

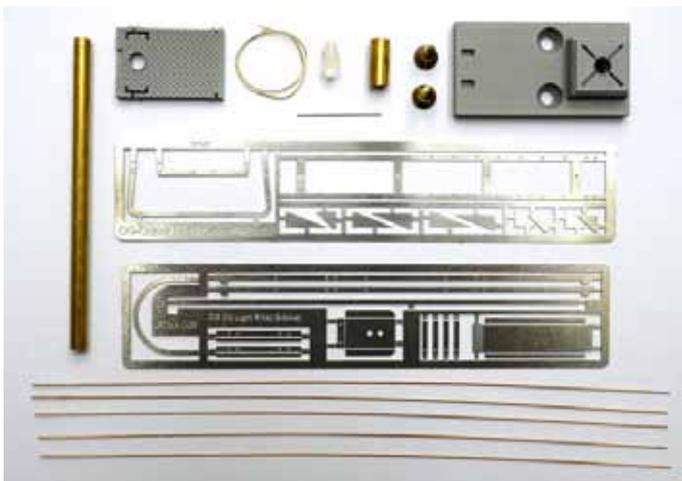
Routemex

O Gauge Junction Signal Post Kit



**Makes One post and ladder
for a Junction Signal**

Contains small parts - Unsuitable for children under 14



This kit enables you to build 1 O Gauge post and ladder with signalmans platform for for a Junction Signal. To be used in **conjunction with a Head Kit (2,3 or 4 aspect) and a route indicator** of your choice.

You will need parts from the Head and Route Indicator kits to complete the junction signal.

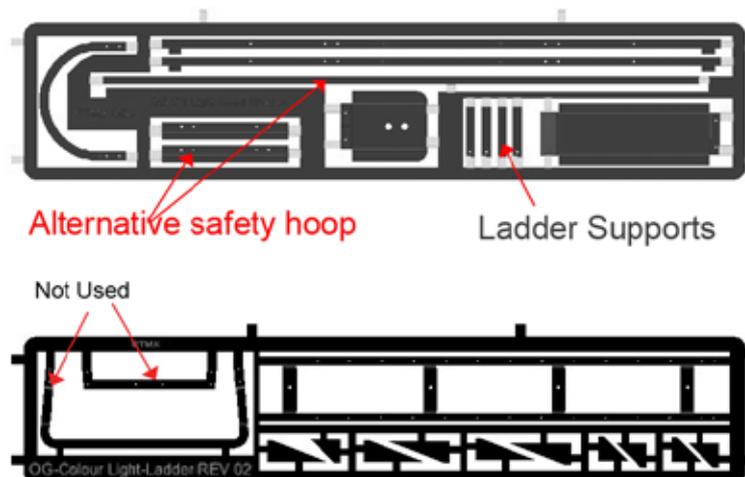
Although assembly is straightforward, I advise reading all the instructions from this kit and the Head Kit and Route Indicator before starting, as there are some areas that are best done in a specific way.

Adhesive

For the ladder assembly and ID plate wires, use thin runny superglue like ROKET HOT but for all other parts, 5 minute epoxy is best. The entire project **can** be completed with superglue but it makes proper alignment difficult and is **not recommended**.

Contents:

- Base
- Platform
- Ladder Fret Rev02
- Barrier Fret OG6
- Brass post
- Brass support tube 9mm
- Telephone box
- 0.4mm Rod - 150mm x 5
- 0.4mm brass wire 60mm
- 12mm x 3mm screws x 2
- 0.4mm drill bit



PREPARATION

Preparation and cleaning of all parts will improve glue, solder and paint adhesion.

Clean off flash and debris from all plastic parts – pay particular attention to the angle plate slots in the base. Clean metal parts by first washing in warm water and detergent to remove surface contaminants and etching residue. Clean the brass post and 0.4mm rods with fine steel wool to a high polish. The Nickel Silver components are most easily cleaned while still on the fret.

