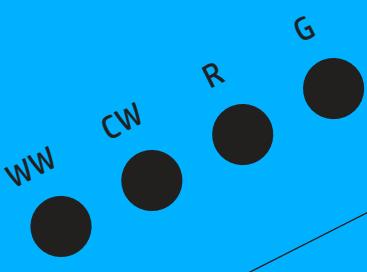
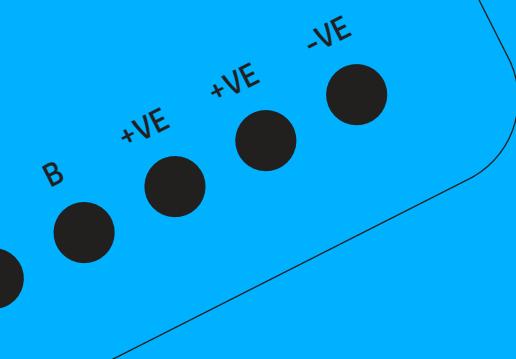


COLOSSUS®

Excellence inside

DATASHEET

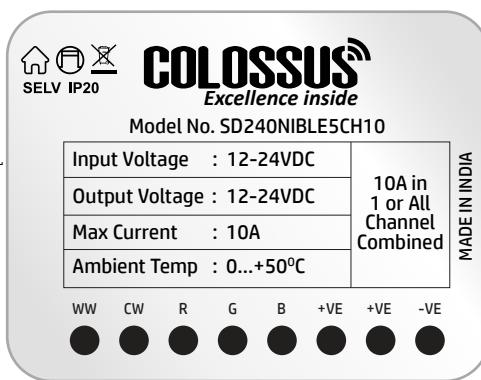
SD240NIBLE5CH10



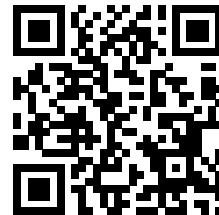
POWERED BY  **plexilent** simplifying life

 **tuya**

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WEBSITE



<https://colossusworld.com/>

*Image is for viewing purpose. Technical Data not to be drawn from above image.

Approval Markings:



Product Description

- Smart Dimmable Constant Current Driver For Led Modules
- Input Voltage 12/24 VDC
- 5-channel Controller
- 10A Max. Current
- Compatible with BLE, BLE MESH Modules
- Nominal Life Time: 30,000 hours @ $t_c \leq t_{c_{max}}$

Functions

- Seamless Control
- CCT & Dimming Control
- RGB Control (16 Million Colors)
- App Control

Benefits

- 1-100% Deep Dimming
- Low Standby Power
- Smooth Transition over wide range of intensity, CCT & RGB

Applications



Office



Shops



House

Technical Data

Mains Voltage Supply

Rated Voltage Range	12 VDC / 24 VDC
Rated Current Range (Max)	10 A (10A in 1 or All Channel Combined)

Output Data

Constant current

Output current tolerance	±5%
Max starting Time	<1s

Interface And Dimming Operation

Dimming Interface	PWM
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Protections

Open Circuit	YES
Output Short Circuit Operation	NA

Connection Terminals

For Solid Or Stranded Wire	
Type	Terminal Block
Wire Cross Section	0.5mm ² - 1.5mm ²
Wire Stripping Length	8.5mm - 9.5mm

Wire Lengths

Max. Wire Length To Controller	<0.3m
Max. Wire Length To Led Module	<1m

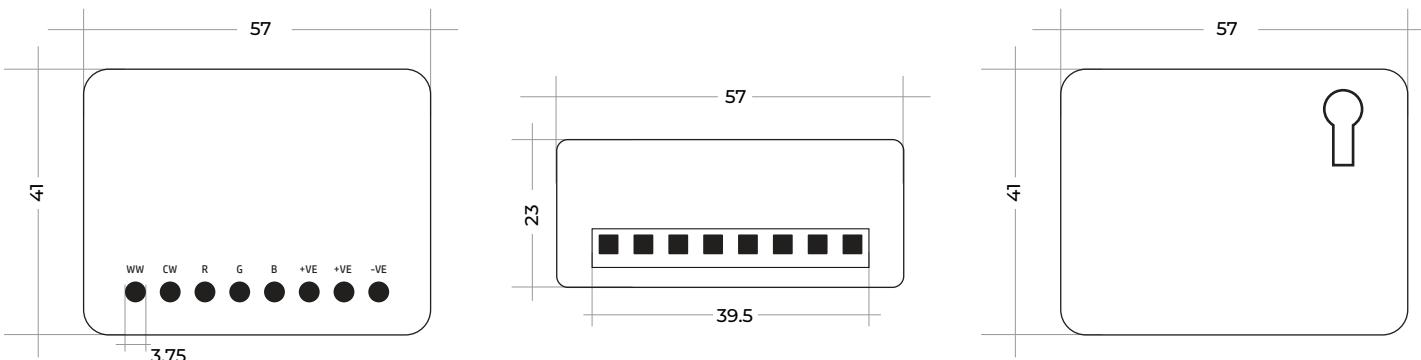
Temperatures (Operation)

