ALLEN DATAGRAPH

Technical Support Bulletin:
Smart Mark Sensor Buttons and Lights

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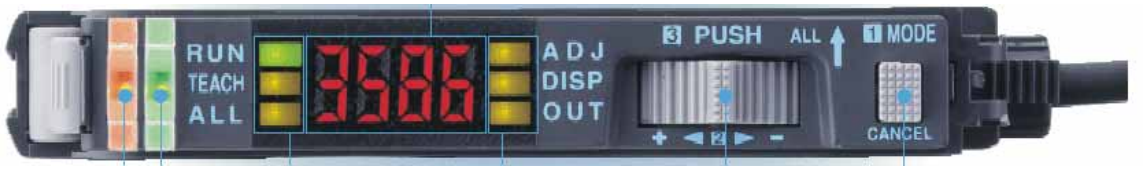
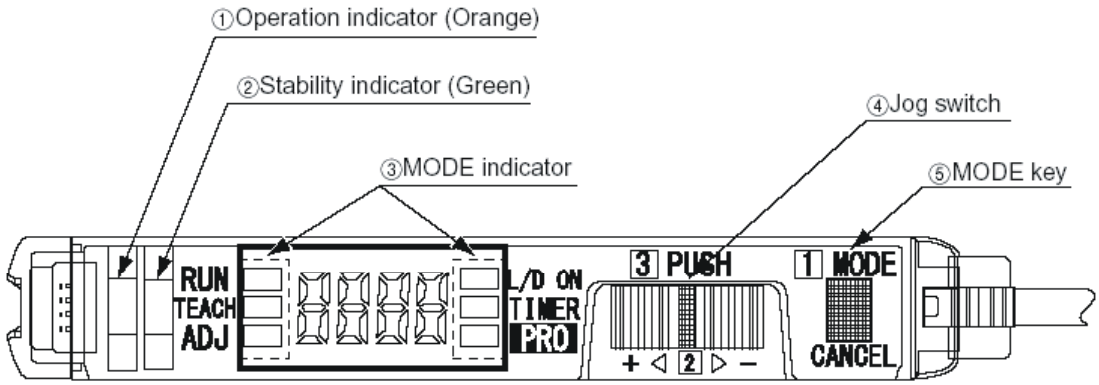
Abstract: This document is the script of the video that shows and describes the buttons and lights on the top of the SmartMark sensor.





The SmartMark sensor sits on the front of the carriage of the Allen Datagraph Cutter or Digital Finishing System. It is the sensor that reads the presence or absence of a target that is printed on the media to allow the cutter to know where target is on the printed media.

The orange light on the top of the SmartMark sensor is on when the sensor is looking at a target on the printed media.

The green light indicates that the sensor is seeing enough reflected light to work correctly.

There are 6 mode lights (RUN, TEACH, ADJ, L/D ON, TIMER, and PRO). The selected mode is indicated with the light next to the mode name.

The four-digit display indicates different values or words depending on the selected mode.

The jog button can be pushed to the left, pushed to the right or down to advance to the next phase.

The mode key cycles the SmartMark sensor between its six modes. Normally while running the cutter the sensor should be in the Run Mode.

I will now briefly describe the 4 modes used during contour cutting on the Allen Datagraph.

The run mode is the power up mode. It is the mode that the sensor must be in while cutting. The four-digit display in this mode show the response from the sensor. It indicates the intensity of the reflected light. This value ranges between 0 and 4000. Displayed values near the high end indicate too much reflected light and indicate that you should change the sensor to its low intensity setting. Displayed values at the low end indicate too little reflected light and indicate that you should change the sensor to its high intensity mode.

The teach mode is used to train the sensor so it can recognize background and target areas on different types of material. The four-digit display, displays the current intensity of reflected light, the words good or hard depending to the difference in the background and the target reflected intensity and at the end of training the sensor briefly display the trained threshold. Intensities less than the trained threshold are considered target areas and intensities greater than the threshold are considered background.

The ADJ mode is used to allow manually adjust the threshold value. This mode can be used for difficult materials (especially high gloss, or shiny laminate). The four-digit display displays the threshold value. Intensities greater than the threshold are considered background and intensities less than the threshold are considered target. Adjusting the ADJ value down will help eliminate false positives. To adjust the threshold in this mode move the jog button left, or right to select the desired threshold value and press down on the jog button to save the new threshold.

The PRO mode is used to go into the menu options to change features of the sensor. The 4-digit display shows menu locations and values in this mode. Allen Datagraph uses this mode to change the intensity of the beam from high to low or low to high. You can increase of decrease the intensity depending on what type of material is being used.