



SIGNLIGHTING.COM.AU
SASIGN INTERNATIONAL
Noel Symon
Ph 07 5564 9930
Email: sales@sasign.com.au
3/31 Dominions Rd, Ashmore, QLD 4214

Suppliers of Edge-lit and Signage Lighting since 1992

LED Installation Manual

CONTENTS:

Introduction	pg2
Safety	pg3
Warranty	pg3
Warnings	pg4
Tools	pg5
Wire Gauge Distance Chart	pg5
Installation Guide	pg6
Optimum Load of Power Supply	pg7
Malfunction and solutions guide	pg8

INTRODUCTION

Sasign International, a national supplier, based on the Gold Coast, has always been a service-oriented business, dedicated to the manufacture and supply of Edge-Lit signage.

With 22 years experience as a wholesaler to the signage, shop fitting and display industries, our company objective has always been focused on nothing but one thing; Sign lighting, i.e. Edge-Lit signage systems - providing reliability, installation efficiency and reducing installation, and ongoing maintenance costs so it just made sense to expand into LED lights for channel letters and light boxes.

We searched long and hard over a two year period for what we believe to be the best value and range available from one supplier who manufactures solely and specifically for Signage applications.

Our Supplier has dedicated the last 11 years in partnership with IPLED in Europe who have been making signage for over 30 years in seven different Western European countries so their know-how and experience of lighting a sign is forefront in the ongoing development of led modules for signage.

Our range of waterproof LED modules will cater to applications for the likes of Channel Letters, and slim back lit light boxes from just 30mm deep, right through to edge lighting 300mm double sided light boxes.

CE-certified and RoHs compliant, Age and UV tested, Using only 'Premium' grade LEDs selected from Epistar, Osram, Cree, Nichia to meet each specific job requirement, all of our smd LEDs are supplied with a 5 year warranty. All other lighting products will now be supported with a 2 year warranty.

Let us help you to make your signs more attractive, more reliable, more energy efficient and for less money.

SAFETY

Turn the power off at the fuse or breaker panel before installation, inspection, service or removal of the LED system and / or power supplies. SASIGN Internationals' LED's have an IP65 rating, however, we recommend using this product in dry or damp locations only. Power supplies must be properly grounded before operation. All wire connections must be made per Australian Electrical Standards and local codes.

WARRANTY

Sasign International's LEDs comes with a warranty of 5 years on the SMD modules and 2 years on all other material, (including Power supply units) unless otherwise specified. Excluded from warranty are failures caused by the following conditions:

- Incorrect use of the LED
- Short circuit, or incorrectly wired circuits
- Wrong connection of the power supply
- Wrong Power Supply
- Mixing of different module types

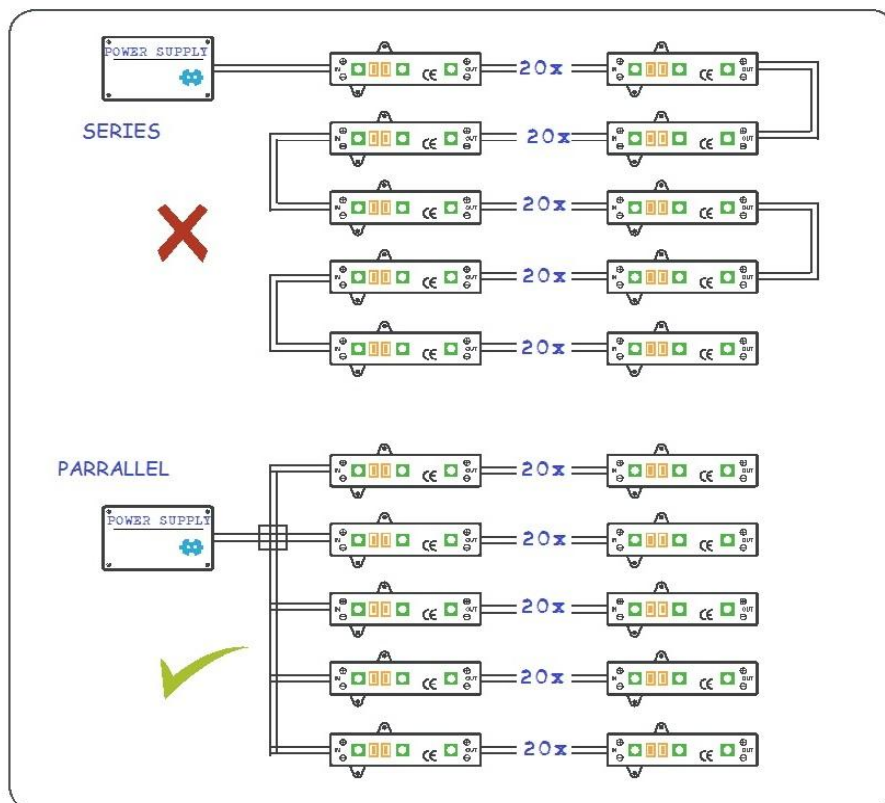
Replacement costs are to be discussed in mutual agreement - if the LED's are in operation for 24 hours a day, the LED's will devaluate in strength if they cannot get rid of their heat, this will shorten their life, and warranty (calculated at 19 hrs operation per day - 35,000 hours).

