Radar Sensors for Traffic Detection

Autoscope DEM144

What, exactly, is a DEM144?

The Detector Expansion Module Master (DEM144) provides a simple solution to wiring detector outputs into a NEMA TS1, TS2, Type 170, or 2070 cabinet where access to the detector input termination points is limited or when the controller software cannot reassign detector inputs. The DEM144 distributes up to four outputs from its rear edge connector. With the addition of the Detector Expansion Module Slave (DEM114) modules, can distribute up to four additional groups of four outputs per module.

Why do agencies use Autoscope?

As the complexities of traffic management increase, ITS strategies are valuing more and more the multi-tasking capabilities of intelligent detection sensors to not only accurately detect traffic at the stop bar to trigger a signal change, but to count, classify, track, and even provide advanced detection for traffic adaptive systems and dilemma zone safety applications. Today’s multi-modal intersections and roadways require the multi-modal capabilities of leading-edge detection sensors to provide capabilities such as bicycle detection and differentiation.

How does Autoscope benefit the driving public?

Econolite’s vehicle detection solutions continue to play a critical role in helping ITS deliver on the promise of enhanced public safety, reduced congestion, shorter travel times, lowered environmental impacts, and increased cost savings for all roadway users.
Benefits
- Distributes all video and radar detection outputs and can be distributed to the correct controller inputs by using the existing detector rack or Input File configuration
- Eliminates the need to wire directly to terminal blocks on the back of the Input File
- Easily adaptable to rack configuration
- Output LEDs and test switches verify the performance and correct output configuration when used with DEM114
- Easily expandable by adding additional DEM114

Outputs
- Up to four outputs on DEM144 rear edge connector and up to four groups of four outputs with front panel RJ-11 connections to DEM114 modules

Inputs
- Up to 16 inputs by front panel DB25

Connectors
- Four RJ-11 conductors
- One DB25 male, D sub miniature connector
- Cinch Jones 50-44A-30M edge connector
- Nine 4-position terminal blocks to program 16 inputs to 20 possible outputs

Warranty
- Two-year warranty

Product Support
- Product support and training is available through the Econolite Learning Center

Hardware
- The DEM144 slides freely into rack card guides, having a nominal slot width of 0.075" and a maximum slot width of 0.125". The front panel is minimally 0.90" sheet aluminum with a durable protective coating. An aluminum handle on the front allows easy removal from a detector rack. Nominal outer dimensions of the handle are 1” x 4”. The unit may be inserted or removed from a powered detector rack

Basic Specifications
- Temperature
  - -34°C to 74°C
  - 0 to 95% humidity (non-condensing)
- Weight
  - 0.35 lb
  - 0.16kg
- Dimensions
  - 4.5” x 1.1” x 6.9” (H x W x D)
  - 114 mm x 28 mm x 175 mm (H x W x D)