

Theory of Operation Soldering Kit Circuit

LESSON 14
EET 150



Learning Objectives

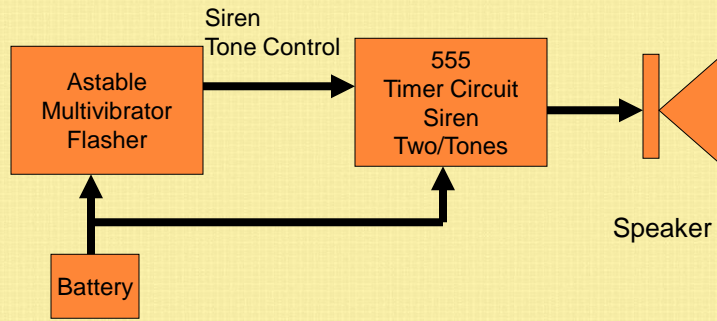


- ▣ **In this lesson you will:**
- ▣ learn the theory behind the operation of the flasher circuit.
- ▣ see how a schematic represents an actual circuit.
- ▣ see an application of an IC timer.
- ▣ see an oscillator constructed using discrete transistors
- ▣ see the waveforms expected at various parts of the circuit

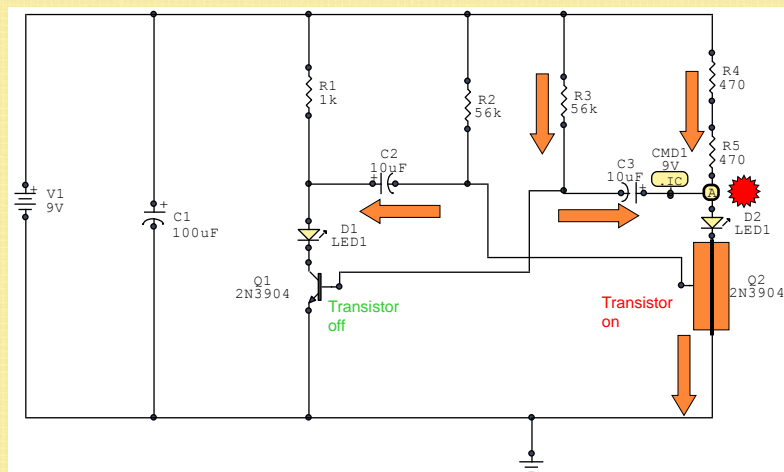


Soldering Kit Circuit

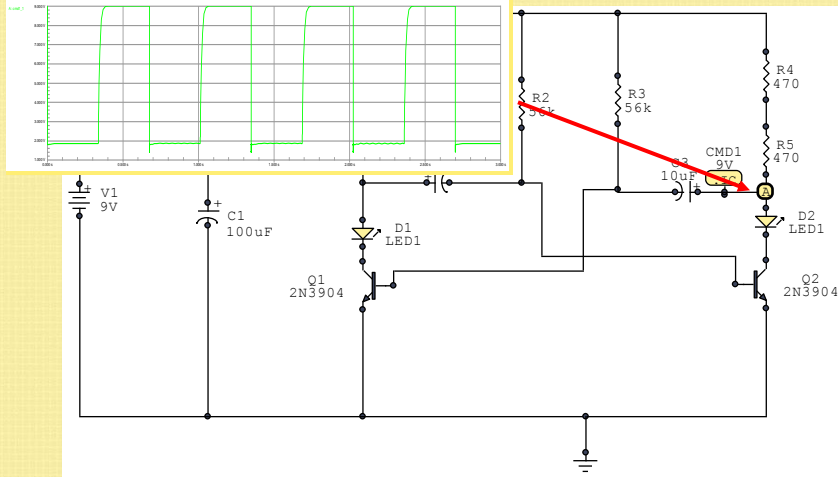
Siren/Flasher Block Diagram



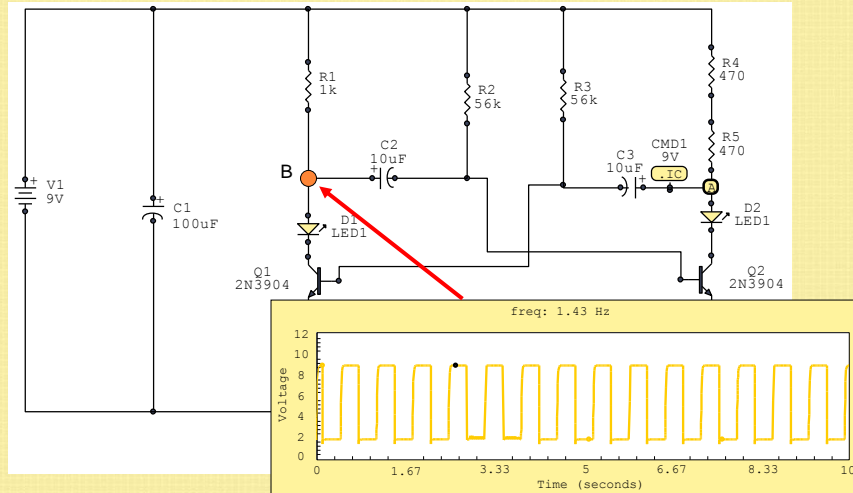
