

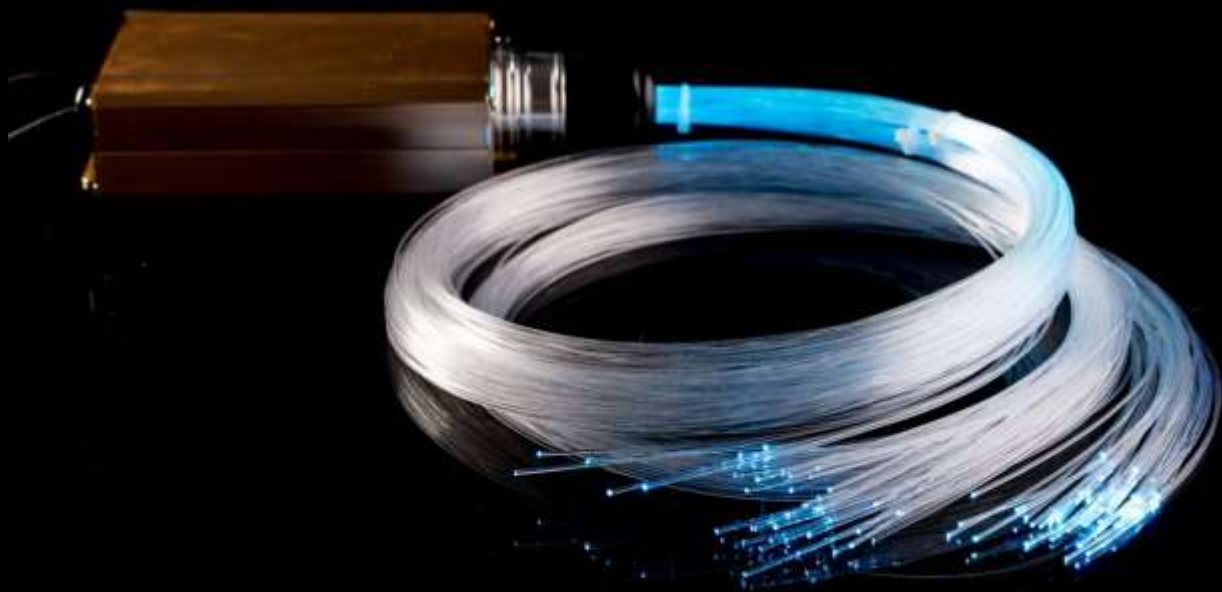


STELLAR LIGHTING

www.stellarlighting.co.uk

Fibre Optic Star Kits

Installation guide





Introduction

This document will guide you through the process of creating your own starry ceiling using our star kit.

