[Important]

To download the latest version of Quick Start Guide, multilingual user manual, software, or driver, etc., please visit Lumens
Table of Contents

Copyright Information ........................................................................................................... 4

Chapter 1  Safety Instructions ............................................................................................ 5

  Precautions ......................................................................................................................... 6
  FCC Warning ....................................................................................................................... 6

Chapter 2  Package Contents ............................................................................................ 7

Chapter 3  Product Overview ............................................................................................ 8

  3.1 Description of LED indicator ......................................................................................... 8
  3.2 Relative Operation Position ......................................................................................... 8
  3.3 Correct use ..................................................................................................................... 9
  3.4 Incorrect use .................................................................................................................. 9

Chapter 4  Installation and Connections ........................................................................ 10

  4.1 System diagram .............................................................................................................. 10
  4.2 Connecting to a computer ............................................................................................. 10
  4.3 Connecting to an Interactive Whiteboard (IWB) .......................................................... 10
  4.4 To mount it at desk ........................................................................................................ 11
  4.5 Installing application software ....................................................................................... 11

Chapter 5  Start Using ...................................................................................................... 19

Chapter 6  Function Menu ............................................................................................... 20

  6.1 Function Descriptions of Control Panel Button ......................................................... 20
  6.2 Windows Operation Interface ....................................................................................... 21
  6.2.1 Windows Software Screen Introduction - Camera ................................................. 21
  6.2.2 Windows Software Screen Introduction - Image Browser Thumbnail .................. 24
  6.2.3 Windows Software Screen Introduction - Large Picture Of Image Browser ............ 25
  6.2.4 Camera Settings ....................................................................................................... 26
Chapter 7  Descriptions of major functions – Windows User

7.1  I would like to optimize the image .................................................. 39
7.2  I would like to freeze the live image ............................................... 39
7.3  I would like to turn on/off the lamp .............................................. 39
7.4  I would like to adjust the brightness ............................................. 39
7.5  I would like to capture images ..................................................... 39
7.6  I would like to capture images continuously ............................... 40
7.7  I would like to record .................................................................... 40
7.8  I would like to annotate the displayed image ............................... 40
7.9  I would like to add textual annotation to images .......................... 41
7.10 I would like to use the mask mode .............................................. 42
7.11 I would like to use the spotlight mode ........................................ 42
7.12 I would like to manage stored image .......................................... 42
7.13 I would like to change the operating languages of the software ..... 44
7.14 Change the setting of firewall ..................................................... 44

Chapter 8  Descriptions of major functions - MAC User

Lumens™
8.1 I would like to optimize the image .................................................... 47
8.2 I would like to freeze the live image ................................................. 47
8.3 I would like to turn on/off the lamp ............................................... 47
8.4 I would like to adjust the brightness .............................................. 47
8.5 I would like to capture images ......................................................... 47
8.6 I would like to capture images continuously .................................... 48
8.7 I would like to record ..................................................................... 48
8.8 I would like to annotate the displayed image .................................. 48
8.9 I would like to add textual annotation to images ............................. 49
8.10 I would like to use the mask mode .................................................. 50
8.11 I would like to use the spotlight mode .......................................... 50
8.12 I would like to manage stored image ............................................. 50
8.13 I would like to change the operating languages of the software .... 52
8.14 Change the setting of firewall ....................................................... 53

Chapter 9  Connecting to Microscope .................................................. 55
Chapter 10  Troubleshooting ............................................................... 56
Copyright Information

Copyrights © Lumens Digital Optics Inc. All rights reserved.

Lumens is a trademark that is currently being registered by Lumens Digital Optics Inc.

Copying, reproducing or transmitting this file is not allowed if a license is not provided by Lumens Digital Optics Inc. unless copying this file is for the purpose of backup after purchasing this product.

In order to keep improving the product, Lumens Digital Optics Inc. hereby reserves the right to make changes to product specifications without prior notice. The information in this file is subject to change without prior notice.

To fully explain or describe how this product should be used, this manual may refer to names of other products or companies without any intention of infringement.

Disclaimer of warranties: Lumens Digital Optics Inc. is neither responsible for any possible technological, editorial errors or omissions, nor responsible for any incidental or related damages arising from providing this file, using, or operating this product.
Chapter 1  Safety Instructions

Always follow these safety instructions when setting up and using the Document Camera:

