

Precautions

- ▶ Install in accordance with the IEE wiring regulations and building regulations.
- ▶ This product must be installed by a suitably competent person.

IMPORTANT

- ▶ Please read these instructions before commencing any work.
- ▶ Please retain these instructions for future reference.
- ▶ Please refer to product listing for detailed information.
- ▶ Remove all packaging before connecting to power supply.
- ▶ If the cable tag is removed, ensure it is retained and stored safely.

Electrical

- ▶ Do not connect directly to mains electrical supply.
- ▶ Switch the power off at the mains supply before installing or maintaining this fitting.
- ▶ Ensure others cannot restore the electrical power supply without your knowledge.
- ▶ Ensure the product is in good working condition. If there is visible damage do not use.
- ▶ This product must be used with a good quality constant voltage LED driver. Ensure that the voltage output of the driver matches rated voltage of the LED modules.
- ▶ Connect the module with correct polarity. Refer to the ‘wiring’ section for help.
- ▶ Ensure that the power capacity of the LED driver is greater than the total load of all the LED modules connected to it.
- ▶ The LED module and cable should be protected by a fuse or equivalent device installed between the driver and LED module and as close to the driver as possible.
- ▶ Ensure that the current capacity of cable connecting the LED modules to the driver is greater than the maximum drawn by the modules and the cut off of any over-current protection (fuse).
- ▶ Protect the modules from static electricity.
- ▶ Ensure insulation and corrosion protection at all wiring junctions and exposed wire ends to maintain long-term reliability.
- ▶ This LED module is not dimmable. Connection to any dimming device or control system may result in malfunction, electrical failure, or risk of damage. Ensure compatibility with fixed output drivers only.

Mechanical

- ▶ Do not use the product if damaged. Do not use with worn or damaged wires or modules.
- ▶ The product will generate heat during use. It should be installed in a well ventilated location on a thermally conductive surface. Fully uncoil the LED modules.
- ▶ Use the pre-applied adhesive tape to position the modules initially, then secure them permanently using screws for optimal mechanical stability. Allow the adhesive to cure in a well-ventilated environment for a minimum of four hours.
- ▶ Protect the modules from mechanical damage. Take care not to dislodge any components during installation. Ensure that wires connecting the modules cannot be pulled.

Environmental

- ▶ The temperature of the LED modules should never exceed 40°C when in operation.
- ▶ IP20 modules are not waterproof and can only be installed indoors and with humidity of no more than 55%.
- ▶ IP65 modules should only be exposed to water for short periods of time and humidity of no more than 80%.
- ▶ IP67 modules are suitable for indoor and outdoor installation.
- ▶ Only install in a location free from chemicals, gases and flammable materials.
- ▶ Do not use organic solvent-based chemicals during installation.
- ▶ This product is intended for use within enclosed signage applications. It must not be installed in open or outdoor environments without suitable protection.

Product Warranty

1. A warranty period is provided for products in normal use. For any faults arising during the period that are confirmed to be quality related by inspection by the company, a product of the same specification will be replaced for free.
2. The warranty does not cover any of the following:
 - (1) Any product damage due to usage not allowed in the instructions.
 - (2) Any product damage due to disassembling or wrong operation by the user.
 - (3) Severe appearance damage or deformation of the product.

LED Modules



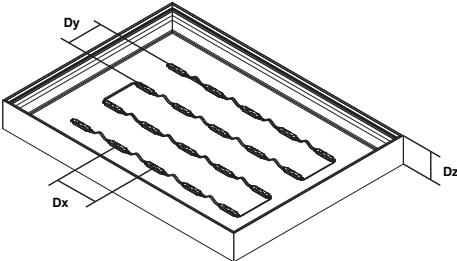
User Manual

Specification

SKU	Voltage	Input Current Type	Voltage Type	Wattage	Max. Number of Modules
TM12-3K1MOD	12V	DC	CV	0.36W	60 pcs
TM12-3K2MOD	12V	DC	CV	0.72W	40 pcs
TM12-3K3MOD	12V	DC	CV	1.08W	20 pcs
TM12-65K1MOD	12V	DC	CV	0.36W	60 pcs
TM12-65K2MOD	12V	DC	CV	0.72W	40 pcs
TM12-65K3MOD	12V	DC	CV	1.08W	20 pcs
TM12-RGB65K3MOD	12V	DC	CV	0.96W	20 pcs
TM12-RGBWP3MOD	12V	DC	CV	0.76W	20pcs

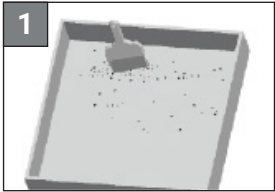
Module Spacing

SKU	Depth (mm)	Distance (mm)
TM12-1MOD	Dz=40	Dx=80 Dy=70
	Dz=60	Dx=100 Dy=90
	Dz=80	Dx=110 Dy=110
	Dz=100	Dx=120 Dy=110
SKU	Depth (mm)	Distance (mm)
TM12-2MOD	Dz=60	Dx=100 Dy=90
	Dz=80	Dx=110 Dy=110
	Dz=100	Dx=120 Dy=130
	Dz=120	Dx=160 Dy=150
SKU	Depth (mm)	Distance (mm)
TM12-3MOD	Dz=60	Dx=130 Dy=100
	Dz=80	Dx=150 Dy=130
	Dz=100	Dx=170 Dy=150
	Dz=120	Dx=190 Dy=170

