

# Staircase Switch through Arm

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## 1 ABSTRACT

This manual shows the implementation of the Staircase switch using XNOR GATE .

## 2 COMPONENTS

Component	Value	Quantity
Vaman	ESP32	1
LED		1
Jumper Wires	F-M	20
Breadboard		1

Input	Gnd	Vcc	led
Arm	4	5	22

TABLE I

## 3 DESCRIPTION

1. Connect the circuit as per Table I
2. Vary the 4 and 5 of ESP32 and observe the output accordingly in the LED.

## 4 PROCEDURE

1. After executing the following code using make, a binary file is generated with .bin extension in the output directory.
2. Now from the termux, using scp protocol, send the generated bin file to the laptop.

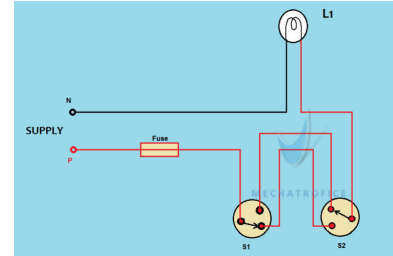


Fig. 1: Switches OFF-ON

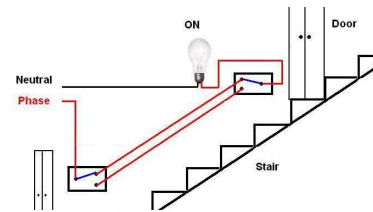


Fig. 2: Staircase Switch when both are on

3. There we are supposed to flash the .bin file into the ARM through the terminal.
4. After flashing, reset the Vaman board.
5. Make connections between the LED and ARM board using jumper wires.
6. Now check the output with reference to the truth table present above.

	W	X	Z
0	0	0	1
1	0	1	0
2	1	0	0
3	1	1	1

TABLE II: Truth table

## 5 CODE

**Observe the circuit by executing the link provided below.**

<https://github.com/Meghana9121/FWC/Arm>