We strongly advise the installation of a twilight switch or timer on the installation.

Sasign International is not responsible for consequential damage to other devices, buildings. or any associated reparation

WARNINGS

- 1) Install the Power Supply within 5 meters from the first Led modules or when the distance is longer than 5 meters, you have to adjust the wire thickness.
- 2) When placing power supply units, there must be at least 5 cm between the power supply units.
- 3) Power supply should not be placed in direct sunlight and should be equipped with protected box for outdoor use with ventilating holes.
- 4) Use IP67 (waterproof) connectors if installed outdoor
- 5) Power supply should not be placed in the water.
- 6) Load all Power supply wires equally, do not cut one.
- 7) Temperature control. Use between -20 & 65 degree C
- 8) Warning low voltage (12V) do not connect the LED directly to 220v
- 9) The power supply achieves optimal results when 80% loaded. Use the LED / power diagram to select the correct power supply.
- 10) When working with electricity, removing covers, or examining your wiring, be certain to turn the power OFF first.
- 11) Do not put pressure on the lens/chip



TOOLS

RULER

Measure the required row and distance of Led modules.

PENCIL

Mark the place and distance between the rows.

CUTTER / NIPPERS

Cut number of LED modules per string.

ELECTRIC DRILL

Drilling holes for the attachments of the power supply.

SCREWS

Mounting the power supply.

SCREW DRIVER

Mounting the power supply.

CONNECTORS

Connect the wires and modules together.

SILICONE SEALANT

Use silicone sealant to secure the LED modules.

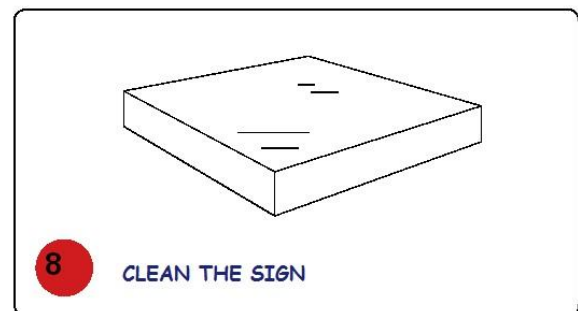
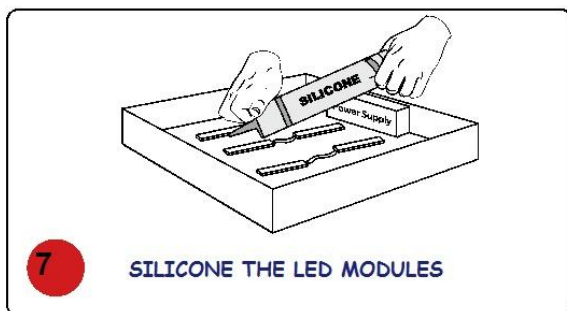
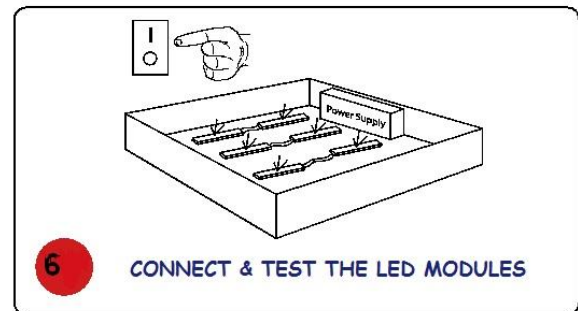
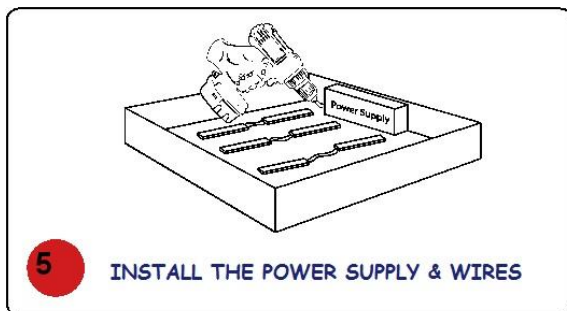
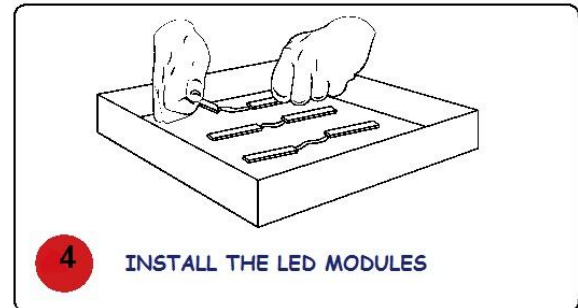
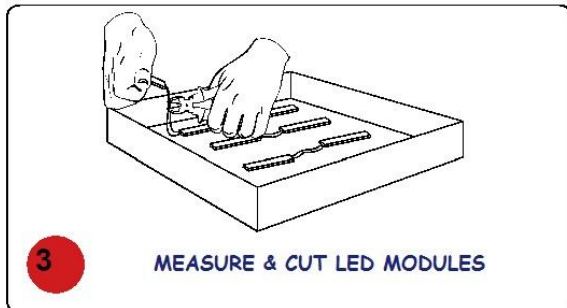
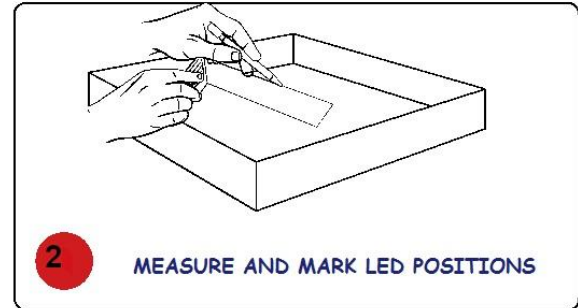
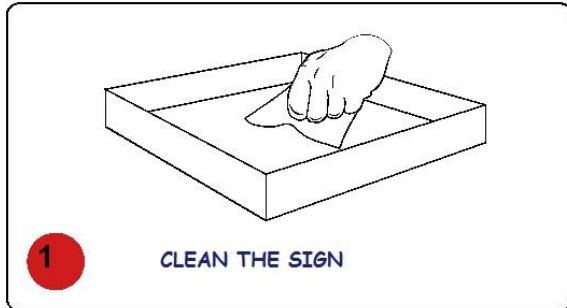
WIRE GAUGE DISTANCE CHART

