Digital Portable Overhead Document Camera LV-1020

Instruction Manual

Content

I、 Product Introduction

1.1 Product appearance

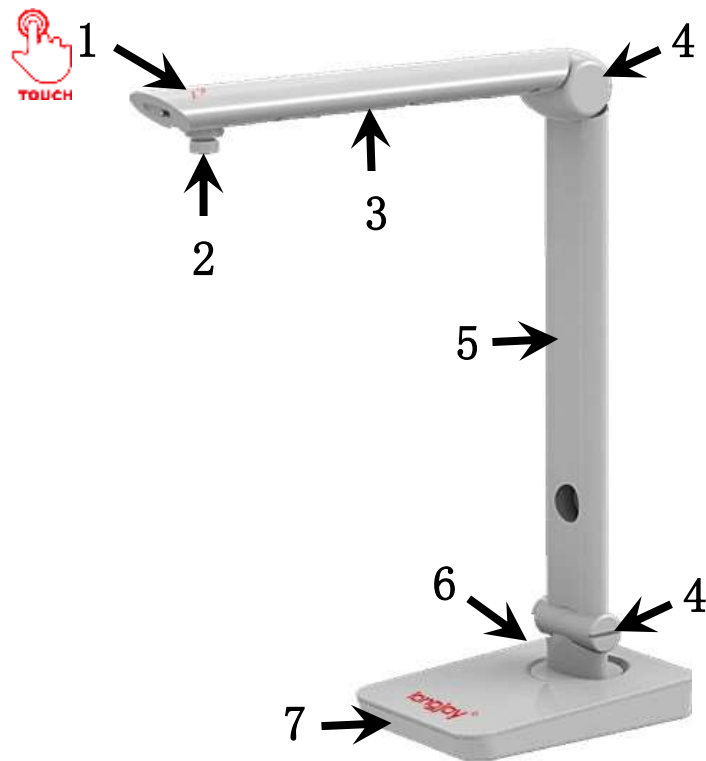## 1.2 The main functions and features of the product

LONGJOY Document Camera is a portable multifunction device. It can easily scan and save images of a paper document, color picture, and even a 3-D object. The foldable design makes the Document Camera look concise, noble, and modest. Unlike the traditional scanner, Document Camera can take pictures without touching the object; therefore, there will be no paper jam problem. The high quality images display and saving will satisfy users' needs for document management. LONGJOY Document Camera was designed to use in multiple fields; the adjustable shooting angle with LONGJOY CAM software will realize the function like courseware making, object demonstration, and multimedia teaching.

1.3 Product specifications

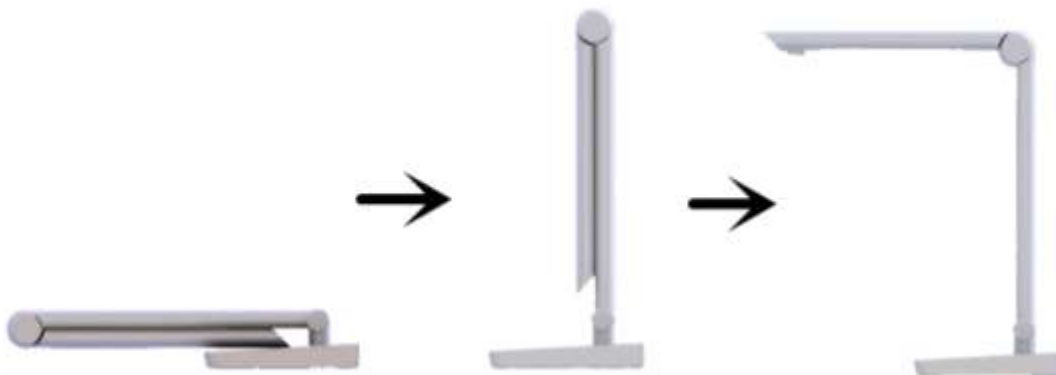| Category	Model	LV-1020
Image system	Sensor	CMOS 8M
	Resolution	800*600,1280*720,1600*1200, 2592*1944，3264*2448
	Focusing	Manual operation
	Aperture	Automatic
	White balance	Automatic
	Shooting dimension	A4
	Picture format	PNG、JPG、BMP、TIF、PDF
Digital processing	Text enhancement	Support
	Image noise reduction	Support
	Brightness control	Support
	Saturation adjustment	Support
	Exposure value adjustment	Support
	Acutance adjustment	Support
	Color adjustment	Support
	Gain adjustment	Support
	Image rotation	Support
	Image freezing	Support
Others	Auxiliary lighting	LED panel light
	Switch of LED light	Touch switch
	Power interface	USB
	Interface type	USB 2.0

II、 Product Installation

2.1 The structure of the Document Camera

1 Touch switch of LED
2 Camera lens
3 LED light
4 Spindle
5 Main arm
6 Power interface
7 Base

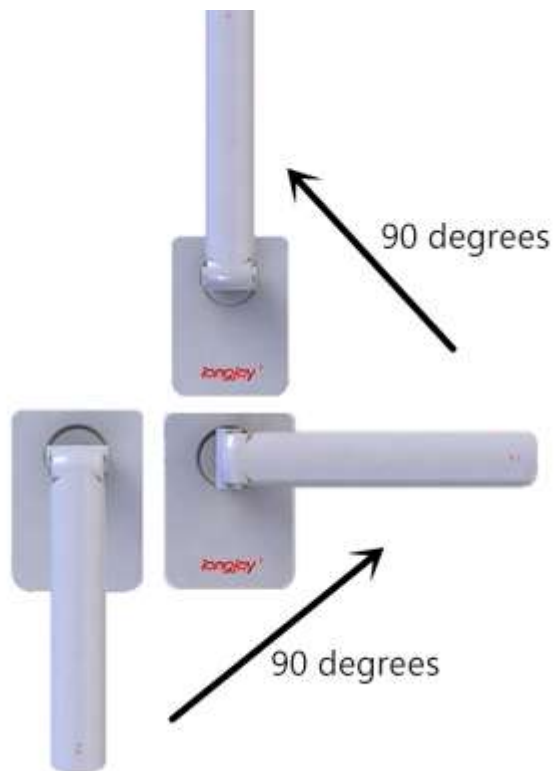## 2.2 The folding and unfolding of the Document Camera

Make the main arm and the shooting arm of the Document Camera
spread out 90 degrees successively
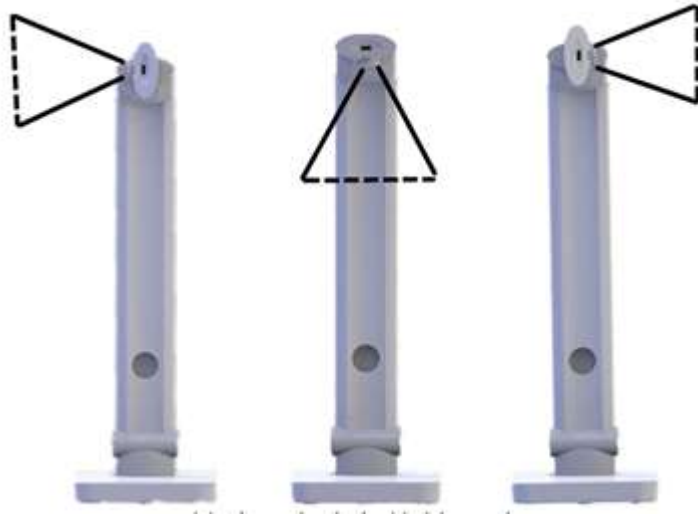
2.3 The vertical height of the Document Camera

33CM

The height of A4 size

2.4 The level angle of the Document Camera

90 degrees

90 degrees

The shooting arm can be rotated horizontally for 180 degrees

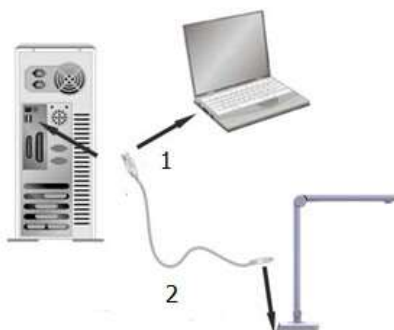## 2.5 The rotation angle of the camera lens of the Document Camera

