

## Product Specification

IRS2 Hardwired

Intelligent Road Studs

Clearview Intelligence's Hardwired Intelligent Road Stud (IRS) Systems have been specifically developed to reduce the number of road accidents and increase safety for all road users.

The innovative and flexible design of Clearview's hardwired studs provides drivers with advance awareness of the road ahead, giving them more time to react accordingly.

Suitable for a wide range of applications from dynamic lane marking to pedestrian crossing systems, the revolutionary intelligent road studs are effective in all lighting conditions, making them a clear choice when it comes to improving safety on our roads.

### Lighting the way

When used in conjunction with road capacity and expansion schemes, dynamic lane marking using Clearview hardwired studs can increase highway capacity and reduce congestion.

The studs have been used to successfully delineate the Hindhead Tunnel in Surrey, resulting in quicker, smoother journey times for road users.

Clearview Intelligence successfully installed 868 hardwired bi-directional studs split equally between the 2 tunnel bores, making the tunnel more clearly defined, and guiding motorists through the tunnel safely.

The bi-directional studs incorporate two different settings, normal running mode and contra flow mode.

Clearview's hardwired studs are increasing safety around the world, being installed in locations including Ireland, France, Holland, Australia and California.

### Cost effective

Easy to install, the intelligent road studs are embedded in the road and are unobtrusive to motorists, motorcyclists, cyclists and pedestrians alike. With low maintenance and low power consumption they are leading the way for traffic guidance and hazard warning.

## Key Benefits

- Low maintenance and running costs, with low power consumption
- Increased road capacity and reduction in congestion when used with dynamic road marking schemes
- Proven to help reduce lane 'drift' on spiral roundabouts
- Highly visible and newsworthy contribution to road safety and traffic management
- Proven increase in safety at pedestrian, railway and tram crossings
- Heightened driver enjoyment of driving along the road

## Key Features

- Up to 1000m visibility
- Modular design / upgradeable
- Programmable functionality
- Profile less than 4mm
- Integration with and activation by 3rd party traffic control devices
- Pedestrian, cycle and motorcycle friendly
- Switchable uni and bi-directional capability
- Superior visibility in poor weather conditions

**Applications include:**

**Dynamic Lane Marking Systems**

- Lane delineation and control
- Tunnel delineation
- Tidal / contra flow - lane reversal (including one way systems)
- Congestion relief / reduction
- Optimisation of road capacity
- Toll and terminal plazas - including: bridges, tunnels, ferries and airports

**Crossing Systems**

- Pedestrian crossings (including traffic light interface)
- Level / railway and tram crossings

**Others**

- Roundabouts - the highlighting of, and to indicate travel direction
- Lane control - such as: use of hard shoulder, bus and taxi lanes
- General hazard warning, priority / direction indication and traffic management

**Solutions include:**

**Incident detection**

Technology to identify and warn of incidents in the flow of traffic.

**Queue detection and warning**

Detection and warning of queues or slow moving traffic using a combination of Clearview Intelligence technology.

**Vehicle area cordon**

Providing high visibility delineation of immediate hazards to passing pedestrian and road traffic, helping to increase the safety of those within proximity of a potentially hazardous situation.

**Tunnel delineation**

Clearview studs can be used to enhance lane delineation and allow for contra flow arrangements in tunnels. In addition the system can be used to provide advance warning of incidents.

**Fog delineation**

Clearview's high brightness hardwired road studs provide enhanced delineation during periods of poor visibility whether during the day or night from activation by an external fog sensor.

**Also available:**

For traffic guidance and hazard warning applications requiring an independent solar powered solution, please refer to Clearview Intelligence's SolarLite road stud range.



**Specifications**

**TECHNOLOGY**

LED

**POWER**

Mains (24V DC stud voltage)

**CONFIGURATION**

Uni-directional / Bi-directional

**NO. OF LEDS**

6 Uni-directional, 2 x 6 Bi-directional

**STANDARD COLOURS**

Amber, red, white and green

**FREQUENCY**

Constant or synchronised 2Hz

**CONTROL**

Power activated, microprocessor controlled

**POWER CONSUMPTION**

1W (Uni-directional) 2W (Bi-directional)

**ROAD PLACEMENT**

Embedded (snow ploughable)

**HOUSING**

GRIVORY GVN-35H

**LENS MATERIAL**

Poylcarbonate Makrolon 6557

**TEMP. RATING**

-35°C to +80°C (-31°F to +176°F)

**DIMENSIONS**

Ø130mm x 75mm (Ø5.12" x 2.95")

**WEIGHT**

1210g

**TOP COVER**

BS3146 PT2 1975: ANC4B, marinegrade stainless steel

**WATER INGRESS RATING**

IP68