

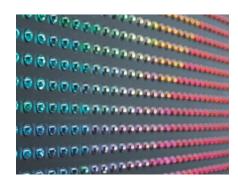


Variable Message Signs (VMS)

Full colour VMS from SWARCO provide ultimate message flexibility and future proofing. They can be used for traffic information, parking guidance, on motorways or in a retail environment.

Functionality and Benefits

- Full colour display, able to display any text, graphic or image offering ultimate message flexibility and future proofing
- Fully scalable modular construction ensuring the most suitable sized display can be supplied for particular requirements; from internal car park signs to motorway applications
- Display pictures, text or graphics, 64 million colours
- A wide range of pixel pitch options from 12mm to 35mm, fitting to any application
- CE Certified to EN12966, EN12899, TOPAS 2516 registered
- Patented lens design which optimises efficiency through light distribution
- SWARCO's cloud-based control system, allows you to create messages for full colour signs, access vital statistics, view full data reports and set car park special days and opening times
- VP based communication including 2/3/4G, Mesh, fibre, wi-fi and ADSL
- Ability to be fully integrated with UTMC systems





Variable Message Signs (VMS)

Use Cases

Information and Warning Messages

Set real-time messages to display traffic information or warnings such as adverse weather conditions or stopped traffic ahead.

- Able to set real time messages; react in real time to the road conditions during extreme weather or unforeseen circumstances
- Keep drivers informed, improving their user experience on your roads
- Manage your roads efficiently and save resource, no need for teams to put out temporary signage
- Timetable messages ahead of time to coincide with planned events

Use VMS to advise and inform;

- Motorway Applications
- Urban Traffic Guidance and Information
- Advise of upcoming events
- Warn of adverse weather conditions
- Offer diversion routes during peak periods or to navigate away from high air pollution areas
- / Lane Control



Messenger Trailer VMS – A Smart Way to Display Messages

All the technology of a SWARCO full colour VMS but moveable. Ideal for temporary messaging such as advising of upcoming events or traffic information.

The Smart Messenger collection can also be used in conjunction with radar detection for speed warning and recording vehicle speeds.

- Full colour RGB Matrix Sign, able to display graphics, text or images.
- Complete with fuel cell for unattended operation, all year round.
- Alternatively, the highly efficient signage systems, means batteries are also a great alternative, with up to 7 days battery-life.
- ITS upgrades available including radar speed detector
- Exceeds all Highways standards including CE Certification to EN12966, L3, R3, B6, T1





- Detachable towing bar
- Powered height adjustment and 360° sign rotation
- Telescopic jacks for levelling
- Sign can be controlled from UTMC System
- Can also be managed using SWARCO's MyCity
- 2G/3G/4G Communications
- Variety of sizes available for different applications ranging including the Smart City which features a small footprint for urban environments up to trailers for use on high - speed roads.





Interurban Variable Signage

Variable Message Signs on the Inter-Urban network guide drivers safely and conveniently to their destination.

Reliability

Our reliable VMS are designed to improve overall traffic flow and reduce energy consumption as a part of SWARCO's commitment to creating environmentally sound products. SWARCO's highway VMS are designed to have a non-aging effect on the LEDs as a result of a very low operating current on the LEDs. Resulting in low power consumption and reduced maintenance.

Key Benefits

When you choose our highway VMS you get a reliable solution made by SWARCO

The SWARCO VMS offers:

- 15 year+ design life
- Highly reliable product, reducing the number of site visits required
- LED brilliance, meets all standards and Highways England approved.

Interurban Variable Signage

A Complete Solution

SWARCO provide the full requirements of TR2607 sign sizes from AMI, MS2, MS3 2x16 and MS3 3x18 as well as MS4 and MS4-R. TR2607 also allows new sign types or non-standard signs to be created using the 20mm pixel pitch full colour full matrix approach and the modular SWARCO platform is ideally placed to meet these needs.

SWARCO have also upgraded the communications of its signs to DSL which can be run using existing highway sign RS485 cabling but increases the bandwidth to 10Mbps as well as allowing traditional communications via RS485.

