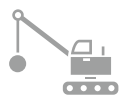


# Intelligent Proximity Alert System

Based on UltraWidebandTechnology



# IPAS *Intelligent Proximity Alert System*

IPAS is designed to reduce the risk of collision between pedestrians and moving vehicles in your workplace. The system uses the cutting-edge RF technology to precisely measure the distance between vehicles and pedestrians and provides a highly reliable collision warning.



## High Accuracy

UWB technology-based highly accurate distance measurement



## Easy Installation

Out-of-the-box with no-registration and no-calibration



## Bilateral Alarm

Acoustic or vibrated alarm for both a driver and a pedestrian



## Easy Operation

Simple and customizable configuration and operation



※ IPAS can be installed on any moving vehicles and machineries.



► Warehouses



► Factories



► Construction Sites



► Mining Sites



► Ports

## IPAS Product

### ● Vehicle Tag (VT)

When PT enters Caution/Danger area of VT, Indicator sounds "Watch out" or "Danger" repeatedly.



Installation	VT : Exterior / IND : Interior	
Interaction	PT, ZT, VT	
Range	1 ~ 30m (Caution/Danger Area Proximity Settable)	
Alarm	Caution Range	Repeating "Watch Out" (Indicator)
	Danger Range	Repeating "Danger" (Indicator)

### ● Pedestrian Tag (PT)

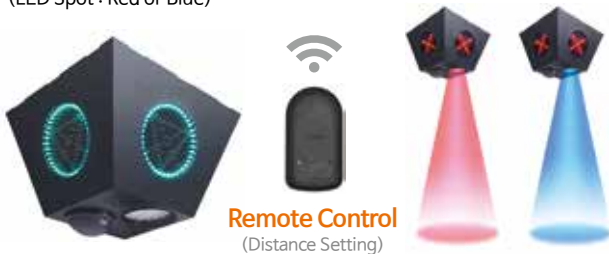
When PT enters Caution/Danger area, PT makes vibration and beep alarm. The pedestrian tag is configurable and rechargeable.



Installation	Attached on a helmet or an arm band	
Interaction	VT	
Alarm	Caution Range	"Beep-Beep-" sound, Vibration
	Danger Range	"Weeyo Weeyo", Vibration
	Low Battery	"Beebeep Beebeep" 5 times every 10 minutes.

### ● Crossway ZT

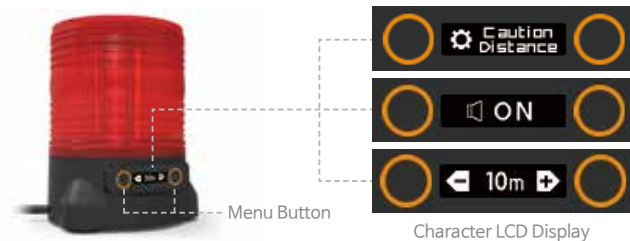
When multiple vehicles are entering into intersection area simultaneously, this product detects vehicles tags and makes voice alert and a spot beam to give a danger alarm to drivers. (LED Spot : Red or Blue)



Installation	Attached on the ceiling of the intersection	
Interaction	VT	
Alarm	No Vehicle Approaching	○ Marked
	1 Vehicle Approaching	▽ Marked, LED Spot (Flashing), "A vehicle is approaching. Watch Out"
	+2 Vehicles Approaching	× Marked, LED Spot (Flashing), "Another vehicle is approaching. Watch Out"

### ● Flashlight ZT

Being installed in the blind area, this product signals sound alarm for anti-collision between adjacent vehicles and pedestrians.



Installation	On the wall	
Interaction	VT	
Range	1 ~ 30m	
Alarm	Default	"Beeeeeep-", Flash
	Option Speaker	Repeating "Watch Out"