When the distance between the power supply and the first led of a letter or sign increases, the thickness of the wire should be increased.

Distance in meters from Power Supply per			
Power (W)	5 meter	5 to 10 meter	10 to 20 meter
30w	1mm ²	1mm ²	2mm ²
60w	1,5mm ²	2mm ²	2,5mm ²
100w	1,5mm ²	2mm ²	2,5mm ²

Note: Overloading will cause the power supply to shut down. REMOVE OVERLOAD. Restart the power supply by reconnecting the 230v power.

INSTALLATION GUIDE - LED MODULES



OPTIMUM LOAD OF POWER SUPPLY

Module	Wattage	Power Supply (watts)	Max No' of LEDs	No: Sq/ Meter	Total Lumens module	
3807W3B 	0.24	30	108	80~120mm 130~160mm 170~250mm	96 50 30	21-24
		60	213			
		100	354			
		150	531			
		200	708			
4815W3B 	0.24	30	98	80~120mm 130~160mm 170~250mm	96 50 30	21-24
		60	193			
		100	322			
		150	483			
		200	644			
7815W6B 	0.48	30	54	80~120mm 130~160mm 170~250mm	100 50 35	42-48
		60	106			
		100	177			
		150	266			
		200	354			
7815W9B 	0.72	30	36	80~120mm 130~160mm 170~250mm	75 48 35	63-72
		60	71			
		100	118			
		150	177			
		200	236			
7030W1B 	2.6	30	9			245-260
		60	18			
		100	30			
		150	45			
		200	60			

MALFUNCTION & SOLUTIONS TABLE

Malfunction	Probable causes	Solutions
No LEDs work	No power from power supply	Supply power
	Short circuit or automatic short circuit protection of power supply	Troubleshoot short circuit and supply power again
	Power supply fuse is burnt	Replace the burnt fuse with a new one
Part of the LED module strings don't work	No power from power supply(ies)	Check the power supply system and troubleshoot
	Some LED Module strings power supply wires are wrongly connected	
Brightness of LED is not consistent or is not enough	Power supply overloading	Add power supply quantity
	Too much current loss of power supply wires	Thicken wires or add wire quantity or adjust the power supply positions to ensure each connection point voltage is no less than 90% voltage stipulated
	More than one LED module string is seriesly connected	Connect each string directly to the master wires from the power supply as diagram on page 5. Dont connect the strings by series
Led twinkeling	Poor wire contacting	Identify poor contacts and troubleshoot.
Individual LED doesnt work	Breakdown due to electrostatics	Replace with new LED or new LED Modules
<p>Experienced electricians are recommended to guide installation. Any queries, please consult with our sales department</p>		