HIYARI HUNTER

ver.2.2

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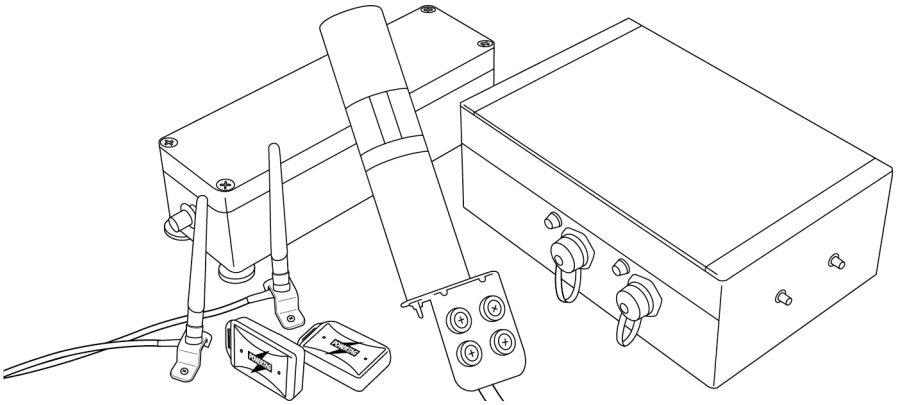


* The contents of this book are as of March 2022. The contents of this document, including product specifications, are subject to change without notice for improvement.

Matrix Inc.
https://matrix-inc.co.jp/

INDEX

Safety Precautions

In order to prevent harm to people and damage to property, we explain that you must follow them.

It distinguishes and explains the degree of harm and damage caused by incorrect use.

⚠	**warn**	Ignoring this labeling and mishandling it may result in death or serious injury to a person and may cause property damage.
⚠	**note**	Ignoring this labeling and mishandling it may result in injury to a person and may cause property damage.

The type of content to be followed is distinguished by picture symbols and explained.

⚠	It is a content to be careful.
⃠	It is a content that should not be done.
❗	What you have to do.

Disclaimer
The company shall not be liable for any damage that you or a third party may suffer incurred from misuse of this product, failure that occurred during use, other defects or use of this product except in cases where legal liability is recognized by law.
Thank you for your understanding.

⚠ warn

Handling of power cords and power plugs	
❗	**Immediately stop using in the event of an abnormality or failure, and turn off the power supply.** ● Smoke or abnormal odors and sounds ● Liquid such as water or foreign matters entered the inside. ● There is a deformed or damaged part of this unit. If you use it as it is, it may cause fire or electric shock. ※ Please turn off the power immediately, stop using and request repair. ※ Repair by customers is dangerous, so please stop.
⃠	**Do not reseating the power with wet hands** Doing so may cause an electric shock.

	Do not use damaged power lines. Do not damage them. ● Damage, modify ● bring them closer to a heat equipment ● Twist, forcibly bend, pull, bundle, put heavy objects, etc. Doing so may cause a fire due to electric shock or short circuit.
	Do not use beyond the power rating. Doing so may cause a fire due to heat generation.
	Ensure that the power line is connected. Incomplete connections may cause fire or electric shock.

About the handling of the main body	
	Do not place a container containing liquid on this unit. If the liquid enters the inside, it may cause fire, electric shock, or malfunction.
	Do not let water in. Doing so may cause fire, electric shock, or malfunction.
	Do not wash high pressure. Water may enter, causing fire, electric shock, or malfunction.
	If lightning strikes, do not touch the unit, power line, or antenna wire. Doing so may cause an electric shock.
	Do not modify this unit. There is a high voltage part inside, which may cause fire, electric shock, or failure.
	Do not place in an unstable place. It may fall or fall, causing injury. ● When using a table, use a solid one that does not have wobble. ● Make sure that the stand surface is flat and strong enough.
	Do not put foreign objects such as metals or flammable objects inside. Doing so may cause fire, electric shock, or malfunction. Please be especially careful with children.
	Do not use in environments with severe temperature differences. If the temperature difference is severe, condensation may occur, which may cause electric shock or failure.
	Do not open the lid by peeling off the anti-opening tape (silver tape). If opened, it will be considered a remodeling and will not be guaranteed as a product.
	Please ask a construction specialist for installation work. Incomplete installation work may cause death or injury. When performing installation work, be sure to read the instruction manual and follow the prescribed procedure. In addition, please be sure to check the operation with the actual machine in advance.

⚠ note

About the handling of the main body	
⊘	**The ventilation of the control unit is not blocked.** Doing so may cause condensation or malfunction.
⊘	**Do not place in places with high humidity or dust, or where oil smoke or steam is exposed.** Doing so may cause fire, electric shock, or malfunction.
⊘	**Does not subject a strong impact.** Doing so may cause injury.
⊘	**Do not place objects on this unit, do not ride.** Doing so may fall, break, or fall, causing injury.
⊘	**Do not forcibly bend, pull, or twist the connection cable.** Doing so may cause fire, electric shock, or malfunction.
⊘	**Do not reseating the connection cable while the power is on.** Doing so may cause fire, electric shock, or malfunction.
⊘	**Do not use in environments such as heavy rain or strong winds.** There is a risk of water.
!	**Handle the connection cables so as not to pinch them to the wall or not to hook the foot.** Doing so may cause fire, electric shock, or injury.
!	**Remove the connection line etc. before moving (power line, antenna wire, connection line between equipment and fall prevention parts)** Doing so may damage the power cord or unit, causing a fire, electric shock, or malfunction.
!	**Check the storage location.** Do not store in the following locations: ● In direct sunlight ● Places with high temperatures and humidity ● Unstable places that may fall ● Places where temperatures can change rapidly ● Places with high vibrations or dust ● Places where static electricity easy to be charged ● Where corrosive, flammable gases are generated
!	**Conduct daily and periodic inspections.** In order to keep the function of this product normal at all times, please keep in mind daily inspections and periodic inspections.
⚠	**Frequently remove dust from the ventilation of the control unit** If you do not clean for a long time, breathability may deteriorate and cause condensation.

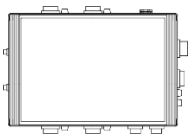
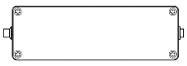
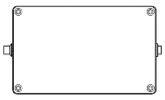
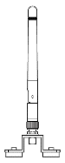
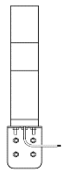
- This product informs workers approaching vehicles or the approaching of vehicles each other. It does not prevent accidents between vehicles and workers, or between vehicles.
- The Company shall not be liable for any damage in the event of an accident between the vehicle and the worker, or between the vehicles, regardless of whether or not this product is activated.
- The Company shall not be liable for any damage caused by the failure of this product, the use of this product, or damage to forklifts or heavy machinery.
- The Company shall not be liable for any accidents or damages incurred by the customer or a third party. In addition, please note that we may not be able to respond urgently to requests for repair and replacement in the event of a malfunction in operation.
- The alarm device will not work unless you enter the designated detection area.
- The detection distance varies depending on the installation status and environment of this product in the vehicle.
- The detection distance and reception sensitivity may change depending on the high noise environment, metal objects, and shields.

- A tag is an active tag with a battery inside. Battery life varies depending on usage conditions. If the battery is lost, please replace the battery with the customer.
- The use and maintenance of the Product is at your own risk.
- Do not clean the equipment housing by splashing water or chemicals, or wash the water. Doing so may flood the inside of the equipment.
- Install the Trigger generator horizontally with the magnet part down. In addition, please install so that the bottom of the equipment housing is not soaked in water.

Product Overview

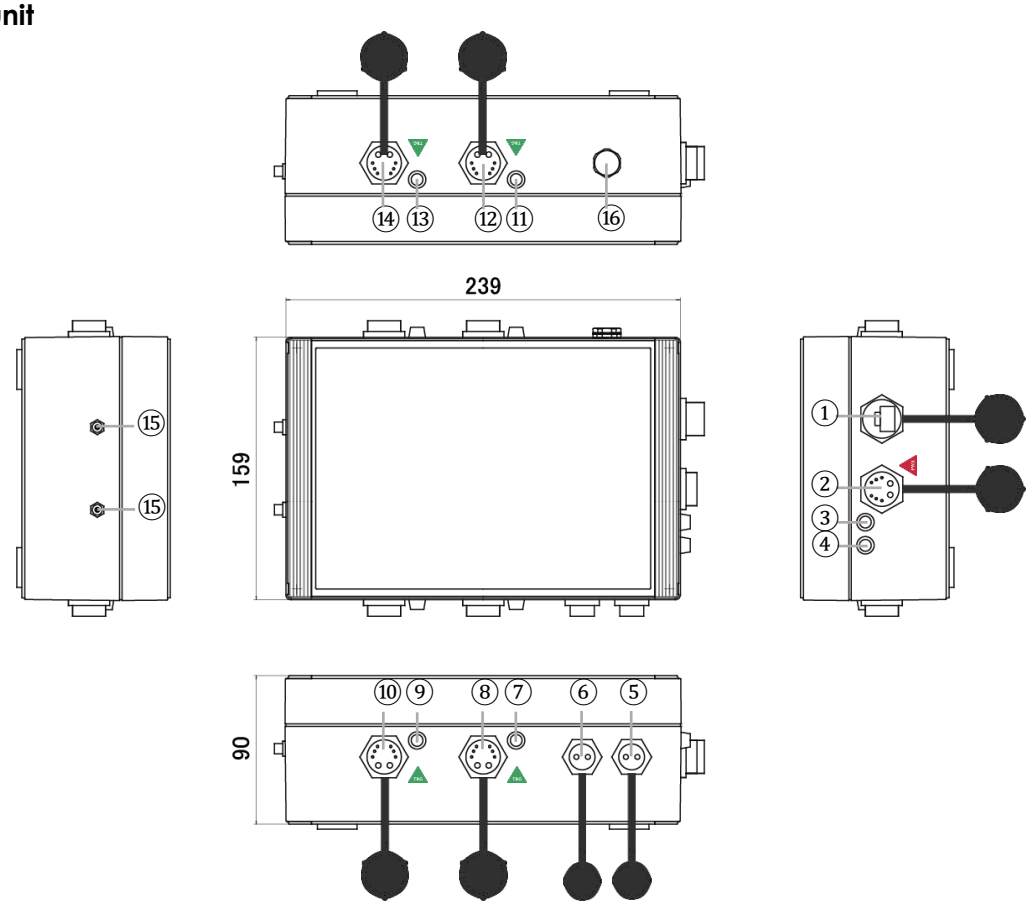
product

The configuration and number of equipment varies depending on the operation.

