TMS LITE SDN. BHD. (Co. No. 671971V)
LED ILLUMINATION SOLUTION PARTNER

1 Channel 5V Analog Controller:
SDH-1000-D1

USER MANUAL

Contents

General Description....1
Front Panel....1
Specification of SDH-1000-D1....1
Specification of Adaptor....1
Configuration....2
Connections....2
Panel Label:....2
Current DIP Switch Settings....3
Power ON....3
Constant....4
Dimension Layout....4
Schematic SDH-1000-D1....4
Accessories....5
Power Cord Information....7

Revision Notes

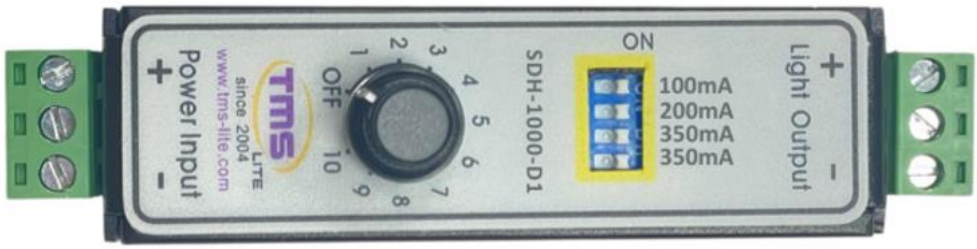
Rev	Date/Author	Comment
1.0	YVONNE	First Editor
1.1	KWNG	Update Information

General Description

Introduction

The SDH-1000-D1controller input power 12V / 24V with provides analog intensity control of 5V LED lighting for machine vision applications. The SDH-1000-D1 provides single channel output, with current output selection.

Front Panel



The front panel consists of VR KNOB (Control LED Intensity range from 1~10) and Dip Switch 4 Way (Current Selector)

Specification of SDH-1000-D1

Power	Controller Supply Voltage	12V/24V DC
	Lighting Output	5V DC
	Input Current	Min 1.2A
	Output current	Max 1.0A / channel
Function	No. of Channel	1
	Intensity Control	VR Adjustable
	Intensity Range	1 ~ 10 steps
	Current Output Selection	100mA – 1000mA

Specification of Adaptor

24VDC

Input Power Supply	Input Power rating	100V - 240V AC, 50/60 Hz, 2.0A
	Output Power rating	24VDC, 2.5A

12VDC

Input Power Supply	Input Power rating	100V - 240V AC, 50/60 Hz, 2.0A
	Output Power rating	12VDC, 3.33A

Remark:

- The Intensity of light is affected by the length of the lighting cable.

Configuration

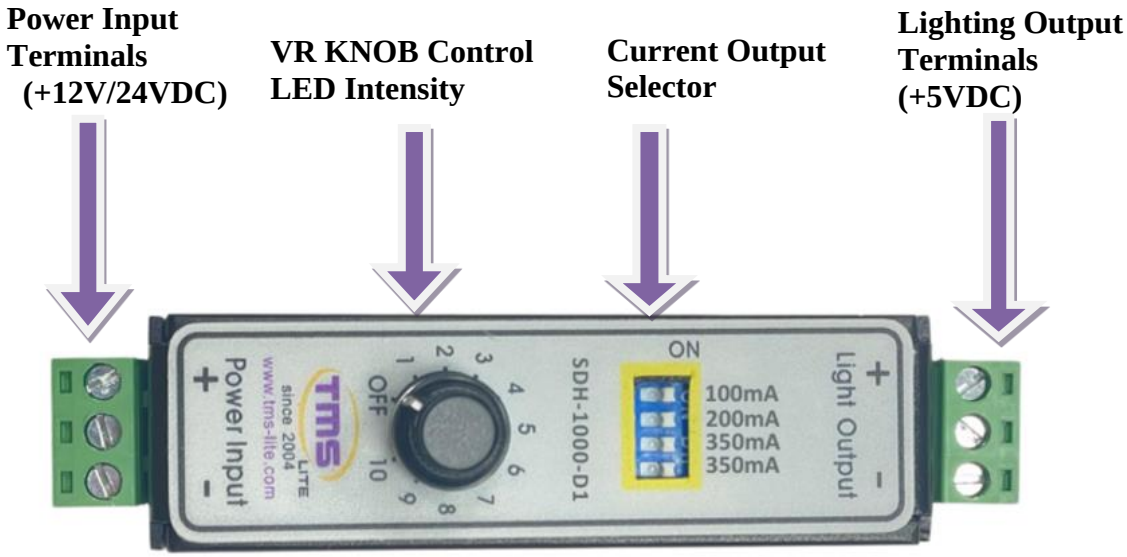
Connections

For SDH-1000-D1 to operate properly, the unit terminals must be connected correctly. The terminals voltage polarity must be followed accordingly to prevent damage to the unit.

