



LED Light Strip

www.triolight.com





Introduction

Light

LEDLight Strip is a combination of SMD Leds and extrusion technology. The SMD (Surface Mounted Device) print - the print plate on which the leds have been assembled directly - has been enveloped with a transparent, UV/IR-protected PVC housing. The result is a high-quality product with which you can create colourful and amazing linear light accents. It is a very efficient and multi-purpose solution for various architectural in- and outdoor applications.

Properties

- Flexible linear lighting
- Very clear SMD leds
- · Low energy consumption and high light yield
- Protected against damp: IP55
- Available in different fixed colours and RGB
- No maintenance and durable
- Minimal heat generation
- Long extension leads
- Possibilities to shorten, connect and roll
- Extremely functional and multi-purpose
- Dimmable
- Accessories and fitting profiles included

The LED Light Strip is available in 6 different fixed colours (amber, red, green, blue, white, warmwhite) and RGB. With the RGB-edition you can mix fascinating colours and with diverse light programs and fixed colour adjustments you can determine the exact colour and atmosphere. The bespoke lining of the fixed colours (6x12mm) differs from the RGB (11x18mm). Special connection and fitting material has been developed for both measures.

Beside the different sizes, the power (fixed colour: 3,6W/m, RGB: 7,2W/m) and the maximum connecting length also differ. Apart from that, nearly all technical specifications are the same. Both strips have a led-distance of 28,5 mm and it is possible to shorten them every 20 cm (equal to 7 leds).

Accessories

For the fitting we deliver mounting materials such as rounding clips, u- profiles and aluminium profiles.

You can fit the LED Light Strip in numerous ways, such as:

- Sinking in wood (having cut out the wood)
- Gluing
- Mounting in various aluminium profiles
- Grouting
- Etc.

Power supplies, dimmers, RGB/Dim Controllers and aluminum profiles Tri-O-Light has selected a number of special supplies and dimmers, and has developed RGB/Dim Controllers and aluminium profiles to complement the system.

Applications

Because of its versatility and many advantages the LED Light Strip is suitable for many applications in various categories:

- Architecture, ambience & decorative lighting
- Accent lighting
- Contour lighting
- Cove lighting
- Recessed lighting
- Route-, marking lighting
- Stair-, doorstep and skirting lighting
- Floodlight

Entertainment & leisure

- Stage, theatre, club or casino lighting
- Pool, health spa, sauna lighting

Displays & advertising

- Lettering
- Advertising lighting
- Display lighting



Introduction

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16



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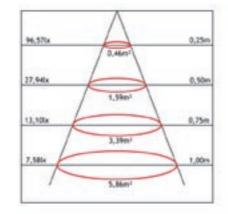
General lighting

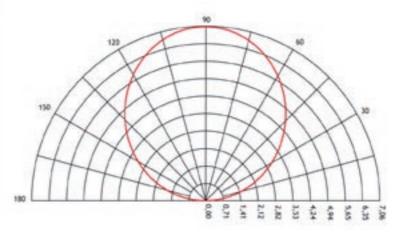
- Emergency and safety lighting
- Retail, corporate, public, residential

We clarify a number of these applications by showing some pictures and information.



RGB	
KGD LED Lifetime Dimensions Degree of protection (IP) Section length (cm) Number of LEDs Maximale connection length (m) Spool length (m) Bend radius (mm) Material LED colour(s) Wavelength (nm) Luminous flux (lm) Luminous intensity (cd) Illuminance (lx) Radiation angle (°) Voltage (V) Power (W) Dimmable Control	SMD (Surface Mounted LED) > 20,000 hours W18xH11mm IP66 20cm 7 per section/ 35 per metre 10m 50m >150mm UV/IR protected PVC RoHs compliant RGB Red = 617.11nm, Green = 533.31nm, I 460.20nm 44.42 (20cm) 7.06cd 7.58 lux (1m) 105° 24VDC 7.2W/m yes with RGB Controller
Ambient temperature (°C) LED spacing (mm) Weight (g) Packing	- 20°C ~ + 40°C 28.5mm 100g/m per m, per spool (50m), exclusive of
To be used with	accessories accessories, 24VDC power supply, RGE Controllers and aluminium profiles
Product code 011297	Description LED Light Strip, 24VDC 11x18mm, RGB [m]







nt n, Blue =



of RGB/Dim

18

RGB

Sets

LED Light Strip RGB			1m demo	5m set	
	Note Dimensions Weight (g) Composition Packing Product code 011556	Complete (demo)-set of 1m L26xW26xH7cm (packing) 1000g 1m LED Light Strip RGB, 1x RC 1x Power plug, 1x Connector s cap, 1x Inline connector, 1x E 5x Mounting clip per set Description LLS RGB Set, 1m + accessories [set]	set 1m, 1x End xtension cord,	Note Dimensions Weight (g) Composition Packing Product code 011559	Complete set of 5m L39xW39xH10cm (packing) 1950g 5m LED Light Strip RGB, 1x RGB Controller, 1x Power supply, 2x Connector set 1m, 2x End cap, 2x Inline connector, Extension cord, 25x Mounting clip per set Description LLS RGB Set, 5m + accessories [set]
LED Light Strip RGB			2m set	10m set	
	Note Dimensions Weight (g) Composition	Complete set of 2m L26cmxW26xH7cm (packing) 1200g 2m LED Light Strip RGB, 1x RC Controller, Power plug, 1x Connector set 1m, 1x Ending, 1x Inline connector, 1x Extension cord, Mounting clip		Note Dimensions Weight (g) Composition	Complete set of 10m L39xW39xH10cm (packing) 3900g 10m LED Light Strip RGB, 1x RGB Controller, 1x Power supply 90W, 2x Connector set 1m, 2x End cap, 2x Inline connector, 1x Extension cord, 50x Mounting clip

Packing

Product code 011557

Description LLS RGB Set, 2m + accessories [set]

per set

Packing

Product code 011561

per set

Description LLS RGB Set, 10m + accessories [set]

LED Light Strip RGB

L.L.

LED Light Strip RGB

Sets

light



LED Light Strip RGB



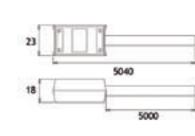
Connector set 1m

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1040



Dimensions Degree of protection (IP) Material Cord Length cord (m) Colour Weight (g) Packing

Dimensions

Length cord (m)

To be used with

Product code

Material

Cord

Colour

Packing

011393

Weight (g)

Degree of protection (IP)

To be used with

Product code 011397

L40xW23xH18mm

cast, round, PVC 5x1²

RGB/Dim Controller

Connector set 11x18mm, 5m [pc]

Description

per piece, per 25, PVC glue + end cap included

Polycarbonate

IP55

5m

black

440g

L40xW23xH18mm

cast, round, PVC 5x1²

RGB/Dim Controller

Connector set 11x18mm [pc]

per piece, per 25, PVC-glue + end cap

Polycarbonate

IP55

1m

black

100g

included

Description

11x18mm

11x18mm

11x18mm

11x18mm

Dimensions

Material

Packing

011425

Weight (g)

Product code

Degree of protection (IP)

Dimensions

Degree of protection (IP) Material Cord Length cord (m) Colour Weight (g) Packing

Product code 011439

L40xW23xH18mm IP55 Polycarbonate cast, round, PVC 5x1² 26cm black 110g per piece, per 25, PVC-glue included

L40xW23xH18mm

Polycarbonate

Description

Inline connector 11x18mm [pc]

IP55

10g

Description Extension cord 11x18mm [pc]

21

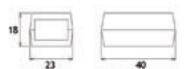
Accessories



Inline connector

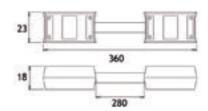


per piece, per 25, PVC-glue included



Extension cord



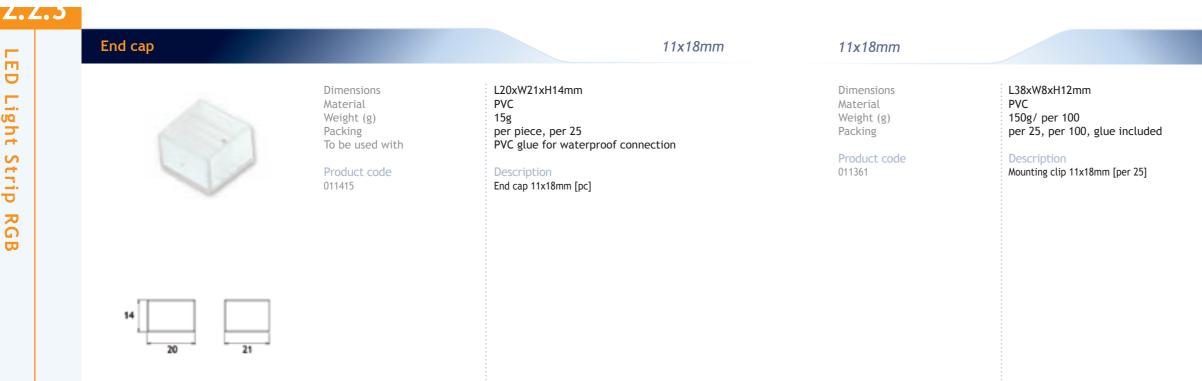


LED Light Strip RGB

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Accessories

light



U-profile



Note Dimensions Material Length (m) Weight (g) Packing

Product code 011371

Standard with double sided tape

PVC (transparent) 1m 75g per piece, per 25, per 100

Description U-profile 11x18mm, 1m [pc]

L1,000xW24xH13mm

11x18mm

6x12mm & 11x18mm

Dimensions Material Weight (g) Composition

L89.5xW35xH28mm Polycarbonate 11.5g cast joint with transparent self sealing moulds, cast resin and necessities per pc IP68

Packing Degree of protection (IP)

Product code 011533

Description Cast joint 6x12mm & 11x18mm [pc]

Mounting clip

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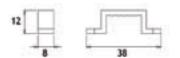
LED

