



SOLAR-POWERED LED BUS STOP BEACON

- ✓ **A day/night signaling device enables waiting passengers to NOTIFY THEIR BUS that a stop is required.**
- ✓ **Can REDUCE or ELIMINATE rider pass-bys and increase customer satisfaction**
- ✓ **Can be EASILY INSTALLED and unique solar/LED design ensures long life and no scheduled maintenance**

Carmanah Technologies is pleased to introduce the standalone **i-SIGNAL™** as the latest addition to our growing suite of solar-powered LED lighting products for the transit industry.

How the i-SIGNAL™ Works

The solar-powered **i-SIGNAL™** is a user-activated flashing beacon that enables waiting riders to signal their bus that a stop is requested... uses the same principle as the stop request cord on the bus itself!

"The [i-SIGNALs] work great! Passengers love them! I love them! May we have one installed at 373rd St. Northbound on 99?" - Bus Driver, Pierce Transit, Tacoma WA

A Bus Operator's Perspective

Bus operators adhere to precise schedules and normally only stop if they see someone waiting at a stop. Conditions often exist whereby an operator may not see a waiting passenger, or may see them too late to stop safely. The **i-SIGNAL™** has the ability to allow bus operators to see, well in advance (as far as a mile away), that a stop is requested.

"The [i-SIGNAL] bus indicators are great! Helps because of the high speed limit on Pac Highway -- it gives us plenty of time to stop." - Bus Driver, Pierce Transit, Tacoma WA

Safety First!

From the passengers' perspective, a pass-by can be viewed as a personal safety issue. In poor weather conditions, where there is no shelter and/or service is infrequent, or late at night in an unfamiliar part of the city, the **i-SIGNAL™** provides the peace of mind that their bus will see them and make the required stop!

A Low-Cost, Easy-to-Install Solution

The **i-SIGNAL™** can be installed without removing the bus stop pole. It fits all round, square and octagonal poles up to 2" in diameter. For flexibility, the LED beacon can be oriented in 16 different directions (22.5° increments). The **i-SIGNAL™** unit is ultra-compact, with all electronics, solar panel and batteries contained within the head. The system is activated by a durable, waterproof switch. For more information, contact Carmanah toll-free at **1.877.722.8877** or via e-mail at **info@carmanah.com**.

"The i-SIGNAL™ offers a unique and inexpensive way to reduce rider pass-bys and enhance the overall transit riders' experience..." - Marc Perla, Former Bus Stops Programs Manager, Tri-Met



i-SIGNAL™ Flashing Bus Stop Beacon

Operational

Night visibility range	~ 1 Mile (1.6km)
Day visibility range	~0.25 Mile (0.4km)
Output color	White
Flash pattern	60 fpm (14% duty cycle)
Flash duration/activation	60 seconds default *
Minimum autonomy	35 hours without charge
Minimum peak sunlight	2 hours
Operating temp. range	-40°F to 176°F (-40°C to +80°C)

Physical

Illumination	Hi-brightness LEDs
Solar panel	Mono-crystalline
Solar panel dome	UV-protected polyurethane
Battery	Pure lead-tin with starved electrolyte (fully recyclable)
Energy management	MICROSOURCE™: - Automatic light control - Intelligent charging
Housing	Injection-molded, UV-protected high impact polycarbonate
Patents	US Patents: 6,355,989, 6,013,985 & 5,782,552. EU Patent App.: 96925627.0 Other Patents Pending

Carmanah Technologies Inc.

Building 3, 204 Harbour Road
Victoria, British Columbia V9A 3S2

Toll-Free (N. America): 1.877.722.8877
Worldwide: 250.380.0052
Fax: 250.380-0062
E-mail: info@carmanah.com
Online: www.carmanah.com



Carmanah