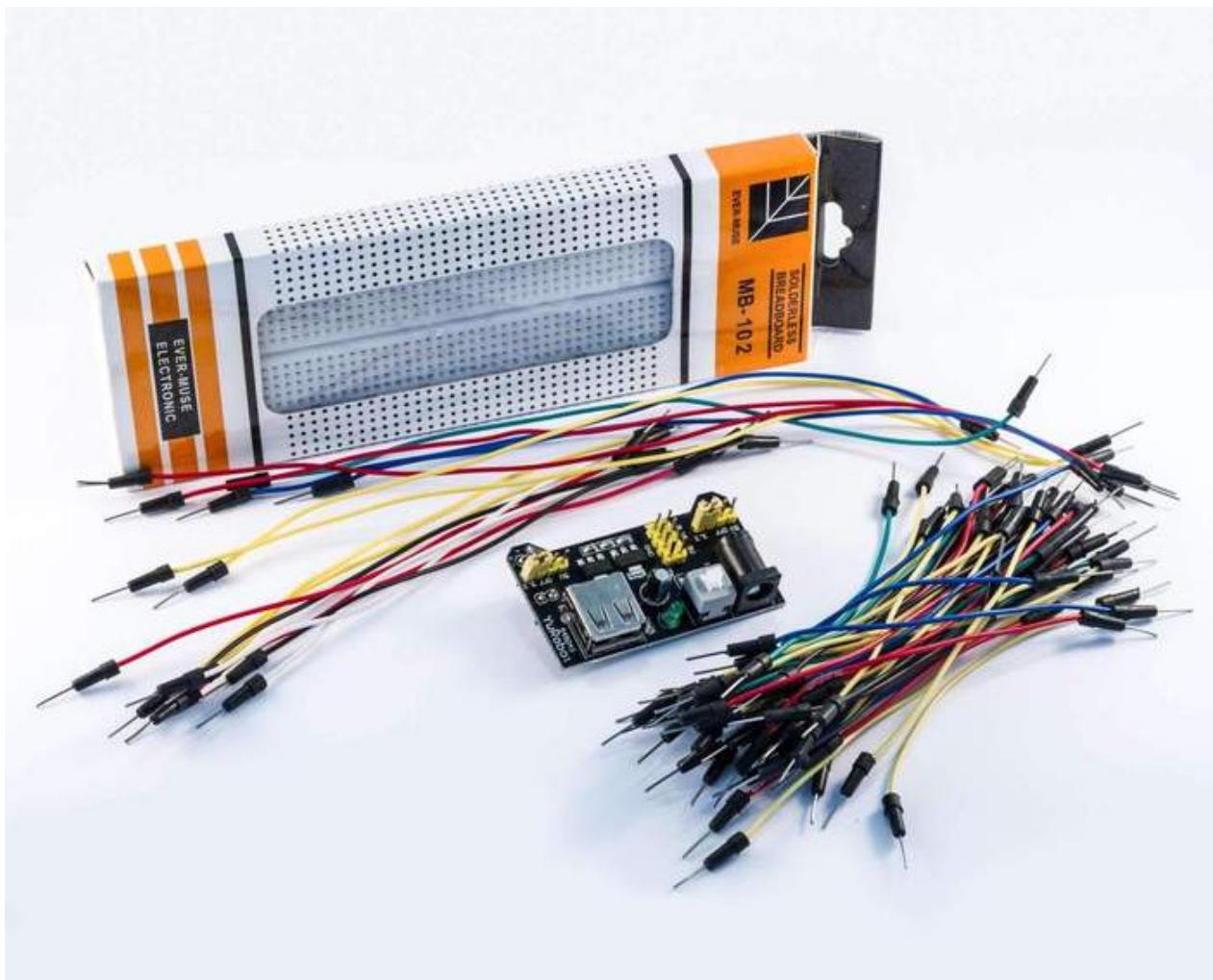


# AZ-Delivery

## Welcome!

Thank you very much for purchasing our AZ-Delivery MB102 Kit. On the following pages, we will introduce you to how to use and setup this handy device.

**Have fun!**



## Areas of application

The power supply is intended for use in electronic circuits, laboratories, educational institutions and development environments. It is used to safely provide direct current for a variety of low-voltage applications.

## Required knowledge and skills

Using the power supply requires basic knowledge of electrical engineering. Users should be able to safely assemble and operate electrical circuits and take the necessary safety precautions.

