PD2 series STU-3000

PSB series PTU2 series

CC-ST-1024

# **Digital Control Units** PD2 series

Refer to our website for product details.

CCS PD2

Use a search engine





Intensity control to 256-step Compatible with a wide range of uses







PD2-1012/PD2-1024

PD2-3012/PD2-3024

PD2-5012/PD2-5024



PD2-3012-4/PD2-3024-4

PD2-3012-8/PD2-3024-8

Compliant model(s) PD2-3012/PD2-3024/PD2-5012/PD2-5024/PD2-3012-2/PD2-3024-2/ PD2-3012-4/PD2-3024-4/PD2-3012-8/PD2-3024-8

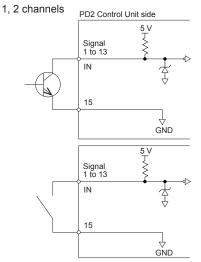
The supplied AC cord is for use with 100 to 120 VAC CCS recommends using the following with 200 to 240 VAC Cable: GTCE-3 x 1.0 mm2 (Kawasaki Electric Wire) Connector: KS-31AY (Kawasaki Electric Wire)

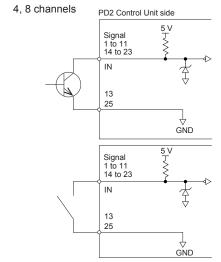
### Selection

- You can select either 12 V or 24 V type according to the input voltage of the LED Light being used.
- You can select from 10 W, 30 W and 50 W types according to the power consumption of the LED Light being used.
- You can select from 2, 4 and 8-channel types if you are using individual intensity settings for multiple
- You can select an optional external control cable if you are using external control (refer to P.161).

**Example connection** \* Refer to the "Instruction Guide" for details.

Example connections of external control signal

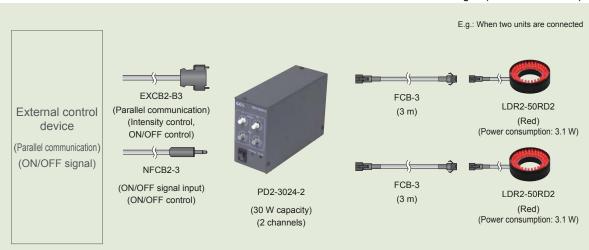




Drive using driver IC or NPN open-collector. Drive is possible if there is a device through which flows an approximately 10 mA current from signal to ground.

Example:

External control device - External control cables -Control Unit -Extension cables - LED Lights (two units connected)



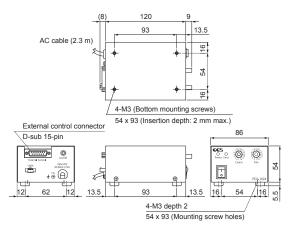
## Specifications

| Model name                    | PD2-1012  | PD2-1024  | PD2-3012               | PD2-3024     | PD2-5012       | PD2-5024    | PD2-3012-2      | PD2-3024-2    | PD2-3012-4      | PD2-3024-4 | PD2-3012-8 | PD2-3024-8 |
|-------------------------------|---|---|------------------------|--------------|----------------|-------------|-----------------|---------------|-----------------|------------|------------|------------|
| Input voltage                 | 100 to 1  | 20 VAC  | 100 to 240 VAC         |              |                |             |                 |               |                 |            |            |            |
| Input current*                | 0.25 A typ.   |   | 0.78 A typ. 1.3 A typ. |              | typ.           | 0.78 A typ. |                 |               |                 |            |            |            |
| Frequency                     | 50/60 Hz  |   |                        |              |                |             |                 |               |                 |            |            |            |
| Inrush current                | 15 A typ.   |   |                        |              |                |             |                 |               |                 |            |            |            |
| No. of channels               | 1 channel   | 1 channel   | 1 channel              | 1 channel    | 1 channel      | 1 channel   | 2 channels      | 2 channels    | 4 channels      | 4 channels | 8 channels | 8 channels |
| DC output voltage             | 12 V  | 24 V  | 12 V                   | 24 V         | 12 V           | 24 V        | 12 V            | 24 V          | 12 V            | 24 V       | 12 V       | 24 V       |
| Output voltage                | 9.5 W max.  | 9.0 W max.  | 28 W max.              | 28 W max.    | 46 W max.      | 46 W max.   | 28 W max.       | 28 W max.     | 27 W max.       | 27 W max.  | 25 W max.  | 25 W max.  |
| Intensity control             | Intensity control method: 62.5 kHz PWM control Manual: 16-step intensity control using coarse and fine rotary switches on the front panel External: Intensity control using 8-bit parallel signal   |   |                        |              |                |             |                 |               |                 |            |            |            |
| External control              | Input circuit: Pull-up of +5.0 V internally by use of resistor (4.7 k $\Omega$ ) Input circuit: Pull-up of +5.0 V internally by use of resistor (2.2 k $\Omega$   |   |                        |              |                |             |                 |               |                 |            |            |            |
| input                         | HS-CMOS input: Low level of max. 1.0 V, high level of 3.5 V or more   |   |                        |              |                |             |                 |               |                 |            |            |            |
| External control connector    | D-sub 15-pin (plug) D-sub 25-pin (plug)   |   |                        |              |                |             |                 |               |                 |            |            |            |
| Lights ON/OFF control         | ON/OFF control during manual intensity control: Ø3.5 mm microphone jack ON/OFF control during external intensity control: D-sub 15-pin on signal (not synchronized with writing sequence)  Manual/External: D-sub 25-pin ON signal (not synchronized with writing sequence) |   |                        |              |                |             |                 | ng sequence)  |                 |            |            |            |
| Light ON/OFF response time    | OFF→ON: 10 μs typ., ON→OFF: 10 μs typ.  |   |                        |              |                |             |                 |               |                 |            |            |            |
| Startup time                  |   | 0.5 sec typ.  |                        |              |                |             |                 |               |                 |            |            |            |
| Output overcurrent protection |   | Operates at 107% of the output current. Reset by turning the power off and then on again. |                        |              |                |             |                 |               |                 |            |            |            |
| Operating environment         | Temperature: 0 to 40°C, Humidity: 20% to 85%RH (with no condensation)   |   |                        |              |                |             |                 |               |                 |            |            |            |
| Storage environment           | Temperature: -20 to 60°C, Humidity: 20% to 85%RH (with no condensation)   |   |                        |              |                |             |                 |               |                 |            |            |            |
| Weight                        | 0.7 kg  | max.  | 1.1 kg                 | max.         | 1.3 kg         | max.        | 1.1 kg          | max.          | 1.2 kg          | max.       | 1.5 kg     | max.       |
| Accessories                   | 3-prong AC cord with ground terminal (2 m) x 1 (except for PD2-1012/1024), Instruction Guide x 1  |   |                        |              |                |             |                 |               |                 |            |            |            |
| * F== 400 \/AC                |   |   |                        | nong no coru | mar ground ton | (2) x 1 1   | (OXCOPTION I BE | 10.12/102.1), | ou doubli Caido |            |            |            |