Control unit		Outputs magnetic field area data. Processes tag data. Controls contact signals (alarm outputs).
Trigger generator small		Outputs a trigger magnetic field to detect tags.
Trigger generator large		Outputs a trigger magnetic field to detect tags.
Monopole antenna		An antenna that receives tag signals. ※ 3m / 5m RF cable included
Input/Output Cable (8Pin Female)) **※ relay box included**	—	1. Connect control unit and vehicle (power supply) 2. Connect the control unit and alarm (power supply and contact signal transmission) ●Cable length: 5m
Trigger generator relay cable (8Pin [female] ⇔ 4Pin [male])	—	Connect control unit and Trigger generator. Cable length: 3m/5m/10m (select)
Tag with buzzer and alarm cancellation function (Tag32)		A tag that receives a trigger magnetic field and transmits sound and radio waves. Instruction Manual (separate volume)
Tag21		A tag that receives a trigger magnetic field and transmits radio waves. Instruction Manual (separate volume)
Lights		Alarm with sound and light. Instruction manual (separate volume * Patlite)

Names and specifications of each part

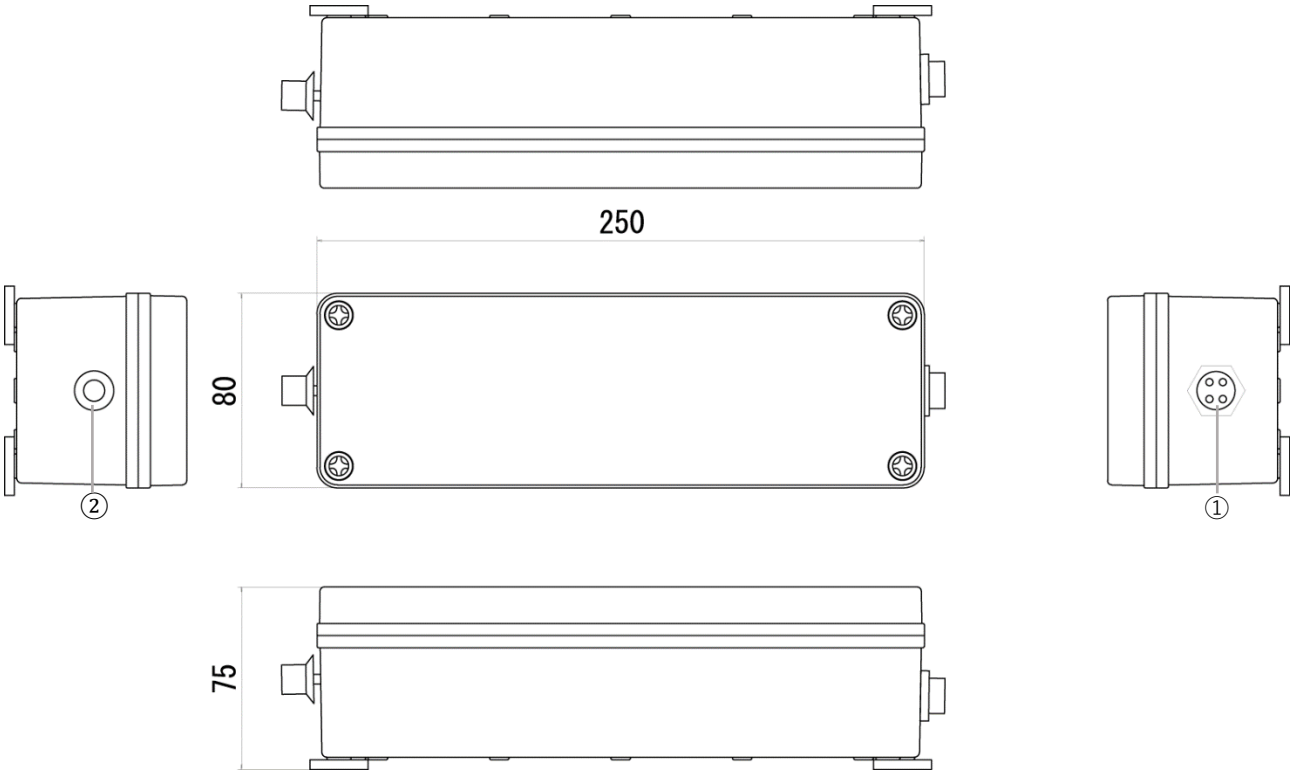
Control unit



No	name	explanation
①	ETHER connector	LAN Cable Connector (TCP/IP)
②	Power input/contact output connector	I/O cable connector
③	Receive LEDs	Receive indicator LED
④	Power LED	Energizing indicator LED
⑤	Power Output Connector 1	Power output relay cable connector For power output (up to 5V 1A)
⑥	Power Output Connector 2	Power output relay cable connector For power output (up to 5V 1A)
⑦	Trigger Level LED for Trg1	Trigger Level Indicator LED (Trg1)
⑧	Trigger output connector for Trg1	Trigger generator Relay Cable Connector (Trg1)
⑨	Trigger Level LED for Trg2	Trigger Level Indicator LED (Trg2)
⑩	Trigger output connector for Trg2	Trigger generator Relay Cable Connector (Trg2)
⑪	Trigger Level LED for Trg3	Trigger Level Indicator LED (Trg3)
⑫	Trigger output connector for Trg3	Trigger generator Relay Cable Connector (Trg3)
⑬	Trigger Level LED for Trg4	Trigger Level Indicator LED (Trg4)
⑭	Trigger output connector for Trg4	Trigger generator Relay Cable Connector (Trg4)
⑮	RF connector	Receive antenna connector
⑯	Vent Cap	Humidity control ventilation ventilation 450 ml / min (differential pressure = 7 kPa)

Model Number	・MXRT-HT-F01-1P（DC12V/24V） ・MXRT-HT-F01-2P（DC48V）
Trigger oscillation frequency	93.75KHz
Number of channels received	2 (1 frequency × 2 antennas)
Receive frequency	300MHz Band 1F
Receive sensitivity	-98dBm or less
Operating supply voltage	■When using MXRT-HT-F01-1P（DC12V/24V） DC12V、DC24V ■When using MXRT-HT-F01-2P（DC48V） DC48V
Power consumption	60W max
Power display	Receive LED red on
Receive display	Trigger level LED 1 to 4 green on
Trigger warning display	Trigger level LED 1 to 4 green lit (lights up when trigger output level is normal) Turn off when trigger level is reduced and disconnection is detected (off when not connected)
Operating temperature range	0℃～50℃ * Do not use in environments exceeding the operating temperature range. The case may be deformed and may cause flooding or malfunction.
Operating humidity range	10% RH to 90% RH (non-condensing)
Contact output	Open Collector 4 Output
Communication	Ethernet（100BASE-TX/10BASE-T）
Material	ABS
Dimensions (W×H×D)	239×90×159 (mm) *Excluding protrusions
Weight	About 1. 55kg
Protection level	IP66 is comparable

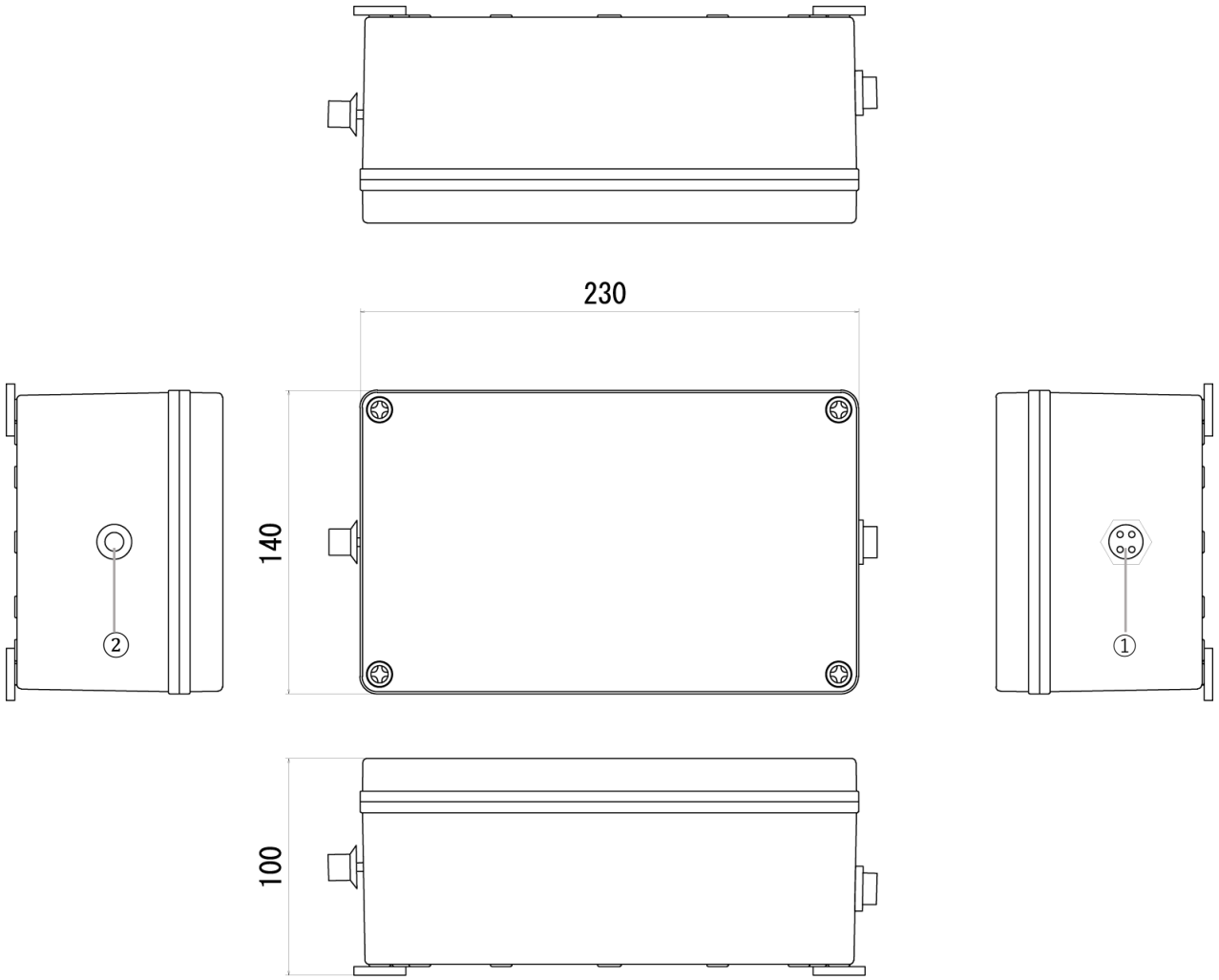
Trigger generator (Small)