1. Do not place Document Camera in tilted position.
2. Do not place the Document Camera on an unstable trolley, stand or table.
3. Do not use the Document Camera near water or source of heat.
4. Use attachments only as recommended.
5. Place the Document Camera on a place where the USB cable can be unplugged easily.
6. Unplug the USB cable of Document Camera before cleaning. Use a damp cloth for cleaning. Do not use liquid or aerosol cleaners.
7. Do not block the slots and openings in the Document Camera case. They provide ventilation and prevent the Document Camera from overheating. Do not place the Document Camera on a sofa, rug or other soft surface or install in a recessed place unless proper ventilation is provided.
9. Except as specifically instructed in this User Manual, do not attempt to operate this product by yourself. Opening or removing covers may expose you to dangerous voltages and other hazards. Refer all servicing to licensed service personnel.
10. Unplug the USB cable during thunderstorms or if it is not going to be used for an extended period. Do not place the Document Camera or remote control on top of heat-emitting equipment or shaking objects such as a car, etc.
11. In case of the following situations, please unplug the USB cable of the Document Camera and refer servicing to licensed service personnel:
   - If the USB port becomes damaged or frayed.
   - If liquid is spilled into it or the Document Camera has been exposed to rain or water.
■ Precautions

Warning: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

<table>
<thead>
<tr>
<th>![Warning Symbol]</th>
<th>![Note]</th>
<th>![Warning Symbol]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caution: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to licensed service personnel.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>This symbol indicates that this equipment may contain dangerous voltage which could cause electric shock.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>This symbol indicates that there are important operating and maintenance instructions in this User Manual with this unit.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

■ FCC Warning

This Document Camera has been tested and found to comply with the limits for a Class A computer device, pursuant to Article 15-J of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of Industry Canada.

Cet appareil numerique respecte les limites de bruits radioelectriques applicables aux appareils numeriques de Classe A prescrites dans la norme sur le material brouilleur: "Appareils Numeriques," NMB-003 edictee par l'Industrie.

■ EN55032 (CE Radiation) Warning

Operation of this equipment in a residential environment could cause radio interference.
## Chapter 2  Package Contents

<table>
<thead>
<tr>
<th>DC125</th>
<th>Quick Start Guide</th>
<th>USB Cable</th>
</tr>
</thead>
</table>
| ![DC125 Image](image) | **Quick Start Guide**
(For download of other language versions, please visit Lumens website)
| ![USB Cable Image](image) |
| **4-Steps Card**
(Note to Teacher) |
Chapter 3  Product Overview

3.1 Description of LED indicator
1. Enable the image, and LED indicator will light up
2. Display the image, and LED indicator will light up
3. Disable the image, and LED indicator is OFF

3.2 Relative Operation Position
3.3 Correct use

3.4 Incorrect use
Chapter 4  Installation and Connections

4.1 System diagram

4.2 Connecting to a computer
➢ See the picture above

4.3 Connecting to an Interactive Whiteboard (IWB)
4.4 To mount it at desk

1. Please purchase the standard VESA installation base.
2. Please use appropriate screws: Screw length = 5 mm + base thickness (H1); M4 screw (P = 0.7)

- VESA bolt pitch 75*75mm
- VESA base thickness (H1)
- Screw length = 5 mm + base thickness (H1)
- M4 screw (P = 0.7)

4.5 Installing application software

After installing Lumens image software, you can use the following functions:
- Control the DC125.
- Capture and record images.
- Annotate the image, highlight important details and save it.
- Support the full screen function.

4.5.1 System Requirements

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>● Min CPU: P4 2.8 GHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>● Min Memory: 512 MB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>● Supporting Direct X 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>● Min Resolution: 1024 x 768</td>
<td></td>
<td></td>
</tr>
<tr>
<td>● Min Hard Drive Space: 500 MB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>● Windows XP SP2 or above</td>
<td>● Min CPU: Intel Core 2 Duo 2GHz</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Min Memory: 1 GB (32-bits)/2 GB(64-bits)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Supporting Direct X 9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Min Resolution: 1024 x 768</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Min Hard Drive Space: 1GB</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Min CPU: Intel Pentium® 2GHz Intel Core 2 Duo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Min Memory: 1GB DDR2 667Hz RAM or above</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Min Resolution: 1024 x 768</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● 24-bit color display monitor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Min Hard Drive Space: 1 GB</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● QuickTime 7.4.5 or above</td>
<td></td>
</tr>
</tbody>
</table>
4.5.2 Install with Windows XP/Vista

1. Please download Ladibug™ software at Lumens website.
2. Extract the file downloaded and then click [Ladibug] to install.
3. The installation wizard will guide you through the process. Please follow the on-screen instructions and press [Next] for the next step.
4. Press [Yes] to create **Ladibug™** shortcut on your desktop.

![Image of the question window]

5. Once the installation is completed, press [Finish] and restart the computer.

![Image of the Finish option]

---

**Lumens™**
4.5.3 Install with MAC

1. Unlock software authentication: Due to the limitation of MAC system, please follow steps below to unlock software authentication. If unlocked, please skip to Step 2 to start the installation.

