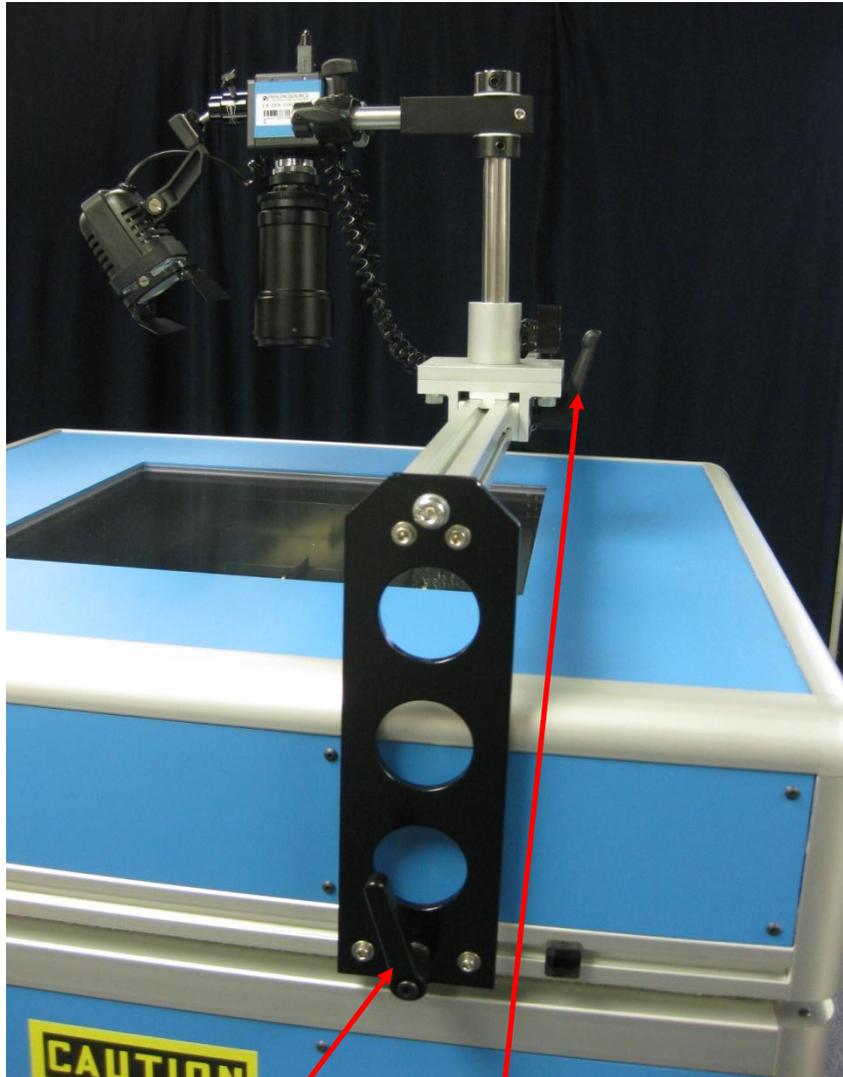


## **PRO 1600 Reflow Oven: Video Recording and Observation Module**

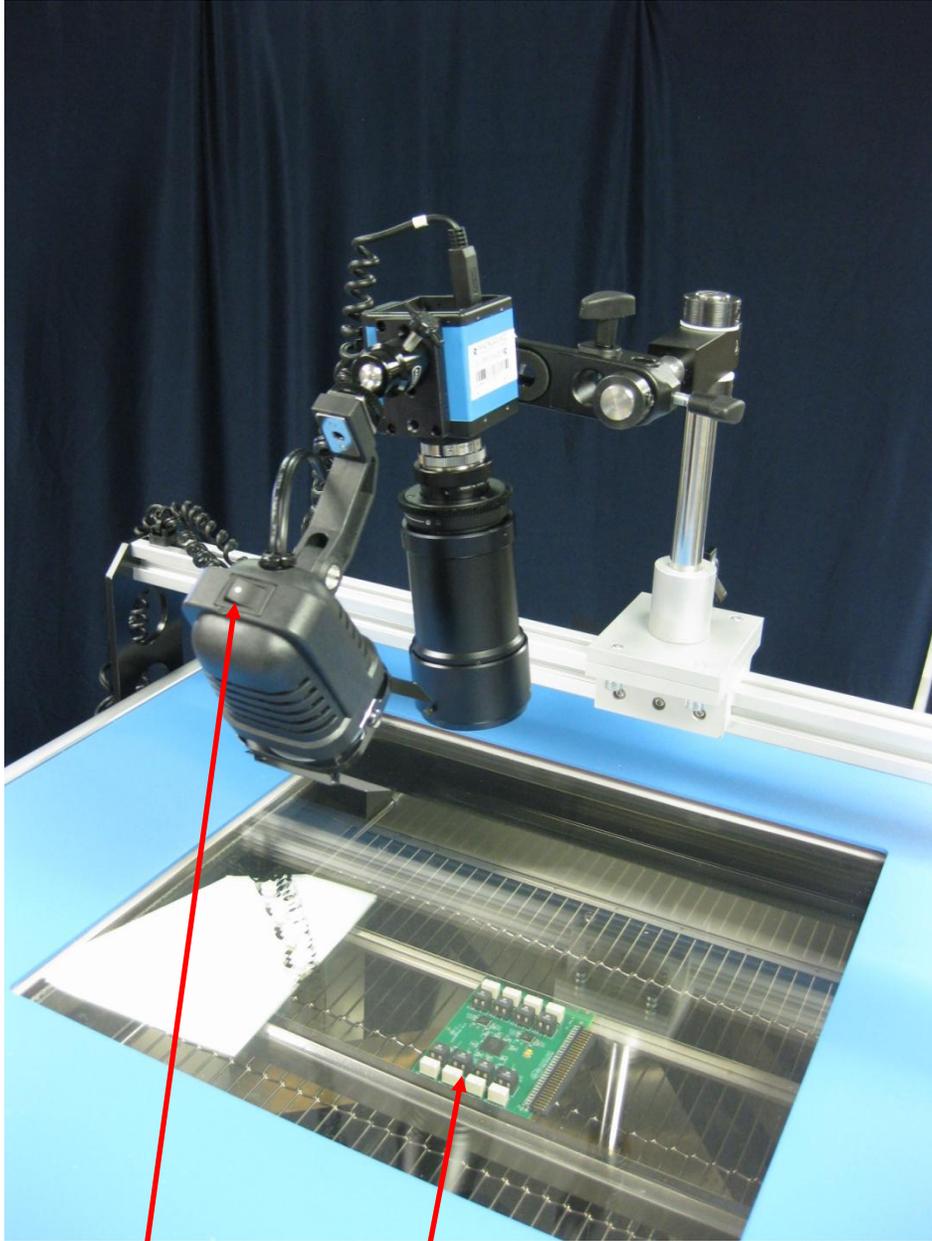
This option allows a top down view of the product / circuit board during the reflow soldering process. The live camera feed, on the IC Capture software screen, provides a magnified view for process observation or video recording. Option contains the following components: dual high temperature glass panels integrated into the cover, adjustable mounting for camera positioning, digital camera, zoom lens with 2X adapter, lighting, notebook PC, IC Capture processing software. Refer to images in Figures 1, 2, 3, 4, 5.



Y axis positioning release / lock

X axis positioning release / lock (shown 1 of 2 – not shown is located on the opposite end of the cover)

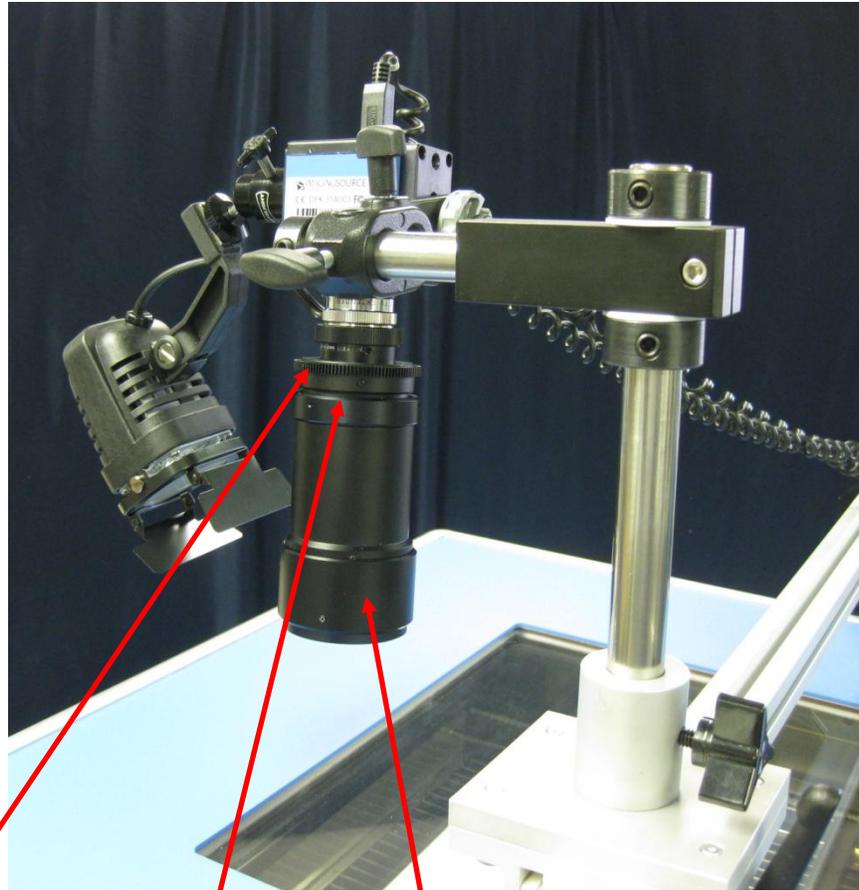
**Figure 1: Overview**



On/Off Light Switch

PCB clamped in the rails of a Double Sided PCB Fixture

**Figure 2: Side View**

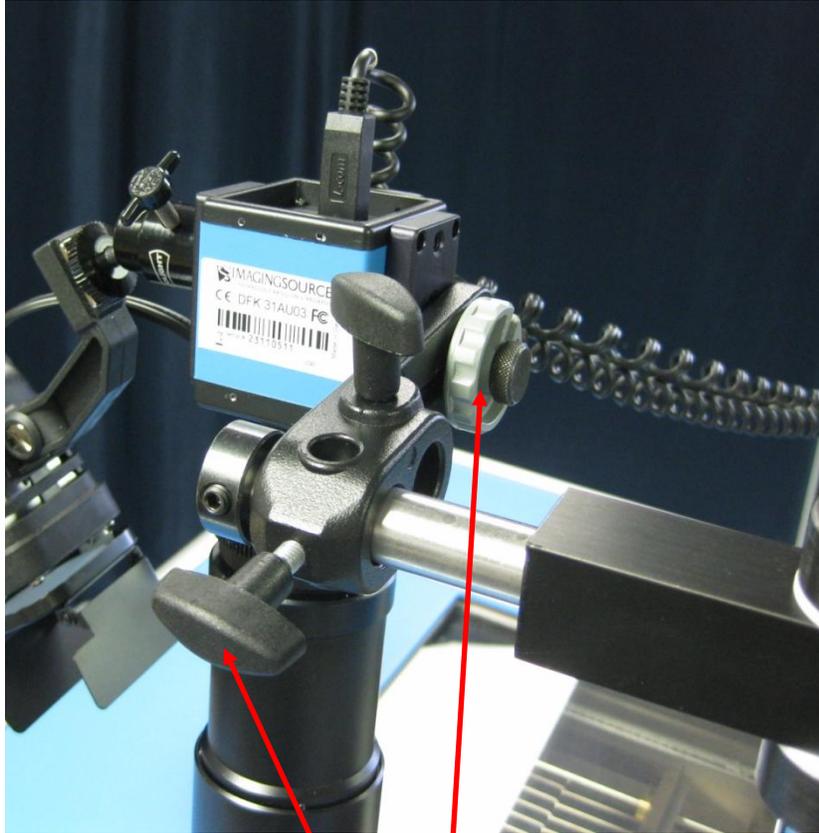


Iris / Light adjustment

Zoom adjustment

Focus adjustment

**Figure 3: Close Up**



Camera angle adjustments

**Figure 4: Close Up**



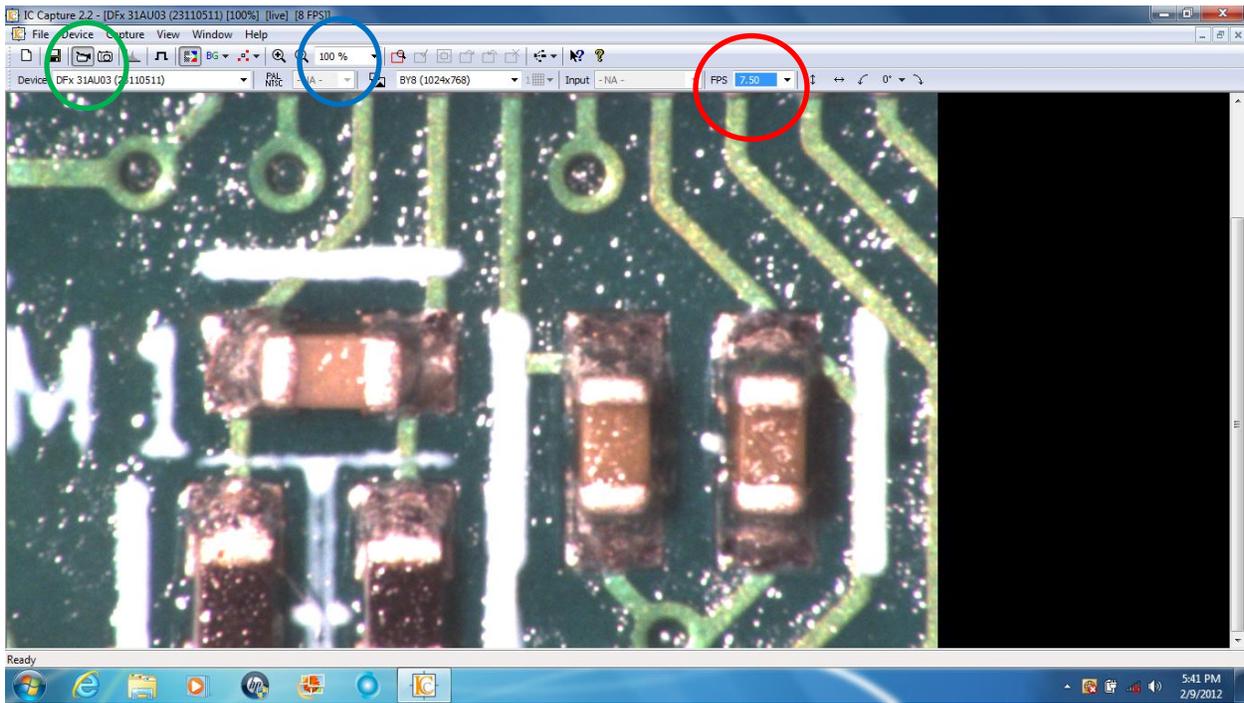
Use plastic cable ties to secure the cables

**Figure 5: Rear View**

## **Operation**

- Prior to initially powering on the oven or after making any position adjustments, make sure that all handles / thumb screws for the camera positioning have been locked in place. Otherwise the camera or associated components may slide off and get damaged.
- Remove the plastic zoom lens cover.
- PCB must be secured in the rails of a Double Sided PCB Fixture when using this option (see Figure 2). Confirm that the 2 socket head screws on each rail are tightened before starting the reflow process.

- In the ovens control software, set the “Lag Time” for an extended period to allow sufficient time for adjusting the camera position and magnification. The recommended Lag Time when using this option is 200 – 300 seconds. Normally Lag Time is set to 15 seconds. This allows sufficient time for the cover to close before reflow is initiated.
- Power up the PC used for this option. Locate IC Capture 2.2 icon on the desktop and double click to load the software. Confirm that FPS is set to 7.5 (circled in red below). With the camera view icon selected (circled in green below) a live video image is displayed on the screen. Magnification of the video may also be increased via digital zoom (circled in blue below).



- Observe caution when touching the lamp since it heats up, especially the metal reflectors.
- The zoom and focus adjustments on a zoom lens should be locked in place with their corresponding thumb screws. This will prevent distortions during the reflow cycle.
- To record a video of the process, go to Capture → Toggle Recording Info Dialog. Record Video File message box will open allowing for setting selection and recording of the video. See screenshot below.

