![GRE Alpha LED Power Specialists logo]

SLD-DIM-DMX

DMX RGBW Dimming Module

Constant Voltage DMX RGBW Dimming Module

GRE Alpha's Constant Voltage DMX dimming modules support high resolution RGBW color control and features full integration with DMX512-A protocol. The onboard dip switch allows for selection between 8 bit and 16 bit mode operation; wide DC input makes them suitable for both 12V and 24V applications. These versatile devices come in fully isolated and non isolated versions with options for RJ 45 terminal block connections. These devices are compliant with RDM protocol for bi-directional entertainment lighting and lighting control communication.

Features

· 5 – 24V DC input
· RGBW color control
· 8-bit or 16-bit resolution
· Spring-loaded terminal for easy installation
· With or without input/output isolation versions available
· Dimming curve selection
· Terminal block connectors or RJ45 connectors versions to choose from for DMX control signal
· Dimming Range: 0-100%
· 97% Efficiency

Applications

· Architectural Lighting
· Linear LED Lighting
· Constant Voltage Lighting Applications
· Lighting Controls
· Smart Lighting

Model Number	Input Voltage Range (VDC)	Channel(s) Output	Output Rating		Max Output Power (All Channels) (W)
			Voltage (VDC)	Max. Current (All Channels) (A)	
SLD-DIM-X	5 - 24	4	Vin - 0.2~0.5V	5	100

x = DMX4 : Terminal block connectors for DMX control signal, without isolation or DMX4I : Terminal block connectors for DMX control signal, with isolation or DMX4-RJ45 : RJ45 connectors for DMX control signal, without isolation or DMX4I-RJ45 : RJ45 connectors for DMX control signal, with isolation

SLD-DIM-DMX
Preliminary datasheet for reference only

Input Specification

Voltage Range	5-24Vdc	Dimmable Input Voltage Range	5 A max
Over Voltage Protection	@Vin=50V	Dimming Range	0-100%
Recommended input wire length	Max 3m		

Output Specification

Output Voltage	Vin - 0.2~0.5V	Output Current	5A max(All Channels)
Power Efficiency	97% @ Full Load	Max. Output Power	100W(Single Channel), 120W(sum of all channels)
Over Current Protection	110% Iout(Max)	Over Temperature Protection	Power MOSFET @ 105℃
PWM Frequency	1 KHz	Recommended LED output wire length	up to 30m*
Standby Power	200mW(Max)	Other Protection Modes	Thermal shutdown with auto restart overload protection

* --Depends on LED specification

Environmental Specification

MTBF	Cooling	Max Case Temp	Operating Temp	Storage Temp
55,000 Hours @ 25℃ full load	Convection	60℃	-25℃ - 40℃ @ Full load	-25℃ - 85℃

Compliance/Safety

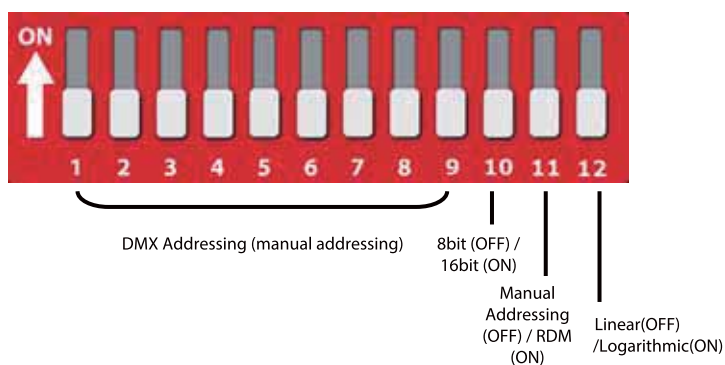|	
Safety Standards:	US Standard : UL/CUL 8750 compliance, FCC part 15 ClassB EU Standard: CE & CB, included EMC & EMI- EN55015, IEC61558-1, SELV, IEC 61347-2-13 Dimming Standard: IEC62386-101, 102 and 207
Weatherability:	IP 20

Mechanical Specification

Dimming Module Dimensions	123(L)*46(W)*19.6(H)mm(SLD-DIM-DMX4/DIM-DMX4I) 123(L)*46(W)*21.8(H)mm(SLD-DIM-DMX4-RJ45/DIM-DMX4I-RJ45)
Case Design/Material	Polycarbonate White
Connector Type	WAGO terminal block connectors(With RJ45 connectors for RJ45 version)
Connectors	Vin+, Vin-, R,G,B,W,DC+,DWX IN,DWX OUT
Wire Size	24-16 AWG(0.25-1mm²)

Pin Assignment

DMX Addressing (manual addressing)

