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Before Use

What You Can Do with This Software

LUMIX Tether is a piece of software used to control a Panasonic digital camera from a PC.
By connecting a camera and a PC, you can change various settings of the camera and record images remotely while viewing the PC screen.
If you set the image storage location to the PC, you can save images to the PC after performing remote recording.
• This software is not designed to enable you to control all functions of your digital camera.

Read This Section First

About the information contained in this document
• Please note that the instructions and screenshots in this document may differ from the actual information and screens.
• This document does not explain basic computer operations and terms. For these topics, refer to resources such as the operating instructions of your PC.
• The information contained in this document is subject to change without prior notice.
• This document may not be reproduced in whole or in part without the express permission of Panasonic.
• The description of Windows® in this document is based on the screens of Windows® 10.
• The screenshots used in this documents are of the screens that appear when the DC-GH5 digital camera is connected.
• Depending on the model of the connected digital camera, some of the functions and settings described in this document may not be available.

Notes on the use of the software
• If the PC is not restarted after installation, the software may not operate properly.
• Do not remove the memory card or the cable connected to the digital camera while operating the software. This may cause the software to stop working correctly or damage the data under transmission.
• If the software cannot be started due to the lack of system resources, close other software programmes, and then restart the software.
• If the software and digital camera stop operating properly when you are operating the software, turn off and on the digital camera and then restart the software.
Starting and Closing the Software

Starting the Software

1. Turn on the PC.
2. Turn on the digital camera.
3. Connect the digital camera and the PC with the USB connection cable supplied with the camera.
   • For information about how to connect them, refer to the operating instructions for the camera.
4. Start LUMIX Tether ( ).

- Updating LUMIX Tether
  Read an update notification when the software starts.
  If a new version is available, a notification message will appear on the screen.
  • The PC must be connected to the Internet.
  • You can also turn off update notifications. (P8)

Closing the Software

1. Close LUMIX Tether.
2. Turn off the digital camera.
3. Remove the USB connection cable.
Specifying Camera Settings from the PC

Descriptions of Recording Panel Components

When you have finished connecting to the camera, the recording panel will appear on the PC screen.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 1 | **Recording operation panel**  
Operate this panel to perform remote recording. (P13) |
| 2 | **Recording setting panel**  
Shows the current settings of the camera. (P6) |
| 3 | **[Flash]**  
Allows you to set the flash settings. (P7) |
| 4 | **Display mode selector button**  
Changes the display mode to a setting that only shows the recording operation panel. |
| 5 | **[Setting]**  
Allows you to set the LUMIX Tether settings. (P8) |
Changing the Recording Settings

1. Click the item you want to modify.
   • The settings of grey items cannot be changed.
   • Operate the camera to change the settings of functions that cannot be changed with this software.
   1. Shutter speed
   2. Aperture value
   3. Recording Mode
   4. [White Balance]
   5. [Drive Mode]
   6. [ISO]
   7. [Exposure Comp.]
      • Click the scale bar to change the value.
   8. [Quality]
   9. [Picture Size]
   10. [Motion Pic. Rec Quality]
      • To change the motion picture recording format, select the appropriate setting on the camera.
   11. [AF Mode]
   12. [Focus Mode]
   13. [Photo Style]
   14. [WB Color Temperature]
   15. [Metering Mode]
   16. [WB Adjust.]

2. Click the desired setting of the item.
   • For details about each function, refer to the operating instructions for the camera.
Changing the Flash Settings

1. Click [Flash].
   • The flash setting panel will appear.

2. Click the item you want to modify.
   • The settings of grey items cannot be changed.
<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>[Firing Mode]</td>
</tr>
<tr>
<td>2</td>
<td>[Flash Mode]</td>
</tr>
<tr>
<td>3</td>
<td>[Flash Synchro]</td>
</tr>
<tr>
<td>4</td>
<td>[Auto Exposure Comp.]</td>
</tr>
<tr>
<td>5</td>
<td>[Flash Adjust.]</td>
</tr>
<tr>
<td>6</td>
<td>[Manual Flash Adjust.]</td>
</tr>
<tr>
<td>7</td>
<td>[Wireless Mode]</td>
</tr>
<tr>
<td></td>
<td>When [ON] is set, the wireless flash setting menu (8 - 14) is displayed.</td>
</tr>
<tr>
<td>8</td>
<td>[Wireless Channel]</td>
</tr>
<tr>
<td>9</td>
<td>[Wireless FP]</td>
</tr>
<tr>
<td>10</td>
<td>[Communication Light]</td>
</tr>
<tr>
<td>11</td>
<td>[Firing Mode]</td>
</tr>
<tr>
<td>12</td>
<td>[Flash Adjust.]</td>
</tr>
<tr>
<td>13</td>
<td>[Manual Flash Adjust.]</td>
</tr>
<tr>
<td>14</td>
<td>[Test Flash]</td>
</tr>
</tbody>
</table>
   • Click this to fire a test flash.

