



CROWN INDUSTRIAL OPERATORS-Safety Devices

Door Hardware, Operators, and Complete Systems

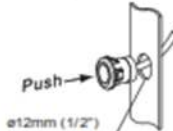
PE-10MC Mini Photo Eye Package w. OS12-C Installation Manual Supplement

INSTALLATION

1 Mounting the SensorHeads (Option)

① One push installation type

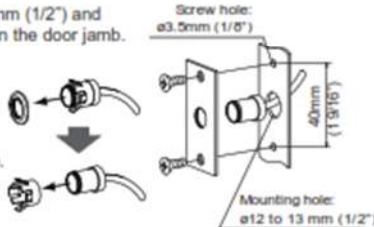
Drill a mounting hole $\varnothing 12\text{mm}$ (1/2") on the door jamb.
Put the sensor heads into the mounting hole.



② Plate installation type

Drill a mounting hole $\varnothing 12$ to 13mm (1/2") and two screw hole $\varnothing 3.5\text{mm}$ (1/8") on the door jamb.

Remove one push plate and head holder from sensor head.
Affix the main body to the plate.
Screw the plate to the door jamb.

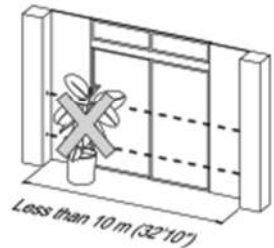


◆ On drilling the mounting holes ◆

1. Be sure to drill holes so that the SensorHeads faces each other.
2. After drilling the holes, remove the flashes around the holes. Otherwise, the apparatus may not operate properly as the SensorHead rides on the flashes causing tilts.

◆ Installation Site Environment ◆

Do not place any swaying object which cuts off the beam path. Otherwise the door may be held open.



◆ On setting of one push plate ◆

Be sure to push the SensorHeads in securely. If the SensorHeads are not secured, it may cause an unnecessary activation signal.

2 Installing the amplifier

Use the provided screws (2 pieces).
*The size of the hole is $\varnothing 3.5\text{mm}$ (1/8")

◆ Distance between the SensorHeads ◆

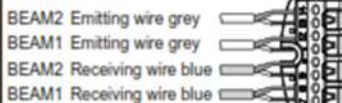
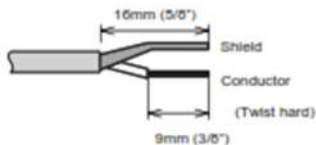
Be sure to set the distance to less than 10m (32' 10"). If the distance is more than 10m (32' 10"), the door may be held open.

INSTALLATION (CONTINUED)

3 Wiring SensorHeads

◆ Cutting the wires ◆

When cutting the wires, prepare the tip of the wires as follows:



WARNING Danger of electric shock.
Before starting the procedure, be sure to turn off the power supply.

CAUTION Risk of breaking the apparatus.
When cutting the wires, be sure to prepare the tip of the wires as shown on the left: If the covers of the shielding wires are peeled off too long, the adjacent tips can easily contact each other causing breakdown of the apparatus.

Insert the wires to Terminal Block as shown on the left.

◆ Prohibition of extending wires ◆

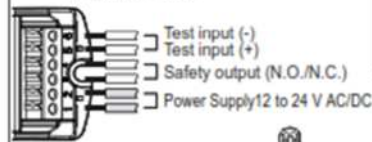
Do not extend the wires. Otherwise, the apparatus may be influenced by noises causing malfunction.

Insert the wire as you press the Wire Connection Button. Then, release the finger. Be sure to insert both the shield and the conductor.



4 Connecting power supply wires and output signal wires

Insert the wires to Terminal Block as shown below.



Press the Wire Connection Button of the power supply signal side and insert the wires. Be sure that all the wires are securely connected.



CAUTION Risk of breaking down the apparatus.
Be sure to connect the power supply wires to terminal 1 and 2. If wired wrongly, the apparatus may break down.

