

DC LAB EXP 9


2015

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AMERICAN INTERNATIONAL UNIVERSITY BANGLADESH
Faculty of Engineering
Laboratory Report Cover Sheet



Students must complete all details except the faculty use part.

Please submit all reports to your subject supervisor or the office of the concerned faculty.

Laboratory Title:	Study of different Types of switches		
Experiment Number:	09	Due Date:	06/12
		Semester:	Fall-2015
Subject Code:	EEE1202	Subject Name:	Electrical Circuit-1
		Section:	E
Course Instructor:	Susmita Ghosh		
		Degree Program:	EEE

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Title:

Study of different types of switches.

Introduction:

The purpose of this experiment is:

- To familiar with different type of switches.
- To construct the electrical circuits by using the switches.

Theory and Methodology:

Sw Switch: In electronics, switches are classified according to the arrangement of their contacts. A pair of contacts is said to be "closed" when current can flow between them at normal voltages. [1]

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The terms 'pole' and 'throw' are also used to describe switch contact variations.


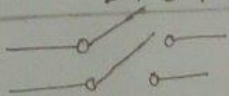
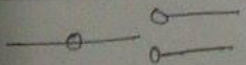
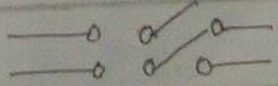
The number of 'poles' is the number of ~~sp~~ separate circuits which are controlled by a single switch. For example, 2 pole switch controlled by a single switch. Number of 'throws' is the number of ~~sp~~ separate wiring path choices other than 'open' that switch can adopt for each pole.

These terms have given rise to abbreviations for the types of switch which are used in the electronics ^{industry} as "Single-pole Single-throw" (SPST) or SPDT connecting either ~~of~~ two terminals to the common terminal [1].

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Light: Light is a form of energy that can be released by an atom. It is made up of every small particle-like packets that have energy and momentum but no mass. These particles are called light photons. [2]

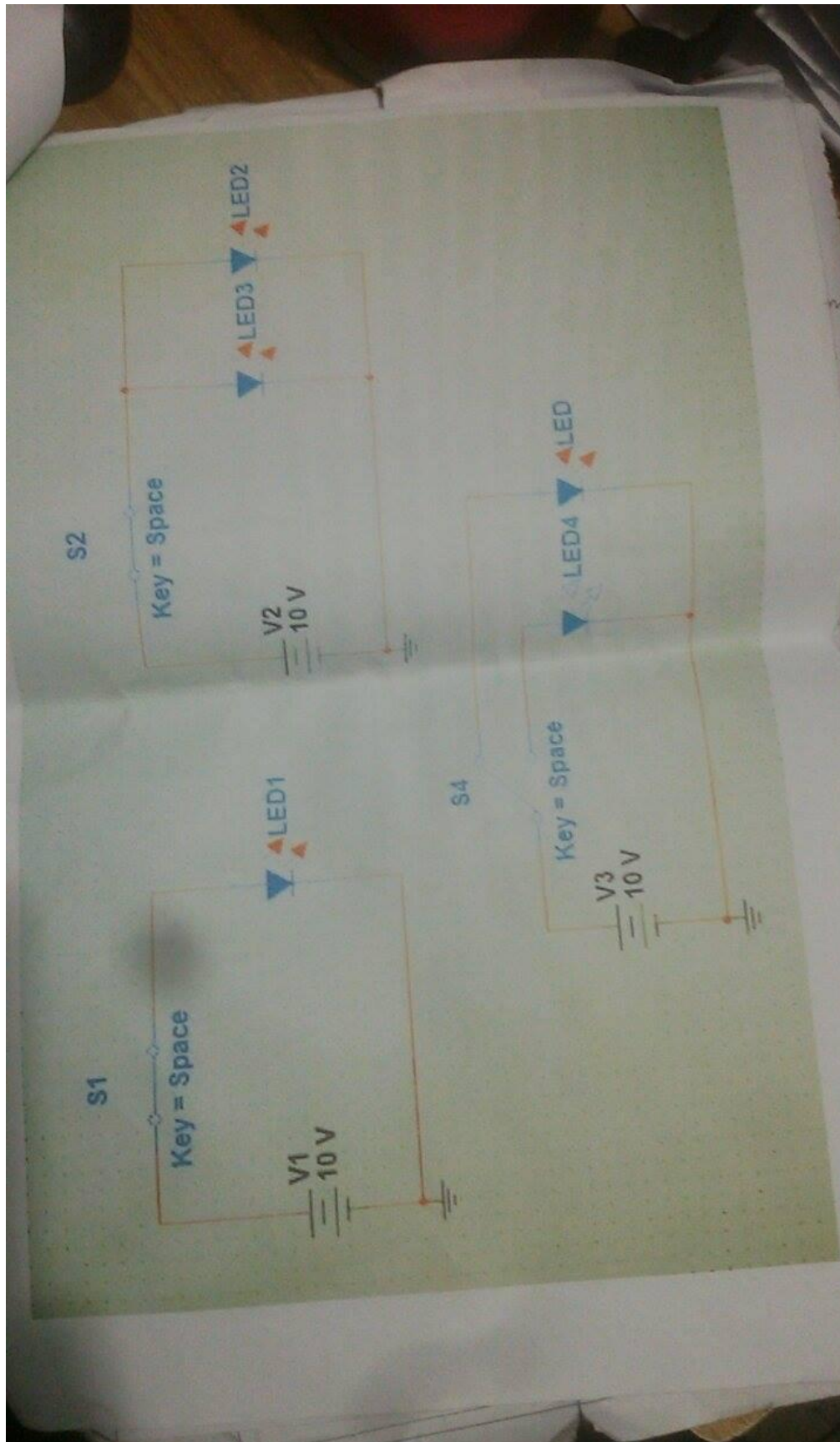
The most common types of switches and their uses are listed in the table is given below:

Switch-type	
SPST	DPST
	
Switch has two positions and controls by only one circuit.	two positions by control by two circuit
Single pole Double through (SPDT)	Double pole • double through (DPDT)
	
It has three positions but controls only one circuit.	Three positions and switch two circuits at one time.

Apparatus:

- 1) SPST, SPDT, DPST, DPDT.
- 2) Incandescent Lamp.
- 3) Digital Multimeter.
- 4) Power Supply.
- 5) Connecting wires.

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Discussion and Conclusion:

- ① Every circuits were connected properly.
- ② Some problems were created while observed those circuits.
- ③ Every switches were used carefully.
- ④ ~~By~~ As every outputs were found properly so it can be said that the objectives were fulfilled successfully..

Reference:

- ① Reza Adhamsi, Peter M. Meenen, Dennis Hite, "Fundamentals Concepts in Electrical and Computer Engineering with Practical Design problems," 2nd Edition. pp. -193-194
- ② Airzyde Corporation Website. [Cited: 8th January, 2015].
- ③ AIUB DC Lab manual. [New]