



THE PIXALUX GUIDE TO CHOOSING AN ILLUMINATED SHELF

The 10 Key Mistakes to Avoid

Learn how to select the best in illuminated shelving and avoid the 10 key mistakes.

Written by [Geoff Fairfield](#)
Shelving Reinvented

PIXALUX®

The Pixalux® Guide to Choosing the Best in LED Illuminated Shelving and Avoiding the 10 Key Mistakes That Could Cost You Dearly.

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Section 1 Different types of LED illuminated shelving

You need to decide if you just want a bit of a glow or you want the shelves to illuminate the products from above or below. If you just want a bit of a glow or you want to see just a glowing edge, then all you need do is take a panel of glass or acrylic and put a strip of LEDs at the back.

That is not what we are covering here.

Picalux shelves are far more than that. Here are some of the key features and benefits:

- Even spread of light across the surface of the shelves
- Choice of edge finishes, including glowing
- Strong, flat surface that can carry the heaviest of weights
- Super-bright light with choice of colours
- Control systems for adjusting the colour, brightness and a lot more
- Shelf support brackets, even with built-in power
- Ways of dealing with the wiring

We will be covering these in more detail in later sections, so read on...

Even Spread of Light

With Picalux shelves we focus on getting an even spread of light across the surface of the shelf. That is why we limit the sizes that are available. Whether you choose a single-sided or double-sided shelf, we will always do our maximum to ensure that the spread of light across the surface of the shelf is as even as possible without any dark patches.

Shelves powered by LEDs on one side of the panel can be up to 400mm deep. If you need a shelf between 400mm and 800mm wide, it will require LEDs on two opposite sides.

Key Mistakes to Avoid

1. Avoid seeing the dots of the LEDs. Apart from the fact that this really does not look good, you need to be seeing the light where it is meant to go rather than the source of the light itself.
2. The light-carrying panel will probably have a grid of dots or lines on it which carry the light across the panel. Ensure that these are completely invisible by the addition of a diffuser panel. With Picalux these are built into the panel, ensuring that no dots or lines are visible- but this is not necessarily the situation with other brands.
3. Uneven light across the panel- if the light is brighter closer to the LEDs and darker as it gets further away, this is a sign that you are not getting an even spread of light across the surface. Also check for any dark or uneven patches on the surface of the panel.
4. The light-carrying panel must be protected at all times. Any scratches, marks or finger prints will show up when the panel is illuminated. With Picalux this panel is protected at all times as it is sandwiched between two other panels.

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Section Two LEDs- How to select what you need

LEDs are available in a variety of options so that you can achieve exactly the effect required.

Colours

Choose from the following colours...

White light is available in the following colour temperatures:

- Cool white (6000-6500 kelvin) – provides a cool white light with a modern look. Cool white is the brightest of the three options.
- Natural white (4000-4500 kelvin) – provides a colour similar to natural daylight. Fits in to any environment.
- Warm white (2700-3000 kelvin) – provides a warm white light with a yellowish tinge. Used a lot in homes and museums and where a more subdued or classic look is required.

CW/WW- If you are not sure which colour white to go for, you could select our cool-white/warm-white option. This is a fully adjustable option allowing you to select anything from warm white to cool white and anything in between. These shelves are supplied with a wireless remote-control unit which allows you to select the colour of your choice. The remote-control unit also allows you to dim the lights if required.

RGB offers you the choice of all the colours of the rainbow and more. This unit is supplied with a remote-control unit which allows you to select your required colour, the brightness and also you can select from a range of effects such as flashing, strobing etc.

RGBW gives you all of the above with the addition of white.

Brightness

The next thing to consider is the brightness of the light that you require. Our standard white LEDs are 14.4 watts per metre. This brightness is suitable for the majority of applications.

There are certain times however when you may need that extra bright light. Here are just a few situations:

- Where you are using the shelf with printing or graphics
- When you need a graphic to be super-bright
- When you are using larger sizes of shelf to allow the light to spread further across the panel
- If you are putting something over the panel and you want the light to shine through

For those situations where a brighter light is required, we have LEDs at 22 watts per metre. These are extremely bright.

