

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

Universal 12- and 16- Channel Computer-Controlled LED Drivers with 5mA Current Resolution

(Part Number: SLC-CA12-U, SLC-CA12-S, SLC-CA16-U, SLC-CA16-S)

FEATURES

- Computer controlled
- Dual control modes: DC and Strobe
- Universal - suitable for any LED
- User friendly application software with GUI
- Capable of driving variable loads
- Full-featured SDK
- Up to 1,000mA output current
- High precision with 5mA current resolution

APPLICATIONS

- Machine vision
- Displays
- Microscopy
- Semiconductor equipment
- Testing instruments
- Medical instruments
- Lighting

PRODUCT DESCRIPTION

Mightex's High-Precision 12- and 16- Channel Computer-Controlled Universal LED Drivers are designed to drive a broad range of LED light sources. Each unit comes with a powerful PC-based software with a user-friendly GUI, which enables users to drive LEDs without the need to write any code. In addition, a full-featured SDK is provided, in order for users to write their own software and to integrate Mightex's LED drivers into their own systems. Furthermore, the drivers have a built-in protection feature, allowing users to limit LED driving current and voltage.



Each channel can be individually configured to work under one of the following two modes:

Normal Mode (or DC Mode): The output current is a constant, which can be adjusted (using software) from 0 mA to 1,000 mA, through the USB interface; and

Strobe Mode: A Pulse-Width-Modulated (or PWM) periodic strobe pattern is output from the channel, which can be turned on by a software trigger. The strobe pattern may last indefinitely or for a preset number of cycles. The frequency of the PWM strobe can be up to 500Hz. In addition, each channel can be individually DISABLED and ENABLED. No voltage or current is output from a DISABLED channel.

ELECTRICAL SPECIFICATION

Parameters	SLC-CA12-U/-S	SLC-CA16-U/-S	Unit
Number of Channels	12	16	
Power Supply Input Voltage (V_{dc})	9 ~ 24		V
Maximum Output Voltage (V_{max})[1]	V_{dc} - 3V		V
Maximum Per Channel Output Current (I_{max})[2]	1,000		mA
Maximum Per Channel Output Power (P_{max})[3]	10		W
Output Current Resolution	5		mA
Output Current Accuracy	±10 mA or ±2.0% whichever is larger		mA
Output Current Repeatability	±5 mA or ±1.0% whichever is larger		mA
PWM Timing Resolution [3]	100		µs
PWM Timing Minimum Step Size [3]	1,000		µs
Interface	USB (-U) or RS232 (-S)		

1. Maximum Output Voltage is 3V less than the Power Supply Input Voltage. For instance, with a Power Supply Input Voltage of V_{dc}=24V, the Maximum Output Voltage V_{max} would be (V_{dc} - 3V) = 21V;
2. If the channel output voltage is V_d and the output current is I_d, they must simultaneously satisfy: (1) $V_d <= V_{max}$; (2) $I_d <= I_{max}$; and (3) $V_d * I_d <= P_{max}$; and
3. Each period of a PWM square wave comprises of ON time and OFF time, i.e. two (2) 'steps'. The minimum value for each step is 1,000µs, and the minimum increment is 100µs.
4. Proper heat dissipation should be provided to the LED controller in customer's system in order to prevent overheating, which may lead to self-shutdown by the LED controller for protection purpose. In addition, the total output current of all channels should not exceed the capacity of the power adapter.

CHANNEL I/O PIN DEFINITION

Each Channel has two pins, defined as following:

Label	LED+	LED-
Description	LED Anode	LED Cathode

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

Mightex
Simply Brighter

Universal 12- and 16- Channel Computer-Controlled LED Drivers with 5mA Current Resolution

(Part Number: SLC-CA12-U, SLC-CA12-S, SLC-CA16-U, SLC-CA16-S)

