


iBright™ Imaging Systems

Catalog Numbers A32749 and A32752

Pub. No. 100046504 Rev. B

 **WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from thermofisher.com/support.

Set up after unpacking

Once unpacked and installed, power on the imager and follow the touchscreen prompts to set up a network configuration, enter instrument information, and install the turntable.

Note: For detailed information and safety symbols on this instrument, refer to the iBright™ Imaging Systems User Manual (Pub. no. MAN0015702).

Modes

Invitrogen™ iBright™ Imaging Systems allow users to image in a mode specific to a sample type. Each mode is optimized to produce a high quality image for further analysis and data collection.

Chemi Blots

Mode to image chemiluminescent Western blots.

Fluorescent Blots (FL1000 model only)

Mode to image fluorescent Western blots using a single channel or up to 4 channels using excitation wavelengths of 455-485 nm, 515-545 nm, 610-635 nm, 655-680 nm, and 745-765 nm (not a feature on CL1000).

Nucleic Acid Gels

Mode to image DNA and RNA gels stained with fluorescent nucleic acid stains such as Ethidium Bromide, SYBR™ Safe, SYBR™ Green (I or II), SYBR™ Gold and similar products.

Protein Gels

- Use this mode with the provided white screen to image protein gels stained with colorimetric stains such as Coomassie and silver stains.
- Use this mode with the white screen to image protein gels stained with SYPRO™ dyes.


Note: Protein Gel mode can also be used to image membranes stained with colorimetric stains such as Ponceau S and Thermo Scientific™ Pierce™ Reversible Membrane Stain.

Gallery


Mode to retrieve, analyze, and manage images. Images are saved into a guest gallery or a registered user's gallery.

Get started


If the unit is off

1. Ensure the unit is plugged in and turn on using the switch on the back of instrument.
2. Touch  to sign in to use or set up a user profile.



Note: For those not logged on as a user (guest), acquired images are saved to a guest gallery. Images cannot be transferred between user and guest galleries.

3. From the Welcome screen, choose the appropriate Mode from the drop-down menu, touch **Open Drawer** and place sample in the center of the transilluminator glass.
4. Touch  to close drawer (do not physically push on the drawer). Instrument adjusts and acquires a live-view sample image.

If the unit is on and in active mode

1. Touch  to sign in to use or set up a user profile.

Note: For those not logged on as a user (guest), acquired images are saved to a guest gallery. Images cannot be transferred between user and guest galleries.

2. From the Welcome screen, choose the appropriate Mode from the drop-down menu, touch **Open Drawer** and place sample in the center of the transilluminator glass.
3. Touch  to open drawer.
4. Insert sample into the middle of the viewing area.
5. Touch  to close drawer.

Acquire an image

Image using Chemi Blot

1. Touch **Smart exposure**. View the image preview and recommended exposure time.
2. Based on the image preview, use the controls on the right side of the screen to adjust the exposure time. The image preview will update in real time. To adjust the time:
 - a. Use the + or – to adjust exposure time.
 - b. Finger swipe in the segmented dial to adjust exposure time.
 - c. Touch the center box to select a preset exposure time from a menu.
 - d. Enter a custom time by touching **Custom**.
3. Touch **Capture** to acquire image with the indicated exposure time.

Captured image appears on screen and automatically saves to the gallery.

 - If an acceptable image, touch **Export, Gallery** or **Analyze**.
 - If an unacceptable image, touch **Trash** to remove image, then return to step 2 to adjust exposure conditions.

Image using Fluorescent Blot (FL1000 model only)

1. Assign dyes from the list to up to 4 channels.
2. Touch **Smart exposure**. View the preview image and recommended exposure time.

Two images will display. The top image is the selected grayscale channel, and the bottom image is the color composite of the overlaid, selected channels.
3. Touch **Edit channels**. Select the appropriate channel for editing (displayed in top image location). Toggle eyeballs on or off to display in the composite overlaid image.
4. Based on the image preview, use the controls on the right side of the screen to adjust the exposure time. The image preview will update in real time. To adjust the time:
 - a. Use the + or – to adjust exposure time.
 - b. Finger swipe in the segmented dial to adjust exposure time.
 - c. Touch the center box to select a preset exposure time from a menu.
 - d. Enter a custom time by touching **Custom**.
5. Touch **Capture** to acquire image with the indicated exposure time.

Captured image appears on screen and automatically saves to the gallery.