No	name	explanation
①	Trigger input connector	Trigger generator relay cable connector [Trigger generator relay cable] 8pin connector (control unit connection side) maximum diameter φ22.5 mm 4pin connector (Trigger generator connection side) maximum diameter φ 18. 0mm
②	Trigger level switching switch	Trigger level switching switch (～MIN),MIN,(MIN～MID),MID,(MID～MAX),MAX

Model Number	MXTC-HT-F01
Operating temperature range	0℃～50℃ * Do not use in environments exceeding the operating temperature range. The case may be deformed and may cause flooding or malfunction.
Operating humidity range	10% RH to 90% RH (non-condensing)
Material	ABS
Dimensions (W×H×D)	250×75×80 (mm) *Excluding protrusions
Weight	Approximately 1 kg
Protection level	IP66 is comparable

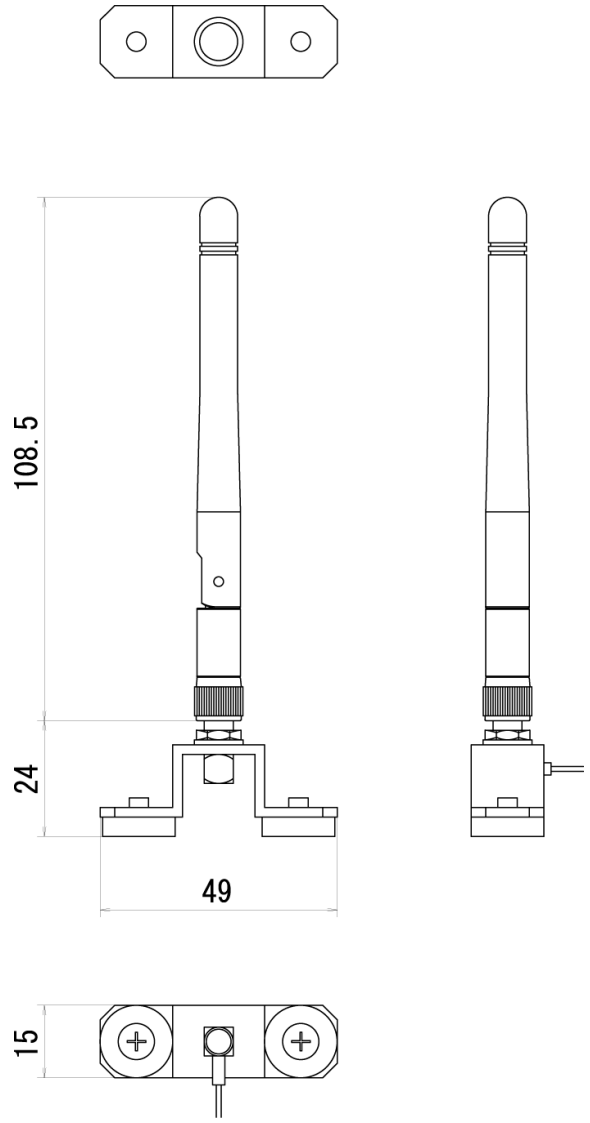
Trigger generator (large)



No	name	explanation
①	Trigger input connector	Trigger generator relay cable connector [Trigger generator relay cable] 8pin connector (control unit connection side) maximum diameter φ22.5 mm 4pin connector (Trigger generator connection side) maximum diameter φ 18. 0mm
②	Trigger level switching switch	Trigger level switching switch (～MIN),MIN,(MIN～MID),MID,(MID～MAX),MAX

Model Number	MXTC-HT-F02
Operating temperature range	0℃～50℃ * Do not use in environments exceeding the operating temperature range. The case may be deformed and may cause flooding or malfunction.
Operating humidity range	10% RH to 90% RH (non-condensing)
Material	ABS
Dimensions (W×H×D)	230×100×140 (mm) *Excluding protrusions
Weight	Approximately 1.3 kg
Protection level	IP66 is comparable

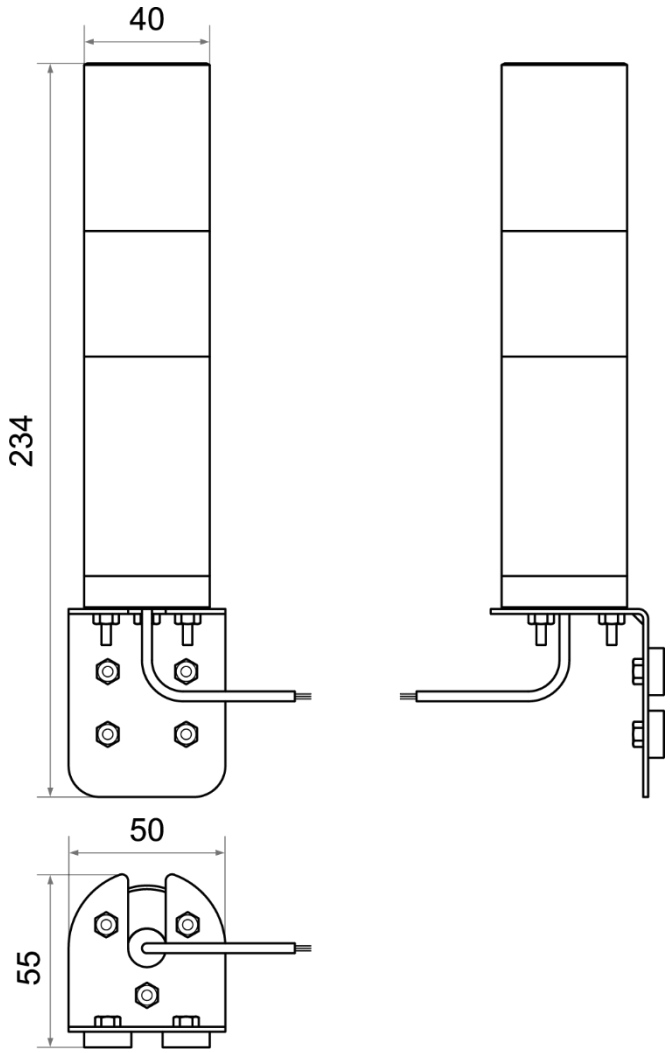
Monopole antenna



[Monopole antenna attached cable]
SMA connector (control unit connection side) maximum diameter φ9.5 mm

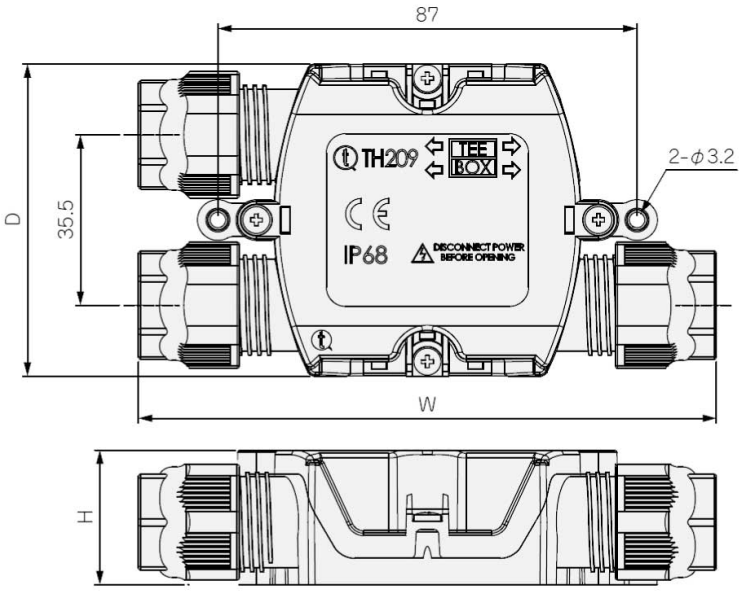
Model Number	MXRA-MP-201
Receive bandwidth	310MHz ± 10
Gains	2.15 dBi (Standard)
impedance	50H
Plug shape	SMA type brass nickel plated
Dimensions (W×H×D)	49×132.5×15 (mm)*Excluding cables
Weight	Approx. 50g (including mounting brackets)
Protection level	IP66 is comparable

