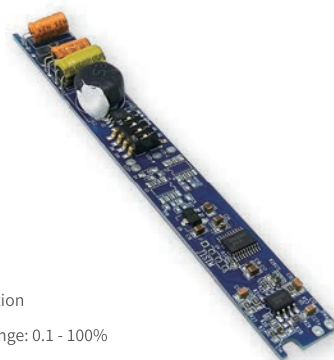


### Product introduction >>>----->>>>

JISIM JD2138 is a constant-current LED intelligent dimming driver. It is a product specifically designed for DC magnetic track lights. It supports 0-10V 1-10V PWM RX dimming function, and its customized dimming curve makes the eyes more comfortable. It is suitable for magnetic lights. When combined with an intelligent control system, it is widely used in high-end places such as smart homes, smart hotels, smart commercial lighting, smart offices, and smart buildings.



### Product Features >>>----->>>>

- Support 0-10V 1-10V PWM RX dimming mode
- Dedicated to magnetic track lights
- Compliance with CE and other certifications
- IP20 protection grade, indoor use
- Nominal life-time up to 50000h,5-year warranty
- Standby power input < 0.5W, meets the requirements of ErP certification
- No high - frequency noise, smooth dimming, Flicker-free,Dimming range: 0.1 - 100%
- Ultra-small size, high efficiency, compatible with shorter size power box
- The multi-level current can be set by the DIP switch, and the maximum output power is 29.4W.
- Intelligent LED hot-plug protection function SELV and Class III design, suitable for use inside of the luminaire

### Technical Specifications (All parameters not specially mentioned are measured at 48Vdc input,full load and 25°C of ambient temperature) ----->>>>

Model	JD2138					
Input	DC Voltage Range	24-48V		Features	Output Type	constant-current
	Rated Voltage	24Vdc/48Vdc			Dimming Interface	1CH 0-10V/1-10V_RX PWM
	Input Frequency	0Hz			Output Feature	Non-Isolation
	Input Current	≤0.56A/24Vdc(at full load) ≤0.64A/48Vdc(at full load)			IP Rating	IP20 (With shell)
	Input Power	Max.35W			Insulation Rating	Class III light fixtures
	Efficiency	≥94%(at full load)			No Load Output Voltage	≤48Vdc
Environment	Working Temperature	ta:-20°C~45°C		Output	Rated voltage	9-18V@Vin=24Vdc,9-42V@Vin=48Vdc
	Working Humidity	20~95%RH(No Condensation)			Output Current Range	150-700mA
	Storage Temperature/Humidity	-20~85°C/10~95%RH			Output Power Range	1.35-12.6W@Vin=24Vdc,1.35-29.4W@Vin=48Vdc
	Life Time	>50000h@ta=45°C			Dimming Range	0.1~100%
ErP	Power Consumption	Standby Power Consumption	<0.5W (PWM Off)		Ripple Current	<5%
	Flicker/ Stroboscopic Effect	IEEE1789	Meet IEEE Std1789-2015		Voltage Accuracy	±5%
		CIESVM	Pst≤1, SVM≤0.4	PWM Frequency	1000Hz	
DF	Phase Factor	DF≥0.9				
Protection	Overload Protection	Hiccup Mode (Auto-Recovery after Elimination)				
	Open Circuit Protection	≤48Vdc				
	Short Circuit Protection	Hiccup Mode (Auto-Recovery after Elimination)				
Test Equipment	AC Source	PS-61005	Withstand Voltage Tester	TH9302D	Other	
	DC Electronic Load	IT8512A+	Thermostatic Humidity Chamber	HT-H-802		
	Spectrum Analyzer	KH3932	Intelligent Electrical Parameter Meter	PF9800	LED Load	
	Surge Generator	SUG61005TB(7.5KV)-2216	Oscilloscope	TBS1102B		
	Stroboscope	LANSHU-201B	Digital Wattmeter	PM2818C		

