

Sensor calibration is required if using any tool other than the loline blade holder (i.e. a ball point pen). Calibration is also required to switch back to the loline blade holder after calibrating for a different tool.

Calibrating the Sensor for Contour Cutting

The registration sensor is calibrated for the standard Ioline cutting tool at the factory before shipment. If the registration sensor if ever replaced or if tools other than the standard Ioline blade holder are used for registration, use the following process to recalibrate the sensor:



Figure 33. Print and measure a 1-cm black square on a white background.

Prepare to Calibrate the

Sensor

1.

Print a black 1-cm square on a white background. Use the sensor calibration files, 1cm_square.jpg or 1cm_square. doc, in C:\ Ioline\Calibration to generate the square. Make sure that there is at least a margin of 3 inches from each edge of the material to the edges of the box. Printing the square in the center of a standard sheet of white paper is acceptable. Make sure to carefully measure the square after printing to ensure that it is exactly 1-cm.



Figure 34. Registration tool in jaw.



Figure 35. Press the tool down to verify the tip lines up with the corner of the box.

- 2. Insert the tool that is used during registration into the tool jaw on the carriage. If calibrating for the Ioline blade holder, insert the registration tool (**Ioline PN 105745**) included in the **Accessory Kit**.
- 3. Move the carriage and material so that the tip of the tool is near the lower left corner of the black square.
- 4. Turn the **Speed** knob down to the minimum level and continue to position the carriage and material until the tip is exactly over the corner. Gently press the tool down onto the paper to ensure that the tip is lined up. *See the Figure 35*.
- 5. Press the **Set Origin** button on the keypad and ensure that the keypad light is **Green**.

Calibrate the Sensor

1. Open the Ioline **Control Center**. A shortcut is available in *Start>Ioline*.

X-Axis Intended (in) 40.000 20.000		
Intended (in) Intended (in) 40.000 20.000		
40.000		
Measured (in) Measured (in)		
Calibration Setting Calibration Setting		
1.0000		
Set Calibration Calibration Plot		
Reset Calibration Done		
Sensor Calibration		
Send calibration plot to plotter.		



- 2. In the **Menu Bar**, choose *Calibrate>Calibrate Plotter*... (*Figure 36*.)
- 3. Press the **Sensor Calibration** button at the bottom of the window.
- 4. Ensure the cutter is ready with the tip of the tool positioned over the lower left corner of the black box and a **Green** keypad LED. Press the **Calibrate Sensor** button in the small window that appears. (*Figure 37.*)
- 5. The sensor will automatically perform the calibration process and update the four values in the windows.
- 6. Press **Done** when the process is complete.

🐨 Sensor Calibrati	ion _ 🗆 🗙
Sensor Ofsets-	
× Forward	7354
X Reverse	6158
Y Forward	8194
Y Reverse	7066
Calibrate Sensor	Done

Figure 37. The Small Sensor Calibration window.

7. Perform test registration cuts to verify that alignment is correct. If it is not, check that the black box is exactly 1-cm then repeat the procedure again. Contact Ioline Customer Service if calibration is unsuccessful.