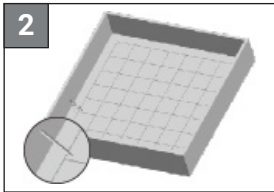


Mounting & Installation

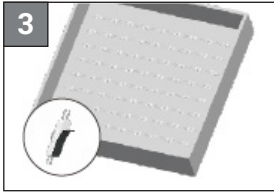
- 1. Switch the power off at the mains supply before installing or maintaining.
- 2. Clean the mounting surface to remove any dust, oil, grease, or debris.
- 3. The LED module chain may be cut between individual modules to achieve the required length.
- 4. Refer to the specification table for the maximum number of modules that may be powered in a single chain.
- 5. During installation, space the modules evenly to ensure consistent and uniform illumination. Refer to data sheet.
- 6. Allow the pre-applied adhesive tape to cure in a well-ventilated environment for a minimum of four hours.
- 7. Ensure all modules are completely dry before mounting.



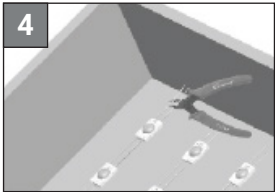
Clean the mounting surface to remove any dust, oil, grease, or debris.



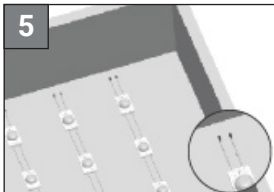
Mark the intended positions of each LED module directly onto the mounting surface to ensure accurate and consistent placement during installation.



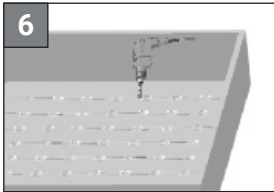
Remove the adhesive backing from the module, then press the module firmly onto the marked location points.



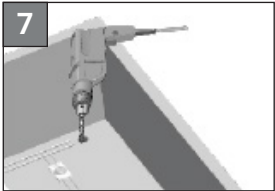
If necessary, remove any excess modules from the end of the chain
Note: Cut the wires at the midpoint between modules.



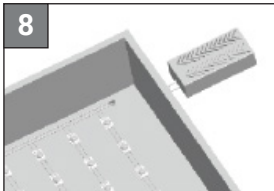
Strip the end of the wire and securely terminate it using an appropriate wire connector.
Note: For waterproofing and anti-corrosion, apply additional sealing.



Secure modules into position with screws via the fixing points located on the body of the modules.

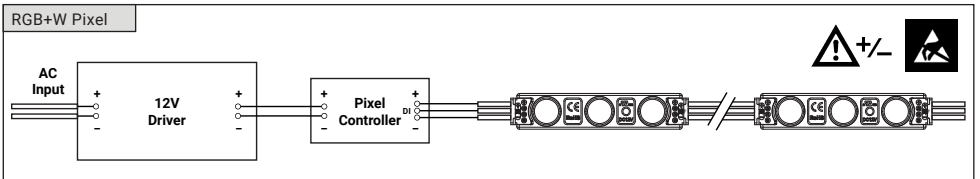
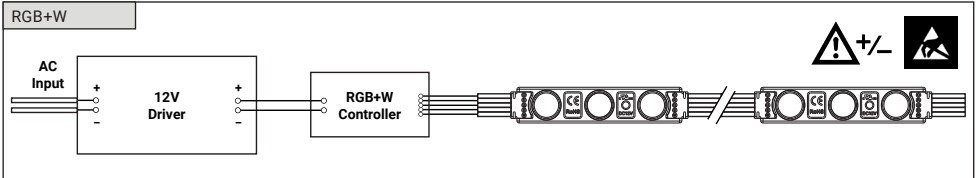
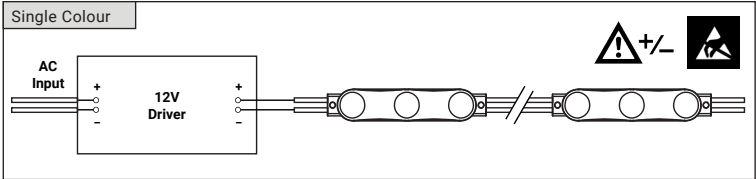


Drill a hole on your installation for connecting power cable.
Note: Ensure the hole does not damage the cable and apply strain relief.



Connect the module to the power cable, taking care to ensure the polarity is correct.

Wiring



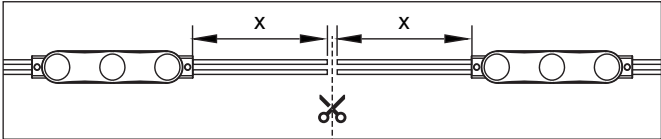
WARNING: This product must be installed by a suitably competent person. Before switching on the power, check that the input voltage and polarity (+/-) are correct. Incorrect voltage or polarity can cause damage to the products and associated components.

Single Colour	
+V	Grey
-V	White

RGB+W	
+V	Grey
-R	Red
-G	Green
-B	Blue
-W	White

RGB+W Pixel	
+V	Red
-Data	Green
-V	White

Cutting



NOTE:
The LED module chain may be cut between individual modules to achieve the required length.