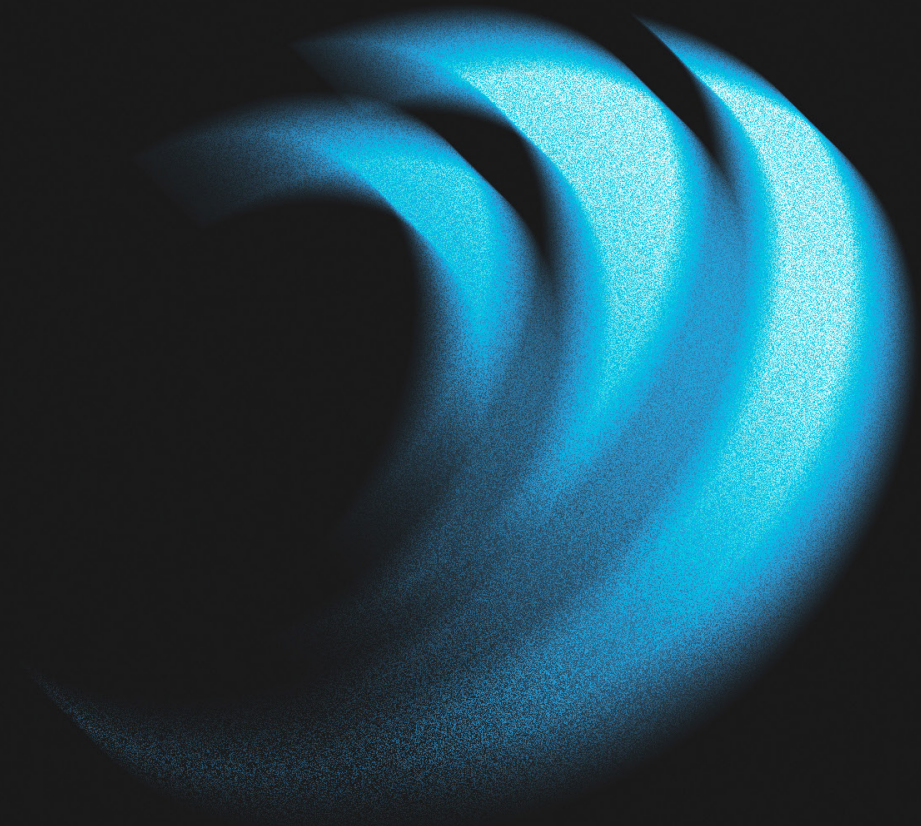
BLUEVIEW

LED
STRIP LIGHT
D5H-RGBWN

DC 24V
MULTI-COLOR SERIES



RoHS

Version: **C1.0**

D5H-RGBWN-216-24

Multi-Color Series

FEATURES

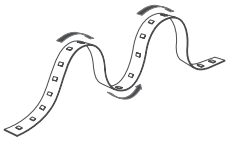
- SPI control with external compatible controllers for dynamic effects
- Advanced IC control with long chip lifespan
- Cuttable design for flexible installation
- Multiple specifications, support customization
- Various IP processes available

DIMENSION

Input voltage: DC 24V
Ra: >80
Rated power: 19.3W(RGBWN)
Power error range: ±10%

Tape IP: IP20
Warranty: 2years
Working temperature: -20~+60°C
Storage temperature: -20~+70°C

Bending radius: Rmin



Rmin=30mm

OPTICAL & ELECTRICAL PARAMETERS

Model No.	Voltage	Pix/m	Ra	Color	CCT/Color Available (K/nm)	Lm/m	Lm/W	W/m
D5H-RGBWN-216-24	24V DC	12	--	R	620-630	87	20	4.32
			--	G	515-530	254	59	4.32
			--	B	460-470	56	13	4.32
			>80	W	2100-2200	331	77	4.32
			>80	N	6100-6800	392	91	4.32
			--	RGBWN	--	1109	58	19.3

OTHER PARAMETERS

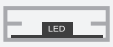
Model No.	LED Qty (pcs/m)	Standard Packing Length (mm)	Max Run (m)	Min. cutting unit (mm)	LED pitch (mm)
D5H-RGBWN-216-24	216	5000	7	83.3	13.9

NOTE:

- Test environment temperature is 25±2°C.
- The above data was measured under standard conditions and actual data may be different. We would update data without further notice.
- The above luminous flux data is based on corresponding light color.
- If the selected LED chip is different, the color temperature and luminous flux will change accordingly.
- Typical luminous flux error is ± 10%.
- The Max run length is based on one end power feed.