Light Strip RGB

Accessories

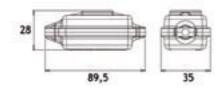


light



Cast joint









Strip

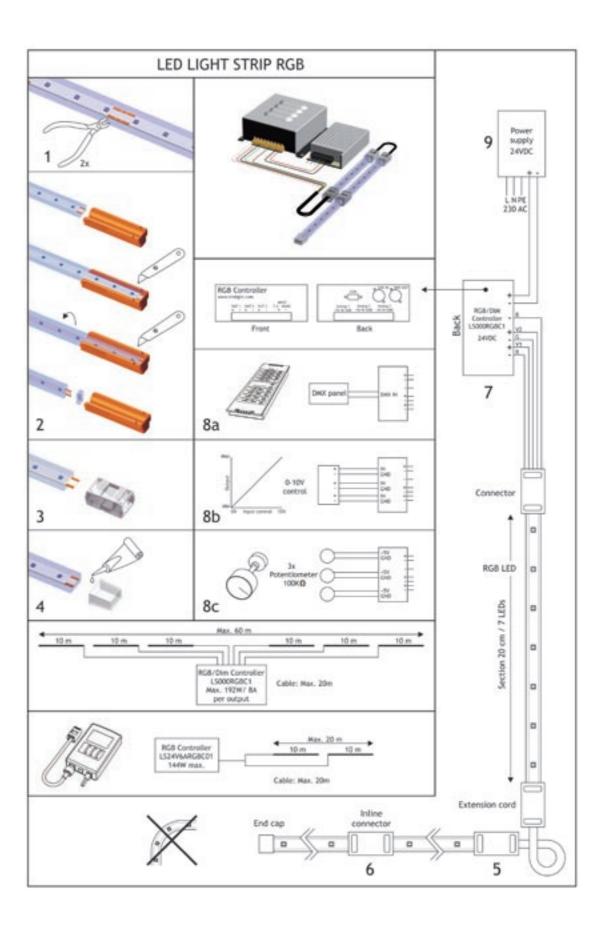
RGB

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Connection scheme

Instructions for connection scheme

- 1. Cut the strip with a 25 mm strip-cutter at the indicated places (2x).
- 2. Lay the strip in the mould and use a knife to cut the PVC loose from the print to the V1 and V2 markings or up to the end of the lines. Remove the PVC without damaging the PCB.
- 3. Fill the connections with PVC-glue for a watertight connection.
- 4. Place the stripped strip in the connector with the PVC glue. In order to ensure a proper connection, make sure that the connections are aligned.
- 5. Use a connector to make a corner. The strip must not be bent over the side.
- 6. Use an in-line connector to connect two strips.
- 7. Place a RGB Controller between the supply and the LED Light Strip to enable the strip to be controlled. The + and - connections must be aligned.
- 8. When applying the RGB/ Dim Controller, there are three steering possibilities: A) DMX, B) 0-10V or C) with potentiometers.
- 9. Connect everything to a 24VDC source. This connection is polar sensitive! The + and connections must be aligned. (the cable with text = +).





LED Light Strip RGB

L.L.4

Connection scheme

26



RGB Ceiling fixtures - Schiphol airport

The Heijmerink Wagemakers design studio created this light object for the Schiphol Plaza (Amsterdam, The Netherlands) ceiling. The idea was to decoratively fill the ceiling with a 5m diametre fixture and to determine the atmosphere by changing the colour, depending on the season or the event. Thanks to the co-operation with Tri-O-Light, this project has turned out to be a winner. Every single ceiling fixture contains a Tri-O-Light 30m LED Light Strip RGB and RGB Controller. On top of that, made-to-measure DMX command consoles were developed, including 5 pre-sets containing the colour schemes as required by the customer. All in all, 22 ceiling fixtures have been fitted.







Project illustration





Qbic Hotel (Amsterdam, The Netherlands) is a design hotel with a futuristic image. The heart of the hotel is the cubic shaped living area, also called the 'Cubi'. The contours of the 'Cubi' are lit with LED Light Strip RGB. With the touch of a button, guests can create the atmosphere that fits the mood at that exact moment: 'mellow yellow', 'red romance' or 'deep purple love'. Every Cubi holds a total of 12m LED Light Strip with RGB Controller and 150W supply.







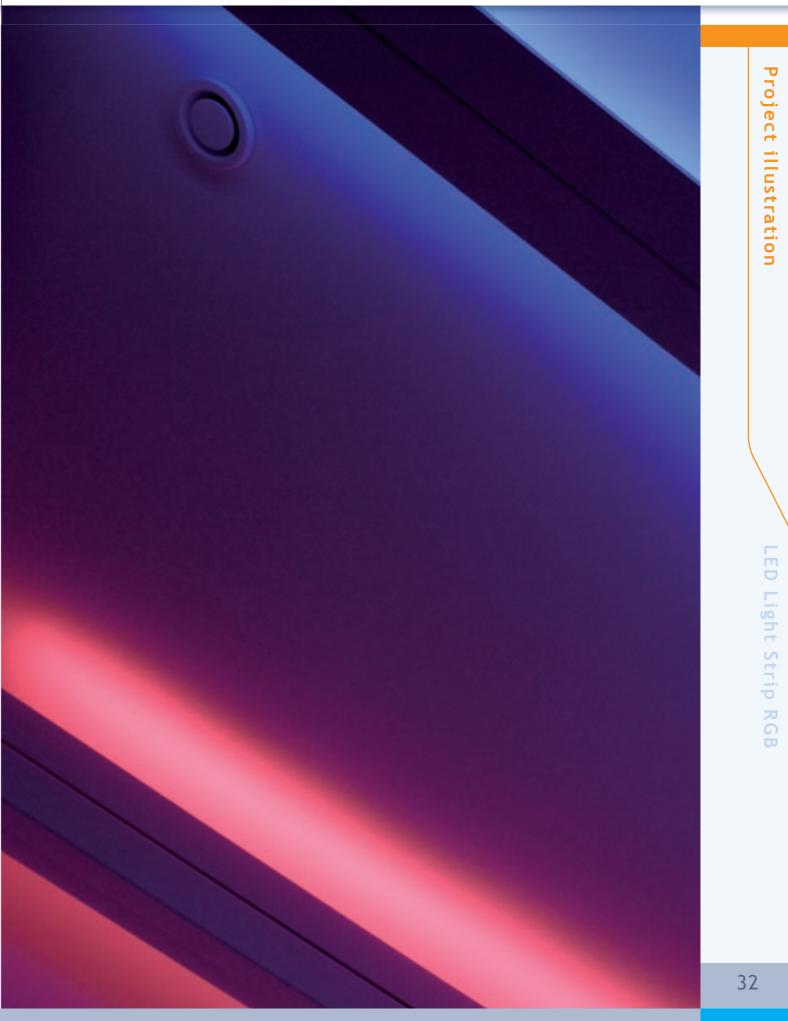
LED Light Strip RGB





LED Light Strip RGB is very powerful and excellently suited for concealed lighting. The advantage of LED Light Strip RGB is the flexibility in the regulation of colour. With the touch of a button or with support from DMX, it is possible to create a floodlight in any chosen atmosphere. (Qbic Hotel, Amsterdam, The Netherlands)





Creative Lighting Concepts

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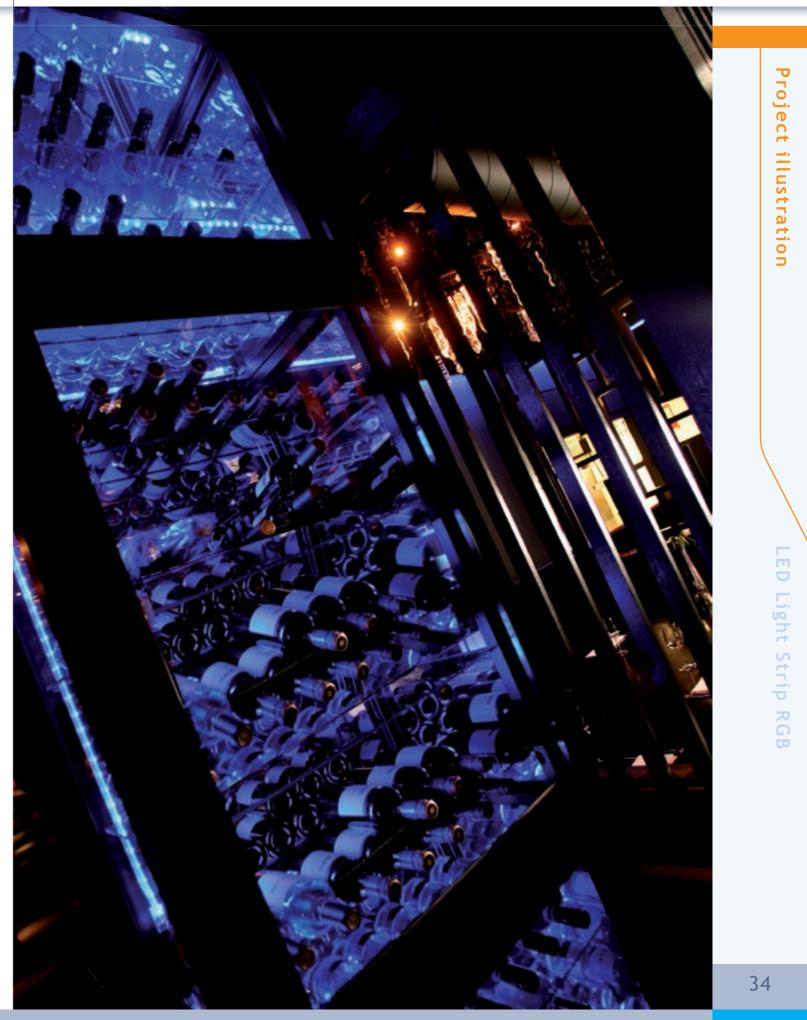
Restaurant 8th (Ede, The Netherlands) has been completely re-styled. Thanks to Tri-O-Light LED Light Strip RGB the restaurant has acquired a trendy look. The bar, the bottle rack and the frames of the seperate parts of the restaurant can change colour at the same time. With the touch of a button you can change the atmosphere in the whole of the restaurant, thanks to an RGB/Dim Controller from Tri-O-Light and a made to measure DMX command console from Crew. Everything is easily controlled from a central point.















Villa Ruimzicht Hotel Restaurant is located in a park at the edge of the centre of the city of Doetinchem (The Netherlands). The grand and majestic building has been renovated to what it was and since September 2007 it has been used as a hotel. Every room has been fitted with Tri-O-Light MR16 RGB spots. By applying a combination of a master and slaves, you can simultaneously change the light colour. Remote control enables the guest to personally change the light and the colour in the room.







Creative Lighting Concept.





Villa Ruimzicht Hotel Restaurants, Doetinchem, The Netherlands





Creative Lighting Concept









RGB Controllers

Tri-O-Light has developed a pair of RGB Controllers to steer LED Light Strip RGB; the advanced RGB/ Dim Controller in combination with DMX-512 and the stand alone RGB Controller.

RGB / Dim Controller

This advanced 15 bits controller delivers a beautiful, even dim pattern. The controller has been developed for dim functions (LED Light Strip II) and RGB-applications (LED Light Strip RGB).

Controls

The RGB controller has 3 steered exits which can be charged with 8A (92W) at the most. The exits are controlled with a DMX512 panel or a very easy to use wall panel with remote control. The RGB Controller can also be used with an analogue 0~10V signal or with internal or external trim-pots.





Software

The possibility to perform 'stand alone' programs completes the controller. You can exchange these programs with the RGB controller with a PC in an upload- and download function. With the provided software, you can install all possible functions quickly and conveniently. The most important functions can be installed with both the software and the jumpers on the print.

