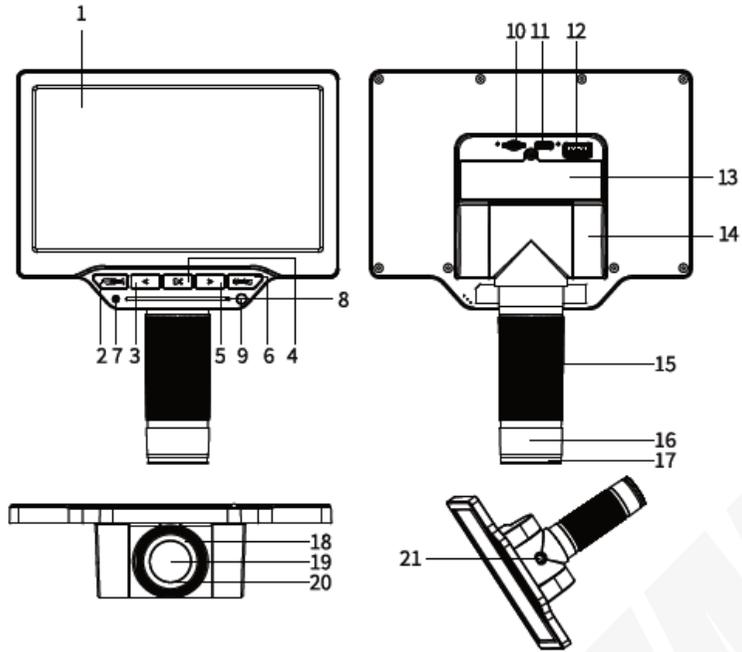




**5311-M710  
DIGITAL MICROSCOPE  
OPERATION MANUAL**



## 1. Product Structure



- 1. Display
- 2. Power button
- 3. Left button
- 4. Confirm button
- 5. Right button
- 6. Menu button
- 7. Power light/charge light
- 8. White LED touch strip
- 9. IR Receiver
- 10. TF card slot

- 11. USB (TYPE-C)
- 12. 5V OUT
- 13. Battery cover
- 14. Lens barrel shaft
- 15. Focusing lens barrel
- 16. Dustproof cover
- 17. Protective lens
- 18. White LED
- 19. Lens
- 20. Lens hood
- 21. Tripod slot interface

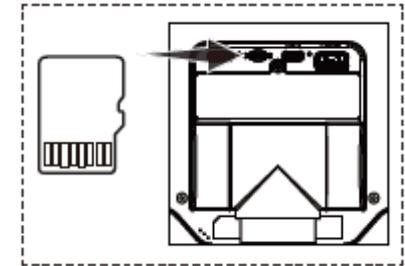
## 2. Instruction

### 2.1 Install video microscope

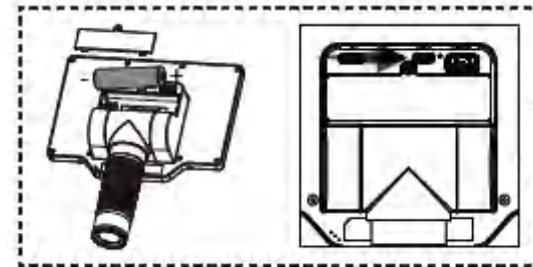
- ◆ Assemble the base bracket and fix it on the bracket platform;
- ◆ TF card gold finger pointing up, insert TF card slot;
- ◆ Plug the battery into the battery compartment or connect to power by USB;
- ◆ Adjust the video microscope screen to a comfortable viewing angle;



Assemble the bracket to lock and fix the microscope.



Insert TF card.



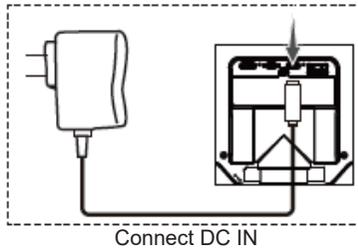
Install battery or connect to power

**Attention:**

Use a Phillips screwdriver to remove and assemble the battery cover;  
Please use 18650 battery with protective plate or original battery;  
Please pay attention to the positive and negative electrodes of the battery, don't assemble them converse;

