



your light on demand

CASE STUDIES

CASE STUDY 1

Hager switches: excellence in design thanks to the collaboration with SLIM

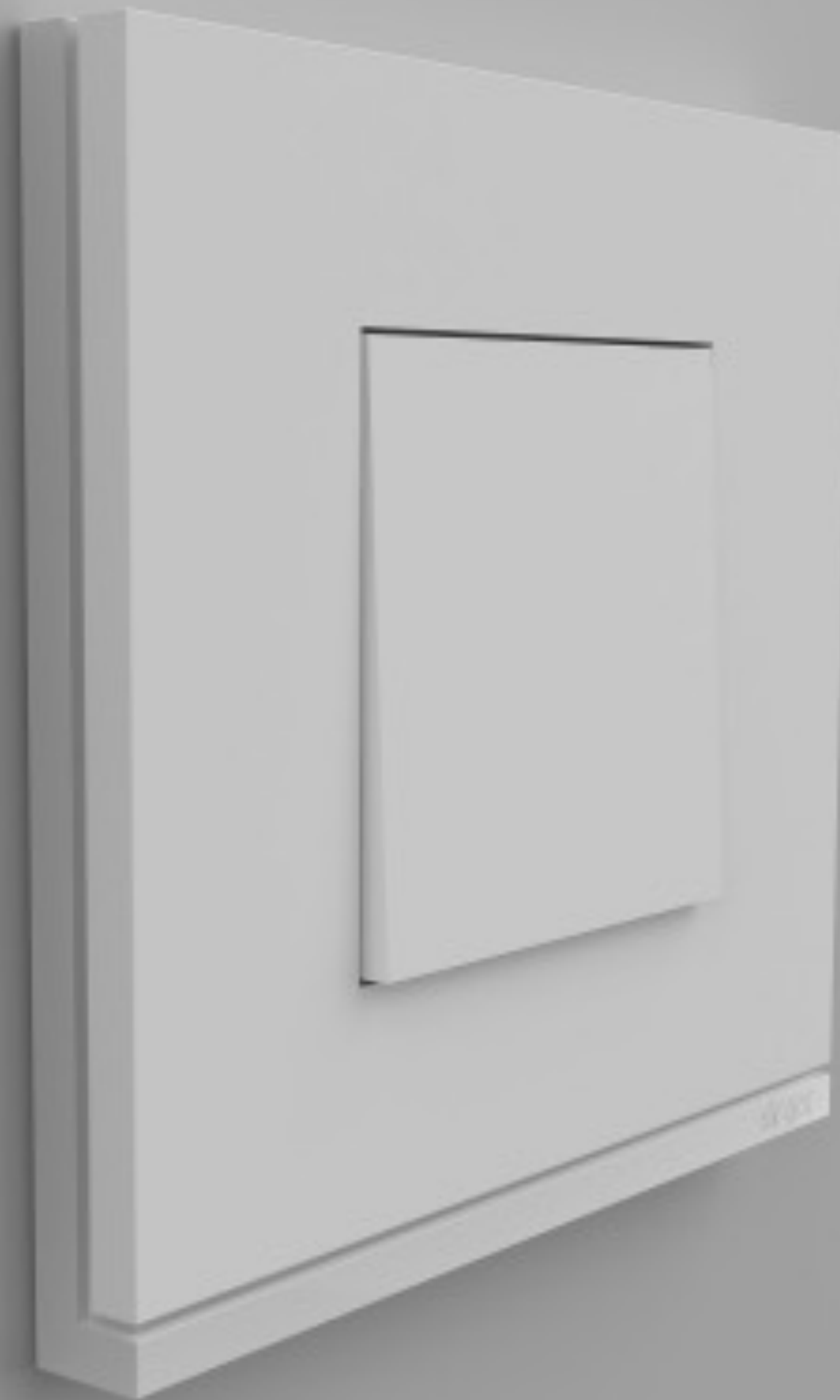
SLIM participated in the creation of the **Hager Gallery** switches and plates range, with a **world-class backlighting system**.

The Institut Français du Design (French Institute of Design) awarded this result with the prestigious *Janus Award*.

Hager switches: the Janus Award

In September 2018, the Institut Français du Design - which promotes industrial design by selecting products and services that create added value while respecting the environment - awarded the Gallery series with the prestigious Janus Award for its excellence according to the economy, ergonomics and emotional aesthetics criteria.

The jury awarded the excellent aesthetic qualities of the range expressed by the light band, which were the result of the collaboration with our company, the variety of materials and colours that make it customizable according to the needs of both the residential and commercial markets.





