



ADxlite lighting layout instructions

These instructions are designed to assist Sign Makers using ADxlites in a variety of different shapes and size of signs. They are general recommendations only, because there are so many factors that affect the light output through the front of the sign. Such as the depth of the sign case, colour of the inside of the sign case (back and sided) and thickness and light transmission properties of the front face material etc.

AREA

< **1M2** ADxlite AD4 lights can be used in small signs, buttons with a company logo etc. Use at 150 mm centres.

< **4M2** Signs of less than 4 M2 use a regular layout of 300 to 350 mm between the lights depending on the depth of the sign case and on the material on the front face.

> **4M2** Signs greater than 4 M2 are generally 150 mm deep with a flex-face signs and we recommend a regular layout of 400 to 450 mm between the lights

DEPTH

This largely depends on the material used in the front face of the sign. In all cases the depths indicated below are from the top of the ADxlite (18 mm high) to the inside front face of the sign. If you pre-mount the LEDs on Fomex or white Duo-bond to make installation or retro-fitting easier, please ensure the depth for these materials is used when calculating the depth of the sign.

Flex-face With a printed graphic this can be as little as 80 mm up to 300 mm depth. Very useful for internal signs used with changeable advertising such as 'Texflex'. With a mainly white graphic, care should be taken with the sign depth so as to avoid spotting as this depends on the light transmission properties of the flex material. 250 -280 micron materials use a minimum of 100 mm.

Opal acrylic White 030 opal acrylic use a minimum of 130 mm, less if there is a graphic.

White 050 Opal acrylic is designed to use with fluorescent tubes, where it was needed to push 50% of the light back into the sign case to avoid strips of bright illumination from washing out the graphic. Side-lit lights, such as the AD4 ADxlites, reflect the light of the sides and back of the sign case to produce an even illumination out of the front face. They do not need the light to be reflected strongly back into the sign case. Do not use this material in new signs as it can stop some of the light from illuminating the front face. Extra AD4 lights may be needed to correct the light level.

However you may have to retro-fit into a sign with 050 acrylic already fitted. Use a minimum of 100 mm with a coloured graphic or a minimum of 130 mm for a white or mainly white graphic. More depth is better with this material.

Coloured Acrylic Use a minimum of 120 mm in a light colour and 100 mm if a dark colour.

Fret cut Pierced or fret cut letters can be illuminated with AD4 lights. Ring fence the area to be illuminated with a light baffle or reflector about 100 mm either side of the letters. The baffle can be aluminium or white. Depth can be a minimum of 100 mm.

Letters Large individual letters can be illuminated using AD4 lights. The stroke width needs to be a minimum of 200-220 mm to allow the light to reflect off the back and sided of the letter case and evenly light the front face. See acrylic and opal acrylic for the depth recommendations.

Double sided Signs AD4 lights can be used to illuminate double sided signs. A minimum depth of 150 mm is recommended for flex-face graphic signs. Care should be taken with white or very light coloured graphics using all types of face materials. The AD4 lights should be suspended on slim (20 mm) white metal rails in the centre of the sign using a regular grid pattern of no more than 250 – 300 mm. Do not mount the AD4 lights on clear acrylic, hoping the light will shine through the acrylic, as this does not work very successfully.

Curved Curved signs can be very successfully illuminated using AD4 lights. Use a smaller grid pattern the tighter the curve. We recommend a minimum depth of 150 mm.

SIGN CASE COLOUR

White is recommended on the inside to the sign case as it reflects and diffuses the light. Aluminium / Silver are also suitable.

NB: Sign Lights Ltd (SLL) can only make general recommendations about lighting layouts and depths of sign cases. There are so many other factors that affect the light output through the face of the sign that it is up to the Sign Maker or lighting installer to ensure that the AD4 lights create an even illumination without hot spots or shadows. If you are having problems we are delighted to help and visit your factory to offer solutions. SLL is not liable for any lighting problems nor will it accept any consequential damages or costs.

Sign Lights Ltd, Unit 2 Links Business Park, Carr Lane, Hoylake, Merseyside, CH47 4AZ Tel: 0151 632 6293
Email: sales@sign-lights.co.uk Web: www.sign-lights.co.uk