



# Z-Stuff for Trains

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## DZ-1012v Block Signal Instructions

The signal only needs the RED wire connected to power (9-18V AC or +DC) and the BLACK wire connected to common (-DC). 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 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. 8 seconds after the train passes, the signal will change back to GREEN or go. The WHITE wire output goes from 5V. to 0V. when a train is sensed.

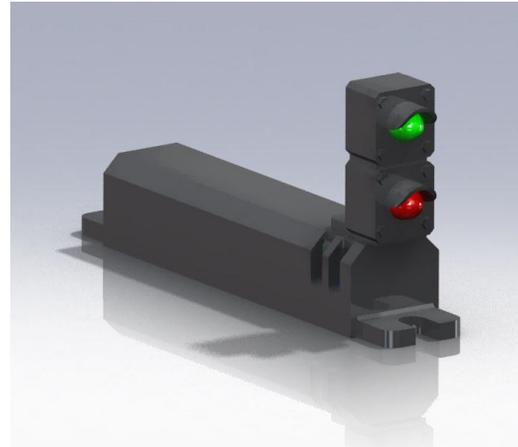
The 8 sec. delay indication change can be set by the user to be any 1 sec. increment from 1 to 60 sec. This is done before power is applied. Hold the YEL and WHT wires together before power is applied. Then, turn on power. The RED LED will flash once per second. Hold YEL to WHT for as long a delay as desired. Remove WHT from YEL after the delay time you desire. Turn off power. When power is turned back on the delay you have set will now be the delay from RED to GREEN.

The signal only needs power to operate, but it does have an input (YELLOW) and an output (WHITE) for additional possibilities.

**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** –The input (YELLOW) wire can be used to control the sensor. Connecting the input wire to common or 0V will cause the signal to indicate stop (RED). With the wire not connected, the signal will time-out and go to GREEN.



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