The camera lens can be rotated 90 degrees at left or right

Note: after rotating the Document Camera to the specified position, it can't be overexerted, or the Document Camera might be damaged.
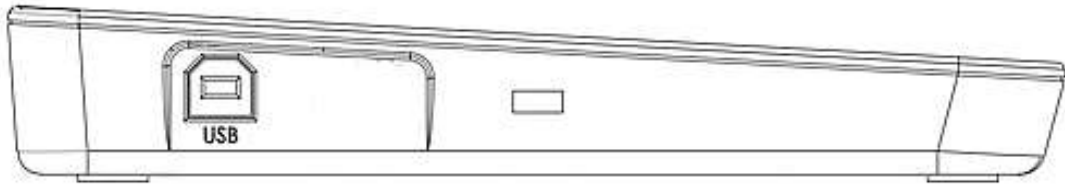
2.6 Hardware connection

This product is connected to the computer with the universal serial bus (USB) interface and the accessories include the USB date cable. After turn on the computer, connect one end of the USB date cable to the Document Camera, and the other end to the computer. After connecting, the system will find the new hardware automatically. Note: please make sure to connect to a USB 2.0 port for the Document Camera to work properly.

1 The USB interface connecting to the computer
2 The USB interface connecting to the Document Camera

Use the USB cable to connect the Document Camera to your computer, and it will get electricity via the USB cable from your computer.
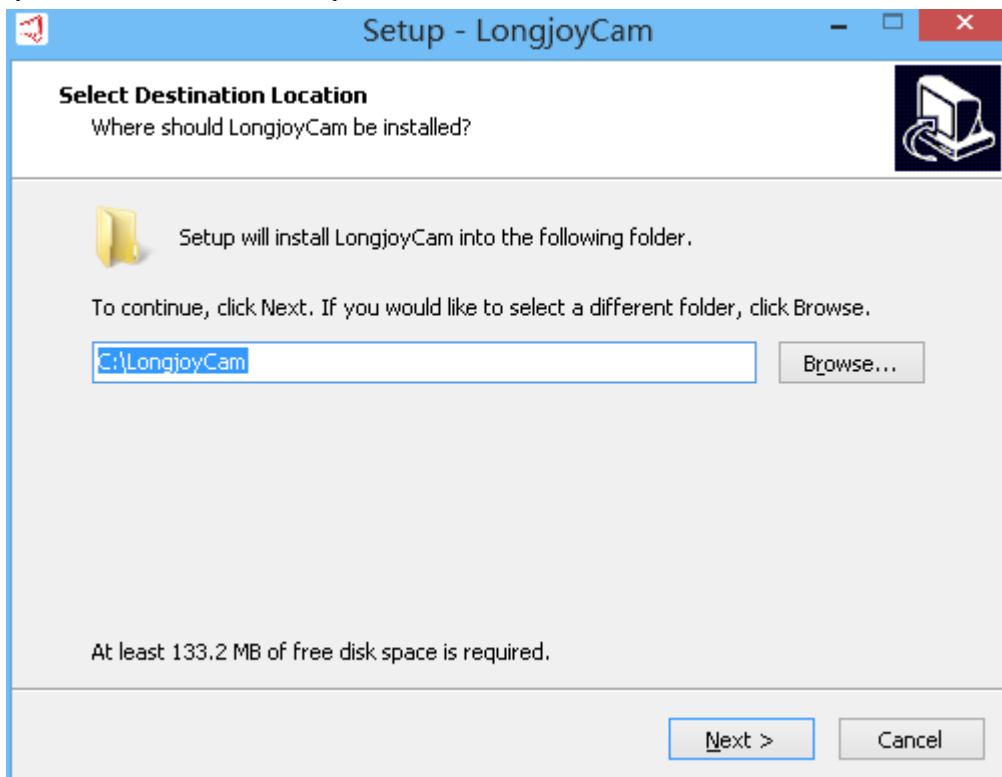
2.7 Software installation

The CD comes with the Document Camera has the software that will be needed to use the device. About 300 MB hard drive space will be needed to install all software into the computer. To make sure there is enough space for the software and image saving, we recommend the users to keep at least 1 GB space for the Document Camera.
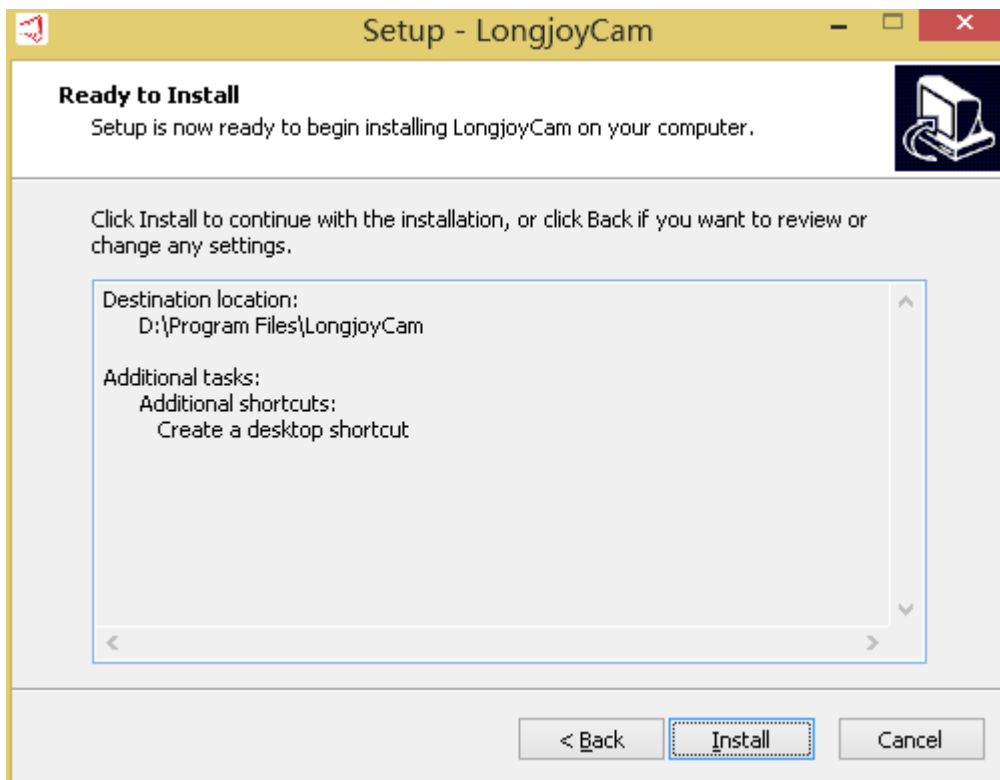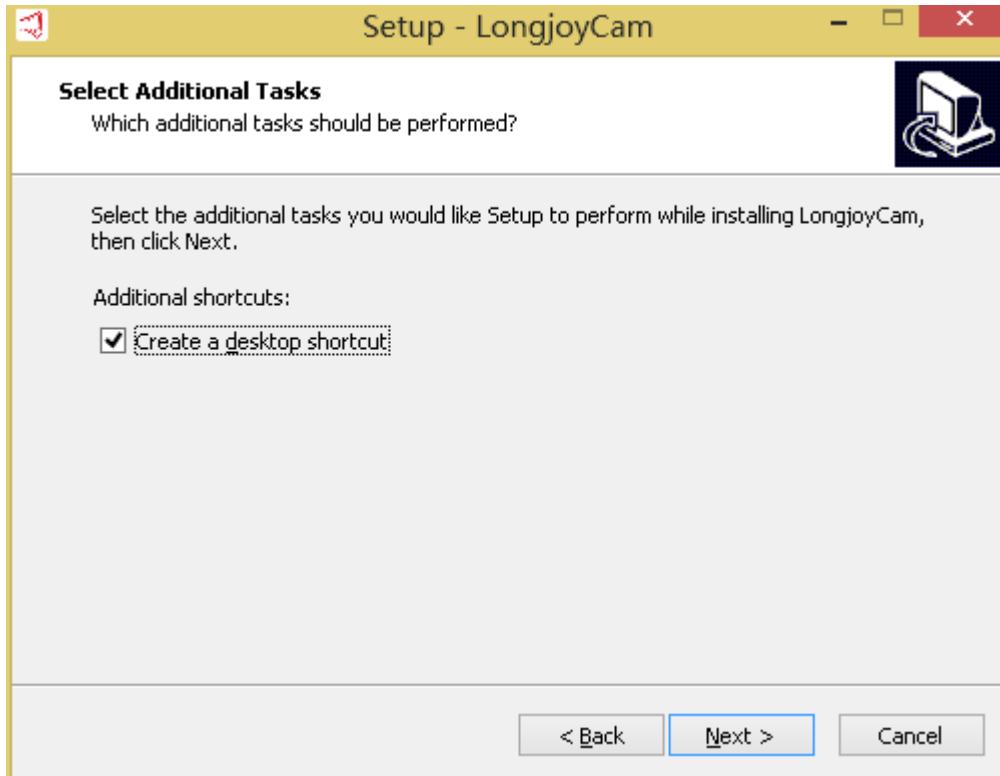
 LongjoyCam.exe

