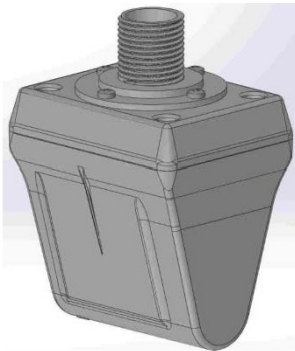


# Lumewave MWX-LVE-90U by Echelon Microwave Sensor and Controller



## Bluetooth Enabled Uni - directional Outdoor Radar based Microwave Sensor and Lighting Controller

Echelon's Lumewave MWX-LVE-90U, is the market's first Bluetooth enabled very long range radar based sensor and controller specifically designed for controlling street, pathway and area lights. The MWX can differentiate between pedestrians, and vehicles in real time, it can detect approaching vehicles at >400' and pedestrians at 100' and tell the difference.

The robust MWX sensor was specifically designed for long term, outdoor conditions and has a directional range of 400', which is 5X greater than that of an infrared sensor

Unlike an IR sensor, it is not impaired by heat or bright light conditions and offers the flexibility of vertical or right angled mounting options. In addition, it is designed to offer optimal coverage even when mounted on a 30- 40' lamp pole.

The MWX can be connected to a Lumewave Top900 Lighting Controller opening up unique, new opportunities, increasing safety while saving energy and cost.

The free, downloadable control software runs on iPhones/iPads and uses Bluetooth 4.0 to communicate with each sensor, making it easy to modify control settings.

## Operating and Control Function Specifications

- Operating Voltage: 12Vdc
- Bluetooth (iPhone) Control: Set sensor sensitivity high, med, low
- Select output filter: vehicle, pedestrian, both (Default)
- Inactivity Time: Disconnects from Bluetooth and resumes being a motion sensor
- Identify Sensor: When sensor is detected and connected, the light flashes 3X
- Mounting: Threaded Nipple vertical mounting
- Certifications: FCC approved
- Environmental
- IP65

## Detection Range at 20' or 30' mounting height

- Range dependent on size and speed of target
- Pedestrian: 100'
- Small Vehicle: 165'
- Full size SUV: 200+
- Truck or Bus 400+

## Microwave (FFT Doppler based) Sensor

- Radar frequency: X Band, 10.250Ghz
- Power Output/Direction: +17DBM, 50mw
- Current at 12Vdc 50ma @ 12Vdc
- Detection processing: Real-time FFT (Fast Fourier Transform) analysis

- FFT detection processing simultaneously detects speed of pedestrian and traffic in real-time. Detects pedestrian and traffic movement together or individually

## MWX Control application Software

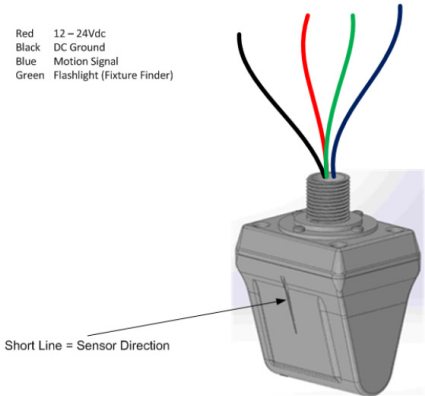
- Control application software may be downloaded at no cost and run on an iPhone/ iPad which will use Bluetooth 4.0 to communicate with each sensor to set and modify its control settings
- The iPhone/iPad application is used to set up and manage sensors



## Cable connections / Wiring

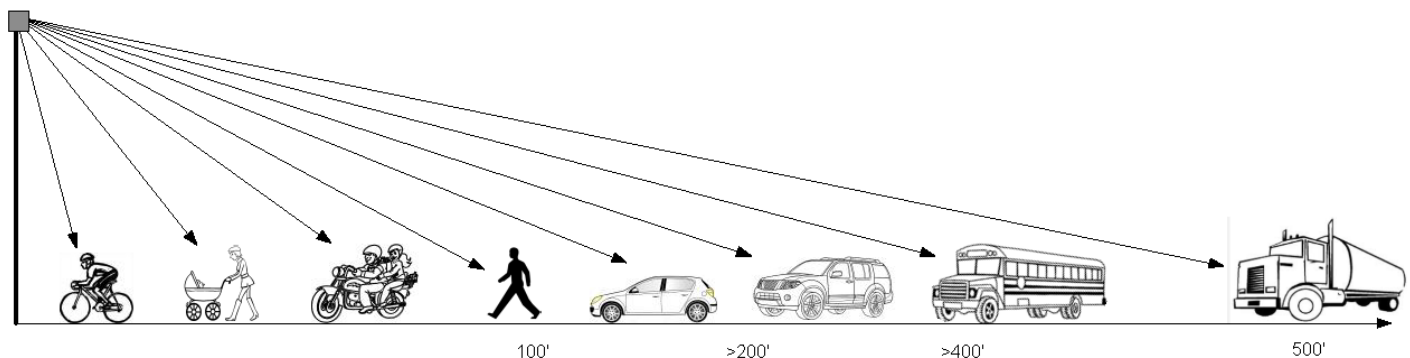
Connect colored wires to the same color wires on the Top900 Outdoor Lighting Controller and EMB900 series Lighting Control Module

- Red 12 - 24Vdc
- Black DC Ground
- Blue Motion Signal (Open collector, active-low)
- Green Fixture Finder Input (Open collector, active-low)



## Models

- MWX-LVE-90U Microwave Sensor  
PN# 100117



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