The PP860 Series
High Current LED Lighting Controllers

LEDS CAN NOW REPLACE XENON STROBES

Brightest LED Pulsing Ever

Pulsing up to 160A

Very Accurate Timing

Designed for New Generation LEDs

The PP860 series LED lighting controller range provides very fast accurate large current pulses for high end applications. With new generation LED's the PP860C series can provide high intensity pulses which exceed the brightness of xenon strobes.

Three modes of operation are provided independently for each channel:

Continuous: Output is a continuous current, with configurable intensity

Pulsed: Output is pulsed once per trigger, with configurable delay, pulse width and intensity

Switched: Output is a continuous current, turned on and off by a digital input

The PP860 series is configured using the RS232 connection to a PC. The configuration is saved in non-volatile memory so that the PP860 series will resume operation after a power cycle.

PP860 Specification	
Output channels	8 independent constant current output channels
Output current	PP860: Controllable in steps of approx 100mA. Up to 20A pulsed or 2A continuous PP860C: Controllable in steps of approx 5mA. Up to 20A pulsed or 2A continuous PP861: Controllable in steps of approx 10mA. Up to 2A pulsed or 2A continuous PP861C: Controllable in steps of approx 0.5mA. Up to 2A pulsed or 2A continuous PP862: Controllable in steps of approx 25mA. Up to 5A pulsed or 2A continuous PP862C: Controllable in steps of approx 1.5mA. Up to 5A pulsed or 2A continuous
Trigger inputs	8 opto-isolated digital inputs
Pulse width timing	From 1 microseconds to 300 milliseconds in steps of 1 microsecond. Timing repeatability 100 nanoseconds
Delay from trigger to pulse	From 4 microseconds to 300 milliseconds in steps of 1 microsecond. Timing repeatability 2 microsecond.
Supply voltage	Unregulated or regulated 12V to 48V
Control	RS232 commands at 115 Kbaud
Dimensions	215mm long by 54mm wide by 82mm high
Weight	600g
Mounting	Panel mounting. Six M4 tapped holes

Gardasoft Vision Ltd offers a wide range of LED controllers suitable for a wide range of lighting solutions.

The PP range of controllers offers the following benefits, improving LED lighting applications.

- **Very fast bright strobing for freezing motion**

- **Very repeatable lighting intensity**

- **Driving the LED's 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 LED's off when not in use, increasing their MTBF rates, reducing downtime**

The PP range of controllers offers a proven stable solution for today's lighting needs; meeting the needs of accurate pulse width control and high speeds to enable overdriving of the LEDs.

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GARDASOFT VISION LIGHTING CONTROLLER RANGE

Product	Number of Channels	Output Current per Channel	Control modes	Interface	Features	Applications
PP500	2	10A max, 2.5mA steps	Continuous, Pulse, switched	Pushbuttons and display	High current output, full featured and easy to set up. Includes patented light sensing and fault detection	Full featured product for general machine vision applications.
PP520	2	10A max, 2.5mA steps	Continuous, Pulse, switched	Pushbuttons and display or Ethernet	As PP500 with Ethernet communications for remote set up	Ethernet interface. Can be used with GigE Vision systems.
PP500F PP520F	2	10A max, 2.5mA steps	Continuous, Fast pulsing, switched	Pushbuttons and display or Ethernet	As PP500/PP520 but with very accurate fast pulsing	Fast strobe applications and applications where pulse length is critical
PP600 Range	2	10A max, 0.25mA steps	Continuous, Pulse, Selected	Pushbuttons and display or RS232	Full featured and easy to set up. RS232, Japanese connector and fast pulsing versions	Standard, very popular product. Use PP500 range for new applications.
PP820 Range	8	20A max, 1.5mA to 100mA steps	Continuous, Pulse	Ethernet	Large number of channels. Fast, accurate high current pulses. Ideally suited to new high brightness LEDs	High brightness output strobe applications

OTHER MACHINE VISION PRODUCTS

CC320	Trigger Timing Controller	Integrates encoders, sensors, reject gates, cameras, lighting triggers.
MD220	Motorised Lens Controller	Controls motorised lenses – zoom, focus, iris, auto-iris. Two trigger inputs and two outputs.

More product information, manuals and application notes can be found at our website www.gardasoft.com

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