



End of Train Detection Collision Awareness System

The End of Train (EOT) unit was designed to provide Collision Awareness Protection to a Rail Maintenance Vehicles such as a Hi Rail Truck following a Haul Train. The Hi Rail truck is fitted with the Early Warning Detection System (EWDS01) which communicates with the EOT unit mounted on the rear of the haul train.

Using a Machine Position Indicator (MPI) the system indicates to the driver of the following vehicle a safe travelling distance to maintain along with the speed of the Haul Train and separation distance. If the Hi Rail vehicle gets too close to the EOT, the system will provide a visual and audible warning to the driver so he/she can act.

The system uses GPS and TOF (Time Of Flight) to determine the separation distance, with TOF being used when GPS is denied. The 900Mhz Radios ensure reliable communications is maintained between the following vehicle and EOT unit.

Both the Vehicle & EOT equipment can be installed as permanent or temporary installation.



EOT Unit

Main System Features:

Vehicle

- IP Rating: Electronics - IP65, OCP- IP54
- Operators Control Panel (OCP): 5" Touch Screen Colour Display with built-in Speakers
- Mounting: Electronics - Bracket, OCP - RAM Mount
- Cables & Connectors: PUR Polyurethane Silicone & Halogen Free cables with M12/8 Connectors
- Indications: Tag ID, Separation Distance, Speed, Direction of Travel, Safe Travelling Distance
- Warnings & Alarms: Collision Alerts, Points of Interest, Over-speed, EOT Low Battery Alarm
- Logging: Events, Alarms, Position, Time, Speed, Location

End Of Train Unit

- IP Rating: Electronics - IP65, Battery Box - IP65
- Enclosure: Stainless Steel with Lockable Hinged Lid & Rubber Grip Carrying Handles
- Mounting: 4x Magnetic Feet
- Controls: On/Off Switch, Battery Discharge Protector (10.4V shut-off)
- Capacity: 72hrs of Continuous Operation

System

- +/-2m Distance Measuring Accuracy with or without GPS
- Utilises Time Of Flight (TOF) & GPS Technologies to determine Distance & Location
- Dual 900Mhz & 2.4Ghz Radios (License free band)
- Typical Operating Range 6km LOS, 2km NLOS
- Configurable Alarms
- System Volts: 12-24Vdc

