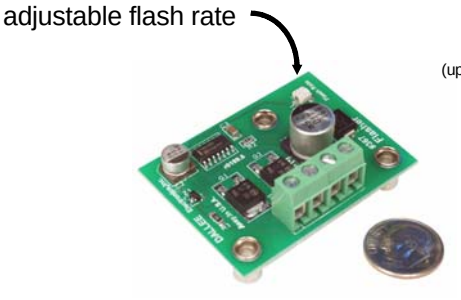
FLASHER
Grade Crossing Light Flasher

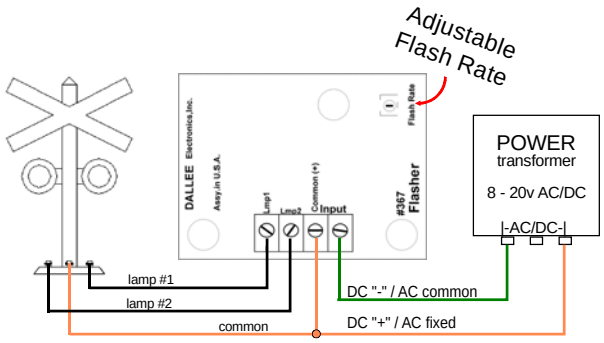
Item # 367



Meas 1.5" x 2.0"

two crossbucks may be connected to 1 flasher

(up to 3 amps per lamp ouput)



The FLASHER circuit is completely solid state and operates with either AC or DC input power.

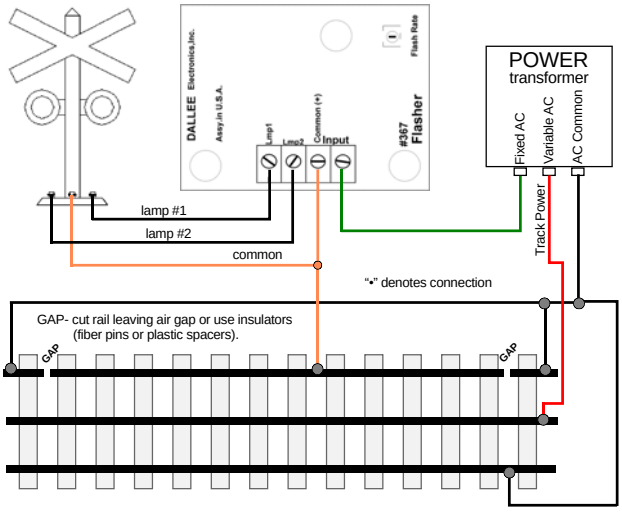
Each of the two outputs can handle up to 3 ampere of current so it is possible for the FLASHER to illuminate several crossing lights at the same time. The FLASHER has an adjustment potentiometer allowing the flash rate to be varied to suit the users preference. Typical range is from 1 - 3.5 Hz (1 - 0.275 second).

A simple on-off switch in the "INPUT" or "COMMON" connection can be used to manually activate the FLASHER. For automatic operation with 3 rail track, insulate a section of one outside rail allowing the wheels and track to function as the switch in the "common" (instructions illustrating this installation included with Flasher). It is also possible to use TRAK-DT, TRAK-DTT, TRAK-DTT2, TRAK-DTL, OPTO-DT, or similar items as a switch to turn on the FLASHER.

Multiple crossbucks would be wired in parallel to each other. A single crossbuck is shown for ease of wiring instructions.

Wiring 3-Rail track for automatic operation

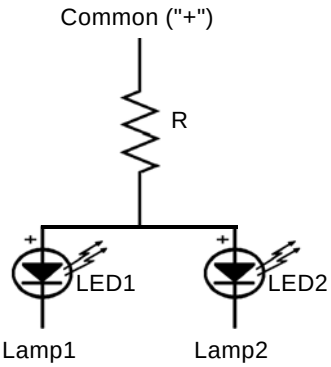
Crossbuck shown has the "common" terminal in the center. Some crossbuck's may have the "common" connection on one end instead of the middle. If the lights don't flash alternately, then you don't have the common wire connected to the common of the crossbuck lamps.



Wiring the Flasher for automatic operatoin with 3-rail track requires using track that has one outside rail electrically insulated from the other outside rail. Most modern track with either wood or plastic ties has the outside running rails electrically insulated.

Although there is only one connection shown for the "Variable AC", as well as the "Track common", to the track, it is best to have more than one power feed for all layouts. It is also a good practice to wire the track common to the opposite outside rail for better operation, as shown.

