

Safety Light Curtain F3SG-□RE Series



<http://www.ia.omron.com/f3sg-r>

Quick Installation Manual



Document Title	Cat. No.
Safety Light Curtain F3SG-R Series User's Manual	Z352-E1

Introduction

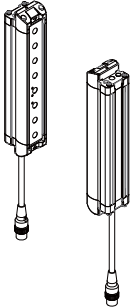
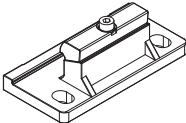
Thank you for purchasing the F3SG-□RE Series Safety Light Curtain (hereinafter referred to as the "F3SG-RE"). This document contains simple instructions to install the F3SG-RE.


Please download the F3SG-RE User's Manual for full contents of the instructions from our website at: <http://www.ia.omron.com/f3sg-r>

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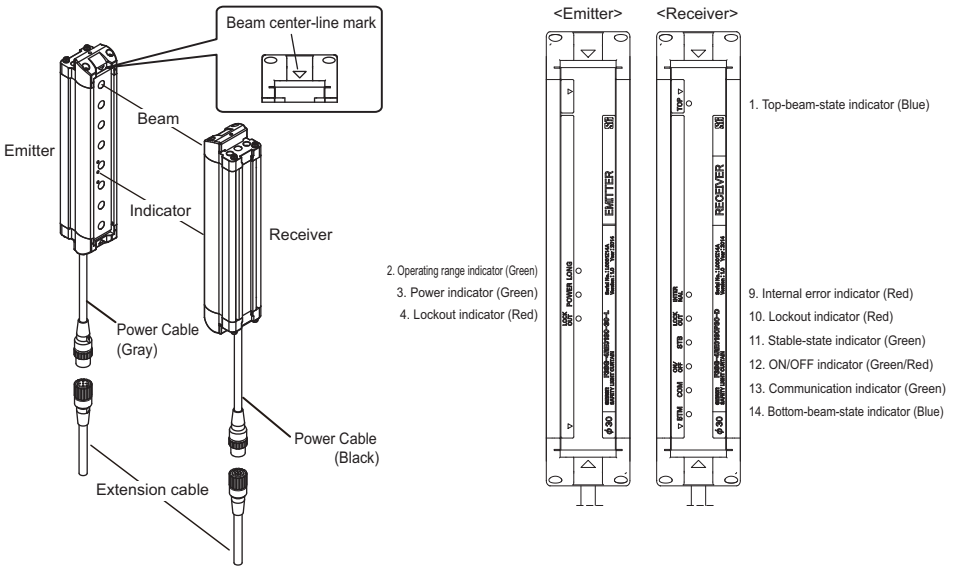
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1. What is Included

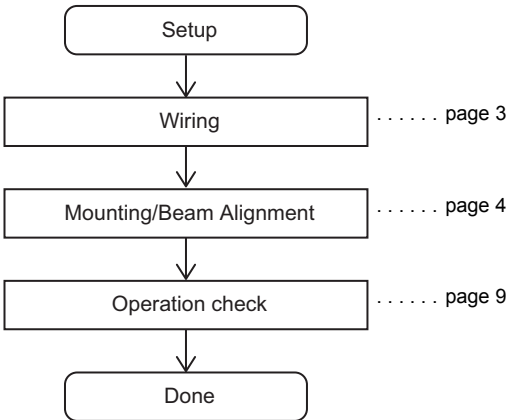
Product	Quantity
F3SG-□RE□□□□□□□□ main unit 	Emitter x 1, Receiver x 1
Standard Fixed Bracket 	The number of brackets included depends on protective height of the F3SG-RE. Less than 1,280 mm: 2 sets 1,280 mm or longer and up to 2,270 mm: 3 sets 2,350 mm or longer and up to 2,510 mm: 4 sets
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 For ratings/specifications, input/output circuit, LED indicator status and troubleshooting, refer to *Safety Light Curtain F3SG-R Series User's Manual*.

