



## Multi-functional and fine-tunable control units



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.



POD-5024-2-PEI  
(2 channel model)



POD-22024-4-PEI  
(4 channel model)

## Features

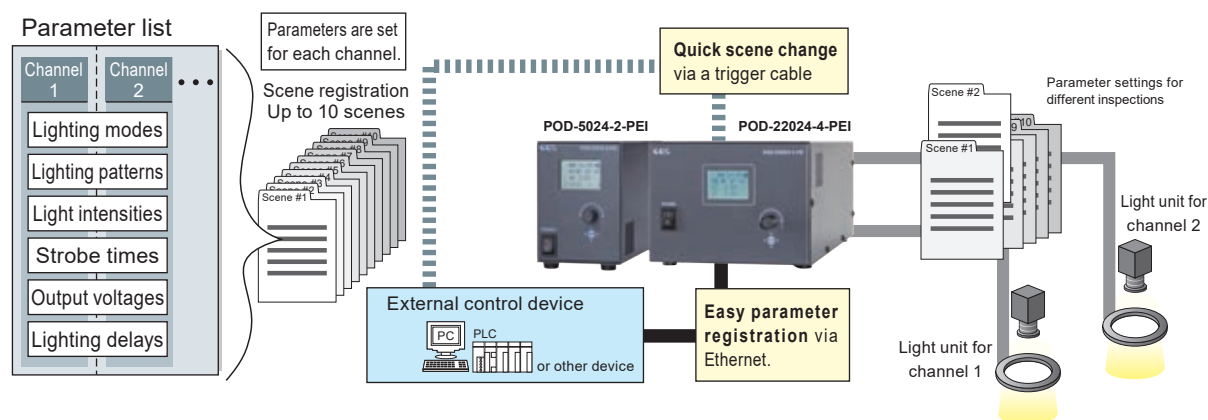
- Strobe lighting. Overdrive specifications.
- Voltage control during overdrive operation.
- Ethernet and parallel communications.
- Continuous lighting under PWM control.
- Sets of parameters related to light control can be registered.
- The light intensity can be set to one of 512 levels.
- Output voltage: 24 to 48 VDC
- Minimum strobe time of 1  $\mu$ s.
- Strobe delay: 0 to 1,000  $\mu$ s (in steps of 1  $\mu$ s)
- 2 channels (POD-5024-2-PEI), 4 channels (POD-22024-4-PEI).
- Trigger link function (POD-22024-4-PEI).

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.

## A Specification Difference between POD-5024-2-PEI and POD-22024-4-PEI

In POD-22024-4-PEI (4-channel model), the lighting mode setting (Overdrive or PWM) is applied to all channels. Please note that the setting cannot be individually specified for each channel as in POD-5024-2-PEI (2-channel model).

## ● 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 User Manual for details.

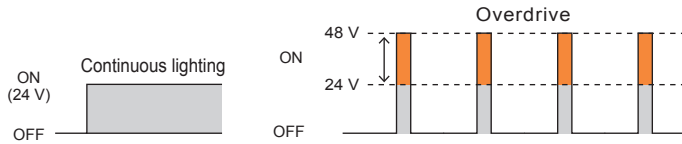
For information on possible combinations of light units with a POD Series control unit, refer to our website.

<https://www.ccs-grp.com/lnk/qr/pod>

# ● What Is "Overdriving"?

Overdriving is used to emit brighter light by applying a high voltage to an LED light unit.

This voltage exceeds the voltage for continuous lighting.

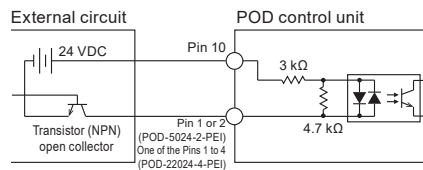


\*The output characteristics and light intensity setting values for starting light emission vary with the combinations of light units and power supplies.

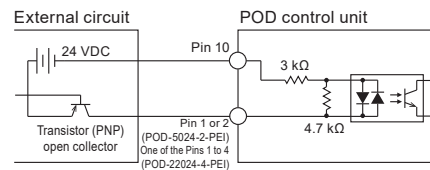
## ➤ Example Connections Refer to the User Manual for details.

### Example connections of external trigger signal

#### ■ Sink type (NPN)



#### ■ Source type (PNP)

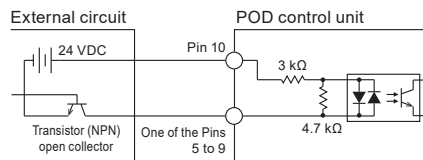


Connection specifications (for each terminal)				
Rated input voltage	Maximum input voltage	Photocoupler ON voltage / ON current	Photocoupler OFF voltage / OFF current	Response time
24 VDC	26.4 VDC	21.6 VDC min. / 6 mA min.	1.5 VDC max. / 1 mA max.	Refer to the sequence diagrams on the User Manual.