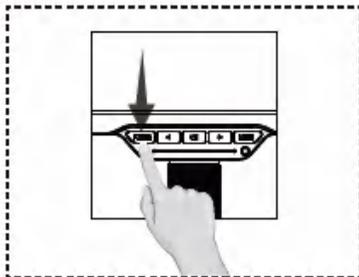
### 2.2 Connect video microscope

- ◆ Plug USB cable into the USB interface of this video microscope;
- ◆ Put another side of the USB cable into the USB interface of the power adaptor;
- ◆ Connect power adaptor with AC;

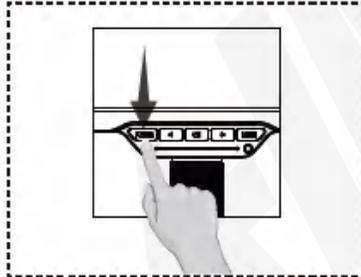


### 2.3 Power on/off

- ◆ Long press power button, video microscope will turn on, power light will be on to enter preview mode;
- ◆ Use center point of monitor to aim the object, adjust bracket height and lens focal length to make image clear;
- ◆ Long press power button again to power off video microscope;



Press power button to power on



Press power button to power off

Attention: In order to reach the best effect, please clean protective lens and display screen before using.

## 3. Instruction

### ◆ Zoom rate adjustment

Press left or right button to adjust the zoom rate and then reach the best display effect;  
This device can be zoomed in and out infinitely between 1X ~ 16X;

### ◆ Touch type white LED adjustment

Click or slide the touch area of the white LED with your finger to adjust the brightness of the white LED.

Click on the touch area to directly set the brightness of the click;

Slide the touch area, the brightness will follow up the touch position;

The indicator area will indicate the current brightness of the white LED, and the brightness increases from left to right gradually;

### Attention:

1. Please keep the finger humidity properly, too dry or too wet may cause insensitive touch;
2. Please keep the touch area clean and avoid getting water or oil stains;
3. The indicator area will indicate the current brightness of the white LED, and the brightness increases from left to right gradually;

### ◆ Photo and video recording function

Preview menu->System->Shortcut set as photo or video recording;  
In preview menu, press Confirm button, can take photo or video recording;  
Attention: Photo or video recording function need to insert TF card.

◆ **Image Freezen(PIP Comparison)**

In preview menu->system->shortcut set as freezen;  
 In preview menu->system->freeze set as full screen, left and right ,up and down, 1/4 screen;  
 In preview menu, press Confirm button, can freeze the monitor to make a comparison;

◆ **Playback function**

In preview->menu->playback, enter into preview mode to check photo and video;

Photo playback:

Press Left button to zoom out;  
 Press Confirm button to get into next photo;  
 Press Right button to zoom in;  
 Press Menu button to enter menu playback;

Video playback:

Press Left button to get into previous video menu;  
 Press Confirm button to play/ pause;  
 Press Right button to get into next video menu;  
 Press Menu button to get into playback menu;

◆ **Brightness adjustment**

AE Lock->lock current exposure value, by adjusting the brightness of the white LED to control the display brightness;

Exposure compensation-> Adjust value of lightness to control the display brightness;

Attention:

When the White LED is insufficient or the environment is dark, the brightness may not be adjusted up.

◆ **White balance adjustment**

Auto white balance ->Through white balance algorithm to reach white balance and meet most application occasions;

Manual white balance-> Adjust R/G/B value to meet different application occasions according to your likes and dislikes.

Calibration white balance ->Before putting the standard ash card in front of the lens, choose calibration white balance to adjust current light to reach accurate white balance control;

◆ **Color Effect Adjustment**

Colorful->Display picture with multi color;

Black white->Display the picture with white and black only to meet special application;

Negative film->Display picture with negative film to meet some special applications;

◆ **WDR**

Start the WDR function , have better effect on dark detailed area;  
 Tips: Lower the lightness first, open the WDR, can avoid the high light reflector;

◆ **Contrast adjustment**

Adjust contrast of picture to meet different requirements of lens, monitors and application occasions.

◆ **Saturation adjustment**

Adjust saturation to 0plication occasions.  
 Tips: Adjust the saturation to the minimum to achieve black and white special effects.

◆ **Sharpness adjustment**

Adjust Sharpness to meet different application occasions.

