

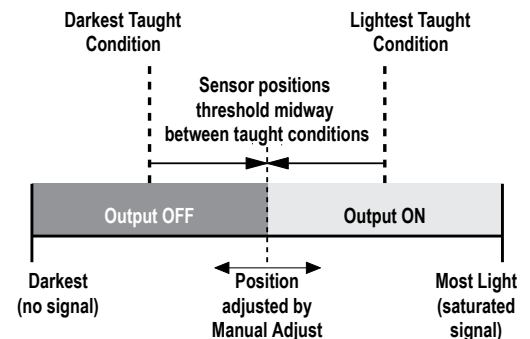
	Push Button	Remote Line	Result
	$0.04 \text{ seconds} \leq \text{"Click"} \leq 0.8 \text{ seconds}$	$0.04 \text{ seconds} \leq T \leq 0.8 \text{ seconds}$	
Access TEACH Mode	Press and hold Static (-) button for more than 2 seconds	No action required; sensor is ready for 1st TEACH condition.	Power LED: OFF Output LED: ON Bar graph: #5 and 6 alternately flash
TEACH Output ON Condition	Present Output ON condition and click the Static (-) button	Present Output ON condition and single-pulse the remote line	Power LED: OFF Output LED: Flash, then OFF Bar graph: #5 and 6 alternately flash
TEACH Output OFF Condition	Present Output OFF condition and click the Static (-) button	Present Output OFF condition and single-pulse the remote line	TEACH Accepted Power LED: ON Bar graph: One LED flashes to show relative contrast (good signal difference shown; see table above) Sensor returns to RUN mode
			TEACH Unacceptable Power LED: OFF Bar graph: #1, 3 and 5, 7 alternately flash to show failure Sensor returns to "TEACH Output ON Condition"

Dynamic TEACH and Adaptive Thresholds

- Teach on-the-fly
- Sets a single switching threshold (switching point)
- Threshold position is adjustable using "+" and "-" buttons (Manual Adjust)
- Recommended for applications where a machine or process may not be stopped for teaching.

Dynamic TEACH is a variation of two-point TEACH. It programs the sensor during actual machine run conditions, taking multiple samples of the light and dark conditions and automatically setting the threshold at the optimum level.

Dynamic TEACH activates the sensor's adaptive threshold system, which continuously tracks minimum and maximum signal levels, and automatically maintains centering of the threshold between the light and dark conditions. The adaptive threshold system remains in effect during Run mode. The adaptive routine saves to non-volatile memory at least once per hour.



When Dynamic TEACH mode is used, the output ON state (Light or Dark Operate) will remain as it was last programmed. To change the output ON state, use Setup Mode.

The sensing threshold may be adjusted (fine-tuned) whenever the sensor is in RUN mode by clicking the "+" and "-" buttons. However, when a manual adjustment is made, the adaptive threshold system is disabled (cancelled).

Bar Graph LED (Following TEACH)	Relative Signal Difference/Recommendation
6 to 8	Excellent: Very stable operation.
4 to 5	Good: Minor variables will not affect sensing reliability.
2 to 3	Low: Minor sensing variables may affect sensing reliability.

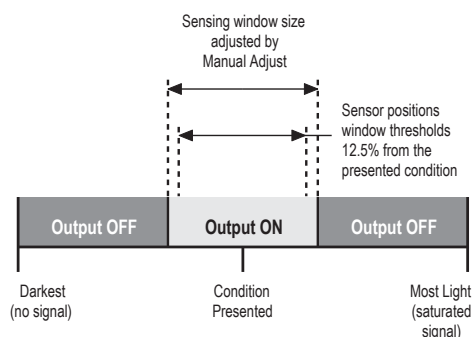
Bar Graph LED (Following TEACH)	Relative Signal Difference/Recommendation
1	Unreliable: Consider an alternate sensing scheme.

	Push Button	Remote Line	Result
Access Dynamic TEACH Mode	Press and hold Dynamic (+) push button for more than 2 seconds	Hold the remote line low (to ground) for more than 2 seconds	Power LED: OFF Output LED: OFF Bargraph: #7 and 8 alternately flash
TEACH Sensing Conditions	Continue to hold push button (+) and present the Output ON and OFF conditions	Continue to hold remote line low (to ground) and present the Output ON and OFF conditions	Power LED: OFF Output LED: OFF Bargraph: #7 and 8 alternately flash
Return to Run Mode	Release push button (+)	Release the remote line/switch	TEACH Accepted Power LED: ON Bargraph: One LED flashes to show relative contrast (good signal difference shown; see table above) Sensor returns to RUN mode with new settings
			TEACH Unacceptable Power LED: OFF Bargraph: #1, 3 and 5, 7 alternately flash to show failure Sensor returns to RUN mode without changing settings

Single-Point Window Set

- Sets a single ON condition that extends 12.5% above and below the taught condition.
- All other conditions (lighter or darker) result in OFF output
- Sensing window size (sensitivity) is adjustable using the "+" and "-" buttons (Manual Adjust)
- Recommended for applications where the target to be sensed may not always appear in the same place, or when other signals may appear.

Single-Point Set designates a sensing window, by setting two switching thresholds at 12.5% above and below the presented condition. The Output ON condition is inside the window, and the Output OFF conditions are outside the window when Light Operate is selected. Output ON and OFF conditions can be reversed by changing Light/Dark Operate status in Setup mode.



Single-Point Window Set and Manual Adjust

Using Manual Adjust with Single-Point Window Set expands or contracts the size of the window. The lighted LEDs on the light bar separate to a greater or lesser extent to exhibit the relative sensing window size.