

# ***hansen***

technologie · elektronik · licht



# **Luminous Panels**

*... providing light in slices*

Low weight  
Extremely thin design  
Custom shapes and sizes



## Tailor-made lighting solutions – everything from one source

Since 1984 we have been providing shining solutions. As an expert in lighting technology, ***hansen*** specializes in the development and manufacture of light sources and associated electronics. With a team of 80 employees, we manufacture our products at our headquarters in Haselund, northern Germany. Following our commitment to quality made in Germany, all our products are developed and produced in-house. Our ability to provide customized products in small numbers is one of our strengths and highly appreciated by our customers.

Our development department designs LED circuit boards and supports the entire product development process from prototyping up to series production. The same applies to converters, power supplies and electronic controllers, which are developed and produced by ***hansen*** in close cooperation with customers. We are constantly expanding our product range, seeking new applications and markets.

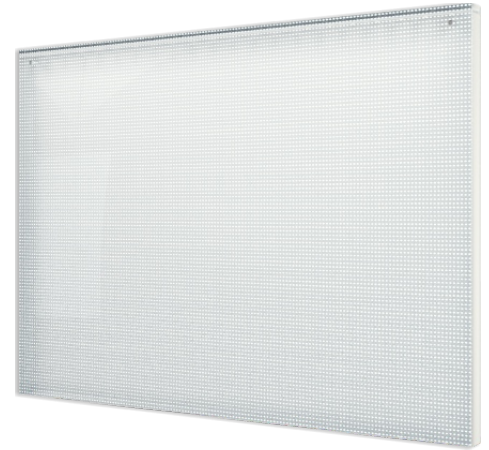
We support our customers in their individual planning and offer a large selection of energy-saving LED products for a wide variety of applications. It is always a welcome challenge for us to solve tasks given to us by our customers. No matter how unusual the idea may be, we will provide you with a solution you can rely on.

Made by hansen · Made in Germany

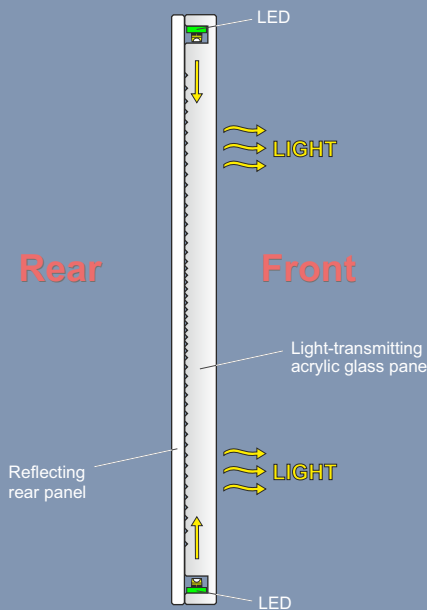
# Content

<b><i>hansen</i></b> Luminous Panel .....	4
Luminous Panel “Basic”   “Eco” <b>The classic one</b> .....	6
Luminous Panel “Slim” <b>The thin one</b> .....	8
Luminous Panel “Power” <b>The powerful one</b> .....	10
Frameless Luminous Panel <b>The special one</b> .....	12
Luminous Panel “RGB”   “RGBW”   “W-W” .....	14
Luminous Panel “Rainbow-RGB” .....	16
Frames for all Luminous Panels .....	18
Controllers .....	20
Explanation of symbols .....	22
Sales contacts .....	24

# ***hansen*** Luminous Panel



Schematic sectional view



The LED light is fed into the light-transmitting acrylic glass pane from the edges. A white rear panel reflects the light towards the front.

A laser-engraved pattern on the rear of the acrylic glass pane ensures an even light distribution resulting in a very uniform luminous appearance.

Depending on the desired brightness the Luminous Panels can be illuminated with LEDs shining into the material from one side, from two opposite sides or from all four sides.

All Luminous Panels are supplied ready for installation, but require a separate power supply unit which is usually included in the scope of delivery. The RGB variants require an additional controller, which can also be supplied by us. Please refer to page 20 for further information on power supplies, dimmers and controllers.

## Individual in size, shape and colour

The ***hansen*** Luminous Panel is a flat, large-surface luminaire for built-in purposes, which is custom-made in our own workshops. The smallest possible size is 80 x 80 mm, the largest is 1,500 x 3,000 mm (Basic/Eco version) and 1,000 x 2,000 mm (Slim version). Special shapes such as circles, ovals or free shapes can be produced as well.

The Luminous Panel can be supplied with single-colour LEDs, white LEDs dimmable from cool white to warm white or with colour-changing RGBW LEDs. The necessary control units are also available from ***hansen*** in different variants. With an overall thickness of 8 mm to 22 mm, the Luminous Panels leave much room for a wide variety of applications.

An additional 3 mm opal cover, which can be fitted to the Luminous Panels as an option, creates a very intense and uniform impression of brightness for aesthetic wall and ceiling designs.

