# Table: Switches

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| **Schema:** | SystemSchematicBuilder |
| **Responsible:** | Kurt A Vedros |

Table holds the information on the Switch Part.

Switch – an electrical, mechanical and or programmable flow regulator that changes the flow of something.

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| **Column Name** | **Data type** | **Description** |
| SwitchID | Int | Primary Key to Switch Table. |
| SwitchBoxID | Int | Foreign Key to SwitchBox Table as a switch can be inside a switch box. |
| FlowRegulatorID | Int | Foreign Key to FlowRegulator Table as a switch is a type of flow regulator. |
| Name | String | Name given by the user (could be left blank). |

**Procedures (Database functions)**

* sprocGetSwitchs
  + Returns a list of Switch objects that are currently stored in the database.
* sprocGetSwitch
  + Returns a Switch object that is currently stored in the database that has the given Switch ID number.
* sproc\_SwitchAdd
  + Stores the given Switch object into the database and returns its assigned Switch ID number.
* sproc\_SwitchUpdate
  + Changes information of the Switchs Table in the database with the given primary key to the given Switch class object.
* sproc\_SwitchRemove
  + Removes the Switch from the Switchs Table with the given Switch ID number.

**DAL (Software Functions)**

* SwitchsGetAll()
  + Returns a list of Switch objects that are currently stored in the database.
* SwitchGet(int ID)
  + Returns a Switch object that is currently stored in the database that has the given Switch ID number.
* SwitchAdd(Switch Switch)
  + Stores the given Switch object into the database and returns its assigned Switch ID number. Returns -1 if error occurred, otherwise returns null.
* SwitchUpdate(Switch Switch)
  + Changes a Switch object that is currently stored in the database with the given Switch’s Switch.ID with the Switch’s information.
* SwitchRemove(int ID)
  + Removes the Switch object stored in the database with the given Switch ID number. Returns -1 if error occurred, otherwise returns null.