Vision Light Tech
creating optical solutions

PPCC16 Series LED Lighting Controllers
Multi-channel LED controllers with Ethernet option

The PPCC16 combines the features of the Gardasoft PP1600 series LED Lighting Controllers with the addition of 8 digital outputs for triggering cameras or general use.

With new generation LEDs the PPCC16 series can provide high intensity pulses which exceed the brightness of xenon strobes.

- 16 channel LED lighting controllers
- Pulsing up to 20A per channel
- 8 trigger inputs
- 8 digital trigger outputs
- RS232 or Ethernet connection
- Designed for new generation LEDs
- Compatible with most machine vision LED lighting

Application benefits

- Very fast bright strobing for freezing motion
- Very repeatable lighting intensity
- Driving the LEDs with a constant current, rather than voltage
- Ability to pulse the output at a higher current to achieve a higher output intensity
- Pulsing turns the LEDs off when not in use, increasing their MTBF rates, reducing downtime
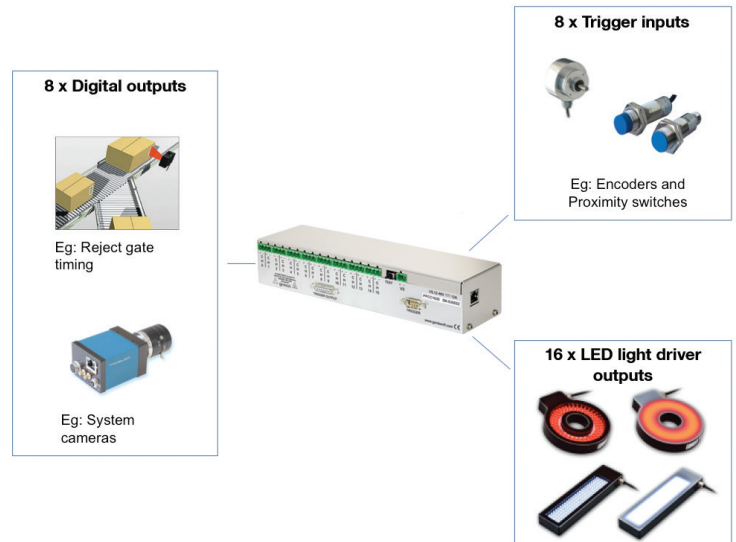
Miniature Web Server

The PPCC1620 Ethernet versions LED lighting controllers have all of the features of Gardasoft's LED lighting controllers with the addition of an Ethernet connection.

The PPCC1620 acts as a miniature web server and can be controlled by images processing software on a remote PC.

All versions can be remotely controlled and dynamically configured using commands sent from an image processing application on a remote PC.

RTCC16 connectivity

8 x Digital outputs

Eg: Reject gate timing

Eg: System cameras

8 x Trigger inputs

Eg: Encoders and Proximity switches

16 x LED light driver outputs

Options for configuration

The PPCC16 Series has models with options for configuration via RS232 or Ethernet. With the Ethernet options, a web browser can be used to access the PP controllers' internal Web pages allowing status to be viewed and parameters to be changed.

The PPCC16 Series also has options to be configured using simple string commands sent from an application program using RS232, TCP/IP or UDP.

The Gardasoft Vision website 'www.gardasoft.com' has a free download of a demonstration program (with fully commented source) showing how the PP1600 can be controlled from a PC using C++.

Flexible operation

Three modes of operation are provided separately for each channel:

Continuous:	**Output is a continuous level**
Pulsed:	**Output is pulsed once per trigger**
Switched:	**Output is switched by a digital input**

SPECIFICATIONS

	PPCC1620	PPCC1621	PPCC1660	PPCC1661
User interface	Ethernet		RS232	
Output channel	16 independent constant current outputs			
Output current	20A pulsed 2A continuous Steps of 6mA	2A pulsed 2A continuous Steps of 1mA	20A pulsed 2A continuous Steps of 6mA	2A pulsed 2A continuous Steps of 1mA
Trigger inputs	8 opto-isolated digital inputs. Require 3V to 24V			
Lighting pulse width timing	1µs to 1ms in steps of 1µs, variation <1µs			
	1ms to 1 second in steps of 100µs, variation <5µs			
Lighting delay timing	4µs to 1ms in steps of 1µs, variation <5µs			
	1ms to 1 second in steps of 100µs, variation <10µs			
Digital output pulse timing	10µs to 300ms in steps of 5µs, variation <10µs			
Trigger outputs	8 TTL level (0.4V to 3.4V typical at ±10mA)			
Output voltage	1.5V to [supply voltage] – 1V			
Supply voltage	12V to 48V regulated DC			
Dimensions	280mm by 54mm by 78mm			
Weight	700g			
Mounting	Panel mount or optional DIN rail kit (Gardasoft PP705)			