



# PROXIMITY ALERT

For more information, visit us online at [www.wavetrend.net](http://www.wavetrend.net)



Too close for comfort?

## The benefits:

- **Improved worker safety:** The ability to quickly alert drivers of the presence of all personnel and vehicles helps better protect the safety and health of your workers
- **Increased cost savings:** Excesses and Premium penalties cut by reducing accident rates
- **Increased driver awareness:** Improvements in visibility will prevent collisions in vehicle blind spots
- **Reduced down time:** Better driving styles reduce wear and tear, fuel consumption and carbon emissions
- **Improved site efficiency:** Detection of safety berms installed on roads is alerted
- **Protections against reputational damage:** Reduced likelihood of an accident safeguards the reputation of your company

## Business Challenge

Many companies are faced with major safety problems that can arise from vehicles and personnel working in close proximity. Whether above ground or below, the problems are essentially the same – vehicle operators suffer from extensive operator blind spots, frequent poor visibility caused by dust or snow, unsealed haul roads, fatigue from long working hours and blind corners.

In this environment, it is almost impossible for the vehicle operator to be fully aware of other personnel and vehicles in the immediate vicinity. A lack of situational awareness by the driver can increase the likelihood of a vehicle/person and vehicle/vehicle collision – this can lead to long-term injuries and fatalities. In this hazardous environment, proper quality of control is not just a regulatory issue, it's critical to employee health and safety.

## The RFID solution

The Wavetrend proximity-detection system gives critical imminent warning of collisions waiting to happen. RFID can help companies improve site efficiency – reducing potential unnecessary incidents involving collisions between vehicles and people. With RFID, the driver operator can gain a keen sense of position on the road – whether in relation to other vehicles or personnel within a set proximity.

With clear visibility, driver operators can dramatically reduce the chances of collision with a vehicle or personnel, providing an effective way to reduce risk and improve safety in any site.

## How does it work?

The system establishes an adjustable safety detection zone around machinery. Personnel will wear a personalised tag, and when activated, will automatically alert drivers of any tagged personnel within the safety zone, providing protection against potential accidents. In addition, the system can enable and disable live equipment and restrict machine operations should a vehicle be left in the ignition.

The system then identifies the detected tags details, confirming the position and identity of the tag. The driver is alerted of the presence of both personnel and vehicles within the detection field enabling the driver to prevent any collisions. The Wavetrend proximity-detection system will deliver reliable early warning, detect multiple moving vehicles and people and provide seamless protection in both ground and underground environments.

# SOLUTION OVERVIEW

Utilising its suite of applicable technologies, **Wavetrend** offers its extensive range of products to deliver integrated solutions that address today's security problems.

## READERS

### RX210 - Serial Reader

The popular RX210 - RS485 / RS232 Readers detect Wavetrend's Activ™ and ActivDuo™ ranges of active RFID tags. This remotely configurable reader connects to the host PC, edge server or intelligent hardware controller via RS232, RS485 or TTL and can be used singly, or networked together. It offers a connection for an external antenna. Wavetrend recommends the IPSU Intelligent Power Supply be used to power RX210 reader networks.

### RX900 – Ethernet Reader

The award winning RX900 – Ethernet PoE Readers detect Wavetrend's Activ™ and ActivDuo™ ranges of active RFID tags. This remotely configurable reader connects to the host PC, edge server or intelligent hardware controller via an Ethernet LAN and has a unique MAC or IP Address to provide reader location ID for RTLS applications.

The reader supports Power over Ethernet and offers a connection for an external antenna. The reader can be ordered without the standard power supply (**RX900-NPS**) when PoE switches will be used to power the readers on the LAN. It supports both DHCP and fixed IP addressing and the 256-bit AES encryption standard. Two relay outputs and two inputs are provided as standard for ancillary device control and monitoring.

## TAG

### TGP – Personnel Tag

The TGP is intended for use with all personnel security and access applications such as dynamic mustering and health and safety compliance. It is primarily for indoor use, being splash proof. The tag can incorporate a motion sensor giving immediate alerts on movement, and offers different user-configurable rates for its status (regular) transmissions.

The tag can also incorporate certain access control card chips (customer supplied) allowing dual use on both active RFID and legacy access control systems and a standard ID badge can be fitted to the reverse. It has an anti-tamper facility, implemented through the use of the AT TGP Anti-Tamper.



© 2012 Wavetrend Europe Limited | All Rights Reserved | All specifications are subject to change without notice.