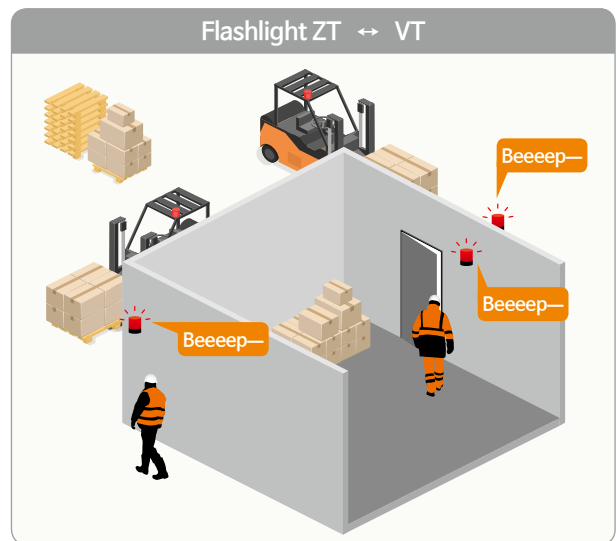
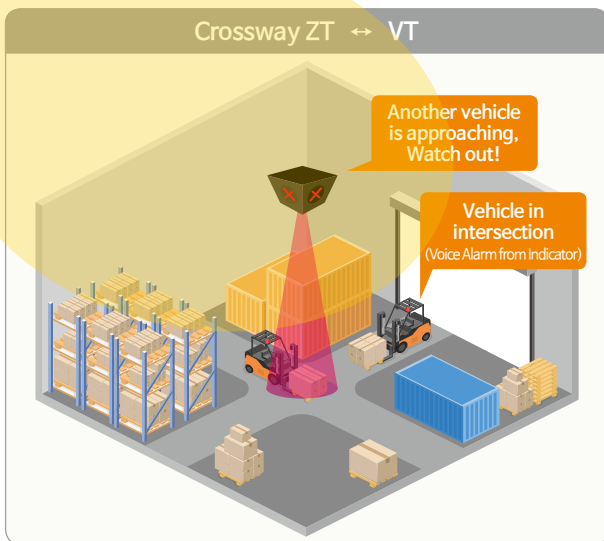
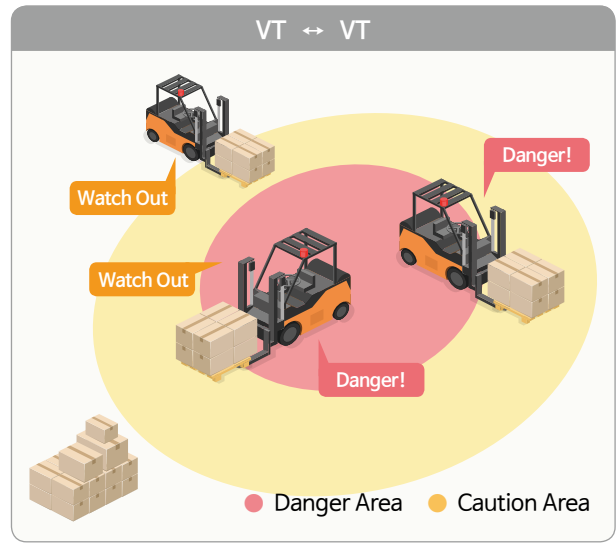
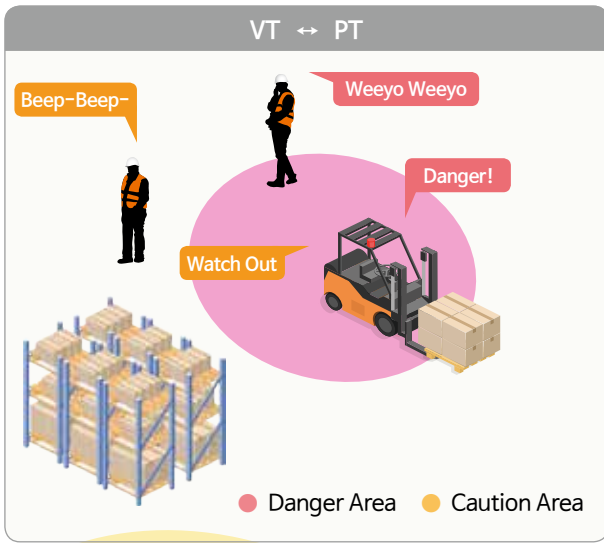
## IPAS Toolkit (Setting Program)

IPAS Toolkit is a PC Program which allows setting and firmware update of IPAS products.



