



220107_Rev. 2.00

KIGIS IPAS Toolkit

User Manual

※ This manual is for setting and firmware update for all IPAS products.



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1. Prior to Use

What is IPAS Toolkit?

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



Products for Setting	Vehicle Tag (VT), Indicator (IND), Pedestrian Tag (PT), Flashlight Zone Tag (FZT), Crossway Zone Tag (CZT), External Output Device (EOD), Silent Tag (VTS)
Products for F/W Update	Vehicle Tag (VT), Indicator (IND), Pedestrian Tag (PT), Flashlight Zone Tag (FZT), Crossway Zone Tag (CZT), External Output Device (EOD), Dummy Light, Crossway Zone Tag Remote Control, Audio Amp, Silent Tag (VTS)

Caution

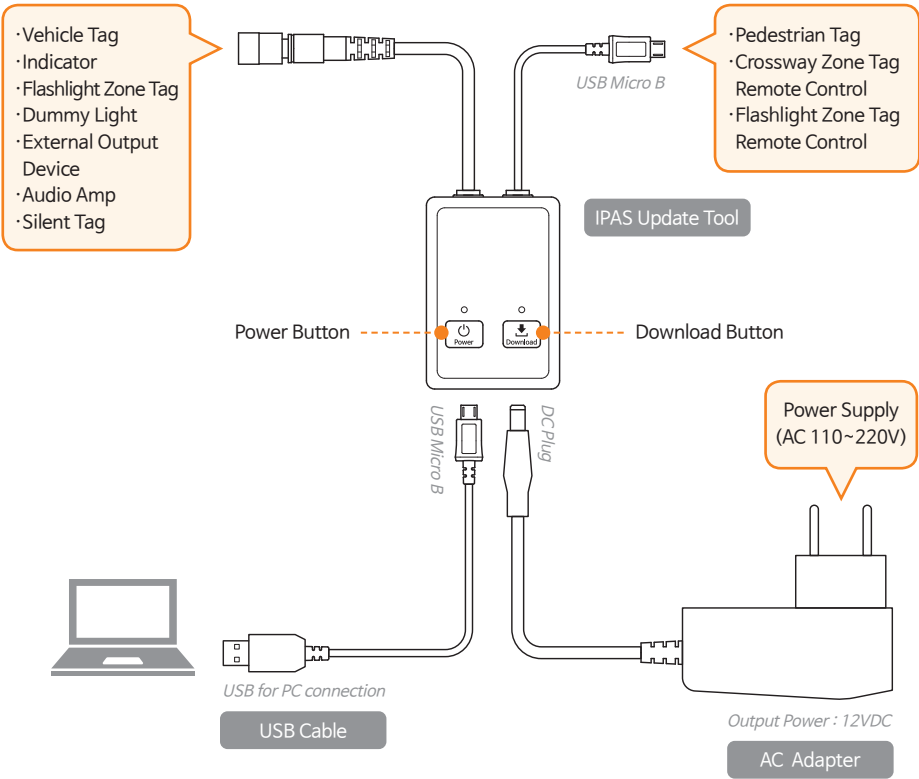
Failure to follow the warnings in this manual may result in damage to the product or serious injury.

- Do not touch the connector or wiring with wet hands. This may cause electric shock or fire.
- Do not place heavy objects on the product or on wiring, or shock. It may cause electric shock or fire.
- If a connector or a wiring gets wet, wipe it with a dry towel. Otherwise, it may cause electric shock or fire.
- Do not disassemble or modify this product. This may cause trouble, and After-Sale Service will not be available.
- Do not place the product near flammable materials, stoves, candles, or fire. This may cause fire and product deformation.
- Do not intentionally immerse the product in water or wash it in running water. This may cause trouble.
- If the product smells, smokes, or makes abnormal noises, turn off the power and contact the customer service center immediately.

※ Any accidents caused by not following the instructions in this manual are the user's responsibility.

2. Component / How to Connect

Component				
	IPAS Update Tool	USB Cable	AC Adapter	User Manual



IPAS Update Tool is not available for Crossway Zone Tag.
Purchase USB to Serial Cable on the market.

► USB to Serial Cable

※ Bluetooth should be OFF when connecting IPAS Update Tool with your PC.

3. Program Execution

※ The program is available for above Windows 10.



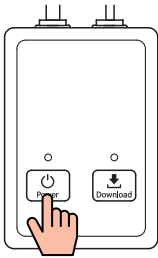
IPAS Toolkit Setup.exe

Setup File

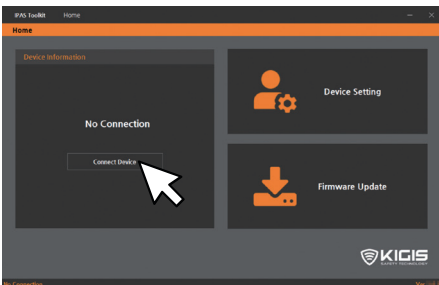


IPAS Toolkit

Program Execution File



· Example : VT



1. Download IPAS Toolkit Setup file.
And Execute IPAS Toolkit program.

2. First, connect IPAS products with IPAS Update Tool then connect IPAS Update Tool with PC.
(Refer to the page 4 for how to connect.)

