EVOS® FL Auto
Imaging System

for Fluorescence and Transmitted Light Applications

Catalog Number AMAFD1000

mercury-free
energy-efficient

life technologies™

For Research Use Only. Not for use in diagnostic procedures.

Overview

The **EVOS® FL Auto Imaging System** is a fully automated imaging system controlled by the integrated EVOS® FL Auto software. The software, accessed by the touch-screen monitor, controls the automated X-Y axis stage and the objective turret, and features standard and advanced imaging and analysis tools.

*Note: The EVOS® FL Auto Imaging System User Guide is provided on the USB flash drive. You can also dowload it from the EVOS® FL Auto Imaging System product page at **www.lifetechnologies.com**.*

Home page of the EVOS® FL Auto software

▶ **Quick Image:** Provides step-by-step instructions for capturing an image in the fastest way possible.

▶ **Capture:** Captures a single image while allowing the direct control of the instrument.

▶ **Scan:** Scans an area to acquire multiple images to build a tiled and stitched image.

▶ **Time Lapse:** Creates and runs time lapse movies based on user specifications.

Setup

1. Unpack the monitor, and plug in the power cord and the USB cable into the monitor.

2. Unpack the computer and accessories. Plug in the mouse, keyboard, and power cord. Connect the monitor and the computer using the USB cable connected to the monitor.

3. Remove the accessory box and the instrument from the shipping box. **DO NOT** lift the instrument by the stage or the condenser arm; lift it by the handholds located in the instrument base.

4. Ensure that the instrument power switch is OFF, and then plug the power cable into the power supply and the instrument. Use the DVI cable to connect the instrument and the monitor, and use the USB cable to connect the instrument to the computer.

5. Remove the shipping restraint by loosening the three thumb screws and pulling the restraint forward, away from the unit.

6. Turn the instrument power switch ON. The automatic X-Y stage will begin to move within a few seconds of being powered on.

7. Once the stage has stopped moving and the windows desktop appears on the monitor, double-click the EVOS® logo (next to the start button) to launch the software.

8. Once the **Home page** is displayed, the instrument is ready to use.

Basic Operation - Quick Image

Note: For more detailed information such as advanced operations (i.e., editing images, creating scan routines, time lapse imaging, etc.) refer to the EVOS® FL Auto Imaging System User Guide.

1. Place the sample on the stage using the appropriate vessel holder.

2. On the **Home page**, click **Quick Image**.

3. Using the **Quick Image Wizard**, enter the following information:

   • **Which Vessel** ❶: Select vessel type

   • **Where to Start** ❷: Select a location to view

   • **Which Lighting** ❸: Select the light paths for preview and capture (you can select multiple paths for the capture overlay)

   • **What Magnification** ❹: Select the objective(s) to preview and capture the image(s)

4. Click **Launch Wizard!** ❺. The system will move to the **Image ▶ Capture tab**, which will display the preview choices selected in Step 3.

5. Adjust the focus and illumination using the **Light** ❻ and **Focus sliders** ❼. The **Light Path buttons** ❽ will allow adjustments to each individual channel.

6. Press **Preset** ❾ to utilize the capture options selected in Step 3. The system will automatically move to the **Image Edit ▶ Overlay tab** to allow for further adjustments to brightness and contrast ❿.

