# Manual \& Analog-Input Controlled Universal LED Driver with Current Display (Part Numbers: SLB-1 200-1) 

## FEATURES

- Dual control modes: manual
or analog-input.
- Universal-suitable for any LED
- Tiered maximum output cur-
rent settings (i.e. 350, 750
and $1,200 \mathrm{~mA}$ ) 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;
2) Analog Input Control Mode: the output current can be controlled via a $0 \sim 5 \mathrm{~V}$ 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 $350 \mathrm{~mA}, 750 \mathrm{~mA}$ or $1,200 \mathrm{~mA}$, whichever applicable. The factory default setting is 350 mA . When the Maximum Current Setting DIP Switch is set at a smaller value (e.g. 350 mA ), 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 $\left(\mathrm{V}_{\mathrm{dc}}\right)$ | $9 \sim 24$ | V |
| Maximum Output Voltage $\left(\mathrm{V}_{\max }\right)$ | $\mathrm{V}_{\mathrm{dc}}-3.0$ | V |
| Maximum Per Channel Output Current $\left(\mathrm{I}_{\max }\right)^{*}$ | 1,200 | mA |
| Maximum Per Channel Output Power $\left(\mathrm{P}_{\max }\right)^{* *}$ | 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 simultaneously satisfy the following conditions: (1) $\mathrm{V}_{\mathrm{d}}<=\mathrm{V}_{\text {max }}$; (2) $\mathrm{I}_{\mathrm{d}}<=I_{\max }$; and (3) $\mathrm{V}_{\mathrm{d}}{ }^{*} \mathrm{I}_{\mathrm{d}}<=\mathrm{P}_{\text {max }}$.


## 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 | $0 \sim 5 \mathrm{~V}$ Analog Input | Analog Input <br> Ground |

## MECHANICAL SPECIFICATIONS

| Dimension | $150 \mathrm{~mm}(\mathrm{~L}) \times 106 \mathrm{~mm}(\mathrm{~W}) \times 55 \mathrm{~mm}(\mathrm{H})$ |
| :--- | :--- |
| Weight | 250 g |



