

Calibrate Paper sensor - CLP 8301 large paper gap, 4mm or more

Unlike the rest of our printers, the CLP 8301 and 9000 series printers calibrate the paper sensor using the actual label and not the backing paper. This usually works well but when a customer wants to use labels with an un-usually wide gap, usually 4mm and more. The printers will error in many cases, usually with a paper out message or similar.

While we would like the printers to be changed so they calibrate using backing paper, just like the other printers in our range, it is unfortunately not possible. The printers were designed to calibrate with the labels and the type of changes needed could have an adverse effect (probably very small) on the printer's ability to see the page gap, generating additional support calls.

Work around

We have therefore developed a "work around" which we have tested a number of times on different types of media, using various sizes of gap between pages/labels etc. The tests have been found to work very well using the standard European yellow backing paper. However we have also found, using certain types of white backing paper, it may not work. Generally, this is because it is not possible to get a big enough voltage jump between the label and the backing paper.

Therefore with backing paper between the paper sensors (**completely opposite to the standard CLP 8 and 9 calibration process**)

1 - Remove one label from the backing paper. Do an "Auto Calibration" using the **BACKING PAPER** in this case (not label)

The boxes below represent what you will see on the control panel after power on and the process of going to Auto calibration.



READY

Press mode and see

PAGE SETUP

All the buttons with yellow text become active

Press the up or down buttons (yellow text) until you see

SYSTEM SETUP

Press Select then up or down until

AUTO CAL MODE

Press select and see

AUTO CAL
Yes No

Move flashing cursor under yes – press select
Printer makes a noise and moves paper about 2cm

Panel shows "call end" if successful or "unable to setup" if not

2 - Without turning the printer off OR moving out of the "System setup" menu, go to Sensor Monitor (up or down in the menu but quite close), it should show about 1 volt, record the actual figure. Leave this on the screen.

SYSTEM SETUP

Press up or down

SENSOR MONITOR

Press select

MONITOR
1.0V

2 - Approx value with backing paper

MONITOR
0.2V

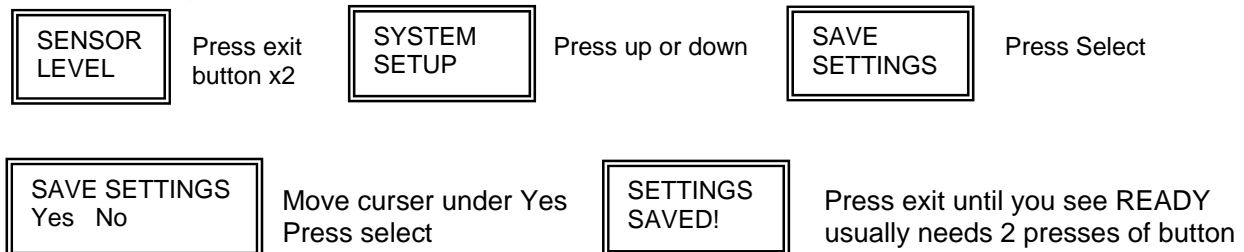
3 - Approx value with the label between the sensors

3 - Open the print head, keeping the sensor arm down, slide or move the media until a label is under the sensors. The Sensor monitor should now show a voltage of about 0.2v, record the actual figure.

4 - Now go to Sensor level, next option in the list, up or down in System Setup. Re-adjust the sensor level to about half way between the two points i.e. about 0.6v. Press select, screen returns to Sensor Level

As a test, press the Feed button to ensure the printer sees the page break correctly. Then make sure you save the new setting. This process has been tested out to about 20mm gaps and has worked every time. We are sure it will work on wider gaps as well if needed.

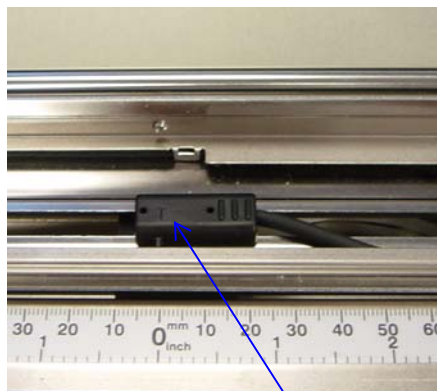
To save settings from this point:



Paper sensors

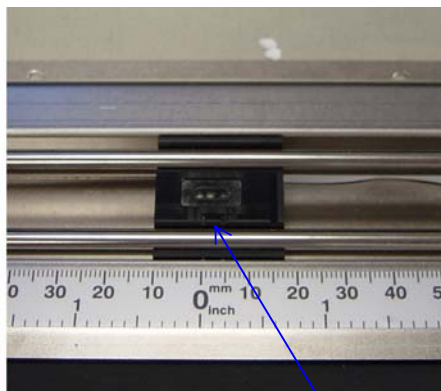
As a little reminder we have added a picture of the upper and lower sensors as a guide to where the markings are.

Upper sensor



Notice the T and small pointer in front of it, referred to as the pip in some of our conversations and documentation

Lower Sensor



Notice the T & R here. Make sure the T is lined up to the same point on the numbered scale

Notice the pointers (or engraved T's) in both pictures are lined up to the zero using the marked scale of the printer. As long as the sensors are in line with each other, the pair can be moved to almost any point across the above graduated scale, except past 60mm on the right side, due to the upper sensor arm assembly