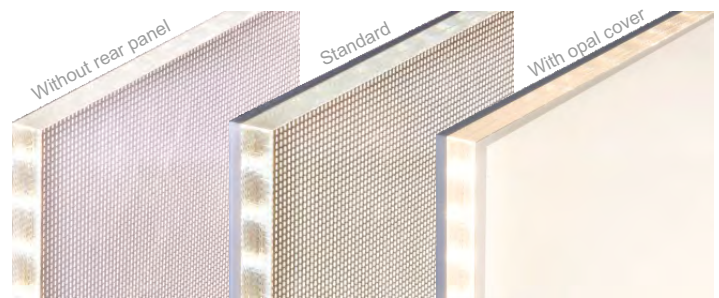
## Typical applications

- Lighting element for walls and ceilings in shop fitting and exhibition stand design
- Backlighting of artificial stone, acrylic or textiles in museums and public buildings
- Glare-free wall luminaire for kitchens and bathrooms
- Illumination of furniture and showcases
- Illumination of decorative glass elements and art objects
- Illumination of flat light boxes
- Recesses luminaires in grid ceilings
- Elevator car lighting

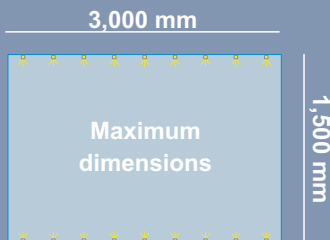
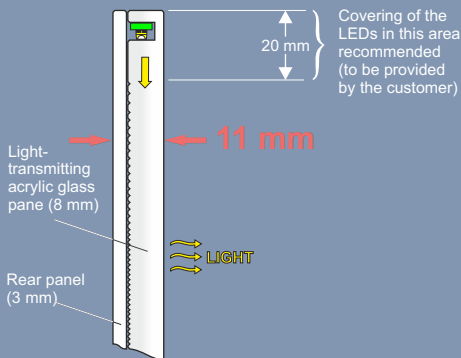
# Typical application examples



# Luminous Panel “Basic” | “Eco”



## Sectional view “Basic” | “Eco”



- Minimum dimensions: 80 x 80 mm
- Suitable for outdoor installation: yes
- Illumination: from one or two sides
- Available without rear panel
- Available with opal cover
- Weight per m<sup>2</sup>: 13 kg
- Voltage: 12 V DC
- Wattage per m<sup>2</sup>: 26 W (Eco: 13 W)
- Luminous flux per m<sup>2</sup>: 1,400 lm (Eco: 700 lm)
- Dimmable

Available colour temperatures

2700K | 3000K | 4000K | 5000K | 6500 K



## The classic one

We have been producing the “Basic” Luminous Panel to customer specification for more than 12 years. Over the years it has proved successful in a wide variety of applications. With an overall depth of only 11 mm and a weight of 13 kg/m<sup>2</sup> it is suitable for both indoor and outdoor applications.

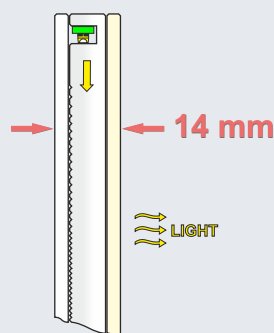
The maximum possible size is 1,500 x 3,000 mm. Special shapes such as circles, ovals of free shapes are possible as well. Openings and cut-outs for switches and sockets can also be produced.

The “Eco” Luminous Panel is similar in design to the “Basic” version and is used when a more subtle brightness is required. It is only half as powerful and can thus be used for economical 12 V operation in applications which require no high luminous intensities.

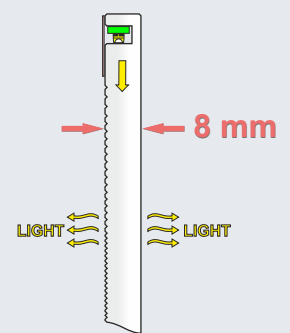
The “Basic” and “Eco” Luminous Panels can be supplied with single-colour, cool to warm white and dimmable LEDs.

## Optionally available:

With 3 mm opal cover



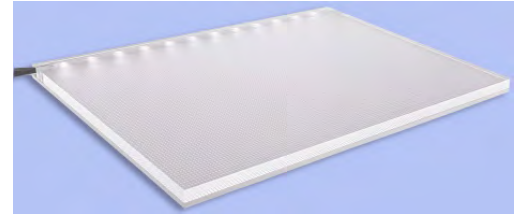
Without rear panel



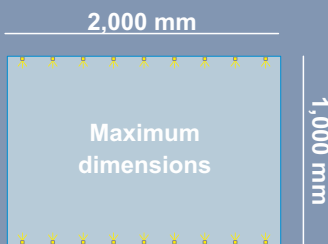
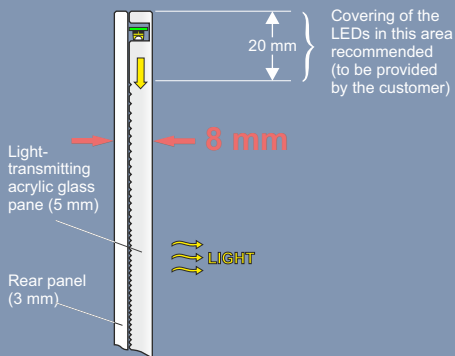
# Typical application examples



# Luminous Panel "Slim"



Sectional view "Slim"



- Minimum dimensions: 80 x 80 mm
- Suitable for outdoor installation: no
- Illumination: from one or two sides
- Available without rear panel
- Available with opal cover
- Weight per m<sup>2</sup>: 9.5 kg
- Voltage: 24 V DC
- Wattage per m<sup>2</sup>: 22 W
- Luminous flux per m<sup>2</sup>: 1,400 lm
- Dimmable

Available colour temperatures

2700K | 3000K | 4000K | 5000K | 6500K



## The thin one

To meet the need of customers for lighter luminous panels suitable for furniture making, we have developed the "Slim" Luminous Panel, which has successfully been used for many years. It has not only proved particularly popular with joiners, cabinet makers and furniture makers, it is also used in ship and yacht building.

