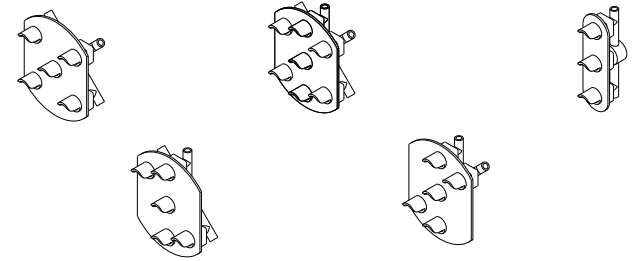
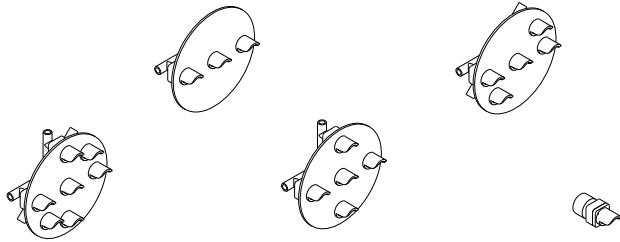




HO Scale Position Light Signal  
 Little Lights Scale Model Details  
 By D5 DEM Model Smiths™

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Congratulations on your purchase of this authentic scale model position light! Below, we outline details and safety precautions to help you get the most out of your model.

### Latex Allergen Warning

This model contains natural latex out of the package. Latex is used to mask the lenses on the model, protecting them from overspray from paint. Use caution when handling the masking, and properly dispose of these plugs after painting.

### Electrical Basics

As with all of our lighted models, this signal is pre-wired and fully functional out of the package. This model uses no common anode or common cathode connections between LEDs, but rather each LED has its own anode and cathode connection. This allows for the most flexibility in wiring the signal to display different aspects. For each light, the red wire is the positive anode connection, and the yellow wire is the negative cathode connection.

To make it easier to install, we have provided the wires at different lengths. Using this standard scheme, it is easy to identify which wires correspond with which lights. This scheme varies slightly between the upper and lower signal heads:

- On the upper signal head, the longest pair of wires is for the center light. The next longest pairs correspond to the vertical lights, the next longest pairs are for the diagonal lights, and the shortest pairs are for the horizontal lights.
- On the lower signal head, the longest pair of wires corresponds to the center light. The next longest pairs are for the lower quadrant lights (left diagonal), the next longest pairs correspond to the vertical lights, and the shortest pairs correspond to the upper quadrant lights (right diagonal).

The wires are provided pre-tinned, so it is simple to solder together or to secure in a screw terminal block.

This model uses 2 volt LEDs rated at 20 mA. When powering the model in the range of 5 to 12 volts, we recommend using resistors at approximately 560 ohms. This requirement can change, though, depending on the configuration used to light the different aspects. Please contact us if you are uncertain about powering the signal, as improper use of these resistors will damage the LEDs.

### Preparing for Installation

Before installing this model on your railroad or diorama, you may want to paint and weather it. The model is made of resin, so most standard model paints work well. The signal comes with a latex mask over each lens to protect against overspray. Once the model has been painted and weathered, a pair of fine tweezers can be used to remove the latex mask from each lens.

### Installation

This model is provided with four different brackets, which can be used to mount it to round tubing. Two brackets are designed to mount to 1/8" tubing, while the other two work with 1/16" tubing. While it is common to use brass or aluminum tube for this type of installation, we strongly advise against using metal tube. Instead, we recommend using plastic tube, such as polystyrene, acetal, or acrylic. This recommendation is made because metal tube has the possibility of damaging the insulation on the wires, which can cause an electrical short. This would affect the ability to display all aspects on the signal.

To install the signal, first slide the mounting bracket onto the tube and place it in the approximate position. Next, use a fine drill bit to drill a hole through the hole in the bracket. Make sure the hole is large enough for all the signal's wires. Then, carefully uncoil the wires on the signal. Take extra care not to kink any of the wires; it is easiest to work if the wires remain straight and free from kinks or knots. Feed the wires carefully through the hole and down the length of the tube. We find this is easiest if you twist the ends of all the wires together, so they are fed as a single bundle. Once the wires pass out the bottom of the tube, carefully pull them to take up the slack, positioning the signal head on the bracket. Use a small amount of cyanoacrylate glue (CA Glue, Krazy Glue) to secure the signal head to the bracket, adjusting it so it remains straight up and down and in line with the tube.

### Final Note

We employ strict quality control standards to make sure each signal works correctly and is free from blemishes before packaging. However, we also understand that this model and the wires used to power it are fairly delicate. If you have any troubles when installing the model, or something becomes damaged in the process, please contact us. We want to make sure you get the most out of your purchase, so we will set things right. You can use the contact form available on our website, or you can email us directly at [service@d5dem.com](mailto:service@d5dem.com).

