



## Backlit LED bars

VDL-SN5

Vivalyte's backlit solutions are suitable for slim lightboxes, starting from cm depth. The high quality SMD 3030 LEDs bring high efficacy and ensure stable and perfectly even light distribution on the image.

# 24V

## **General specifications**

Input voltage 24 VDC

Efficacy 110 lm/W

**CRI** ≥ 80 (90 optional)

IP class IP60

**Lifetime** > 50 000H L70

LED type SMD 3030
Certificates CE/RoHS/UL

## **Applications**

- Interior design
- Retail and exhibitions
- Backlit banners
- Light ceilings & walls



## **Key features**



Indoor use



High-quality **SMD 3030** 



3 years warranty



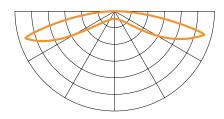
Dimmable



Easy connection and installation

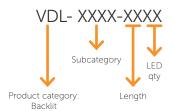
## **Dimensions**

## **Light distribution graph**



## Safety & operation instructions

- Requires proper installation by qualified people
- All connections must be made while disconnected from the main power
- For indoor installation environment only
- Operating temperature range: -20°C to 60°C
- Storage temperature range: -20°C to 70°C
- LED bars can be fixed with screws, clean surface required
- 24V DC finput: safe, low voltage loss & longer run



## **Specifications**

Article name	Length	(pcs)	Input voltage	Power	Light output	Max. in serial connection	Efficacy	Cuttable
VDL-SN5-1302				1.68W	184 lm			100mm/2 Leds
VDL-SN5-3304				3.36W	368 lm			100mm/2 Leds
VDL-SN5-4305								100mm/2 Leds
VDL-SN5-5306					560 lm			100mm/2 Leds
VDL-SN5-9310								100mm/2 Leds

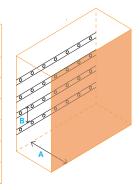
#### Available color temperature

Other color options availabe on request



#### Instalations guidance

Thickness of the panel A (cm)	Bar to bar distance <b>B</b> (cm)	Illumination (lux)	Power density (W/ m²)
4	8	9350-12510	132
5	14	6140-7630	77
6	25	3760-5020	44
8	25	3520-4510	44
10	33	2720-3450	33
12	50	2020-2360	22



#### Note \*:

- 1: Distance "B" is measured center to center
- 2: All test was using a pure white reflective backplane and white light-box fabrics as example.
- 3: Performance can vary when products are used in different environment. The reflectivity of back panel and transmissive characteristics of the front diffuser play vital role in the result.











## Backlit LED bars

VDI-SN4T

Vivalyte's unique backlit solutions are suitable for **ultra-thin lightboxes**, 3-10 cm depth. The first quality SMD LEDs ring **high brightness** and ensure **stable and perfectly even light distribution**.

# 24V

## **General specifications**

Input voltage 24VDC (12V optional)

**Current** Constant voltage

Efficacy 90 lm/W

**CRI** >80

Power consuption 5 or 10 W

IP class IP60

**Lifetime** 30 000H L70

**LED type** SMD 2835

Certificates CE/RoHS/UL

## **Applications**

- Interior design
- Retail & exhibition stand
- Banners
- Ceilings & walls



## **Key features**



Indoor use



High quality **2835LED** 



3 years warranty

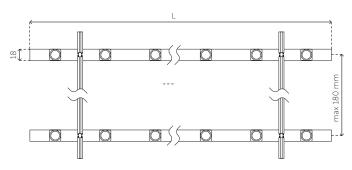


Dimmable



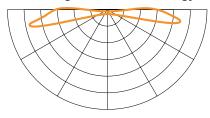
Easy connection and installation

## **Dimensions**



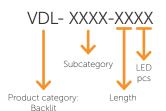
## Light distribution graph

Beam angle: 210° (50% energy)