Maximum connecting lengths

You can make one long line of 60m, because of the maximum connecting length of 10m of the LED Light Strip RGB and the maximum length of the extension cable of 20m. If we are not dealing with one long line, you can connect up to 80m (8 x 10m) to an RGB Controller; maximum 192W per exit. Make sure you do not exceed the maximum connecting and extension cable length (See connecting scheme).

RGB Controller

A simple control panel steers this RGB Controllers. Instructions of the control elements of the RGB Controller are written below. The RGB Controller can be charged with maximum 144W. In view of the maximum connecting length of 10m of the LED Light Strip RGB, you can connect two lines of 10m at the most.

Control elements

(I) FN/ Power 1 sec. (I) = On, one more time (I) is go to the next modus (4x)5 sec. (I) = Off Mode 1 = Colour change according to memory

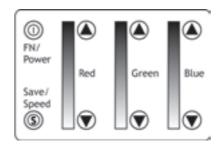
Mode 2 = Jumping colour change of 7 colours

Mode 3 = Flowing RGB colour change

Mode 4 = Installation modus

(S) Save/ Speed

(S) from mode 4 = save (save chosen colour to mode 1) (S) from mode 1, 2, 3 = speed (control speed of colour change) 1x (S) speed is 5 sec., 2x (S) speed is 15 sec., 3x (S) speed is 30 sec. Arrows upwards/ downwards = mixing colours from mode 4. (I) skip, (S) save.





L.5

RGB

Controllers



RGB/Dim Controller

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Note Dimensions Current (mA) Input Output Control Housing Connection

Included

Facilities Weight (g) Packing To be used with Degree of protection (IP)

Product code 011147

RGB and/or dimfunctions
L185xW160xH70mm
max. 8A each output
7.5V-36V
7.5V-36V
by means DMX512, analog 0~10V signal,
internal or external potentiometers
aluminium
DMX IN, DMX OUT, RS232 COM connection for
PC software, power supply
software for up- and downloading stand
alone programmes PC and RGB Controller
settings with software
860g
per piece
LED Light Strip RGB/ LED Light Strip II
IP20

DMX/ analog

Description RGB/ Dim Controller (voltage controlled) [pc]

DMX 512

Dimensions Input Control Housing Weight (g) Packing To be used with Working temperature (°C) Degree of protection (IP) Connection Included

Installation dimensions Mounting

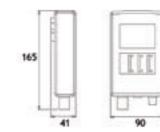
Product code 011461

L86xW86xH45mm 12VDC DMX 512 polycarbonate, white 200g per piece LED Light Strip RGB, RGB/Dim Controller -10°C ~ +50°C IP20 RJ45 Remote control (L86xW40xH5mm), DMX cable (1.5m), DMX Controller with connecting cable 230VAC (1m), CAT5E Patch cable (7.5m) L70xW47xD80mm heart to heart 60mm

Description LED Wall panel RGB, DMX [pc]

RGB Controller





Dimensions Maximale connection length (m) 2x10m Power (W) Current (mA) Input Control Housing Included

Length cord (m) Colour Weight (g) Packing To be used with

Product code 011291

L143xW90xH41mm max. 144W max. 6A 24VDC (2m waterproof cable flat PVC 2x0.75²) by means of keypad on RGB controller (8 functions) plastic, black connecting cable for LED Light Strip (with 5-pole female swivel-connection) 5m black 350g per piece LED Light Strip RGB

Description

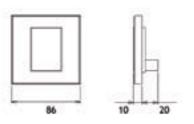
RGB Controller 24V - 6A/144W [pc]

Stand alone

41







42

Controllers

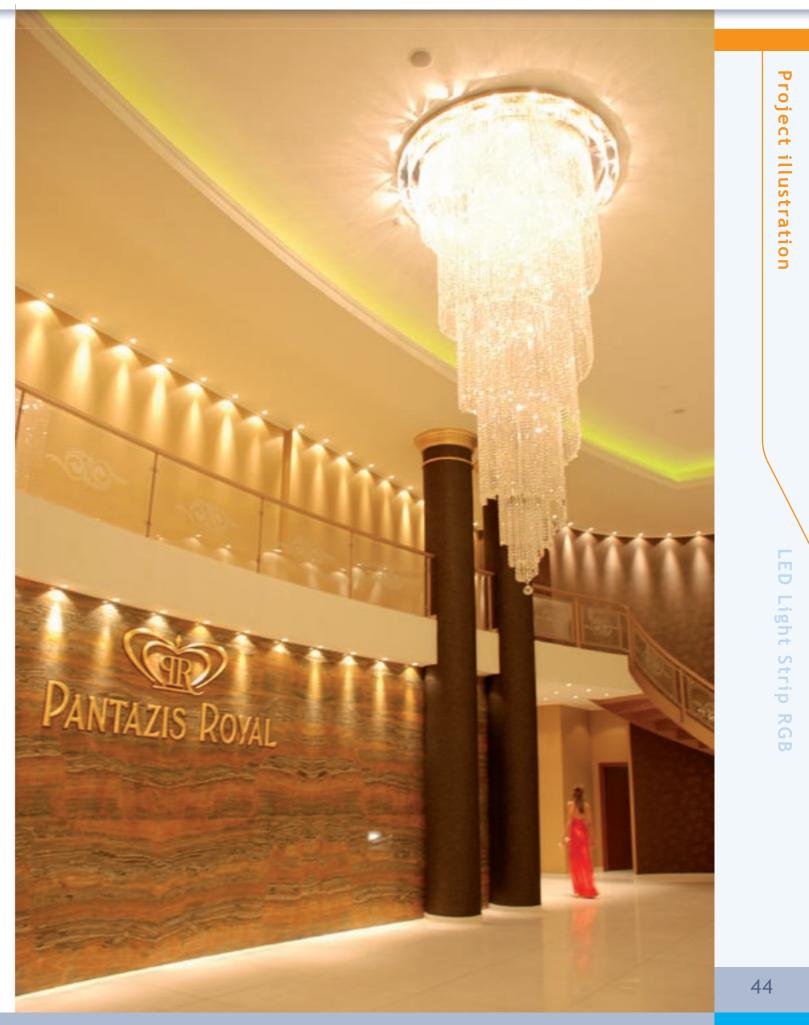


In the entrance and halls of the Pantazis Royal conference centre in Argos, Greece, the ceiling frames are fitted with LED Light Strip RGB. They are all controlled with the advanced RGB/Dim Controllers of Tri-O-Light in combination with DMX. The resul is an easy to control atmosphere lighting with fascinating colour changes.

43











Project illustration

LED

Light Strip

RGB

Optician Akkerman International Eye Fashion in Rotterdam, (The Netherlands), has become a true design store, partly because of the RGB LED lighting. The Perspex wall, which shows the trends in glasses since 1900 until now, sits at 14cm in front of the rear wall. A total of 120m strip was mounted horizontally behind the perspex on the rear wall by means of mounting clips. The result is a diffuse wall with fascinating colour changes, which is user-friendly and controlled by means of a DMX-panel.





Creative Lighting Concep



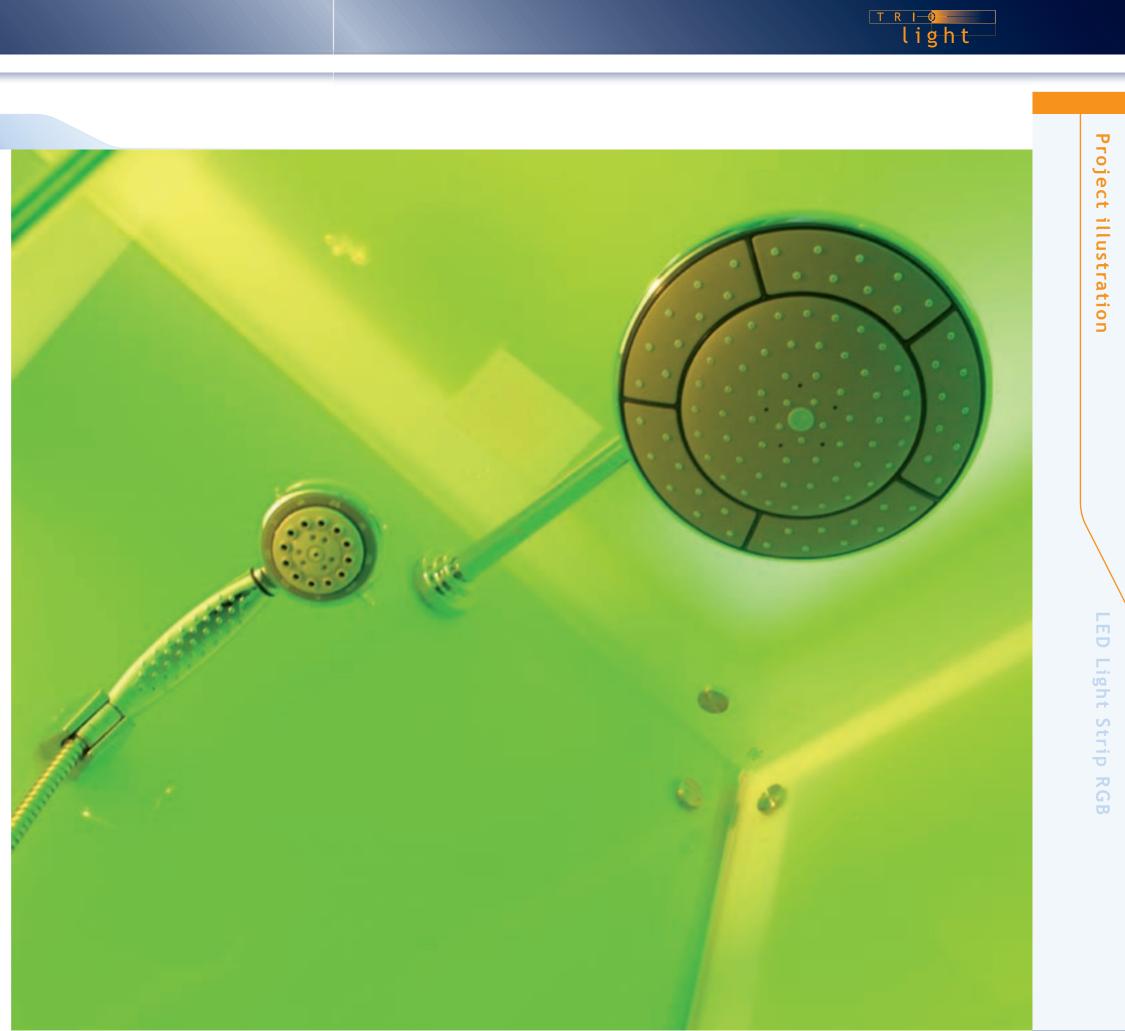




Qbic Hotel, Amsterdam, The Netherlands







48



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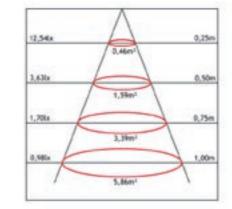


