NOWATT LIGHTING

CRYSTAL
PLRE2 – PLRE4

User guide

NOWATT LIGHTING

Sommaire

Overview

Usage : Solar outdoor marking stud connected with LEDs with no cabling.

The Crystal stud is standalone thanks to a solar panel and a battery.

LEDs' colors:

- PLRE2: Amber or White 3000 K or White 4000 K.

- PLRE4: Colors RGB + White 4000 K.

Structure : Tempered glass frame thickness 15 mm on an aluminum tube.

Battery LiFePO4 (3,6 Ah).

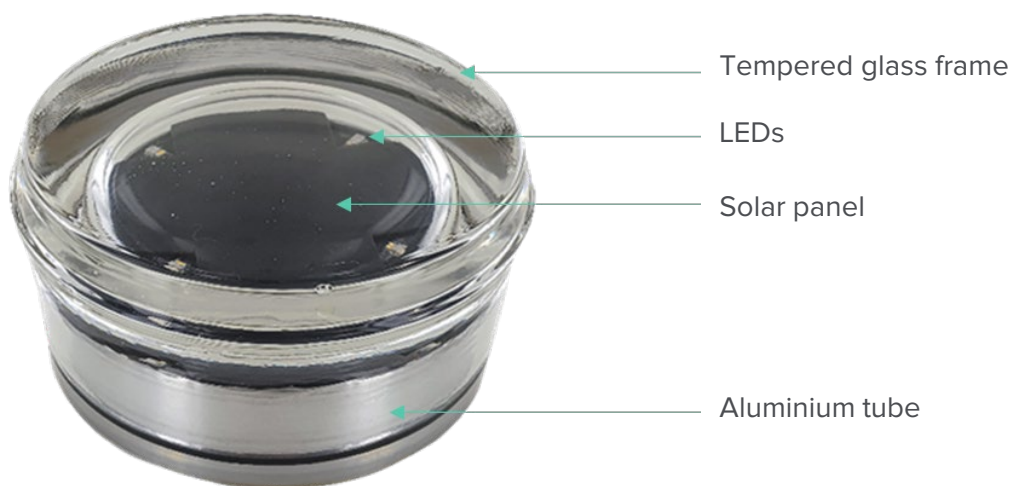Solar panel Sunpower Back Contact.

Operating temperatures : - 10°C / + 60°C.

Class III – IP67 – IK10 – CE.

Product lifespan over 20 years.

Dimensions : 119 x 72 mm.

Weight : 1.25 kg.

Tempered glass frame

LEDs

Solar panel

Aluminium tube

Unpacking

Check all parts of the product for damage.

Do not put the product into service in case of damaged solar panel or LEDs.

The identification number of your Crystal stud is indicated on a label on the side of the product.

Fixture positioning tips

Choose a suitable location where sunlight can directly reach the solar panel.

Avoid obscuration by eaves or trees.

In the northern hemisphere, favor installation to the south of obstacles, to the east or west. Do not install due north.

In the southern hemisphere, favor installation to the north of obstacles, to the east or to the west. Do not install due south.

Recommendations

The most critical time for solar lighting is winter.

Days are shorter than in summer, and the sun is lower in the sky. Therefore, it is advisable to assess the correct positioning of a solar lighting device in winter, to avoid shadow areas.

It is advisable to draw up a layout plan of the site before installation. You can indicate the location of the devices there, making sure to note their identification numbers indicated on their labels.

Example

In winter, the sun is 21° in Bordeaux, France at noon. A 2-meter-high wall then has a shadow cast of 5 meters directed towards the North.

In summer, the sun is 68° in Bordeaux, France at noon. A 2-meter-high wall then has a shadow of 70 cm directed towards the North.

In Bordeaux in winter, the sun rises in the southeast at 7:30 a.m. and sets in the southwest at 4:30 p.m.

In Bordeaux in summer, the sun rises in the northeast at 4:30 a.m. and sets in the northwest at 8 p.m.

More information: www.sunearthtools.com/dp/tools/pos_sun.php?lang=en

Control with the Nowatt Lighting application

Download the Nowatt Lighting app

The Nowatt Lighting application is free to download from the Play Store and the Apple Store. You can download it on a Smartphone or a tablet.

Activate your Bluetooth connection

Start the Nowatt Lighting application on your Smartphone

The app asks you for permission to access Bluetooth. Tap "Allow" then "OK".

