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# Manual & Analog-Input Controlled Universal LED Driver with Current Display

(Part Numbers: SLB-1200-1)

#### FEATURES

- Dual control modes: manual or analog-input.
- Universal-suitable for any LED
- Tiered maximum output current settings (i.e. 350, 750 and 1,200mA) to prevent overdrive
- Capable of driving variable loads

#### **APPLICATIONS**

- Microscopy
- Lighting
- Machine Vision
- Displays
- Semiconductor equipment
- Test instruments
- Medical Instruments

#### **PRODUCT DESCRIPTION**

Mightex's SLB-1200-1 universal LED driver is designed for driving a broad range of LED light sources. The LED driver has two operational modes:

- 1) Manual Knob Control Mode: the output current can be adjusted manually;
- Analog Input Control Mode: the output current can be controlled via a 0 ~ 5V analog input signal.

The control mode is set via a DIP switch, and the factory default setting is "Manual Knob Control Mode". The driver also has a Maximum Current Setting DIP Switch, which allows user to set the maximum current to 350mA, 750mA or 1,200mA, whichever applicable. The factory default setting is 350mA. When the Maximum Current Setting DIP Switch is set at a smaller value (e.g. 350mA), the LED driver has a finer resolution for the output current.



When the driver is set to "Analog Input Control Mode", the output current is proportional to the voltage of the analog input signal.

### ELECTRICAL SPECIFICATION

| Parameters  | SLB-1200-1            | Unit |
|---|-----------------------|------|
| Number of Channels                                      | 1                     |      |
| Power Supply Input Voltage (V <sub>dc</sub> )           | 9 ~ 24                | V    |
| Maximum Output Voltage (V <sub>max</sub> )              | V <sub>dc</sub> - 3.0 | V    |
| Maximum Per Channel Output Current (I <sub>max</sub> )* | 1,200                 | mA   |
| Maximum Per Channel Output Power (P <sub>max</sub> )**  | 10                    | W    |

\* The maximum output current can be set to 1,200, 750 or 350 mA using the DIP switch.

\*\* If the channel output voltage is  $V_d$  and the output current is  $I_d$ , they must <u>simultaneously</u> satisfy the following conditions: (1)  $V_d \le V_{max}$ ; (2)  $I_d \le I_{max}$ ; and (3)  $V_d * I_d \le P_{max}$ .

## **CHANNEL I/O PIN DEFINITION**

Each channel has four pins, defined as follows:

| Pin Label   | LED+      | LED-        | Analog Signal       | Analog Input GND       |
|-------------|-----------|-------------|---------------------|------------------------|
| Description | LED Anode | LED Cathode | 0 ~ 5V Analog Input | Analog Input<br>Ground |

### **MECHANICAL SPECIFICATIONS**

Dimension 150mm (L) x 106mm (W) x 55mm (H)

Weight 250g

Mightex Systems, 2343 Brimley Road, Suite 868, Toronto, Ontario M1S 3L6, Canada Tel: 1-416-840-4991 or 1-925-218-1885, Fax: 1-416-840-6541, Email: sales@mightex.com www.mightex.com or www.mightexsystems.com