Where required for enforcement the signs have been HOTA (Home Office Type Approved) to cover red X lane closures and speed enforcement.



Prism Signs

Use prism signs as an alternative to LED Variable message signs for preset messages

Designed and engineered to provide an alternative to LED Variable Message signs, Prism signs are an ideal solution if you require a limited number of messages.

Ideal for use in part time pedestrian zones or where a frequent diversion may need to be implemented.

Prism signs can display up to 4 messages and signs can be made up of multiple drives.

- Choice of 100mm or 200mm prism sections
- Sinusoidal drive feature maximizes sign life
- Optional temperature controlled de-icing cycle
- UTMC Compliant
- NMCS2 Compliant
- Remotely monitor sign status including current messages display, communications and power
- Local control override for maintenance
- Manual control override available in the event of power failure
- Displays messages even in the event of a communication or power failure
- Løw power consumption means solar is a convenient option





Vehicle Activated Signs

Encourage safer driving with a range of Vehicle Activated signs to warn speeding vehicles or to raise awareness of vehicle speeds

As enter a built - up residential area, or where there are adverse risks to road users, speed warning signs can be used to display a warning message to speeding drivers.

When are they used?

- To warn speeding drivers to slow down and obey the speed limit.
- To change driver behaviours through Speed Indication signs that display the speed of the approaching vehicle.
 This makes drivers as well as all other road users aware of the vehicles speed.
- A variety of power solutions are available with SWARCO's patented low power LED system; choose from solar, mains or switched mains
- Automatic Dimming to ambient light levels
- Also available as moveable, battery powered signs (MVAS)



Vehicle Activated Signs

Complete Solutions

- All built in to a single enclosure, even with a solar solution, there are no external battery boxes, ensuring all components are situated in a single water resistant enclosure
- Use a number of these signs across a neighbourhood or borough to improve speed awareness across the area and use the data logging to analyse local traffic trends such as volume and speeds to detect for speeding issues or understand peaks and troughs in traffic flow
- Remote data logging available

Benefits

- Improving road safety and speed awareness
- With a 15 year design life, these are a reliable option
- All standard VAS are TSRGD Compliant, however we also provide bespoke solutions
- Free warranty as standard, maintenance agreements and extended warranties are also available
- All LED signage is made using ultra-low voltage LED's, they are ideal for a solar solution or use off-grid. This also makes them long lasting products and an environmentally friendly option



Movable Vehicle Activated Signs (MVAS)

The MVAS has been designed especially for village or residential environments and can be used as part of a community speed watch project. They can be moved around to different locations and can be powered by solar or battery and come with free data logging.

The electronic speed signs are great for self-deployment to improve road safety and encourage safer driving speeds.

The signs in this range can be mounted to existing street furniture reducing the need for additional poles and are designed to be light enough to be easily relocated.

This range comes with data logging as standard so that vehicle speeds, quantities and trends can be analysed to assess road safety measures.

These devices have a battery life of up to 20 weeks from a single charge, making it the lowest maintenance version to date. Alternatively, these can also be solar powered reducing the need for maintenance even more.







Hazard Warning Signs Prevent Accidents in Real Time

Intercept the hazards before they occur. Hazard Warning signs can be used at dangerous junctions or roads that are susceptible to adverse weather conditions.

- Give warning to motorists of hazards ahead or of dangerous road conditions
- Activation can be from a multitude of inputs; including queue or junction detection, weather monitoring or from a central management system. These are capable of interfacing to UTMC central systems too, we have a full solution to suit your needs





Hazard Warning Signs Prevent Accidents in Real Time

Solutions

- Tackle particularly dangerous junctions with our complete warning solutions bespoke to your project requirements
- Receive live information from your sign including the number of activations and a full fault or error report to ensure safety critical signs are always in optimum condition. All of which can be accessed remotely using remote monitoring.
- SWARCO can also provide complete solutions for road areas prone to extreme weather. Our flood warning system enables you to monitor flood levels at all times and activate warning signs automatically

Certifications and Approval

- CE Certified to EN12966
- TOPAS 2516 approved on TSRGD designed signs
- Designed and manufactured in the UK





School Warning Systems

School sites are a unique environment where safety is paramount With a range of options to choose from, allow us to make your school sites safer

Functionality

- Timetable your signs to fit with local school hours and term times
- With a low power consumption, renewable power sources such as solar are a suitable solution
- A variety of designs available including speed limit warnings featuring the school crossing triangle warning symbol.