Model No.	Ambient(ta)	Case (tc)
SD240NIBLE5CH10	0°C... +50°C	Max + 85°C

Housing Properties

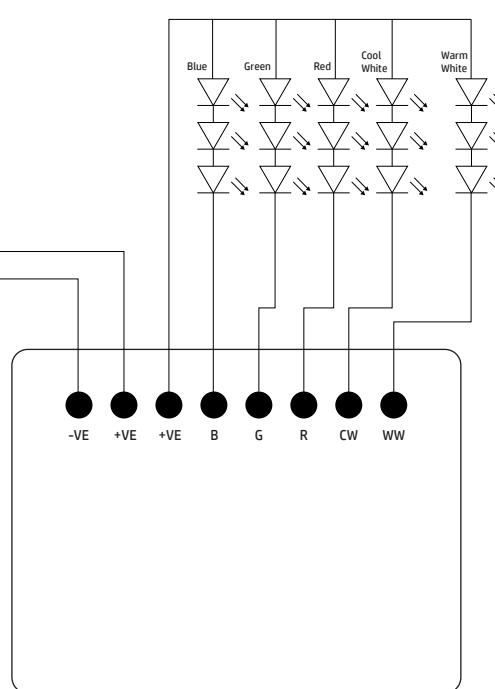
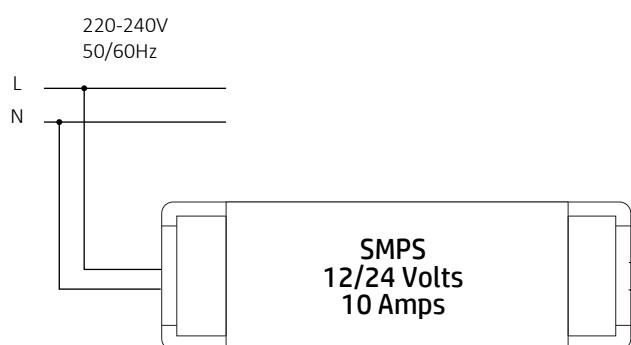
Degree of protection	IP20
Casing	Polycarbonate, White

Housing Dimensions



Dimensions (LxWxH)	57X41X23 mm
Tolerance	± 1mm
Weight	40 gm

Wiring Diagrams



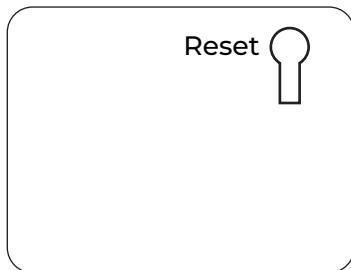
Note: The controller indication will vary based on the model you choose—1CH, 2CH, 3CH, 4CH, or 5CH.

Error expected. We reserve the right to make alterations in the interest of improving our products.

Version: 01

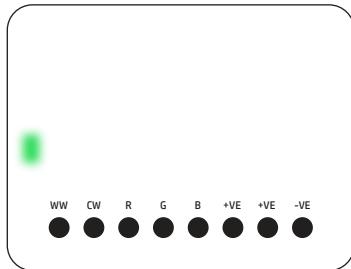
Operating Instructions

• Manual Reset Controller:



1. Ensure the controller is powered ON with 12VDC or 24VDC.
2. Locate the Reset button on the back of the controller.
3. Press and hold the reset button for 5 seconds.
4. Colored LED on the controller will blink 8 times.
5. The load connected to the controller will also blink 8 times.
6. Blinking of the LED / load indicates the controller has been reset and removed from the mesh successfully.
7. You can now pair the controller again using the smart application on your smartphone.

• Color Sync Indicator:



1. The controller has a built-in LED that shows the current color.
2. The LED changes color based on the selection made via app, remote, or other control methods.
3. It reflects the exact color or color mixing selected by the user.
4. This LED indication provides real-time feedback of the active lighting output.
5. Any color transition, mixing, or mode change is mirrored live on the controller.

*The light on the controller instantly shows the color selected in the app, for Eg: Here it shows Green as chosen on the device.

Expected Lifetime

Lifetime	30,000 hours
Warranty	2 years

Logistics Data

Model No.	SD240NIBLE5CH10
Weight (gm)	40 gm