## DC Track Light 0-10V Dimmable LED Driver

### LED Current Settings

DC24V ▶

Number	Output				Switch Position			
	Current (mA)	Voltage (VDC)	NO Load Outout Voltage (VDC)	Power (W)	1	2	3	4
*1	150	9-18	24	2.7	/	/	/	/
2	200	9-18		3.6	ON	/	/	/
3	250	9-18		4.5	/	ON	/	/
4	300	9-18		5.4	ON	ON	/	/
5	350	9-18		6.3	/	/	ON	/
6	400	9-18		7.2	ON	/	ON	/
7	450	9-18		8.1	/	ON	ON	/
8	500	9-18		9	ON	ON	ON	/
9	550	9-18		9.9	/	/	ON	ON
10	600	9-18		10.8	ON	/	ON	ON
11	650	9-18		11.7	/	ON	ON	ON
12	700	9-18		12.6	ON	ON	ON	ON

- ◀ \* Factory default.
- ◀ 1. Please disconnect the AC input before adjusting the output current via the DIP switch, If not, it may damage the lighting fixture.
- ◀ 2. No Overload, The output power should be less than or equal to 12.6W.

DC48V ▶

Number	Output				Switch Position			
	Current (mA)	Voltage (VDC)	NO Load Outout Voltage (VDC)	Power (W)	1	2	3	4
*1	150	9-42	48	6.3	/	/	/	/
2	200	9-42		8.4	ON	/	/	/
3	250	9-42		10.5	/	ON	/	/
4	300	9-42		12.6	ON	ON	/	/
5	350	9-42		14.7	/	/	ON	/
6	400	9-42		16.8	ON	/	ON	/
7	450	9-42		18.9	/	ON	ON	/
8	500	9-42		20	ON	ON	ON	/
9	550	9-42		23.1	/	/	ON	ON
10	600	9-42		25.2	ON	/	ON	ON
11	650	9-42		27.3	/	ON	ON	ON
12	700	9-42		29.4	ON	ON	ON	ON

- ◀ \* Factory default.
- ◀ 1. Please disconnect the AC input before adjusting the output current via the DIP switch, If not, it may damage the lighting fixture.
- ◀ 2. No Overload, The output power should be less than or equal to 29.4W.

