LED BOX

A LED BASIC PRODUCT
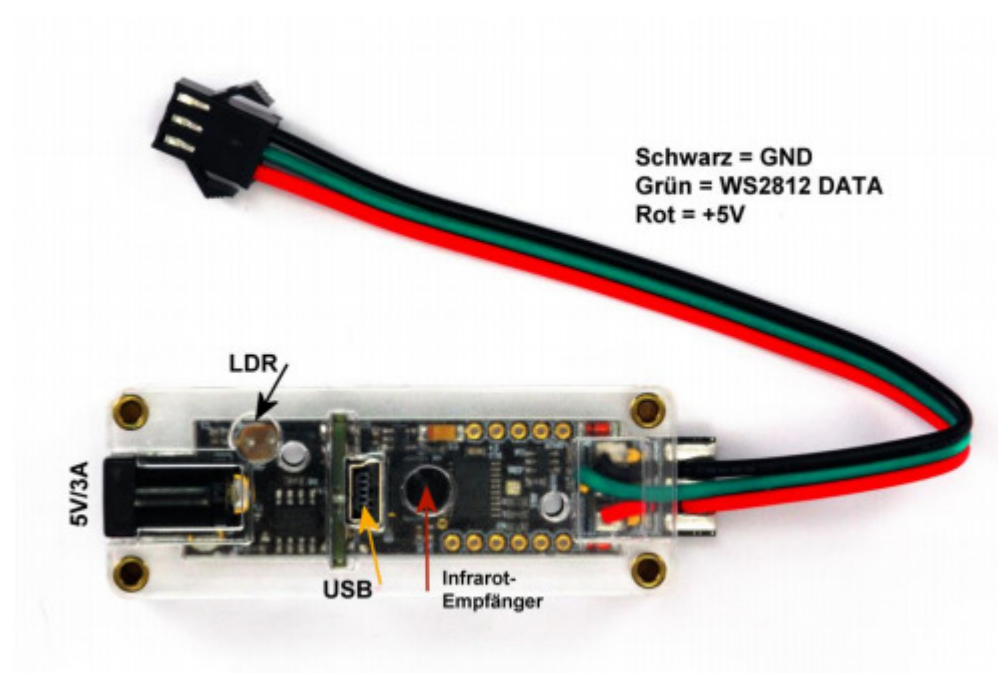
**LED BOX**

**quick start Guide**

<u>The hardware</u>

Special circuit for controlling WS2812 stripes with infrared remote control. The LED box contains the basic LED controller, a LED strip with 60 LEDs, infrared remote control and power supply. Ideal for effect lighting in the apartment. Brightness adjustments of the strip are possible via the LDR depending on the ambient brightness. EEPROM with 16 memory locations. Terminal print and error output via USB. Power supply via 5V / 3A power adapter.



Schwarz = GND
Grün = WS2812 DATA
Rot = +5V

BLACK=GND / GREEN=WS2812 DATA / RED=+5V

<u>Connection</u>

Connect the LED connection cable to the supplied stripe. Reverse polarity is not possible due to the connectors used. Then insert the hollow plug of the power supply unit into the socket provided on the LED Basic Controller and plug the power supply into the socket.

The functions can now be tested with the remote control. Make sure that the infrared receiver is clearly visible on the LED Basic Controller and point with the remote control in this direction.

IMPORTANT INSTRUCTIONS!

Please unplug or connect the stripe only when de-energized.

Only use the supplied power supply 5V / 3A.

Features

The functions of the LED box largely depend on the installed Basic program. When the LEDBox is delivered, the basic functions are supported:

   The color buttons set all LEDs to the same color

   4 levels can be set via the brightness buttons

   Key on / off saves the current setting

   If white is displayed, you can press the buttons

+ and - change the white hue to 4 levels.

   The SLOW1 and SLOW2 buttons are used to start various effects and to change them with the + and - buttons.

   The FAST and FLASH keys may be programmed with experimental effects. Just try it.

Please note that color deviations of the LEDs compared to the color buttons are possible.

LED Stripe

LEDs of types WS2812 are characterized by the fact that each individual LED in color and the only one data line

(including mass and 5V). The data protocol used for this purpose is generated by the LED Basic Controller. The supplied LED stripe with 60 LEDs can be glued on the smooth self-adhesive back on any smooth material.

If the stripe is too long, it can be cut with scissors between the LEDs on the markers. Several individual sections can be soldered directly to each other with tin or connected to lines. Always pay attention to the correct polarity: connect GND with GND, 5V with 5V and DO with DI. The lines for the power supply should not be too thin to keep the voltage drop as low as possible.

The LED box can be completely reprogrammed via the LED Basic programming environment and provided with its own functions and effects. The basic program installed at the time of delivery is located in the sample data of the LED Basic program package and can be changed and extended as required. The software as well as the detailed description of LED Basic can be found on the specified homepages under Links.



Remote control with key values for LED Basic

Power supply

The supplied power supply 5V / 3A = 15W is sufficient for the supply of the Strip. When switched off, the power consumption of the LED Basic Controller with the connected stripes is reduced to a minimum, but the infrared receiver and the microcontroller continue to consume power. If the LED box is not used for a long time, the AC adapter should be removed.

USB port

The mini-USB port is only needed for programming with the LED Basic programming environment. For Windows 7 and 8.x, the USB driver must be installed on the PC, which is located in the LED Basic program package. Windows 10 does not require a driver.

Links

LED-Basic Homepage

http://www.led-basic.de

LED Genial Online Store

http://www.led-genial.de

Diamex shop

http://www.diamex.de

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