# Quarter DIN Registration Control System *for* Bi-directional Registration Control





#### Overview

Scanning Devices manufactures the HB Quarter DIN Registration Control system, a bi-directional registration control system with out-of-registration alarm and outputs for automatic correction. It is particularly well suited for applications where a label is being applied to a bottle, or other package form where ensuring accurate material position is critical to the production process. Out of registration conditions can be set to alarm/alert operators or stop/prevent label feed if registration is not maintained. This registration control system is designed to reduce scrap and improve productivity.

Using an optical sensor, to detect the registration mark, and a Quarter Din Selector Switch the system can identify when the process is out of registration. It then drives correction motors to make both forward and reverse adjustments automatically. The system has features that allow an operator to set independent and varying degrees of correction each time an out-of-registration condition is identified. It also allows for manual adjustments with a "Jog" switch that makes immediate forward and reverse registration adjustments.

#### Features/Capabilities

- Easy to operate intuitive controls
- Automatically adjusts forward and reverse to correct registration errors during material processing
- Manual adjustments can be made on-the-fly with the Forward/Reverse toggle switch
- Forward and Reverse correction inputs can be independently adjusted, increasing or decreasing the time correction motor is engaged
- Three scanner options ensure accuracy in a wide variety of applications including; general purpose mark scanners, low contrast scanners, and fiber optic scanners for small marks in hard to reach places
- Selector switch rotates with label/material feed and segments the repeat into four distinct regions for better registration control

### Quarter DIN - System Selector Switch

- Installed so as to rotate selector switch shaft once per revolution with label/other material to be registered
- Transparent housing for visual inspection
- Mechanical adjustments, accessible from the front, make setting registration tolerances simple
- Contains two optical slot scanners, mechanical flag and adjustable interrupters to define registration regions
  - In-Registration no correction needed
  - Forward reverse correction needed
  - Reverse forward correction needed
  - Out-of-Registration requires operator intervention



## **Scanning Devices CX6 Scanner & Encoder**

- General Purpose Registration Mark Scanner
- Optimized for color contrast detection
- NPN Transistor Collector sinks current to power supply minus, 100 milliamps MAX
- Selection Switch for Light mark on dark background or Dark mark on light background
- Multi-turn adjustment dial
- Quick Disconnect cables, lengths 15 to 50'
- Vertical and Horizontal Orientation



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