



EVOS™ FL

EVOS™ FL Color

Imaging Systems for Fluorescence
and Transmitted Light Applications

Catalog Numbers AMF4300, AMEFC4300

Doc. Part No. ZP-PKGA-0494

Pub. No. MAN0007717

Rev. A.0

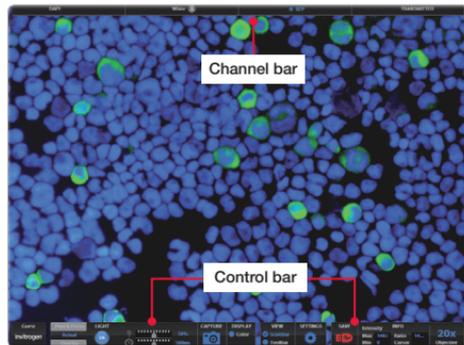


Overview

The EVOS™ FL and EVOS™ FL Color Imaging Systems have two types of controls: manual and onscreen. Manual controls include the stage X-Y axis knobs, focusing knobs, objective selection wheel, phase annuli selector, and the light cube selection lever. Onscreen controls are located in the **control bar** at the bottom of the display screen. The **channel bar** at the top of the display screen shows the selected light cube or transmitted light position.



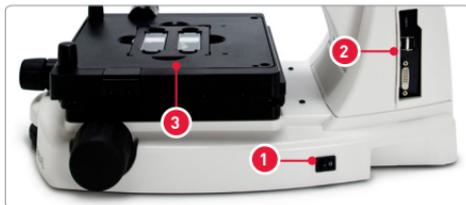
CAUTION! UV HAZARD. Avoid exposure to light beam and use protective shields. NEVER look directly at UV light!



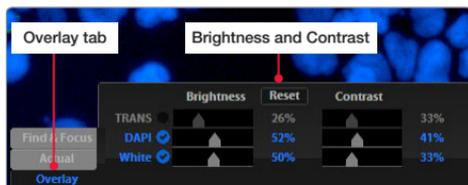
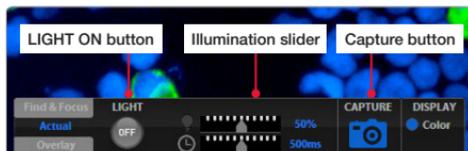
Basic Operation

Note: For detailed instructions, refer to the *EVOS™ FL Imaging System User Guide* (Pub. No. MAN0007988), which is provided on the USB flash drive. You can also download it from the EVOS™ FL Imaging System product page at thermofisher.com.

1. Turn on the instrument using the **power switch 1** on the right side of the base.
2. Plug a USB flash drive into one of the **USB ports 2** on the right side of the instrument.
3. Place the **sample 3** on the stage, using a vessel holder if needed.
4. Set magnification with the **objective selection wheel 4** on the front of the instrument.
5. Pull the **light cube selection lever 5** all the way toward the front of the instrument. The channel bar will highlight the “Transmitted” position.

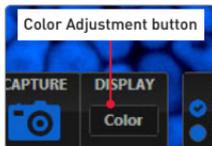
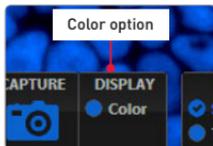


- Turn on illumination with the **LIGHT ON button** located on the left side of the control bar.
- Focus the sample with **focusing knobs** 6.
- Optional:* To take a picture of the transmitted light image, click the **Capture button** on the control bar.
- Place the **light shield box** 7 on the stage, over the sample.
- Move the **light cube selection lever** 5 to the desired fluorescence channel. The channel bar will highlight the selected light cube.
- With the **Find & Focus** tab active, turn on fluorescence illumination using the **LIGHT ON button**.
- Adjust the focus as necessary.
- Adjust the **Illumination Intensity slider** on the control bar as needed.
- Click the **Capture button**.
- Repeat steps 10–14 to capture in each fluorescence channel.
- Click the **Overlay** tab to show all channels in color overlay mode.
- Adjust **Brightness and Contrast** for each channel to bring them into desired balance.
- Click the **Save** button to save the color image (for details, refer to the EVOS™ FL Imaging System User Guide).



Helpful Tips

- ▶ In **Find & Focus** or **Actual Mode**, the **Color option** (for EVOS™ FL, Cat. No. AME4300) can be turned off to display a grayscale image. This often shows more details than a color image.

