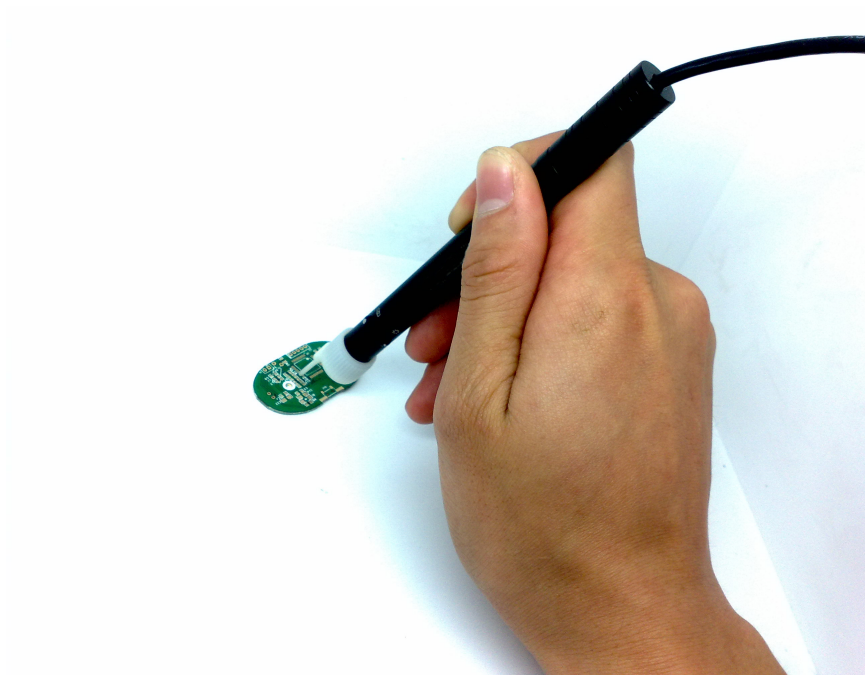


# Portable microscope for multi-purpose

B003



**USER'S MANUAL**



## **Introduction**

### **Functions and applications**

The DIGITAL PEN CAMERA is a new electronic health care product for the home. It is a tubular imaging system consisting of an optical lens, an image sensor, an illumination mechanism, and an image transfer control circuit connected to a computer. You can display the images captured by the DIGITAL PEN CAMERA on the computer screen, store them on the computer, print them, or send them over the Internet.

As an endoscope, you can use it to observe yourself like using a mirror. You can observe any part of your body, in particular the parts that you could not see before. Frequent observation and knowing what your body looks like in its normal, healthy state make you more alert to any abnormalities and will lead to early detection and treatment of illnesses.



As a USB microscope, it can magnify stamps, coins, antiques, insects, electric circuits, machines, fabrics, food, decorations, etc. and can also help visually impaired patients magnify small text for reading.

## **Attention**

Before installation and use of this product, please read the instructions in this manual to ensure its correct use.

## **Safety instructions**

Before using this product, please carefully read the following safety instructions.

1. The socket that the computer is plugged in must be properly grounded, as the computer supplies power to this product. If in any doubt, please have a professional electrician check and verify the grounding to ensure safety.
2. Never use this product in stormy weather.
3. This product contains delicate and precision components. Be gentle when using it and avoid harsh handling or excessive force that may cause damage to the product.
4. The temperature of the handle increases slightly during use and it feels a little warm. This is normal. If the product is overheated and hot to the touch, immediately cut off the power and contact us for repair.
5. Never leave the product on unattended. Unplug from the USB port after use.
6. Do not disassemble this product. Disassembling this product will result in irreparable damage. The company is not responsible for damage resulting from disassembly of the product by the user. In case of any difficulties in using the product, please contact us.
7. This product may only be used by children under supervision of an adult. Never give this product to a child to use or play by him or herself. Keep this product out of reach of children.
8. Do not let this product come in direct contact with steam, vapor, water, or liquids of any kind. Such contact can cause irreparable damage that is not covered by warranty.
9. When not in use, put the handle in the transparent sleeve and store it in a tightly sealed box to avoid moisture and decay. Damages resulting from improper storage are not covered by the warranty.
10. When using this product for eye examination, the illumination should be as dim and the examination time as short as possible. Never use this product to examine the eyes of infants or young children.
11. Examination or cleaning of the ear canal, nasal cavity and oral cavity should only be undertaken by adults who have mastered the depth and force required for such a task.

