The World’s Most Popular Precision Label Sensors

Clear • Paper • Metal • Hologram | Versatile • Easy to Use • Reliable
What People Are Saying About LRD Sensors

“The sensors worked better than anything else we had, so we converted all our labelers to Lion.”

“I was told that Lion Precision made the best sensor for clear label application. They didn’t lie. Have your sensors on two of our main labelers and will be replacing others as they need it.”

“The best out there. Seems to last forever and our customers usually buy more to put on other machines.”

LRD6300 NEW!

High-Speed Accuracy, One-Button Setup

Use the finest clear label sensor in the world for reliable, easy-to-set label sensing on applicators and slitter/rewinders.

- Works on clear, paper, and most foil labels
- Easy pushbutton setup
- Capacitive sensor accuracy

Response Time: 15 µS
Accuracy: 0.05mm (0.002”)
Switching Frequency: 10 kHz
Operating Temperature: 40°F-140°F, 4°C-60°C
Outputs: NPN and PNP
Power In: 12 to 24 VDC
Environment: IP54
Short-Circuit and Overload Protection
Works with all label materials including most solid foil.
### LRD8200

**Ultrasonic Technology for Every Label Type**

Ultrasonic technology provides accurate sensing of any type of label. Wide fork for booklets and easy web threading.

- Works on all label materials and designs
- Pushbutton adjustment
- Easy to read informative indicators

**Specifications**

- **Response Time:** 425 µS (max delay)
- **Accuracy:**
  - 60 m/min: 0.15 mm (0.006")
  - 250 m/min: 0.60 mm (0.024")
- **Switching Frequency:** 1 kHz; 2 mm gaps at 250 m/min
- **Operating Temperature:** 40°F-140°F, 4°C-60°C
- **Outputs:** NPN and PNP
- **Power In:** 12 to 24 VDC
- **Environment:** IP54

Short-Circuit and Overload Protection

Requires 4-pin M12 sensor cable

Works with all label materials

---

### LRD2100

**The Sensor that Started a Revolution**

The world’s first clear label sensor. Optics-free, capacitive sensing does not require changes in color or contrast to sense labels.

- Works with clear and paper labels
- Extremely stable setup
- Fast, accurate, reliable

**Specifications**

- **Response Time:** 20 µS
- **Accuracy:** 0.05 mm (0.002")
- **Switching Frequency:** 10 kHz
- **Operating Temperature:** 40°F-140°F, 4°C-60°C
- **Outputs:** NPN and PNP
- **Power In:** 12 to 24 VDC
- **Environment:** IP54

Short-Circuit and Overload Protection

Works with all labels without metallic or high-carbon materials or artwork.

---

Lion Precision  
800-229-6544, 651-484-6544
Specialized Versions
These sensors use LRD2100 sensing technology in unique applications.

LRD3100
Clear Label Technology for Small Spaces
Same great performance as the LRD2100 in smaller spaces. Sensor head can be used with supplied baseplate as pictured, or a baseplate system can be designed into the machinery. 10” (25.4mm) cable from main body to sensor head. Same specifications as the LRD2100.

LRD5100
Tear-Tape Sensor
The LRD5100 senses the presence/absence of tear-tape on overwrap film. Works with all tear-tape materials and nonmetallic overwrap. Same specifications as the LRD2100.

Selection Chart
LRD sensors are also used for glue, splice, and hole detection. Ask a sales engineer about your unique sensing application.

<table>
<thead>
<tr>
<th>Adjustment Type</th>
<th>Paper</th>
<th>Clear</th>
<th>Metallic Ink</th>
<th>High-Carbon Black Ink</th>
<th>Hot Stamp</th>
<th>Solid Foil</th>
<th>Response Time</th>
<th>Switching Speed (kHz)</th>
<th>Accuracy (mils / mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRD6300 Button</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>20 µS</td>
<td>10</td>
<td>2 / 0.05</td>
</tr>
<tr>
<td>LRD8200 Button</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>125 µS</td>
<td>1</td>
<td>24 / 0.30</td>
</tr>
<tr>
<td>LRD2100 Screw</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>20 µS</td>
<td>10</td>
<td>2 / 0.05</td>
</tr>
<tr>
<td>LRD3100 Screw</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>20 µS</td>
<td>10</td>
<td>2 / 0.05</td>
</tr>
</tbody>
</table>