## Operating conditions

The DC power supply should only be operated in dry, well-ventilated indoor areas. The ambient temperature should be between 0°C and 40°C and the relative humidity should not exceed 80%. For safe operation, the power supply must be installed in a suitable housing

## Environmental conditions

The power supply must be used in an environment that is free from moisture and direct sunlight. It should be operated away from flammable materials and liquids to ensure safety.

## Intended Use

The product is designed for use in educational, research and development environments. It is used to develop, program and prototype electronic projects and applications. The product is not intended as a finished consumer product, but rather as a tool for technically savvy users, including engineers, developers, researchers and students.

## Improper foreseeable use

The product is not suitable for industrial use or safety-relevant applications. Use of the product in medical devices or for aviation and space travel purposes is not permitted

## disposal

Do not discard with household waste! Your product is according to the European one Directive on waste electrical and electronic equipment to be disposed of in an environmentally friendly manner. The valuable raw materials contained therein can be recycled become. The application of this directive contributes to environmental and health protection. Use the collection point set up by your municipality to return and Recycling of old electrical and electronic devices. WEEE Reg. No.: DE 62624346

## electrostatic discharge

Attention: Electrostatic discharges can damage the product. Note: Ground yourself before touching the product, such as by wearing an anti-static wrist strap or touching a grounded metal surface.

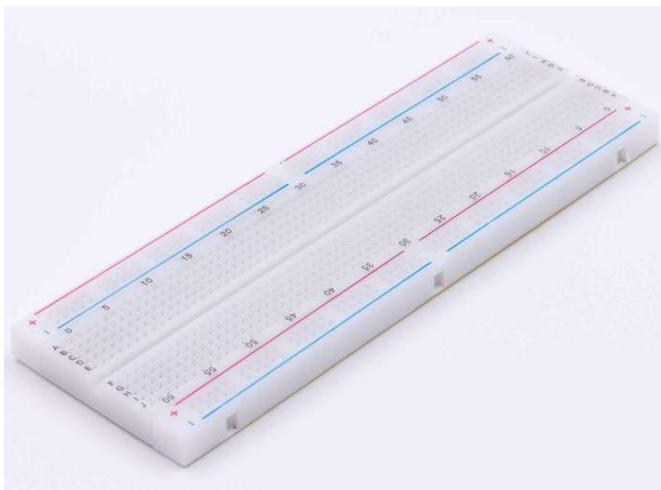
## safety instructions

Attention: Improper disposal of electronic components can endanger the environment and health. Note: Dispose of electronic components in accordance with local regulations and use appropriate recycling options. Attention: If damaged, electronic components can release harmful substances. Note: Avoid contact with damaged components and dispose of them properly. Attention: Improper disposal of electronic components can endanger the environment and health. Note: Dispose of electronic components in accordance with local regulations and use appropriate recycling options. Attention: If damaged, electronic components can release harmful substances. Note: Avoid contact with damaged components and dispose of them properly. Attention: Mechanical shocks can cause damage and malfunction. Note: Avoid mechanical shock and stress on the power supply. Caution: Inadequate fastening can lead to accidents. Note: Make sure the power adapter is securely and firmly mounted to prevent accidental movement or falls. Attention: Damaged components can affect the functionality of the entire system. Note: Check the power supply regularly for visible damage and replace defective parts immediately. Caution: Short circuits can result in electric shock and fire. Note: Avoid short circuits by using insulated tools and appropriate protective covers for electrical connections. Caution: Overvoltage can damage the power supply and connected devices. Note: Strictly adhere to the power supply's specified voltage and current limits. Caution: Direct contact with live parts can result in injury. Note: Make sure there is no direct contact with live parts during operation. Attention: Incorrect polarity can lead to damage to the power supply and the connected devices. Note: Be sure to connect the polarity correctly. Attention: Continuous operation under full load can shorten the lifespan of the power supply. Note: Do not leave the power supply running at full load for long periods and allow regular breaks. Caution: Overheating can cause damage to the power supply and connected devices. Note:

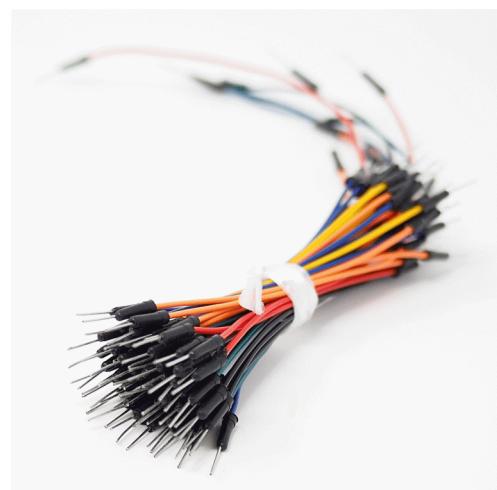
Make sure the power supply is adequately ventilated during operation and monitor the temperature regularly. Caution: High temperatures can significantly shorten the lifespan of the power supply and connected devices. Note: Only operate the power supply within the recommended ambient temperatures (0°C to 40°C). Caution: Overheated components can cause fires. Note: Avoid use in direct sunlight or near heat sources. Caution: Overloading can lead to overheating and failure of the power supply. Note: Use the power supply only within the specified load limits. All power supplies have been developed in accordance with valid EMC regulations. These switching power supplies are rated as components and developed for installation in a terminal device. After integration into an end device, the EMC properties of the end system must be checked again.