With an overall depth of only 8 mm and a weight of just 9.5 kg/m<sup>2</sup>, the "Slim" Luminous Panel is a real lightweight. Operated with 24 V, it is suitable for indoor use only.

If a very brilliant luminous surface is required, the "Slim" Luminous Panel can be supplied with an optional 3 mm opal cover fitted to the panel. This cover creates a very intense and uniform impression of brightness.





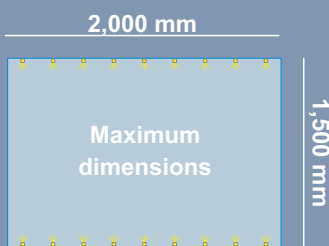
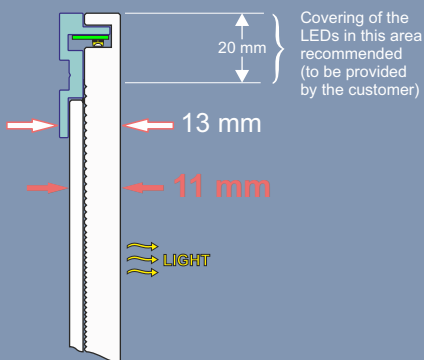
# Typical application examples



# Luminous Panel "Power"



Sectional view "Power"



## The powerful one

The "Power" version of the Luminous Panel distinguishes itself by an even higher, more powerful brightness. Like all the other variants of the Luminous Panel, the "Power" version is made to customer specification.

The panel has an overall depth of 13 mm and weighs 14 kg/m<sup>2</sup>. It is operated with 24 V and designed for indoor use only.

The largest possible size is 1,500 x 2,000 mm, the smallest is 80 x 80 mm. Within these dimensions any size can be produced with millimetre precision. A typical application is the installation of "Power" Luminous Panels as lighting elements in walls and ceilings.

A 3 mm opal cover, which can be fitted to the Luminous Panel as an option, creates a very intense and uniform impression of brightness.