Benefits

- You can remotely enter up to 255 separate timetables up to three years in advance, reducing the need for engineer site visits
- Ensure safety of vulnerable road users and make approaching vehicles aware of the potential hazard
- Make drivers aware of the speed limit as they enter the area

Certification and Approvals

- CE Certified to EN12966
- Produced and designed in an ISO Quality, Environmental and Health and Safety registered environment
- Designed and manufactured in the UK





Over-height Vehicle Detection

Prevent bridge strikes and allow drivers to safely navigate around low bridges and tunnels.

Functionality

- A variety of detection methods
- Compliant fixed messages
- Also available in full colour RGB VMS to display any message or graphic
- Ideal for use in locations with low bridges, restricted access due to height or tunnels
- Use the signage to not only warn drivers but to divert them to an alternative route

Solutions

- Remote monitoring allows for constant monitoring of these safety critical systems. Including, recording the number of activations, sign status and power status as well as a full error reporting system
- Host multiple signs on a single remote monitoring system



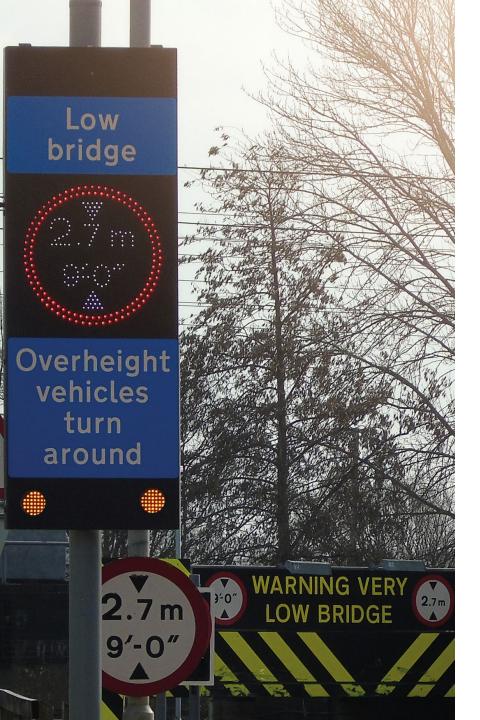
Overheight Vehicle Detection

Benefits

- Reduce the number of bridge strikes and the knock on effects for the traveller as well as extensive repair costs
- Ensure safety of all road users with this dynamic warning
- Use the data for analysis to register the number of activations and driver behaviours

Certification and Approvals

- CE Certified to EN12966
- TOPAS 2515 approved
- Produced and designed in an ISO Quality, Environmental and Health and Safety registered location
- Designed and manufactured in the UK





Flexible Parking Guidance Solutions

Choose from the simple yet effective module LED signs or opt for full colour to demonstrate a number of messages.

- Guides the traveller to the nearest spaces, improving the user experience
- Reduces congestion by reducing the search for free spaces and improves air quality and pollution levels
- Display technology is fully scalable from simple single colour display through to full matrix display providing the ultimate solution for message flexibility and impact
- Option to integrate car park count equipment within signs which can reduce the requirement for separate cabinets
- Fully flexible designs, we will create a design especially for your needs





Traffic Signals

SWARCO's signals for the UK are a sleek and modern designed exclusively for LED units, creating a slim profile and low power consumption. Built to last and conform to the UK highways standards. With optional backing boards, additional aspects and regulatory symbols available these can be used for any highway application.