SLIM for Hager Gallery switches

SLIM's contribution to the realization of Hager Gallery switches and plates was both important and challenging at the same time:

- we were able to create an indicator light in a very small space (in particular as regards the thickness of the plate);
- we were able to ensure homogeneity of light along the entire length of the plate: the points of the single LEDs are not visible and this is the result of an accurate study on the diffusion of light;
- the light is moved from the rocker to the plate: it is no longer the single point or a line inside the rocker, but a line in the plate;
- the practical aspect has been combined with the design: in addition to being visible in poorly lit rooms, the switch plate becomes a design line of light, which furnishes the environment.

Information on [Hager Gallery switches](#) can be found on the website of the Hager Group, whereas the website of the Institut Français du Design illustrates the reasons that led to the awarding of the [Janus award to the Hager Gallery switches](#).

The creative and design capacity, the flexibility and the commitment to find new and more efficient solutions are some of the qualities that characterize SLIM.

We are at your disposal for developing customized design backlighting solutions.

CASE STUDY 2

Home cooking system: Panoramagic - ILVE's innovation spirit

ILVE, an Italian world-class brand in the production of **professional cooking systems for home**, has created **Panoramagic**, a line that includes blocks, hobs and ovens, designed by Emo Design. Panoramagic is an icon in the sector, whose restyling was awarded with the Good Design Award in 2017.

ILVE's Panoramagic and the collaboration with SLIM

Panoramagic is the **free-standing model** that has revolutionized the panorama of home cooking systems. Today, this icon of Italian style and technology has been renewed to continue to fascinate: **its new look is the result of the collaboration with SLIM**.

The back-lighting solution for the knobs of the ovens and of the hob adopted for Panoramagic, which light up when the oven or the burners are switched on, did not meet ILVE's expectations in terms of attention to detail. The company's painstaking attention to details ensures that its collections are performing, versatile and reliable. Specifically, the following criticalities were highlighted:

- difficulty in positioning the back-lighting solution;
- the light was not conveyed inside a support and the diffusion was uneven.





SLIM's solution for ILVE's Panoramagic

Thanks to the mutual trust established over time with our technical research and development staff, ILVE's staff submitted the problem to us, trusting in a proactive **collaboration**.

We worked side by side to identify a **solution** that could represent an improvement both in terms of efficiency and aesthetics as well as be environmentally friendly, in line with ILVE's vision and philosophy.

We therefore created a **first printed circuit with high-performance LEDs** that facilitated assembly and emitted a homogeneous light in a specially designed shade of red following the indications given by Emo Design.

We then **developed a customized light guide and a ring nut**, whose geometries were engineered in relation to the space available, the components to be inserted and the type of polymer to be used: the printed circuit found a tailor-made housing inside the ring and the cables had a dedicated output.

The study was conducted in collaboration with the manufacturer of the moulds, so that all the variables involved could be taken into consideration.

The realization of a pre-series fully satisfied ILVE: the technical reliability parameters, the use of noble materials and the aesthetic design met the company's expectations.

In the last phase, the opal colour of the light guide was assessed (with the light on and off), in contrast with the colour of the inclined dashboard: ILVE was fully satisfied with the final result.

Now, the Panoramagic professional cooking systems for home are ready to be ignited with renewed splendour!

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In developing the backlighting system for the Panoramagic knobs, we asked SLIM for solutions capable of communicating two aspects that we consider to be strategic: perceived value and performance.

In the first case, the result has a remarkable scenic impact and faithfully reflects what the designers had defined in terms of chromatic tone of light and colour temperature.

For the second aspect, the use of LED technology and the custom solutions adopted by SLIM guarantee the perfect alignment of these components with the total quality that characterizes Panoramagic.

Dott. Gianluigi Freschi, CEO and General Manager of Ilve



SLIM for Bticino: the Living Now line

Bticino is a prominent Italian brand, part of the Legrand Group, one of the world's leading manufacturers in the low voltage electrical equipment sector, with which **SLIM** has been collaborating for decades for the production and development of customized light signalling solutions.

Bticino contacted us for the development of the backlighting of the inverters for their **Living Now** range, the natively connected **line of** the latest generation wall plates, featuring an innovative design both as regards the shape and finishes. The company had specific requirements in terms of light output and also wanted to avoid using light guides.

SLIM's solution for Bticino wall plates

The **two research and development teams worked side by side** to evaluate and implement different technical and design alternatives to create the perfect solution to respond to the challenges.

We started with a **first white backlighting version** on printed circuit board (SMD technology): the development of the right colour tone and the correct sizing of the circuit, which had to be housed in defined spaces, required time, energy and - last but not least - that pinch of creativity that may be needed even in the most technical context.

