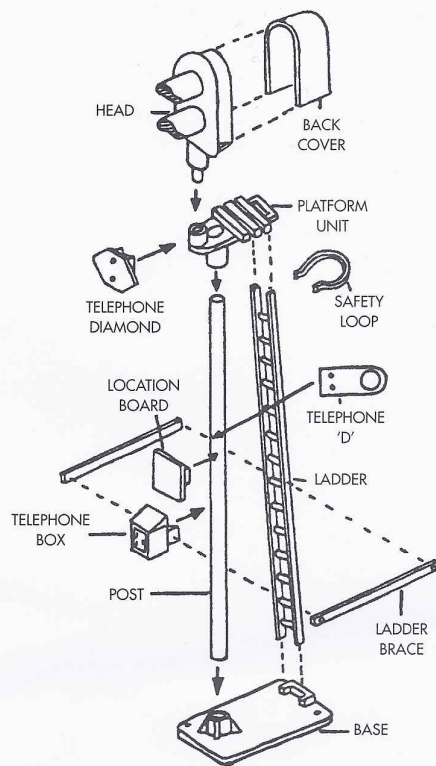


ECKON 4mm SCALE COLOUR-LIGHT SIGNAL KITS GENERAL ASSEMBLY INSTRUCTIONS



black cut-out figures are provided on this sheet. Use a general cyanoacrylate adhesive to fix parts to the metal post and polystyrene cement for plastic to plastic. The model may be painted as desired using model enamel paints.

- 1] JUNCTION SIGNAL KITS have the junction arms fitted to the post. The post must be inserted into the base carefully to give the required 'hand'. All other assembly as detailed below.
- 2] Study the exploded view of parts (individual components may change in detail from time to time) before commencing assembly. Always cut parts from their sprues with a sharp craft knife or single edged razor blade.
- 3] Place the base on a flat, hard surface and insert the post. Gently tap the top of the post until the bottom of the post is flush with the under surface of the base, to give an interference fit.
- 4] Ease the platform unit onto the top of the post, making sure the housing for the head is to the front and the ladder housing is square with that of the base. Tap the platform unit firmly down, using a steel rule (or similar piece of material) placed centrally over the post until the unit is flush with the top of the post.
- 5] The signal head can now be fitted to the platform unit (and the junction arm if applicable). The head spigot should be an interference fit. If the head will not go into place with moderate pressure, coat the hole with a very small amount only of liquid polystyrene cement. After one minute, ease the head into place. Check that the head is square with the rest of the assembly.
- 6] The ladder can now be fitted between the housing on the base and that in the platform unit, using a little liquid polystyrene cement. For kits with short posts, the ladder must first be cut to the required length.
- 7] Using a small amount of low viscosity cyanoacrylate adhesive (thin super glue) fix the telephone box squarely to the front of the post. The underside surface of the box should be 1.6mm from the top surface of the base unit
- 8] The ladder braces may now be cemented from the telephone box to the sides of the ladder. Instructions as at No. 7 should be followed if this process is to be completed successfully.
- 9] Thread the LED leads down the post and insert the LED bodies into place from the rear of the head (see aspect positions 'below'). Place the back cover onto the rear of the head. **DO NOT CEMENT.** If the cover is a loose fit, gently squeeze the sides together or fix in place using a soluble glue, so as not to obtain permanent assembly.
- 10] The last details can now be added to the model, i.e. the safety loop to the top of the ladder, the telephone 'D' OR Diamond (these items are not used together) to the post and the location board. For this last item white on

WIRING INSTRUCTIONS

These wiring instruction assume that the assembled model is to be operated manually using our own ECKON 'LECTRALOK' electrical lever switches. Any other preferred method must be undertaken with the modellers own knowledge and risk.

To achieve the full range of signalling combinations, each HEAD should be independently switched. A 2 aspect head should be wired to a two way switch (Cat. No. EE2). A 3-aspect head to a 3-way switch (Cat. No. EE3) and a 4-aspect head will require two switches, one 3-way switch (Cat. No. EE3) and one ON/OFF switch (Cat. No. EE1) the latter to operate the auxiliary yellow in the top aspect. An ON/OFF switch will also be required to operate the route indicator heads. Searchlight heads are treated as 2-aspect.

Before attempting to illuminate any LED a resistor must be fitted to the WHITE lead before a current of 12 VOLT DIRECT CURRENT ONLY is applied. The white leads of a head should be joined together and a single resistor installed. See the wiring diagrams on this sheet for clarity. The POSITIVE supply to the COLOURED leads and a NEGATIVE supply to the WHITE RESISTED lead. If this polarity is reversed the LED will fail to illuminate.

For easy identification, kits with a 4-aspect head will contain one yellow LED wired with a BLUE lead (Negative) and a Black lead (Positive). Kits that contain more than five LED's are now supplied with common return wired LED sets, spaced to fit directly into the signal heads.

On no account must a higher voltage than that stated be used. Although LED's can be illuminated on A.C. current, they will appear to 'flicker'. this constant change in polarity will very considerably reduce the normally very long life of the LED.

As will be seen the wires have been attached to the LED's at a convenient 90 deg. angle to eliminate the need to bend the wires. Please read the reverse of the ECKON package: CUSTOMER ADVICE AND GUARANTEE.

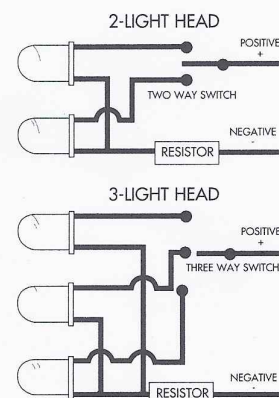
POSITIONING OF LED's

The most common form of aspect positions (from the top to bottom) are as follows:

- 2 aspect HOME.....GREEN-RED
- 2 aspect DISTANT.....GREEN-YELLOW
- 3 aspect HOME/DISTANT.....GREEN-YELLOW-RED
- 3 aspect DISTANT.....YELLOW-GREEN-YELLOW
- 4 aspect SECTION.....YELLOW-GREEN-YELLOW-RED

The idea of aspect positioning, is to have the red light as near to the drivers eye line as possible and to be visible for as long as possible, even when viewed from directly under the signal. With this in mind, the red light is normally in the lowest aspect. There are no doubt exceptions. Similarly, ground signals can have the red light at the top of the head.

The above aspect notes are intended for guidance only and do not imply any expertise on the subject by the manufacturers.



0 1 2 3 4 5 6 7 8 9	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
0 1 2 3 4 5 6 7 8 9	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z