Control system of Neon Lamp.....

1. Requirements

- (1) The neon lamp shall be automatically turned on at 18:00 and off at 23:59 every day.
- (2) It can be controlled by the manual/automatic selection switch. The system can be activated by manual switch at any time. When Time Switch or Photosensitive switch is triggered, the system can be opened automatically.
- (3) Photosensitive Switch shall be provided to complement Time Switch so that the lamp will be automatically turned on when photosensitivity is weak and insufficient. And Photosensitive Switch is of no effect at every day 0:00~10:00.
- (4) Rain detector: On a rainy day, the neon lamp shall be automatically switched off.
- (5) Over (under) voltage detector: The system will be automatically switched off when the operating voltage is too high or too low.

Display steps: Step 1: ARRAY Step 2: ARRAY ELECTRON Step 3: WELCOME YOU TO ARRAY ELECTRON Step 4: Do loop step 1~3

2. Components used

Input	Output
I1 Rain Detector	Q1 Indicator "ARRAY"
I2 Over (under) voltage detector	Q2 Indicator "ARRAY ELECTRON"
I3 Photosensitive switch	Q3 Indicator "WELCOME YOU TO ARRAY ELECTRON"
I4 Manual/automatic selection switch	
I5 Hand switch	

3. Advantages and Specialties

Fewer components are necessary than the traditional solutions.

B18 ≥1 <u>M0</u> I112 \mathcal{D} B20 B13 ≥1 B1 M5 Q1 RS 13 **B**5 $\overline{\mathbb{D}}$ & M6 ≥1 M11 D \mathbb{D} B17 **B2** © M2 1 M3 B14 \triangleright **B4** B11 B9 | ≥1 **Q**2 D/W t-DPR & **м7** D \mathbb{D} M13 M14 **B**3 RS © M4 D/W B19 <u>B15</u> <u>B12</u> 1 B10 | ≥1 M1 **B6** Q3 \triangleright Σ лл м8 M16, I4 · RS DPR t-PLR **B8 B**7 & D M10 лл м9 B16 I5 · L → J t-DPR PLR M17

4. Software Circuit Diagram