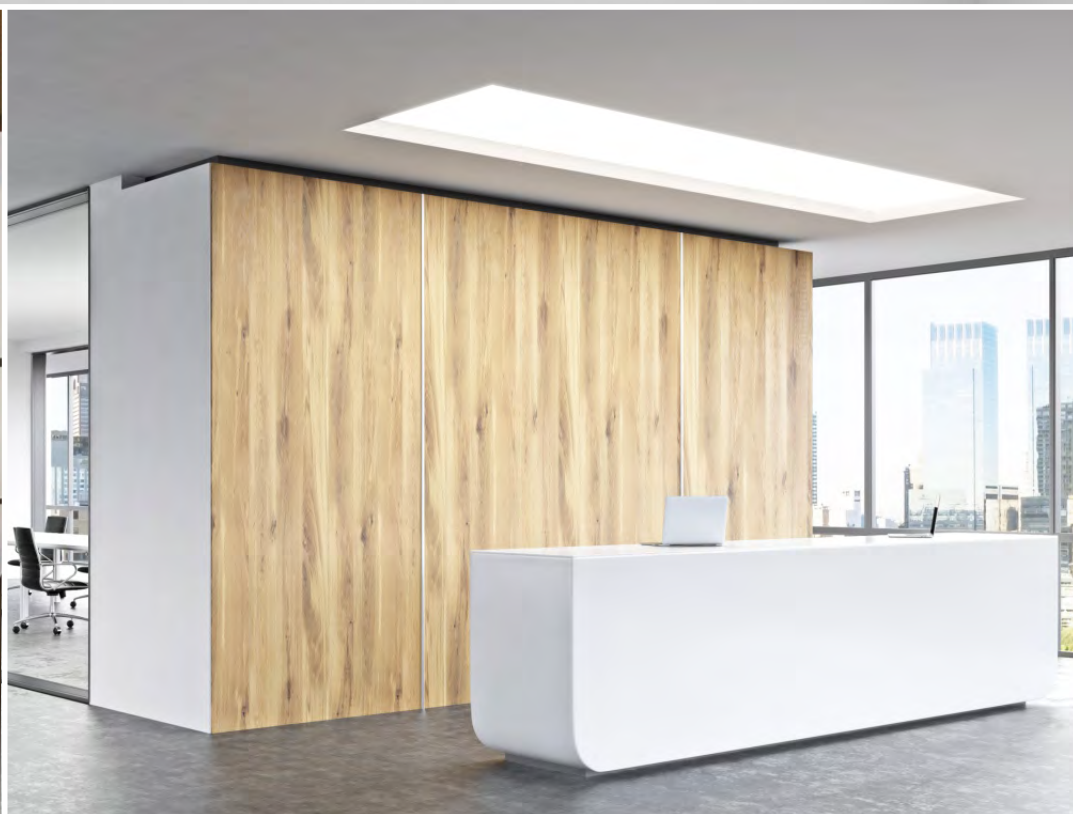
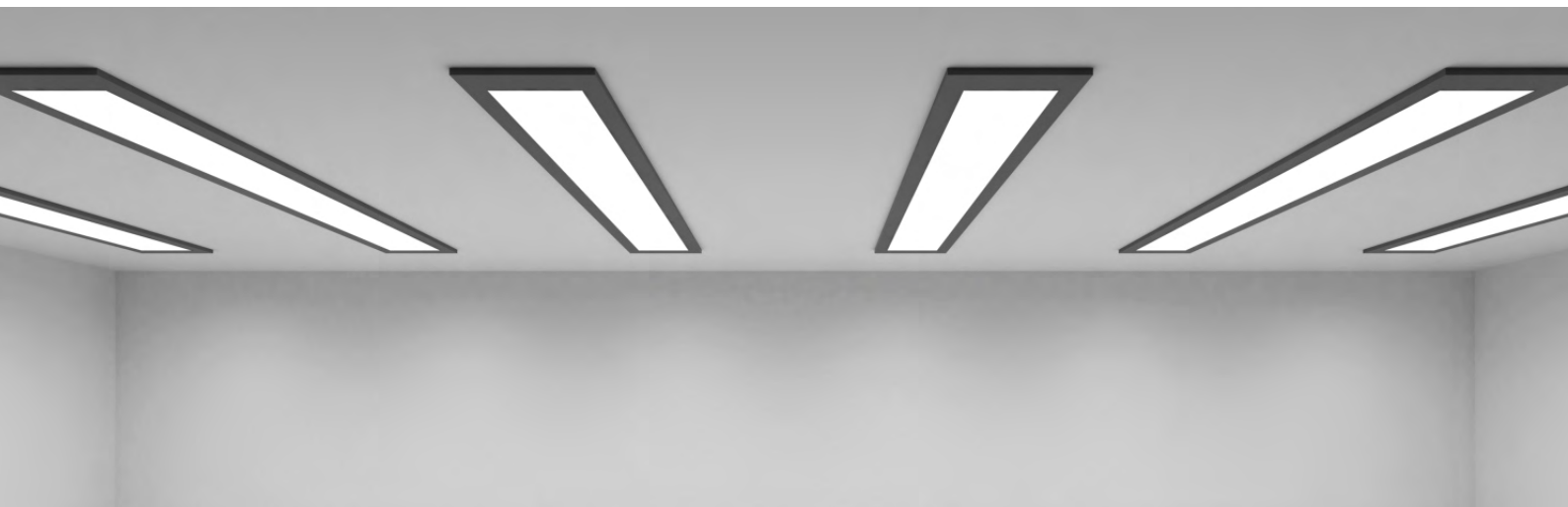
- Minimum dimensions: 80 x 80 mm
- Suitable for outdoor installation: no
- Illumination: from one or two sides
- Available without rear panel
- Available with opal cover
- Weight per m<sup>2</sup>: 14 kg
- Voltage: 24 V DC
- Wattage per m<sup>2</sup>: 53 W
- Luminous flux per m<sup>2</sup>: 2,600 lm
- Dimmable

Available colour temperatures

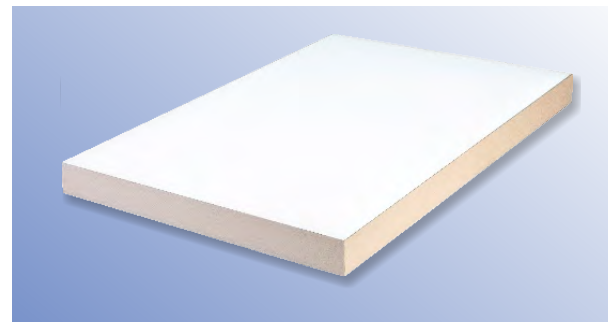
2700K | 3000K | 4000K | 5000K | 6500 K



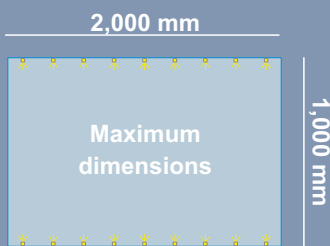
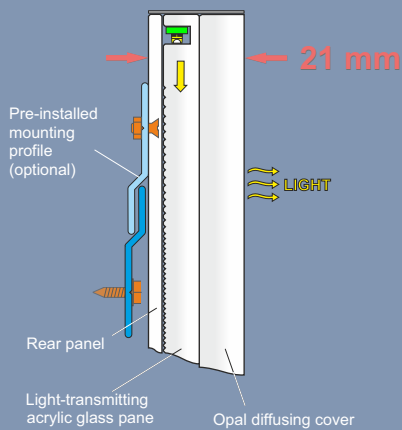
# Typical application examples



# Frameless Luminous Panel



## Sectional view "Frameless"



- Minimum dimensions: 200 x 200 mm
- Suitable for outdoor installation: no
- Illumination: from one or two sides
- Available without rear panel: no
- Supplied with opal cover
- Weight per m<sup>2</sup>: 24 kg
- Voltage: 12 V DC
- Wattage per m<sup>2</sup>: 26 W
- Luminous flux per m<sup>2</sup>: 1,100 lm
- Dimmable

Available colour temperatures

2700K | 3000K | 4000K | 5000K | 6500K



## Homogeneous illumination right up to the edge

Our Frameless Luminous Panel is ideally suited as a flush-mount luminaire for walls and furniture – offering uniform illumination right up to the edges without any visible bright spots. The opal satined front cover, which comes as standard, can be directly decorated with foil graphics or printed on.