Home page

Products are divided into two groups: those you have already logged into are listed at the top in "My Modules". Others are listed below in "New Modules".

To connect to a device, click on its identification number shown in the menu.

Enter your password

Nowatt Lighting will communicate a password by default in the user guide delivered with the device.

You can change the password to secure your product in the settings.

It is important to check with the person in charge of programming that the modified password will be recorded and distributed to those responsible for the project.

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Homepage information

Identification number of your product

Battery charge status

Mode : OFF / Activated / Demo

Your stud may display a 0% state of charge on startup. Wait a few seconds for the actual percentage to display.

Identification of the model of your product

Settings

All scenarios available in the app

PLRE2 - Select a light animation

Tap "Scenario".

Select a light effect from the 4 choices available.

Monochrome
Blanc fixe

Chandelle

Onde Monochrome

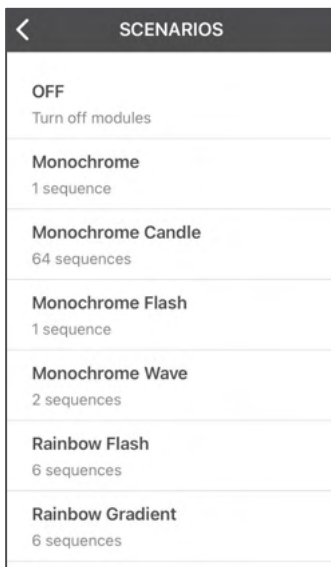**Flash**
Choix du nombre de clignotements par seconde

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PLRE4 - Select a color

Tap "ON" then "Custom Color" at the bottom of the page to select your color.

Use the color wheel or RGBW sliders, then press "Save" to save your color.
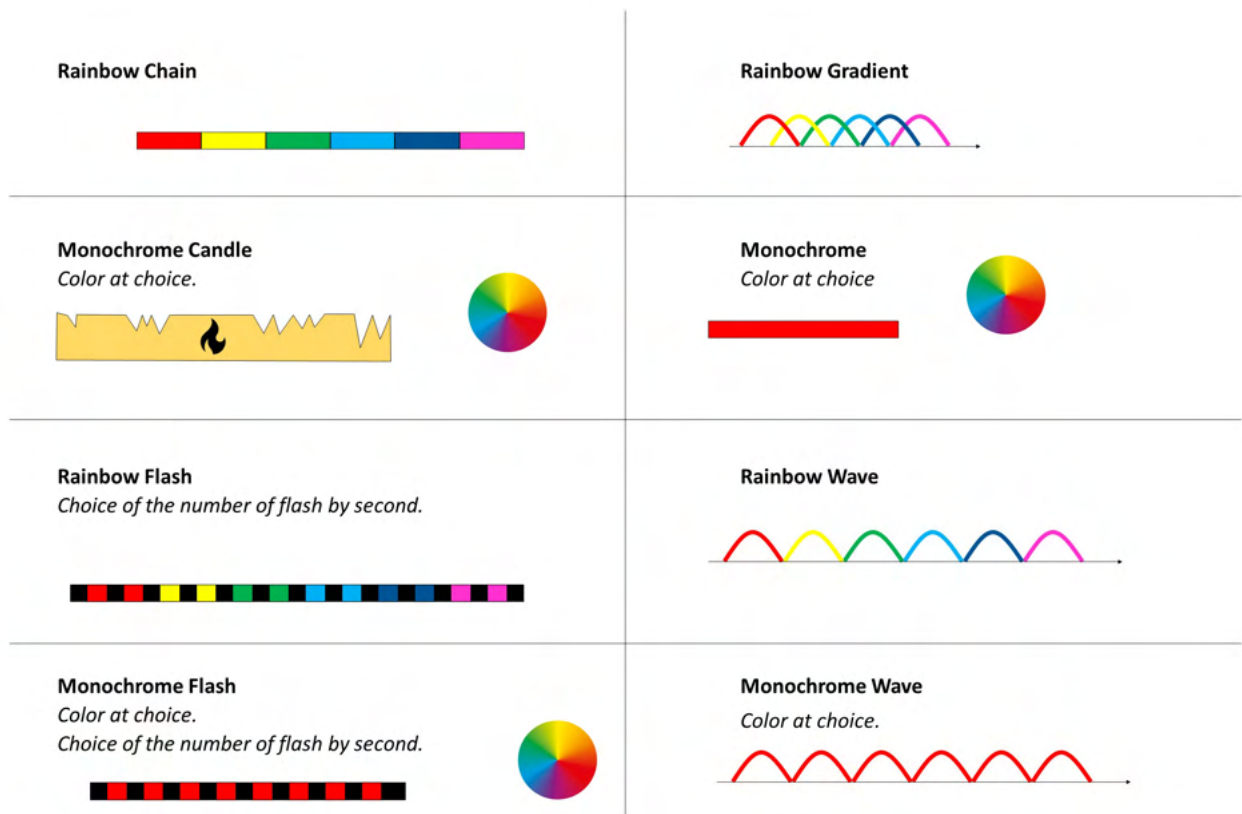
To delete a color, long press on the color box and then press "yes".