◆ Stated connection capacity ◆

- Solid (Rigid) $\varnothing 0.4$ - $\varnothing 1.2\text{mm}$ (AWG26-18)
- Stranded (Flexible) 0.3mm^2 - 0.75mm^2 (AWG22-20)
(Strand diameter shall be more than 0.15mm)

◆ Warning about wiring ◆

Do not connect more than 2 wires to one terminal.



CROWN INDUSTRIAL OPERATORS-Safety Devices

Door Hardware, Operators, and Complete Systems

ADJUSTMENT & CHECKING



A) Sensitivity Adjustment

1) Press Programming Button for more than one second. When the green and red LED blinking becomes green and red (no blinking), the setting is completed. The proper sensitivity is adjusted automatically. **Note:** if green/red light blinks alternately, the sensitivity is insufficient, check the following:\

- If there is no person or object in the detection area. Ensure no swaying objects are in use.
- If the lens surface is clean.
- If the wire connections are done property.
- If the emitting/receiving Sensor Heads are mounted straight and are aligned (not tilted).

B) Select N.O. / N.C. for Active High.

- 1) Press and hold the Programming Button until red LED starts to blink, it enters amplifier mode.
- 2) Press Programming Button to select appropriate setting of 4 amplifier modes (A to D). Must be pushed within 10 seconds* Typical setup is Mode B– Active High/N.O. Refer to Below Chart.

Amplifier Mode			
A	Green <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Red <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Active-Low / N.O.	
B	Green <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Red <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Active-High / N.O.	
C	Green <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Red <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Active-Low / N.C.	
D	Green <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Red <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Active-High / N.C.	

- 3) Press Programming Button until green and red LED blinking goes off to finalize setting.
- 4) Check the auto-set adjustment with the below table:

LED	State
Green/Red ON	The sensitivity has been set correctly. The adjustment is completed. (When using two beam)
Green ON	The sensitivity has been set correctly. The adjustment is completed. (When using one beam)
Green/Red Blink alternately	The sensitivity is insufficient. Check the followings.
Simultaneous twice Blinking(Red&Green)	Setting error.Contact your installer or service engineer.



CROWN INDUSTRIAL OPERATORS-Safety Devices

Door Hardware, Operators, and Complete Systems

3 Checking the operation

Check the operation of the apparatus according to the following chart.

Entry motion (Image)				
Operation Indicator	OFF	ON (Green/Red)	OFF	ON (Green/Red)
Status	Power OFF Failure of the apparatus	Stand-by status No person or object exists between the SensorHeads	While a person or object is passing in the beam path	After the traffic has passed, the status becomes stand-by.
Output	N.O.			
	N.C.			

INFORM THE FOLLOWING ITEMS TO THE BUILDING OWNER/OPERATOR

1. When turning the power on, always walk-test the sensor to ensure proper operation.
2. Always keep the Lens surface clean. If dirty, wipe the lens with a damp cloth. (Do not use any cleaner or solvent)
3. Do not wash the sensor with water.
4. Do not disassemble, rebuild or repair the sensor yourself; otherwise electric shock may occur. Contact your installer or the sales engineer if you want to change the settings.
5. Do not place an object that moves or emits light in the detection area.
6. (Ex. Plant, illumination etc.)
7. Do not paint the Lens surface.

