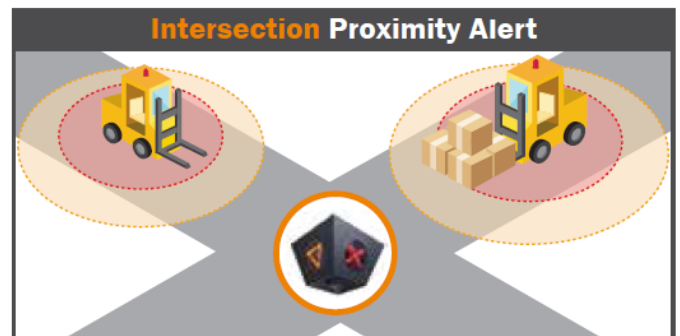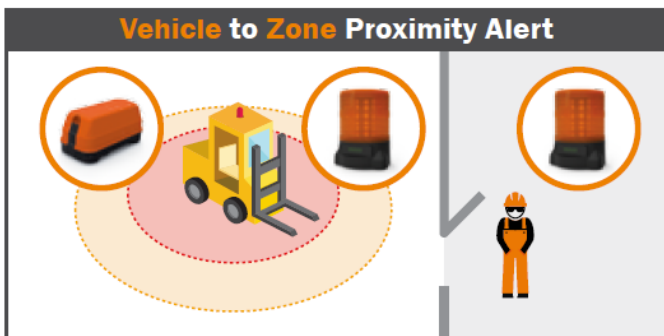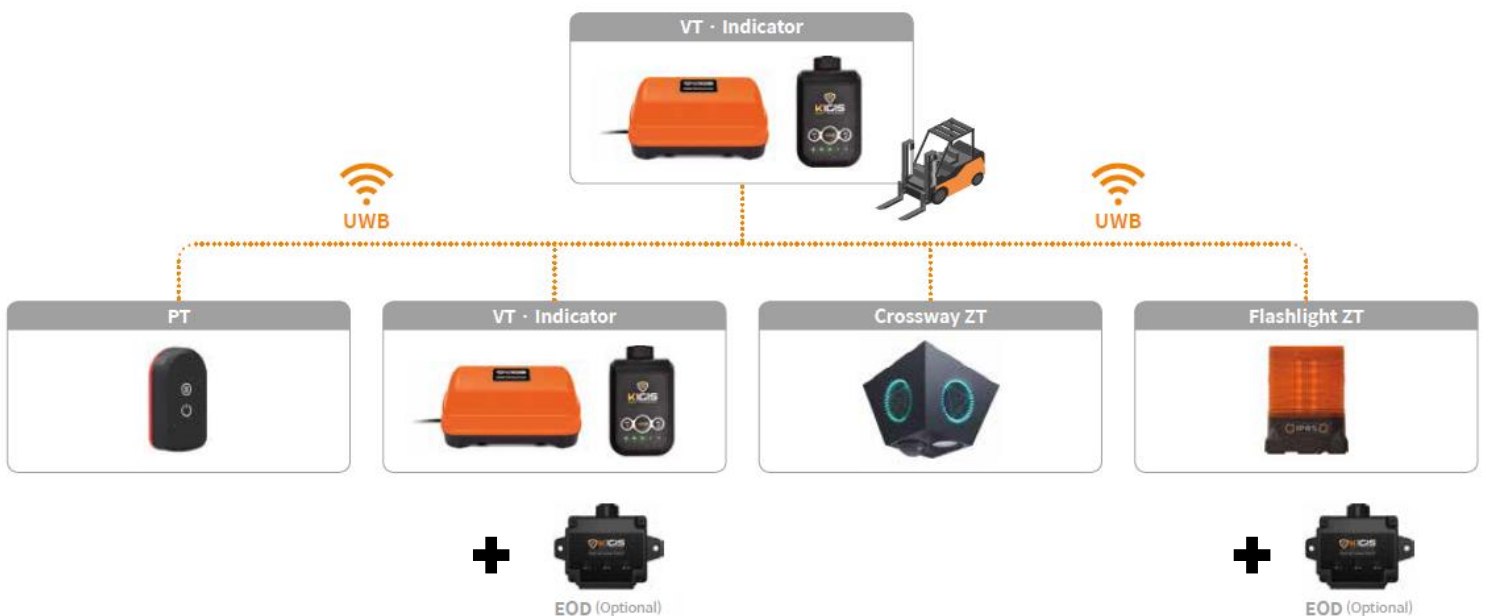**KIGIS** SAFETY TECHNOLOGY

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 the vehicles and pedestrians providing highly reliable collision warning.

● **Functionality**

Vehicle to Pedestrian Proximity Alert

Vehicle to Vehicle Proximity Alert

Vehicle to Zone Proximity Alert

Intersection Proximity Alert

● **Key Map for Operating and Sensing**

VT · Indicator

UWB   UWB

| PT | VT · Indicator | Crossway ZT | Flashlight ZT |

EOD (Optional)   EOD (Optional)

Datasheet

External Output Device allows additional devices to operate according to IPAS warning signal.

