Kitronik

ESSENTIAL INFORMATION

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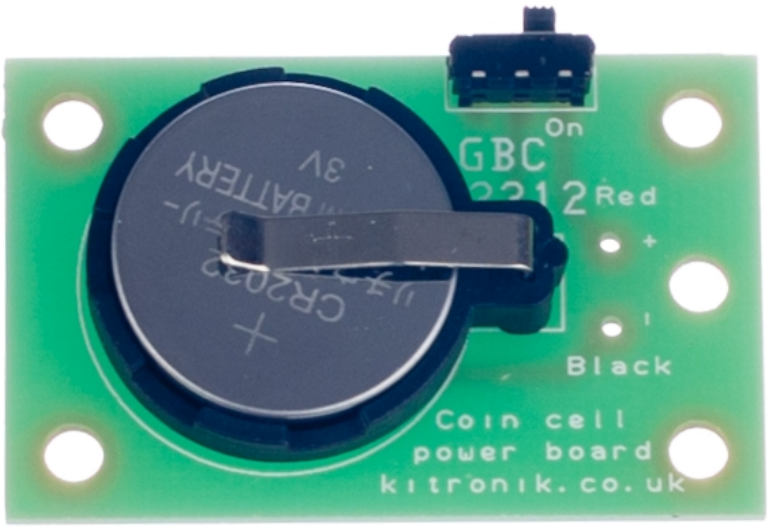
GIVE YOUR PROJECT A BOOST WITH THIS

COIN CELL POWER BOARD KIT



Version 2.0

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Coin Cell Power Board Essentials

www.kitronik.co.uk/2145

Overview

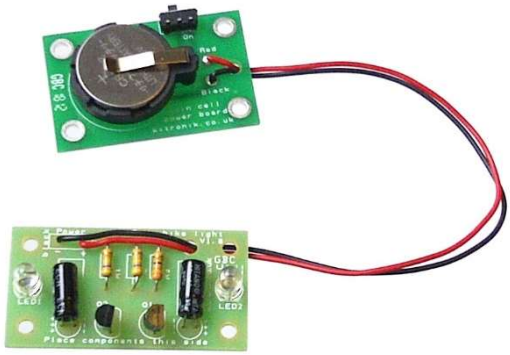
Coin cells will supply 3V, however the amount of current that can be drawn should be limited to about 20mA. If a higher power load is used the coin cell won't have the power to drive it. The board can be used with anything that works off 3V and needs up to 20mA. The compact size of the board (44mm x 28mm) makes it an ideal alternative to using two AA batteries.

Coin cells can deliver about 20mA continuous current, which is enough to power several of our kits such as the Rear Bike Light, Easy Build Timer, Record and Playback or Air Freshener Project Kit.

This kit is supplied as a pack of parts and requires soldering.

Using the Board to Power Another Kit

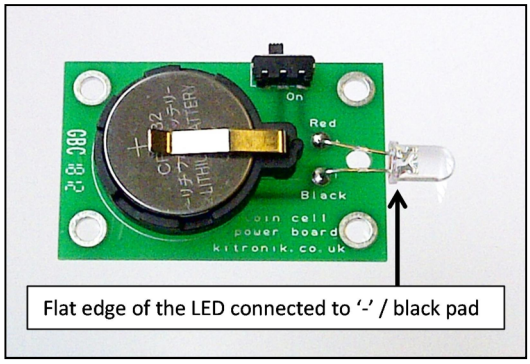
- Take a short length of red and black multi-strand wire.
- Strip both of the wires at both ends.
- On the Coin Cell Power Board:
    - Feed both wires through the strain relief hole from the bottom of the board.
    - Solder the red wire to the pad marked 'red' and '+'.
    - Solder the black wire to the pad marked 'black' and '-'
- Follow the instructions for the device that the power is connected to.



Using the Board to Make a Torch

An LED can be connected to the board provided that the forward voltage of the LED is about 3 Volts. Suitable LEDs are listed below and a diagram showing how to make the connections is shown below right.

Code	Colour	Size	Angle	Brightness
3542	White	5mm	60°	700 mCd
3543	Blue	5mm	60°	500 mCd
3568	Pink	4.8mm	100°	700 mCd
3524	White	5mm	15°	5,000 mCd
3537	Blue	5mm	15°	3,500 mCd
3546	White	5mm	140°	3,000 mCd
3549	White	5mm	15°	18,000 mCd
3550	White	5mm	30°	12,500 mCd



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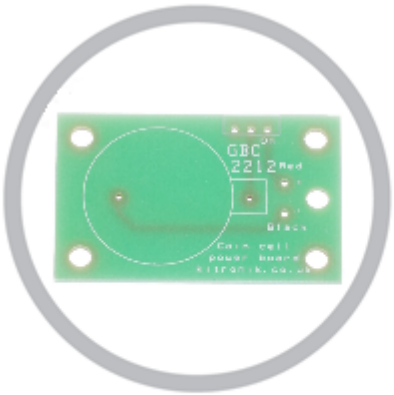
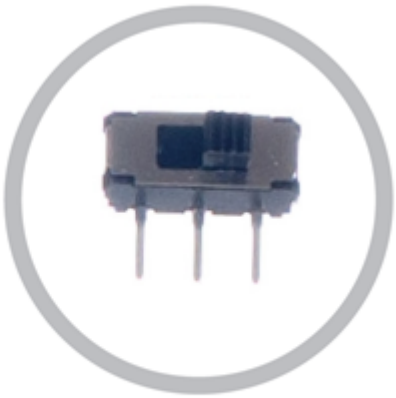
What's in the Kit?



1 x Coin Cell Power Board PCB



1 x PCB Mount Slide Switch

1 x 3V Coin Cell Battery (CR2032)

1 x CR2032 Coin Cell Holder

PCB dimensions

- 43.5mm x 28mm.

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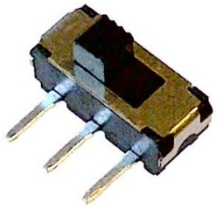
Build Instructions

Build the Coin Cell Power Board by following these simple steps.

1 SOLDER THE SWITCH

Solder the switch into the board with the slider facing the edge of the board. Be careful not to solder adjacent pads together.



2 SOLDER THE COIN CELL HOLDER

Now solder the Coin Cell Holder into the board, making sure that the part matches the outline marked on the PCB.

Online Information

Two sets of information can be downloaded from the product page where the kit can also be reordered from. The 'Essential Information' contains all of the information that you need to get started with the kit and the 'Teaching Resources' contains more information on soldering, components used in the kit, educational schemes of work and so on and also includes the essentials. Download from:

www.kitronik.co.uk/2145

This kit is designed and manufactured in the UK by Kitronik

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