I recommend CARRS SURFACE CONDITIONER for a final clean of metal parts as this will remove the invisible oxide layer and greatly improve paint and glue adhesion and simplify soldering. Some components from the post kit, head kit and route indicator can be prepared and painted at the start as this will make construction faster and simpler.

PAINT FINISHES

There is some variation in colours depending on age and location. In general the Route indicator and main signal FRONT PLATE and target are finished in black, however, due to long exposure to the elements they have often faded to a mid-grey so it can be hard to tell what the original colour was.

The rest of the post assembly can be finished in a very light grey.

PREPARE THE HEAD UNIT:

From the head kit fit the desired **TARGET BOARD** to the **FRONT PLATE** and spray Black PIC



PREPARE THE ROUTE INDICATOR.

The support bracket is sized to fit a 4 aspect signal but is easily modified to suit a 2 or 3 aspect signal by snapping off at the half etched marks. Snap off one section for a 3 aspect signal and two sections for a 2 aspect signal as shown.

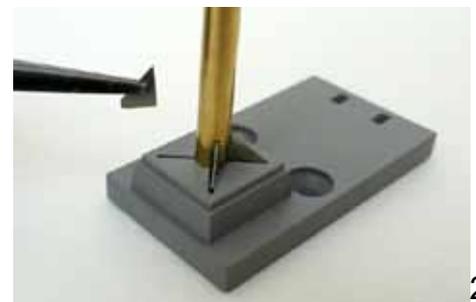
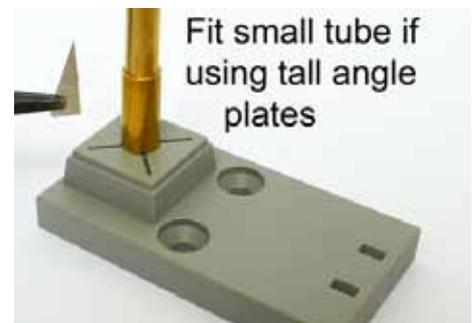
Fold to shape following the route indicator instructions. Check that it fits the platform slots before proceeding further. Paint as shown as the inside will not be accessible once fitted over the Back Box. PIC Target Boards on the Route Indicator are not always present – depends on location. If required Paint the desired Target Board and leave to dry. SUNSHADE is optional and is not always present. Fold to shape, paint and leave to dry.



POST AND LADDER:

Fix post to base – ensure measurement from top of **slotted base** to top of post is no more than 70mm – adjust post hole or post length if required. PIC

There are two options at the base: If using the high angle plates slide the small tube over and fix in place then fix the tall plates. Otherwise fit the small plates directly onto the BASE and POST. **It is vital that the slots are fully cleared of any debris and the tags on the plates fully filed off otherwise they will not fit properly.**



PLATFORM
Slide platform onto post and **leave loose**.



BACK BOX

Use EPOXY to fit back box from head kit to post- ensure it is square and plumb and allow to set. Superglue sets too fast and makes it very hard to achieve correct alignment.



Apply some EPOXY to the post and slide Platform up to meet underside of Back Box and ensure they are in direct contact. **If they are not in direct contact, the support bracket for the route indicator will not fit.** Again, Superglue sets a bit too fast for this operation.

JIG

Fold over the jig as shown and place so that the fold is at the rear of the BACK BOX and drill a 1.5mm hole – this is for the route indicator wires.



LADDER

The ladder stiles are joined by 4 connecting bars which form a temporary jig – leave these in place at this stage.

The rung holes in the ladder stiles are etched and as this is a variable process may not be quite big enough. If so, use the supplied 0.4mm drill to open up the rung holes in the stiles, hoop and stand-off. Do this while still in the fret.

Remove the ladder assembly from the fret by cutting the half etch tabs at the end of the stiles. **DO NOT REMOVE THE 4 THE CONNECTING BARS AT THIS STAGE**

With the half etch marks upwards carefully fold up the ladder sides with pliers. **DO THIS SLOWLY IN STAGES** to avoid distorting the sides and ensure they are parallel. Check the ladder is true in all aspects.

