

RobotDyn Keypad 3x4 Analog library for Arduino
1.0.0

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Contents

1	RobotDyn library for Arduino	1
2	Class Index	3
2.1	Class List	3
3	File Index	5
3.1	File List	5
4	Class Documentation	7
4.1	RobotDynKeypad3x4Analog Class Reference	7
4.1.1	Detailed Description	7
4.1.2	Constructor & Destructor Documentation	7
4.1.2.1	RobotDynKeypad3x4Analog()	7
4.1.3	Member Function Documentation	8
4.1.3.1	getButtons()	8
5	File Documentation	9
5.1	RobotDynKeypad3x4Analog.cpp File Reference	9
5.1.1	Detailed Description	9
5.2	RobotDynKeypad3x4Analog.h File Reference	9
5.2.1	Detailed Description	9
	Index	11

Chapter 1

RobotDyn library for Arduino

This is a RobotDyn Keypad 3x4 with analog output library for Arduino.

Hardware

Any Arduino / ESP8266 board with an ADC (Analog Digital Converter).

Pins

Keypad	Any Arduino board	WeMos D1 & R2 / Node MCU	WeMos LOLIN32
VCC	5V (or 3.3V)	3V3	3V3
GND	GND	GND	GND
OUT	A0 (ANALOG pin)	A0 (ADC0)	A0 = SVP (GPIO36)

Example

Examples | Erriez RobotDyn Keypad 3x4 Analog:

- [Calibrate](#)
- [Example](#)

Usage

Initialization

```
{c++}
#include <Arduino.h>
#include <RobotDynKeypad3x4Analog.h>

// Connect the keypad OUT pin to the ANALOG pin of an Arduino / ESP8266 / ESP32 board
#define KEYPAD_ANALOG_PIN A0

// Create keypad object
RobotDynKeypad3x4Analog keypad(KEYPAD_ANALOG_PIN);
```

Get buttons

```
{c++}  
// Read buttons:  
// -1: Buttons up  
// 0..11: Button down  
int keypadState = keypad.getButtons();
```

Library dependencies

- None.

Documentation

- [Doxygen online HTML](#)
- [Doxygen PDF](#)

Library installation

Please refer to the [Wiki](#) page.

Chapter 2

Class Index

2.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

RobotDynKeypad3x4Analog	
RobotDyn Keypad 3x4 Analog class	7

Chapter 3

File Index

3.1 File List

Here is a list of all documented files with brief descriptions:

RobotDynKeypad3x4Analog.cpp	
RobotDyn Keypad 3x4 Analog library for Arduino	9
RobotDynKeypad3x4Analog.h	
RobotDyn Keypad 3x4 Analog library for Arduino	9

Chapter 4

Class Documentation

4.1 RobotDynKeypad3x4Analog Class Reference

RobotDyn Keypad 3x4 Analog class.

```
#include <RobotDynKeypad3x4Analog.h>
```

Public Member Functions

- [RobotDynKeypad3x4Analog](#) (uint8_t analogPin, uint16_t maxAnalogValue=MAX_ANALOG_VALUE)
Constructor LCDKeypadShield class.
- virtual int [getButtons](#) ()
Read buttons from one analog pin.

Protected Attributes

- uint16_t [_maxAnalogValue](#)
Max analog value.
- uint8_t [_analogPin](#)
Analog pin number.

4.1.1 Detailed Description

RobotDyn Keypad 3x4 Analog class.

Definition at line 50 of file RobotDynKeypad3x4Analog.h.

4.1.2 Constructor & Destructor Documentation

4.1.2.1 RobotDynKeypad3x4Analog()

```
RobotDynKeypad3x4Analog::RobotDynKeypad3x4Analog (
    uint8_t analogPin,
    uint16_t maxAnalogValue = MAX_ANALOG_VALUE ) [explicit]
```

Constructor LCDKeypadShield class.

Parameters

<i>analogPin</i>	Analog pin number
<i>maxAnalogValue</i>	Maximum value of the ADC value may be slightly different. This may be compensated, but was not needed during testing with several different boards.

Definition at line 62 of file RobotDynKeypad3x4Analog.cpp.

4.1.3 Member Function Documentation

4.1.3.1 `getButtons()`

```
int RobotDynKeypad3x4Analog::getButtons ( ) [virtual]
```

Read buttons from one analog pin.

Returns

-1: Button up 0..11: Button down

Definition at line 74 of file RobotDynKeypad3x4Analog.cpp.

The documentation for this class was generated from the following files:

- [RobotDynKeypad3x4Analog.h](#)
- [RobotDynKeypad3x4Analog.cpp](#)

Chapter 5

File Documentation

5.1 RobotDynKeypad3x4Analog.cpp File Reference

RobotDyn Keypad 3x4 Analog library for Arduino.

```
#include "RobotDynKeypad3x4Analog.h"
```

5.1.1 Detailed Description

RobotDyn Keypad 3x4 Analog library for Arduino.

Source: <https://github.com/Erriez/RobotDynKeypad3x4Analog>

Experimental ADC keypad values +-----+-----+-----+-----+ | AVR | ESP8266 | ESP32 | Button | +-----+-----+
+-----+-----+ | 0 | 0 | 0 | None | +-----+-----+ | 490 | 467 | 1700 | 11 | | o OUT GND VCC o | | 510 | 490 |
1800 | 0 | +-----+-----+ | 540 | 515 | 1900 | 10 | | | | 570 | 546 | 2050 | 9 | | | 1 2 3 | | 600 | 580 | 2170 | 8 |
| | | 640 | 615 | 2300 | 7 | | | 4 5 6 | | 680 | 660 | 2500 | 6 | | | | 730 | 700 | 2700 | 5 | | | 7 8 9 | | 790 | 760 | 2940 |
4 | | | 850 | 825 | 3250 | 3 | | | 10 0 11 | | 930 | 900 | 3700 | 2 | | o o | | 1023 | 990 | 4095 | 1 | +-----+-----+
+-----+-----+-----+-----+ TOP VIEW

5.2 RobotDynKeypad3x4Analog.h File Reference

RobotDyn Keypad 3x4 Analog library for Arduino.

```
#include <Arduino.h>
```

Classes

- class [RobotDynKeypad3x4Analog](#)
RobotDyn Keypad 3x4 Analog class.

5.2.1 Detailed Description

RobotDyn Keypad 3x4 Analog library for Arduino.

Source: <https://github.com/Erriez/RobotDynKeypad3x4Analog>

Index

getButtons

RobotDynKeypad3x4Analog, [8](#)

RobotDynKeypad3x4Analog, [7](#)

getButtons, [8](#)

RobotDynKeypad3x4Analog, [7](#)

RobotDynKeypad3x4Analog.cpp, [9](#)

RobotDynKeypad3x4Analog.h, [9](#)