In the installation guide, do the operations according to the hint, then click "Next". For normal usage, leave this as the default.
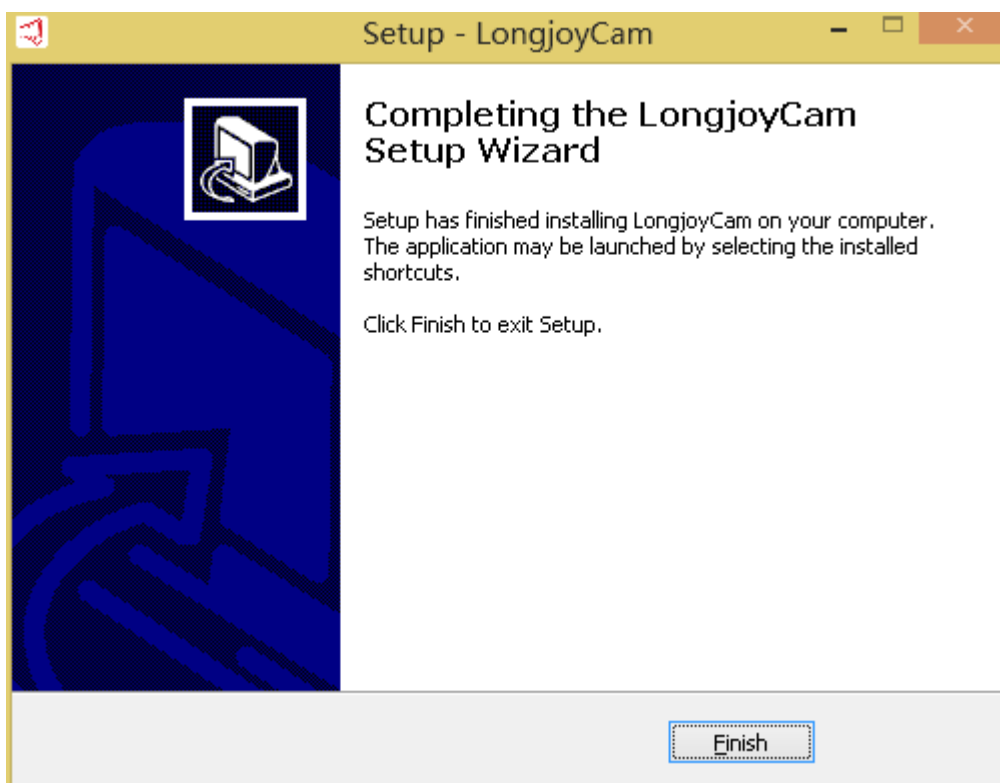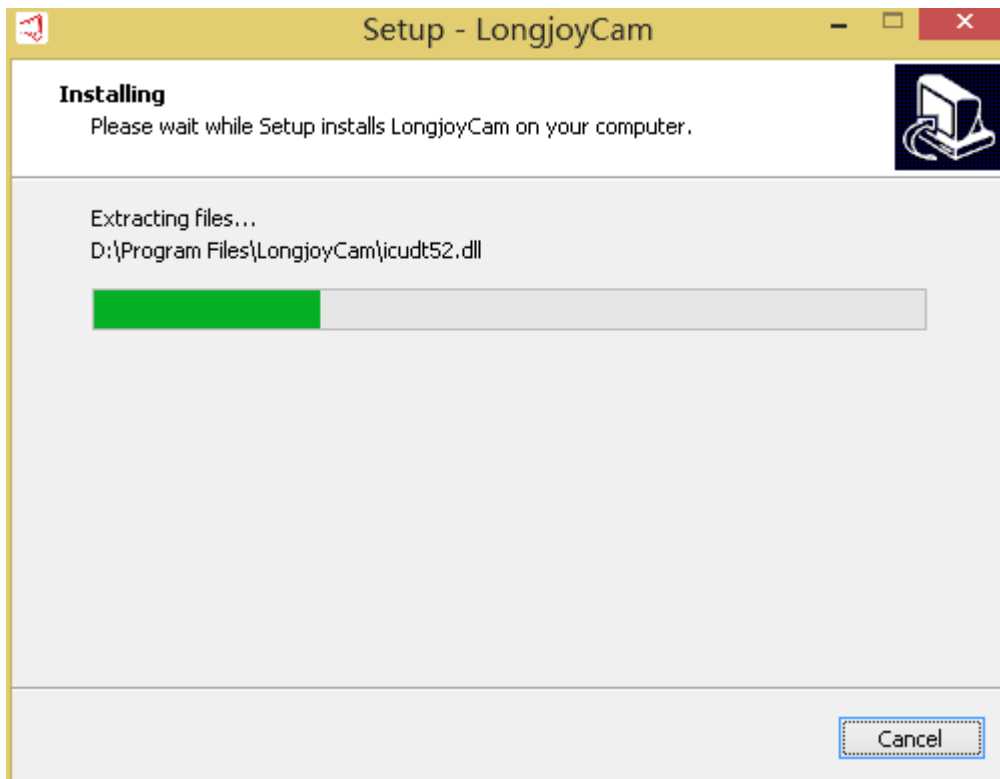
Select your installation directory:

Click "Next" to select additional tasks:

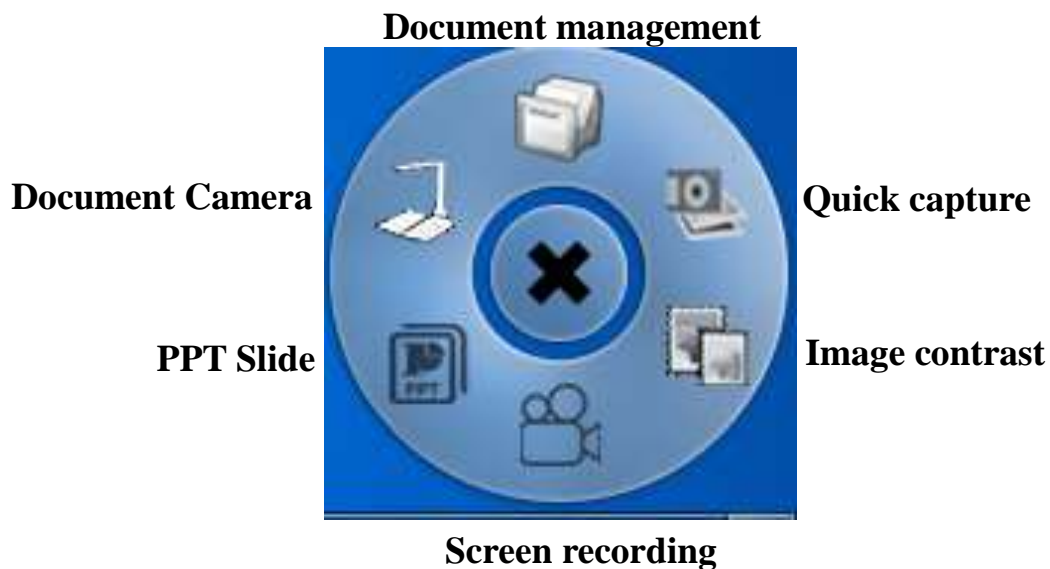Click "Install" to confirm the installation