• Available for attachment with various extra devices such as speed controller, lamp, alarm and etc.
• CAN bus interface with 12/24V external power
• Easy use without a setup
• Simple installation and detachment using magnetic pads and a lever
• Device operates in warehouse, factory, port and construction/mining site

● **Technical Data**

General Specifications

Interface	Output Channel	Weight
CAN Bus 2.0	3 channel (Ch1, Ch2, Ch3)	203g

Electrical Characteristic

Power	Operating Voltage	Max. Current Consumption	Allowance Current
DC 12V / 24V	DC 9~32V	100mA	5A (per channel)

Operating Specifications

Operating Temperature	Storage Temperature	Connector
-30~85℃	-40~85℃	I.P Connector PLUG 6P (M10xP0.5)

● Overview

IPAS External Output Device is an intermediate device which allows additional devices to operate according to IPAS warning signal. EOD can be used with various devices such as speed controller, lamp, alarm and etc. It is necessary to connect with IPAS.
The three channels are factory pre-set to default setting value; they can be reconfigured for different options using IPAS Toolkit which is PC tool for configuration.
The sensitivity was pre-calibrated at the factory, assuming that the detecting field will be clear of obstacles. The sensitivity cannot be adjusted by user's handling.
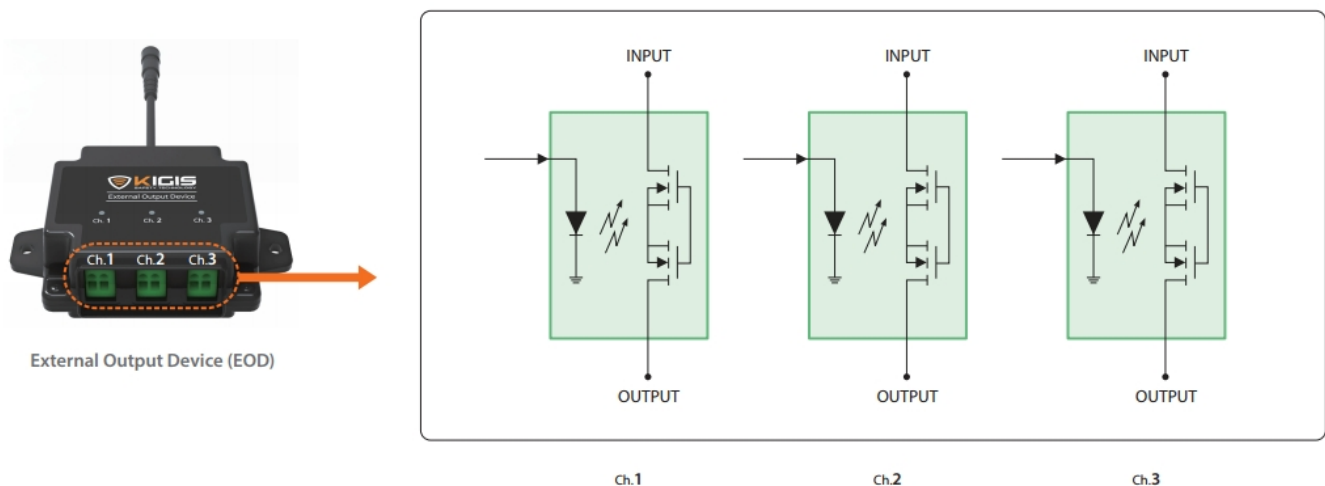

