

Pocket Piano sing 555 Timer

We as a whole realize that Sound is a Mechanical Wave as it is delivered by back and forth development of particles of the medium. Relocation of particles are in similar course as propagation of sound waves, so sound is a Longitudinal Wave. The back and forth motion of particles in the medium makes pressure (high pressure) and rarefactions (low pressure) in the medium, so sound is a Pressure Wave.

An Astable Multivibrator is an oscillator circuit that ceaselessly creates rectangular wave without the guide of outside setting off. So Astable Multivibrator is otherwise called Free Running Multivibrator. I have previously posted about Astable Multivibrator utilizing Transistors. Astable Multivibrator utilizing 555 Timer is exceptionally basic, simple to configuration, truly steady and minimal expense. It very well may be utilized for timing from microseconds to hours. Because of these reasons 555 has an enormous number of utilizations and it is a famous IC among hardware specialists.

A tone is a sound which is delivered by a regular vibration. So it has just a single frequency despite the fact that intensity/amplitude can differ. A Loudspeaker is an electronic transducer which switches electric signs over completely to pressure varieties to make the impression of sound. To make this stomach of the loudspeaker will vibrate as per the frequency and amplitude of electric signs. Discernible frequency range of people is from 20Hz to 20KHz, so we will create frequencies in this range utilizing 555 timer and feed it to the loudspeaker.

This Pocket piano makes use of 555 timer to develop a mini portable pocket piano that can be carried and played anywhere.

Components

- 555 Timer IC
- Push Buttons
- Speaker
- Battery
- Regulator Circuitry
- Switches
- LED's
- PCB Board
- Resistors
- Capacitors
- Transistors
- Cables and Connectors

Block Diagram

