Vigilant® LED Based Obstruction Lights
On when it matters most.

Products and solutions that protect your business
Dialight’s LED Technology Innovations Over the Years
First ever FAA certified LED obstruction light

Features & Benefits
• 5 year warranty
• Resistant to shock and vibration
• High impact polycarbonate lens with UV, scratch and chemical resistant coating
• Reduction in tower climbs for lower maintenance costs/unplanned site visits
• Smallest flash head in the industry
• Community friendly lighting system utilizing patented optics

Dialight Timeline
1999 - First ever FAA certified LED L810
2001 - First ever FAA certified LED L864
2007 - First ever FAA certified LED L865/L864
2011 - First ever FAA certified LED L856
2012 - First ever FAA certified LED L856/L864

Dialight (LSE: DIA.L) is leading the energy efficient LED lighting revolution around the world for industrial and hazardous areas as well as transportation and infrastructure applications. For 40 years it has been committed to the development of LED lighting solutions that enable organizations to vastly reduce energy use and maintenance needs, improve safety, ease disposal and reduce CO2 emissions.
Vigilant LED Based L-856 / L-864
High Intensity (White / Red) Strobe

Certifications & Compliance
- FAA AC 150 / 5345 - 43G
- FAA EB No. 67D
- IP66
- Transport Canada CAR 621.19
- ICAO Annex 14
- DGAC Mexico

Features & Benefits
- ETL verified to FAA standards
- Superior surge and lightning protection
- Patented optics for minimal down light / ground scatter
- Ideal for broadcast towers, stacks and other tall structures
- 360 degree coverage using three (3) flash heads
- Maximum of 18 synchronized flash heads for each controller
- Shock and vibration resistant
- Lighting and hardware kits available for standard towers

Mechanical Information:
- Flash head weight: 63 lbs (30 kg)
- Operating voltage: 208 - 277V AC 50/60Hz
- Effective intensity:
  - White Day - 270,000 cd
  - White Twilight - 20,000 cd
  - White Night - 2,000 cd
  - Red - 2,000 cd
- Wattage:
  - White Day - 160W
  - White Twilight - 30W
  - White Night - 23W
  - Red Night - 30W
- Power factor: > 0.9
- Ambient temperature: -40°F to +131°F (-40°C to +55°C)
- Synchronization: Multiple unit sync from single controller

All values typical unless otherwise stated (tolerance +/- 10%)
Vigilant LED Based L-865 / L-864 (+IR) (+GPS)
Medium Intensity (White / Red) Strobe - Infrared (IR) or GPS models available

Certifications & Compliance
- FAA AC 150 / 5345 - 43G
- FAA EB No. 67D
- IP66
- Transport Canada CAR 621.19
- ICAO Annex 14
- DGAC Mexico

Features & Benefits
- ETL verified to FAA standards
- Superior surge and lightning protection
- Patented optics for minimal down light / ground scatter
- Remote monitoring options available
- Compact, low power design
- Ideal for towers, stacks, wind turbines, buildings, etc.
- 360 degree coverage for each flash head
- Shock and vibration resistant
- Lighting and hardware kits available for standard towers
- GPS synchronized controller available

Mechanical Information:
- Flash head weight: 21 lbs (9.5 kg)
- Operating voltage: 120 - 277V AC 50/60Hz or 48V DC power factor corrected supply (see below for options)
- Supply voltage ranges: Nominal +/- 10%
- Effective intensity:
  - White Day - 20,000 cd
  - White Night - 2,000 cd
  - Red Night - 2,000 cd
- Flash head power:
  - White Day - 36W (system = 75W)
  - White Night - 4W (system = 10W)
  - Red Night - 12W (system = 25W)
- Power factor: > 0.9
- Operating temperature: -40°F to +131°F (-40°C to +55°C)
- Synchronization: Multiple unit sync from single controller
All values typical unless otherwise stated (tolerance +/- 10%)

