ELECTRICAL HAND SWITCHES: TYPES

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ELECTRICAL HAND SWITCHES: TYPES

A **SWITCH** is an electrical device, usually electromechanical, used to control continuity between two points.

**HAND SWITCHES** are actuated by human touch.

**LIMIT SWITCHES** are actuated by machine motion.

**PROCESS SWITCHES** are actuated by changes in some physical process (temperature, level, flow, etc.).

*(ALLABOUTCIRCUITS.COM)*
TOGGLE SWITCHES

TOGGLE SWITCHES ARE ACTUATED BY A LEVER ANGLED IN ONE OF TWO OR MORE POSITIONS. THE COMMON LIGHT SWITCH USED IN HOUSEHOLD WIRING IS AN EXAMPLE OF A TOGGLE SWITCH. MOST TOGGLE SWITCHES WILL COME TO REST IN ANY OF THEIR LEVER POSITIONS, WHILE OTHERS HAVE AN INTERNAL SPRING MECHANISM RETURNING THE LEVER TO A CERTAIN NORMAL POSITION, ALLOWING FOR WHAT IS CALLED "MOMENTARY" OPERATION. (ALLABOUTCIRCUITS.COM)
PUSHBUTTON SWITCHES ARE TWO-POSITION DEVICES ACTUATED WITH A BUTTON THAT IS PRESSED AND RELEASED. MOST PUSHBUTTON SWITCHES HAVE AN INTERNAL SPRING MECHANISM RETURNING THE BUTTON TO ITS "OUT," OR "UNPRESSED," POSITION, FOR MOMENTARY OPERATION. SOME PUSHBUTTON SWITCHES WILL LATCH ALTERNATELY ON OR OFF WITH EVERY PUSH OF THE BUTTON. OTHER PUSHBUTTON SWITCHES WILL STAY IN THEIR "IN," OR "PRESSED," POSITION UNTIL THE BUTTON IS PULLED BACK OUT. THIS LAST TYPE OF PUSHBUTTON SWITCHES USUALLY HAVE A MUSHROOM-SHAPED BUTTON FOR EASY PUSH-PULL ACTION. (ALLABOUTCIRCUITS.COM)
SELECTOR SWITCHES

SELECTOR SWITCHES ARE ACTUATED WITH A ROTARY KNOB OR LEVER OF SOME SORT TO SELECT ONE OF TWO OR MORE POSITIONS. LIKE THE TOGGLE SWITCH, SELECTOR SWITCHES CAN EITHER REST IN ANY OF THEIR POSITIONS OR CONTAIN SPRING-RETURN MECHANISMS FOR MOMENTARY OPERATION.

(ALLABOUTCIRCUITS.COM)
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JOYSTICK SWITCHES

A JOYSTICK SWITCH IS ACTUATED BY A LEVER FREE TO MOVE IN MORE THAN ONE AXIS OF MOTION. ONE OR MORE OF SEVERAL SWITCH CONTACT MECHANISMS ARE ACTUATED DEPENDING ON WHICH WAY THE LEVER IS PUSHED, AND SOMETIMES BY HOW FAR IT IS PUSHED. THE CIRCLE-AND-DOT NOTATION ON THE SWITCH SYMBOL REPRESENTS THE DIRECTION OF JOYSTICK LEVER MOTION REQUIRED TO ACTUATE THE CONTACT. JOYSTICK HAND SWITCHES ARE COMMONLY USED FOR CRANE AND ROBOT CONTROL. (ALLABOUTCIRCUITS.COM)
ROCKER SWITCHES

A ROCKER SWITCH IS AN ON/OFF SWITCH THAT ROCKS (RATHER THAN TRIPS) WHEN Pressed, WHICH MEANS ONE SIDE OF THE SWITCH IS RAISED WHILE THE OTHER SIDE IS DEPRESSED MUCH LIKE A ROCKING HORSE ROCKS BACK AND FORTH. A ROCKER SWITCH MAY HAVE A CIRCLE (FOR "ON") ON ONE END AND A HORIZONTAL DASH OR LINE (FOR "OFF") ON THE OTHER TO LET THE USER KNOW IF THE DEVICE IS ON OR OFF. ROCKER SWITCHES ARE USED IN SURGE PROTECTORS, DISPLAY MONITORS, COMPUTER POWER SUPPLIES, AND MANY OTHER DEVICES AND APPLICATIONS. (ALLABOUTCIRCUITS.COM)
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SLIDER SWITCHES

A SLIDER SWITCH IS AN ON/OFF SWITCH THAT SLIDES RATHER THAN TRIPS. IT IS QUITE OFTEN USED IN DIMMER SWITCHES.
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BUTTON SWITCH

FINGER SWITCH

SENSI-BALL SWITCH

SWITCHES FOR HANDICAPPED USERS
ELECTRICAL
HAND SWITCHES: TYPES

GRIP SWITCH
STRING SWITCH

SWITCHES FOR HANDICAPPED USERS