Crossbuck wiring using LED's



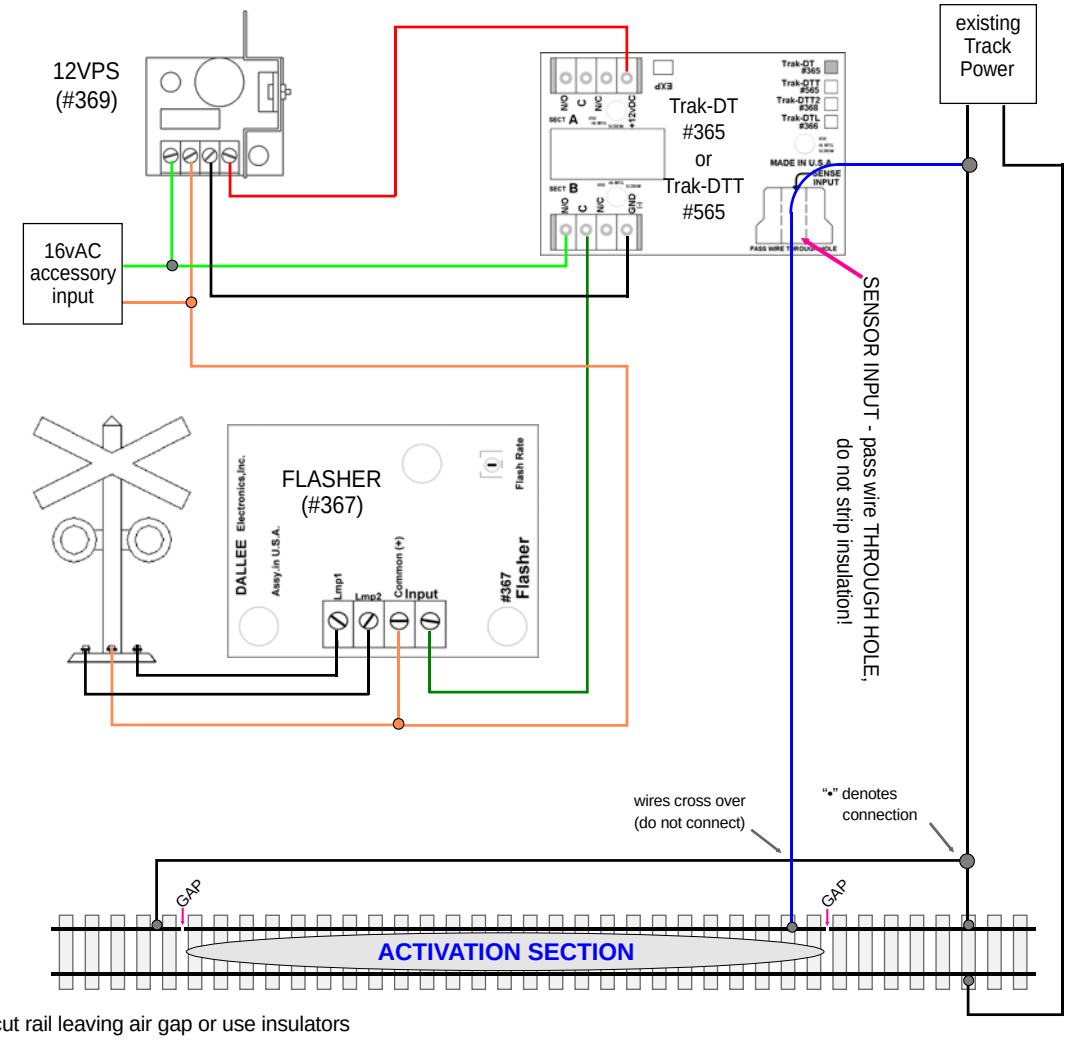
input Vmax	R	Item#
12	390	535
22	1k	558

LED's are current type devices, not voltage devices like light bulbs. Therefore you have to use a limiting resistor to operate the LED's. Otherwise you will burn out the LED's. Since only one LED is on at a time, only one limiting resistor is required for one crossbuck. Values shown are for RED LED, item 532.

The "input Vmax" shown is for the opeating voltage of the Flasher (item 367), or Grade Crossing Controller with Bell Sound (item 587) units.

Only 1 resistor is needed per pair of LED's since only one is on at a time.

Automated Flasher for DC, DCC, AC, or other type of track operation.