Click "Finish" to complete the installation

Note: if there are some changes on the software, it will be subject to the actual software.
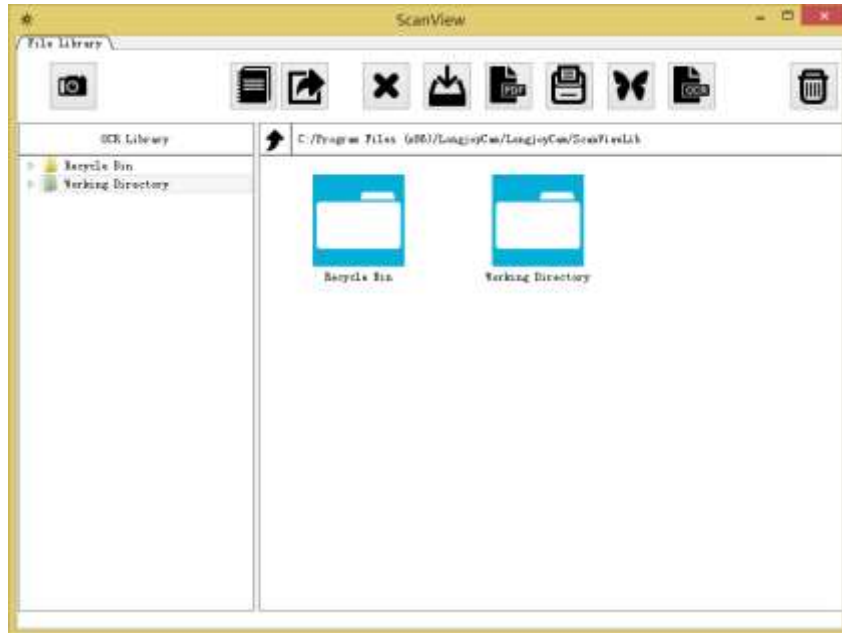
2.8 Function introduction for the software

The software of the document camera

As shown in the figure, after starting the software, the central control navigation bar will appear at the lower right corner of the screen and 6 functions can be selected.

Document management

Document Camera   **Quick capture**

PPT Slide   **Image contrast**

Screen recording

Click the center control "Document management"

This function provides a lot of single click buttons. Select the corresponding function button according to the required operation. And the operation can be easily done following the operation guidance. The main interface of document management for the document camera is illustrated as following:

The main toolbar of the software is listed above, and it mainly includes:

1. Obtain the images from the scanning source

2. Bind the images into the volume

 3. Unbind the images

4. Delete the images

5. Export the files to the specified path

6. Export the images to PDF
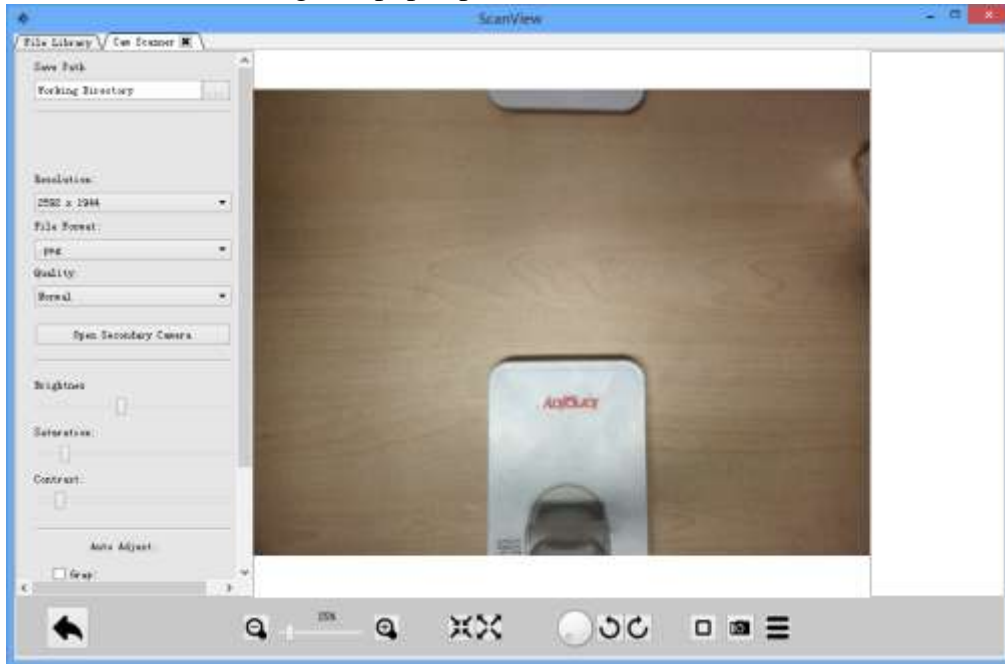
7. Print the images

8. Compare the images

9. OCR character recognition

Collect the pictures from the scanning source
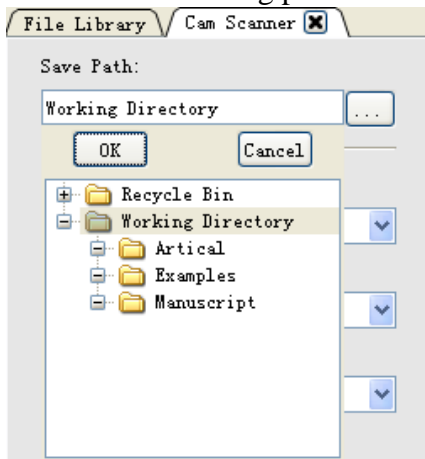
Click "Cam Scanner" icon

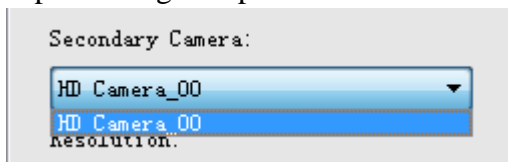"Cam Scanner" dialog box pops up

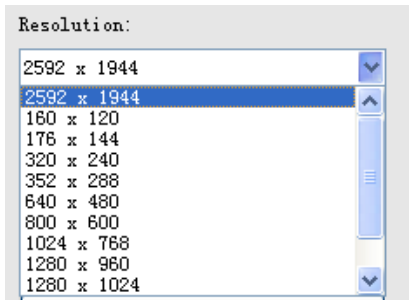The introduction of the main function of "Cam Scanner"

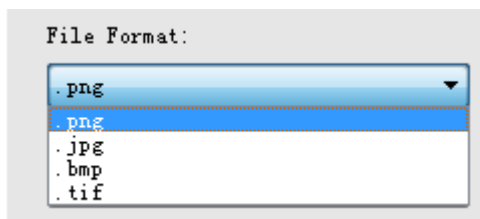Select the file saving path under "Save Path"

2. For "Secondary Camera", the alternate video equipment can be selected. The software supports multiple connections. Therefore, you may select the specific equipment to capture images at present.
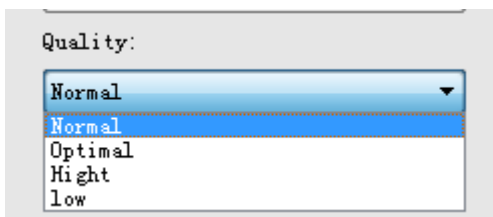
3.Select the suitable resolution in the drop-down list of "Resolution" to adjust the pixel of the images when there is a need.
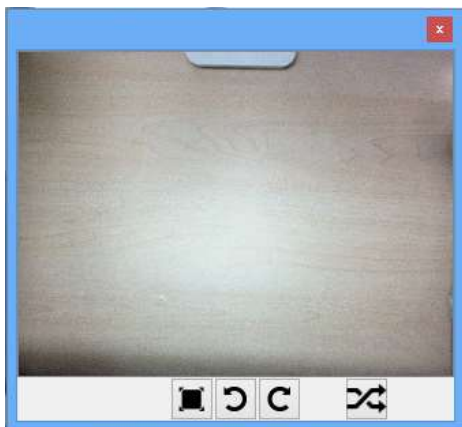

4. Select the saving format of image in the "File Format". The document camera software supports JPG picture format compressed format and the lossless BMP picture format which are the most common formats currently. In addition, it also provides TIFF and PDF file format which are common in the file management and government documents. Therefore, users can obtain the required documents directly without extra conversion.