1.1. Select [System Preferences] in the Apple Menu.

1.2. Click on the [Security & Privacy].
1.3. Click on the Authenticating icon on the lower left corner to unlock the panel, and enter the username and password of the Administrator.

1.4. Click on the [Anywhere] option as shown below.
1.5. Select [Allow From Anywhere], and confirm not to proceed with the authentication. Upon completion, start the installation.

2. Please download Ladibug™ software at Lumens website.

3. Extract the file downloaded and then click [Ladibug] to install.

4. Please finish the installation by following the on-screen instructions.

5. Click [Continue].
6. Click [Install].

7. Enter the username and password, and then press [Install Software].

8. Click [Continue Installation].
9. Press **[Restart]** to finish the software installation.
Chapter 5  Start Using

<Note> Ensure that the USB cable is connected and Ladibug™ software is installed at first. Refer to Chapter 4 Installation and Connections in this user manual.

1. Double click on icon to open Ladibug™ Software.
2. Place an object to be displayed under the camera.
3. **POWER Frequency** setting page, please complete the settings following the instructions on the screen. A live image is displayed when the setting is finished. (※ This setting is required for the first use only.)

   **Note:** You are advised to confirm the local voltage/frequency before setting the POWER Frequency. For example, 60Hz is applicable for America, Taiwan, Japan, etc; 50Hz is applicable for Europe or other regions.

4. Press button to optimize the image. You are ready to teach/present.
# Chapter 6 Function Menu

## 6.1 Function Descriptions of Control Panel Button

<Remark> The below functions are listed alphabetically

<table>
<thead>
<tr>
<th>Name</th>
<th>Function Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO TUNE</td>
<td>Automatically adjust the image to have the best brightness and focusing performance.</td>
</tr>
<tr>
<td>CAPTURE</td>
<td>Capture the image to the computer.</td>
</tr>
<tr>
<td>FOCUS</td>
<td>AF Button.</td>
</tr>
<tr>
<td>FREEZE</td>
<td>Freeze the current image to remain temporarily on the screen. Press again to defreeze.</td>
</tr>
<tr>
<td>LAMP</td>
<td>Turn on / off LED indicator.</td>
</tr>
</tbody>
</table>
## 6.2 Windows Operation Interface

### 6.2.1 Windows Software Screen Introduction - Camera

1. Preview window
2. Page switch

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Image" /></td>
<td>Real-time image</td>
</tr>
<tr>
<td><img src="image" alt="Image" /></td>
<td>Image browser page</td>
</tr>
<tr>
<td><img src="image" alt="Image" /></td>
<td>Function settings page</td>
</tr>
<tr>
<td><img src="image" alt="Image" /></td>
<td>Software information page</td>
</tr>
<tr>
<td><img src="image" alt="Image" /></td>
<td>Switch to Full Screen</td>
</tr>
<tr>
<td><img src="image" alt="Image" /></td>
<td>Disable Ladibug</td>
</tr>
</tbody>
</table>
3. Left function menu

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Icon]</td>
<td>Select the connection mode of camera</td>
</tr>
<tr>
<td>![Icon]</td>
<td>NA</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Auto focus</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Freeze</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Capture</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Time Lapse</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Setting of annotation tool</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Eraser (Clear all the objects)</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Recover</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Redo</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Fold the menu</td>
</tr>
</tbody>
</table>
4. Right function menu

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;</td>
<td>Switch function menus</td>
</tr>
<tr>
<td>📸</td>
<td>Image setting</td>
</tr>
<tr>
<td>🔁</td>
<td>Lamp On/Off</td>
</tr>
<tr>
<td>☀</td>
<td>Brightness</td>
</tr>
<tr>
<td>🎥</td>
<td>Recording; this function is not supported in Wireless mode and Share Image mode.</td>
</tr>
<tr>
<td>🍰</td>
<td>Free-hand drawing tool</td>
</tr>
<tr>
<td>🔧</td>
<td>Arrow</td>
</tr>
<tr>
<td>🍋</td>
<td>Circling tool</td>
</tr>
<tr>
<td>✂️</td>
<td>Eraser</td>
</tr>
<tr>
<td>✓</td>
<td>Draw a rectangle</td>
</tr>
<tr>
<td>✍️</td>
<td>Draw a line</td>
</tr>
<tr>
<td>☑️</td>
<td>Edit text</td>
</tr>
<tr>
<td>🗝️</td>
<td>Mask Mode</td>
</tr>
<tr>
<td>🎯</td>
<td>Spotlight Mode</td>
</tr>
<tr>
<td>🤴</td>
<td>Fold the menu</td>
</tr>
</tbody>
</table>
### 6.2.2 Windows Software Screen Introduction - Image Browser Thumbnail

