User Guide

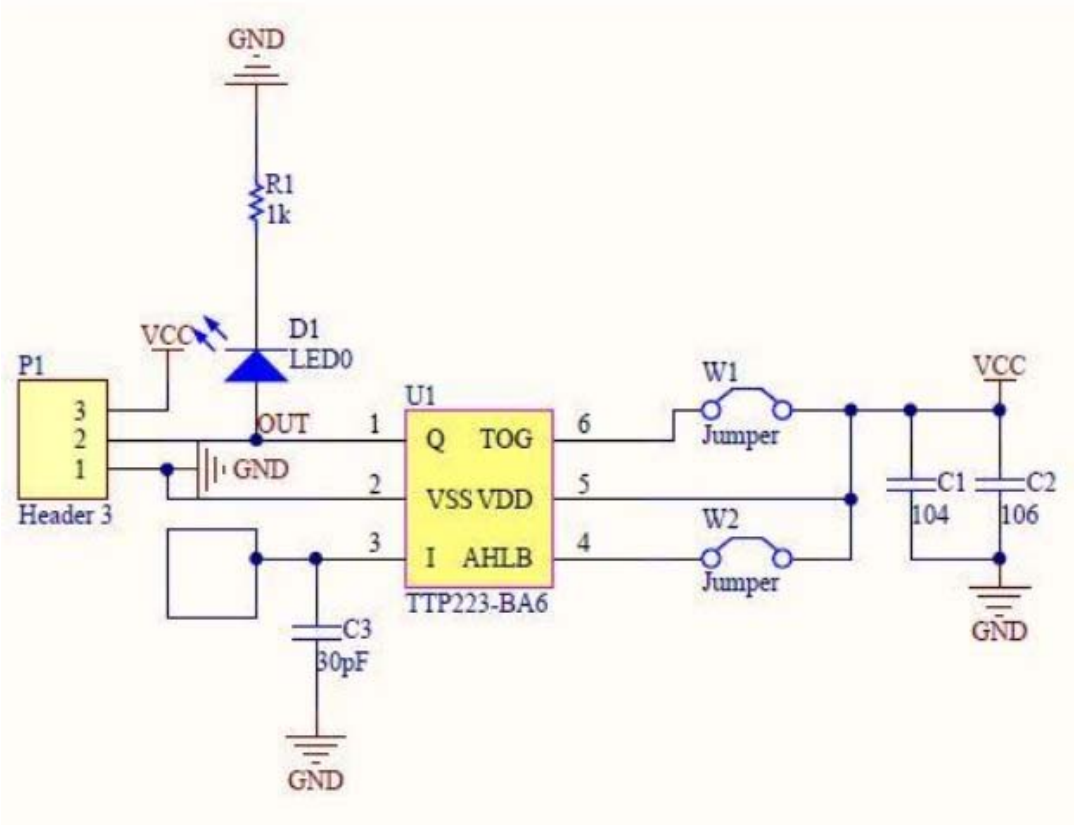
TTP223B 1-Touch Capacitive Sensor Module

This module is based on capacitive touch-sensing IC TTP223B. This versatile small sensor board is user configurable with on-board shorting pads as activated Low or High, momentary or latching output to suit for various control requirements. This touching detection module is designed for replacing traditional mechanical button switch with diverse pad size with no wear and tear problem of mechanical switches.