3. Check the product information on 'Device Information' sector.

- Device : Product Name
- PID : Product Identification Number
- F/W VER : Firmware Version

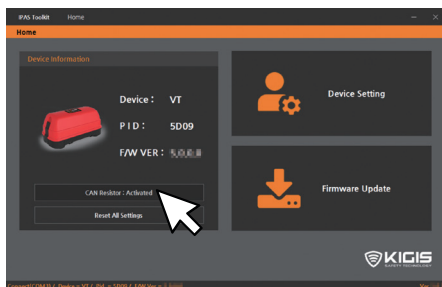
※ Check on the bottom if the program is the latest version.

[If product information is not shown]

Click 'Connect Device' button.

※ IPAS Toolkit 1.0.7 is available for the product ver. 2.4.0.0. In order to use IPAS Toolkit, update the product.

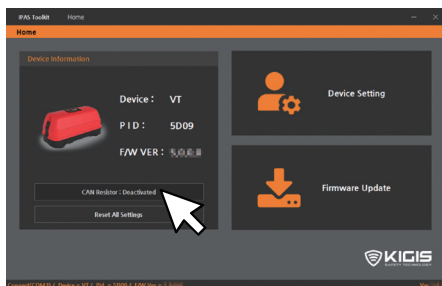
4. CAN Resistor Setting



CAN Resistor Setting

Click 'CAN Resistor' button to set CAN Resistor.

- **Activated**
: CAN Resistor Activated
- **Deactivated**
: CAN Resistor Deactivated



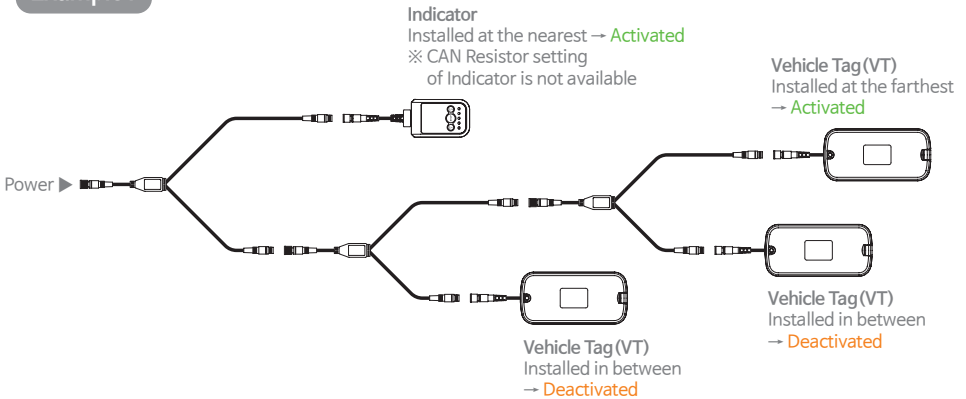
Refer to connection diagram examples in the next page.

4. CAN Resistor Setting

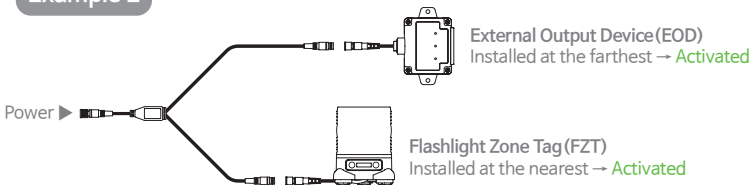
In case of installation of more than 3 devices to power supplier :

- ① For the stability of CAN communication, try to place Indicator, VT, ZT at the nearest and farthest connector from the power supplier. The rest (e.g EOD, Dummy light, AMP & Speaker) to be placed in between the nearest and the farthest connector from the power supplier.
 - ② Refer to below instruction for CAN Resistor configuration.
 - Device(s) installed at the nearest / farthest connector from the power supplier : 'Activated'
 - Device(s) installed in between : 'Deactivated'
- ※ CAN Resistor of Indicator is set as 'Activated'. (CAN Resistor setting is not available.)