PLRE4 - Select a light animation

Tap "Scenario".

Select a light effect from the 8 choices available.

Rainbow Chain

Rainbow Gradient

Monochrome Candle
Color at choice.

Monochrome
Color at choice

Rainbow Flash
Choice of the number of flash by second.

Rainbow Wave

Monochrome Flash
Color at choice.
Choice of the number of flash by second.

Monochrome Wave
Color at choice.

Confirm your product settings

The scenario you chose is written here.

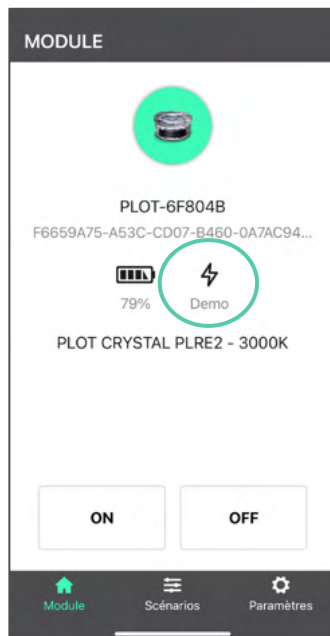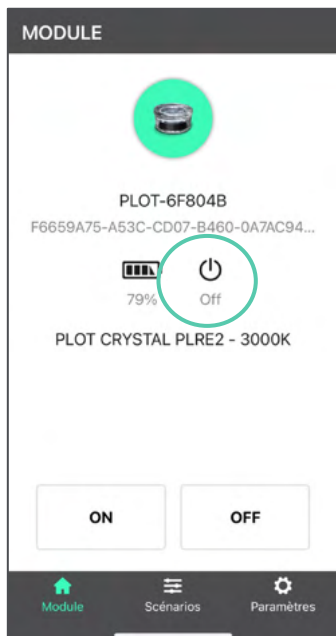If you selected a Monochrome scenario, confirm the color.

Select the operating time of your device with the sliders:

- Total duration of use

- Number of hours after sunset

- Number of hours before sunrise

Check your program with demo mode by tapping "Show Scenario". Please note that this only allows you to view the light effect. The scenario is not saved for the following nights.

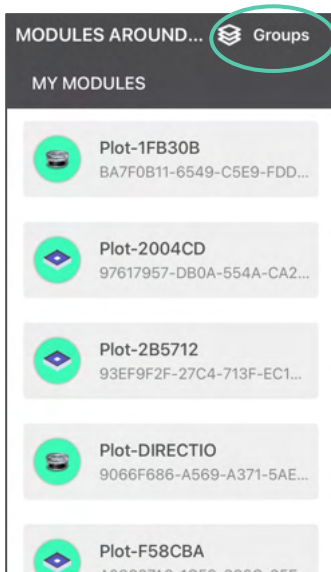Tap "Apply Scenario" to save it. It will light up every night with this scenario.
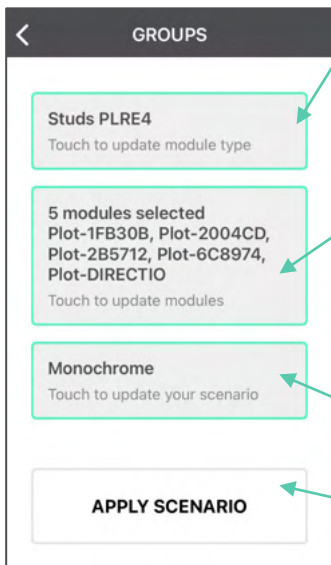
Check your programming

If the home page indicates OFF or Demo, your scenario is not saved, you must repeat the previous steps.