2. System Components



3. F3SG-RE Setup Procedure Example

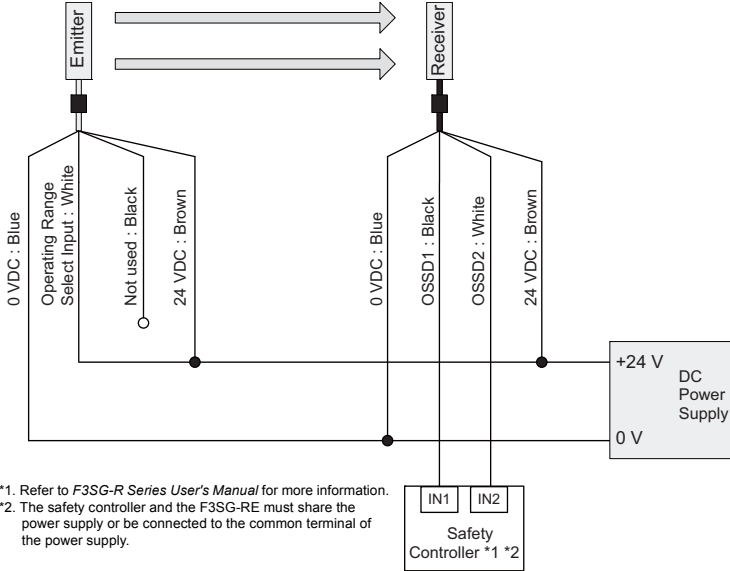


4. Wiring Examples

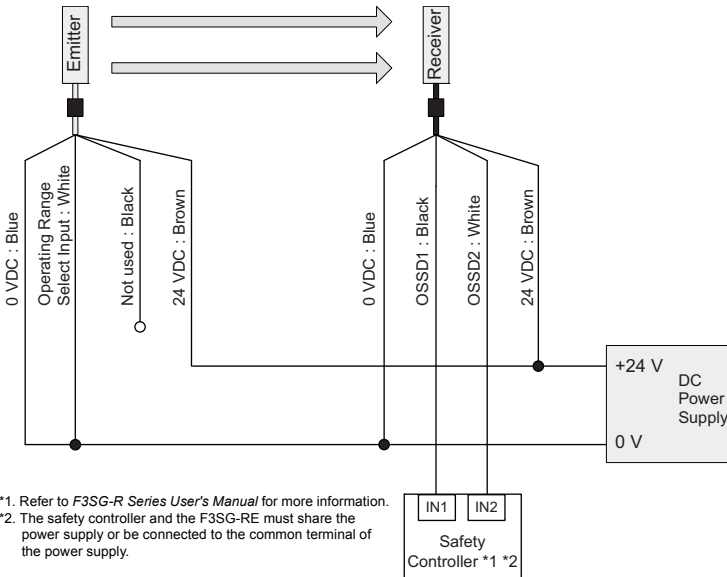


For input/output circuit and other examples than below, refer to *Safety Light Curtain F3SG-R Series User's Manual*.

4-1. Long Mode



4-2. Short Mode

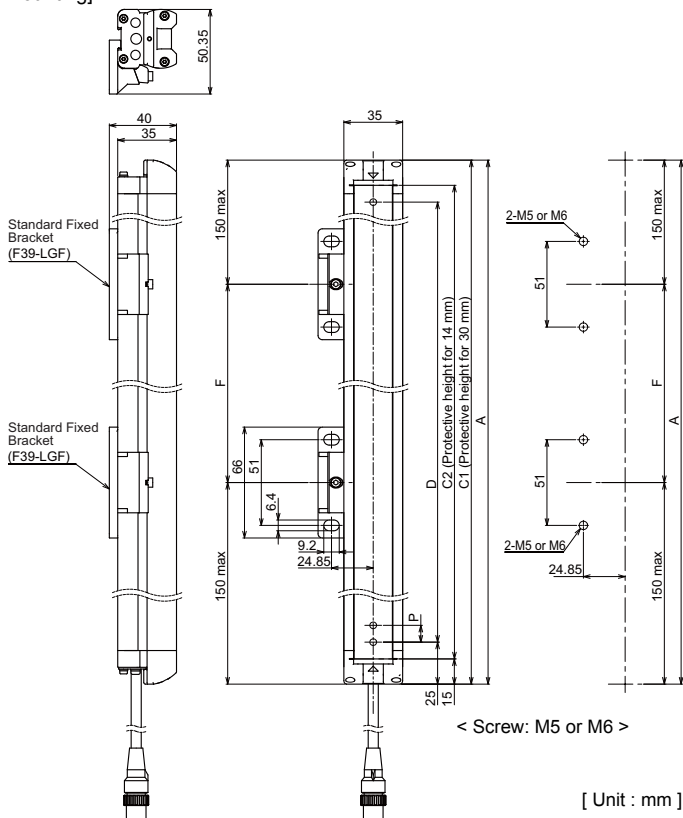


5. Mounting and Beam Alignment

5-1. Mounting with Standard Fixed Brackets (F39-LGF)

