

Product introduction >>>>

JISIM JD5212C is a 20W constant current LED intelligent dimmable driver specifically designed for DC magnetic track lights. It supports bluetooth tunable white dimming functions. The customized dimming curve provides a more comfortable viewing experience for the human eye. When not connected to an external signal, it can be used as a non-dimmable driver and supports a gradual start-up effect. It is suitable for magnetic track lamps. Paired with various intelligent control systems, it is widely used in smart homes, smart hotels, intelligent commercial spaces, smart offices, smart buildings, and other facilities.



Product Features >>>>

- Support bluetooth Tunable white dimming mode
- No high - frequency noise, smooth dimming, Flicker-free, Dimming range: 0.1 - 100%
- Dedicated to magnetic track lights
- Ultra-small size, high efficiency, compatible with shorter size power box
- Compliance with CE and other certifications
- Nominal life-time up to 50000h, 5-year warranty
- IP20 protection grade, indoor use
- The multi-level current can be set by the DIP switch, and the maximum output power is 20W.
- Intelligent LED hot-plug protection function SELV and Class III design, suitable for use inside of the luminaire

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

Model	JD5212C							
Input	DC Voltage Range	24-48V		Features	Output Type	constant-current		
	Rated Voltage	24Vdc/48Vdc			Communication mode	Bluetooth		
	Input Frequency	0Hz			Output Feature	Non-Isolation		
	Input Current	≤0.42A/24Vdc(at full load) ≤0.45A/48Vdc(at full load)			Insulation Rating	Class III light fixtures		
	Input Power	Max.22W		Output	No Load Output Voltage	≤48Vdc		
	Efficiency	≥93%(at full load)			Rated voltage	15-18V@I/P24Vdc, 15-40V@I/P48Vdc		
Environment	Working Temperature	ta:-20°C~45°C			Output Current Range	150-500mA		
	Working Humidity	20~95%RH(No Condensation)			Output Power Range	2.25-9W@Vin=24Vdc, 2.25-20W@Vin=48Vdc		
	Storage Temperature/Humidity	-20~85°C/10~95%RH			Dimming Range	0.1~100%		
	Life Time	>50000h@ta=45°C			Ripple Current	<5%		
Protection	Overload Protection	Hiccup Mode (Auto-Recovery after Elimination)				Voltage Accuracy	±5%	
	Open Circuit Protection	≤48Vdc					PWM Frequency	4000Hz
	Short Circuit Protection	Hiccup Mode (Auto-Recovery after Elimination)						
ErP	Flicker/ Stroboscopic Effect	IEEE1789	Meet IEEE Std1789-2015		DF	Phase Factor	DF≥0.9	
		CIESVM	Pst≤1, SVM≤0.4					
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				

LED Current Settings >>>>

DC24V >

Number	Output				Switch Position		
	Current (mA)	Voltage (VDC)	NO Load Output Voltage (VDC)	Power (W)	1	2	3
*1	150	15-18	24	2.7	/	/	/
2	200	15-18		3.6	ON	/	/
3	250	15-18		4.5	/	ON	/
4	300	15-18		5.4	ON	ON	/
5	350	15-18		6.3	/	/	ON
6	400	15-18		7.2	ON	/	ON
7	450	15-18		8.1	/	ON	ON
8	500	15-18		9	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 9W.

Dimming and Tunable White LED Driver for Magnetic Track Lights

DC48V ➤

Number	Output				Switch Position		
	Current (mA)	Voltage (VDC)	NO Load Output Voltage (VDC)	Power (W)	1	2	3
*1	150	15-40	48	6	/	/	/
2	200	15-40		8	ON	/	/
3	250	15-40		10	/	ON	/
4	300	15-40		12	ON	ON	/
5	350	15-40		14	/	/	ON
6	400	15-40		16	ON	/	ON
7	450	15-40		18	/	ON	ON
8	500	15-40		20	ON	ON	ON

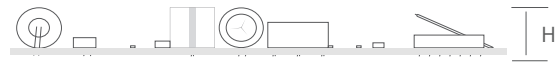
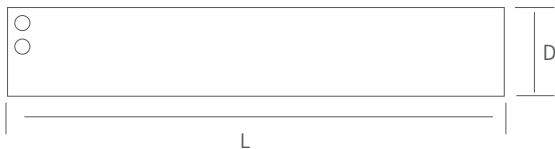
◀ * Factory default.

◀ 1. Please disconnect the AC input before adjusting the output current via the DIP switch, If not, it may damage the lighting fixture.

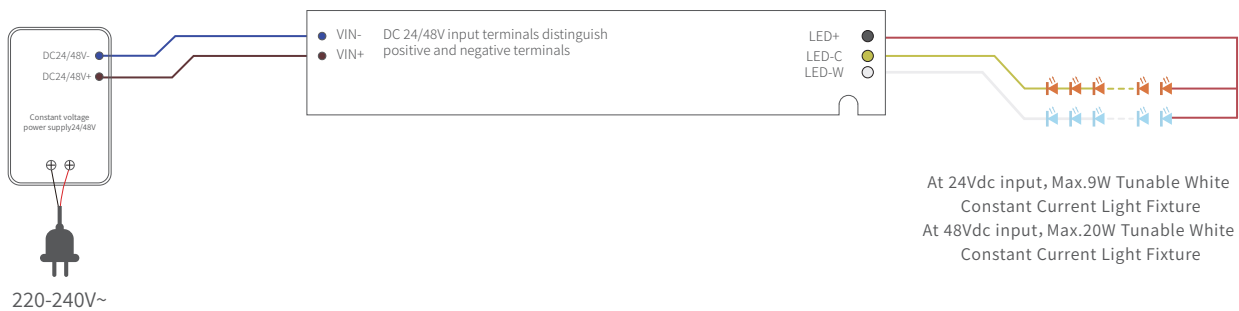
◀ 2. No Overload, The output power should be less than or equal to 20W.

2D Diagram

Length (L)	Width (D)	Heigh(H)	Weight(W)
76.5mm	13mm	8mm	7.1±5g



Wiring Diagram



Dimming and Tunable White LED Driver for Magnetic Track Lights

Operation Instructions for Modifying the Configuration File



◀ Scan the QR code to view the detailed steps

Installation Instructions

Interface	Marking	Description
Input	VIN-	Negative DC 24/48V input
	VIN+	Positive DC 24/48V input
Output	LED+	Positive electrode output of the driver
	LED-W	Negative electrode output of warm light
	LED-C	Negative electrode output of cold light

◦ Connection instructions ◦

1. Check the color of the interface and cable carefully before wiring.
2. The driver output does not support hot swap
3. Incorrect wiring can damage the LED.

Packaging Image



◀ Small Carton Packaging



◀ Large Carton Packaging

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.

Dimming and Tunable White LED Driver for Magnetic Track Lights

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.