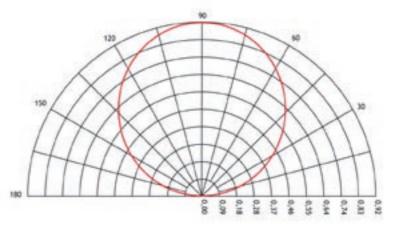
Amber

Product code 011465



Description LED Light Strip II, 24VDC 6x12mm, amber [m]







LED Light Strip II

LED Light Strip II

Amber



RoHs compliant



n), no accessories , accessoiries, dimmers

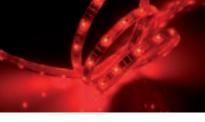


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Red

LED Light Strip II







LED

Lifetime

Product code 011477

SMD (Surface Mounted LED) > 20,000 hours W12xH6mm IP66 20cm 7 per section/ 35 per meter 60m >150mm UV/IR protected PVC with RoHs compliance Red 617.11nm 14.52 (20cm) 2.31cd 2.48 lux (1m) 105° 24VDC 3.6W/m yes - 20°C ~ + 40°C 28.5mm 100g/m per m, per spool (60m), no accessories 24VDC power supplies, accessories, dimmers and aluminium profiles

Red

Description LED Light Strip II, 24VDC 6x12mm, red [m]

Green	
LED	SMD (Surface Mounted LED)
Lifetime	> 20,000 hours
Dimensions	W12xH6mm
Degree of protection (IP)	IP66
Section length (cm)	20cm
Number of LEDs	7 per section/ 35 per meter
Maximale connection length (m)	20m
Spool length (m)	60m
Bend radius (mm)	>150mm
Material	UV/IR protected PVC with Ro
LED colour(s)	Green
Wavelength (nm)	533.31nm
Luminous flux (lm)	44.13 (20cm)
Luminous intensity (cd)	7.02cd
Illuminance (lx)	7.53 lux (1m)
Radiation angle (°)	105°
Voltage (V)	24VDC
Power (W)	3.6W/m
Dimmable	yes
Ambient temperature (°C)	- 20°C ~ + 40°C
LED spacing (mm)	28.5mm
Weight (g)	100g/m

Packing

011473

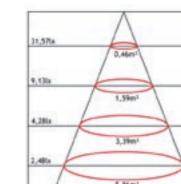
To be used with

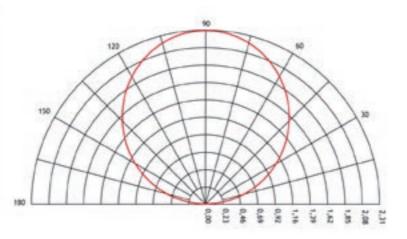
Product code

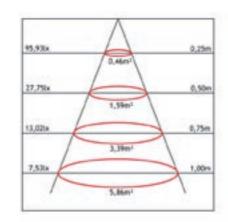
100g/m per m, per spool (60m), no accessories 24VDC power supplies, accessories, dimmers and aluminium profiles

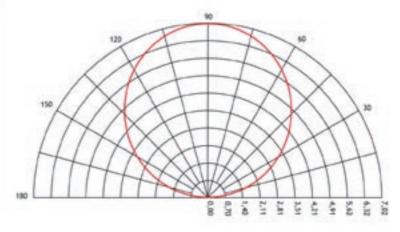
Description

LED Light Strip II, 24VDC 6x12mm, green [m]









0,250

0,50m

0,75m



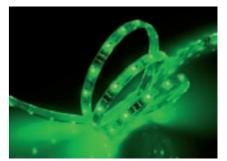
L.4.3

LED

Light Strip II

Green

light



C with RoHs compliance





L.4.4

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Blue

LED Light Strip II

Lifetime Dimensions Degree of protection (IP) Section length (cm) Number of LEDs Maximale connection length (m) 20m Spool length (m) Bend radius (mm) Material LED colour(s) Wavelength (nm) Luminous flux (lm) Luminous intensity (cd) Illuminance (lx) Radiation angle (°) Voltage (V) Power (W) Dimmable Ambient temperature (°C) LED spacing (mm) Weight (g) Packing To be used with

LED

Product code 011469

SMD (Surface Mounted LED) > 20,000 hours W12xH6mm IP66 20cm 7 per section/ 35 per meter 60m >150mm UV/IR protected PVC with RoHs compliance Blue 460.2nm 5.26 (20cm) 0.83cd 0.90 lux (1m) 105° 24VDC 3.6W/m yes - 20°C ~ + 40°C 28.5mm 100g/m per m, per spool (60m), no accessories 24VDC power supplies, accessories, dimmers and aluminium profiles

Blue

Description

LED Light Strip II, 24VDC 6x12mm, blue [m]

LED	SMD (Surface Mounted LED)
Lifetime	> 20,000 hours
Dimensions	W12xH6mm
Degree of protection (IP)	IP66
Section length (cm)	20cm
Number of LEDs	7 per section/ 35 per meter
Maximale connection length (m)	
Spool length (m)	60m
Bend radius (mm)	>150mm
Material	7 per section/ 35 per meter
LED colour(s)	White
Luminous flux (lm)	50.8 (20cm)
Luminous intensity (cd)	8.09cd
Illuminance (lx)	8.67 lux (1m)
Radiation angle (°)	105°
Voltage (V)	24VDC
Power (W)	3.6W/m
Dimmable	yes
Ambient temperature (°C)	- 20°C ~ + 40°C
LED spacing (mm)	28.5mm
Packing	per m, per spool (60m), no
To be used with	24VDC power supplies, acce
	and aluminium profiles
Weight (g)	100g/m

Product code 011481

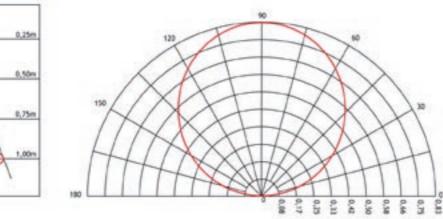
White

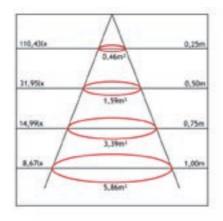
accessories

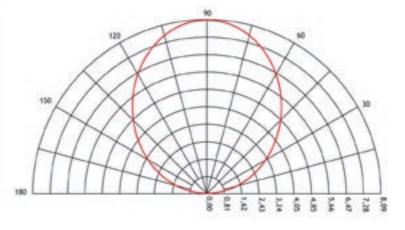
Description LED Light Strip II, 24VDC 6x12mm, white [m]



0,90







53

1.59m

3,39m



LED Light Strip II

LED

Light Strip II

White





essories, dimmers



Z.4.0



LED Light Strip II



011487

Product code

LED	SMD (Surface Mounted LED)
Lifetime	> 20,000 hours
Dimensions	W12xH6mm
Degree of protection (IP)	IP66
Section length (cm)	20cm
Number of LEDs	7 per section/ 35 per meter
Maximale connection length (m)	20m
Spool length (m)	60m
Bend radius (mm)	>150mm
Material	UV/IR protected PVC with RoHs compliance
LED colour(s)	Warm white
Luminous flux (lm)	43.11 (20cm)
Luminous intensity (cd)	6.86cd
Illuminance (lx)	7.36 lux (1m)
Radiation angle (°)	105°
Voltage (V)	24VDC
Power (W)	3.6W/m
Dimmable	yes
Ambient temperature (°C)	- 20°C ~ + 40°C
LED spacing (mm)	28.5mm
Weight (g)	100g/m
Packing	per m, per spool (60m), no accessories
To be used with	24VDC power supply, accessories, dimmers and aluminium profiles

Description LED Light Strip II, 24VDC 6x12mm, warm white [m]

Warm white

LED Light Strip II

Note Dimensions LED colour(s)	
Weight (g)	

Composition

011525

plug- & play L26xW26xH7cm (packing) amber, red, green, blue, white or wa white 1100g 1m LED Light Strip II, 1x Power plug, 1x Connector set 1m, 1x End cap, 1x Inline connector, 1x Extension cord, 1x Catalogue per set
 Description LLS II Demo-set, 1m amber, connector set,

D

ł	LLS II Demo-set, 1m amber, connector set
ł	plug [set]
i	LLS II Demo-set, 1m red, connector set, p
i	[set]
ł	LLS II Demo-set, 1m blue, connector set,
ł	[set]
÷	LLS II Demo-set, 1m green, connector set
ł	plug [set]
ł	LLS II Demo-set, 1m white, connector set
ł	plug [set]
ł	LLS II Demo-set, 1m warm white, connect
ł	power plug [set]
ł	

LED Light Strip II + RGB

Note Dimensions Material

Included Colour Facilities

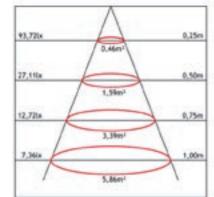
Weight (g) Composition

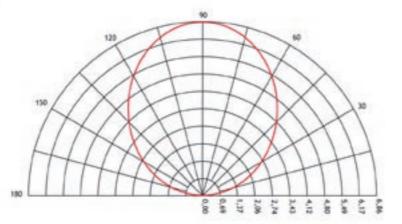
Packing

Product code 010607 010709

Demo case complete with insert LED Light Strip II & RGB L455xW345xH160mm Aluminium Connection cable (230V) Alu Should you already have the case it is possible to just order the insert. . 6500g Case + Insert with 6x30cm LED Light Strip II in amber, red, green, blue, white and warm white. 1x30cm LED Light Strip RGB, 1x RGB Controller. per pc

Description Demo case LED Light Strip, 440x330mm [pc] Insert LED Light Strip for demo case 440x330mm [pc]







Demo-set 1m

Z.4./

LED

Light Strip II

Demomaterial

varm



power plug

t, power

t, power

ctor set,



Demo case





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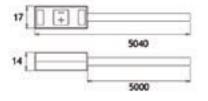
Connector set 1m		6x12mm	6x12mm	
	Dimensions Degree of protection (IP) Material Cord Length cord (m) Colour Weight (g) Packing	L40xW17xH14mm IP55 Polycarbonate round, PVC 2x1 ² 1m black 52g per piece, per 25, PVC glue + end cap included	Dimensions Degree of protection (IP) Material Weight (g) Packing Product code 011507	L40xW17xH14mm IP55 Polycarbonate 8g per piece, per 25, PVC glue in Description Inline connector II 6x12mm [pc]
	Product code 011495	Description Connector set II 6x12mm, 1m [pc]		
17 + 1040 14 1000				

Connector set 5m



Dimensions Material Cord Length cord (m) Colour Weight (g) Packing

Product code 011499



Degree of protection (IP)

L40xW17xH14mm

IP55 Polycarbonate round, PVC 2x1² 5m black 220g per pc, per 25, PVC glue + end cap included

6x12mm

Description Connector set II 6x12mm, 5m [pc]