3. Click the desired setting of the item.
Specifying Camera Settings from the PC

**Changing the LUMIX Tether Settings**

1. Click [Setting].
   - The setting panel will appear.

2. Click the item you want to modify.

   1. **[Storage Location]**
      - Allows you to select the card in the camera, PC, or both as the storage location(s) of images.

   2. **[Import Folder]**
      - Specifies a folder on the PC where images are to be stored.

   3. **[Automatically create subfolders by date]**

   4. **[Import File Name]**
      - Specifies the base name of the files that you transfer to the PC.
      - Even if you select [Original File Name], files will be saved with the name set in [User Setting] in the following cases:
        - when [Storage Location] is set to [PC]
        - when recording 6K/4K photos

   5. **[Transfer for RAW + JPEG]**
      - Sets the format of files that are transferred when [Quality] is set to [RAW] or [RAW+].
      - If [Storage Location] is set to [PC], files will be saved in the [RAW+JPEG] format.

   6. **[Automatically display review image]** (P14)

   7. **[Check for application update at startup]**

   8. **[Automatically send usage conditions]**

   9. **[Send usage conditions now]**

10. **[Version]**

3. Click the desired setting of the item.

4. Click [Save].
## Using the Live View Function

### Descriptions of Live View Screen Components

<table>
<thead>
<tr>
<th></th>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Live view screen</td>
<td>Shows the preview image from the connected camera. You can also click the screen and set the focus point.</td>
</tr>
<tr>
<td>2</td>
<td>Control panel</td>
<td>Sets the recording support function settings. (P10)</td>
</tr>
</tbody>
</table>
Changing Settings on the Live View Screen

1. Click [LV].
   - The live view screen will appear.

2. Click the item you want to modify.
   - The settings of grey items cannot be changed.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[White Set] (P11)</td>
<td></td>
</tr>
<tr>
<td>[AF Area Display]</td>
<td>Displays the AF area position. It does not work with Auto Focus Mode settings that constantly display the AF area, such as 1-Area AF.</td>
</tr>
<tr>
<td>[1 Shot AF]</td>
<td>Adjusts focus by temporarily enabling Auto Focus when using Manual Focus.</td>
</tr>
<tr>
<td>[Level Gauge]</td>
<td></td>
</tr>
<tr>
<td>[Grid] (P11)</td>
<td></td>
</tr>
<tr>
<td>[Guide Line] (P11)</td>
<td></td>
</tr>
<tr>
<td>[Histogram]</td>
<td></td>
</tr>
<tr>
<td>[Zoom In Scale] (P12)</td>
<td></td>
</tr>
<tr>
<td>[MF Adjust.] (P12)</td>
<td></td>
</tr>
<tr>
<td>[Live View Rotate] (P12)</td>
<td></td>
</tr>
<tr>
<td>[Aspect Ratio]</td>
<td></td>
</tr>
<tr>
<td>[Preview]</td>
<td></td>
</tr>
</tbody>
</table>
Using the Live View Function

[White Set]
Getting started: Set [White Balance] to a setting that allows you to use the White Set function (口, etc.).
1 Click [White Set] to display [口].
2 Click the part on the live view screen that you want to specify as a White Balance setting.
• The part will be specified as a White Balance setting.

[Grid]
1 Click [Grid].
2 Click [口].

<table>
<thead>
<tr>
<th>Grid Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[3 x 3]</td>
<td>Displays a grid consisting of three columns and three rows.</td>
</tr>
<tr>
<td>[2 x 2 + Diagonal Lines]</td>
<td>Displays a diagonal grid in addition to a grid consisting of two columns and two rows.</td>
</tr>
<tr>
<td>[Customize]</td>
<td>Allows you to set the number, thickness, and colour of grid lines.</td>
</tr>
</tbody>
</table>

3 (When [Customize] is selected) Click the desired item to change its setting.

4 Click [口] to close the window.

[Guide Line]
1 Click [Guide Line].
2 Click [口].
3 Click the checkboxes of the guidelines you want display.

