

Pocket Money Kit of the Month – oct 2018

No 11 – LED dimmer

Many layouts now incorporate LED lighting inside buildings, in lampposts, yard lights, etc.

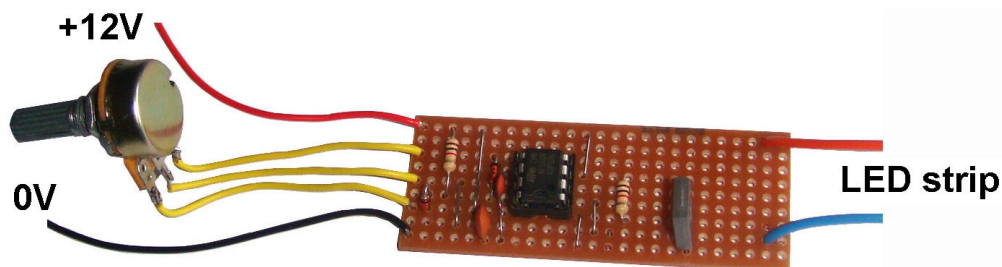
It is also increasingly being used as a means of illuminating a layout, usually with long LED strips hidden behind pelmets.

LED strips are designed to be run at 12V. These work well but always produces the same level of illumination.

Ideally, you want to be able to handle these situations:

- On a bright day, you may want to have maximum brightness.
- Used at night, in a dark, room, you may want to lower the brightness, otherwise the lights become too overwhelming and unrealistic.
- At different public exhibitions, your layout may be situated in areas where the LED light level needs to be adjusted to match the ambient light in the room.
- Illuminating LED strips to different levels to simulate different times of day (morning, dusk, etc.) or different weather conditions (sunny, sunsets, overcast, etc.). This effect is increased if a number of coloured LED strips are used (bright white, warm white, amber, blue).

That's where a LED dimmer is useful, as it opens up ways to bring interesting effects to a layout.



It uses only a handful of components and is easy to build.

After building the kit, you simply connect 12V at one end of the board and the LED strip at the other end. Rotating the spindle of the control changes the brightness of the LED strip.

The board can also be used with high power LEDs or multiple LEDs, as long as you add the appropriate dropper resistor.

The kit has few components and is available at all West of Scotland activities (for £1.45) or can be purchased from the national MERG website.