iS
IMAGE STUDIO

Version 5.2

Quick Start Guide

For the Odyssey® Fc Dual-Mode Imaging System

Fc
ODYSSEY

LI-COR®

1   Install Image Studio™ Software

Note: *Ensure you have the correct permissions to install software on the computer you want to use.*

Windows 7, 8, 8.1, or 10 Operating Systems

Install via CD

1) Place installation CD into drive.

2) If installation does not start immediately, browse to the CD and double-click on Win_Image Studio Full_5.x.x.exe.

3) Click **Next** and follow the instructions in the Setup Wizard.

Install via download

1) Download and double-click on the Win_Image Studio Full_5.x.x.exe file on your computer.

2) Click **Next** and follow the instructions in the Setup Wizard.

   Note: *Some options are only available after you import a separate software key into Image Studio (see licor.com/AnalysisKeys for more information). If you are upgrading from a previous version of Image Studio, you should not need to import the additional keys again.*

Mac OS X 10.9, 10.10, 10.11, or 10.12 Operating Systems

Install via CD

1) Place installation CD into drive.

2) If installation does not start immediately, browse to the CD and double-click on MacImageStudioFull_5.x.x.dmg.

3) Click Agree to accept the license agreement.

4) Drag the Image Studio icon into the Applications folder.

Install via Download

1) Go to your Mac System Preferences and click Security and Privacy to open the Security and Privacy window.

2) Click the lock symbol in the bottom left corner of the window to allow editing, if necessary.

3) Under the General tab, enable the Mac App Store and identified developers radio button under the Allow applications downloaded from option.

4) Download, and double-click on the MacImageStudioFull_5.x.x.dmg file on your computer.

    a. Click Agree to accept the license agreement.

    b. To install, drag the Image Studio icon **iS** into the Applications folder.

    c. Open the Image Studio Application by double-clicking on the Image Studio icon **iS**.

    d. If you see a dialog that says: "ImageStudio.app is an application downloaded from the internet. Are you sure you want to open it?" click Open.

    Note: Some analysis options do not come with Image Studio and require you to import a separate software key (see licor.com/AnalysisKeys for more information).

2   Start Image Studio Software

Double-click the Image Studio icon **iS** on the desktop to start Image Studio Software.

3   Set Up a Work Area

A Work Area contains related images, analyses, and software settings.

*Hint: It is best to create an **Overall** folder to house your lab members' Work Areas. Each lab member should create an individual Work Area within the **Overall** folder. This will ensure that Work Areas are easy to find and that everyone's Work Area has the correct images and settings.*

For more information about Work Areas in Image Studio 5.x, see licor.com/WorkArea.
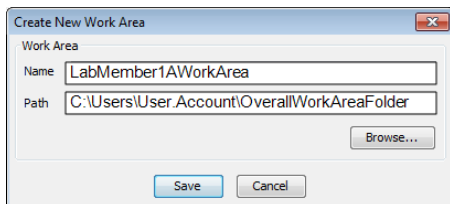
Add a Work Area

1) The first time you start Image Studio, you will need to create a Work Area. Click **Create New...** in the Set Active Work Area dialog.
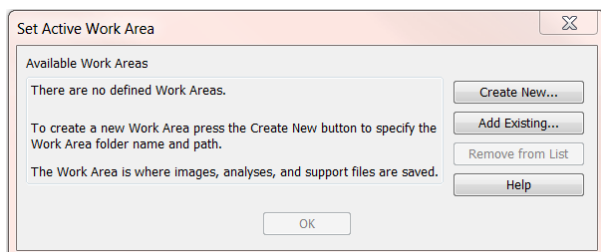
2) In the Name field, type a name for your Work Area. Browse to the location of the **Overall**

folder where you want to save the Work Area, and click **Save**.

Note: *Avoid using the default path in the Set Active Work Area dialog. It's best to create a folder specifically for Work Areas to make it easy to remember where your Work Areas are.*

Remove a Work Area

To remove a Work Area from the Set Active Work Area list, select the Work Area to remove and click **Remove from List**.

- Removing the Work Area from the list does not delete the Work Area folder or its contents from your hard drive.

- You can add the Work Area back to the list using the Add Existing option.

4   Connect to the Instrument

The first time you connect, **power on** the instrument and **wait several minutes** to allow the instrument to establish a network address. The software will discover the instrument automatically.