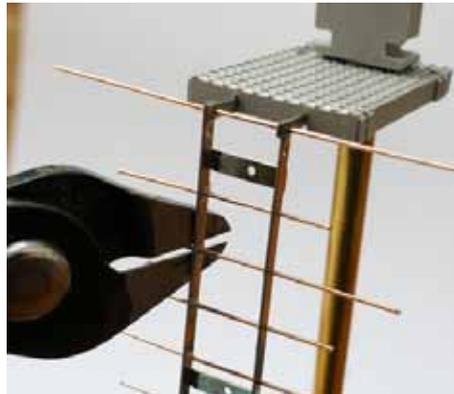
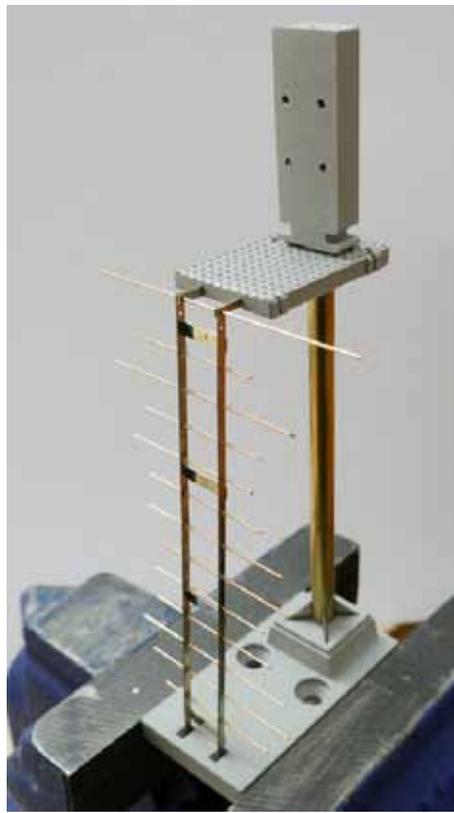
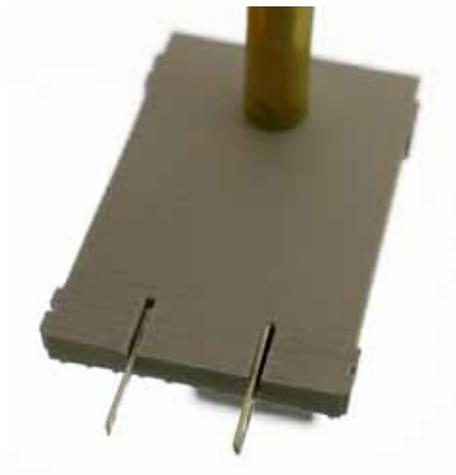
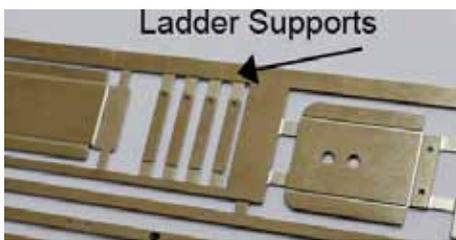
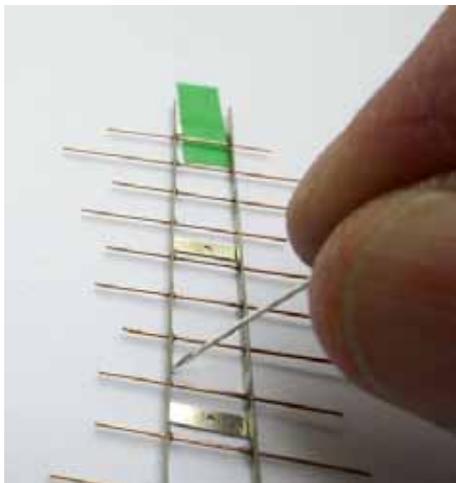
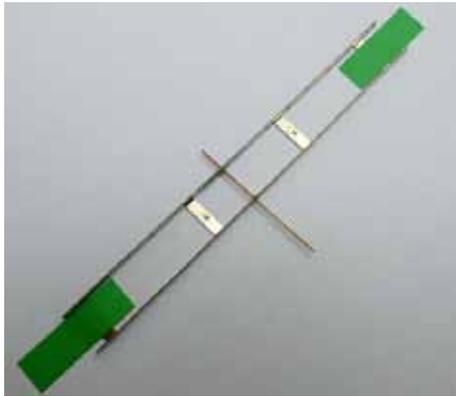
Cut 12 pieces of 0.4mm rod at approx. 25mm and 2 pieces at approx. 30mm.

