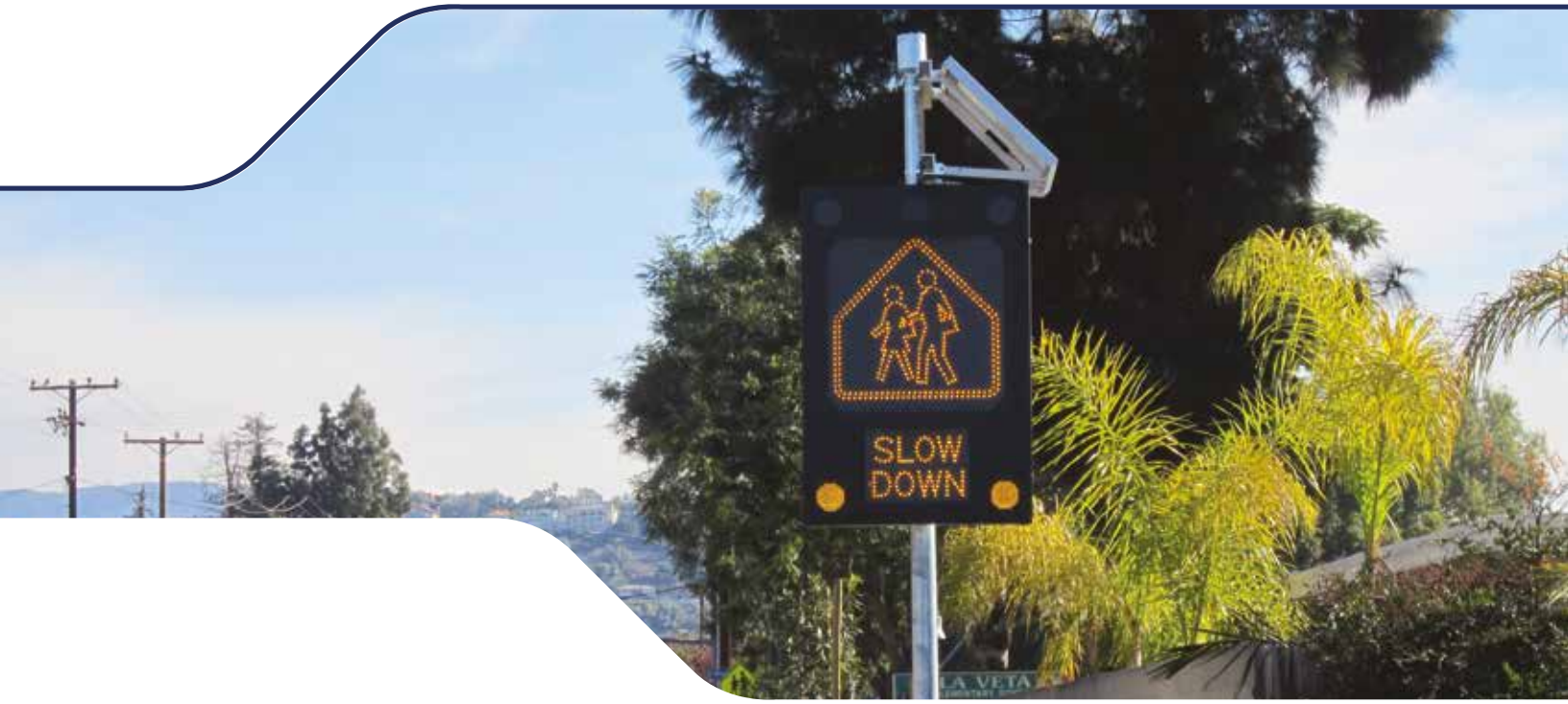
Regulatory VATCS – School Zone Series

No responsible driver wants to speed in a school zone, but some need reminding, particularly at key times of the school operation



- Hazard specific - educates driver of posted speed limit and school hazard at peak times
- Independently proven to be long term effective
- 4mph reduction on average speed maintained after 3 years - TRL 548 report
- 1/3rd drop in accident rate after 3 years - TRL 548 report
- Dynamic flashing corner beacons attract driver attention
- MUTCD compliant
- Clear speed management strategy in line with MUTCD
- Dual Posted Speed and School warning diagram models
- Automated scheduler for school zone peak times

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Increased Safety in School Zones

All regulatory school zone VATCS units employ microwave Doppler radar to detect vehicle approach speed and in line with the core MUTCD philosophy of a consistent road speed management strategy, utilize R2-1 speed limit and S1-1 school zone diagrams that are already recognized in the MUTCD.

Targeted drivers are not informed what speed they are travelling, rather they are advised of the regulatory posted speed limit and school zone hazard with the request to "SLOW DOWN" further enhanced by dynamic flashing pairs of horizontal beacons.

