

# Outdoor and Indoor Lighting.....

## 1. Requirements

Outdoor and indoor lighting of a house is controlled using FAB. When no person is in a house and it is dark, person approaching are to be detected and the lighting system is switched on via the motion detectors and the alarm contact.

## 2. FAB Solution

There are 3 areas of outdoor lighting (Q1, Q2, Q3), each area has its own motion detector (I2, I3, I4). If one of these motion detectors is activated during a certain period, the according outdoor lighting is switched on for 90 seconds. The time period is set via a time switch integrated in FAB (PM17:00 to AM7:00).

The photosensitive switch I1 ensures that the lighting is only switched on when it is dark. The fourth motion detector (I5) is nothing to time switch and darkness. I5 is activated, all lighting is switched on for 90 seconds, outdoor lighting is switched on for 90 seconds via the alarm contact of alarm system.

Additionally after switching off the outdoor lighting, the indoor lighting is switched on for 90 seconds, and the indoor lighting is instant switched on for 90 seconds via the motion detector I5 or the alarm contact.

## 3. Components used

Input	Output
I1 Photosensitive switch (NO contact)	Q1 Outdoor lighting 1
I2 Motion detector I1 (NO contact)	Q2 Outdoor lighting 2
I3 Motion detector I2 (NO contact)	Q3 Outdoor lighting 3
I4 Motion detector I3 (NO contact)	Q4 Indoor lighting
I5 Motion detector I4 (NO contact)	
I6 Alarm contact (NO contact)	

## 4. Advantages and Specialties

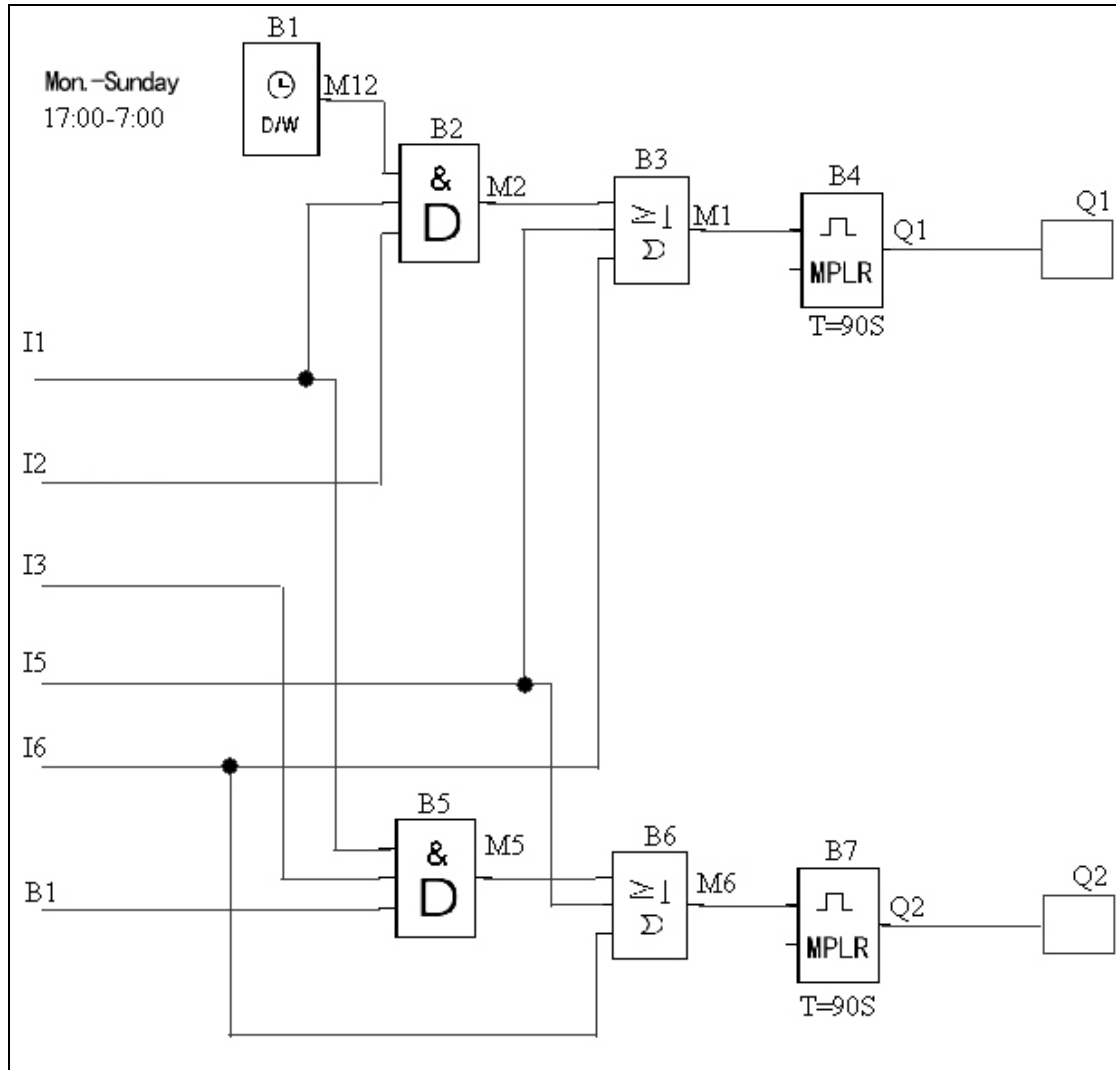
Saving Energy due to adopting of the time switch, the photosensitive switch and the motion detector.

The set time can easily be changed, e.g. time range of time switch or time periods for lighting.

Fewer components are necessary than the traditional solutions.

## 5. Software Circuit Diagram

Part I .....



Part II.....