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function Descriptions</th>
<th>Icon</th>
<th>Function Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Up Arrow" /></td>
<td>Upload the file to the cloud</td>
<td><img src="image" alt="Prev Page" /></td>
<td>Move to the previous page</td>
</tr>
<tr>
<td><img src="image" alt="Mail" /></td>
<td>Send e-mail</td>
<td><img src="image" alt="Next Page" /></td>
<td>Move to the next page</td>
</tr>
<tr>
<td><img src="image" alt="Upload" /></td>
<td>Upload to Google Drive</td>
<td><img src="image" alt="Last Page" /></td>
<td>Move to the last page</td>
</tr>
<tr>
<td><img src="image" alt="Select" /></td>
<td>Select All</td>
<td><img src="image" alt="Page" /></td>
<td>Move to a given page</td>
</tr>
<tr>
<td><img src="image" alt="Delete" /></td>
<td>Delete</td>
<td><img src="image" alt="Pages" /></td>
<td>Current page/total number of pages</td>
</tr>
<tr>
<td><img src="image" alt="First Page" /></td>
<td>Move to the first page</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 6.2.3 Windows Software Screen Introduction - Large Picture Of Image Browser

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function Descriptions</th>
<th>Icon</th>
<th>Function Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>📁</td>
<td>Save files</td>
<td>🎫</td>
<td>Circling tool</td>
</tr>
<tr>
<td>📁</td>
<td>Save as a new file</td>
<td>🗑️</td>
<td>Eraser</td>
</tr>
<tr>
<td>🗑️</td>
<td>Delete</td>
<td>🗑️</td>
<td>Setting of annotation tool</td>
</tr>
<tr>
<td>🎨</td>
<td>Free-hand drawing tool</td>
<td>🗑️</td>
<td>Eraser (Clear all the objects)</td>
</tr>
<tr>
<td>🇺 Başkanı</td>
<td>Arrow</td>
<td>🚦</td>
<td>Recover</td>
</tr>
<tr>
<td>🛠️</td>
<td>Draw a line</td>
<td>🛠️</td>
<td>Redo</td>
</tr>
<tr>
<td>🟢</td>
<td>Draw a rectangle</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6.2.4 Camera Settings

Control the live image via the Camera Settings interface. The operating procedure is the same as the control panel and remote control of the Document Camera.

<Remark> The display of the button may vary depending on product functions. An inactive button will grey out.

Click 📷 to open Camera Settings interface.

1. **Auto Focus**: Adjust the best focal length.
2. **Hands free AF**: Automatically adjust the best focal length.
3. **Focus**: Manually adjust focal length on an object.
4. **Auto Exposure**: Set on/off.
5. **Auto White Balance**: Set on/off.
6. **Photo/Text**: Setting Photo/Text mode.
7. **Rotate**: Rotate the image by 0/180 degree.
8. **Select Output Size**: Set output resolution.
9. **Power Frequency**: The power frequency may vary with countries. Please check it before using.
<Remark> In most parts of the world, it is 50 Hz. In the America, however, it is typically 60 Hz.


11. Factory reset: The function of restoring the Document Camera to default is not supported in Wireless mode.

6.2.5 Time Lapse (Burst Settings)

Click 🕒 to open Time Lapse menu.

1. Specify a file name.
2. Set the start time.
3. Set the capture interval and the capture time.
6.2.6 Setting of annotation tool

Click ☞ to open the setting menu

1. Set the pen color
2. Select the line width
3. Select the font size
4. Select the font
6.2.7 Setting (Advanced)

Click [ 图标 ] to open the setting menu

1. **Software factory reset**: Reset to the default value.
2. **Language**: Select language.
3. **File Directory**: File storage path.
4. **Enable Audio Recorder**: Activate recording function and select audio output device.
5. **Enable Video Compression**: Activate video compression.
6. **Video Compression Type**: Set video compression format.
7. **Video Compression Property**: Open the advanced settings for video compression format.
8. **Share Image**: Share Image; this function is not supported in Wireless mode.
9. **IP address**: Server IP address for image sharing.
10. **Image Quality**: Select image quality (high/medium/low).
11. **Port**: Enter port settings (8500 ~ 9000).
12. **Unicast/Multicast**: Select cast type.
13. **Software Mode**: Change the mode to Live Mode/Drawing Mode according to the requirement.
### 6.3 MAC Operation Interface

#### 6.3.1 MAC Software Screen Introduction - Camera

1. Preview window
2. Page switch

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>📸</td>
<td>Real-time image</td>
</tr>
<tr>
<td>📼</td>
<td>Image browser page</td>
</tr>
<tr>
<td>🔄</td>
<td>Function settings page</td>
</tr>
<tr>
<td>🔄️</td>
<td>Software information page</td>
</tr>
<tr>
<td>📞</td>
<td>Switch to Full Screen</td>
</tr>
<tr>
<td>✗</td>
<td>Disable Ladibug</td>
</tr>
</tbody>
</table>
3. Left function menu

