave cover included in the package depending on your needs.

Note: For optimal use of the device without support, grip the device between thumb and index accommodating it in the palm of the hand and using your thumb to rotate the wheel of focus. The tool can be rotated on its axis in order to achieve the rotation of the image on the screen.

Please ask to the patient to assume a comfortable position and not to move during the whole visit.

- Connect the device to the computer/tablet or smartphone
- Launch the Mic-Fi software (previously installed) See paragraph 13
- Place the device on the part to be observed
- Turn the wheel to get a clear picture
- Choose the “capture” button to get a photo or video.
- Move the device from the patient
- Tell the patient is able to move again



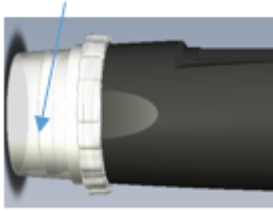
The device is intended for external use only. Do not enter the device in the oral cavity



Do not use the device in contact with wounds or painful parts of the body.



The part of the device that needs to come into contact with the patient is made up of a transparent / opaque or black cover that must be disinfected after each use. If other parts of the Mic-Fi device should come into contact with the patient, it is sufficient to disinfect them. The Mic-Fi device is built with biocompatible materials. MICFICL30 and MICFICLOSEDCAP are disposable covers.



**The size that can be viewed from Mic-Fi SW and App are indicative and must not to affect to the final judgment borne by the doctor.**

### 9.3 EARSCOPE

This medical device is used in conjunction with a speculum (sizes 3.5, 4.3, 5, 6, 7mm) which allows you to perform visual examinations of the hearing canal outside of the walls of the eardrum through direct analysis of otoscopic photos or digital video caught by the device. In this configuration the device offers doctors a valuable method for improving the accuracy of the visual analysis.

Mic-Fi otoscope requires the deployment of a speculum CE marked disposable. Put the speculum on the device before capturing pictures or video (simple joint) and ask the patient to take a comfortable position and to remain immobile for the duration of the visit

- Connect the device to the computer/tablet or smartphone
- Launch the Mic-Fi software (previously installed) See paragraph 13
- Place the device on the part to be observed
- Turn the dial to get a clear picture
- Choose the “capture” button to get a photo or video
- Move the device from the patient
- Tell the patient is able to move again



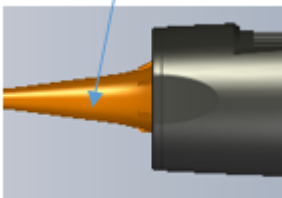
Earscopic investigations must be achieved by keeping the device parallel to the floor of the room in order to minimize the risk to cause pain to the patient or eardrum perforation.



The device is intended for external use only. Visual surveys of the ear and the hearing canal must be conducted exclusively by using a speculum (CE marked)



The part of the device that needs to come into contact with the patient is the speculum that must be disinfected after each use. If other parts of the Mic-Fi device should come into contact with the patient, it is sufficient to disinfect them. The Mic-Fi device is built with biocompatible materials. FEDMEDSP3.5,4.3,5.0,6.0 and 7.0 are disposable speculum.



The size that can be viewed from Mic-Fi SW and App are indicative and must not to affect to the final judgment borne by the doctor.

## 9.4 DENTALSCOPE

In the dental field the device with the appropriate accessories holder for dental mirror may be used to perform visual examinations of the oral cavity, through direct analysis in real time on the monitor or later through the analysis of the video and images captured and stored via software. In this configuration the device facilitates the dentist during the inspection of the oral cavity allowing a better view and a better working posture and ergonomics. Put the mirror into the holder device and ask the patient to take a comfortable position and to remain immobile for the duration of the visit

- Connect the device to the computer/tablet or smartphone
- Launch the Mic-Fi software (previously installed) See paragraph 13
- Place the device on the part to be observed
- Turn the dial to get a clear picture
- Choose the “capture” button to get a photo or video
- Move the device from the patient
- Tell the patient is able to move again



The device is intended for external use only. Do not enter the device in the oral cavity



Make sure that the holder has been regularly cleaned and disinfected before use



Do not to use the device simultaneously with the cleaning and dental descaling



**The size that can be viewed from Mic-Fi SW and App are indicative and must not to affect to the final judgment borne by the doctor.**



The part of the device that needs to come into contact with the patient is the mirror dental for example that must be disinfected/sterilized after each use. If other parts of the Mic-Fi device should come into contact with the patient, it is sufficient to disinfect them. The Mic-Fi device is built with biocompatible materials.

## 9.5 CAMERA for OPTICAL DEVICES

Connect the Mic-Fi medical device to your optical instrument. The connection can be direct (through the step C) or by C-coupler. Visit [www.mic-fi.com](http://www.mic-fi.com) for viewing various accessories.

- Connect the device to the computer/tablet or smartphone.
- Launch the Mic-Fi software (previously installed) See paragraph 13.
- Place the device on the part to be observed.
- Choose the “capture” button to get a photo or video.



**The size that can be viewed from Mic-Fi SW and App are indicative and must not to affect to the final judgment borne by the doctor.**

The part of the device that needs to come into contact with the patient is the optical device as for example endoscope or microscope that must be disinfected/sterilized after each use. If other parts of the Mic-Fi device should come into contact with the patient, it is sufficient to disinfect them. The Mic-Fi device is built with biocompatible materials.



## 10. CLEANING THE DEVICE

It is very important to avoid touching the lens of the device because it is very delicate. The lenses should be cleaned regularly, as particles of dust on them could have a negative impact on image quality. For this reason, it is recommended to protect the device with its protective casing when not in use. Avoid using any other objects or liquids that could easily scratch or damage the surface of the lens or the sensor. To clean the body of the device use a slightly dampened soft cloth. The product is designed to last 5 years average, and is resistant to most chemicals products except ketones MEK, solvents and substances used to remove the smalt.



The cleaning and disinfection operations should take place after each use.  
**DO NOT USE the device for at least 15 minutes after its cleaning operation.**



Avoid touching the surface of the lenses When cleaning the lens, if necessary, use dry compressed air to remove dirt.



Do not use abrasive materials to clean the lens, it could cause permanent damage to it.

## 11. DISPOSAL



The crossed waste bin indicates that the product at the end of its useful life must be collected separately from other waste.

La Italeco S.r.l. fulfills the obligations of DL n. 49 of 14 March 2014 (implementation of Directive 2012/19 / EU on waste electrical and electronic equipment (WEEE)).

Indicates that the product at the end of its life must be separately collected. Thus the user must bring it to the specific collecting point dedicated to the collection of electronic and electric devices, or bring it back to the reseller in case of the purchase of a new one. The adequate separate collection contributes to a correct environment policy which allows the reuse of dismissed devices. The illegal collection will be strictly punished according to the related laws and norms.



### **HOW TO TREAT BATTERIES AND ENERGY CHARGER.**

Implementation of Directive 2013/56 / EU on batteries and accumulators repealing Directive 2006/66 / EC. The collection and recycling of batteries contributes in reducing the potential environmental impact on health created by the substances held in these components **ATTENTION!** Batteries are strictly considered as special wastes! Do not put them together with normal wastes. Users have to collect them in a special way or bring them to special collection points. Every shop in which batteries are sold have to dispose of one collection point. And the collection of batteries is not subordinate to the purchase of new batteries. The symbol placed on batteries and accumulators indicates that batteries must be separately disposed from household wastes, according to EU Directive 2013/56/UE and with the local laws. If under the symbol there is also a chemical symbol, in oservance to the directive, this symbol indicates the presence of metal (Hg = Mercury, Cd = Cadmium, Pb = Lead) in the battery with a higher level than the one allowed by the directive. The illegal disposal of batteries will entail the application of administrative sanction, according to D. Lgs. n. 22/1997" (article 50 and following of D.Lgs.n.22/1997).

## 12. WARRANTY

Congratulations for purchasing our product. This product HAS BEEN MANUFACTURED TO THE HIGHEST QUALITY AND STANDARDS. Italeco guarantees this product against any defects due to materials or workmanship for a period of 2 years from the date of original purchase. To take advantage of the guarantee, you must retain your purchase invoice. If the product is found to be defective within the warranty period it should be returned to the selling agent with proof of purchase. The warranty is null and void if the damage is resulting from carelessness or misuse. No compensation will be given by Italeco and its distributors if the product is returned during the warranty period. In addition, any replacement or repair carried out during the warranty period, will not prolong the duration of the guarantee.

### The warranty lapses in the following cases:

- The product has been tampered with or the label placed on the usb cable bearing the serial number has been removed, damaged or rendered unreadable
- The product has been damaged or has been misused
- The product has been opened or repaired by unauthorised personnel
- The product has been damaged due to non compliance with the instructions in the booklet

Products considered to be defective should be returned only to the dealer from which it was purchased accompanied by the invoice.

The product will be repaired or replaced, under our sole discretion.

If you need any information and / or assistance, contact Mic-Fi Technical Support:

[assistenza@mic-fi.com](mailto:assistenza@mic-fi.com)

Tel +39 (0)11 5690295

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### **13. INSTALLATION AND USE OF THE SOFTWARE AND APP'S**

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## **INFORMATION**

Mic-Fi Softwares and Apps have been developed and are intended to be used with Mic-Fi Medical devices. We recommend to keep all your devices (Tablet , Smartphone and PC) with the most updated version of OS available in order to maintain constant performances.

Mic-Fi Softwares and Apps cannot be copied, disassembled, decompiled , engineering reversed or reduced in any other human form perceived.

## **WARNING!**

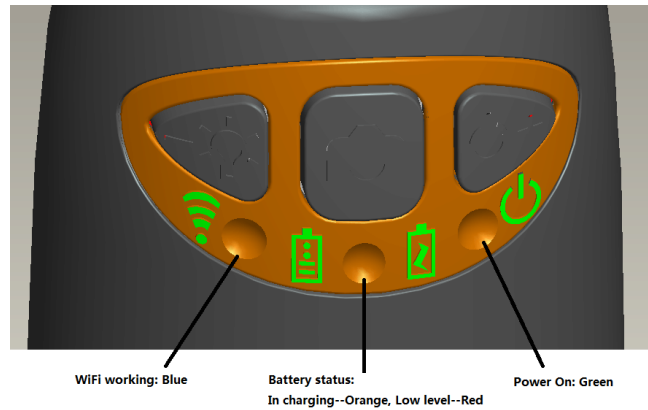







Before disinstalling Mic-Fi Softwares and Apps please contact our technical support in order to recuperate pictures and video.

