

Keypad

Arduino and chipKit library support for keypads

Manual

The logo for Rinky-Dink Electronics features the company name in a stylized, glowing cyan font with a 3D effect. The text is set against a dark background that includes a close-up image of a green printed circuit board (PCB) with various electronic components and traces visible.

Rinky-Dink Electronics

Introduction:

This library is just a quick and easy way to get input through keypads. The library supports keypads with up to 6 columns and up to 5 rows of keys.

You can always find the latest version of the library at <http://www.RinkyDinkElectronics.com/>

For version information, please refer to `version.txt`.

PRE-DEFINED CHARACTERS:

Default characters defined for 3x3, 3x4 and 4x4 keypads:

3x3 Keypad

1	2	3
4	5	6
7	8	9

3x4 Keypad

1	2	3
4	5	6
7	8	9
*	0	#

4x4 Keypad

1	2	3	A
4	5	6	B
7	8	9	C
*	0	#	D

Other-sized keypads have **NO** characters pre-defined. Use `setKeyChars()` to assign characters.

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FUNCTIONS:

KeyPad(cols, rows);

The main class constructor.

Parameters: cols: Number of columns of keys (1-6)
 rows: Number of rows of keys (1-5)

Usage: KeyPad myKeys(4, 4); // Initialize the library for a 4x4 keypad

setColPins(c0[, c1[, c2[, c3[, c4[, c5]]]]);

Configure which pins are connected to the keypad columns.

Parameters: c0: Pin connected to keypad column 1 (leftmost)
 c1: <optional> Pin connected to keypad column 2
 c2: <optional> Pin connected to keypad column 3
 c3: <optional> Pin connected to keypad column 4
 c4: <optional> Pin connected to keypad column 5
 c5: <optional> Pin connected to keypad column 6

Usage: myKeys.setColPins(2, 3, 4, 5); // Setup a keypad with 4 columns connected to pins 2, 3, 4 and 5

setRowPins(r0[, r1[, r2[, r3[, r4]]]);

Configure which pins are connected to the keypad rows.

Parameters: r0: Pin connected to keypad row 1 (top)
 r1: <optional> Pin connected to keypad row 2
 r2: <optional> Pin connected to keypad row 3
 r3: <optional> Pin connected to keypad row 4
 r4: <optional> Pin connected to keypad row 5

Usage: myKeys.setRowPins(6, 7, 8, 9); // Setup a keypad with 4 rows connected to pins 6, 7, 8 and 9

setKeyChars(row, chars);

Configure which characters belong to a row of buttons on the keypad.

Parameters: row: Which row to set characters for (1 is the upper row)
 chars: Characters belonging to the row

Usage: myKeys.setKeyChars(1, "123A"); // Associate the keys on the upper (1st) row with the characters '1', '2', '3' and 'A' on a keypad with 4 columns

setDebounceDelay(delay);

Set delay-time to pause after each key press.

Parameters: delay: Delay-time in milliseconds

Usage: myKeys.setDebounceDelay(); // Switch off the delays

Notes: Set to 0 (default) to switch off.

readKeys();

Check if a key is being pressed and return the associated character.

Parameters: None

Returns: (char) Character associated with the pressed key. Char(0) is returned if no key is pressed.

Usage: myKeys.readKeys(); // Check the keys

readRaw();

Check if a key is being pressed and return the raw button value.

Parameters: None

Returns: (integer) Raw code for the button being pressed. -1 is returned if no button is pressed.

The raw code is calculated as (column *10) + row. The third button on the upper row would return 31.

Usage: myKeys.readRaw(); // Check the keys