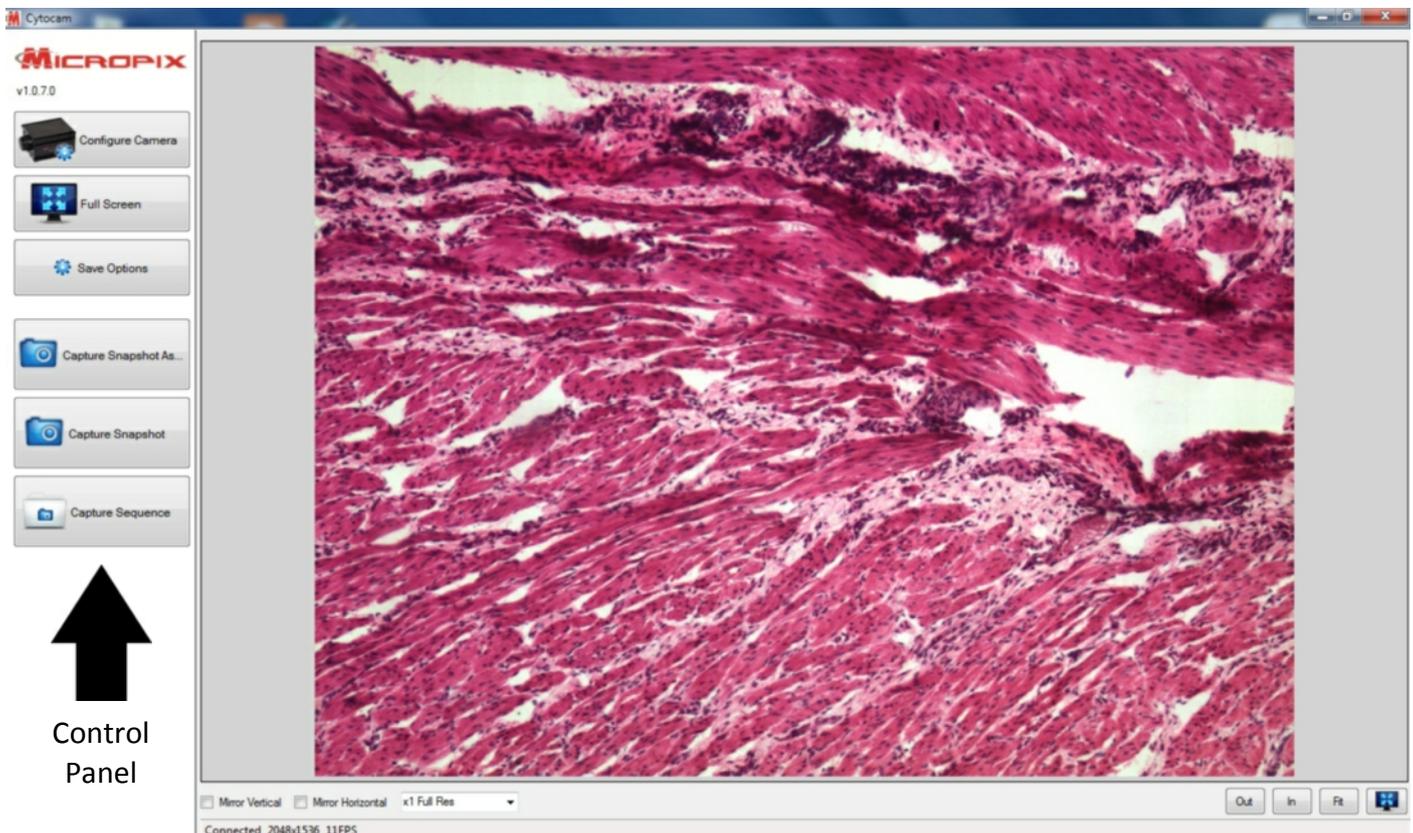# MICROPIX

Cytocam - User Guide

- To start the software go to **Start > Program Files > Micropix > Cytocam**
- Or if you have created a desktop shortcut, double click it.
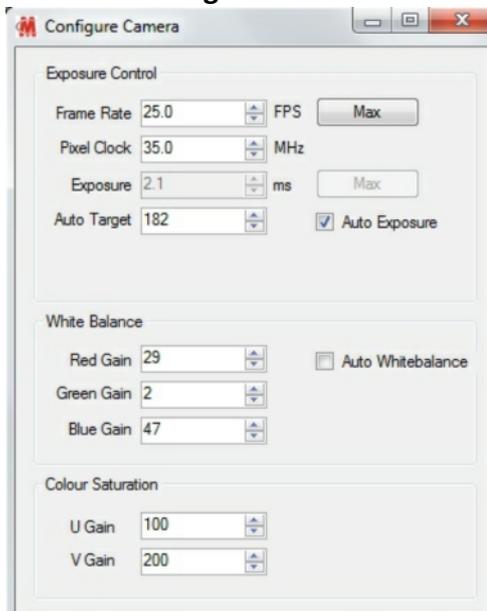- The software will automatically search for your camera and start in Live mode.