The panel has an overall depth of only 21 mm and a weight of 24 kg/m<sup>2</sup>. It is operated with 12 V and is designed for indoor use only.

The maximum possible size is 1,000 x 2,000 mm, the smallest is 200 x 200 mm. Between these dimensions any size can be produced with millimetre precision.

The Frameless Luminous Panel can be supplied with single-colour LEDs, white LEDs dimmable from cool to warm white or with colour-changing RGB LEDs.



# Typical application examples



# Luminous Panel “RGB” | “RGBW” | “W-W”



**Sectional view “RGB”**

Light-transmitting acrylic glass pane

Rear panel

20 mm

Covering of the LEDs in this area recommended (to be provided by the customer)

11 mm

RGBW and W-W version: 13 mm

LIGHT

3,000 mm

1,500 mm

Maximum dimensions

- Minimum dimensions: 80 x 80 mm
- Suitable for outdoor installation: no
- Illumination: from one or two sides
- Available without rear panel
- Available with opal cover
- Weight per m<sup>2</sup>: 13 kg (W-W: 16.5 kg)
- Voltage: 12 V DC
- Wattage per m<sup>2</sup>: 32 W (W-W: 26 W)
- Luminous flux per m<sup>2</sup>: 850 lm (W-W: 1,300 lm)
- Dimmable
- Available with white channel (RGBW)

Available variants

RGB or RGBW or W-W

IP20

## Colour diversity

### Luminous Panel “RGB”

“RGB” stands for the three primary colours red, green and blue. Accordingly, RGB light consists of red, green and blue light. By mixing these three primary colours, virtually every luminous colour can be generated.

Using smart controllers, an automatic and continuously variable colour change can be achieved where the luminous colour cycles through the entire spectrum – quickly or slowly, just as desired, creating an attractive and intense eye-catcher.

### Luminous Panel “RGBW”

As RGB-generated white light is not perfectly white, RGBW has been the next logical step. “RGBW” denotes systems featuring a separate white LED in addition to each RGB-LED. This allows perfect natural white light to be generated and offers a multitude of new possibilities such as pastel colours and various other mixed colours.

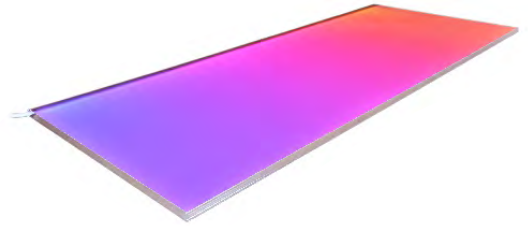
### Luminous Panel “W-W”

“W-W” stands for the mixing of cool white and warm white LED light. This allows, for example, different lighting moods to be created in the natural white range. All colour temperatures from cosy and relaxing warm white to activating cool white can be adjusted.

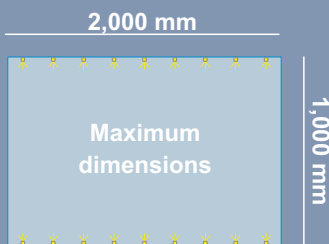
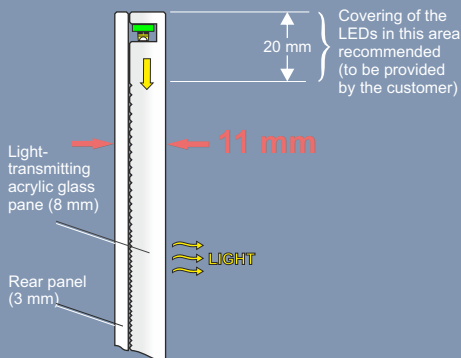
# Typical application examples



# Luminous Panel "Rainbow-RGB"



## Sectional view "Rainbow-RGB"



- Minimum dimensions: 200 x 200 mm
- Suitable for outdoor installation: no
- Illumination: from one or two sides
- Available without rear panel
- Available with opal cover
- Weight per m<sup>2</sup>: 13 kg
- Voltage: 12 V DC
- Wattage per m<sup>2</sup>: 25 W
- Luminous flux per m<sup>2</sup>: 650 lm
- Dimmable

### Available variants

Rainbow-**RGB**

IP20



## In the colours of the rainbow

### Dynamic colour changes

The new ***hansen*** Rainbow-RGB technology allows continuous dynamic RGB colour flows to be generated over an entire surface.

What is new is that groups of LEDs inside the Luminous Panel can be controlled individually and programmed freely as desired. This allows, for example, a rainbow effect or various different running light effects to be generated.