[assistenza@mic-fi.com](mailto:assistenza@mic-fi.com)



+ 39 011 569 02 95

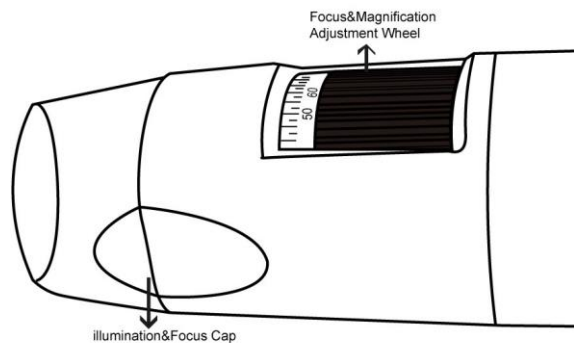
## 13.1 Use of the device



- **Wi-Fi:** Press  for 2 seconds; the microscope will generate a Wi-Fi network
- **Wi-Fi Indicator**  (**Blue LED**): Flashing light indicates data transmission; constant light indicates no data transmission.
- **Power Indicator**  (**Green LED**): Lights up when Wi-Fi power is on or connected to PC or AC adaptor via MiniUSB cable.
- **LED:** Press  for 2 seconds to switch the LED; press + and – to increase or decrease the intensity of light or to change LED if the device is provided.
- **P.S. this key does not work in the FEDMEDMICFIEYE/EYE5M models.**
- **Photo:** Press  to capture the picture directly from microscope.
- **Snapshot Button:** Every time after the successful connection of the WiFi microscope, you have to enable the Snapshot feature on the App (The LED illumination will be off and then lights up again). The Snapshot only works with the receiver device when the App snapshot feature has been enabled.

## 13.2 Charging Instructions



1. Connect the DC Adapter (plug the AC adapter into an AC outlet) or PC's USB cable, it charges whether the power switch is on Wi-Fi or OFF/USB. **We DO NOT recommend charging Wi-Fi Microscope while in use.**
2. **Battery LED**  (**Orange LED** or **Red LED**): **Red LED** when the battery level is low; **Orange LED blinking** when the battery is charging
3. **The charge LED** : **Orange LED fix** when the battery is at fully charged.



**WARNING : IMPAIRMENT OF IMAGE OR SLOW VIDEO ARE THE RESULT OF A LOW BATTERY. BEFORE FIRST USE OF THE MICROSCOPE, PLEASE CHARGE THE BATTERY FOR AT LEAST 12 HOURS.**

### 13.3 Working in Wi-Fi Mode

**Before starting the Mic-Fi app, please make sure the Wi-Fi microscope has already connected to your display device by Wi-Fi.**


1. Install:
  - a) For **iPad**: Search “**Mic-Fi Medical**” in **App Store** to download and install it.
  - b) For **iPhone**: Search “**Mic-Fi**” in **App Store** to download and install it.
  - c) For **Smart-Phone** and **Tablet Android**: Search “**Mic-Fi Med**” (generic App) or “**Mic-Fi DERMA**” that is a specific App for dermatologist in **Google Play** to download and install it.
  - d) For **Windows** and **Mac PC**: Install the Mic-Fi Software by CD included in the box.
2. Press **U** for 2 seconds, wait for ~20 seconds until the Wi-Fi indicator  and the illumination LEDs light, then the Wi-Fi signal will be transmitting correctly.
3. Check the wireless connection on your Phone/Tablet or PC and a list of available networks will appear. Select the SSID “**Wi-Fi2SCOPE\_xxxxxx**” network from the list to connect; the network “**Wi-Fi2SCOPE\_xxxxxx**” requires a password: enter the password “**12345678**” and click OK.
4. Once connected, please wait for about 5 seconds to open the “**Mic-Fi**” application to see your images. If there is no video display, please close and restart the “**Mic-Fi**” app again. When the Wi-Fi indicator LED  flashes the video stream signal should be displayed in the app. Video streaming can be broadcasted to many devices, but the frame rate of live video will decrease as the number of receiving devices increases.

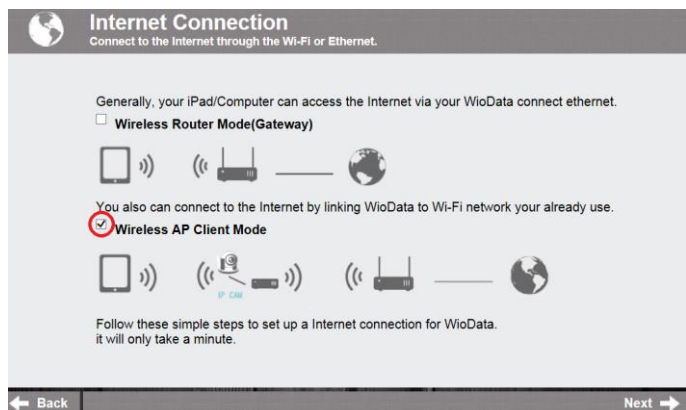
### 13.4 Simultaneous use of Internet and device Wi-Fi Connections



**You can use the Wi-Fi network of the microscope and that of the PC / SmartPhone / Tablet at the same time**

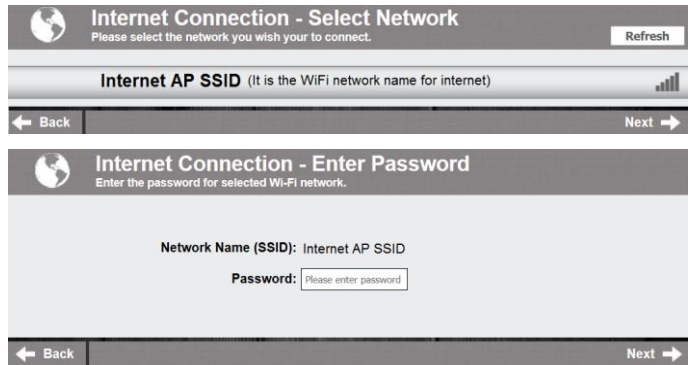
1. To access the internet by Wi-Fi connection at the same time the Wi-Fi microscope is working, open an internet browser, input <http://10.10.1.1> and click “enter”. A pop-up window will require you to enter a username and password, please enter: **admin** and **admin**, and then this window should appear:



2. Click  in the window to pop-up the screen.



3. Select “Wireless AP Client Mode”, click **Next**  to pop-up the screen:
4. Click **Refresh**  till your desired network SSID appears, and click it to pop-up the screen:




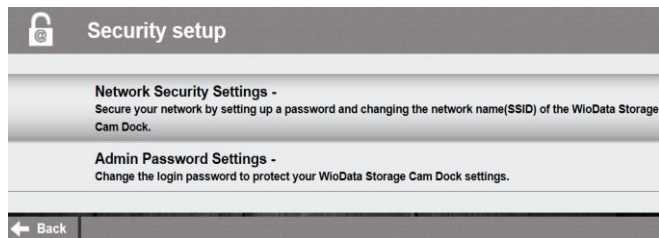
### 13.5 Wi-Fi Security Setup

To change the Wi-Fi access password:

1. Open an internet browser, input <http://10.10.1.1> and click “enter”. A pop-up window will require you to enter a username and password, please enter: **admin** and **admin**, and then this window should appear:



2. Click  in the window to pop-up the screen:



3. Click “Network Security Settings” to pop-up the screen on the right.
4. Enter your desired Network Name (SSID) and password in “WPA-PSK Key” and “Re-Enter”, and click “Next”. The setting is done, now you can re-connect the new SSID Wi-Fi by entering the new password.



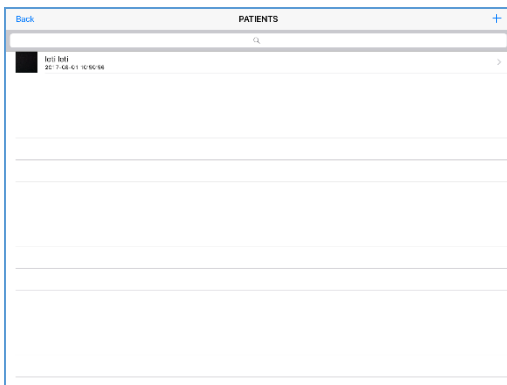


## 13.6 "Mic-Fi Medical" on iPad

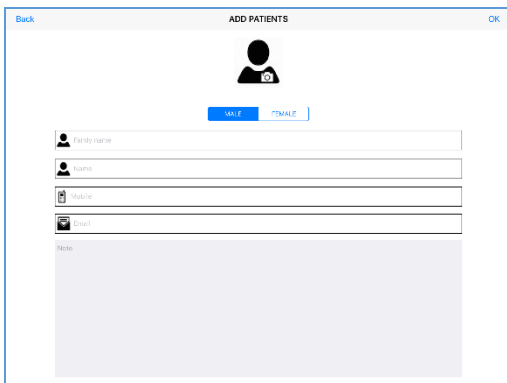
### 13.6.1 Insert a new patient



- Click on

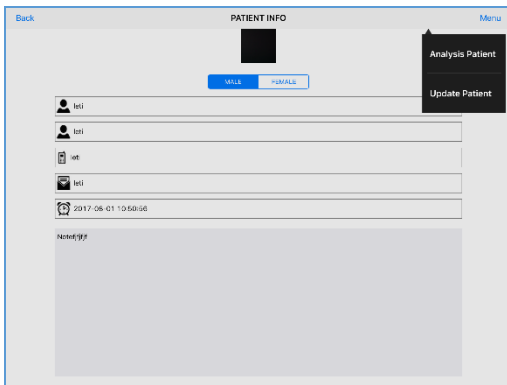
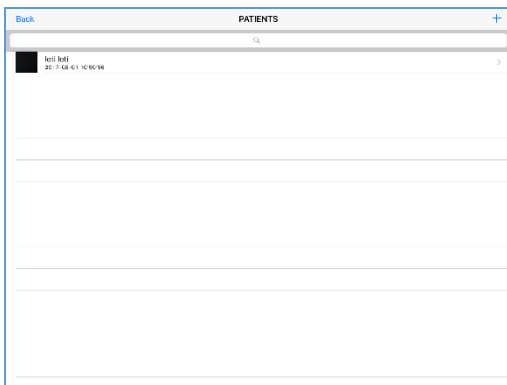


- Click on  to insert a new patient.



- Filling out all the fields and click on "OK" to confirm .

## 13.6.2 Analysis



- Select a patient.
- Click on “Menu”.
- Click on “Analysis Patient” to start the analysis.
- Move the magnification black wheel of your device to obtain the clear image



and click on to capture photo or video.



- Photo and Video mode.



- Measurement.



- Setting: resolution, Snapshot, WiFi internet, Internet.



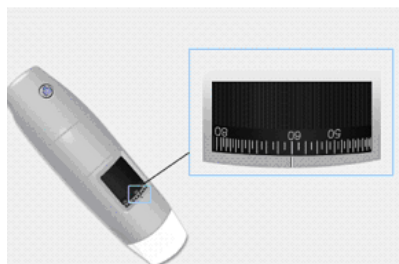
- Return to the patients list.