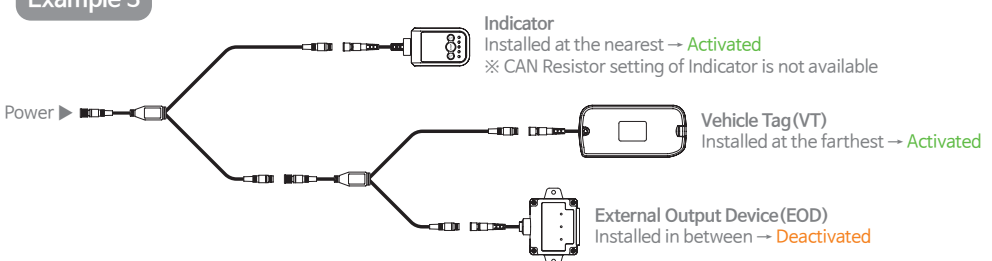
Example 1



Example 2



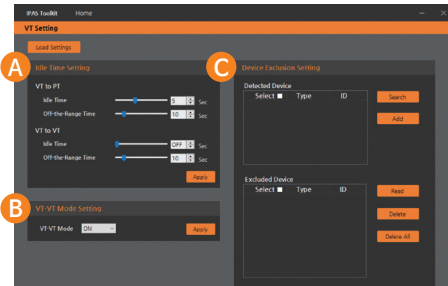
Example 3



5-1. Setting - Vehicle Tag(VT)



1. First, connect IPAS products with IPAS Update Tool. Then connect the update tool with PC.

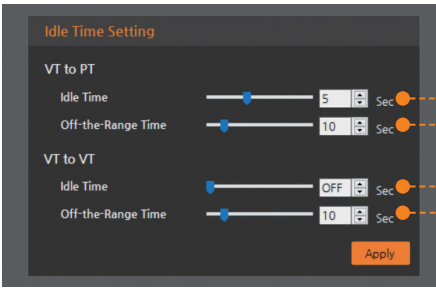


2. Click 'Apply' button every time after each setting (A, B, C).

※ To load current parameter setting values, click 'Load Settings'.

5-1. Setting - Vehicle Tag(VT)

A



- Idle Time : OFF / 3~10sec (by 1sec)
- Off-the-Range Time : OFF / 3~60sec (by 1sec)

A Idle Time Setting

· VT to PT / Idle Time
: Alarm allowance time between Vehicle Tag and Pedestrian Tag.

[ex] Alarm occurs for only 5seconds when PT is in the VT-PT caution area.

· VT to PT / Off-the-Range Time
: Time to maintain Idle Time under the condition that the tag exits and re-enters the caution area.

[ex] VT-PT Idle Time maintains if PT exits and re-enters the VT-PT caution area within 10 seconds.

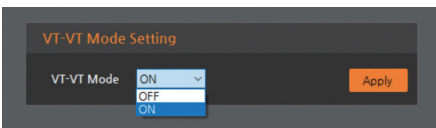
· VT to VT / Idle Time
: Alarm allowance time between Vehicle Tag and Vehicle Tag.

[ex] Alarm keeps occurring when VT is in the VT-VT caution area.

· VT to VT / Off-the-Range Time
: Time to maintain Idle Time under the condition that the tag exits and re-enters the caution area.

[ex] VT-VT Idle Time maintains if VT exits and re-enters the VT-VT caution area within 10 seconds.

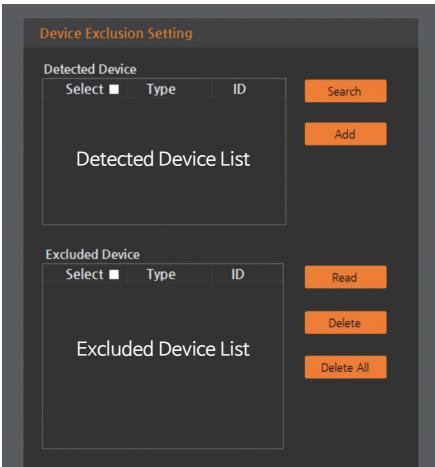
B



B VT-VT Mode Setting

- OFF : VT- PT Only
- ON : VT- PT + VT-VT

C



C Device Exclusion Setting

This function is to deactivate the detection between UWB-related devices (Vehicle Tag, Flashlight Zone Tag, Pedestrian Tag) and the connected Vehicle Tag.

- Detected Device
: Detected device list
- Excluded Device
: Excluded device list

[How to exclude the device]

- ① Place the device nearby the connected Vehicle Tag within 5m.
※ Power of detected device(s) MUST be ON.
- ② When clicking 'Search' button, detected device list is shown.
- ③ Select the device and click 'Add' button. (Click the 'Select' box to select all devices.)
- ④ Then, the devices are being registered and shown in the 'Excluded Device' list.

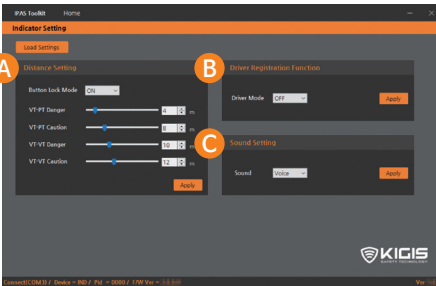
[How to read and delete the device]

- ① Click 'Read' button to load the excluded device list.
- ② Select the device and click 'Delete' button.
(Click 'Delete All' button to delete at once.)

