

# Control Units for CCS LED Lights

Please select a best-suited control unit according to your intended use and objective.

## Analog Control Units

### PSB Series

#### CCS Standard Analog Control Units

\*Use the PD2 Series of Digital Control Units if detailed control settings, control accuracy, or reproducibility is desired.

The PSB Series is an analog control unit series providing stepless intensity control through variable voltage control. It is ideal for continuous use with cameras having a shutter speed of 1/4,000 or faster. Worldwide type also available.

\* Models with lock of dimming control knob are available as option.

Models: PSB-512VL / PSB-524VL / PSB-1012VBL / PSB-1024VBL / PSB-3012VBL / PSB-3024VBL



<b>CE</b>	Models with CE Marking
	PSB-1012V-WW / PSB-1024V-WW

### Specifications

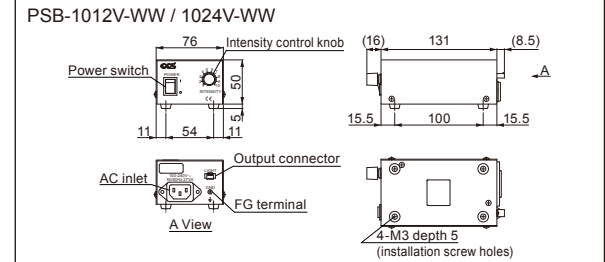
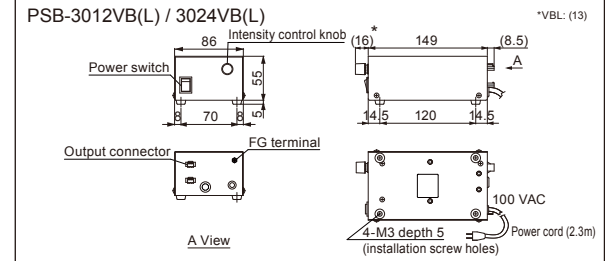
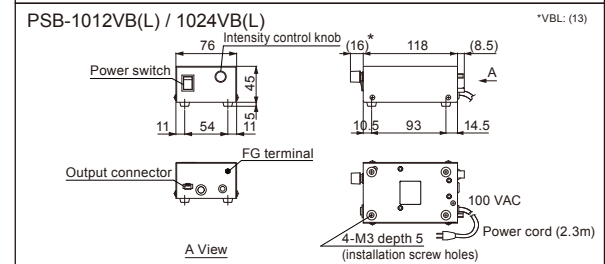
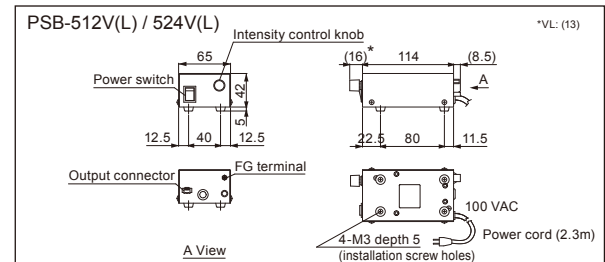
Model	PSB-512V	PSB-512VL	PSB-524V	PSB-524VL
Direct Number	2000229	2000231	2000233	2000236
Lighting method	Constant lighting			
Drive method	Constant-voltage system			
Light control method	Variable voltage control			
Number of channels	1 channel			
Applicable illuminators (rating)	12V / 5W		24V / 5W	
Input voltage (rating)	100 to 120V AC			
Power consumption (typ.)	15VA			
Weight (typ.)	420g			

Model	PSB-1012VB	PSB-1012VBL	PSB-1024VB	PSB-1024VBL
Direct Number	2000185	2000187	2000194	2000197
Lighting method	Constant lighting			
Drive method	Constant-voltage system			
Light control method	Variable voltage control			
Number of channels	1 channel			
Applicable illuminators (rating)	12V / 10W		24V / 10W	
Input voltage (rating)	100 to 120V AC			
Power consumption (typ.)	27VA			
Weight (typ.)	470g			

Model	PSB-3012VB	PSB-3012VBL	PSB-3024VB	PSB-3024VBL
Direct Number	2000206	2000209	2000215	2000219
Lighting method	Constant lighting			
Drive method	Constant-voltage system			
Light control method	Variable voltage control			
Number of channels	1 channel			
Applicable illuminators (rating)	12V / 30W		24V / 30W	
Input voltage (rating)	100 to 120V AC			
Power consumption (typ.)	78VA			
Weight (typ.)	700g			

Model	PSB-1012V-WW	PSB-1024V-WW
Direct Number	2000178	2000191
Lighting method	Constant lighting	
Drive method	Constant-voltage system	
Light control method	Variable voltage control	
Number of channels	1 channel	
Applicable illuminators (rating)	12V / 10W	24V / 10W
Input voltage (rating)	100 to 240V AC	
Power consumption (typ.)	27VA	
Weight (typ.)	470g	

### Dimension Diagrams (Unit: mm)





## Strobe Control Units

### PTU2-3012/PTU2-3024

Compatible with more than 300 models of CCS LED lights

The PTU2 control unit Series enables CCS standard lights to be used with strobes. It enables the lights to emit several times brighter than using the On/Off control function of the conventional PSB and PD2 Series, or by strobe lighting using STU-3000. The units have two independent circuits with separate controls for each circuit. The strobe illumination time can be set from 10  $\mu$ s to 990  $\mu$ s using rotary controls.

