

Control Units

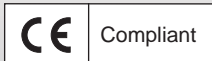
High Power Strobe Control Units

PF Series

Enables “extreme power” strobe lights

Dedicated for the High Power Strobe Light Units

Light intensity 512 levels	Ethernet enabled
Available Strobe time 1 μ s min.	Lighting delay time 0 to 100 μ s



The supplied AC cord is for use with 100 to 120 VAC.
If you would like to use the Control Unit with 200 to 240 VAC,
you must procure another appropriate AC power cord.

PF-A4048-2
(2 channel model)

PF-A16048-4
(4 channel model)

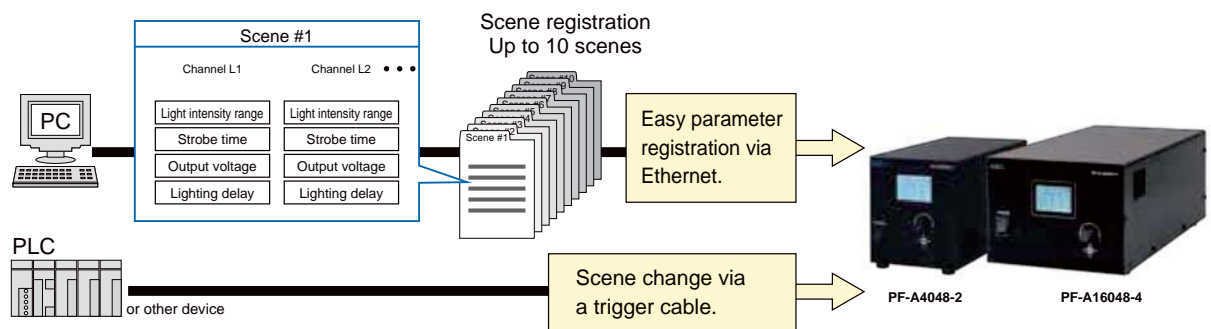
High Power Strobe Lights
PF series

Product Page ▶ P.117

Features

- Dedicated Control Unit for the High Power Strobe Lights PF series
PF series Product Page ▶ P.117
- Light intensity: 512 levels
- Minimum strobe time of 1 μ s
- Lighting delay time: 0 to 100 μ s (in steps of 0.1 μ s)
- 2 channels (PF-A4048-2), 4 channels (PF-A16048-4)
- Ethernet and parallel communications
- Sets of parameters related to light control can be registered.
- Trigger link function (PF-A16048-4)
You can make the Light Units on multiple channels turn ON (or OFF) with a single trigger signal that is input through one of the pins of the trigger input connector.

● Registering Scenes (sets of parameters)

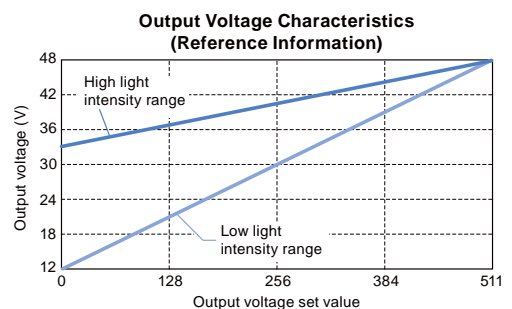


You can register sets of parameters called scenes that consist of the light control settings for all channels. By just applying a scene to the channels, you can easily change the settings. Up to 10 scenes can be registered. Refer to the "Instruction Guide" for operation details.

● Light Intensity Ranges

Each channel can be set to either of the light intensity ranges below. The output voltage of the output connectors varies depending on the light intensity range.