Astable Multivibrator Circuit



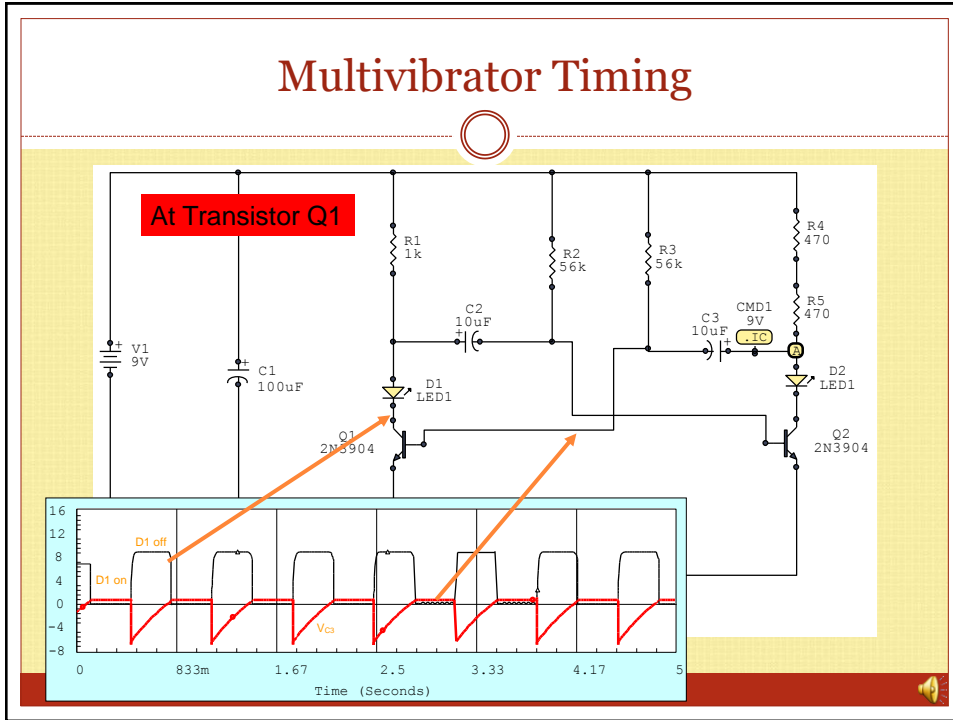
Multivibrator Output Point A



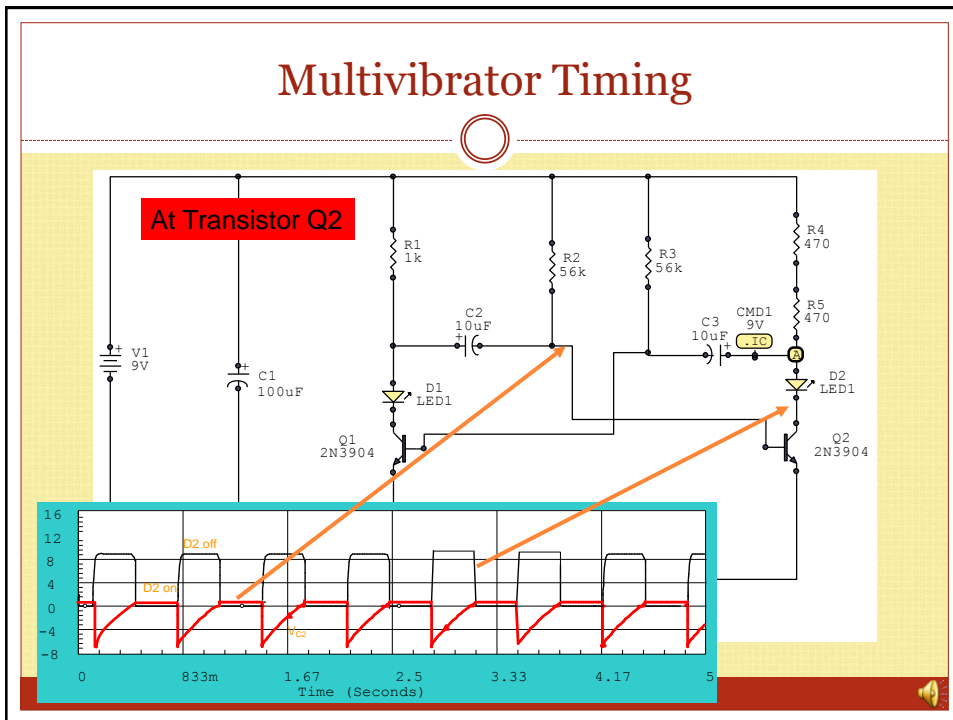
Multivibrator Output Point B



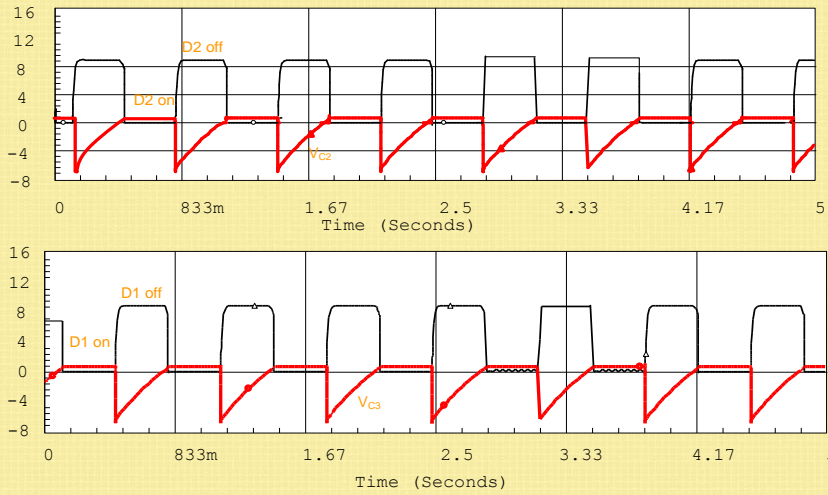
Multivibrator Timing



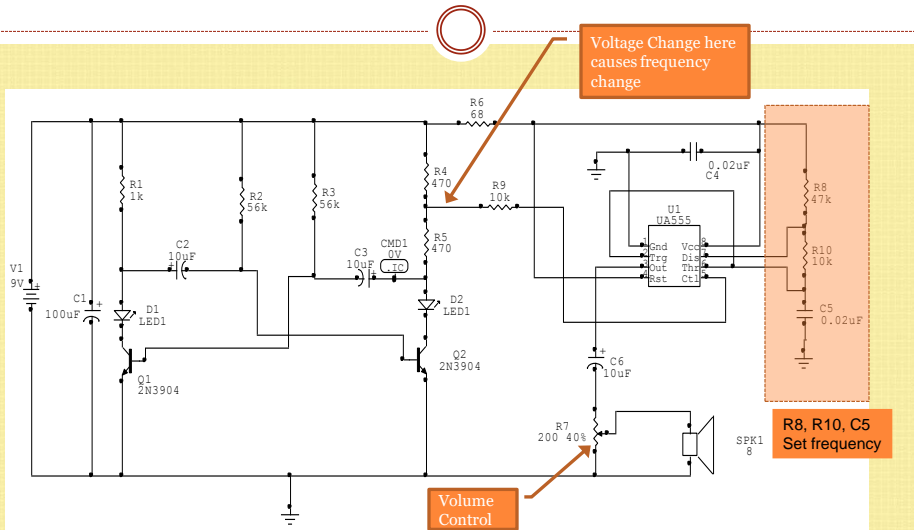
Multivibrator Timing



