

Meray Tech Capture

# **User Manual**

Shenzhen Hipower Optoelectronics Co.,Ltd

[Http://www.szhipower.net](http://www.szhipower.net)

## Contents

Chapter I: Introduction .....	1
1.1 Safety warnings and precautions .....	1
1.2 Your Meray Tech Capture .....	2
1.3 Installation instructions .....	2
Chapter II: Functions of device .....	9
2.1 Turn off device.....	9
2.2 Refresh device .....	9
2.3 Select device.....	10
Chapter III: Meray Tech Capture Settings.....	11
3.1 Hardware parameters .....	11
3.2 Options .....	14
Chapter IV: Image preview .....	19
4.1 preview window .....	19
4.2 Image control module.....	21
Chapter V: Snapshot and video .....	24
4.1 Snapshot: .....	24
4.2 Video recording .....	24

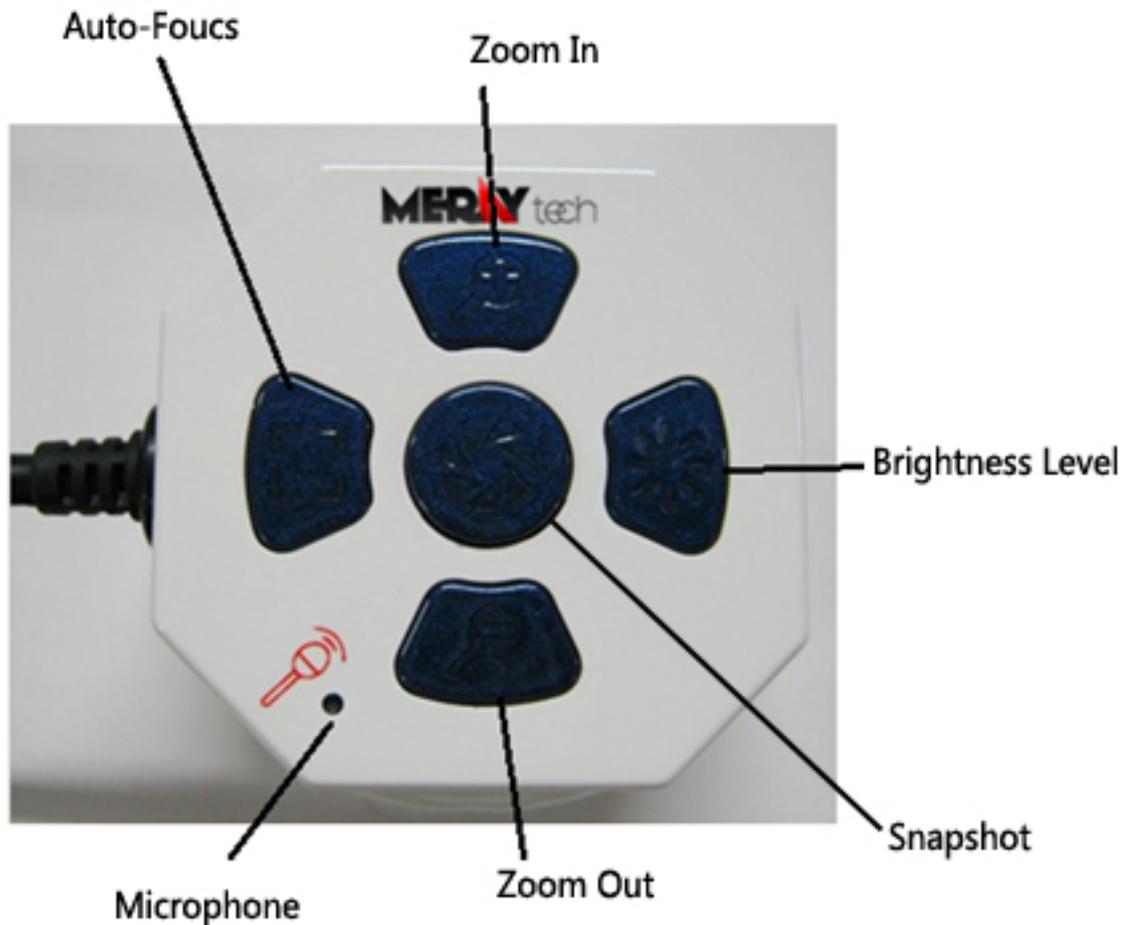
Chapter VI: File management .....	26
Chapter VIII : Help .....	27
8.1 Meray Tech Capture update .....	27
8.2 About Meray Tech Capture.....	27
8.3 Service Support .....	28

# Chapter I: Introduction

## 1.1 Safety warnings and precautions

- 1) To avoid danger or damage incurred to the lens, do not touch the lens and LED part directly with your fingers.
- 2) To avoid failure or electric shock hazard and so on, do not disassemble or modify the internal structure of the device.
- 3) Do not plug in or unplug the USB connectors when the hands are wet.
- 4) Do not use alcohol and other organic solvents to clean the device.
- 5) If the lens is dirty or damp, you should better use the dry and non-linen fabric or professional lens tissue to wipe it. To avoid scratches on the surface, do not touch the lens with your fingers and wipe the lens lightly.
- 6) The products are not specifically designed for an outdoor use. Do not expose it to outdoor environment without any protection, because the excessive temperature and humidity will damage the lens.
- 7) Please store and use in the following environment: Temperature: 0°C ~40°C; relative humidity: 45%~85%
- 8) If there is any foreign matter / water or liquid enter into the device by accident, please disconnect the USB interface immediately and send it to the maintenance center and do not use the hair dryer to dry it by yourself.
- 9) To prevent being tripped over or dropping the device, please put away the device 's USB cables.
- 10) To avoid electric shock by accident, please unplug the device from PC before you move the PC.

## 1.2 Your Meray Tech Capture



**Zoom in/out:** Zoom in and out of the observed object size

**Autofocus:** Press this button can automatically focus.

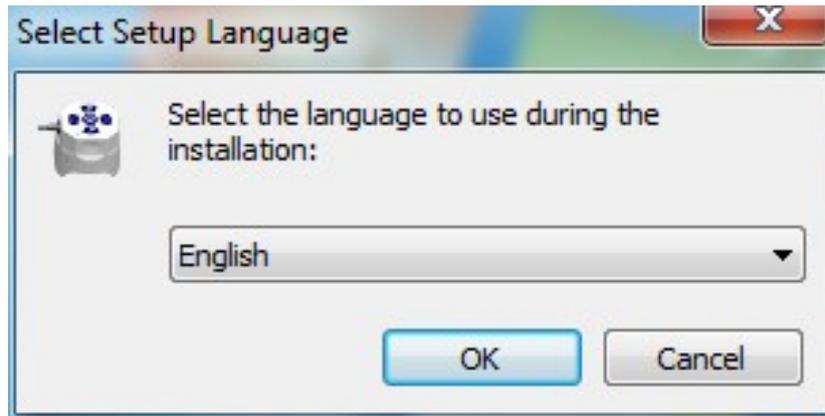
**Brightness level:** According to personal preferences, the brightness could be, in turn, chosen as 100% - off - 16% - 33% - 50% - 66% - 83% - 100% circularly

**Microphone:** Built-in microphone to record the note of verbal analysis.

## 1.3 Installation instructions

**Step 1:** Start the computer and put the installation disk into the CD-ROM., Double click the “Meray Tech Capture\_Setup.exe”, then the language selection box will pops up.

Click the drop down menu to select the language. Then click ok.



Tip: Different language operating system may be had different choices, it depends on the language pack which installed in your system. The default language is the same as your operating system.



