

MODEL

# R838 SERIES

REMOTE-ACTIVATED SOLAR LED FLASHING BEACON

### Typical Applications:

- Emergency vehicle warning
- Advance traffic warning systems

### Improves Safety

- Allows users to activate several beacons on-demand using a master controller
- Communicates wirelessly to other beacons via remote control
- Capable of multiple beacons per system

### Reliability Assured

- Incorporates field-proven wireless technology from ENCOM Wireless Data Solutions Inc.
- Core energy management system ensures operation; even during periods of cloud cover
- Turn-key system custom configured for optimum performance based on location, solar insolation and desired operation

### Cost-Effective Solution

- No trenching, wiring or digging required
- "Plug-and-play" installation for reduced disruption to traffic
- Cabinet-free, sturdy design inhibits vandalism

### Easy Installation and Operation

- User-configurable and allowing for flasher durations to be pre-programmed
- Enabled with two-way communication allowing for switch closure confirmation from remote sites
- Installs to existing sign posts within thirty minutes
- Easy to relocate and repurpose to other locations

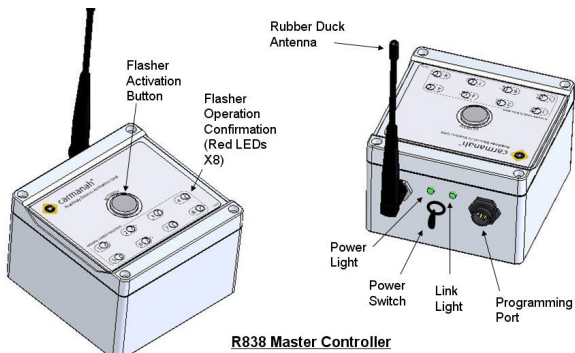
### Quality Ensured

- Manufactured in accordance with ISO 9001:2008
- Designed and assembled in North America
- No maintenance required for up to 5 years
- Backed by a 3-year limited warranty



### MASTER CONTROLLER SPECIFICATIONS

Weight	1.8 lbs (0.8 Kg)
Dimensions	4.7" (H) x 4.7" (W) x 3.1" (D) (120mm x 120mm x 80mm), plus antenna
Power supply	AC auto adapter (60 Hz)
Power supply backup	Primary: 2 hrs, secondary: 24 Hrs (at 25° C)
Power supply vehicle	12V adaptor
Max quantity R838 master controllers	2
Max quantity R838 transceivers	8
Mounting options	Wall mount or handheld



R838 Master Controller

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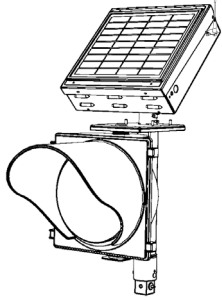
- visit us at [www.carmanah.com](http://www.carmanah.com)
- or call +1.250.380.0052 (toll-free US & Canada 1.877.722.8877)

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## MOUNTING EXAMPLES

### SINGLE BEACON (C-Compact)

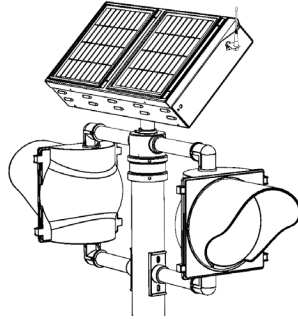
Single - Pole Mount (Square/Round)