5.Select the quality of picture in "Quality". If there is a requirement for the quality of picture when shooting JPG file, select the quality of picure in the picture quality column to set the picture at the right quality.

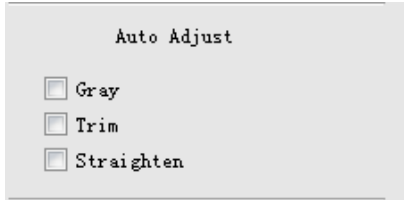6. Click "Open Secondary Camera" to open the secondary camera

In the video dialog box, users can rotate and adjust the picture, and realize the switchover of the secondary camera video signal.

7. Drag the control bar to adjust the value of "Brightness"，"Saturation" and "Contrast".

Brightness:

Saturation:

Contrast:

8. Selecting "Gray", "Trim" or "Straighten" in the "Auto Adjust" menu to realize the corresponding operation for the image of the video.

Auto Adjust

☐ Gray
☐ Trim
☐ Straighten

9. Exit from "Cam Scanner"

10. Rotate the button at any angle

11. Rotate the button in 90 degree clockwise and counterclockwise
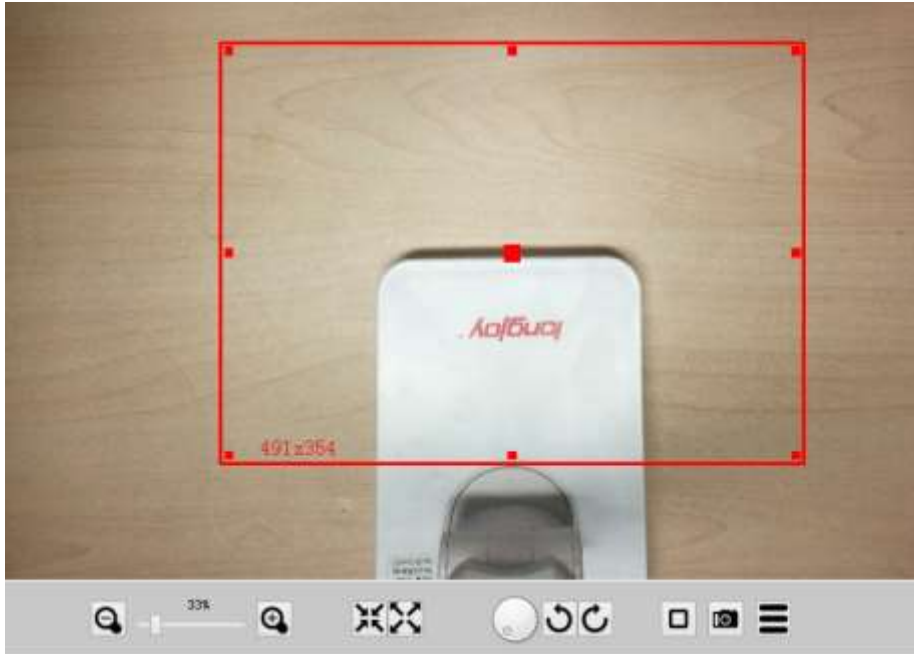

12. Zoom in and zoom out for the images of the video can be adjusted within a range of "9%——1000%". The shortcuts of "32%" and "100%" enlargement effects for the image can be set.

13. By clicking "", users can set up the effective area of shooting:

Adjust the size of the effective area by clicking the red square frame in the following picture and the corresponding size will be showed. Drag the effective frame by clicking the central point of it.

14. Shooting button

15.Click "" to set up the continuous shooting function.
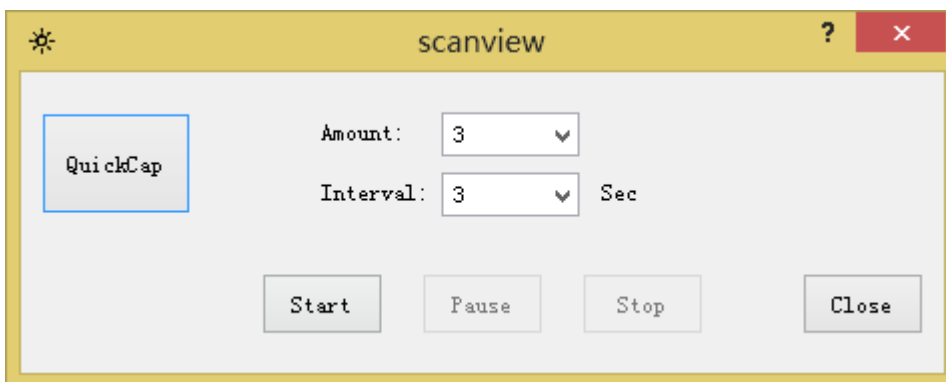
* One way is to click the "QuickCap", then press any buttons on the keyboard to do the continuous shooting.

* Another way is to set up the quantity of the photo at the parameter of "Amount". Set up the interval time of shooting at the parameter of"Interval". After setting up these two parameters, click "Start" to start shooting.

 "Pause"：pause the continuous shooting function
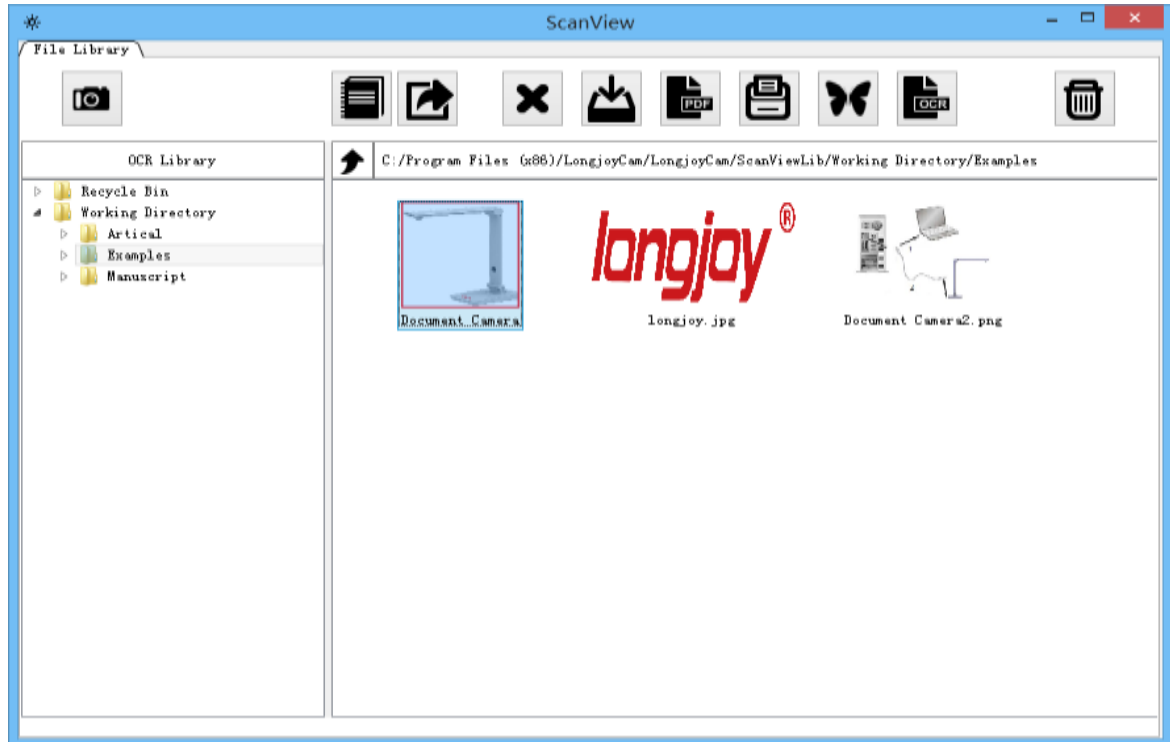
 "Stop": stop the continuous shooting function
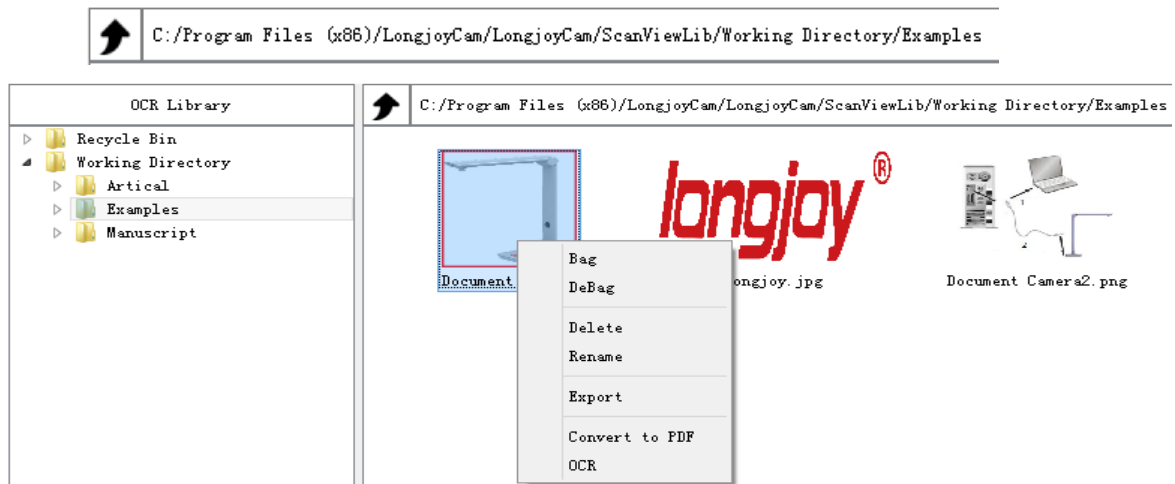
 "Close"：close the continuous shooting menu