US Patents #7,208,881 #7,568,821 #7,604,380 #7,777,424

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Voltage</th>
<th>Certification / Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1RW-C13-409SYS</td>
<td>Medium intensity dual (white / red) AC system</td>
<td>120 - 277V AC</td>
<td>FAA (TC) L-865 / L-864</td>
</tr>
<tr>
<td>D1RW-C14-409SYS</td>
<td>Medium intensity dual (white / red) DC system</td>
<td>+/- 48V DC</td>
<td>FAA (TC) L-865 / L-864</td>
</tr>
<tr>
<td>D1CW-C13-409SYS</td>
<td>Medium intensity dual (white / red) +IR AC system</td>
<td>120 - 277V AC</td>
<td>FAA (TC) L-865 / L-864 +IR</td>
</tr>
<tr>
<td>D1CW-C14-409SYS</td>
<td>Medium intensity dual (white / red) +IR DC system</td>
<td>+/- 48V DC</td>
<td>FAA (TC) L-865 / L-864 +IR</td>
</tr>
</tbody>
</table>

1GPS synchronized controller available

www.dialight.com | Dialight_LED_Obstruction-Main_FAA__Jan2018
Vigilant LED Based L-864 (+IR)
Medium Intensity (Red) Beacon - Infrared (IR) models available

**Certifications & Compliance**
- FAA AC 150 / 5345 - 43G
- FAA EB No. 67D
- IP66
- Transport Canada CAR 621.19
- ICAO Annex 14
- DGAC Mexico

**Features & Benefits**
- ETL verified to FAA standards
- Superior surge and lightning protection
- Patented optics for minimal down light / ground scatter
- Controllers available for all applications
- Compact, low power design
- Ideal for towers, stacks, wind turbines, buildings, etc.
- 360 degree coverage for each flash head
- Shock and vibration resistant
- Lighting and hardware kits available for standard towers

**Mechanical Information:**
- **Unit weight:** 18 lbs (8.2 kg)
- **Operating voltage:**
  - AC: 120 - 240V AC 50/60Hz power factor corrected supply
  - DC: 24 - 48V DC ±10%
- **Supply voltage ranges:** Nominal ±10%
- **Effective intensity:** 2,000 cd
- **Wattage:**
  - 3.3W (16.7% duty cycle) - standard
  - 7.0W (16.7% duty cycle) - IR models
  - 20W flashes per minute with 0.5 sec. on time
- **Operating temperature:** -40°F to +131°F (-40°C to +55°C)
- **Power factor:** > 0.9

All values typical unless otherwise stated (tolerance ±10%)

**Part Number | Description | Voltage | Certification / Compliance**

<table>
<thead>
<tr>
<th>Standard Modelss</th>
</tr>
</thead>
<tbody>
<tr>
<td>D564-A13-001</td>
</tr>
<tr>
<td>D464-A54-001</td>
</tr>
</tbody>
</table>

**Infrared (IR) Models**
- D464-R13-001 Flash head - Red + Infrared (IR) 120 - 240V AC FAA (TC) L-864

*Obstruction Signals | FAA Approved*
Vigilant LED Based L-864
Medium Intensity (Red) GPS Beacon

Certifications & Compliance
- FAA AC 150 / 5345 - 43G
- FAA EB No. 67D
- IP66
- Transport Canada CAR 621.19
- ICAO Annex 14
- DGAC Mexico

Features & Benefits
- ETL verified to FAA standards
- Superior surge and lightning protection
- Self-contained unit (no exterior controller)
- Patented optics for minimal down light / ground scatter
- Integrated photocell and GPS synchronized flasher
- Ideal for MET towers, wind turbines, bridges, buildings, etc.
- 360 degree coverage for each flash head
- Shock and vibration resistant
- Lighting kits available for standard towers
- 6kV of surge protection