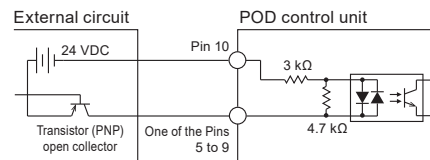
Setting of the LCG-TRG item on the COM Menu	Photocoupler	When lighting mode is set to O/D Mode, or when lighting mode is set to PWM Mode and lighting pattern is set to Strobe Lighting Pattern	When lighting mode is set to PWM Mode and lighting pattern is set to Continuous Lighting Pattern
ACTIVE HI	ON	No change	Light Unit OFF
	OFF	Light unit flashes for the strobe time.	Light Unit ON
ACTIVE LO	ON	Light unit flashes for the strobe time.	Light Unit ON
	OFF	No change	Light Unit OFF

### Example connections of external trigger signal (Applying scenes)

#### ■ Sink type (NPN)



#### ■ Source type (PNP)

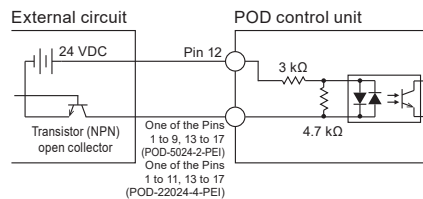


Photocoupler	Data	
	When the LGC-PAR item on the COM Menu is set to ACTIVE HI	When the LGC-PAR item on the COM Menu is set to ACTIVE LO
	ON	OFF
ON	1	0
OFF	0	1

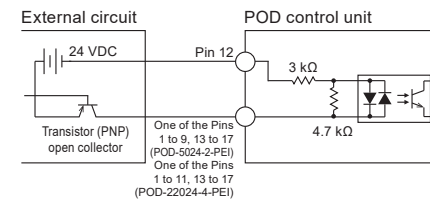
Scene number	Data				LCD
	SC3	SC2	SC1	SC0	
00	0	0	0	0	S01
01	0	0	0	1	S02
02	0	0	1	0	S03
03	0	0	1	1	S04
04	0	1	0	0	S05
05	0	1	0	1	S06
06	0	1	1	0	S07
07	0	1	1	1	S08
08	1	0	0	0	S09
09	1	0	0	1	S10

### Example connections of external signal (Parallel communications)

#### ■ Sink type (NPN)



#### ■ Source type (PNP)



Photocoupler	Data		Connection specifications (for each terminal)			
	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	Rated input voltage	Maximum input voltage	Photocoupler ON voltage / ON current	Photocoupler OFF voltage / OFF current
	ON	OFF	24 VDC	26.4 VDC	21.6 VDC min. / 6 mA min.	1.5 VDC max. / 1 mA max.
ON	1	0				
OFF	0	1				

## POD Series



Refer to our website for product details.

CCS POD

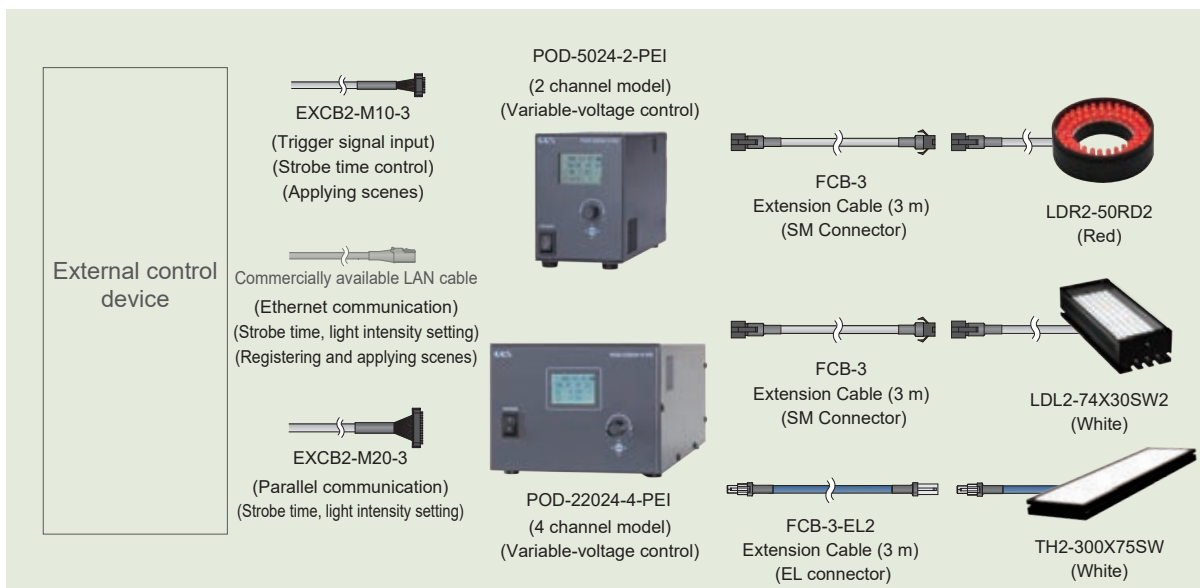
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## Example System Configuration