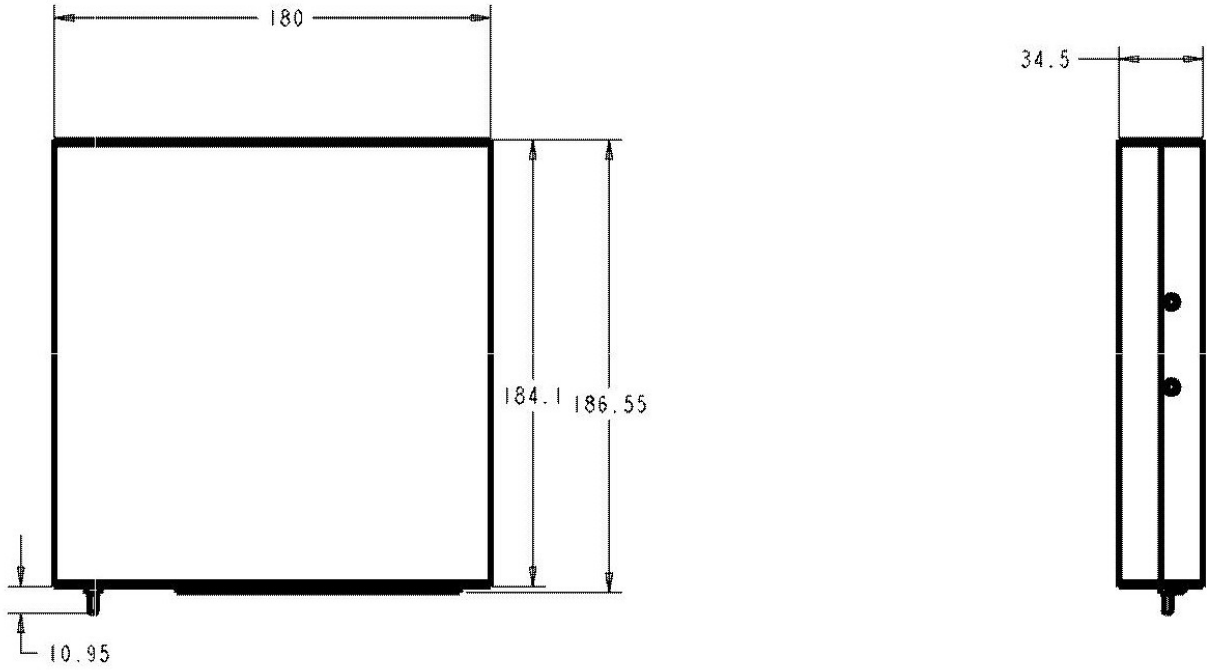
OPERATION CONDITION

Operating Temperature Range	0°C ~ 45°C
Storage Temperature Range	-25°C ~ 85°C
Relative Humidity, Non-condensing	5% ~ 95%

