LED LIGHTING
## CONTENTS

**LED LIGHTING EXPLAINED** 4  
**LED LIGHTING FIXTURES** 6  
### INDOOR  
- DOWNLIGHTS 8  
- PANEL LIGHTS 28  
- OYSTER LIGHTS 30  
- SPOTLIGHTS 36  
- PENDANT LIGHTS 38  
- UP/DOWN LIGHTS 42  
- STRIP LIGHTS 44  
- BATTENS 48  
### OUTDOOR  
- DECK LIGHTS 54  
- STEP LIGHTS 56  
- STARLIGHTS 58  
- UP/DOWN LIGHTS 60  
- ADJUSTABLE LIGHTS 70  
- BUNKER LIGHTS 76  
- FLOODLIGHTS 84  
- WORKLIGHTS 100  
**DIMMERS AND LED COMPATIBILITY** 102  
**DOWNLIGHT ACCESSORIES** 104  
**LIGHTING SENSORS** 104  
**INDEX OF PROTECTION** 105  
**LED LIGHTING GLOBES** 106  
**LED GARDEN LIGHTING** 120  
- BENEFITS 122  
- SPOTLIGHTS 124  
- POND SPOTLIGHTS 136  
- BOLLARDS 140  
- WALL & STEP LIGHTS 144  
- DECK LIGHTS 150  
- TRANSFORMERS 154  
- CABLE & TRANSFORMER CONFIGURATION CHART 158  
- CABLES 160  
- ACCESSORIES 162
**LED LIGHTING EXPLAINED**

**LIGHT COLOUR**
Expressed in Degrees Kelvin (K), light colours are the key to determining the mood of a room.

<table>
<thead>
<tr>
<th>Warm White</th>
<th>Cool White</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DEGREES</strong></td>
<td>2700-3000K</td>
</tr>
<tr>
<td><strong>DESCRIPTION</strong></td>
<td>SOFTER, WARMER LIGHT</td>
</tr>
<tr>
<td></td>
<td>Comparable to traditional incandescent lighting. Preferred in cooler climates</td>
</tr>
<tr>
<td><strong>ROOM</strong></td>
<td>Bedroom, living room, bathroom, kitchen</td>
</tr>
</tbody>
</table>

**AVERAGE LAMP LIFE**

<table>
<thead>
<tr>
<th>LED</th>
<th>COMPACT FLUORESCENT</th>
<th>INCANDESCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>30,000 HOURS</strong></td>
<td><strong>10,000 HOURS</strong></td>
<td><strong>1,000 HOURS</strong></td>
</tr>
</tbody>
</table>

**DURABILITY:** LEDs are very long-lasting compared to other lighting technologies, with an average 30,000 hours life expectancy. We use quality components which make our lamps even more durable, being laboratory tested and assessed at 30,000 hours life expectancy. That represents approximately 20 years based on 3 to 4 hours usage per day.

**DIMMING COMPATIBILITY**
Critical to a successful installation is an understanding of LED compatibility with dimmers.

HPM is one of the only major brands on the market to deliver a full solution from dimmers to drivers and LED fixtures. Choose the winning combination of HPM LED fixtures and HPM or Legrand dimmers to ensure superior performance – including smooth dimming with no flickering, reliability and long life.

**LIGHT PERFORMANCE**

<table>
<thead>
<tr>
<th><strong>LIGHT OUTPUT</strong></th>
<th><strong>INCANDESCENT</strong></th>
<th><strong>HALOGEN</strong></th>
<th><strong>CFL</strong></th>
<th><strong>LED</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>220 lm</td>
<td>25W</td>
<td>18W</td>
<td>5-7W</td>
<td>3W</td>
</tr>
<tr>
<td>420 lm</td>
<td>40W</td>
<td>28W</td>
<td>7-8W</td>
<td>4-5W</td>
</tr>
<tr>
<td>720 lm</td>
<td>60W</td>
<td>42W</td>
<td>11-12W</td>
<td>6-9W</td>
</tr>
<tr>
<td>930 lm</td>
<td>75W</td>
<td>52W</td>
<td>13-18W</td>
<td>9-13W</td>
</tr>
<tr>
<td>1300 lm</td>
<td>100W</td>
<td>70W</td>
<td>18-23W</td>
<td>16-20W</td>
</tr>
</tbody>
</table>

