

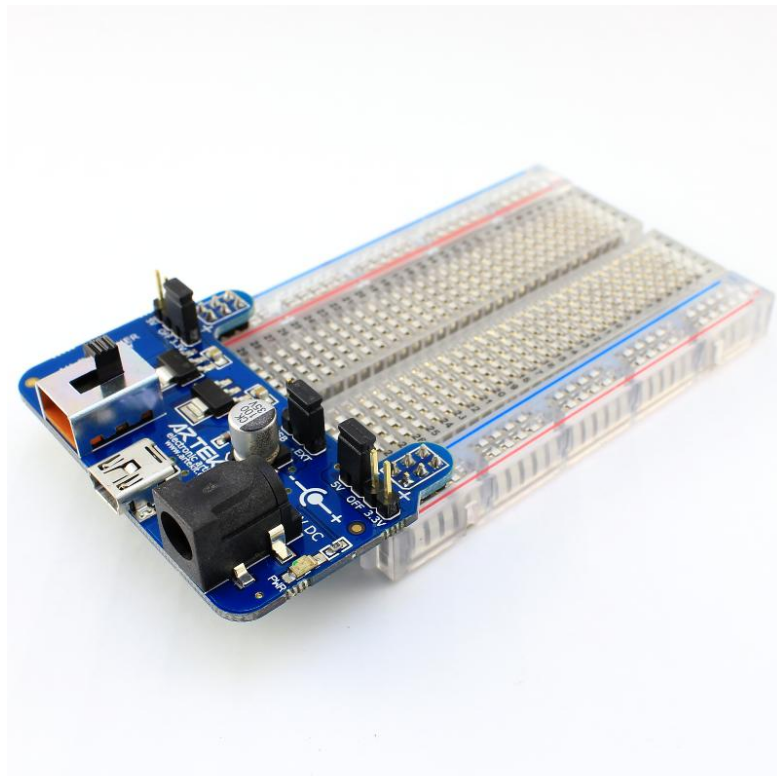


ARTEKIT

electronic artists

AK-BB-POWER

Reference manual





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About this document

Revision history

The table below displays the revision history for the chapters in this manual.

Chapter	Date	Revision	Changes made
All	December 2014	1.0	First publication

Contact information

For the latest news, upgrades and information about Artekit products, visit the Artekit web site at <http://www.artekit.eu>

For technical support on this product, visit the support page at <http://www.artekit.eu/support>

For additional information about Artekit products, consult the sources below.

Information type	Resource
Technical support	support@artekit.eu
Literature	www.artekit.eu
Sales	sales@artekit.eu
Products forum	www.artekit.eu

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Specifications

Product description

The Artekit AK-BB-POWER board is a versatile, low-cost, two rails (3.3V/5V 800mA) breadboard power supply

The AK-BB-POWER is capable of sourcing 3.3V/5V @ 800mA from external source or 500mA from USB

Main components

The AK-BB-POWER board has the following main components:

- Mini USB connector.
- 2.1mm jack (positive to center pin) for 7 to 12V DC input
- ON/OFF switch
- Power ON LED
- Two regulator IC's (3.3V and 5V)
- Jumper switch to select 3.3V or 5V on each rail
- Jumper switch to select power input (USB or external source)

Environmental requirements

The AK-BB-POWER board must be stored between -40°C and +100°C. The recommended operating temperature is between 0°C and +70°C.

