

Sensor Configuration

Configure the sensor using any of five TEACH or Set options (by push button or the remote wire) to define the sensing limits. Use a Setup procedure to enable a 30 ms OFF-delay or to change the Light-/Dark-Operate setting (see [Sensor Setup](#) on page 3). Sensing limit configuration options include:

- Static TEACH: one switching threshold, determined by two taught conditions
- Dynamic (on-the-fly) TEACH: one switching threshold, determined by multiple sampled conditions
- Light Set and Dark Set: one switching threshold, offset from a single sensing condition (the "dark" condition or the "light" condition; see Figure)
- Window Set: a sensing window, centered around a single sensing condition

The sensor's output is disabled during all TEACH and Set procedures, and is enabled upon return to Run mode.

Following any TEACH or Set procedure other than Static TEACH, the Output ON condition (Light- or Dark-Operate setting) remains as it was last configured. To change that setting or the OFF-delay setting, see [Sensor Setup](#) on page 3.

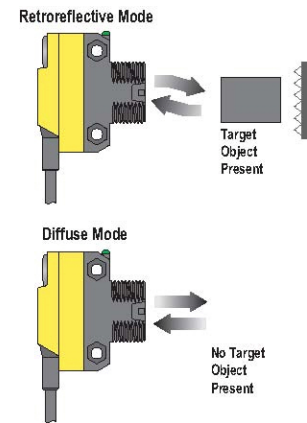


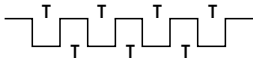
Figure 2. Dark Sensing Condition

Remote Configuration

Use the remote function to configure the sensor remotely or to disable the push button for security. Connect the white wire of the sensor to ground (0V dc), through a remote programming switch. Pulse the remote line according to the diagrams in the configuration procedures. The length of the individual programming pulses is equal to the value T: $0.04 \text{ seconds} \leq T \leq 0.8 \text{ seconds}$

Push Button Enable/Disable

The remote input may be used to disable the sensor push button to prevent unauthorized adjustment. Connect the white wire of the sensor as described above to perform the procedure below to either enable or disable the feature.

Push Button Enable/Disable		
Push Button ($0.04 \text{ seconds} \leq \text{"Click"} \leq 0.8 \text{ seconds}$)	Remote Line ($0.04 \text{ seconds} \leq T \leq 0.8 \text{ seconds}$)	Result
Not available	From Run mode, four-pulse the remote line. 	Sensor toggles between enable/disable settings and returns to RUN mode. Power LED: Flashes 3x, then ON Green Output LED: OFF, ² then ON or OFF, depending on output state

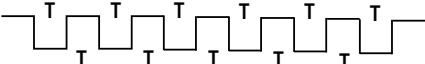
Returning to RUN Mode without Saving Settings

Exit Static TEACH and Set modes after the automatic 60-second time-out or by manually exiting the process. To manual exit, press and hold the push button (or hold the remote line low) for 2 seconds. The sensor returns to Run mode without saving any new settings.

Sensor Setup

Access setup functions directly from Run mode using the following procedures.

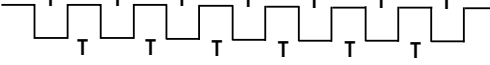
30 ms OFF-Delay (Pulse Stretcher) Enable/Disable

Push Button ($0.04 \text{ seconds} \leq \text{"Click"} \leq 0.8 \text{ seconds}$)	Remote Line ($0.04 \text{ seconds} \leq T \leq 0.8 \text{ seconds}$)	Results
From Run mode, six-click the push button. 	From Run mode, six-pulse remote line. 	Sensor toggles between enable/disable settings and returns to Run mode. Power LED: Flashes 3x, then ON Green Output LED: Enabled – ON, ³ Disabled – OFF, ³ Then ON or OFF, depending on output state

² Initial output LED condition is simultaneous with Power LED 3-flash

³ Initial Output LED condition is simultaneous with Power LED 3-flash.

Light-Operate/Dark-Operate Select

Push Button (0.04 seconds ≤ "Click" ≤ 0.8 seconds)	Remote Line (0.04 seconds ≤ T ≤ 0.8 seconds)	Results
From Run mode, seven-click the push button. 	From Run mode, seven-pulse remote line. 	Sensor toggles between Light-/Dark-Operate settings and returns to Run mode. Power LED: Flashes 3x, then ON Green Output LED: Light Operate – ON, ³ Dark Operate – OFF, ³ Then ON or OFF, depending on output state

Static TEACH

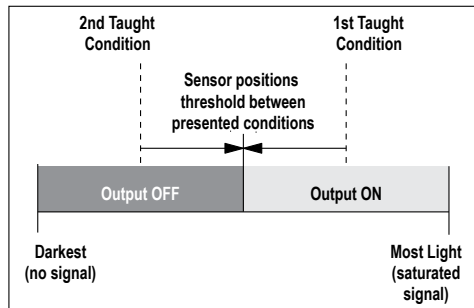


Figure 3. Static TEACH (Light Operate shown)

- Static TEACH locates a single switching threshold (switchpoint) at the optimal location between the two taught conditions, with the Output ON condition on one side, and the Output OFF condition on the other.
- During Static TEACH, the first condition taught is the ON condition. Output ON and OFF conditions may be reversed by switching the TEACH order or by changing the Light-/Dark-Operate setting in setup mode (see [Sensor Setup](#) on page 3).
- Static TEACH is recommended for applications where two conditions can be presented individually.

1. Access the Static TEACH Mode.

Method	Action		Result
Push Button	Press and hold the push button 2 to 4 seconds.		The sensor waits for the first sensing condition. Power LED Indicator: OFF Output LED Indicator: Slow flash (1Hz)
Remote Line	No action required; the sensor is ready for the first sensing condition.		

2. Teach the first sensing condition.

Method	Action		Result
Push Button	Present the first (ON) sensing condition, then click the push button.		Power LED Indicator: OFF Output LED Indicator: Double-flash
Remote Line	Present the first sensing condition, then single-pulse the remote line.		

3. Teach the second sensing condition.

Method	Action		Result
Push Button	Present the second (OFF) sensing condition, then click the push button.		<u>TEACH Accepted</u> Power LED Indicator: Flashes 3 times, then solid green Output LED Indicator: OFF
Remote Line	Present the second sensing condition, then single-pulse the remote line.		The sensor returns to Run mode with the new settings. <u>TEACH Not Accepted</u> Power LED Indicator: OFF Output LED Indicator: Slow flash (1 Hz) The sensor returns to the wait state, ready for the first sensing condition.