**LUMINOUS EFFICACY (lm/W)**
Picking a lamp fixture based only on wattage or physical size could result in the wrong choice: Wattage (measured in W) represents the power consumed by the luminaire. The actual output of a lamp is measured in lumens (lm): the more lumens, the more light emitted by the luminaire. A smart criteria for determining the efficiency of a light fixture is its lumens/Watt ratio, which represents how much light the fixture delivers versus what it consumes to perform. This value is called luminous efficacy, and proves LED lights are more efficient than other light technologies.

**COLOUR RENDERING INDEX (CRI)**
CRI measures how well a lamp makes colours appear: CRI scores light sources from 1 – 100; a high CRI means that the eye can pick up slight variations in colour, making details in an interior appear sharper and more vibrant. For outstanding colour rendering, opt for our Dalia series which boasts a very high 92 index.

Our downlights range from 80 to 92, to enhance skin tones, hues and textures in rooms.

**BEAM ANGLE**
The light effect from a luminaire is determined by its beam angle. That is the shape and direction of light generated by the lamp. Most conventional fixtures deliver a focused light distribution at 35-60° beam angle, but LED technology can go well above those values, while still maintaining a fair pool of light.

Our lights deliver beam angles ranging from 80 to 120° to ensure a beautiful light is spread throughout a room.
When installing LED lights, you do not need to use a transformer with a high wattage rating. If you have chosen lights that aren’t available in a kit form (i.e. including a transformer or a cable), a HPM LED lighting installation pack is ideal for your needs.

When you reduce your overall energy consumption, you significantly increase the total number of lights you can add to your transformer. This makes it easier to install more lights when you wish to update the look of your garden.

It is important to choose a transformer that is suitable for your lighting system – refer transformer selection chart page (158-159).

**IMPORTANT:**
- For a 60VA transformer you can use up to 60W of halogen lamps or 30W of LED lamps.
- If mixing halogen and LED globes, then follow equation below to determine the right size transformer:
  \[
  \text{Total wattage of required transformer} = (\text{Number of LED globes} \times \text{wattage}) + (\text{Number of halogen globes} \times \text{wattage})
  \]
- Always choose a transformer of higher rating than the total load of all lights put together.

**INSTALLATION EXAMPLE**

- **DIY STEP 1**
  - **CHOOSE YOUR LIGHTS**
    - Mix & match styles.
    - You can add LED and halogen lights on the same cable.

- **DIY STEP 2**
  - **CHOOSE A TRANSFORMER**
    - Add up the wattage of the lights you have selected, then choose a transformer with a wattage higher than the total wattage of your lights.

- **DIY STEP 3**
  - **CHOOSE A CABLE**
    - The selection chart on the HPM cable range packaging will help you determine the best cable for your installation.
GARDEN SPIKE LED SPOTLIGHT (12V)

A stunning spotlight made from 304 grade stainless steel – which means it’s quality, not a painted fakey. Use it to highlight your garden gems. Day or night, it will flaunt your eye for style.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>1W</td>
</tr>
<tr>
<td>Nominal voltage</td>
<td>12V</td>
</tr>
<tr>
<td>Globe type</td>
<td>LED</td>
</tr>
<tr>
<td>Construction</td>
<td>Solid 304 grade Stainless Steel</td>
</tr>
<tr>
<td>Package contents</td>
<td>1 x light fixtures with 0.3m cable and connector</td>
</tr>
<tr>
<td>Requires</td>
<td>12V transformer and cable (not included in pack and sold separately)</td>
</tr>
<tr>
<td>Weight</td>
<td>0.5kg</td>
</tr>
<tr>
<td>Adjustable head</td>
<td>Yes</td>
</tr>
<tr>
<td>Product code</td>
<td>Silver Finish GLLEDLS5</td>
</tr>
</tbody>
</table>
This is another great spotlight for the eco-conscious. And rather handsome too. We wonder what you’ll be spotlighting: a favourite shrub, a mosaic feature wall, or secret reading nook.