 - If an acceptable image, touch **Export, Gallery** or **Analyze**.
 - If an unacceptable image, touch **Trash** to remove the entire image file from the gallery (and image tray) or return to step 3 to adjust exposure time(s).

Image using Nucleic Acid Gel

1. Touch **Smart exposure**. View the preview image and recommended exposure time.
2. Based on the provided image preview, use the controls on the right side of the screen to adjust the exposure time. The image preview will update in real time. To adjust the time:
 - a. Use the + or – to adjust exposure time.
 - b. Finger swipe in the segmented dial to adjust exposure time.
 - c. Touch the center box to select a preset exposure time from a menu.
 - d. Enter a custom time by touching **Custom**.
3. Touch **Capture** to acquire image with the indicated exposure time.

Captured image appears on screen and automatically saves to the gallery.

 - If an acceptable image, touch **Export, Gallery** or **Analyze**.
 - If an unacceptable image, touch **Trash** to remove image, then return to step 2 to adjust exposure conditions.
4. (Optional) Band excision can be done by touching **More Options** ▶ **Band Excision** and following the screen instructions.

Image using Protein Gel

For visual stained gels (e.g., Coomassie or silver-stained gels), ensure the white screen is placed under the sample.

1. Touch **Smart exposure**. View the preview image and recommended exposure time.
2. Based on the provided image preview, use the controls on the right side of the screen to adjust the exposure time. The image preview will update in real time. To adjust the time:
 - a. Use the + or – to adjust exposure time.
 - b. Finger swipe in the segmented dial to adjust exposure time.
 - c. Touch the center box to select a preset exposure time from a menu.
 - d. Enter a custom time by touching **Custom**.
3. Touch **Capture** to acquire image with the indicated exposure time.

Captured image appears on screen and automatically saves to the gallery.

 - If an acceptable image, touch **Export, Gallery** or **Analyze**.
 - If an unacceptable image, touch **Trash** to remove image, then return to step 2 to adjust exposure conditions.

Gallery

- Sort and search image files by keyword, date range, and/or imaging mode.
- View image files as thumbnails or a list.
- Select one, multiple, or all image files in the gallery. Select **Actions** to review the selected image file(s) and perform additional functions.
 - Delete a selected image file from the tray by touching **Trash**. **Deleted images are removed from the gallery.**
 - Export a selected image file from the tray by touching **Export**.
 - Analyze a selected image file in the tray by touching **Analyze**.
 - View the image information for the selected image file by touching **Image Information**.
 - Adjust the appearance of a selected image by touching **Image Adjust**.
 - To generate a pdf report for a selected image file, touch **Analyze** ▶ **Next** ▶ **More Options** ▶ **Generate Report**. Report contains images, image information, and densitometry data in table format. Report can be printed to a network printer and/or exported to a USB or network drive.

Export

1. Choose appropriate export destination from the drop-down menu **Destination**.
 - Thermo Fisher Cloud (exported as proprietary G2I file format)
 - USB port
 - Network drive
 - Printer
2. For exporting to a USB drive, network drive, or a network printer, choose the appropriate file type from the menu under **File Type**.
 - Publication (TIFF, JPEG, PNG): Images are exported as 24-bit RGB image files as they appear on the instrument with any image adjustments or false coloring applied. Optimal format for the printing or presentation of images.
 - Analysis (TIFF, G2I): Images are exported as 16-bit raw image files. The exported files represent the raw data with no image adjustments. Optimal format for downstream analysis and quantitation of the image using appropriate external analysis software.

Analyze

- Automatically analyzes selected image file by identifying up to 4 analysis frames and the lanes and bands associated with each frame.
- Automatically saves analysis results and adjustments to the gallery.

iBright™ Analysis Software

Desktop installation system requirements: Windows™ 7, 8, 8.1, or 10 with a minimum of 8 GB RAM.

IMPORTANT! You must be logged into the Windows™ Operating System using an Administrator-type account.

To install the desktop version of the software:

1. Download the iBrightAnalysisSoftware.exe file from thermofisher.com/ibrighanalysis.
2. Double-click on the iBrightAnalysisSoftware.exe file on your computer and follow the instructions in the Setup Wizard.

For access to the Thermo Fisher Cloud version of the analysis software, go to thermofisher.com/cloud.



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Revision	Date	Description
B	12 June 2018	Add install and system requirements
A	13 April 2017	New manual

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