### Applications

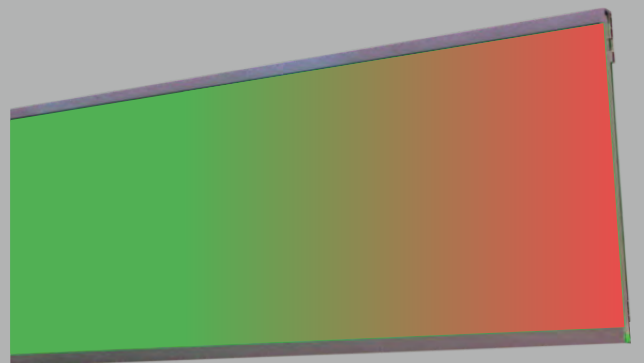
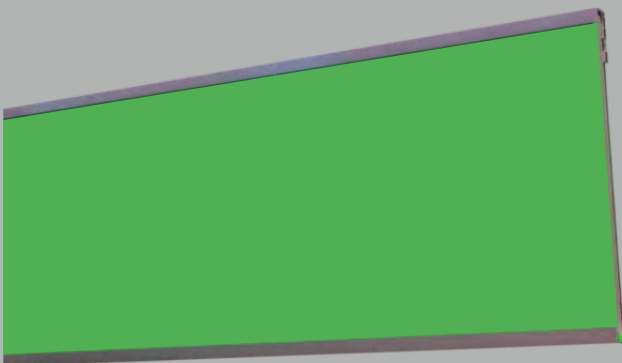
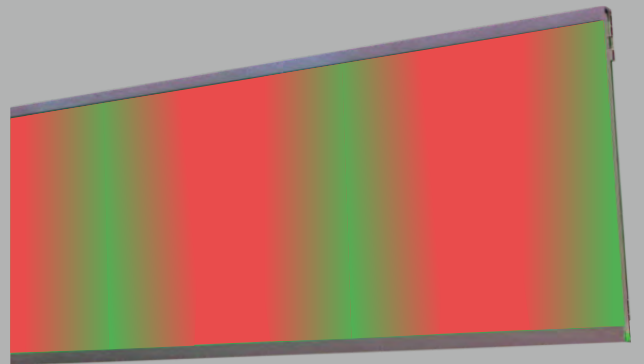
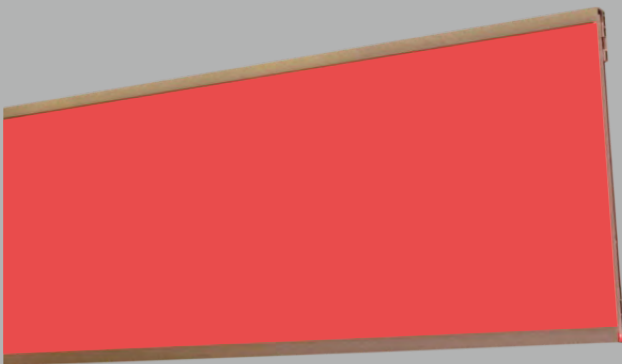
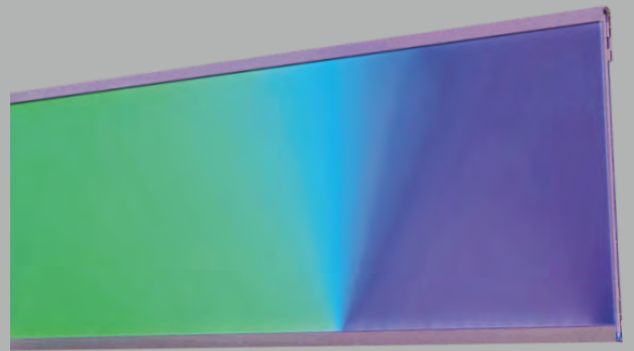
This type of dynamic lighting is particularly suitable for bars and counters in event catering and theme restaurants or hotel reception desks. It is ideal for the events sector, where it always proves to be a highlight on stage. Other areas in which it is increasingly being used are shop fitting and exhibition stand design.

The Rainbow-RGB panel offers many interesting possibilities to creative lighting designers.





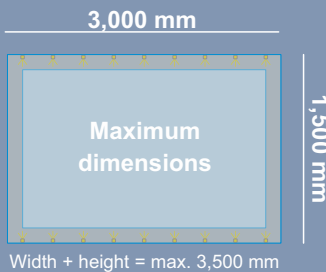
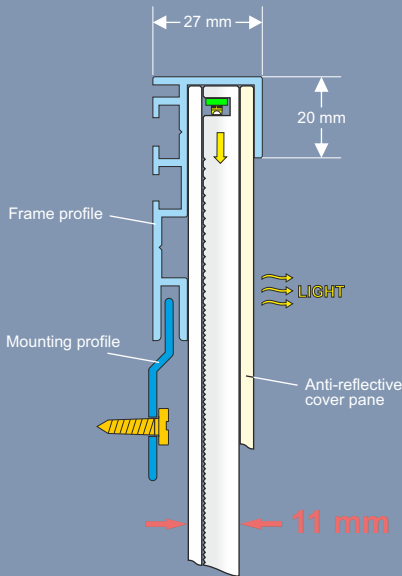
# Typical application examples



# Frames for all Luminous Panels



Sectional view  
20 mm Aluminium Frame



## Stylish illuminated frames made to measure

### 20 mm Aluminium Frame

The Aluminium Frame is a stylish and robust frame with a face width of 20 mm all round fitting all our Luminous Panels. Designed for simple wall mounting, it can be hung using a mounting profile. Like the Luminous Panels, the frames are custom-made in-house.