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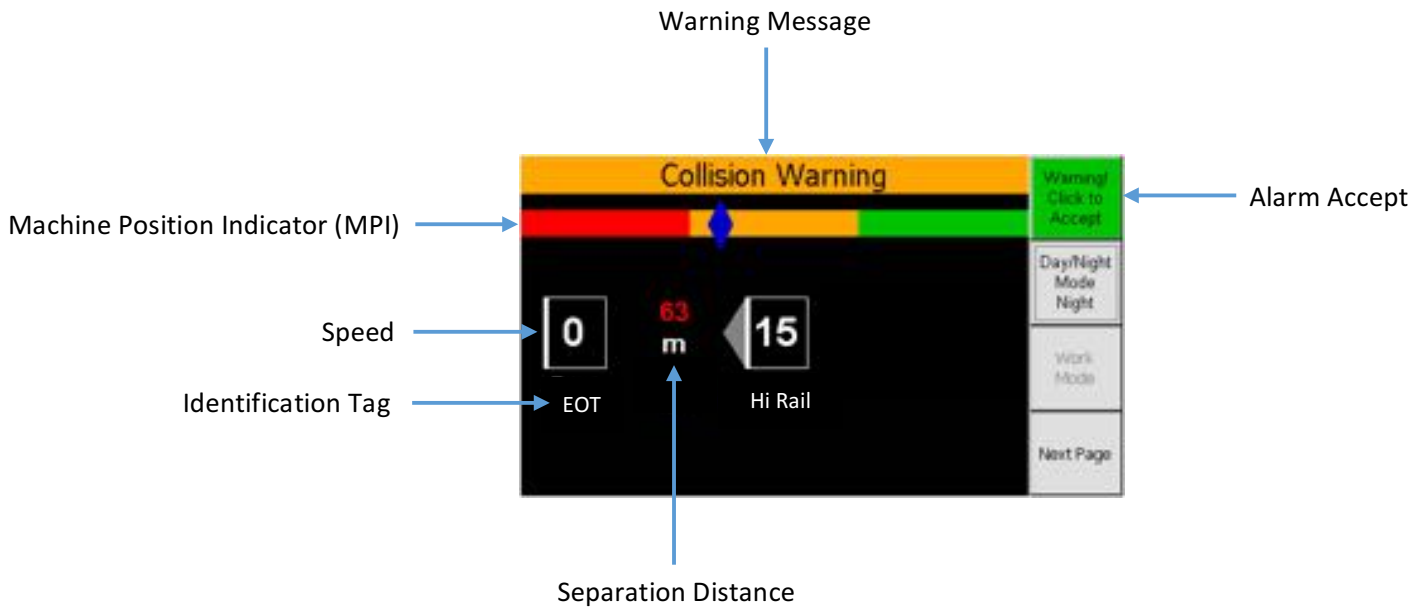
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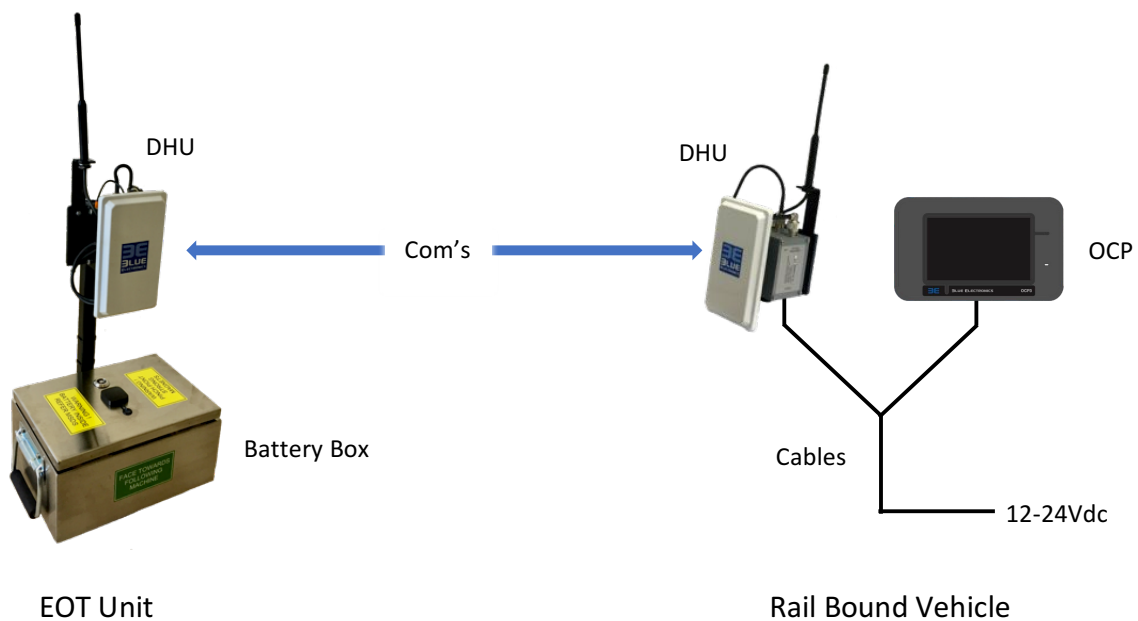
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Vehicle Operators Main Display:



System Architecture:



Applications: Options:

- | | |
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| <ul style="list-style-type: none"> • Rail Maintenance Vehicle Collision Awareness • Coal, Ore, Grain, Sugar or Freight Wagon EOT Detection | <ul style="list-style-type: none"> • Remote Tracking • Remote Access for Logs & Updates • Points of Interest (POI) Warnings • Personal Proximity Detection • Multiple Operator Displays • SIL Compliance • EOT Warning Lights |
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