5-2. Setting - Indicator

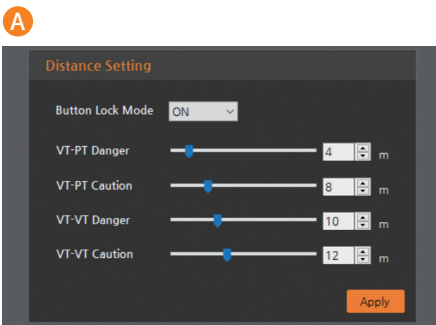


1. First, connect IPAS products with IPAS Update Tool. Then connect the update tool with PC.



2. Click 'Apply' button every time after each setting (A, B, C).

※ To load current parameter setting values, click 'Load Settings'.



A Distance Setting

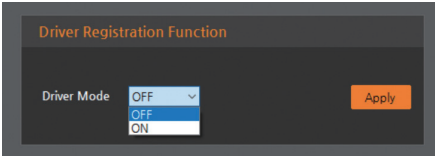
Button Lock Mode

- OFF : Distance setting by Toolkit is not available. (Instead, distance setting manually by Indicator is available.)
- ON : Distance setting by Toolkit is available. (Instead, distance setting manually by Indicator is not available.)

Set the distance of the caution / danger area. (1 to 30m, by 1m each)

※ The caution distance must be longer than the danger distance.

B



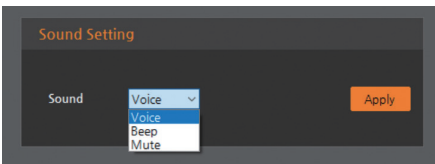
B Driver Registration Function

Driver Registration Function is to deactivate the alarm of driver's PT.
(How to register the tag : Refer to 'User Manual VT · PT'.)

'Driver Mode' Setting

- OFF : Driver Registration unavailable
- ON : Driver Registration available

C

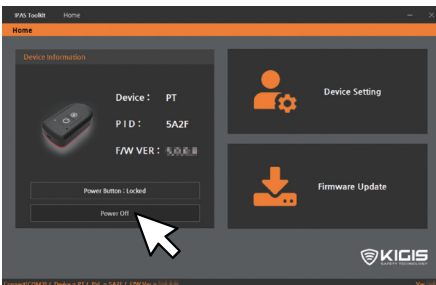


C Sound Setting

Choose the sound type.

- Voice
- Beep
- Mute

Prior to connect with IPAS Update Tool, power of IPAS PT MUST be ON.



Power Button

Power Button function is to lock / unlock all buttons of Pedestrian Tag.

- Unlocked
: Allows Button configuration by manually.
- Locked
: Button configuration not allowed. (Button configuration and power-off are available by using Update Tool only)

[To power off the PT which is button locked function applied.]

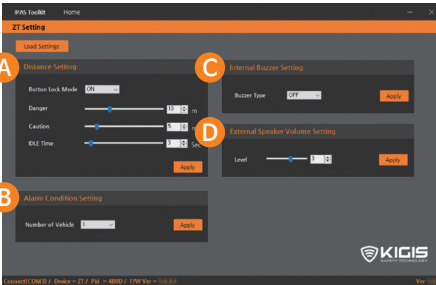
- ① Connect with IPAS Update Tool and Click 'Power Off' button.
 - ② Disconnect PT with IPAS Update Tool.
- ※ Press 'Power' button of PT for 2 seconds in order to power on. The power button keeps locked.

5-4. Setting - Flashlight Zone Tag(FZT)

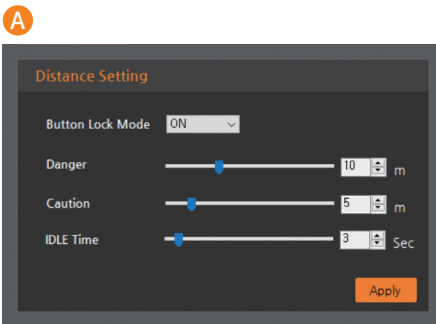


1. First, connect IPAS products with IPAS Update Tool. Then connect the update tool with PC.

2. Click 'Apply' button every time after each setting (A, B, C, D).



※ To load current parameter setting values, click 'Load Settings'.



A Distance Setting

'Button Lock Mode' Option

- OFF : Distance setting by Toolkit is not available. (Instead, distance setting manually by FZT is available.)
- ON : Distance setting by Toolkit is available. (Instead, distance setting manually by FZT is not available.)

① Set distance of caution / danger area (1~30m, by 1m / Danger area is only available when external speaker and audio amp are connected.)

※ The caution distance MUST be longer than danger distance.

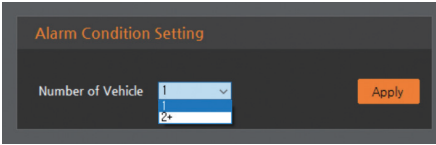
② Idle Time Setting (0~50sec, by 1sec)

※ 0 : OFF

'Idle Time' is the duration of waiting time of stopped vehicle. The alarm will be automatically muted after the idle time and will not alert until the vehicle moves again.