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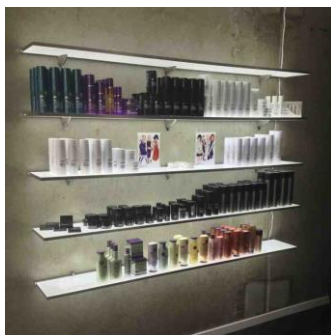
Colour Rendering

When using white light, it may be important for you see the products on display in their true colours. For example, in fashion display, you don't want customers to have to carry the products outside to check out the colours.

If this is important to you then always be sure to check the CRI or Colour Rendering Index of the LEDs that are being supplied. The higher the number, the more you will see true to life colours. Picalux LEDs have a CRI of 95% or greater.

Key Mistakes to Avoid Continued...

5. Not asking about the colour of the LEDs being supplied- if you just leave this to chance you may not get the result you expected.
6. If you plan on having repeat orders of LED shelves and you want to ensure you get the same exactly the same colour, then ask about the 'binning' of the LEDs- the lower the number the better. Picalux panels have a low binning score with a very tight control over the colour of the panels.
7. Don't make the panel so bright that the light will shine in people's eyes and prevent them from seeing the products.
8. Some products may be better lit from above than below. We found this recently with spectacles for an optician. When the lighting was from below, the colour of the frames could not be seen well as they were in silhouette. By having light coming down from the shelf above, perfect light was provided, allowing the frames to be seen in their true colours.
9. Ask if the LEDs can be changed if required. Although they last a long time, LEDs do not have an unlimited span of life- eventually they will start getting dimmer. On the odd occasion, there may also be an electrical fault. If you can't change the LEDs you may be left high and dry. With Picalux, the LEDs are housed in an aluminium extrusion which can be removed from the panel if required. This also acts as a heat sink- see my next point.
10. If the LEDs get too hot, this can affect their life and they may start to fail sooner than you would like. It is important therefore to have a metal heat sink which draws heat away from the LEDs. All Picalux LEDs are mounted on a metal strip and then inserted into the aluminium profile. This provides extra capability for removing the heat.



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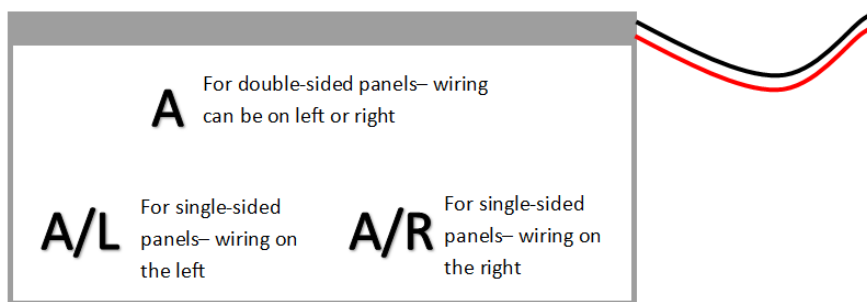
Section Three Wiring

In order to provide you with exactly what you need, your panel provider should be able to provide you with a number of options for the cabling:

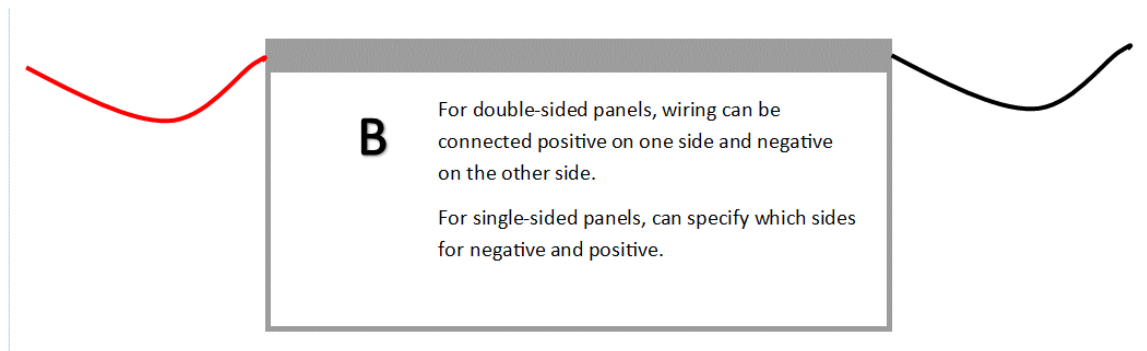
Cable Exit

Decide where you want the cable to exit from the panel. Here are a few options for you to choose from:

A- Positive and negative cables from one end of the shelf



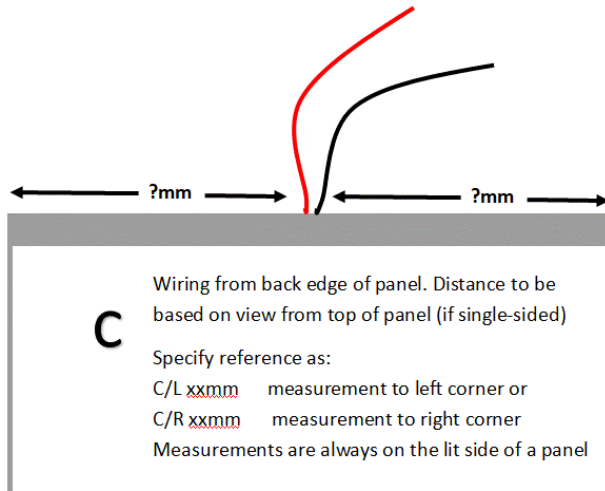
B- Positive from one end and negative from then other



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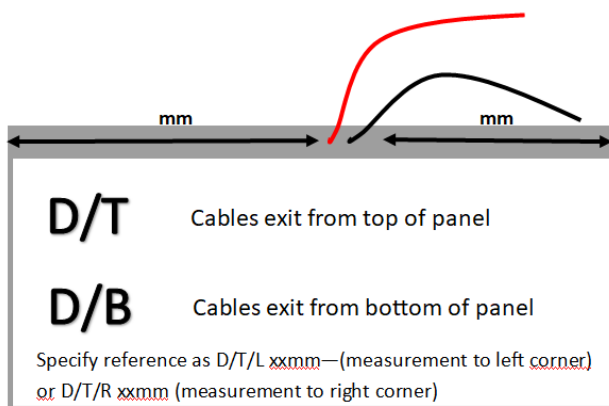
C- Both wires exit from the back edge of the shelf

You can specify the distance of the cables from one end or the other.



D- Both wires exit from the side of the profile that carries the LEDs

You can specify the distance of the cables from one end or the other



Note— measurements are always on the lit side of a panel.

Length of Cables

Specify the length of cable required. One metre long is very popular but specify something else if you need to.

Termination of Cables

Please specify if you need a jack-plug to connect to the power supply unit. Other options are bootlace ferrules or just plain ends.

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Summary

We hope that this brief guide will help you in getting the best result possible for your LED illuminated shelving.

Pay attention to the 10 key mistakes and take action to avoid those. If you get it wrong, it could cost you dearly.

We realise that this is just a guide is not meant to be detailed specification information. If you would like a copy of our specification guide, then please contact us, information below.

I hope that you have found this useful and if you would like any further help, please send us an email or give us a call. Please also see our website at www.pixalux.co.uk.

For further advice and guidance,

Call us on +44 (0)845 299 6466 or

Send me an email to geoffrey.fairfield@pixalux.co.uk

If you have any further ideas as to what could be added or improved, I would love to hear from you.

Wishing you all the best and hope you enjoy 'Shelving Reinvented'.

Geoff Fairfield

Pixalux UK Ltd

Tel: +44 (0)845 299 6466

Web: www.pixalux.co.uk