8bit (OFF) / 16bit (ON)

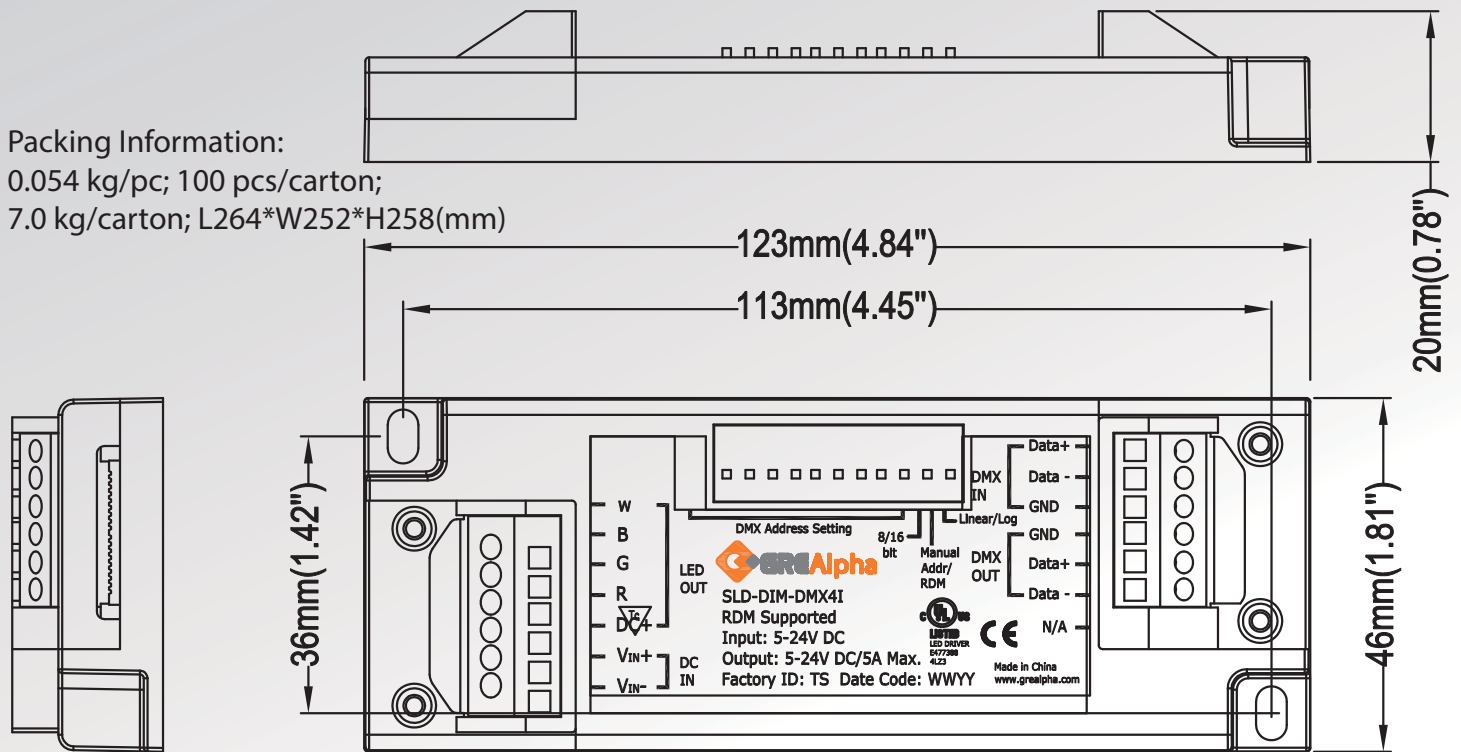Manual Addressing (OFF) / RDM (ON)

Linear(OFF) /Logarithmic(ON)

