

SPECIFICATIONS

ELECTRICAL

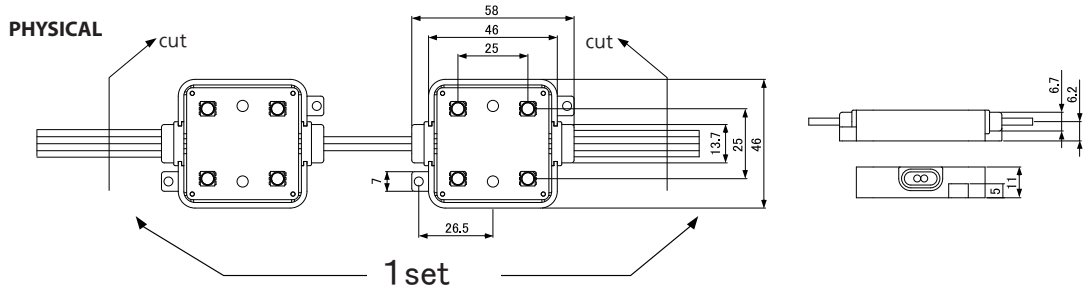
Current dissipation : 17.5mA/1 module
 Power Consumption : 1.75W
 Operating power : AC 100V
 Quantity for maximum connection in serial : 200 modules
 Constant current drive
 Reverse voltage protection

THERMAL

Cooling : Ambient air
 Maximum operating temperature : 60°C (140°F)
 Minimum operating temperature : -25°C (-13°F)
 Maximum storage temperature : 60°C (140°F)
 Minimum storage temperature : -30 C (-22 F)



PHYSICAL



PRECAUTIONS

Use precautions to avoid damages to the product or injuries of users. Any actions against following contents will cause serious issues such as malfunction, electric shock, or burn.



100V / 220V USE AC100V or AC220 ONLY



Do not perform actions listed below
 - Alter or modify
 - Touch LED lamps with sharp objects
 - Put glue or silicon over the LED lamps

DC INPUT DO NOT USE DC INPUT



Do not cut or rejoin wires while product is connected with live power source



Maximum driver quantity per serial connection is limited. Failure causes overload of current and damages to the product



Avoid performing installation under rain or high humidity for outdoor use



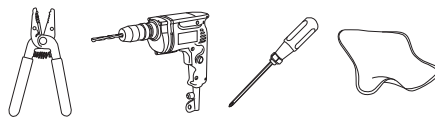
Must use circuit breaker on the input and use circuit breaker with 20% larger capacity than total amount of current draw from LED modules



Do not use the product under circumstances listed below
 - High temperature spots over 60°C (140°F)
 - Spots draw extreme moisture or dust
 - Spots have corrosive gas or highly effected by electromagnetic field

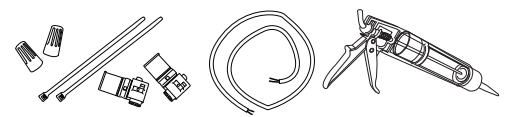
PREPARATION

TOOLS REQUIRED



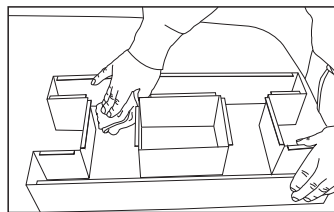
Wire Stripper, Drill, Screw Driver, Wiper

SUPPLIES REQUIRED

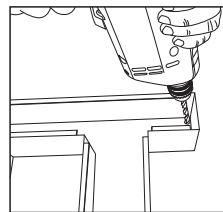


Wire Nuts, Cable Ties, IDC Connectors, VCTF(PLTC) Cable, (Optional : Silicon and Screws)

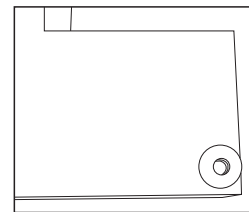
PREPARE CHANNELS



1. Clean moisture and dust inside



2. Make holes



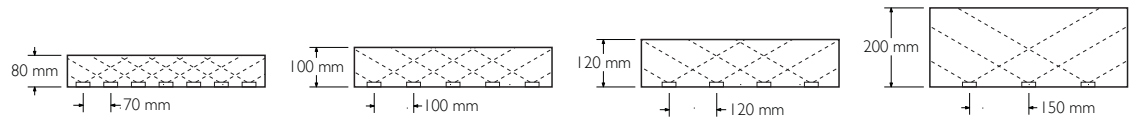
3. Use bushing to protect wires

1. Wipe out dust, water, and oil inside. 3M tape will come off easily if product is mounted on uncleaned surfaces.
2. Make holes for wires from modules to AC power source.
3. Without bushings, wires will easily be cut and short-circuit will occur.
 *Use white paint inside the channels for better reflection

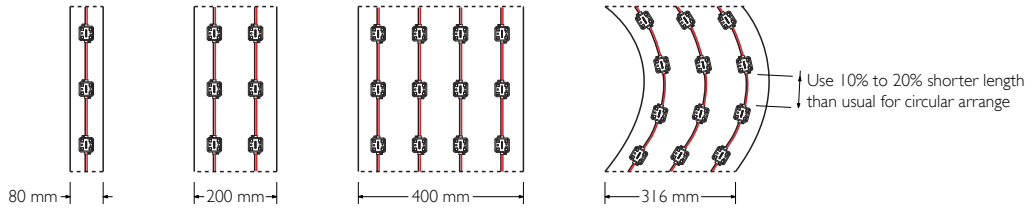
LAYOUT DENSITY GUIDELINES

Use recommended length for pitch between each module to achieve optimum lighting output while maintaining lowest unit cost. Failure or misplacing will cause dimmed spots or uneven appearance of light on the surface.