The school zone VATCS series are used in tandem with existing static school zone signage being deployed downstream as a targeted reminder and not to be used as a replacement for the static signage.

Deploying the VATCS family sign series will provide a consistent and clear approach for managing driver speeds 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 FHWA, VATCS are now in operation across 15 states and are steadily becoming the benchmark for consistent community display based traffic calming.

Technical Data

Part Code	Regulatory VATCS – School Zone Series
	VATCSS1-1/R2-1,X/SD/L/DL/PT (Dual Diagram)
	VATCSS1-1/SD/L/DL/PT (Single Diagram)
	Note: Dual R2-1 Regulatory VATCS also available for this application
Display Technology	ITE color tested high intensity LED display. Optical performance in compliance with FHWA MUTCD, Auto Luminosity control to suit ambient light conditions.
Display Format	Color inverted MUTCD speed limit diagram, R2-1 (24") and S1-1 (30") size options, combined together in one sign or single S1-1 display, complete with matching Slow Down message and amber flashing beacon pairs. Slow Down text height 4" (100mm). Beacon size 5" diameter.
Vehicle Detection	FCC compliant K band radar microwave vehicle detector integrated into the sign, factory preset range of 600 feet / 190Metres. Speed range of 5 to 150mph (8 to 240kmh). 12 degree beam accuracy +/-1 unit of measure. Simple set up.
Model Dimensions	Size 60" (1510mm) high x 40" (1016mm) wide by 6" (160mm) deep.
Model Weights	90lbs (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 x 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.
Data Logging and Analysis Software	Datalogger windows based software is available to download date and time stamped traffic speed data from sign over Bluetooth™ for evaluation analysis in Excel.
Sign Configuration	Custom windows based software over Bluetooth™ wireless connection from client supplied Laptop or Netbook.
Scheduling	VAMP© windows based scheduler software is available to create schedules for upload to the dual diagram versions of the sign, enabling automated operation in accordance with the time of day posted speed limits in your school zone. Operator can schedule 10 different switching intervals per day and 40 exception periods per year.
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	¼" (5mm) anti reflective Polycarbonate.
Operating Temp Range	-30 to 165°F, 95% non condensing.
Mechanical Interface	Two mounting options are available: **1.** Sign will be supplied equipped with sign fix U channel supports on rear and SX0220 channel banding interface brackets to allow ¾" band mounting to a variety of support posts. **2.** Sign will be equipped with horizontal Z bracket mountings on rear which are thendrilled to suit post by installer and sign is then clamp mounted by stainless steel U bolts (Not supplied). Solar Panel equipment is supplied with side pole mount to allow ½" 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 ¾" knock out for conduit cable entry. Dust Caps are supplied to protect any unused sockets. Internal power connections are screw terminal.

Operation

The VATCS sign is designed to operate in both ACTIVE and STEALTH mode.

STEALTH mode is used to allow client to attain a baseline of road speed from the VATCS without the VATCS displaying any visual warning to the approaching traffic. Once collected this base data can be compared against historic data and then importantly used to evaluate performance of the sign in ACTIVE mode.

Once in ACTIVE mode the sign upon detecting an approach speed above the pre-configured trigger speed will cause the warning display to be illuminated for 3.5 seconds giving drivers sufficient time to digest and adjust behaviour appropriately. When vehicles are travelling below the trigger speed the sign will remain entirely blank, importantly the warning message is only targeted at offending vehicles. It is normal practice for regulatory school zone series warning sign applications to set this to 10% + 2mph (e.g. In a posted 30mph zone, the sign would be set to trigger at 35mph).

Optional VAMP© desktop scheduling software allows the operator to automate sign operation to school calendar in dual diagram VATCS models. Schedules are uploaded to the signs using Bluetooth™ to reflect time of day regulatory posted speed limits.

All VATCS are supplied with 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.

Dual Display

Model
VATCS/S1-1/R2-1,20/SD/L/DL/PT

Uniplan Part No.
SVSR2-1CSLDPCAP (30" x 30")

Model
VATCS/S1-1/R2-1,25/SD/L/DL/PT

Uniplan Part No.
SVSR2-1DSLDPCAP (30" x 30")

Model
VATCS/S1-1/R2-1,30/SD/L/DL/PT

Uniplan Part No.
SVSR2-1ESLDPCAP (30" x 30")

Model
VATCS/S1-1/R2-1,35/SD/L/DL/PT

Uniplan Part No.
SVSR2-1FSLDPCAP (30" x 30")

Single Display

Model
VATCS/S1-1/R2-1,20/SD/L/DL/PT

Uniplan Part No.
SVSR2-1CSLDPCAP (30" x 30")

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