



**Z-Stuff for Trains**  
*Making model railroading more fun*

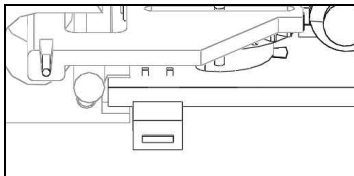


## G-Gauge TrackSide Signal Instructions

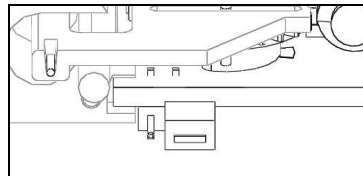
### Instructions

Remove the bottom cover and attach a 9V battery. [Alternately, the signal only needs the RED wire connected to power (12-18V AC or DC) and the BLACK wire connected to common.] Place the signal next to the track about 1-1/8" away from the outside rail. Facing the front of the signal, the train is detected on the LEFT side. The sensor will typically not reach across more than one track. When the train passes the signal, the indication will change to RED or stop and hold until the train has passed.

4 seconds after the train passes, the signal will change to YELLOW or caution. Then, after 4 more seconds, it will change back to GREEN or clear. This time can be increased by moving the jumper on the bottom of the circuit board. Remove the bottom cover and pull the jumper off and put it on only one pin as shown below for a 12 second and 8 second delay.



Position for 4 sec. Delay



Position for 12 sec. Delay

On 9V battery power (only), the signal will go to sleep if a train does not pass the signal for 20 minutes. This is to increase battery life. The signal will wake up and operate again when a train passes it. The signal will operate with no sleep mode if powered by 14-18V AC or DC.

The signal only needs power to operate, but it does have an input (YELLOW) and an output (WHITE) for additional possibilities. **This requires the BLACK wire to be connected to the COMMON of the other signal, sensor or relay.**

**OPTION A** – If the WHITE wire of a signal down-track is connected to the YELLOW wire of an up-track signal, the up-track signal will hold on caution (YELLOW) until the down-track signal goes off stop (RED).

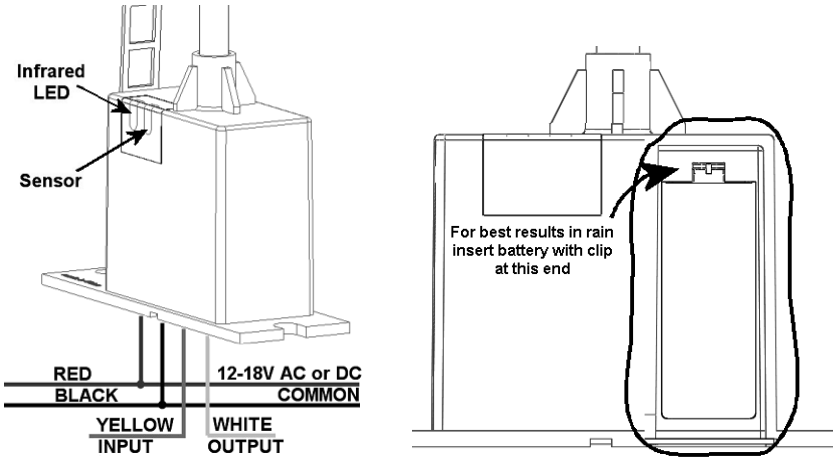
**OPTION B** – The WHITE wire can be connected to the GREEN wire of a DZ-1008 relay module. The RED wire of the DZ-1008 should be connected to the same power as the signal and the BLACK wire connected to common. The signal will then cause

the relay to change when the signal goes to stop (RED) and the relay will change back when the signal goes off stop to caution (YELLOW).

**OPTION C** – If the sensor is covered with black tape, then the input (YELLOW) wire can be used by itself to control the sensor. Connecting the YELLOW input wire to COMMON will cause the signal to indicate RED (stop). With the wire not connected, the signal will time-out and go to YELLOW (caution), and then GREEN (clear).

Check our website for other applications and use of signals.

[www.z-stuff.net](http://www.z-stuff.net)



Ver. 6-15-10