7. Click **Save Image** ⓫. For more information, refer to the EVOS® FL Auto User Guide.
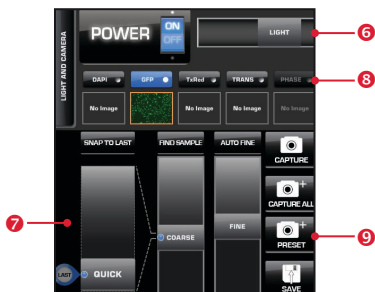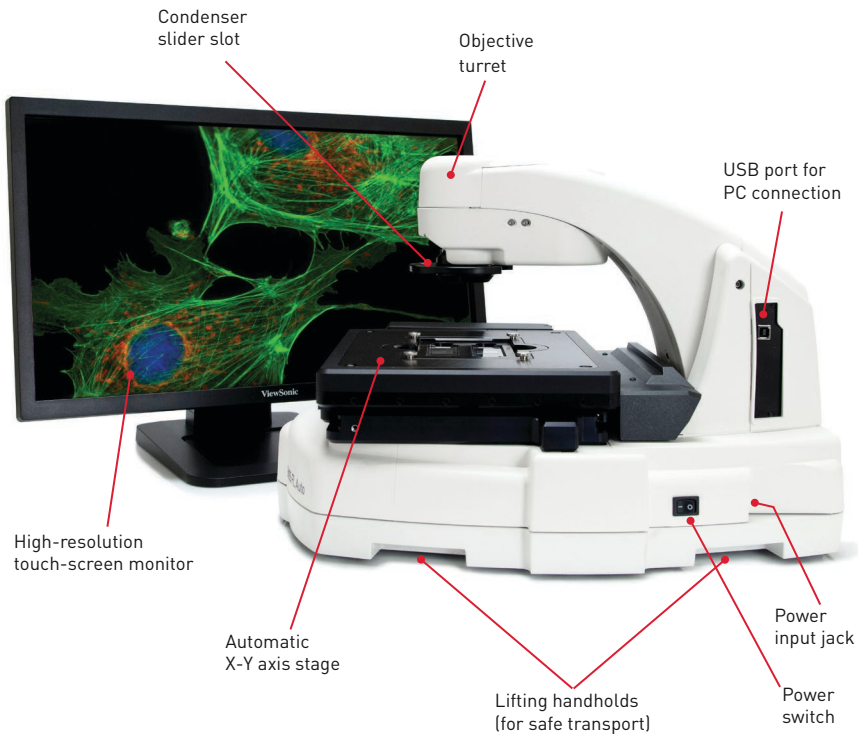
Capture Tab Controls

The controls on the Capture tab can be accessed via the **Quick Image Wizard** (see *Basic Operation - Quick Image*), by selecting **Capture** on the **Home page**, or by clicking the **Image ▸ Capture tab** on any screen.

▸ **Vessel Expert ❶**: Used for selecting vessel type; the **crosshairs ❷** on the virtual vessel are used for choosing a location to view.

▸ **Objective buttons ❸**: Automatically adjust the objective turret for the desired magnification.

▸ **Power button ❹**: Turns the light ON or OFF.

▸ **Light and Camera button ❺**: Selects between *Monochrome* or *Color* cameras. If using the monochrome camera, allows displaying *Pseudocolor*.

▸ **Light Path buttons ❻**: Select between installed light cubes or transmitted light from the condenser.

▸ **Snap to Last ❼**: Auto-focuses on the last position on the z-axis; used for quick focus on similar types of samples.

▸ **Quick slider ❽**: Calculates the focal range where the sample is located based on the vessel selected.

▸ **Find Sample ❾ and Auto Fine ❿**: Automatic course and fine focusing.

▸ **Course ⓫ and Fine sliders ⓬**: Used for manually adjusting course and fine focus.

▸ **Capture ⓭**: Captures the current image on the screen.

▸ **Capture All ⓮**: Captures an image using each of the installed light cubes.

▸ **Z-Stack ⓯**: Captures a series of images in the z-axis.

▸ **Save ⓰**: Saves the captured images.

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*Note: ⓭, ⓮, ⓯, and ⓰ are **Hot Buttons**. Hot Buttons are user-specified, programmable buttons that customize the imaging system. Up to four Hot Buttons can be displayed on the **Image ▸ Capture tab.** For more information, refer the EVOS® FL Auto Imaging System User Guide.*

Condenser slider slot

Objective turret

USB port for PC connection

High-resolution touch-screen monitor

Automatic X-Y axis stage

Lifting handholds (for safe transport)

Power input jack

Power switch

Note: The EVOS® FL Auto Imaging System is a fully automated imaging system; no manual adjustment is required for the objective turret, focusing controls, light cube and camera selection, etc.

EVOS®

Limited Product Warranty

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