Z-Stuff for Trains
making model railroading more fun

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DZ-1265
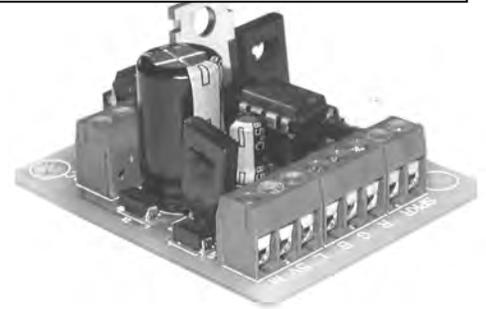## Diesel Fueling Station Animator
With TMCC Compatibility
Rev. 11-10-03

Contents:
(1) DZ-1260 Controller (Same Board used for DZ-1260)
(1) DZ-1265-2 Detector & White LED
(1) DZ-1205 Sensor and (1) Mounting Screw
(1) DZ-1015 Speaker
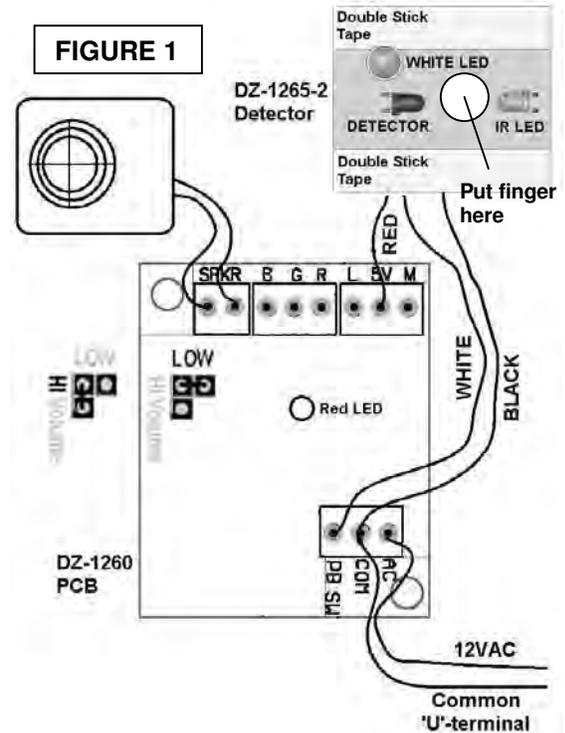(4) Reflector Cards
(2) Mounting Screws for Controller

Features:
The DZ-1265 Diesel Fueling Station adds sound and engine sensing to Lionel's 415 Diesel Fueling Sation adding a little touch of fun to your layout.. Just add the detector for the little man, a white reflective card to the engine's fuel tank, and a sensor that mounts between the rails. When the engine stops so that the card is over the sensor and the LED lights up for 1 second, the man goes into action. The sound of his footsteps, the sound of the hose connecting and the fuel being pumped into the fuel tank are heard. After the "You're all set to go!" is heard the hose is disconnected and the man walks back to the building. Manual actuation is also possible with the traditional push button. The DZ-1265 can also be operated using Lionel's CAB-1 Remote.

DZ-1265 Setup & Test:
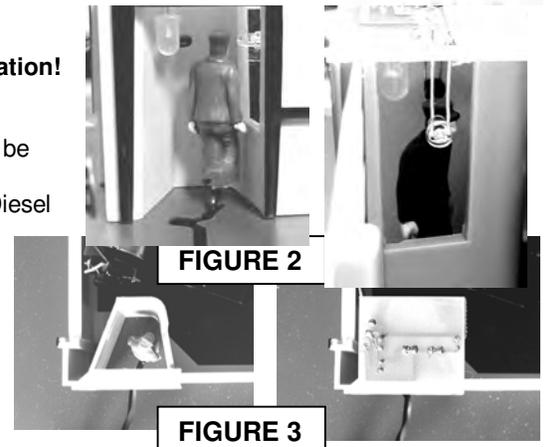   See Figure 1 - Consider testing the setup on a bench or tabletop before installing on your layout.
1) Connect a short piece of wire (TEST WIRE) to COM of the power connector.
2) Connect the speaker to the two terminals marked SPKR.
3) Connect the DZ-1265-2 Detector & LED. The RED wire connects to '5V' terminal, the BLACK wire connects to 'COM' and WHITE wire to 'PBSW'.
4) Connect 12VAC to the AC and COM inputs and turn power **ON**.
5) As soon as the power is turned on you should hear the sound of footsteps and the WHITE LED should be ON. If not, check to make sure the infrared LED and SENSOR are facing each other.
6) Place your finger or other object between the IR LED and DETECTOR. The WHITE LED should go out.
7) Turn power off. Connect the black plastic SENSOR as shown in Figure 4.
8) Remove the covering on the double stick tape and place the DZ-1265-2 Detector on the station house above the doorway as shown in Figures 2 & 3. Connect the 415 Motor and Power connections as shown in Figure 4.
9) Turn power on. The Animator will automatically start to move the man in and out of the station doorway. This will be repeated until the timing is correct for the voltage applied. (11-14VAC, 12VAC is best)
10) With nothing in front of the SENSOR, the WHITE LED should be OFF. Place one of the white cards ½" in front of the SENSOR. The White LED should turn on immediately and after 2 seconds, the 'walking' sound should be played, the man should come out and start the 'fueling' sound. After 'You're all set to go.', he returns to the building to the sound of footsteps.
11) Lastly, change the VOLUME jumper to HI or LOW as desired.

