Continuity tester by using 555 timer IC

Components required:-

|  |  |  |
| --- | --- | --- |
| Serial NO | Components | Quantity |
| 1. | NE555 timer IC | 1 |
| 2. | Capacitors | 100uf(1), 22uf(1), 10uf(1) |
| 3. | Resistor | 2.2k, 1.5k, 100ohm |
| 4. | Speaker | 1 |
| 5. | Test probes | 2 |
| 6. | Potentiometer | 10k(1) |

Description:-

Here 555 work in a stable mode of operation.

555 are designed to generate 2 KHz output frequency.

Output of 555 is connected to an 8 ohm speaker.

As you know 555 is enabled only when the reset pin (4th pin) is connected to Vcc. Here the 4th pin connected to ground through a 100ohm resistor, so normally it is OFF. Thus speaker doesn’t produce any sound.

One probe is taken from Vcc and other probe from the 4th pin, through a potentiometer.

When we are connecting the probes between the testing points, then the 4th pin will get a positive Vcc. Thus enabling 555 multimeter and hence speaker will start to produce sound.

Potentiometer helps to set the resistance to determine the point when the buzzer should turn ON.