Signal lights



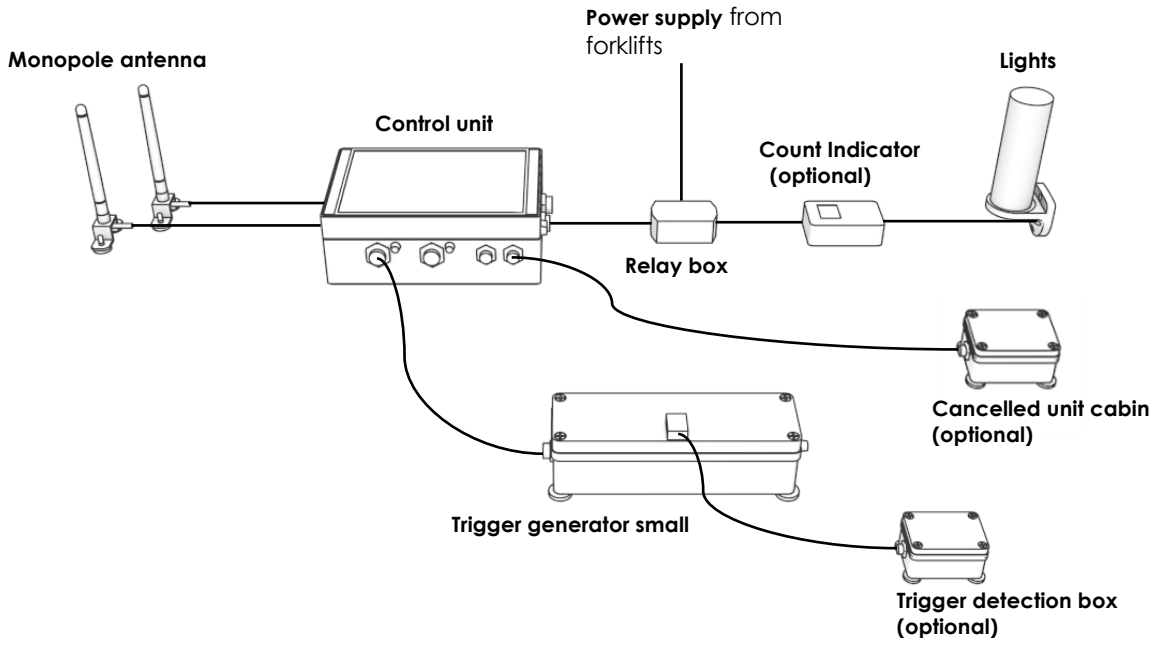
Model Number	MXAL-HT-004
LED color	Standard: Red
Buzzer sound pressure	Type.85dB
Buzzer tone	4 patterns *Switching by DIP switch

Relay box

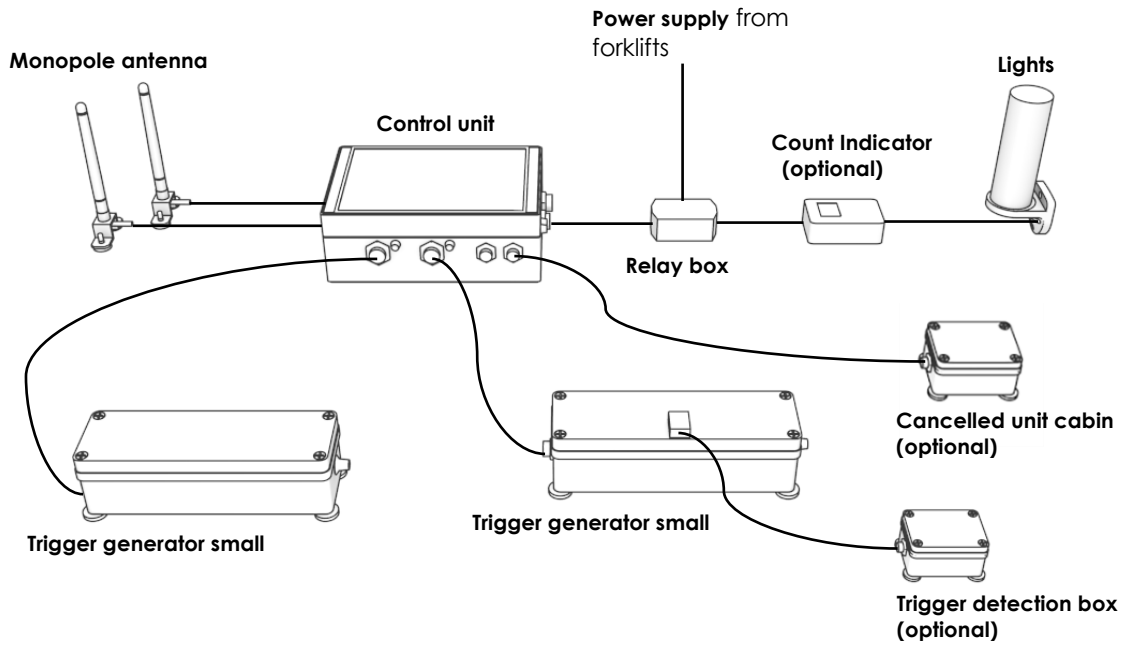

87
D
35.5
2-ϕ3.2
TH209
TEE
BOX
IP68
DISCONNECT POWER
BEFORE OPENING
W
H

Equipment configuration

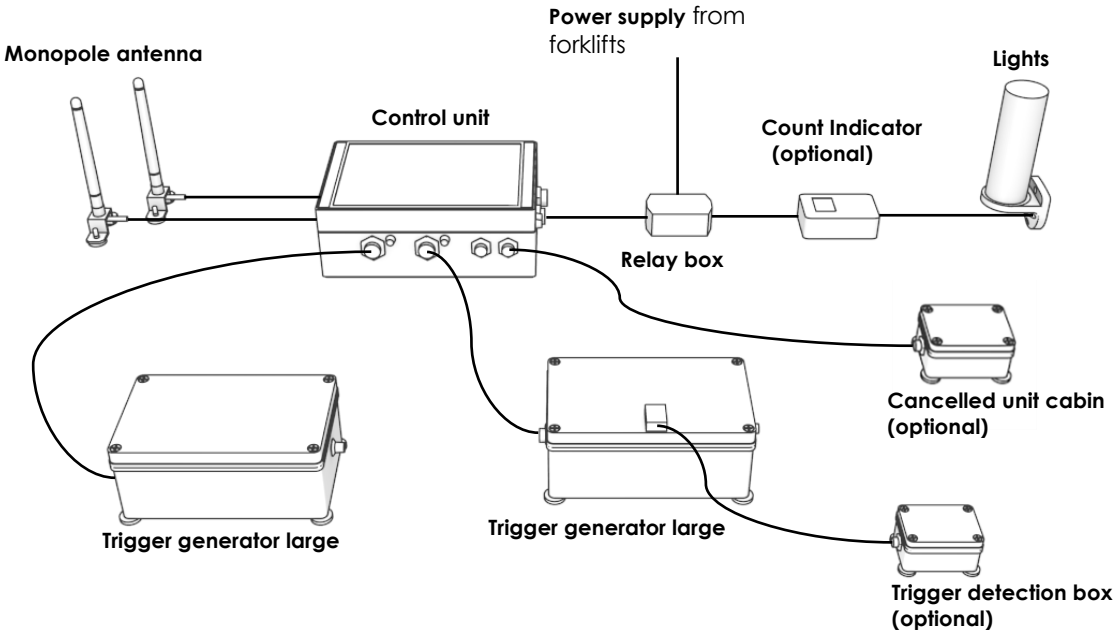
Trigger generator small × 1



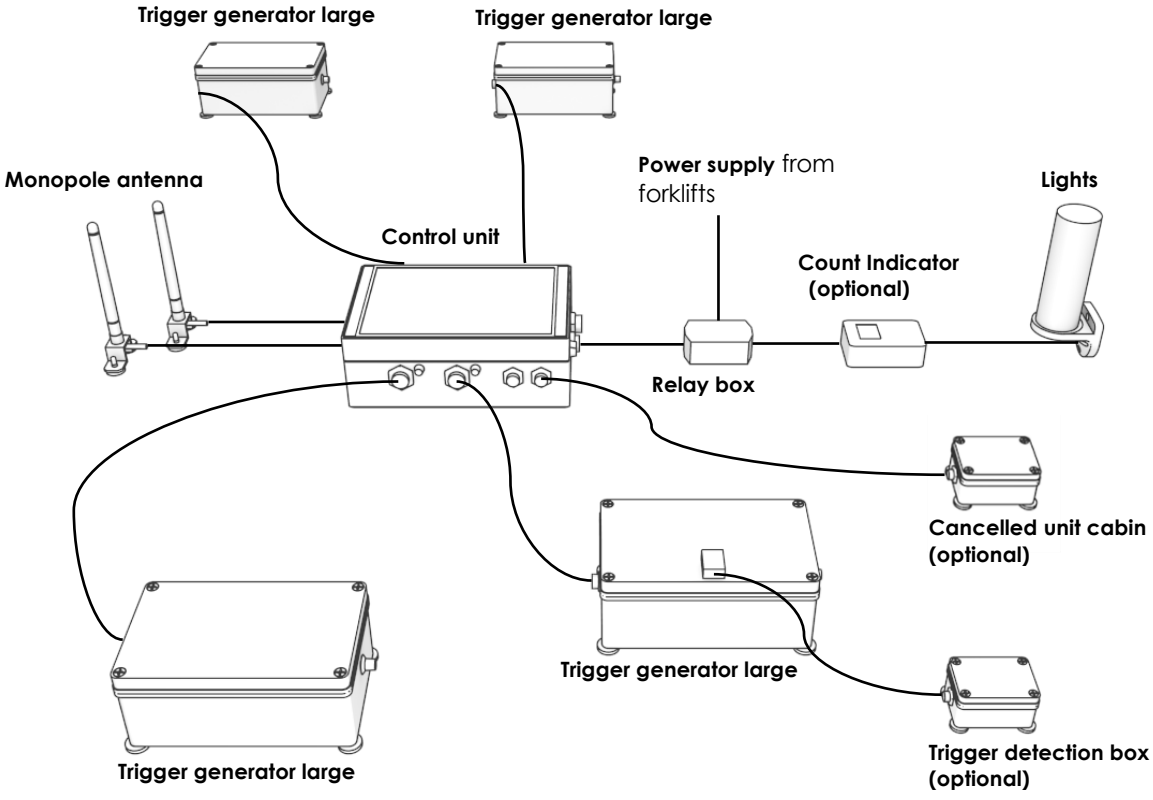
Trigger generator Small × 2



Trigger generator Large × 2



Trigger generator Large × 4



power supply

Power is supplied from the vehicle's battery. Please contact the vehicle service representative for wiring.

