

Output Circuit Diagrams

Out-put form	Model	Output transistor operation mode	Timing charts	Operation selector	Output circuit
NPN Out-put	E3X-SD21 E3X-SD7	Light-ON	Incident light No incident light Operation indicator (orange) Output transistor Load (e.g., relay) Operate Reset (Between brown and black leads)	LIGHT ON (L-ON)	
		Dark-ON	Incident light No incident light Operation indicator (orange) Output transistor Load (e.g., relay) Operate Reset (Between brown and black leads)	DARK ON (D-ON)	
PNP Out-put	E3X-SD51 E3X-SD9	Light-ON	Incident light No incident light Operation indicator (orange) Output transistor Load (e.g., relay) Operate Reset (Between brown and black leads)	LIGHT ON (L-ON)	
		Dark-ON	Incident light No incident light Operation indicator (orange) Output transistor Load (e.g., relay) Operate Reset (Between brown and black leads)	DARK ON (D-ON)	

Safety Precautions

Warning

This product is not designed or rated for ensuring safety of persons either directly or indirectly. Do not use it for such purposes.



Caution

Do not exceed the rated voltage. Excess voltage may result in malfunction or fire.



Do not use an AC power supply. Using an AC power supply may result in rupturing..



High-temperature environments may result in burn injury.



Precautions for Safe Use

The following precautions must be observed to ensure safety.

1. Do not use the product in locations where flammable or explosive gas is present.
2. Do not use the product in locations subject to splashing water, oil, or chemicals, or in locations subject to steam.
3. Do not attempt to disassemble, repair, or modify the product.
4. Do not apply voltage or current in excess of the rated ranges.
5. Do not use the product in atmospheres or environments that exceed product ratings.
6. Do not wire the product incorrectly, such as using incorrect power supply polarity.
7. Connect the load properly.
8. Do not short-circuit both ends of the load.
9. Do not use the product if the case is damaged.
10. When disposing of the product, dispose of it as industrial waste.
11. Do not use the product in locations subject to direct sunlight.
12. The surface temperature of the product may rise as a result of the ambient temperature, power supply, or other usage conditions. Use caution when performing maintenance and washing. Failure to do so may result in burn injury.

Precautions for Correct Use

Do not use the product in atmospheres or environments that exceed product ratings.

Amplifier Units

Designing

Communications Hole

The hole on the side of the Amplifier Unit is a communications hole for preventing mutual interference when Amplifier Units are mounted side-by-side. The E3X-MC11 Mobile Console (sold separately) cannot be used.

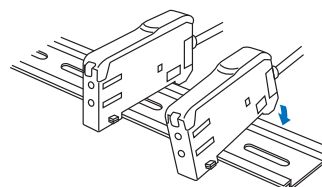
If an excessive amount of light is received via the Sensor, the mutual interference prevention function may not work. In this case, make the appropriate adjustments using the sensitivity adjuster. Mutual interference prevention is effective when E3X-SD-series Amplifiers are gang-mounted without other E3X-series Amplifiers.

Mounting

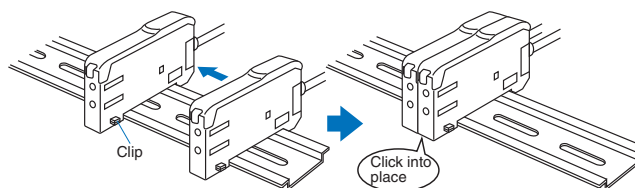
DIN Track Mounting/Removal

Mounting Amplifier Units

1. Mount the Amplifier Units one at a time onto the DIN track.



2. Slide the Amplifier Units together, line up the clips, and press the Amplifier Units together until they click into place.



Removing Amplifier Units

Slide Amplifier Units away from each other, and remove from the DIN track one at a time. (Do not attempt to remove Amplifier Units from the DIN track without separating them first.)

- Note**
1. The specifications for ambient temperature will vary according to the number of Amplifier Units used together. For details, refer to *Ratings and Specifications*.
 2. Always turn OFF the power supply before mounting or removing Amplifier Units.