

Dimming LED lamps

LED lamps are rapidly becoming mainstream in everyday life. A rather obvious development, given the fact that they are highly energy efficient and applicable in many ways. The process of dimming LED lamps, however, is highly complicated, especially since there are many manufacturers on the market and not a single production standard. That is why HQ teamed up with dimming specialist Tradim® to develop a number of custom-made dimming solutions.

Decreasing availability of incandescent and halogen light

Lower power consumption and great light quality at the same time: it fits perfectly within the positive trend to care for the environment and control our spendings. The European Union goes along with this development by tightening its regulations. As an effect, incandescent lamp sales decreased drastically since 2009. Production and sales of halogen lamps will also be phased out eventually. Incandescent and halogen lamps are notorious for their poor energy output, converting energy mostly into heat. Incandescent lamps, for example, only convert 10% of the energy they use into visible light; the rest gets wasted.

LED, the energy-saving alternative

The good news is that there is an alternative: LED lamps. LED technology offers the possibility to produce more light with less energy. In addition to this much greater output, LED can be applied in endless ways thanks to its flat design. Nowadays, LED is also available in a very broad colour spectrum. Formerly infamous for its cold, white light, the new generation LED offers the same warm colour temperatures as traditional incandescent lamps.

Dimming of LED light is challenging

Despite all these advantages, there is one important downside to LED dimming: it requires some highly complicated techniques. Unlike incandescent, CFL and halogen lamps, LED comprises a number of complex processes which are closely linked to each other. They involve numerous electronic components to enable the production of light via a light emitting diode, better known as LED. As an effect, it requires a great deal of accuracy to control – and thus to dim – LED lamps. What makes it even more difficult is that there are so many suppliers on the market and not a single production standard. This makes it very hard for manufactures to develop a universal dimmer which guarantees a flawless performance for each dimmable LED lamp.

Consequences of bad dimming behaviour

For all these reasons, consumers and even experienced installers find it hard to match a dimmer – often already installed – with the right lamps. A bad match causes an unstable and flickering light, a disappointing dimming range and worst case scenario, dimmable LEDs that fail at being dimmed. A mismatch between LED lamp and dimmer could also shorten the life cycle of both dimmer and lamp. Eventually, this will lead to complaints and irritation because people have to return the goods while there is absolutely no guarantee that a new dimmer will work.

Our solution

Like no other, HQ understands the difficulties that come with dimmers and dimmable LED lamps, which is why we started a cooperation with Dutch dimming specialist Tradim®.

It resulted in a range of dimmers specifically developed to fit the HQ dimmable LED lamp assortment. This allows for an optimal and flawless dimming behaviour, enabling you to create any type of atmosphere and light output.

Summary

- Optimal and smooth dimming behaviour thanks to HQ dimmers and HQ lamps that are specifically designed to communicate with each other
- The same decent price/quality ratio that also applies to our HQ lamp range
- Guaranteed lifespan of both lamp and dimmer thanks to matching technologies
- Suitable for all dimmable light sources
- Compliant with all current norms/standards, such as KEMA certificate & EN60669
- Does not cause any interferences on your Wi-Fi network
- Available as cord dimmer, floor dimmer and wall dimmer