Mechanical Diagram

SLD-DIM-DMX4 / SLD-DIM-DMX4I
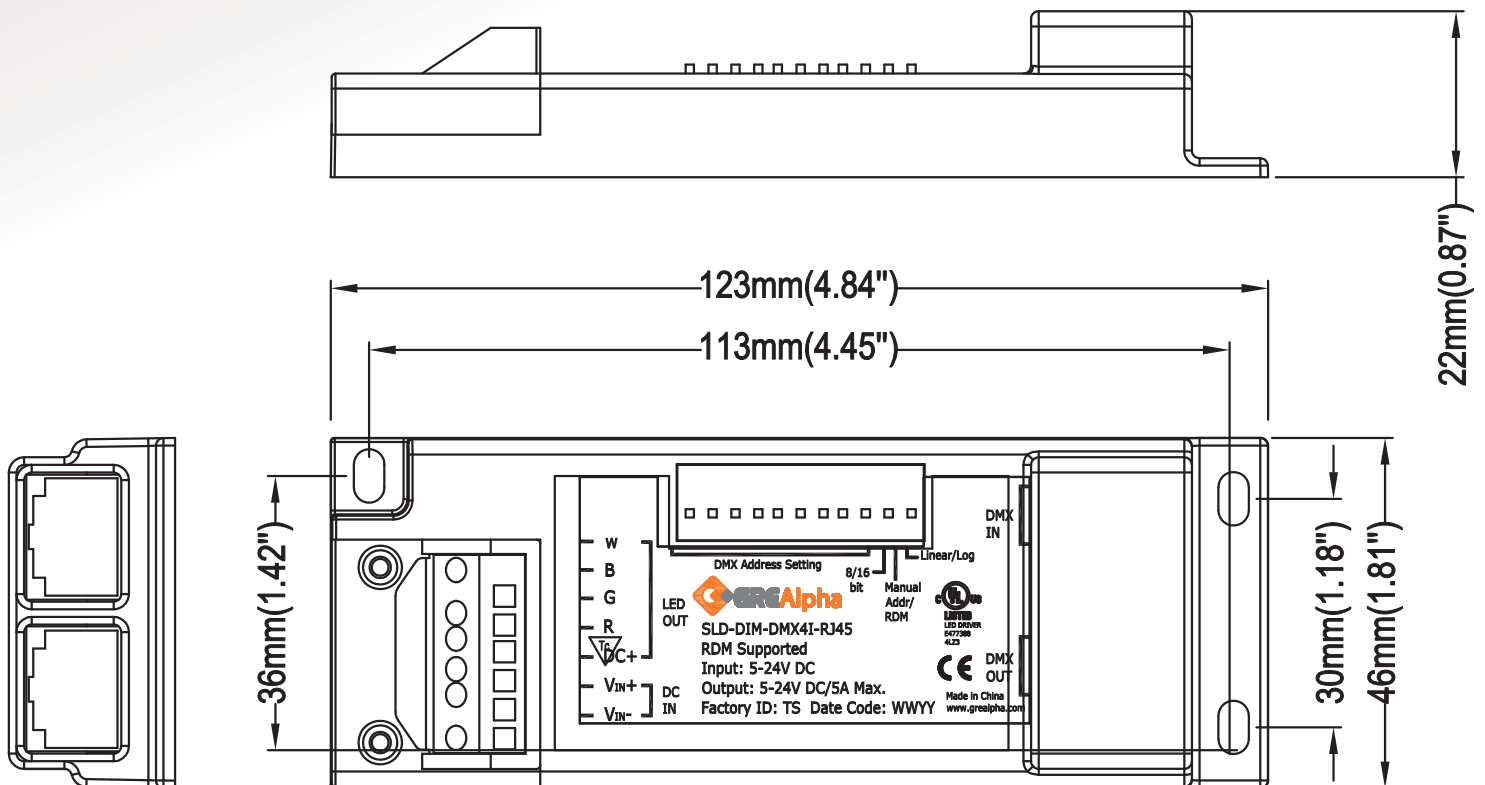
Packing Information:
0.054 kg/pc; 100 pcs/carton;
7.0 kg/carton; L264*W252*H258(mm)

123mm(4.84")

113mm(4.45")

36mm(1.42")

20mm(0.78")

46mm(1.81")

W
B
G
R
DC+
V_IN+
V_IN-

LED OUT

DC IN

DMX Address Setting

8/16 bit

Manual Addr/RDM

Linear/Log

DMX IN
Data+
Data -
GND

DMX OUT
GND
Data+
Data -
N/A

GREAlpha
SLD-DIM-DMX4I
RDM Supported
Input: 5-24V DC
Output: 5-24V DC/5A Max.
Factory ID: TS Date Code: WWYY

UL LISTED LED DRIVER E477388 4L23 CE

Made in China
www.grealpha.com

SLD-DIM-DMX4-RJ45 / SLD-DIM-DMX4I-RJ45

123mm(4.84")

113mm(4.45")

22mm(0.87")

36mm(1.42")

30mm(1.18")

46mm(1.81")

W
B
G
R
DC+
V_IN+
V_IN-

LED OUT

DC IN

DMX Address Setting

8/16 bit

Manual Addr/RDM

Linear/Log

DMX IN

DMX OUT

GREAlpha
SLD-DIM-DMX4I-RJ45
RDM Supported
Input: 5-24V DC
Output: 5-24V DC/5A Max.
Factory ID: TS Date Code: WWYY