4 Click the icons for the desired guidelines to set their positions.

5 Click each item to set the thickness and colour.

6 Click [口] to close the window.
Using the Live View Function

<table>
<thead>
<tr>
<th>[Zoom In Scale]</th>
<th>Click the desired icon to zoom in/out the screen.</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;&lt;</td>
<td>Zooms out (~5.0×)</td>
</tr>
<tr>
<td>&lt;&lt;</td>
<td>Zooms out (~1.0×)</td>
</tr>
<tr>
<td>&lt;</td>
<td>Zooms out (~0.1×)</td>
</tr>
<tr>
<td>&gt;</td>
<td>Zooms in (+0.1×)</td>
</tr>
<tr>
<td>&gt;&gt;</td>
<td>Zooms in (+1.0×)</td>
</tr>
<tr>
<td>&gt;&gt;&gt;</td>
<td>Zooms in (+5.0×)</td>
</tr>
</tbody>
</table>

• You can move the magnified area by dragging the image on the live view screen.

<table>
<thead>
<tr>
<th>[Live View Rotate]</th>
<th>Click the desired icon.</th>
</tr>
</thead>
<tbody>
<tr>
<td>⬅️</td>
<td>Rotates the live view screen to the left by 90°.</td>
</tr>
<tr>
<td>[AUTO]</td>
<td>Enables/disables the automatic rotation function. The function rotates the live view screen automatically so that it is displayed in the same orientation as the camera.</td>
</tr>
<tr>
<td>⬅️</td>
<td>Rotates the live view screen to the right by 90°.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>[MF Adjust.]</th>
<th>This item is available only when [Focus Mode] is set to [MF].</th>
</tr>
</thead>
<tbody>
<tr>
<td>Click the desired icon to adjust.</td>
<td></td>
</tr>
<tr>
<td>&lt;&lt;</td>
<td>Shifts the focus to a farther position quickly.</td>
</tr>
<tr>
<td>&lt;</td>
<td>Shifts the focus to a farther position gradually.</td>
</tr>
<tr>
<td>&gt;</td>
<td>Shifts the focus to a closer position gradually.</td>
</tr>
<tr>
<td>&gt;&gt;</td>
<td>Shifts the focus to a closer position quickly.</td>
</tr>
</tbody>
</table>

• Hover the cursor over and click and hold the icon to adjust continuously.
Remote Recording

Basic Operations

Check before recording.
• Check the image storage location setting. For information about the setting, refer to page 8.
• Verify that the card is inserted into the camera.
  – If the card is not inserted, the image storage location will be set to the PC.

<table>
<thead>
<tr>
<th></th>
<th>Number of recordable pictures</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Available recording time</td>
</tr>
<tr>
<td>3</td>
<td>Battery indication</td>
</tr>
<tr>
<td>4</td>
<td>Motion picture button (P15)</td>
</tr>
<tr>
<td>5</td>
<td>Half-press shutter button (P14)</td>
</tr>
</tbody>
</table>
  This is a button equivalent to the half-press shutter function of the camera. |
| 6 | Shutter button (P14)         |
  This is a button equivalent to the shutter function of the camera. |
Taking Pictures

1 Click the half-press shutter button (a) to adjust focus.
   • To cancel the operation performed by the half-press shutter function, click the half-press shutter button again.

2 Click the shutter button (a) to take a picture.

   When recording in Burst Mode or with the [6K/4K Burst] function
   Hover the cursor over and click and hold the shutter button in Step 2.
   • Recording will stop when you release the shutter button.

   When recording in Bulb Mode or with the [6K/4K Burst(S/S)] function
   After performing Step 2, click the shutter button again to stop recording.

Magnifying/reducing review images
After a picture is taken, its review image appears automatically.
• Review images are not displayed when [Storage Location] is set to [SD Card].

1 Click the review screen.
2 Rotate the mouse wheel.
   • To move the magnified area while maintaining the magnification factor, drag the image on the screen.
   • To exit the magnified/reduced display, click the screen again.
Recording Motion Pictures

1. Click the motion picture button A to start recording.
2. Click the motion picture button again to stop recording.
Uninstalling the Software

Follow the standard software uninstallation procedure of the OS to delete the software.

(Windows)
Select [LUMIX Tether XX] (where XX is a version) to uninstall LUMIX Tether.
• When uninstalling the software, log in as a system administrator.

(Mac)
Drag and drop [LUMIX Tether] to the Trash.

Trademarks and Licenses

• Windows is a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.
• Mac is a trademark of Apple Inc., registered in the U.S. and other countries.
• Other names of systems and products mentioned in these instructions are usually the registered trademarks or trademarks of the manufacturers who developed the system or product concerned.