*For products with a power consumption exceeding 15W, auxiliary heat dissipation devices must be added

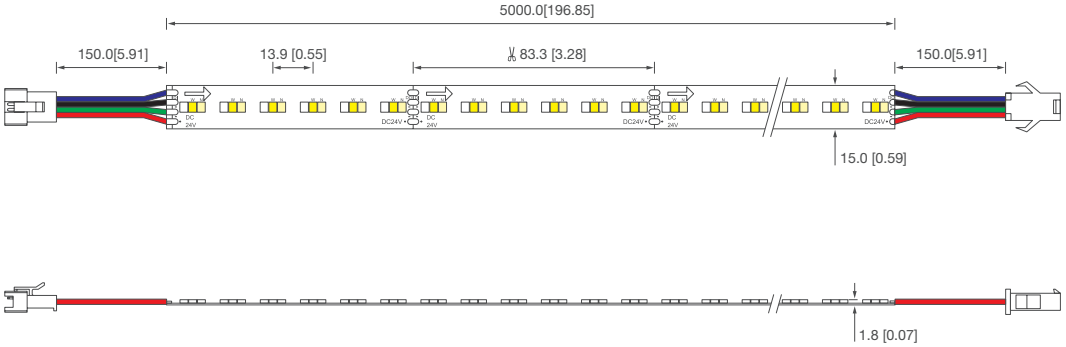
PRODUCTION PROCESS

IP Process	IP Rating	Picture description	Diagram
N	IP20	Non-waterproof	
WP	IP64	Spray Glue Coated	
WS	IP65	Thick Glue Coated(WS)	
WT	IP67	Tube Waterproof(WT)	

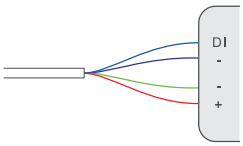
Note: This product supports the above processes.

PROFILE DRAWINGS

Unit: mm[inch]

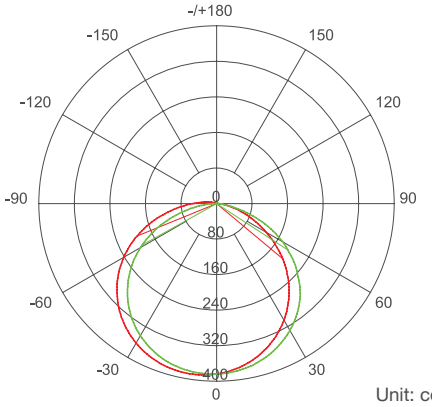


SPI Control Wiring Diagram



Note: for more info, please contact sales rep.

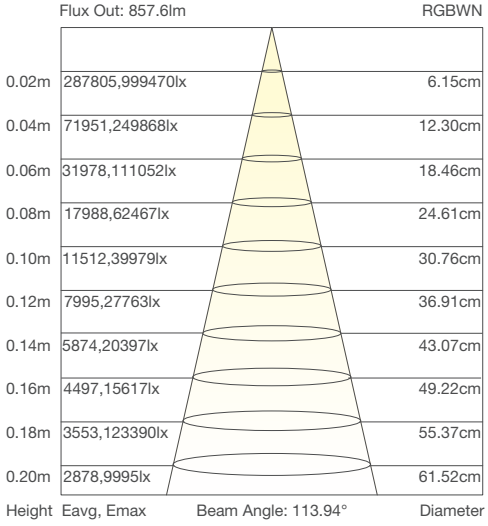
LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