Grouping function

The grouping function allows you to create groups to send the same scenario to several devices simultaneously (within the range of Bluetooth). However, this operation does not allow synchronized operation of the devices. They receive the same scenario, at the same time, but they do not communicate with each other. They remain independent.
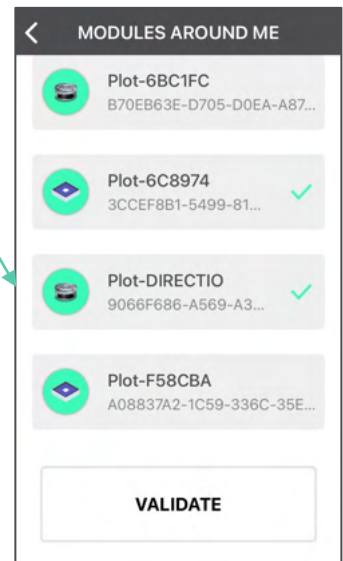

1. Tap "Groups".

2. Select the type of products you want to group.

3. Enter the products you want to include in the group. Warning: only the products for which you have previously entered the password during a first connection can be grouped.

4. Choose your scenario.

5. Apply the scenario.

Installation in concrete floor

This installation tutorial applies to poured concrete, paving stones and slabs, deactivated concrete, and concrete to be poured.

1.   Make a drill core hole of 130 mm in diameter for a minimum depth of 95 mm.

2.   Remove the drill core, possibly with the help of a perforator.

3.   Position the stud with a suction cup.

4. Set the stud's height.

Pour a resting mortar (if rolling space) or fill with sand according to the following two configurations:

> Flush stud:
> H (mortar height) = D (coring drilling depth) - 75mm
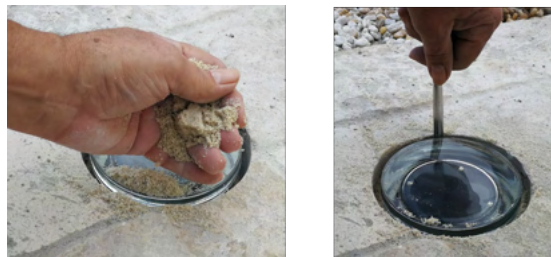>
> Stud protruding from the height of the collar:
> H (mortar height) = D (core drilling depth) - 60mm

5. Adjust flush and horizontality.

6. Fill the vertical cavity up to 2 cm before the finished floor (sand or mortar) and pack well.
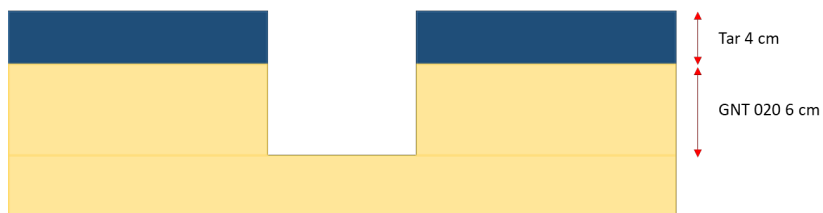