TAPE the ladder assembly to a **PIECE** of **PAPER** rather than the work surface in case glue adheres the assembly to the bench **PIC**

INSERT the 12 lower pieces of wire into the stiles as shown. **DO NOT** insert rods into the top holes - these are for connecting the ladder to the platform

Use a thin runny superglue. **DO NOT** use the bottle nozzle to apply glue as it will cause blobs necessitating a lot more cleaning up later. Instead, use a pin or a piece of wire to apply the superglue to the **INSIDE** of the stiles. Do a few at a time and use a clean pin to remove excess whilst wet.

Once cured, carefully Remove the Connecting Bars by cutting in the middle with fine nosed cutters and then folding back and forth.



LADDER SUPPORT PLATE: Optional
 This is an optional item and is not always present on these signals – fold over sides but not half etch flap – place on post and check fit against ladder – fold over flap. Glue to post – strengthen by adding 0.4mm brass wire as shown. Glue to ladder rung.



ID PLATES
 Take preferred part from the Head Kit and glue to post -allow to set then feed brass wire through one side and glue, allow to set then complete by feeding wire through=h and apply adhesive.

DIAMOND

Is optional and is rarely seen on this type of signal

POSITION LIGHT BRACKET : Optional – Fold over etch and glue a piece of brass wire as shown. Then glue to post and finish by fitting 0.4mm brass wire as shown PIC

TELEPHONE BOX

Fit as shown



Fit the Route Indicator Support Bracket to the slots in the platform and ensure it is square before glueing – ENSURE the protruding top plate is at the rear and that the centre hole in the plate aligns with the hole in the back box

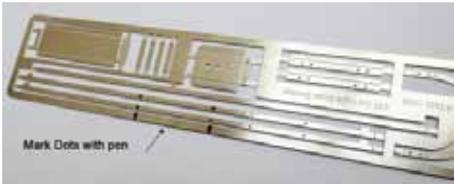




Fence/Barrier

Fit the barrier fence as shown PIC . The fence rails have small half etched marks – mark with a pen first and the metal should be bent at these points. Attach to platform ensuring the lugs are facing inwards and make sure the bottom of the rails are flush with the platform.

Insert 0.4mm rods as shown. The lower rods are permanent and should be glued at both ends PIC The upper rods are temporary and should only be glued at the ladder end.



SAFETY LOOP

The safety hoop should be bent to shape at the half etch dots as shown. Slide over rods and glue – once set cut off excess rod. Fit the hoop by sliding over the rods and trim once set.



Optional Spare Parts – Additional strapping is provided on the fret to enable custom fence/barrier assemblies.



Alternative Safety Hoop

To finish assembly it's best to fit the route indicator first by feeding the wires through the support bracket and back box and on down the post - scrape back paint on the support bracket and fix with superglue

Then feed the main LED cluster wires down the post and fit the Front Plate - ensure the wires are placed centrally to avoid snagging by the fixing screws. - Follow the wiring instructions in the Head Kit and Route Indicator kit and ensure you connect the resistors before applying power.



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