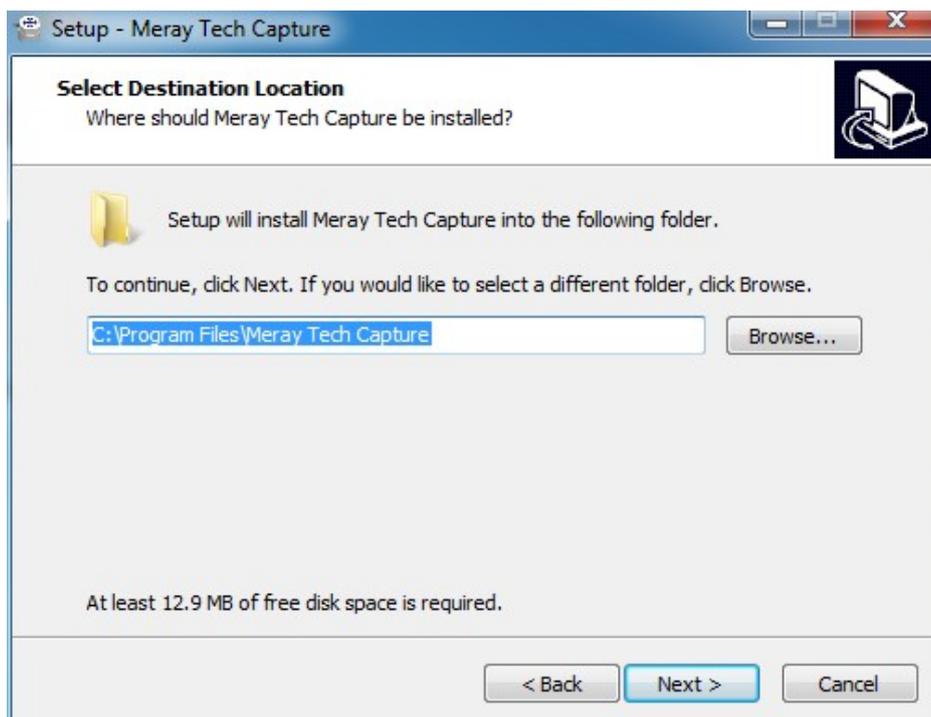
**Step3:** When appears below dialog, then click “next”.



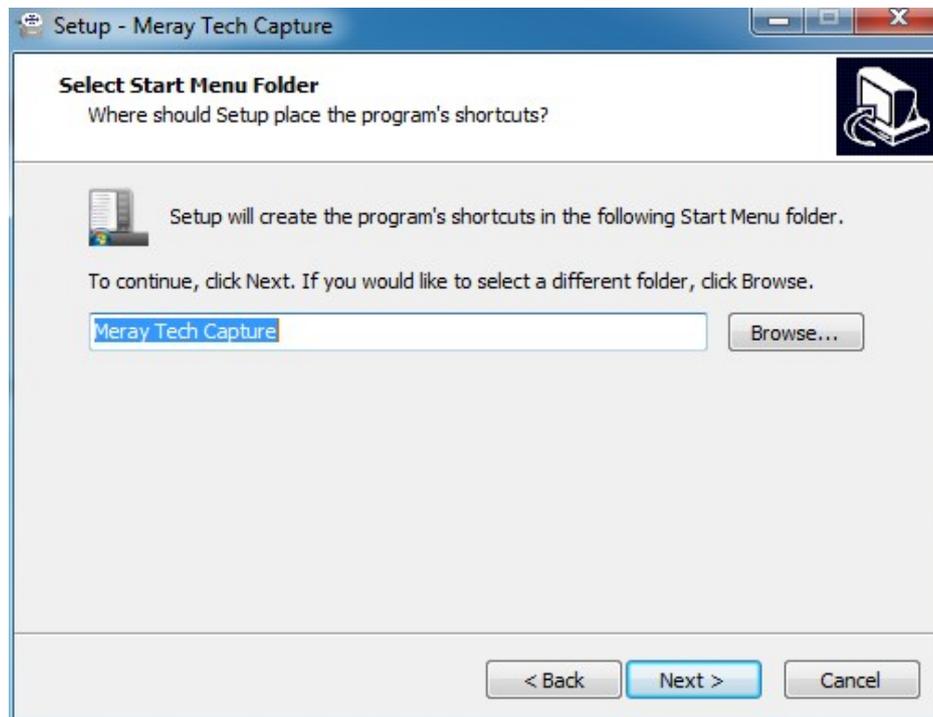
**Step4:** Read the license agreement carefully in this step, if you do not accept the license agreement, click “cancel”, and it will exit the setup. If you accept this license agreement, select “I accept the agreement”, and click “next”.



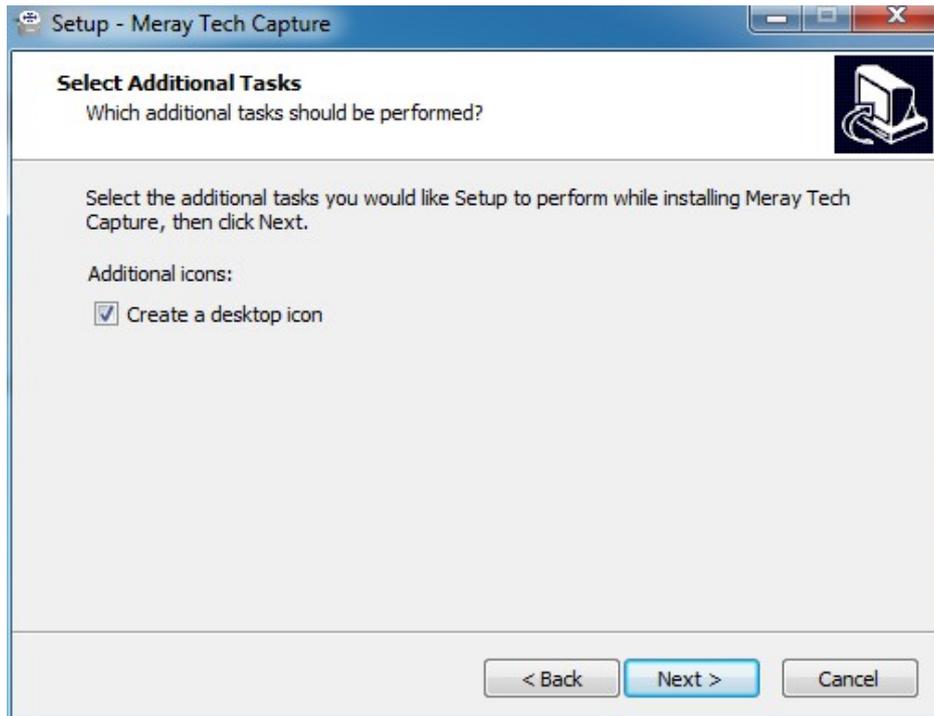
**Step5:** Select the installation path, and click “browser” to choose your installation path, click “Next” to continue the installation.



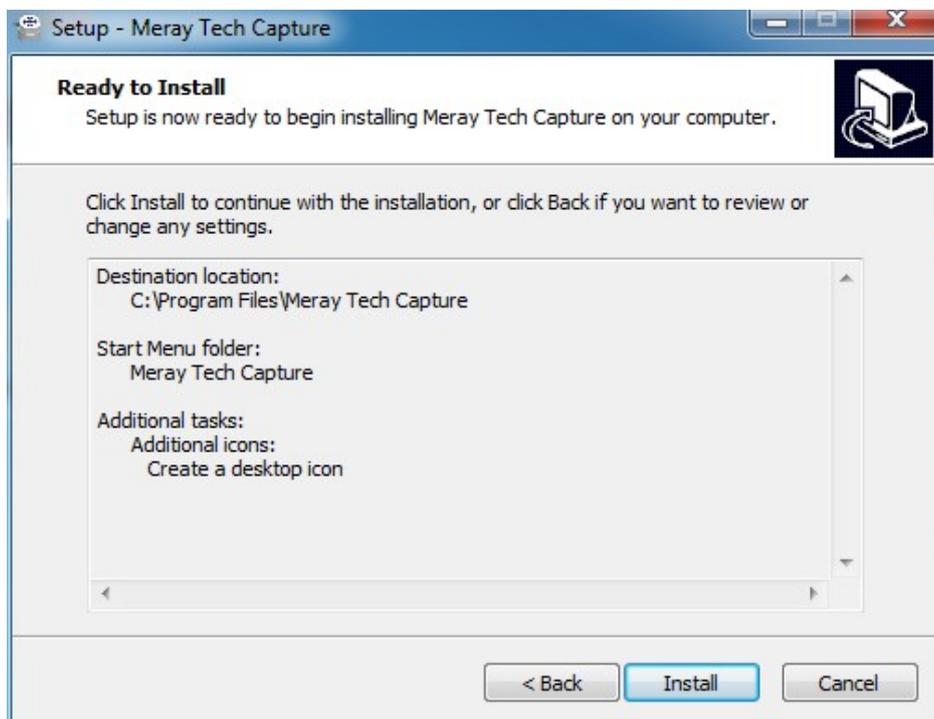
**Step6:** select the path and type the name of the program shortcut which will appears in the star menu. Click “next” to continue.