6x12mm

Dimensions Degree of protection (IP) Material Cord Length cord (m) Colour Weight (g) Packing

Product code 011511

L40xW17xH14mm IP55 Polycarbonate cast, round, PVC 2x1² 26cm black 38g per piece, per 25, PVC glue included

Description Extension cord II 6x12mm [pc]



Inline connector

Z.4.0

LED

Light Strip II

Accessories

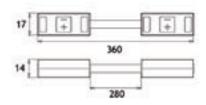


glue included

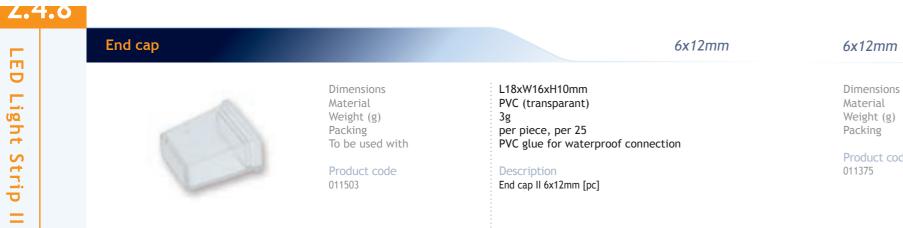


Extension cord





light



Product code

L23xW16xH10mm PVC 180g/ 100 pieces per 100

Description Saddle 6x12mm [per 100]







16

Note Dimensions Material Length (m) Weight (g) Packing

Product code 011369

7,5

Standard with double sided tape L1000xW18xH7mm

PVC (transparent) 1m 50g per piece, per 25, per 100

Description U-profile 6x12mm, 1m [pc] 6x12mm

6x12mm & 11x18mm

Dimensions Material Weight (g) Composition

Packing

011533

L89.5xW35xH28mm Polycarbonate 11.5g cast joint with transparent self sealing moulds, cast resin and necessities per piece IP68

Degree of protection (IP) Product code

Description

Cast joint 6x12mm & 11x18mm [pc]

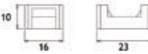


Saddle

LED Light Strip II

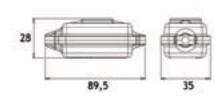
Z.4.0





Cast joint







60

Accessories

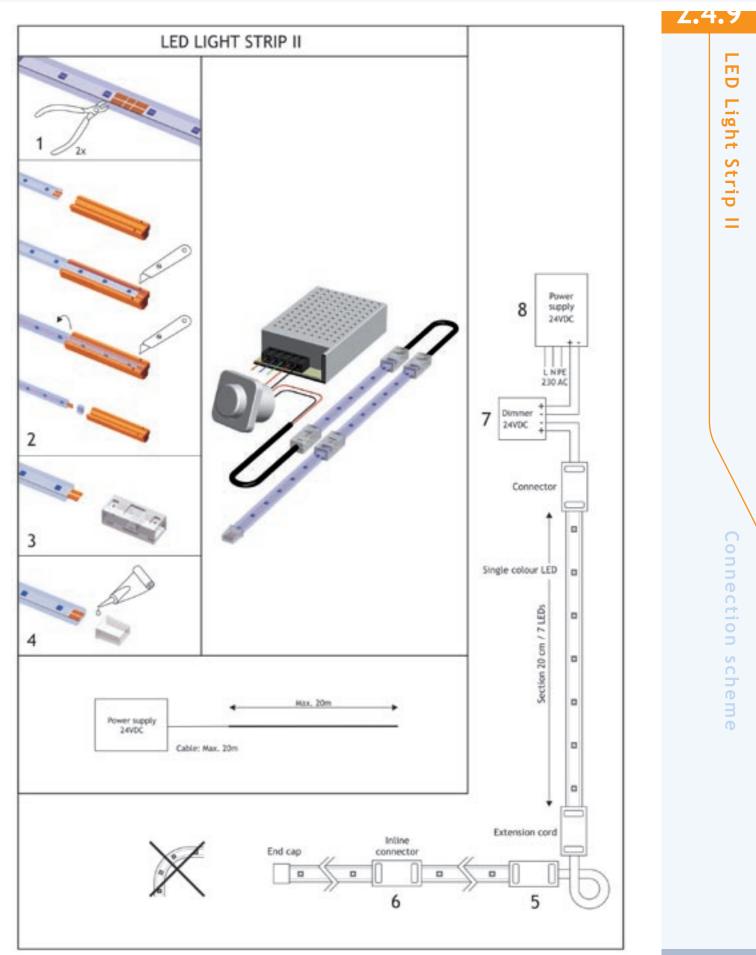


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Z.4.7

Instructions for connection

- 1. Cut the strip at the places indicated with a 25 mm strip-cutter (2x).
- 2. Place the strip in the mould and use a break-knife to cut the PVC loose from the print up to the + and markings or up to the end of the lines. Remove the PVC without damaging the PCB.
- 3. Fill the connections with the PVC-kit for a watertight connection.
- 4. Place the stripped strip in the connector using PVC glue. Make sure the connections are aligned for a proper connection.
- 5. Use a connector to make a corner. The strip must not be bent over the side.
- 6. Use an in-line connector to connect two strips.
- 7. Place a 24VDC dimmer between the source and the LED Light Strip, to enable the strip to be dimmed. The + and connections must be aligned.







LED Light Strip - blue



63

Project illustration

TRIO light

LED Light Strip - blue

64



LED Light Strip - warm white

In the interior of the 36m long Super Yacht Arcadia, built by Royal Huisman Shipyard BV, (The Netherlands) and designed by interior stylist Dick Young Design, a warm white coloured LED Light Strip was used. The LED Light Strip is used as indirect ambient lighting underneath the steps in the 'Salon', as skirtingboard lighting in the back of the 'Dining' and in the several glass door cupboards of the 'Guest Cabin'. The set-up is dimmable.



65

Creative Lighting Concept







LED Light Strip - warm white

In the interior of super yacht Gliss, designed by interior stylist Dick Young Design and built by Royal Huisman Shipyard BV, (The Netherlands) the warm white coloured LED Light Strip was used. The LED Light Strip is used as an indirect ambient lighting underneath the steps, as skirtingboard lighting and as indirect lighting in the several cupboards. LED Light Strip is also used in superyacht Antares.



Creative Lighting Concept

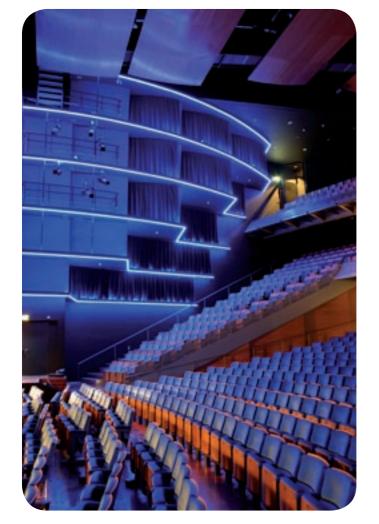




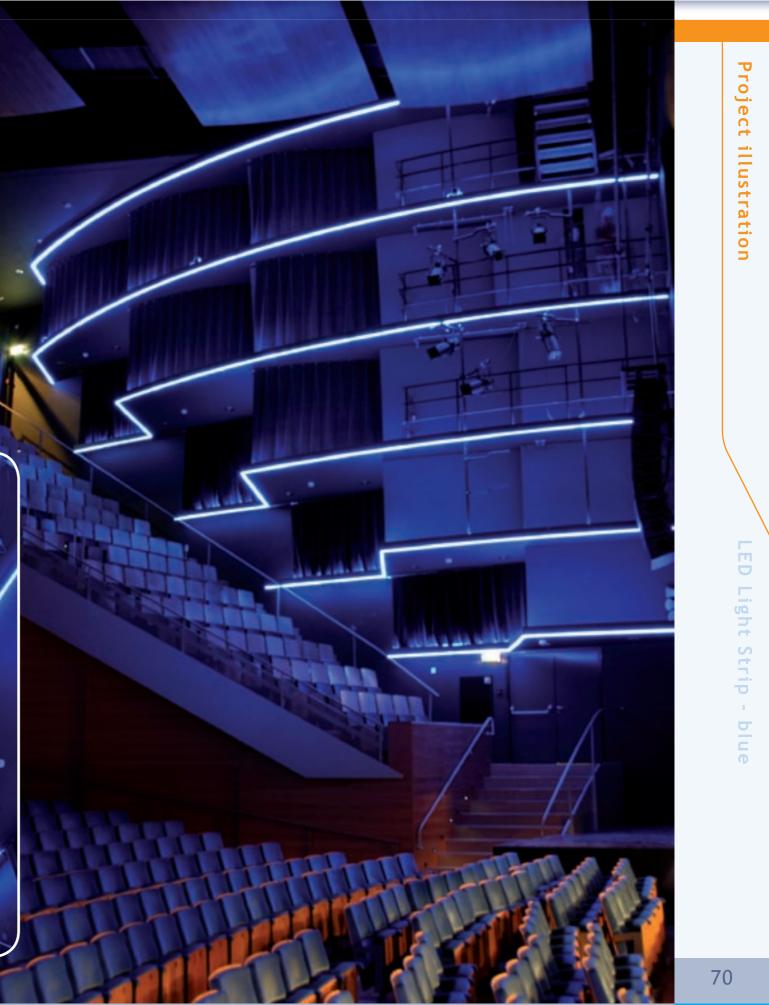


LED Light Strip - blue

The Orpheus theatre in Apeldoorn, The Netherlands, used the blue LED Light Strip on the sides of the balconies and underneath the curtains. The lighting was fitted using U-profiles. The blue illumination accentuates the contours and different levels of the balconies and illuminates the curtains with a beautiful blue floodlight. The set-up is completely dimmable.











LED Light Strip - warm white

The VROM ministry in The Hague, The Netherlands, was decorated in 2005 with a new lighting design. To preserve energy, the escalators have been fitted with a warm white LED Light Strip. Energy costs were reduced by more than 90%. The lighting can be used as backup lighting, route marking or as emergency exit lighting. But it was mainly used aesthetically in this project and meant to give the escalators a better look.





Project illustration

Creative Lighting Concept







LED Light Strip - warm white

The artwork "Zaan Zang", designed by Marc Ruygrok is beneath the A8, a highway that runs right through the old city centre of Koog aan de Zaan, the Netherlands. The concrete pillars are lined with stainless steel. Arie van den Berg poems, inspired by Koog aan de Zaan, are cut into it. Dynamicom Lichtarchitectuur (Lichting Architecture) created a light design to light the text 24 hours a day. In the space between the concrete and the stainless steel, a warm white colored Led Light Strip has been used.

