CITIZEN

Calibrating the paper sensors on the CLP 8301 and 9000 series printers.

These printers use an automated setup routine to recognise the various types of paper. You can set them for Transparent (or See Through) backing paper, None (continuous paper), Reflective (black mark or line) and Notch (hole or slot in the label). However even when "None" is selected, in the CLP 8301 printer, the paper sensors must still be in line with each other (see **Paper sensors** below), allowing the printer to detect "end of paper" when it runs out. The CLP 9000 series has dual adjustable sensors, removing the need to check the sensors are in line with each other.

The Printers default setting is Transparent or See Through sensor. If the paper is loaded and the Feed button is pressed, the paper should feed through to the front edge of the first full label every time. If it does not, the sensors are either not setup correctly, not in line (CLP 8301) or possibly faulty (we rarely see a faulty sensor).

Make sure the **"actual label"** is between the two halves of the paper sensor (completely opposite to other CLP printers in our range). The boxes represent what you will see on the control panel after power on and how to get to the Auto Calibration process.

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 curser 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

If the printer cannot calibrate, check there is paper between the sensors and the sensors are in line with each other, if you are using the CLP 8301.
If OK (cal end showing), Press the Feed button to ensure the printer sees the page break correctly. Then make sure you "save" the new setting.

To save settings from this point:

CAL END → Press exit button x2 → SYSTEM SETUP → Press up or down → SAVE SETTINGS → Press Select

SAVE SETTINGS Yes No → Move curser under Yes Press select → SETTINGS SAVED! → Press exit until you see READY usually needs 2 presses of button

If the backing paper is a very similar colour to the label or possibly white, rather than the more normal yellow colour, the automatic calibration mode my not be able to set up the sensor accurately the first time around and so, when pressing feed, the sensor may still not be sensitive enough to detect the page break.

If this is the case, go back to System setup and then to Sensor Monitor, move the label/backing paper through the sensor manually and check the two voltages shown, **the print head can be opened during this process**.

SYSTEM SETUP	Press up or down	SENSOR MONITOR	Press select
MONITOR 1.1V 356	Approx value with paper	MONITOR 2.4V 998	Approx value just backing paper

First voltage; with the Label between the sensors– make a note of this
Second voltage; with the backing paper between the sensors – make a note of this
All CLP printers need a definite voltage step between the label and the backing paper, usually at least 1.5 volts.

Next go to Sensor Level, still in System setup, it would normally show a voltage of about 1.5volts. Change the voltage setting, moving it lower, to something around 0.9volts or less and test it again.

SYSTEM SETUP	Press up or down	SENSOR LEVEL	Press select
LEVEL 1.5V	Change too	LEVEL 0.9V	Press select - This change should produce an Approx voltage jump between the label and the backing paper of close to 1.5v

Our testing has shown a setting of around this voltage is a good average when using the more specialised or very thin backing papers. If the media is quite long the Maximum media length may need to be adjusted as well as the printer defaults to 4" (100mm.)

Test the printer without **turning it off. If every thing works,** go to Save Settings **in the menu system.**

To save settings from this point:

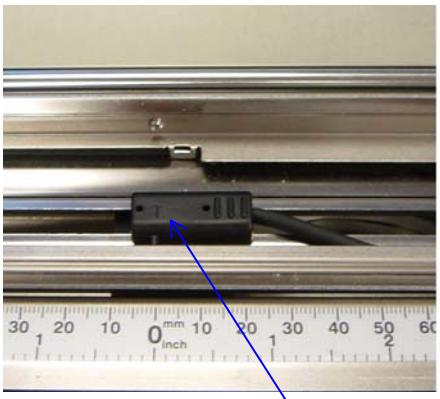
SENSOR LEVEL	Press exit button once	SYSTEM SETUP	Press up or down	SAVE SETTINGS	Press Select

SAVE SETTINGS Yes No	Move curser under Yes	SETTINGS SAVED!	Press exit until you see READY

It is a good idea to turn the printer off and back on again at this point. Press Feed one more time to test every thing is still working.

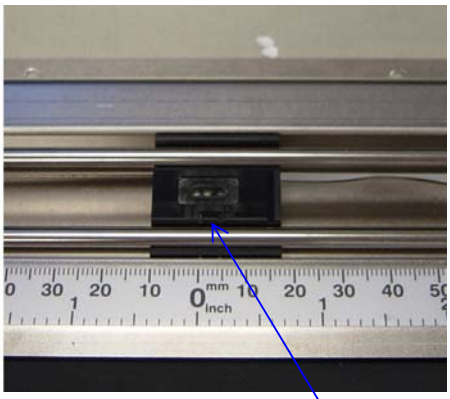
Paper sensors
As a little reminder we have added a picture of the upper and lower sensors as a guide to where the markings are.

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 in 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