- High light intensity range (default): 33 to 48 VDC
- Low light intensity range: 12 to 48 VDC

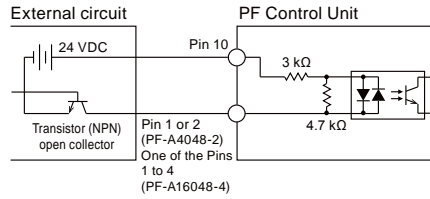


Example Connections

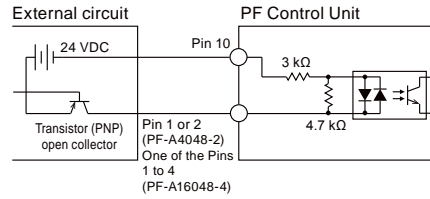
Refer to the "Instruction Guide" for details.

Example connections of external trigger signal

Sinking (NPN)



Sourcing (PNP)

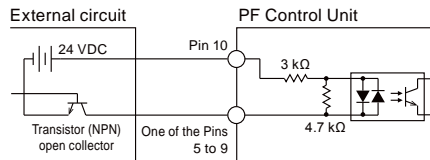


Connection specifications for each terminal				
Rated input voltage	Maximum input voltage	Photocoupler ON voltage / ON current	Photocoupler OFF voltage / OFF current	Response time
24 VDC	26.4 VDC	21.6 V DC min. / 7 mA min.	1.5 V DC max. / 1 mA max.	Refer to the sequence diagrams on the Instruction Guide.

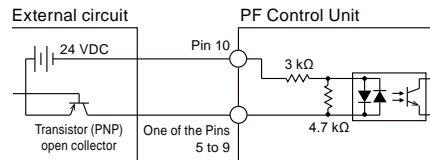
Setting of the LCG-TRG item on the COM Menu	Photocoupler	Light Unit status
		ACTIVE HI
ACTIVE LO	ON: Light Unit flashes for the strobe time. OFF: No change	

Example connections of external trigger signal (Applying scenes)

Sinking (NPN)



Sourcing (PNP)

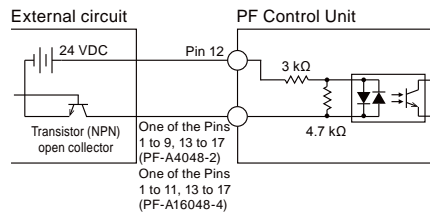


Photocoupler	Data	
	When the LGC-PAR item on the COM Menu is set to ACTIVE HI	When the LGC-PAR item on the COM Menu is set to ACTIVE LO
ON	1	0
OFF	0	1

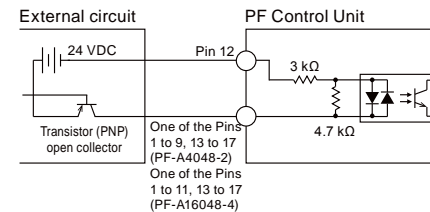
Scene number	Data				LCD
	SC3	SC2	SC1	SC0	
00	0	0	0	0	S01
01	0	0	0	1	S02
02	0	0	1	0	S03
03	0	0	1	1	S04
04	0	1	0	0	S05
05	0	1	0	1	S06
06	0	1	1	0	S07
07	0	1	1	1	S08
08	1	0	0	0	S09
09	1	0	0	1	S10

Example connections of external signal (Parallel communications)

Sinking (NPN)



Sourcing (PNP)



Photocoupler	Data	
	When the LGC-PAR item on the COM Menu is set to ACTIVE HI	When the LGC-PAR item on the COM Menu is set to ACTIVE LO
ON	1	0
OFF	0	1