DENBRACHT J

Creative Lighting Concept



light



supplies

24VDC



25W

Dimensions	
Power (W)	
Input	
Mounting	
Weight (g)	
Packing	
To be used with	
Efficiency (%)	
Degree of protection (IP)	

Product code 011305

L123xW39xH27mm 25W 230VAC Screw fasteners 100g per piece LED Light Strip 24VDC 90% IP20

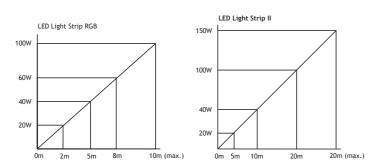
Description Transformer 24VDC 25W [pc]

Power supplies 24VDC

Tri-O-Light has selected a few stabilized 24VDC power supplies and transformers. These power supplies meet the highest standards and are excellent to use in combination with the LED Light Strip. When the power supplies don't mention a protection category they must be built in a cupboard. Take care of proper ventilation in that case. To minimize loss of voltage, make sure the cable is not longer than 20m.

Calculation

You can select the right power supply by multiplying the number of metres with the Watt per meter. The maximum connection length must not be exceeded. For optimal use, add an extra 5-10% power. Example: 10m LED Light Strip RGB = $10m \times 7,2W/m = 72W + 5\%$ is 75.6 => 100W power supply.



40W

Dimensions Power (W) Input Output Efficiency (%) Mounting Weight (g) Packing To be used with

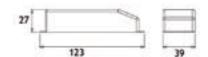
Product code 011309 L129xW98xH38mm 40W 85-264VAC 24VDC, 10% adjustable 78.0% screw fasteners 340g per pc LED Light Strip 24VDC

Description Power supply 24VDC 40W [pc]



Transformer 24VDC





Power supply 24VDC

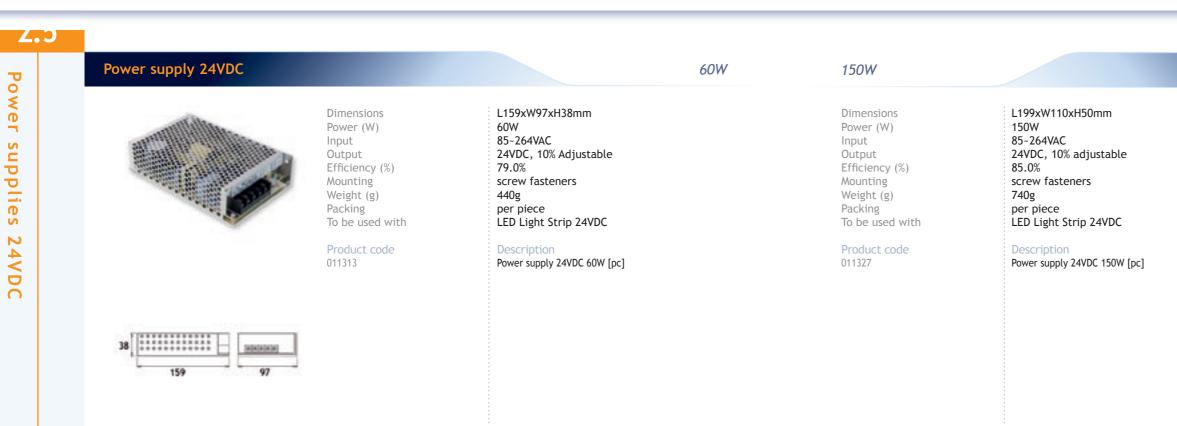




Power supplies 24VDC

76





Power supply 24VDC

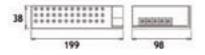


Input Output Efficiency (%) Mounting Weight (g) Packing To be used with

Dimensions

Power (W)

Product code 011319



L199xW98xH38mm 100W 85~132/180~264VAC 24VDC, 10% Adjustable 83.0% screw fasteners 580g per piece LED Light Strip 24VDC

> Description Power supply 24VDC 100W [pc]

100W

Dimensions Power (W) Input Output Efficiency (%) Mounting Weight (g) Packing To be used with Protection

200W

Product code 011331

L199xW99xH50mm 200W 85~264VAC 24VDC, 10% adjustable 83.0% screw fasteners 780g pro Stück LED Light Strip 24VDC forced cooling

Description Power supply 24VDC 200W [pc]



Power supply 24VDC





Power supply 24VDC



50

Power supplies 24VDC

Z.J





30W

Dimensions Degree of protection (IP) Power (W) Input Output Efficiency (%) Weight (g) Packing To be used with Protection

Product code 011307

L144xW46xH30mm IP64 30W 90~264VAC 24VDC, 10% adjustable 85.0% 220g per piece LED Light Strip 24VDC forced cooling

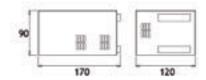
Description

Power supply 24VDC 30W IP64 [pc]

Power supply 24VDC



pitting. 114



Dimensions Power (W) Input Output Efficiency (%) Mounting Weight (g) Packing To be used with Protection

Product code 011339

L170xW120xH90mm 85~264VAC 24VDC, 10% adjustable screw fasteners

1750g per piece LED Light Strip 24VDC enforced cooling

500W

85.5%

Description Power supply 24VDC 500W [pc]

500W

Dimensions Degree of protection (IP) Power (W) Input Output Efficiency (%) Weight (g) Packing To be used with Protection

60W

Product code 011315

L181xW61.5xH35mm IP64 60W 90~264VAC 24VDC, 10% adjustable 86.5% 220g per piece LED Light Strip 24VDC forced cooling

Description Power supply 24VDC 60W IP64 [pc]

79

Z.J





Power supply 24VDC





Power

supplies

24VDC

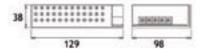


DC/DC Convertor 24VDC



Dimensions Power (W) Input Output Efficiency (%) Cooling Application Mounting Weight (g) Packing To be used with

Product code 011293



L129xW98xH38mm 50W 19~36V 24V, 0~2.1A 80% No Situations without stabilised power supply Screw fasteners 480g per piece LED Light Strip 24VDC

Description DC/DC Convertor 24V 50W [pc] 50W

50W

Dimensions Power (W) Current (mA) Input Output Efficiency (%) Protection Working temperature (°C) Storage temperature (°C) Housing Cord Weight (g) Packing To be used with

Product code 011311

L121xW61xH33mm 50W max. 2A 90VAC-264VAC 24VDC 85% overvoltage and short circuit 0-35°C - 20°C ~ + 85°C Plastic black 2m connection cable with plug (230VAC) 400g per piece LED Light Strip 24VDC

Description Power supply 24VDC 50W + 2m connection cable [pc]

TRI-0

Power plug 24VDC

Z.J

Power supplies

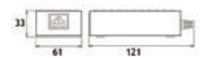
24VDC





Power supply 24VDC







Z.J

Power supply 24VDC



Power (W) Current (mA) Input Output Efficiency (%) Protection Working temperature (°C) Storage temperature (°C) Housing Cord Weight (g) Packing To be used with

Dimensions

Product code 011317

L135xW65xH39mm

90W

24VDC 84% overvoltage and short circuit 0-35°C - 20°C ~ + 85°C plastic black 2m connection cable with plug (230VAC) 480g per piece LED Light Strip 24VDC

Description

90W

max. 3.75A

90VAC-264VAC

Power supply 24VDC 90W + 2m connection cable [pc]

Power supply 24VDC



Power (W) Current (mA) Input Output Efficiency (%) Protection Working temperature (°C) Storage temperature (°C) Housing Cord Weight (g) Packing To be used with

Product code 011329

Dimensions

L173xW60xH38mm 150W max. 6.25A 90VAC-264VAC 24VDC 80% overvoltage and short circuit 0-40°C - 20°C ~ + 85°C plastic black 2m connection cable with plug (230VAC) 500g per piece LED Light Strip 24VDC

Description

Power supply 24VDC 150W + 2m connection cable [pc]

100















12-24VDC

Dimensions Power (W) Input Output Efficiency (%) Protection Dimmable Housing Back box Installation dimensions Weight (g) Packing To be used with

Product code 011455

L60xW60xH35mm max. 280W at 24V 10~30VDC 12VDC or 24VDC 96-99% overload, short circuit and overheat 10-100% plastic white plastic white L59xW59xH41mm Ø46mm (building in) 80g per piece LED Light Strip II

Description Dimmer built-in/on, 12-24VDC, white [pc]

Dimmers

LED Light Strip can be dimmed. It is, however, not possible to use conventional dimmers on the LED Light Strip. In the chapter 'Dimmers' you will find a number of suitable dimmers. You can also use the RGB/Dim Controller. The dimmer (24VDC) is placed between the source and the LED Light Strip (see connection scheme).

12-24VDC

Dimensions

Degree of protection (IP) Current (mA) Input Output Protection Dimmable Housing Included Weight (g) Packing To be used with

Product code 011457

L80xW55xH33mm, push button L35xW20xH37mm IP68 max. 10A 10~30VDC 12VDC or 24VDC overload, short circuit and overheat 0-100%, by means of pulse aluminium plastic grey push button 220g per piece LED Light Strip II

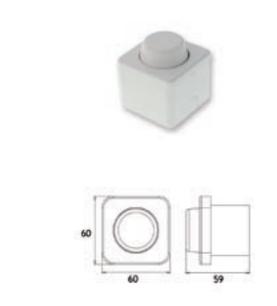
Description Digital dimmer with push button, 10A, 10~32VDC [pc]

TRI liøht

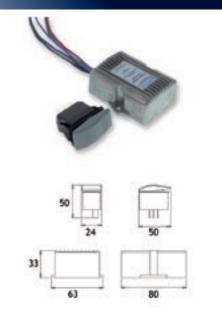
Dimmer built in/ on

Z.0

Dimmers



Digital dimmer





LED Light Strip - green

In the cabin of the yacht 'Cruz del Sur' (Italy) a green LED Light Strip was used. The colour and the brightness of the LED-lighting is meant to have clearly readable instruments also at night. The voltage of the LED Light Strip (24VDC) made the fitting on the yacht easier. A DC/DC converter was used however, to ensure stabilized voltage. The set-up is completely dimmable.



