

## **Installing the Low Ink Sensor System for the Pro-1000**

We have refined the current process so that everything is essentially, PEEL and STICK and PLUG IN and it is fully functional.

The two system boards are now prewired and pretested. Each sensor has been pretested and calibrated for operation on the Pro-1000.

First locate all the pieces in the package.

- 1- USB to round barrel connector cable.
- 2- 2 bags of 6 sensors in each bag.
- 3- Package containing the prewired left and right interface circuit boards prewired.

USER PROVIDED – USB outlet to provide power to the system. Preferred is a USB charging adapter (1 A) or PC powered USB port. Any standard USB female port will provide sufficient power for the system.

Step by Step.

1. Locate the USB cable and unwrap.
2. Unwrap the circuit boards.
3. Check that the blue connectors with the joining wire has not become loose in shipping. Retighten with a small screwdriver if necessary.
4. Plug in the round connector to the LEFT side circuit board. ( One with TWO BLUE connectors.)
5. Plug in the USB cable to the USB outlet/charger.
6. Check that that all LEDS light up.
7. Remove the round power connector.
8. Take the circuit boards to the printer. Determine where you will want the circuit boards to be installed. This is not critical but observe the right side circuit board must be below the button and you like will want to have both left and right side boards at the same relative position from the edges of the printer.
9. Remove the red backing from the GEL tape adhesive on the rear of the board. This can take some time and patience and will be the most difficult part though the simplest. Using a blade to get under the red backing will likely help especially if you have no fingernails.
10. Open the ink access door and pass the wire underneath the door and then place the circuit boards against the chosen locations and press.
11. Connect the round plug to the left board to power the system up.
12. Now one at a time remove the red backing on a sensor
13. You will now mount the sensor onto each tank. Note that the cable entering the sensor should be at the lowest point on the sensor. ( Bottom) ( NOTE: the LED on the sensor is

NOT the highpoint of the sensor so do not use that as a reference) The sensor can be mounted anywhere on the face of the tank but since the face of the tanks are not perfectly flat across the whole face they will need to be mounted off center a bit so that maximum contact with the adhesive GEL tape will occur.

14. Repeat for all twelve sensors
15. Plug in the sensor cables to the power boards. There will be a Right grouping and Left grouping of six colors each. So that the PBK tank sensor will connect to the rightmost connector on the LEFT circuit board. The B tank sensor will be leftmost position on the Right circuit board.
16. Install the door defeat sensor. Slide the piece of cardboard that is the door defeat on the left side of the hinge between PM and R until the printer screen no longer warns of an open door.

Installation is complete.

### **Hanging the cables.**

It is nice to tidy up the wires and we've found the simplest way to do this is to hang the wires onto the side of the printer away from the front. It is best to do this in a coordinated fashion so that the end results are neat and tidy. On the rightmost grouping, locate the rightmost sensor cable (PC) loosely pull this to the rear on the printer. This one will be the longest loop on the side. Install a hanger hook and hook the cable on it. Now locate the shortest loop on the side and it will be the (BL) cable. Again pull loosely, install a hook and hang the cable. Now in a coordinated fashion, hang the other cables. Repeat for the LEFT side with the same strategy. You will likely prefer to have the open end of the hooks pointing to the rear of the printer. Do not make the loops too tight but allow enough slack to allow removal of the cable when a tank needs to be topped off.

### **LIGHTS:**

The BLUE LED should be on when the printer is being used. This indicates that the sensors are being powered. You may choose to leave the system powered on at all times and the power consumption is less than 2 watts. Similar to printers on standby.

Anytime a YELLOW light appears it is a warning. The system is designed so that approximately 20 ml of ink is remaining when the LED lights up. When the yellow LED lights up, the RED led on the sensor will go dark.

You will also notice that when the sensor is plugged in and there is ink in the tank, the Yellow light will go OFF. Similarly IF the sensor ever falls off the tank or the cable is disconnected, the YELLOW light will appear and will warn you something needs attention.