

OPOS X with reflective media on SummaCut

Introduction

The optical sensor which detects the markers sends out a white light. This light is reflected on the media and is picked up with the OPOS receiver.

When using high reflective material then the light will completely be reflected and will be seen as black. This can be compared with a copy machine. When copying a mirror sheet then the copier will output an almost black page. Covering this page with a yellow transparent sheet will result as this reflective sheet being seen by the copier as a light gray sheet.



This procedure describes how to apply a yellow optical filter (reference MI9904) to the OPOS X sensor for use on reflective media.



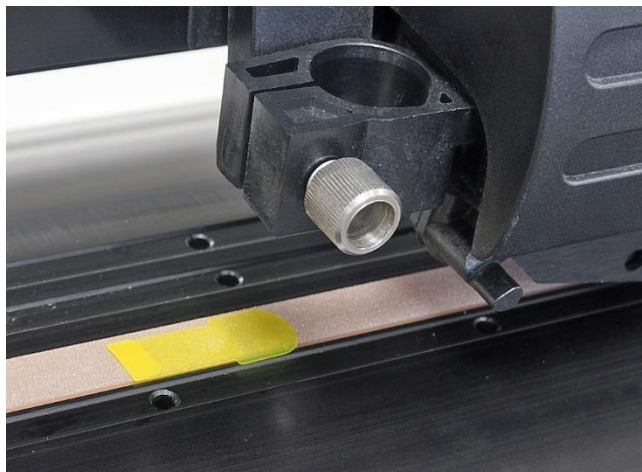
Apply yellow filter

1. Switch the machine off.
2. Remove media from the machine.
3. Remove the knife holder from the tool clamp.

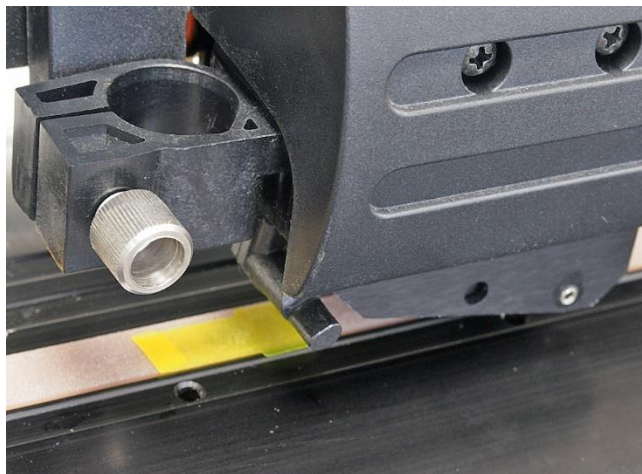
4. Bend the small end of the filter for about 3 mm.



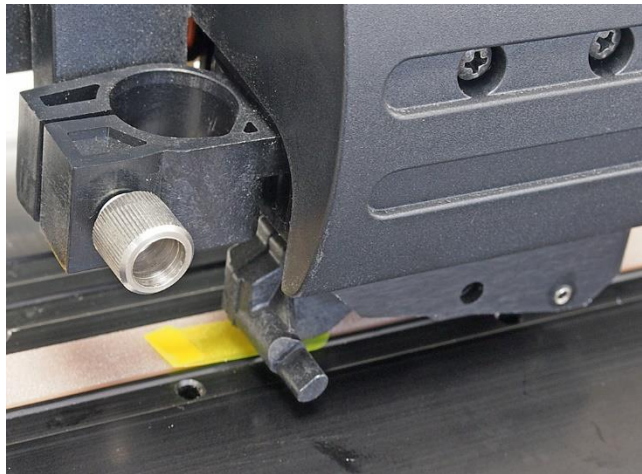
5. Position the yellow filter on the cutting strip with the sticky side up as is in below picture.



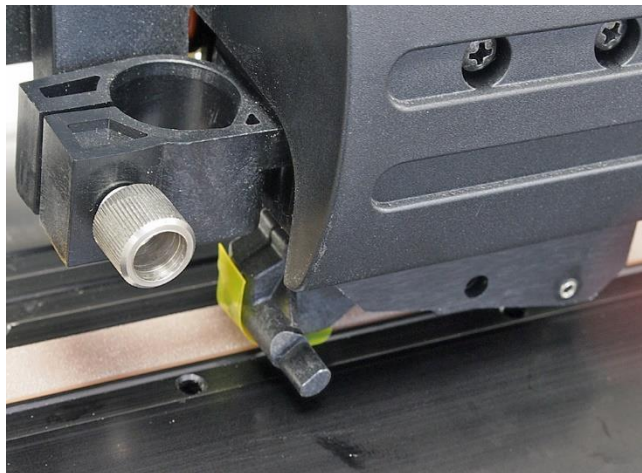
6. Move the OPOS sensor on the cutter head above the wide part of the yellow filter.