- **Power Input Terminals**
  These terminals are to be connected to a 12V / 24V DC power supply with minimum 1200mA capability.

- **Light Output Terminals**
  These terminals are to be connected to **5V-Lightings** for a 12V / 24V DC power supply at Lightings Input Power Terminals.

Panel Label:



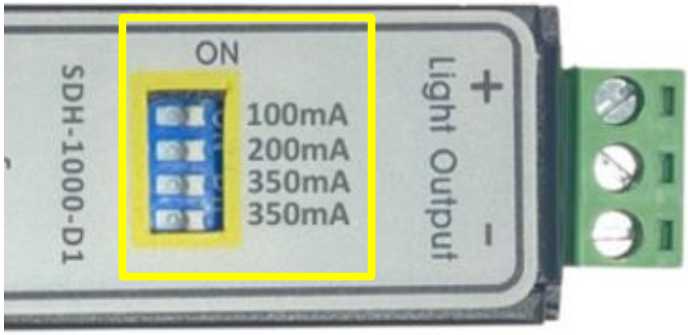
(TOP View)

Current DIP Switch Settings

The DIP Switches sets the maximum output current to the Lighting Output for over current protection for each respective channel.

Factory default for each channel is 300mA.

Caution: Make sure the selected maximum current output is suitable for lighting to prevent damage to both the lightings & Controlle



Switch				Output Current (mA)
1 (100mA)	2 (200mA)	3 (350mA)	4 (350mA)	
OFF	OFF	OFF	OFF	INVALID
ON	OFF	OFF	OFF	100
OFF	ON	OFF	OFF	200
ON	ON	OFF	OFF	300
OFF	OFF	ON	OFF	350
OFF	ON	ON	OFF	550
ON	ON	ON	OFF	650
OFF	OFF	ON	ON	700
ON	OFF	ON	ON	800
OFF	ON	ON	ON	900
ON	ON	ON	ON	1000

DIP Switch Settings for Maximum Lighting Output Current

Power ON

The default current setting for the controller is 600mA. If other current settings are desired, please make sure LED Lighting Current can support before power on the unit.

Connect the lighting connectors to the lighting connection terminals.

Connect a power +12/24 VDC to terminal block with label **POWER INPUT (+)** and **(-)** at casing. The POWER LED at Board will be ON when user have switch “ON” the VR by turning.

Operating Modes

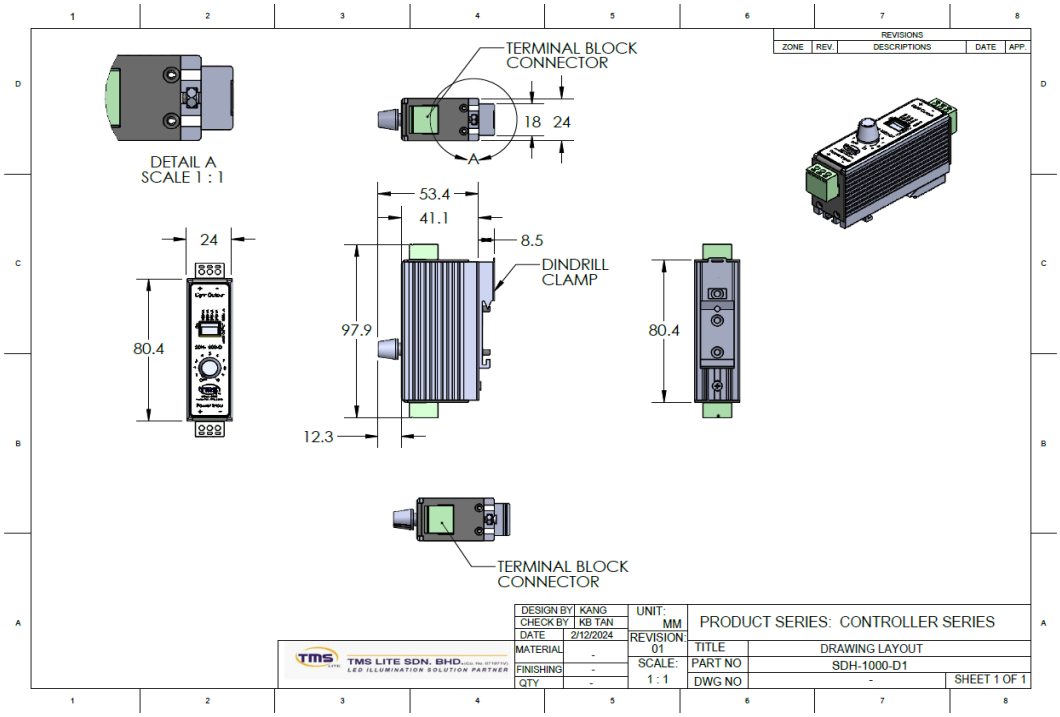
- Constant (Analog VR intensity control)