**GARDEN SPOT LED SPOTLIGHT (12V)**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power</strong></td>
<td>1W</td>
</tr>
<tr>
<td><strong>Nominal voltage</strong></td>
<td>12V</td>
</tr>
<tr>
<td><strong>Globe type</strong></td>
<td>LED</td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td>Black die-cast housing</td>
</tr>
<tr>
<td><strong>Package contents</strong></td>
<td>1 x Light fixture with 0.3m cable and connector; 1 x Durable plastic stake</td>
</tr>
<tr>
<td><strong>Requires</strong></td>
<td>12V transformer and cable (not included in pack and sold separately)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>0.32kg</td>
</tr>
<tr>
<td><strong>Adjustable head</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Product code</strong></td>
<td>Black Finish GLEDSLBL</td>
</tr>
</tbody>
</table>

1 YEAR WARRANTY
We love the cone shaped head on this spotlight. It has a distinctive character and consumes surprisingly little energy. Our stylish, eco-conscious friends, this is one for you.

**GARDEN CONE LED SPOTLIGHT (12V)**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>1W</td>
</tr>
<tr>
<td>Nominal voltage</td>
<td>12V</td>
</tr>
<tr>
<td>Globe type</td>
<td>LED</td>
</tr>
<tr>
<td>Construction</td>
<td>Black die-cast housing</td>
</tr>
<tr>
<td>Package contents</td>
<td>1 x Light fixture with 0.3m cable and connector, 1 x Durable plastic stake</td>
</tr>
<tr>
<td>Requires</td>
<td>12V transformer and cable (not included in pack and sold separately)</td>
</tr>
<tr>
<td>Adjustable head</td>
<td>Yes</td>
</tr>
<tr>
<td>Product code</td>
<td>Black Finish RGLSP1M2</td>
</tr>
</tbody>
</table>
If you want precise illumination and longevity in performance, our Lilo square will not disappoint. It's all about using contemporary lines and angles to make a statement. This sleek and square spotlight is designed with an ultra-modern look and feel.

**TIP**

Heavy duty construction

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power</strong></td>
<td>1W</td>
</tr>
<tr>
<td><strong>Nominal voltage</strong></td>
<td>12V</td>
</tr>
<tr>
<td><strong>Globe type</strong></td>
<td>G4 LED lamp</td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td>Aluminium powdercoated</td>
</tr>
</tbody>
</table>
| **Package contents**  | 1 x Light fixture with 0.3m cable and connector  
1 x Ground stake  
1 x Adjustable "U" clamp with screws  
1 x G4 LED lamp |
| **Requires**          | 12V transformer and cable (not included in pack and sold separately) |
| **CRI**               | 80+                      |
| **Weight**            | 6.208kg                  |
| **Adjustable head**   | Yes                      |
| **Light colour**      | Warm White (2,700K) nominal |
| **Wiring connection** | Jaw lock connection      |
| **Product code**      | Black Finish GLLED003    |

**NEW**
This LED is made to jazz up any space or nook you point it to, and will add a splash of retro with its disco-like finish. Go bold, go cheeky and go eco-friendly with this Lilo round spotlight.

**THE LILO - ROUND LED SPOTLIGHT [12V]**

**TIP**
Heavy-duty construction

---

**Power**: 3W

**Nominal voltage**: 12V

**Globe type**: LED

**Construction**: Aluminium powder-coated

**Package contents**: 1 x Light fixture with 0.3m cable and connector; 1 x Ground stake; 1 x Adjustable "U" clamp with screws

**Requires**: 12V transformer and cable (not included in pack and sold separately)

**CRI**: 80+

**Adjustable head**: Yes

**Light colour**: Warm White (3,000K) nominal

**Lumens**: 200 lm

**Lifespan**: 10,000 h

**Product code**: Black Finish GLED004

---

1 YEAR WARRANTY

---

3 WATTS

---

BEAM ANGLE 43°
This is Lilo’s most powerful and versatile spotlight. With a 5W light source, a durable construction and a tough exterior hood, we give this spotlight a 10/10 for reliability. The beam angle of 65° will allow you to point it in many directions and get ultra-creative with your outdoor light play.