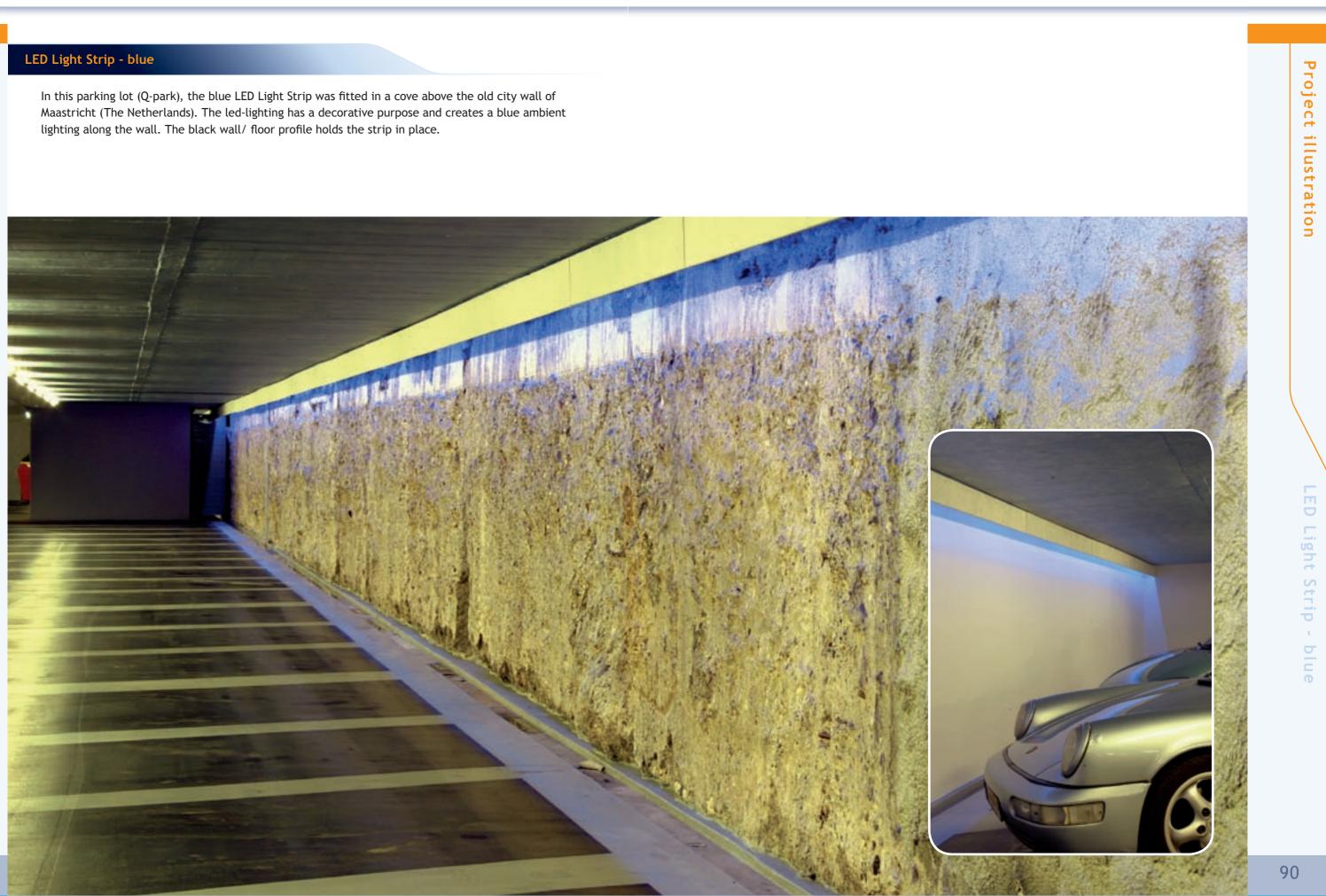
Creative Lighting Concept.





Maastricht (The Netherlands). The led-lighting has a decorative purpose and creates a blue ambient

89



t R I-0 light



LED Light Strip II - warm white

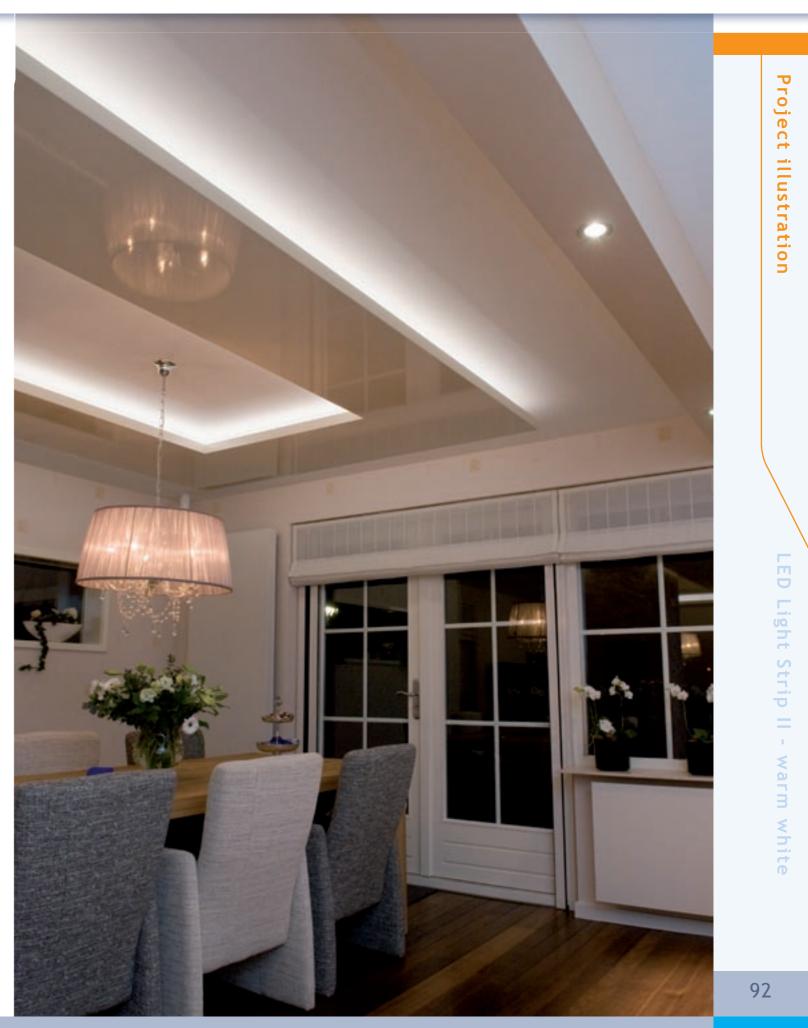
The warm white LED Light Strip II has been fitted in the beautiful frames in several rooms of this house. The set-up is completely dimmable.











Project illustration

Creative Lighting Concept





LED Light Strip II blue

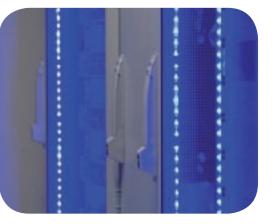
The server room of ROC A12 MBO educational institute (Ede, The Netherlands) has completely been fitted with the blue LED Light Strip II, purely for atmosphere purposes. The colour blue was chosen because of its association with water and the water-cooled Rittal server cupboards. The LED Light Strip has been fitted using Tri-O-Light u-profiles. Each cupboard takes up about 4m and a 20W transformator. ITN Installatietechniek (ITN Fitting Techniques) have fitted the whole set-up.







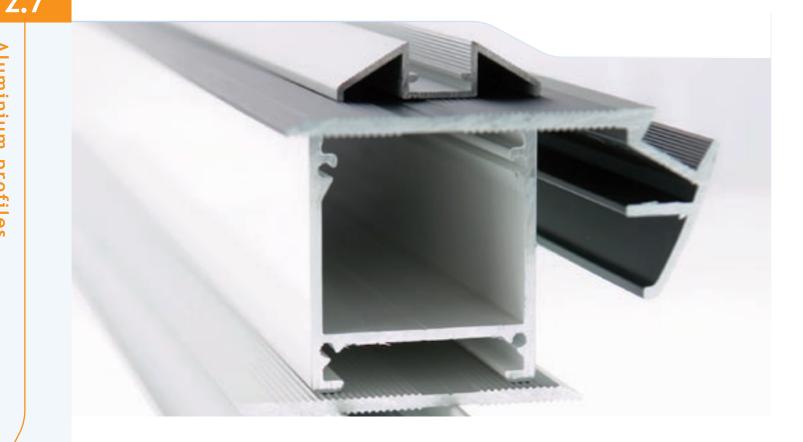
LED Light Strip II blue



light

eative Lighting Concepts





Stair profile & Wall/floor profile

These profiles are only applicable for LED Light Strip II. The stair profile has anti-slip grooves. Both profiles are screwed or glued onto steps, wall, floor or ceiling. The LED Light Strip can easily be pressed into the profile and is not easily removable.

Aluminium profiles

The aluminium profiles have been developed especially for the LED Light Strip. They are ideal for functional and decorative applications such as marking stairs, floors, walls and ceilings in theatres, cinemas and clubs.

Line profiles

The line profiles are available in two widths: 20mm and 40mm. In combination with a LED Light Strip and frosted or clear acrylic a diffuse light line can be created. Several accessories are available to fix and mount the profiles. The profile has a white epoxy coating. These line profiles are suitable to build in and on floors and walls.

Wall profile indirect

The 'wall profile indirect' is designed to create floodlight effects along a wall. The profile consists of a fitting profile, which is screwed to the wall, the cover, the polycarbonate and the end caps. This system is "lout-proof" (also suitable for applications in public places) and can not be taken apart easily. The profile is available in silver grey, black and white.

95



Aluminium profiles

L.



Line profile 20mm		white	white	
51	Dimensions Material Trim Application Cutting tolerance (mm) Maximum length (m) Standard length (m) Weight (g) Packing To be used with Facilities Product code 010982	W24xH51mm aluminium white (RAL9010) diffuse or clear lightline build in and/ or on ± 5mm 6m 2m 900g/ m per 2m/ unless differently agreed LED light strip II and RGB, acrylic 20mm, end cap 20mm, mounting clip 20mm cut to size, extra cuts will be charged Description Line profile 20mm, white [m]	Dimensions Material Trim Included Weight (g) Packing To be used with Product code 010969	L51xW24xH2mm aluminium white (RAL9010) screws 700g/ 100 pc per pc lineprofile 20mm Description End cap 20mm [pc]
24 6000				

Acrylic 20mm



Material Maximum length (m) Standard length (m) Cutting tolerance (mm) Facilities Weight (g) Packing To be used with

010959 010965

Dimensions



Product code

frosted/ clear

W20xH5mm acrylic clear and frosted 3m 2m ±5mm cut to size, extra cuts will be charged 200g/ m per 2m, except differently agreed lineprofile 20mm

Description Acrylic 20mm, frosted [m] Acrylic 20mm, clear [m]

white

Dimensions Material Trim Weight (g) Packing To be used with

Product code 010977

Ø14xH24mm

nylon white 300g/ 100 pieces per pc line profile 20mm

Description Mounting clip 20mm [pc]

Ζ.

