

# What is RGBDigit

*RGBDigit is the first 7 segment display with programmable RGB LEDS, that requires only 3 wires to control them.*

RGBDigit improves the possibilities and usability of displays compared to those that are currently on the market:

## Standard display

The well-known classic 7-segment display.

- One pre-set colour, where the variety of colours is limited
- 10 wires on the back

## Adafruit RGB 7 segment display (<http://www.adafruit.com/products/1399>)

Although the display looks quite good, it has some disadvantages.

- High price, the price is quite high at around €14 per display.
- 25 pins on the back, this requires a lot of solder work if you want to have for example a simple 4 digit clock, were you have to make sense of 100 wires.
- Limited Arduino platform support, a more advanced micro controller is needed that can receive all these inputs (Arduino UNO doesn't have enough ports for just one of these digits!)

## RGBDigit

The new developed RGBDigit gives a solution with the struggles that are shown above. We offer the following features:

- **Arduino platform support.**
- **Neopixels**, allowing 16.581.375 possible colours and the use of the well-developed Neopixel library <https://learn.adafruit.com/adafruit-neopixel-uberguide/arduino-library>  
By using standard neopixels the RGBDigit's can also be controlled by micro controllers other than the Arduino UNO e.g. raspberry pi.
- **Minimum number of connecting pins**, using only 3 pins in from your micro controller and 3 pins out that are used to connect the digits with each other.
- **Cascading up to 10 RGDigits**, using only 3 input wires for all the digits.
- **Open source product.**  
Currently there is already a RGBDigit library available, written by a RGBDigit user
- **Supporting products available for using the RGBDigit's.**  
At this moment there is a Arduino UNO shield and a Arduino Micro 4 or 6 digit backbone available.
- **Hardware and demo software available via the Site or Webshop.**  
See RGBDigit.com/Download and RGBDigit.com/shop
- **Community**, make it possible that future users have a lot of fun in using/programming/applying the RGBDigit's. just like me. Maintaining/expanding a RGBDigit application list for all existing and future users.

We are of course always open to ideas or suggestions to improve the RGBDigit products.

Kind regards,

RGBDigit.com and Coen.