◆ **Image invert**

Horizontal mirror Mirror the image in a horizontal direction;  
Vertical flip Flip the image in a vertical direction;

◆ **Light source frequency**

Choose 50HZ or 60HZ according to the light source frequency of the current environment, which can effectively prevent image water ripples.

◆ **Marking function**

Mouse pointer: Pointer, Cross, Gesture 3 different shapes optional.  
Cross cursor: Switch off, Ruler and Centre 3 different shape optional.  
Grid line: Provide 8 line grids, each line can set turning on/off、 type (Horizontal、Vertical), position、 line width、 color etc.

Attention: In open/close grid line menu, double click Confirm button, can turn on/off all grid lines;  
Cross pointer's color and line width adopt grid line 1 setting;  
Image freeze color and line width adopt grid line 1 setting;

◆ **Battery power check**

This device provides power indicator and low battery tips function.

When use battery, short press Power button, the bottom left corner will show the current battery level;

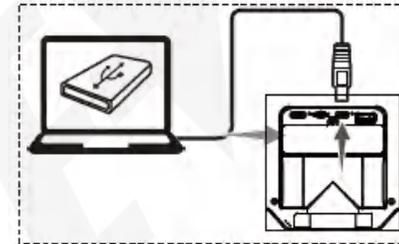
When use power adaptor, short press Power button, the external power supply will be displayed in the bottom left corner;

When in low battery, it will prompt that the battery is low, and power off automatically.

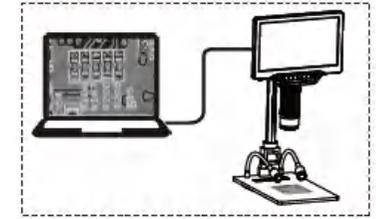
Attention: It will automatically show current battery power when you turn on the device every time.

◆ **Connect to computer (U disk+UVC)**

After connecting USB cable with computer, computer can recognize the device as mass storage device or PC camera(UVC), it can switch between storage device and PC camera by pressing Confirm button.



Mass Storage Device



PC Camera(UVC)

Mass Storage Device: Can show the picture and video playback or download and save in computer.

PC Camera(UVC) :Can deliver video to computer to display in real time for analysis , measurement etc.

◆ **IR Remote**

This device can support IR remote in order to make the device avoid image shaking.



**◆ Mouse operation**

All operations of mouse middle key are the same as the operations of the button on the device:

Back roll ->same as left button

Middle key ->same as middle button ( Double click is Menu button )

Front roll ->same as right button

**◆ Mouse quick operation supported:**

1. Click right key to open or close menu;
2. Click relevant menu directly and choose it quickly;
3. Double click menu option and set relevant option and choose it quickly;
4. While zooming in the picture, please kindly press mouse and drag the picture;

**Attention**

In order to keep your video microscope working in the best condition, please read below notes carefully:

Do not expose video microscope under high temperature or sun light;

Please make sure video microscope protective lens and display clean enough to have the best imaging effect;

Please make sure video microscope far away from humidity, rain, liquid and chemicals;

Please do not use video microscope near inadequately shielded electronic devices or medical equipment;

Please make sure to use video microscope between 10°C and 40°C;

Please make sure to store video microscope between -20°C and 40°C;

Please do not try to repair or open video microscope to avoid damage out of warranty;

Please use original adapter and accessories to avoid possible damage and danger;

**Problem Solutions**

Questions	Solutions
Video microscope cannot be switched on	Make sure if power connect correctly; Make sure if battery install correctly;
Video microscope without display	Make sure if monitor is on;Make sure if monitor switch to HDMI output mode;
Touch white LED malfunction or insensitivity	Make sure if finger is too dry or too wet; Make sure if there is interference source in the surrounding environment; Please use original power adaptor;
White LED causes the screen to reflect the light	Please try to dim or turn off the white LED, use ambient light; Please try to make an angle between the lens barrel and the observation object to avoid the reflective point;
Video microscope image is too dark or too bright	Make sure if lens focus on the observation object;Make sure if white LED is on; Make sure if screen brightness setting is too dark;
Video microscope blur or dirty	Clean lens and filter;Make sure if focal length is placed at the best position;
Video microscope cannot be stored or showed card error	Format TF card or change a new one;
Mouse doesn't work or cannot show	Re-plug and unplug the mouse or restart it;