Futura UK signals

Widely used in the UK and across the globe, the FUTURA traffic signal is sleek and modern in design yet is durable and adaptable for any highway application.

Benefits

- A reliable solution for traffic control
- Conforms to all UK highway standards
- Slim profile to reduce street clutter
- Modular design, built to any specification
- Variety of mounting brackets and fixings available
- Standard ELV 48V but alternative
- voltages also available
- Backing boards available
- CE Certified to EN12368:2015



Traffic Signals

Flexible Application

The Futura UK is not only available as a 3-aspect RAG signal but also as a 4-aspect with arrow masks and 300mm regulatory symbol units for when applications require. We are also able to offer 2-aspect pedestrian signals as well as a variety of accessories including backing boards, tunnel hoods and a number of fixing types for all mounting methods. Supplied as standard as ELV 48V, alternative voltage options available.

World Renowned LED's

Our signals are fitted with our world renowned FuturLED LED modules, operate using a centralised light source, providing uniform illumination and improved reliability. The IP65 rated LED's are driven at a low power output increasing the product lifecycle and resulting in an incredibly efficient unit, complete with a 5 year warranty.



ITC – 3 Traffic Controller

Exceeding UK and International standards the ITC-3 is available as ELV and LV and to a number of sizes depending on the user requirements up to and including 32 phases. The integral easy-to-use interface provides engineers a fully flexible solution for easy configuration and signal status confirmation.

Benefits

When you choose ITC-3, you get a reliable solution made by SWARCO. The controller and interface offer:

- Touchscreen with full access to all parameters and overview of status
- Integral UTMC Interfaces for UTC and RMU
- TOPAS 2500 approved
- BS EN7987, BS EN50556, BS EN12675
- Free configuration and simulation software
- Fault reporting systems via email or SMS
- Password protected with two security levels
- Built-in bus priority functions available
- Up to 32 phases and 128 detectors can be configured for complex applications
- Optional I/O cards for control or relay in/output
- Real time clock with battery backup
- Detection system based on inductive loops with 8 loops per card. Video, magnetometer and radar detection also supported
- Lamp drive cards with TRIAC outputs for 48/230 VAC with full monitoring



Low Level Cycle Signals

The low - level cycle signal from SWARCO offers additional safety to cyclists at junctions. Often used to give cyclists an opportunity to move at a junction prior to vehicles or sometimes used to give cyclists a phase separately to vehicles, they are used to improve cyclist safety and confidence.

Benefits

- Available as standard 3-aspect configuration or with additional regulatory symbol
- Durable aluminium and aesthetic design, vandal resistant
- ELV 48V for added safety
- Tested in accordance with EN12368, IP 65
- Luminous Intensity; performance level 1, class 1







SWARCO MyCity

MyCity is a new modular Traffic Management Platform that allows authorities to improve mobility for their citizens throughout the entire journey.

This continuously growing platform allows you to work from a single sign-on system, with various user rights and lets you add new features at any time. Start small and add required functionalities when needed to improve your city traffic flow and safety. Reduce service costs and manage your city in the better way.

MyCity is an open platform that can be extended to your city's individual needs. A city can start small with an "as a Service" business model and add required functionalities when needed. Various legacy systems, data sources and information systems can be easily integrated. For the larger cities we offer full blown tailormade on-prem solutions where various sources of data are integrated to determine the current and future traffic situation and determine an optimisation strategy.



SWARCO MyCity

Integrate your roadside equipment to get remote monitoring of live data, set sign messages, timetables and receive statistics & reports.

Benefits

Improve Traffic Safety

Improve traffic safety by using surveillance and well-functioning equipment

Improve Traffic Information & Create A Smoother Traffic Flow

Plan and evaluate your traffic and make decisions based on facts rather than theories

Reduce Congestion & Pollution

Meet your city's environmental goals by reducing traffic con- gestion and prioritising cyclists and pedestrians

Make Best Use Of Existing Infrastructure

Modern planning tools and cloud - based solutions create the possibility to improve existing infrastructure instead of building more roads, reducing your costs.





