

ARDUINO KEYPAD AND BUTTON SWITCHES

DESCRIPTION:

These were simple keypads and follow the normal wiring for push button switches. This means each of the push button switches is wired to a separate pin on the Arduino. This obviously means you need 5 pins. This was fine until I wanted to add extra solenoid valves and realized I didn't have enough spare pins.

I started looking for pre-made keypads again and came across the Keyes Keypad. They also use a single pin. These are analogue keypads that use a single analogue pin on the Arduino.



The main difference between the digital keypad and the analogue keypad is how the keys are read and how the returned value is used. For the digital keypad you need to check each pin/key separately. For example. If left key is pressed, if right key is pressed. The analogue keypad uses a single variable which has a different value depending on the key pressed. For example. if Keypress is left, or if keypress is up. I found this a little easier to work with but it can be written anyway you wish.

Both diagrams are the same. Internally, the left and right sides of the switch are joined together. This can be seen from the schematic icon used for switches

The analogue keypad produces a different voltage or analogue value depending on which key is pressed. This can be read by a single analogue pin on the Arduino.