5-4. Setting - Flashlight Zone Tag(FZT)

B

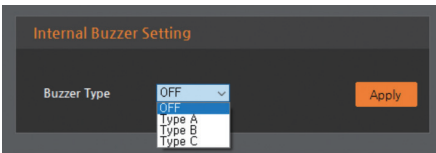


B Alarm Condition Setting

Number of Vehicle : The number of vehicle which enters the caution/ danger area of FZT.

- 1 : Alarm occurs when one vehicle enters.
- 2+ : Alarm occurs when two or more vehicle enter.

C

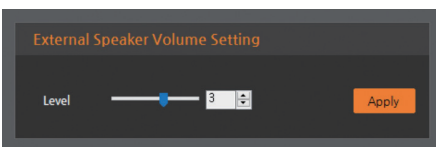


C Internal Buzzer Setting

Buzzer Type : Sound alarm type of internal buzzer embedded inside FZT

- OFF : No buzzer / Flash only
- Type A : Beep- (constant) + Flash
- Type B : Beep- (1sec interval) + Flash
- Type C : Beep- (1.5sec interval) + Flash

D

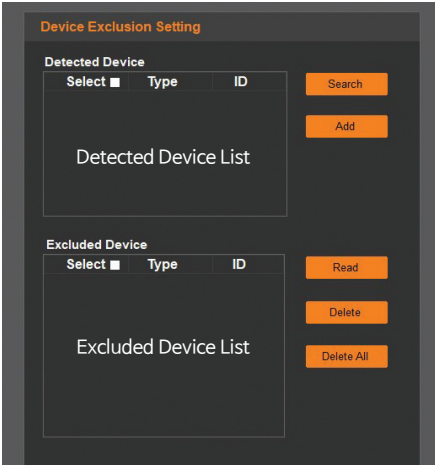


D External Speaker Volume Setting

External Speaker Volume (0~5 level)

- ※ 0 : OFF
- ※ Amp / Speaker(20W): Optional (MUST be installed in pairs.)

E



E Device Exclusion Setting

This function is to deactivate the detection between FZT and particularly selected VT.

- Detected Device
: Detected VT(s)
- Excluded Device
: Excluded VT(s)

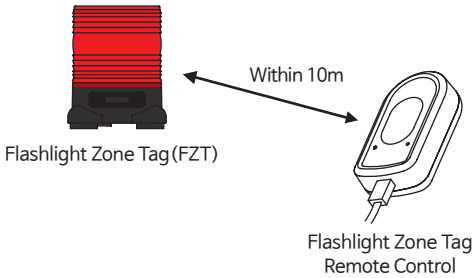
[How to exclude Vehicle Tag(s)]

- ① Place Vehicle Tag(s) nearby the Flashlight Zone Tag within 5m.
※ Power of Vehicle Tag(s) MUST be ON.
- ② When clicking 'Search' button, detected VT(s) is shown.
- ③ Select VT(s) and click 'Add' button. (Click the "Select' box to select all VT(s)
- ④ Then, Vehicle Tags are being registered and shown in the 'Excluded Device'.

[How to read and delete Vehicle Tag(s)]

- ① Click 'Read' button to load the excluded Vehicle Tag(s).
- ② Select the Vehicle Tag(s) and click 'Delete' button.
(Click 'Delete All' button to delete all Vehicle Tags at once.)

5-4. Setting - Flashlight Zone Tag(FZT)



1. First, connect the Remote control with PC by using USB cable. Then, place the remote control nearby Flashlight Zone Tag within 10m.

- ※ Prior to device setting, power of FZT MUST be ON.
- ※ Remote control allows wireless setting in between FZT and Remote control.

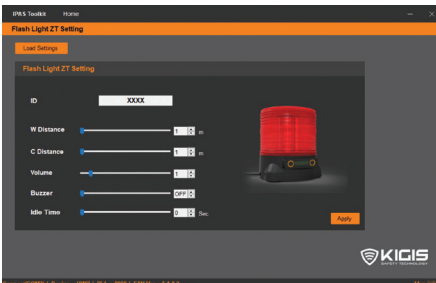
2. Choose the device (Flashlight ZT)



3. Click 'Device Setting' button.



4. Set the function. Click 'Apply' button.

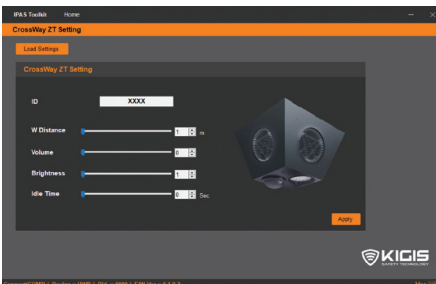
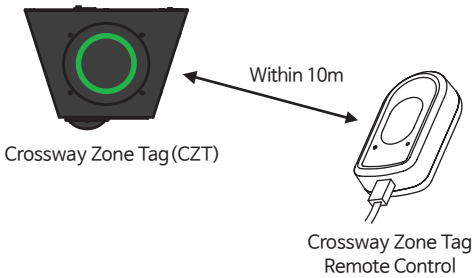


- ※ To load current parameter setting values, click 'Load Settings'.