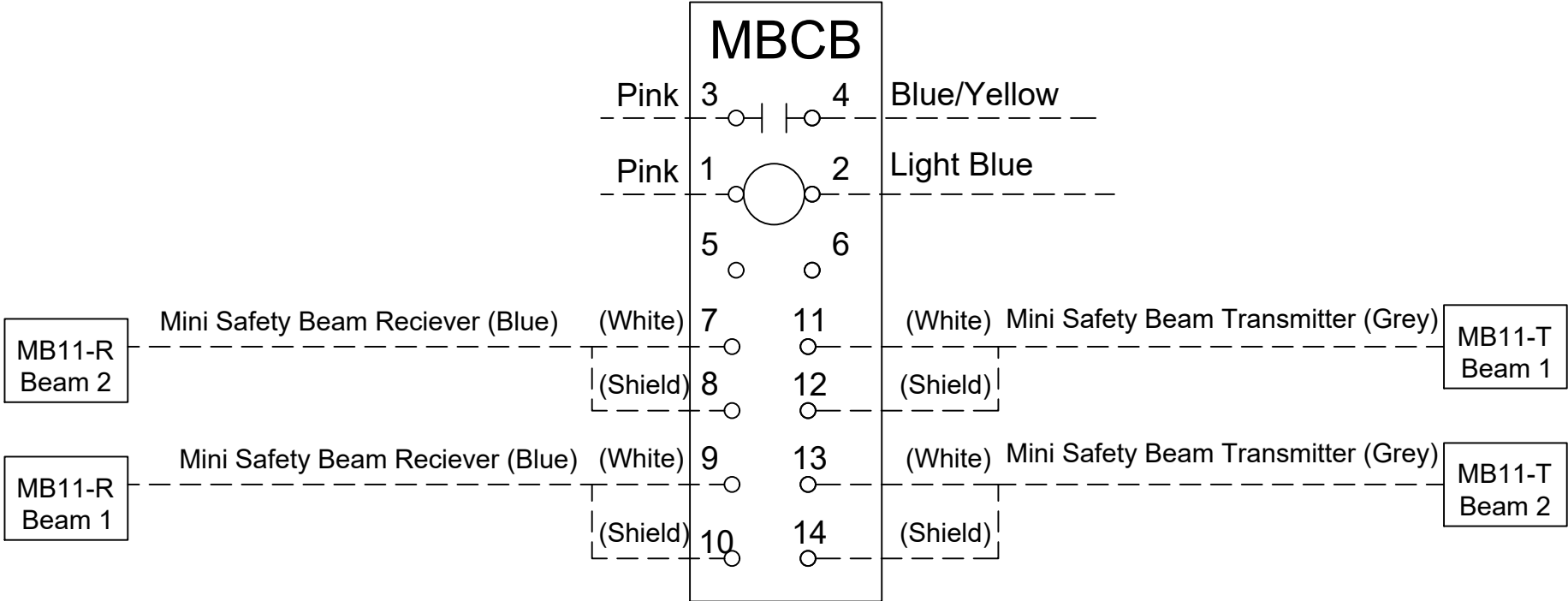
TROUBLESHOOTING

Trouble	Possible Cause	Solution
Does not operate	Irregular supply voltage	Adjust to the stated voltage.
	Wire cut or bad connection	Check the wiring.
	Inappropriate installation distance or condition	Check the installation distance and condition.
	Amplifire mode setting is not adjust the safety output type of your operator.	Check the amplifire mode setting (SEE ADJUSTMENT & CHECKING 2)
Operates by itself (Ghosting)	Inappropriate installation distance or condition	Check the installation distance and condition.
	Something swaying between the SensorHeads cutting off the beam.	Remove the obstruction.
	Dirty lens.	Remove the dirt.
	Amplifire mode setting is not adjust the safety output type of your operator.	Check the amplifire mode setting (SEE ADJUSTMENT & CHECKING 2)

Contact your installer or the sales engineer if:

- you need to change the settings or replace the sensor.
- the trouble still persists after checking and remedying as described above.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



---- PCS. AS SHOWN
STOCK MAT'L:

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF CROWN INDUSTRIAL. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT WRITTEN PERMISSION OF CROWN INDUSTRIAL IS PROHIBITED.	STOCK #: PE-10MC
	DESCRIPTION: OC-12C-T Optex Mini-Beam
FINISH:	MATERIAL:



CROWN INDUSTRIAL
So. San Francisco, Ca
(650) 952-5150
www.crown-industrial.com