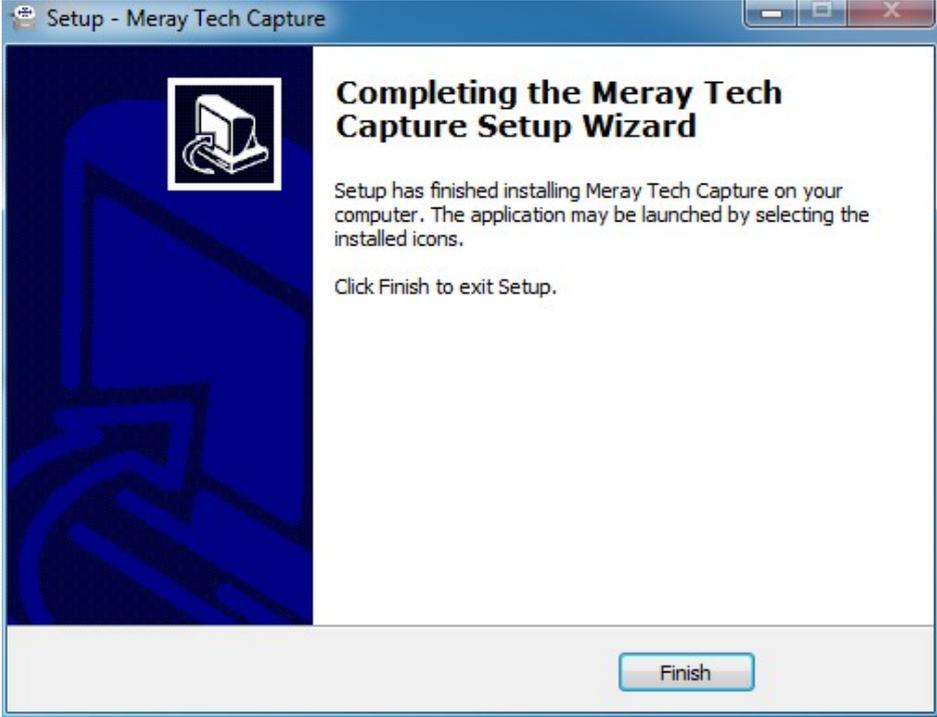
**Step7:** Choose whether to create desktop shortcut, and click “next”.



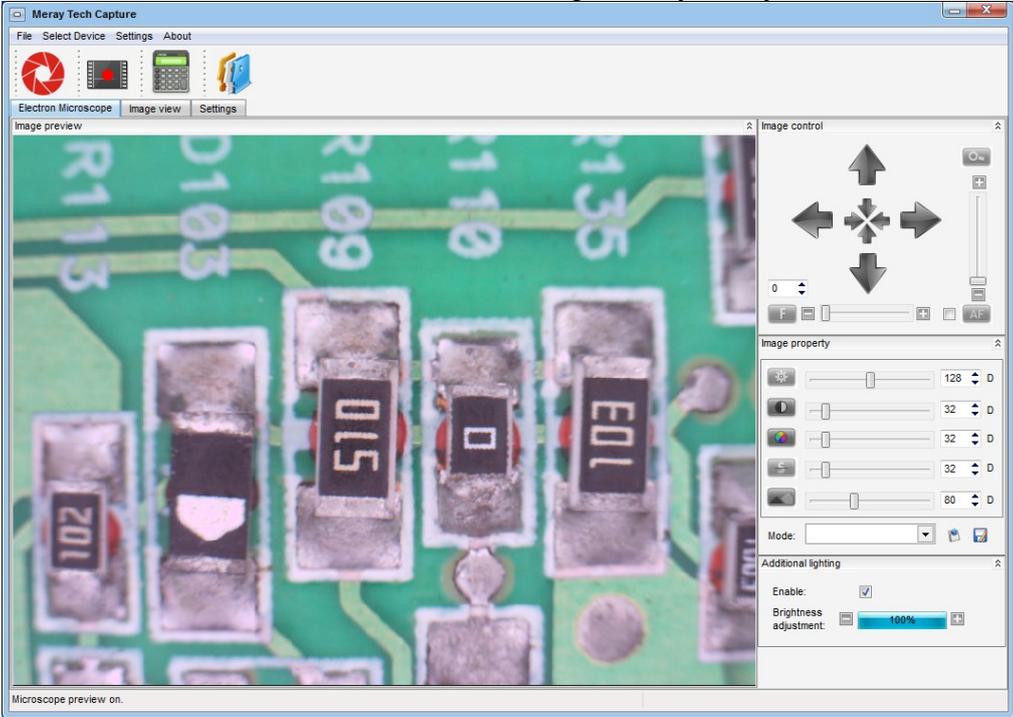
**Step8:** Confirm the installation information, then click “Install”.



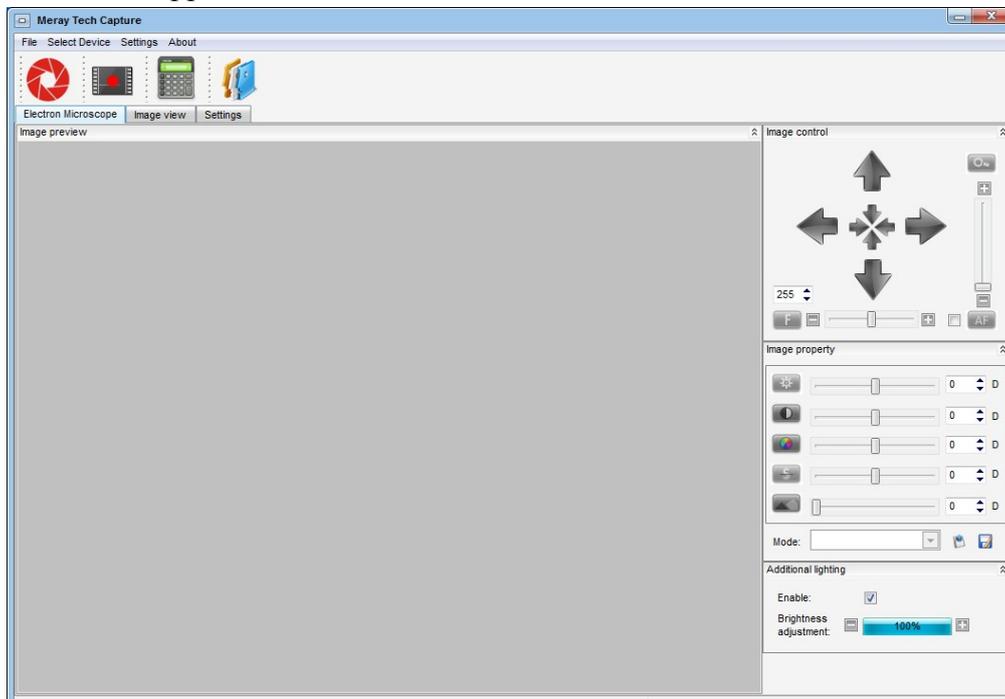
**Step 9:** The program had been installed successfully, when you see the following dialog box. Click "Finish" to confirm the installation.



**Step 10:** When the device is connected to the PC, "Found a New Device" will appear on the screen, the driver installation will be completed by the system automatically.



**Step11:** Run "Meray Tech Capture " on the desktop or from "Start"→"All Programs", the main window appears as below.

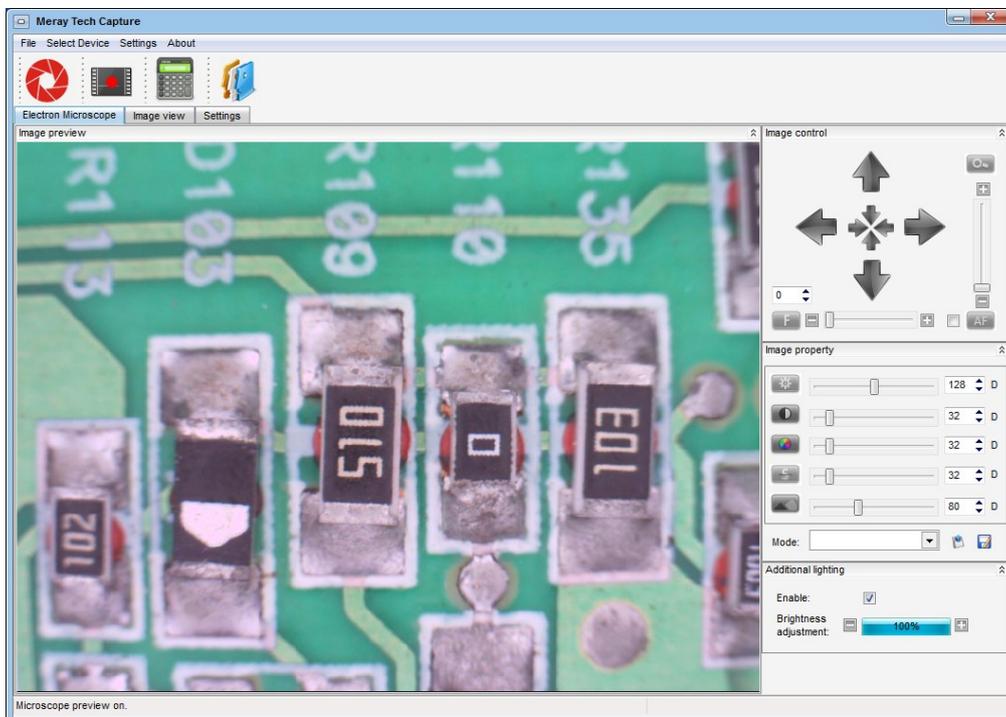
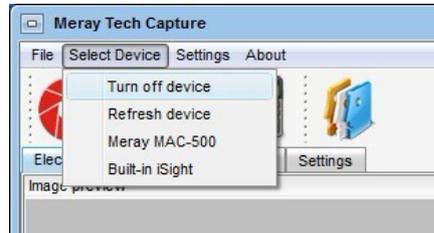


**Tips 1:**Make sure that the device has been connected with the computer before you run the “Meray Tech Capture” at the first time. If your computer has more than one USB port, the system may prompt you to install the device again, when you plug into the difference USB ports. Also the system will complete the installation automatically.

