

# RAIDEN

## ULTRA LOW PROFILE LIGHTBAR with Programmable Serial bus Control Module



12-24VDC

### FEATURES

- **Fully-Programmable:** All function wires and individual lighthouse actions may be customized and re-programmed to user's preference.
- **Ultra Low Profile:** With only 4 cm (1.69") in height, the Raiden™ lightbar is among the thinnest premium lightbars in the market.
- **Wiring at Ease:** Plug-n-play Serial bus Control Module that converges all wires for a easier installation and simpler wiring.
- **Ambient Light Sensor:** Built-in sensor that detects ambient light and automatically activate or deactivate the Low-Power operation.
- **Single, Dual:** Choice of any color combination.
- **Powerful Optics:** 360 degree seamless output that meet and exceed ECE R65 Class 2 and SAE standard.
- **Colored Top:** Choice of any coloured top cover to show your designation.
- **Quality and Durability:** Highest tier premium bar that is built to last and protect your road safety.
- **Multi-Voltage:** Input 12-24VDC with EMC Compliance.
- **Easy maintenance:** Simple removal of top cover for re-configuration or replacement of lighthoods.

### SPECIFICATIONS

**Compliance:** SAE J845 Class 1, SAE J595 Class 1; CA Title 13; ECE R65 II (TA2/TB2/TR2)<sup>1</sup>; ECE R10; CISPR25;  
NOTE: actual approvals may vary; based on actual lightbar configuration.

**Operating Voltage:** 12-24VDC

**Cable & Wire Gauge:** Single Loom Cable, 300 cm (9.8 Feet)

**42" (1066 mm) ~ 66" (1675 mm)**

Power Cable - 2 wires @ 12AWG

Comm. Cable - 2 wires @24AWG

**72" (1825 mm)**

Power Cable - 2 wires @ 10AWG

Comm. Cable - 2 wires @24AWG

**Serial bus Control Module:** 30 cm (11.8 Inch) x 2 Harness

6-PIN Harness (PWR/LB Comm.) | 18-PIN Harness (Input/Output)

2 x PWR wire @22AWG

2 x Comm. wire @24AWG

16 x Function Input wire @24AWG

2 x Function Output wire @24AWG

**No. of LEDs:** Single Color Lighthouse - 6LED per Lighthouse  
Dual Color Lighthouse - 12LED per Lighthouse

### COLOR OPTIONS

**LED Color:** Amber, Blue, Green, Red, White (Single or Dual)

**Lens Color:** Clear

**Top Cover Color:** Amber, Black, Blue, Clear, Red

### CURRENT & POWER RATING

| CURRENT                      | @12.8VDC         |                  | @25.6VDC         |                  |
|------------------------------|------------------|------------------|------------------|------------------|
|                              | Max. Current (A) | Avg. Current (A) | Max. Current (A) | Avg. Current (A) |
| Single/Dual Color Lighthouse | 0.86 / each      | 0.43 / each      | 0.43 / each      | 0.14 / each      |
| Serial-bus Controller        | 0.14             | 0.1              | 0.1              | 0.1              |

| CURRENT                      | @12.8VDC      |                | @25.6VDC      |                |
|------------------------------|---------------|----------------|---------------|----------------|
|                              | Max. Power(W) | Avg. Power (W) | Max. Power(W) | Avg. Power (W) |
| Single/Dual Color Lighthouse | 11.01 / each  | 5.5 / each     | 11.01 / each  | 3.58 / each    |
| Serial-bus Controller        | 1.79          | 1.28           | 2.56          | 2.56           |

### SUGGESTED FUSE RATING

| FUSE RATING                  | @12.8VDC      | @25.6VDC      |
|------------------------------|---------------|---------------|
| Single/Dual Color Lighthouse | +1.16A / each | +0.58A / each |
| Serial-bus Controller        | +0.19A / each | +0.14A / each |

**NOTE:** Please calculate the total fuse rating needed base on your lightbar configuration.

### FLASH PATTERN (Setting via a PC only)

| FLASH PATTERN CHART |                     |       |    |                          |
|---------------------|---------------------|-------|----|--------------------------|
| 1                   | Double              | [2Hz] | 19 | Triple-Triple Mid        |
| 2                   | Single              | [2Hz] | 20 | Quint-Triple             |
| 3                   | Triple              | [2Hz] | 21 | 7-1 Flash                |
| 4                   | Quad                | [2Hz] | 22 | Quad-Single              |
| 5                   | Single              | [SAE] | 23 | Quint-Quint              |
| 6                   | Double              | [SAE] | 24 | ICAO Flash               |
| 7                   | Triple              | [SAE] | 25 | Random                   |
| 8                   | Quad                | [SAE] | 26 | Steady Max               |
| 9                   | Quint               |       | 27 | Steady 100%              |
| 10                  | Mega                |       | 28 | Steady 75%               |
| 11                  | Giga                |       | 29 | Steady 50%               |
| 12                  | Ultra               | [SAE] | 30 | Steady 25%               |
| 13                  | Single-Quad         |       | 31 | Steady 5%                |
| 14                  | Single H/L          |       | 32 | Steady 1%                |
| 15                  | Single-Triple-Quint |       | 33 | Brake (Aux.) - SAE/ECE   |
| 16                  | Single-Single       |       | 34 | Tail (Aux.) - SAE/ECE    |
| 17                  | Double Double       |       | 35 | Turn (Aux.) - SAE/ECE    |
| 18                  | Triple-Triple Fast  |       | 66 | Reverse (Aux.) - SAE/ECE |

## BAR PATTERN

(Setting via a PC only)

| CLASSIC BAR PATTERN |                             |    |                         |    |                         |
|---------------------|-----------------------------|----|-------------------------|----|-------------------------|
| 1                   | Left-Right Single-Single    | 11 | Left-Right Swing I      | 21 | In-Out Quad-Quad        |
| 2                   | Left-Right Double-Double    | 12 | Left-Right Triple-Blast | 22 | In-Out Quad-Single      |
| 3                   | Left-Right Double-Single    | 13 | Left-Right Swing II     | 23 | In-Out Single H/L II    |
| 4                   | Left-Right Triple-Triple    | 14 | Left-Right Swing III    | 24 | In-Out Double Double II |
| 5                   | Left-Right Triple-Single    | 15 | Left-Right Triple H/L   | 25 | In-Out Double-Blast     |
| 6                   | Left-Right Quad-Quad        | 16 | In-Out Single-Single    | 26 | In-Out Swing I          |
| 7                   | Left-Right Quad-Single      | 17 | In-Out Double-Double    | 27 | In-Out Triple-Blast     |
| 8                   | Left-Right Single H/L II    | 18 | In-Out Double-Single    | 28 | In-Out Swing II         |
| 9                   | Left-Right Double-Double II | 19 | In-Out Triple-Triple    | 29 | In-Out Swing III        |
| 10                  | Left-Right Double-Blast     | 20 | In-Out Triple-Single    | 30 | In-Out Triple H/L       |

## TRAFFIC ARROW PATTERN

(Setting via a PC only)

| TP# | TRAFFIC ARROW PATTERN   |
|-----|-------------------------|
| 1   | Sweep Single            |
| 2   | Sweep Double            |
| 3   | Sweep Triple            |
| 4   | Sweep Single End-Double |
| 5   | Solid                   |
| 6   | Solid End-Double        |
| 7   | Solid Chaser            |
| 8   | Solid Fade              |
| 9   | Blink Double            |
| 10  | Blink Triple            |
| 11  | Blink Solid             |

| PULSING BAR PATTERN |                                |    |                                    |    |                                      |
|---------------------|--------------------------------|----|------------------------------------|----|--------------------------------------|
| 1                   | All Pulsing                    | 9  | Clockwise Pulsing Chaser           | 17 | Clockwise Pulsing Comet              |
| 2                   | All Pulsing Fast               | 10 | Anti-Clockwise Pulsing Chaser      | 18 | Anti-Clockwise Pulsing Comet         |
| 3                   | Left-Right Pulsing             | 11 | Clockwise Pulsing Chaser Fast      | 19 | Clockwise Pulsing Comet Fast         |
| 4                   | Left-Right Pulsing Fast        | 12 | Anti-Clockwise Pulsing Chaser Fast | 20 | Anti-Clockwise Pulsing Comet Fast    |
| 5                   | All Pulsing Tremor             | 13 | Clockwise Pulsing Scan             | 21 | Split Pulsing Chaser                 |
| 6                   | All Pulsing Tremor Fast        | 14 | Anti-Clockwise Pulsing Scan        | 22 | Split Pulsing Chaser Fast            |
| 7                   | Left-Right Pulsing Tremor      | 15 | Clockwise Pulsing Scan Fast        | 23 | Split Pulsing Scan                   |
| 8                   | Left-Right Pulsing Tremor Fast | 16 | Anti-Clockwise Pulsing Scan Fast   | 24 | Split Pulsing Scan Fast              |
|                     |                                |    |                                    | 25 | Split Pulsing Comet                  |
|                     |                                |    |                                    | 26 | Split Pulsing Comet Fast             |
|                     |                                |    |                                    | 27 | In-Out Pulsing Scan Wig-Wag          |
|                     |                                |    |                                    | 28 | In-Out Pulsing Scan Wig-Wag Fast     |
|                     |                                |    |                                    | 29 | Left-Right Pulsing Scan Wig-Wag      |
|                     |                                |    |                                    | 30 | Left-Right Pulsing Scan Wig-Wag Fast |
|                     |                                |    |                                    | 31 | Butterfly Pulsing Scan               |
|                     |                                |    |                                    | 32 | Butterfly Pulsing Scan Fast          |

## MOUNTING OPTIONS & ACCESSORIES

### RAI-ACC-001

Low Profile Standard Brackets (2PCS)

*\* For custom strap kit, contact your sales representative.*



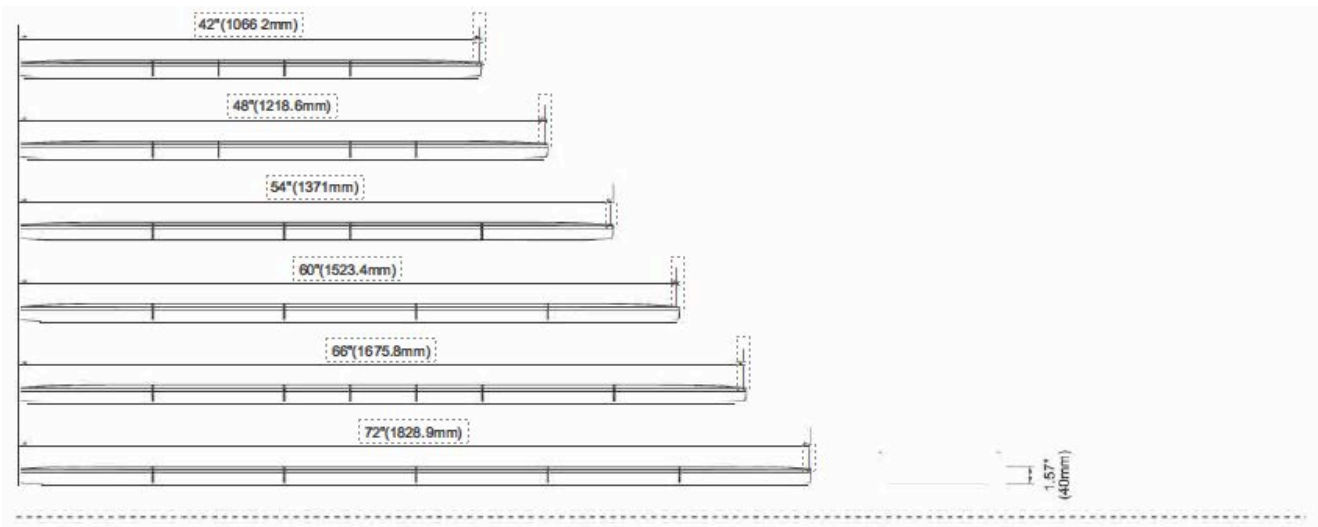
### RAI-ACC-002

Serial bus Control Module



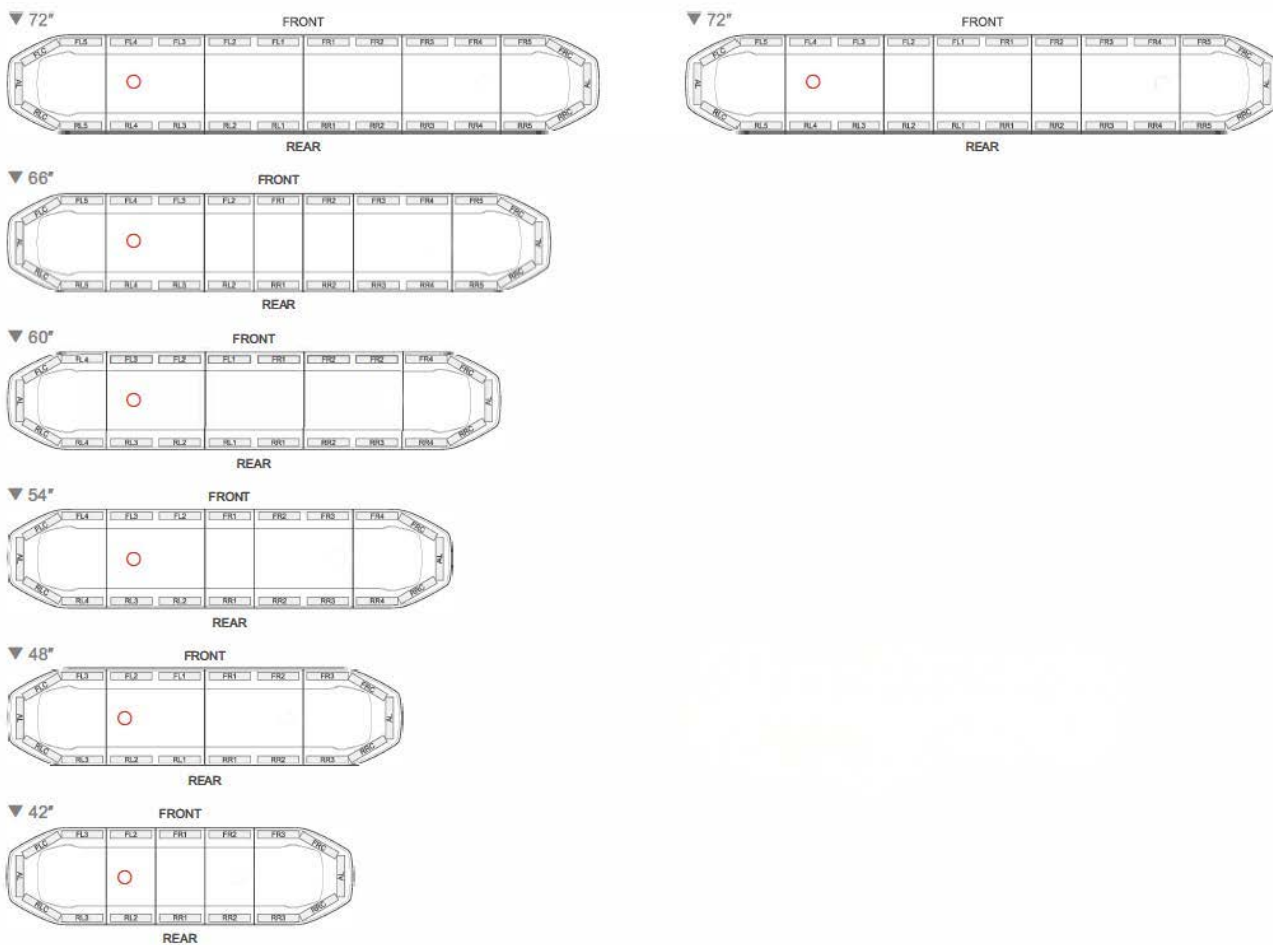
## DIMENSIONS

Available Model Length:



## LAYOUT

Standard Model



**NOTE:** Models shown above are standard layouts. For customized lighthouse configuration, contact your sales representative.

○-Cable-Exit