Notes

1. **Check battery output voltage**
   The power consumption of this product is up to 60W. Select a protective fuse with an appropriate current rating from the battery output voltage. **【01】**

2. **Power is supplied on key switch on**

3. **Distinguishes** the polarity of wiring (+ and -)
For power lines, please prepare + side and - side respectively.
For wire rods, use 0.75sq (equivalent to AWG18) or 0.5sq (equivalent to AWG20).

Be sure to pull the power wiring out of the fuse alone.
If it is not removed from the fuse, it may cause a malfunction.

【01】
When the battery output voltage is DC24V
(4A) Requires a protective fuse with a capacity of about

When the battery output voltage is DC12V
(8A) Requires a protective fuse with a capacity of about

When the battery output voltage is DC48V
(2A) Requires a protective fuse with a capacity of about

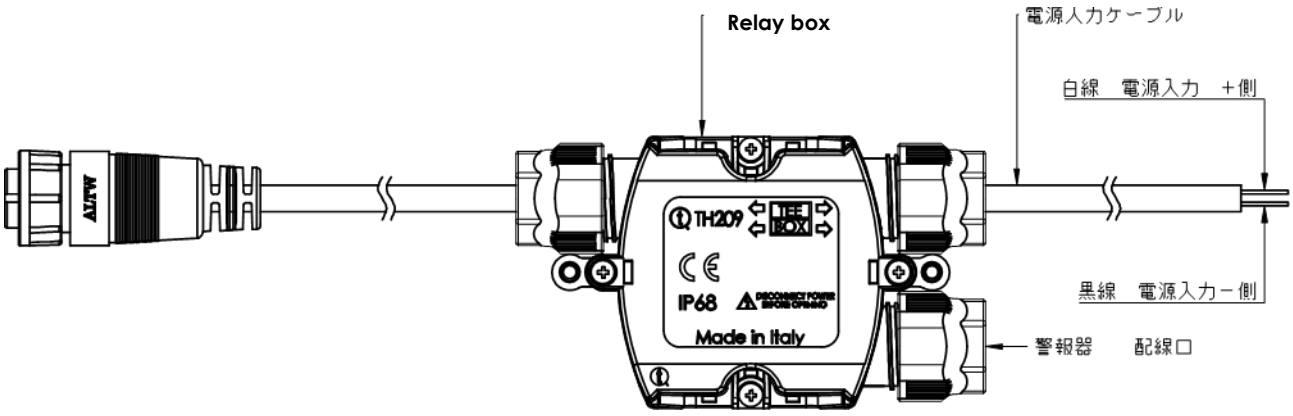
* Power (W) ÷ voltage (V) = current (A)

Connect power to I/O cable

※ Please perform this work in the state of key switch off.

Connect the power line from the vehicle to the power input cable.
White and black lines **[02]** are cut off, **be sure to perform protection treatment (waterproof treatment) after connection.**

【02】
White line: Power input ＋ side
Black line: Power input － side



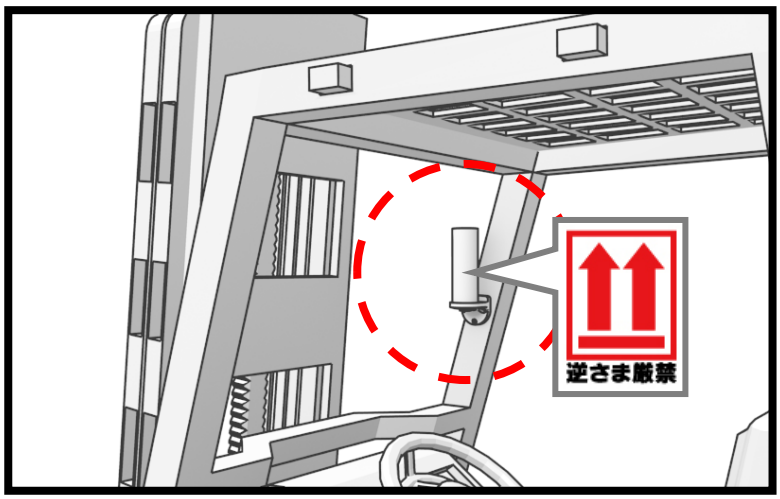
If you connect the power wiring by mistake, it may cause failure, fire, etc.

Set up

Be sure to perform installation and wiring work in a key switch off state.

Install alarms

Connects a signal light as an alarm. Install the alarm anywhere within the operator's view.



Notes

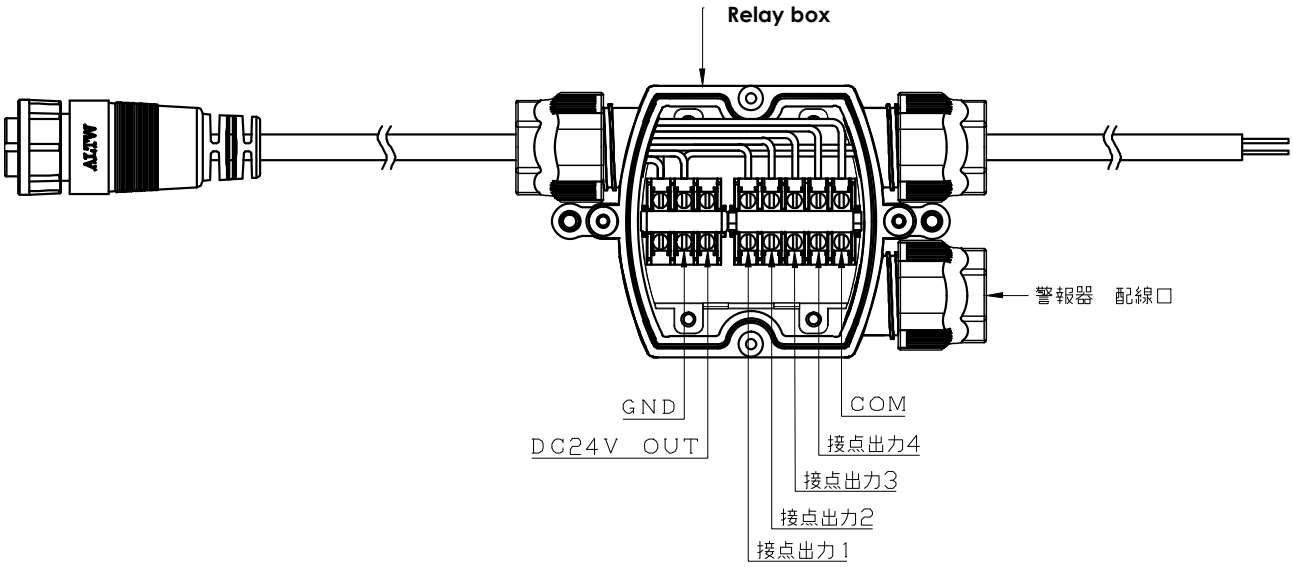
The mounting location should be as follows. ・There is little vibration, it must be strong enough, and it must be on a flat surface. Install the product in a stand-up state. If it is unavoidably installed in uneven place and waterproof performance is required, apply sealing treatment to the gap between the product and the mounting surface. If IP65 is required, seal the bolts or nuts and wiring holes when securing each bracket to the mounting surface.

When connecting an alarm provided by the user

How to connect

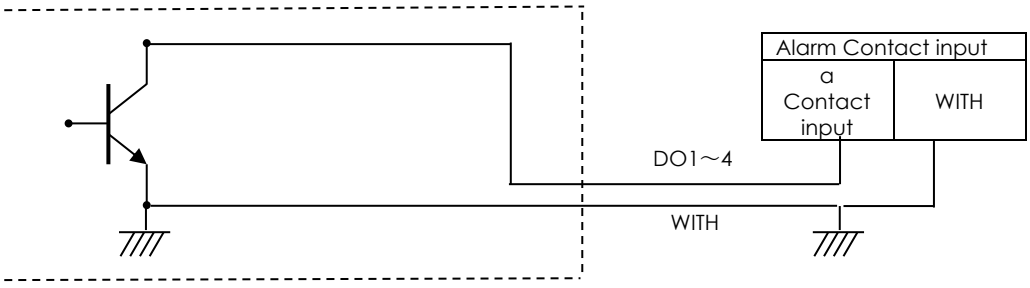
The power output for the alarm is DC24V. Connect only alarms that support power input DC24V.

Check the key switch off status and open the lid of the relay box on the I/O cable. Insert the wiring of the alarm from the alarm wiring port and connect the corresponding input and output lines to the terminal block below.



