

TP1110/LCM Lighting Control Module
Product Description and Specification

Overview

This product is designed to provide an interface between a BMS 0 to 10V output control signal and multiple controllable lighting ballast units.

The 0 to 10V outputs from the majority of BMS systems have a limited current capability ranging from 1mA to 10mA and normally this is a current source not a current sink. The inputs to most controllable lighting ballast units require 0 to 10V input with current sink capability of 0.5mA to 1mA down to less than 1V. If multiple ballast units are installed running from a single 0 to 10V output signal then the current drain on the signal line can be quite significant and beyond the capability of any BMS system/controller.

The TITAN TP1110/LCM module is a 8-channel output module and provides the current interface required to drive multiple ballast units with ease. With the 24V supply connected the input requires a source current from the BMS signal of less than 0.1mA and the module will provide a 0 to 10V output sink current of up to 100mA per channel.

If only a small number of ballasts are used on a single channel or if a higher a high current sink current of 10mA or greater is available from the BMS, then the module could be used without an external 24V power supply. If only low sink/source currents are available from the BMS the TP1110/LCM module must be provided with a 24V AC/DC supply and this supply must be rated to be greater than the maximum combined load of all the outputs.

Inputs

24V AC/DC supply rated to buffer the inputs to provide the total output current required.
(Total number of ballast units connected to the interface x sink current per ballast)

0V input terminal, this provides the common point for the 24V supply and the 0V common from the BMS system.

8 x 0-10V 0.1mA input source current per channel L1 to L8 (a separate 24V supply required)

8 x 0-10V 10mA input sink current per channel to provide 100mA of output H1 to H8 (when this is used the 24V supply is not required)

Outputs

8 x 0 to 10V at up to 0 to 100mA current sink per channel

8 x 0V common per channel

Switches

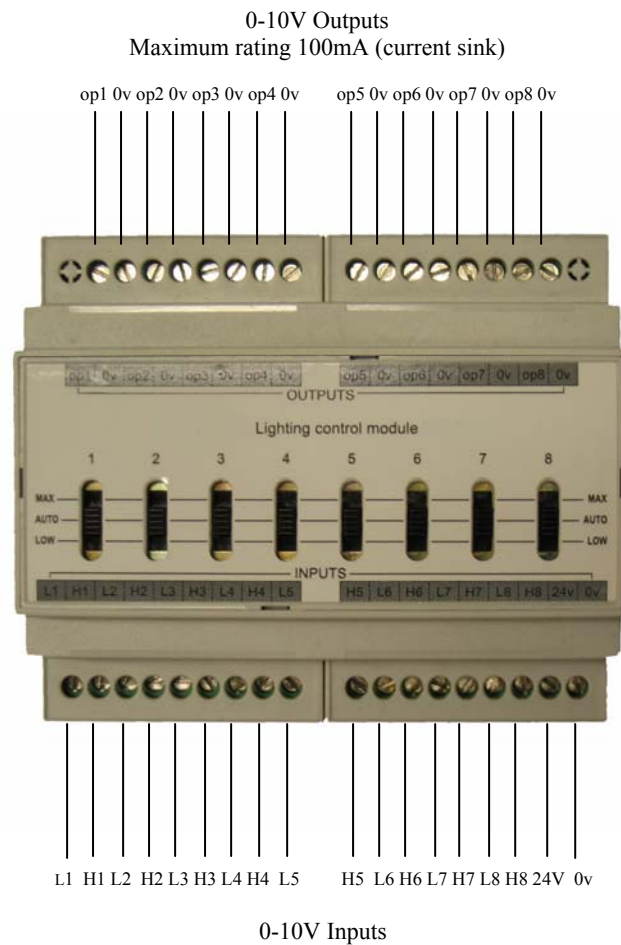
A three way switch is provided for each channel marked High / Auto / Low.

In the **High** position no current sink is provided and the ballast will run at full power

In the **Low** position maximum current sink is provided and the ballast will run at minimum power

In the **Auto** position the output voltage will match the input signal voltage and the power output value will be dependent on the value of the control signal input voltage.

CONNECTIONS



L1 to L8 – Use for low current source signals and can only operate with a 24v Supply.

H1 to H8 – Use when greater than 10mA sink current is available with the common 0V when using these input signals **No** 24v Supply is required

SPECIFICATION

Inputs	8 x 0-10V (source or sink current)
Outputs	8 x 0-10V current sink 100mA max
Supply	24v AC/DC \pm 15%
Power Consumption	8 x 100mA max
Setting Switches	Min /Auto /Low
Terminal	Max cable size 2mm
Operating Temperature	-10 to +40°C
Housing	DIN Enclosure
Mounting	DIN Rail (top hat)
Dimensions	92mm high 106mm wide 58mm deep
Order Code	TP1110/LCM