12. Never use the mirror or cotton swab for cleaning or treatment of the deep rear part of the oral cavity. Parts may drop into the throat and cause serious damage.
13. The cable in this product have been strictly tested. To ensure safe use, do not replace it..

### **System Requirements**

For best picture quality, the following specifications are recommended:

1. IBM PC compatible computer
2. Intel Pentium III processor or above
3. 128M RAM or above
4. At least one USB port (For best effect, USB 2.0 port is recommended).
5. WinXP or Vista home edition or professional edition with CD-ROM and a 40G or higher hard disc.

### **Technical Specifications**

1. Handheld USB Microscope
2. Sensor: high-quality CMOS sensor, with software capable of static interpolation up to 1.3 million pixels.
3. Resolution: 640×480
4. Colors: true color 24bit (RGB)
5. Interface: USB 2.0
6. Frame rate: 30 frames/sec (CIF and VGA).
7. Focal distance: 10mm -  $\infty$
8. Magnification: 200X (at 10mm on 17" screen by 640 x 480 resolution)

## Packing List

Name	QTY.
Digital Pen Camera	1
Reflector with focusing ring	1
Ear tip with focusing ring	1
Ear pick with focusing ring	1
Large focusing cap	1
Small focusing cap	1
Cotton swabs with focusing ring	1
<b>Tripod</b>	<b>1</b>
Software CD (User manual included)	1

## FUNCTION PARTS

Reflector with focusing ring



Ear tip with focusing ring



Large focusing cap



Small focusing cap



Ear pick with focusing ring



Cotton swabs with focusing ring




## **Installation and set up**

To avoid mistakes in the installation process, please strictly follow these steps: install driver→ restart→ plug Digital PEN CAMERA into the USB port→ follow system prompts to complete the installation→ restart.


### **Install driver** (use WINXP as an example)

- > Place the included CD into the CD-ROM drive.
- > Click “Setup.exe” and follow the prompts to complete installation.
- > Click “Complete”, and restart the system.
- > After restart is complete, plug the DIGITAL PEN CAMERA into the USB port, and the “New Hardware Guide” interface should pop up. Follow the prompts to complete installation.

### **Set up procedure**

- > Double click on the  icon on "My programm" and a window should appear as on the screen.

## **Directions for Use**

Properly connect the DIGITAL PEN CAMERA to the computer and to  t  
Touch the Left button to controls the brightness of the LEDs on the DIGITAL PEN  
and touch the right button on device to capture the pictures

After a short while you should see the image captured by the  
DIGITAL PEN CAMERA on the computer monitor.

## FOCUSING

Attach the focusing ring on any one of the parts to the front end of the DIGITAL PEN CAMERA. Make sure the focusing ring is properly connected to the lens. **The four focusing rods inside the focusing ring should match up with and sit in the**

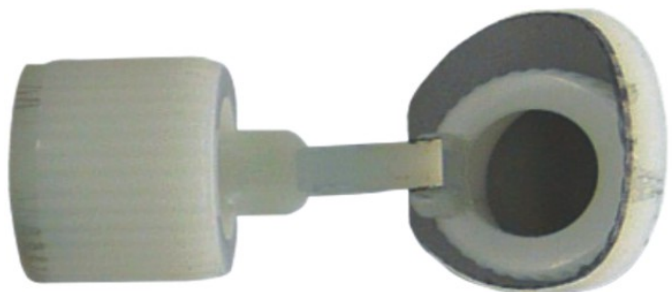
**four hollows in the focusing plate on the surface of the lens. When the focusing ring is rotated the lens should rotate, thus adjusting the focus. Please pay attention to that every function part is the same way connection to the lens.**



## REFLECTOR

The reflector always comes with the focusing ring and it adjust focus same way with the other function parts. The focusing distance can be 10mm to infinity.

For use on the teeth checking it should be focused on any surface that is at the distance of 10 to 15mm far from the reflector before it be used for teeth checking.





## FOCUSING CAPS

The focusing caps adjust the focus the same way as the focusing ring and are used

to focus on and inspect printed materials on flat surfaces. The advantage of using a focusing cap is that it saves you from the need to constantly adjust the focus when you use the pen camera to view flat surface materials and have to constantly move the camera. By attaching a focusing cap to the pen camera, you can press the cap against the surface of the materials you want to view and thus always maintain a constant distance between the lens of the pen camera and the materials.