### 13.6.3 Calibration

**Before making a measurement you need to calibrate the device.  
Calibrate the device at every magnification.**





**The size that can be viewed from Mic-Fi SW and App are indicative and must not to affect to the final judgment borne by the doctor.**



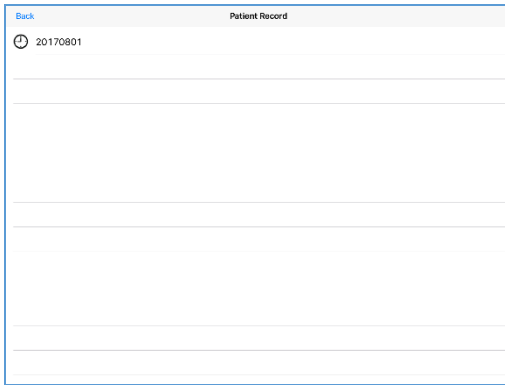
1. Use the calibration ruler included in the package.
2. **Move the magnification black wheel of your device to obtain the clear image**
3. **Click on "Calibration"**
4. Select the first point and the second point of the measurement known (for example 5mm) and click at the center of the image. New windows will open: insert 5 and click OK.
5. Use the arrows to move the points in the correct position.


Now you can make the measurement in real time.

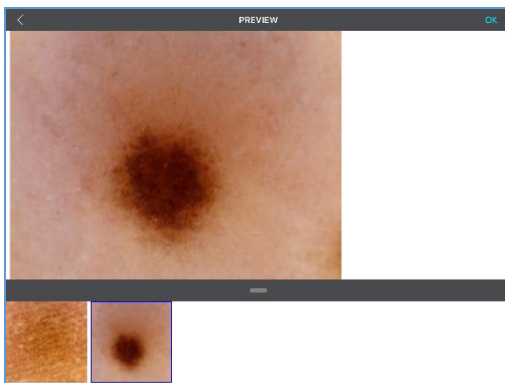
- Click on 
- **Select for example "Line".**
- Select the first point and the second point and click at the center of the desk.
- Use the arrows to move the points in the correct position.
- Click on  to save the measurement.

**Don't touch the magnification wheel or you will need to recalibrate the device.**

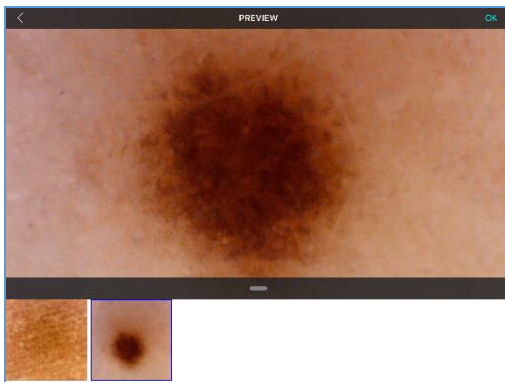
### 13.6.4 Historical




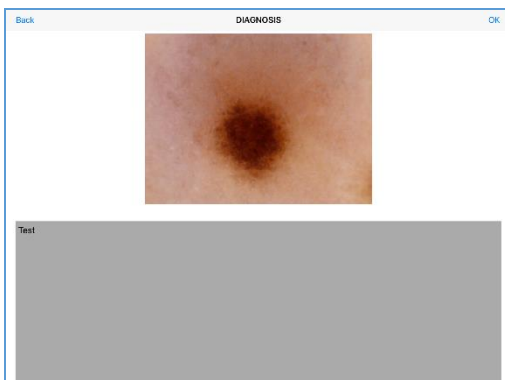
- Click on 
- Click on the record saved.



- Select a picture to see it more big.



-   
Enlarge the image.



- Click on "OK" to write a comment and click still on "OK" to save it.

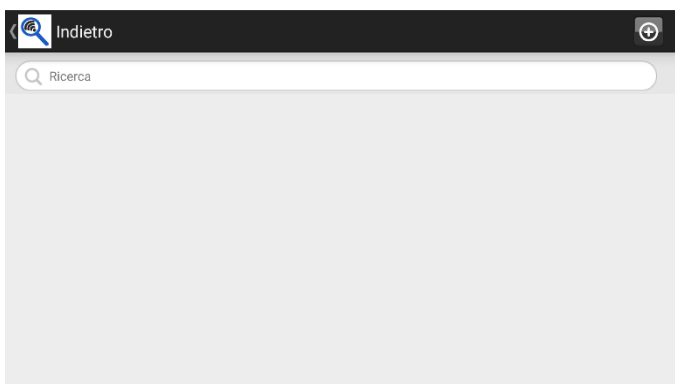
## 13.7 “Mic-Fi DERMA” on Android Tablet /Phone

- 1 Search “Mic-Fi Derma” app on Google Play and install it in your android device.
- 2 Mic-Fi Derma icon will appear on your device.
- 3 Read the points 2,3 and 4 of the chapter n.13.3 of this user manual.
- 4 Open the Mic-Fi Derma app.

### 13.7.1 Add a patient




- Click on 

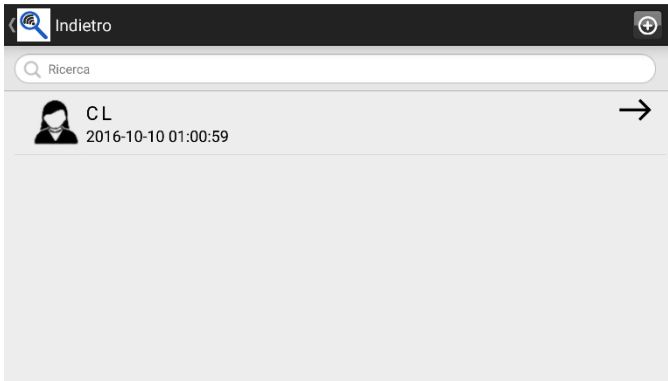


- Click on  to insert a new patient.

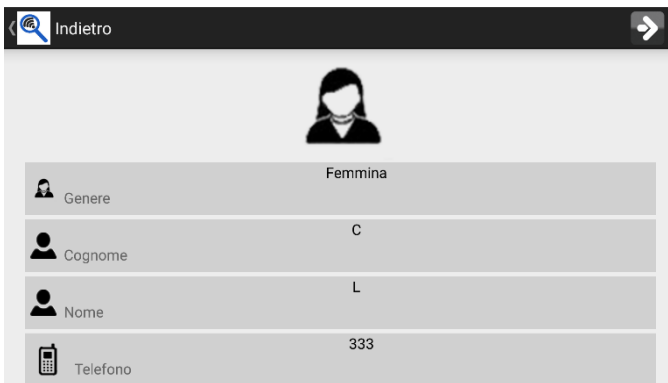


- Filling out all the fields and click on  to confirm.

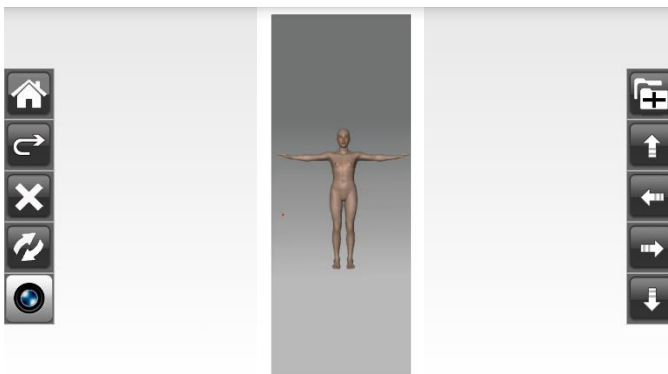
### 13.7.2 Select point








- Click on the patient.








- Click on 



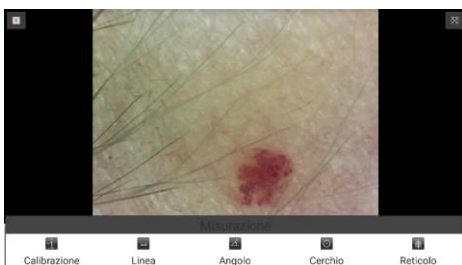
- Select the points of interest on the body.
- Click on the arrows for move the points in the right position.
- Click on  to rotate the body.
-  Delete the last point selected.
-  Delete all the points selected.
-  Return to the patient note.
-  Images folder.

### 13.7.3 Analysis



- Click on  to start the analysis.
- Select the point; the n.  (for example)
- Move the magnification black wheel of your device to obtain the clear image and click on 
-  Measurement tool.
-  Resolution setting.

### 13.7.4 Calibration & Measurement

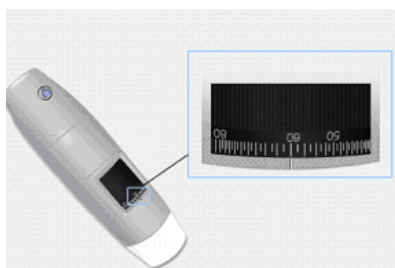


**Before making a measurement you need to calibrate the device.**

**Calibrate the device at every magnification.**



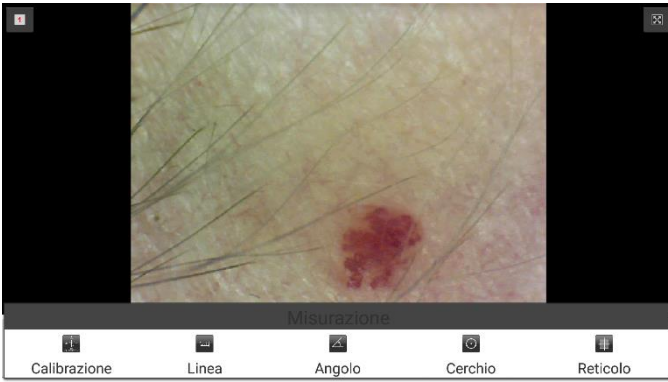
**The size that can be viewed from Mic-Fi SW and App are indicative and must not to affect to the final judgment borne by the doctor.**



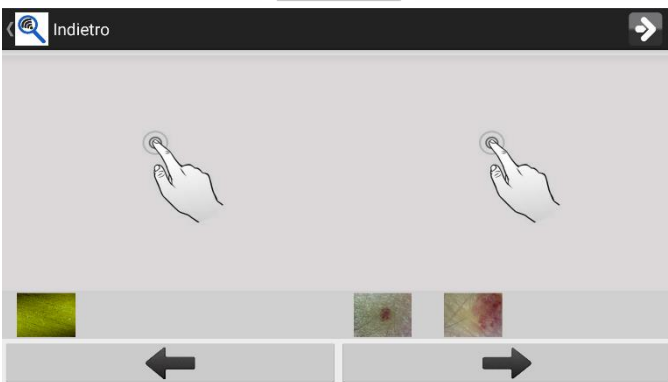
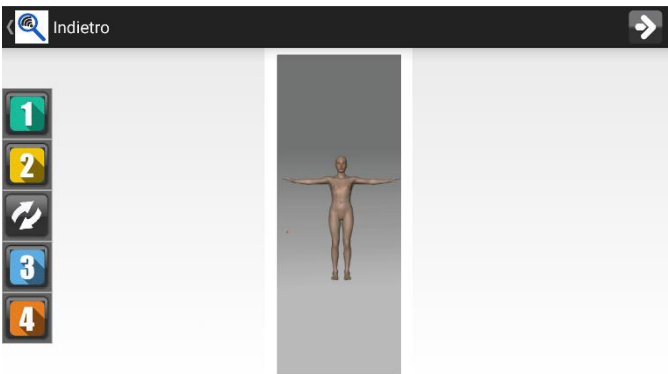
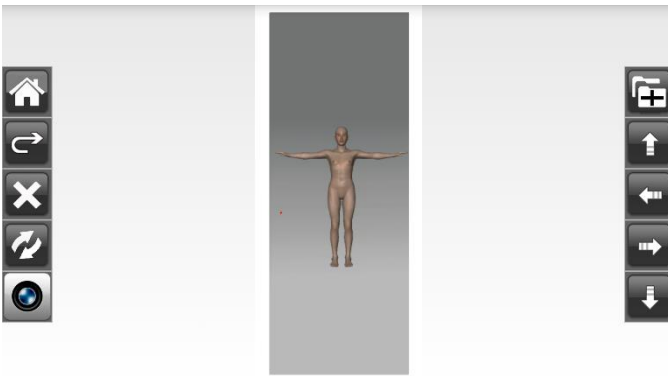
6. Use the calibration ruler included in the package.
7. **Move the magnification black wheel of your device to obtain the clear image.**
8. **Click on "Calibration".**
9. Select the first point and the second point of the measurement known (for example 5mm) and click at the center of the image. New windows will open: insert 5 and click OK.
10. Use the arrows to move the points in the correct position.