## Safety & operation instructions

- Requires proper installation by qualified people
- All connections must be made while disconnected from the main power
- Non-water-resistant product for indoor installation environment
- Operating temperature range: -25°C to 60°C
- Storage temperature range: -25°C to 60°C
- LED bars can be fixed with double-sided tape or screws, clean surface required
- 24V DC input: safe, low voltage loss & longer run. 12V DC optional

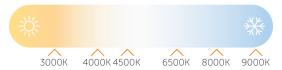


## **Specifications**

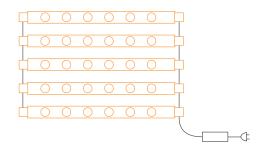
Article name	Length	LED (pcs)	Input voltage	Power	Light output	Max. in serial connection	Efficacy
VDL-SN4T-9612	960mm				906lm		
VDL-SN4T-4806	480mm						

#### Available color temperature

Other color options availabe on request

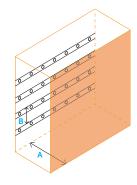


#### **Curtain design**



#### **Recommended placement**

Thickness of the panel A	Bar-to-bar distance <b>B</b>	Qty/m
3cm	10cm	9pcs
5cm	12cm	8pcs
8cm	18cm	5pcs
12cm	22cm	4pcs



#### Note \*:

- 1: Distance "B" is measured center to center
- 2: All test was using a pure white reflective backplane and white light-box fabrics as example.
- 3: Performance can vary when products are used in different environment. The reflectivity of back panel and transmissive characteristics of the front diffuser play vital role in the result.











## **Backlit waterproof LED bars**

VDL-N3

Vivalyte's backlit solutions are suitable for ultra-thin lightboxes, 5-15cm depth. The high quality Nichia 3030 SMD LEDs bring high brightness and ensure stable and perfectly even light distribution.

## 24V

## **General specifications**

Input voltage 24 VDC

**Current** Current regulated

Efficacy 115 lm/W

**CRI** ≥ 82

IP class IP67

**Lifetime** > 60 600H L70

**LED type** 3030 SMD

Certificates CE/RoHS/UL

## **Applications**

- Interior design
- Retail and exhibitions
- Outdoor banners
- Ceilings & walls



## **Key features**



**Outdoor use** 



High-quality **3030 SMD** 



5 Years warranty



Dimmable

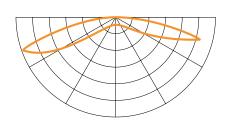


Easy connection and installation

## **Dimensions**

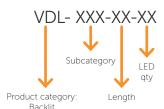
# 9.2mm 9.2mm 51.5mm Spacing center to center Length

## **Light distribution graph**



## Safety & operation instructions

- Requires proper installation by qualified people
- All connections must be made while disconnected from the main power
- Waterproof product for outdoor installation environment
- Operating temperature range: -25°C to 60°C
- Storage temperature range: -20°C to 70°C
- LED bars can be fixed with screws or silicone on clean surface
- 24V DC input: safe, low voltage loss & longer run

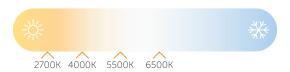


## **Specifications**

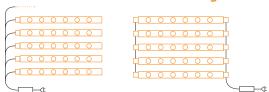
Article name	Length	LED (pcs)	Efficay (lm/W)	Power	Light output	Max. in serial connection	Warranty (Years)
VDL-N3-98-14	980 mm						
VDL-N3-49-07	490 mm				366 lm		
VDL-N3E-98-14	980 mm						
VDL-N3E-49-07	490 mm				366 lm		
VDL-N3HB-10-12	980 mm		79		1136 lm		
VDL-N3HB-05-06	490 mm				586 lm		
VDL-N3HB-03-03					289 lm		

#### Available color temperature

Other color options availabe on request



#### Master cable or Curtain design



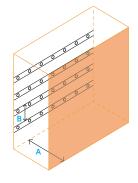
#### **Vivaclip**

The VDL-N3 backlit series is compatible with the Vivaclip system. This budget-friendly clipsing system will help you mount LED curtains even faster and easier.



#### **Recommended dimensions**

Thickness of the panel A	Bar to bar distance <b>B</b>	Qty/m²
5cm	10 cm	10 pcs
7 cm	10 cm	10 pcs
8 cm	11 cm	9 pcs
10 cm	13 cm	8 pcs



#### Note \*:

- 1: Distance "B" is measured center to center
- 2: All test was using a pure white reflective backplane and white light-box fabrics as example.
- 3: Performance can vary when products are used in different environment. The reflectivity of back panel and transmissive characteristics of the front diffuser play vital role in the result.





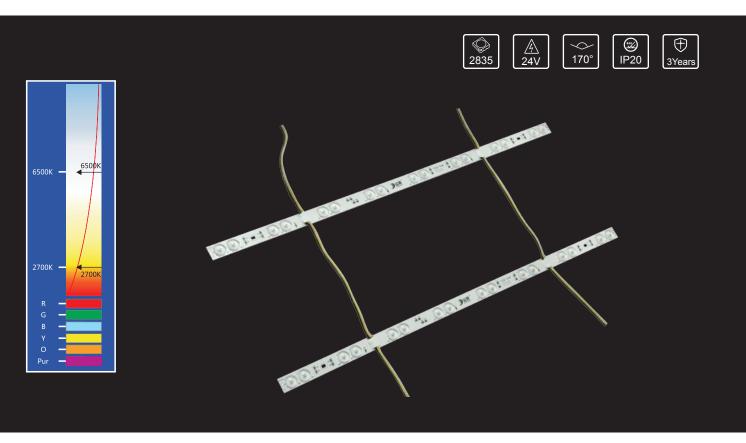












#### **Features**

- 1. Adopt high quality 2835 LED
- 2. Self-designed secondary lens with 170°beam angle for uniform light
- 3. Aluminum PCB for direct and quick heat dissipation
- 4. Curtain style, easy mounting.
- 5. Two lengths for option, customization available.
- 6. lighting evenness of light box surface up to 0.9
- 7. Achieve light effect change by external controller

#### **Application**

Suitable for back-lit lightbox with depth of 6-18cm.

#### Installation

Fix by screws or adhesive tape

## Lighting Mode



#### Specification

Model No.	Light Color	Color Temperature(K)	Beam Angle	CRI	Typical Luminous Flux value(lm/pcs)	Efficacy (Im/W)	Voltage (V DC)	Power (W/pcs)
VDL CNA DW C2040	W	6500	- 170° 70+ -	691	90	24\/	0	
VDL-SN4-DW-62016	N	2700	170	70+	707	92	24V	8
VDI 0N4 DW 77000	W	6500	470°	70.	864	90	24V	10
VDL-SN4-DW-77020	N	2700	170	170°   70+	883	92	240	10

#### Other Parameters

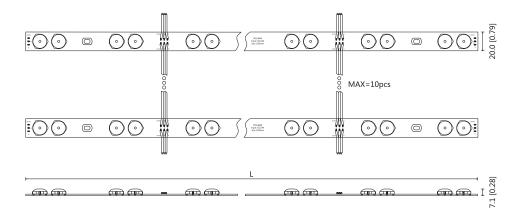
Model No.	LED Quantity/pc	Product Size L*W*H(mm)	Standard Packing Quantity (pcs/string)	Working Temperature	Storage Temperature
VDL-SN4-DW-62016	16	620*20*7.1	10	-20~+60°C	-20~+70°C
VDL-SN4-DW-77020	20	770*20*7.1	10	-20~+60 C	-20~+70 C

#### NOTE:

- 1.Test environment temperature : 25±2°C.
- 2. The above data is typical values. The actual data of each single product may differ from the typical values. The data is subject to change without notice.
- 3.Luminous flux above is tested with single-color light on at 8000-9000K.
- 4.Different color temperature will make luminous flux different.
- 5.The Luminous flux&power tolerance within ±10%.

#### **Profile Drawings**

 $\pmb{\mathsf{Unit}} : \mathsf{mm}[\mathsf{inch}]$ 



Note: For detailed drawing, please consult sales rep.

VIVALYTE BVBA

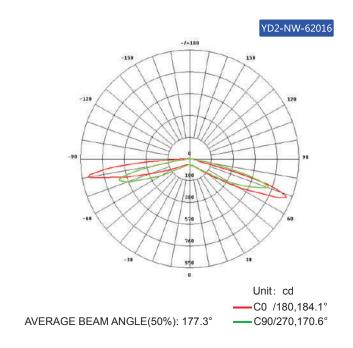
Tel.:+32 56 42 65 35

Mail:info@vivalyte.com Web:www.vivalyte.com

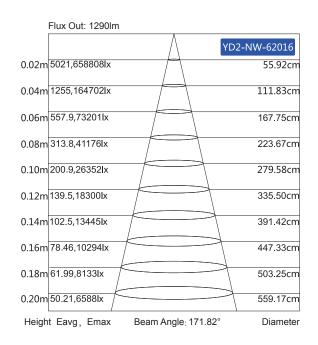
Add.:Kouterstraat 6, Wevelgem, B-8560, Belgium VAT: BE500611159



#### **Luminous Intensity Distribution Diagram**



## Average Illumination



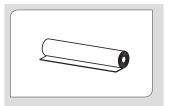
Note: The above two igures are tested with the sample VDL-SN4-DW-62016 at N=2700K/W=6500K, for other data, please consult sales rep.



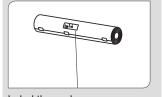
#### packing



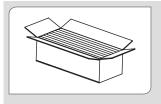
Roll the product with EPE foam.



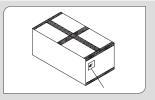
Seal the reel.



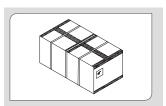
Label the reel.



Put the product neatly into carton box.



Seal and label the box.



Use packing belt to pack. Add edge protectors if necessary.

#### **Packaging information**

Model No.	Product Size L*W*H(mm)	Carton Size(mm)	Pcs/Carton	Net Weight(kg)	Gross Weight(kg)
VDL-SN4-DW-62016	620*20*7.1	685*295*275	150	12.65(1±10%)	13.95(1±10%)
VDL-SN4-DW-77020	770*20*7.1	825*295*275	150	15.25(1±10%)	16.55(1±10%)

#### Note:

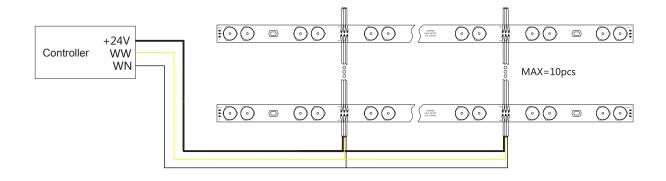
Packaging material: EPE foam and carton box.

The above quantity and weight are only for the illustrated packaging method. There will be differences in the quantity and weight with other packaging methods.



#### Installation

#### 1.Connection Diagram



#### 2.Installation Reference

Model No.	Surface Material	Depth H(cm)	Illumination (Lux)	Evenness	Density (pcs/ m²)	Bar Spacing Y(cm)	Power Density (W/m²)	Visual effects
		6	12340-14520	0.85	7	14	134	ОК
		8	9950-11850	0.84	6	16	115	ОК
VDL-SN4-DW	White Soft	10	7650-9220	0.83	5	20	96	ОК
-77020	Film	12	7090-8250	0.86	5	20	96	ОК
		15	6210-7050	0.88	5	20	96	ОК
		18	5320-5890	0.90	5	20	96	OK

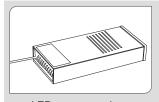


#### Note:

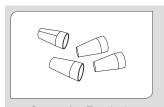
- Light box type: single face light box
- Light box bottom: Reflective coating
- Spacing, see left
- The data of above form is tested with the sample VDL-SN4-DW-77020 at N&W two lights normal on,for other data,please consult sales rep.



#### 3. Products and Tools







LED power supply Diagonal pliers

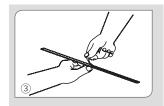
Connection Terminals

#### 4.Installation Methods and Steps

Method one: fix by double-sided foam tape and screws











- 1. Clean the mounting surface.
- 2. Arrange the mounting space.
- 3. Peel away the self adhesive tape on the rear of product and evenly mounting the product with appropriate space.
- 4. For bare wire connection, please use terminals.

  Treat the thread with insulation,waterproof, and anti-corrosion arrangement as it cannot pull out by hands.
- 5. Check and ensure correct installation, and fix the product with screws ,then power on for self-test.

#### Note:

- 1. Screw to avoid welding plate, avoiding short circuit
- 2. When fastening the screw, make sure to add plastic gaskets to insulate the screw from the LED panel.



#### **Attentions before installation**

- Before installation, check that the product parameters are consistent with the requirements (Seeing product specifications or product labels)
- Load voltage, current, power and power supply should be matched with the product.
- Follow the instructions of wiring diagram (first connect the load and then the power supply) to avoid short circuit.
- Make sure the correct connection of positive and negative poles between products and power supply. Otherwise, the light will not be on.
- Make sure the power cord firmly screwed into the terminal and it should not be pulled out by hands.
- The terminal should have insulation, waterproof and anti-corrosive treatment.
- Please take and use the product gently to avoid damage.

#### **Common Faults and Troubleshoot**

	0.33.00	:		
	Quick Gu	ide		
Problems	Reasons	Solutions		
	No electric supply.	Power on		
All LEDs can not light on.	Automatic power protection from the open or short circuit in output of the power supply.	Fix the short circuit problem.		
	Wrong connection of power supply.			
	Some switching mode power supplies are not powered.	Check the power supply		
LEDs can not light on partly.	Power supply line error.	system to fix it.		
	Mistaken wire connection of some of products	Correctly connection		
	Power overloaded.	Replace with more powerful power		
Brightness of LED is inconsistent tor insufficient.	Power supply circuit excessive consumption.	Make sure the working voltage of the product within ±5% of standard voltage, or keep balance by circuit power consumption.		
tor insumcient.	Excessive quantities in series connection of the product	Reduce the quantities of the product in series connection to meet requirement.		
	Connection point fault.	Remove bad connection point.		
LED flicker.	Switching power supply failure.	Replace a new power supply.		
	Wrong Installation or use of products	Please follow the instructions		

#### **Marning**

- 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.
- $\bullet$  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.

## Statements and Recycling

#### Statements:

Repair should be operated by a qualified technician, if the external circuit or main line of this product is damaged. The parameters given in this manual are typical values and for reference only.

All illustrations and drawings in this manual are for reference.

This product is subject to change without notice.

#### Recycling:

LED lighting products belongs to electronic products, please do recycling treatment according to the relevant WEEE directives.

