

Diverging Diamond Interchange Products

In-road LED lights guide drivers safely through the DDI, minimizing driver confusion at lane intersections.

LaneLight in-road warning lights provide driver-facing guidance through intersections within the DDI. When a driver enters or exits the DDI, in-road warning lights line lanes that intersect with other roadways, improving driver confidence.

In-road lights are integrated into the surrounding traffic systems through the LaneLight Mk7+ system controller, allowing for synchronized activation with existing traffic systems.

In this brochure

In-road warning lights

Mk7+ system controller

DDI warning systems configuration





In-Road Warning Lights

In-road warning lights are installed directly within the pavement, delineating lanes and providing guidance through the DDI. The lights are snowplow safe, flush with the pavement, ultra-bright and come in a variety of LED colours (white, amber, red).

- ↳ MUTCD compliant
- ↳ Dimmable, daytime visible up to 3000 feet
- ↳ USA stainless steel
- ↳ Bicycle safe/snowplow safe
- ↳ IP68 rating, tested up to 95,000 lbs load

Mk7+ System Controller

The LaneLight Mk7+ system controller communicates with in-road warning lights by integrating into SCADA systems using MODBUS TCP/IP communication protocol. This allows the controller to remotely activate or deactivate the in-road warning lights via signals sent from existing or accompanying traffic systems. The controller is housed in a 2U, 19 inch rack-mount enclosure.

In addition to SCADA system integration, the controller can activate in-road warning lights via:

- ↳ AC signals (120-240V) originating from traffic signals
- ↳ 10-30V AC or DC low-voltage signal
- ↳ External contact closure (NO)
- ↳ Loop detectors

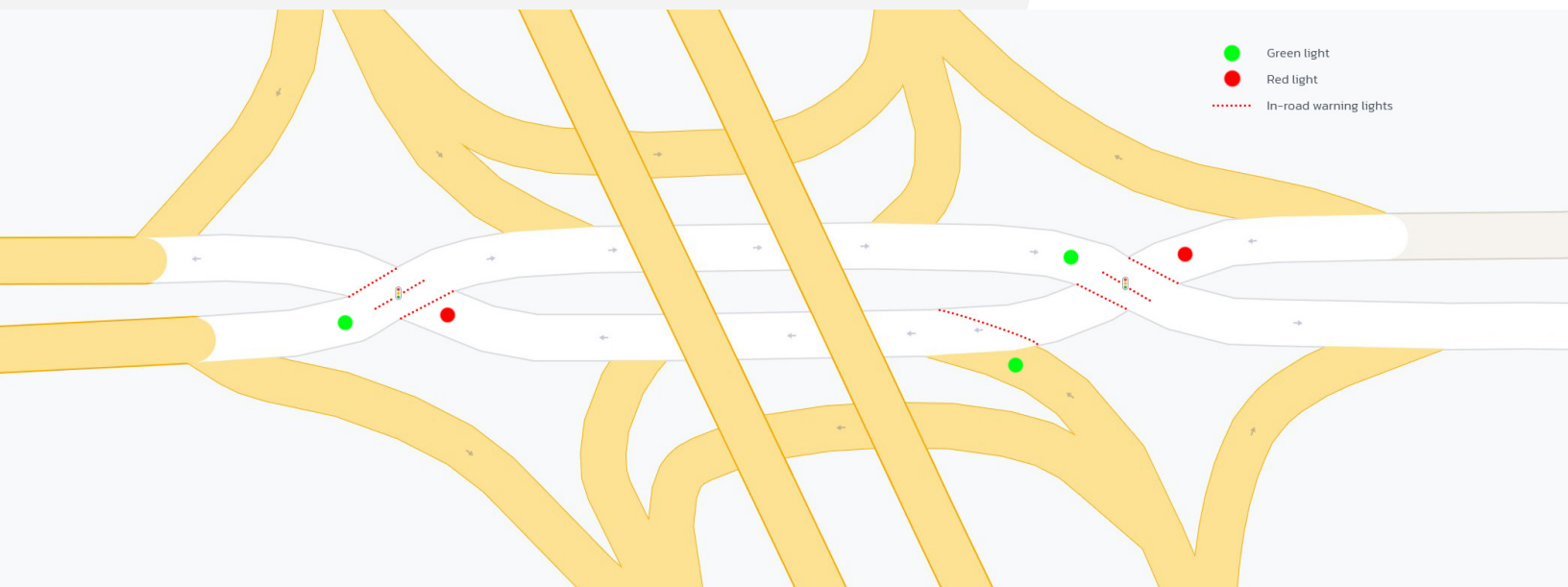


DDI Configuration

In-road warning lights are placed at the entrances and exits of the DDI where lanes intersect. The graphics below illustrate how the lights dynamically turn on or off depending on the flow of traffic.

When the light turns green at the entrance of the DDI, a signal is sent to the in-road warning lights, turning on or off the appropriate sections.

Flow 1



Flow 2