Overview

Control Panel

Resolution
Frame rate
Flip image X
Flip image Y

Zoom control

Configure Camera - Camera Controls

Press the **Configure Camera** button to bring up your camera control panel:

Auto Exposure (AE) - tick to turn on. Use the **Auto Target** figure to adjust the image brightness when AE is on. Higher for brighter, lower for darker. When Auto Exposure is off use the Exposure setting to manually control the brightness.

Frame Rate - CMOS cameras only. Set to Max FPS (frames per second) unless you are in low-light conditions.

In low-light conditions: reduce the **Pixel Clock** and **Frame Rate** in order to increase maximum exposure times. The lower the frame rate and pixel clock, the higher the maximum exposure time (see camera specifications for the exposure time range of your camera).

White Balance - go to a blank part of your slide and tick Auto Whitebalance (AWB). After a few seconds the camera will settle on settings for Red, Green and Blue. Untick AWB and adjust R, G, B values manually if required.
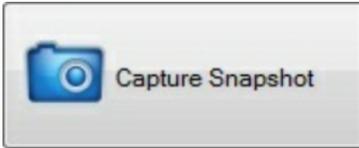
Colour Saturation - used to adjust the vibrancy of Blue (U) and Red (V). Set between 0-200.

Saving an image

There are three ways to capture an image:

Capture Snapshot As... Pressing this button will bring up a dialogue box where you can manually select the destination folder and file name of your image. The file location dialogue opens where you last saved an image.
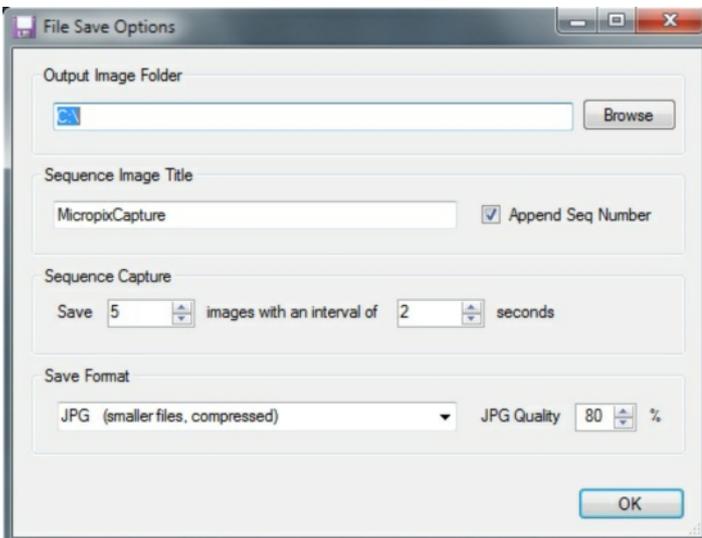
Capture Snapshot Allows one-click image saving. Predetermine the destination folder and file name of your images using the **Save Options** (see below). Useful when capturing multiple images with the same file name (+1).
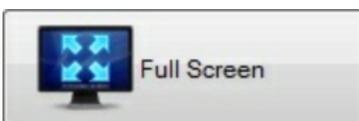
Capture Sequence Begins **Time Lapse** capture as per **Sequence Capture** settings within **Save Options** (see below).

Save Options

● Click **Browse** to determine the destination folder of your saved images. It will be displayed in the **Output Image Folder** box.
● Determine the file name of your images in the **Sequence image title** box. Tick Append Seq Number to use the file name +1 when saving multiple images using **Capture Snapshot** or **Capture Sequence**.
● For **Time lapse** capture, determine the number and interval of images you require before using the **Capture Sequence** button.

Zoom and Full screen

Press the **Full Screen** button on the control panel or at the bottom right corner of the screen to make the live image fill the screen.

Press the **Return to Windowed Mode** button at the bottom right corner of the screen to exit Full Screen mode.
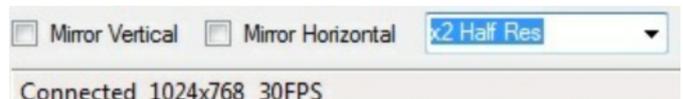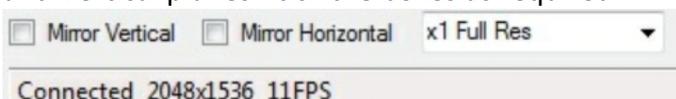
Zoom into the image by cleft-licking your mouse on the image or by pressing **IN**.
Zoom out of the image by right-clicking on the image or by pressing **OUT**.
Press **FIT** to fit the image window to your screen.

Buttons located at bottom right of screen.

Resolution, Frame rate and image flipping

To orientate your camera with your microscope view, you may need to mirror the image in the Horizontal and Vertical planes - tick the boxes as required.

At the bottom of the screen, the resolution and speed (frames per second) of your camera are displayed. If you halve the camera resolution, by selecting **x2 Half Res,** you double the display speed.