#### Part Names and Functions

	<p><b>Trigger Setting</b></p> <p>Selectable trigger mode. Ext (External trigger): Light emission synchronized to an external signal Int (Internal trigger): Operation test of lighting and control unit</p> <p><b>Pulse Width Setting</b></p> <p>Ext: Two channels are set automatically between 10 and 990 <math>\mu</math>s Int: Not relevant</p> <p><b>Light Volume</b></p> <p>Ext: Intensity can be adjusted to between 10% and 100% of the pulse width Int: 10 to 100 <math>\mu</math>s (1.42-ms period) light-emitting width</p> <p><b>Power Supply Switch</b></p>	<p><b>Trigger Controller Connector (D-sub 25)</b></p> <p>Connection with External Control Units (Image Processor, PC, PLC, Etc.)</p> <p><b>Out put Connectors</b></p> <p>Connect 12/24V lights.</p>
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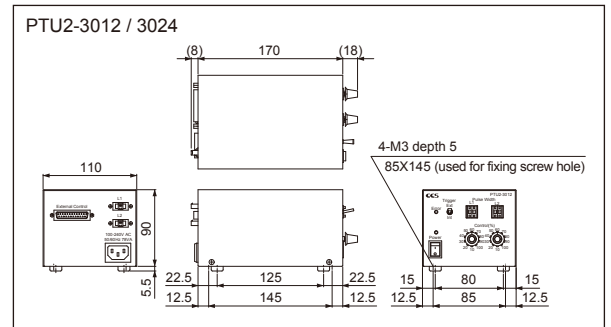


\*The PTU2 Series produces strobing with overdrive. Overdrive boosts the voltage and current supplied to the Light to produce a higher output.

#### Specifications

Model	PTU2-3012	PTU2-3024
Direct Number	2000540	2000541
Output	2 circuits max, 27W	
Illumination Mode	(Strobe) Internal Trigger/External Trigger	
Trigger Input	Photocoupler Input (5 mA), with Insulated Power Supply	
Power Supply	100 to 240V AC 78VA	
Output Connector	SMP-02V X 2 (12V) / SMP-03V X 2 (24V)	
Trigger Input Connector	D-sub 25pin, male	
Strobe illumination Width	10 $\mu$ s to 990 $\mu$ s, set with 2-digit thumb-rotary switch	
Trigger Cycle	Int: 1msec, Ext: 1msec or more at 10% duty or less	
Option	External Trigger Cable: EXCB2-25-3 (3m) Refer to page 90.	

#### Dimension Diagrams (Unit: mm)



## Strobe Unit

### STU-3000

Achievement of strobe function in combination with CCS's digital control unit



By connecting the STU-3000 to CCS's PD2 Series digital control units, a constant lighting unit can be used as a strobe light. The one-shot circuit in the adaptor is activated by external trigger signals, the power ON/OFF supply is controlled at a defined pulse width, and an LED light is flashed as a strobe light. The strobe flash time can be set between 0.01 and 99.99msec. by means of the four-digit digital switch.

#### Specifications

Direct Number	2000366
Input	SMP-04V-BC (12V DC or 24V DC) M3 terminal block 3P (Trig+ Trig- FG)
Output	SMP-02V-BC (12V DC) SMP-03V-BC (24V DC) M3 jack (ON/OFF control signal)
Trigger	Photo-coupler input 5V to 24V DC Current: 5mA max. Pulse width: 20 $\mu$ s min. Rising / falling edge: 10 $\mu$ s max.
ON/OFF control signal	Connection to lighting ON/OFF jack of the PD/PD2 control unit Inside: Signal Outside: GND
ON pulse width	Set with the 4-digit thumbwheel switch (0.01 to 99.99ms).
Light delay	10 $\mu$ s max.
Accessories	ON/OFF control cable Power cable (12V) / Power cable (24V)
Weight	400g max.
Connectable control unit	PD2-1012/1024/3012/3024/5012/5024/3012-2/3024-2/ Other optional control unit

\*For uses requiring large light volumes in short time periods, use the PTU2 Series.

#### Dimension Diagrams (Unit: mm)