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌤️</td>
<td>Select the connection mode of camera</td>
</tr>
<tr>
<td>🌅</td>
<td>NA</td>
</tr>
<tr>
<td>🕵️‍♂️</td>
<td>Auto focus</td>
</tr>
<tr>
<td>🌽️</td>
<td>Freeze</td>
</tr>
<tr>
<td>🕵️‍♀️</td>
<td>Capture</td>
</tr>
<tr>
<td>🕒</td>
<td>Time Lapse</td>
</tr>
<tr>
<td>📚</td>
<td>Setting of annotation tool</td>
</tr>
<tr>
<td>🗑️</td>
<td>Eraser (Clear all the objects)</td>
</tr>
<tr>
<td>🕒</td>
<td>Recover</td>
</tr>
<tr>
<td>🕒</td>
<td>Redo</td>
</tr>
<tr>
<td>⬅️</td>
<td>Fold the menu</td>
</tr>
</tbody>
</table>
### 4. Right function menu

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;</td>
<td>Switch function menus</td>
</tr>
<tr>
<td>🗄️</td>
<td>Image setting</td>
</tr>
<tr>
<td>🕯️</td>
<td>Lamp On/Off</td>
</tr>
<tr>
<td>🕯️</td>
<td>Brightness</td>
</tr>
<tr>
<td>📧</td>
<td>Recording; this function is not supported in Wireless mode and Share Image mode.</td>
</tr>
<tr>
<td>🖋️</td>
<td>Free-hand drawing tool</td>
</tr>
<tr>
<td>✏️</td>
<td>Arrow</td>
</tr>
<tr>
<td>🟢</td>
<td>Circling tool</td>
</tr>
<tr>
<td>🗯️</td>
<td>Eraser</td>
</tr>
<tr>
<td>🟠</td>
<td>Draw a rectangle</td>
</tr>
<tr>
<td>🖋️</td>
<td>Draw a line</td>
</tr>
<tr>
<td>🖋️</td>
<td>Edit text</td>
</tr>
<tr>
<td>🕒</td>
<td>Mask Mode</td>
</tr>
<tr>
<td>🕑</td>
<td>Spotlight Mode</td>
</tr>
<tr>
<td>📋</td>
<td>Fold the menu</td>
</tr>
</tbody>
</table>
6.3.2 MAC Software Screen Introduction - Image Browser

### Thumbnail

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function Descriptions</th>
<th>Icon</th>
<th>Function Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌐</td>
<td>Upload the file to the cloud</td>
<td>🌐</td>
<td>Move to the first page</td>
</tr>
<tr>
<td>💌</td>
<td>Send e-mail</td>
<td>🌐</td>
<td>Move to the previous page</td>
</tr>
<tr>
<td>🔄</td>
<td>Upload to Google Drive</td>
<td>🔄</td>
<td>Move to the next page</td>
</tr>
<tr>
<td>🔄</td>
<td>Upload to Dropbox</td>
<td>🔄</td>
<td>Move to the last page</td>
</tr>
<tr>
<td>⏰</td>
<td>Select All</td>
<td>⏰</td>
<td>Move to a given page</td>
</tr>
<tr>
<td>🗑</td>
<td>Delete</td>
<td>🗑</td>
<td>Current page/total number of pages</td>
</tr>
</tbody>
</table>
### 6.3.3 MAC Software Screen Introduction - Large Picture Of Image Browser

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function Descriptions</th>
<th>Icon</th>
<th>Function Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Save files" /></td>
<td>Save files</td>
<td><img src="image" alt="Circling tool" /></td>
<td>Circling tool</td>
</tr>
<tr>
<td><img src="image" alt="Save as a new file" /></td>
<td>Save as a new file</td>
<td><img src="image" alt="Eraser" /></td>
<td>Eraser</td>
</tr>
<tr>
<td><img src="image" alt="Delete" /></td>
<td>Delete</td>
<td><img src="image" alt="Setting of annotation tool" /></td>
<td>Setting of annotation tool</td>
</tr>
<tr>
<td><img src="image" alt="Free-hand drawing tool" /></td>
<td>Free-hand drawing tool</td>
<td><img src="image" alt="Eraser (Clear all the objects)" /></td>
<td>Eraser (Clear all the objects)</td>
</tr>
<tr>
<td><img src="image" alt="Arrow" /></td>
<td>Arrow</td>
<td><img src="image" alt="Recover" /></td>
<td>Recover</td>
</tr>
<tr>
<td><img src="image" alt="Draw a line" /></td>
<td>Draw a line</td>
<td><img src="image" alt="Redo" /></td>
<td>Redo</td>
</tr>
<tr>
<td><img src="image" alt="Draw a rectangle" /></td>
<td>Draw a rectangle</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6.3.4 Camera Settings

Control the live image via the Camera Settings interface. The operating procedure is the same as the control panel and remote control of the Document Camera.