RECOMMENDED PITCH PER DEPTH

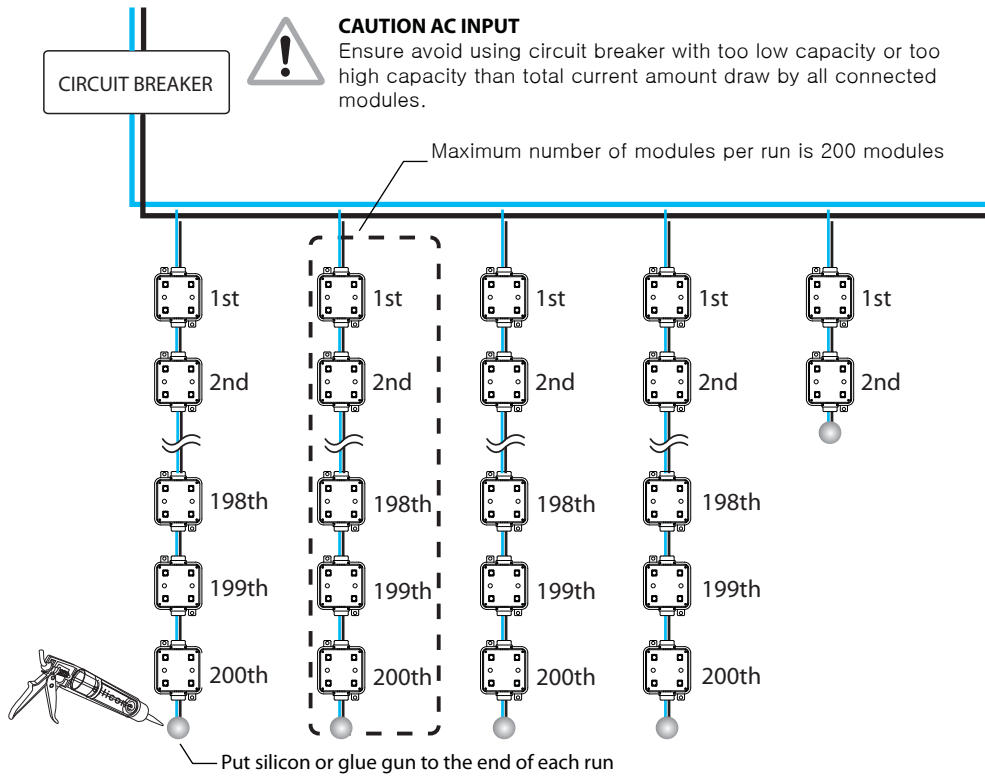


RECOMMENDED LAYOUT DENSITY PER CHANNEL WIDTH



CONNECTION GUIDE

Maximum driver quantity per serial connection is limited. Using more quantity per run will cause overload from circuit breaker which will cut off AC input, or over-connected modules will be dimmed if circuit breaker does not cut off.



MODULE QUANTITY GUIDELINES

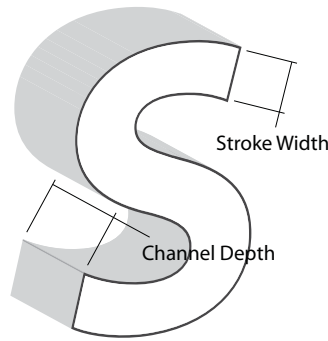
MODULE QUANTITY PER CIRCUIT BREAKER CAPACITY

CAPACITY	5A	10A	16A	32A	60A
Max Module Q'TY	230pcs	470pcs	750pcs	1500pcs	2800pcs
Recommended Input Wire	VCTF3.5 AWG10	VCTF3.5 AWG8	VCTF3.5 AWG7	VCTF6.0 AWG4	VCTF8.0 AWG1

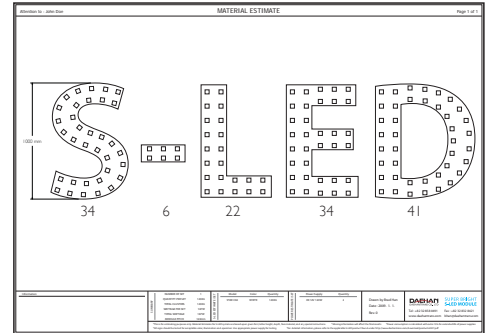
*Wiring and installation should be operated by trained electrician

INSTALLATION GUIDE

1. DETERMINE LAYOUT

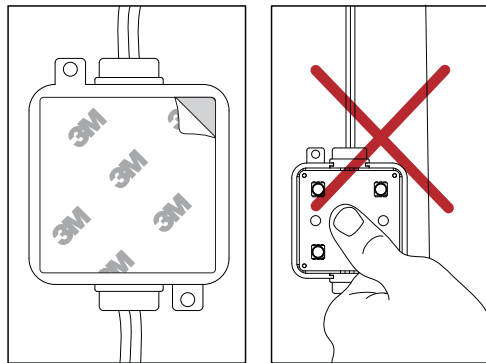


Refer to 'LAYOUT DENSITY GUIDELINES' on page 2 to determine spacing and amount of LEDs required.



