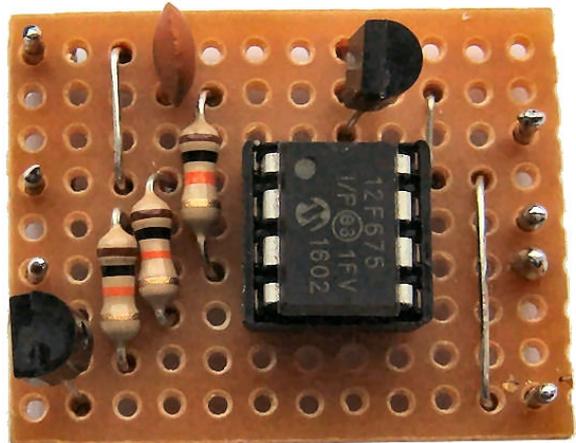


Pocket Money Kit of the Month – Nov 2018**No 22 – Laser train detector**

Train detectors are very useful on layouts. They can be used to illuminate lights on your control panel to show when a loco is in a particular siding or they can be used to start another activity (e.g. initiating an animation, playing a sound, etc.)

This detector works with both DC or DCC. Unlike some others it can work in complete darkness (e.g. tunnels, hidden sidings) and needs only the normal 12V supply that you have on your layout.



The kit comes with a laser head and a laser detector. The laser head is the type used in many laser pointers and laser spirit levels. They are placed on your layout so that a laser beam straddles a track,

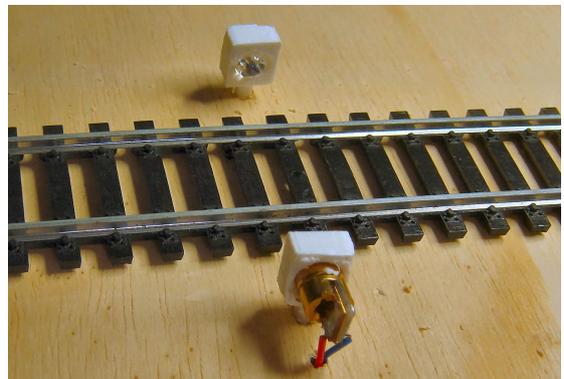
While the laser beam is interrupted, one of the module's outputs goes from +5V to 0V while another output goes from 0V to +5V.

If you fit an optional link, the outputs are held in these altered states for 10 seconds after the beam is restored. After 10 seconds, the outputs revert back to their normal states.

Three possible uses

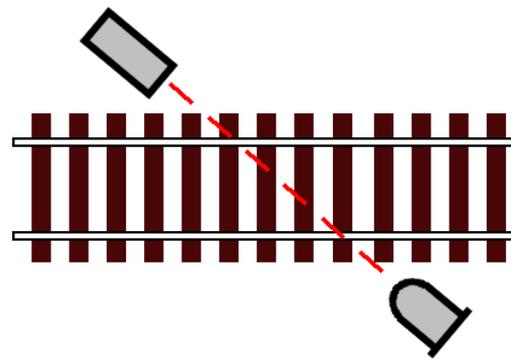
If the laser head and detector face each other across a track, as in this image, a train is detected the moment it breaks the beam. The output will remain on until the beam is no longer broken.

This is useful for triggering another module that needs a simple change of state to start its activities (e.g. playing a sound).

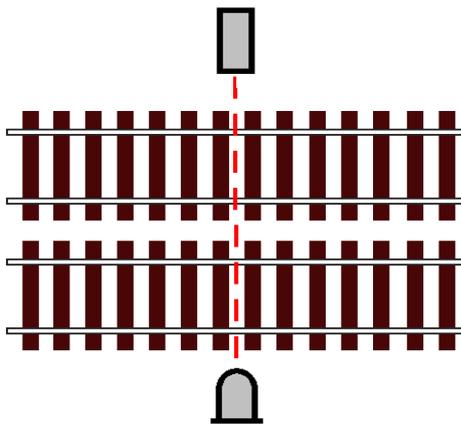


If the laser head and detector are placed at an angle across a track, the beam remains broken while the entire train passes, as gaps between rolling stock are not detected.

This is useful for module that need to be kept activated (e.g. keeping crossing gates).



Also, if the head and detector are spaced a distance apart, the module can be used to detect the presence of a train sitting anywhere along that section of track.



The head and detector can straddle two or more tracks and will be triggered if a train comes into any of the tracks (e.g. in a fiddle yard).

The kit needs only eight components on its board and is available at all West of Scotland activities (for £1) or can be purchased from the national MERG website.