In fact, **the aesthetic value is in the detail, which in this case was bright!**

Happy with this first white version, Bticino then invited us to develop a blue one as well.





The experience gained has allowed us to reduce the time needed for the development and the definition of the required hue. **The elegant thread of light is the hallmark of the Living Now** range of switches, which in this case are used in combination with the Living Now Smart connected devices. Alongside the 230V versions, Bticino requested the development of a 127V variant, for countries that use this voltage, specifically those in South America.

To admire the aesthetics and validity of this solution, all you have to do is browse the [Bticino catalogue of the Living Now line](#).

If this story has sparked your interest, click on the button below and find out what we can do together!

CASE STUDY 4

The collaboration between SLIM and Quick Mill: the UV-C LED steriliser kit

[Quick Mill S.r.l.](#) is a company based in Senago (MI) and specialised in the design and manufacture of **domestic and professional coffee machines**, which are extremely **functional and easy-to-use**.

Quick Mill, with whom we have been cooperating for the development of light sources for coffee machines, contacted us to create a UV-C LED holder for sanitising the water tank of their coffee machines.





Quick Mill's application

We received the request during Covid-19 pandemic. The goal of the application was to create a tool that could further improve the coffee machines and, meanwhile, could contribute to people's health. Our distinctive features as **the experience and the continuous innovation in the development of functional lighting solutions**, with an emphasis on aesthetics, have ensured that Quick Mill picked us for the development of a unique custom solution.

The initial idea was to create another type of device: a sterilising device for housing coffee cups but, unfortunately, the following criticalities were highlighted:

- the reflection and dispersion of the LED light on the machines which are made of steel;
- the suitable length of the sterilization cycle to reach an effective bacteria abatement.

Therefore, we worked proactively to seek a solution to this set of problems. Consequently, we proposed **a replacement device to sterilise the water in the tanks**, since some microorganisms are resistant to water-heating for making coffee.

SLIM's solutions for Quick Mill

Our R&D team carried out an in-depth study to identify **the most suitable UV-C module** and the appropriate **plastic holder** that allowed the same module to be placed on top of both water tank's models required. This location was designed so that during the disinfection process the UV-C rays would avoid hitting the eyes or other parts of the user's body.

In developing the project, we have taken account of the aesthetic result. In fact, the appearance of the light sources is important because, being placed at the front of the machines, they must satisfy the end customer

The realization has lived up to Quick Mill expectations, and the first satisfactory results encouraged us to implement this innovative project.

The collaboration has led to the creation of a [complete kit](#), which includes: a **holder**, a **light source**, a **power cable with a USB port** and an **instruction booklet**. The UV-C module is mounted on a plastic holder that fits onto the tank. Above it, the button to start the sterilisation cycle contains a LED that changes colour when the operating status changes.

The circuit inside the plastic holder starts a **180-second sterilisation cycle**; if held down for longer, it carries out 360-second cycles. A double cycle completes the sanitisation process and the **bacteria destruction rate rises to over 99%**. The percentage is certified by [Pro Lab Service](#) laboratory.

We are at your disposal, ready to support you with the development of the perfect **custom solutions**, both in terms of configuration and functionality.

In order to know further details, simply consult the area dedicated to [How a project comes to life](#) and evaluate our partnership.



CASE STUDY 5

SLIM for Hager Australia: the *Good Design Awards*

Hager Australia, a leading provider of electrical installation solutions and services within the Hager Group, has given **new life to its *Allure and Finesse*** range of electrical sockets and switches for the Australian market through the '*Make the switch*' program. The **restyling** of the classic Australian switch for residential buildings led **Hager being named *Good Design Award Winner*** during the *Australian Good Design Awards Week* in October 2021.

SLIM's solutions

We have contributed to this renewal through the development of a new **custom LED indicator light**.

Hager approached our technical department to develop a **specific indicator light** that would fit harmoniously into the new product design lines.

The request was for a **retrofit of the white LED source light**, which was custom made for some Hager products, into a **custom blue version** to create a distinctive aesthetic effect.

The development of this version has been designed to integrate perfectly in the new product concept, which is clear, clean and modern.



Make the switch

allure and finesse



The project was based on modifying the previously supplied indicator light by replacing the white LED with a **blue LED**, also **mounted on the printed circuit board**. From the moment we received guidelines from the company, we started with the replacement of the white LED, and then readjusted the tone and homogeneity of the light. The excellent working relationship between the parties has allowed to reduce the time of development and delivery of **Hager's desired light signal**.

To admire the aesthetics of Hager winner ranges, visit [Good Design Australia](https://www.gooddesignaustralia.com.au/) website and discover the reasons that led to win the title of [Good Design Award Winner](https://www.gooddesignaustralia.com.au/).



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