- W Distance (Warning) : 1~30m
- C Distance (Caution) : 1~30m
- Volum : 1~10 level
- Buzzer : OFF and 1~3 level
- Idle Time : 0~50sec(by 10sec)

'Idle Time' is the waiting time of stopped vehicle in order to stop the alarm of Flashlight Zone Tag. The alarm will be automatically stopped after the designated time and restart if the vehicle moves again.

5-5. Setting - Crossway Zone Tag Remote Control



※ To load current parameter setting values, click 'Load Settings'.

1. First, connect Crossway Zone Tag Remote Control with PC by using USB cable. Then, place the remote control nearby IPAS Crossway Zone Tag within 10m.

- ※ Prior to device setting, power of IPAS CZT MUST be ON.
- ※ Remote control allows wireless setting in between CZT and remote control.

2. Choose the device (Crossway ZT)

3. Click 'Device Setting' button.

4. Set the function. Click 'Apply' button.

- Distance : 1~30m
- Volume : 0~5 level
- Brightness : 1~5 level
- Idle Time : 0~50sec(by 10sec)
- ※ 0 : OFF

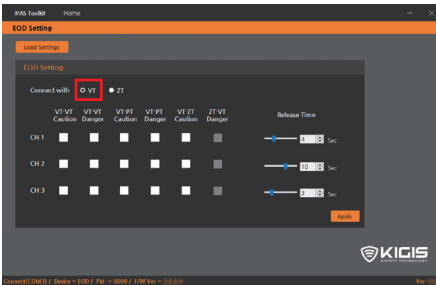
'Idle Time' is the waiting time of stopped vehicle in order to stop the alarm of Crossway Zone Tag. The alarm will be automatically stopped after the designated time and restart if the vehicle moves again.

5-6. Setting - External Output Device(EOD)



1. Click 'Device Setting' button.

※ Only one EOD is allowed for each power supply.



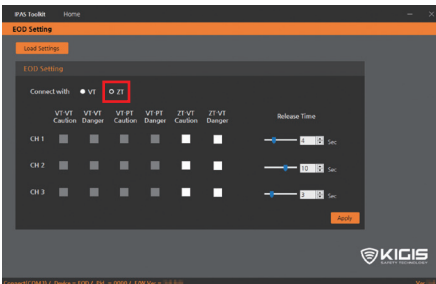
2. Choose the device type connected with EOD. (VT or ZT)

3. Set the function. Click 'Apply' button.

※ Multiple choice for each channel is available / Multiple choice is not available in case the release time applies.

- VT-VT Caution
- VT-VT Danger
- VT-PT Caution
- VT-PT Danger
- ZT-VT(VT-ZT) Caution
- ZT-VT Danger

※ Setting for 'ZT-VT Danger' is not allowed when the device type is VT.

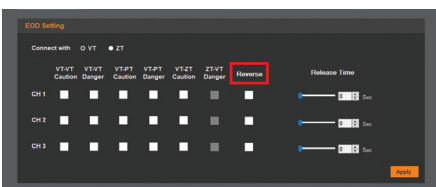


4. Set Release Time for each channel.

※ Release Time : Retention time of output signal (0~15sec)

5. Reverse feature
'Reverse feature' is to operate the EOD's channels backwards.

※ Setting for 'ZT-VT Caution/Danger' is only allowed when the device type is ZT.



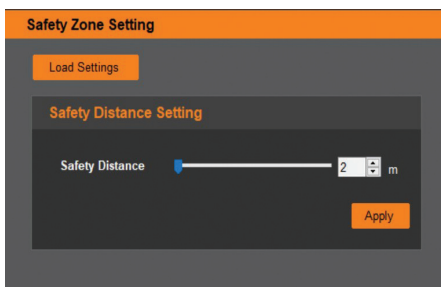
- Normal
: Signal is OFF when EOD's power turns ON.
Signal is ON upon EOD's detection.
- Reverse
: Signal is ON when EOD's power turns ON.
Signal is OFF upon EOD's detection.

5-7. Setting - Silent Tag(VTS)



1. Click 'Device Setting' button.

※ Only one Silent Tag is allowed for each power supply.



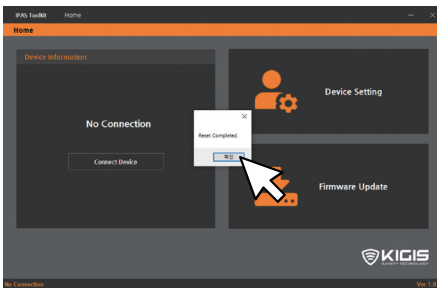
2. Set the distance and click 'Apply' button.