**Tips 2:** Please close the " Meray Tech Capture " program first, before unplug USB from the computer.

# Chapter II: Functions of device

When the “Meray Tech Capture” is running, click “Select Device” from the menu, select “Meray MAC-500”, then you can check the object in the preview window.



## 2.1 Turn off device

Click “Select Device” from the menu, select “Turn off device”, the running device will be closed and preview frame will become gray.

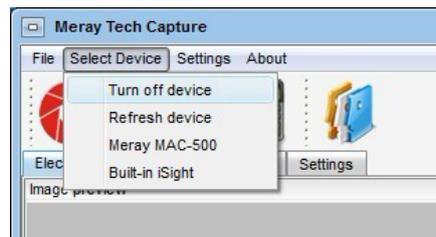
## 2.2 Refresh device

Click “Select Device” from the menu, select "Refresh devices", the program will allow

you to recheck the connecting device, which makes it more convenient for you to choose another device.

## 2.3 Select device

Click “Select Device” from the menu, select the device that you need, for example: “Meray MAC-500”.



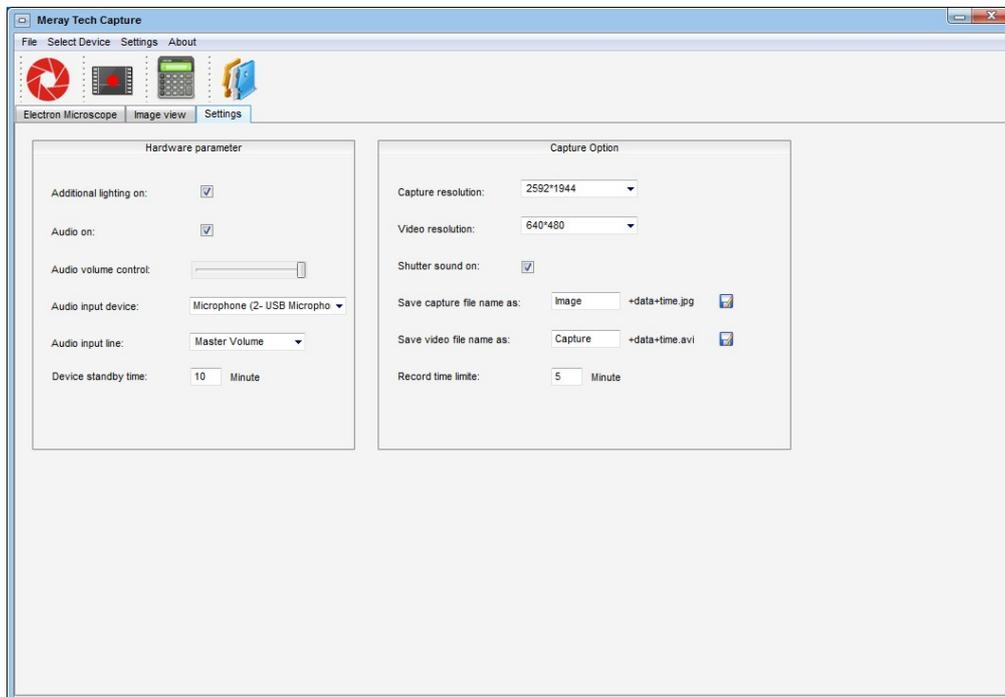
**Tips 1:** The name of device under “Select Device” menu is identified by the system automatically. The identified names may vary under different operation systems.

**Tips 2:** “Meray Tech Capture” can connect with multiple devices at the same time, but only one device can be run at each time. If you want to switch to another device, you should turn off the running device before you run another.

**Tips 3:** Do not detach the device before you close “Meray Tech Capture” programm.

# Chapter III: Meray Tech Capture Settings

It has two options in the following setting menu.



## 3.1 Hardware parameters

**Turn on auxiliary illumination:** Turn on/off Mini Microscope LED lights.

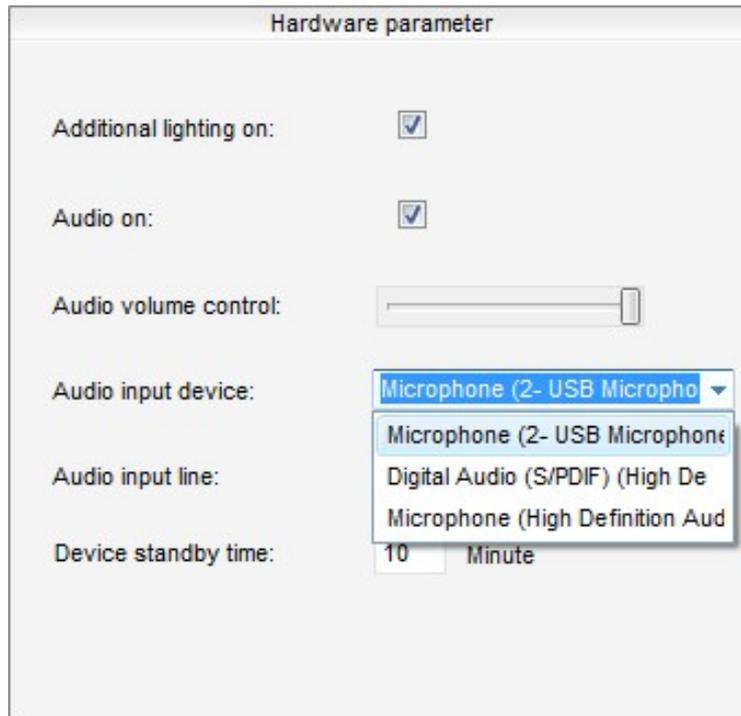
**Turn on audio:** Turn on/off the Microscope's shutter sound.

**Audio volume:** Modulate the shutter sound of the Mini Microscope.

**Hardware parameter**

Additional lighting on:	<input checked="" type="checkbox"/>
Audio on:	<input checked="" type="checkbox"/>
Audio volume control:	<input type="range"/>
Audio input device:	Microphone (2- USB Micropho ▾)
Audio input line:	Master Volume ▾
Device standby time:	<input type="text" value="10"/> Minute

**Audio input device:** It is used to select the microphone device associated with the audio device. If your computer is installed with other audio devices, you may have more options. For the better results, we suggest to use the microphone device with our device.



Tip 1: The name of audio device under “Hardware parameter” is identified by the system automatically. The identified names may vary under different operation systems. In general, it is identified as “Microscope(2-USB Microphone)” under the Win 7 and Vista in English operation system; It is identified as “USB Microphone” under the XP in English operation system.

**Audio input line:** It is used to select the sound quality when recording the audio with the microphone. High-quality audio needs a large sample rate and more storage space.

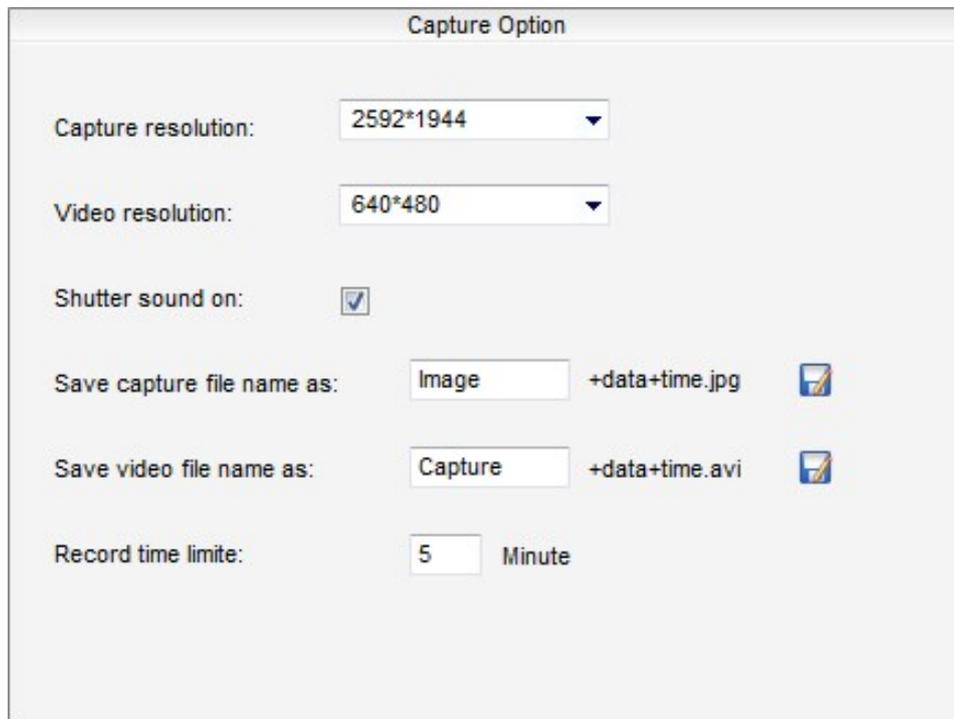
**Standby time:** This mode can make the device enter into the standby mode when there is without any operation in the UI, the unit is minute. The default value is 10 minutes. If the value set as 0, that means the “Standby mode” will be cancel.

**Tip:** “Standby” and “wake up” , in this case, they are only apply in UI, but not apply in

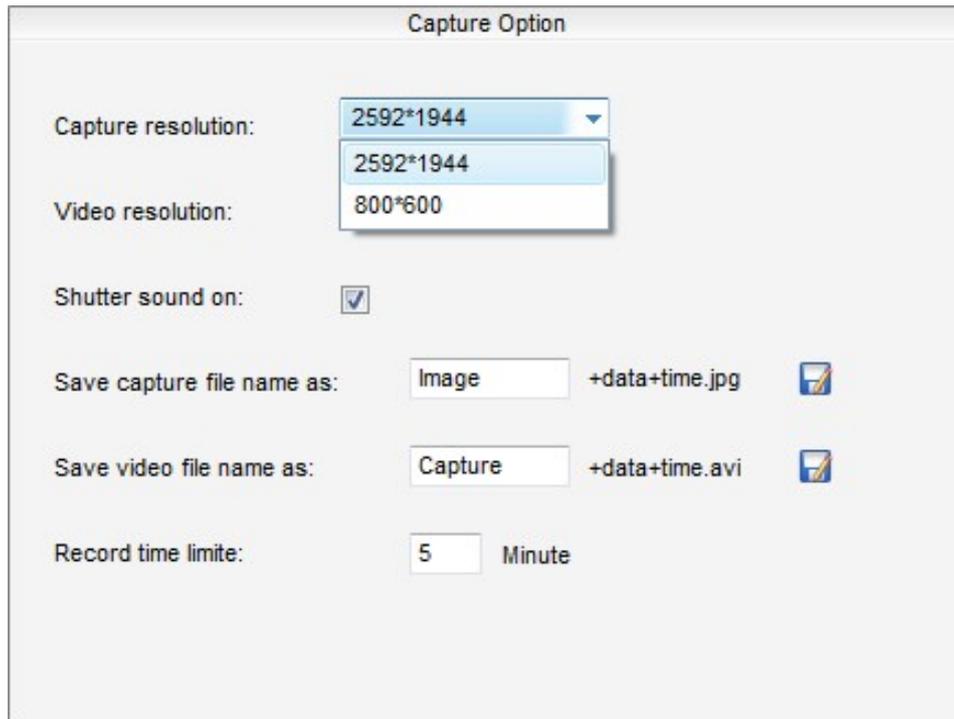
the Mini Microscope. That means, if you have actions on the Mini Microscope in the set time, but no operation in UI, it still will enter into the standby mode. If you need to exit the standby mode, you need to wake it up from UI, but not from the Mini Microscope.

## 3.2 Options

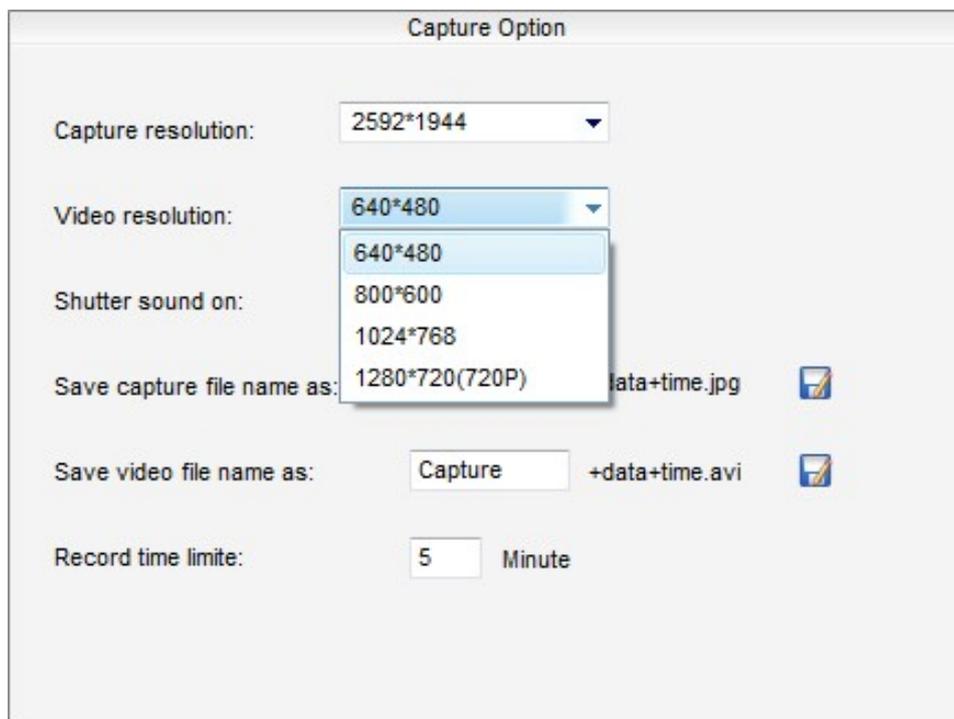
The settings of snapshot and video recoding



**Image resolution:** There are two options in image resolution: 2592x1944 and 800x600. When you select 800x600, the picture is the same as you see in the preview window. 2592x1944 can capture the whole view size of lens, if you zoom in/out, and the image that you capture will not the same as you see in the preview window. The default resolution is 2592x1944.

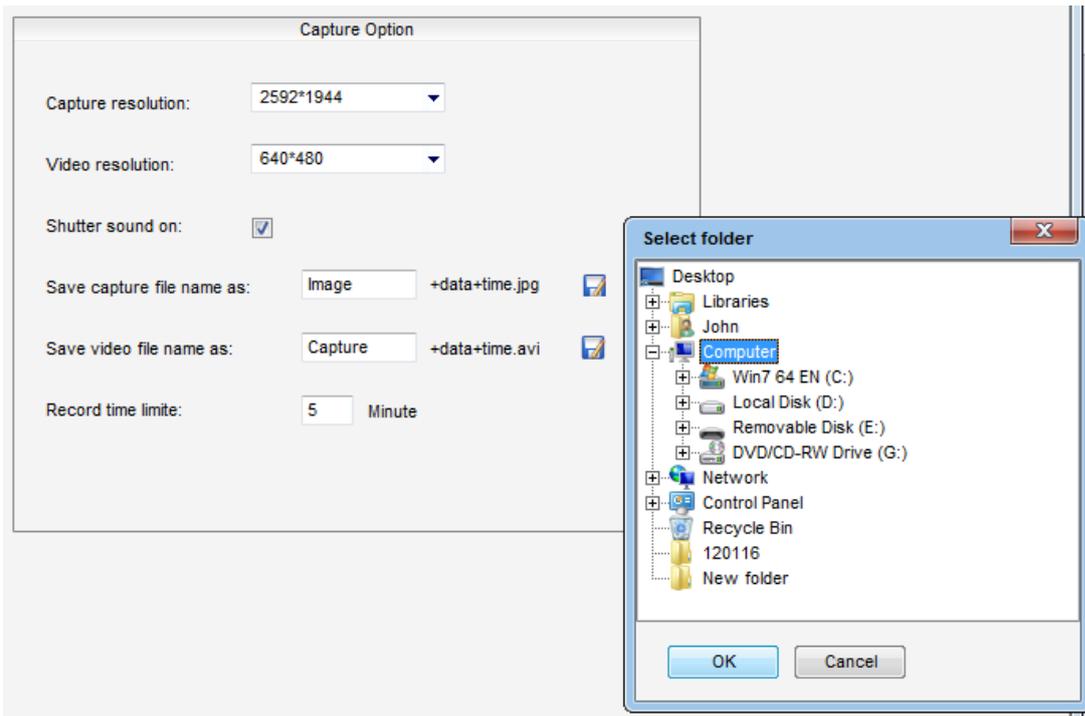


**Video resolution:** There are four resolution options for recording video: 640x480, 800x600, 1024x768 and 1280x720(720P). The higher resolution, the better quality, which also needs more storage space. The default resolution is 640x480.