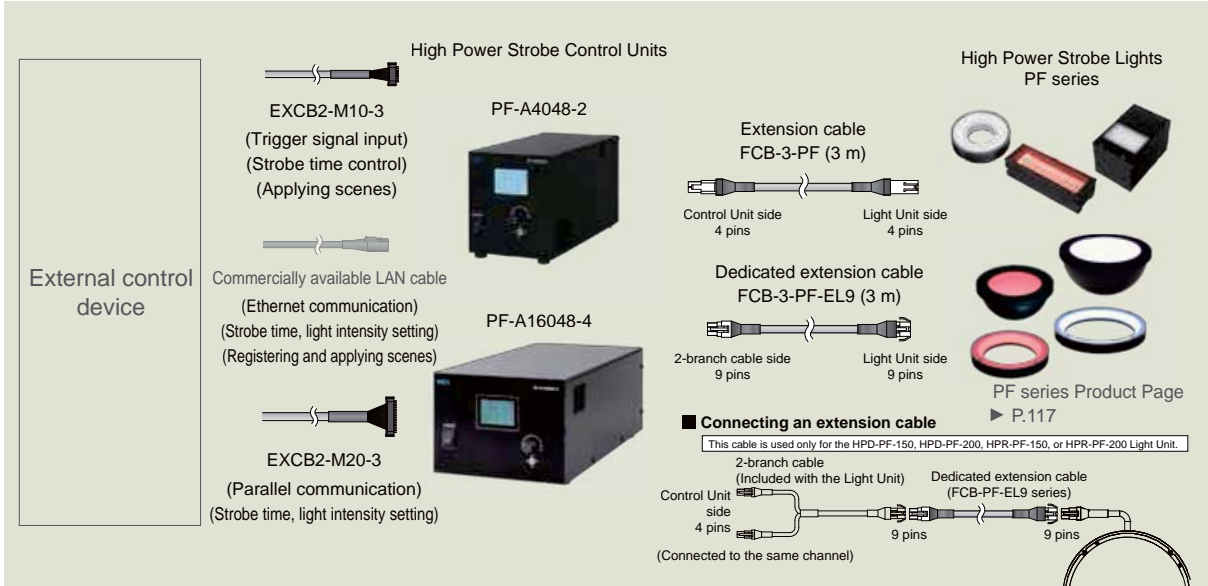
Connection specifications for each terminal				
Rated input voltage	Maximum input voltage	Photocoupler ON voltage / ON current	Photocoupler OFF voltage / OFF current	Response time
24 VDC	26.4 VDC	21.6 V DC min. / 7 mA min.	1.5 V DC max. / 1 mA max.	Refer to the sequence diagrams on the Instruction Guide.

PF Series



Example System Configuration

Example:
 External control device — External control cable — Control Unit — Extension cables — LED Light



Specifications

Model name	PF-A4048-2, PF-A16048-4	
Lighting method	Strobe lighting	
Drive method	Constant-voltage system	
Intensity control method	Variable-voltage control, Strobe time control	
Number of channels	PF-A4048-2	2 channels
	PF-A16048-4	4 channels
Number of output connectors	PF-A4048-2	L1: 2, L2: 1
	PF-A16048-4	L1: 2, L2: 2, L3: 2, L4: 2
Applicable Light Unit (ratings)	High Power Strobe Light Units	
Output voltage settings	Manual	Operation on the front panel
	External	Command input via TCP/IP or UDP/IP communications
		Signal input through parallel port
512 levels		
Strobe time settings	Manual	Operation on the front panel
	External	Command input via TCP/IP or UDP/IP communications
		Signal input through parallel port
PF-A4048-2: 1 to 100 μ s (in steps of 0.1 μ s) PF-A16048-4: 1 to 500 μ s ^{*1}		
Lighting delay settings	Manual	Operation on the front panel
	External	Command input via TCP/IP or UDP/IP communications
		Signal input through parallel port
0 to 100 μ s (in steps of 0.1 μ s)		
Input power	100 to 240 VAC (+10%, -15%), 50/60 Hz	
Power consumption (typ.)	PF-A4048-2	65 VA
	PF-A16048-4	140 VA
Inrush current (typ.)	PF-A4048-2	15 A (at 100 VAC), 36 A (at 240 VAC) from a cold start
	PF-A16048-4	17 A (at 100 VAC), 40.8 A (at 240 VAC) from a cold start
Ground leakage current	3.5 mA max. (264 VAC, 60 Hz, with no load)	
Output voltage (ratings)	High light intensity range: 33 to 48 VDC Low light intensity range: 12 to 48 VDC	
Output current (peak)	PF-A4048-2	Total for 2 channels: 43.2 A (21.6 A/connector)
	PF-A16048-4	Total for 4 channels: 172.8 A (21.6 A/connector)
Insulation withstand voltage (input-output, input-FG)	1500 VAC for one minute, Cutoff current: 10 mA, 500 VDC, 20 M Ω min.	
Overvoltage category	Category II	
Operating environment	Temperature: 0 to 40°C, Humidity: 20% to 85% (with no condensation)	
	Altitude: 2,000 m max., Protective ground class: Class I, Pollution degree: 2, Indoor use only	
Storage environment	Temperature: -20 to 60°C, Humidity: 20% to 85% (with no condensation)	
Cooling method	Forced air cooling	
CE marking	Safety standard: Conforms to EN 61010-1 EMC standard: Conforms to EN61000-6-2, EN61000-6-4	
Environmental regulations	RoHS compliant	
Material, coating, and surface processing	Steel sheet, Cover thickness: 1.6 mm, Chassis thickness: 1.0 mm, Black (half matte)	
Weight	PF-A4048-2	1900 g max.
	PF-A16048-4	3,300 g max.
Accessories	Instruction guide, 2-m-long 3-prong AC power cord with ground terminal	

