What is a Sensor Threshold setting?

To ensure accurate feeding of labels, the Citizen CLP 621 printers attempt to detect the start and end of each label by shining a light through the media onto a sensor. Where there is a gap between the labels as they are mounted on the backing, more light is able to shine through and is registered by the printer as an increased voltage on the sensor. The sensor threshold setting tells the printer how strong the penetrating light must be to trigger the sensor.

Why do I need to adjust the Threshold setting?

Because different materials, or even the same materials from different manufacturing batches, may differ in opacity (the extent to which they permit light to pass through). A sensor adjust operation calibrates the printer to detect the light level (within a certain tolerance) that signifies the inter-label gap for the current media, so a change in media may require recalibration.

When do I need to adjust the Threshold Setting?

Whenever your printer is stopping with the "PAPER JAM" error without there being any apparent obstruction in the media. This is most likely to occur immediately after loading new media but can occur mid-roll.

How do I adjust the Threshold Setting?

By following the simple procedure outlined below.

LINE UP THE SENSOR ELEMENTS

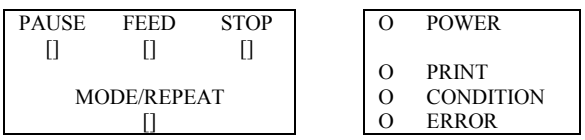
The sensor on the Citizen CLP621 consists of moveable upper and lower elements. If these are not properly aligned a feed error is caused. To ensure correct alignment:

1. Open the print head.
2. Ensure the point of the white triangle on the upper sensor element is aligned with the white notch on the lower sensor element. Move one or other of the elements if necessary to achieve proper alignment.

If these were NOT aligned properly then after adjusting them test the printer again, this may have cured the problem. Otherwise proceed to Manual Threshold Setting.

MANUAL THRESHOLD SETTING

Manual threshold adjustment is achieved using the buttons and indicators on the front panel of the printer. Locate these on your printer then proceed as follows:



Keys *LED Indicators*

1. Switch OFF the printer.
2. Press the [PAUSE] + [FEED] + [STOP] keys simultaneously and hold in whilst turning the printer ON.
3. Release the keys as soon as the printer beeps.

4. The CONDITION and PRINT lights should illuminate.
   If the PRINT LED is **flashing** the printer is currently in REFLECTIVE sensor mode – **GO TO 5**.
   If the PRINT LED is **steady** the printer is currently in TRANSMISSIVE sensor mode – **GO TO 6**.

5. *(Perform this step only if the PRINT LED was **flashing** at **4.**)*
   Change the sensor setting to Transmissive mode, ie:
   Press and hold the [MODE/REPEAT] key and press the [STOP] key once (release both keys).
   Buzzer sounds once and PRINT LED is steady – printer is now in TRANSMISSIVE sensor mode.
   GO TO 7.

6. *(Perform this step only if the PRINT LED was **steady** at **4.**)*
   Refresh the sensor by toggling between sensor modes, ie:
   Press and hold the [MODE/REPEAT] key and press the [STOP] key once (release both keys).
   Buzzer sounds twice and PRINT LED flashes slowly – printer is now in REFLECTIVE sensor mode.
   Press and hold the [MODE/REPEAT] key and press the [STOP] key once (release both keys).
   Buzzer sounds once and PRINT LED is steady – printer is now in TRANSMISSIVE sensor mode.
   GO TO 7.
   NB: this step is not strictly necessary but refreshing the sensor makes the following operation more likely to succeed.

7. Open the print head and sensor arm.

8. Remove one or more labels from the backing to create an area of at least four inches of exposed backing.

9. Close the sensor arm, adjust the media so that the leading edge of the exposed backing is forward of the sensor arm (and only exposed backing is between the sensor elements) then close the print head.

10. Press and hold the [MODE/REPEAT] key and press [PAUSE] once (release both keys).
    PRINT LED goes off, CONDITION LED illuminates and begins to flash rapidly – media feeding then starts and sensor is adjusted automatically.

11. If CONDITION and ERROR LED's are flashing this indicates the adjustment has failed. Switch off the printer and start again (return to step 1). If the adjustment fails a second time contact Hibiscus PLC for assistance.

12. If the adjustment succeeded, the printer returns to Transmissive Sensor Mode (PRINT and CONDITION LED's illuminated). Press the [STOP] key once to return the printer to normal operation.

13. Send a test print to the printer. If problems are not resolved repeat the process, then if necessary contact Hibiscus PLC for further assistance.

Printer Self-Test

1. Turn the printer on whilst pressing the [FEED] button, keep depressed until the printer 'beeps' and the PRINT LED begins to flash.

2. Two test labels will print. Press [FEED] again to re-print or [STOP] to return to normal operation.