

CLR Option

Clear Materials

Overview

SCAN-A-LINE™ Auto-Sync 10XAS-Series non-contact sensors have the unrivaled ability to detect the edges of transparent, translucent or loosely-woven materials for measurement, guiding and control applications. The **Clear Materials Option - CLR Option** provide plastic, film and other clear material (or loosely woven) manufacturers the capacity to accurately and reliably perform the critical dimensional and position management required for today's competitive environments.

SCAN-A-LINE™ Auto-Sync sensor systems used for the detection of opaque material edges are computer balanced at the factory. Computer balancing is necessary to ensure that the receiver views each Light Emitting Diode (LED) in the emitter at the same intensity. The computer "balances" out the LED intensities so the receiver "sees" each diode the same, irrespective of its individual characteristics.

But with transparent, translucent or loosely woven materials, a factory computer balance can not sufficiently duplicate the actual operating environment. The **CLR Option** solves the difficult problems inherent in the detection of clear material edges by balancing the sensors on-line to overcome any installation variables.

The **CLR Option** involves two major components. The first is the **SCAN-A-LINE™ 10XAS-Series** sensor which includes an electrically erasable/programmable read-only memory chip (EEPROM) to store the LED balance data. The second is the **Digital Sensor Balance Module - Model DSB-1040**. This state-of-the-art micro controller is programmed for balancing SCAN-A-LINE™ 10XAS-Series sensors on-line, eliminating the requirement of a factory balance.

The **10XAS-Series** sensor and processing unit is installed on a clear materials process line. The Model DSB-1040 is plugged into the emitter (cabling included) and easily performs a sensor balance in less than five minutes! This provides true on-line material and environmental variability compensation, ensuring the best performance from the sensor. The sensor can be "tuned" to the line on which it is operating, eliminating many of the problems inherent with the sensing of transparent, translucent or loosely woven materials.

Also included with the **Model DSB-1040** is a serial (RS-232) communications interface to assist with the most arduous clear materials applications. The data output from the **Model DSB-1040** provides complete diagnostics of the sensor, allowing operators to "fine tune" the sensor system to especially troublesome environmental and/or material conditions.



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Features

- **Actual On-Line Sensor "Tuning" to Account for Material & Environmental Variability's**
- **Enhanced Sensor Diagnostics Available via Serial Communications Interface**
- **Optimization of Sensor Performance for Preventative Maintenance Operations**