

HO Scale PL Signal Trackside Mast Kit

Little Lights Scale Model Details

By D5 DEM Model Smiths®

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Congratulations on your purchase of this position light mast kit! This kit is designed specifically to work with our PL-2 Position Light signals. With a little patience, these components yield a highly accurate recreation of a trackside signal used on the Pennsylvania Railroad.

Kit Contents

This kit contains both resin components and a brass tube for the main mast. All pieces are ready to go with no required cutting or drilling. The brass tube is cut to length to match the standard 18 foot mast design. The two holes drilled in the side indicate the positions for the upper and lower signal faces. The holes are used for passing the wires from each signal into the tube body

In addition to the tube, the kit includes a one-piece ladder/platform/handrail assembly. The ladder assembly is flexible to reduce the chance of breakage, yet it becomes properly rigid when installed. Additionally, the kit includes the pinnacle for the top of the mast, the base for the bottom, and two brackets for mounting the signal faces. Note that the signal heads come with these brackets as well; duplicates are provided just in case.

Preparation

Care and patience are critical to achieving good results with this kit. The specific procedure outlined has been developed based on experience and customer feedback, and works well to yield proper results. Please carefully read through this procedure before beginning, and diverging from the procedure is not recommended.

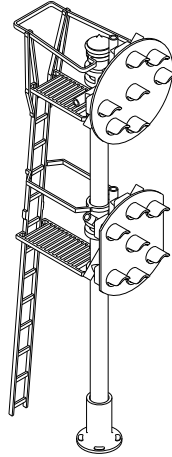
Recommended supplies include a pair of fine tweezers, cyanoacrylate glue (super glue) with a fine applicator, and tape. A small desktop vise will aid while installing the signal faces, but is not strictly required. Additionally, a flat work surface will assist with alignment when gluing all components together.

Assembly Procedure

First, secure the base to the bottom of the mast with a dot of glue. Be careful not to obscure the hole in the bottom with the glue.

Next, carefully slide on the ladder assembly and two brackets from the top of the mast. The correct order from the top down is as follows; (1) the lower platform mount, (2) one signal bracket, (3) the lower handrail mount, (4) the upper platform mount, (5) one signal bracket, and (6) the upper handrail mount. By following this order, both signal mounts can line up with the holes in the mast, and the ladder can remain properly straight. Do not glue these components to the mast at this time.

After this, it's time to feed the signal wires through the mast. Begin with the lower signal, then repeat the process with the upper signal. Carefully untwist the wires for the signal and stretch them out. Note that the coil of wires should stretch out like a slinky toy; stretch them slowly so as not to create tight loops/knots. Do not uncoil them like an extension cord. Tape the wire ends to your workbench, then straighten the wires between your fingers to mitigate the coil effect. With the wires generally straightened out, twist the ends together to create a single cable. Best results will be achieved if you twist the end two to three inches of wires; it is not strictly necessary to twist the entire length of wires. Bend the twisted wire ends into a hook shape with a radius to match a pencil.



Now for the tricky part. Position the lower signal bracket so the hole aligns with the hole in the mast. Take the twisted wire ends bent in a hook shape, and feed them into the hole and down the mast. The hook shape should help guide the bundle in. Be careful not to jam the wires in, or you will need to pull them out and try again. This will take careful adjustments, however once the wires begin moving, the motion should be smooth and easy. Carefully work the bundle of wires in using an up and down rocking motion to aid in the sliding motion. Best results are achieved when the bundle of wires being fed in sit at a 45 degree angle from the mast; it's much harder to feed if the wires are perpendicular to the mast. Carefully feed the wires a bit at a time until the bundle is available out the bottom of the mast. At this point, carefully and slowly pull all the wire through until the back of the signal locks into the bracket. Carefully loop the wires together to keep them tidy and out of the way.

Repeat this process for the upper signal. The entire procedure will be the same, it'll just take longer as the wires have further to travel. With both signal heads in place, you may want to coil all wires together. As the upper signal sits about an inch above the lower signal, the wires out the bottom will be shorter. This makes it easy to distinguish the wires between the signal heads later on.

Now that the hard part is out of the way, it's time to secure the components to the mast. First, glue the signal heads to their brackets, being careful not to glue the brackets to the mast yet. For each one, look at the signal head on to ensure the rotation is correct relative to the axis of the mast.

With the signal heads fixed to their brackets, place the assembly face down on your workbench. Allow the hoods on each lamp to touch the workbench, aligning the upper and lower signals so they are coplanar with each other. With this alignment properly confirmed, carefully glue each bracket to the mast.

Once that glue has set, glue the pinnacle to the top of the mast. Then, carefully glue all four ladder mounting points to the mast. The mount for the top handrail should glue right against the pinnacle, then the position of the other three mounts should be adjusted so the ladder remains straight. Look from the top down to ensure the rotation of the ladder assembly matches that of the signal heads.

Painting

With the signal mast assembled, you can now paint it using the method and paint of your choice. The resin components work well with all standard model paints. Note that our signals come with latex masking on each lens. This allows you to use an airbrush or spray paint without the fear of painting over the lights. After the painting process is complete, use a pair of tweezers or a toothpick to remove the masking from the lenses. More details can be found in the instructions for the signal heads.

Final Notes

We employ strict quality control standards to ensure each kit is consistent and free from damage. However, we understand that the components in this kit are very delicate, and the assembly process may lead to broken kit components. If you have any problems with the assembly process, or any parts are inadvertently broken, please contact us. We want you to 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.