Constant

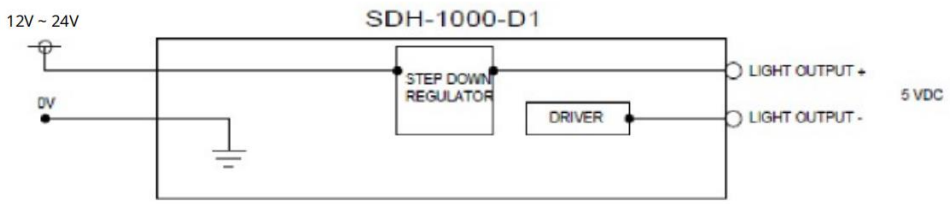
The unit has constant mode intensity from 1 to 10 (Analog).
Independent VR controls the lightings intensity of each channel.
The Lightings intensity is set by manually adjust the position of VR Knob (label 1-10) on the casing.

When VR Knob position at '1', it sets the lightings intensity at minimum.
When VR Knob position at '10', it sets the lightings intensity at maximum.

Dimension Layout



Schematic SDH-1000-D1



Accessories

Additional accessories that can be used with SDH-1000-D1 controllers.

Selection Power Supply

24V

- 24V Adaptor power supply
- Choose one Power Cord UK, US or EU

MODEL	SPECIFICATIONS
24V ADAPTOR POWER SUPPLY WITH POWER CORD	• SDH-1000-D1-PS2.5A-UK (CONTROLLER WITH 24V ADAPTOR AND UK POWER CORD) • SDH-1000-D1-PS2.5A-US (CONTROLLER WITH 24V ADAPTOR AND US POWER CORD) • SDH-1000-D1-PS2.5A-EU (CONTROLLER WITH 24V ADAPTOR AND EU POWER CORD)

12V

- 12V Adaptor power supply
- Choose one Power Cord UK, US or EU

MODEL	SPECIFICATIONS
12V ADAPTOR POWER SUPPLY WITH POWER CORD	• SDH-1000-D1-PS12V-UK (CONTROLLER WITH 12V ADAPTOR AND UK POWER CORD) • SDH-1000-D1-PS12V-US (CONTROLLER WITH 12V ADAPTOR AND US POWER CORD) • SDH-1000-D1-PS12V-EU (CONTROLLER WITH 12V ADAPTOR AND EU POWER CORD)

Power Cord Information

The cable length is 1.8 Meter length of power cord.

240VAC Power Cord (UK)

220VAC Power Cord (EU)

110VAC Power Cord (US)

MACHINE VISION SHOP
FOR ALL YOUR VISION PRODUCTS

Thank you for downloading this document from
www.machine-vision-shop.com

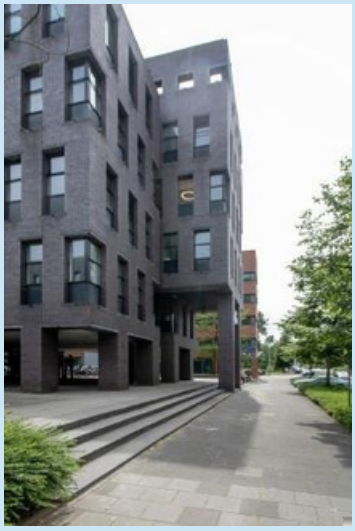
If you have any questions, you need help composing the right package for your application or do you want to order?

Feel free to contact us via e-mail at
sales@vision- consultancy.nl or visit our webshop.

Our vision experts are happy to help you.

Natascha Overhof

Christian Crompvoets



Machine Vision Shop

Trade name of Vision Consultancy BV

Robert Schumandomein 2
6229 ES Maastricht
The Netherlands

+31 (0) 438 522 651

sales@vision-consultancy.nl
www.machine-vision-shop.com

Scan me to visit machine-vision-shop

© 2025 Vision Consultancy