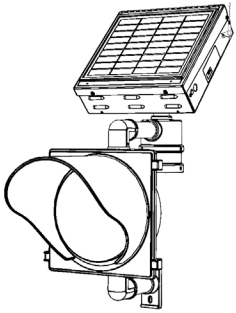
Single - Top of Pole Mount

### DUAL BEACON

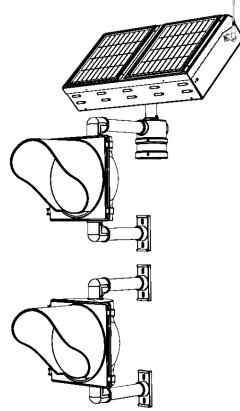
Dual - Horizontal Top Pole Mount



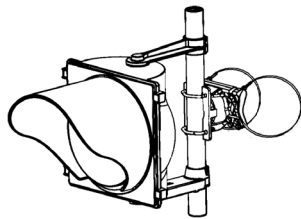
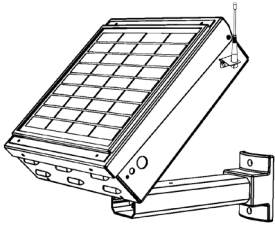
Dual - Vertical Top Pole Mount



Single or Dual - Side of Pole Mount



Single or Dual - Mast Arm Mount



\* OTHER MOUNTING OPTIONS AVAILABLE  
PRODUCT MAY NOT BE EXACTLY AS SHOWN

## QUALITY STANDARDS

Quality certification	ISO 9001:2008 Certified Manufacturer
Certification	NCHRP 350, FDOT, Radio Only: FCC, Industry Canada, system compliant with Buy American Act

## WARRANTY

Term	3-year limited warranty (including batteries)
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COMPONENT	DIMENSION		
	Length	Width	Height
Single Beacon	25.0" (635 mm)	15.0" (381 mm)	33.5" (851 mm)
10 W Engine	15.0" (381 mm)	14.8" (376 mm)	4.8" (121 mm)
20 W Engine	15.75" (401 mm)	29.3" (743 mm)	6.0" (151 mm)

\* Dimensions may vary based on pole selection, 45° tilt and beacon configuration

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US Patent No 6,573,659, Other patents pending. "Carmanah" and Carmanah logo are trademarks of Carmanah Technologies Corp.

## MODEL

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## OPERATION

Flash pattern	MUTCD* compliant Alternate, unison, and quick-flash
Control	ENCOM radio configuration - PC-based software included, input connector - DB9 (female)

## LED SIGNAL MODULE

Standard	ITE VTCSH LED circular signal supplement
Size and LED colour	12" (305 mm) diameter amber or red 8" (203mm) diameter amber

## ENVIRONMENTAL

Operating temperature range	5 to 122° F (-15 to 50° C)
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## ENERGY MANAGEMENT SYSTEM

Battery lifespan	3 – 5 years (field replaceable)
Capacity without solar charging	Up to 30 days typical (location dependent)
Daily operation profile	Up to 12 hours per day (configuration dependent)
Automatic light control (ALC)	Systems continue to provide useful light during extreme conditions that prevent charging over an extended period of time

## WIRELESS ACTIVATION

Activation	Master controller push-on/push-off or auto-timeout configurable up to 1 hour
Frequency	902-928 Mhz ISM Band FHSS (Frequency Hopping Spread Spectrum)
Effective range	500 ft (152 m)
System Configurations	Point-to-point, point-to-multipoint, multipoint-to-point, multipoint-to-multipoint

## MOUNTING HARDWARE

Bracket options for standard sign posts	1.75" (45 mm) square telpar, 2 3/8" (60 mm) round, 4 1/2" (114 mm) round Pelco traffic signal mounting hardware
Color	Black, yellow or green

## COMPONENTS

Solar Panel	High-efficiency 10 W (C-Compact) or 20 W panel
Battery	Replaceable, recyclable best-in-class battery pack. Sealed, maintenance-free.
Light Source	Ultra-bright LEDs featuring innovative optic and lens design for optimum light divergence
Construction	Fully self-contained weather, corrosion and vandal-resistant unit with premium-grade UV-resistant head

\* Meets all requirements for design, illumination, and colour of signal sections required by MUTCD, chapter 4D.18 MUTCD: Manual on Uniform Traffic Control.

Performance is tied to solar availability and geographic location.  
All specifications are subject to change without notice.