SUPPORTS FOR OUR SIGNMATES
Ask us to obtain accurate layout

2. PEEL AND STICK

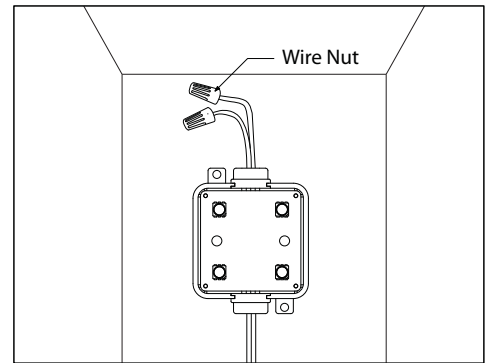


Using predetermined layout and LED placement from step 1, remove 3M tape on the back of modules and stick them into place. Ensure modules are firmly attached on the surface.



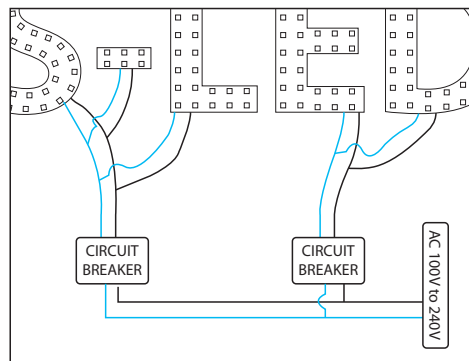
CAUTION
When handling the module, avoid pressing down directly on top of LED lamp

3. CAP ALL UNUSED WIRES



The strand of modules should not be looped to create a closed circuit.

4. CONNECT WITH AC POWER

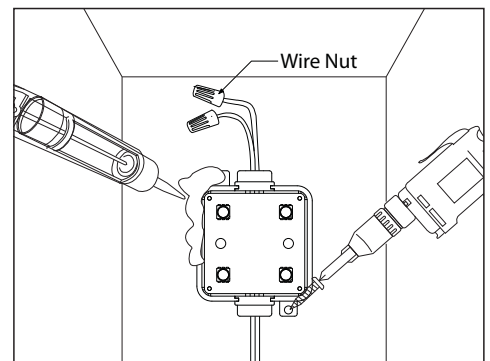


Using predetermined layout and LED placement from step 1, divide channels into sections and distribute each section to corresponding circuit breaker.



CAUTION
Before connect with AC power source, use measuring instrument to check short-circuited connections.

5. FIX MODULES PERMANENTLY



FASTENERS : If desired, modules can be secured with M2.5*15 metal screws.

SILICON : If desired, modules can be secured with silicon. Do not to put silicon on the top of the LED lamps.

TROUBLE SHOOTING

Entire sign or leg does not light after complete installation.	Check connection from power lead to first module. Make sure connections are properly made at the AC power source lead and any jumper wire is correct.
Still does not light	Check AC power source using a voltmeter. The voltage should be 200VAC to 240VAC (or 100VAC to 120VAC). If there is no voltage, have a licensed electrician check input voltage.
Circuit breaker shuts off after complete installation	Connection from power source to first module or connections between legs are short-circuited. Check connections made with wire nuts or IDS connectors.
Still circuit breaker shuts off	Total current amount running through the entire modules exceeds the capacity of the circuit breaker. Count the total number of modules used connected to one circuit breaker and calculate the total current being used (Ex. one module consume 0.017A and multiply it by total number of modules used for one circuit breaker). Change the circuit breaker with higher capacity up to 20% extra amount.
Beginning of a leg lights, but the entire leg does not light or lights intermittently.	The primary cause of a portion of a S-LED leg not lighting or lighting intermittently is a bad connection between the modules that light and the modules that don't light. Check this connection.
One module does not light, but all others in the leg light.	S-LED is designed so if one module fails, it will not cause the entire sign or leg to go out. If one module does not light, but all others in the leg do, replace this module with a new one.
All modules light, but some of them are dimmed.	Check each run has no more than maximum number of modules. Refer to 'MODULE QUANTITY GUIDELINES' on page 2.
Dark spots or dimmed spots occur.	Channel depth is too low, or center distance between modules is too far. Refer to 'LAYOUT DENSITY GUIDELINES' for more information.
Still has spots.	Covering acrylic is not intended for LED illumination. Use light diffusing acrylic sheets which are specially made for LED light source.