

Pocket Money Kit of the Month – December 2019

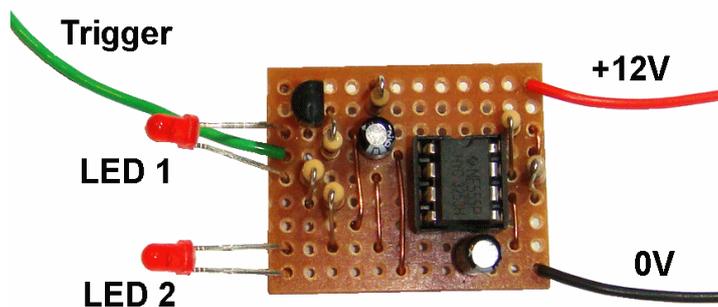
No 21 – Twin flasher

This module flashes two LEDs alternately.

It has many uses including:

- Pickup trucks, emergency vehicles.
- Crossing gate warning lights.

It operates from a 12V supply and has a fixed flashing rate.



Using in a vehicle

Using for a crossing

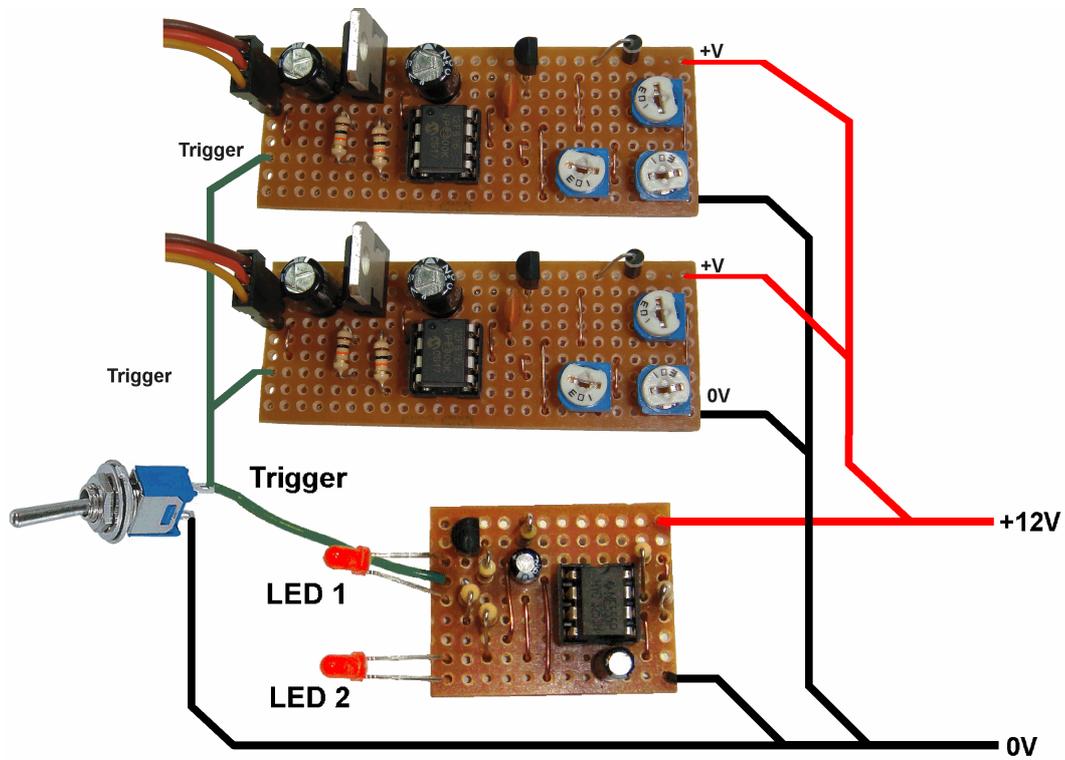
As above, with the following changes:

The LEDs should flash alternately. For the crossing lights, the LEDs should only flash when the trigger wire is grounded (connected to 0v).

Wiring for a crossing

When used with a barrier crossing, you need the flashing to be switchable, only working

when the gates are lowered. The BC557 transistor, when fitted, acts as a switch. When the transistor's base connection is brought down to 0V, the transistor is switched on, providing the voltage to operate the 555 oscillator chip. The same wire from the switch can be used to operate the servos. This diagram shows wiring two PMP18 EzyPoints kits.



This diagram shows wiring the switch to the flasher module and a Servo4 module.

Other inputs for crossing barriers

The dual flasher is also capable of being operated by other MERG modules. The circuit diagrams above show a switch being thrown/released to operate the modules. All the switch does is bring the flasher's transistor input down to 0V. So, other modules whose output switches down to 0V could be used to operate the crossing. Just make sure that they share the same 0V connection, as all voltages are with respect to this common ground connection.

Also, it allows *automatic* operation of the modules by connecting the outputs of the DTC8 8-channel block detector (Kit 56), the DCC Train Detector (PMP Kit 807) or pin3 of the Automatic Signals kit (PMP Kit 817) to the input of the above circuits.

The kit is available at all West of Scotland activities (for 80p) or can be purchased from the national MERG website as PMP 21.