■Dimensions (Check position)

[Backside mounting]



Step1

Check
position

Step2

Mount

F3SG-□RE□□□□□□30 Series

Dimension A	C1
Dimension C1	4-digit number of the type name (Protective height)
Dimension D	C1-50
Dimension P	20

F3SG-□RE□□□□□□14 Series

Dimension A	C2+30
Dimension C2	4-digit number of the type name (Protective height)
Dimension D	C2-20
Dimension P	10

Protective height (C1)	Number of Standard Fixed Brackets *1	Dimension F
0190 to 1230	2 *2	1000 mm max.
1310 to 2270	3	1000 mm max.
2350 to 2510	4	1000 mm max.

Protective height (C2)	Number of Standard Fixed Brackets *1	Dimension F
0160 to 1200	2 *2	1000 mm max.
1280 to 2080	3	1000 mm max.

*1. The number of brackets required to mount either one of emitter and receiver.

*2. Mounting an emitter or receiver with one bracket is possible for the models of protective height of 0160 to 0270. In this case, locate this bracket at half the Dimension A (or at the center of the sensor length).

Refer to *Safety Light Curtain F3SG-R Series User's Manual* for dimensions of side mounting.

■ Mounting

Note: Although this chapter uses the figures of the F3SG-RA series safety light curtain, the mounting procedure of the F3SG-RE series is the same as the F3SG-RA series.

Step1

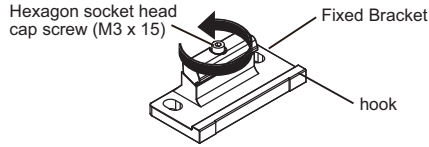
Check position



Step2

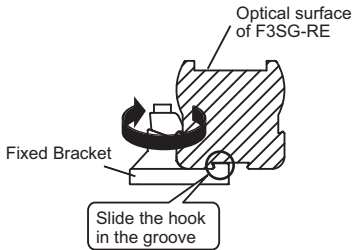
Mount

1. Loosen the screw.

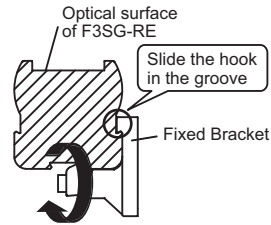


2. Lightly tighten the screw.

<Backside mounting>

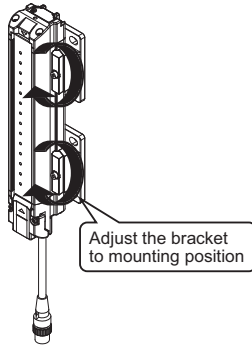


<Side mounting>

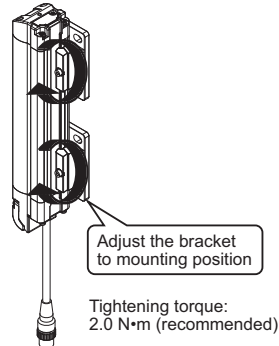


3. Adjust the mounting position and secure the bracket.

<Backside mounting>



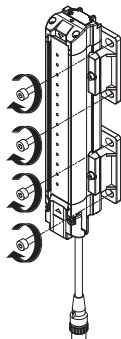
<Side mounting>



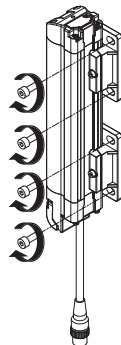
Tightening torque:
2.0 N•m (recommended)


