# Warning VATCS - Cyclist Series

Sharing the road safely - promoting driver awareness of cyclists



Identifies bicycles amongst other traffic

Highly accurate cycle counts even in groups

Independently proven to be long term effective

Dynamic flashing beacons attract drivers attention

Clear speed management strategy in line with MUTCD

Vehicle or cyclist triggered



#### Share the road safely

Cyclist VATCS signs can be triggered from inductive Zelt loop or microwave doppler radar to detect cyclist presence or vehicle approach speeds or a combination of both detection forms and in line with the core MUTCD philosophy of consistent road speed management strategy, utilize warning diagrams that are already recognized in the MUTCD.

The VATCS may be installed to give additional emphasis to the targeted driver of cyclist activity ahead, in particular in circumstances where designated cyclist paths do not already exist or cyclists cross driver's path. Targeted drivers are not informed what speed they are travelling, rather they are advised of the cyclist presence.

The warning can be supplemented with SLOW DOWN, or CYCLIST AHEAD text and further enhanced by dynamic flashing pairs of horizontal beacons. The VATCS are not a replacement for static signage or to be used as a repeater.

Deploying the VATCS family sign series will provide a consistent and clear approach for managing driver cyclist awareness in your community. VATCS are the only traffic calming display technology that has been federally field tested on a large scale to prove long term effectiveness, with driver respect of the technology being maintained over a 5 year period.

First introduced in 2008 after being piloted by various communities in Ontario, VATCS are now in operation across 5 provinces and are steadily becoming the benchmark for consistent community display based traffic calming.





## Technical Data

Model Reference	Cyclist Ahead VATCS – VATCS/W11-1/CA/L/DL/PT (cyclist ahead warning text)
	Cyclist Ahead VATCS – VATCS/W11-1/SD/L/DL/PT (slow down warning text)
Display Technology	ITE color tested high intensity LED display. Optical performance in compliance with FHWA MUTCD, Auto Luminosity control to suit ambient conditions.
Display Format	Color inverted MUTCD Cyclist warning diagram, (750 × 750mm) and (600 × 600mm) diagram size options, complete with matching CYCLIST AHEAD or SLOW DOWN message and flashing beacon pairs. Warning text text height 100mm and 150mm to suit (600 × 600mm) and (750 × 750mm) model sizes. Beacons 125mm in diameter.
Vehicle Detection	In applications where sign is to be activated by vehicle speed detection , an FCC compliant K band radar microwave vehicle detector is integrated into the sign, factory preset range of 600 feet / 190Metres. Speed range of 8 to 240kmh. 12 degree beam accuracy +/-1 unit of measure.
Cyclist Detection	ZELT Inductive Loop Sensor and controller validated and supplied by Eco- counter to be the only invisible system able to accurately count bicycles in almost any type of configuration, and especially in mixed traffic. PC based configuration software used over Bluetooth™ to set the activation delay and duration times of the display warning from loop trigger.
Model Dimensions	(600 x 600mm) Size 1681mm high x 956mm wide x 150mm deep (750 x 750mm) Size 1881mm high x 1156mm wide x 150mm deep
Model Weights	(600 × 600mm) Size 45Kg (plus batteries in case of solar) (750 × 750mm) Size 60Kg (plus batteries in case of solar)
Power Supply	Display is dual Solar DC and AC 110V compatible as standard. In the case of Solar power installs SP80S4 solar kits should be ordered for each sign comprising 80W panel, side of pole mount and $4 \times 12V$ 20amphr battery reservoir which are mounted internal to sign. Important for 24/7/365 solar operation, solar panel must be facing due south and have clear unobstructed view of sky with no shadowing.
Cyclist Count	ZELT sensor detects the wheels of a bicycle and sends a signal to the Eco-combo logger. Eco-combo logger records count. Data is collected over Bluetooth <sup>™</sup> or transmitted to a server by GPRS and analyzed using the Eco-Visio online platform.
Enclosure	Purpose fabricated lightweight vandal resistant NEMA Type 3S ingress rated enclosure.
Finish	Matt Black front face Aircraft Grey rear powder coat finish or color to suit, 60 micron min thickness.
Window	5mm anti reflective Polycarbonate.
Operating Temp Range	-35°C to + 74°C, 95% non condensing.
Mechanical Interface	Sign will be supplied with Signfix U channel supports on rear and SX0220 channel banding interface brackets to allow 3/4" band mounting to a variety of support posts. Solar panel equipment is supplied with side pole mount to allow 1/2" banding
Electrical Interface	Cable kits are supplied to facilitate plug and play connection to solar panel and sign. Sign also equipped on rear with naked AC plug and socket type 6P connection and separate <sup>3</sup> / <sub>4</sub> " knock out for conduit cable entry. Dust Caps are supplied to protect any unused sockets. Internal power connections are screw terminal.



### Operation

The Cyclist Ahead warning VATCS is activated by receiving a cyclist presence detection signal from the zelt inductive loop detector provided by Eco-Counter. The activation timings from receipt of the signal are configured locally over Bluetooth<sup>™</sup>.

Cycle count data can be collected locally by the eco-combo logger or download remotely and further analysed by the Eco-Visio platform. Optionally the sign may also be activated by vehicle speeds from an internal integrated K band radar which is configured to suit the posted speed limits in effect.

When vehicles are travelling below the radar trigger speed or the cyclist is not present the sign will remain entirely blank, importantly the warning message is targeted and hence remains long term effective.

All VATCS are supplied with a full operator manual which contains a guide to installation and set up best practices, which it is recommended are followed to ensure optimal performance and results.

#### **About Unipart**

The Unipart Group is a leading UK manufacturer, full service logistics provider and consultant in operational excellence. Operating across a range of market sectors, including automotive, manufacturing, mobile telecoms, rail, retail and technology, Unipart offers a breadth of services to a wide range of blue chip clients internationally.

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