The LS7340 IC has a typical application as a Timed-On Light Switch (See Data Sheet, Figure 5). Activating the ON input turns the light On and starts the RC Oscillator which controls a timer on the IC. The Light turns Off when timeout is achieved or when the OFF input is activated.

Figure 1 shows how to control the OSC port to make a 3-function Light Switch with the LS7340. When the ON switch is depressed the light turns On and the RC Oscillator is kept inactive by returning R to +V. The light remains On until either the DELAYED OFF switch or the OFF switch is depressed. Activating the DELAYED OFF switch causes the R to be switched to -V. This activates the Oscillator, allowing the IC timer to control how long the light remains On. Depressing the OFF switch at anytime causes the light to immediately turn off.

For 5 Minute Delayed Off
R = 5.1MΩ  C = 0.22µF

All Resistors 1/4W, all Capacitors 25V unless otherwise specified.

FIGURE 1. ON - OFF - DELAYED OFF LIGHT SWITCH