※ Distance is available up to 20 meters.

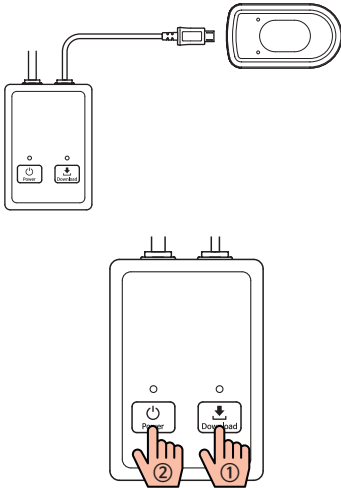
6. Reset All Settings(All IPAS Products)



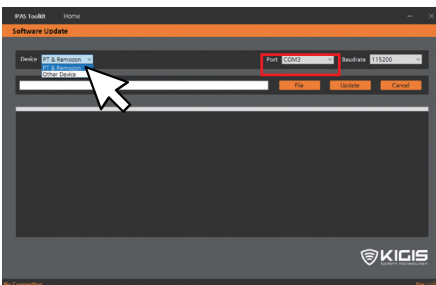
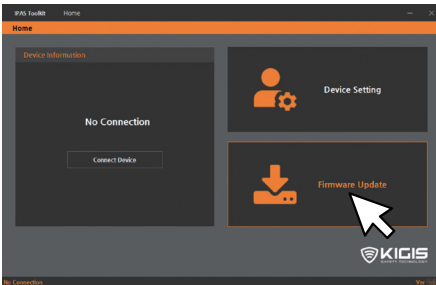
1. Click 'Reset All Setting' button to reset all settings.



7-1. Firmware Update(PT & Remocon)



Press buttons in numerical order.



1. ① Pedestrian Tag (PT)
: Turn the device power off, then connect PT with IPAS Update Tool.
2. ② Crossway Zone Tag Remote Control
: Connect Remote Control with IPAS Update Tool. Then, connect IPAS Update Tool with PC.

※ Prior to connect with IPAS Update Tool, turn the power off of the update tool.

2. Press 'Download' button. Then, press 'Power' button.

3. First, connect IPAS products with IPAS Update Tool, then connect the update tool with PC. And click 'Firmware Update' button.

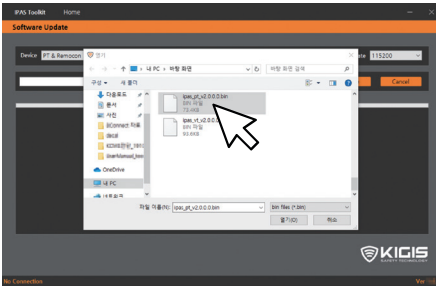
4. Choose 'PT & Remocon' in the device menu.

- PT & Remocon
: Pedestrian Tag, Remote Control for both Crossway Zone Tag and Flashlight Zone Tag
- Other Device
: Vehicle Tag, Indicator, Flashlight Zone Tag, Crossway Zone Tag, External Output Device, Audio Amp, Dummy Light, Silent Tag

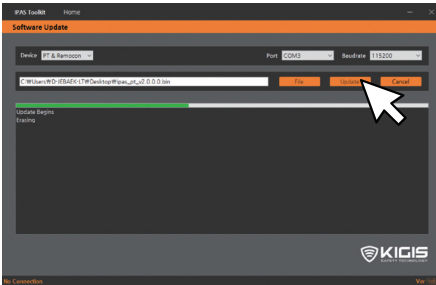
Port and Baudrate are automatically connected.

※ Reconnect the cable of IPAS Update Tool if error occurred.

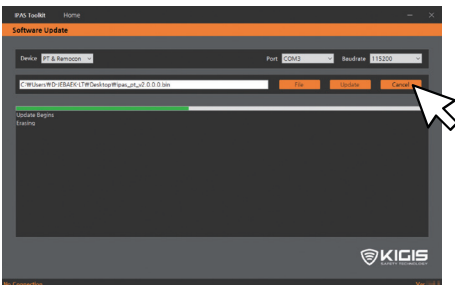
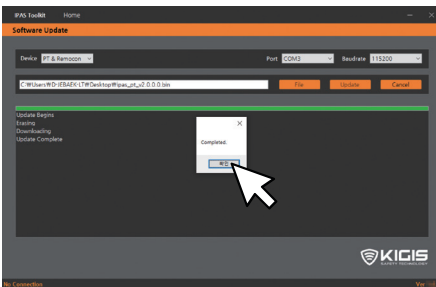
7-1. Firmware Update(PT & Remocon)



