



QPC35

Caterpillar
USER MANUAL



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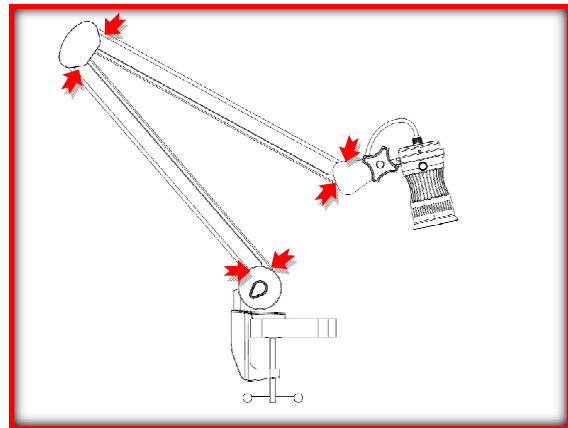
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Part 1. Precautions

1. Do not allow children to operate the folding arm without supervision.



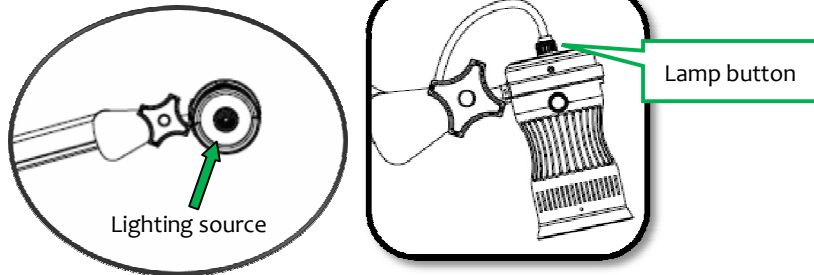
2. Do not insert fingers into the arm joint area. Pay attention to the six folding areas (indicated by the arrows.)



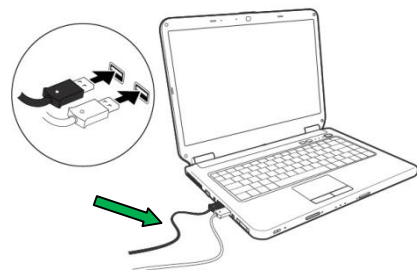
3. Do not look directly at the LED light source, this may cause retinal damage.
4. Do not pull or twist folding arm in opposite direction.
5. Do not touch the camera glass, this may cause blurred images.
6. Do not disassemble it to perform any repair. In case of damage please contact technical support.

To achieve the best image, please follow the suggestions below:

- Do not use Docking Station or USB Harbor when connecting the camera.
- Turn on the **Lamp Button** to get the best image.



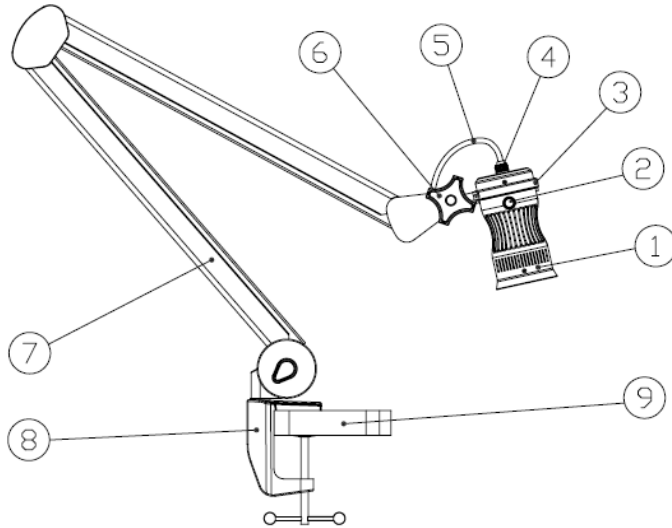
- Connect the black wire to increase lamp brightness.



- Confirm that your computer meets the dual core CPU requirement.
- Avoid multiple tasks when screen capture is running as it consumes a good deal of the CPU processing power.

