# **Traffic Systems**

Constant innovation since 1977 has made our experience global.





# **Experience**

Displaying the right information, in the right places, at the right times gives the information your drivers need to get from one place to the next. Explore our solutions.



The world is far from perfect. Traffic conditions are constantly changing and emergencies spring up out of nowhere. Our displays can handle communicating this change in a wide range of applications—from small lane control signs to large variable message signs to parking guidance systems—that make your roads safer and keep your traffic flowing.

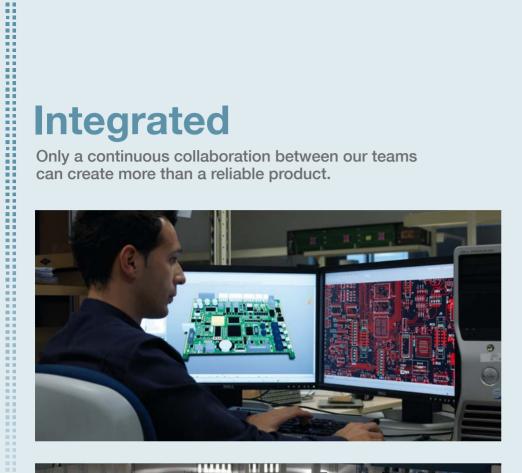
Viewed by millions of people daily on five continents, our displays are prepared for information change around the globe. We are a world leader in communication systems and display technologies, serving the traffic, transit, industrial, and municipal markets. Founded in 1977, today we have over 300 team members dedicated to product excellence.

Explore our brochure to learn more about our traffic communication and display systems. If you have more questions, visit www.aesys. com and click on our contact page. We'll be happy to help you find the system that's right for you.



# Integrated

Only a continuous collaboration between our teams can create more than a reliable product.



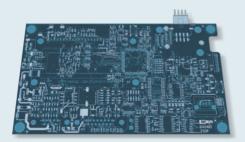






It takes a great team to design and build a display system that can perform reliably over the long run. The product development process begins in the technical office where they coordinate with our laboratory to constantly research and develop the latest display and communication technologies. When a technology is ready for the market, our electronic, mechanical, and software engineering teams coordinate on all the details—from the right electronic control system to the best environmental protection to the most appropriate information flow.

Our production units are carefully integrated with the engineering teams to ensure each project is properly executed. PCBs, or printed circuit boards, are completely assembled in-house using the latest placement machinery. Our mechanical shop produces the metal casings and structures using cutting-edge robot technology. In the final step, our assembly teams integrate all the components and conduct complete quality checks before our display systems are shipped out all over the world.





# Reliable

To have maximum care even when we screw in the most common of bolts, it's one of the many small details that goes into building a reliable display.



At Aesys, we design communication systems and display technologies for many applications. Our solutions range from highway to urban, from hardware to software, and from large variable messages signs to small lane control signs. Our displays are prepared to withstand the most extreme environmental conditions and can communicate in several languages.

### Built for Reliability

we control the entire design and production process—from design to delivery

## Designed for Systems Integration

open source software for easy systems integration or independent operation

### Low Power Consumption

built with low power control electronics for minimized power consumption

## Optimal Visibility

high quality components and automatic brightness control for consistent visibility

# Comprehensive Diagnostics

built-in diagnostics can determine the exact cause of most problems

# Regulatory Compliance

compliant with traffic regulations including UNI CEI EN 12966-1 and NEMA TS 4



# Variable Message Sign



Variable message signs can be placed in a wide range of places like highways, urban arteries, and major road junctions. Typically installed at the side or above the roadway, the VMS uses text and graphics in monochrome or color format to inform drivers of a variety of situations including emergencies, construction, and delays. Our variable message signs come in two major formats:

### Alphanumeric Matrix

displays a set number of characters in a set number of rows in a fixed character width and height

#### Full Line Matrix

displays a wide range of fonts at varying heights across an open matrix for higher definition and better visual impact—the full line matrix is ideal for scripts like Hindi and Arabic; when not in use, the pictogram area can be used to expand the text matrix







Our variable message signs are designed and built to operate in a wide range of places with different types of systems. Key features include:

### Extreme Temperatures

each display is designed to operate in its particular environment, from the freezing Ural Mountains in Russia to the hot desert of Saudi Arabia

### Vast Protocol Experience

our software team has vast experience integrating our displays on multiple continents with many different protocols, including NTCIP, DGT, and TEDI / LCR, to name a few

### Power Line Optional

our patented Ultra Low Power technology enables an 80% or higher power consumption reduction and an entire large display can be powered with a photovoltaic panel

#### Real Time Traffic Information

each display can operate as a stand-alone system or integrated with cameras and sensors to provide a constant stream of traffic information that can be used for real-time traffic monitoring, law enforcement, and analyzing statistics of traffic volumes, speeds, density, and vehicle classifications



# **Lane Control System**



Lane controls signs can be used to manage lanes for safety, emergencies, and traffic optimization. At toll gates, lane control signs guide drivers to quickly choose the right payment lane and know the right toll amount so they can pay quickly and keep traffic flowing. This information can be shown through pictograms or text. In tunnels, the lane control signs guarantee security by stopping or diverting traffic in the case of an emergency. Four primary types of displays are available:

#### Speed Control\*

display used to show the speed, placed above single lanes, above the entire road, or at the side of the road

Arrow-Cross\*

# Pictogram\*

graphic display used in highway tolls to display color pictograms for immediate driver impact, showing the payment method for the corresponding lane

Text

TOLL-10°

monochrome graphic display used at highway toll booths to display the toll amount or other important messages in a single or multiple line matrix; many languages can be displayed

\*Functionality can be combined in one display



# Mobile VMS - Fuel Price Sign





#### Mobile VMS

Mobile variable message signs—whether mounted on a trailer or vehicle—provide timely information where it's needed most.

Information displayed can range from road conditions to road work to emergencies, using both text and images on a full matrix display in either amber or full color.

Clear visibility with ultra bright LED technology is ensured both day and night through automatic brightness adjustment. The displays are designed to withstand typical road conditions and our vast technical experience enables installations on many vehicle types. Displayed messages can be controlled through a connected controller or wirelessly with many options like GPRS, GSM, and Wi-Fi.

## Fuel price signs

The fuel price signs show a comparison of fuel prices at the entrance or along the side of the highway—making it easy for drivers to find the best price for fuel through price transparency. The displays, using LED technology, are easily visible from a distance.

Drivers can see the list of all fuel prices and the display highlights the lowest price with an indicator light. This increases the competition among fuel suppliers and gives drivers optimal prices. The fuel price signs are networked and connected through included software to a central operating unit.



# Parking Guidance System - Speed Control Sign





### Parking Guidance System

The parking guidance system controls a network of displays located both within and outside a city to guide drivers to the closest open car parks. The system helps drivers quickly find a parking space, improving traffic flow, reducing fuel consumption, and reducing CO2 emissions. The displays receive up-to-the-minute parking information from the car parks through a central controller using either wired or wireless communication. Displays can be placed above the road or along the side.

#### Speed Control Sign

Speed control signs help improve safety and reduce accidents by notifying motorists of their speed and encouraging them to drive within the speed limit. Using a speed sensor, the display measures a car's speed and displays an appropriate message relative to that speed. Potential messages include showing the speed with an approval or disapproval indicator, alerting the driver to speeding penalties, or even simply reminding the driver to "slow down". The displays can be integrated with a photovoltaic panel, traffic sensors, and dynamic messaging.



# **Customers**

A select list of our customers is the best advertising we can have.

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> AIC - Morocco

> American Traffic - Argentina

> ANAS - Italy

> Arteris - Brazil

> ASF - France

> AUSA - Argentina

> Autocamionale della Cisa - Italy

> Autostrada Brescia Verona Vicenza Padova - Italy > Enfrasys - France

> Autostrada del Brennero - Italy

> Autostrada Pedemontana Lombarda - Italy

> Autostrada Torino-Savona - Italy

> Autostrade Centro Padane - Italy

> Autostrade per l'Italia - Italy

> Autovie Venete - Italy

> Bond Traffic Solutions - UAE

> Bre.Be.Mi. - Italy

> CCR - Brazil

> Cegelec Mobility - France

> Clemessy - France

> Concesionaria Madden Colon - Panama

> Concesionaria Rutas de Lima - Peru

> Concessionária Bahia Norte - Brazil

> Concessionária Porto Novo - Brazil

> Concessionária Rodovia dos Tamoios - Brazil

> Concessionária ViaRio - Brazil

> Concessioni Autostradali Venete - Italy

> Consorzio Autostrade Siciliane - Italy

> Consorzio 5T Torino - Italy

> Deviteck - Colombia

> Fcorodovias - Brazil

> Etra Interandina - Spain

> FIMA - Lithuania

> Grupo CCR - Brazil

> GTIE Transport - France

> IBI Group Hellas - Greece

> Indra Sistemas - Spain

> Intertech Batinorm - Lebanon

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> ITS Teknik - Denmark

> JSC 3M - Russia

> Kapsch TrafficCom - Chile

> KTC International - Qatar

> Linea Amarilla - Peru

> Milano Serravalle - Milano Tangenziali - Italy

> Mota-Engil - Portugal

> Nea Odos - Greece

> NTS Group - Ecuador

> Odebrecht TransPort - Brazil

> Q-Free - Norway

> Raccordo Autostradale Valdostano - Italy

> Rodovias do Tietê - Brazil

> Roma Servizi per la Mobilità

> RS Industries - Israel

> Sanef - France

> Servyre de CV - Mexico

> Sielte - Romania

> Siemens - Norway

> Soc. Con. Costanera Norte - Chile

> Soc. Italiana Traforo Autostradale del Frejus - Italy

> Soc. Italiana Traforo Monte Bianco - Italy

> Società Autostrada Ligure Toscana - Italy

> SPIE - France

> Strada dei Parchi - Italy

> Tangenziale Est Esterna di Milano - Italy

> Tecsidel - Spain

> Telvent Trafico y Transporte - Spain

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