Mechanical Information:
- Unit weight: 20 lbs (9 kg)
- Operating voltage: 120 - 240V AC, 50/60Hz; Switch selectable
- Flash rate: 20, 30, or 40 (+/- 1%) flashes per minute (switch selectable); (1/2 ON and 1/2 OFF)
- Effective intensity: 2,000 cd
- Wattage: 3.3W (16.7% duty cycle); 20 flashes per minute with 0.5 on time
- Power factor: > 0.9
- Operating temperature: -40°F to +131°F (-40°C to +55°C)
- All values typical unless otherwise stated (tolerance +/- 10%)

Patented Optics
Minimum ground scatter for a “community-friendly” lighting system

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<th>Certification / Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>D564-A13-001-GPS</td>
<td>Flash head - integrated GPS, Photocell, Monitoring</td>
<td>120 - 240V AC</td>
<td>FAA (TC) L-864</td>
</tr>
</tbody>
</table>
Vigilant LED Based L-810
Low Intensity (Red) RTO Side Light - Infrared (IR) models available

Certifications & Compliance
- FAA AC 150 / 5345 - 43G
- FAA EB No. 67D
- IP66
- German Air Traffic Control Notices for Pilots Part I 6, January 2005
- Transport Canada CAR 621.19
- ICAO Annex 14
- DGAC Mexico
- Nachrichten für Luftfahrer Teil I Langen, 6. Januar 2005

Features & Benefits
- ETL verified to FAA standards
- Superior surge and lightning protection
- Controllers available for all applications
- Compact, low power design
- Ideal for towers, stacks, wind turbines, buildings, etc.
- 360 degree coverage for each flash head
- Shock and vibration resistant
- Lighting kits available for standard towers

Mechanical Information:
- Unit weight:
  - 1.25 lbs (0.56 kg) (Retro unit)
  - 2.00 lbs (0.91 kg) (Single unit)
  - 4.60 lbs (2.09 kg) (Dual unit)
- Supply voltage ranges: Nominal +/- 10%
- Power factor: > 0.9 (All AC units)
- Operating temperature: -40°F to +131°F (-40°C to +55°C)
- Input AC frequency: 50/60Hz

All values typical unless otherwise stated (tolerance +/- 10%)

Dimensions in inches [mm]