**Power**
5W

**Nominal voltage**
12V

**Globe type**
LED

**Construction**
Aluminium powder-coated

**Package contents**
- 1 x Light fixture with 0.3m cable and connector
- 1 x Ground stake
- 1 x Adjustable “U” clamp with screws
- 1 x G4 LED lamp

**Requires**
12V transformer and cable (not included in pack and sold separately)

**CRI**
80+

**Adjustable head**
Yes

**Light colour**
Warm White (3,000K) nominal

**Lumens**
200 lm

**Mounting**
Metal bracket / plastic ground stake

**Wiring connection**
Jaw lock connection

**Lifespan**
10,000 h

**Product code**
Black Finish GLLED006

**Tip**
Heavy duty construction

---

5 WATTS

BEAM
ANGLE 65°

100mm

IP55
WEATHERPROOF
Sprinkle these around your pond and create your own fantasy garden. Tuli is a lightweight spotlight that will not only bring out the green in your garden, but also leave a green footprint with her excellent use of energy.

**THE TULI LED POND SPOTLIGHT (12V)**

**TIP**
Can be used above and below water

---

**Technical Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power</strong></td>
<td>4.5W</td>
</tr>
<tr>
<td><strong>Nominal voltage</strong></td>
<td>12V</td>
</tr>
<tr>
<td><strong>Globe type</strong></td>
<td>4.5W MR16 LED</td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td>Brass and Nickel plated</td>
</tr>
<tr>
<td><strong>Package contents</strong></td>
<td>1 x Light fixture with 2.9m cable and connector, 1 x Ground stake, 1 x Adjustable “U” clamp with screws, 1 x 4.5W MR16 LED lamp</td>
</tr>
<tr>
<td><strong>Requires</strong></td>
<td>12V transformer and cable (not included in pack and sold separately)</td>
</tr>
<tr>
<td><strong>CRI</strong></td>
<td>80+</td>
</tr>
<tr>
<td><strong>Adjustable head</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Light colour</strong></td>
<td>Warm White (3,000K) nominal</td>
</tr>
<tr>
<td><strong>Lumens</strong></td>
<td>370 lm</td>
</tr>
<tr>
<td><strong>Mounting</strong></td>
<td>Metal bracket / plastic ground stake</td>
</tr>
<tr>
<td><strong>Wiring connection</strong></td>
<td>Jaw lock connector</td>
</tr>
<tr>
<td><strong>Lifespan</strong></td>
<td>25,000 h</td>
</tr>
<tr>
<td><strong>Product code</strong></td>
<td>Black Finish GLLED007, Brass Finish GLLED008</td>
</tr>
</tbody>
</table>

**Features**
- 4.5W Watts
- 150mm Beam Angle 67º
- Replaceable MR16 LED lamp
- Black Finish GLLED007
- Brass Finish GLLED008
- 1 YEAR WARRANTY
- IP68 Submersible
- 25,000 h Lifespan
- Jaw lock connector
- Metal bracket / plastic ground stake
- Warm White (3,000K) nominal
- 370 lumens
- Adjustable head
- CRI 80+
- 12V transformer and cable (not included in pack and sold separately)
Sprinkle these around your pond and create your own fantasy garden, but don’t let her small size fool you. The miniature Tuli is an extra-small spotlight as powerful as her big sister Tuli.

