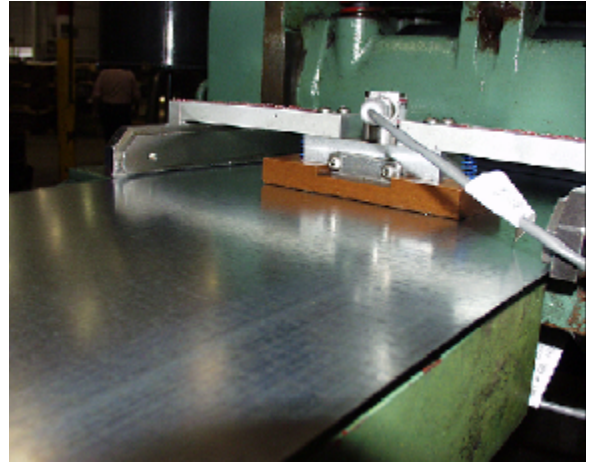
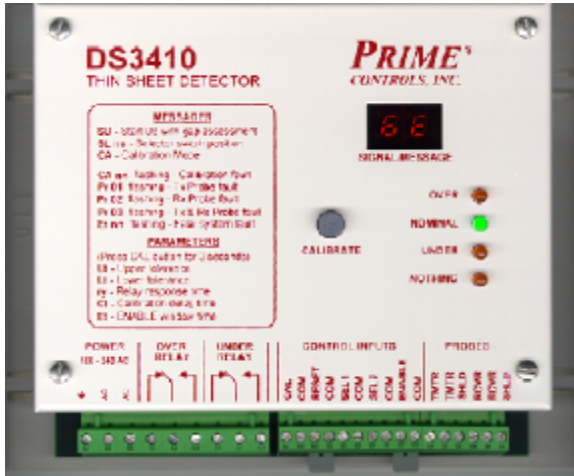


**Model DS3410**  
For copper, stainless steel, &  
thin aluminum foil

**PRIME**®  
**CONTROLS, INC.**  
METAL SENSING SOLUTIONS

## Thin Metal Thickness Detector



**PRIME'S** Model DS3410 Thin Metal Detector measures the thickness of stainless steel, copper and other difficult-to-detect nonferrous metals. Following a simple installation, the detector is ready to **Stop** thickness variations from slipping through unnoticed. It's time saving features include push-button calibration, quick change terminals and diagnostic fault detection and warning system. Contact relay outputs are energized when the metal is measured as "Nominal", "Over", "Under" or "Nothing". The Model DS3410 allows reject threshold adjustment in 1% increments for precise control. Up to eight "Nominal" thickness values are user preset in nonvolatile memory and retrieved at any time. The detector has a snapshot feature that permits inspection of a specific point on a larger target. Simple Indicator lamps and a two digit display gives you all the information you need to verify that the process is operating correctly. All these great features were designed into a simple, easy-to-use system that creates performance you can depend on at price well under other thickness detectors. Phone or fax for a demonstration or further details, today.

**Pushbutton teach calibration**

**Snapshot inspection feature**

**Detect Stainless Steel .002 to .300 "**  
**or 1/2, 1, & 2 ounce copper**  
**or single or double sided boards.**  
**ultra thin aluminum film**  
**thin metal thickness coil, sheets**

**Adjustable reject in 1% increments.**

**Measures within 2% of nominal**

**Stores up to 8 thickness values for fast recall**

**Separate outputs for Over & Under rejects**

**Fault analysis indication and outputs.**

**Fast & Easy calibration**

# Specifications

**Power input:** 100 to 240 VAC, 50/60 Hz  
300 mA operating load

**Output:** 2 SPDT contact relays

**Max load:** 10 Amps @ 240 V AC  
8 Amps @ 24 V DC  
½ HP @ 240 V AC

**Output fail safe:** Defaults to reject w/power off

**Output response:** \* < .030, .100, .500, 1 second

**Probe assessment:** \* Determines probe type, probe separation, nothing present signal level when powered up or AUXIN input is closed.