US Patent #7,604,384
### Vigilant LED Based L-810

**Low Intensity (Red) RTO Side Light Ordering Information**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Voltage</th>
<th>Certification / Compliance</th>
<th>Wattage</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTO-1R06-001</td>
<td>Single Light</td>
<td>277V AC</td>
<td>FAA (TC) L-810</td>
<td>8.0</td>
</tr>
<tr>
<td>RTO-1R07-001</td>
<td>Single Light</td>
<td>120-240V AC</td>
<td>FAA (TC) L-810</td>
<td>6.5</td>
</tr>
<tr>
<td>RTO-1R08-001</td>
<td>Single Light</td>
<td>12-48V DC</td>
<td>FAA (TC) L-810</td>
<td>3.5</td>
</tr>
<tr>
<td>RTO-1R18-001</td>
<td>Single Light - Low Power</td>
<td>12-48V DC</td>
<td>FAA (TC) L-810</td>
<td>1.5</td>
</tr>
<tr>
<td>RTO-1R06-002</td>
<td>Dual Light</td>
<td>277V AC</td>
<td>FAA (TC) L-810</td>
<td>8.0</td>
</tr>
<tr>
<td>RTO-1R07-002</td>
<td>Dual Light</td>
<td>120-240V AC</td>
<td>FAA (TC) L-810</td>
<td>6.5</td>
</tr>
<tr>
<td>RTO-1R08-002</td>
<td>Dual Light</td>
<td>12-48V DC</td>
<td>FAA (TC) L-810</td>
<td>3.5</td>
</tr>
<tr>
<td>RTO-1R18-002</td>
<td>Dual Light - Low Power</td>
<td>12-48V DC</td>
<td>FAA (TC) L-810</td>
<td>1.5</td>
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<tr>
<td>RTO-1R06-004</td>
<td>Single Retro-fit Light</td>
<td>277V AC</td>
<td>FAA (TC) L-810</td>
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<tr>
<td>RTO-1R07-004</td>
<td>Single Retro-fit Light</td>
<td>120-240V AC</td>
<td>FAA (TC) L-810</td>
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<tr>
<td>RTO-1R08-004</td>
<td>Single Retro-fit Light</td>
<td>12-48V DC</td>
<td>FAA (TC) L-810</td>
<td>3.5</td>
</tr>
<tr>
<td>RTO-1R18-004</td>
<td>Single Retro-fit Light - Low Power</td>
<td>12-48V DC</td>
<td>FAA (TC) L-810</td>
<td>1.5</td>
</tr>
<tr>
<td>RTO-CR07-001</td>
<td>Single Light Red / Infrared (IR)</td>
<td>120-240V AC</td>
<td>FAA (TC) L-810</td>
<td>5.5</td>
</tr>
<tr>
<td>RTO-CR08-001</td>
<td>Single Light Red / Infrared (IR)</td>
<td>12-48V DC</td>
<td>FAA (TC) L-810</td>
<td>5.0</td>
</tr>
<tr>
<td>RTO-CR07-002</td>
<td>Dual Light Red / Infrared (IR)</td>
<td>120-240V AC</td>
<td>FAA (TC) L-810</td>
<td>5.5</td>
</tr>
<tr>
<td>RTO-CR08-002</td>
<td>Dual Light Red / Infrared (IR)</td>
<td>12-48V DC</td>
<td>FAA (TC) L-810</td>
<td>5.0</td>
</tr>
<tr>
<td>RTO-CR07-004</td>
<td>Single Retro-fit Light Red / Infrared (IR)</td>
<td>120-240V AC</td>
<td>FAA (TC) L-810</td>
<td>5.5</td>
</tr>
<tr>
<td>RTO-CR08-004</td>
<td>Single Retro-fit Light Red / Infrared (IR)</td>
<td>12-48V DC</td>
<td>FAA (TC) L-810</td>
<td>5.0</td>
</tr>
<tr>
<td>RTO-1R07-001-EU</td>
<td>Single Light</td>
<td>120-240V AC</td>
<td>ICAO only, 32cd</td>
<td>6.5</td>
</tr>
<tr>
<td>RTO-1R07-002-EU</td>
<td>Dual Light</td>
<td>120-240V AC</td>
<td>ICAO only, 32cd</td>
<td>6.5</td>
</tr>
<tr>
<td>RTO-1R07-004-EU</td>
<td>Single Retro-fit Light</td>
<td>120-240V AC</td>
<td>ICAO only, 32cd</td>
<td>6.5</td>
</tr>
<tr>
<td>RTO-6CR7-001</td>
<td>Single Light Red / Infrared (IR)</td>
<td>120-240V AC</td>
<td>TC only L-810</td>
<td>9.0</td>
</tr>
<tr>
<td>RTO-6CR7-002</td>
<td>Dual Light Red / Infrared (IR)</td>
<td>120-240V AC</td>
<td>TC only L-810</td>
<td>9.0</td>
</tr>
<tr>
<td>RTO-6CR7-004</td>
<td>Single Retro-fit Light Red / Infrared (IR)</td>
<td>120-240V AC</td>
<td>TC only L-810</td>
<td>9.0</td>
</tr>
</tbody>
</table>
Vigilant LED Based L-810
Low Intensity (Red) Light

Certifications & Compliance
- FAA AC 150 / 5345 - 43G
- FAA EB No. 67D
- ip65
- German Air Traffic Control Notices for Pilots Part I 6, January 2005
- Transport Canada CAR 621.19
- ICAO Annex 14
- DGAC Mexico
- CASA
- Nachrichten für Luftfahrer Teil I Langen, 6. Januar 2005

Features & Benefits
- ETL verified to FAA standards
- Superior surge and lightning protection
- Controllers available for all applications
- Ideal for towers, stacks, wind turbines, buildings, etc.
- 360 degree coverage for each flash head
- Shock and vibration resistant
- Lighting kits available for standard towers
- 6kV of surge protection

