



# Z-Stuff for Trains

Making model railroading more fun

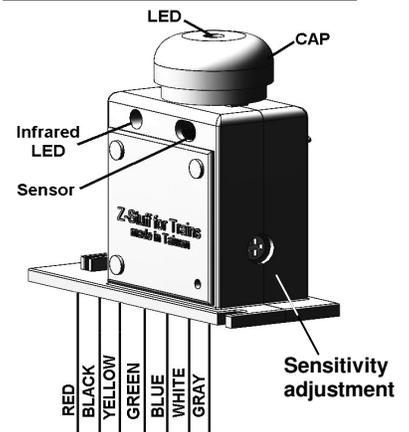


## DZ-1075 TrackSide Power Sensor Instructions

This trackside sensor only needs the RED wire connected to power (12-18V AC) and the BLACK wire connected to common to operate. It has been tested in ALL lighting conditions from total darkness to direct sunlight with no problem. Place the sensor next to the track about 1-1/2" away from the outside rail. Facing the front of the sensor, the train is detected on the LEFT side. The sensor will not reach across more than one track. If more sensitivity is needed to detect black rolling stock, try rotating the sensitivity adjustment clockwise. For some rolling stock the sensor may need to be raised to sense the high riding cars. When the train passes the sensor, the LED in the cap will light until the train has passed. 4 seconds after the train passes, the LED will go out. When the LED is lighted the GRAY wire will turn on and the WHITE wire will turn off. When the LED is not lighted, the GRAY wire is off and the WHITE wire is on. The outputs can directly handle nearly 1 Amp on each output. This means they can operate nearly any signal or accessory with lamps, solenoids, or unusual wiring that would otherwise require a relay.

**OPTION A** – The WHITE and GRAY wires are connected directly to the GREEN and RED wires of an MTH signal with the BLACK wire of the signal connected to common. The BLUE wire connects to ACC power. The MTH bridge and cantilever signals a typical examples. For these signals, (2) DZ-1075 will be required. One for each track.

**OPTION B** – If the optical sensor is covered with black tape, then the input (YELLOW) wire can be used to control the sensor. Connecting the input wire to an isolated rail will cause the sensor to change its two outputs and operate a typical LED signal.



Wire Color	Function
RED	ACCESSORY POWER
BLACK	NEUTRAL or Common
YELLOW	INPUT (low → ON)
GREEN	OUTPUT (5VDC)
BLUE	ACC PWR OR COMMON
WHITE	NORMALLY 'ON'
GRAY	NORMALLY 'OFF'