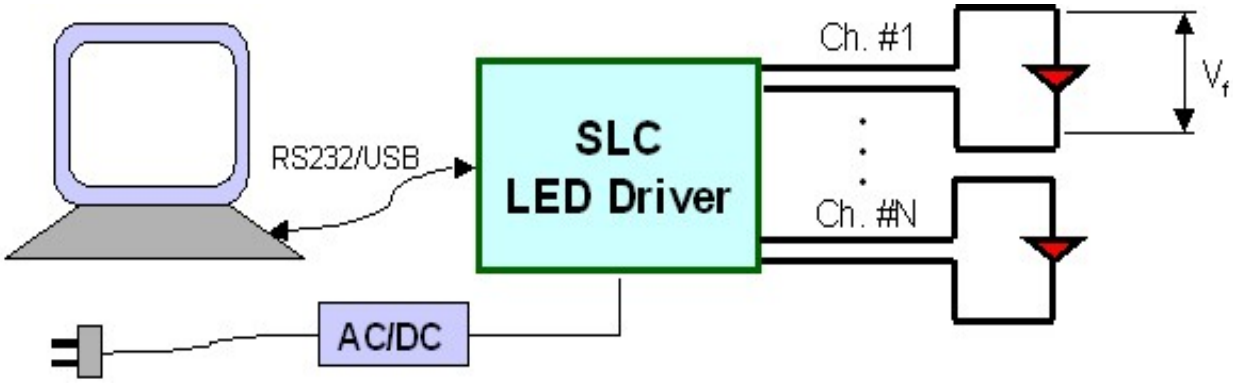
DIMENSION AND WEIGHT

Dimension	180.5mm(L) x 180mm (W) x 34.5mm (H)
Weight	400g

INSTALLATION DRAWING



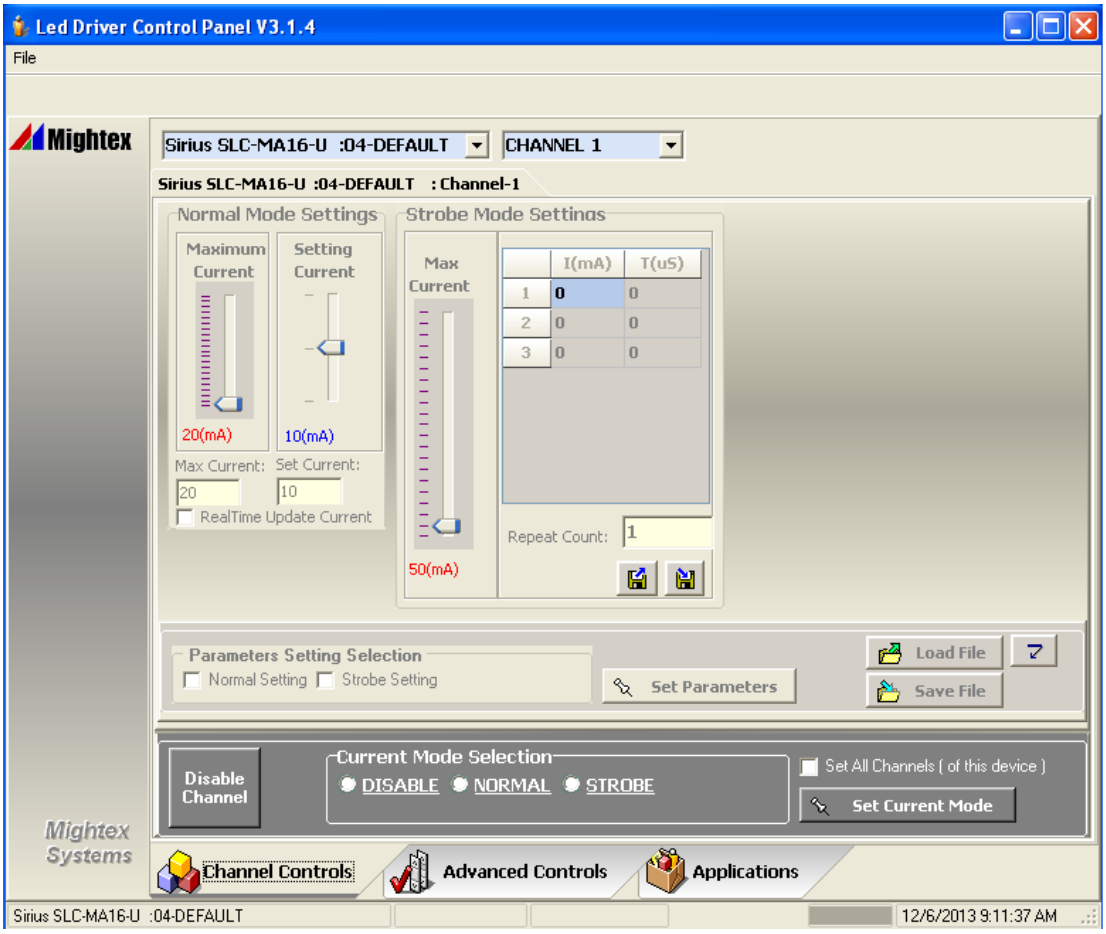
APPLICATION DIAGRAM



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

Mightex
Simply Brighter

EXAMPLE OF GRAPHICAL USER INTERFACE



With a world-class OEM design team, Mightex offers a broad range of customized solutions in order to meet individual customer's unique requirements. Please call 1-416-840 4991 or email sales@mightex.com for details.

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP