

A

Series Name	Cutttable on wire between every module			Cutttable on wire here
Model No.	M921DB	MG01DB	MG11DB	MG01XBB
LED Color	White			
IP Code	IP65			
Rated Power(W/Piece)	1.2	2.3	2.7	2.4

Rated Working Voltage (V DC): 12 /

Operating Temperature(°C/°F): -25... (60[-13-+140])

Storage Temperature(°C/°F): -25-+ 70[-13-+158]

Application range: double-sided light box with applicable width<:2000mm[78.74in] thickness 140-400mm[5.51-15.75in] or single-sided light box with 80-200mm [3.15-7.87in] thickness.

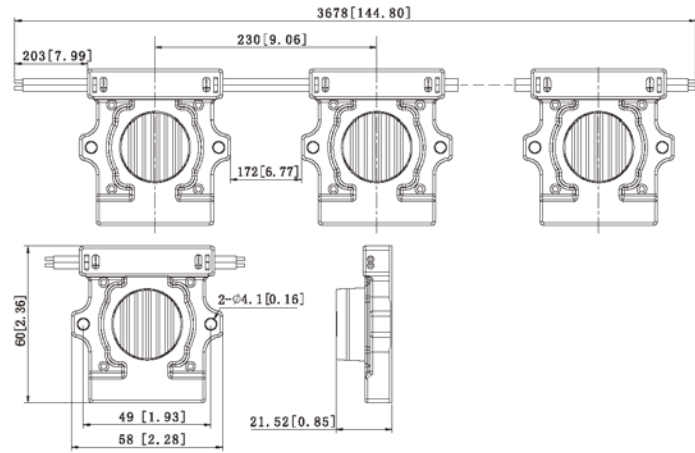


Fig3. MG11DB

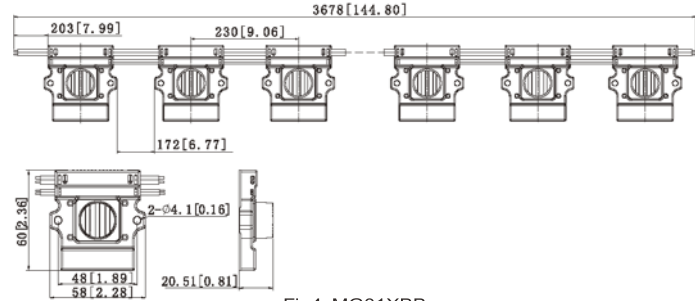


Fig4. MG01XBB

Connecting Instruction:

(Please ensure the + & - of modules are connected with the Jose of power supply correctly.)

The wire with red strips is +
The white wires is -

1. Product Spare Parts:



Wire connectors

2. Self-provided Tools & Material:

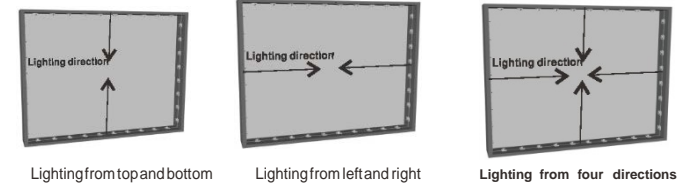


Cutting nipper, Electrical Drill & Drill bit

Self-tapping Screws(ST3.5)

Installation Example:

Application & Installation Diagram:



Reference Scheme

Model: M921DB

(mm)PnD Co (mm)PnD (mm)PnD	140[5.51]	180[7.09]	220[8.66]	260[10.24]	300[11.81]	Remark
70[2.76]	580	502	442	394	355	1.5m[4.9211]
110[4.33]	375	321	283	251	228	double-sided light box layout
150[5.91]	264	224	194	179	165	
190[7.48]	/	191	164	148	138	
230[9.06]	/	/	134	123	112	

(mm)PnD Co (mm)PnD (mm)PnD	140[5.51]	180[7.09]	220[8.66]	260[10.24]	300[11.81]	Remark
70[2.76]	1070	912	784	721	638	2m*1.5m
110[4.33]	724	593	531	475	429	16.56*4.9211
150[5.91]	482	419	366	327	311	double-sided light box layout
190[7.48]	/	343	298	269	247	
230[9.06]	/	/	245	224	207	

Model: MG01DB

(mm)PnD Co (mm)PnD (mm)PnD	140[5.51]	180[7.09]	220[8.66]	260[10.24]	300[11.81]	Remark
70[2.76]	1512	1321	1122	1019	932	1.5m[4.9211]
110[4.33]	910	802	719	652	593	double-sided light box layout
150[5.91]	646	559	508	445	412	
190[7.48]	/	482	423	370	352	
230[9.06]	/	/	344	295	271	

(mm)PnD Co (mm)PnD (mm)PnD	140[5.51]	180[7.09]	220[8.66]	260[10.24]	300[11.81]	Remark
70[2.76]	1189	941	879	824	745	2m[6.56ft]
110[4.33]	752	686	618	557	511	double-sided light box layout
150[5.91]	/	463	407	374	340	
190[7.48]	/	359	327	303	278	
230[9.06]	/	/	/	253	229	

(mm)PnD Co (mm)PnD (mm)PnD	140[5.51]	180[7.09]	220[8.66]	260[10.24]	300[11.81]	Remark
70[2.76]	2779	2432	2079	1890	1722	2m*1.5m
110[4.33]	1680	1482	1325	1214	1103	16.56*4.9211
150[5.91]	1196	1032	921	816	757	double-sided light box layout
190[7.48]	/	850	728	679	619	
230[9.06]	/	/	631	562	514	

Model: MG11DB

(mm)PnD Co (mm)PnD (mm)PnD	140[5.51]	180[7.09]	220[8.66]	260[10.24]	300[11.81]	Remark
70[2.76]	1423	1255	1118	1006	912	double-sided light box layout
150[5.91]	648	565	504	454	408	
190[7.48]	/	451	394	357	346	
230[9.06]	/	/	326	293	274	

(mm)PnD Co (mm)PnD (mm)PnD	140[5.51]	180[7.09]	220[8.66]	260[10.24]	300[11.81]	Remark
70[2.76]	1137	1007	895	822	790	2m[6.56ft]
110[4.33]	779	649	581	537	486	double-sided light box layout
150[5.91]	/	482	427	378	354	
190[7.48]	/	359	318	288	265	
230[9.06]	/	/	/	258	226	

(mm)PnD Co (mm)PnD (mm)PnD	140[5.51]	180[7.09]	220[8.66]	260[10.24]	300[11.81]	Remark
70[2.76]	2654	2326	2028	1821	1659	2m*1.5m
110[4.33]	1779	1502	1367	1178	1097	16.56*4.9211
150[5.91]	1200	1033	905	829	746	double-sided light box layout
190[7.48]	/	836	721	659	616	
230[9.06]	/	/	589	545	496	

(mm)PnD Co (mm)PnD (mm)PnD	140[5.51]	180[7.09]	220[8.66]	260[10.24]	300[11.81]	Remark
70[2.76]	915	885	798	692	640	1.5m[4.92ft]
110[4.33]	654	568	487	436	394	double-sided light box layout
150[5.91]	475	390	337	306	297	
190[7.48]	/	318	267	244	219	
230[9.06]	/	/	209	189	177	

(mm)PnD Co (mm)PnD (mm)PnD	140[5.51]	180[7.09]	220[8.66]	260[10.24]	300[11.81]	Remark
70[2.76]	1684	1644	1454	1298	1199	2m*1.5m
110[4.33]	1257	1094	930	854	778	16.56*4.9211
150[5.91]	931	778	672	590	544	double-sided layout
230[9.06]	/	/	418	379	346	

Remark:

- Above illumination is average illumination when surface is uniform;
- This light box adopt 3M-P2; light transmittance 40%;
- All above layout data are tested from product with 6000K color temperature;
- "/" means uneven lighting;
- All above data are for reference.

B

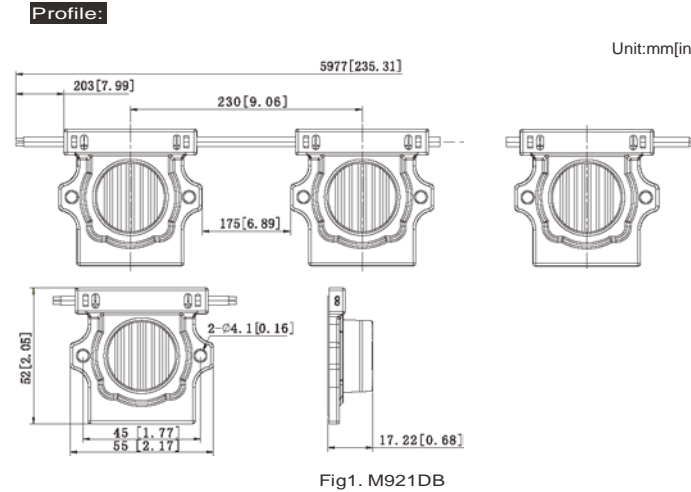


Fig1. M921DB

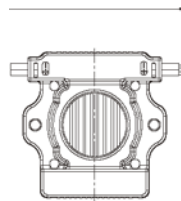
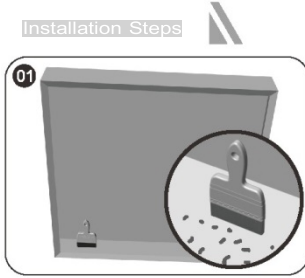
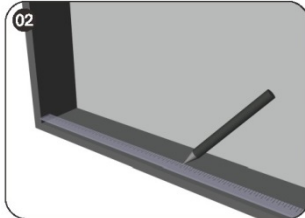


Fig2. MG01DB

A

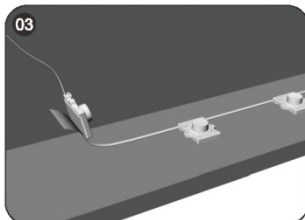


01 Clean the installing surface.

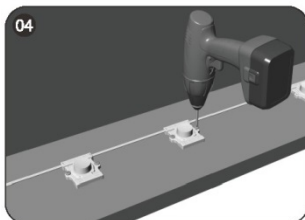


02 Mark the installing place for modules and determine the needed quantity, remain centered installation.

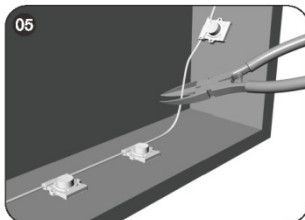
B



03 Peel off the release paper of double-sided adhesive tape in the backing of modules, then, stick modules on the installing surface for preliminary mounting.

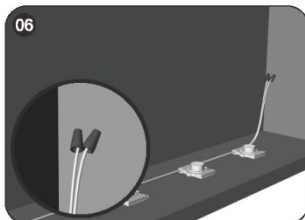


04 Adjust the modules to the best position, then, press the double-sided adhesive tape tightly and fasten it by screws.



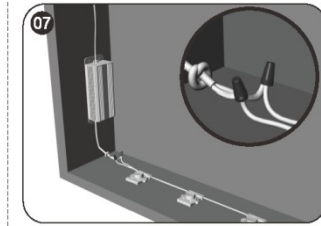
05 Cut off modules to the desired qty, and peel off the insulation skin of wire about 10mm.

C



06 When the wires exposed in the last module, please peel off the insulation skin of wire about 10mm, then, connect it by terminals according to the wire's anode & cathode, and please dispose the joints with waterproof and anti-corrosion.

&Note: Please cut the wire in the middle; When cut wires of module MG01XBB, cut every three modules (cutting along scissors sign).



When connect to external power supply, please ensure that the wire's anode & cathode in the first module are connected with the cable of power supply correctly, waterproof and anti-corrosion.

Troubles Shooting:

Malfunction & Solution Table		
Malfunctions	Possible Causes	Solutions
All LEDs don't work	1. The power supply didn't connect to the power grid.	Power on.
	2. The power supply is auto protected because output is 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.
Part of LEDs don't work	1. Some power supplies have no output.	Check the power supply and remove malfunctions.
	2. Part of modules is wrongly connected to 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 input voltage to modules are within $\pm 5\%$ of rated voltage (1. Shorten the length of wires between the modules to power supply or use wires of big diameter; 2. Check and ensure the cascaded quantity of modules can't exceed the maximum cascade quantity which allowed; and the quantity for each electrical circuit are the same or the difference can't exceed 3 modules between strings.
	3. Modules cascaded too many per the strings.	Lessen the cascaded qty for the modules and ensure the quantity for each electrical circuit is 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.

Cautions:

- I. 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-sided adhesive tape is only used for preliminary fixing. Please use the screws or the neutral silicon sealant to fasten the modules, otherwise, defects will be caused, such as product shift, fall off and so on.

- 1.3 The maximum cascade quantity of MG01DB/MG11DB is 15PCS, and the maximum cascade quantity of MG01XBB is 5 units (15pcs in total); the maximum cascade quantity of M921DB is 25 pcs, prohibited to exceed this limitation in actual using.
- 1.4 Please dispose the exposed wire and the joints with insulation, waterproof and anti-corrosion.
2. Cautions for other parts selected:
 - 2.1 Please ensure that the output voltage of using power supply is $12\pm 5\%$ VDC, and the rated power must be reserved 20% than the actual loading.
 - 2.2 The using power supply must pass safety certification which have protection function in short-circuit, over-voltage and over-current.
 - 2.3 During installing, please ask qualified person to count and select the suitable cable according to diameter and length when the connecting cable need to be extended, otherwise, low input voltage to product, fire hazard due to overheat cable will be caused.

- 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 professional persons. Prohibited to operate it by unprofessional person.
- Prohibited to use any acid or alkaline adhesive to fix this product.
- This product will generate heat during working, must choose material with good cooling performance and installation density must be taken into consideration.
- 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.
- **This is high power module which is not available in double-ended feed from power supply!**
- 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:

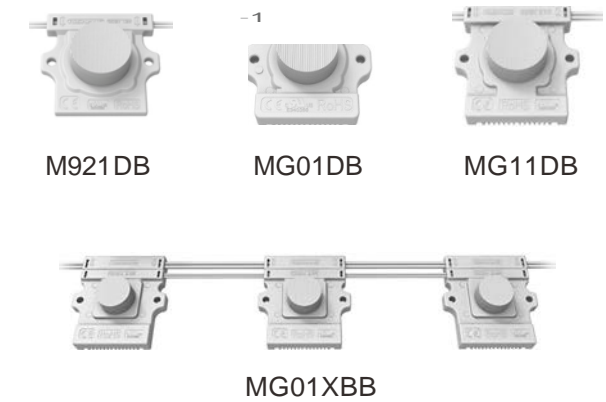
Model No.	Warranty
M921DB/MG01DB/MG11DB/MG01XBB	5 years or 22000 hours, whichever come first!

Additional Remarks:
Above warranty period are only for products which are used in inside of light box.

Declaration:

- If the external flexible cable of light box is damaged, please replace it by the manufacturers or their 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 Modules User Manual



Please carefully read this manual before use our products and keeping properly
V 1.0