Now you can make the measurement in real time.

**Don't touch the magnification wheel or you will need to recalibrate the device.**



### 13.7.5 Historical



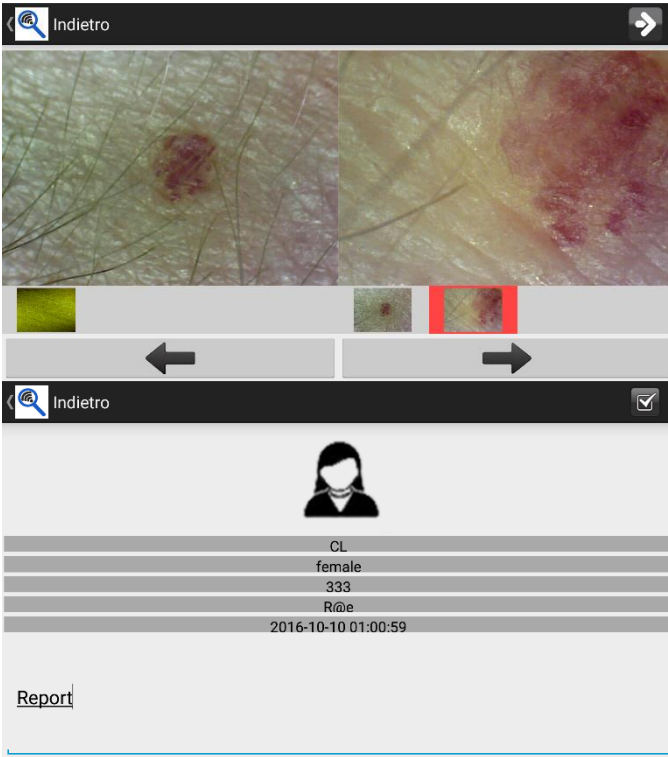
- Click on 
- Select for example "Line".
- Select the first point and the second point and click at the center of the desk.
- Use the arrows to move the points in the correct position.

- Click on 

- Click on one point to show history of images captured at the selected point.

- The images are cataloged by date.



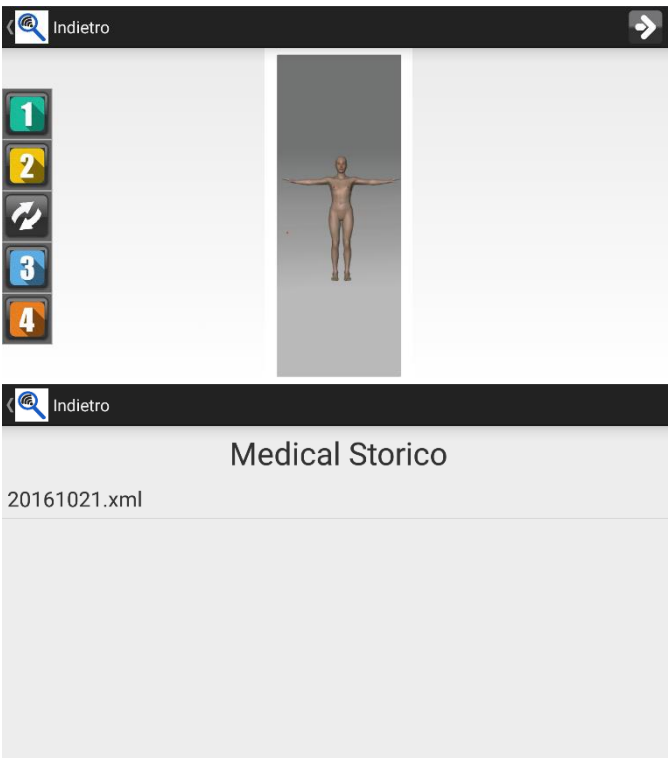


- Click on the image and then on one of the two panels to enlarge it and put it in comparison with another image.

- Click on  to write the report.

- Click on  to save the report.

### 13.7.6 Report




- Click on  from this desk to see all the patient reports.

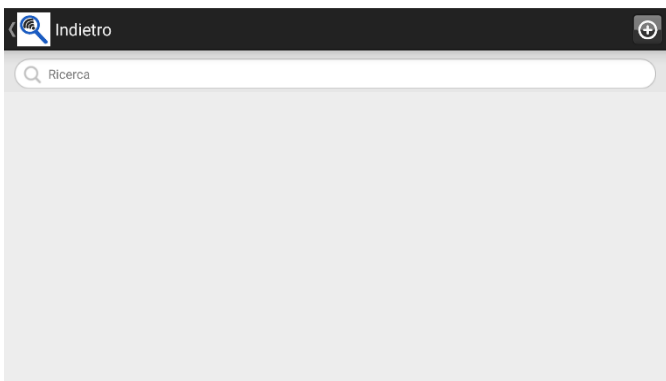
## 13.8 “Mic-Fi Med” on Android Tablet /Phone



- 14 Search “Mic-Fi Med” app on Google Play and install it in your android device.
- 15 Mic-Fi Med icon will appear on your device.
- 16 Read the points 2,3 and 4 of the 13.3 chapter of this user manual
- 17 Open the Mic-Fi Med app.




- Click on  to start viewing.  
No saving will be possible.

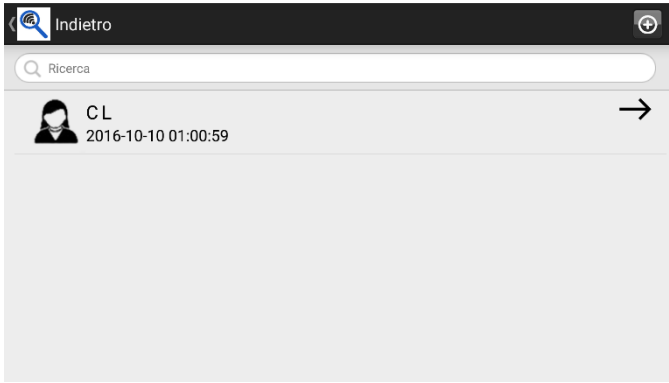
### 13.8.1 Add a patient



- Click on 
- Click on  to insert a new patient.







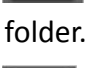
- Filling out all the fields and click on  to confirm



- Click on the patient.

### 13.8.2 Analysis

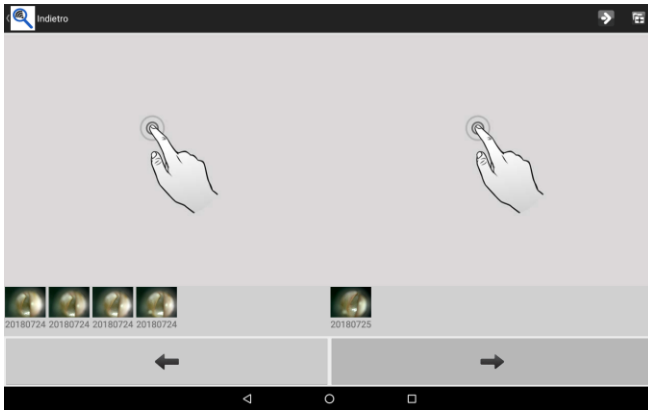


- Move the magnification black wheel of your device to obtain the clear image and click on 
-  Measurement tool.
-  Resolution setting.
-  Return to the patient folder.
-  Folder of the pictures captured.

### 13.8.3 Calibration and Measurement

See the point 13.7.4 and 13.7.5 of this user manual.

### 13.8.4 Historical

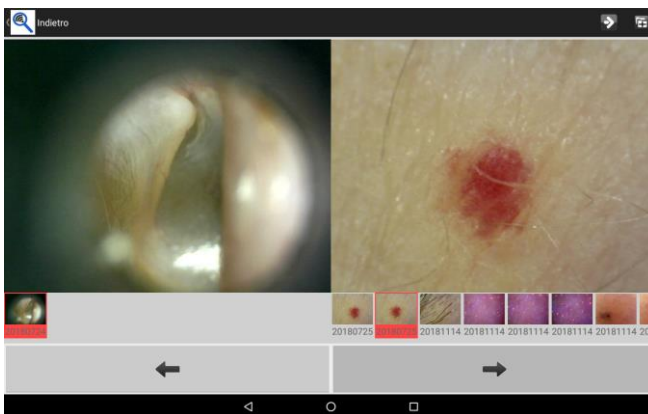


- Click on 

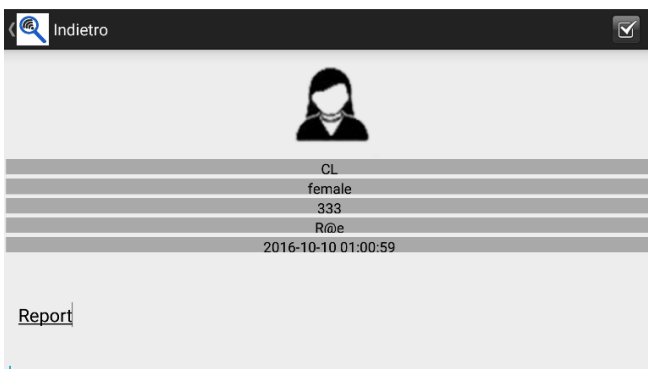
The images are cataloged by date.

- Click on the image and then on one of the two panels to enlarge it and put it in comparison with another image.