4. Secure the bracket to the wall.

<Backside mounting>



<Side mounting>



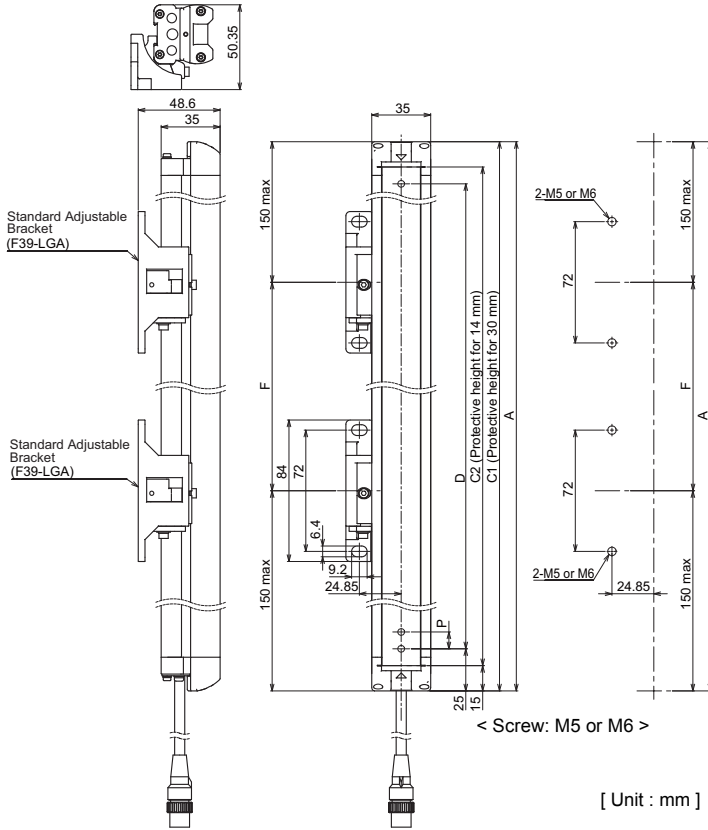
 Screws to mount the brackets to the wall are not included.



5-2. Mounting with Standard Adjustable Brackets (F39-LGA)

■ Dimensions (Check position)

[Backside mounting]



F3SG-□RE□□□□□30 Series

Dimension A	C1
Dimension C1	4-digit number of the type name (Protective height)
Dimension D	C1-50
Dimension P	20

F3SG-□RE□□□□□14 Series

Dimension A	C2+30
Dimension C2	4-digit number of the type name (Protective height)
Dimension D	C2-20
Dimension P	10

Protective height (C1)	Number of Standard Adjustable Brackets *1	Dimension F
0190 to 1230	2 *2	1000 mm max.
1310 to 2270	3	1000 mm max.
2350 to 2510	4	1000 mm max.

Protective height (C2)	Number of Standard Adjustable Brackets *1	Dimension F
0160 to 1200	2 *2	1000 mm max.
1280 to 2080	3	1000 mm max.

*1. The number of brackets required to mount either one of emitter and receiver.

*2. Mounting an emitter or receiver with one bracket is possible for the models of protective height of 0160 to 0270. In this case, locate this bracket at half the Dimension A (or at the center of the sensor length).

 Refer to *Safety Light Curtain F3SG-R Series User's Manual* for dimensions of side mounting.

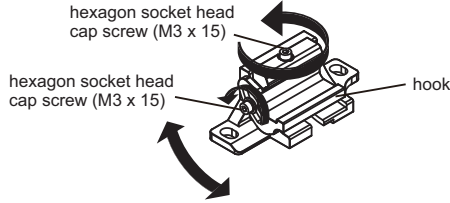
Step1
Check position
↓
Step2
Mount
↓
Step3
Align beams

■ Mounting and Beam Alignment

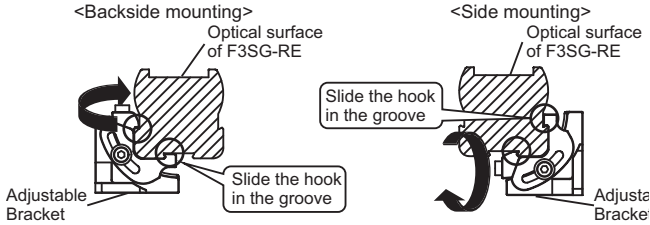
Note: Although this chapter uses the figures of the F3SG-RA series safety light curtain, the mounting procedure of the F3SG-RE series is the same as the F3SG-RA series.

- Step1
Check
position
↓
Step2
Mount
↓
Step3
Align
beams

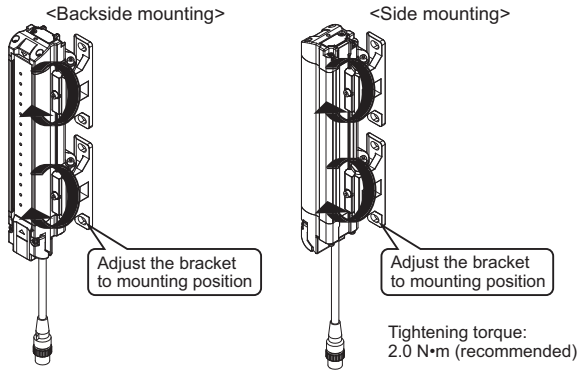
1. Loosen the screws and adjust the angle.