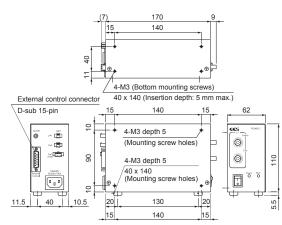
<sup>\*</sup> For 100 VAC

## **Dimensions (mm)**

### PD2-1012/PD2-1024



### PD2-3012/PD2-3024



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PD2

PD3 series PD2 series STU-3000 PSB series PTU2 series PB-2430-1 CC-ST-1024 BB series PJ series CC-PJ-0707 PSCC series PSB3-30024

## PD2 series



### Refer to our website for product details.

CCS PD2

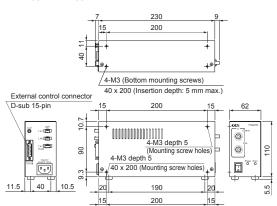
Use a search engine



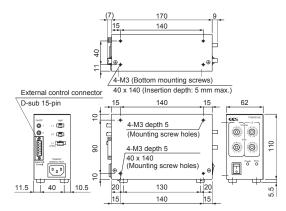
You can also use your smartphone or cell phone

## Dimensions (mm)

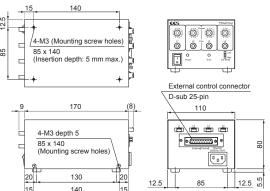
#### PD2-5012/PD2-5024



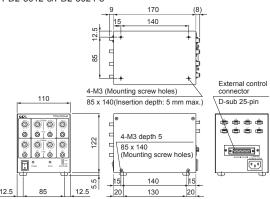
#### PD2-3012-2/PD2-3024-2







PD2-3012-8/PD2-3024-8

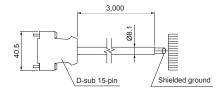


### Options

#### External control cable

Corresponding Control Unit: PD2 (1 and 2 channels) series

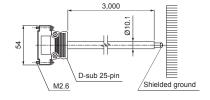
EXCB2-B3 (3 m): D-sub 15-pin



| N | lo. | Line color | No. | Line color   |  |  |
|---|-----|------------|-----|--------------|--|--|
|   | 1   | Black      | 9   | Gray         |  |  |
|   | 2   | White      | 10  | Pink         |  |  |
|   | 3   | Red        | 11  | White/Black  |  |  |
|   | 4   | Green      | 12  | Red/Black    |  |  |
|   | 5   | Yellow     | 13  | Green/Black  |  |  |
|   | 6   | Brown      | 14  | Yellow/Black |  |  |
| Г | 7   | Blue       | 15  | Brown/Black  |  |  |
|   | 8   | Purple     | NC  | (Blue/Black) |  |  |

### Dimensions (mm)

Corresponding Control Unit: PD2 (4 and 8 channels) series EXCB2-25-3 (3 m): D-sub 25-pin

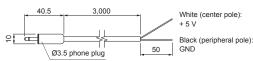


| No. | Line color | No. | Line color No |    | Line color        | No. | Line color          |  |
|-----|------------|-----|---------------|----|-------------------|-----|---------------------|--|
| 1   | Black      | 9   | Gray          | 17 | Purple/Black      | 25  | Brown/White         |  |
| 2   | White      | 10  | Pink          | 18 | Grey/Black        | NC  | (Blue/White)        |  |
| 3   | Red        | 11  | White/Black   | 19 | Pink/Black        | NC  | (Purple/White)      |  |
| 4   | Green      | 12  | Red/Black     | 20 | Light green/Black | NC  | (Grey/White)        |  |
| 5   | Yellow     | 13  | Green/Black   | 21 | Black/White       | NC  | (Pink/White)        |  |
| 6   | Brown      | 14  | Yellow/Black  | 22 | Red/White         | NC  | (Light green/White) |  |
| 7   | Blue       | 15  | Brown/Black   | 23 | Green/White       |     |                     |  |
| 8   | Purple     | 16  | Blue/Black    | 24 | Yellow/White      |     |                     |  |

### External ON/OFF control cable

Corresponding Control Unit: PD2 (1 and 2 channels) series

NFCB2-3 (3 m)



| Line color | Signal  |
|------------|---------|
| White      | ON/OFF  |
| Black      | GND (-) |