<Remark> The display of the button may vary depending on product functions. An inactive button will grey out. Click to open Camera Settings interface.

1. Auto Focus: Adjust the best focal length.
2. Hands free AF: Automatically adjust the best focal length.
3. Focus: Manually adjust focal length on an object.
6. Photo/Text: Setting Photo/Text mode.
7. Rotate: Rotate the image by 0/180 degree.
8. Select Output Size: Set output resolution.
9. Power Frequency: The power frequency may vary with countries. Please check it before using.

<Remark> In most parts of the world, it is 50 Hz. In the America, however, it is typically 60 Hz.

Lumens™
11. **Factory reset**: The function of restoring the Document Camera to default is not supported in Wireless mode.

### 6.3.5 Time Lapse

Click 📐 to open Time Lapse menu.

1. Specify a file name.
2. Set the start time.
3. Set the capture interval and the capture time.
6.3.6 Setting of annotation tool

Click to open the setting menu

1. Set the pen color
2. Select the line width
3. Select the transparency
4. Select the font size
5. Select the font
6.3.7  Setting (Advanced)

Click 🛠️ to open the setting menu

1. **Software factory reset**: Reset to the default value.
2. **File Directory**: File storage path.
3. **Enable Audio Recorder**: Activate recording function.
4. **Audio source**: Select audio output device.
5. **Audio Compression Type**: Select audio output quality.
6. **Video Compression Type**: Set video compression format.
7. **Share Image**: Share Image; this function is not supported in Wireless mode.
8. **IP address**: Server IP address for image sharing.
9. **Image Quality**: Select image quality (high/medium/low).
10. **Port**: Enter port settings (8500 ~ 9000).
11. **Unicast/Multicast**: Select cast type.
Chapter 7  Descriptions of major functions – Windows User

7.1 I would like to optimize the image

➢ Auto Operation: Click AUTO.
➢ Manually enabled function: Press the AF [FOCUS] button on the camera head of main unit.

7.2 I would like to freeze the live image

➢ Click ⚫️ to freeze the live image of Ladibug™.
➢ Click ⚫️ once again to lift the freeze.

7.3 I would like to turn on/off the lamp

➢ Click ⚫️ to turn on/off the camera lamp.

7.4 I would like to adjust the brightness

➢ Click ⚫️ to open the brightness scroll.
➢ Move rightward to increase brightness, or leftward to decrease brightness.

7.5 I would like to capture images

➢ Click ⚫️ to capture images.

<Note> When the images are captured, please view the images on the image browser page ⚫️.

Lumens™
7.6 I would like to capture images continuously

➢ Click ☑️ to open burst mode setting. Click [OK] after setting.

>Note> For more information about Time Lapse setting, please refer to 6.2.5 Time Lapse

>Note> When the images are captured, please view the images on the image browser page 🎬

7.7 I would like to record

➢ Click 📹 to open the recording tool.

>Note> Click 🛠️ to open the setting window of video format and audio source. For more information, please refer to 6.2.7 Setting

➢ Click 🎥 to start recording.

➢ Click 🎥 to stop recording.

➢ Click 📹 to close the recording tool.

>Note> You can add annotation when recording but cannot save it

>Note> When the images are captured, please view the images on the image browser page 🎬

>Note> The recording function is not available when connecting to the image sharing server or wireless network

7.8 I would like to annotate the displayed image.

➢ Select an annotation tool.
Mark or annotate the displayed image.

<Remark> If they are live images, you can click \( \) to capture images.
If the image files are opened on image browser page \( \), you can press the \( \) [SAVE] or \( \) [SAVE AS] to save files.

### 7.9 I would like to add textual annotation to images

- Select \( \).
- Click the screen to display the [Text Tool] window
- Enter text in the blank area and press [OK].

<Remark> If they are live images, you can click \( \) to capture images.
You can click [SAVE] or [SAVE AS] to save files if they are image files.

7.10 I would like to use the mask mode

➤ Click \(\square\) to open the mask mode.

➤ You can use the mouse to directly modify the length and the width of the block.

➤ Click \(\times\) to close the mask mode.

7.11 I would like to use the spotlight mode

➤ Click \(\square\) to open spotlight mode.

➤ You can use the mouse to directly modify the length and the width of the block.

➤ Press \(\downarrow\) to change the spotlight shape

➤ Click \(\times\) to close the spotlight mode.