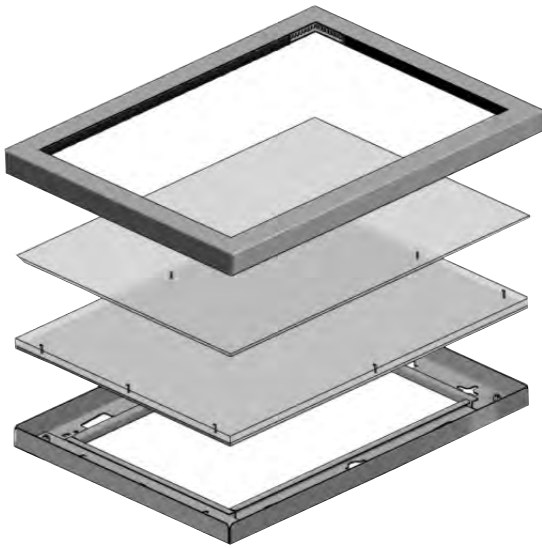
Back view  
(detail)



Connecting cable  
12/24 V DC power supply

- Minimum dimensions: 200 x 200 mm
- Face width: 20 mm all round
- Material: anodized aluminium
- With mitred corners
- Mounting options:
  - Wall mounting with mounting profile
  - Suspended mounting on wall with wire system
  - Suspended mounting from ceiling with wire system
- Suitable for outdoor installation: no

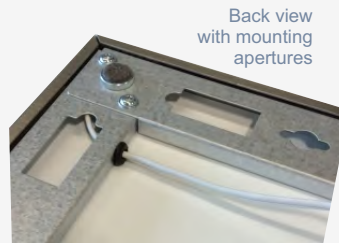




## Simple to use and very attractive

### 30 mm Magnetic Frame

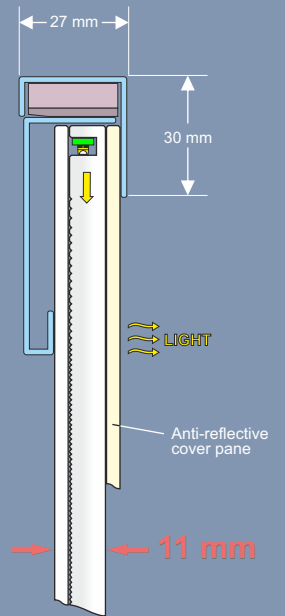
What makes the Magnetic Frame so special is the ease with which the motif can be exchanged. The front frame with a face width of 30 mm features magnetic strips on the inside and can be removed without loosening any screws. Like the 20 mm Aluminium Frame it is custom-made and can be used with all our Luminous Panels.



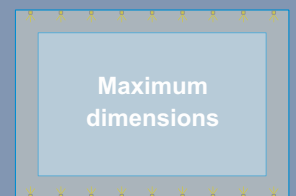
Back view  
with mounting  
apertures

Connecting cable  
12/24 V DC power supply

### Sectional view 30 mm Magnetic Frame



2,400 mm



1,100 mm

- Minimum dimensions: 200 x 200 mm
- Face width: 30 mm all round
- Material: Alunox with brushed stainless steel look
- No mitred corners
- For wall mounting only using mounting apertures on the rear
- Front frame can be removed without tools
- Suitable for outdoor installation: no



# Dimmers and controllers



## Dimmer

for single-colour Luminous Panels



## RGB(W) control

Remote control



## Rainbow control COLEEN

Wall-mount control



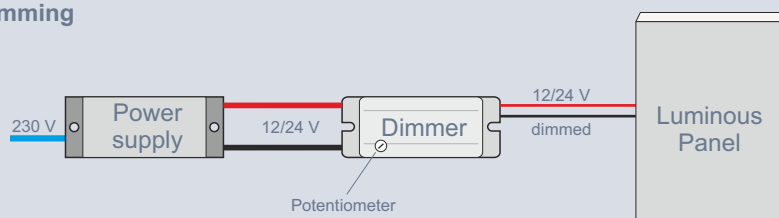
## Dimming and controlling

The dimmer can be used to adjust the brightness of the Luminous Panel. It is optionally available with an external potentiometer and rotary knob for manual adjustment.

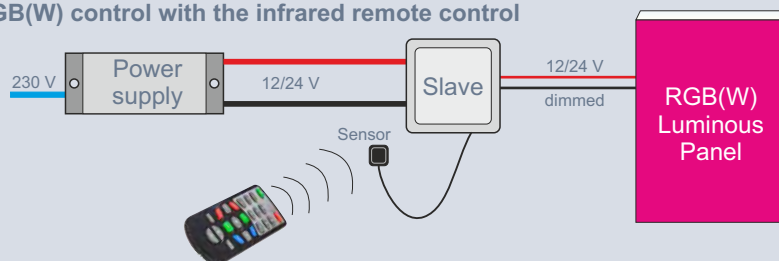
For RGB(W) control we offer the infrared remote control. All the usual RGB applications are pre-programmed. An additional white channel can be operated as well.

COLEEN is the controller for Rainbow-RGB panels. Typical applications are pre-programmed, and user-defined sequences can be programmed and stored. In addition, COLEEN is well-suited for various general control tasks in the lighting sector.