Available Product for Setting	Vehicle Tag, Indicator, Pedestrian Tag, Crossway Zone Tag, Flashlight Zone Tag, External Output Device
Available Product for Firmware Update	Vehicle Tag, Indicator, Pedestrian Tag, Crossway Zone Tag, Remote Control, Flashlight Zone Tag, Dummy Light, External Output Device, Amp

## Alarm Type



## Application Case



▶ Forklift Roof / VT



▶ Inside Cabin / Indicator



▶ Helmet / PT

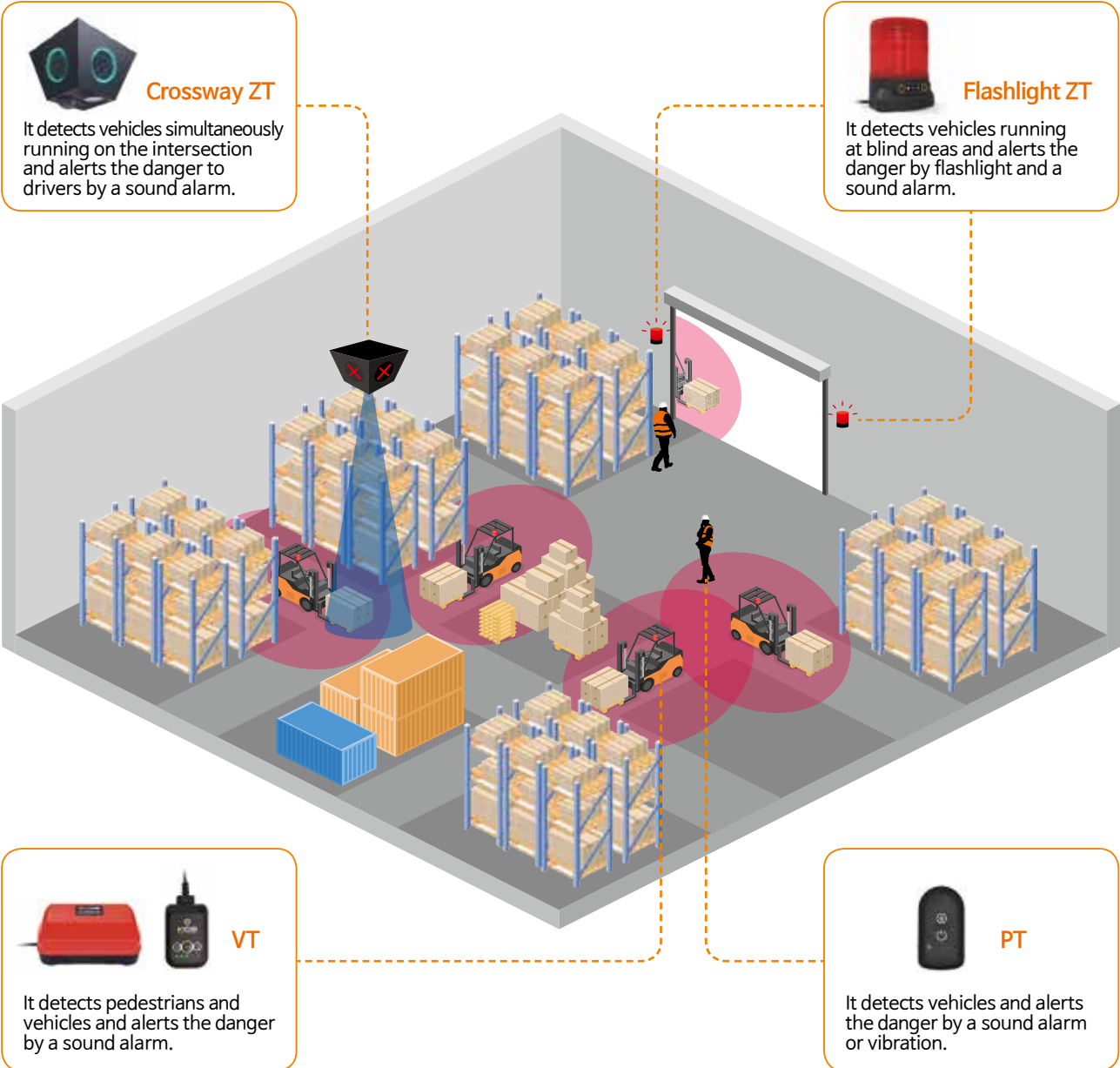


▶ Inside&Outside Office at Factory / Flashlight ZT

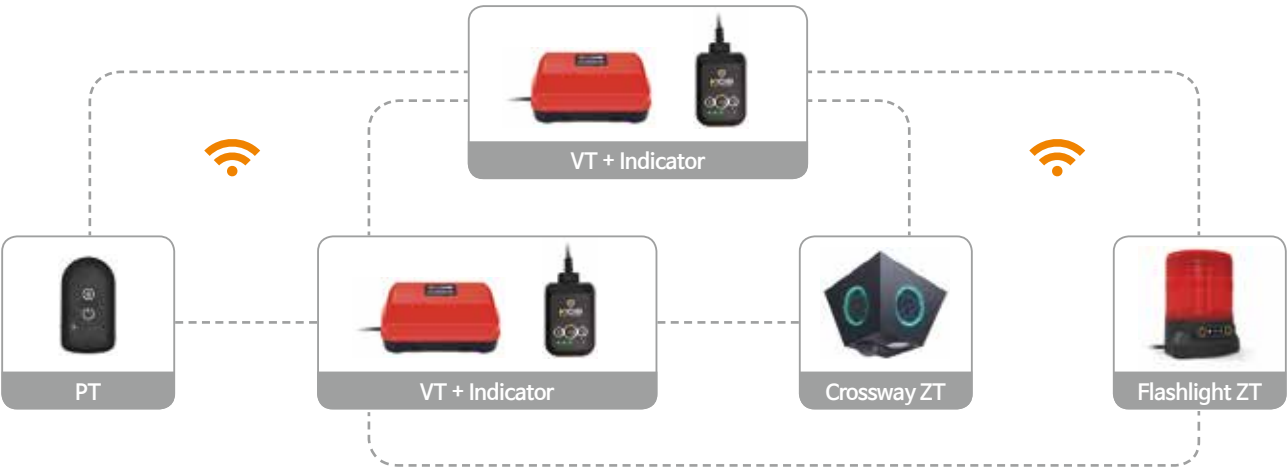


▶ Factory Indoor / Crossway ZT

Installation & Concept Map



Key Map for Operation and Sensing





Product Name	Vehigle Tag (VT)	Indicator	Pedestrian Tag (PT)	Crossway Zone Tag (ZT)	Flashlight Zone Tag (ZT)
Power	12/24Vdc Input (9/32Vdc)	12/24Vdc Input (9/32Vdc)	-	110/220VAC (90~264Vac)	110/220VAC (90~264Vac)
Current Consumption	300mA	500mA	-	-	500mA