The focusing caps come in large and small sizes.

With the large focusing cap, the distance between the lens of the camera and observed surface is 20mm.

With the small focusing cap, the distance between the lens of the camera and observed surface is 10mm.

The large and small focusing caps are sold separately. Please order according to your need.

**Portable microscope**  
for multi-purpose  
多功能USB顯微鏡

use for

Windows Vista  
Apple  
Linux  
2.0 USB

Video with extra-long  
time-11 hours long  
& 3.6GB of memory  
video  
VIDEO WITH SPECIAL EFFICIENCY

take out from the attachment and install  
on your device, enlarge **100 times** your  
**mouth, internal ear, skin, hair** and  
so on on the computer screen and exist.

Plug and play

Snap Shot  
拍照鍵

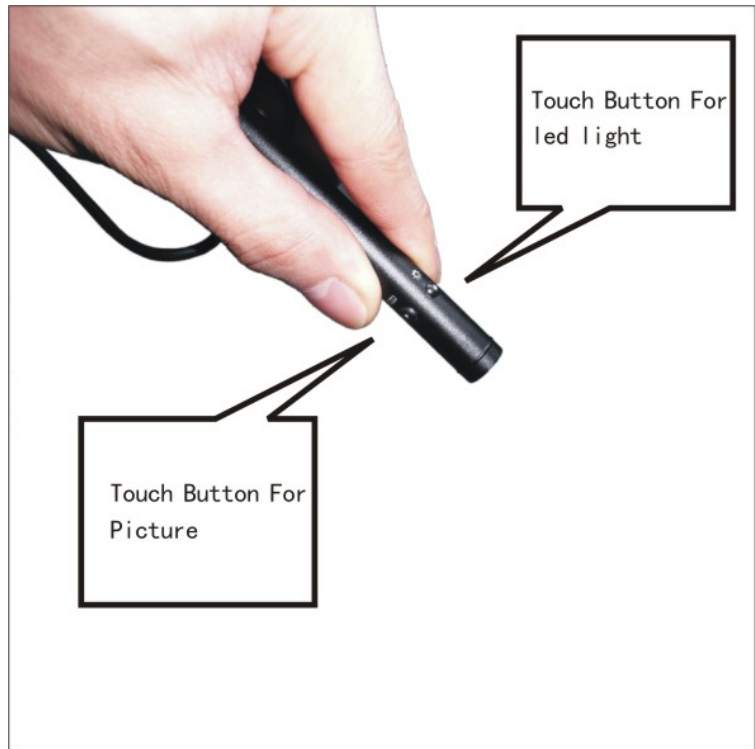
Manual focus  
手動調節放大倍率

Touch the switch for  