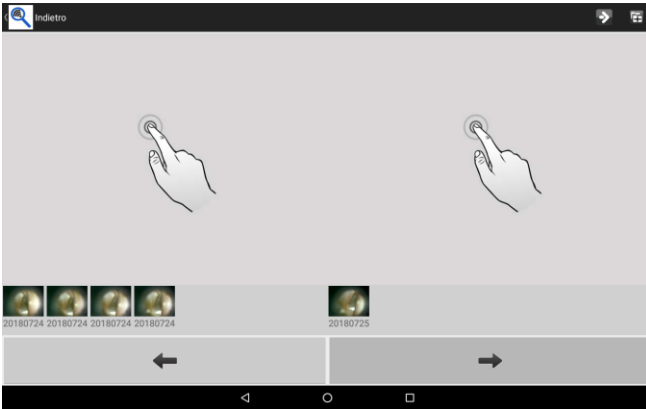
- Click on  to write the report.



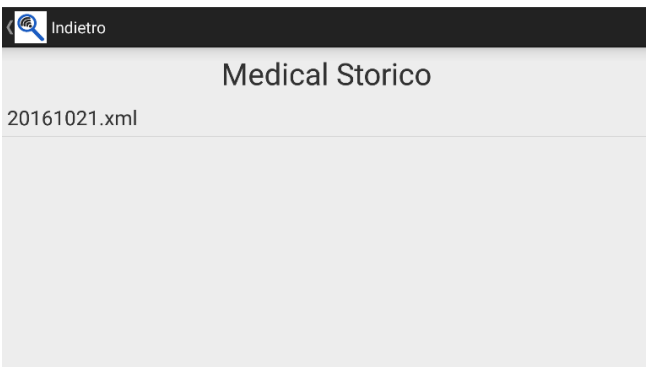
- Click on  to save the report.



### 13.8.5 Report



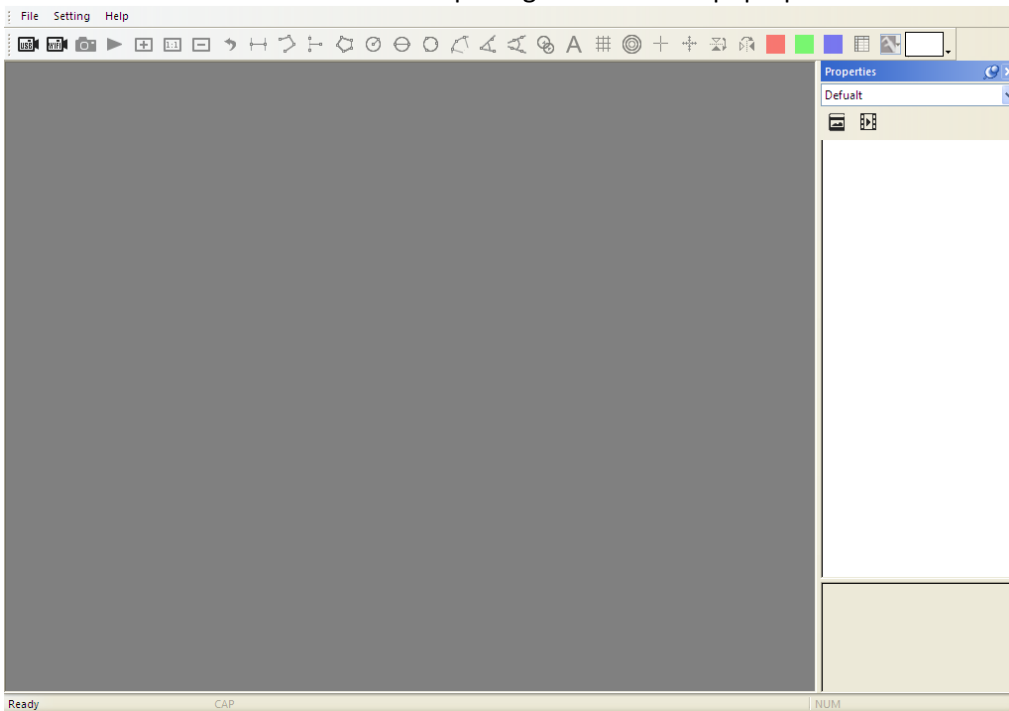
- Click on  from this desk to see all the patient reports.



## 13.9 “Mic-Fi” WiFi and USB on Windows Computer



Install the software Mic-Fi.exe for Windows.

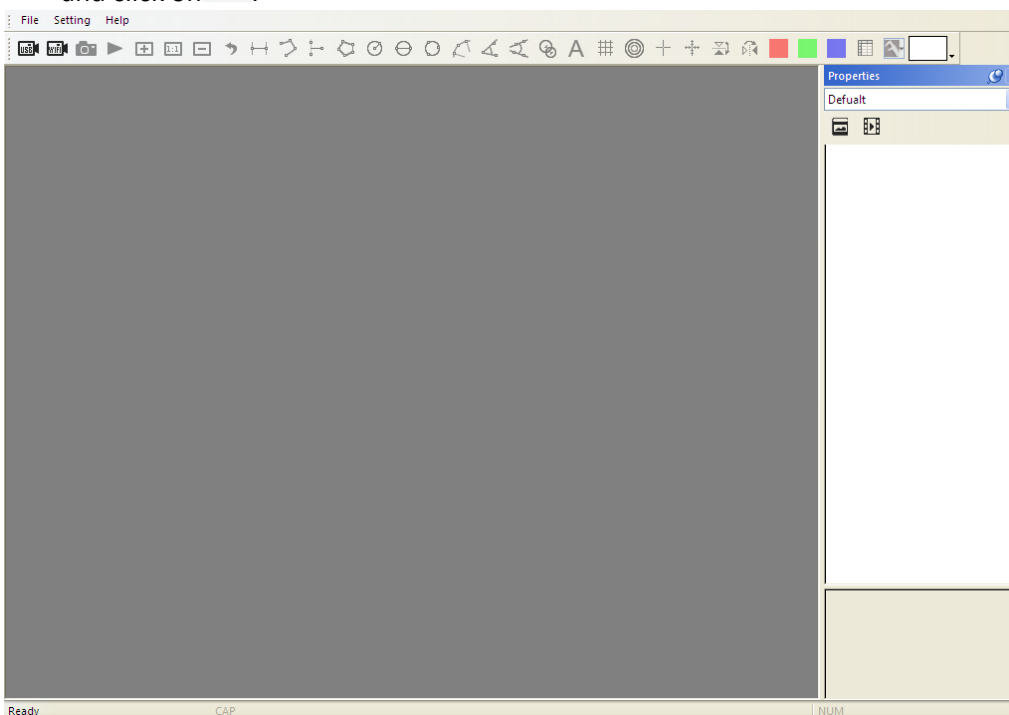
Double-click on Mic-Fi icon after completing installation to pop-up the below screen:





### 13.9.1 Tool Bar

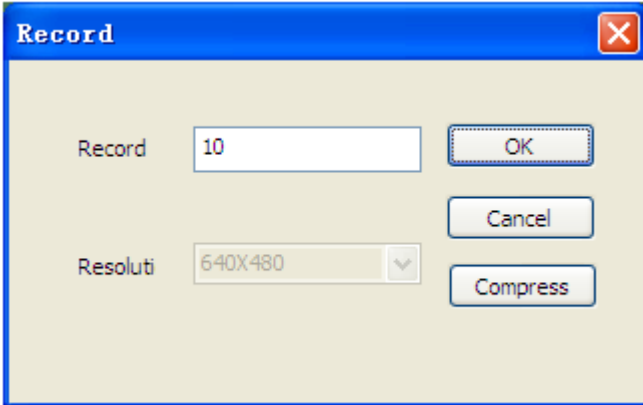



- Connect USB cable to microscope and USB port of your PC and click on ; **please do NOT turn On the microscope.**
- Connect to Wifi your microscope as indicated in the point n. 2,3,4 of the chapter 13.3 of this manual and click on .




 : Take a picture.


 : Record a video: you can click to start and stop recording a video.





 : Zoom Out: zoom out the view window.


 : Normal: Normal the actual size.


 : Zoom In: zoom in the view window.


 : Undo: undo the last action.


 : Delete: delete all measurement.


 : Line Measurement: The line measurement allows you to measure the linear distance between two points. Simple left-click and drag to the desired length, and click again to finish.


 : Continuous line Measurement: The continuous line function allows measurement of the distance between multiple connecting lines. Simply click and drag to from on section of distance, click again to start another section. Continue until the total desired distance is measured. Right click to finish.


 : Point to line measurement: the point to line measurement feature allows measurement of a line 90 degree from a certain line. Simply create a line to represent the base(e.g. the light blue line in the sample picture below) by clicking once to start, drag, and then click again to set the endpoint. Branch off from the base line to start measuring the line that is 90 degrees from the base line and a final click to finish the measurement.


 : Polygon Measurement: The polygon measurement feature allows measurement of a polygon. Simply click and drag to from the desired length, and click again to start the next section. When finished, double-click to finish the polygon measurement.


 : Radius of Circle Measurement: The radius of circle measurement allows you to measure the circumference , area, and radius of a circle. Simply click and extend out to the desired radius.


 : Diameter of Circle Measurement: The diameter of a circle measurement allows you to measure the circumference, area, and radius of a circle. Simply click and extend out to the desired diameter.


 : Three Points Circle Measurement: The three points circle measurement allows the measurement of the circumference, area, and radius of a circle. Simply click on any three points on the circle you wish to measure.


 : Three Points Arc Measurement: The three points arc measurement allows a measurement of an arc. Click on three consecutive points on an arc to measure.


 : Three Point Angle Measurement: The three point angle measurement allows the measurement of an angle. Start at the pivot point and extend out to start measuring an angle.


 : Four Point Angle Measurement: The four point angle measurement allows the measurement of an angle by selecting four points. Simply select two points from one line segment and another two points from another line segment to complete the angle measurement.


 : Circle Distance: draw two circle and measure the distance of the two circles.


 : Add Text: The text tool lets you write text anywhere on the video and picture.

 : Gridlines: you can add gridlines to the live video and images. The pitch will match the magnification inputted.


 : Circle Grid: you can add circle grid to the live video and images. The pitch will match the magnification inputted.

 : Crosshair: you can add a crosshair to the live video and images. The crosshair XY position can be moved when you select it. The cursor position is the location of the mouse pointer and location 0,0 is center coordinates of the crosshar.


 : Scale Crosshair: you can add a scale crosshair to the live video and images. The crosshair XY position can be moved when you select it.


 : Horizontal Flip: flip an image horizontally.

 : Vertically Flip: Flip image vertically.

 : Monochrome image: Red monochrome image.

 : Monochrome image: Green monochrome image.

 : Monochrome image: Blue monochrome image.

