Worker® Protection System (WPS)

INTEGRATING PERSONNEL SAFETY WITH OPERATIONAL EFFICIENCY

METROM RAIL®

KEEPING ON-TRACK PERSONNEL CLEAR OF ONCOMING TRAFFIC

A VERSITILE PLATFORM FOR ENSURING ON-TRACK SAFETY

The Metrom Rail Worker Protection System (WPS) provides advanced warning between on-track equipment and workers in the vicinity of track. With a combination of vehicle-based and portable wayside equipment paired with wearable modules, WPS is the perfect tool for taking worker safety and awareness to the next level.

QUICK SYSTEM FACTS

- System contains a versatile data recorder for training and event recreation.
- WPS offers portability and ease of configuration to allow it be set up in any environment seamlessly.
- WPS provides alerts for both the vehicle operator as well as all workers within a customer-configurable distance.
- Optional wayside units provide redundant warning capabilities with additional range.
- Wearable Warning Units can be customized to operate according to individual organizations' rules and regulations.
- WPS alarms are speed based, allowing for consistent alarm intervals
- System can be integrated into future communication based train control systems

PPS CORE TECHNOLOGIES

Personnel Unit

Designed to be clipped to any vest or worn with an auxiliary strap, the Personnel Unit provides protection for any worker in the vicinity of trains. The Unit deploys a multi-color LED beacon, a programmable speaker, vibration effects, and a confirmation button to silence alarms. Personnel Units are lightweight, environmentally sealed, and can last up to a week of continuous use on a single charge.

Vehicle Unit

The Vehicle Unit serves as an Interface that alerts the operator of any train / light rail car to the presence of nearby workers. The Unit provides real-time information on worker quantity and distance, as well as any other customer - specific data required. The Vehicle Unit can operate either as a stand-alone system, or can be integrated into existing displays for AURA Collision Avoidance and Light Rail Systems.

Wayside Unit

The Wayside Warning Unit utilizes advanced microwave radar to detect the presence of a train or vehicle, and initiates a system-wide warning for nearby workers. In addition, the Wayside Unit can be deployed as a redundant system that communicates with Vehicle units, effectively increasing available warning distances. The Unit can be deployed along the wayside without the need to foul the tracks, and a lightweight, portable design allows for quick deployment.

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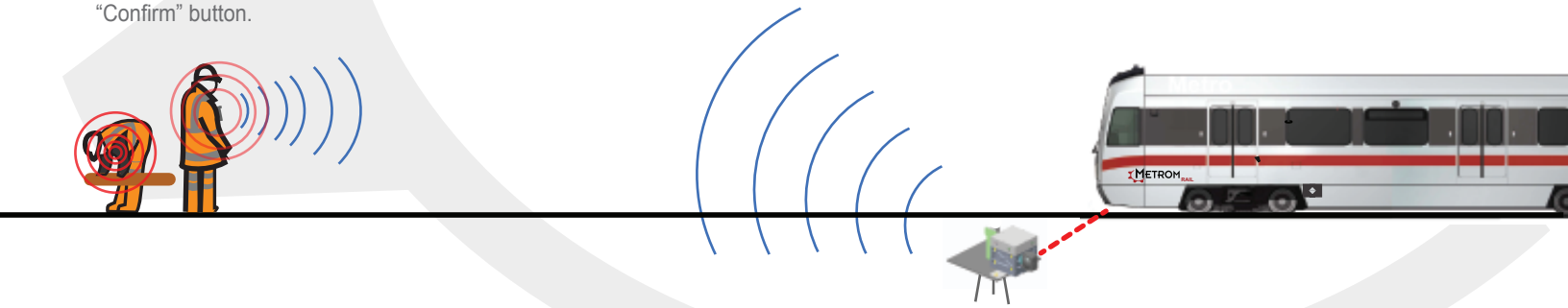
WORKER PROTECTION SYSTEM MODES OF OPERATION

INTERACTION BETWEEN PERSONNEL AND VEHICLE UNITS

Personnel Units will alarm once they are detected by any train-based Vehicle Units within a specified distance. In the Cab, the User Interface will detail how many Worker Warning Units are present within the specified distance. Workers and Operators can silence the alarm by hitting the "Confirm" button on the Wearable Warning Unit or on the User Interface.

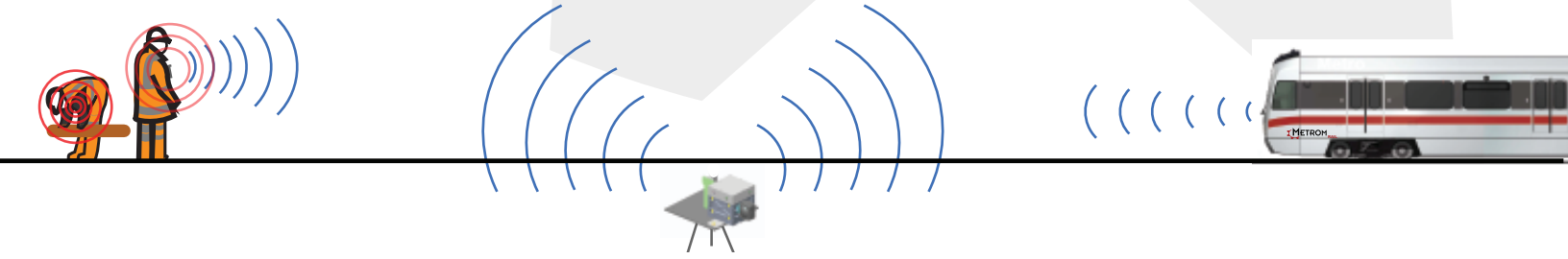
INTERACTION BETWEEN PERSONNEL AND WAYSIDE UNITS

Wearable Warning Units will be in communication with a deployed Wayside Warning Unit. When a train is detected after passing by the Wayside Warning Unit, it will send a proximity warning to all local Wearable Warning Units. Wearable Warning Units can be silenced by hitting the "Confirm" button.



INTERACTION BETWEEN PERSONNEL, WAYSIDE, AND VEHICLE UNITS

Trains equipped with an Operator Warning Unit can communicate directly with an oncoming Wayside Warning Unit. At a specified distance, the Wayside Warning Unit will send a proximity warning to all local Wearable Warning Units. Wearable Warning Units can be silenced by hitting the "Confirm" button.



LOGGING CAPABILITIES

All Worker Protection System Units actively store all events within an event recorder. Information such as Unit GPS coordinates, Vehicle Speed, and Unit movement over time can be downloaded for efficiency monitoring or incident analysis.

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REIMAGINE YOUR RAILWAY

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