

WW100

Wrong-Way 24-Hour Flashing Warning Sign Data Sheet



High-intensity, 24-hour flashing signs increase safety by focusing wrong-way driver attention on problematic highway off-ramps.

- ✓ Cost-effective driver warning solution
- ✓ Highest intensity output in the industry
- ✓ Buy America compliant
- ✓ Solar Power Report™ (SPR) prepared for every location to ensure battery longevity
- ✓ Self-contained design to simplify installation

Superior Alert Technology

The WW100 flashes 24 hours a day on exit ramps and other areas to deter potential wrong-way entry. Additionally, multiple signs can be installed along the ramp to help get driver attention before they enter the main roadway. Each sign can be outfitted with high-intensity, rapid-flashing light bars or an LED enhanced sign.

Easy Installation

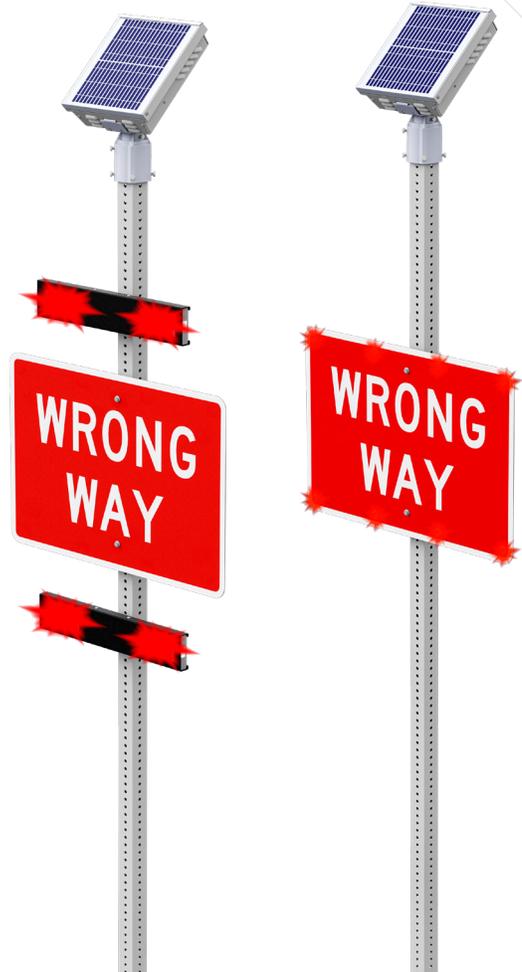
The WW100 includes a compact enclosure containing the batteries, solar panel, and energy management system. This self-contained engine speeds up installation, dramatically reducing installation costs. Existing wrong way sign posts can be retrofitted in minutes and new installations can be completed quickly and easily without trenching.

Advanced User Interface

The WW100 comes with an on-board user interface for quick configuration and status monitoring. It allows for simple in-the-field adjustment of flash pattern, duration, intensity, ambient auto adjust, night dimming, and more.

Long-term Solar Reliability

The WW100's solar engine is sized for your project location using Carmanah's proven solar software simulation. A comprehensive site assessment and report ensures each WW100 system will operate reliably over the long term.



WW100 with red LED light bars

WW100 with LED enhanced wrong way sign



MUTCD compliant



Buy America compliant



3-year limited warranty



Solar-sized for every location

WW100

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FLASHING BEACON ENGINES



Compact, 15w integrated solar engine

Large, 30w integrated solar engine

Cabinet-based, 20w, 50w, and 80w solar and AC systems

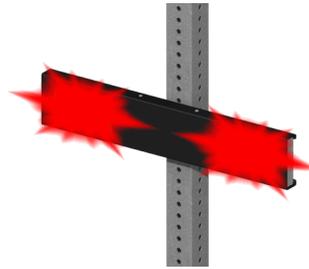
SOLAR ENGINE MOUNTING

2.0" - 2.5" Perforated Square Pole Mount 2.38" - 2.88" Diameter Round Pole Mount 3.5" - 4.5" Diameter Round Pole Mount Side Pole Mount



WARNING LIGHT OPTIONS

Light Bar(s)



LED Enhanced Sign



SYSTEM SPECIFICATIONS

On-Board User Interface	Adjustable system settings with auto-scrolling LED display on our latest EMS
	System test, status, and fault detection: battery, solar, beacon, day/night
	Flash patterns: RFB (WW+S), RFB1 (WW+S legacy), RFB2 (WSDOT), 0.5 sec. alternating (MUTCD), 0.5 sec. unison (MUTCD), 0.5 sec. x3 alternating (MUTCD), 0.1 sec. unison, 0.25 sec. unison, 0.1 sec. x3 quick flashes unison, 0.1 sec. x3 quick flashes alternating, steady on
	Intensity setting: 20 to 1400 mA for multiple light bars or LED enhanced signs
	Nighttime dimming: 10 to 100% of daytime intensity
	Ambient Auto Adjust: increases intensity during bright daytime
	Automatic Light Control: reduces intensity if the battery is extremely low
Energy Collection	Solar or AC-powered
	45-degree solar panel tilt for optimal energy collection
Energy Storage	Maximum Power Point Tracking with Temperature Compensation (MPPT-TC) battery charger for optimal energy collection in all solar and battery conditions
	Replaceable, recyclable, sealed, maintenance-free, best-in-class AGM batteries offer the widest temperature range and longest life
	Battery design life: +5 yrs.
Solar Engine Construction	Tool-less battery change with quick connect terminals and strapping for easy installation
	Weatherproof, gasketed enclosure with vents for ambient air transfer (NEMA 3R)
	Lockable, hinged enclosure for access to on-board user interface and batteries
	Corrosion-resistant aluminum with stainless steel hardware
	Raw aluminum finish or powder coated in yellow or black
Environmental	Prewired to minimize installation time
	High-efficiency optics and EMS = the most compact, lightweight system
Warranty	-40 to 165° F (-40 to 74° C) system operating temperature
	-40 to 140° F (-40 to 60° C) battery operating temperature
Warranty	3-year limited warranty (1-year battery warranty)

LED ENHANCED WRONG WAY SIGN



R5-1a

MUTCD Chapter 2B compliant, R5-1a layout
3M Diamond Grade DG3 retroreflective sheeting, 4092 red
8 red LEDs
36 and 42" sign sizes

WARNING LIGHT SPECIFICATIONS

Light Bar	Purpose-built light bar optics = maximum efficiency and no stray light
	Exceeds SAE J595 class 1 intensity when used as recommended
	Meets SAE J578 chromaticity
LED Enhanced Sign	3 in (76 mm) x 7 in (178 mm) clear, UV-rated polycarbonate lens with red LEDs
	High-power LEDs: +90% lumen maintenance (L90) based on IES LM-80
	Independent, stainless steel mounting brackets make back-to-back installation simple and enable in-field aiming for maximum effectiveness
LED Enhanced Sign	MUTCD compliant: 2009 MUTCD, Chapter 2B Signs
	High-power LEDs in waterproof housings
	Aluminum channels protect wiring; includes junction box

Specifications subject to local environmental conditions, and may be subject to change.

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