**Thickness range:** .5 to 2 ounce copper plate. Up to .100 non-magnetic stainless steel.  
Magnetic SS see DS1500 Fami

**Probe types:** Type "AX", Models PIC, PICS

**Probe separation:** 12 mm to 75 mm (.5 to 3") or more. Max. varies w/(metal, thickness & probe, separation). Maximum range is realized with Model P1CS transmitter & receiver probes.

**Calibration methods:** Push-button switch used to change time interval or manually initiate calibration.

\*Two sample calibration. Manually place two samples between probes, push Cal. button.

**Enable** Windowed inspection feature. Accepts 24 Sinking or Sourcing sensor output. No dc power provided for the sensor

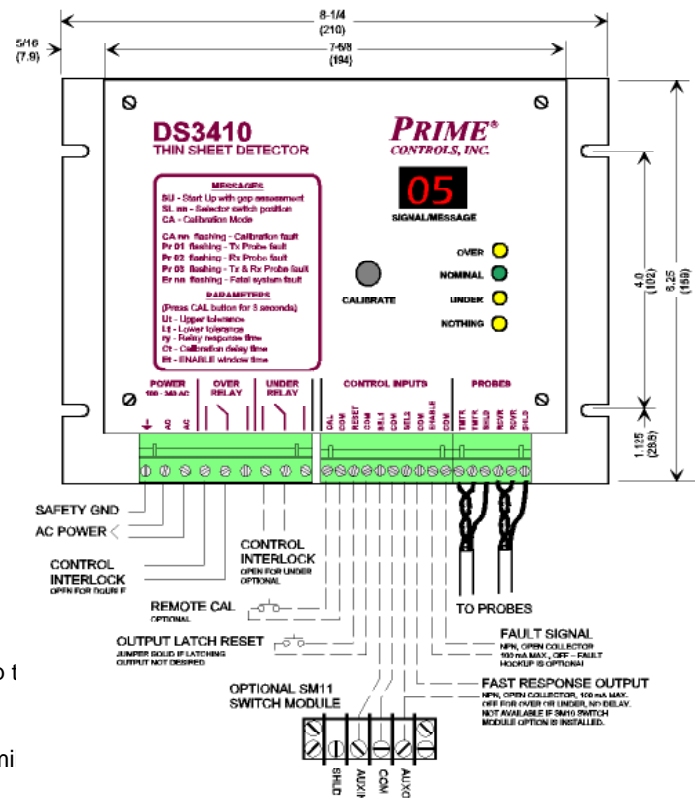
**Reject threshold:** 50% between two sample calibration. Opposite output via 50% interpolation

**LED indicators:** Green for single, Amber for Over, Under & Nothing detected.

**Sensor operation:** Eddy Current in metal impedes signal from transmitter to receiver. Impedance changes as metal thickness changes.

**Display Indication:** 2 digit LED, alphanumeric, .5 inch high. setup menu, calibration mode, operating probe signal strength, fault codes.

*\*Some features are turned on or off through dip switches located under front cover.*



## LIMITATION AND EXCLUSION OF WARRANTIES

All goods purchased from Prime Controls, Inc. shall be free from defects in materials, design and workmanship under normal conditions of use for one year from the date of shipment. THIS WARRANTY IS THE SOLE WARRANTY AND IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE. THE LIABILITY OF PRIME CONTROLS TO ANY PURCHASER SHALL BE LIMITED EXCLUSIVELY TO THE COST OF REPLACEMENT OR REPAIR OF DEFECTIVE PARTS, AND SHALL NOT INCLUDE LIABILITY FOR ANY DIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER, WHETHER FORESEEN OR UNFORESEEN, INCLUDING BUT NOT LIMITED TO LOST PROFITS, LOST SALES, OR INJURY TO PERSONS OR PROPERTY. 1/6/98