Part 2. Preparing the Document Camera

2.1 Knowing the Document Camera parts



Items	Part name
1	Camera Head
2	On/Capture
3	Fastenings
4	Lamp Button
5	USB Cable
6	Tighten Knob
7	Folding Arm
8	Clamp
9	Table

2.2 Specifications

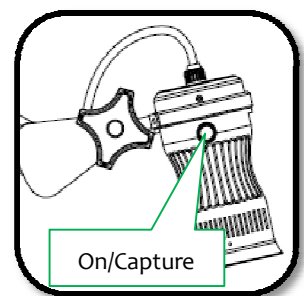
Camera	
Type	CMOS
Max. Pixels	5.0M pixels
Output Style	MJPEG/YUV
Size	1/4"
Auto Exposure	YES
Autofocus	YES
Auto White Balance	YES
Resolution available	480*640, 800*600, 1024*768, 1920*1080, 2048*1536, 1944*2592 (Resolution may be limited by your computer capabilities.)
FOVi	A3
Frame Rate	Up to 30fps@1080P
Image processing	Screenshot, webcam capture, timedShot, annotation, zoom, and Image flip, using QCamera software.
video and Recording	Video Recording available with QCamera software
Camera Lens	

Aperture	F=2.8mm
Illumination	
Type	LED Brightness Adjustable
Output Power	Max.1.5W
Audio & video Input and Output	
USB2.0 high speed 480Mbps	
Built-in high sensitivity microphone	
Operating System & Driver	
Supporting System	Windows XP, vista, Windows 7, Windows 8
Driver	Standard UVC&UAC
Other Features	
Power Dissipation	5.0V DC, Max. power below 3.5W
Weight	2.35/2.1Kg
Dimension	58.5*28.5*10.5/49.0*28.5*10.5 cm
Accessories	
USB Cable, CD, Warranty, Quick Star Guide	

2.3 Button functions on camera head

The **On/Capture** Button on the camera head will perform the following functions:

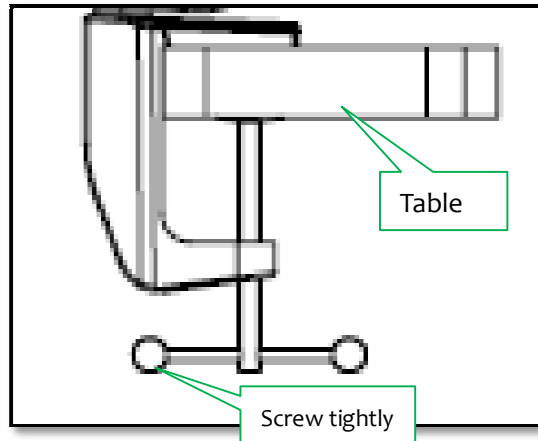
- Press button once to start the QCamera software.
- Press button once to capture live image while running QCamera software.
- Double press button to record video while running QCamera software.



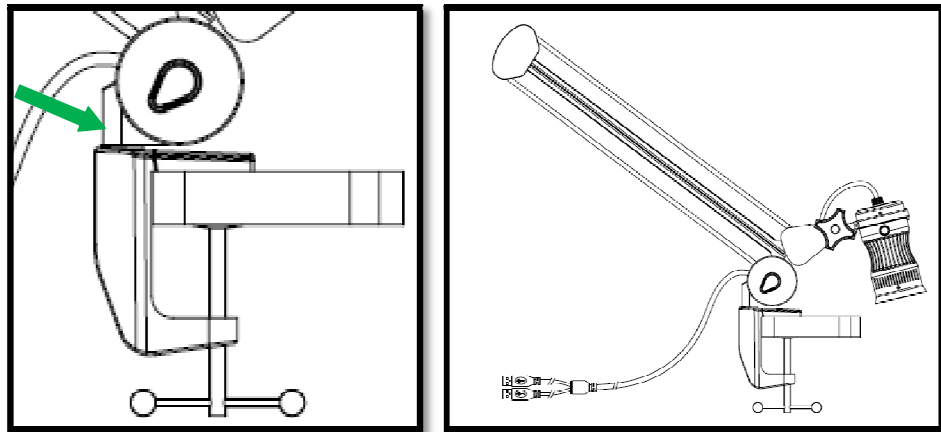
Part 3. Installation and connection

Please follow the below steps to install the camera and connect with software.

