

WHAT IS IT?

Designed to alert equipment operators of nearby personnel and other equipment, C.A.P.S., reduces the risk of crushing and pinning accidents as well as vehicle-to-vehicle collisions by detecting when a person or vehicle enters the "Customized Protection Zone" around the machine. When a tagged asset enters the protection zone, the system activates up to three open collector outputs for audible, visual, or other alert response systems to warn the equipment operator and nearby personnel of the dangerous situation.

HOW IT WORKS

C.A.P.S. uses unique two-way synchronous ranging technology to create a protective zone around the machine. The C.A.P.S. transmitter is installed onto the equipment with adequate line-of-site to the surrounding area and communicates with other C.A.P.S. units or personnel TAGs to determine what assets are in the vicinity.

Workers and operators wear ranging TAGs that continuously communicate with the C.A.P.S. system transmitter to determine their proximity from the machine and alert the equipment operator of possible danger and safety risks.

To avoid vehicle-to-vehicle collisions, the C.A.P.S. unit detects the signals emitted by other pieces of equipment and activates the configured alarms and response systems.

SYSTEM OVERVIEW

- The system operates seamlessly without any interaction required by the machine operator.
- C.A.P.S. can be installed on most types of machinery and vehicles.
- With C.A.P.S., the equipment operator can expect fewer false alarms compared to other proximity detection and collision avoidance systems.
- Multiple machines and multiple workers can work closely without any conflict or interference.

DATA RECORDING

- The C.A.P.S. unit optionally records all TAG-equipped personnel and vehicles in the vicinity of the machine with a Micro SD memory card.
- Downloaded wirelessly or locally by USB connection.
- Transmitted via AMR's Mine Net™ Mesh or other Wi-Fi network systems.

PROTECTION ZONES

- Detection distance is user-configurable and customized specifically to each vehicle type for both a warning and alarm zone.
- Detection fields may be expanded around the machine to cover blind spots by adding additional units linked together for seamless coverage.
- C.A.P.S. can remain enabled to provide collision avoidance when equipment is parked with engine off

KEY FEATURES

- C.A.P.S. has been successfully implemented on various types of equipment such as forklifts, underground haulage machines, trucks, bulldozers, and light-duty vehicles.
- Input power of 6-60 volts DC.
- Three open collector outputs for a variety of alert configurations including audible or visual alarms and optional connection to the vehicle's brake system or other safety device. The outputs are rated 100VDC @ 175 mA and are capable of activating an external relay circuit.
- C.A.P.S. unit includes a memory card for recording TAG detection and distance information, useful for accident investigation, productivity efficiency, or hazard analysis.
- Optional wireless connectivity via integrated 802.11 Wi-Fi communications module.
- TAG's are rechargeable with battery life depending on adjustable communication rate.

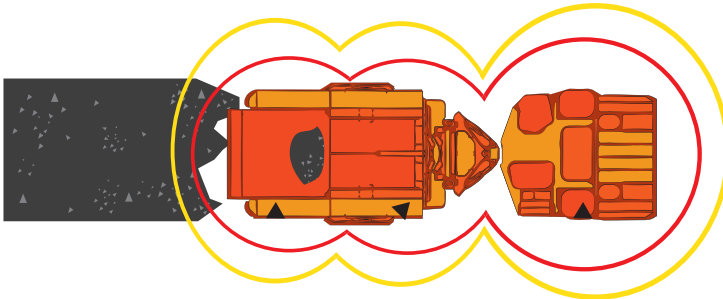
APPLICATIONS

- Forklifts
- Drilling Machinery
- Four Wheelers
- Personnel Carriers
- Scoops
- Bulldozers
- Road Graders
- Passenger & Water Trucks
- Track Hoes
- Haulage & Loading Machines
- Draglines and Shovels
- Skid Steers

