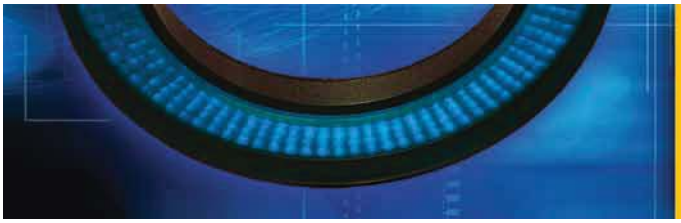

LATAB
Industrial LED Lighting

Control units

General information

Reliable controllers are a precondition for efficient LED lighting. That's why LATAB has developed an extensive range of its own controllers. These not only maximize the life time of the sensitive LEDs, but automatically adapt to the connected light head.

The product features of the LATAB controllers are numerous: designs suitable for industrial use, adjustable light intensity, up to 4 channels, PC operation via Ethernet or other interfaces, as well as stand-alone solutions, either for continuous mode operation or strobe mode, with adjustable pulse durations from 50 µs to 1.5 ms.

The controllers are based on constant current generators with a "plug and play" feature that automatically adapts to the connected LED light for exact light intensity.

The major differentiating factor of LATAB controllers is the illumination technique:

Continuous mode

The adjustable parameter for continuous mode controllers is light intensity.

Continuous mode controllers are equipped with the "long flash" feature: The long flash function is a kind of trigger-controlled light. Light starts with trigger pulse and lasts as long as the trigger pulse is on.

In the long flash mode double intensity is available, that means that light intensity is twice the standard intensity. In double intensity (DI) mode ON-time is limited to five seconds, followed automatically by five seconds OFF-time. Shorter ON-time double intensity pulses are not limited and can be repeated at users demand.

Rise time is about 1.5 msec and fall time about 10 to 15 msec.

Strobe mode

The adjustable parameters for strobe controllers are light intensity and strobe pulse length.

For PC-controlled units also a trigger pulse delay is available.

Strobe controllers provide 5 times more intensity compared to continuous devices.

In strobe mode the pulse length is tuneable by internal set time from 50 to 1500 µsec.

Rise and fall time is a few µsec.

A second differentiating factor of LATAB controllers is the interface:

Ethernet interface

These controllers communicate by Ethernet protocol. In principle this allows an unlimited number of units to be connected to the same computer. When using the test program the number is limited to 8 controllers.

The trigger signal is connected to the controller by a separate connector.

RS-232 interface

The RS-232 interface is converted (within the COM-port connector itself) to RS-485, enabling up to 16 units to be connected to the same COM-port in a so-called multi drop system. These units are delivered with a test/demo PC-software which can also be used in real applications.

Stand alone operation

In the stand alone mode the controller operates without an external computer. Light is adjusted by either an internal or an external potentiometer. Intensity can also be modulated by the voltage from zero (0 V) to full brightness (10 V).

Test program

The PC-control unit is delivered with a test program for testing purposes and lab applications.

The protocol has a simple form and is therefore easily programmable by the user.