adjust the LED  
觸摸開關

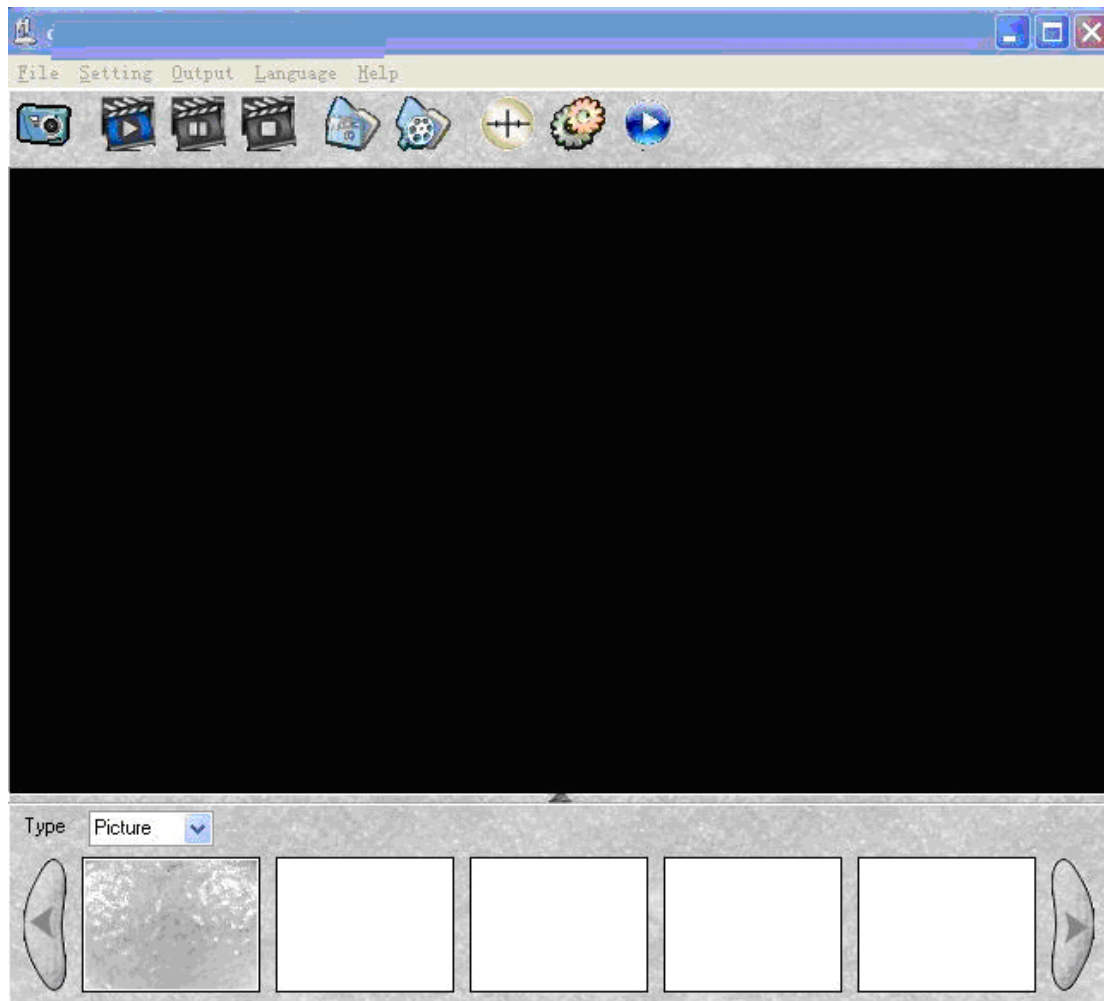
## EAR TIP

The ear tip should be connected to the focusing ring, which is then connected to the front end of the handle. The four focusing rods inside the focusing ring should match up with and sit in the four hollows in the focusing plate on the surface of the lens. When the focusing ring is rotated the lens should rotate, thus adjusting the focus.

To use the ear tip, focus on the edges of the opening at the front end of the lens. This is done by adjusting the focus until you see a sharp edged circle on the screen. The ear tip can now be used to inspect the ear canal, nasal cavity, hair roots, skin, etc.

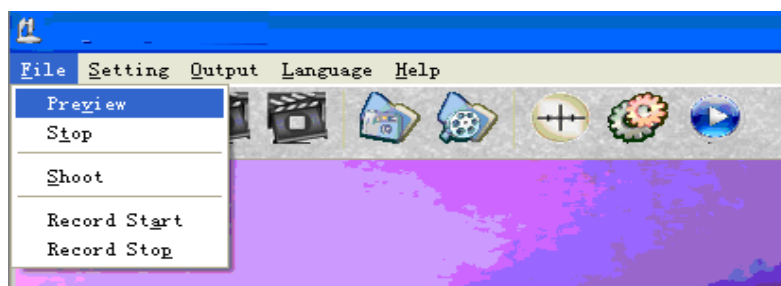


## Main menu introduction:

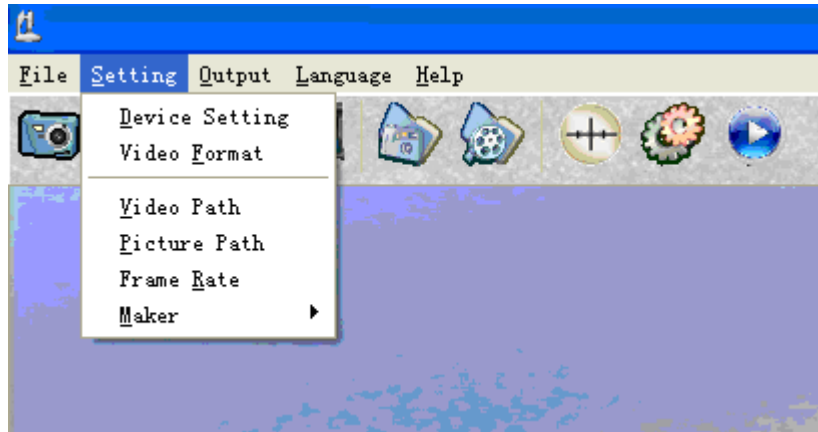


(Default interface when you open software)

