

IMAGING AND ANALYSIS SOFTWARE

Acquiring a Multichannel Image with the ChemiDoc™ and ChemiDoc MP Imaging Systems

Quick Guide

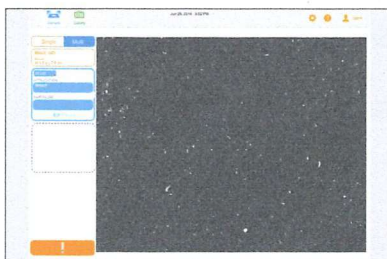
Using the ChemiDoc MP Imaging System, you can acquire data from 1–3 channels in a multichannel image for applications that use blots. Using the ChemiDoc Imaging System you can acquire single-channel images as well as two-channel images consisting of data from a chemiluminescent channel and a colorimetric channel.

When the imaging system is turned on, Image Lab™ Touch Software starts.

Log In

- 1 Tap **Begin** on the touch screen and enter a user name in the New User box.
- 2 If you are prompted to choose whether you want to be an administrator, tap **No**.
- 3 Tap your user name.

A Camera view of the imaging stage appears.

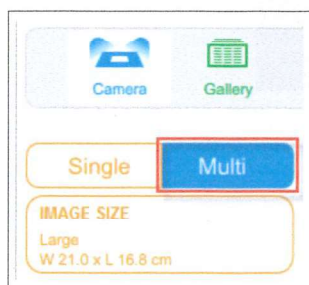


Note: In the following procedures, tap a tile in the left pane to view and select settings for each channel you want to include in the multichannel image. When quick help screens appear, read and then close these screens.

Place a Sample in the Imager

- 1 Center a sample on the blot/UV/stain-free tray.
- 2 Place the tray on the imaging stage and close the transilluminator drawer.

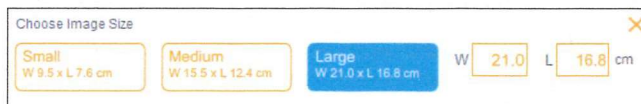
- 3 In the left pane, tap **Multi**.



Choose an Image Size

Tip: For greatest sensitivity, specify an image size large enough for the sample to fill as much of the screen as possible.

- 1 In the left pane, tap **IMAGE SIZE** to display image size options.



- 2 Tap a standard size or enter the image width or length in centimeters. The software calculates the other dimension.

Choose an Application

- 1 In the tile just below IMAGE SIZE, tap **Select** to display categories and applications. The category Blots is already selected.
- 2 Tap an application.

The application name appears in the tile. Filter and illumination source settings appear under the application name.

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(Optional) Change a Channel Color

Tap the color name near the top of the channel tile and tap a different color in the list that appears.

Preview the Image

- 1 Near the bottom of the tile, tap **Preview**.

The imager generates a low-resolution image of the sample and a selection rectangle you can adjust to surround an area of interest.



- 2 (Optional) If a quick help screen appears, read and then close this screen.
- 3 To resize the rectangle, drag a corner.
- 4 To move the rectangle, drag an edge.

Choose an Auto-Exposure Type

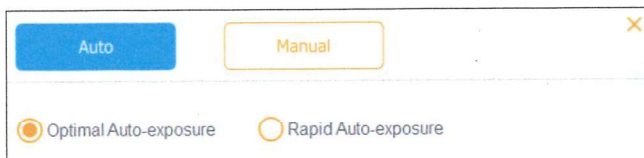
- 1 In the channel tile, under EXPOSURE, tap **Auto Optimal**.

The application category Auto is already selected in the dialog box that appears.

- 2 (Optional) If a quick help screen appears, read and then close this screen.
- 3 Tap **Optimal Auto-exposure** or **Rapid Auto-exposure**.

Optimal — full dynamic range: exposure time is calculated to allow bright bands to be saturated, making faint bands visible.

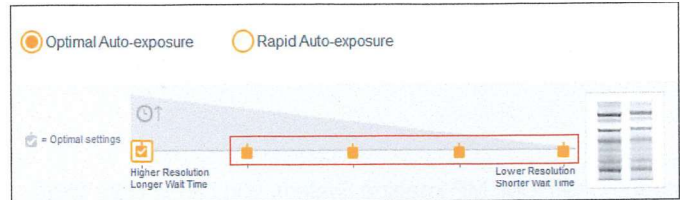
Rapid — exposure time is calculated more quickly without adjusting for faint or bright bands.



Choose a Resolution Setting

Note: Applies to chemiluminescent and low-light applications only.

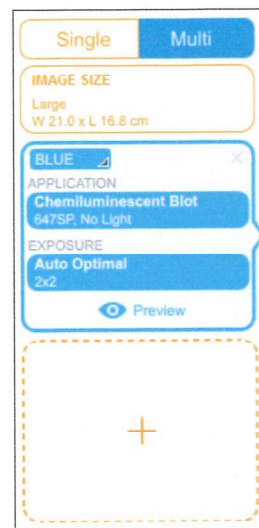
A checkmark indicates the binning setting that offers optimal exposure without compromising resolution for the selected image size and application. Each orange box indicates a preset resolution. When you tap the resolution setting you want, a surrounding box indicates the selected resolution setting.



Choose Settings for Each Additional Channel

When you tap an application for a channel, a plus sign appears in a dotted box below the current channel tile.

- 1 Tap the plus sign in the dotted box and select an application, exposure, and resolution setting for that channel, if applicable.



- 2 (Optional) If a quick help screen appears, read and then close this screen.

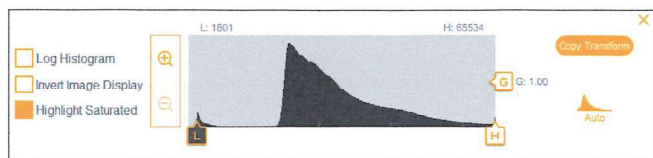
Acquire the Image

Tap the Camera icon at the bottom of the left pane.

Change Image Appearance

You can adjust image transform settings to change the brightness and contrast of the image. The actual data are unaffected.

- 1 Tap **Transform** in the lower toolbar to display transform settings.



- 2 Adjust transform settings to your liking. The system automatically saves your changes with the image.

Export the Image File

The system automatically saves and exports acquired image data as an .scn (single channel) or .mscn (multichannel) file, which can be opened and analyzed using Image Lab Software on a separate computer. You can also export image data in raw TIFF format (16 bit) for analysis using other software. Export image data in JPG or TIFF (8 bit) format for publication-quality images.

- 1 Tap **Send/Save**.
- 2 Under Export Options, tap a file type.
- 3 Above Export Options, tap a destination:

Save to Network — in the dialog box that appears, type the path name to a network folder.

Save to USB Drive — saves the image data to a USB drive connected to the imager.

- 4 Tap **OK** in the Image Exported dialog box that appears.

Find Out More

More information can be found in the following:

- ChemiDoc and ChemiDoc MP Imaging Systems with Image Lab Touch Software User Guide (10000062126)
- Online help topics available on the touch screen. Tap the question mark in the top toolbar of any screen to view relevant help. Tap the Help Topics link at the bottom of any Help screen to view a list of help topics.
- The V3 Western Workflow™ Imaging Target, included in the imaging system accessory kit

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