7.12 I would like to manage stored image

Please switch to Image browser page to go through the following steps

7.12.1 Browse images

➤ Open the Image browser page to view the thumbnails of stored images

➤ Click on the rightward/leftward icon to switch to another page, or enter numbers to switch to a given page
➢ Double click on the image to display a large picture

➢ Click to switch to Full Screen

➢ Click to return to image thumbnails

7.12.2 Delete Image

➢ Click the image or click Select All

➢ Then click Delete to delete the selected image

7.12.3 Share images

➢ : Send by E-mail

a. Click the image or click Select All

b. Click to select how to upload images

c. Enter recipient, subject, and content, and click “Send”

<Remark> Email settings must be completed before sending images via email. Change settings according to the instructions of various operating systems and ISPs.

➢ : Upload to Google Drive

a. Click the image or click Select All

b. Click to select how to upload images

c. Click “Log In”. Log in by entering your google username and password.
d. Click “Accept” to enable Ladibug™ to access information stored in Google Drive.

e. Click “Upload” to upload files. Upload is complete when the “upload finished” message is shown.

7.13 I would like to change the operating languages of the software

- Switch to settings page
- Select language
- Restart the Ladibug™

7.14 Change the setting of firewall

7.14.1 Windows 7


b. Click [System and Security], and then click [Allow a program through Windows Firewall].

[Remark] Click [Windows Firewall] in the icon view of [Console].

d. Please select *Ladibug* program in the list.

e. If *Ladibug* was not listed, please click [Allow another program], and then you will find Ladibug program.

f. Select *Ladibug*, and then click [Add]. If it was not listed, please click [Browse], select *Ladibug* program, and then click [Enable].

[Remark] *Ladibug* may be displayed in the form of *Ladibug.exe*.

g. Click [OK] in [Allowed Program] window.


### 7.14.2 Windows 8

a. Point the mouse to the upper right corner of the screen and move the mouse pointer down, then click [Search] and input the firewall in the search block, click or click [Allow the Application Program or Function to pass Windows Firewall].

b. Click or press [Change Settings]. System may ask for your system administrator password or confirm your selection.
c. In the allowed application program list, find **Ladibug**, check the checkbox beside the application program, and then click or press [Confirm].
Chapter 8  Descriptions of major functions - MAC User

8.1 I would like to optimize the image

➢ Click AUTO.

8.2 I would like to freeze the live image

➢ Click to freeze the live image of Ladibug™.

➢ Click once again to lift the freeze.

8.3 I would like to turn on/off the lamp

➢ Click to turn on/off the camera lamp.

8.4 I would like to adjust the brightness

➢ Click to open the brightness scroll.

➢ Move rightward to increase brightness, or leftward to decrease brightness.

8.5 I would like to capture images

➢ Click to capture images

<Note> When the images are captured, please view the images on the image browser page.
8.6 I would like to capture images continuously

- Click \( \text{ } \) to open continuous mode setting. Click [OK] after setting.

<Note> For more information about Time Lapse setting, please refer to 6.3.5 Time Lapse.

<Note> When the images are captured, please view the images on the image browser page.

8.7 I would like to record

- Click \( \text{ } \) to open the recording tool.

<Note> Click \( \text{ } \) to open the setting window of video format and audio source. For more information, please refer to 6.3.7 Setting.

- Click \( \text{ } \) to start recording.

- Click \( \text{ } \) to stop recording.

- Click \( \text{ } \) to close the recording tool.

<Note> You can add annotation when recording but cannot save it.

<Note> When the images are captured, please view the images on the image browser page.

8.8 I would like to annotate the displayed image.

<Note> To annotate the stored images, please open the images on the image browser page.

- Select an annotation tool.
Mark or annotate the displayed image.

<Remark> If they are live images, you can click to capture images. If the image files are opened on image browser page, you can press the [SAVE] or [SAVE AS] to save files.

8.9 I would like to add textual annotation to images

- Select .
- Select range on page and enter text

<Remark> If they are live images, you can click to capture images. You can click [SAVE] or [SAVE AS] to save files if they are image files.
8.10 I would like to use the mask mode

- Click 🗝 to open the mask mode.
- You can use the mouse to directly modify the length and the width of the block.
- Click 🔃 to modify the transparency of the block.
- Click ✗ to close the mask mode.

8.11 I would like to use the spotlight mode

- Click 🕯 to open the spotlight mode.
- You can use the mouse to directly modify the length and the width of the block.
- Click 🔃 to modify the transparency and shape of the block.
- Click ✗ to close the spotlight mode.