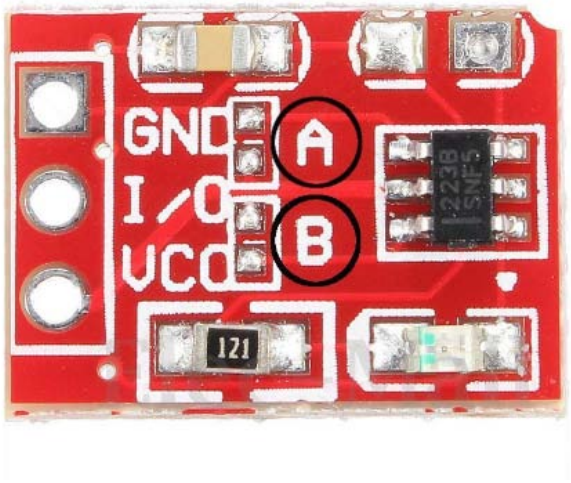
Brief Data:

- Operating voltage: 2.0~5.5V.
- Operating current @VDD=3V: 1.5uA, maximum 3.0uA.
- Output: Active high or active low, momentary or latching, set by 2 on-board shorting pads.
- Response time: 220mS max@ 3V.
- 2.54mm breadboard friendly header pin connector.

Schematic:



Mode of Operation:

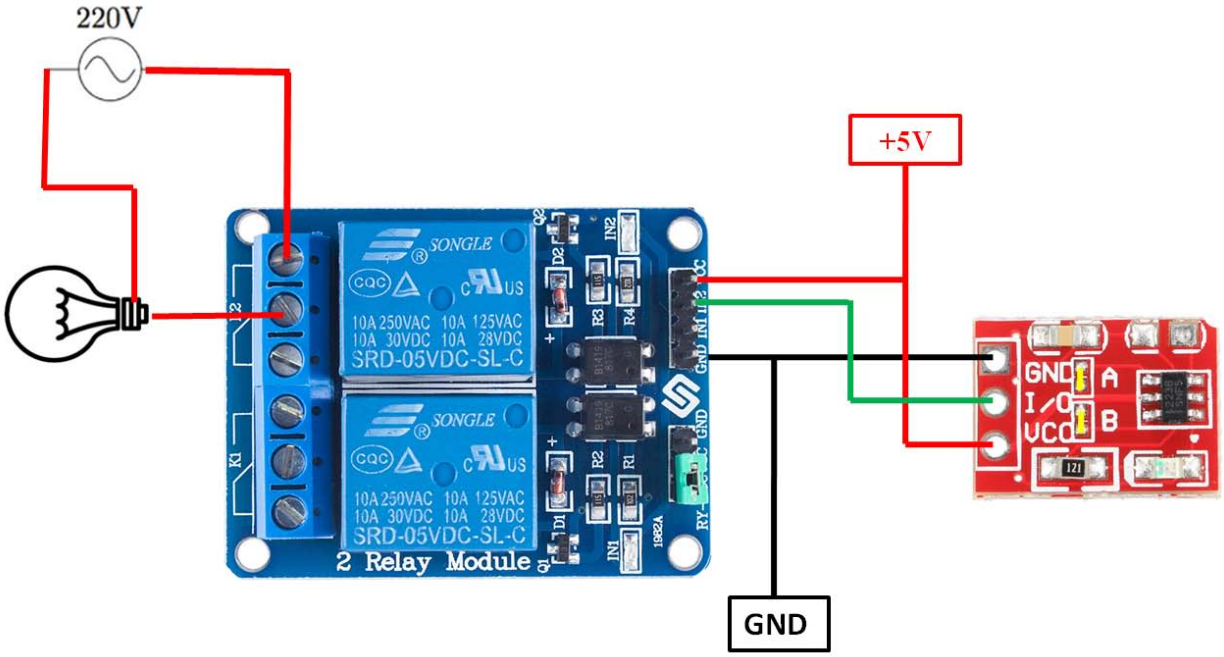


Output Mode (Centre I/O Pin)	Pad A	Pad B
High Momentary	Open	Open
High Latching	Open	Short
Low Momentary	Short	Open
Low Latching	Short	Short

Table-1: Output Mode Shorting Pad Setting

Application Examples:

1. **Direct connect to Relay Boards for controlling heavy load or high voltage appliances.**



In this case, the TTP223B module is configure to active low and latching type, with Pad A & B shorted. When the sensor is touch, it will switch On/Off the 5V optical relay board.