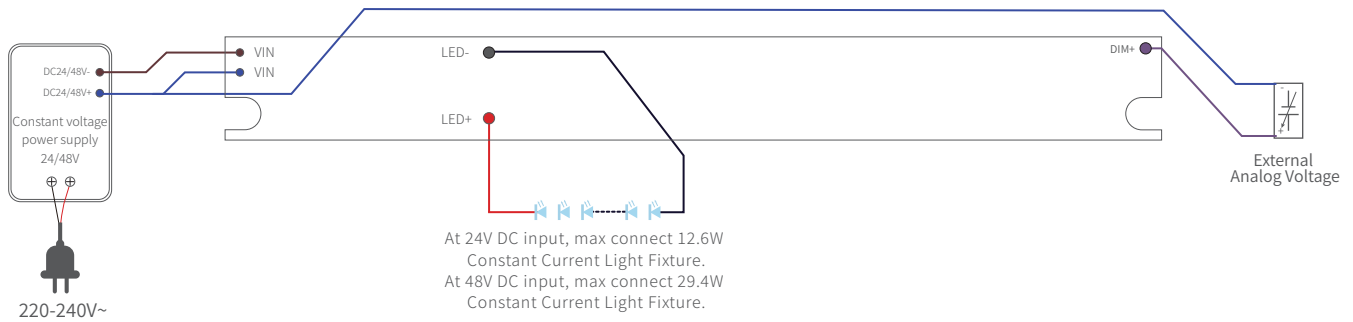
### 2D Diagram

Length(L)	Width(D)	Heigh(H)	Weight(W)
124mm	13.8mm	12mm	11.5±5g



## DC Track Light 0-10V Dimmable LED Driver

### Wiring Diagram

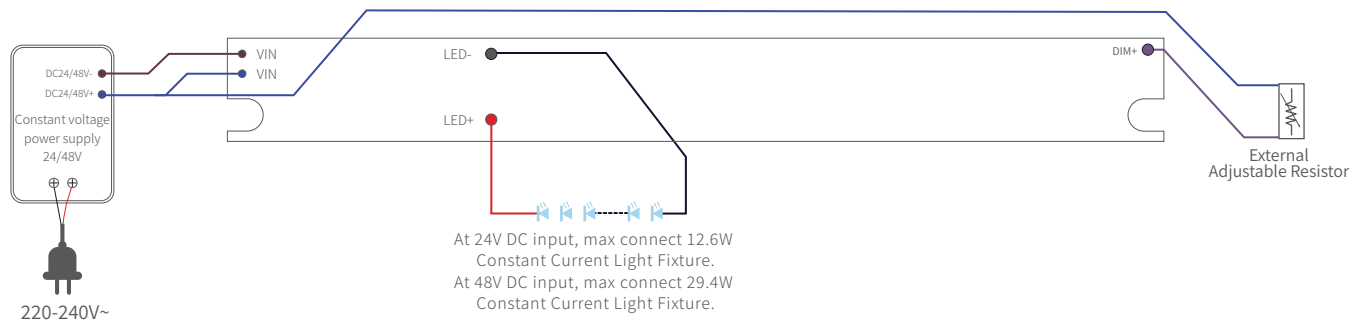


#### ◦ Explanation of 0/1-10V Interface Signals ◦

◀ The DIM+ terminal is used to adjust brightness:

When the voltage at the DIM+ terminal is adjusted within the range of 0/1-10V, the brightness changes from 0 to 100%. The light turns on/off at a voltage value of  $0.75 \pm 0.05V$ .

When DIM+ terminals is left floating (unconnected), the default output is 100% Brightness.

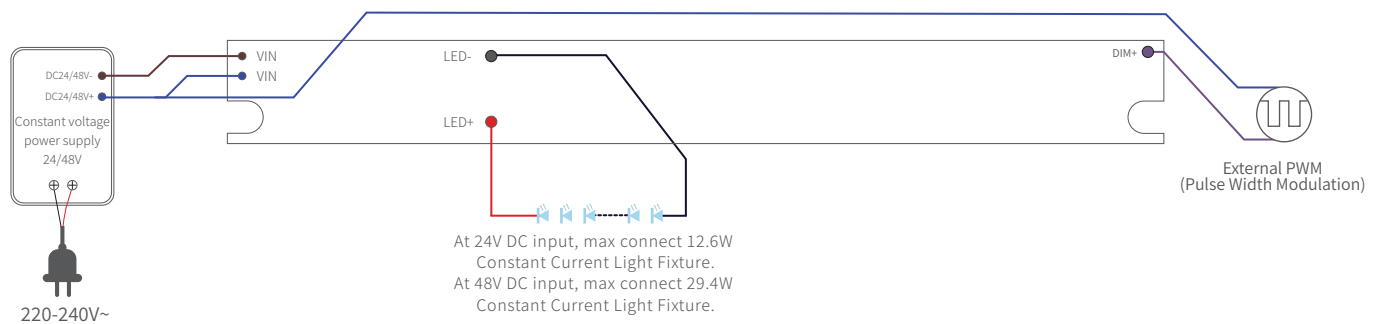


#### ◦ Potentiometer (Rx) Interface Signal Description ◦

◀ The DIM+ terminal is used for adjusting brightness:

When the resistance value at the DIM+ terminal is adjusted within 0-100K $\Omega$ , the brightness changes from 0 to 100%. Specifically, a resistance value of  $3K\Omega \pm 1K\Omega$  triggers the light to turn on/off.

When DIM+ terminals is left floating (unconnected), the default output is 100% Brightness.



