

The four keys to optimizing performance and value.

RoadStar LED Display  
Single Faced, 16 x 64, 89mm Red  
RF900 wireless communication

Long Distance Viewing LED Signs are a powerful and effective way to communicate with potential customers and increase your sales. Yet it's important to carefully consider all your options, to be sure you get the best possible return on your display investment. Sign selection criteria like lighting efficiency, operational reliability, serviceability and

### 1 EFFICIENT LIGHT OUTPUT

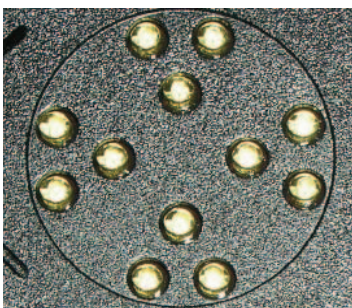
**How much light intensity do I really need?**

The pixel brightness requirements for Long Distance Viewing LED Signs are similar to those of LED highway traffic displays used by state transportation departments. The RoadStar Series meets or exceeds these pixel brightness specifications. What's more, we specifically engineer each of our solutions to the application, to optimize brightness efficiency. Some competitive systems use as many as 30 LEDs per pixel (often, lower grade/lower performing LEDs). Yet RoadStar incorporates the latest high-quality, super-brite LEDs and pixel-based geometry to achieve the desired brightness with as few as 4 red LEDs or 8 amber LEDs per pixel, significantly lowering energy consumption costs while offering 100,000 hours of LED life... without degradation of performance.

### 2 LONG-TERM OPERATIONAL RELIABILITY

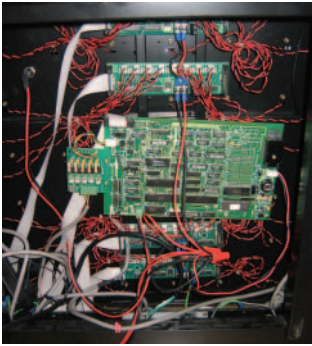
**How can I tell if a display system is designed to last or not?**

You don't have to be an electrical engineer or a service specialist to evaluate display systems. Take a look inside the cabinet. The more components, wires and connections there are, the more there is that can go wrong. Connections are a key consideration because they are typically the most susceptible areas to degradation. Unlike the simple screw-type connections used extensively by many competitors, RoadStar features pre-made wire harnesses with heavy-duty, positive-locking connectors and corrosion-resistant gold-plated lead sets. We use dielectric grease throughout to protect connectors from moisture and contaminants. For added corrosion protection, all boards are also conformal coated. But what sets RoadStar apart from all competitors is its Protector™ enclosed, weather-proof cabinet design.



RoadStar Pixel Geometry

overall manufacturer support play key roles in determining the true total lifetime cost of your display. Now, Adaptive Micro Systems sets new standards for these criteria with the RoadStar Series.



A competitive design

### Why is the Protector cabinet such a big improvement in reliability?

The innovative Protector cabinet has no fans exchanging outside air, which helps keep rain, salt fog, dust and other caustic contaminants away from all vital electrical components in order to significantly extend component life and minimize your service requirements. Plus, no vents means no filters to service on a regular basis. And when a display is that high up in the air, service calls can really add up.

To further assure system reliability, RoadStar effectively maintains isothermal conditions by utilizing innovative heat dissipation techniques and by using a combination of proven natural and forced air convection cooling, as well as special selection of electrical components (like solid state power supplies) to minimize thermal gains. Finally, a low absorptivity coating was applied to the outside of the cabinet to further reflect heat gain from solar loads.

### How can I be sure I'm getting the most for my money?



Freezing rain testing

Look at system ratings. More testing and more severe test standards are good indicators of a system's ability to withstand the test of time.

In terms of general construction, RoadStar is the first LED sign design of its kind to earn an Information Technology Equipment rating (UL 60950-1) for US & Canada, which is more demanding than traditional sign standards. It also meets a comparable standard (IEC 60950-1) for Europe.

RoadStar is also the first system of its kind to receive such a wide range of weatherability ratings. Unlike most competitive systems, RoadStar's UL 50 (enclosure standard) rating offers you the assurance of third party certification. Its IP 44 rating means it meets demanding European standards for protection against moisture and other contaminants. And we didn't stop there, the display system is designed to pass a stringent military standard for protection against driving rain in sustained winds of 40 mph as well as icing/freezing using a minimum of 1/4"-thick ice!

### 3 SERVICEABILITY

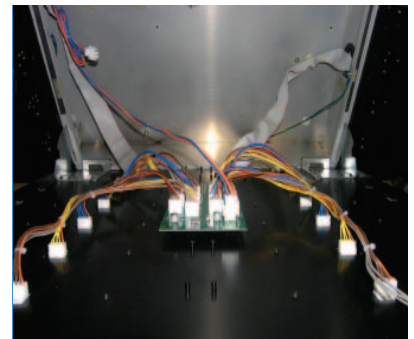
**Service can be expensive and time consuming. What can be done to minimize these factors?**



SmartStick being replaced

SmartStick 4-pixel strips provide an ingenious modular solution to LED replacement. The low-voltage SmartSticks allow LEDs to be quickly and easily replaced from the front, without even opening up the Protector cabinet. So repair personnel can speed service while avoiding contact with more costly interior components or working in the

vicinity of higher voltage areas. Should internal access be required, RoadStar is designed to expedite every facet of a service call. All service can be performed with three simple tools. A single door provides convenient access to all internal components and easy-to-use diagnostic tools speed troubleshooting. In addition, color-coded and letter-keyed wiring supports quick, confident servicing. Keyhole type fasteners assure positive attachment, for fast trouble-free component change-out, minimizing the potential for lost fasteners.



RoadStar open access panel door

### 4 SUPPORT

**How does Adaptive support add value to my investment?**

For starters, Adaptive offers the shortest leadtimes in the industry, shipping within 2 weeks from the time the order is placed. Plus, comprehensive, factory-backed training from your AlphaEclipse dealer and easy-to-use software help you use the RoadStar with confidence, so you can realize the maximum return on your investment. Our authorized dealer technical service support means we are always there to support you. And as one of the fastest growing companies in the LED EMC industry, you can count on us to be there to support you over time.

By offering a unique combination of support, serviceability, reliability and efficient design, RoadStar optimizes your system performance and value.