**Need help with installation?**
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# Livinglite Wireless

Installation and Operating Instructions

OutdoorLEDs

the brighter choice

Outdoor LEDs Livinglite Wireless is a brand new, top-of-the-range external LED lighting system. This cool, classy and controllable colour-changing lighting offers our most user-friendly system to date; creating the ideal mood and atmosphere for your outdoor living space is now a breeze.

The Livinglite Wireless literally puts the control in your hands like never before. Using the new wireless remote control, scroll around the colour wheel to see a spectrum of 640,000 colours before your eyes. New features also allow the user to choose from a variety of settings; Slow, smooth colour transitions for sophisticated summer nights, or fast paced, exciting flashes of colour to give off great party vibes.

The Livinglite Wireless, an upgrade of the original Livinglite, incorporates all of the best features of the original. Like the Livinglite, the Livinglite Wireless uses the same easy to install plug and play connectors, removing the need for an electrician, and retains the same low power consumption and high reliability.

The Livinglite Wireless is also upgradable; the Livinglite Wireless Starter Kit has the potential to use up to eight separate light units, compared to the original Livinglite which offered six.

Take a look at how the Livinglite Wireless could transform your outdoor living space. You won't find LEDs like these anywhere else!

Note: Livinglite Wireless is a new external lighting system and is not compatible with the original Livinglite System.

## Livinglite Starter Kit Contents

- 2x In-Line illuminated units (2 cable terminations)
- 1x End-of-Line illuminated unit (single cable termination)
- 1x Power Cable (4m)
- 1x Power Supply Unit (internal use only)
- 1x Wireless Remote Control sender unit
- 1x Wireless Remote Control receiver unit with 4m cable attached
- 2x 2m cables (for linking Livinglites)


**Safety Note:** During installation the chain of illuminated units must be connected to a low voltage power supply unit, which must be plugged in to a suitably protected mains power supply socket.

The Livinglite Wireless units, interconnecting cables and power supply are all designed to be installed by unqualified personnel. However, the mains power supply socket must be installed by a qualified electrician in a way that complies with the current IET wiring regulations (BS 7671). If you are in any doubt about your ability or qualifications to do this work, then we recommend that you use a qualified electrician to install the product.

## Planning Your Installation

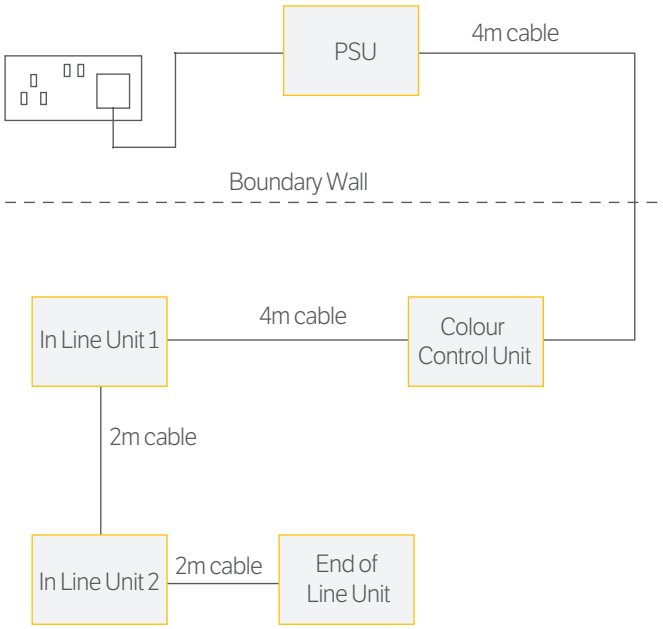
The system is designed for domestic installations where there is no vehicular overrun. The lighting units are robust under normal load bearing conditions, but point loading, such as chair legs, should be avoided.

The Livinglite Wireless illuminated units must be installed with the PSU at one end in a daisy chain formation with the end of line (single lead) unit at the other. The remote control receiver unit must be the first unit in the chain after the power supply unit (see figure 1).

The Wireless Controller must be installed in a location no more than 30m of where the user intends to operate the system from. This distance will alter if there are walls between the controller and the user.