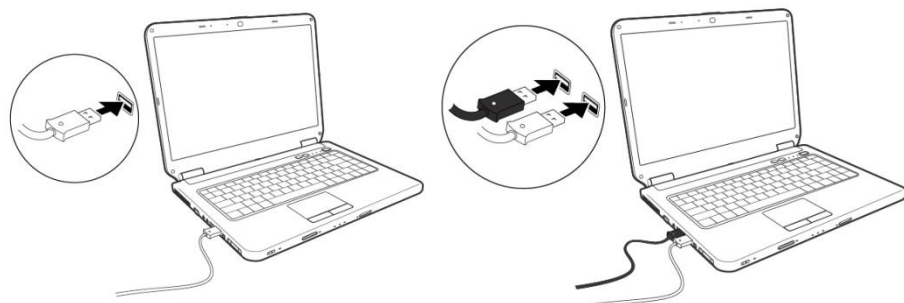
1. Open the packaging and remove the camera from the packing bag.
2. Fix the **Clamp** on table by screwing tightly



3. Insert the bottom stem of the **Folding Arm** into the **Clamp**.



4. Install the QCamera software from the CD, or download from the Qomo website.
<http://qomo.com/FileList.aspx?FileType=1>
5. Connect the white USB wire to computer for camera functionality. Connect the black wire into computer to increase camera brightness.



6. Press the **On/Capture** button on the Camera to start the QCamera software;
 Or double click the QCamera shortcut on desktop.

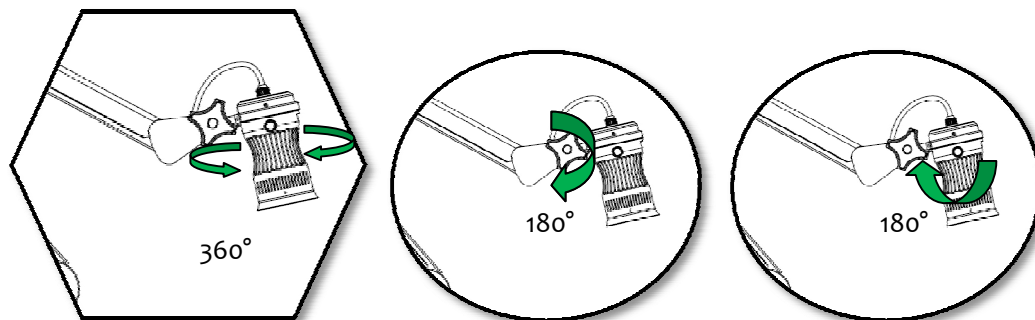
Part 4. Setting up

This section provides useful tips on how to adjust the Document Camera smoothly for your needs.

■ Camera head

The **Camera Head** can rotate freely 360°.

The **Camera Head** can turn freely 180° up and down, left and right.

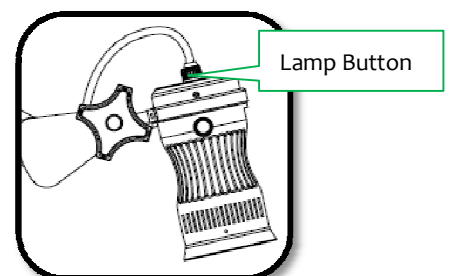


Note: Before turning the **Camera Head**, please set the **Tighten Knob** on both side of the Camera Head to ensure the head loose enough to operate.

■ LED Lamp

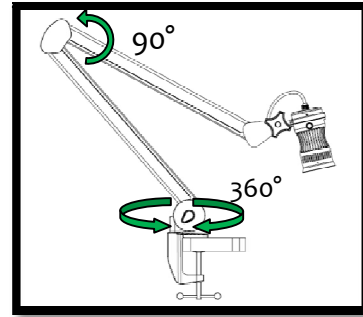
If natural light is not enough, turn on the **Lamp** on the Camera Head.

1. Press the **Lamp Button** to turn on / off the LED lamp.
2. Adjust the brightness by rotating the **Lamp Button** on top of the camera head.



■ Mechanical folding arm

The folding arm can bend freely 90° up and down and the lower arm can rotate 360° for different view of live image.



Part 5. Software Operation

The software consists of three parts:

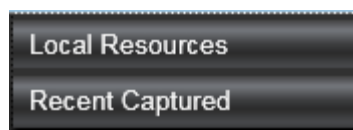
- Camera Display Area
- Resources
- Toolbar

5.1 Camera Display Area


Default Document Camera display area that shows images and videos.
Editing Area where annotation can be freely made such as text, lines and geometrical figures.


5.2 Resources

Display the software default resources, as well as the recent captured images and videos on the left of the screen. There are two options:




- Local Resources
- Recent Captured Resources

Clicking the button  to show and hide local and recent captured resource.


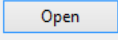
Clicking the button  to switch between local resources and recent captured resources.