7. Make finishing mortar.
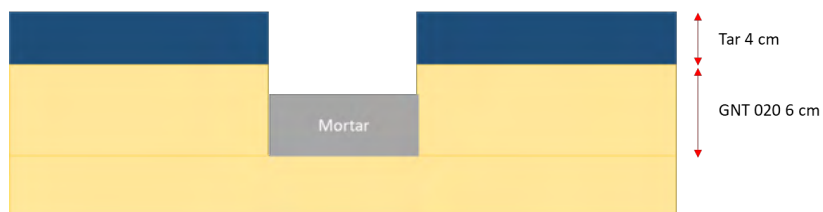

8. Clean and let dry the gasket 24 hours.

Installation in coated soil

This installation applies to coated soil, bitumen and asphalt.
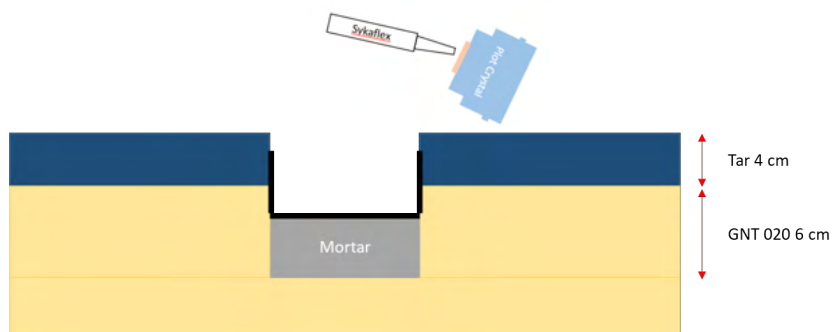
1. Make a 122/130 mm diameter coring for a 90 mm depth.
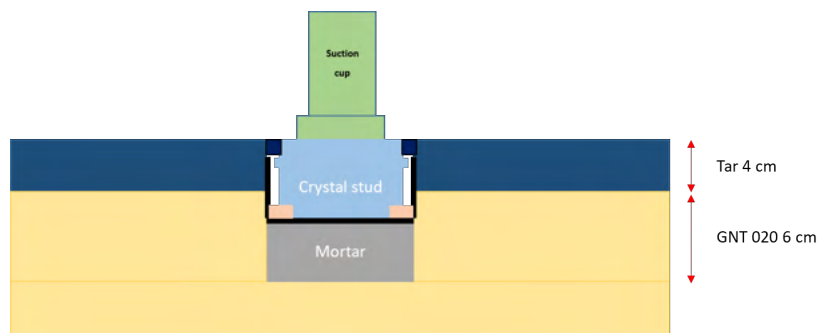

Tar 4 cm

GNT 020 6 cm
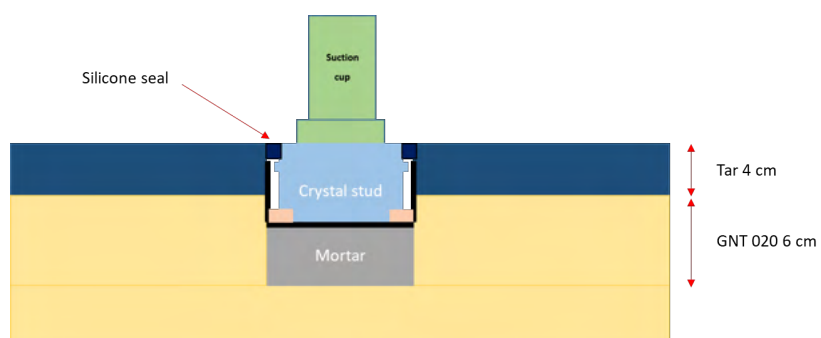
2. Pour a resting mortar over 1 to 1.5 cm.

Mortar

Tar 4 cm

GNT 020 6 cm

3. Apply the primer.

Mortar

Tar 4 cm

GNT 020 6 cm

4. Apply Sykaflex on the bottom of the stud (only on the metal background).

Sykaflex

Mortar

Tar 4 cm

GNT 020 6 cm

5. Set the stud with a suction cup.
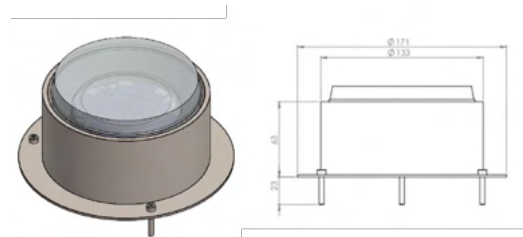

6. Make a finishing silicone seal.
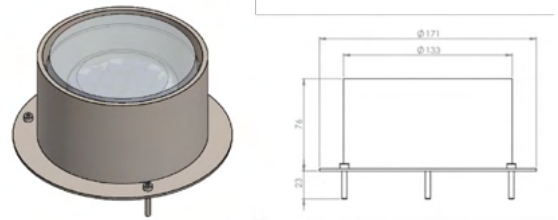
Installation in gravel ground

Use of stainless steel fixing for stud.
This device is screwed onto concrete blocks and maintained by 3 M4 screws.

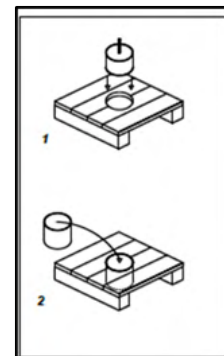Tube height for a glass protruding installation : 62 mm.
Low flange.

Tube height for a flush glass installation : 75 mm.
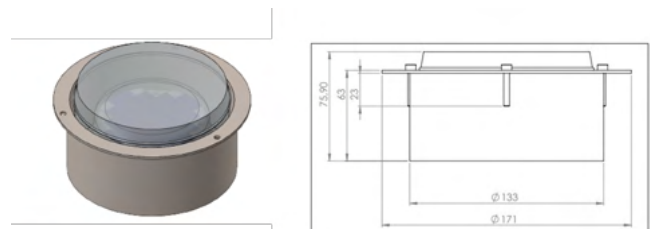High flange.

