# EZ-LIGHT® K50L and K80L Audible Indicator Lights

## Datasheet

### DC-Operated Indicators with Steady or Pulsed Sound Indication

To view or download the latest technical information about this product, including specifications, dimensions, accessories, and wiring, see [www.bannerengineering.com](http://www.bannerengineering.com).

- Rugged, cost-effective, and easy-to-install indicators available in K50 or K80 housing style
- Steady or pulsed sound indication
- Illuminated dome provides a big, easy-to-see green, red or amber job light
- Compact devices are completely self-contained, no controller needed
- Choose NPN or PNP input, depending on model
- Immune to EMI and RFI interference
- 18 V dc to 30 V dc operation
- Three color LED function: green, red, and amber

### WARNING: Not To Be Used for Personnel Protection

Never use this device as a sensing device for personnel protection. Doing so could lead to serious injury or death. This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition.

## Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Construction</th>
<th>Audible Tone</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>K50LGRA1YPQ</td>
<td>50 mm dome/30 mm mount polycarbonate</td>
<td>Steady (75 dB)</td>
<td>PNP</td>
</tr>
<tr>
<td>K50LGRA1YNQ</td>
<td></td>
<td>Pulsed (75 dB)</td>
<td>NPN</td>
</tr>
<tr>
<td>K50LGRA2YPQ</td>
<td></td>
<td>Loud Steady (95 dB)</td>
<td>PNP</td>
</tr>
<tr>
<td>K50LGRA2YNQ</td>
<td></td>
<td></td>
<td>NPN</td>
</tr>
<tr>
<td>K80LGRA1YPQ</td>
<td>50 mm dome/Flat or DIN-mount polycarbonate</td>
<td>Steady (75 dB)</td>
<td>PNP</td>
</tr>
<tr>
<td>K80LGRA1YNQ</td>
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<td></td>
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</tbody>
</table>

### Notes

1. Integral quick disconnect models are listed.
   - To order the 150 mm (6 in) PVC cable model, replace the suffix "Q" with "QP" in the model number. For example, K50LGRA1YPQP.
   - K50L Models: To order the 2 m (6.5 ft) PVC cable model, omit the suffix "Q" in the model number. For example, K50LGRA1YP.
   - K80L Models: To order the terminal-wired model, omit the suffix "Q" in the model number. For example, K80LGRA2YP.
   - Models with a quick disconnect require a mating cordset.
2. Typical decibel level is at a distance of 1 m.
Wiring Diagrams

**PNP**

```
A
Y
5
4
3
2
1
```

**NPN**

```
A
Y
5
4
3
2
1
```

**Key:**

1 = Brown
2 = White
3 = Blue
4 = Black
5 = Gray
G = Green
R = Red
Y = Yellow
A = Alarm

Specifications

**Supply Voltage and Current**
18 V dc to 30 V dc at 40 mA maximum, per LED color (alarm)

**Input Response Time**
Indicator ON/OFF: 10 ms maximum

**Oscillation Frequency**
- A1 models: 3 kHz ± 500 Hz
- A2 models: 3 kHz ± 500 Hz; pulse rate 3 Hz ± 20%
- AL1 models: 2.7 kHz ± 500 Hz

**Operating Conditions**
-20 °C to +50 °C (−4 °F to +122 °F)

**Environmental Rating**
IEC IP50
K50L models only: NEMA/UL Type 4X, 13

**Certifications**
- All models: 
- K50L models only: 

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**Indicators**
LEDs or audible independently selected: green, red, amber

**Connections**
Integral 5-pin M12/Euro-style quick disconnect, or 150 mm (6 in) PVC cable with a 5-pin M12/Euro-style quick disconnect, or 2 m (6.5 ft) unterminated 5-wire PVC cable, depending on model
K80L Models: Terminal-wired models for use with bulk cable available

**Required Overcurrent Protection**

**WARNING:** Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

Overcurrent protection is required to be provided by end product application per the supplied table. Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.

Supply wiring leads < 24 AWG shall not be spliced.
For additional product support, go to [www.bannerengineering.com](http://www.bannerengineering.com).