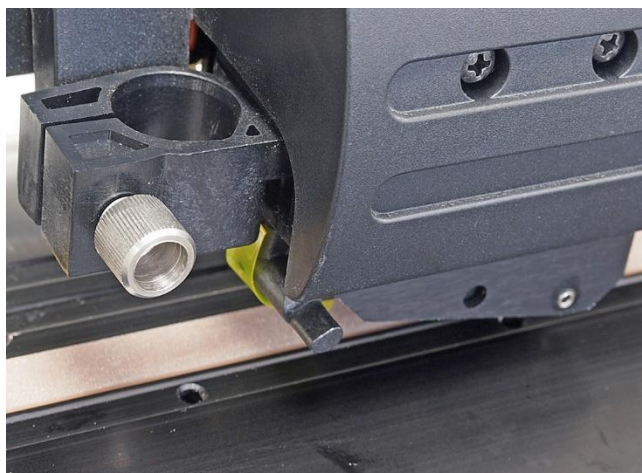
7. Lower the OPOS sensor.



8. Bend the filter up and stick the end of the filter to the housing of the OPOS sensor.



9. Lift the OPOS sensor.



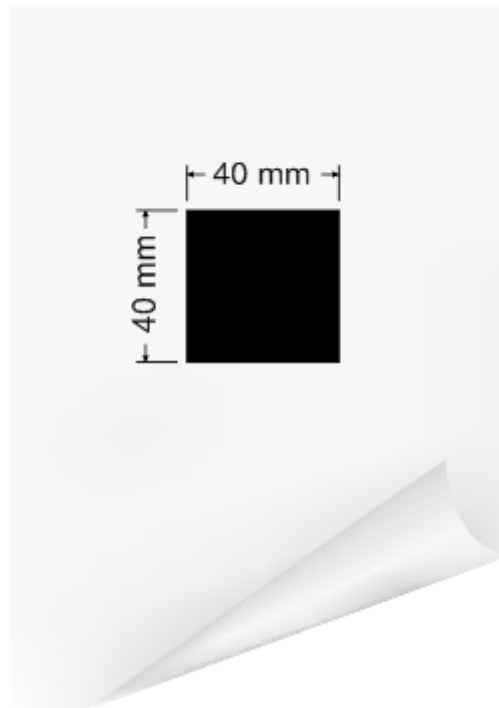
10. Put the knife holder back in the tool clamp.

Next step is to define the sensitivity of the OPOS sensor. This requires to run the “Media Calibration” test.

Media calibration ensures that the sensor is able to recognize the markers. The OPOS sensor is calibrated at the factory to work on a wide range of media. However, certain media -- such as those with a high gloss -- may not work with the default settings. Before working with such materials, perform a media calibration test. This test will alter OPOS’s sensitivity so that it will read the markers with greater reliability. The sensitivity setting is then stored in the current configuration setting. Eventually change to another configuration setting (there are 8 different configurations possible) before adjusting the OPOS sensitivity.


















Print OPOS test sheet

Print a square measuring at least 4x4cm on the media that will be used. Be sure to use the same ink and media that will be used when creating the registration markers and design. Laminate the test sheet in case the final design also features lamination.



NOTE: It is not recommended to do media calibration for OPOS. If the media calibration is done and results are not better, then set the media calibration value again to default : 60 (see further in the procedure how).

Calibrate OPOS sensitivity













11. Turn on the cutter and load the (laminated) vinyl with the printed square.
12. Press  .
'KNIFE PRESSURE' appears on the front panel.
13. Press  .
'SYSTEM SETUP' appears on the front panel.
14. Press  .
'ACTIONS' appears on the front panel.
15. Press  or  until *'CALIBRATIONS'* is displayed.
16. Press  .
'CAL. MEDIA' appears on the front panel.
17. Press  .
'MEASURE' appears on the front panel.
18. Press  .
'PUT SENSOR ON WHITE AREA' appears on the front panel.
19. Use , ,  and  to maneuver the sensor on top of a white area (the area should be at least 3 by 3 cm or 1" by 1").
20. Press  to confirm.
The cutter will make a circular movement while it measures the reflection of the media. It will briefly display the measured values and display the message *'PUT SENSOR ON PRINTED AREA'*.
21. Use , ,  and  to maneuver the sensor on top of a black area (approximately in the middle and slightly to the bottom right).

22. Press  to confirm.

The cutter will make a circular movement while it measures the reflection of the marker color. It will briefly display the measured values, and then it will show a value that is characteristic for this media color – marker color combination. Store this value for future reference.


Set OPOS sensitivity


To set the sensitivity of the OPOS sensor to a known previously recorded value, then use this procedure:

1. Turn on the cutter and load the (laminated) vinyl with the printed square.
2. Press  .
'KNIFE PRESSURE' appears on the front panel.
3. Press  .
'SYSTEM SETUP' appears on the front panel.
4. Press  .
'ACTIONS' appears on the front panel.
5. Press  or  until *'CALIBRATIONS'* is displayed.
6. Press  .
'CAL. MEDIA' appears on the front panel.
7. Press  .
'MEASURE' appears on the front panel.
8. Press  or  until *'SET'* is displayed.
9. Press  .
*'CURRENT=*xx' will appear on the front panel. xx represents the current value.*
10. Use  or  to set the sensitivity to a known value for the media used.



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11. Press  to confirm.
An asterisk (*) will precede the value indicating the active value.

12. Press  twice to leave the menu.

Revised November 10, 2020