

# Instructions

## Art-Nr: 5050 / 5051 Red illuminated safety stop signal

1. These parts are not suitable for small children. There is a danger of swallowing.
2. The product 5050 can be seen in figure 1. To article 5051 the separate red warning sign is loosely enclosed. It has to be pasted by yourself underneath the LED. These instructions are part of the product. Please retain them well.
3. The component is suited for direct and alternating current from 6 – 16 volt. The current consumption depends on the brightness of the LED connected, usually it is a couple of milliamperes.
4. At its input side, the component is equipped with slide-on receptacles that fit with the small banana plugs commonly used in the model train world. The usual current supply with a yellow and brown wire is sufficient. The polarity does not matter, the component is suited for direct and alternating voltage.
5. At the output side, the component is equipped with screw clamps that accommodate even the smallest wires. This has the advantage that for the installation from below your model train facility you do not have to do any soldering – overhead soldering can be quite dangerous due to solder dripping down.
6. The component has a controller with which the brightness is continuously adjustable from almost zero to the maximum. Turn the red control knob as far as possible to the left, the LED is switched off or only shining very dim. Keep in mind that the component is suited for 3 to 4 LEDs and so supplies more current than one LED alone can use. Therefore turn the knob only very slowly to the right. Like this you can regulate the brightness exactly as desired. Regarding its dimension, it is the smallest LED on the market, but it shines with the same brightness like the others – so by regulating the current at the component you can get your LED shining brightly and well visible. We often like to compare the intensity of this light with a fog tail lamp. But if the color of the light changes from dark red to light red or orange, the LED is likely to get damaged – turn down the brightness instantly. You have the right amperage, if the LED is always shining in the same color, a luscious dark red. If regulating the current, only the brightness or brilliancy should change. As soon as the color changes, the current flowing through the LED is too high.
7. As a protection against an eventual shifting, it is possible to remove the red leveling disc with a little effort – of course it also can be put back on anytime. Besides this feature, the component is working absolutely independent from possible voltage fluctuations on your facility that usually are caused mainly by engaging further consumer loads like a track switch. In this case, the electronics intervenes at once and the brightness of the LED remains unchanged.

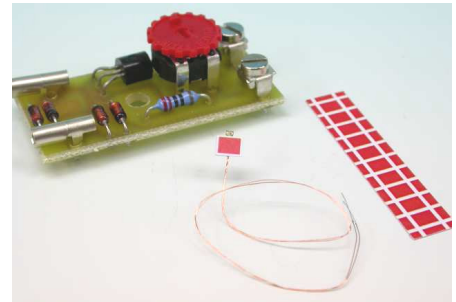


figure 1: Illuminated safety stop signal with a connecting component for regulation of the brightness, and with 10 further warning signs to be cut out included

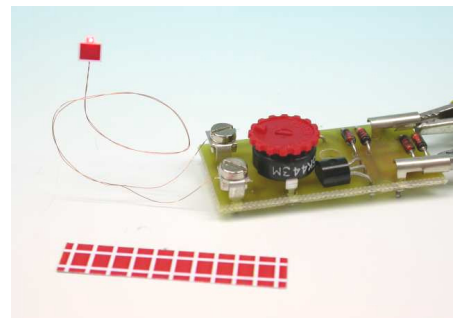


figure 2: Connecting the LED to the component



figure 3: Illuminated and not illuminated – affixed to the doors of the engine shed



figure 4: A great effect – more may not be said about this



figure 5: Dawn is closing in...

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8. The component works according to the principle of constant current. So it has no importance which LED in which color or working voltage is connected to it. The voltage is regulated automatically, what you can regulate with the controller is the current running through the LED.
9. The component comes with a hole in the middle, so it can be installed with a screw directly below the train facility. Spacers are not necessary, the soldering points then abut directly on the wood.
10. Do not connect any of the contacts with each other. Unlike with older components, there is no common mass. All the four contacts carry a different potential.
11. High Tech Modellbahnen manufactures its products with the greatest possible care. We issue a guarantee and warranty according to legal regulation. Should you find any new product you just bought defective, please contact your local dealer.
12. If one of our products has been damaged or breaks, please contact your local dealer as well. He often might be able to save it, while own attempts to repair it might lead to a total economic loss.



figure 6: Thanks to the very thin wires, the door of the shed can still be opened without any problem

Now enjoy your new red illuminated safety stop signal, and always have the lights on your train facility shining brightly.

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