5. Click 'File' button. Select and open the firmware file.

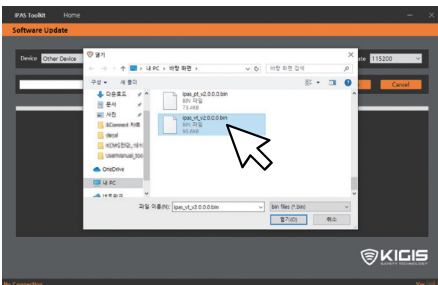
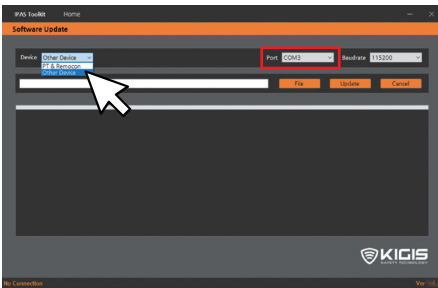
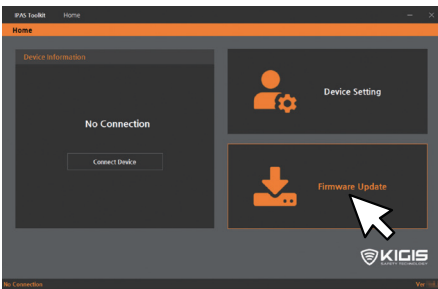
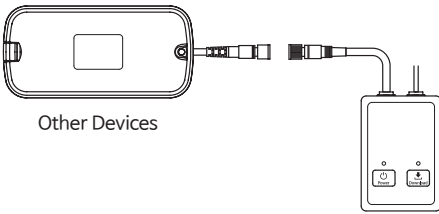


6. Click 'Update' button.



[If error occurs]
Reboot the IPAS Update Tool or click 'Cancel' button and try the update again.

7-2. Firmware Update(Other Device)



1. Connect IPAS products with IPAS Update Tool. **Prior to connect with the update tool, turn the power off of the update tool.**

※ **Other Device** : Vehicle Tag, Indicator, Flashlight Zone Tag, Crossway Zone Tag, External Output Device, Audio Amp, Dummy Light, Silent Tag

2. First, connect IPAS products with IPAS Update Tool, then connect the update tool with PC. And click 'Firmware Update' button.

3. Choose 'Other Device' on the device menu.

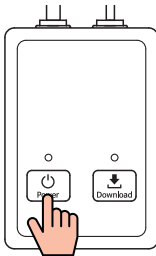
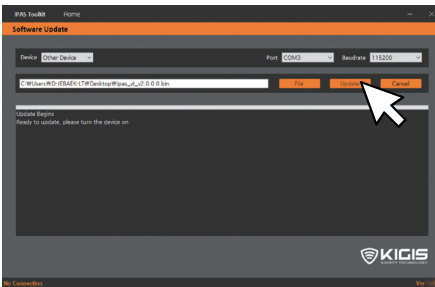
- PT & Remocon
: Pedestrian Tag, Remote Control for both Crossway Zone Tag and Flashlight Zone Tag
- **Other Device**
: Vehicle Tag, Indicator, Flashlight Zone Tag, Crossway Zone Tag, External Output Device, Audio Amp, Dummy Light, Silent Tag

Port and Baudrate are automatically connected.

※ Reconnect the cable of IPAS Update Tool if error occurred.

4. Click 'File' button. Select and open the firmware file.

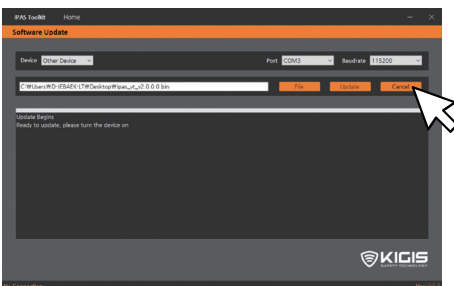
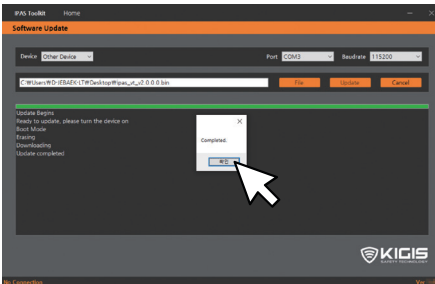
7-2. Firmware Update(Other Device)



5. Click 'Update' button.

6. Press 'Power' button of IPAS Toolkit.

※ IPAS Update Tool is not available for Crossway Zone Tag. ('USB to Serial Cable' should be purchased separately.) Turn the crossway zone tag's power on for the update.



[If error occurs]

Reboot the IPAS Update Tool or click 'Cancel' button to try the update again.

MEMO

Think Safe

Work Safe

Home Safe

Distributor (or purchasing store)

* Any inquiry about the purchased product is contactable to distributor (or purchasing store) at below line.



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(847) 296-4279

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Manufacturer


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