1) Select the correct instrument in the Instrument Model Selection dialog.

2) Click **OK**.

Image Studio Software will open your Work Area and search for the instrument.

Note: *If the software discovers multiple instruments, you will be prompted to select a specific instrument. Select the serial number of the desired instrument and click **OK**.*
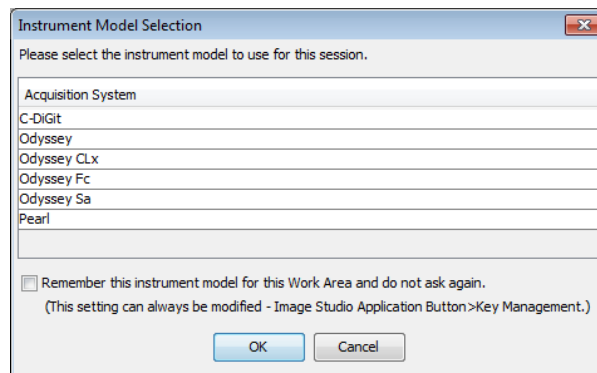
5 Acquire an Image

1) Place a sample on the imaging tray (blots protein-side up) and insert the tray into the imaging drawer.

2) Click the **Acquire** tab, and choose your acquisition settings.
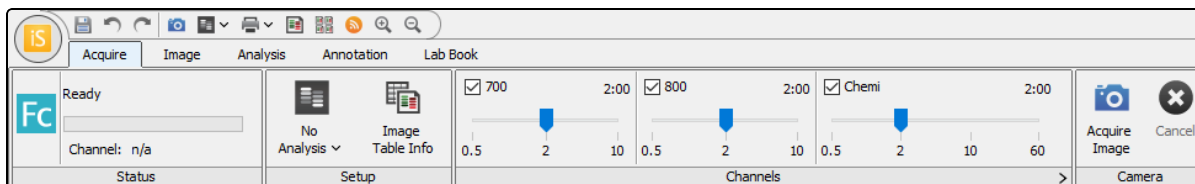
Setup group

Select **No Analysis** from the Analysis Type list.

Channels group

- Select the check box next to the desired channel (600, 700, 800, and/or Chemi) to designate which channels to image.

- Set the Integration Time for each of the selected channels. For typical acquisitions, this can be left at the default value of 2 minutes. Longer exposure times lead to improved signal-to-noise ratios.

Camera group

Click **Acquire Image** to start the scan.

6 Adjust Image Display

Choose Display

After acquiring an image, the **Choose Display** dialog will open. Click the view with the best display.
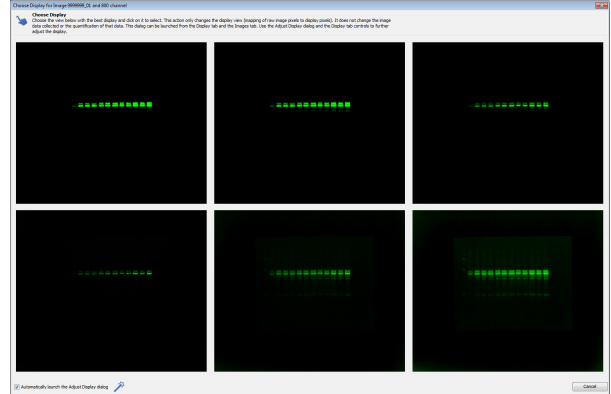

Adjust Display

The **Adjust Display** dialog will open to allow for further adjustments. Click **Dimmer** or **Brighter** to optimize the image display.
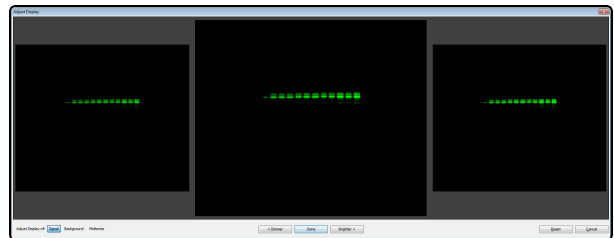
Finer Adjustments

For finer adjustments, brightness and contrast adjustments can be made using the adjustable sliders on the Display panel on the right side of the window.

1) Click **Curves** ⬚ to toggle the view to the Curves Image Display Adjustments.