<table>
<thead>
<tr>
<th>Supply Wiring (AWG)</th>
<th>Required Overcurrent Protection (Amps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>5.0</td>
</tr>
<tr>
<td>22</td>
<td>3.0</td>
</tr>
<tr>
<td>24</td>
<td>2.0</td>
</tr>
<tr>
<td>26</td>
<td>1.0</td>
</tr>
<tr>
<td>28</td>
<td>0.8</td>
</tr>
<tr>
<td>30</td>
<td>0.5</td>
</tr>
</tbody>
</table>
Dimensions

**K50L Models**
- **M30 x 1.5 (mounting nut included)**
- **Max. Torque 4.5 Nm (40 in-lbf)**
- **Internal Threads** ½”-14 NPSM
- **Max. Torque 2.25 Nm (20 in-lbf)**

**K80L Models**
- **109.5 mm (4.31”)**
- **80.8 mm (3.18”)**
- **66.3 mm (2.61”)**
- **26.0 mm (1.02”)**

**Accessories**

**5-Pin Threaded M12/Euro-Style Cordsets — Single Ended**

<table>
<thead>
<tr>
<th>Model</th>
<th>Length</th>
<th>Style</th>
<th>Dimensions</th>
<th>Pinout (Female)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MQDC1-501.5</td>
<td>0.50 m (1.5 ft)</td>
<td>Straight</td>
<td><img src="image" alt="Straight Diagram" /></td>
<td>1 = Brown, 2 = White, 3 = Blue, 4 = Black, 5 = Gray</td>
</tr>
<tr>
<td>MQDC1-506</td>
<td>1.83 m (6 ft)</td>
<td>Straight</td>
<td><img src="image" alt="Straight Diagram" /></td>
<td>1 = Brown, 2 = White, 3 = Blue, 4 = Black, 5 = Gray</td>
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<tr>
<td>MQDC1-515</td>
<td>4.57 m (15 ft)</td>
<td>Straight</td>
<td><img src="image" alt="Straight Diagram" /></td>
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<tr>
<td>MQDC1-530</td>
<td>9.14 m (30 ft)</td>
<td>Straight</td>
<td><img src="image" alt="Straight Diagram" /></td>
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<tr>
<td>MQDC1-506RA</td>
<td>1.83 m (6 ft)</td>
<td>Right-Angle</td>
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**K80L Brackets**

**SMBOX80DIN**
- Black reinforced thermoplastic
- Bracket for mounting on a 35 mm DIN rail

**K50L Brackets**
SMB30A
- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-ga. stainless steel

Hole center spacing: A to B = 40
Hole size: A = 6.3, B = 27.1 x 6.3, C = ø 30.5

SMB30MM
- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor

Hole center spacing: A = 51, A to B = 25.4
Hole size: A = 42.6 x 7, B = ø 6.4, C = ø 30.1

SMBAMS30RA
- Right-angle SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-ga. (2.6 mm) cold-rolled steel

Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 x 7.0, B = ø 6.5, C = ø 31.0

SMB30FA
- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-ga. 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric and inch size bolt available

Bolt thread: SMB30FA, A = 3/8 - 16 x 2 in; SMB30FAM10, A = M10 - 1.5 x 50
Hole size: B = ø 30.1

SMBAMS30P
- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-ga. 300 series stainless steel

Hole center spacing: A = 26.0, A to B = 13.0
Hole size: A = 26.8 x 7.0, B = ø 6.5, C = ø 31.0

SMB30FVK
- V-clamp, flat bracket and fasteners for mounting to pipe or extensions
- Clamp accommodates 28 mm dia. tubing or 1 in. square extrusions
- 30 mm hole for mounting sensors

Hole size: A = ø 31

LMBE12RA35
- Direct mounting of stand-off pipe, with common bracket type
- Zinc-plated steel
- 1/2-14 NPSM nut
- Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 35 mm

Hole center spacing: 20.0

LMBE12RA45
- Direct mounting of stand-off pipe, with common bracket type
- Zinc-plated steel
- 1/2-14 NPSM nut
- Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 45 mm
Hole center spacing: 35.0
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