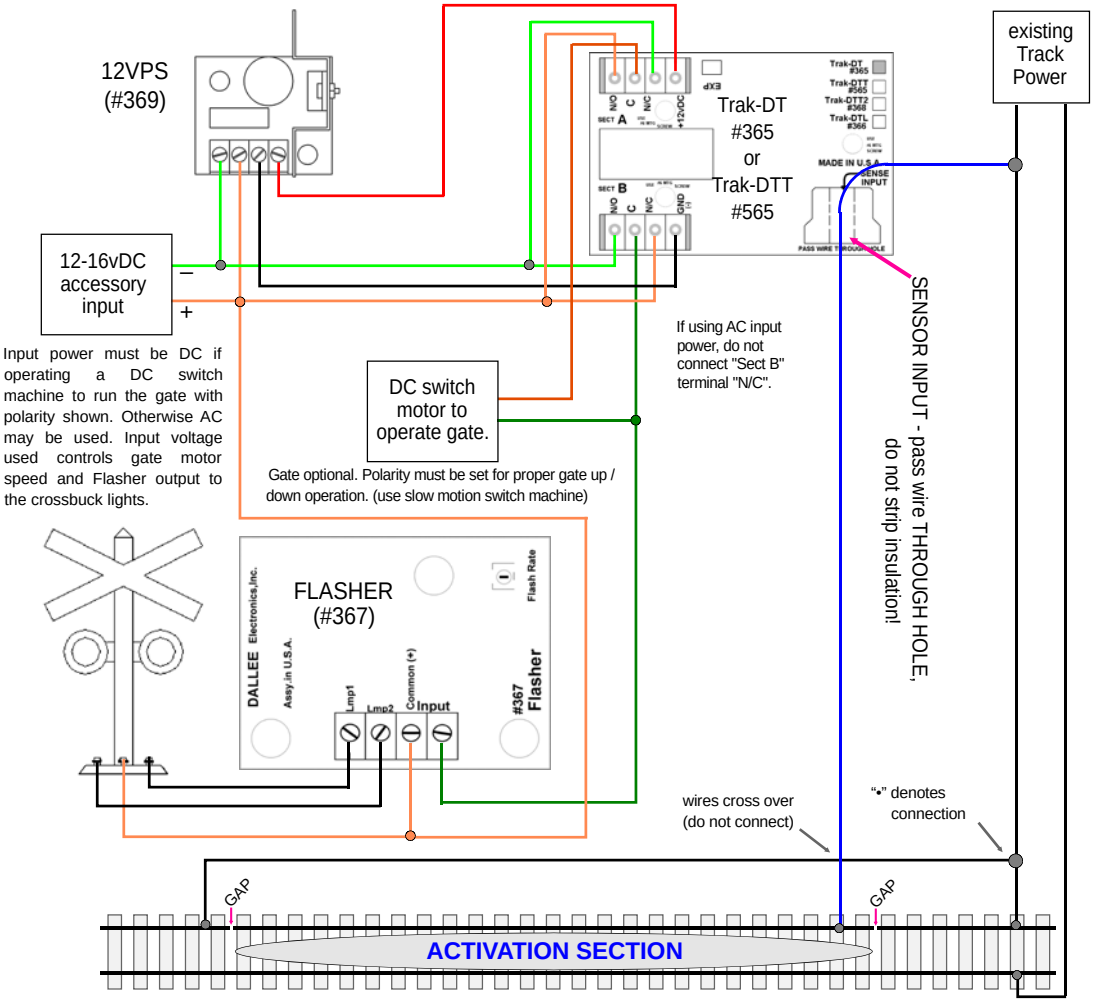


GAP- cut rail leaving air gap or use insulators
(fiber pins or plastic spacers).

By adding a Trak-DT, Trak-DTT, or Trak-DTRL, you can make the flasher turn on and off at desired locations. For a more precise operation, use our Opto-DT.

If using for AC 3-rail track, the insulated section can be either an outside rail or center rail. The Flasher will operate whenever current flows through the sensor on the Trak-DT.

Automated Flasher for DC, DCC, AC, or other type of track operation with optional gate drive.



GAP- cut rail leaving air gap or use insulators
(fiber pins or plastic spacers).

By adding a Trak-DT, Trak-DTT, or Trak-DTRL, you can make the flasher turn on and off at desired locations. For a more precise operation, use our Opto-DT or two Trak-DTT's as shown in our Wiring Guide.

A crossing gate, driven by a slow motion DC switch motor, can be easily automated with the same detection device as shown.

If operating with AC 3-rail track, the insulated section can be either an outside rail or center rail. The Flasher will operate whenever current flows through the sensor on the Trak-DT.