



## We've seen the future

Handheld retroreflectometers from DELTA are known throughout the world for their reliability and robustness. State-of-the-art DELTA retroreflectometer technology represents next-generation thinking for ensuring effective road infrastructures and optimised road safety.

### The best available

Just as with virtually every other modern technology, the complexity and capabilities associated with measuring visibility are accelerating by leaps and bounds. DELTA retroreflectometer technology is streets ahead of any other products on the market today, and represents the only example of next-generation thinking currently available.

DELTA retroreflectometer products are renowned for their advanced technology and unsurpassed capabilities, and are an important asset in managing the road infrastructure of both today and tomorrow.

### DELTA helps develop the standards

DELTA has been at the forefront of developing and implementing instruments for measuring retroreflection ever since the 1970s. The company is widely recognised as a leading force in the formulation and continual refinement of virtually all the major international standards currently used for measuring the visibility of road markings and road signs.

These include current standards used in Europe (EN 1436, EN 12899) and the US (ASTM E 1709, ASTM E 1710).

Implementing such standards has a substantial, documented effect on road safety statistics – especially at night when a relatively large proportion of traffic accidents and fatalities normally occur.

### DELTA provides the technology

DELTA retroreflectometer instruments are packed with the most advanced technology available. This includes sensors for measuring ambient temperature and humidity, geotagging using GPS mapping software, USB connectivity and seamless links to any web browser. They are also designed to interface with both current and future ID tagging and asset management systems.

They use proprietary high-tech filters that make it possible to measure the retroreflectivity of any type or colour of signs, surfaces and materials using the same type of unit, and with no need for correction factors.

An effective, continually updated calibration strategy is essential for ensuring correct and repeatable measurements – calibrating such instruments with the enclosed standard before each measurement is not enough, especially when used in demanding environments. With DELTA retroreflectometer instruments, this complex process is particularly easy as a result of a simple one-step calibration process.

### DELTA provides the products

DELTA is the world's leading manufacturer of instruments for measuring retroreflectivity. These instruments are the solution of choice for discerning professionals who appreciate that getting the best results requires using the best equipment.

The current generation of DELTA retroreflectometers consists of the LTL range for monitoring road markings and the RetroSign range for monitoring road signs. A new mobile system is being tested. These are designed to be visually attractive as well as being particularly user-friendly because they are lightweight, easy to calibrate and easy to set up the instrument for measurement. All measurement data can easily be transferred to computers and other electronic equipment via USB or Bluetooth.

DELTA instruments are also extremely durable and will last for years with proper treatment. They are designed with the individual user in mind – and are therefore very easy to understand and handle.

LTL instruments for measuring the retroreflection of road and pavement markings feature easy-to-read displays, single-handed operation and single-touch controls, making them easy and comfortable for operators to work with.

Handheld RetroSign single or triple-geometry instruments for monitoring road signs are available with both GPS for identifying the location of each sign and an RFID reader for effective asset management.

### DELTA helps you invest in the future

DELTA instruments measure and evaluate the visibility of all kinds of road markings. The data they provide enable the owners and opera-

tors of road infrastructure to make effective, informed decisions about road layouts, road maintenance and the management of road safety. This data also provides valuable information for use in asset management, manpower deployment and road management efficiency. In-service performance and cost-effectiveness can be significantly improved when maintenance and replacement decisions are based on documented measurements rather than traditional fixed intervals for replacement. DELTA retroreflectometer technology makes it possible to measure precisely where markings and signs are under-performing, so that resource allocation can be focused effectively – benefiting both departmental budgets and road safety statistics. Money spent on driving safety represents money saved on road accidents. By making absolutely sure that road signs and road markings are easy to see in virtually all light conditions – regardless of weather or time of day – DELTA enables those in charge of road infrastructure projects to achieve significantly higher levels of road safety. This means fewer accidents and fewer fatalities – and with greatly reduced human cost and costs to society because of this.

### **The people to talk to**

DELTA delivers state-of-the-art instruments for documenting that road markings and road signs deliver exactly what is expected of them – or whether they need upgrading, servicing or replacement. DELTA is the ideal partner for discussing and planning any road safety improvement programme. The company is internationally recognised as one of the world's leading experts in measuring and monitoring retroreflection and visibility, both commercially and in terms of the development of international standards in this specialist road safety field.