

修订					
版本	标记	处数	内容	日期	变更者
V0			N/A		

**Model No. & Specifications :**

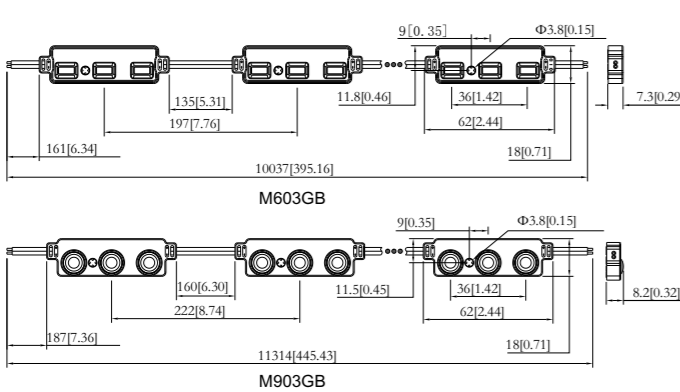
Model No.	M603GB	M903GB
Rated Power (W/Piece)	0.6	0.6
Working Voltage(V DC)	12	
IP Code	IP65	
Operating Temperature (°C[°F])	-25~+60[-13~+140]	
Storage Temperature (°C[°F])	-25~+70[-13~+158]	

**Profile:**

1. Standard Cascade Qty

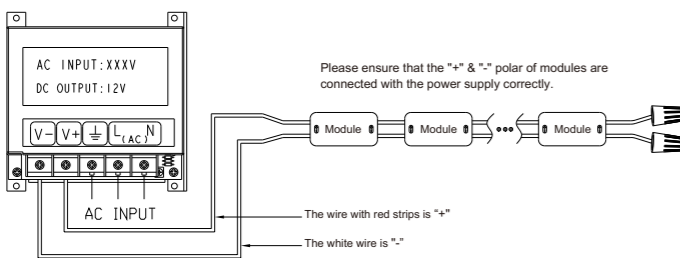
Model No.	M603GB	M903GB
Standard Cascade Qty ( pcs )	50	50

2. Standard Cascade Dimensions



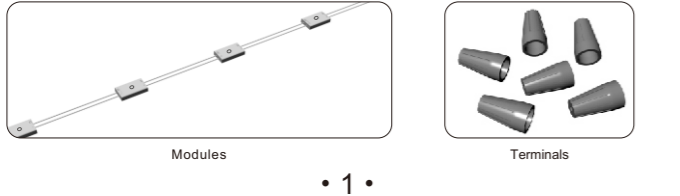
**Connection, Product, Accessories & Installing Tools:**

1. Connecting Instruction :



2. Product, Accessories & Installing Tools :

(1) Product & Accessories



(2) Self-provided Installing Tools & Materials



**Installation Example:**

1. Layout of Channel Letter

Reference Scheme

Model No. : M603GB

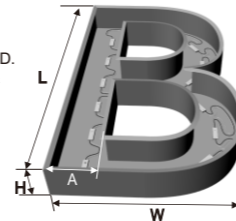
Letter specification				Modules			Surface Illumination Scope (lux)
Width of main strokes (mm)	Thickness (mm)	Dimensions (mm)	Area (m <sup>2</sup> )	Max. Distance between Modules(mm)	Used Qty (pcs)	Installation Density (pcs/m <sup>2</sup> )	
A=60	H=61	L473*W290	0.14	70	18	129	6000~7200
A=80	H=79	L710*W430	0.3	90	25	83	3500~4500
A=100	H=103	L855*W525	0.45	100	26	58	2600~3300
A=120	H=123	L1040*W653	0.68	120	28	41	1800~2300
A=150	H=152	L1194*W710	0.85	140	30	35	1700~2000
A=180	H=182	L1490*W900	1.34	160	33	25	1200~1400

Model No. : M903GB

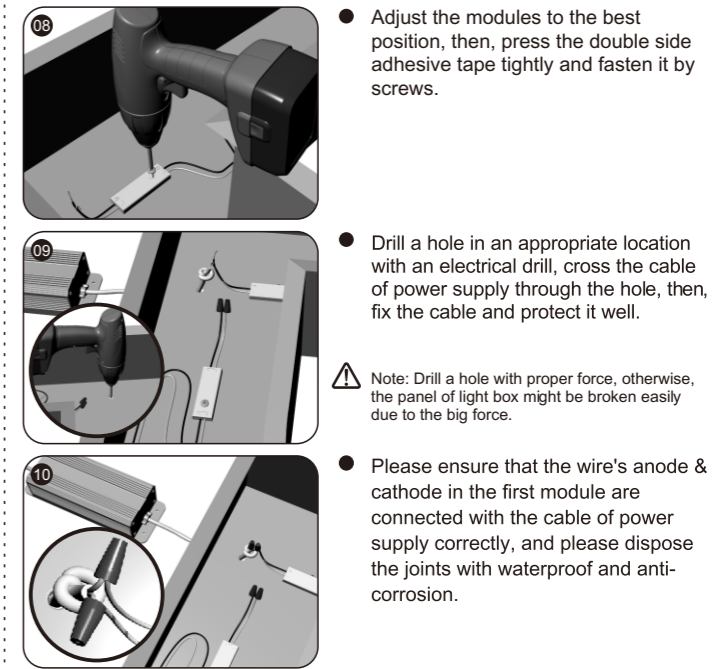
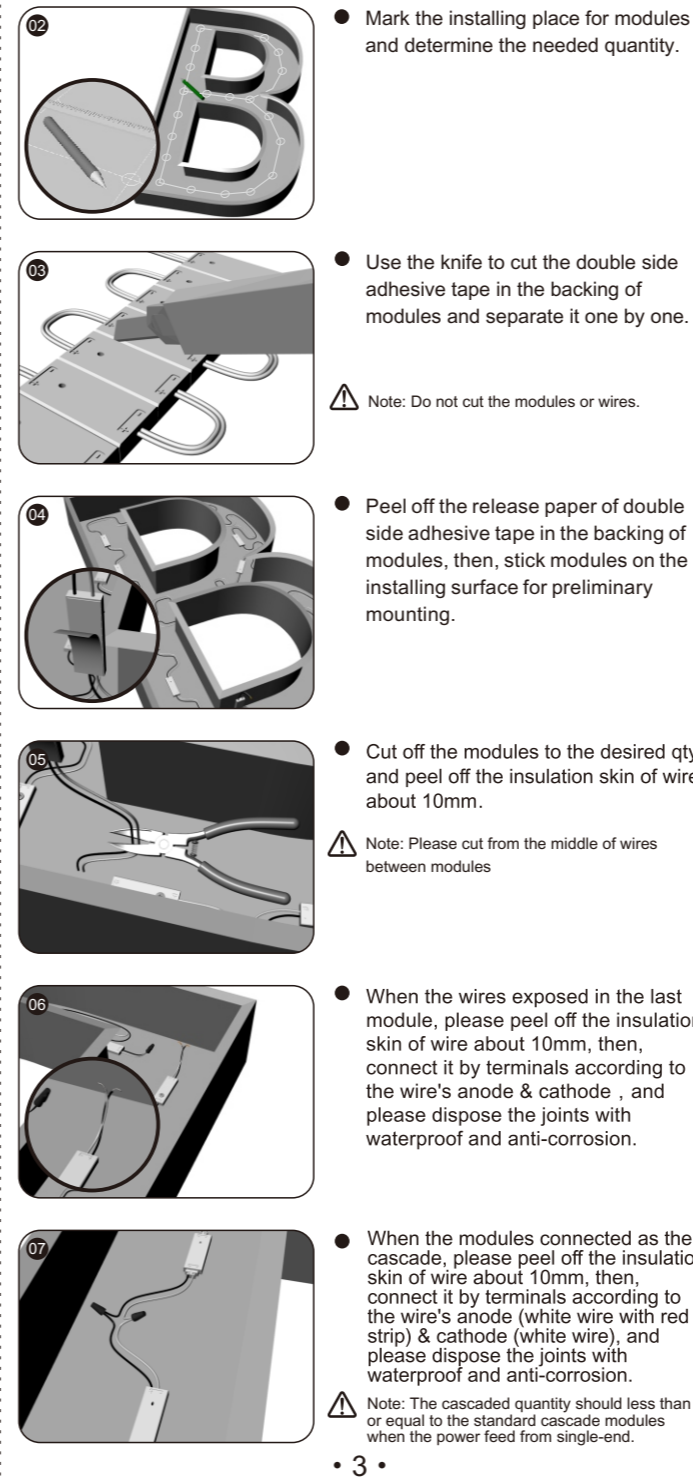
Letter specification				Modules			Surface Illumination Scope (lux)
Width of main strokes (mm)	Thickness (mm)	Dimensions (mm)	Area (m <sup>2</sup> )	Max. Distance between Modules(mm)	Used Qty (pcs)	Installation Density (pcs/m <sup>2</sup> )	
A=60	H=61	L473*W290	0.14	90	16	114	4500~5600
A=80	H=79	L710*W430	0.3	110	21	70	2500~3300
A=100	H=103	L855*W525	0.45	130	22	49	1800~2400
A=120	H=123	L1040*W653	0.68	150	25	37	1400~1700
A=150	H=152	L1194*W710	0.85	180	26	31	1300~1500
A=180	H=182	L1490*W900	1.34	220	26	19	800~1000

Remarks :

1. Tested with the modules which built by CCT 6000K LED.
2. The above data was tested with 3mm thickness acrylic board which the light transmittance is 54.4%.
3. The above illumination is the minimum data when the surface illumination is uniform under this thickness.
4. All the above data is for reference only.



**Installation Steps**



2. Layout for Light box

Reference Scheme

Model No. : M603GB

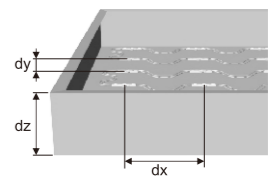
Light Box Thickness(mm)	Distance between modules (mm)		Installation Density (pcs/m <sup>2</sup> )	Illumination Scope (lux)
dz = 60	dx = 65	dy = 40	385	9400~9800
dz = 80	dx = 70	dy = 50	286	7100~7500
dz = 100	dx = 80	dy = 60	208	4900~5300
dz = 120	dx = 100	dy = 70	143	3100~3500
dz = 150	dx = 120	dy = 90	93	2000~2300
dz = 180	dx = 140	dy = 120	60	1400~1600

Model No. : M903GB

Light Box Thickness(mm)	Distance between modules (mm)		Installation Density (pcs/m <sup>2</sup> )	Illumination Scope (lux)
dz = 60	dx = 70	dy = 50	286	6800~7200
dz = 80	dx = 80	dy = 60	208	4600~4900
dz = 100	dx = 90	dy = 70	159	3100~3300
dz = 120	dx = 110	dy = 100	91	1980~2000
dz = 150	dx = 130	dy = 120	64	1380~1420
dz = 180	dx = 160	dy = 140	45	970~1000

Remarks :

1. Tested with the modules which built by CCT 6000K LED.
2. The above data was tested with 3mm thickness acrylic board which the light transmittance is 54.4%.
3. The above illumination is the minimum data when the surface illumination is uniform under this thickness.
4. All the above data is for reference only.



- 备注 :**
- 1.尺寸 : 385\*210mm ;
  - 2.材质 : 80g书纸 ;
  - 3.公差 : ±1mm ;
  - 4.灰度双面印刷 ;
  - 5.虚线不印刷 , 来料必须从虚线处折好 ;

**说明书反面**

深圳市日上光电股份有限公司 RISHANG OPTOELECTRONICS CO., LTD.					
零件名称	3014包塑模组说明书 (英文 日上LOGO)	设计	肖云强	日期	2013.01.08
零件编码	308-02-107	审核		日期	
图纸编号	RD-M603GB-BZ004	标准化		日期	
页数	共 2 张 第 2 张	批准		日期	
				表面处理	
				重量	
				比例	N/A
				单位	

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Installation Steps

Remind : Please refer to the installation steps for Channel Letter.

Troubles Shooting:

Malfunction & Solution Table		
Malfunctions	Possible Causes	Solutions
All LED don't work	1.The power supply didn't connect to the Power grid.	Power on
	2.The power supply is auto protected because the output are short circuit.	Remove the malfunction and power on again.
	3.The input of modules to the output of power supply are connected reversely	Check the connecting and ensure the wires are connected correctly.
The part of LED don't work	1.The part of power supply no output	Check the power supply and remove malfunctions.
	2.The part of modules are wrong connected to the power supply.	
	3.Several modules are connected reversely.	Connect the wires correctly.
Brightness of LED is dark or not even	1.The loading of power supply is overloaded.	Use more supplies or replace it with high power supply.
	2.The line losing of the power supply's wire is too big, or exist the bigger difference for each electrical circuit .	Ensure the input voltage to modules are 12V DC with 5% tolerance. (1. Shorten the length of wires between the modules to power supply or use big diameter of wires. 2. Check and ensure the cascaded quantity of modules are less than or equal to the maximum cascade quantity which allowed. And the quantity for each electrical circuit are same, or the difference no exceed 3 modules between the strings. )
	3.Modules cascaded too many per the strings.	Lessen the cascaded qty for the modules and ensure the quantity for each electrical circuit are within the maximum cascade quantity which allowed.
LEDs are blinking	1.Poor contacted in the joints.	Find out the malfunction and remove it immediately.
	2.Failures in the power supply.	Replace the power supply.

Caution :

1. Cautions for Installation and Using:
  - 1.1 Please check and ensure that the anode & cathode for the module's wires are connected to power supply output's anode & cathode accordingly. Otherwise, the product can not work normally.
  - 1.2 Double side adhesive tape is only used for preliminary fixing. Please use the screws or the neutral silicon sealant to fasten the modules, otherwise, there will be caused defects such as product shift, fall off and so on.
  - 1.3 The standard cascade quantity is 50pcs modules. The maximum cascade quantity is 50pcs modules under single-end power feed and 100pcs modules for double-end power feed, prohibited to exceed this limitation in the actual using.
  - 1.4 Please dispose the exposed wire and the joints with insulation, waterproof and anti-corrosion.

2. Cautions for others parts selected:
  - 2.1 Please ensure that the output voltage for the using power supply are 12±5%V DC, and the rated power must be reserved 20% than the actual loading.
  - 2.2 The using power supply must pass safety certification which have the protect functions in short circuit, over voltage and over current.
  - 2.3 During the installing, please ask the qualified persons to count and select the suitable cable according to the diameter and length when the connecting cable need be extended, otherwise, there will be caused low input voltage to product, or fire hazard due to the cable too hot during working.

Warning:

- Prohibited to disassemble, modify this product.
- Prohibited to operate the product during power on.
- Prohibited to use any organic chemical solvents to contact this product directly or indirectly.
- Installation, repair, maintain must be operated by the professional persons. Prohibited to operate it by the unprofessional persons.
- If the modules don't fasten with the screws, you can use the neutral silicon sealant to fix it. During the using, please don't seal the light box until the silicon is solidified fully. Prohibited to use any acid or alkaline adhesive to fix the product. Please pay attention to the silicon sealant don't stuck the surface of the lens.
- This product will generate the heat during working. Please consider the installing density for the modules and use the materials with good heat dissipation.
- These products are suitable for use in dry, damp and wet locations.
- These products are only suitable for connection to a circuit from a Class 2 power source.
- These products have not been evaluated for use when connected to a power source that does not comply with Class 2 voltage and energy limited supplies.
- For wet location products, "These products are not required to be enclosed or protected from weather".

Warranty:

Model No.	Warranty
M603GB	5years or 22000 hours, whichever come first!
M903GB	

Additional Remarks:  
The warranty period in the above refer to the product which used in the inside of light box and signage with waterproof.

Declaration:

- If the external flexible cable of light box is damaged, please replace it by the manufacturers or theirs service agent or the qualified persons to avoid a hazard.
- The given data in this manual is based on our standard product. There may be existed varies with the actual delivery products. Please subject to the measure data for the actual product.
- All illustrations in this user manual are for reference only. Please subject to the received goods.
- The product subject to change or modify without prior notice.



LED Injection Modules User Manual

M603GB M903GB



Please carefully read this manual before use our products and keeping properly V1.0

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 Service Hotline: +86-400-880-2460  
 E-mail: info@ledlamps.com.cn  
 Website: www.ledlamps.com.cn

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说明书正面

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零件编码	308-02-107	审核		日期		重量
图纸编号	RD-M603GB-BZ004	标准化		日期		比例
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