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SLD-DIM-DMX

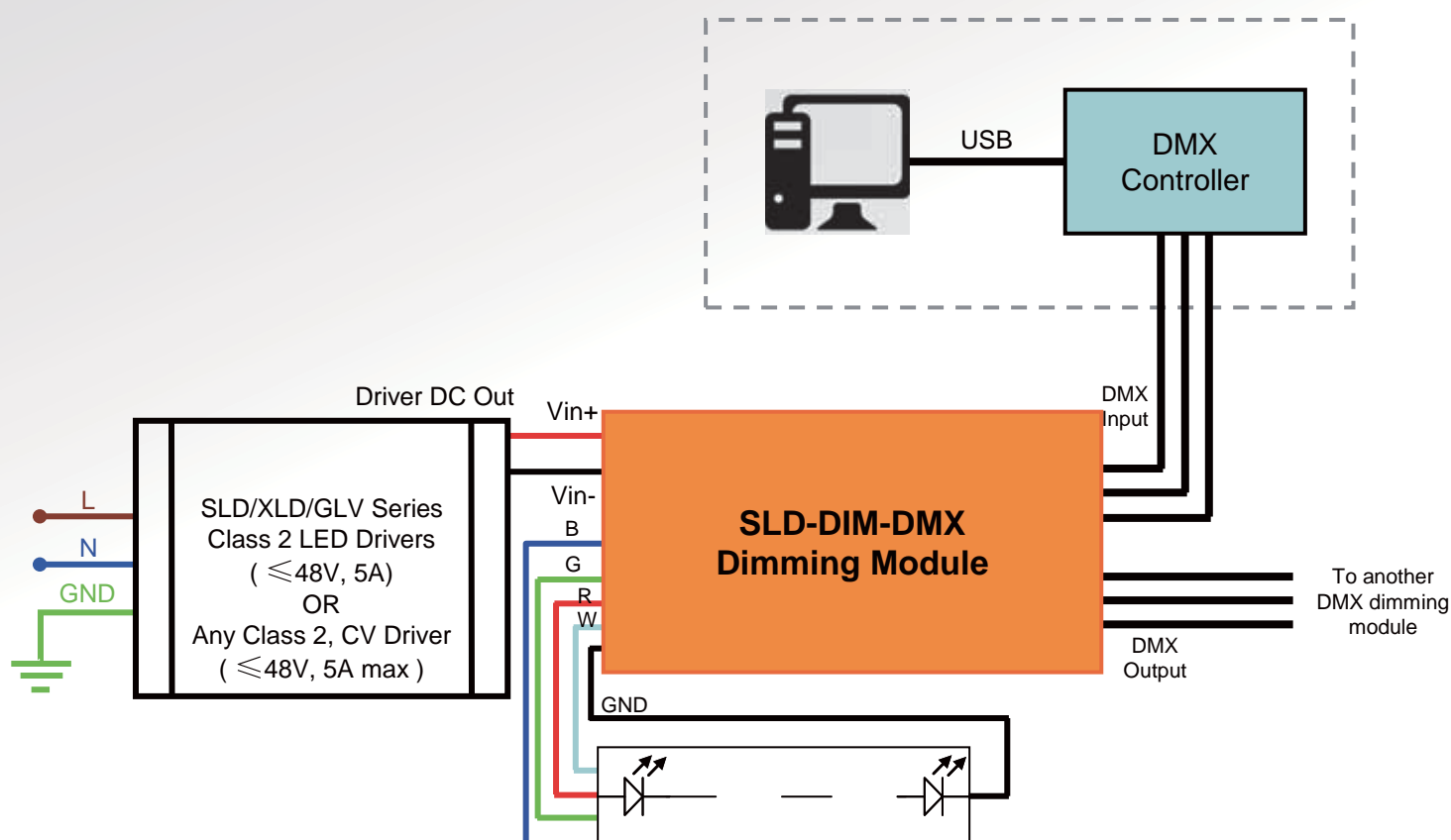Preliminary datasheet for reference only

RJ45 Pinout

ESTA Version*:

Pin1: Data+
Pin2: Data-
Pin3~6: Not Assigned
Pin7~8: GND

*: Other Pinout Versions available.Please contact us for further details.

Wiring Diagrams


```
USB ─── DMX Controller

DMX Input

Driver DC Out   Vin+

L
N
GND

SLD/XLD/GLV Series
Class 2 LED Drivers
( ≤48V, 5A)
OR
Any Class 2, CV Driver
( ≤48V, 5A max )

Vin-
B
G
R
W
GND

SLD-DIM-DMX
Dimming Module

To another
DMX dimming
module

DMX Output
```

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