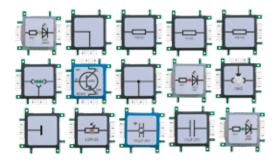




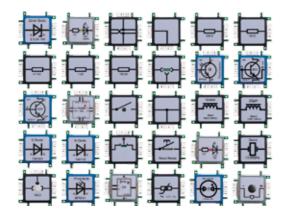
# Brick'R'knowledge

Set overview



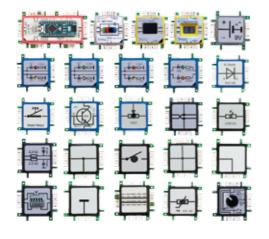
#### **Basic Set**

The Basic Set introduces you to the most important variables and functionalities of electronic circuits. The 19 bricks included in the kit help you understand more about electronics. For those of you who are interested in electronics and want to know more about it, the Basic Set is the adequate kit to start with.



#### **Advanced Set**

The Advanced Set enables users to rebuild basic cicuits of modern electronics and to further develop them. The included manual contains explanations of the 111 different bricks and experimental setups. The set includes a variety of switches and transistors, antenna and audio elements and special modules like the Timer 555.



# **Arduino<sup>®</sup> Coding Set**

The Brick'R'knowledge Arduino<sup>®</sup> Coding Set introduces you to digital electronics and programming with the Arduino<sup>®</sup> Nano that is included in the kit. The set includes digital components such as 7-segment displays, OLED display, D/A converter or a I2C adapter that are complementary to all analog bricks.



## **Internet of Things Set**

With the Internet of Things Set it is finally possible to control your bricks via internet. With the included IoT Brick you will learn how to build your first website and control I/O pins via smartphone. Furthermore, the set contains a temperature and humidity sensor. To drive the 7-segment display, the so called I<sup>2</sup>C bus is used.

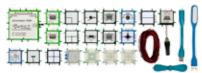
Art.Nr.: 118704

Art.Nr.: 115589

Art.Nr.: 125697

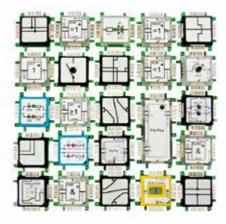
Art.Nr.: 138090





Solar Set Art.Nr.: 133574

The Brick'R'knowledge Solar Set guarantees fun with experiments for the whole family and introduces renewable energies in a playful and easy way. How does a solar cell work? How can an accumulator store energy? How can you build a night light with a motion detector? These questions and many more will be answered with the set.



## Logic Set

The Logic Set is ideally suited for a quick start into the digital circuit technology. While working with the manual, which includes didactically structured examples of circuits, students learn about the most important digital circuits like adder, shift register and numerator. The comprehensively equipped Logic Set provides teachers with a practical basis for daily teaching. Plugging the bricks together and experimenting with them is fun and encourages building your own circuit variants. The Logic Set's scope of supply ranges from easy logic bricks (AND, OR, NAND, NOR, XOR, XNOR, NOT), to a variety of flip flop bricks (D-, RS- and JK-type), to an impulse brick (alternatively a debounced switch for single pulses) up to a BCD counter brick with an integrated 7 segment display.

Art.Nr.: 135006

Art.Nr.: 136818

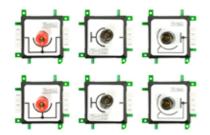
Art.Nr.: 136820

## Brick'R'knowledge measuring adapters



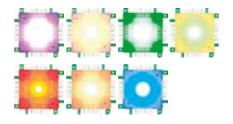
#### **Measurement Set One**

The Measurement Set One enables you to measure the voltage, current and other measured variables with standard measuring instruments. The set includes a measuring adapter connector (3x2mm), a measuring adapter (4mm Closed End GND) with additional cable clamp and two additional measuring adapters (4mm Endpoint and 4mm Inline red).



#### **Measurement Set Two**

The Measurement Set Two includes the following 6 measurement bricks:  $2 \times 1000$  km measuring adapters (4mm Closed End GND),  $2 \times 100$  measuring adapters (4mm Open End GND). The Measurement Set Two enables you to measure the voltage, current and other measured variables with standard measuring instruments.



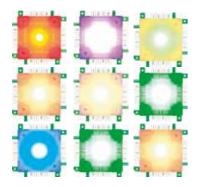
## 7 Color Light Set

The 7 Color Light Set includes 28 LED bricks in the colors red, yellow, blue, orange, violet, green and warm white. The set is perfectly adequate for individual lighting characters. You can build your own night lamp with it as the bricks can be plugged also vertically in 3D. Children can playfully learn colors with our Light Set. As the bricks are very robust even infants can play with them and easily plug them together - which additionally promotes motor skills.



