Thomson Automation

High Power
DC Light Dimmer

Part nr. 1044rev2.0   firmware: rev2.0

Pot CCW
Analog In
5 VDC
Down
Up
Full Voltage
Supply -
Supply +
Lamp -
Lamp +

P1
P2
+5
DN
UP
FV
IN-
IN+
OUT-
OUT+

User's Manual

Controls

Controlling lamp intensity with the pushbuttons
Brighter:
        Push and hold the "Up" pushbutton. Lamp intensity increases.
Dimmer:
        Push and hold the "Down" pushbutton. Lamp intensity decreases.

Quick-touch control
To recall the stored intensity setting:
        Press the "Up" pushbutton briefly. The lamp intensity will go to the stored setting.
To turn the lamp off:
        Press the "Down" pushbutton briefly. The lamp will turn off.

To store an intensity setting for "Quick-touch" recall:
   1. Set the lamp at the desired intensity using the pushbuttons.
   2. Push and hold both pushbuttons till the lamp goes out.
   3. Release the pushbuttons.
   4. The new intensity setting is now stored.

Analog input
        In the analog input mode the lamp intensity is a function of the input voltage from 0-5 VDC. A pot or process analog output can be used as a signal source. The analog input is not isolated; the voltage reference is supply -. (See the section on **Settings** for setting the module up for analog input mode.)

Installation

Voltage selection (12 or 24 volt)

Supply voltage is automatically sensed and the module is automatically set for 12 or 24 VDC operation. During 24V operation, the lamp voltage is half the supply voltage. To use 24V lamps install a jumper between terminals '+5' and FV on the terminal strip. This overrides the automatic voltage sensing and provides full output voltage.

Connections (See Figure 1)

Connect terminals IN+ and IN- to a 12V, 25A or 24V, 12.5A power source. Correct circuit protection is 30A fast-acting @ 12V or 15A @ 24V. Connect the lamps or other resistive load to terminals OUT+ and OUT-.

Control inputs are 5 VDC. Control power is available at the +5 terminal. Use only dry-circuit or self-cleaning contacts.

Settings

To enable the analog input:
1. Push and hold both pushbuttons while powering-up the module.
2. Release the pushbuttons and turn off the source power for 5 seconds.
3. The setting will be stored in permanent memory.

To enable the pushbutton inputs:
1. Push and hold the "up" pushbutton while powering-up the module.
2. Release the pushbutton and turn off the source power for 5 seconds.
3. The setting will be stored in permanent memory.

Specifications

Name	DC Light Dimmer
Part no.	1044
Hardware rev	1.8
Firmware rev	1.9
Supply Voltage	9 to 28 VDC
Lamp Voltage	Nominal 12 VDC (Dependent on the supply voltage)
Maximum Current	20 A (Without fan cooling)
Maximum Fuse Size	50 A Fast-acting
Lamp channels	1
Output	Restive Loads Only
Digital inputs	5V 16ma sourcing
Analog input	0-5 VDC
Control Power	5 VDC for 10K pot and digital inputs
Switching Frequency	130 Hz
Pot resistance for analog input	10K ohms

Mounting Dimensions (mm)