

INSTRUCTIONS FOR THE #83649 GRADE CROSSING FLASHER CIRCUIT

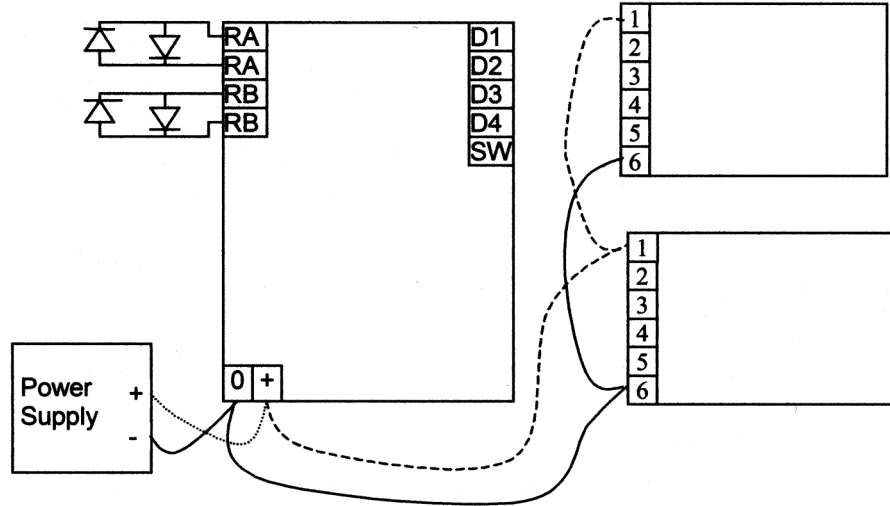
The crossing controller circuit works on single or double track. It may be operated by reed switches, IRDOT-1 infra red detectors, or manually with a switch.

POWER CONNECTIONS

For a 12 volt DC supply, connect the supply positive to the "+" and supply negative to the "o" terminals of the crossing controller. The IRDOT-1s are wired to the same power supply as shown in the diagram. Connect the terminal 1's to positive and the terminal 6's to negative. Now check that each IRDOT-1 is working correctly. The LED supplied fitted to the IRDOT-1 should light when your hand moves over the IRDOTs infra red sensors. If the LED does not light, recheck the power wiring. If the LED is permanently lit, check for infra red reflections off ties, etc. The wiring is identical for AC. Ensure that terminal 6 of the IRDOT's and terminal 0 of the crossing controller are all connected together.

TRAIN DETECTORS

One detector is required at either side of the crossing. Wire from terminal 2 of the IRDOTs to terminal D1 and D2 of the crossing controller. Reed switches can be used instead of IRDOT-1 train detectors. Wire one end of each reed switch to the "o" terminal. Wire the other end of the reed switch as described for terminal 2 of the IRDOT. For double track, two more detectors or reed switches are wired to terminals D3 and D4.



CROSSING LIGHTS

Two pairs of LEDs are provided for the crossing lights.

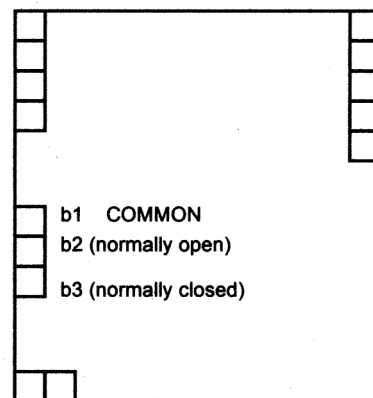
Different sized LEDs may be substituted. One pair of LEDs connects to terminals RB, the other to terminals RA. When the lights are being flashed, the polarity of the terminals reverses, allowing the LEDs to be light alternately with only two wires connected to the LEDs. The LEDs are connected with the long leg of one to the short leg of the other.

MANUAL SWITCH

For manual operation, a switch can be used to make a connection between terminal "o" and terminal "SW".

RELAY CONNECTIONS

The diagram shows the 3 connections to the relay contacts on the circuit board. The relay switches while the lights are flashing. It maybe used to operate barriers by using it to switch a slow motion switch motor.



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