#### ◦ PWM Interface Signal Description ◦

◀ The DIM+ terminal is used for adjusting brightness:

When the 10V PWM signal at the DIM+ terminal is adjusted from 0 to 100%, the brightness changes correspondingly from 0 to 100%.

When DIM+ terminals is left floating (unconnected), the default output is 100% cool Brightness.

## DC Track Light 0-10V Dimmable LED Driver

### Installation Instructions

#### ◦ Connection instructions ◦

Interface	Marking	Description
Input	Vin+	Positive Input of the driver
	Vin-	Negative Input of the driver
Output	LED-	Negative electrode output of the driver
	LED+	Positive electrode output of the driver
Signal	DIM+	input 0-10V/PWM/RX dimming

1. Before wiring, carefully check the labels at the input, output, and signal points.
2. All connections must be as short as possible to ensure good EMI performance.
3. The driver output does not support hot swap.
4. Incorrect wiring can damage the LED.
5. The driver should be installed in a dry, acid-free, oil-free, fat-free environment
6. The installation ambient temperature of the drive shall not exceed the value of ta at any time.
7. Max. length of output wires is 0.5 m.
8. Please be careful not to damage the electronics during assembly.
9. All electronic components shall not be squeezed after assembly.

### Packaging Image



### Packaging Size

Packaging Details	Carton Size	Packing Units	Weight
Small Carton Packaging	350 x 197 x 167mm	210pcs	2.92kg
Large Carton Packaging	420 x 360 x 365mm	840pcs	12.59kg

#### Packaging instructions:

14 products are installed on each layer. Each small box contains 15 layers, with a total of 210 products. Each large box holds 4 small boxes.

## DC Track Light 0–10V Dimmable LED Driver

## Cautions

- ▶ This product is used as a component of the luminaire in conjunction with the end-use equipment. Since EMC performance is affected by the luminaire and wiring, the end customer shall perform EMC verification for the complete product set.
- ▶ No operation with power on. Installation and debugging should be performed by qualified professionals. Please read the product manual carefully before installation.
- ▶ This product can be installed inside the luminaire for use, but the internal temperature of the luminaire must be strictly controlled to not exceed 45°C. Exceeding this temperature may adversely affect the service life of the luminaire.
- ▶ This product is not waterproof and should be avoided from direct sunlight and rain. If it is installed outdoors, please use a waterproof case.
- ▶ Good heat dissipation conditions are beneficial to the product's lifetime. Please install the product in a suitable environment, and strictly prohibit using double-sided tape to attach the casing or circuit board.
- ▶ Please check the parameters of the LED driver to ensure they meet the application requirements of the lighting fixture.
- ▶ Please install according to the standard wire gauge specified in the manual to avoid malfunctions caused by inappropriate wiring.
- ▶ Before powering on, please ensure that the wiring is correct to prevent damage to the driver or lighting fixture caused by incorrect wiring.
- ▶ If a malfunction occurs, please do not attempt to repair it yourself, if you have any questions, please contact the manufacturer.
- ▶ The manual is for reference only. Please refer to the actual product. Any changes to this product will not be notified separately.
- ▶ For more information, please send an email to fei.l@jisim-tech.com.

## Warranty Terms

- ▶ The product is warranted for 5 years. (The life and MTBF of the product are for reference only, and do not represent a warranty statement.)
- ▶ During the warranty period, if any quality issues arise, JISIM will provide free repair or replacement services.

## Non-Warranty Terms

The following situations are not covered by the free warranty or replacement service:

- ▶ The warranty period has expired.
- ▶ Damage caused by human factors such as overvoltage, overload, or improper operation.
- ▶ Deformation or damage to the exterior appearance.
- ▶ Damage caused by natural disasters or other irresistible human factors.
- ▶ The warranty label has been torn off or removed.
- ▶ No contract or invoice proof is provided.



## Notice:

1. Repair or replacement provided is the only remedy for customers. JISIM is not liable for any incidental or consequential damage unless it is within the law.
2. JISIM has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.