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PROGRAMMABLE MUSICAL BELL

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ABSTRACT.

The circuit presented here is that of a musical bell which may be programmed for generation of a number of musical notes. To design this circuit we need to use 4 types of ICs, resistors, capacitors, transistors, speakers, port meters, switches and diodes. IC1 (NE555) is a timer. Frequency of the timer IC may be varied with the help of portmeter VR1. The output of IC1 at the selected frequency of operation is coupled to the clock input of IC2 (CD4017). IC3 (CD 4051) is a C-MOS 8- input analogue multiplexer. Its function is to make electrical connection between output of IC3 and pin 15 of IC2. IC4 (CD 4060) is a 14-bit binary counter. It is to produce the variety musical notes that can be heard through the speaker. The delay timer of tones is adjusted by port meter VR2.The transistor SL100 is use as amplifier. The 7-way rotary switches are used (S1, S2 and S3). The different music notes can be heard when the S1, S2, and S3 are taking to different position. The VR1 is used to change the tone. It can produce about 816 types of different musical notes.

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CONTENT

CHAPTER 1.

INTRODUCTION.

1.1) INTRODUCTION.

This project is to make programmable musical bell. It was use many electronics component like resistors, IC, diodes, port meter and speaker. This project may be use for any situation, for example at home door and car door. Its tone change when it is moved for different frequency that is control by counter.

One of these applications is to use at home door. It can function as a doorbell with many musical bells with many musical bell users can change the music tone, as they want. It depends on what tone that is set by user. By using this, any situations become interesting than before.

It also can use for car door. When different door are opened, many different music can be heard. When the doors are opened together, another music will be heard. The music will be continuously hearing if the door is not close completely. This is the advantage of this programmable musical bell.