Example:

External control device — External control cable — Control unit — Extension cables — LED light



## Specifications

Model name	POD-5024-2-PEI / POD-22024-4-PEI			
Lighting method	Strobe lighting (Overdrive mode), continuous lighting (PWM mode)			
Drive method	Costant-voltage system			
Intensity control method	Variable-voltage control or PWM control			
Number of channels	POD-5024-2-PEI: 2 channels / POD-22024-4-PEI: 4 channels			
Number of output connectors	POD-5024-2-PEI	L1: 1 (SM connector), L2: 1 (SM connector)		
	POD-22024-4-PEI	L1: 2 (EL connectors, SM connectors), L2: 2 (EL connector, SM conenctor), L3: 1 (SM connector), L4: 1 (SM connector)		
Output ratings*1	POD-5024-2-PEI		POD-22024-4-PEI	
	When both channels are in O/D Mode	Output current: 10 A max. (total for 2 channels)	O/D Mode (peak)	
	When both channels are in PWM Mode	Output power: 45 W max. (total for 2 channels)		
	When the channels are used together with different lighting modes	Output current: 6.3 A max. and Output power: 36 W max. (total for 2 channels)	PWM Mode	
	Total for 4 channels: 50 A max. L1, L2: 15 A max./channel (EL connector: 15 A max./channel) (SM connector: 10 A max./channel) L3, L4: 10 A max./channel			
	Total for 4 channels: 200 W max. L1, L2: 100 W max./channel (EL connector: 100 W max./channel) (SM connector: 60 W max./channel) L3, L4: 60 W max./channel			
Output voltage (ratings)	Overdrive (O/D) mode: 24 to 48 VDC, PWM mode: 24 VDC			
PWM frequency	125 kHz			
Light control settings	Manual	Operation on the front panel	512 levels	
	External	Command input via TCP/IP or UDP/IP communications		
Strobe time settings	External	Signal input through parallel port	POD-5024-2-PEI: 1 to 1,000 μs (in steps of 1 μs) POD-22024-4-PEI: 1 to 3,000 μs*2	
		Manual		Operation on the front panel
		External		Command input via TCP/IP or UDP/IP communications
Lighting delay settings	External	Signal input through parallel port	0 to 1,000 μs (in steps of 1 μs)	
		Manual		Operation on the front panel
		External		Command input via TCP/IP or UDP/IP communications
Input power	100 to 240 VAC (+10%, -15%), 50/60 Hz			
Power consumption (typ.)	POD-5024-2-PEI: 65 VA, POD-22024-4-PEI: 260 VA			
Inrush current (typ.)	POD-5024-2-PEI: 15 A (at 100 VAC), 36 A (at 240 VAC) from a cold start			
	POD-22024-4-PEI: 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)			
Insulation withstand voltage (input-output, input-FG)	1,500 VAC for one minute, Cutoff current: 10 mA, 500 VDC, 20 MΩ min.			
Overvoltage category	Category II			
Overcurrent Protection	PWM control: Operates at 110% min. of output current; Strobe lighting: Operates at 120% min. of output current			
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			
Applicable standards	CE, UKCA, RoHS compliant			
Material, coating, and surface processing	Steel sheet, Cover thickness: 1.6 mm, Chassis thickness: 1.0 mm, N3 (leather tone)			
Weight	POD-5024-2-PEI: 1,500 g max., POD-22024-4-PEI: 3,300 g max.			
Accessories	User Manual x1, 2-m-long 3-prong AC power cord with ground terminal x1			

\*1 For information on possible combinations of light units with a POD Series control unit, refer to our website, <https://www.ccs-grp.com/lnk/qpr/pod>\*2 For manual control and Ethernet communications: 1 to 1,000  $\mu$ s (in steps of 1  $\mu$ s), 1,002 to 3,000  $\mu$ s (in steps of 3  $\mu$ s)For parallel communications: 3 to 3,000  $\mu$ s (in steps of 3  $\mu$ s) for high strobe time range, 1 to 1,000 (in steps of 1  $\mu$ s) for low strobe time range

Various technical documents available.