Contact output specifications

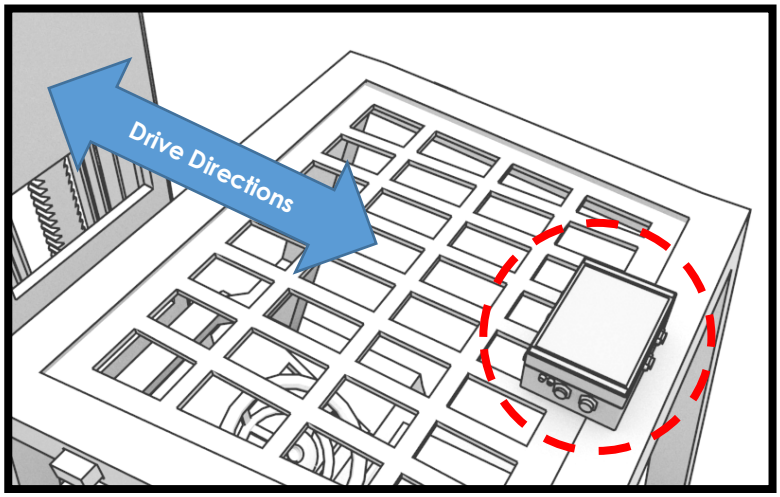
The contact output is an open collector output. Be sure to observe the following ratings and use.



Number of outputs	4 outputs (DO1, DO2, DO3, DO4).
Output mode	Open collector output
Output withstand voltage	DC 50V
Output current	100mA
Output leakage current	100uA maximum

Install control unit

The mounting location does not affect the detection distance or reception sensitivity. It is installed in a place that does not interfere with daily work such as on the ceiling or under the seat.



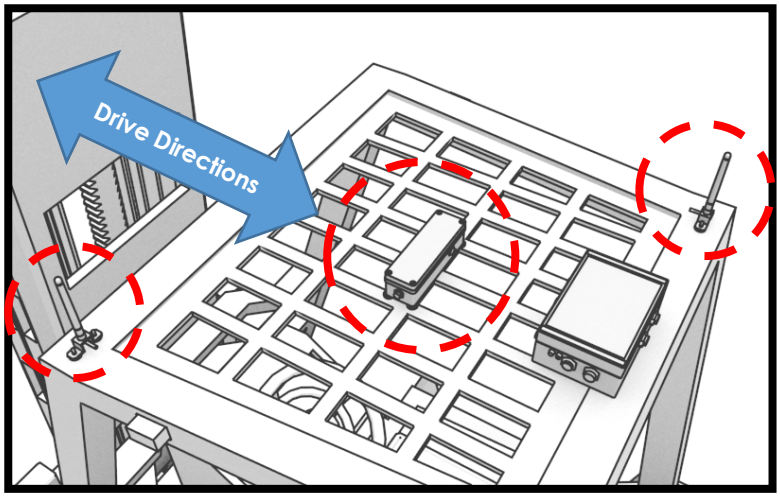
Trigger generator and monopol antenna installed

For one Trigger generator

equipment	Number
Trigger generator (Small/Large)	1
Monopole antenna	2

Place the Trigger generator with a neodymium magnet in the center on the ceiling guard. Install two dipole antennas with neodymium magnets front and rear of the Trigger generator. **【01】**

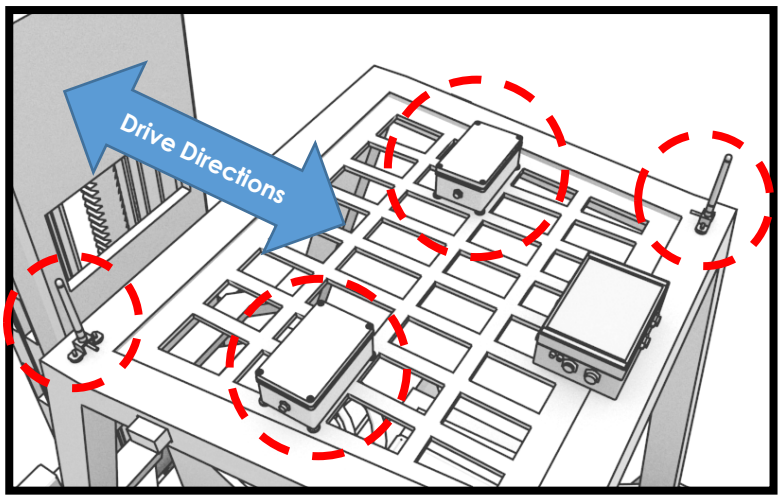
【01】
Monopoly antennas may be blocked from reception due to noise from signal lights and LED lighting, so keep them as far away as possible from these devices.



For two Trigger generators

equipment	Number
Trigger generator (Small/Large)	2
Monopole antenna	2

Place the Trigger generator with a neodymium magnet in the center on the ceiling guard. Install two monopole antennas with neodymium magnets front and rear of the Trigger generator. **【02】**

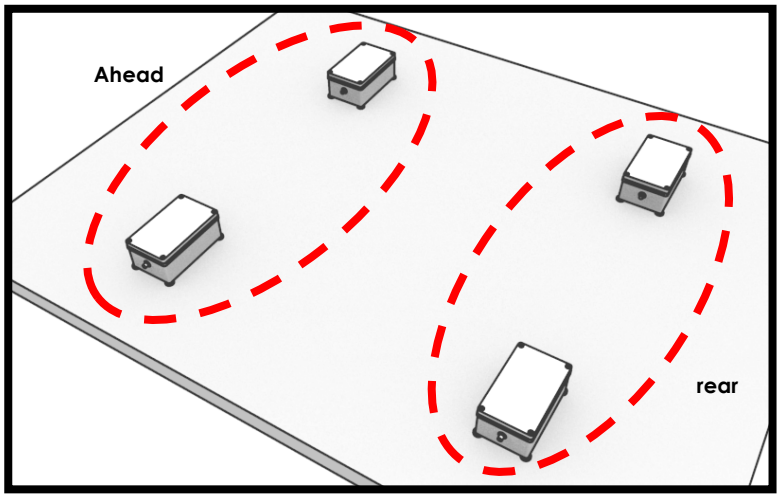


【02】
The Trigger generators are installed 80 cm apart.

Monopole antennas may be blocked from reception due to noise from signal lights and LED lighting, so keep them as far away as possible from these devices.

For 4 Trigger generators

If you are installing four Trigger generators, install the two in one pair and forward and backward.



*** There is a direction to install in the Trigger generator. For more information, please refer to the next page.**

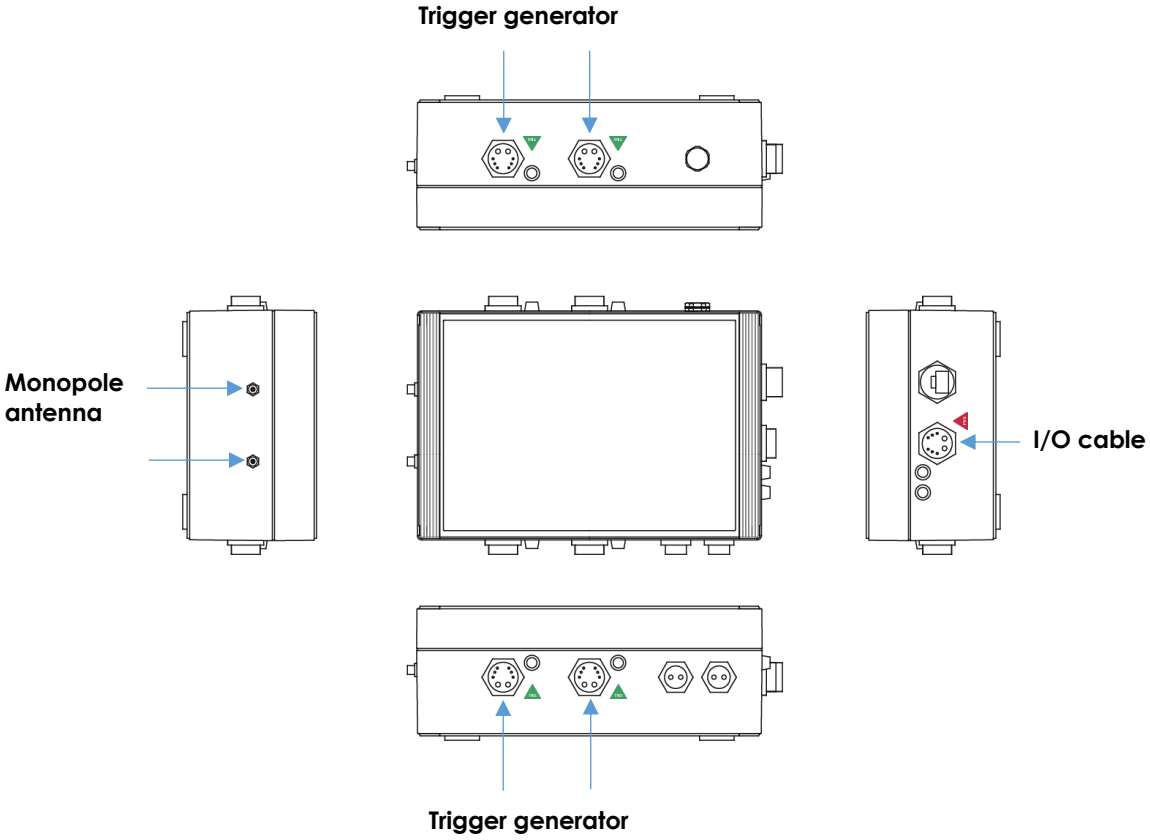
Connect each unit

Check the key switch off status and connect each unit to the control unit with its own cable. 【01】

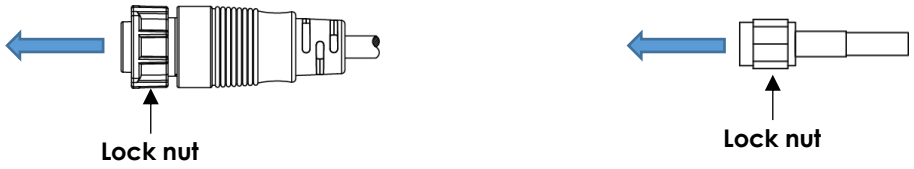
equipment	cable
Trigger generator	Trigger generator relay cable
Monopole antenna	RF cable
Control unit	I/O cable

【01】
Please secure each cable to the vehicle with a binding band or the like.

