

# Control Units for CCS LED Lights

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

## Analog Control Units

### PSCC-60048

#### High-capacity 582-W Constant-current Control Unit

PSCC-60048 Analog Control Units provide a high capacity of 582 W at a constant current. You can change the current to control the light intensity. Light is output with 1 channel and 1 connector. This Analog Control Unit provides 256 different levels of light intensity control. Perform external control through parallel, EIA-485, or Ethernet communications. The built-in error detection can also tell when a cooling fan is not spinning fast enough or is stopped, when an LED circuit is disconnected, or when a bulb is burned out due to a short.

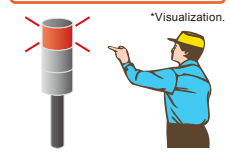
\*The error detection conditions depend on the connected Lights.



- ! Cooling fans stopped.
- ! LEDs fail to light.



Problems are quickly avoided.



\*Visualization.  
Warning lamp turns ON. Error discovered.  
\*This visualization assumes that an error signal is sent to a warning lamp that is connected to turn ON the light.

## Increased Safety with Interlock

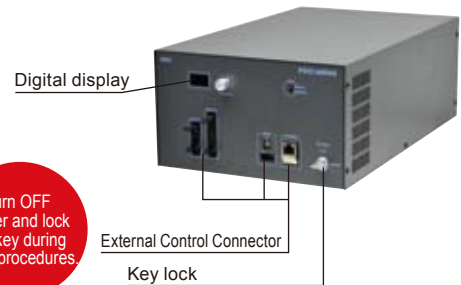
Maintain safety during work with the power OFF and key switches. You can prevent the Lights from being turned ON by anyone but the key manager, or from being turned ON accidentally when setting up Lights or performing maintenance.

\*Locking is also possible when using parallel communications for external control.

\*Refer to *Analog Control Unit for LED Light Unit PSCC-60048 Instruction Guide* for specific application information.



Turn OFF power and lock the key during work procedures.



## Ethernet Communications

You can build a Light control system based on Ethernet communications. Also you can control the Lights with parallel or EIA-485 communications.

\*Refer to the Connecting EIA-485 Communication Cables on the CCS website for information on multi-drop wiring connections. You can download this information from the product website page.



### Ethernet Communications Specifications

Communicators protocol	TCP/IP, UDP/IP
Standard	IEEE 802.3, 802.3u, 802.3x
Baud rate	10 Mbps or 100 Mbps (Automatically detected.)
Transmission medium	10Base-T, 100Base-TX



### Parallel Communications Connection Specifications

Rated input voltage	24V DC
Maximum input voltage	26.4V DC
ON voltage/ON current	20V DC min./6 mA min.
OFF voltage/OFF current	3V DC max./1 mA max.
Response time	Approx. 100 ms
Input impedance	6.8 kΩ (per terminal)



### EIA-485 Communications Specifications

Protocol	EIA-485 compliant
Baud rate	19,200 bps
Data bit length	8 bits
Parity bit	None
Stop bits	1 bit

\*Refer to *Analog Control Unit for LED Light Unit PSCC-60048 Instruction Guide* for specific application information.