Unit: cd
- C 0 /180,117.9°
- C 90/270,117.7°

AVERAGE BEAM ANGLE(50%): 117.8°

AVERAGE ILLUMINATION



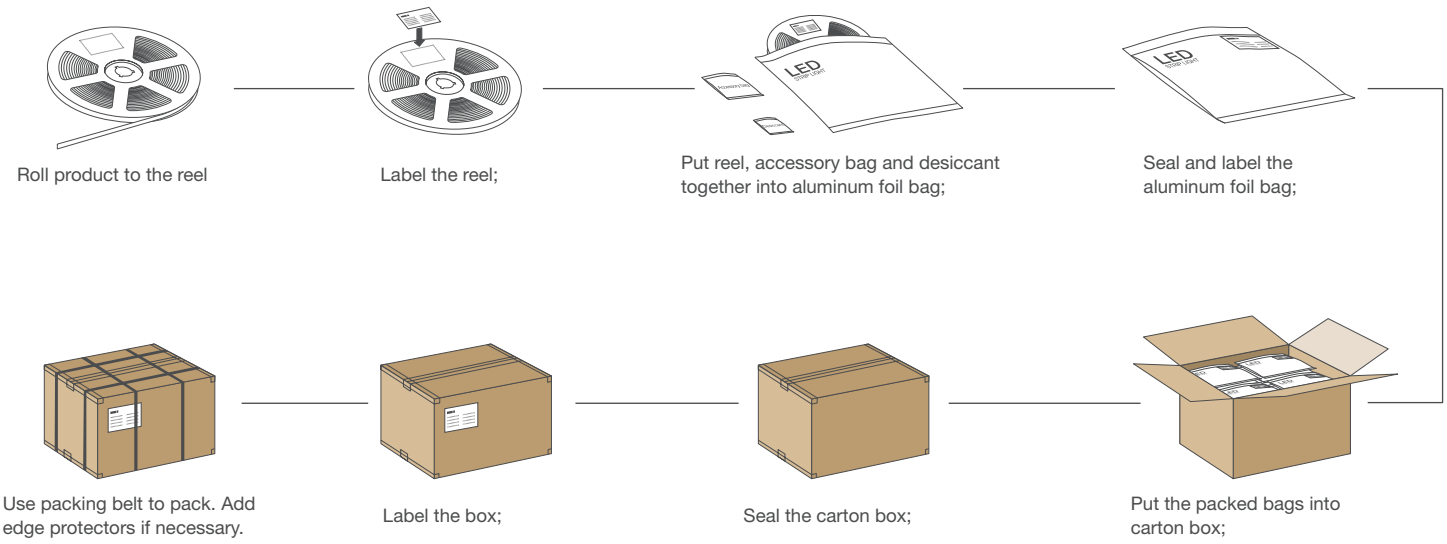
Note: above data tested with D5H-RGBWN-216-24 at RGBWN. For other data,please consult sales rep.

RECOMMENDED POWER SUPPLY UPON WORKING LENGTH

Operating Length (m)	1	4	7	8	10
Operation Voltage (DC V)	24.0	24.0	24.0	24.0	24.0
Total current (A)	0.82	2.56	4.50	4.88	5.53
Total Power (W)	19.73	77.76	117.12	124.8	132.72
Head voltage (DC V)	23.8	23.5	23.4	23.3	23.3
Tail voltage (DC V)	23.7	22.0	19.4	19.0	17.6
Head current (mA)	62.81	64.77	64.79	64.77	64.79
Tail current (mA)	63.89	61.25	45.37	38.36	27.72
Head-to-tail voltage drop rate(%)	0.42	6.38	17.09	18.45	24.46
Head-to-tail current drop rate(%)	0.32	5.42	29.97	40.77	57.22
Single/Double feed	Single feed	Single feed	Single feed	Double feed	Double feed

Note: if the current drop rate exceeds 30%, power must be supplemented;

PACKAGING INFORMATION



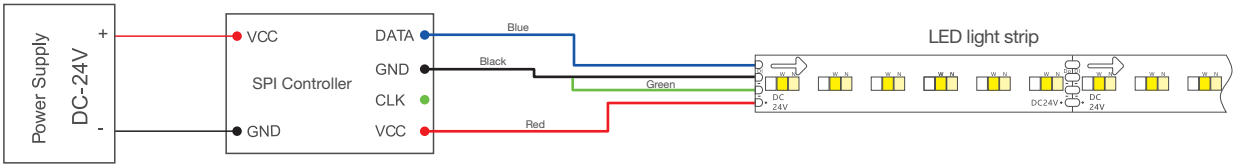
Model No.	Product Size(mm)	Carton Size (mm)	Meter/Reel	Reel/Carton	Net Weight (kg)	Gross Weight (kg)
D5H-RGBWN-216-24	5000*15	550*400*340	5	70	8.05(1±10%)	12.10(1±10%)

Note:

The above-mentioned packaging quantity and weight are only for the illustrated packaging method. For other packaging methods, the packaging quantity and weight will be different. The actual weight is subject to the actual product.

