



1. Power Button

Illumination is switched on using the power button. A single press for on, and a single press for off. The LED will automatically switch off after approx 20 minutes and the light can be switched on again with a single button press.

2. Focus Wheel

The focus control wheel is a continuous bi-rotational control, delivering the full focus range within a single 360° rotation in either direction. Focus can therefore be achieved quickly regardless of whichever direction the wheel is turned. The press-on fine focus adapter is particularly useful at high magnifications where small focus adjustments are needed.

3. Lighting Arm

The illumination source is a built-in white LED. The LED is located in an adjustable arm that positions the light beam directly over the specimen. The arm can be incrementally raised or lowered for various lighting and contrast effects or rotated upwards to the vertical for clear stage access.

4. XY Slide Indexer

A micrometer XY slide indexer is provided as standard to allow very precise movement of specimen slides for scans, cell counts and other tasks. It can easily be removed (two screws) and the provided slide clips may be substituted if desired. The two bars control the movement of the indexer.

5. Slide Retention Arm

Specimen slides are held in place using a spring-loaded arm which holds the edge of a mounted slide, enabling slide indexing.

6. Lens Carousel

Objective positions are numbered 1 to 3. Position 1 is 10x, position 2 is 40x, and position 3 is the expansion option which may be a blanking plug, a 60x, or 100x oil objective, depending on model. The magnification power is marked on the top of each objective using the number and colour code convention.

7. Magnification Control

Objectives are selected by rotating the magnification knob located in the centre underneath the main body. The selected magnification clicks into position as the red dots align.

8. Battery Compartment

Internal power is made available by the installation of 3 x AAA batteries which are stored underneath the microscope behind a removable cover.

9. External Power

The internal circuitry of the Em1 also permits illumination to be provided by an external USB connector (supplied) in the event that the internal batteries are not available. This allows the Em1 to be powered from a laptop, separate battery pack or solar array. When using the USB cable the automatic cut-off timer is disabled.

10. Illumination Brightness

The viewing brightness can be increased or decreased by rotating the thumb wheel underneath. Generally, the lowest lighting level is sufficient for the 10x and 40x objectives, and a fresh battery pack can deliver up to 1,000 hours illumination.

11. Mounting Bushes

Two standard photographic tripod bushes (1/4" UNC) are provided on the underside of the Em1. This allows the Em1 to be mounted on a wide range of tripods or similar accessories.