If reinforcement is required, please consult a service company separately.



There are four connectors that connect the Trigger generator. It is usually ok to insert it anywhere. Align and insert the cables before firmly tightening the lock nuts. There is no orientation for antenna cables (RF cables).



*** Be sure to attach a protective cap for connectors that do not connect.**

*** When removing the device, be sure to turn off the power before doing so. Reseating each cable with the power on may cause electric shock or failure.**

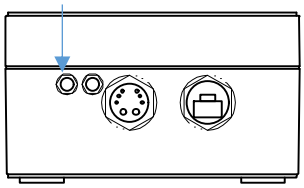
*** When connecting (or removing) a dedicated cable to each unit, please do it by hand without using tools.**
Please ensure that the lock nuts on the control unit and Trigger generator are securely tightened. Using them in a loosened state may lead to malfunction.

Check operation

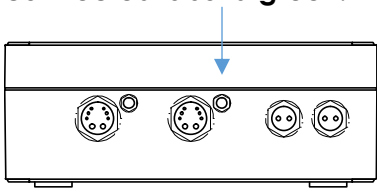
Check to see if it works with the actual tag.

Verification steps

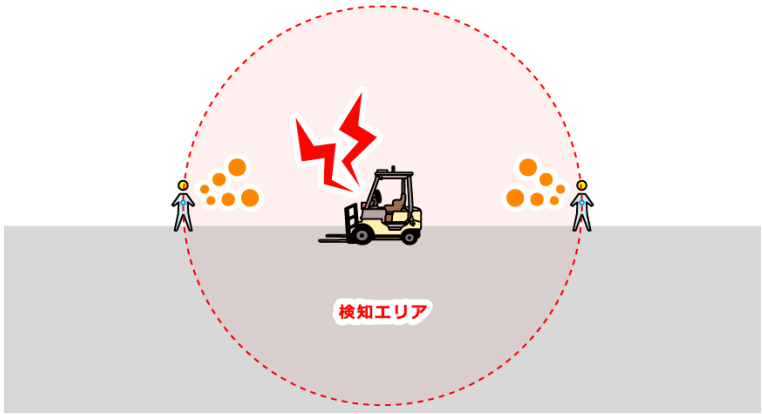
1. **Make sure there are no tags around the vehicle.**
2. **Switch on the key switch of the vehicle.**
3. **Make sure the power LED is solid green.**



4. **Confirm that the trigger level LED next to the connector to which the Trigger generator is connected is solid green.**



5. **The person with the tag actually approaches the vehicle and confirms that the alarm works.**



If it does not work properly

If this unit does not operate properly or becomes abnormally in operation, please check the following items.

symptoms	cause	treatment
Power LED does not light up even when key switch on	The power wiring is not securely connected. Or it's broken.	Ensure that the power wiring is connected. If it is broken, replace the wiring.
	The polarity of the power wiring is incorrect.	Correctly connect the polarity of the power wiring.
	The DC input voltage is too high or the protective fuse is fusing.	Check whether the DC input voltage and this unit specification are compatible. Check the current capacity of the fuse.
Trigger level LED does not light up	The Trigger generator relay cable is not securely connected.	Ensure that the Trigger generator relay cable is connected.
Check the above two items, Even though there is no problem The alarm does not work or The receive LED does not light up.	The tag is being blocked from being sent or received.	When you have a tag, please keep away from mobile terminals such as mobile phones.
The alarm is unstable.	There is a strong magnetic field and electric field source in or near the vehicle.	Keep the receiving antenna away from the equipment that seems to be the source of the magnetic field and electric field.

* If the above symptoms do not apply, or if the symptoms do not subside even if the above causes are cleared, please contact the sales agent or our sales office.

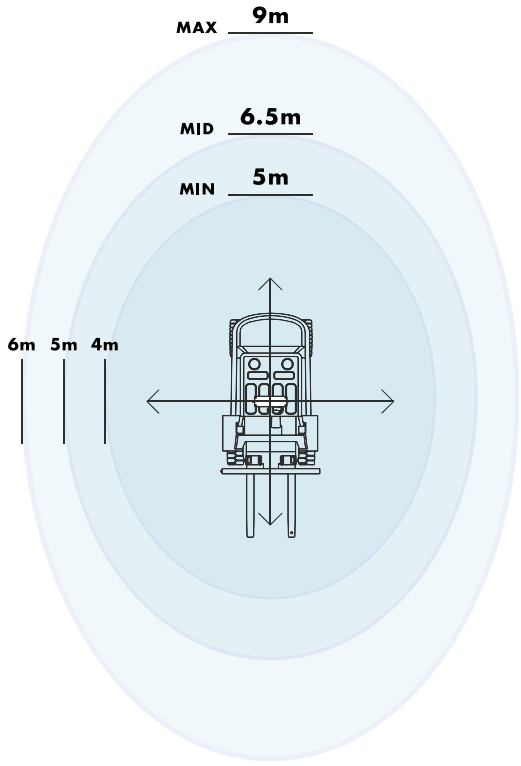
Tag detection distance

The detection distance is adjusted by the trigger level switching switch in the Trigger generator. Please note
that turning the switch too hard may damage it.

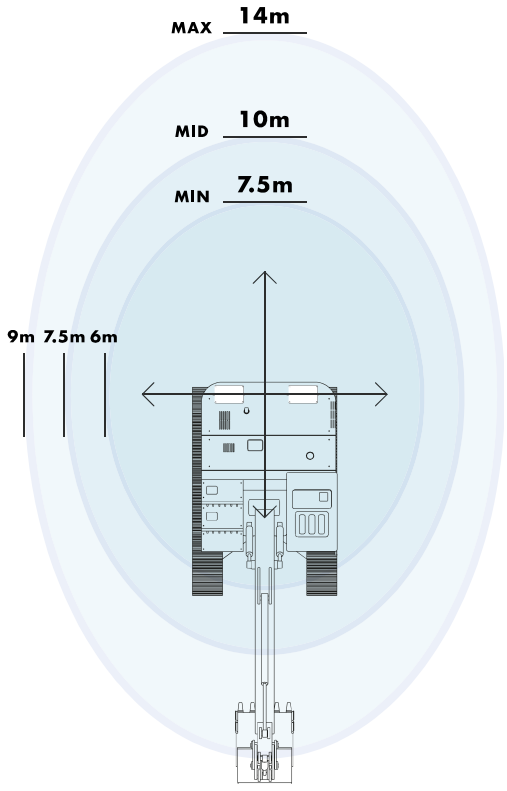
Sensing distance (distance from Trigger generator)

Trigger level switching switch	direction	Trigger generator small × 1	Trigger generator Large × 2
～MIN	Front and rear	4m	6.5m
	around	3.6m	5m
MIN	Front and rear	5m	7.5m
	around	4m	6m
MIN~MID	Front and rear	5.5m	9m
	around	4.3m	6.5m
MID	Front and rear	6.5m	10m
	around	5m	7.5m
MID～MAX	Front and rear	8m	12.5m
	around	5.7m	8m
MAX	Front and rear	9m	14m
	around	6m	9m

※ The numerical value in the table above is a reference guide. The tag detection distance varies depending on the vehicle type and environment (indoor/outdoor, power supply voltage, equipment installation location). In addition, when using Type-M IC tags, it will be about 30% shorter.



Trigger generator small × 1 (centrally installed)



Trigger generator large × 2 (installed at the end)

The bucket side shown above is greatly affected by the car body, so the detection distance may change.

Trigger generator small × 1 (when installed in the center of the car body)

Trigger level switching switch	direction	Sensing distance
～MIN	Front and rear	4m
	around	3.6m
MIN	Front and rear	5m
	around	4m
MIN~MID	Front and rear	5.5m
	around	4.3m
MID	Front and rear	6.5m
	around	5m
MID～MAX	Front and rear	8m
	around	5.7m
MAX	Front and rear	9m
	around	6m

※ The numerical value in the table above is a reference guide. The tag detection distance varies depending on the vehicle type and environment (indoor/outdoor, power supply voltage, equipment installation location). In addition, when using Type-M IC tags, it will be about 30% shorter.

Trigger generator large × 1 (when installed in the center of the car body)

Trigger level switching switch	direction	Sensing distance
～MIN	Front and rear	4.5m
	around	4m
MIN	Front and rear	5.5m
	around	4.5m
MIN~MID	Front and rear	7m
	around	5m
MID	Front and rear	7.5m
	around	6m
MID～MAX	Front and rear	9m
	around	6.5m
MAX	Front and rear	10m
	around	7.5m

※ The numerical value in the table above is a reference guide. The tag detection distance varies depending on the vehicle type and environment (indoor/outdoor, power supply voltage, equipment installation location). In addition, when using Type-M IC tags, it will be about 30% shorter.

Trigger generator small × 2 (when installed in the center of the car body)

Trigger level switching switch	direction	Sensing distance
～MIN	Front and rear	5m
	around	4.5m
MIN	Front and rear	6.5m
	around	5m
MIN~MID	Front and rear	7m
	around	5.5m
MID	Front and rear	8.5m
	around	6.5m
MID～MAX	Front and rear	10.5m
	around	7.5m
MAX	Front and rear	12m
	around	8m

※ The numerical value in the table above is a reference guide. The tag detection distance varies depending on the vehicle type and environment (indoor/outdoor, power supply voltage, equipment installation location). In addition, when using Type-M IC tags, it will be about 30% shorter.