In the function module of "Cam Scanner", strive to help customers to get the pictures they desired by the minimum clicks. Through real time shooting, adjustment and picture capturing, achieve the principle of what you see is what you get.

Picture editing function:

1. Edit the picture file in the "File Library" interface

Select in the "OCR Library or click the path directly to find the file that needed to be edited.
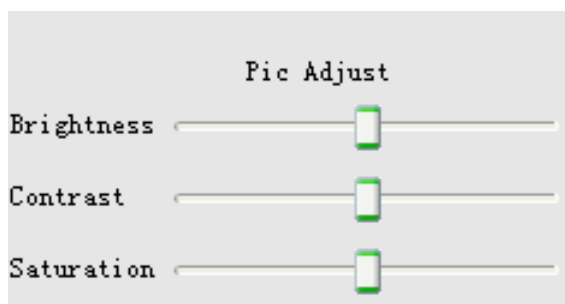

* For one picture file or many pictures file, right click to operate the functions of "Bag", "DeBag"，"Delete"，"Export" and "Convert to PDF", and also can realize the operation of "Rename" and "ORC" for one file.

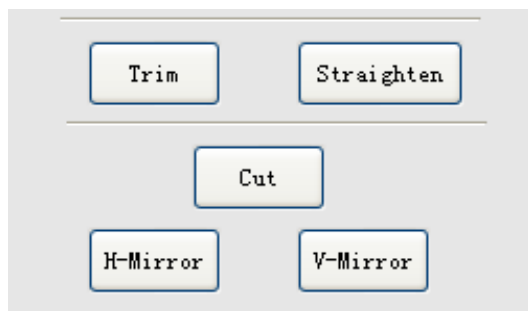*For one picture, Double-click the file to enter into the "Browser" interface:

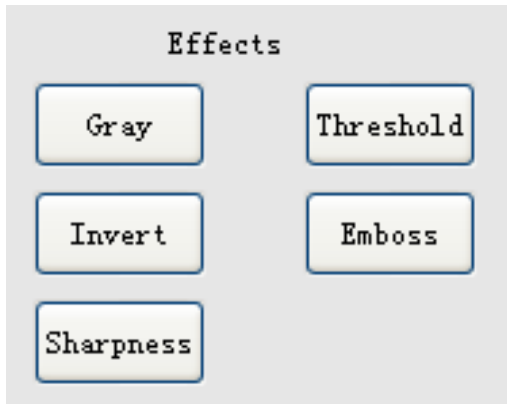The introduction of "Browser" interface function

1. Realize the adjustment for the "Brightness", "Contrast" and "Saturation" of the image file.

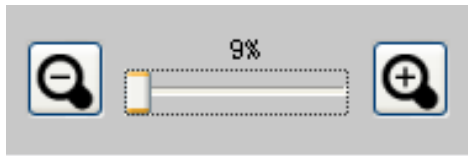2.Realize the operation of "Trim", "Straighten", "CUT"，"Y axis mirror", and "X axis mirror" for the image file

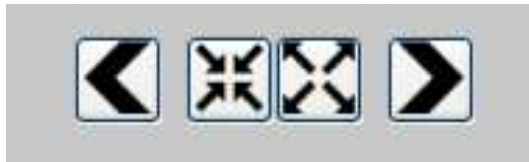3. Realize the five effects for the image file, such as "Gray", "Threshold", "Invert", "Emboss" and "Sharpness"

4. Click "Undo"，"Redo"，"Confirm" or "Reset" to do reversal operation for the editing process.

5. Zoom in and zoom out the image in the range of "9%—1000%"

6. Browse the image file under the same directory backward or forward. The range of quick adjustment for the size of image is between "100%" and "245%".
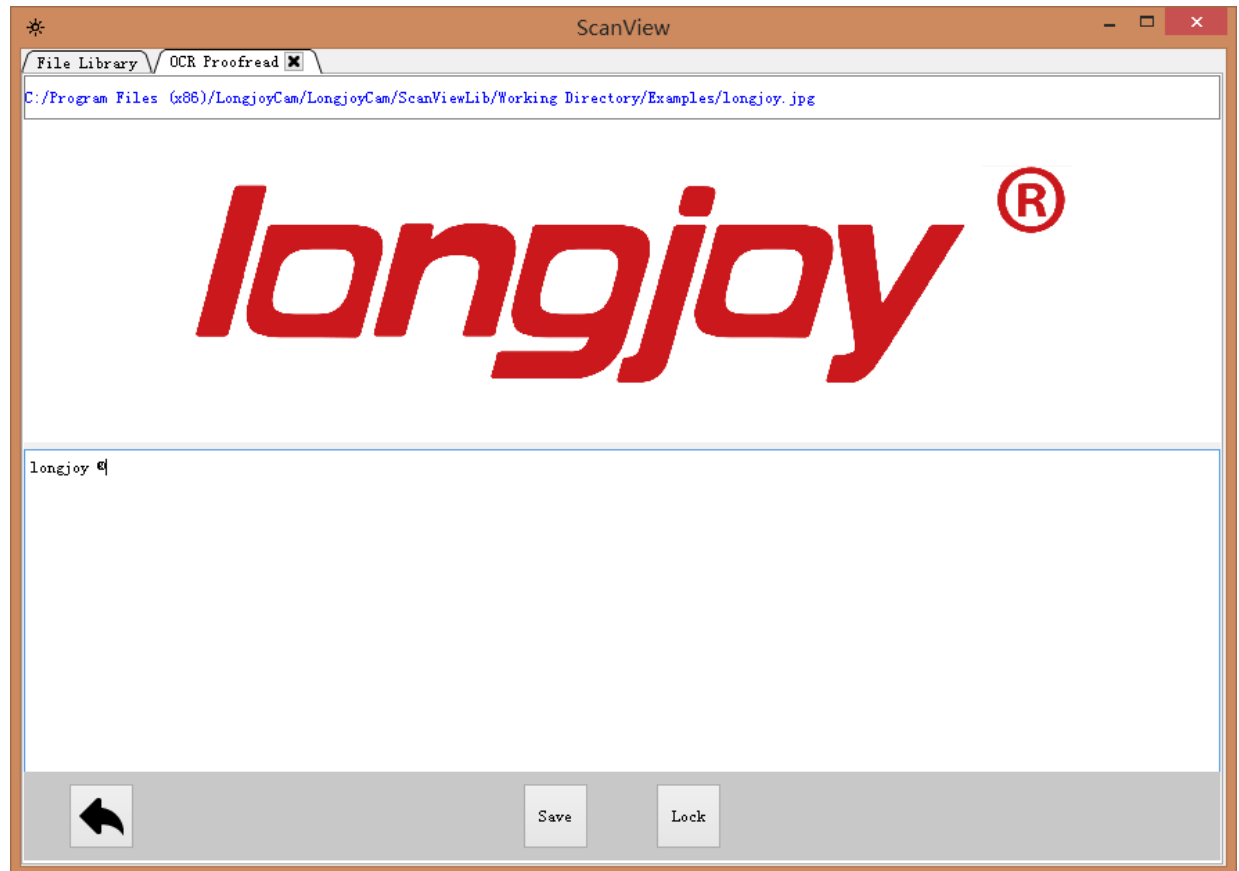