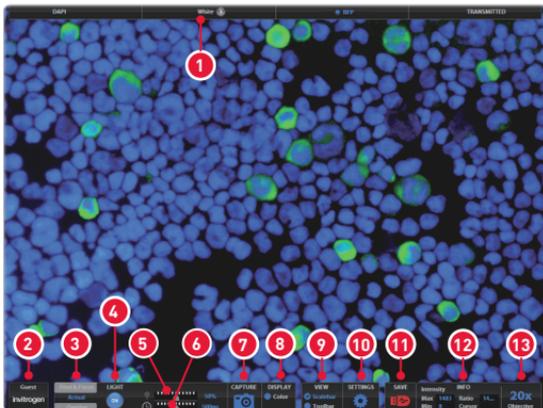


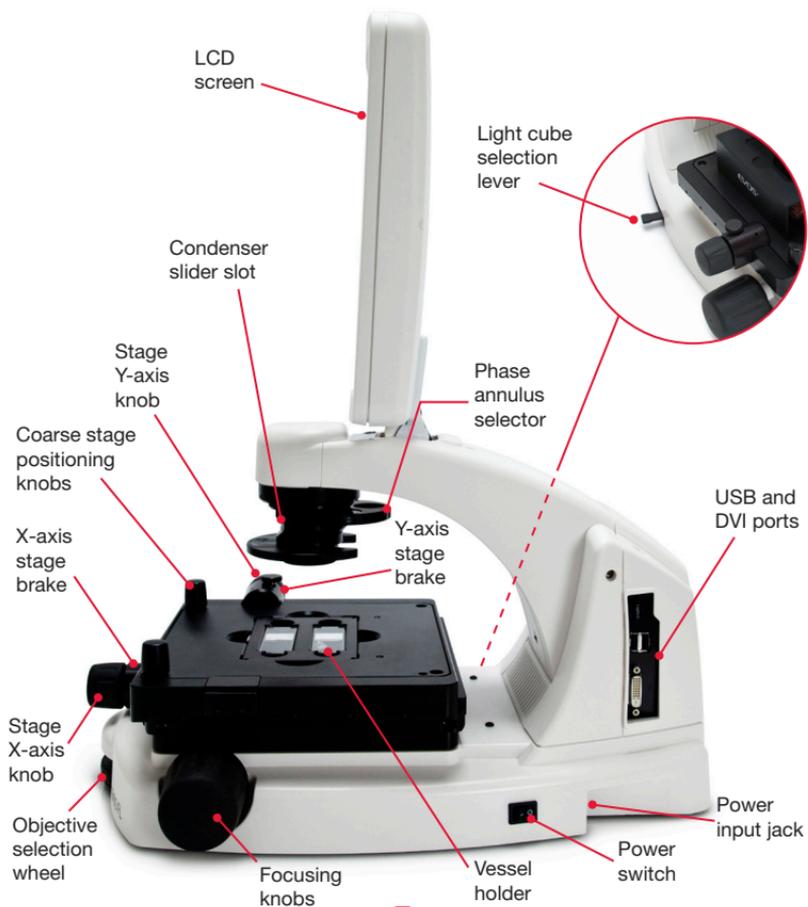
For EVOS™ FL Color (Cat. No. AMEFC4300), use the **Color Adjustment** button to fine tune your live image **Brightness, Contrast, Saturation, and Hue** before capture.

- ▶ In **Find & Focus Mode**, the exposure time is set to 100 ms to assist real-time focusing, moving the stage, etc. The illumination level is approximately 60% of the amount used for image capture to minimize photobleaching and phototoxicity. Clicking **Capture** results in brighter illumination and a longer exposure time during image capture to provide a higher-quality image.
- ▶ In **Actual Mode**, turning on the illumination results in full-powered illumination and actual exposure times for live viewing of the sample. With longer exposure times (more than 200 ms) there will be a lag between moving the focus knob and seeing the focus change onscreen.

Onscreen Controls

1. Active Channel (highlighted)
2. Login Button
3. Control Bar Tabs
 - Find & Focus
 - Actual
 - Exposure Time Slider
 - Overlay
 - Overlay Color Dialogue Box
4. Light ON/OFF Button
5. Illumination Slider
6. Exposure Time Slider
7. Image Capture Button
8. Color Option
9. Scalebar/Toolbar Options
10. Setting Control Button
11. Save Image Button
12. Info Display Bar
13. Selected Objective





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Revision history Pub. No. MAN0007717

Revision	Date	Description
A.0	02 October 2017	Rebrand document.
1.0	18 March 2013	Basis for this revision.

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