**THE TULI LED MINI POND SPOTLIGHT (12V)**

- **Power**: 3.5W
- **Nominal voltage**: 12V
- **Globe type**: 3.5W MR16 LED
- **Construction**: Aluminium
- **Package contents**: 1 x Light fixture with 2.75m cable and connector, 1 x Ground stake, 1 x Adjustable “U” clamp with screws, 1 x 3.5W MR16 LED lamp
- **Requires**: 12V transformer and cable (not included in pack and sold separately)
- **CRI**: 80+
- **Adjustable head**: Yes
- **Light colour**: Warm White (3,000K) nominal
- **Lumens**: 260 lm
- **Mounting**: Metal bracket / Plastic ground stake
- **Wiring connection**: Jaw lock connection
- **Lifespan**: 25,000 h
- **Product code**: Single Product, GLLED005
  - Black Finish
  - 4 Pack, GLLED009
  - Black Finish

**TIP**
Can be used above and below water

---

**4 PACK - GLLED009**
Strong and regal for the contemporary era, these Stargate bollards are made from hefty 304 grade stainless steel for long-lasting durability. They will impress any and every visitor.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>8W</td>
</tr>
<tr>
<td>Nominal voltage</td>
<td>12V</td>
</tr>
<tr>
<td>Globe type</td>
<td>LED lamp</td>
</tr>
<tr>
<td>Construction</td>
<td>304 Grade Stainless Steel</td>
</tr>
<tr>
<td>Package contents</td>
<td>1 x Bollard with 0.3m cable and connector</td>
</tr>
<tr>
<td>Requires</td>
<td>12V transformer and cable (not included in pack and sold separately)</td>
</tr>
<tr>
<td>Weight</td>
<td>0.7kg</td>
</tr>
<tr>
<td>Light colour</td>
<td>Warm White (3,000K) nominal</td>
</tr>
<tr>
<td>Product code</td>
<td>Silver finish RGL1215</td>
</tr>
</tbody>
</table>
With its cylindrical contemporary curves and strong regal presence, our Cacto Bollard will light up your path with confidence. Its IP rating of 54 and LED globe mean that Cacto is the ideal pathlight for water resistance, durability and long-lasting performance. The stainless steel finish completes this elegant eye-catcher nicely!

**Specifications:**

- **Power:** 1W
- **Nominal voltage:** 12V
- **Globe type:** G4 LED lamp
- **Construction:** 304 Grade Stainless Steel
- **Package contents:**
  - 1 x Bollard with 0.3m cable and connector
  - 1 x Ground stake
  - 1 x G4 LED lamp
- **Requires:** 12V transformer and cable (not included in pack and sold separately)
- **Light colour:** Warm White (2,700K) nominal
- **Lumens:** 100 lm
- **Mounting:** Plastic ground stake
- **Wiring connection:** Jaw lock connection
- **Lifespan:** 6,000 h
- **Product code:** Silver finish RGLLED001

**Main applications:**
Pathways and driveways
A classic, matt black D.I.Y round wall light. Echoing marine style design, it’s great for those who find straight lines boring. Add them to landscaped areas and driveways for visibility and safety.

**ROUND LED WALL LIGHT 2 PACK (12V)**

- **Power**: 0.5W (per light)
- **Nominal voltage**: 12V
- **Globe type**: LED lamp
- **Construction**: Aluminium and glass
- **Package contents**: 2 x LED round wall lights with 0.3m cable and connector
- **Requires**: 12V transformer and cable (not included in pack and sold separately)
- **Weight**: 0.5kg
- **Product code**: Matt Black finish RGLBW2

**Specifications**

- **Ø100mm**
- **0.5Watts per light**

**Warranty**

1 YEAR WARRANTY

**IP44**

WEATHERPROOF
Add an inviting glow to each step you take with Rosi. This LED Steplight is ideal for adding extra safety to those ‘hard to tread’, providing drops of illumination wherever you wish. Rosi also amplifies those hidden and drab areas, bringing out a whole new beauty to your landscape design.