*1 For Ethernet communications: 1 to 100 μ s (in steps of 0.1 μ s), 100.5 to 500 μ s (in steps of 0.5 μ s)

For parallel communications: High strobe time range (5 to 500 μ s, in steps of 0.5 μ s), Low strobe time range (1 to 100 μ s, in steps of 0.1 μ s)

- PD3
- PD2
- STU-3000
- PSB
- POD
- PTU2
- PF
- CN-4024-2-EIPT
- PB-2430-1
- CC-ST-1024
- BB
- PJ2
- PJ
- CC-PJ-0707
- PSCC
- PSB4-30024
- PSB3-30024
- Band-Pass Filters
- Lens Filters
- Diffusion Plates
- Polarizing Plates
- Light Control Films
- Brackets
- Fixtures, etc.
- SM/EL Cables

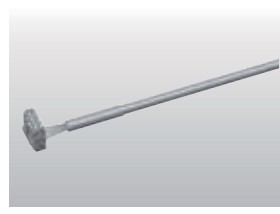
Options

External control cables

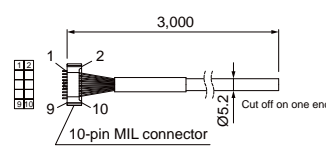
Dimensions (mm)

Trigger input cable

Used to input an external trigger signal of parallel bits. Used for performing strobe lighting and scene application.



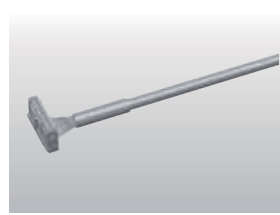
Model name: EXCB2-M10-3



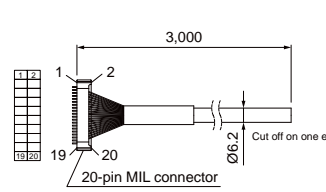
PIN No.	Line color	Marking
1	Orange	Black1
2	Orange	Red1
3	Gray	Black1
4	Gray	Red1
5	White	Black1
6	White	Red1
7	Yellow	Black1
8	Yellow	Red1
9	Pink	Black1
10	Pink	Red1

Parallel communication cable

Used for performing external control via parallel communication.



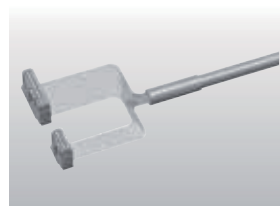
Model name: EXCB2-M20-3



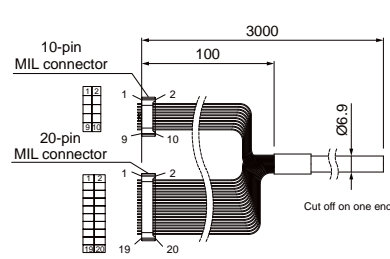
PIN No.	Line color	Marking	PIN No.	Line color	Marking
1	Orange	Black1	11	Orange	Black2
2	Orange	Red1	12	Orange	Red2
3	Gray	Black1	13	Gray	Black2
4	Gray	Red1	14	Gray	Red2
5	White	Black1	15	White	Black2
6	White	Red1	16	White	Red2
7	Yellow	Black1	17	Yellow	Black2
8	Yellow	Red1	18	Yellow	Red2
9	Pink	Black1	19	Pink	Black2
10	Pink	Red1	20	Pink	Red2