# A2z-Delivery

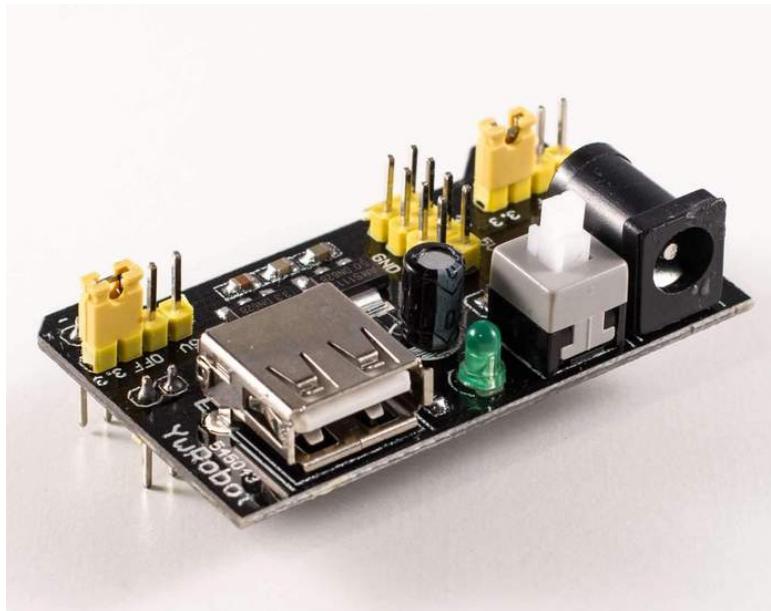
This kit has three parts: one solderless breadboard, a set of male to male jumper wires for breadboards and one MB102 power adapter for breadboard.



Solderless breadboard



set of m/m jumper wires

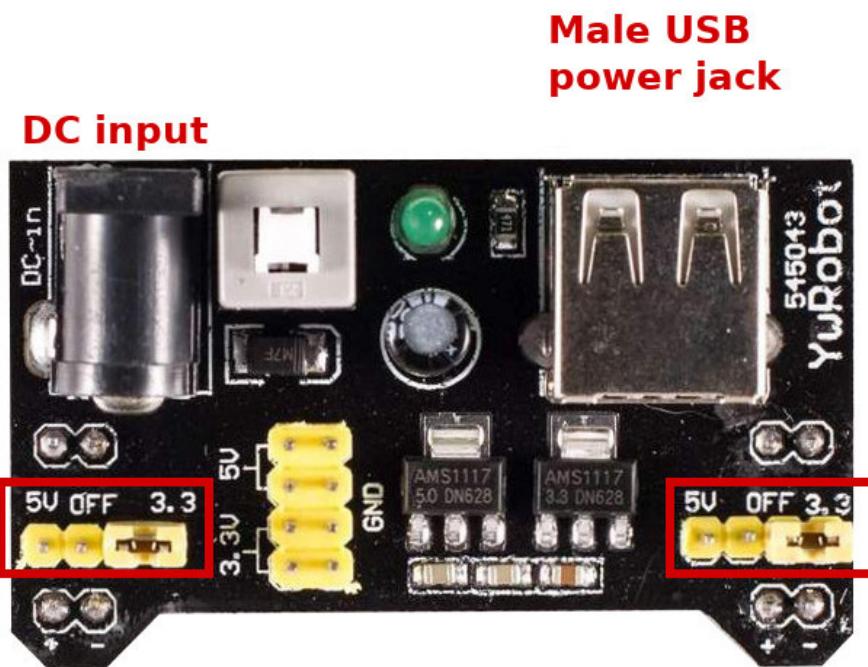


MB102 power adapter for solderless breadboard

# Az-Delivery

This kit is perfect for any of your prototyping electronics project that requires few parts to be connected with each other and with external power supply.