VIVALYTE BVBA

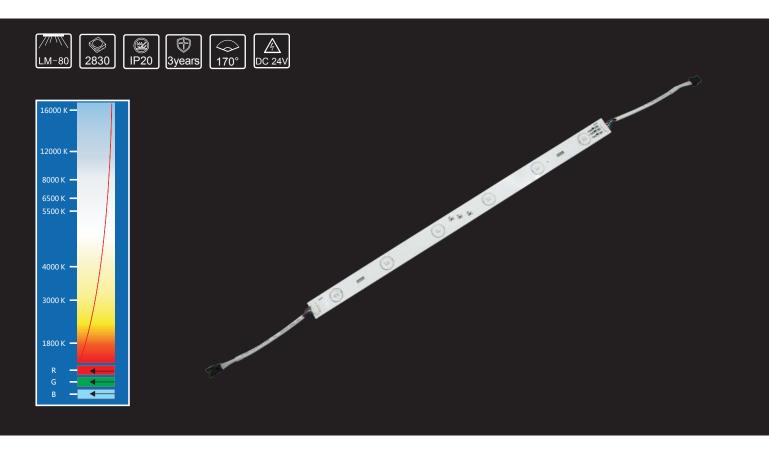
Tel.:+32 56 42 65 35

Mail:info@vivalyte.com Web:www.vivalyte.com

Add.:Kouterstraat 6, Wevelgem, B-8560, Belgium VAT: BE500611159







#### **Features**

- Adopt RGB in one 2830 LED
- Good color-mixing effect and stability
- Special lens with 170° beam angle, suitable for thin light box
- Create rich color changing effect via controller
- Adopt standard terminals for easy usage

#### **Application**

• Suitable for RGB lightbox with thickness above 7cm etc.

#### Installation

Prefix with self adhesive tape and fix with screws



#### **Optical & Electrical Parameters**

Model No.	Light Color	Color Temperature/ Wavelength(nm/k)	Beam Angle	Ra	Typical Luminous Flux(lm/pcs)	Efficacy (lm/w)	Voltage (DC V)	Power (W/pcs)
	R	620			48	30. 0		1.92
VDL-SN-	G	540	170°		77	48. 2	24	1.92
RGB3in1-48-6	В	470	170		25	15. 7		1.92
	RGB*	100000			142	29. 6		5.76

#### Other Parameters

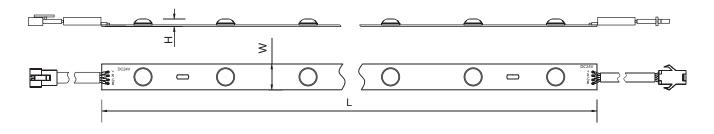
Model No.	LED Quantity (pcs)	Product Size L*W*H(mm)	Standard Series Connection (pcs)	Max Run (pcs)	Working Temperature	Storage Temperature
VDL-SN- RGB3in1-48-6	6	480*25*7.3	3	3	-20~+60°C	-20~+70°C

#### Note:

- Test environment temperature : 25±2°C.
- The above data is typical values. The actual data of each single product may differ from the typical values. The data is subject to change without notice.
- The luminous flux is tested with single light on.
- Different color temperature will make luminous flux different.
- The data of RGB is tested with RGB three lights on.

#### **Profile Drawings**

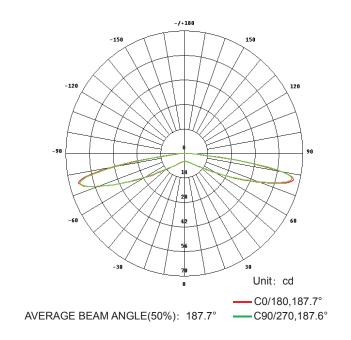
Unit:mm



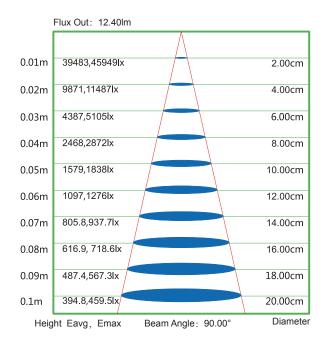
Note: Please ask the sales for detail drawing



#### **Luminous Intensity Distribution Diagram**



#### **Average Illumination**

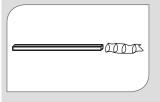


Average Illumination(with RGB light on)





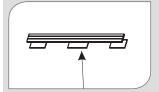
#### **Packaging Information**



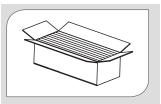
Put the product into PE bag.



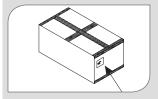
Seal the bag in two ends and label it.



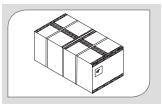
Separate the product layer by layer with foam.



Put the product and accessories bag into carton box.



Seal and label the box.



Use packing belt to pack. Add edge protectors if necessary.