The power supply unit, its cables and the mains supply socket are not waterproof and must all be installed in locations where they are protected from the weather. This means that they must either be installed within a building or in a weatherproof enclosure. If you need to drill a hole for the low voltage cable connecting the unit to the power supply unit use a 25mm drill. Reseal the hole using a weatherproof sealant.

Fig.1




## Pre-installation Check

It is important to carry out a check to ensure that the system is working correctly before you install any of the components.

1) Unpack the kit and check the contents. Report any shortages to your supplier immediately (check the packaging to ensure that connecting cables are not concealed within before discarding it).

2) Test the system by connecting all the items together and connecting the power supply unit to a power source (figure 2).

3) Press the colour wheel on the remote control to check that all of the units are illuminated. If any illuminated units fail to light check the System Diagnostics and FAQs section at the end of this manual. If you are unable to solve the problem please contact Outdoor LEDs on **01229 484 633** for help.

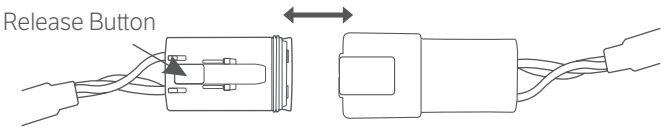
Fig.2

## Livinglite Wireless Connecting Cables

The Livinglite system is designed for easy installation, and the key to this are the low voltage connecting cables that are used to join the illuminated units together. These are available in 2M and 4M lengths, and are fitted with plug-in connectors.

To join the connectors simply push them together until they latch. To separate the connectors press the release button and pull them apart.

Fig.3




**Notes:**

- Before making connections ensure no moisture is trapped within the connectors and keep them free from sand and dirt
- Under no circumstances are the cables to be cut
- Having the wire insulation exposed where the cable joins the connector is a standard feature of the connectors used in this product.

Fig.4

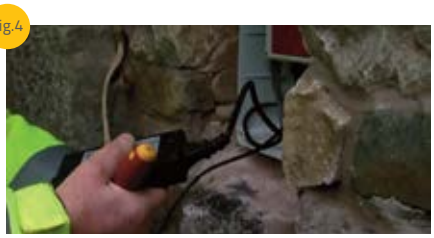


Fig.5

Fig.6

## Cable and PSU Installation

The low voltage cables should be installed in a bed of sand which is at least 50mm deep. In open ground consider protecting the cables with a conduit to prevent possible damage from garden tools.

Use the low voltage cable to accurately position the illuminated unit locations as follows:

1. Install the power supply unit in its position close to the mains supply socket and connect it to the remote control receiver unit (the thinner wire with two cores) (figure 4).
2. Fit the remote control receiver unit in position and secure it with the screws provided (figure 5).
3. Fit the remote control receiver unit to the first section of low voltage cable.
4. Connect all of the low voltage cables together so that they form a continuous length, ensuring that the joints of the connections are fully latched.
5. Fit the end of line lighting unit to the end of the cable (figure 6).
6. Place the joined cable in position along the cable run with the end of line unit in position.
7. Measure out the desired location of the lights, loop the cable at the joint, and place the looped joint where the illuminated unit is to be installed.
8. Loop any additional cable and place it along the cable run where it can be buried (under no circumstances should the cable be cut to shorten it).
9. Cover the cables with compacted bedding sand.
10. Carefully prise the cable joints out of the bedding sand to provide an indication of the illuminated unit location.
11. If necessary, complete the laying of the surrounding paving slabs, ensuring that sufficient space has been left for the illuminated unit to be installed (the illuminated units must not be cut or filed in an attempt to make them fit).

Fig.7

Fig.8

## Illuminated Unit Installation

The Livinglite Wireless illuminated units must be installed on a full mortar bed so that the light unit is supported across its entire lower surface. If this is not done the flags will be vulnerable to damage and will not be covered by our warranty.

Start by fitting the end of line illuminated unit:

1) Insert the unit where desired (figure 7).

2) Set the height of the unit so it is slightly below the surface of the paving slabs. Leaving the units proud of the surface will leave them vulnerable to damage (and will invalidate the warranty).

Continue by installing all the remaining illuminated units as follows:

1) Remove all sand and moisture from the low voltage connector and then disconnect it.

2) Connect both cables to the illuminated unit. Ensure that the connections are fully inserted and locked.

**Note. Sand or dirt in the connector could cause the seals to leak and may lead to early failure of the system.**

3) Fit the illuminated unit into position on its bed of mortar.

4) Repeat this procedure until all illuminated units have been installed.

5) Allow the mortar at least 24 hours to cure before jointing the paving. Conventional wet mortar pointing is recommended. Remove any wet mortar that is accidentally spilt onto the surface of the light unit immediately with a damp cloth (figure 8).

6) Connect the mains supply and switch on to test that the system is fully operational.

**WARNING: Do not run a vibrating compacting plate over the Livinglite Wireless units as this will damage the surface and may cause the units to fail.**

**The units are designed to have uniform light emissions, emanating from the top surface. The intensity is suitable for decorative and security purposes in low light condition, but the illumination may not be visible in bright sunlight. These units must not be operated in direct sunlight as there is a possibility of the units overheating.**

**For more help with installation, please visit our website: www.outdoorleds.co.uk where you can watch a video of the installation of a Livinglite starter kit. Note: Installation of the Livinglite Wireless is the same as the original Livinglite System, however with a different Remote Control Sender Unit and Receiver Unit.**

## Extending your system

The Livinglite Wireless Starter kit provides a basic system of three illuminated units. It is possible to extend the system so that a maximum of eight Livinglite Wireless illuminated units are driven by a single power supply unit. For installations of more than eight lights, a Booster Unit kit is required. Each booster unit will allow you to add an additional eight illuminated units.

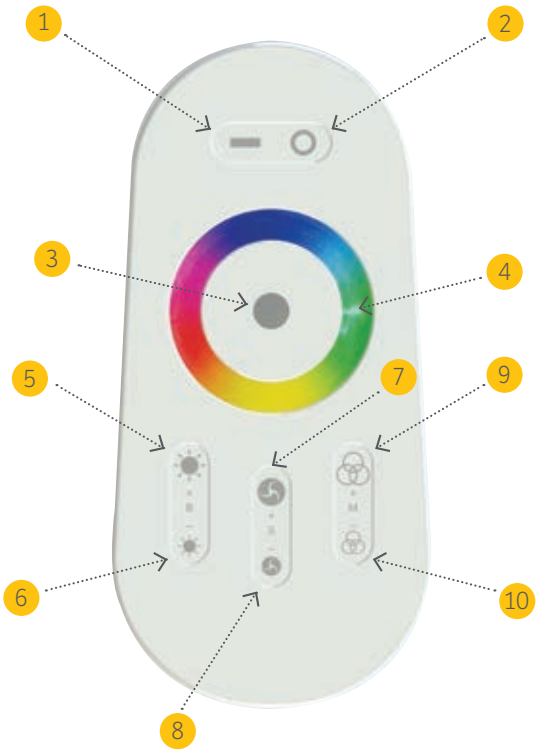
The number of booster units that you can add is unlimited, but each requires its own independent power outlet socket. See your supplier for more details.

## Operating the Remote Control

The remote control will allow you to have control of the operation of your Livinglite system. It is powered by 2 x AAA batteries and must be operated within 30m of the controller unit.

## Mode Options

| Order | Mode Option |
|---|---|
| 1 | Static White |
| 2 | White gradual change |
| 3 | All colours cycle |
| 4 | Red/green/blue gradual change |
| 5 | Seven colours step change |
| 6 | Three colour step change |
| 7 | Red and green step change |
| 8 | Red and blue step change |
| 9 | Blue and green step change |
| 10 | Blinking white |
| 11 | White glitter |
| 12 | Red blink |
| 13 | Red glitter |
| 14 | Green blink |
| 15 | Green glitter |
| 16 | Blue blink |
| 17 | Blue glitter |
| 18 | Yellow blink |
| 19 | Yellow glitter |
| 20 | Colour show circulation |




## Switching the System On/Off

To switch the units on, press button 1. To switch the units off, press button 2.

## Wireless Controller


## Pairing the Remote

The remote will arrive already paired, but in the event this pairing is lost please follow these steps to pair the remote:

Using the pairing button at the base of the Wireless controller housing, press the button and then press and hold key 5 on your remote (within 3 seconds). The tiles will blink twice slowly to confirm the pairing.

## Un-pairing

Remotes can be removed from a system if needed, when the remote is un-paired from a controller the Tiles will remain in their previous state.

To un-pair the remote press the pairing button on the bottom of the wireless controller housing, press the button again to switch the system back on and hold button 5 (within 3 seconds of switching on) on the remote you wish to remove. The tiles will flash 9 times quickly to confirm the un-pairing.

### Remote Control Selection Buttons

1. On
2. Off
3. Indicator light
4. Colour wheel
5. Speed control +
6. Speed control –
7. Brightness control +
8. Brightness control –
9. Show Selection up
10. Show selection down

## Notes about the Remote Control

One remote can control many wireless controllers but only 4 remotes can be paired to one wireless controller.

When installing the batteries in the remote keep fingers away from the colour wheel to improve sensitivity and use the remote 3 seconds after installing the batteries.

The remote will operate up to 30 meters from the wireless controller, this is based on line of sight and no other interference in the area.

The range of the device may be reduced because of other electromagnetic sources and large areas of metal.

## Wireless Controller

The system integrates a wireless device to allow the user to use their smart phone or tablet to connect and control the lights rather than using the remote control. This is achieved by one of two methods. A device can be connected directly to the controller or the controller can be connected to the home WiFi system.

The system is compatible with Apple phones and tablets with iOS 5.0 or higher and Android smartphones and tablets. The app is available from the Apple App Store or Google Play Store; search the app name Mi –light.

## Connecting your device correctly

**Wi-Fi Connections**

Connecting your smartphone or tablet can be achieved through two methods

- A direct Wi-Fi Connection
- Through your home Wi-Fi Connection

Ensure the mi-light app is correctly installed on your tablet or smartphone

**Direct Connection**

Go to the wireless settings of your device and connect to the wireless network named “milight”.

Open the mi-light app; you will be presented with the screen as shown in figure 9. If you have used other mi-light devices previously they will be present in the list but will not be selectable whilst in a direct connection. Select the active network denoted by the blue tick. At this stage you can rename the network to something more meaningful such as “Patio”. This is to aid if there are multiple systems installed to ensure the correct area is selected.

Once the network is selected you will be presented with the screen shown in figure 10. Choose the highlighted panel, this represents the same controls as the remote supplied and operates in the same fashion (figure 11). Follow the same procedure to pair your device to the wireless controller as the physical remote supplied.

There are three options screens selectable at the bottom of the app (figure 10). The information screen allow you to rename the network and add an image to help identify different zones.

The last option screen (configuration) relates to the second method of connecting your device to the wireless controller through your home Wi-Fi.

**Connecting through home Wi-Fi**

Whilst connected in direct connection mode.

In the mi-light app click Wi-Fi settings, this will bring up a list of available networks (figure 13). Select your home Wi-Fi and enter your password.

If successful you will be asked to restart the wireless controller, (click ok figure 14).

Once the system has restarted you should now be able to control your lights from the app whilst connected to your home network and not being connected directly to the wireless controller.

If your home Wi-Fi password is changed or your Wi-Fi device is replaced please contact us in regards to re-connecting.

If more than one wireless controller is installed for different areas each device will need to be connected to the home Wi-Fi system by repeating the above process for each controller.

Fig.9


Fig.10

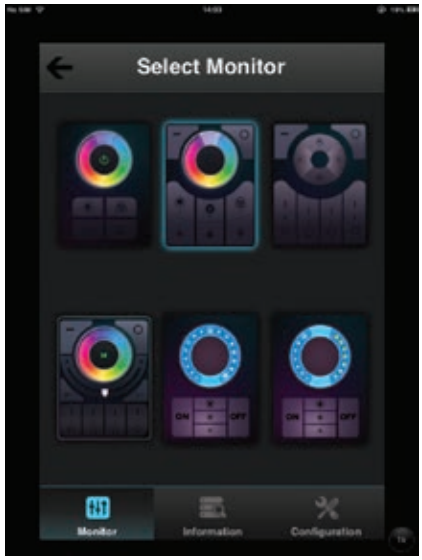



Fig.11


Fig.12


Fig.13


Fig.14

## Cleaning and Maintenance

Regular cleaning will ensure the long term life and performance of your system. The units should be cleaned by first removing any excess contamination with a soft, non-abrasive cloth, followed by cleaning with warm water and a mild detergent, again using a soft, non-abrasive cloth to wipe the top surface.

Do not use a pressure washer on these units.

## Disposal

The crossed out wheeled bin symbol on your product, literature or packaging reminds you that in the European Union all electronic products must be taken to a separate collection at the end of their working life.

DO NOT DISPOSE IN UNSORTED MUNICIPAL WASTE.

Units can be returned to Marl at the customer's cost for disposal.

## System Diagnostics and FAQs

**Q: Why aren't the lights coming on?**

1) In very bright sunlight the units may not appear to be lit. Check for illumination in darker conditions.
2) Check that the green power LED is lit up on the power supply. If there is no LED lit on the power supply, check the power supply lead is fitted correctly and that the mains supply is switched on.

**Q: Why are some units lit, but not all?**

1) Check that all interconnecting wires are plugged together correctly.
2) The illuminated unit may be faulty - contact Outdoor LEDs for advice.

**Q: I have damaged the cable during installation.**

Any breaks in the cable can result in water ingress. Replace the cable section.

For further assistance, please contact Outdoor LEDs on **01229 484 633**.

## Guarantee

This product is guaranteed in the UK for a period of one year from the date of purchase against defective materials or faulty workmanship. This guarantee is invalid in the case of improper use, installation, tampering, and removal of the Q/C date label, installation in an improper working environment or installation not according to the current edition of the IET Wiring Regulations (BS7671). Should this product fail during the guarantee period, it will be replaced free of charge, subject to correct installation and return of the faulty unit. Outdoor LEDs accept no responsibility for any installation cost associated with the replacement of this product. Your statutory rights are not affected.

Outdoor LEDs reserve the right to alter specifications without prior notice.

## Technical Specification

Weight: One Lighting Kit has a weight of approximately 10kg

Dimensions: One illuminated unit, 295mm x 295mm x 30mm

Operating Temperature: -20˚C to +40˚C

Scratch Resistance: Some surface scuffing may occur during the lifetime of the product. This is normal and will not affect the performance of the units.

Chemical Attack: If the units are exposed to any chemicals, we recommend that they should be thoroughly cleaned at the earliest opportunity (see Cleaning and Maintenance).

Pressure Washing: The equipment is not designed to be pressure washed.

Low Voltage Directive: The system is designed to meet and exceed the requirements of the LVD directive.

## Power Supply Specification

Input Voltage: Universal Mains (90Vac to 250Vac at 50/60Hz

Output Voltage: 24Vdc Maximum Current: 4.0 A

## Limitations of liability

Marl has taken care to ensure that this product is safe and fit for purpose. You should ensure at all times that you follow the installation and after care instructions detailed in this manual. Nothing in this manual limits or excludes Marl's liability for (i) death or personal injury caused by negligence, (ii) fraudulent misrepresentation, or (iii) any other liability which cannot be limited or excluded by applicable law.

Subject to the above, Marl will not (to the fullest extent permitted by law) be liable, whether in contract, in tort (including, without limitation, negligence), or otherwise arising out of or in connection with these terms and in particular where any injury or loss has been sustained through ignorance of warnings, misuse of goods (including use other than in accordance with the manual, or unauthorised modifications) continued use after a danger became apparent and fair wear and tear, for any: economic losses (including, without limitation, loss of revenues, data, profits, contracts, business or anticipated savings); or loss of goodwill or reputation; or special or indirect losses suffered or incurred by you arising out of or in connection with the installation or use of this product.

This does not affect your statutory rights as a consumer.

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