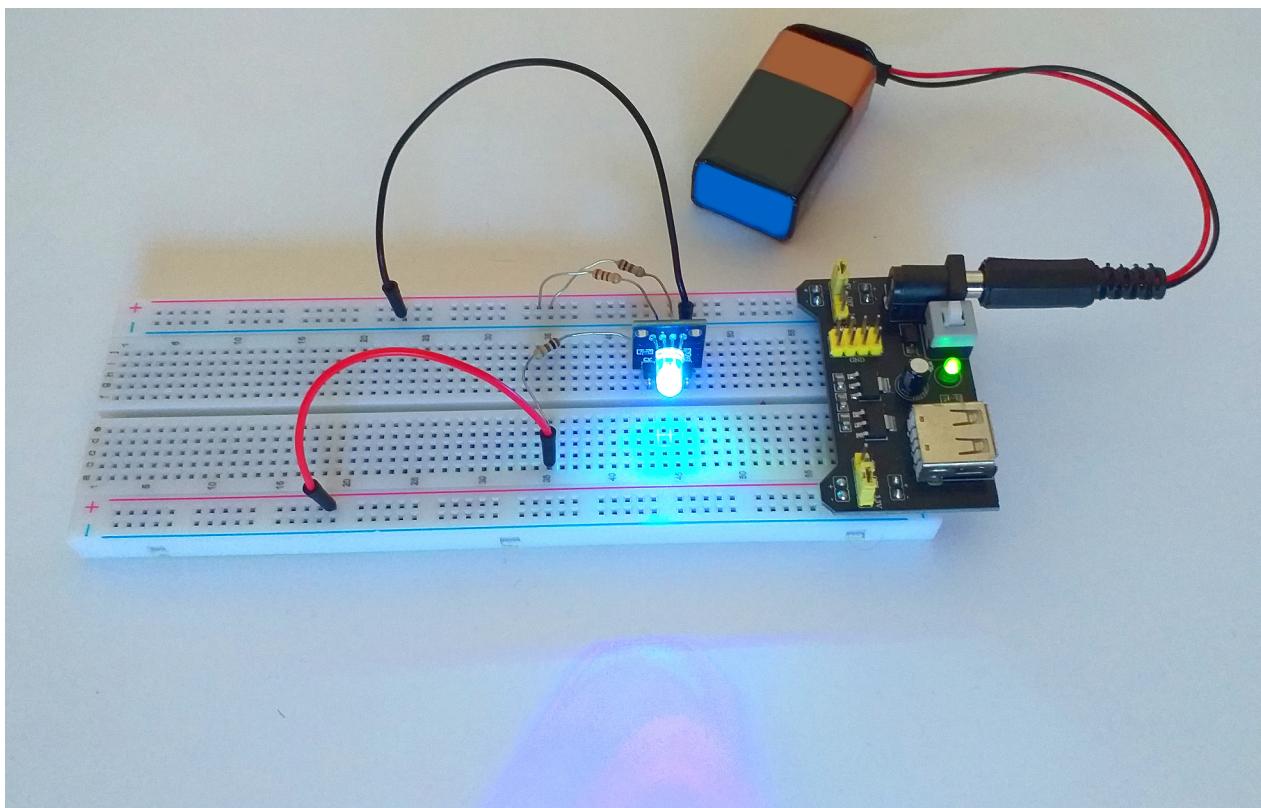
MB102 power adapter uses DC input (via 2.1mm male DC power jack) in range from 6.5V up to 12V and can output both 5V and 3.3V depending on yellow jumpers setup (image below). It has also, an male USB power jack that can power for example an Atmega328p board.



To power up MB102 power adapter, you need to connect DC input, and press power switch (white rectangle on image above), after which green LED will be turned on.

## Application example

We use breadboard to connect our RGB LED with power supply from MB102 power adapter. We connect MB102 power adapter with 9V battery. Green and Blue pins of RGB LED are connected to the +5V via  $100\Omega$  resistors, and Red pin is connected to the +3.3V via  $100\Omega$  resistor, just for example. Ground pin of RGB LED is connected to the ground pin of MB102 via black wire.



**You've done it, you can now use your module for your projects.**

# Az-Delivery

Now it is time to learn and make the Projects on your own. You can do that with the help of many example scripts and other tutorials, which you can find on the internet.

If you are looking for the high quality microelectronics and accessories, AZ-Delivery Vertriebs GmbH is the right company to get them from. You will be provided with numerous application examples, full installation guides, eBooks, libraries and assistance from our technical experts.

<https://az-delivery.de>

Have Fun!

Impressum

<https://az-delivery.de/pages/about-us>