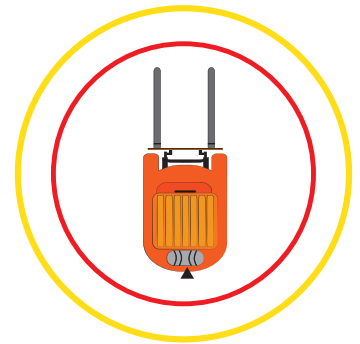
All mobile and production machinery

ADJUSTABLE PROTECTION ZONES

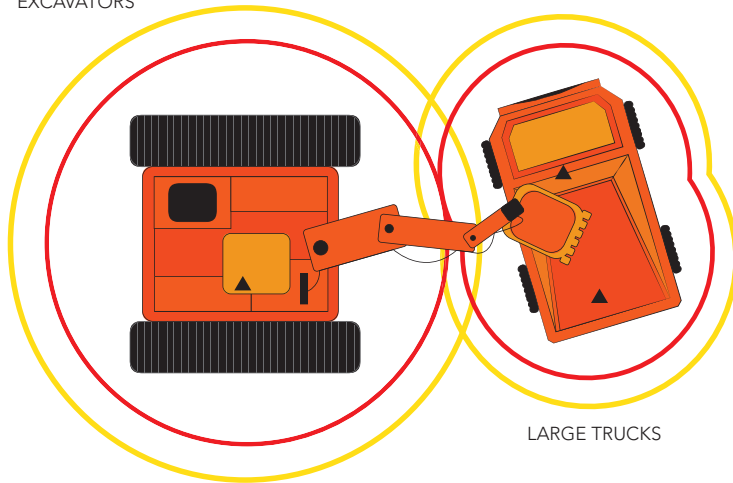
UNDERGROUND MATERIAL HAULERS



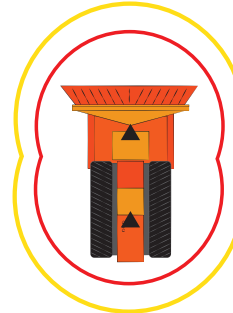
FOUR WHEEL FORKLIFT



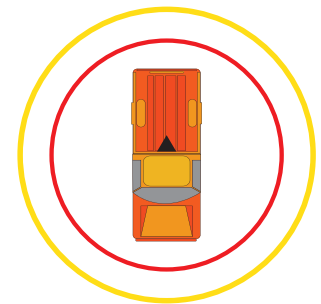
EXCAVATORS



BULLDOZERS



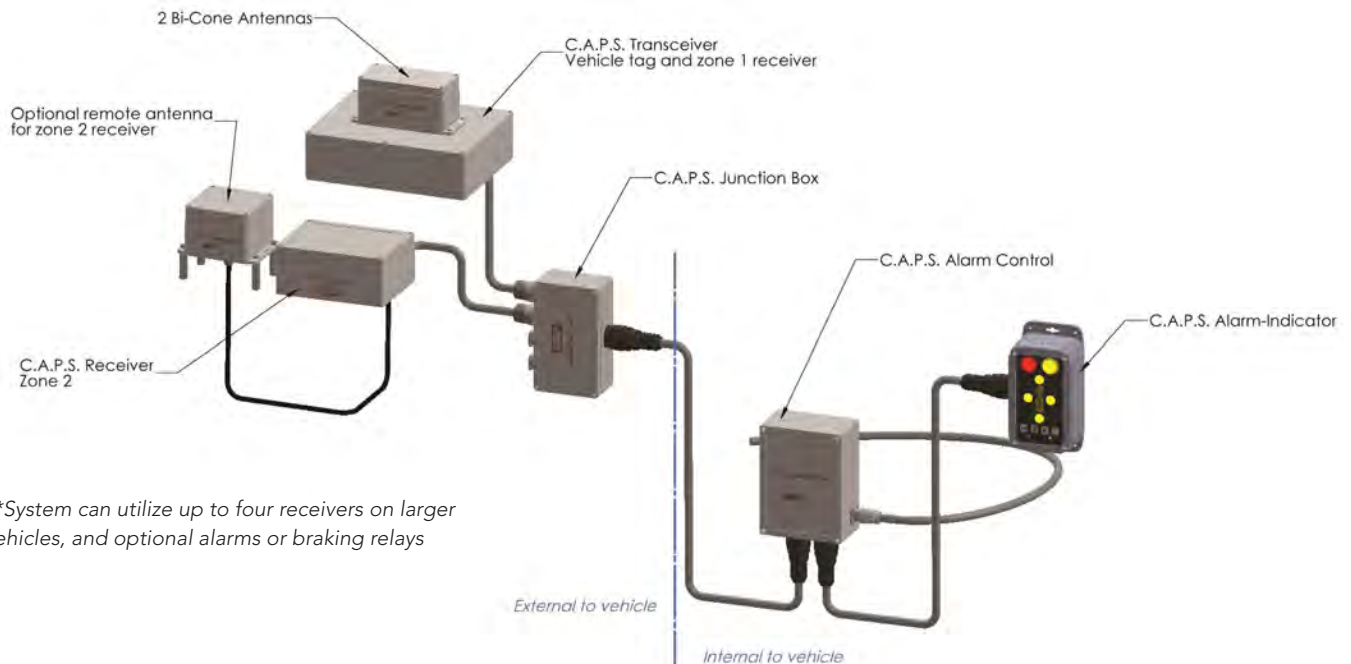
PICKUP TRUCKS



LARGE TRUCKS

**Denotes approximate placement of C.A.P.S. receivers
 **Units can be configured with one or two detection zones

MODULAR HARDWARE



**System can utilize up to four receivers on larger vehicles, and optional alarms or braking relays