Installation in a duckboard

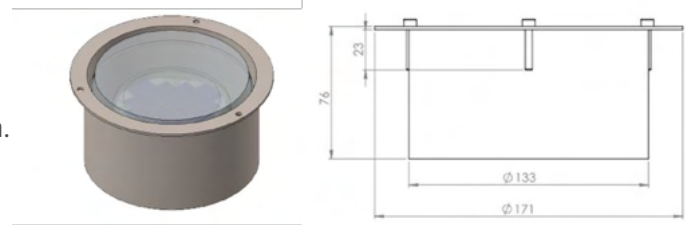Use of stainless steel fixing for stud.
This device is maintained by 3 M4 screws.

Tube height for a glass protruding installation :
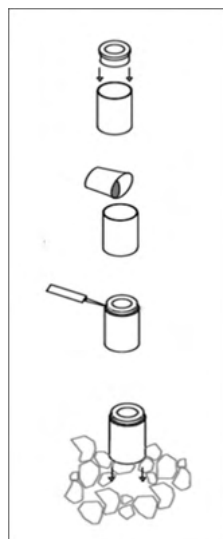62 mm.
Low flange.

Tube height for a flush glass installation : 75 mm.
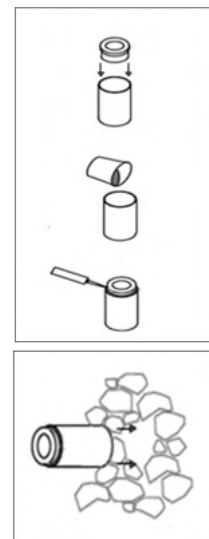High flange.

Installation in pebbles or gabions

1. Use 140 mm PVC tubes. Cut lenghts equal to the depth of the installation of the pebbles or gabions.

2. Check that your stud is in OFF mode.

3. Install it at the end of the tube.

4. Fill the PVC tube with mortar or concrete.

5. Pour the polyurethane mastic of the color of your choice (white, grey or black).
    Ref. : PU BOND 40 ATE VITRATEC, between the stud and the PVC tube.

6. Smooth the gasket using a plastic spatula previously moistened.

7. Let dry 20 minutes.

8. Integrate the tube and the stud in the pebbles or gabions.

9. Put the stud in ON according to the instructions.

Installation in pebbles

Installation in gabions

Installation in flood zone

For installations where the studs could be covered with water for several hours a day, we recommend to provide drainage for the cavity.

It is also recommended to use the stainless-steel fastening device (with or without a flange) and to fill it with polyurethane.

Cleaning and care

The product requires no maintenance.

Regular checks for damage can increase the lifespan of the product.

Removing dirt can help increase product performance.

Risk of material damage

Unsuitable detergents may damage the luminaire.

Check surface tolerance with detergents.

If there is dirt or weather deposits on the solar panel, clean the glass frame with a soft cloth and mild detergent.

Waste management

Please observe the legal obligations relating to waste management.

Return old devices to your dealers or directly to Nowatt Lighting.

Do not dispose of old devices with unsorted household waste.

Do not throw old devices into fire or water.

CE declaration of conformity

This product complies with the requirements of the following standards, laws and directives:

- Electromagnetic Compatibility Directive 2004/108/EC

- RoHS Directive 2001/65/EC

- Batteries and Accumulators Act (BattG)

- WEEE Electrical and Electronic Devices Directive 2012/19/EU

Warranty

Nowatt Lighting products are manufactured with the utmost care.

The function and safety of this product have been tested according to the currently valid directives, with a final inspection.

Nowatt Lighting guarantees faultless condition and operation.

The warranty period is 24 months and begins on the day of sale to the customer.

It includes the elimination of defects resulting from a defect in material or construction.

The warranty will be provided at our discretion by repair or exchange of defective parts.

The warranty does not apply to wearing parts.

The warranty does not apply to damage or defects due to improper use or maintenance.

Consequential damage to other objects is excluded from the warranty.

The warranty only applies if the undisassembled device is returned accompanied by a brief description of the defect and a receipt or invoice bearing the date of purchase and the seller's stamp.

Please send the product properly packaged to the after-sales service.

In the event of faults not covered by the guarantee, contact your point of sale to find out if a repair of the device is possible.

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