

Conference Lamp Controller

THE circuit shown in Fig.1. was used at a conference to enable the chairman to remotely indicate to the speaker: continue talking (green), one minute left (yellow), and stop talking (red). Readily available 3-core mains cable was used instead of the 4-core that would normally be needed.

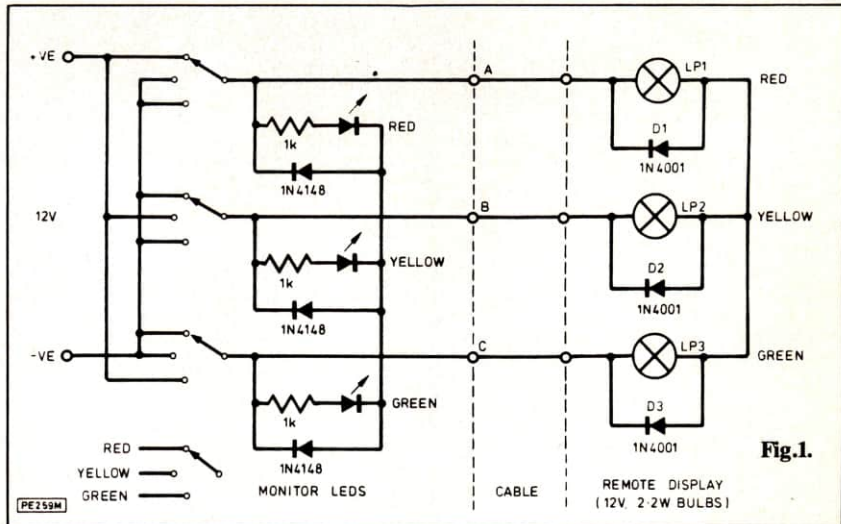
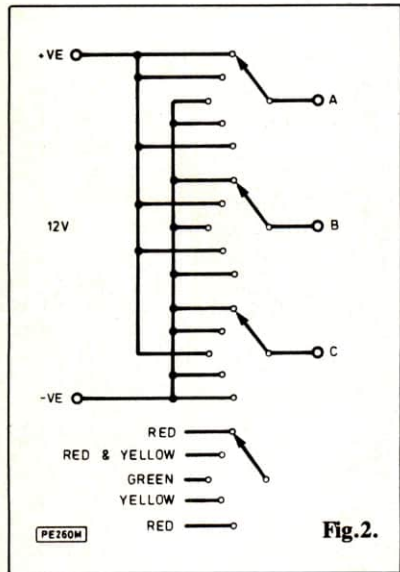


Fig.1.

Each lamp in the remote display unit has a diode across it which is reverse biased when that lamp is on. For example, if the red lamp is on, line A is connected to the positive supply, and lines B and C are connected to the negative supply by the switch. This forward biases D2 and D3, and reverse biases D1, so turning LP1 on, and LP2 and LP3 off. A similar arrangement of l.e.d.s. on the control unit monitors the status of the remote display. Since only one diode needs to be forward biased,

any two lamps can be on at any one time. Fig.2. shows the switching required for a traffic light sequence.

The principle can be extended to control any number of lamps with the same number of wires, but it should be remembered that at least one lamp must be off, as at least one diode must be forward biased. The diodes should be rated to carry the combined current of the maximum number of lamps on simultaneously.

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