

FAQ

QUESTIONS AND ANSWERS

GLOSSARY

LED

A light-emitting diode (LED) is a semi-conductor element that emits light when electricity passes through it. This semi-conductor element consists of a crystal that is attached to a metal holder, and both are encapsulated in protective plastic. LEDs are mostly based on inorganic, i.e. non-carbonic materials.

OLED

Organic light-emitting diodes (OLEDs) are based upon organic (carbonic) materials. OLEDs are manufactured in thin layers and therefore provide a diffuse light source. The OLED technology is becoming more frequently used in display applications (e.g. mobile phones and PDA screens).

Service life of an LED

Up to 50,000 hours.

Infrared radiation from LEDs

LEDs do not emit infrared radiation like incandescent bulbs do.

Heat generation of LEDs

All light sources produce heat, even LEDs. However, they do not become very hot, especially if the LEDs and lights are fitted with "heat sinks", which help lead away heat.

Test of service life in accordance with the LM-80 standard?

Häfele tests Loox LED flexible strip lights in accordance with the LM-80 standard. LM-80 is a standardized testing method, which allows products to bear the EPA's (Environmental Protection Agency) Energy Star. The test is a manufacturer-independent comparison of LEDs. During the test the luminous flux (Lumen maintenance) and the service life of an LED are tested at three different temperatures (131, 185, and 221 °F) for 6,000 hours.

LEDs and foodstuffs

Since LEDs do not emit UV radiation, they are a better option for supermarkets, restaurants and kitchen lighting. UV radiation reduces the nutrient content in foods, while all other light sources, including natural and artificial emit UV radiation. In addition LEDs do not emit heat which keeps foods fresher longer.

Lead in Loox products

Loox products by Häfele are lead-free and adhere to the RoHS guidelines.

TECHNICAL QUESTIONS ABOUT LOOX

Can the 12 V/24 V lights be dimmed at the primary side?

Yes, this is possible with the dimmable magnetic driver.

What has a major effect on the service life of drivers and LEDs?

An ambient temperature and/or voltage that is too high.

How long should the lead of an LED light / LED flexible strip light be?

6 meters (20'), with a longer lead the resistance drops and the specified light intensity cannot be guaranteed.

What is the service life of the drivers?

Approximately 30,000 hours at an ambient temperature of 113 °F.

Can an LED flexible strip light be used behind acrylic glass?

Yes, however the acrylic glass increases the light color variations (binning) up to four times and minimal color deviations are subsequently more visible.

Can the multi switch box, the multi driver box and the 3-way distributor with switching function be connected in series multiple times?

No, because the signals would not be transmitted properly.

With what output tolerance should drivers and LED lights be calculated?

±10 percent

What binning (color deviation) do Loox LED lights have?

±200 Kelvin

Can 12 V and 350 mA lights be used together?

Yes, please use our corresponding converter.

Which ambient variables can lead to problems when using the door sensor switch?

High-gloss front panels and sliding doors. For a solution, please use a motion detector.

Is it possible to control multiple color mixers with a single remote control?

Yes, different color mixers can be managed on a single remote control.

Is the dimmer setting saved if the power fails?

The dimmer setting is saved for RGB/multi-white mixers.
No, this is not saved for the Loox dimmer.

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TECHNICAL QUESTIONS ABOUT LOOX

LED

2.5 Amperes

What is the maximum Wattage that I can connect to an AWG-22 lead and plug?

With 12 V systems this is $12\text{ V} \times 2.5\text{ A} = 30\text{ W}$. With 24 V systems this is $24\text{ V} \times 2.5\text{ A} = 60\text{ W}$

What is AWG 22?

AWG stands for American Wire Gauge.

It is the coding for wire diameters in electrical leads that are mainly used in North America. This identifies the cross-section of wires in electrical leads that consist of strands and wire.

Can your lights be operated using multiple switches?

Yes, please use the multi switch box to do this. Up to three switches can be connected to the multi switch box. The dimmer does not work with the multi switch box

What is the difference between the different LED flexible strip lights?

LED 3011, 3017 flexible strip lights are encased in silicone, so profiles are not required for installation.

These LED flexible strip lights can be directly installed into a groove or attached to a surface.

LED 2013, 2015, 3015 flexible strip lights do not have silicone and it is advisable to use aluminum profiles for installation and heat management.

What influence does the type of glass edge have on the lighting effect that is generated?

The lighting effect varies depending on the type of glass shelf.

- > Glass edge with satin finish = even light line
- > Clear glass edge = point light

Can I simply cut LED flexible strip lights to length?

Yes, LED flexible strip lights can be shortened at the mark with the scissor symbol.

Please note the following differences when doing this:

- > LED 3011, 3017 flexible strip lights can be shortened but not re-attached.
- > LED 2013, 2015, 3015 flexible strip lights can be shortened or extended as much as required, since the connection between the strips and the connection to the driver is made using clip connectors.

Example of LED 2013, 2015, 3015 flexible strip lights:
Cut off, fit clip connector and press on – finished.



Can be shortened



Installation: Self-adhesive



Lead with clip connector

Why do the lights have to be plugged in first before connecting the main plug?

If the driver is connected to the power first, electrical power is output at the secondary side, which leads to overvoltage which damages the lights if they are connected.

Can Loox lights be used in vehicles, for example?

Yes, but an upstream voltage stabilizer must always be installed, since voltage fluctuations occur in on-board power supplies and voltage peaks (even slight overvoltage). This can reduce the service life of the lights considerably or cause damage.

How can I compare the output of an LED light with a halogen light?

Use the light cone to compare the values at 500 mm (19 5/8"). A 20 W halogen light features approx. 600 lx at 500 mm.

TROUBLESHOOTING

Why does the light flash at regular intervals when it is switched off?

This is caused by leakage current in the electrical installation which is charging the capacitor in the driver until it briefly gives off the power at regular intervals to discharge itself resulting in brief flashing of the light.

Solution: Check the entire installation.

Why does my LED light flash?

Flashing is a sign of underloading or overloading.

Use a driver with higher power or reduce the consumption.

What may be the cause if an RGB LED flexible strip light is only displaying individual colors?

The clip connector has been connected incorrectly or the strip has been connected to the wrong end or to the driver.

Why is the door sensor switch not operating correctly?

When sliding doors are being used, the door sensor switch cannot record the rapid movement and the movement of the door properly.

Dark surfaces (e.g. jet black) have poor reflection, therefore the optical sensor may fail to detect the door panel.

Solution: Use motion detectors

What are the differences between the output of the different Loox LED flexible strip lights?

	LED 2011	LED 2013	LED 2015	LED 3011	LED 3015
Wattage W/ft.	.8/ft.	1.5/ft.	2.5/ft.	.9/ft.	4.7/ft.
Number of LED/m	36	60	30	36	120
Lumen per Watt*	47	60	67	50	80
Lux 500 mm*	30	70	140	136	523
max. length [m] per lead	6 (20')	6 (20')	4.25 (14')	6 (20')	4 (13')

* Comparison with warm white light color 3000–3200 K