

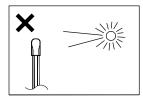
# Multi Photoelectric Beam Detector

## **MPB-30D2**

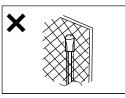
Thank you for purchasing SASO Multi Photoelectric Beam Detector. SASO MPB Series will provide reliable service for a long term when properly installed. Please read the following instructions very carefully for accurate and effective use.

Note: SASO MPB Series is designed to detect an intruder and to sound an alarm when detected; it is not to prevent burglary. We are not responsible for damage or losses from accident, theft, natural calamity, misuse, abnormal use, improper installation and bad maintenance.

## 1. Precautions on Installation



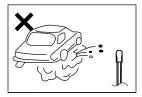
Do not install the unit where exposed to direct sunlight.



Do not install in a place where it cannot be fixed stably.

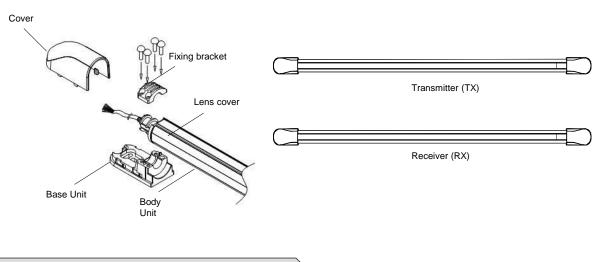


Do not install in places where obstructions are laid within detection range.



Do not install in places where dirt can be put on the unit.





### 3. Installation

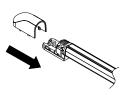
- ① Fix the base unit with screw bolts ② Connect wires to the terminal. on the wall.
- (Refer to 7. WIRING)



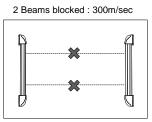
- Transmitter - Receiver
- ③ After angle adjustment, fix the masking seat to the body unit by tightening screw bolts. (Refer to 6. Angle Adjustment)



#### ④ Put on the cover.



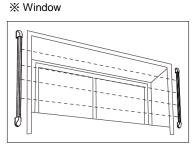
## 4. Response Time Adjustment (Auto)

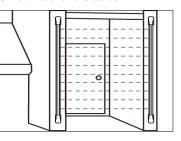


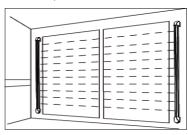
% MPB Series has automatic response time adjustment according to the number of beams.

# 5. Application

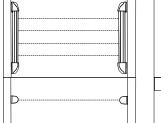
### ※ Front Door and Outside

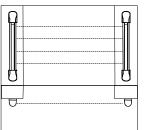


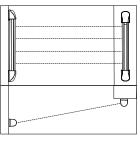


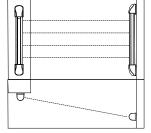


※ Examples of Installation in Different Positions



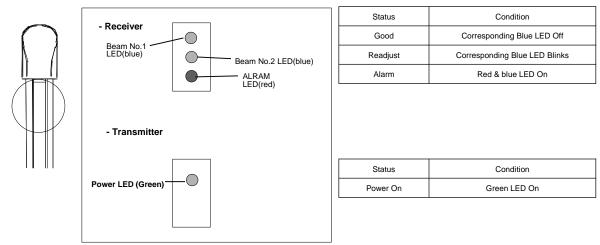






### 6. Angle Adjustment

- 1 Connect to electrical power source.
- 2 Align the lens of transmitter and receiver.
- ③ Check LED on receiver and then check lighting / blinking / blackout for each beam.



\* Green LED lighting when transmitter is turned on/ Green LED blackout when transmitter is turned off.

## 7. Wiring

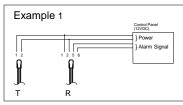
#### - Receiver

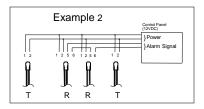
NO	Color	Polarity	NO	Color	Polarity
1	Red	+	5	Blue	СОМ
2	Black	-	6	Yellow	N.C
3	White	+	7	Brown	N.O
4	Green	-	8	Orange(Gray)	N.O

### - Available Wiring Distance (Based on 1 Set and DC12V)

Voltage Wiring size	2 beams
AWG 22(Dia 0.65mm)	260m
AWG 20(Dia 0.8mm)	400m
AWG 18(Dia 1.0mm)	630m
AWG 16(Dia 1.1mm)	900m

### - Examples of Wiring





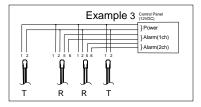
#### - Transmitter

NO	Color	Polarity
1	Red	+
2	Black	-
3	White	+
4	Green	-

#### Note:

 Maximum wiring distance when two or more sets are connected is the value above divided by the numbers of sets.

2) The signal line can be wired to distance of up to 1,000m with AWG22 telephone line..



## 8. Troubleshooting

Problem	Possible Cause	Possible Solution
Inactive Blue LED	- Electrical power is cut off.	- Supply electrical power.
	- Inferior wire or wire disconnected.	- Check wiring.
Inactive LED when beam	- Electrical power is cut off.	- Supply electrical power.
is blocked	- Inferior wire or wire disconnected.	- Check wiring.
	- Beam of transmitter is reflected on other	- Remove the object or change the direction
	objects and goes into the receiver.	of beam.
Blue LED is keep lighting	- Improper beam adjustment	- Readjust the angle.
	- There is an object between TX and RX.	- Remove the object between TX and RX.
	- Lens is covered with substance or stain.	- Remove substance or stain with soft cloth.
	- Wiring is improper.	- Check wiring.
Periodic False Alarm	- Electric pressure is improperly supplied.	-Supply stable electric pressure.
	- There is an object between TX and RX .	- Remove the object between TX and RX.
	-Installed in places near noisy machineries.	- Change location for installation.
	- Installed in places where fixation is not stable.	- Install at stable positions.
	- Lens is covered with substance or stain.	- Remove substance or stain with soft cloth.
	- Improper beam adjustments	- Readjust the angle.

## 9. Specifications

Model		MPB-30D2	
Detection Range		Indoor, Outdoor : 15m	
Number of Beams		2	
Supply Voltage		DC 10 ~ 25V (Polarity)	
Current		Max. 100mA	
LED	ТХ	Power ON: Green LED ON	
Signals	RX	Angle Good: Blue LED OFF / Readjustment : Blue LED Blink / Alarm : Red LED ON	
Response Time		100ms / 300ms	
Alarm Output		Dry contact relay output 1C, Contact action: 2+0.5 sec, Contact capacity: 30V(AC/DC) 1A or less	
Tempe	rature	-20°C ~ +60°C	
Beam Adjustment		190° (±95°) Right/Left	
Mounting Site		Outdoor, indoor wall or window frame (Town house, apartment complex, luxury villa etc.)	
Weight (g)		TX : 254g RX : 267g	
Dimensions (mm)		H440 x W34 x D35	
Materials		Aluminum, PC resin, ABS resin	

\* Caution: Above specification is subject to change without prior notice for improvement.

# 10. External Dimensions