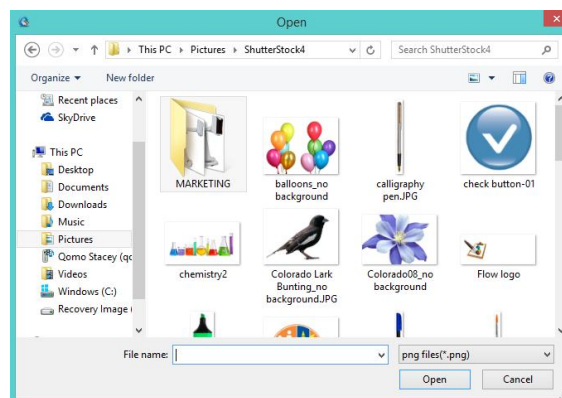
Local Resources have a variety of categories including arrows, emoticons math

symbols, etc. Double click the category folder to enter the thumbnail gallery of the resources. There are three ways to insert the resource on camera display area.

- Double click on the resource
- Right click the selected resource, and select  **Insert into page** from the option menu.
- Drag and drop the selected resource onto the camera display area.

Note: Resource size can be changed in the System Setting.

Under the Local Resources, Click the  button, a window will pop up for users to choose the resource and file format from the computer. Select the desired resource and click the  button, it will be added onto the camera display area.

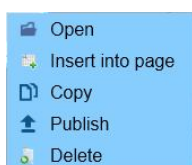


The QCamera software supports the following files formats:

- Image: PNG, BMP, GIF, PNG, JPEG
- Audio: WAV, MP3, WMA
- Video: MP4, RMVB, AVI, MOV
- Flash: SWF

Recent Captured lists the thumbnails of images, audio files and videos captured by the QCamera software.

Right click on the thumbnails of the recently captured resource to get the

















following options :























- Open: Open the resource directory that is stored in the local computer.
- Insert into page: Click to insert the resource onto the display area.
- Copy: Resource can be pasted into Microsoft Office programs.
- Publish: Upload captured resource onto the Facebook website.
- Delete: Delete the recent captures resource.

5.3 Toolbar

The toolbar enables users to select and use a variety of functions:



Icon	Menu		Description
QCamera	Help		Software update and version information
	Setting		Including system setting and camera setting
	Exit		Exit current application.
	Camera		Choose camera definition 480*640/ 800*600 /1024*768 / 1920*1080 / 2048*1536 /1944*2592
Screen Recorder	Region capture		Capture part of screen.
	Webcam capture		Capture live image.
	Timeshot		Capture image in fixed time.
	Screen Recorder		Take video and record.
	Undo		Undo the previous process on the drawing board.
	Redo		Redo the last process on the drawing board.
	Select		Select objects on the drawing board, adjust the location and size.
	Play Mode		Move the selected object in the Play Mode.
Pen	Pen		Click the button to set the pen color and thickness, then use the Pen tool to draw.
	Highlighter		Click the button to set the color and thickness, then use the Highlighter tool.

	Figure		Click the button to select a figure and set the thickness, then draw figure on the drawing board
Clear 	Pixel erase		Clear part of the selected object, only for object drawn by pen and highlighter
	Object erase		Clear selected object
	Clear		Clear all contents on display area.
T	Text		Input text on the board.
	Time Stamp		Display time on the screen
Zoom 		Zoom in	Set live image to zoom in
		Restore	Return live image to normal size
		Zoom out	Set live image to zoom out
	Freeze		Freeze live image/Unfreeze live image
	Brightness		Adjust brightness of live image
	Contrast		 Set contrast of live image.  Part of properties can be changed in the settings of option menu
	Focus		 Default set as autofocus  Changed to manual mode and modify the focus value by pulling the secondary scrolling
Title and split		Title	Separate the screen in two horizontal parts during display
		Split	Split the screen in two vertical parts during display
	Rotate		Rotate image by 0°/90°/180°/270°
	Hide		Hide/show annotations & objects on the Display Area

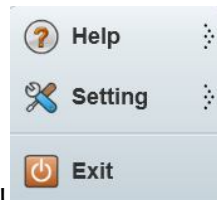
Note:

1. These buttons        are not available when camera is not connected.

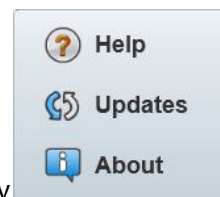
2. When you choose freeze , these buttons     will not be available

5.3.1 Details description for some menus functions as below:

5.3.1.1 QCamera :



Click the button to open the option menu



- **Help:** click the **Help** button, three options show

- ◇ **Help:** Click to link the User Manual
- ◇ **Update:** Update the software.
- ◇ **About:** Display the QCamera version information.