7. Rotate the image 90 degree clockwise or counterclockwise
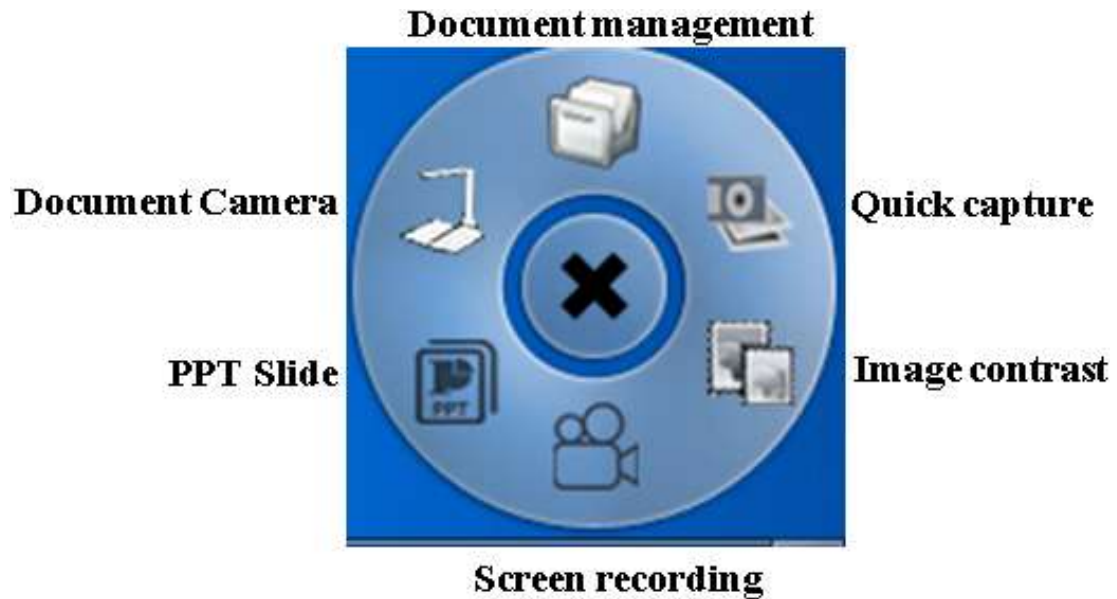
The introduction of "OCR" function

Click the " " icon of "ScanView" interface or right click the picture to edit and select the "OCR" function, and then "OCR Proofread" interface will be popped up:

"OCR" target document will show above the interface and character interface after recognition will show as below

Document Camera software

Click the "Document Camera" button in the central console

Click the main interface button to start the exhibition stand software, as shown in figure below.

The introduction of the functions for buttons

Brush tool for three colors   Light stick tool

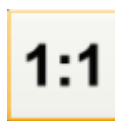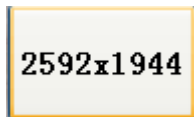|	
Erasing tool	Clear the entire screen
Remove the designated effect	Hand shape drag button
Define the degree of thickness	Define the line type
Color tool Transparency tool to select the transparency of the brush	
Shape tool	Save tool
Setup	Zoom in function
Zoom out function	1:1 display
Best display	High-speed picture
2592x1944	Q
Adjusting the resolution	High-quality picture
Rotate to the left	Rotate at random

Rotate to the right

Image contrast

Take the photo

Screen recording

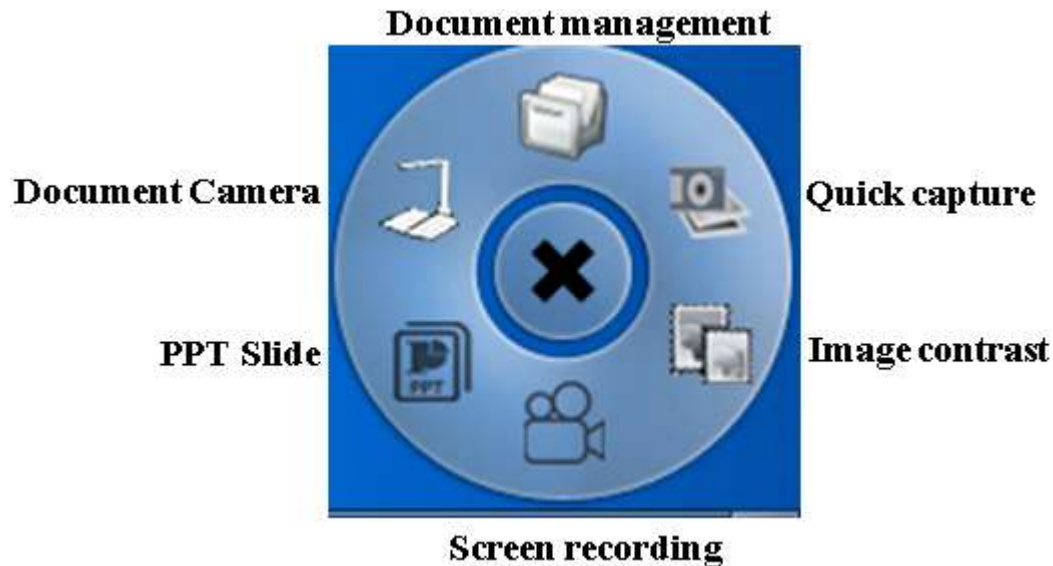Add the auxiliary camera

Exit

Create PPT

By clicking "PPT Slide" button in the central console, the new PPT can be created.