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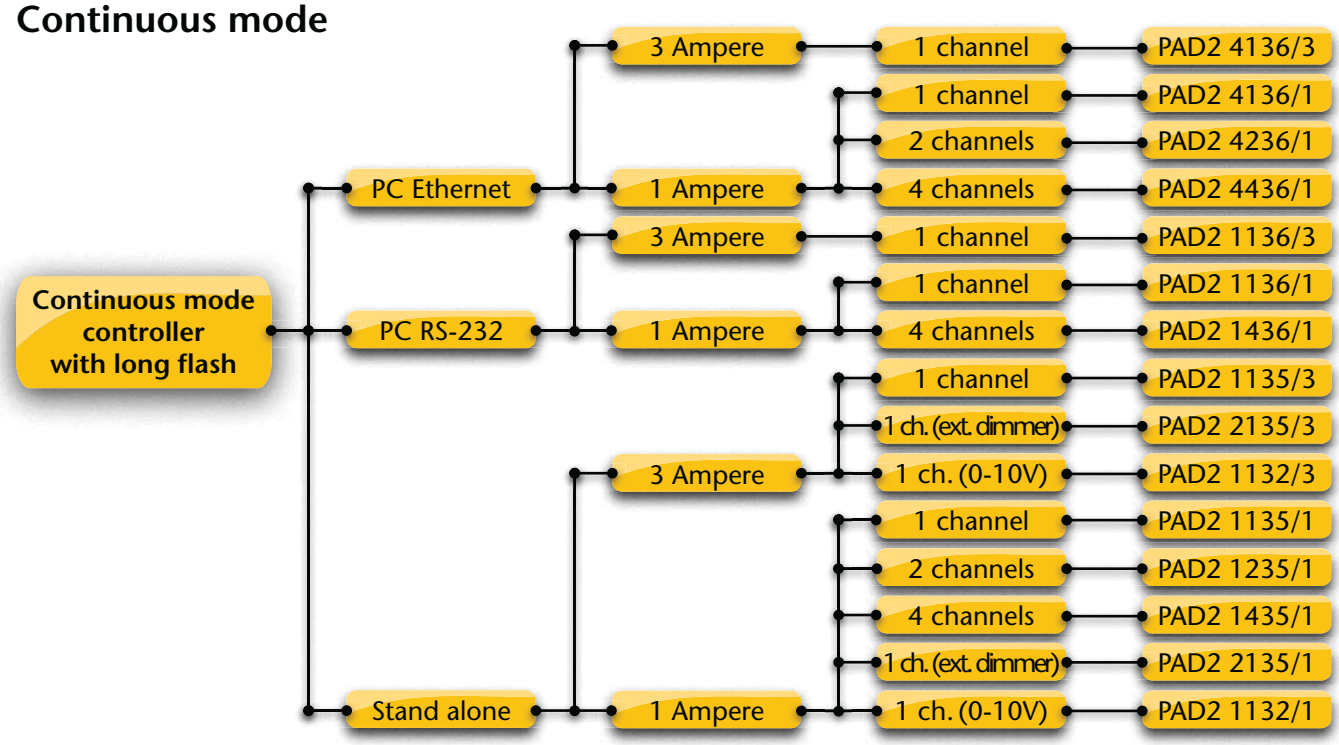
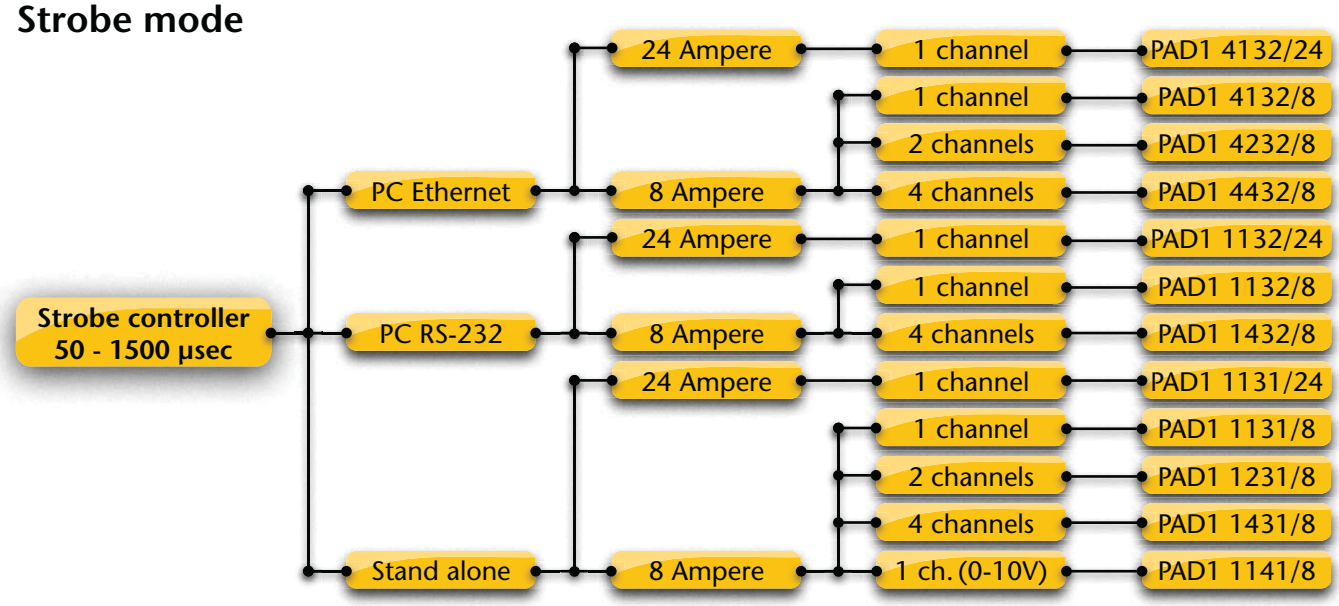
LATAB
Industrial LED Lighting

Controller selection

Continuous mode



Strobe mode



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