## **Highpower LED Set 50**

The Highpower LED Set 50 includes fifty 1 watt highpower bricks and a 12V 8A power supply. You can build a staircase lighting, for example, that is infinitely expandable and that will grow like a tree throughout your house. The Highpower LED Set 50 enables you to playfully deal with light design.



## **Programmable LED Set**

The kit contains 49 programmable and controllable RGB LED bricks, each with two or three connectors and a conjunction-brick for Arduino® management and power supply. The programmable LED set also includes an Arduino® adapter brick and an Arduino® Nano. With this kit, you can realize colorful LED animations and other individual ideas. And the best thing about it: by performing different projects microcontroller programming can be learned easily.



## **RGB Color Light Set**

Create your light show! The RGB Color Light Set includes four flexible LED strips containing 36 LEDs in total that can be controlled with the included infrared remote control. You can glue, cut and connect the LED strips however you want. The infrared remote control has 16 different color keys and 4 light programs.

Art.Nr.: 124344

Art.Nr.: 124449

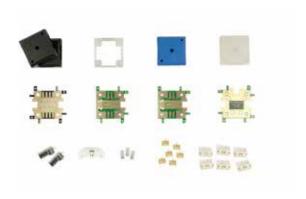
Art.Nr.: 133358

Art.Nr.: 133907

MHz DIY Set

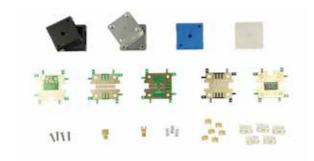
Art.Nr.: 130192

The MHz DIY Set enables users to easily realize their own individual bricks for experiments and circuits in the MHz field. The kit includes four different experimentation boards, BNC connectors, P-SMP plugs and matching connectors. Each board includes the grid to be combined with the bricks of the Brick'R'knowledge system.



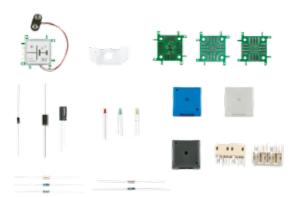
GHz DIY Set Art.Nr.: 130193

The GHz DIY Set includes everything that you need to build your own circuits in the GHz field. You can use the different boards to build splitters, combiners, filters, mixers, adapters, attenuators, bias feeding you can use it as a passive connecting element. Furthermore, the kit contains high-quality SMA and P-SMP connectors, plugs and connectors and different plastic cases. The set is suitable especially for fans of measurement technology and for radio amateurs.



DIY Set Art.Nr.: 124343

The DIY Set enables inventors and developers to design their own bricks. By using soldering iron and tin solder you can either rebuild standard bricks or design your own individual ones for special applications or even develop your own brick sets.

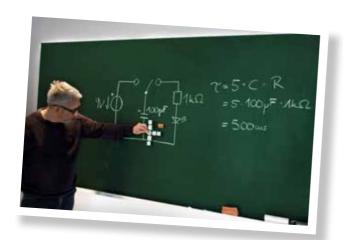


### Brick'R'knowledge education institutions

Our aim is to simplify the learning and teaching of analogue and digital electronics, digital circuit technology, renewable energy and development and to make this knowledge accessible to everyone. A common problem in electronics classes is the presentation and handling of electronic components. On the one hand, the circuits that are soldered on PCBs are not reusable, on the other hand, the breadoard has the disadvantage of not being able to document circuits in an easy way. A further problem is that most of the up-to-date components are only available in the SMD form which is not suitable for lessons. The advantages of the Brick'R'knowledge system for education purposes can be explained in five easy steps:

- Easy documentation and sharing of circuit plans by taking photos of the circuit
- Easy exchange of components and change of the circuits by connecting bricks
- Compact circuits by ground return

- Didactic manuals and new projects everyday via a growing community
- Robust and stable plug system by plastic housings that can be opened. Four pole hermaphrodite connectors that can realize 3D constructions







Please find more information on sets and educational material here: www.brickrknowledge.de/en/education/



**ALLNET GmbH**Maistraße 2
D-82110 Germering

Tel.: +49 89 894 222-921 Fax.:+49 89 894 222-33

www.brickrknowledge.com E-mail: info@brickrknowledge.com **Maker Store & Maker Space** Danziger Straße 22 D-10435 Berlin

Tel.: +49 30 473 756 81

www.maker-store.de/en/