

## General Description

The AS76R is with motion activated sensor, light on when people pass by.

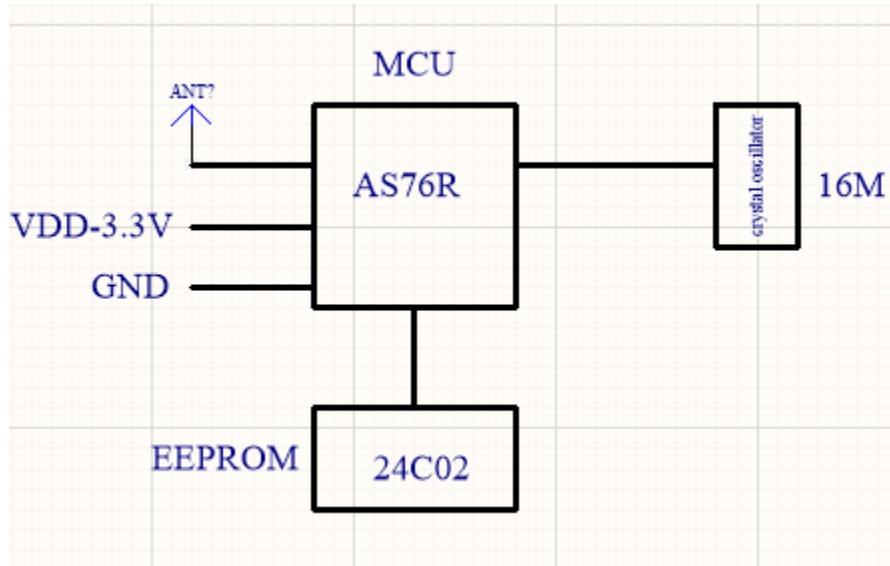
Via the human infrared sensor on the light that can detects whether there is any movement in front of the luminaire. When the person is sensed, the lights automatically turn on and send a light-on command to the outside through the 2.4G module, and the luminaire in the same lamp group receives the light-on command. Then turn on the lights at the same time for illumination.

When the person leaves the range of luminaire sensing, the luminaire starts counting down the set number of seconds (user configurable), and the luminaire turns off the light after setting the number of seconds. At the same time, other lamps in the lamp group do not receive an external light-on command, and the lights are turned off by default.

The 2.4G module is integrated in the luminaire as a communication transmission between the lamp and the lamp. The module is in bidirectional mode and can transmit and receive signals with an operating frequency of 3 transmit channels (2420MHz, 2450MHz and 2470MHz).

The luminaire control panel detects the ambient brightness by the photodiode to determine the day or night. When the ambient status is detected, the control panel detects the moving human body according to the preset mode, and makes a corresponding light-off delay control command; The daytime status is detected, and the corresponding low-power standby mode is entered, and the human and object movement triggers are invalid.

## Block Diagram



1. VDD-power positive 3.3V,
2. GND-power negative

# Fresh Source International Inc.

3. MUC processor;
4. 24C02 register;
5. 16M crystal oscillator;
6. ANT antenna;
7. Transmitting power: -27Ddbm
8. Antenna gain: 0dbi

After powered to the MCU, it can send or receive 3 transmit channels (2420MHz, 2450MHz and 2470MHz). Stores the linkable code signal in the 24C02 register. When the linkable signal is received or transmitted, it is compared with the code signal of 24C02, and then the MCU processes and controls the output.

## Function Description

### 1.1. Host learning mode:

Long press the button to start the host learning mode. After entering the host learning mode, the light flashes slowly to clear the codes that the host has learned, and continue to send the host's own codes. Release the button to exit the host learning mode and enter the normal induction working mode.

### 1.2. Machine learning mode

Tap the button to start the slave learning mode, enter the slave learning mode, the light flashes quickly, and the slave is in the continuous receiving state. If the learning code sent by the host is received, it will record the currently learned code and exit the slave learning mode. To enter the normal induction working mode. Enter the slave learning mode, touch the button again to exit the slave learning mode.

### 1.3. Normal induction working mode

- (1). Turn on the electric engine for 15S
- (2). Normally the sensor lights up for 20S, and sends the sensor light code, and the paired light receives the code at night and lights up for 20S.
- (3). Over-discharge protection function, 3V automatically turns on the over-discharge function, 3.3V release
- (4). No induction during the daytime, but will turn on the induction detection function at night

### 1.4. Related performance description:

- (1). Whole machine power consumption: 2.3mA at night, 800uA during the day
- (2). Linkage distance: larger than 30m in open location
- (3). Induction distance: 8120-5 lens / 25 degrees / 5.5m