Quick capture

By clicking "Quick capture" button in the central console, users can drag the image in the video directly to other applications, for example, the picture contrast
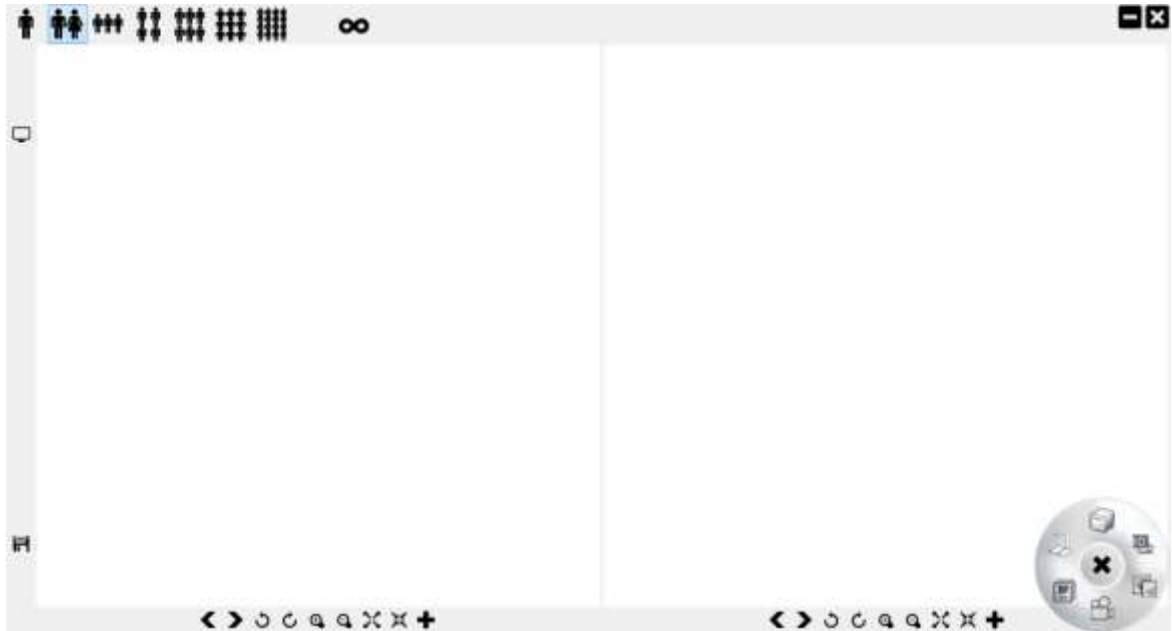
Contrast teaching

Click "Image contrast" button in the central console.

Select one or multiple pictures to do the contrast teaching and up to 16 course pictures can be contrasted. Users will be able to replace, insert, shoot, and compare images. The Image Contrast also supports image zooming, rotating and moving.

*Double click on blank space of the dialog box, select the path in the pop-up image, then the selecting of contrasting picture is completed.

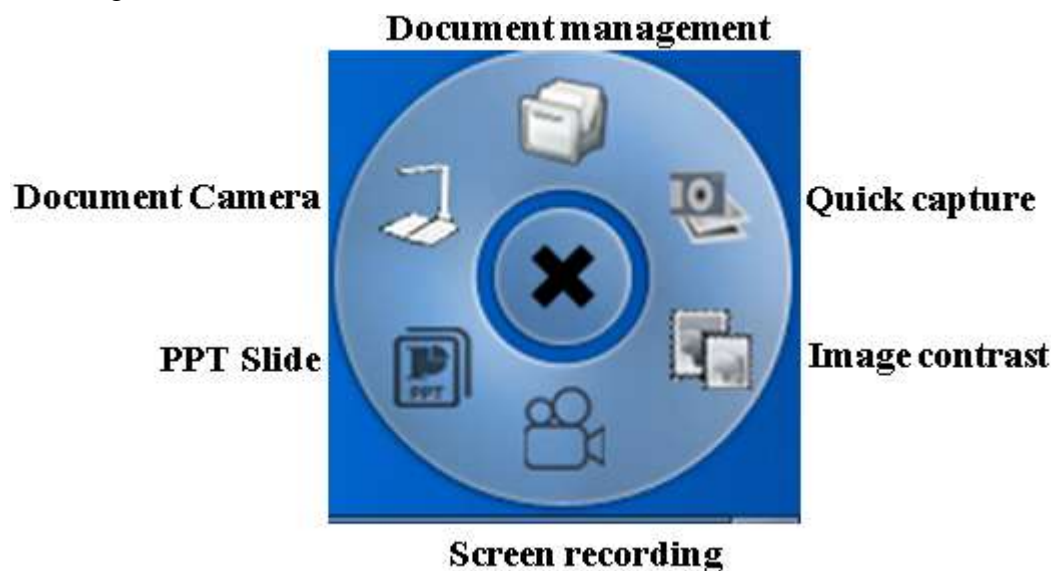*Click the graphical button to open more image editing tools

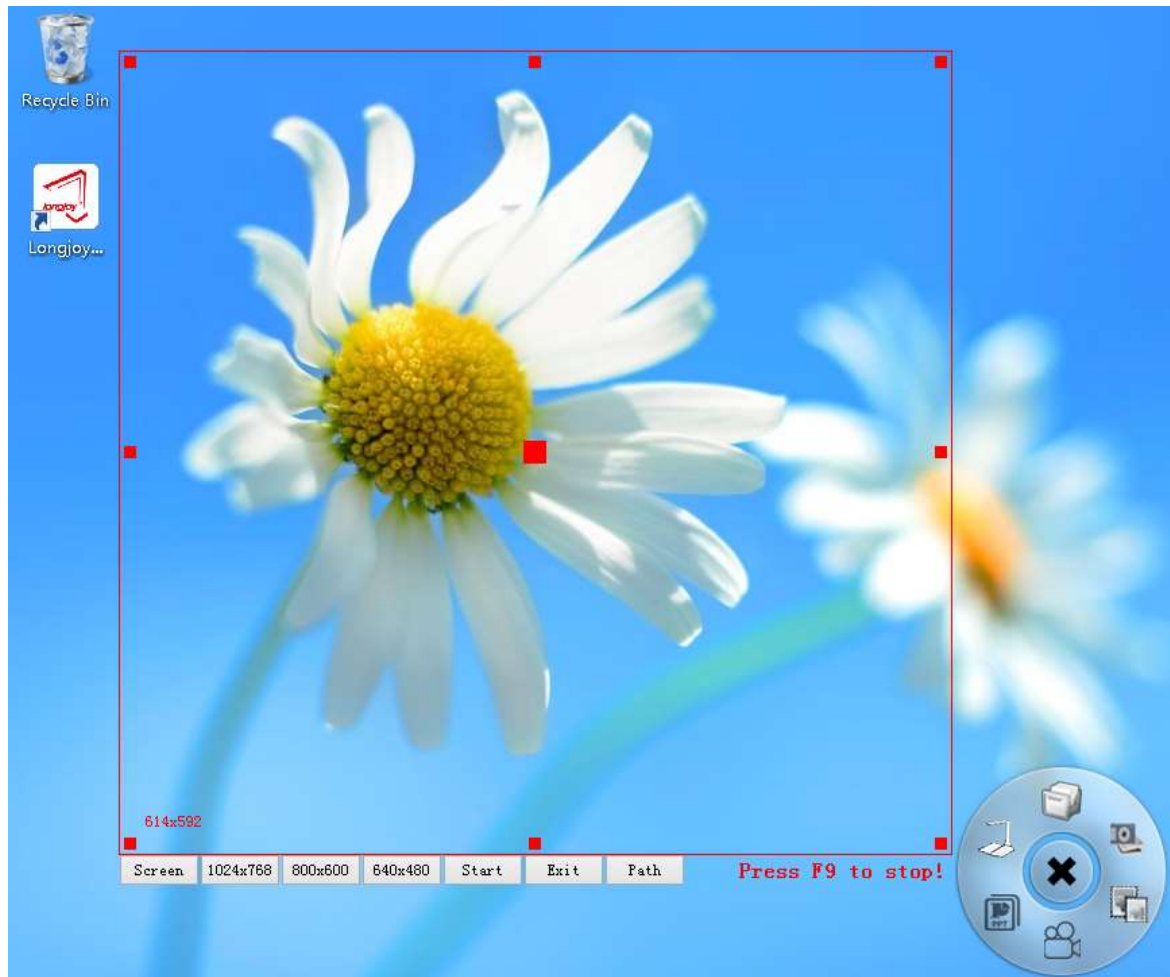*When opening many pictures to contrast, users can use the mouse wheel to realize the

scaling of the picture. Clicking " " link function can realize the scaling, movement

and other functions for many pictures at the same time

Screen recording function

Click "Screen recording" in the center console, then the interface will appear as shown in the figure below

1. The size of the recording screen can be selected at the lower left corner, such as 1024X768, 800X600 and 640X480. The content in the red box of the screen can be recorded.

2. Adjust the window size of the video recording by dragging the red frame. By clicking the central point of the red frame, the effective area of the video can be dragged.

3. Click and select "Start" to begin to record the video, click "Exit" to exit and click "Path" to select the path

4. Press F9 to end the screen recording.