Interface	CAN Bus 2.0	CAN Bus 2.0	-	-	CAN Bus 2.0
Sound Level / @	-	92dB / 0.1m	87dB / 0.1m	-	88dB / 1m
Battery	-	-	Li-Polymer 950mA	-	-
Operation Voltage	-	-	3.7V	-	-
Charge Inerface	-	-	Micro USB Type-B (5V/1A)	-	-
Charging Time	-	-	About 1h 30m	-	-
Charging Current	-	-	0.85mA	-	-
Operatoin Hour	-	-	6 days(8 hours/day)	-	-
Dimension	177.8×84.1×86mm	93×130.5×47.5mm	40×72×19.5mm	380×380×281.5mm	122.7×140.6×111.5mm
Weight	444g	207g	58.5g	5,500g	483.5g
Color	● Red / ● Amber	-	● Red / ● Amber	● Red LED Spot / ● Blue LED Spot	● Red / ● Amber
Mount Type	Magnet Mount Type, Cable Tie Connect Link	Screw Fix (or Adhesive Tape)	Helmet Clip(In-Box Item)	Fixture Bracket or Wire	Magnet Mount Type or Bracket Type
Proximity Measure Cycle	0.5sec	-	0.5sec	0.5sec	0.5sec
Operation Temp	-30 ~ 85°C	-30 ~ 85°C	-20 ~ 55°C	-30 ~ 85°C	-30 ~ 85°C
Storage Temp	-40 ~ 85°C	-40 ~ 85°C	-20 ~ 55°C	-40 ~ 85°C	-40 ~ 85°C
Enclosure	IP65	IP65	Waterproof	-	IP65