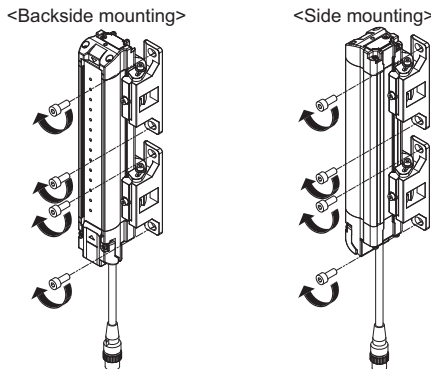
2. Lightly tighten the screw.




3. Adjust the mounting position and secure the bracket.



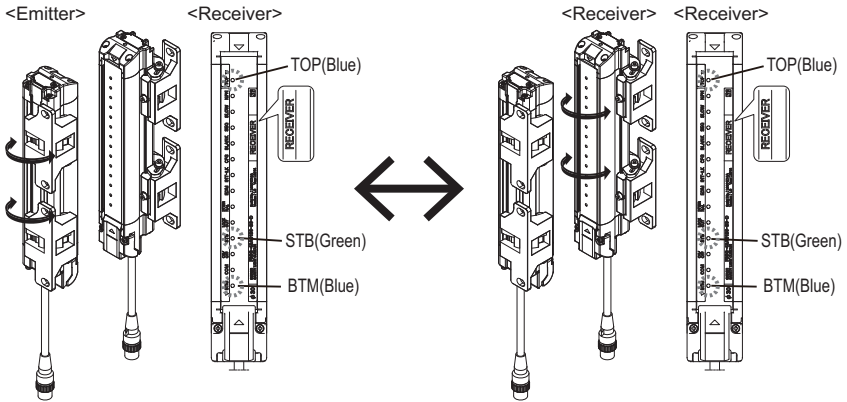
4. Secure the bracket to the wall.




 Screws to mount the brackets to the wall are not included.



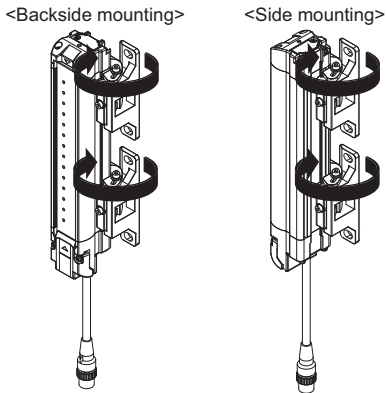
5. Perform beam alignment according to the indicators.



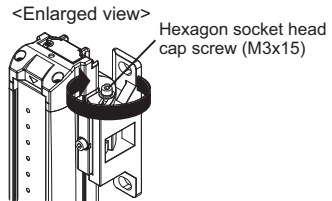
- Step1
Check position
- ↓
- Step2
Mount
- ↓
- Step3
Align beams

 Angle adjustment range: $\pm 15^\circ$

6. Securely tighten the remaining screws.



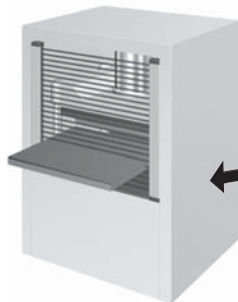
Tightening torque:
2.0 N•m (recommended)





6. Operation Check

After wiring, mounting and beam alignment are done, check the operation of the F3SG-RE. Attach the included Troubleshooting Guide Sticker nearby, if necessary.



TROUBLESHOOTING [EN]		OMRON	
<input checked="" type="checkbox"/> Blinking	<input type="checkbox"/> OFF		
LED INDICATOR			MAJOR CAUSE
LOCKOUT	INTERNAL	<input checked="" type="checkbox"/>	Error of internal circuit
Unlocking	ON/OFF	<input checked="" type="checkbox"/>	Error of OSSD lines
Unlocking	LONG	<input checked="" type="checkbox"/>	Error of Operating Range Select Input line
Unlocking	POWER	<input checked="" type="checkbox"/>	Error of power
LOCKOUT	ONOFF, COAL or INTERNAL	<input checked="" type="checkbox"/>	Error due to abnormal power supply or noise
Unlocking	POWER	<input checked="" type="checkbox"/>	Error due to noise
LOCKOUT	STB	<input checked="" type="checkbox"/>	Error due to detection of ambient light



Refer to *Safety Light Curtain F3SG-R Series User's Manual* or the web site for troubleshooting.



<http://www.ia.omron.com/f3sg-r>

Suitability for Use

Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

See also Product catalog for Warranty and Limitation of Liability.

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In the interest of product improvement, specifications are subject to change without notice.