2) Adjust the three points on the histogram. To view the entire histogram, click the Show All icon.
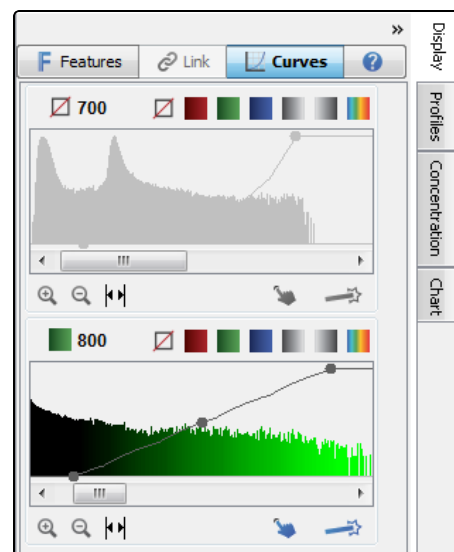
7   Analyze Data

Choose the correct software for your analysis.

Use Empiria Studio® Software for Quantitative Western blot analysis

Empiria Studio software is designed for reliable analysis of **near-infrared Western blots** using publisher guidelines. Empiria Studio uses workflows to minimize user-to-user variation, provides more extensive analysis options, and can compute vital statistical values.

To get started using Empiria Studio, please see the *Empiria Studio Quick Start Guide* or visit licor.com/empiria-support.

Use Image Studio Software for other types of analysis

Use **Image Studio Software** for quick signal quantification and for analyzing images from other assays.

8   Export Zip Files for Analysis

Export a Zip File to transfer images to another computer for analysis. Image Studio Zip Files can be imported into Empiria Studio at the beginning of each workflow.
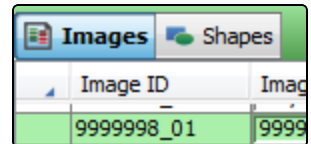
1) Click the **Images** tab and select the image(s) to be exported.

2) Click the **Image Studio Application** button [iS] and hover over Export ⬆.

3) Click Image Studio Files [iS⬆] , then click **Zip File**.
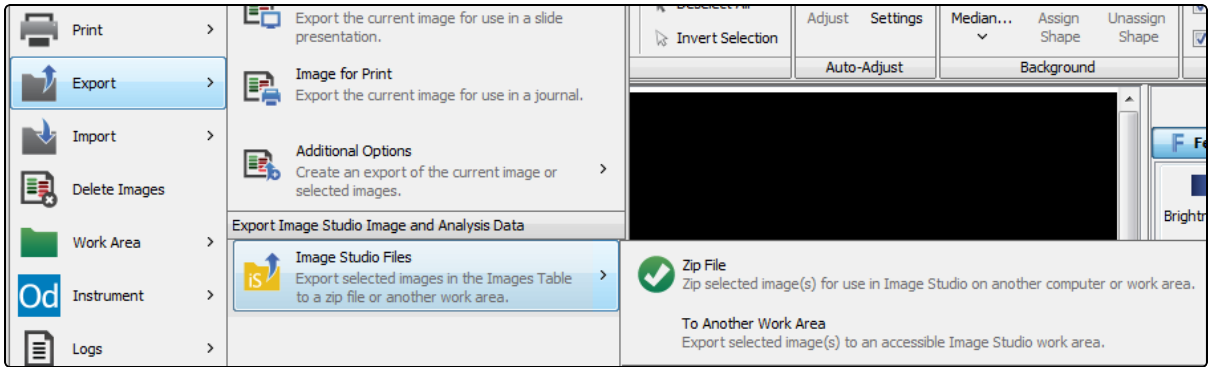
4) Specify where you want the Zip File to be exported, and click **Save**.

9 Export Image for Publication or Presentation

1) Click the **Images** tab above the table, then click on the image to be exported.

2) Click the **Image Studio Application** button and hover over **Export**.

- To export an image suitable for use in a **slide presentation**, click Image for Digital Media.

- To export an image for use in a **journal** or other print media, click Image for Print.