INSTALLATION TOOLS

CONTROLLER WIRING DIAGRAM (SPI CONTROL)



Notes:

- The case uses the MR502 controller;
- The controller supports Bluetooth and mobile phone APP control;
- MR502 can drive up to 2048 pixels;
- Controller MR502 working voltage DC5~24V;
- For other information, see the MR502 Illusion Manual.
- MR502 recommends a load of less than 50m;
- This product features single-wire dual-channel communication, using an SPI return-to-zero code protocol, and is compatible with ICs such as LB1934, LB1934A, and SK6812.

Wiring Method:

Blue wire: Connect to the controller DATA.

Black wire: Connect to the controller GND or the power supply negative terminal.

Green wire: Connect to the controller GND or the power supply negative terminal.

Red wire: Connect to the controller VCC or the power supply positive terminal.

INSTALLATION METHODS AND STEPS

Aluminum channel installation

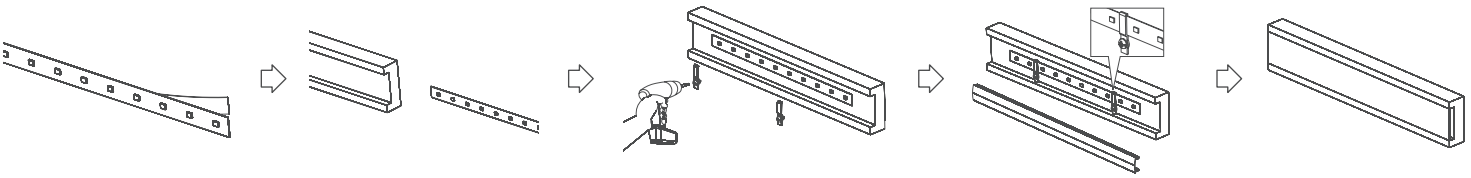
Peel away the self adhesive tape on the back of strip.

Cut off the excess part based on the installation position.

Evenly arrange the strips with appropriate spacing in the track.

Install the cover and end cap.

Covered channel installation



Peel away the self adhesive tape on the back of strip.

Cut off the excess part based on the installation position.

Evenly arrange the strips with appropriate spacing in the track and fix them with clips.

Install the cover and end cap.

Finished.

ATTENTIONS BEFORE INSTALLATION

- Before installation, please check whether the parameters of the product are consistent with the requirements (Seeing the Product Specification or Label).
- The voltage, current, and power of the power supply and load used must be consistent with this product.
- Follow the instructions of wiring diagram (first connect the load and then the power supply) to avoid short circuit.
- Product wires must be correctly connected to the positive and negative terminals of the power output, otherwise the light will not turn on.
- The power cord should be tightly screwed into the terminal, with a recommended tightness that cannot be pulled out by hand.
- The connection terminals must be effectively waterproof and corrosion-resistant.

WARNING

- Do not disassemble or retrofit the light. Do not touch the surface of the light with a sharp object.
- Do not do live-line working during installation,especially for high voltage product.
- Do not use any organic chemical solvents.
- Use neutral glass adhesive to fix this product and it needs to be dried 4 hours in the open environment after operation.
- Treat the ends and the circuit connection points that are not connected to the main line with insulation,waterproof, and anti-corrosion in the installation.
- Use 18AWG (0.75mm² cross-sectional area) or thicker core wire to avoid adverse consequences caused by overheating, if the power cable need to lengthen.
- Make sure the input voltage meets the requirements and lines are connected correctly before lighting on.
- This product is for signage, and do not use as general lighting.
- Series connection within the max run.
- The length of the power cable between the power supply and the led strip should not exceed 2 meters.Otherwise, large circuit loss will lead to inconsistent brightness.
- Installation, maintenance and repair should be operated by a qualified technician.

Version	Content	Date
C1.0	First release	2025-9-23

BLUEVIEW ELEC-OPTIC TECH CO.,LTD

☐ Tel: +86-28-8148 0011
☐ Fax: +86-28-8148 1258
☐ Web.: www.blueviewled.com
☐ Email: sales@blueviewled.com

☐ Add.: No. 1000, Section 2, Konggang 2nd Road, Shuangliu, Chengdu 610207, Sichuan, CHINA