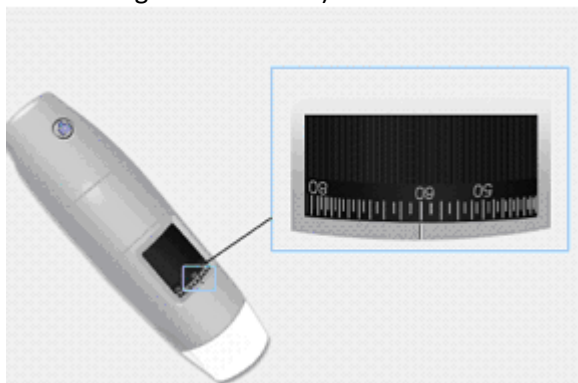
Clicking on the  icon allows you to show or hide the measurement properties window. The measurement property window organizes and shows the status of all the measurements as well the ability to adjust how the results are shown on the image.



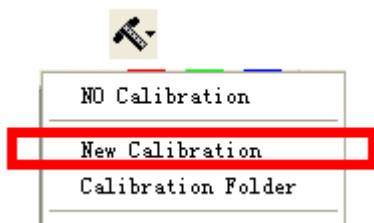
### 13.9.2 Calibration Menu

**It is strongly suggestion: To obtain the accurate measurement data, please calibrate before any measurement function at each magnification.**

Select a known measurement standard as the to-be-observed object, such as a ruler, to be used for calibration. Bring photo of the selected ruler into focus by turning the “Focus & Magnification adjustment wheel”, determine the magnification by taking a reading from the scale on the focus dial as below(The default magnification is 60):



1. In the live video window select the calibration drop down menu.
2. Select “New Calibration”.



3. A small window will pop-up, please enter profile name 、 magnification and the actual length.

**Calibration**

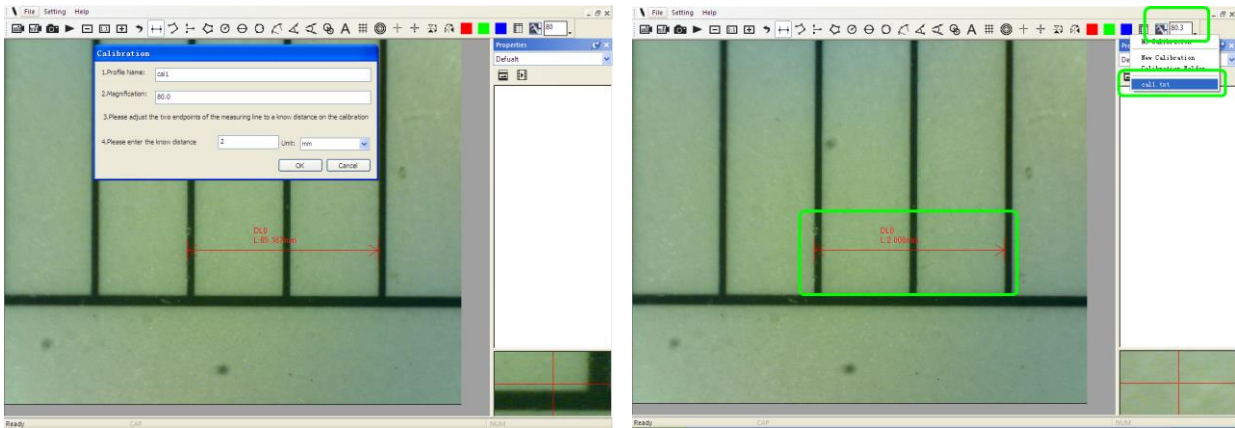
1.Profile Name:

2.Magnification:

3.Please adjust the two endpoints of the measuring line to a know distance on the calibration

4.Please enter the know distance  Unit:

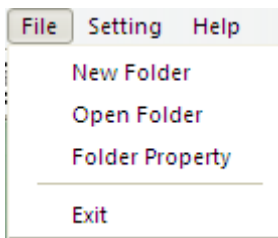
4. Drag the mouse to draw a line which has actual length.



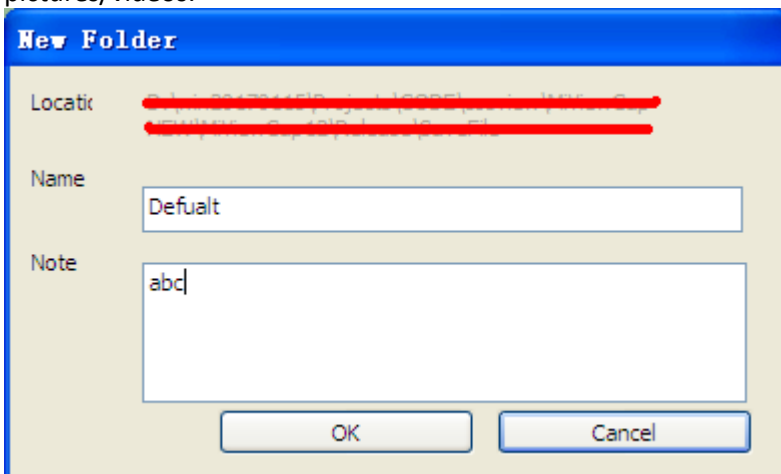
5. Press “OK” button to finish calibration.

Now the calibration is By clicking on the screen again, you can mark measurements on the live video using the same focus. (**Please, do not adjust the “Focus & Magnification wheel!”**). If the new photo object is not in focus, please only adjust the distance between the microscope and the object until the image becomes clear. The measurement data can be saved on the photo image.

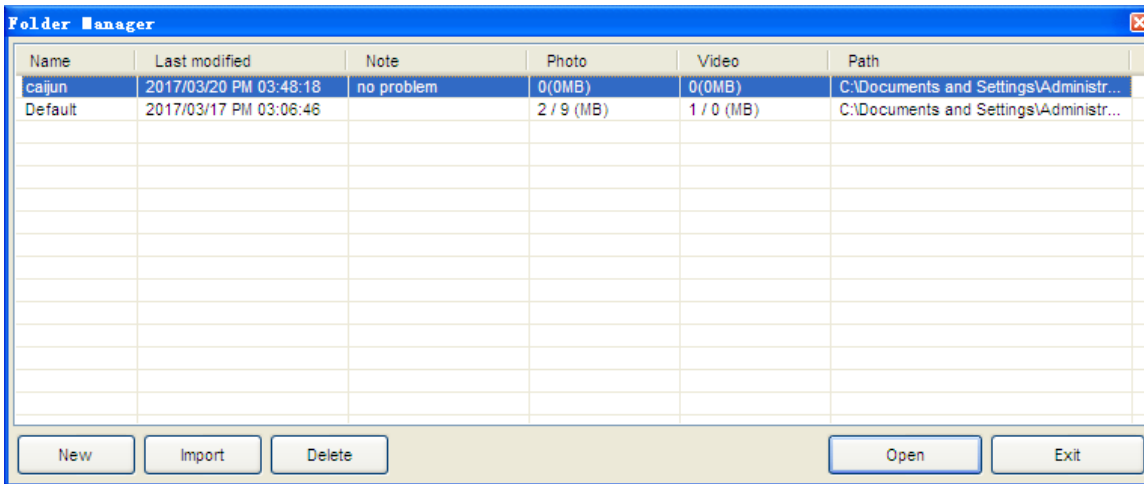
### 13.9.3 File.



**New Folder:** Display the “New Folder” window that allow you to create a new folder to save pictures/videos.



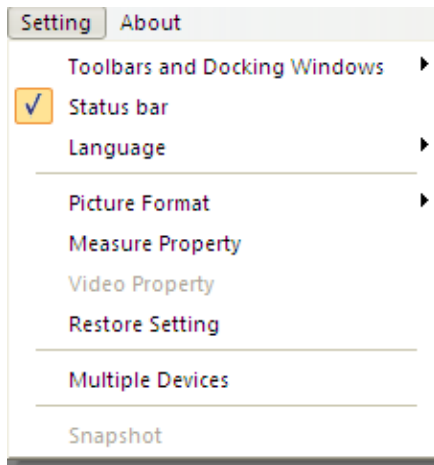
**Folder Manager:** Display the “Folder Manager” window, which allows you import, create, open, delete, as well as change the sorting order of folders.



**Folder Properties:** Display the “Folder Property” window. Allow you to see the properties of the current save folder and also allow changing the name and edit notes about the current save folder.

**Exit:** Exits Mic-Fi software.

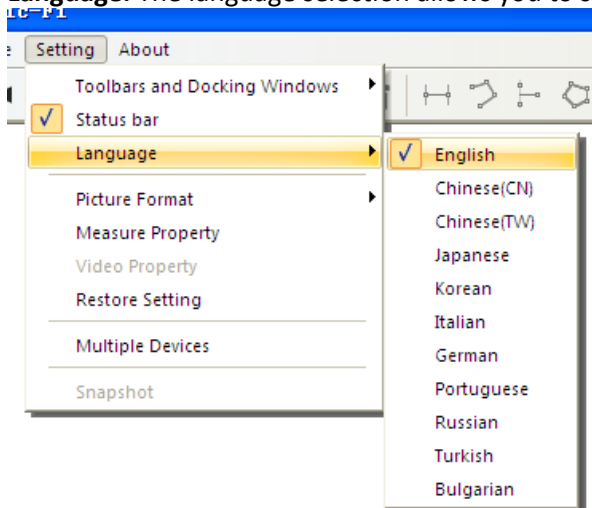
### 13.9.4 Setting



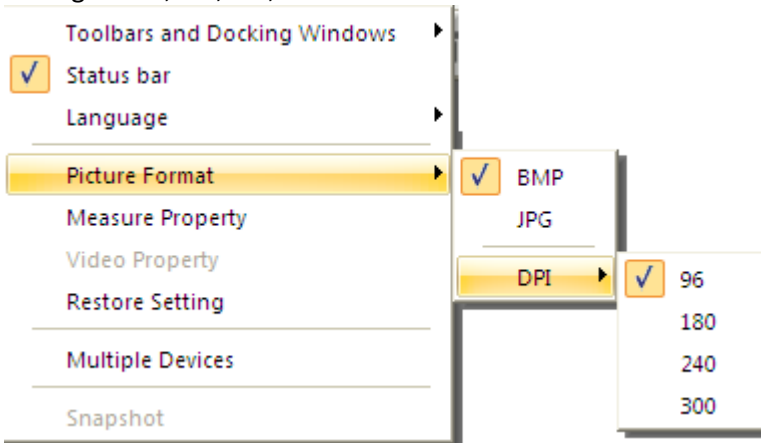
**Toolbar and Docking windows:** Check to show the tool bar. Uncheck to hide the tool bar

**Status bar:** Check to show the status bar. Uncheck to hide the status bar.

**Language:** The language selection allows you to select the Mic-Fi interface language.



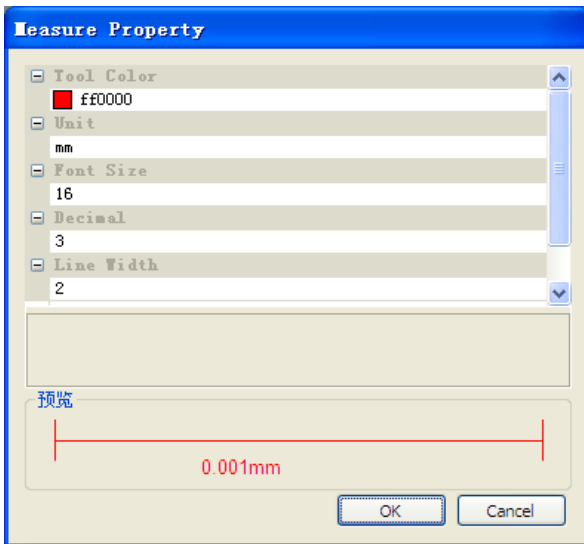
**Picture Format:** Change the default picture format from BMP to JPG and also set the default picture DPI settings to 96,180,240,300.



