

# USBCELL™

**AA rechargeable batteries**  
Plug into any usb port to recharge  
**No charger needed**



**Simple, re-usable power**

## User Guide

# Product User Guide

The USBCELL™ has been designed for real-world ease of use. By opening the cap and plugging into USB, you can recharge pretty much anywhere there's a USB socket. We hope that by making it easier to recharge batteries we can help the environment: Easier recharging means more frequent use which means fewer disposable batteries get made and thrown away.

## Getting Started

Charge your USBCELL™ before first use. You can recharge a USBCELL™ in any accessible powered USB socket; for example in computers or USB hubs. Once connected, you will see a small green light comes on at the USB plug end of the battery. This shows that the battery is charging. The built-in intelligent charger controls the charging process: When the battery is nearly full the light will start flashing (top up mode) and then will switch off when the battery is fully charged.



## Charging Tips

**Charge time:** In a powered USB socket, USBCELL™ should take about 5 hours to charge to over 90% of capacity, sooner if the battery was only partly depleted. Refer to the Technical Info section for a description of how the built-in 'intelligent' charger works. It's OK to top up; or just partially charge USBCELL™ if you need the power in a hurry: Ni-MH batteries aren't affected by partial charging or 'memory' problems, unlike Nickel Cadmium (NiCad) batteries. As with most rechargeable NiMH batteries, you may find that maximum capacity is reached only after a few full charge and discharge cycles.

**Suitable USB sockets:** Most USB sockets are suitable, but occasionally a device will have a recessed or difficult-to-access USB socket: If the battery doesn't plug in easily, don't try to force it. Some (un-powered) USB hubs don't provide enough power to fully charge more than one USBCELL™ at a time. Use powered USB sockets or connect directly where possible.

**Can be used with ordinary NiMH chargers:** The preferred charging method is via USB, however with the cap on USBCELL™, works just like a normal Ni-MH battery and can be charged in an ordinary AA Ni-MH charger. Do not charge with super-fast chargers (rated over 600mA) that charge batteries in less than 2 hours. The USBCELL™ is not designed to work with these chargers. Check your charger's manual before charging.

The recommended charging current is 250mA for 7 hours. Make sure that you use a good quality charger – a good charger should stop charging automatically when the battery is full. Make sure that the batteries are properly connected – the positive terminal (green cap) must be at the correct end. It is normal for the USBCELL™ to get warm during charging but should never get so hot that it cannot be touched; If they seem to be getting too hot disconnect the charger.

# Using USBCELL™

With the cap on, USBCELL™ behaves as a standard 1300mAh AA battery, suitable for use in high-drain devices such as digital cameras, or low-power devices, like wireless mice or games controllers. They can be used in almost any device that needs AA batteries.

**Known compatibility issues:** USBCELL™ is standard AA size, but in some devices with very tight AA sockets or barrels, (e.g. tight-barreled torches) it may be difficult to extract and we do not recommend USBCELL™ for use with these devices. Again, if it's hard to insert, don't force it.

Always make sure that batteries are connected the right way round.

When depleted, batteries should all be swapped at the same time, as a set (otherwise in some situations one battery could act to reverse-charge another).

In high-drain applications batteries can get warm. Refer to the Technical Info section for maximum recommended ambient temperatures.

**Storage:** Where possible, keep batteries in their original packaging until needed. This helps prevent any risk of short-circuiting. USBCELL™ should be stored out of direct sunlight, in a cool, dry place at room temperature.

All Ni-MH cells will lose some charge over time while stored, at the rate of approximately 1% per day. A week or so should not result in a noticeable loss of power in most applications - however, because of this property Ni-MH batteries should never be used to power safety-critical devices such as smoke alarms or medical devices.

After prolonged periods of storage, it may be necessary to charge and discharge USBCELL™ several times before maximum capacity can be obtained.

**Avoid short-circuiting:** Never leave batteries loose in a drawer with metal objects; carry them in a pocket; or solder wires onto the terminals. The USBCELL™ can deliver high current: As a result, short-circuiting can cause high temperatures. (If the USBCELL™ has been short-circuited, it may vent as a safety measure, and should be disposed of immediately; please refer to the Recycling section)

**Product Care:** USBCELL™ should be used with care, abusive use will damage your product and void the warranty. Keep the USBCELL™ clean and dry, and keep battery contacts clean. Wipe with a clean **dry** cloth if USBCELL™ becomes dirty.

**Product Support:** For additional support please contact us at: [usbcell.com/contactsupport](http://usbcell.com/contactsupport)

**Technical Info:** The built-in 'intelligent' USB charger, the charging circuit built into the USB plug looks for the tiny changes in voltage that indicate a full charge. In some situations, this is not possible to detect and a timer controls the end of charge.

