

PROGRAMMABLE ILLUMINATION CONTROLLER

ABSTRACT

5 The illumination controller comprises a card controller, a plurality of
output power channels and a plurality of input trigger channels. An output
power channel comprises in series a Digital Controlled Potentiometer
(DCP), a switch, and a Field Effect transistor (FET). An input trigger channel
comprises in series an AC optocoupler and a comparator. A wide variety of
10 illumination devices may be connected to the plurality of output power
channels of the illumination controller. These illumination devices are Direct
Current (DC) devices. It should be noted that power requirements of the
illumination devices are supplied directly from a computer via a computer
bus and the card controller, and separate power supply modules are
15 generally not required. If a Hi-Power illumination device is used, i.e. the
power consumption required is higher than can be supplied by a single
output power channel, multiple output power channels can be combined to
provide the necessary power to the Hi-Power illumination device.

20 Fig. 1 accompanies the abstract.