PDF Drawings

DXF Drawings

Product Brochures

Instruction Guides

3D CAD

Data Sheets

Imaging Examples

Digital Catalogs

Register to use them.

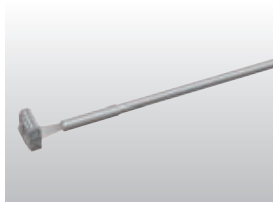
## Options

### External control cables

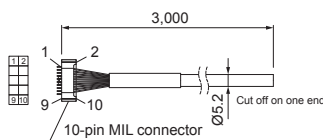
Dimensions (mm)

#### 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



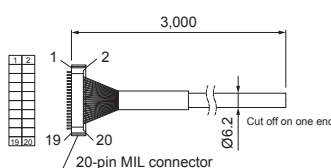
PIN No.	Line color	Marking
1	Orange	Black1
2	Orange	Red1
3	Gray	Black1
4	Gray	Red1
5	White	Black1
6	White	Red1
7	Yellow	Black1
8	Yellow	Red1
9	Pink	Black1
10	Pink	Red1

#### Parallel communication cable

Used for performing external control via parallel communication.



Model name: EXCB2-M20-3



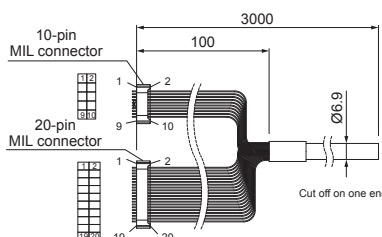
PIN No.	Line color	Marking	PIN No.	Line color	Marking
1	Orange	Black1	11	Orange	Black2
2	Orange	Red1	12	Orange	Red2
3	Gray	Black1	13	Gray	Black2
4	Gray	Red1	14	Gray	Red2
5	White	Black1	15	White	Black2
6	White	Red1	16	White	Red2
7	Yellow	Black1	17	Yellow	Black2
8	Yellow	Red1	18	Yellow	Red2
9	Pink	Black1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



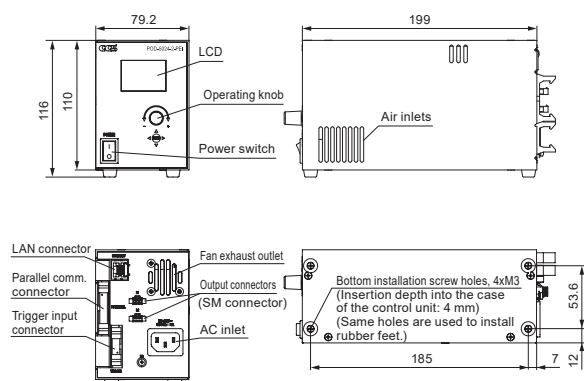
Model name: EXCB2-M10M20-3



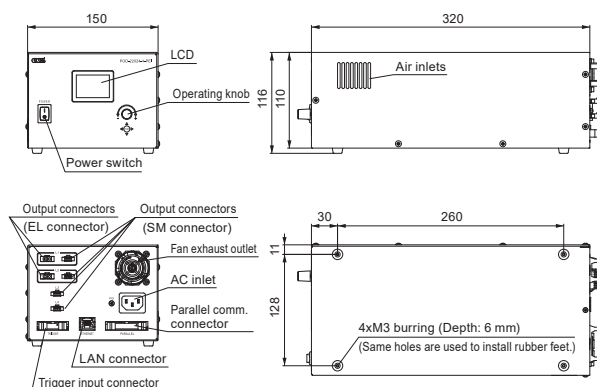
10-pin MIL connector			20-pin MIL connector		
PIN No.	Line color	Marking	PIN No.	Line color	Marking
1	Orange	Black1	1	Orange	Black2
2	Orange	Red1	2	Orange	Red2
3	Gray	Black1	3	Gray	Black2
4	Gray	Red1	4	Gray	Red2
5	White	Black1	5	White	Black2
6	White	Red1	6	White	Red2
7	Yellow	Black1	7	Yellow	Black2
8	Yellow	Red1	8	Yellow	Red2
9	Pink	Black1	9	Pink	Black2
10	Pink	Red1	10	Pink	Red2
			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)

### POD-5024-2-PEI



### POD-22024-4-PEI



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