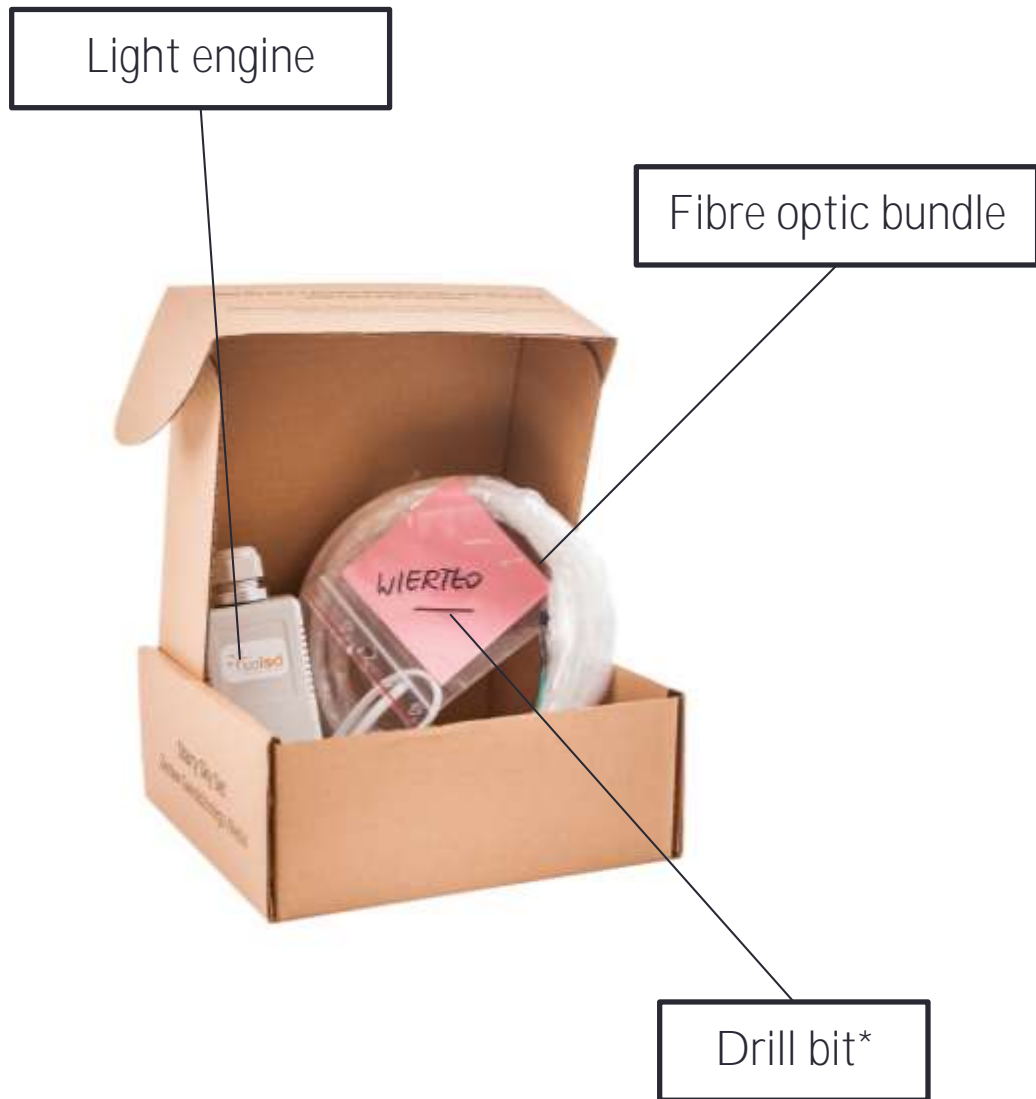
Making your own starlight ceiling can be a fun and exciting DIY project! Although the installation is not complicated, it can be time-consuming and you should consider the following before starting.

- Our star kits can be installed in plasterboard, acrylic sheets (such as Perspex or Plexiglas), PVC, Dibond, wood or stretch ceilings.
- As the light source sits above the ceiling and the fibre optic tails pass through the ceiling to create the star points, you will either need access to the area above the ceiling (e.g. loft area or sufficient space in a ceiling void) or you can create a special housing for the panel that will accommodate the star kit.
- Consider the electrical connection of the light engine as it might require the involvement of a trained and competent person.



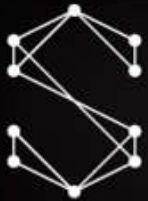
Introduction

Your star kit will include the following items:



* Drill bits are only included with selected light engines

CHAPTER 1



BEFORE YOU START





Before you start

DIY tips and safety advice

- This task will involve working at height. A safe system of work should be established and maintained, in order to prevent injury.
- Consider your safety! Think about the potential risks and dangers of the work and the steps you should take to avoid them.
- Personal protective equipment. Make sure that you are equipped with suitable and sufficient personal protective equipment. This could include eye protection, face mask, protective overalls, safety footwear and gloves.
- Ensure that the work area is sufficiently illuminated.
- Check that the tools you will be working with are in a good operating condition. For the installation, you will need a cordless drill, epoxy glue, side cutters or scissors and the drill bit which is part of the starlight kit.



