

# Bonezegei HD44780: Arduino Library for 16x2 LCD 4-Bit Mode

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## Abstract

Bonezegei HD44780 is an Arduino library that allows users to control 16x2 LCD displays in 4-bit mode. The library provides functions for initializing, clearing and printing text. The library is compatible with Arduino Uno, Nano, Mega, and other boards that use the HD44780 controller. The library is easy to use and requires only four data pins and two control pins to interface with the LCD. The library also supports multiple LCDs on the same Arduino board using different pin configurations. Follow the installation steps at <https://bonezegei.com> on how to install bonezegei libraries on Arduino IDE (Batutay, 2023).

## Disclaimer

The code and libraries provided by Bonezegei is intended for informational and educational purposes only. Bonezegei does not own or manufacture the hardware associated with the code. The code is provided "as is" without any warranty, express or implied, including but not limited to the warranties of merchantability, fitness for a particular purpose, and non-infringement. In no event shall Bonezegei be liable for any claim, damages, or other liability arising from the use of the code or the hardware. Users are solely responsible for ensuring that their use of the code complies with all applicable laws and regulations.

## 1. Hello World

```
/*
  4-bit mode Hello World Example
  Author: Bonezegei (Jofel Batutay)
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*/

#include <Bonezegei_HD44780.h>

/*
  param1 = RS
  param2 = EN
  param3 = D4
  param3 = D5
  param3 = D6
  param3 = D7
*/
Bonezegei_HD44780 lcd(9, 8, 4, 5, 6, 7);

void setup() {
  lcd.begin();
  lcd.print("Bonezegei");
  lcd.setPosition(0, 1);          //param1 = X   param2 = Y
  lcd.print("HD44780");
  delay(2000);
  lcd.setPosition(0, 0);
  lcd.print("Hello World");
}

void loop() {
  lcd.setPosition(0, 1);
  String str = "ms:";
  str += millis();
  lcd.print(str.c_str());
  delay(100);
}
```

## References

Batutay, Jofel. (2023). Library Installation on Arduino IDE. Bonezegei.

<https://bonezegei.com/?c=resources/tutorial&&d=resources/tutorial/libraries/install&&nav=1>



bonezegei

Website : <https://bonezegei.com>

Repository URL: [https://github.com/bonezegei/Bonezegei\\_HD44780](https://github.com/bonezegei/Bonezegei_HD44780)