### Specifications

**Power** | 1W  
---|---  
**Nominal voltage** | 12V  
**Globe type** | G4 LED lamp  
**Construction** | Corrosion resistant 304 grade Stainless Steel  
**Package contents** | 1 x LED round wall light with 0.3m cable and connector  
| 1 x 1W G4 LED lamp  
**Requires** | 12V transformer and cable  
(not included in pack and sold separately)  
**Light colour** | Warm White (2,700K) nominal  
**Lumens** | 100 lm  
**Lifespan** | 6,000 h  
**Product code** | Silver finish  

![Replaceable G4 LED lamp](image1)
SQUARE LED WALL AND DECK LIGHT (12V)

With a peeping eyelid style design, this 12V wall light creates an interesting light spread in a downward direction. Line a few up along exterior walls for directional light and atmosphere.

**Specifications**

- **Power**: 0.5W
- **Nominal voltage**: 12V
- **Globe type**: LED lamp
- **Construction**: Aluminium and glass
- **Package contents**: 1 x LED square wall light with 0.3m cable and connector
- **Requires**: 12V transformer and cable (not included in pack and sold separately)
- **Weight**: 0.268kg
- **Product code**: Satin Silver finish RGLSSW1

**Additional Features**

- **IP44 Weatherproof**
- **1 Year Warranty**
- **0.5 Watts**
- **100mm x 100mm x 55mm**
FLORA LED DECK LIGHT KIT 4 PACK (12V)

Constructed in a brushed stainless steel finish, this kit has everything you need to illuminate your outdoor space and with just the right lighting. Sleek and modern in design, these cylinder-shaped lights nestle seamlessly into patio floors, verandahs, or entryways. Connect up to 25 deck lights on one driver kit and be assured installation is simple!

Power | 0.3W (per light)
Nominal voltage | 12V
Globe type | LED lamp
Construction | Aluminium Stainless Steel and glass
Package contents | 4 x Deck lights
                 | 8 x Cable connector locking plugs
                 | 1 x 30mm cutting template
                 | 1 x 8.4W Transformer
                 | 1 x 12m Extra low voltage cable
Weight | 4 x 2.2kg
Cut-out | Ø30mm
Light colour | White light
Product code | Brushed Stainless Steel finish

1 YEAR WARRANTY
IP44 WEATHERPROOF
0.3 WATTS PER LIGHT
Ø45mm 37mm 67mm
60mm 35mm
Enliven the edges of your deck and steps with these easy D.I.Y lights. With an LED light source they are safe to touch, so little ones are free from any burning harm. Safe, simple, stunners.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>0.3W (per light)</td>
</tr>
<tr>
<td>Nominal voltage</td>
<td>12V</td>
</tr>
<tr>
<td>Globe type</td>
<td>LED lamp</td>
</tr>
<tr>
<td>Construction</td>
<td>Aluminium, Stainless Steel and glass</td>
</tr>
<tr>
<td>Package contents</td>
<td>4 x Deck lights with cable connector locking plugs</td>
</tr>
<tr>
<td>Requires</td>
<td>1 x 10W Transformer</td>
</tr>
<tr>
<td></td>
<td>1 x Standard duty 0.5mm cable</td>
</tr>
<tr>
<td></td>
<td>(not included in pack and sold separately)</td>
</tr>
<tr>
<td>Weight</td>
<td>4 x 0.5kg</td>
</tr>
<tr>
<td>Cut-out</td>
<td>Ø30mm</td>
</tr>
<tr>
<td>Light colour</td>
<td>White light</td>
</tr>
<tr>
<td>Product code</td>
<td>Brushed Stainless Steel finish</td>
</tr>
<tr>
<td></td>
<td>R0LKRSLD24</td>
</tr>
</tbody>
</table>

FLORA LED DECK LIGHT 4 PACK (12V)
When installing 12V garden lights, a transformer is required to reduce the 240V mains voltage to the extra low voltage (12V) used by HPM D.I.Y. garden lights. Transformer selection is simple – just add up the total wattage of the garden lights in your installation and choose the next highest rating for your transformer. For example, 10W light + 20W light + 10W light + 10W light = 50W.
12V TRANSFORMERS WITH INTEGRATED TIMERS & SENSORS

LED INSTALLATION PACK
A handy D.I.Y LED garden light installation pack including 10m of cable and a 10VA transformer.