- Ensure the image size is set appropriately for your needs. Click Reset Inches (or Reset Pixels) to set the exported image size to the original size of the image.
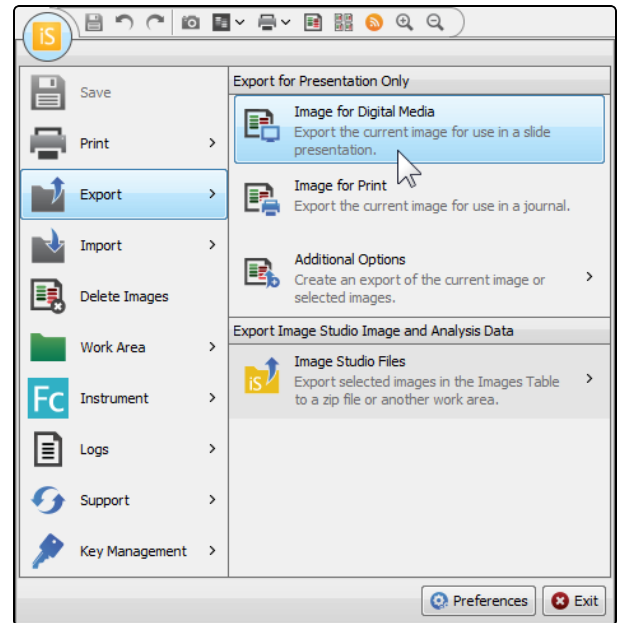
3) Click **Save**.

Note: Is only a portion of the image you want to export showing in the Export dialog? Cancel out of the Export dialog and deselect Apply in the Print/Export group.

10   Export Data

- **Copy and Paste**: Right click selected data in the table you want to export data from, then click copy (or press CTRL+C). Paste the data into a spreadsheet.

- **Export table data to a spreadsheet**: Click **Report** above and to the right of the table view, then choose whether to launch the data in an external spreadsheet program or save the data.

  Use **Options** at the bottom of the Report menu to:

  - Change whether data is saved as a .xls file or a tab-separated text document.

  - Change whether the entire table is exported or just selected rows.

- **Export data and images to a Lab Book PDF**: Open the Lab Book tab.

  - On the far left of the Lab Book tab, click the **Layout Template** list and choose a layout close to what you need.

  - Click **Edit** to choose which images and data will be included in the PDF. The layout and any changes will appear in a layout preview.

  - Click **Header Options** to choose a logo and text to appear at the top of the exported Lab Book page.

  - Click **Page Setup** to change the paper size, page setup, and margins. Use Print Preview to preview how all changes will appear.

  - Click **Save** to save the Lab Book page.

11 Import Image Studio Zip File

1) Click **Image Studio Zip File** on the **Import** menu.
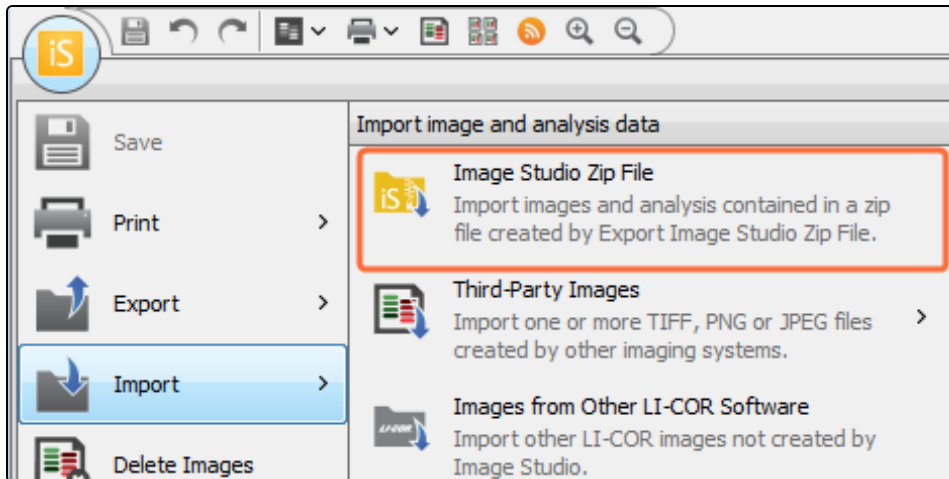
2) In the **Import Image Studio Zip File** dialog, browse to a Zip file and select it.

   Multiple Zip Files can be selected.

3) Click **Open**. The entire file is imported to the current **Work Area**.

Note: *To import images from older LI-COR software, click Import and then click **Images from Other LI-COR Software**.*

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