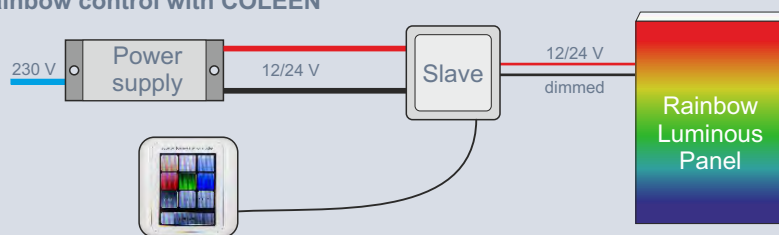
### Dimming



### RGB(W) control with the infrared remote control



### Rainbow control with COLEEN



# Dimmers and controllers



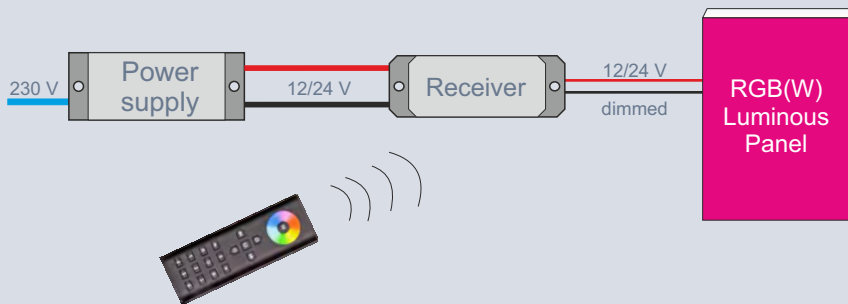
## Radio technology

All the control devices shown on this page are radio-operated. The wall-mount units use radio technology as well, i.e. no data cabling must be installed. Radio-operated remote controls offer a larger transmission range and more convenient operation.

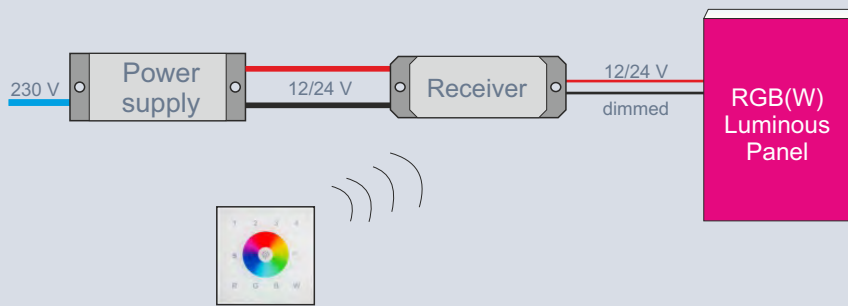
The remote controls allow all the usual functions to be implemented such as dimming, push-pull dimming and RGB(W) control. Customized settings can be defined and stored permanently.

The wall-mount control is also a radio transmitter. The device can be installed without any cabling into a standard flush-mount box. What makes it special is its elegant design and very intuitive operation.

### Dimming and controlling with the radio remote control



### Dimming and controlling with the wall-mount radio control



## Dimmer

for single-colour Luminous Panels

Remote control



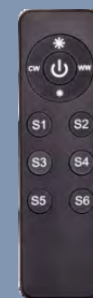
Wall-mount control



## Push-pull dimmer

for "W-W" Luminous Panels

Remote control

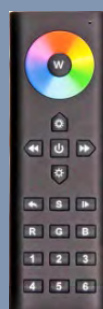


Wall-mount control

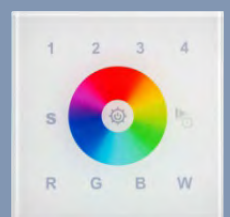


## RGB | RGBW

Remote control



Wall-mount control



## Symbols



Suitable for indoor use



Suitable for outdoor use



CE marking



Protection class



Degree of protection

## Colour Temperature Sample Set

The  
**Must-have**  
decision-making tool



**49 €**  
plus VAT  
and shipping

- "Basic" Luminous Panel (455 x 150 mm) with different colour temperatures
- 3 mm opal cover pane
- 12 V plug-in power supply





**Hansen GmbH**  
Norderstr. 1  
D - 25855 Haselund  
Germany

Tel. +49 48 43 - 20 09 - 0  
Fax +49 48 43 - 20 09 - 33  
info@hansen-neon.de  
[www.hansen-led.de](http://www.hansen-led.de)



DIN EN ISO 9001:2015  
REG.-NR. 01 0116352

### Global Distribution Office

**Hansen LED ApS**  
Malervej 5  
DK-6710 Esbjerg, Denmark

Tel. +45 75 45 - 22 11  
E-mail: info@hansen-led.com

[www.hansen-led.com](http://www.hansen-led.com)

### Austria

**Hansen Sales Office Austria**  
Triester Str. 83  
A-8073 Feldkirchen / Graz

Tel. +43 664 - 16 17 663  
Fax +43 316 - 29 28 44  
E-mail: info@hansen-neon.at

### United Kingdom

**Hansen Sales Office UK**  
5 Wadhurst Business Park, Faircrouch Lane,  
Wadhurst, East Sussex, TN5 6PT

Tel. +44 333 700 4326  
Fax +44 333 700 4327  
E-mail: info@hansen-lighting.co.uk