TRANSFORMER WITH SENSOR
Our HPM 12V Dusk to Dawn Timer with Sensor will automatically switch on garden lights at dusk and switch them off at dawn. Enjoy an easy and safe installation.

TRANSFORMER WITH TIMER
Come home late to a beautifully lit garden. Add a sunset timer to your D.I.Y garden light installation and enjoy the convenience of automation.

---

**LED INSTALLATION PACK**
- Maximum wattage: 10W
- Nominal voltage: 12V
- Weatherproof rating: IP56
- Resetting thermal overload protection: Yes
- Cable length: 12m
- Colour: Black
- Weight: 0.95kg
- Product code: RGLPCTAW20

**TRANSFORMER WITH SENSOR**
- Maximum wattage: 150W
- Nominal voltage: 12V
- Weatherproof rating: IP44
- Automatic switch: Yes
- UV Resistant: Yes
- Weight: 0.203kg
- Colour: Black
- Product code: DGLS150

**TRANSFORMER WITH TIMER**
- Maximum wattage: 200W
- Weatherproof rating: IP44
- Automatic switch: Yes
- Weight: 0.50kg
- Colour: Black
- Product code: RGL10
# LED Garden Lighting

## Cables and Transformers Configuration Chart

### Range: Outdoor Transformers

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Maximum Wattage</th>
<th>IP Rating</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGLPCTAW20</td>
<td>10W</td>
<td>IP67</td>
<td>Featured with resetting thermal overload protection which shuts down the system if overheated. Restart when it gets cool. Kit suitable for deck lights. Comes with 12 metres of AW20 gauge narrow extra low voltage.</td>
</tr>
<tr>
<td>RGLTR48</td>
<td>60W</td>
<td>IP56</td>
<td>Featured with resetting thermal overload protection which shuts down the system if overheated. Restart when it gets cool.</td>
</tr>
<tr>
<td>RGLTR105</td>
<td>105W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RGL11</td>
<td>150W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RGLTR220</td>
<td>220W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RGLTR400</td>
<td>400W</td>
<td>IP64</td>
<td></td>
</tr>
</tbody>
</table>

### Range: Transformers with Integrated Timers and Sensors

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Maximum Wattage</th>
<th>Automated</th>
<th>UV Resistant</th>
<th>IP Rating</th>
<th>Installation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>DGLS150</td>
<td>150W</td>
<td>No</td>
<td>Yes</td>
<td>IP44</td>
<td></td>
<td>Should be installed between the transformer and the lights. Can be used with any 12V garden light system. Locate the sensor in a relatively sunny area to allow the photo-electric sensor to work.</td>
</tr>
<tr>
<td>RGL10</td>
<td>200W</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td>The timer turns the light on at sunset and off after time set on the dial has expired (increments of 2, 4, 6, or 8 hours).</td>
</tr>
</tbody>
</table>

### Range: Cables

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Utilisation</th>
<th>Length</th>
<th>Copper Thickness</th>
<th>No. of Cores</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGL8</td>
<td>Standard Duty</td>
<td>10m</td>
<td>1.3mm²</td>
<td>2</td>
<td>Standard utilisation</td>
</tr>
<tr>
<td>RGLHSC15</td>
<td>Standard Duty</td>
<td>15m</td>
<td>0.5mm²</td>
<td>2</td>
<td>For use with all HPM LED Deck &amp; Step lights</td>
</tr>
<tr>
<td>RGL9</td>
<td>Standard Duty</td>
<td>20m</td>
<td>1.3mm²</td>
<td>2</td>
<td>Standard utilisation</td>
</tr>
<tr>
<td>RGLCL21/30</td>
<td>Heavy Duty</td>
<td>30m</td>
<td>3.3mm²</td>
<td>2</td>
<td>Recommended for high wattage loads</td>
</tr>
<tr>
<td>RGLCL33/30</td>
<td>Extra Heavy Duty</td>
<td>30m</td>
<td>3.3mm²</td>
<td>2</td>
<td>Recommended for high wattage loads</td>
</tr>
</tbody>
</table>

### Range: Cable Connector

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Pack</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDGLCC4</td>
<td>4 Connectors</td>
<td>Join extra low voltage cables together. Simply insert the cable into the connector and twist together. These connectors contain a weatherproof sealant so no tape is required.</td>
</tr>
</tbody>
</table>

**Important Information**

The total wattage of garden lighting must not exceed the maximum wattage of the transformer.
Choose from a range of garden cables to suit your needs: narrow, standard duty, heavy duty.