Before you start

Electrical work safety advice and tips

- Ensure that the room has an available 230 V lighting circuit with a suitable wall switch.
- We recommend that the lighting circuits from the consumer unit or distribution board are comprised of twin and earth PVC insulated cable with a minimum conductor size of 1.5 mm².
- An appropriate protective device e.g. fuse or miniature circuit breaker should be installed at the consumer unit. We recommend a 6 A type B MCB for this purpose. If the supply circuit to the ceiling panel is not dedicated, your electrician can advise on protection arrangements.
- Before undertaking any electrical connection work, ensure the circuit is isolated at the consumer unit by turning off the MCB and, if practicable, locking it in the OFF position.

CHAPTER 2



Creating a frame





Creating a frame

If you don't have access to the ceiling space, begin by creating a frame large enough for the area of the panel and deep enough to comfortably house the light engine. Fitting the fibre optic tails into the board will take place before securing the board to the frame.



CHAPTER 3



Installing your star kit





Installing your star kit

1. Prepare the visible surface of your board to make sure it's smooth and in your choice of colour. We have used filler, sanded and painted. (Figure 1)
2. You will need the following tools for the installation: drill, epoxy glue, side cutters or scissors and the drill bit provided with your starlight kit. (Figure 2)
3. On the back of the board, mark the places where you will drill the holes for the fibre optic tails. The number of marks you make should correspond the number of tails in your fibre optic bundle. For the “night sky” effect, make the marks random but spread across the whole surface of the board. Alternatively, draw a pattern of your choice. Remember to draw the mirror image of what you want to see from below. (Figures 3-4)
4. Drill the holes with the drill bit provided with your starlight kit. (Figures 5-6)



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Installing your starlight kit

5. Insert each tail into a hole and pull it right through. Where tails are different lengths, consider their position in relation to the light engine: shorter tails should be used in holes closer to the light engine, longer tails should be for holes further away. (Figures 7-8)
6. When pulling the fibres through the holes, allow at least 1-2 cm excess that can be cut later. If you are working directly on the ceiling, and not on a separate panel, this will also allow you to paint the ceiling after the installation of the star kit as the fibres can be cut once the paint has dried. (Figure 9)
7. **Apply the glue to each hole to secure the tails' position.** (Figure 10)
8. Once the glue has dried, connect the fibre optic bundle **to the light engine. Make sure it's operating as expected.** (Figure 11)
9. During the installation process, make sure that the fibres are not too tense and that they do not have sharp bends. (Figure 12)