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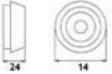
End cap 20mm





Mounting clip 20mm





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Aluminium profiles



Ζ./

Aluminium profiles

Line profile 40mm		white	white	
	Dimensions Material Trim Application Maximum length (m) Standard length (m) Cutting tolerance (mm) Facilities Weight (g) Packing To be used with	W44xH51mm aluminium white (RAL9010) diffuse or clear lightline build in and/ or on 6m 2m ±5mm cut to size, extra cuts will be charged 900g/ m per 2m/ unless differently agreed LED light strip II and RGB, acrylic 40mm, end cap 40mm, mounting clip 40mm	Dimensions Material Trim Included Weight (g) To be used with Packing Product code 010971	L51xW44xH2mm aluminium white (RAL9010) screws 130g/ 100 pieces lineprofile 40mm per piece Description End cap 40mm [pc]
51	Product code 010985	Description Line profile 40mm, white [m]		

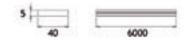
frosted/ clear

Acrylic 40mm



Dimensions Material Included Maximum length (m) Standard length (m) Cutting tolerance (mm) Facilities Weight (g) Packing To be used with

Product code 010961 010967



W40xH5mm acrylic frosted and clear screws m) 3m m) 2m (mm) ±5mm cut to size, extra cuts will be charged 330g/m

2m, except differently agreed lineprofile 40mm

Description Acrylic 40mm, frosted [m] Acrylic 40mm, clear [m] white

Dimensions Material Trim Weight (g) To be used with Packing

Product code 010979

Ø32xH6mm

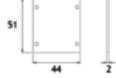
nylon white 600g/ 100 pieces line profile 40mm per piece

Description Mounting clip 40mm [pc]



End cap 40mm





Mounting clip 40mm



Aluminium profiles

Z./

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Z.

Aluminium profiles

Wallprofile indirectly	silver grey/ black/ white	clear	
Dimensions Material TrimMounting Maximum lengts Standard lengts Cutting toleran Facilities Weight (g) Packing To be used withMounting Maximum lengts Standard lengts Cutting toleran Facilities Weight (g) Packing To be used withMounting Maximum lengts Maximum lengts Mounting (g) Packing To be used withMounting Maximum lengts Maximum lengts Maximum lengts Mounting (g) Packing To be used withMounting Maximum lengts Maximum lengts Mounting (g) Packing To be used withMounting Maximum lengts Mutting lengthsMounting Maximum lengts Mutting lengthsMounting Mutting lengthsMounting Mutting lengthsMounting Mutting lengthsMounting Mutting lengthsMounting Mutting lengthsMounting Mutting lengthsMounting Mutting lengthsMounting Mutting lengthsMounting lengthsMounting lengthsMounting lengthsMounting lengthsMounting lengthsMounting lengths <th>n (m) 2m te (mm) ±5mm cut to size, extra cuts will be charged 760g/ m 2m, except differently agreed</th> <th>Dimensions Material Trim Mounting Maximum length (m) Standard length (m) Cutting tolerance (mm) Facilities Weight (g) Packing To be used with Product code 011591</th> <th>W23.7xH0.8mm PC transparant 2m ±5mm cut to size, extra cuts w 23g/ m per 2m, unless differen wallprofile indirectly Description PC Cover for wall profile ind</th>	n (m) 2m te (mm) ±5mm cut to size, extra cuts will be charged 760g/ m 2m, except differently agreed	Dimensions Material Trim Mounting Maximum length (m) Standard length (m) Cutting tolerance (mm) Facilities Weight (g) Packing To be used with Product code 011591	W23.7xH0.8mm PC transparant 2m ±5mm cut to size, extra cuts w 23g/ m per 2m, unless differen wallprofile indirectly Description PC Cover for wall profile ind

mountingprofile





Dimensions Material Trim Mounting Maximum length (m) Standard length (m) Cutting tolerance (mm) Facilities Weight (g) Packing To be used with

Product code 011589

W25xH57mm aluminium silver grey (RAL 9006) on mountingprofile 6m 2m ±5mm cut to size, extra cuts will be charged 760g/ m per 2m, unless differently agreed

wallprofile indirectly

Description Mounting profile for wall profile indirect, silver [m]

silver grey

Dimensions Material Trim Weight (g) Packing To be used with

left/ right

Product code 011571 011573

L57xW26.5xH18mm PU black 66g per piece wallprofile indirectly

Description

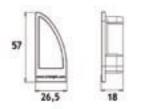
End cap left for wall profile indirect, black [pc] End cap right for wall profile indirect, black [pc]

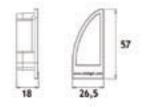




End cap







Stair profile		silver/ black
	Dimensions Material Trim Application Maximum length (m) Standard length (m) Cutting tolerance (mm) Facilities Weight (g) Packing To be used with	W62xH35mm aluminium silver or black anodised Stairnosing lighting 6m 2m ±5mm cut to size, extra cuts will be charged 1kg/m per 2m, unless agreed on differently LED Light Strip II
	Product code	Description

011565 011567 Description Stair profile, 6x12mm, silver [m] Stair profile, 6x12mm, black [m]

silver/ black

Dimensions Material Trim Application Maximum length (m) Standard length (m) Cutting tolerance (mm) Facilities Weight (g) Packing To be used with

Product code 011593 011595 W40xH10mm

aluminium

silver or black anodised orientation lighting for wall and floor

6m

2m

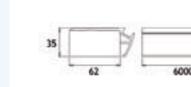
±5mm

cut to size, extra cuts will be charged 250g/ m per 2m, unless differently agreed LED light strip II

Description

Wall/floor profile, 6x12mm, silver [m] Wall/floor profile, 6x12mm, black [m]

Z./



103





104



LED Light Strip with line profile

T-for Telecom used the white LED Light Strip for their renewed interior concept. This project uses the 20mm line profile. The LED Light Strip was mounted inside the 20mm line profile using a u-profile. The yellow T-for-Telecom colour was created with a yellow diffuse acrylic cover. The result is an illuminated diffuse line, visible on the furniture and cupboard partitions. The line has only a decorative purpose and meant to create a bright, fresh and renewing accent.





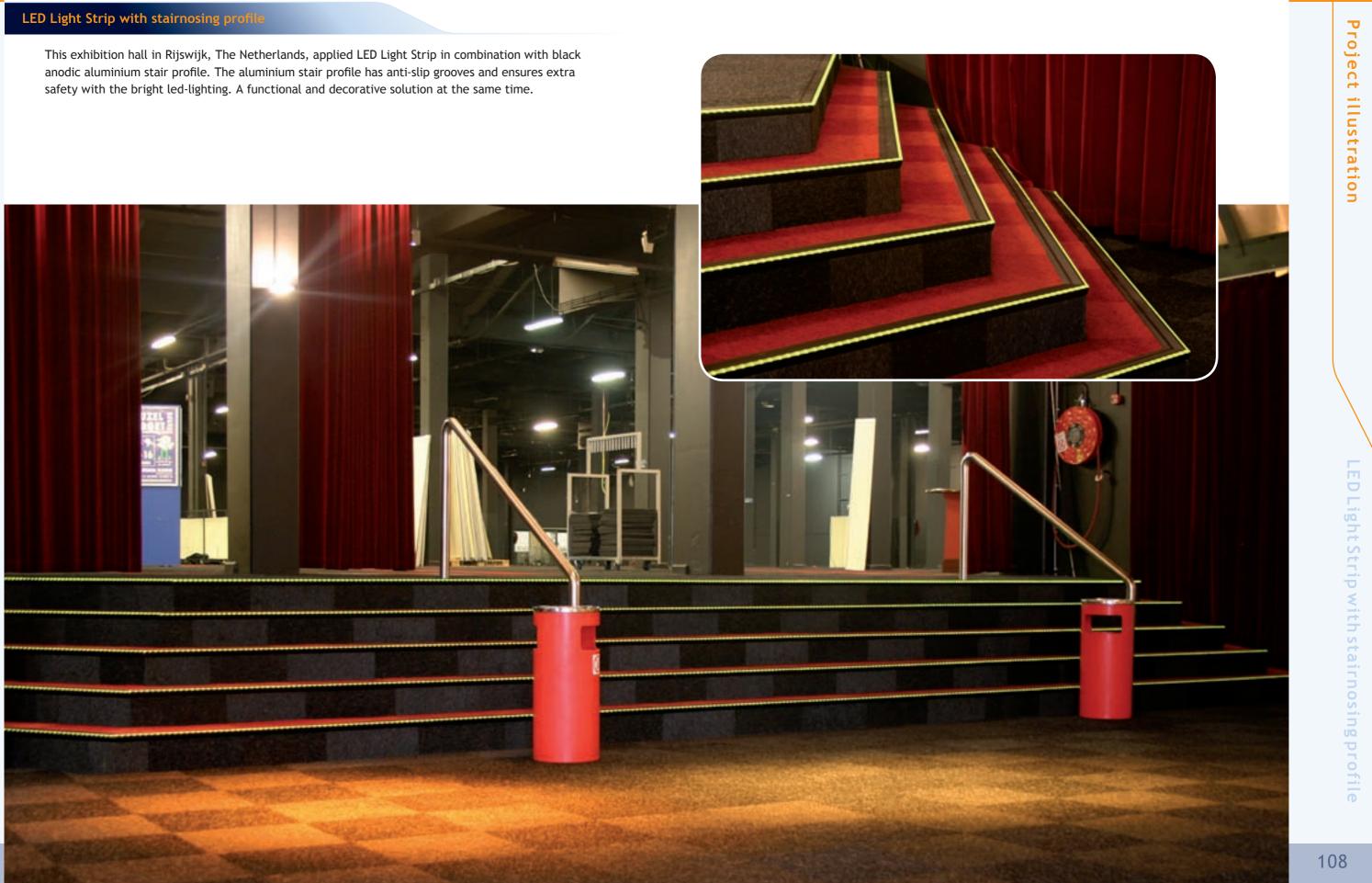
Creative Lighting Concepts







anodic aluminium stair profile. The aluminium stair profile has anti-slip grooves and ensures extra







In order to create more safety and comfort, Motala Train AB upgraded a number of regional passenger trains by means of LED-lighting. They installed aluminium stair profiles with LED Light Strip and integrated the wall/floor profile in the entrances for the disabled. Purpose of the installation was to increase safety and overview when getting on and off. It is an aesthetic and at the same time durable innovation.



109

light





Warning

- Please remember during the fitting procedure that you are dealing with an electrical device. Handle with care. Ensure mains supply is switched off before commencing work.
- The LED Light Strip cannot withstand a voltage fluctuation. Always use a stabilised 24VDC power supply and check on sufficient power and right voltage.
- In situations where power supplies are not stabilised, for example on a car or boat, it is necessary to use a DC-DC converter; see the chapter 'power supplies'.
- The maximum connection length of the LED Light Strip must not be exceeded. The cable from the strip to the power supply cannot be longer than 20m to prevent voltage loss.
- As (led) diodes are used, the dimming characteristic is not linear. Therefore it is not possible to dim with conventional dimmers.
- Cut the strip on the section markings only. In each section the leds are connected in series. The section should not be interrupted or damaged. Once the LED Light Strip is cut, the IP-rate (IP66) is no longer guaranteed.
- Ensure, when connecting the accessories, that the + and signs on the connectors are aligned to ensure a correct connection.
- Keep connector sets, end caps and connectors out of reach of water or moisture or make sure that all connections are sealed 100% waterproof, using PVC-kit.
- LED Light Strip cannot be connected or used when coiled. Keep a minimum bend radius of (>) 150mm when bending the strip forwards or backwards. The strip must not be bent over the sides.





112