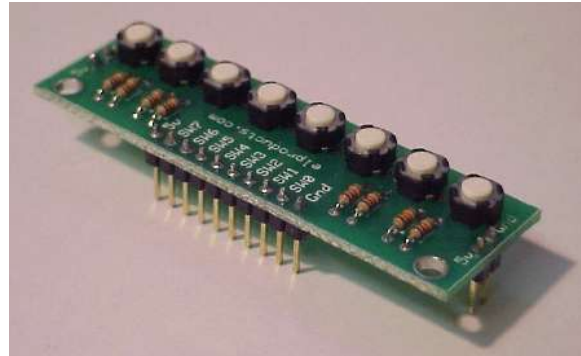
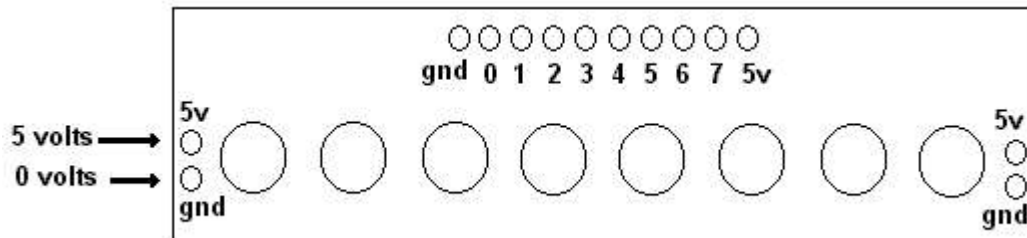


## Switches Breadboard Module



### **Operation:**

Connect the module gnd and 5v pins to the breadboard buss strip or connect to the 5v and gnd on the 10 pin header. Connect the switch pins to the I/Oports of your micro. Pressing a momentary switch will supply a low (0v) at the switch pin. Leaving the switch unpressed will supply a high (5v) at the switch pin.



' ----[ Program Description ]-----

'This program demonstrates how to read a switch and drive LEDs in PicBasic Pro format.

'PortA RA1 and RA2 will drive LEDs. The RA0 port will be an input and read the state of a momentary push button switch to determine which LED to light. If switch is pressed LED2 will light. If switch is not pressed then LED1 will light.

Define LOADER\_USED 1 'Only required if bootloader used to program PIC

Init:

```
adcon1 = 6          ' Set all PortA to digital I/O
trisa = %00000001  ' set PortA RA4-RA1 to outputs, RA0 input
porta = %00000010  ' Set PortA RA1 high to turn on LED1
```

**Main:**

```
' *** Test the switch state ***  
if portA.0 = 0 then led2 'If switch is pressed then jump to LED2 routine  
  
PortA.1 = 1      ' Turn LED1 on  
portA.2 = 0      ' Turn LED2 off  
goto Main       ' Jump to the top of the main loop
```

**LED2:**

```
' *** Turn LED2 on ***  
porta.2 = 1      ' LED2 on  
porta.1 = 0      ' LED1 off  
goto Main       ' Jump to the top of the main loop
```