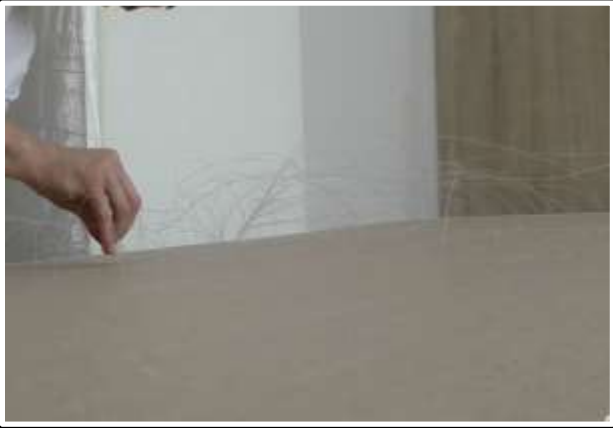


Figure 7



Figure 8



Figure 9

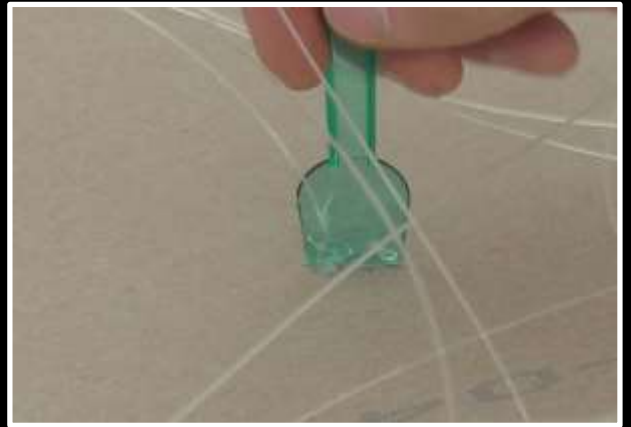


Figure 10



Figure 11



Figure 12



Installing your starlight kit

10. The light engine should always be placed in a dry location to avoid short circuits and prolong its lifetime. It should also be accessible in the future in case of technical issues or should you wish to change the light engine.
11. If you are using a dedicated frame, the next step is to secure the board to the frame. You will probably require additional help for this stage. (Figures 13-14)
12. Once the panel is in position, you can cut the excess fibres. We can get more interesting effects by cutting the fibres at a variety of angles. (Figures 15-16)

Your panel is now ready and you can enjoy the beautiful light effects.

The approximate time needed for the installation of a 3 sqm panel with 200 fibre optic tails is about 8-9 hours including the construction of the frame and the plasterboard panel. Drilling the holes and installing the fibre optic tails takes about 1.5 hours.

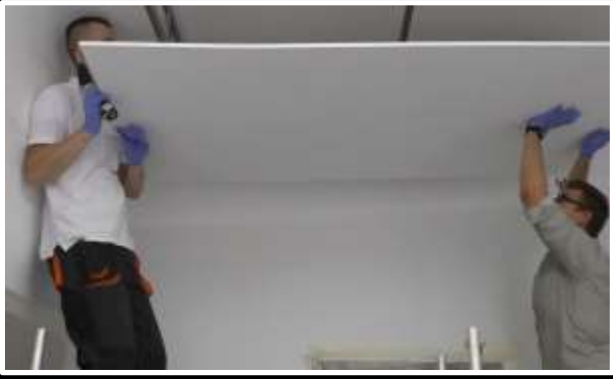


Figure 13



Figure 14

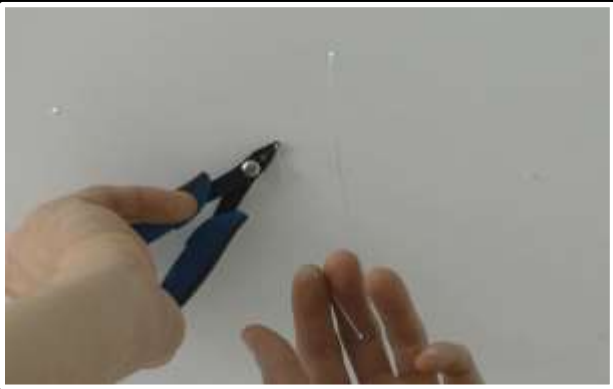


Figure 15



Figure 16

NOTES

The operating temperature for the set is 0° C to 40° C.

The light engine should be placed in a dry, well ventilated and accessible location.

The cooling holes of the light engine's casing should not be covered while in operation.

Opening or damaging the case of the light engine will void the warranty.

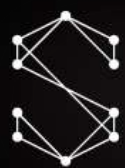
Star kits should only be installed on dry and smooth surfaces. Wet surfaces (including fresh paint) contain moisture that could short circuit the light engine.

Please do take care while working at a height by carrying the tasks out in a safe manner. At least two people are required for the installation; for larger panels, you may need additional help.

Electrical work should only be performed by trained and competent persons with sufficient skills and knowledge to avoid danger. If in any doubt, we recommend engaging the services of an approved electrician.

We do not take responsibility for any damage caused by improper installation.

If you have any questions, problems or comments regarding the installation or the operation of your starlight kit, please contact us on info@stellarlighting.co.uk



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