8.12 I would like to manage stored image

Please switch to Image browser page 🌉 to go through the following steps

8.12.1 Browse images

- Open the Image browser page 🌉 to view the thumbnails of stored images
- Click on the rightward/leftward icon to switch to another page, or enter numbers to switch to a given page
Double click on the image to display a large picture
Click \( \text{\textbullet}\) to switch to full screen
Click \( \text{\textbullet}\) to return to image thumbnails

8.12.2 Delete images
Click the image or click Select \( \text{\textbullet}\) All
Then click Delete \( \text{\textbullet}\) to delete the selected image

8.12.3 Share images
\( \text{\textbullet}\) E-mail : Send by E-mail
a. Click the image or click Select \( \text{\textbullet}\) All
b. Click \( \text{\textbullet}\) to select how to upload images \( \text{\textbullet}\)
c. Enter recipient, subject, and content, and click “Send”

<Remark> Email settings must be completed before sending images via email. Change settings according to the instructions of various operating systems and ISPs.

\( \text{\textbullet}\) Google Drive : Upload to Google Drive
a. Click the image or click Select \( \text{\textbullet}\) All
b. Click \( \text{\textbullet}\) to select how to upload images \( \text{\textbullet}\)
c. Click “Log In”. Log in by entering your Google username and password.
d. Click “Accept” to enable Ladibug™ to access information stored in Google Drive.
e. Click “Upload” to upload files. Upload is complete when the “upload finished” message is shown.
- Upload to Dropbox
  a. Click the image or click Select All
  b. Click to select how to upload images
  c. Click “Log In”. Log in by entering your Dropbox username and password.
  d. Click “Accept” to enable Ladibug™ to access information stored in Dropbox.
  e. Click “Upload” to upload files. Upload is complete when the “Upload complete” message is shown.

8.13 I would like to change the operating languages of the software
- Open the MAC [System Preferences] option, select from the [Preferred Languages] option list in the [Language & Region] icon, and restart.
8.14 Change the setting of firewall
Applicable to MAC OS X v10.6/10.7/10.8/10.9

8.14.1 Select the setting of [System Preferences] in the Apple Menu.
8.14.3 Click the tab [Firewall].

8.14.4 Click the lock on the lower left corner to unlock the panel, and enter the username and password of the Administrator.
8.14.5 Click [Start] or [Activate Firewall] to activate the firewall.
8.14.6 Click [Advanced] at the lower right corner.
8.14.7 Select [Automatically allow signed software to receive incoming connections].
8.14.8 Change Ladibug in the list to [Allow incoming connections]. If the software name was not listed, please click [+ ] to add new programs to the list, and start to use the software.
Block all incoming connections
Blocks all incoming connections except those required for basic Internet services, such as DHCP, Bonjour, and IPSec.

iTunes
Allow incoming connections

Automatically allow signed software to receive incoming connections
Allows software signed by a valid certificate authority to provide services accessed from the network.

Enable stealth mode
Don’t respond to or acknowledge attempts to access this computer from the network by test applications using ICMP, such as Ping.
Chapter 9  Connecting to Microscope

1 Mount the **microscope adapter** onto the microscope.
   <Note> Please choose an appropriate microscope adapter. Microscope adapter accessories are applicable to eyepieces of Ø 28 mm.

2 Connect the lens with the **microscope adaptor**.

3 If the image is not clear
   3.1. Press the [FOCUS] button on both sides of the lens to activate the auto focus.
# Chapter 10  Troubleshooting

This chapter describes problems you may encounter while using DC125. If you have questions, please refer to related chapters and follow all the suggested solutions. If the problem still exists, please contact our distributors or service center.

<table>
<thead>
<tr>
<th>No.</th>
<th>Problems</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Boot without power signal</td>
<td>Ensure that the USB cable is connected.</td>
</tr>
<tr>
<td>2</td>
<td>Unable to focus</td>
<td>Probably the document is too close. Please pull the document away from the lens, and then press the [AF] button on both lateral sides of the lens.</td>
</tr>
<tr>
<td>3</td>
<td>DC125 cannot operate normally</td>
<td>The machine cannot operate normally probably because the power supply of the USB port at the front end of the computer is insufficient. Try to connect to a USB port at the rear end or a USB hub with a power adapter.</td>
</tr>
<tr>
<td>4</td>
<td>Cannot identify DC125</td>
<td>Outdated or incomplete OS versions might not be able to identify USB devices like DC125. Please use Windows XP SP2 or newer versions that are compatible.</td>
</tr>
<tr>
<td>5</td>
<td>Output screen flicker</td>
<td>The presetting value of Ladibug™ current frequency is 60 (Hz). If current frequency of your local country is 50 (Hz), output screen flicker may occur during the use of Ladibug™. Please refer to Chapter 6 - 6.2.4 and 6.3.4 Camera Settings to change Power frequency to 50 (Hz).</td>
</tr>
<tr>
<td>6</td>
<td>When running Time Lapse function, Preview screen freezes</td>
<td>Connecting to USB Hub may cause insufficient band-width, leading to machine abnormalities. It is advised that the machine be connected to the computer directly via USB cable, without USB Hub.</td>
</tr>
</tbody>
</table>