#### **Packaging information**

Model No.	Product Size(mm)	Carton Size(mm)	Total Quantity(pcs)	Net Weight(kg)	Gross Weight(kg)
VDL-SN- RGB3in1-48-6	480*25*7.3	550*400*340	216	15.34(1±10%)	16.65(1±10%)

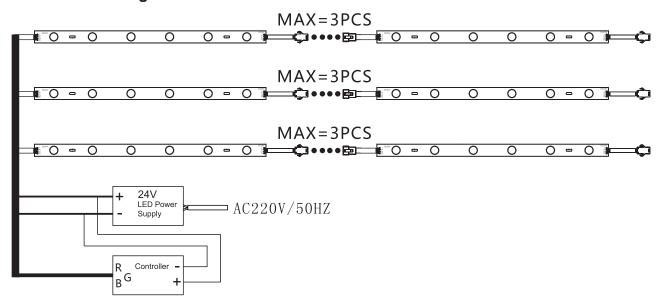
#### Note:

- Shipping materials: PE bags and carton box.
- The above quantity and weight are only for the illustrated packaging method. There will be differences in the quantity and weight with other packaging methods.



#### Installation

#### 1.Connection Diagram



#### 2.Installation Reference

Model No	Bottom Color of Light Box	Surface Material	Thickness H(cm)	Brightness (cd/ m²)	Density (pcs/ m² )	Spacing Y(cm)	Visual effects
		ite White Soft Film	7	255	24	8	OK
VDL-SN-	White		8	231			
RGB3in1-48-6	vviiite		9	210			
			10	190			



#### Note:

- The colored light is tested with brightness(cd/m), and here is the data with RGB three lights normally on.
- BQ5-A is 0.5m per bar, please pay attention to the installation density.
- Spacing, see upper left;
- Please ask the sales for data of other depth or colors.





#### 2.Accessories & Tools







Tools:Diagonal pliers



Mounting gaskets



M3 Self-tapping screw



Electric batch and electric drill



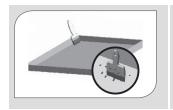
Clip bar



Connection terminal

#### 3.Installation steps

#### 1.Method one: fix by double-sided foam tape and screws



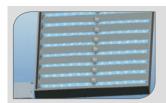
Clean the mounting surface.



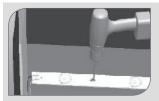
Arrange the mounting space.



Peel away the self adhesive tape on the rear of product and evenly mounting the product with appropriate space.



Connect the DC output end of power supply with product and connect the controller. Treat the thread with insulation,waterproof, and anticorrosion arrangement as it cannot pull out by hands.



Check and ensure correct installation, and fix the product with screws ,then power on for self-test.

#### Note:

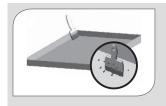
Screw to avoid welding plate, avoiding short circuit

- When fastening the screw, make sure to add plastic gaskets to insulate the screw from the
- LED panel.

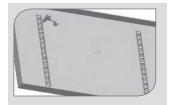


# RIGID BAR VDL-SN-RGB3in1

#### 2.Method two: fix by clip bar



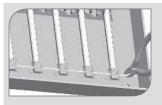
Clean the mounting surface.



Evenly mounting the clip bars with appropriate space and fix with screws.



Fix the product one by one with clips on the bar.



Cut off the excess rigid bar.

Note: Cut in the middle of the



Please fix by at least two terminals if the product need to be connected, and treat the thread with insulation,waterproof, and anti-corrosion arrangement as it cannot pull out by hands.



Install the power supply and treat the thread.

Note: make sure the metal clip bar without reach any live part to avoid short circuit.

#### **Attentions**

- Before installation, check that the product parameters are consistent with the requirements (Seeing product specificationsor product labels)
- Load voltage, current, power and power supply should be matched with the product.
- Follow the instructions of wiring diagram (first connect the load and then the power supply) to avoid short circuit.
- Make sure the correct connection of positive and negative poles between led module and power supply. Otherwise, the light will not be on.
- Make sure the power cord firmly screwed into the terminal and it should not be pulled out by hands.
- The terminal should have insulation, waterproof and anti-corrosive treatment.