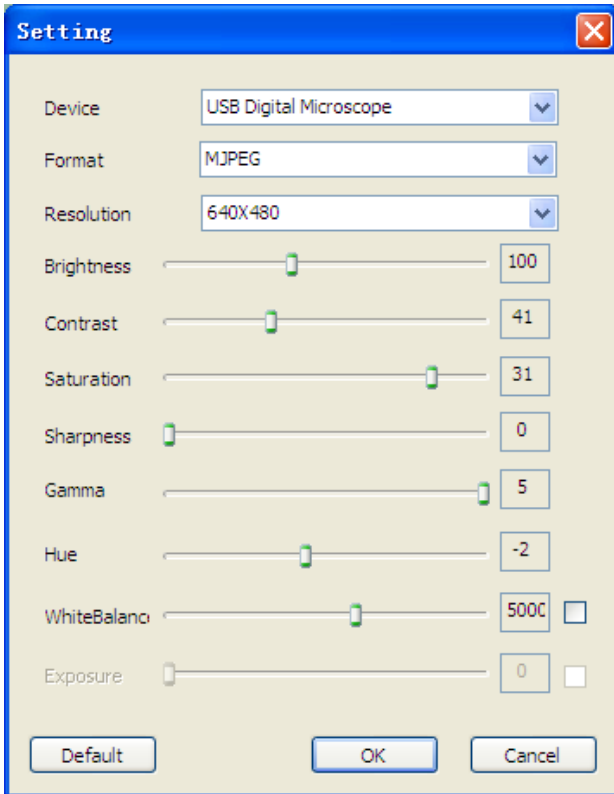
**IF SOFTWARE REPORT ERRORS OR INTERRUPTS, PLEASE RESTORE SETTINGS.**

### Measure setting

Click to pop-up the measure setting: (If the "Line width" is 2 or 3 Pixel, the "Pen Type" must be Solid-Line).



## Video Setting



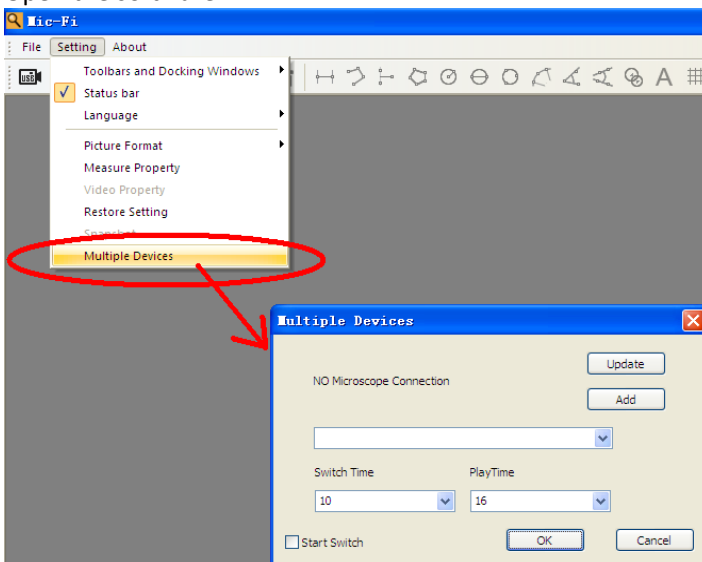
**Restore Settings:** Restore default settings.

## Multiple Devices

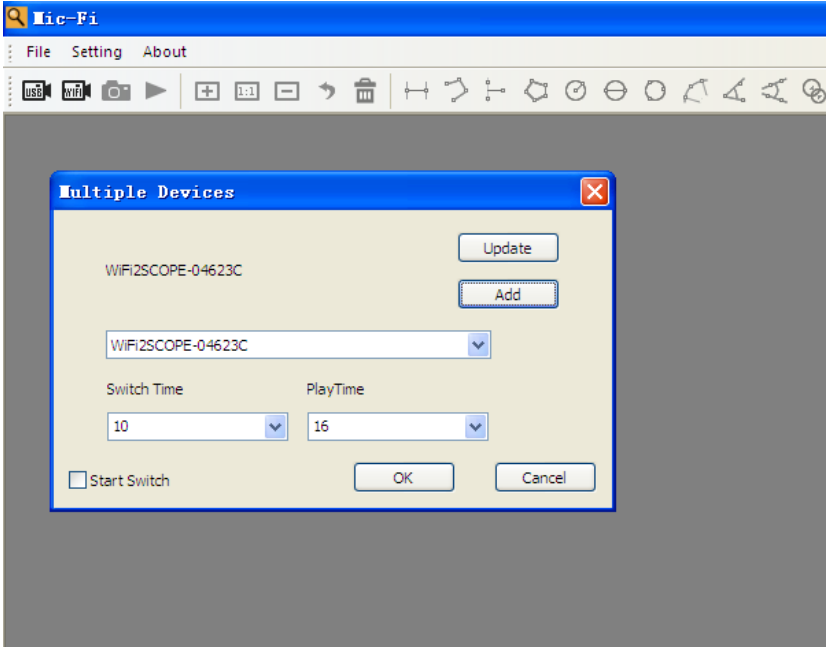
### Multiple WiFi microscopes exchange work.

Please note the following: Recommend Notebook or the computer which comes with internal network card.

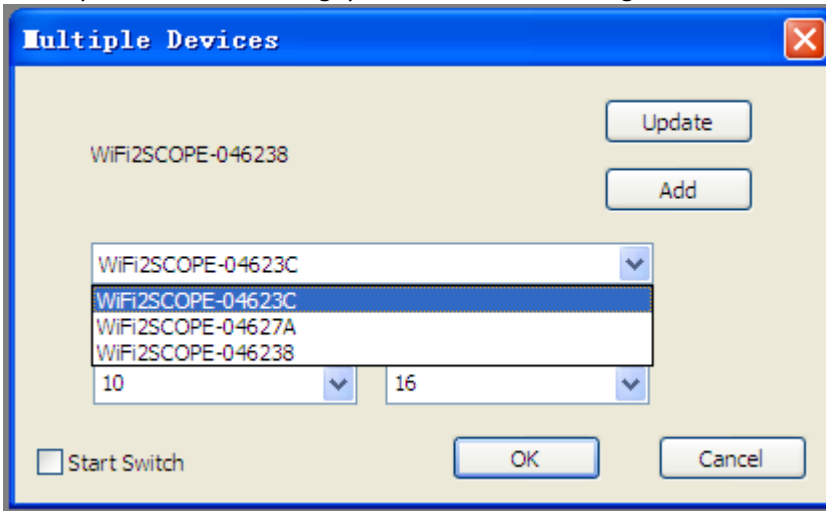
- 1) The first step:  
Turn on all Wi-Fi microscopes (the Max number is 8pcs), make sure them work fine.
- 2) Connect the Wi-Fi microscopes to computer as below:
- 3) Add the Wi-Fi Microscopes to software as below:  
Open the software:



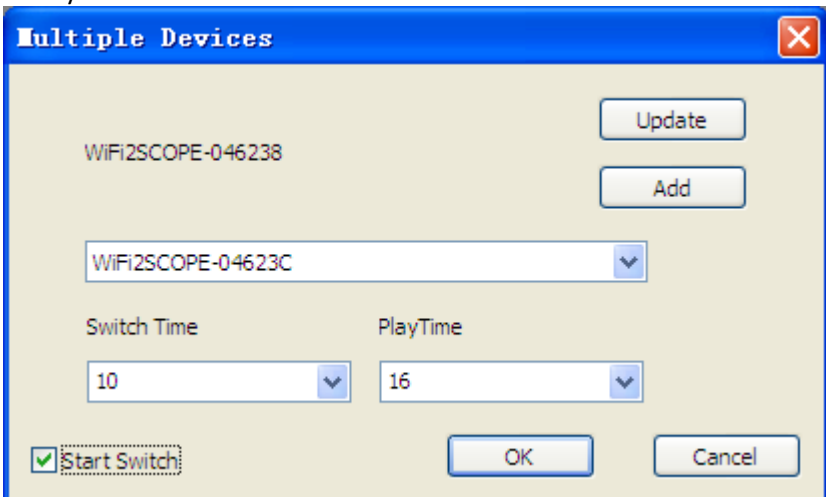
- 4) When you have connected one Wi-Fi microscope, now please click “Update” and then “Add” Buttons to add the Wi-Fi microscope into software, now you can add other microscopes one by one with the same way.



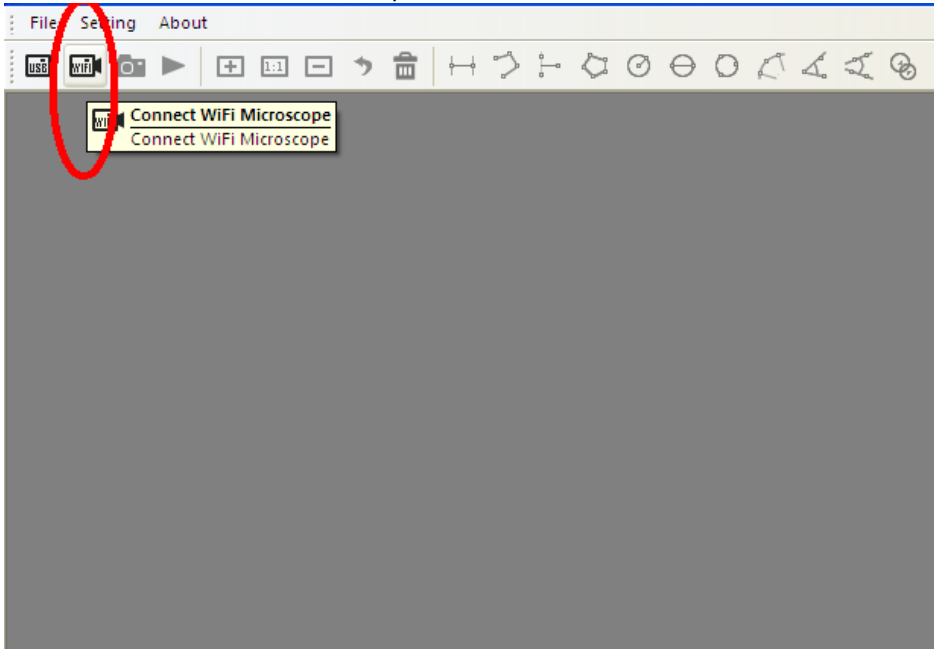
- 5) When you finished all adding, you will see the following:



- 6) Finally select the “Start Switch” button and click “OK”.