**Shutter sound:** Turn on/off the shutter sound.

**Name of image:** It allows you to add a prefix in the image name, the date and time will be added into the file name automatically, which will match the current date and time with the computer by the computer program.



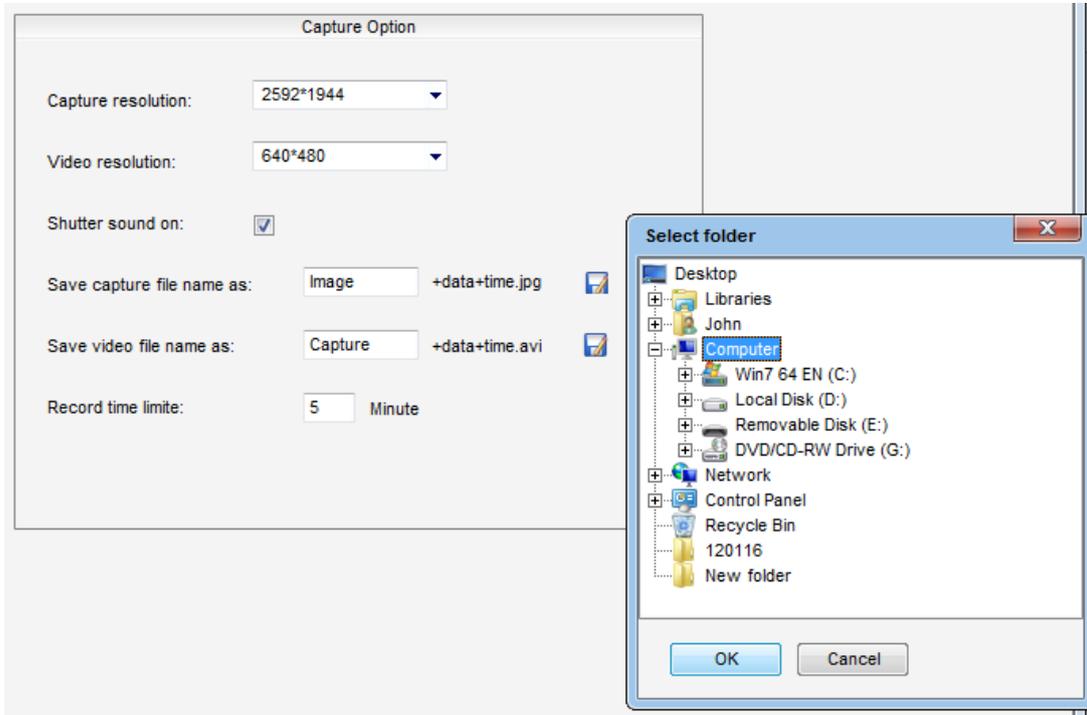
**Tip 1:** The default location path is in the “Image ” under the “Program Files” folder, “C:\Program Files\Meray Tech Capture\Image”.

**Tip 2:** Please create a new folder first, the pop-up file is not support to create a new folder.

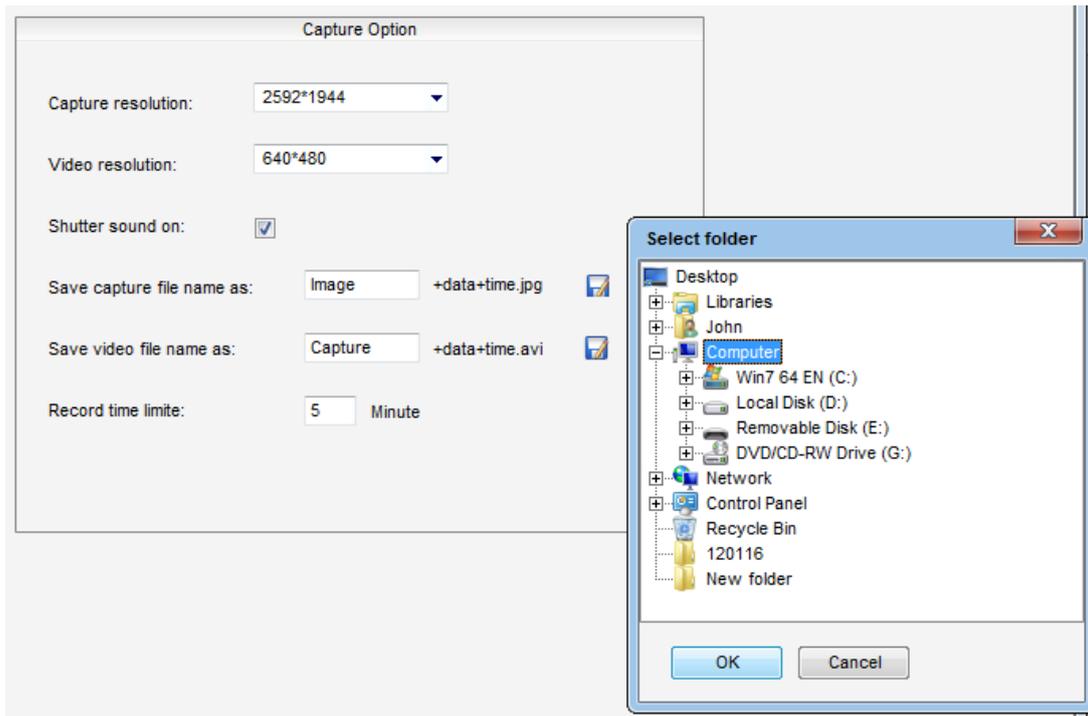
**Tip 3:** The default format is JPG, if you need to save in other format, please use “save as”.

**Name of Video:** It allows you to add a prefix in the video name, the date and time will be added into the file name automatically, which will match the current date and time with

the computer by the computer program, which makes it more convenient to storage and management.



**Video path:** Click the “” icon, pop open a “Select folder”, you can choose the path for the file.



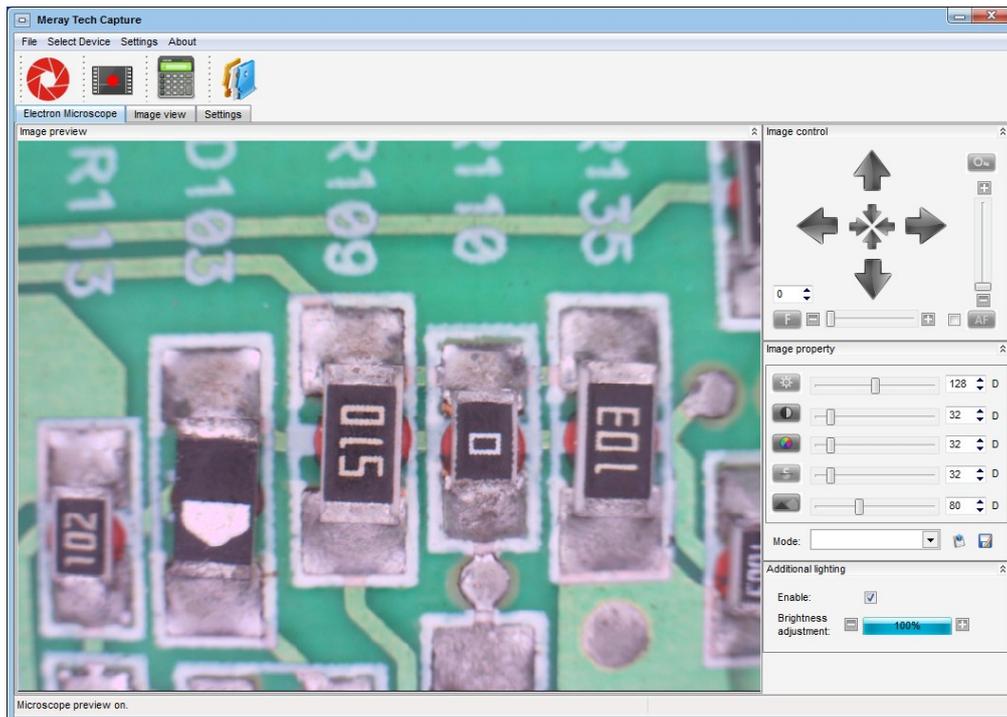
**The size of the duration of the recording:** When the recording reaches the end of its designated time period it will automatically stop, also you can stop it under the designated time by yourself. The unit is minute. The default value is 5 minutes

**Tip 1:** The default location path is in the “Video” under the “Program Files” folder, “C:\Program Files\Meray Tech Capture\Video”.