Figure 1. Block Diagram

● Functionality

Output Signal
1) Vehicle to Pedestrian, "Caution Area"
2) Vehicle to Pedestrian, "Danger Area"
3) Vehicle to Vehicle, "Caution Area"
4) Vehicle to Vehicle, "Danger Area"
5) Vehicle to Zone, "Caution Area"
6) Vehicle to Zone, 'Danger Area"
7) Zone to Vehicle, "Caution Area"
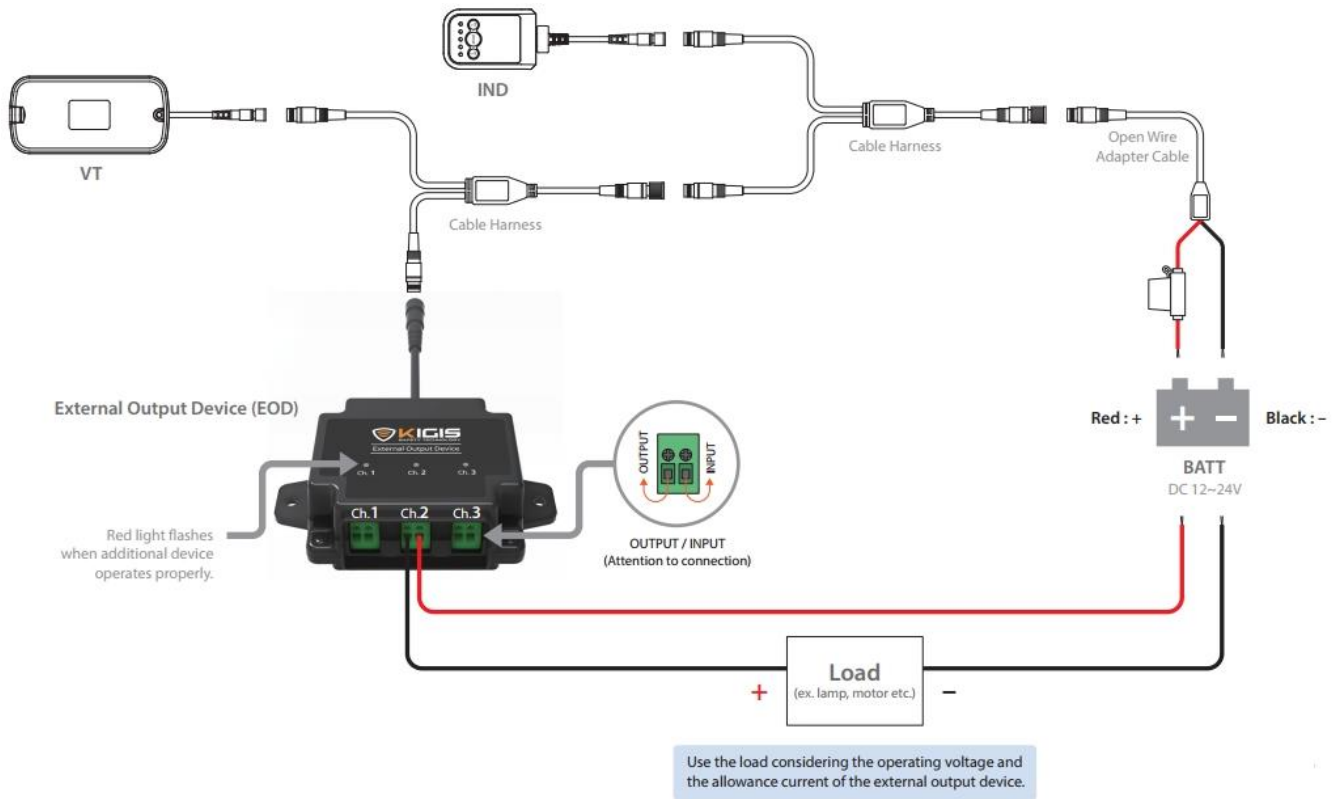8) Zone to Vehicle, "Danger Area"

Channel
- Purpose: Setting available output signal
- Number of Channel: 3 Channels
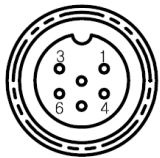- How to Set: Click the check box for each channel

Release Time
- Purpose: Deactivating EOD by timeout
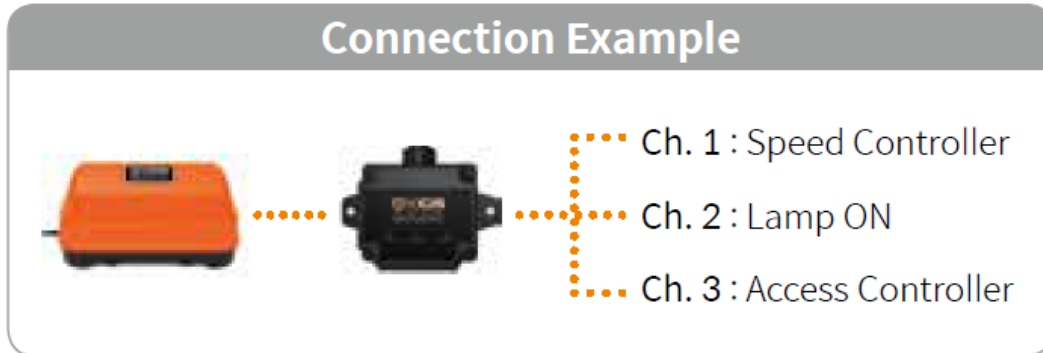- Time: 0-15 Seconds

● Connection Example

External Output Device (EOD)

Red light flashes when additional device operates properly.

OUTPUT / INPUT (Attention to connection)

Use the load considering the operating voltage and the allowance current of the external output device.

Connector Specifications

Pin No.	Function	Wire Description	
		Size	Color
P01	+12V	AWG #26	Red
P02	CAN_L		Yellow
P03	CAN_H		Blue
P04	RS232_TX		White
P05	RS232_RX		Green
P06	GND		Black

● Products Assembly

Connection Example

Ch. 1 : Speed Controller
Ch. 2 : Lamp ON
Ch. 3 : Access Controller

● Order Number (Product Code)

Product Name	Product Code
IPAS External Output Device	PAS-K01-7400

● Certifications

C E

CE: KTI19EC02001_PAS-K01-74

IPAS Vehicle Tag

Manufacturer:

KYUNGWOO SYSTECH, INC.

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