Determine the location of your garden lights and the position of your transformer. When extra low voltage is run through the cable over a long distance energy is lost. This is called voltage drop. If the voltage drops too much, your appliance will not work efficiently. See selection table below:

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>TOTAL WATTAGE OF YOUR GARDEN LIGHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CABLE TYPE REQUIRED</td>
<td>10W</td>
</tr>
<tr>
<td>Extra Heavy Duty</td>
<td>90m</td>
</tr>
<tr>
<td>Heavy Duty</td>
<td>60m</td>
</tr>
<tr>
<td>Standard Duty</td>
<td>35m</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length</th>
<th>Wire gauge</th>
<th>Copper thickness</th>
<th>Utilisation</th>
<th>Colour</th>
<th>Construction</th>
<th>Product code</th>
</tr>
</thead>
<tbody>
<tr>
<td>10m</td>
<td>16 AWG, 2 core cable</td>
<td>1.3mm²</td>
<td>Standard duty, narrow places</td>
<td>Black</td>
<td>Plastic and copper</td>
<td>RGL8</td>
</tr>
<tr>
<td>20m</td>
<td>16 AWG, 2 core cable</td>
<td>1.3mm²</td>
<td>Standard duty, narrow places</td>
<td>Black</td>
<td>Plastic and copper</td>
<td>RGL9</td>
</tr>
<tr>
<td>30m</td>
<td>16 AWG, 2 core cable</td>
<td>2.1mm²</td>
<td>Heavy duty</td>
<td>Black</td>
<td>Plastic and copper</td>
<td>RGLCL21/30</td>
</tr>
<tr>
<td>30m</td>
<td>16 AWG, 2 core cable</td>
<td>2.1mm²</td>
<td>Extra Heavy Duty</td>
<td>Black</td>
<td>Plastic and copper</td>
<td>RGLCL33/30</td>
</tr>
<tr>
<td>15m</td>
<td>16 AWG, 2 core cable</td>
<td>0.5mm²</td>
<td>Standard duty, narrow</td>
<td>Black</td>
<td>Plastic and copper</td>
<td>RGLHSC15</td>
</tr>
</tbody>
</table>
ACCESSORIES

REPLACEMENT LED GLOBES
Designed to replace halogen globes so you can reduce the overall energy consumption of your garden lighting. This means it suits a wide variety of 12V garden lights including pathlights, spotlights and uplights.

SOLAR RECHARGEABLE BATTERIES
HPM solar rechargeable batteries are suitable for use with HPM solar garden lights. This handy 4-pack is a reliable source of power for keeping your lights on.

CABLE CONNECTORS
Cable connectors join your extra low voltage cables together. You simply insert the cables into the connector and twist together. These connectors contain a weatherproof sealant so no tape is required.

REPLACEMENT GLOBES
- Power: 0.5W
- Lamp base: MR16
- Nominal voltage: 12V
- Globe type: LED
- Construction: Aluminium and glass
- Package contents: 2 x LED Globes
- Finish: Satin Silver
- Light colour: White light
- Product code: DGLWLED

BATTERIES
- Current: 600mAh
- Construction: NiCD Nickel-cadmium
- Colour: Yellow
- Package contents: 4 x Solar rechargeable batteries
- Battery type: AA
- Product code: DSLBAT4

CABLE CONNECTORS
- Nominal voltage: 12V
- Construction: Plastic
- Colour: Black
- Product code: CDGLCC4