Trigger generator large × 2 (when installed at the end of the car body)

Trigger level switching switch	direction	Sensing distance
～MIN	Front and rear	6.5m
	around	5m
MIN	Front and rear	7.5m
	around	6m
MIN~MID	Front and rear	9m
	around	6.5m
MID	Front and rear	10m
	around	7.5m
MID～MAX	Front and rear	12.5m
	around	8m
MAX	Front and rear	14m
	around	9m

※ The numerical value in the table above is a reference guide. The tag detection distance varies depending on the vehicle type and environment (indoor/outdoor, power supply voltage, equipment installation location). In addition, when using Type-M IC tags, it will be about 30% shorter.

Various settings

Various settings are made in a web browser by connecting the control unit and PC to the LAN.

Preparation in advance

Set your PC's IP address

Make the IP address set in the control unit the same segment of the IP address of the PC.

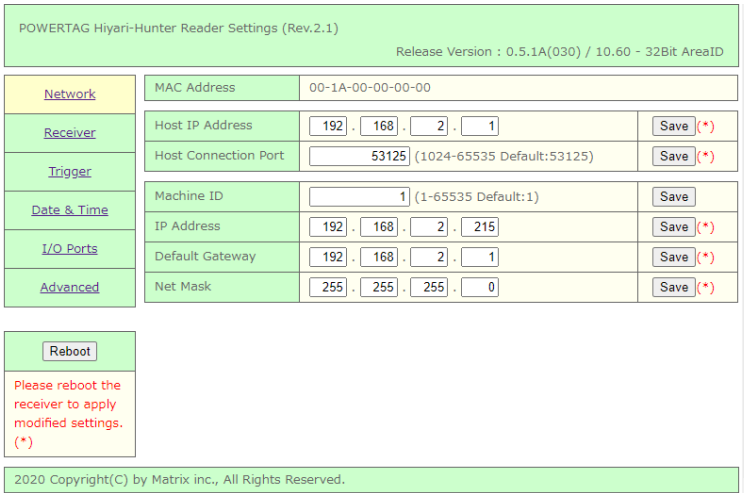
Initial IP address setting of the control unit	192.168.2.215
PC's IP address	192.168.2. (1～255) * Values that do not overlap in the same network

Connect to your PC

1. **Turn on the control unit and connect it with a PC with LAN.**

2. **Enter the IP address of the control unit in the address bar of your web browser and press Enter. Example: http://192.168.2.215**

3. **If there is no problem with the connection, the setting screen of the control unit is displayed.**



Settings

Network Settings (Network)

Item	explanation	Lower limit	Upper limit	Initial value
MAC Address	MAC address of this product	—	—	—
Host IP Address	IP address of the connected PC	—	—	192.168.2.1
Host Connection Port	Listening Port No. (Client mode only)	1024	65535	53125
Machine ID	Identification number in the network of this product	1	65535	1
IP Address	IP address	—	—	192.168.2.215
Default Gateway	Default gateway	—	—	192.168.2.1
Net Mask	Net Mask	—	—	255.255.255.0

Receive Settings (Receiver)

Item	explanation	Lower limit	Upper limit	Initial value
Buzzer Time	Set buzzer ringing time and operation mode when receiving tag data (in 10 milliseconds) ● Normal: [S] The buzzer rings only when data is received. ● [X Enable]: When [S] and [X] data are received, the buzzer rings ● Continuous: The buzzer rings every time data is received.	0	200	20 [Normal]
Holding Time	[E] Waiting time before issuance (in 10 milliseconds) ※ Usually set to 50 or more	1	300	200
Battery Info Counts	Number of tag receptions before confirming battery information	1	10	1
Log Data	● Displays the location information of the reception log and initializes the buffer of the reception log saved by the [Erase] button. ● When initialized, the log starts back to the beginning. * It takes up to 6 seconds to delete log data. Incoming tag data while deleting log is discarded.			
Received Tag Data	● Display tag reception data on the web screen ● From the left, the display contents are Tag ID, AREA ID, reception flag (S, E, X), battery information, reception date and time. ● Automatic update frequency is 3 seconds ● It becomes effective by turning ON the check of [Enable] at the bottom *Only the latest 32 items are displayed. When there are many tags received at the same time, the display may be lost. *If you want to match the reception date and time with the actual time, please set the date and time (see P31).			[Off]

Trigger Settings

Item	explanation	Lower limit	Upper limit	Initial value
Mode	Switching detection output mode 1. Omnidirectional detection 2. Directional detection (front and rear detection) 3. Directional detection (front, rear, left and right detection) 4. Rear mask action 5. Stage detection operation * 2 to 5 will not be used unless special instructions are given.	1	4	1
Area ID ※1,2	Trg1 to 4 Set output area ID	1	199	1
Cycle Mode	Trigger output mode switching ● Fixed: Fixed ● Random: Random Output	—	—	Random
Interval Time	Set the output interval when the trigger output mode is fixed (10 milliseconds) If the detection output mode is 3, it is fixed to 100.	50	60000	50
Status	Show trigger connection status When connected: OK Not connected: NG	—	—	—

*1 Area ID can be selected from the drop-down list.
*2 Please match the setting range of the area ID filter that can be set separately. If you receive tag data for out-of-range area IDs, neither the DATA LED nor the buzzer will work. Please note that there is no reception failure.

Date time setting (Date ＆ Time)

Item	explanation	Lower limit	Upper limit	Initial value
Get Date & Time	Show the current clock of this product	—	—	—
Set Date & Time	Set the clock for this product [Easy]: Set the current clock of P C to this product	—	—	—
SNTP Mode	SNTP time synchronization mode (When setting other than disabled,the time is also synchronized at startup) ● Disabled: Do not synchronize SNTP time ● Specified Time: Synchronized to an hourly specified time (0:00 a.m. to 11:00 p.m., once a day) ● [Every Time] : Synchronized every specified hour in 1-hour increments (every 1-23 hours)	—	—	Disabled
SNTP Server IP Address	IP address setting of SNTP servers ● Domain input not supported ● SNTP server designation in LAN recommended	—	—	192.168.2.1
SNTP Port (UDP)	Set UDP port number to be used for SNTP	1	65535	123
SNTP Timing（※）	Set the time or interval between when sntp time synchronization starts ● In the specified time synchronization mode, it becomes a time value ● In the specified time synchronization mode, it becomes a time value	0	23	2
SNTP Time Offset (UTC)	Set time offset time from SNTP time (UTC time)	—	—	+9:00:00 (JST)
Latest Sync Time	Show the last sntp time synchronization completed	—	—	—
Latest Execution Time	The last sntp time synchronization is performed and the flag value is displayed. Flag value ● [00]: Not executed ● [01]: Normal is finished ● [16]: Indicates that the time synchronization was not possible due to tag reception ● [17]: Indicates that the time synchronization was not possible due to a network failure. ● [18]: Indicates that the time synchronization was not possible due to the reception of abnormal time values	—	—	—

* The SNTP time synchronization function is just a simple version. Accurate time synchronization on orders of tens of milliseconds or less is not possible.

Input port configuration (I/O Ports)

Item	explanation	Lower limit	Upper limit	Initial value
DO Drive Mode	Common settings for DO1, 2, 3, 4 ● By Command: Manipulating DO with Communication Commands from a PC ● [S] : DO turns on when receiving tag [S] (automatically OFF after DO time has elapsed)*1 ● [S = > E]: DO is ON when tag [S] is received (DO is turned off when tag [E] is confirmed) DO time setting ignored ● For Display: Set when connecting the count indicator DO1 to 3: Number of people count , DO4: vehicle detection DO Display Thr: set the maximum number of displays (usually 7)	—	—	[S = > E]
The following can be set only when DO Drive Mode is selected [S]				
DO Drive Area ID	Set the area ID to be output to the contact If it is 0, all area IDs (1 to 199) are eligible ※2	0	199	0
DO Drive Time	If the time until the contact output (DO) is turned on and the time until it turns off automatically (in seconds) [0], the output will be disabled.	0	3600	0

*1 When DO Drive Mode is in [S = > E] mode, DO will not turn off.
*2 Area ID filter takes precedence.

Advanced Settings

Network (Network Settings)				
Item	**explanation**	**Lower limit**	**Upper limit**	**Initial value**
TCP Connection Mode	TCP communication (connection for log acquisition) sets whether this product is Client or Server ● [Client]: Connect to a PC from this product *1 ● [Server]: Connect to the product from PC	—	—	[Client]
On Connect Command	When connecting, set whether to notify the device ID (connection notification) to the PC *2	—	—	[On]
Rcv Command TMOUT	Set the time to automatically disconnect due to no command reception during TCP communication (in seconds) Disconnecting if communication commands (Get log commands, etc.) cannot be received within the set time	0	3600	20

*1 When using "MHCommTCP.dll" or "TagExplorer.NET", be sure to set it to [Client].
*2 When using "MHCommTCP.dll" or "TagExplorer.NET", be sure to set it to [On].

Receive Settings (Receiver)				
Item	**explanation**	**Lower limit**	**Upper limit**	**Initial value**
Area ID Filter ※1、2	Set the received data within the area ID range Logical disjunction [OR operation] when multiple settings are set	1	199	・ **On/Off**：On ・ **From**：1 ・ **To**：199
Alarm Inhibition Setting	Setting the area ID for cancellation For tags sent in the set area ID Do not perform contact operation (alarm output).	—	—	・ **On/Off**：On ・ **Area ID**：200 ・ **Holding Time**：300

*1 Area ID can be selected from the drop-down list.

*2 Please match the setting range of the output area ID that can be set separately. If you receive tag data for out-of-range area IDs, neither the DATA LED nor the buzzer will work. Please note that there is no reception failure.

Trigger Settings				
Item	**explanation**	**Lower limit**	**Upper limit**	**Initial value**
Warning Level	not supported	—	—	—

Etc (Other settings)				
Item	**explanation**	**Lower limit**	**Upper limit**	**Initial value**
Load Default Setting	Return all settings to their initial values (reboot required)	—	—	—