**Tip 2:** Please create a new folder first, the pop-up file is not support to create a new folder.

# Chapter IV: Image preview

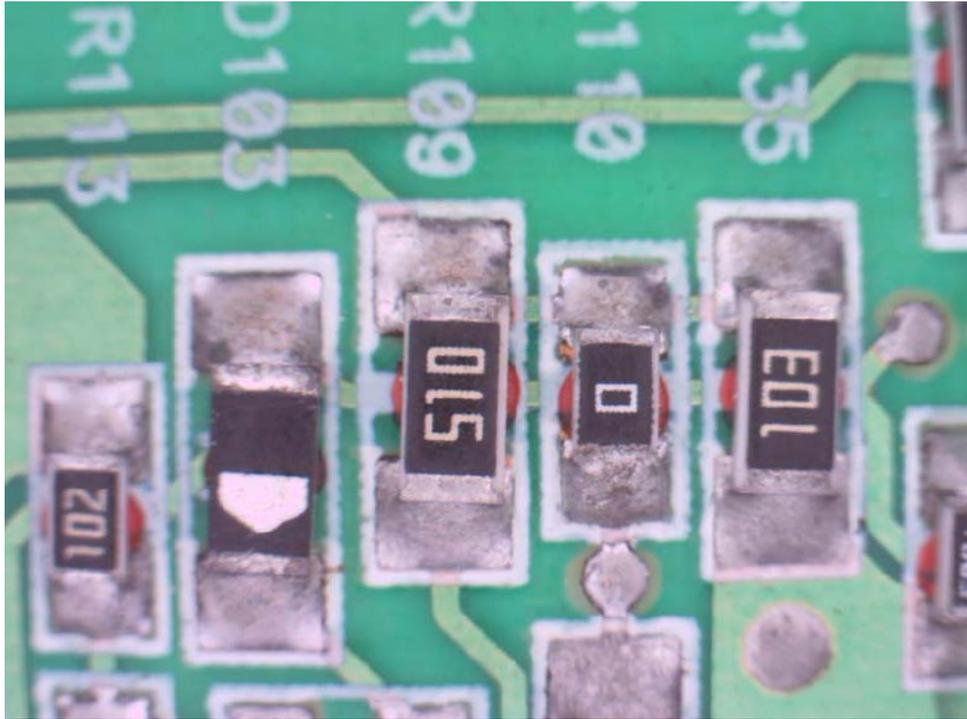
**Image preview page** includes: preview window, settings window.



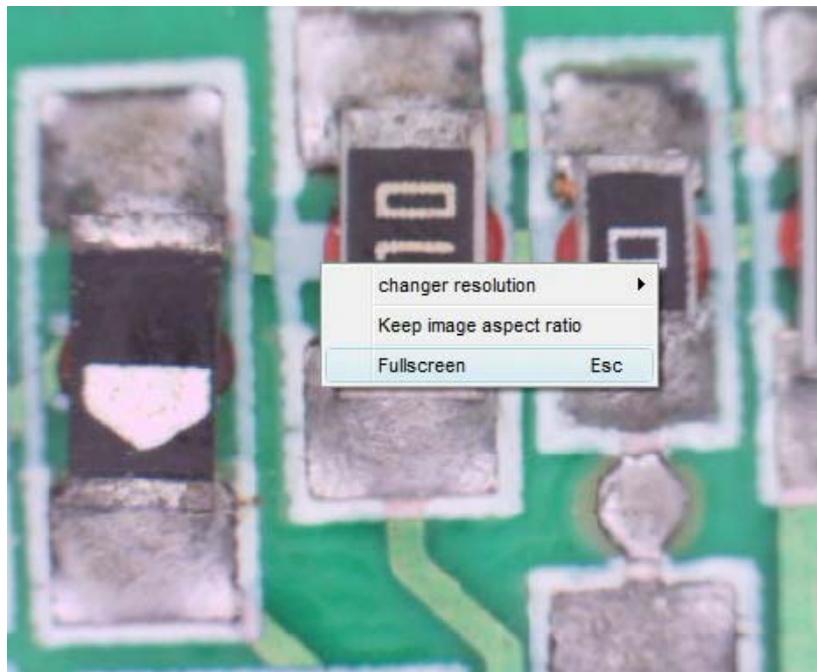
## 4.1 preview window

Real-time display the detection image on preview window, easy for the user to check the object

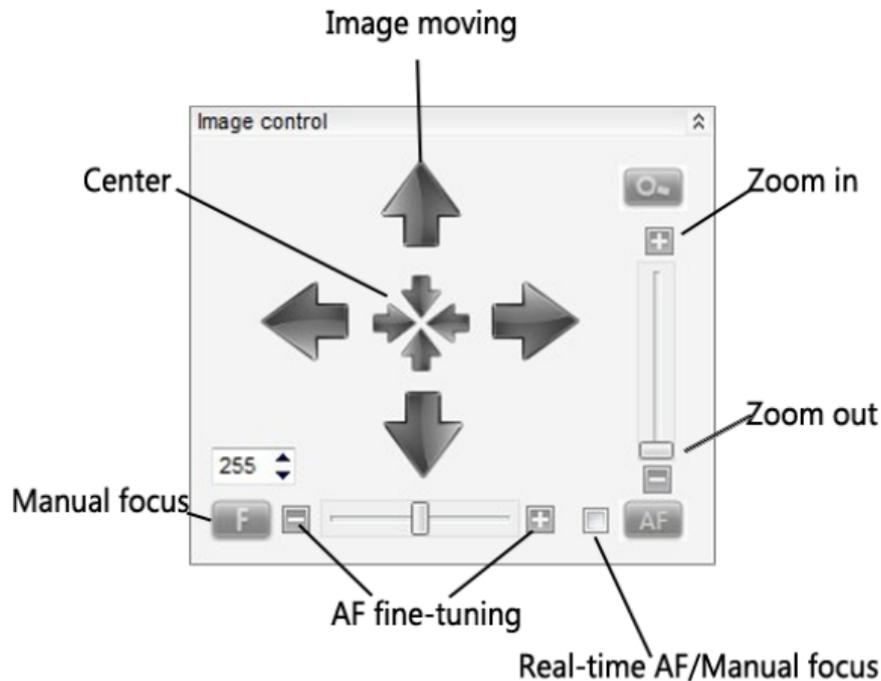
You can get a better view and have a full-screen to preview, when you double-click the left button of the mouse.



In the case of full-screen preview, you can click the right button of the mouse: According to the screen ratio, keep the video size ratio, or Esc the full screen.



## 4.2 Image control module



**Zoom in/out:** The image can be zoomed in/ out by pressing the zoom in/out button from the UI or device. Default is the smallest state.

**Image moving:** The view of preview real-time image can be moved at the corresponding direction by the four arrows via the software or directly click the left button of the mouse in the preview window

**Real-time AF / Manual focus:** It is used to select the focus mode. When the manual focus option is not ticked, you can make it AF by yourself via the “Manual Focus” button or the button on the device .Or it will stay in the AF status, and AF at any change by itself. The default option is manual focus.

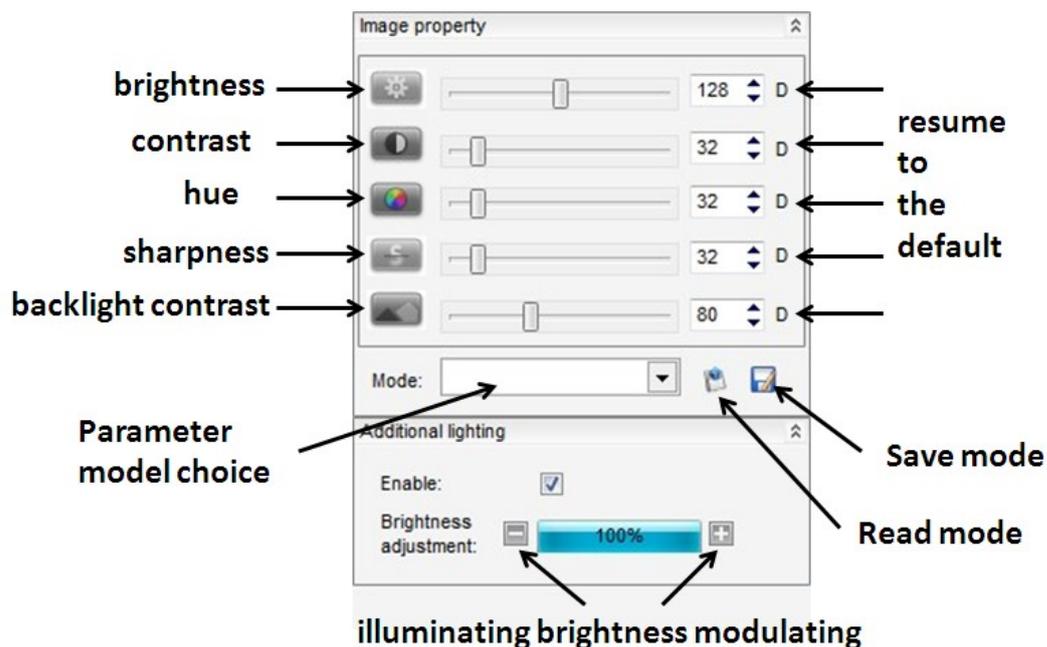
**Manual focus:** When pressing this button, the observed object will be automatically focused. In this scenario, “Real-time AF / Manual focus” button is unavailable.