#### Common Faults and Troubleshoot

	Quick Guide				
Problems	Reasons	Solutions			
	No electric supply.	Fix the short circuit problem.			
All LEDs can not light on.	Automatic power protection from the open or short circuit in output of the power supply.	Fix the short circuit problem.			
	Wrong connection of power supply.				
LEDs can not	Some switching mode power supplies are not powered.	Check the power supply			
light on partly.	Power supply line error.	system to fix it.			
	Mistaken wire connection of some of products	Correctly connection			
	Power overloaded.	Replace with more powerful power			
Brightness of LED is inconsistent tor insufficient.	Power supply circuit excessive consumption.	Make sure the working voltage of the product within ±5% of standard voltage, or keep balance by circuit power consumption.			
	Excessive quantities in series connection of the product	Reduce the quantities of the product in series connection to meet requirement			
	Connection point fault.	Remove bad connection point.			
LED flicker.	Switching power supply failure.	Replace a new power supply.			
	Wrong Installation or use of products	Please follow the instructions			

#### 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.

## Statements and Recycling

#### Statements:

Repair should be operated by a qualified technician, if the external circuit or main line of this product is damaged.

The parameters given in this manual are typical values and for reference only.

All illustrations and drawings in this manual are for reference.

This product is subject to change without notice

#### Recycling:

LED lighting products belongs to electronic products, please do recycling treatment according to the relevant WEEE directives.



## Backlit RGB full color LED bars

**VDL-SN-RGE** 

Vivalyte backlit RGB full color solutions are a perfect fit for rich color rendered lighboxes or backlit illuminated surfaces, where the perfect homogeneity would play a vital role on the vivid visual experiences.

# 24V

## **General specifications**

Input voltage 24 VDC

**Current** constant current regulated

Power consuption < 12 W

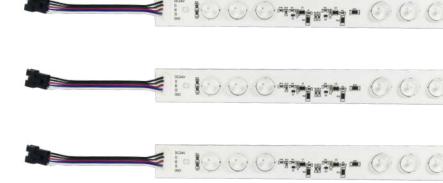
IP class IP20

**LED type** Osram RGB LED

Certificates CE/RoHS/UL

## **Applications**

- Interior design
- Retail and exhibitions
- Large ceilings & walls



## **Key features**



Indoor use



**RGB** full color



5 Years warranty



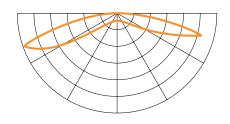
Dimmable



Easy connection and installation

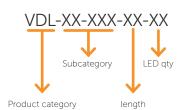
## Light distribution graph

Beam angle 170°



## Safety & operation instructions

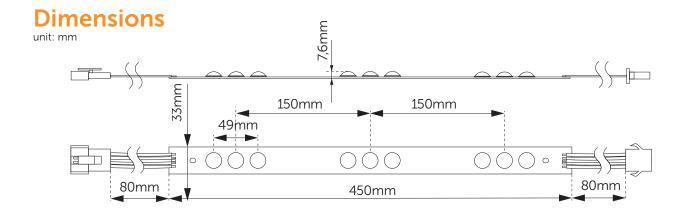
- Requires proper installation by qualified people
- All connections must be made while disconnected from the main power
- Non-water-resistant product for indoor installation environment
- Operating temperature range: 25°C to 60°C
- Storage temperature range: -25°C to 70°C
- LED bars can be fixed with screws or silicone on a clean surface
- 24 V DC input: safe, stable & reliable.



## **Specifications**

Article name Length Wave length (nm) Input voltage Power (W/pcs) connection

**VDL-SN-RGB-45-09** 450 mm R 620 G 540 B 450 24 V DC < 12 8 pcs



#### 5-Pin connection cable

The VDL-RGB backlit bars are interconnected with 5-pin connectors. Additional extension cables are available in 50cm and 150cm.

