

Summa nv Rochesterlaan 6 8470 Gistel Belgium

OPOS-X Sensor Calibration

This procedure explains how to adjust the potentiometers controlling the OPOS sensor found on the cutter head.

Required tools

Small flat head screw driver

Calibration Jigs, part number 1NC40-67031:

- Philips screw driver #0
- Height Adjustment Tool
- OPOS Calibration Sheet



Procedure

First reset the potentiometers to their default settings. For this we need to have access to the potentiometers. They are hidden behind the cutter head cover. Remove the knife holder from the tool shaft. Remove this cover (mounted with two screws).









We also need to monitor the reflection values of the OPOS sensor. The value can be seen from the OPOS monitor screen:

- 1. Power on the cutter.
- 2. Click "Settings".
- 3. Click "More" to move to the next page.
- 4. Click "OPOS".
- 5. Click "More" to move to the next page.
- 6. Click "OPOS monitor".

This will cause the OPOS sensor to be lowered, and activated: a white light spot will be projected, which is then reflected by the media (the OPOS calibration sheet) put under the sensor.

Reset the potentiometers to their default settings:

- 1. Turn R6 clockwise for 15 turns.
- 2. Turn R7 clockwise for 15 turns.
- 3. Turn R6 counterclockwise for 7.5 turns (this sets the potentiometer halfway).
- 4. Slide the gray part from the OPOS calibration sheet under the OPOS sensor.
- 5. Adjust R3 until the value is 550.

Fine-tune the reflection values as described on the OPOS calibration sheet:

- 1. Put the sensor over the white area, and turn R6 until the value displayed is 120.
- 2. Put the sensor over the black area, and turn R7 until the value displayed is 1940.
- **3.** Move the sensor over the grey area, and check if the value is between 400 and 700.
- 4. If not, adjust R3 until the value is 400.
- 5. Repeat the steps 1 to 4 until all the values are within specifications.

Put the cover back on the cutter head.





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Notes

- R3 controls the brightness of the LED and is checked over the grey area.
- R6 controls white level.
- R7 adjusts the sensitivity and influences the black level.



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