- **Setting:** Click setting menu , it comes with option menu

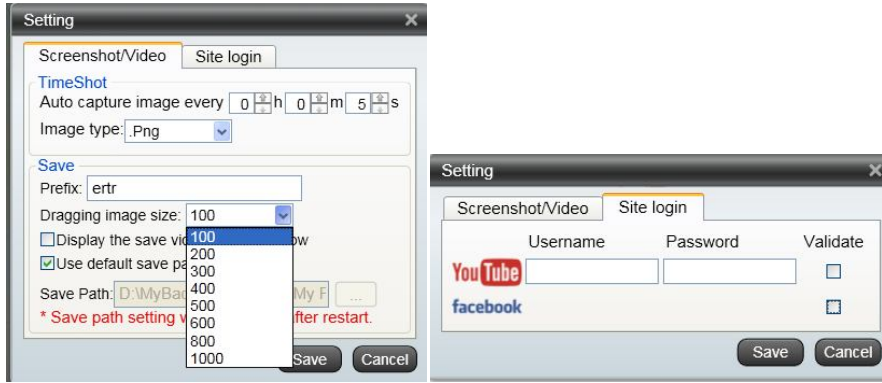
including **System Setting** and **Camera Setting**



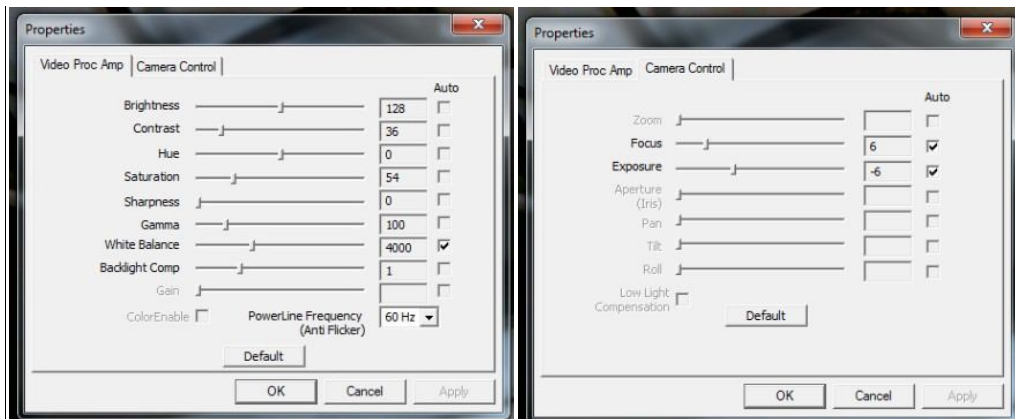
- **System Setting**

Under the System Setting window, two tabs will display: Screenshot/Video and Site login

- ◇ Under the **Screenshot/Video** tab, following functions can be realized:
 - Set the image auto capture time, image type in the TimeShot list
 - Add the prefix for the TimeShot image
 - Customize resource size by choosing in the drop-down list
 - Set default save path of captured images and videos
- ◇ Under the **Site login** tab, you can connect to resource-sharing or social network sites to share the screenshots and videos.




- **Camera Setting**
Click the **Camera Setting** menu, a window will pop out for adjusting the camera properties as Contrast, Brightness, Focus, etc.



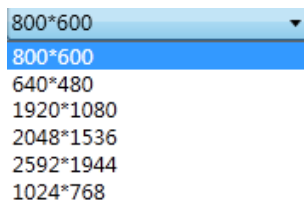
- **Exit:** Exit the QCamera software.

5.3.1.2 Camera

Click the camera button , a window will pop out to choose the camera definition




Choose the definition from the drop-down list (by connecting with QPC35)




Note:

The live image will be automatically shown when the program is started only by connecting with QOMO QPC35. If using other Document Camera devices, user needs to connect the camera by

clicking the camera button  .

If there is camera device connected with computer, click the insert button

 from pop-out window, the camera live image will be shown on the Display Area with a small window.







5.3.1.3 Capture and Record


1. Region capture :


Click the **Region capture** menu option. A half-transparent screen will be covered on the interface. Click and drag to choose the desired capture area. At

the right bottom of the capture image these options appear .

 : Exit the **Region capture**

 : Cancel **Region capture**, but the half-transparent screen will be remain on the board

 : Choose the clipboard button, the window will be minimized. The captured image can be pasted to Microsoft Office programs.

 : Choose the Publish button, and a window will pop up. The captured image can be uploaded into Facebook. You can add a description before publishing.