Mechanical Information:
- Unit weight: 7.14 lbs (3.23 kg) (Single unit)
  16.06 lbs (7.28 kg) (Dual unit)
- Wattages:
  15W / 120mA (120V AC) +/-10%
  16W / 120mA (230V AC-60Hz) +/-15%
  16W / (230V AC - 50 Hz)
  24W / 2.0A (12V DC - Standard)
  20W / 920mA (24V DC)
  13W / 275mA (48V DC)
- Voltage amp:
  44 VA (120V AC) +/-10%
  67 VA (230V AC) +/-15%
- Operating temperature: -67°F to +131°F (-55°F to +55°F)
  All values typical unless otherwise stated (tolerance +/- 10%)

US Patent #6,425,678 (other patents pending)
Vigilant LED Based L-810
Low Intensity (Red) Light Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Voltage</th>
<th>Certification / Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>860-1R01-001</td>
<td>Single Light</td>
<td>120V AC</td>
<td>FAA (TC) L-810</td>
</tr>
<tr>
<td>860-1R02-001</td>
<td>Single Light</td>
<td>230V AC</td>
<td>FAA (TC) L-810</td>
</tr>
<tr>
<td>860-1R03-001</td>
<td>Single Light</td>
<td>12V DC</td>
<td>FAA (TC) L-810</td>
</tr>
<tr>
<td>860-1R04-001</td>
<td>Single Light</td>
<td>48V DC</td>
<td>FAA (TC) L-810</td>
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<tr>
<td>860-1R05-001</td>
<td>Single Light</td>
<td>24V DC</td>
<td>FAA (TC) L-810</td>
</tr>
<tr>
<td>860-1R01-002</td>
<td>Dual Light</td>
<td>120V AC</td>
<td>FAA (TC) L-810</td>
</tr>
<tr>
<td>860-1R02-002</td>
<td>Dual Light</td>
<td>230V AC</td>
<td>FAA (TC) L-810</td>
</tr>
<tr>
<td>860-1R03-002</td>
<td>Dual Light</td>
<td>12V DC</td>
<td>FAA (TC) L-810</td>
</tr>
<tr>
<td>860-1R04-002</td>
<td>Dual Light</td>
<td>48V DC</td>
<td>FAA (TC) L-810</td>
</tr>
<tr>
<td>860-1R05-002</td>
<td>Dual Light</td>
<td>24V DC</td>
<td>FAA (TC) L-810</td>
</tr>
<tr>
<td>860-5R02-001</td>
<td>Single Light</td>
<td>230V AC</td>
<td>ICAO only, 10cd</td>
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<tr>
<td>860-5R02-002</td>
<td>Dual Light</td>
<td>230V AC</td>
<td>ICAO only, 10cd</td>
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<td>860-4R02-001-EU</td>
<td>Single Light</td>
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<td>860-4R02-002-EU</td>
<td>Dual Light</td>
<td>230V AC</td>
<td>ICAO only, 50cd</td>
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<td>860-1R02-001-EU</td>
<td>Single Light</td>
<td>230V AC</td>
<td>ICAO only, 32cd</td>
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<td>Dual Light</td>
<td>230V AC</td>
<td>ICAO only, 32cd</td>
</tr>
<tr>
<td>860-6R01-001</td>
<td>Single Light</td>
<td>120V AC</td>
<td>TC only L-810</td>
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<tr>
<td>860-6R01-002</td>
<td>Dual Light</td>
<td>120V AC</td>
<td>TC only L-810</td>
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<tr>
<td>860-7R02-002</td>
<td>Dual Light</td>
<td>230V AC</td>
<td>CASA only, 100cd</td>
</tr>
</tbody>
</table>

*All candela’s are minimums. See www.dialight.com for more information.

Dialight also offers these LED Obstruction lights for use in Hazardous Locations (Class I, Div 2)

www.dialight.com | Dialight_LED_Obstruction-Main_FAAC__Jan2018
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