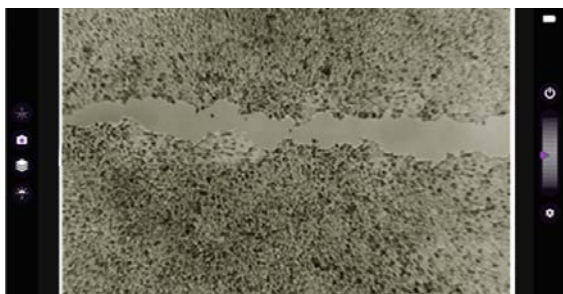




IncuView™ LCI (Live Cell Imaging) Operations Manual

H3565-LCI45 and H3565-LCI180



Introduction:

The IncuView LCI provides users of the Benchmark SureTherm™ CO2 Incubators with a powerful, internal microscope that can be used for basic live cell imaging of samples in well plates, flasks and dishes.

Each time that an incubator door is opened, cells are put at risk of contamination. When cells are removed from the chamber, this risk is increased, along with the added risk of damage due to changes in temperature, CO2 percentage and humidity. With the IncuView, users can monitor their cells from within the chamber, keeping cells healthy and reducing these risks.

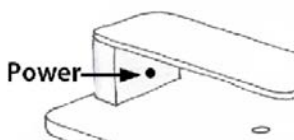
incubator door opened) cells are put at risk. Whether it is contamination or the shock of a new environment,

Installation:

Remove all packaging and place the shelf with pre-mounted microscope into the desired location of the incubator chamber. Locate the micro-USB plug in the back of the chamber and plug into the backside of the microscope.

(NOTE: There are two micro-USB cables in the incubator. This is for users that purchase the IncuView shelves. The cables are identical and either can be used.)

Locate and press the power button (underneath the illumination post).

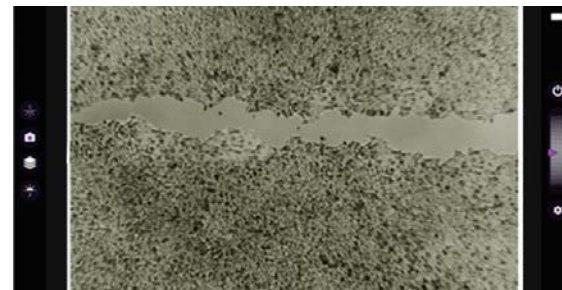


Operation:

- Close incubator door and ensure that the tablet display on the front panel is connected to the micro-USB plug (for power). Turn the tablet display on by pressing and holding the power button (top right side of the display).
- Allow the display to initialize and then open the IncuView application on the home screen.
NOTE: The IncuView application can also be installed onto your personal Android or iOS device. Please contact info@benchmarkscientific.com for details.
- The display will ask that you choose from an available wifi network, choose the wifi network that begins with "iolightxxxx".
- After a few seconds, the captured imaging of the camera should be displayed.
- Open the door and install your sample onto the shelf. Be careful to align the vessel so that the desired viewing area is aligned with the lens.
- Use the adjustment knob beneath the lip of the shelf to do an initial focus adjustment. (Fine adjustments to the focus can later be controlled from the software.)

The door of the incubator can now be closed.

Application Controls:



Illumination from above sample
(can be adjusted from 0 to 4)



Illumination from below sample
(can be adjusted from 0 to 4)



Capture/Save image



Record video



Settings menu (scale grid & power off)



Microscope battery charge level



Fine focus. Press the white triangle on the left hand side of the fine focus thumb-wheel to center focus

IMPORTANT:

Once you have finished using the microscope,

CAUTION: ALWAYS exit the program (settings, power off.) Leaving the microscope on for long time periods (especially with the bottom light activated) can generate heat and effect the sample temperature.

Specifications:

Magnification:	Approx. 200x
Field of View:	1mm fixed width
Resolution:	Approx 2 um
Sample Container:	Flasks, dishes, plates Clear <8mm thick
Illumination:	Top and/or Bottom
Image Format:	5MP (2592 x 1944 pix)
Video Format :	MPEG-4 up to 1296x972 10FPS
Power Supply:	5V

Cleaning and Maintenance:

IMPORTANT! IMPORTANT!

NEVER run a high heat sterilization cycle with the microscope inside the chamber.

ALWAYS remove the microscope shelf before starting any sterilization cycle.

When cleaning the microscope, a 70% isopropyl alcohol is recommended.

ALWAYS, use a soft and clean cloth when cleaning the lens area.



Service and Contact:

In the event that service or technical support is required, please contact Benchmark Scientific by email:

Scientific by email:

info@benchmarkscientific.com or phone at 908-769-5555.