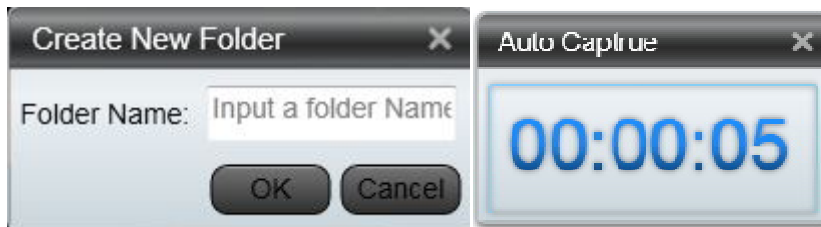
 : Click to save the image to the recent images.

2. Webcam capture :

Click the button to auto capture live image.

3. Time shot ;

Automatically take screenshots in a fixed time lapse. Click the  button, a window will pop up, input a name for the new folder and click the  button. The default is set to take a picture every five seconds. The images will be saved in the new folder under Recent Captured.



Note: time, image type, and save path, and image size can be revised in the System Setting window

5.3.1.4 Video Recorder :



Click the button. A small window will pop up at the right bottom corner to show your recording time. When you close the timer

window, you will be prompted to save your video.



- Save: Save the video in the specified path.
- Save and Open: Save the video and open it for preview.
- Cancel: Cancel the recording.

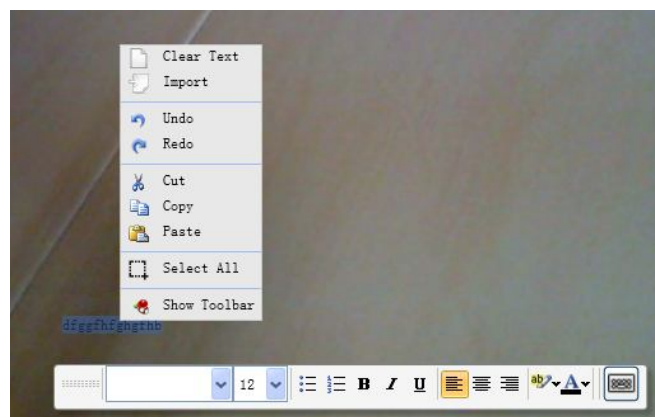
Note:

1. Webcam capture and Video recorder functions will show and be used only when the camera is connected to the USB.
2. The Video Recorder pop-out saving window can be hidden /shown by ticking the item Display the save video record window in the System Setting Window.

Text T :

Click the button first, and then click anyplace you want to input text. The text toolbar will display under the box.

Select the input text and an option menu will display



- Clear Text: Clear the text in the text box.

- Import: Import a file of *.rft or *.txt.
- Cancel tools: Redo, Undo.
- Editing tools: Cut, Copy and Paste.
- Select All: Select all content in the text box.
- Hide toolbars: show and hide

Part 6. Troubleshooting

Tips for using the Document Camera:

1. No image

- ✧ Cause: Poor connection
- ✧ Solution: Check if the white USB power **Cable** is connected and the light on **Camera Head** shows red

2. Poor focus

- ✧ Cause: 1). Not enough light or too much light
2). Object beyond focus
3). Unclean camera glass
- ✧ Solution: 1). Turn on/off Lamp Light and rotate **Lamp Button** to adjust brightness 2). Use cloth to clean the Camera glass

3. No video shown after application starts or after the device is selected

- ✧ Cause: Document Camera is being used in another program
- ✧ Solution: Re-connect the USB and choose the device

4. Application can't be started by pressing the button (using QPC35)

- ✧ Cause: No QomoDeviceMonitorSrv.exe In task manage
- ✧ Solution: Add QomoDeviceMonitorSrv.exe in installation directory

5. Blur image

- ✧ Cause: Focus is in manual mode
- ✧ Solution: Change to auto mode in the **Focus** Menu

6. Video is not smooth

- ✧ Cause: Computer configuration might be low
- ✧ Solution: Change the Camera to lower definition

7. Glitter on the camera display area

- ✧ Solution: Change the frequency (50HZ/60HZ) in the Camera Setting window

Part 7. Maintenance

- Remember to unplug the USB power **Cable** and fold up the **Camera Head** and **Arms** if it won't be used for a long time.
- Use a damp cloth to clean the Document Camera surface.
- Keep the Document Camera in low humidity condition.
- Keep away from heat sources.
- Do not expose under blazing sun.
- Keep away from water or other fluid.
- Avoid letting the Document Camera fall from a high place.

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