

# Control system of traffic light.....

## 1. Requirements

As the crossroad, the south and north is B direction, and the east and west is A direction.

Step 1: If red light in B direction is lit, then red, green and yellow light in direction A will be lit in turn.

Step 2: If red light in A direction is lit, then red, green and yellow light in direction B will be lit in turn.

Step 3: repeat step 1 and 2 circularly

(Note: work time of each light need to be adjusted)

## 2. Components used

| Input | Output                          |
|-------|---------------------------------|
|       | Q1 red light for A direction    |
|       | Q2 green light for A direction  |
|       | Q3 yellow light for A direction |
|       | Q4 red light for B direction    |
|       | Q5 green light for B direction  |
|       | Q6 yellow light for B direction |

## 3. Advantages and Specialties

Fewer components are necessary than the traditional solutions.

#### 4. Software Circuit Diagram