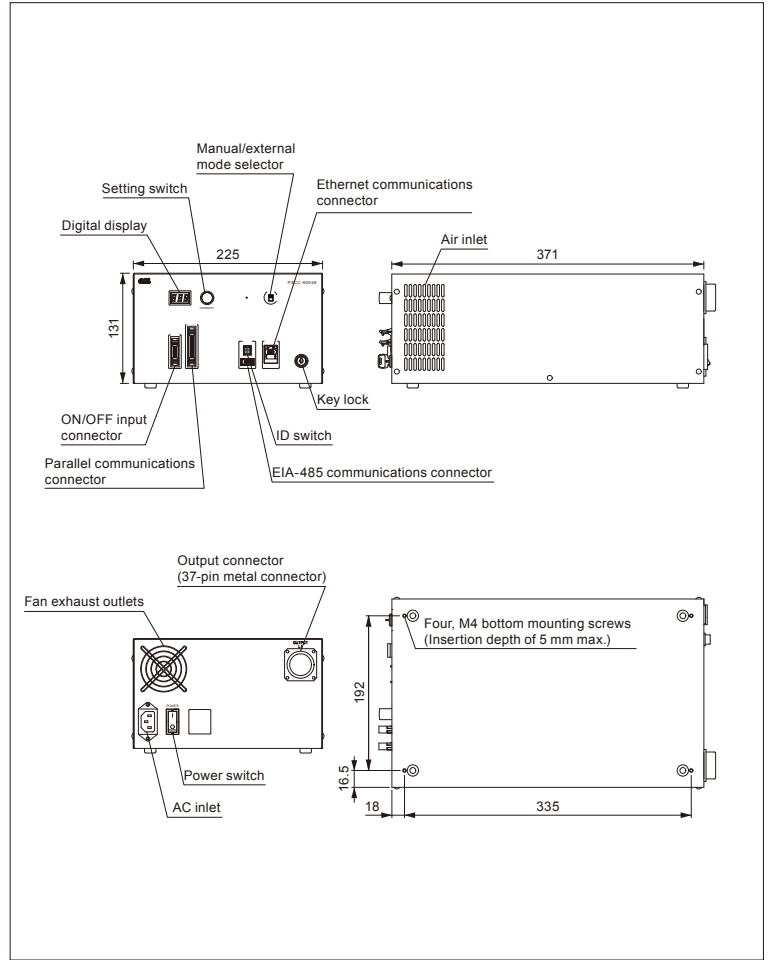
# Control Unit



## Specifications

Model	PSCC-60048	
Direct number	2000846	
Lighting method	Constant lighting	
Drive method	Constant-current system	
Light control method	Variable-current control	
Number of channels	1 channel	
Applicable Lights (rated)	43V DC max., 582 W max. (including 30 W max. for fans)	
Light intensity control	Manual and external intensity control	Front manual/external switch (MODE)
Manual control	Set any of 256 levels via the setting switch. Press and hold the switch for 2 seconds to lock the intensity value.	
	External	Parallel communications: 8-bit intensity value setting (B0 to B7) and write signal (WR) EIA-485 communications: Command input via EIA-485 communications Ethernet communications: Command input through TCP/IP UDP/IP communications External control mode can be selected by pushing the setting switch while turning ON the power to the Control Unit.
Lighting control	Parallel bit input	OFF signal (ON/OFF)
	EIA-485 communications	Command input through EIA-485 communications
	Ethernet communications	Command input through TCP/IP UDP/IP communications
EIA-485 communications settings	ID	Set via the front ID switch (00 to 03). Maximum of 4 connected Units.
	Terminating resistance	Set via the front ID switch. (Terminating resistance is connected only when ID is set to 00.)
Error detection display	LED burnout detection, open circuit	Front digital "E01" display
	LED burnout detection, short circuit	Front digital "E02" display
	Light fan slowdown or stoppage	Front digital "F01" to "F15" display
	Communications error detection	Front digital "E04" display
	Connector unconnected detection	Front digital "E04" display
Error detection output	Internal Power Supply error was detected.	Front digital "E05" display
	Parallel communications	Output to pins 19 and 20. Photocoupler isolation. Open-collector output. Closed for alarm (Load current: 10 mA max.)
	EIA-485 communications	Confirmed with status command via EIA-485 communications. (Command sent at error occurrence.)
	Ethernet communications	Confirmed with status command via TCP/IP or UDP/IP communications. (Command sent at error occurrence.)
Input power supply	100 to 240 VAC (+10%, -15%), 50/60 Hz	
Power consumption (typ.)	750 VA	
Operating temperature and humidity	Temperature: 0 to 40°C, Humidity: 20% to 85%RH (with no condensation)	
Storage temperature and humidity	Temperature: -20 to 60°C, Humidity: 20% to 85%RH (with no condensation)	
Cooling method	Forced air cooling	
CE marking	Safety standard: Conforms to EN 61010-1, EMC standard: Conforms to EN 61326-1, Class A.	
Environmental regulation	RoHS compliant	
Material, coating, surface processing	Steel plate, thickness of cover: 1.0, thickness of chassis: 2.0, N3 leather tone finish	
Weight	7,000 g max.	
Accessories	2 meter long 3-prong power cord with ground terminal (1), keys (2)	

## Dimension Diagrams (Unit: mm)



## Options

### External Control Cable

These Cables are used for parallel or EIA-485 communications. Select the right cable for the required control method. (mm)

<p><b>Parallel Communications Cable</b> Direct number: 3000683 Model name: EXCB2-M20-3</p>	<p><b>ON/OFF Input Cable</b> Direct number: 3000682 Model name: EXCB2-M10-3</p>	<p><b>EIA-485 Communications Cable</b> Direct number: 3000685 Model name: EXCB2-E3-3</p>	
<p><b>EIA-485 Communications Relay Cable</b> Direct number: 3000721 Model: EXCB2-E3-E3-0.2</p>		<p><b>Parallel Communications and ON/OFF Input Cable</b> Direct number: 3000684 Model: EXCB2-M10M20-3</p>	
<p><b>Relay Connector</b> Direct number: 3000720 Model: ECNR-E3CN4</p> <p>*Refer to the EIA-485 Serial Communications Cable Connection Guide on the CCS website for information on multi-drop wiring connections. You can download this information from the product website page.</p>			