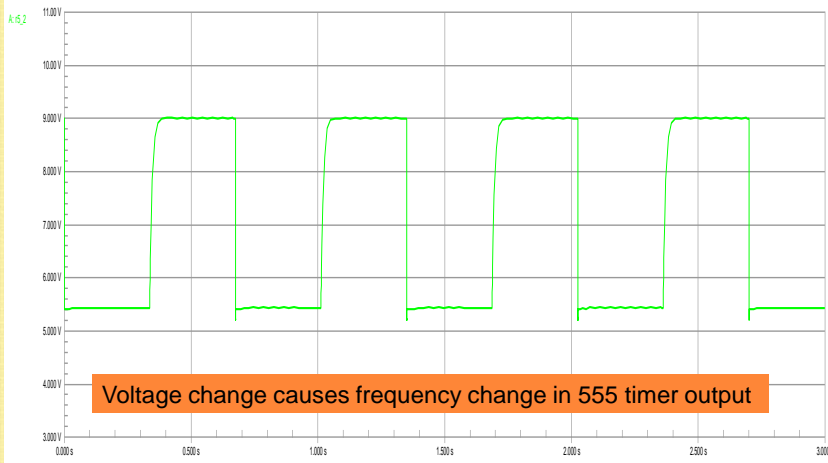
Synchrograph Diagram



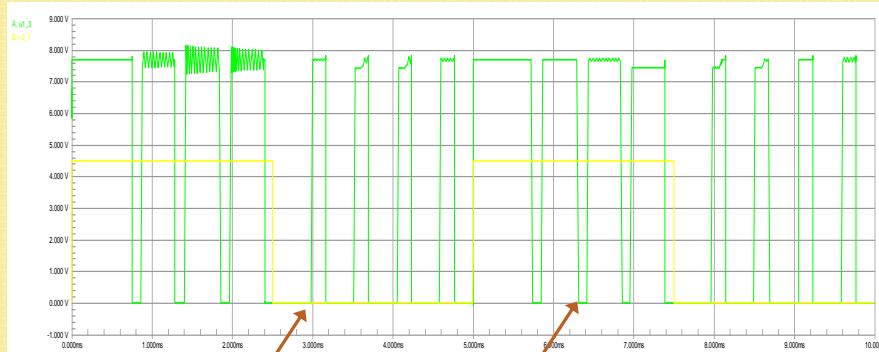
Full Siren Circuit



Control Voltage Waveform



Frequency Output



High Frequency

Low Frequency

Soldering Kit Siren Circuit Theory



**END LESSON 14 EET 150
COMING NEXT:
INTRODUCTION TO
TROUBLESHOOTING**

