

# Your Mobile Battery Connector

We offer you a sample battery connector to show how simple it is to solar charge almost any mobile phone battery.

We expect these connectors will be made by local NGOs and sold in more remote parts of developing countries where charging mobile phones is often difficult.

Even in some towns mains failure is frequent but the sun is often almost constant!

**There are other ways of charging mobile phones but they cost more and don't always work!**

All that is required to make a battery connector is one 3A terminal block, 2 steel paper clips, a 5v pv module with soldered on wires.

It's best have also: narrow jaw pliers, small screwdriver, meter.

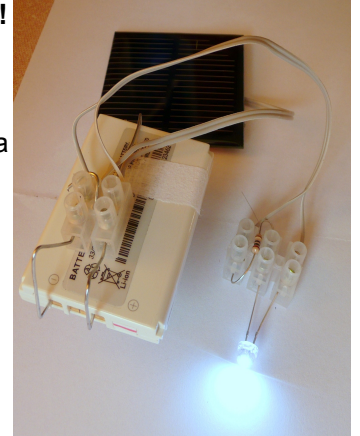
**If you intend to make dozens of connectors every day, detailed instructions for batch production can be supplied, plus parts.**

When in use it is best if the battery is in shade while the pv module is in sun.

In addition this arrangement can be used, as shown opposite, to power one or two LEDs mounted in an extra terminal block - as a sort of torch - or to power a radio, etc.

If the right model battery is purchased, you need never go without mobile power again charging one battery while the other is in use!

You can get Chinese mobile batteries for £2-3 though they must be used with care!



## 'Difficult' Batteries

We appreciate that some mobile batteries have very different terminals but we have tested this block arrangement on many mobile batteries and found few where the wires could not be made to connect.

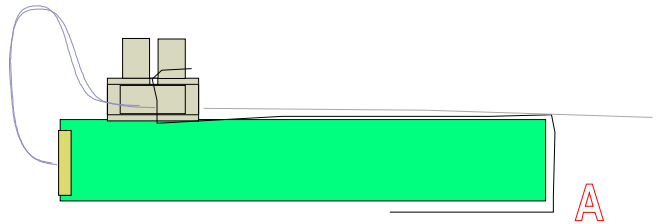
It often requires some extra bending and, with a few, spacing the wires out with extra terminal blocks where the terminals are on each side of the battery.

## Adapting this sample for your mobile battery

Remove the lid from your phone and lift out the battery - you may need to look at the phone instructions as some batteries are held in very firmly.

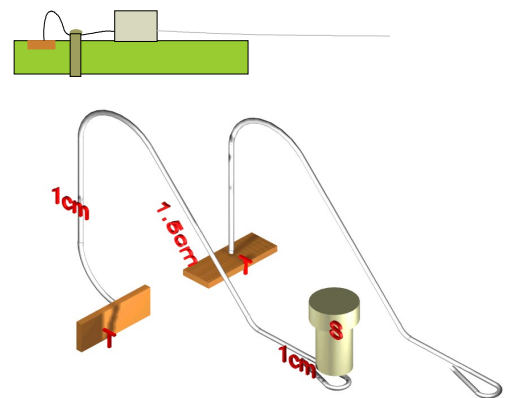
Place the connector in position on the battery with the wires touching the terminals and see if the connector works first time - it will for most Nokia batteries as in photo.

The terminal block may first not exert sufficient pressure on the probes for good electrical contact so the easiest course then is to straighten and then rebend the steel clip wire at A



For batteries with top terminals (see below) the wires are bent as shown and held in place with an elastic.

If you want to make more bent wires refer to lowest diagram which shows them in contact with a battery terminal both at the end of a battery or shorted for top terminals.



## Connecting an LED

Connect up a flex lead to the terminal block and it can power an LED but better have a resistor or its life will be short!

Or you can power most small radios connecting the two leads into the battery box.

## Using Li-ion Batteries

These batteries are not like NiCd/MH cells being both better and worse. If you have a meter, when you first charge the battery, check the rising voltage. It should automatically stop rising at about 4.3v.

But with some cheap batteries it will keep on charging and then swelling and then failing!

**So best to charge/discharge often so the voltage never rises too high.**

## What we would like from you!

**If you decide not to go ahead, that you take this charger into places where you can demonstrate it to local people who might be interested in starting such a local enterprise and tell them where they can get the parts needed!**