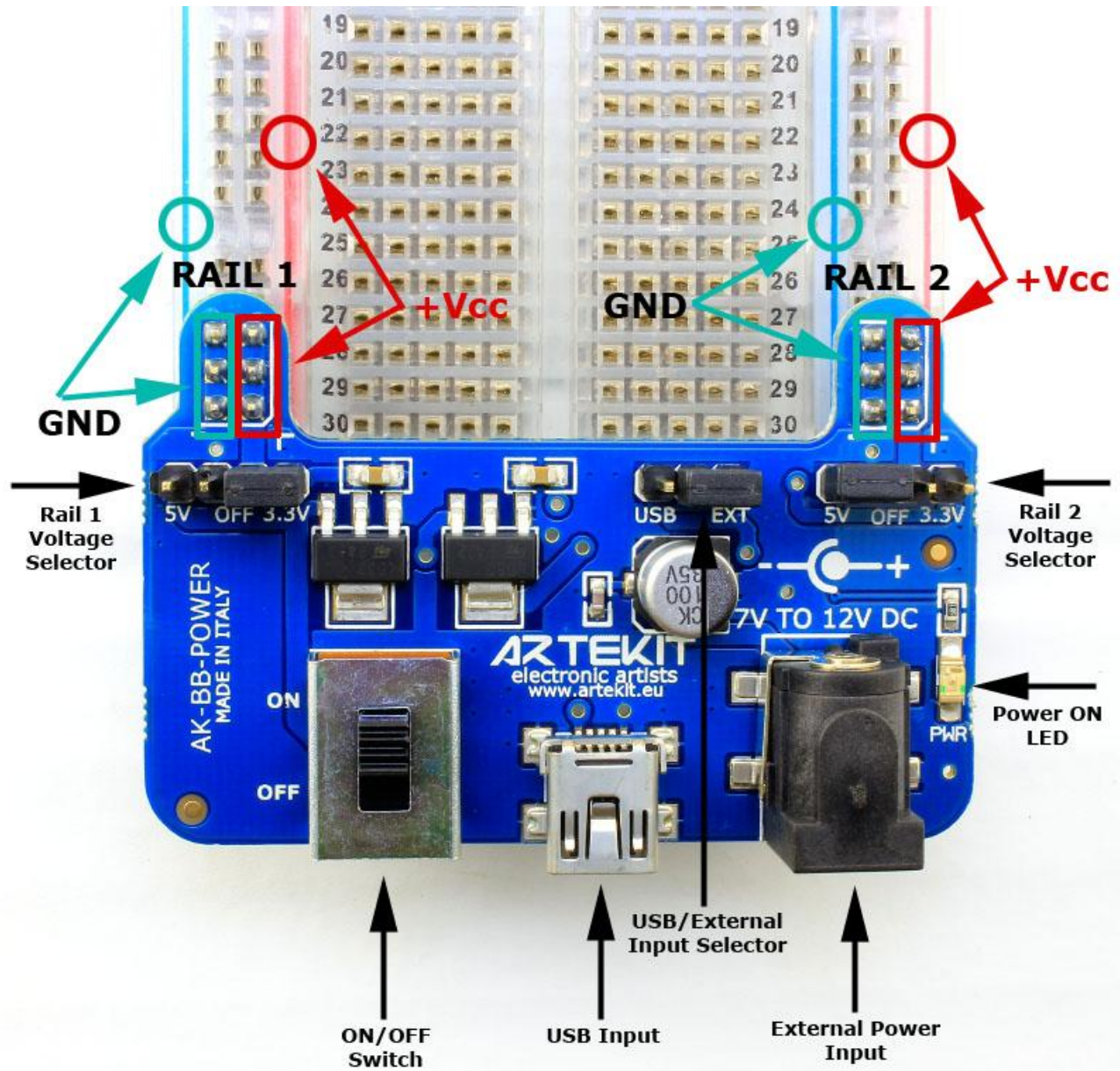
The AK-BB-POWER board may be damaged without proper anti-static handling.

Handling the board

When handling the board, it is important to observe the following precaution:

Static discharge precaution – Without proper anti-static handling the board can be damaged. Therefore, take anti-static precautions when handling the board.

Board Usage



Electrical characteristics

Test conditions

Unless specified, all voltages are referenced to GND.

Minimum and maximum values

Unless otherwise specified, the minimum and maximum values are guaranteed in the worst conditions of ambient temperature, supply voltage and frequencies by tests in production on the 100% of the devices with an ambient temperature $T_A = 25\text{ }^\circ\text{C}$.

Typical values

Unless otherwise specified, typical data are based on $T_A = 25\text{ }^\circ\text{C}$. They are given only as design guidelines and are not tested.

Absolute maximum ratings

WARNING Exceeding values beyond these absolute maximum values may cause permanent damage to the device and/or board. Operating at absolute maximum rating conditions for extended periods may affect the device reliability.

Symbol	Ratings	Min.	Max.	Unit
VCC-GND	External main supply voltage.	-0.5	14	V
VCC-GND	USB Input Voltage	-0.5	5.5	

Current sourcing in operative mode

Symbol	Parameter	Max.	Unit
Icc-Ext	Supply Current	800	mA
Icc-USB	Supply Current	500	mA