Parallel communication/Trigger input branch cable

Branch cable that combines parallel communication and trigger input cables into a single cable.



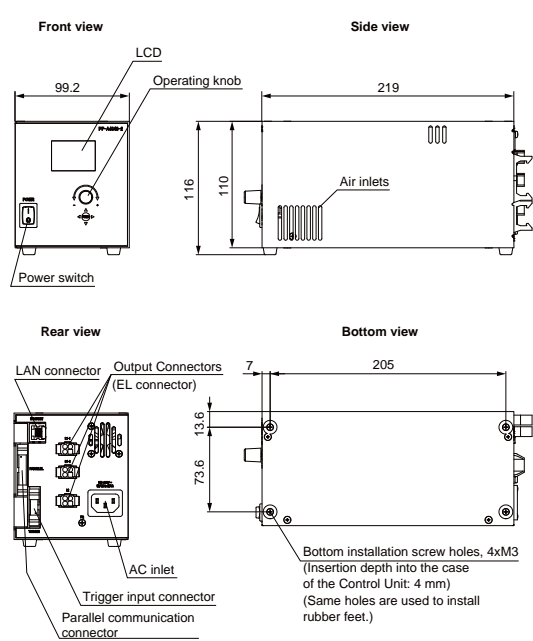
Model name: EXCB2-M10M20-3



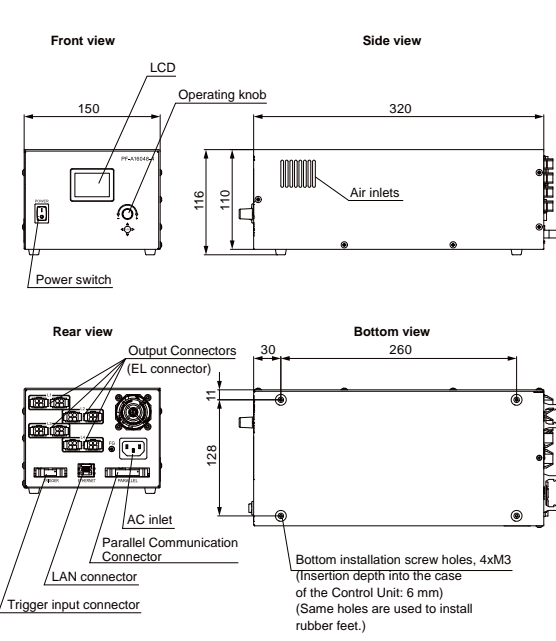
20-pin MIL connector			10-pin MIL connector		
PIN No.	Line color	Marking	PIN No.	Line color	Marking
1	Orange	Black2	1	Orange	Black1
2	Orange	Red2	2	Orange	Red1
3	Gray	Black2	3	Gray	Black1
4	Gray	Red2	4	Gray	Red1
5	White	Black2	5	White	Black1
6	White	Red2	6	White	Red1
7	Yellow	Black2	7	Yellow	Black1
8	Yellow	Red2	8	Yellow	Red1
9	Pink	Black2	9	Pink	Black1
10	Pink	Red2	10	Pink	Red1
			11	Orange	Black3
			12	Orange	Red3
			13	Gray	Black3
			14	Gray	Red3
			15	White	Black3
			16	White	Red3
			17	Yellow	Black3
			18	Yellow	Red3
			19	Pink	Black3
			20	Pink	Red3

Dimensions (mm)

PF-A4048-2



PF-A16048-4



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- Discontinued Products