

Delayed Interior Car Lamp

By G8MNY

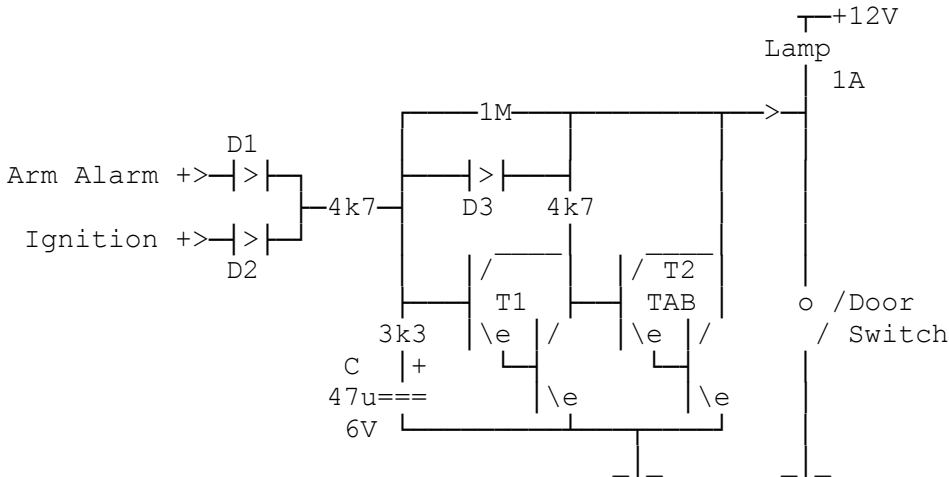
(Correction Jan 10)

(8 Bit ASCII graphics use code page 437 or 850, Terminal Font)

Here is a circuit I used, originally based on a Maplin kit.

WHAT IT DOES

It holds on the interior light for 20-30 seconds after opening the door, but immediately turns it off if the Ignition Switch is turned on, or the car Alarm is armed.



HOW IT WORKS

C is normally charged up to 1.2V & T1 darlington held on by the current through the 1M, T2 power darlington (or VMOS FET) is held off.

Opening the door the lamp lights & C is discharged through D3 turning off T1.

Now on closing the door T2 is held mostly on (1.5V drop) through the 4k7 until the C is charged up to 1.2V via the 1M. At C = 1.2V T1 is again turned on & T2 turned off. The addition of the 3k3 makes this a snappier action keeping T2's heating down.

If either the Ignition or Alarm circuits are powered while C is less than 1.2V it will very quickly charge up & the light extinguished.

LOCATION

This circuit does not need power itself, only an earth, so the location is not too critical. If switched power lines like the Ignition & Alarm are at risk with this addition, consider putting a 4k7 in series with each wire so that accidental shorts to earth can't harm anything.

Note this circuit draws about 2.2mA all the time, & although a very small current it may add to other loads on a parked car battery!

Why Don't U send an interesting bul?

73 De John, G8MNY @ GB7CIP