



# MK-16 RGBWT / MK-50 RGBWT

## User manual



### Technical specification

Model	MK-16RGBWT	MK-27RGBWT	MK-50RGBWT
Programs	Speed, brightness, 20 colour changing programs, twinkling wheel speed, on/off		
Remote controller	Yes, RF, and Bluetooth app		
Light source type	LED		
CRI (Ra>):	70		
IP rating	IP33		
Light colour mode	RGBW		
Working voltage	DC12V	DC 24 V	DC 24 V
Power	16 W	27 W	50 W
Material of housing	Aluminium		
Light engine dimensions	110 mm (L) x 80 mm (W) x 110 mm (H)	150 mm (L) x 80 mm (W) x 150 mm (H)	150 mm (L) x 80 mm (W) x 150 mm (H)
Net weight	0.64 kg	0.8 kg	1.0 kg
Remote control dimensions	105 mm x 60 mm x 8 mm; wall mounting bracket: 105 mm x 62 mm x 14 mm		
Fibre optic port diameter	20 mm	30 mm	30 mm
Maximum number of fibre optic bundles at 0.75 mm diameter	550	1100	1100
Lifetime	50,000 hours		
Warranty	2 years		
Package dimensions (excluding fibre optic bundle)	210 mm (L) x 120 mm (W) x 90 mm (H)	300 mm (L) x 200 mm (W) x 145 mm (H)	300 mm (L) x 200 mm (W) x 145 mm (H)
Weight with packaging	0.75 kg	1.6 kg	1.8 kg



### Safety notices

#### Electrical work safety advice and tips

- Make sure the input voltage is correct.
- Avoid placing the light engine in the rain or in moist areas. Please ensure that the light engine has sufficient ventilation and is not placed in a completely sealed area.
- Do not open the LED light engine for inspection or re-wire the electronic circuits if you are not a professional. Opening the light engine might void your warranty.
- Avoid any debris on top or around the light engine as it can cause poor heat dissipation.
- Avoid using the device above 40 C temperature.

#### DIY tips and safety advice

- This task will involve working at height. A safe system of work should be established and maintained, in order to prevent injury.
- Consider your safety! Think about the potential risks and dangers of the work and the steps you should take to avoid them.
- Personal protective equipment. Make sure that you are equipped with suitable and sufficient personal protective equipment. This could include eye protection, face mask, protective overalls, safety footwear and gloves.
- Ensure that the work area is sufficiently illuminated.
- Check that the tools you will be working with are in a good operating condition. For the installation, you will need a cordless drill, epoxy glue, side cutters or scissors and drill bits.

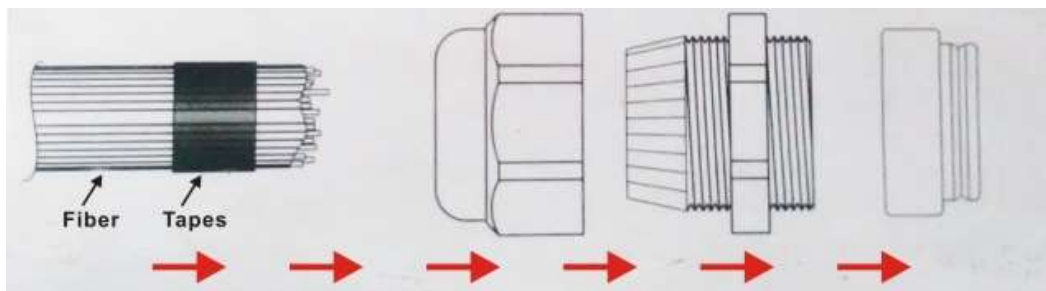


### Connection method between optical fibres and the light engine



Your fibre optic bundle will come with the connector fittings ready to connect to the light engine. However, if you need to adjust your bundle or you're making your own, follow the steps below.

1. Align all the optical fibre ends and fasten with tapes which can resist temperature over 130°C
2. Pass the fibres through the connector and fasten the rotary tensioner until the fibres are tightened.



3. Cut the fibre bundle to a flat surface with a heat-knife or blade.



4. Make sure that the optical fibre bundle head is smooth and clean to ensure even light distribution.
5. Place the fibre optic bundle's connector into the light engine's port connector. Fasten the bundle with the screw on the top of the light engine's port connector.



### RF Touch remote controller guide



The light engine can be controlled by the remote controller and the Bluetooth App at the same time.

The remote uses CR2025. Please note that the battery is not included!

### Programme modes

- 7 colour fade
- RGB fade
- Seven colour breathe
- RGB breathe
- Red & green fade
- Red & blue fade
- Green & blue fade
- Seven colour jump
- RGB jump
- 7 colour flash
- RGB flash
- Red flash
- Green flash
- Blue flash
- Yellow flash
- Purple flash
- Cyan flash
- White flash
- Yellow & purple flash
- Purple & cyan flash



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Troubleshooting for remote controller connection issues:

- Make sure that the remote controller is switched on by pressing the “On” button
- Check if the battery is operational in the remote controller: Press a button on the remote and the indicator light should flash up. If the light doesn’t flash up, it means that there is either no battery in the remote or the battery needs replacing.
- If the remote’s control light flashes up, check whether the green indicator light on the back of the light engine flashes up, when a button is pressed on the remote. If the indicator light is not flashing up, restart the device and test again. If the indicator light still doesn’t flash up, try re-pairing the remote controller with the light engine. If the pairing didn’t work, please contact your supplier.
- Pairing your remote controller with the light engine:
  1. Make sure the light engine is switched off
  2. Press and hold down the "Motor Slow" button of the remote controller and power on the light source
  3. The light engine should flash 3 times if the pairing was successful.

## Bluetooth App control guide

1. Download the Bluetooth App

Option 1: QR code:



- Both Android and Apple phones can scan the QR code to download the app

Option 2: App store:



- For Apple system: go to the App Store and search for “my smartLED” to download the App
- For Android system: go to the Google Play Store and search for “my smartLED” to download the App

2. Connect your Bluetooth device with the app
  - a. Turn on Bluetooth on your mobile phone
  - b. Power on the light engine
  - c. Open the App on your mobile phone



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d. The App will automatically connect to light engine

### Important notes

- Do not connect your mobile phone manually to the light engine in your mobile phone's Bluetooth settings
- One mobile phone can connect to and control multiple light engines, but one light engine can only be connected to and controlled by one mobile phone at a time

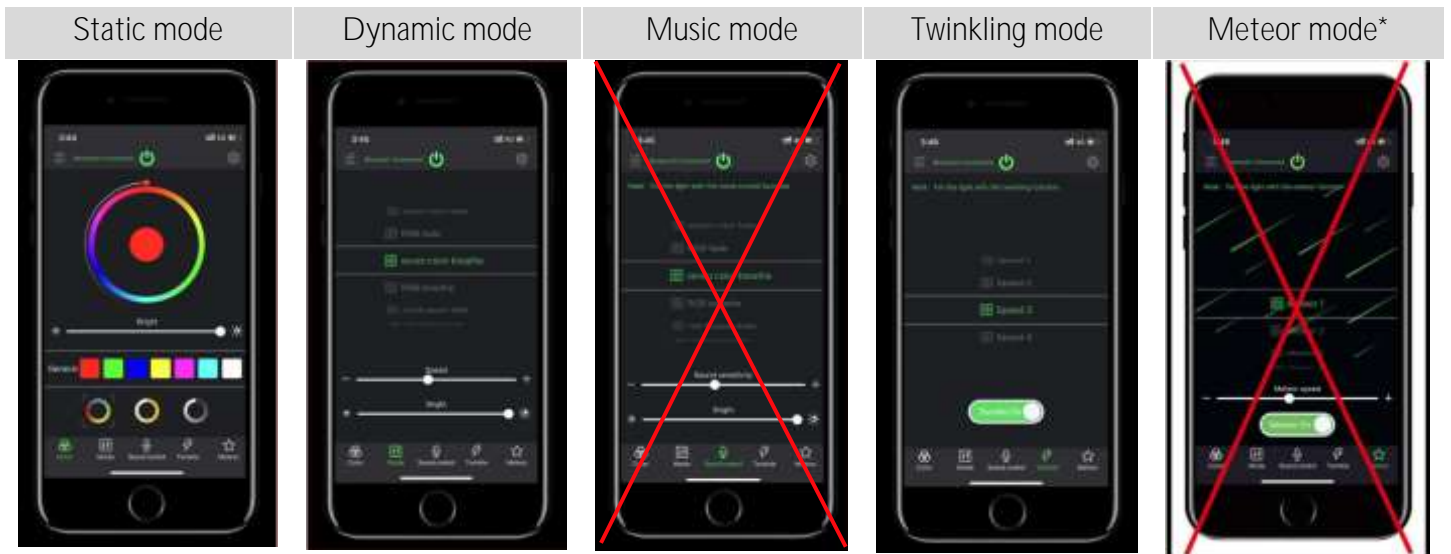
### 3. Operation and modes





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\* “Music mode” and “Meteor” mode is not supported with this light engine.

#### 4. Bluetooth connection settings

- a. Open the App and click on “Device Management” to see all connected devices



- b. Rename connected devices in the App



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Click "Rename"



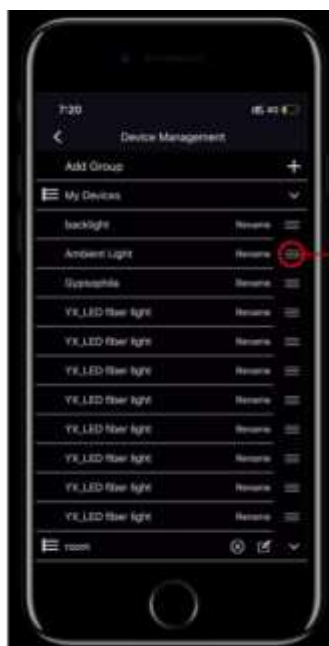
Rename device

### c. Group devices in the App

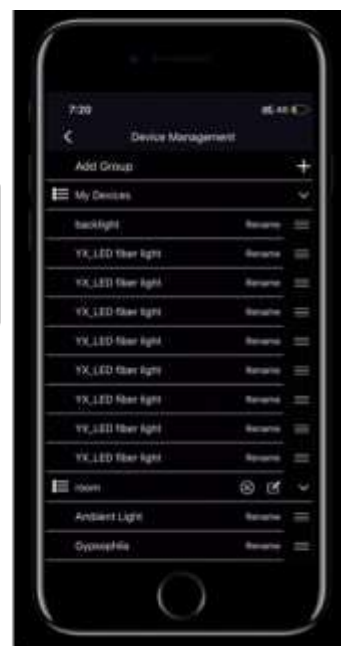


Click to add device group

Name the device group



Hold the move icon and drag to the new group







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### 5. Troubleshooting for Bluetooth connection issues

- Check that the light engine is powered on.
- Check that the Bluetooth is turned on the mobile device.
- Check if another mobile phone is already connected to the light engine. If another mobile phone is already connected to the light engine, disconnect it first.
- If necessary, reconnect the mobile phone with the light engine: (1) exit the App, (2) turn off Bluetooth on the mobile phone, (3) turn on Bluetooth on the mobile phone, (4) Re-open the App. The App should automatically connect to the light engine.