

Street Lights



Lighting can transform any model railway layout. The PMP12 random lights kit can be used to produce realistic street scenes with building lights randomly turning on and off. The addition of street lights will enhance the layout even further and produce an atmospheric scene.

There are many working street lamps available to match the period that you are modelling, but they tend to be quite expensive if you require them in quantity. With the aid of a few tools and some basic skills it is not difficult to create numerous types of lamppost. This article shows how to construct a swans neck lamppost typical of the late 19th early 20th century. The techniques can be adapted and used for other styles.

The main material used is round brass tube, 2mm and 3mm outside diameter (Chronos Ltd, BT2M, BT3M).

To accurately and cleanly cut fine brass tubing a mini cut off saw is recommended, see "Tools of the Trade" . To bend the tube a jewellers wire bender is recommended, see "Tools of the Trade".

Dimensions are a personal choice but there are many online references for the dimensions of real lamposts which can be scaled down.



Figure 1

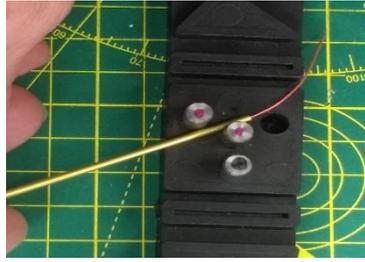


Figure 2

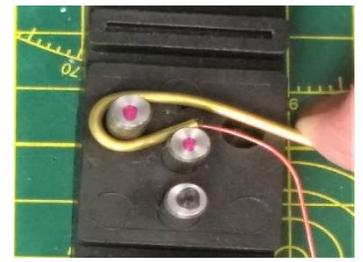


Figure 3

1. Cut a piece of 2mm diameter brass tube, in this case 90mm in length, and a piece of 3mm diameter brass tube, 10mm in length.
2. Insert a piece of fine wire, e.g Kynar, into the tube to prevent it collapsing during the bending process.
3. Insert the tube into the wire bending jig as shown and gently make the first bend.

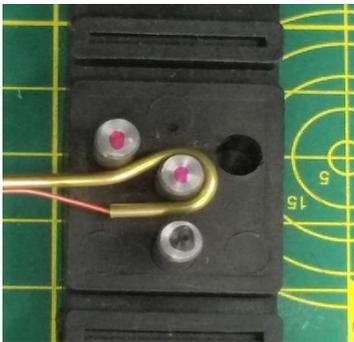


Figure 4



Figure 5



Figure 6



Figure 7

4. Turn the tube over, re-position it as shown and carefully make the second bend.
5. Cut off the excess tube as shown arrowed.
6. Superglue a 3mm washer to a 3mm warm led.
7. Solder wires as close as possible to the base of the led but use only momentary contact of the soldering iron to avoid damage. Two microlitz wires will easily go through the tube but thicker wire e.g Kynar will not. If microlitz wire is not available the cathode of the led can be soldered to the brass tube and only the anode connected by wire. A wire can then be soldered to the base of the tube to complete the connection.



Figure 8



Figure 9



Figure 10



Figure 11

8. Check the led is working. A 9V battery with a 1K dropping resistor is fine.
9. Carefully feed the wires through the tube.
10. There are options for securing the led to the tube, such as epoxy, or heat shrink tube. I am using 3.5mm heat shrink tube. The heat shrink is passed up the brass tube and carefully supeglued to the base of the led. The heat shrink is then carefully heated with the tip of a soldering iron to close it around the brass tube.

The 10mm length of 3mm diameter brass tube is slid onto the 2mm diameter tube and held with superglue. The position of the 3mm diameter tube enables you to accurately set the height of the lamp post. The lampost is completed by superglueing a 2mm washer to the base.

11. Protect the led with Humbrol maskol before spraying the lamp post with an undercoat, such as Halfords grey, and complete the job with a top coat of your own choice.

Shorter versions of the lamp post look great on period station platforms.

A simple technique for wiring street lamps is to attach two parallel bare copper wires beneath the board , a hot glue gun is good for this. Solder the lamp cathodes to one wire and the anodes, including a dropping resistor, to the other.



[Click on Image for video](#)

Keith 2/04/20