HOWARD INDUSTRIES INTRODUCES

PATENT PENDING

5 Year WARRANTY

PEDESTRIAN LIGHT PATH SAFETY SYSTEM
Light Path Safety System
Foundation (by others)

**LPSS Overview Features**

*Easy to operate: no programming required – install with conventional tools.*

1. Durable-weather, rust-resistant aluminum body construction with high-performance, 100%-acrylic-polyurethane finish

2. Low-power consumption
   (1 amp @ 120v supply or .5 amp @ 277v supply)

3. Advanced louver design directs lighting, preventing blinding of drivers and pedestrians – Lexan® cover for debris-free louvers

4. Long-life, high-intensity LED lighting technology

5. Modular component construction – easy maintenance

6. Integral push button activation with wireless communication. Optional – Bollard mounted directional-motion-sensor activation

7. Louvered panel disperses ultra-bright, pure-white LED illuminated light beam that projects over 16 feet

8. Custom graphic area
Light Path Safety System
Foundation (by others)

Foundations by Others

Threaded Rod with Washers and Nuts

1 1/2" Ø Conduit Pass Through Point

18" Ø Caisson Foundation

Scale 1/2" = 1'

35° Swing

1 1/8" CC

22 11/16"

9 1/2 CC

11 1/16"

1 1/8"
Light Path Safety System

LPSS Exploded View

A  Front lens retainer panel
B  Custom graphic area
C  .125” polycarbonate front lens
D  .050” aluminum custom routed louver retainer panel assembly with high-intensity-LED lighting modules
E  Louver retainer
F  Electronic component encloser
G  Wireless communication module
H  Power control module
I  Low-voltage terminal block
J  P20 extruded aluminum frame with welded baseplate
K  Power connection box with 20 Amp disconnect switch
L-M  2-piece custom aluminum extruded baseplate cover
N  120-277 vac to 24Vdc power supply
O  .100” aluminum rear access panel
P  .050” rear lighting deflector with 2 low intensity accent LEDs
Q  .100” aluminum rear lighting access panel
R  .125” polycarbonate lens
S  Activation push button
T  Custom push to walk graphic
Light Path Safety System

Wiring Details

Control Layout Details

- Wireless Control Module
- Power Control Relay
- High Intensity LED Modules
- 24 Vdc Power Block
- 24 Vdc Power Supply
- 120/277 Volt ac Power Connection Box with 20 amp SPST Disconnect Switch
Light Path Safety System
Optional - Bollard Activation Detail

Conduit Details
by others

Dual Beam Directional Pedestrian Sensors

(Conduit B)
12 Vdc from Pedestrian Light Path Unit
Signal Wires from Sensor Bollards to
Pedestrian Light Path Unit

(Conduit C)
120-277 Vac in from
External Power Source
24 Vdc from Pedestrian
Crossing Unit to Bollards/
Signal Wires from Sensor
Bollards to Light Path Unit

(Conduit A)
120-277 Vac in from
External Power Source
Light Path Safety System
Bollards with Motion Sensor Activation (Optional)

LPSS Bollard Foundation Details

A 2 1/4" x 10" flat cap
B Protective all-weather hood
C Dual-beam-pedestrian sensors
D 2 1/4" x 10" x 3/8" Aluminum bollard post with welded baseplate
E 8" x 8" Custom decorative baseplate cover (shown slid up on post for easy anchor access)

36" Diameter

36-48" Depth to extend below location frost line to be able to maintain proper alignment of sensors
Light Path Safety System

Lighting Output Details

Lighting Output Details

<table>
<thead>
<tr>
<th>Distance From Light Path</th>
<th>11.5'</th>
<th>32.5'</th>
<th>53.5'</th>
<th>74.5'</th>
<th>95.5'</th>
<th>116.5'</th>
<th>137.5'</th>
<th>158.5'</th>
<th>179.5'</th>
<th>200.5'</th>
<th>221.5'</th>
<th>242.5'</th>
<th>263.5'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foot Candles</td>
<td>204.4</td>
<td>197.2</td>
<td>190.1</td>
<td>183.8</td>
<td>177.6</td>
<td>171.4</td>
<td>165.2</td>
<td>159.0</td>
<td>152.8</td>
<td>146.6</td>
<td>140.4</td>
<td>134.2</td>
<td>128.0</td>
</tr>
</tbody>
</table>

-5.5 Lux

-4.8 Lux

-21.6 Lux

-8.8 Lux

Center of Projector

1' 6'

21'

3.5'

Light Path Safety System
Project: Lighting Distribution
Name: Mike Eckels
Date: 5/22/19