7) Click the “Connect Wi-Fi Microscope” Button on the toolbar as below:



During the exchange procedure, the wireless network card is constantly connected to each microscope

### 13.9.5 Snapshot Enable

**Warm Tips:** If the Windows Security Alert appears when enable snapshot (Windows 8 as example) as below window:



You MUST select the both check boxes of “Private networks” and “Public networks”, and then click “Allow access” to allow “Snapshot” program communicate on these networks, or the button snapshot doesn’t work. If miss the Allow operation, please click “Control panel->Windows firewall->Restore defaults”, and restart Mic-Fi and “Snapshot Enable” to reset it.

**Help:**

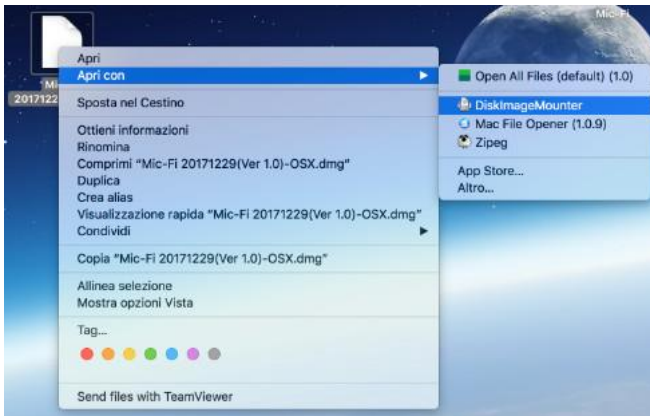
**About:** Opens the “About” page pop-up for Mic-Fi.

## 13.10 New WiFi&USB Mic-Fi for MAC

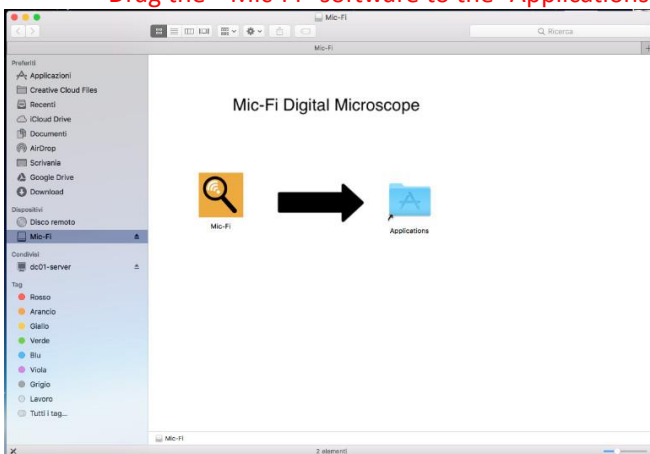
### 13.10.1 Installation

Install the “Mic-Fixxx.dmg” software.

Copy the file on the “desktop” and open with “DiskImageMounter”



Drag the “Mic-Fi” software to the “Applications” folder to complete installation.




P.S If will appears a pop-up windows Security&Privacy see the following information.





You need to adjust the following settings:

Click the Apple icon  to pop-up the window on the right and click “System Preference” to open the next window.


Click on “Security&Privacy” to show the following window.

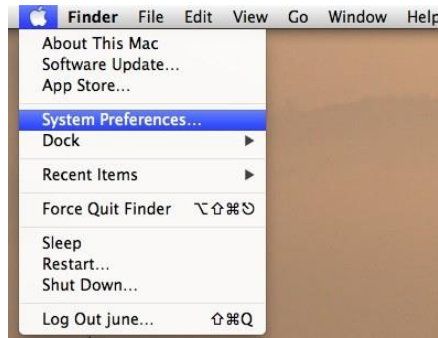
Click “Click the lock to make changes” to pop-up the following window.

Input “Name” and “Password” of your system, and click “Unlock” to show the following window:

Select “Anywhere” to finish the setting.


Now you may install the “Mic-Fi” software.


After the installation, double click on this icon  to open the SW.

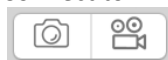


## 13.10.2 Mode of use



Connect USB cable to microscope and USB port of your PC and click on 

Connect to Wifi your microscope as indicated in the point n. 4 of this manual and click on 



- 1) Take picture
- 2) Take/Stop Video



- 1) Undo
- 2) Delete
- 3) Redo



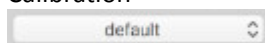
- 1) Line
- 2) Continuous line
- 3) Point to line
- 4) Radius Circle
- 5) Diameter Circle
- 6) Three Points Circle
- 7) Three Points Angle
- 8) Four Points Angle
- 9) Polygon
- 10) Add Text



- 1) Gridlines
- 2) GridCircles
- 3) Crosshair
- 4) Scale lines

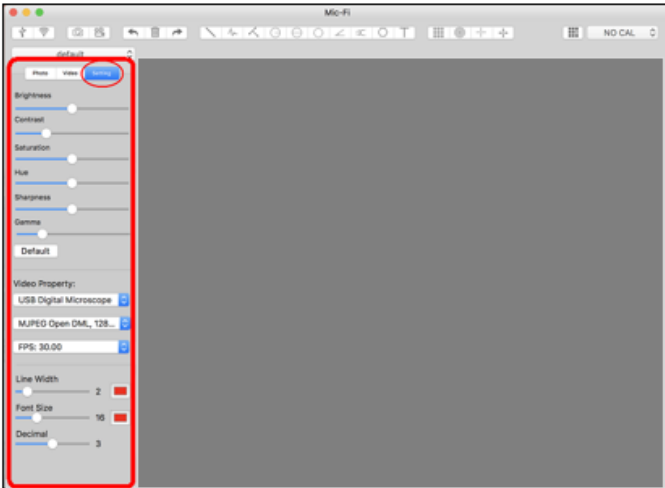


- 1) Calibration

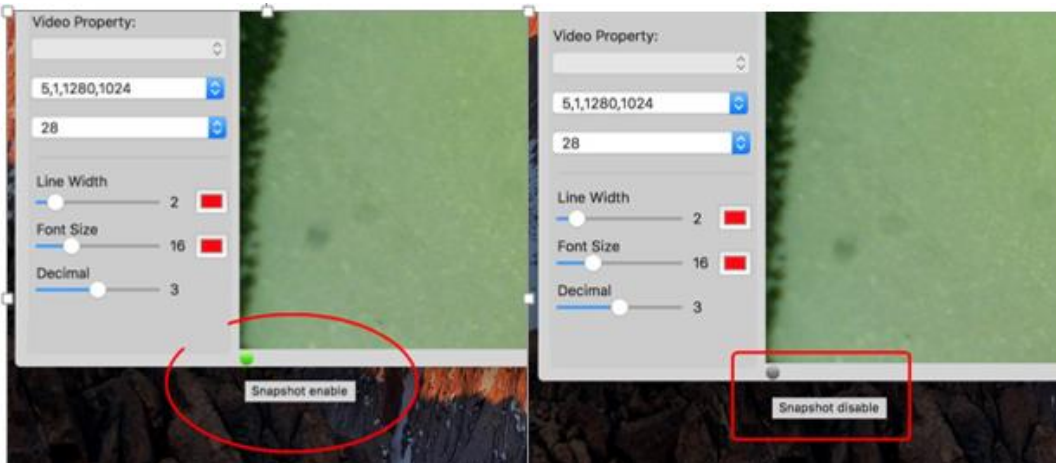
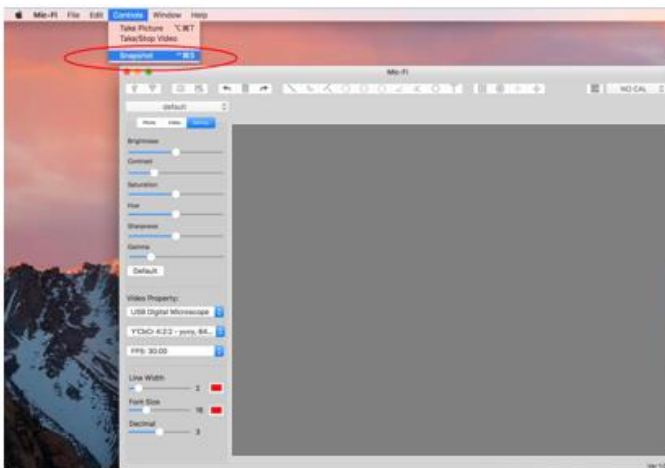


- 1) Folders Image/video

### 13.10.3 Setting



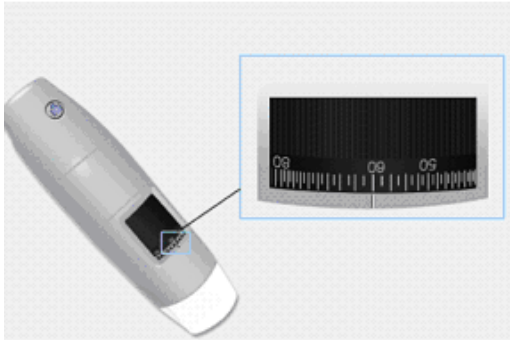
SNAPSHOT:




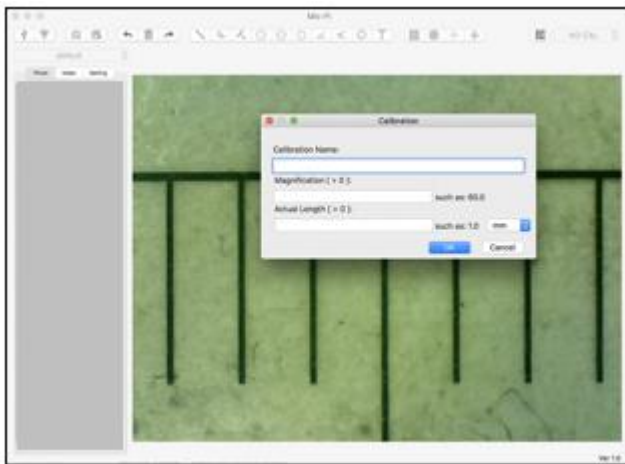
P.s. The snapshot works only in WiFi mode.

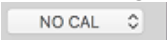
### 13.10.4 Calibration

Select a known measurement standard as the to-be-observed object, such as a ruler, to be used for calibration. Bring photo of the selected ruler into focus by turning the “Focus & Magnification adjustment wheel”, determine the magnification by taking a reading from the scale on the focus dial as below(The default magnification is 60):



- 1) Click on 



- 1) Fill the fields and click on OK
- 2) Drag the mouse to draw a line which has actual length.
- 3) Select the calibration from this menu 

Now the microscope is calibrated and you can mark measurements on the live video using the same focus. **(Please, do not adjust the “Focus & Magnification wheel!”)**. If the new photo object is not in focus, please only adjust the distance between the microscope and the object until the image becomes clear.