1. \* At file option, select “preview” to view item your are testing while selecting “stop” to halt viewing .  
\*Select “shoot” to picture capture,which will show in bottom display area area automatically.  
\*Select “record start” to video recording and select “record stop”,the video will also show in bottom display area automatically.



2. At setting option, select “device setting”, you can setting the “brightness,contrast,white balance etc”as you like.  
\*Select “video format” to select video size as you like,it from 680\*480 to 5120\*3840.  
\*Select “video path” and “picture path” to pre-allocate storage Path for video and picture you taken  
\*To select frame rate to customize your frames rate .  
\*Select maker to show guage



3. To select “Langue option”to setting langue option,English and Chinese is available.

#### To Measure the object :

Click the ruler icon on the tool bar and a check mark will appear on the screen, move the check mark to where u would like to measure, pull the check mark and release it , a measurement will pop up to the screen.

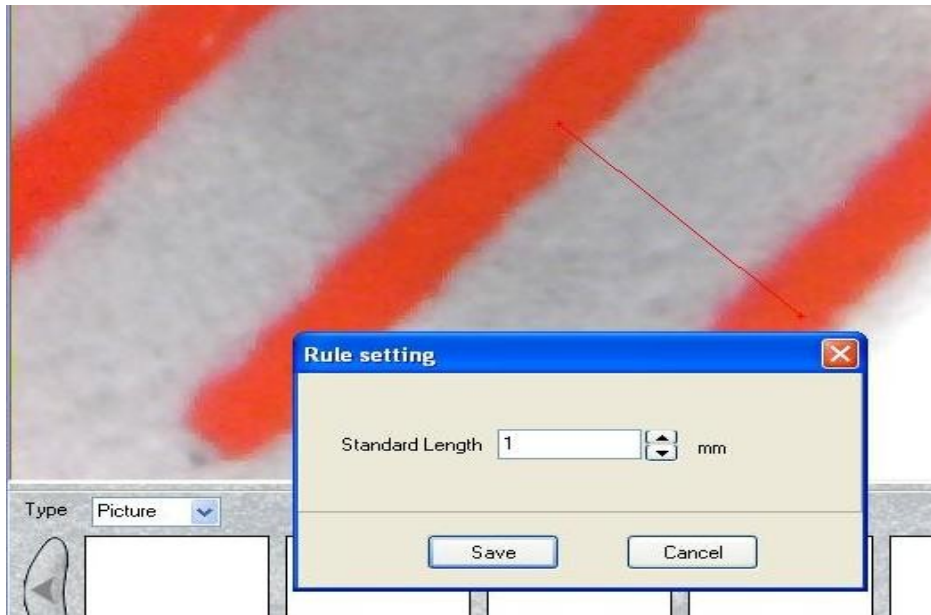


#### To Adjust Settings:

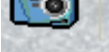



At setting option, select "device setting", you can adjust the brightness, contrast, white balance, etc., as you like. Before your first measure, you need to adjust the measurement setting to get accurate measurement,


otherwise the measurement will be wrong. Please follow below steps to get it done.


~ put a real ruler & use the microscope to view the "mm" section . Select "measure setting" and a rule setting box is pop out. Measure the "mm" section & change the Standard Length from the pop out box to 1mm & click Save, the software will save it for the on going measure.




## Shortcut key introduction:

I To icon of  is for picture capture .    are for video recording start ,recording pause and recording stop.

I Incon of   are for image folder and video folder,you can open the the file your pre-setting.

I  for showing maker.

I  to customize the picture output size.

I  is video player for recording video.

### Repair Service Card

Product model:

Date of repair	
Customer's name phone number	
Description of faults	
Place of repair	
Results	

**Warranty Card**

Name of customer	Address of customer
Purchase date	Customer phone number
Product model	Labeling of Sales Company
Serial number	