**AF fine-tuning:** It is used to coordinate with “manual focus”. If manual focus results cannot satisfy you. You can use "+" or "-" button to get a better result. When ticking "real-time AF / manual focus", these buttons are unavailable.

**Tips 1:**The definition of the picture greatly depends on the position of the Mini Microscope. For the tall object, Mini Microscope allows you to raise one or two legs to focus and observe the objects.

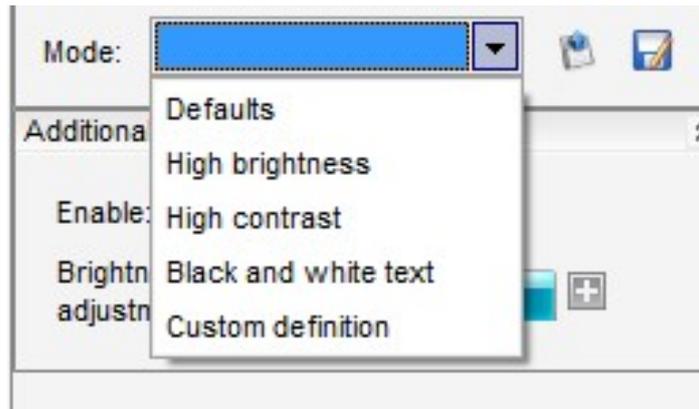
### 4.3 Image parameter modulating module

Parameter modulating: According to the characteristics of the observed objects or personal preferences, you can adjust the brightness, contrast, hue, sharpness, backlight contrast auxiliary illumination brightness and other parameters to achieve the best results. Adjustable parameters are only valid for the current observation, device reopening will resume to the default values. If you want to save the modulating parameters, please follow below mode to save and recall .



**Save parameters:** The parameters can be modified according to personal preference. It will make the operation more convenient, when it is saved as a mode. Operation: Select “custom” and click “save” after modifying the parameters. The parameter will be saved and you can invoke it at any time.

**Parameter call:** In the "Mode", you can select the parameter that you need, click “Read Mode”, then the parameter can be invoked.



## Chapter V: Snapshot and video

### 4.1 Snapshot:

You can choose one of the following ways to take a picture:

- Click the capture icon on icon bar



- Press the capture key on the device



**Tips1:** The resolution of image depends on the setting of the image resolution option.

**Tips 2:** The default saving path of the image is the same as installation path for the software. If you want to save it in other place, please click “save to”.

### 4.2 Video recording

Click the video icon on icon bar:



Click the video icon to stop recording whenever you want.



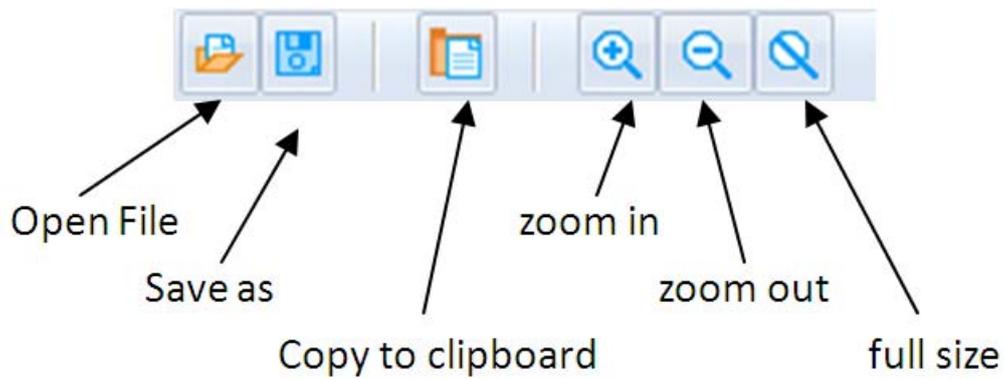
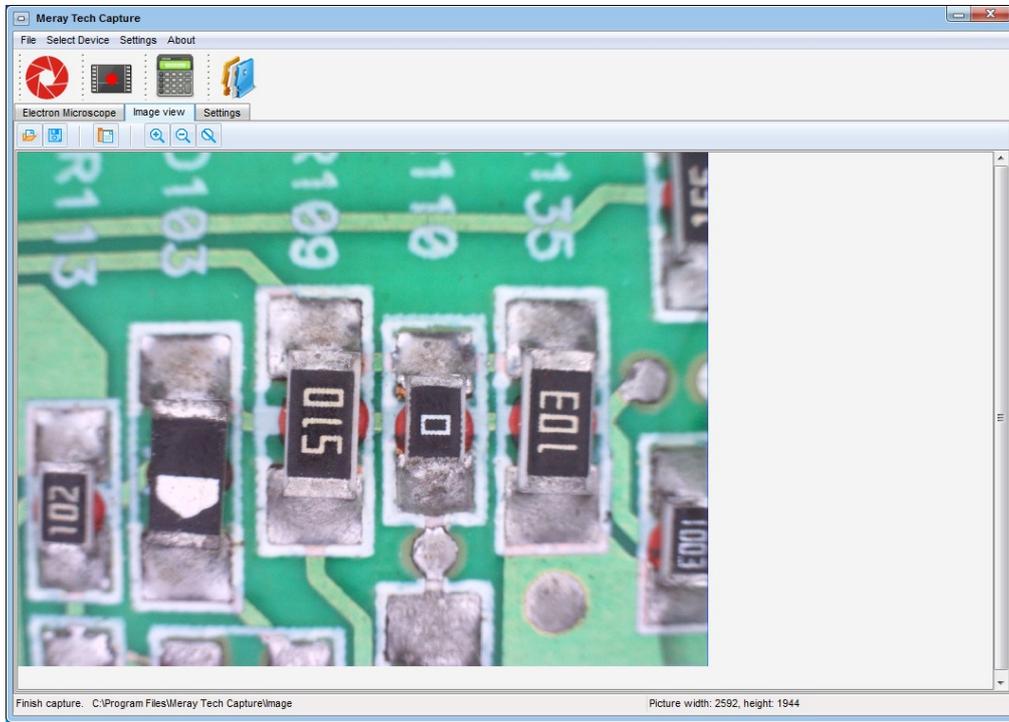
**Tips 1:** The video resolution depends on the setting of video resolution option.

**Tips 2:** The default saving path of the video is the same as installation path for the software. If you want to save it in other place, you need to click “save to”.

**Tips 3:** To record a video needs a large storage space, make sure that your computer's hard disk storage space is adequate.

**Tips 4:** In order to get a high-quality sound record, please keep your mouth close to the microphone of the device.

## Chapter VI: File management



The function can be done by clicking the corresponding button.

# Chapter VIII : Help

## 8.1 Meray Tech Capture update

The option of “Meray Tech Capture update” allows you to check and upgrade the program. Turn into “illustrate”, and click ” Meray Tech Capture update update”, you can check whether it has been updated or not. If it finds a new version, the window will have a prompt, and you can download the latest version by only clicking “Yes” .

## 8.2 About Meray Tech Capture



Clicking “About Meray Tech Capture” , it will let you know about the version of Meray Tech Capture.

## 8.3 Service Support

To upgrade the device program, search the error code table or troubleshooting solutions, please find it at [www.szhipower.net](http://www.szhipower.net)

ADD : 1305-1306, C Building, Huangdu Plaza, Yitian Road,  
Futian District, Shenzhen, Zip 518048, China.

TEL: +86-755-82821460

FAX: +86-755-83841134

Web : [www.szhipower.net](http://www.szhipower.net)