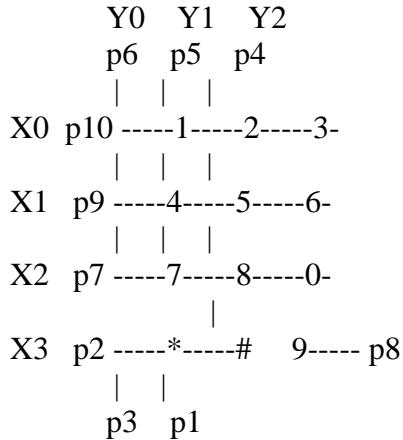


4x3 matrix 12-key keypad, Jameco Electronics, Part Number: 2082206

Connections are made via a short segment of colored ribbon cable, pre-soldered to the backing PCB. By carefully removing the 5 miniature phillips screws that hold the PCB in place, the ribbon cable may be easily replaced with a strip of 0.1" breakaway header.

Connections for Jameco 2082206 keypad are as follows:



Pin 1 (p1) is located closest to the "3" key, and Pin 10 (p10) is located closest to the "1" key

Note that the * and # keys have been assigned separate pins that are not part of the main matrix, which allows them to be used for other purposes. They may be incorporated into the matrix as follows:

$$\begin{aligned} X_0 &= p^{10} \\ X_1 &= p^9 \\ X_2 &= p^7 \\ X_3 &= p^2 + p^8 \end{aligned}$$

$$\begin{aligned} Y_0 &= p_6 + p_3 \\ Y_1 &= p_5 + p_1 \\ Y_2 &= p_4 \end{aligned}$$

In summary, the (X,Y) coordinates of each key will be established as follows:

- 1 - (0,0)
 - 2 - (0,1)
 - 3 - (0,2)
 - 4 - (1,0)
 - 5 - (1,1)
 - 6 - (1,2)

7 - (2,0)

8 - (2,1)

0 - (2,2)

* - (3,0)

- (3,1)

9 - (3,2)