This completes the "Bench Testing" of the DZ-1260. Now you are ready for installation!
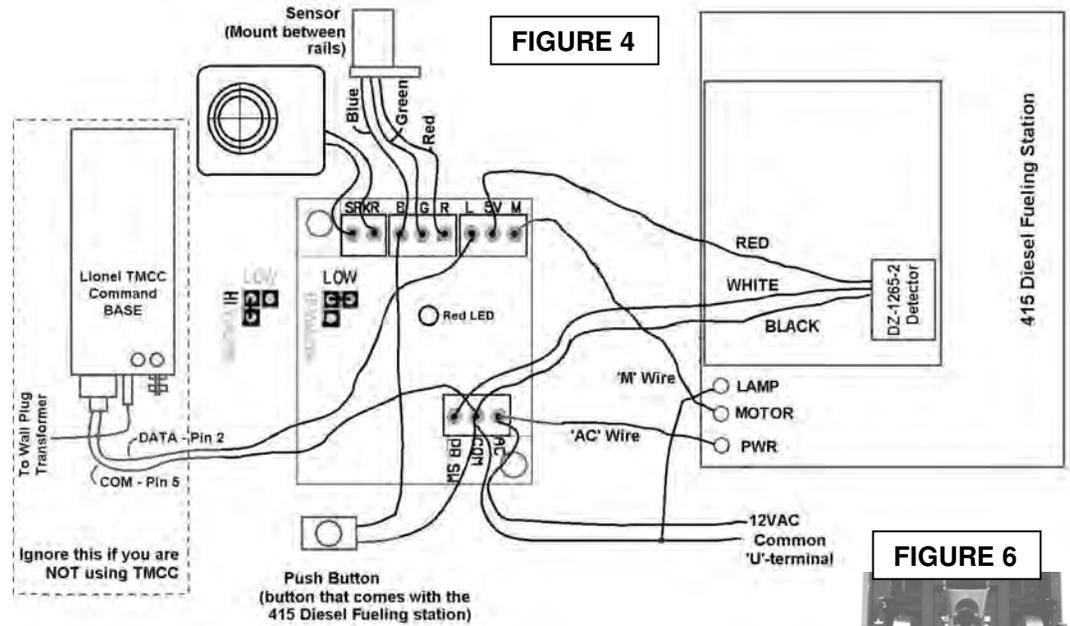
Installation:
1. Mount the SENSOR between the rails as shown in Figure 5. The SENSOR should be opposite the slot that guides the little man.
2. Connect the DZ-1265-2 DETECTOR, SENSOR, SPEAKER, PB Switch, and 415 Diesel Fueling Station as shown in Figure 4.
3. The white card can be mounted on the fuel tank of most diesel engines. Figure 6 shows the card mounted using the sticky tape on the back of the card.
4. Place the engine on the track away from the fueling station and SENSOR. Slowly move the engine down the track until the WHITE LED turns on. When it turns on, stop moving the engine. After 2 seconds, the sound should start playing and the man should 'walk' out and start fueling. After the "You're all set to go!" announcement, the man will return to the doorway.
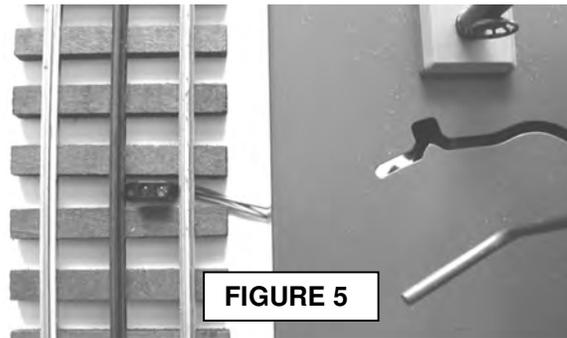

FIGURE 1

FIGURE 2

FIGURE 3

TMCC Compatibility:

The Diesel Fueling Animator can be operated remotely from your Lionel TMCC CAB-1 controller using the accessory function. The DZ-1265 must first be connected to the command base and given an address. You need a DB-9 with a DATA wire connected to pin 2 and a COMMON wire connected to pin 5. Plug this into your Lionel Command Base computer port. The COMMON wire connects to the COM input on the DZ-1265 and the DATA wire connects to the 'L' input on the DZ-1265. Figure 4 shows these connections. Lionel 6-14191 or Z-Stuff DZ-2001.

FIGURE 4

FIGURE 6

To SET Accessory ADDRESS:

1. Connect a wire from the 'B' to COM.
2. Make sure the Lionel Command Base is ON and that the data cable is plugged into it. The wires from the cable should be connected to the DZ-1265.
3. Turn ON power to DZ-1265. The RED LED and the WHITE LED (if it's connected) will light. The board is now ready to receive an address.

FIGURE 5

4. Using the CAB-1 remote, Press ACC button then the address you'd like for the DZ-1265, any number from 0-99. Then press AUX1. If the address is accepted by the DZ-1265, the RED LED will slowly flash. If the command is incorrect, the LED will flash and then stop. You can simply try again.
5. When the RED LED is flashing continuously, turn OFF power and remove the wire you connected from 'B' input to COM. You are now ready to use the DZ-1265 with your CAB-1 remote.

To Operate using the CAB-1 Remote:

Press ACC, then the address number, and then AUX1. The RED and WHITE LEDs should turn ON, the sound should start playing and the man should walk out and fill up the engine's fuel tank.

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For Technical Questions Call:

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