If the USBCELL™ is already fully charged when plugged into a USB socket, it will usually start flashing (top-up mode) after about 20 minutes, then stop charging after another 10 minutes. If the USBCELL™ was partially charged, the charger may switch to top-up mode anytime within 5 hours. In any case, after 5 hours charging the battery should be at least 90% charged and charging will terminate after an extra 90 minutes of top-up charge.

The USBCELL™ may get warm during charging, this is normal. They should be charged only in ambient temperatures between 0degC and 40degC and preferably at room temperature. It is not recommended to charge an already warm battery, or to repeatedly recharge a full battery, as this will diminish their useful life, and the casing may get hot.

For dimensions, temperature ratings, charge and discharge characteristics, please refer to the technical datasheet.

# Safety

**It is important to use batteries carefully. They should not be used in situations likely to cause a hazard; in particular:**

- Charge before use, and always replace sets of batteries together. Avoid mixing different battery brands or types in a set.
- Never mix a USBCELL™ with alkaline 1.5v batteries in the same device.
- Insert batteries the correct way round, according to the + / - symbols. Read equipment instructions carefully, so as to install correctly.
- Do not open, disassemble, short-circuit, incinerate or subject batteries to mechanical shock. If used improperly or disposed of in fire, batteries may 'rupture or leak'.
- In the event of a cell leaking, do not allow the liquid to come into contact with skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice immediately.
- Charge according to instructions; via USB socket or with a high-quality 250mA Ni-MH charger, incorporating end-of-charge function.
- Do not leave on prolonged charge when not in use.
- Avoid leaving discharged or unused for long periods of time. If this is necessary, remove batteries from devices first, and follow the storage instructions.
- Don't carry batteries loose in a pocket or bag with metal objects; this may cause a short-circuit, generating high heat.
- Keep the USBCELL™ clean and **dry**, and keep battery contacts clean. Wipe with a clean dry cloth if USBCELL™ becomes dirty.
- Batteries get warm during charging. For best results charge at room temperature and never above a 40degC ambient temperature.
- Ni-MH cells lose charge over time. Do not use in safety-critical applications, like medical devices or smoke alarms.
- Keep out of reach of children.
- Seek medical advice immediately if a battery has been swallowed.
- Dispose of properly – refer to the Recycling section, below.

# Recycling

We believe that the USBCELL™ will help protect the environment (and save you money) by reducing the amount of waste batteries. If used properly, you should be able to recharge a USBCELL™ about 500 times before they lose a significant amount of their capacity.

Both the packaging and the USBCELL™ can be recycled. While in use, we recommend keeping the packaging, for future reference and as a useful place to store the USBCELL™

Please recycle your USBCELL™ when they have reached their end of their usefulness: Send them to us free of charge (within the UK) and we'll deal with everything:

USBCELL RECYCLING  
FREEPOST:  
Moixa Energy Ltd.  
Unit 9, 10-11 Archer Street,  
London, W1D 7AZ  
United Kingdom

We recommend sending in a discharged state, preferably in their original packaging; in a strong (ideally padded) envelope.

For further information see the Recycling section on our website at [usbcell.com/recycle](http://usbcell.com/recycle)

## Refunds and Returns

**No Quibble' one-month refund policy:** If for any reason you are not satisfied with your USBCELL™, you may return the product to us if bought online from USBCELL.com at the address below, within 1 month of purchase, for a refund. The packaging must be clearly marked "REFUND RETURNS" and must enclose the original purchase receipt and online Order ID. We will refund the full cost (to the account used for the original purchase).

USBCELL REFUND RETURNS,  
FREEPOST  
Moixa Energy Ltd  
Unit 9, 10-11 Archer Street,  
London W1D 7AZ,  
United Kingdom

(for refund returns from outside UK, omit the word FREEPOST, and attach the equivalent 2nd class postage payment. If a postage receipt is enclosed, we will also refund the cost of postage).

**Hardware Defects Warranty:** USBCELL™ has been thoroughly tested to high international standards and should provide trouble-free use. Please contact us using the Support Form if you experience any technical or hardware problems. We provide a full one-year limited warranty over USBCELL™ should the product or any part thereof be proved to be defective by reason of faulty workmanship or materials and we will at our option replace the product free of charge subject to the following conditions; That defects do not include anything resulting from misuse of the product, neglect, or from normal use of the product, such as normal wear and tear, insertion in tight fitting USB sockets, or diminished battery capacity after repeated use; and that the product is returned with original Order ID and invoice.

If you find that a product is defective at any time within one year of purchase, please return it to us by recorded delivery at the address below, enclosing the original invoice, order ID and a full explanation of the defect. The envelope must be clearly marked "WARRANTY RETURNS". Once we have confirmed that the product is defective, we will replace it immediately and refund the cost of postage to you.

USBCELL Warranty Returns,  
Moixa Energy Ltd  
Unit 9, Archer street studios,  
10-11 Archer Street,  
London  
W1D 7AZ, United Kingdom

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