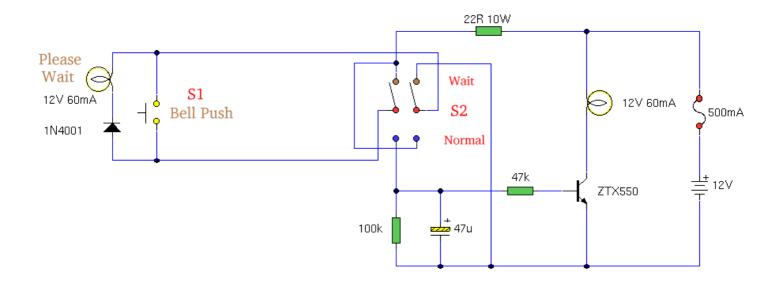
Doorbell for the Deaf

Description:

This circuit provides a delayed visual indication when a door bell switch is pressed. In addition, a DPDT switch can be moved from within the house which will light a lamp in the door bell switch. The lamp can illuminate the words "Please Wait" for anyone with walking difficulties.



Notes:

The circuit uses standard 2 wire doorbell cable or loudspeaker wire. In parallel with the doorbell switch, S1, is a 1N4001 diode and a 12 volt 60mA bulb. The bulb is optional, it may be useful for anyone who is slow to answer the door, all you need to do is flick a switch inside the house, and the bulb will illuminate a label saying Please Wait inside the doorbell switch or close to it. The double pole double throw switch sends the doorbell supply to the lamp, the 22 ohm resistor is there to reduce current flow, should the doorbell switch, S1 be pressed while the lamp is on. The resistor needs to be rated 10 watts, the 0.5 Amp fuse protects against short circuits.

When S2 is in the up position (shown as brown contacts), this will illuminate the remote doorbell lamp. When down, (blue contacts) this is the normal position and will illuminate the lamp inside the house. Switch S1 will then charge the 47u capacitor and operate the transistor which lights the lamp. As a door bell switch is only pressed momentarily, then the charge on the capacitor decays slowly, resulting in the lamp being left on for several seconds. If a longer period is needed then the capacitor may be increased in value.