

MatchBox MBI Instruments

MBI Nuke™ Charger



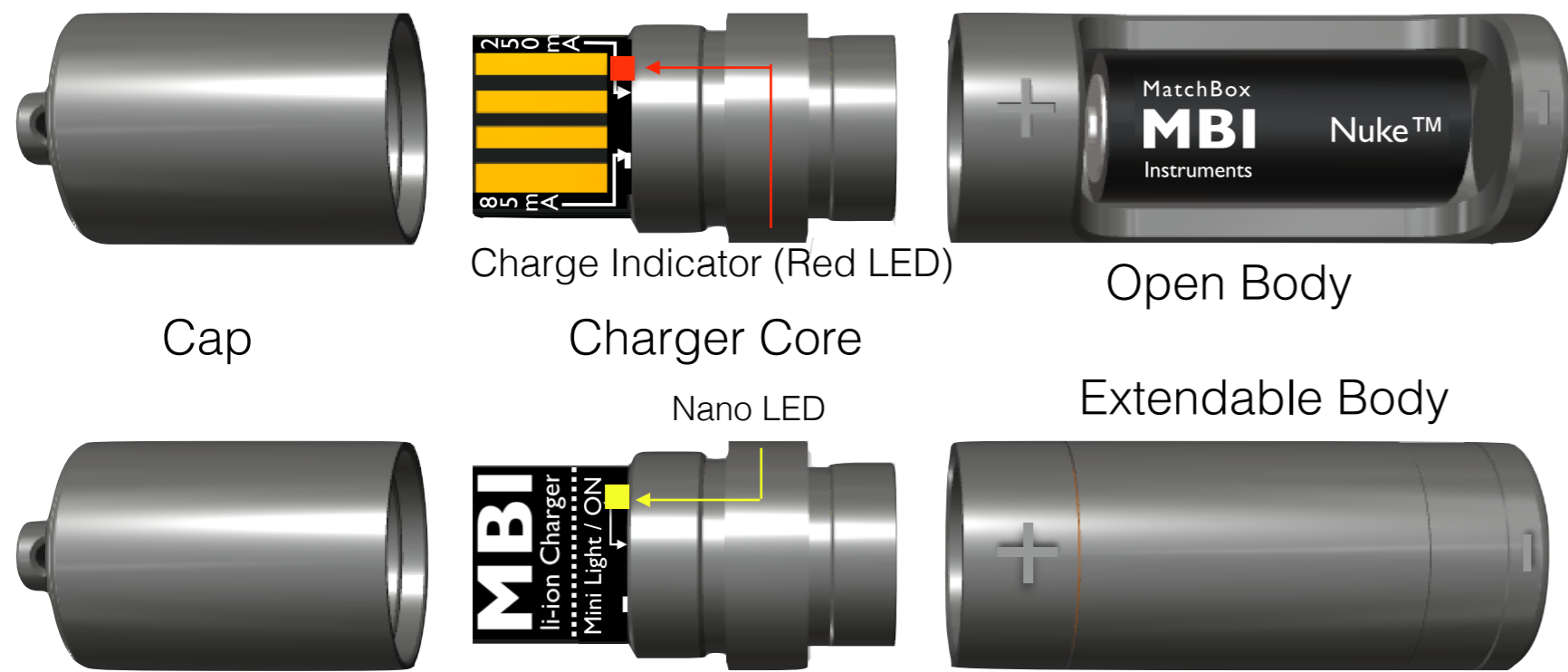
Key Features:

- Selectable Charge Current (85mA / 250mA)
- Reverse Voltage Protection (no harm to the battery when reversed)
- Auto Trickle Charge for very weak batteries.
- Auto Power-Off at peak charge
- LED Indicator displays to indicate charging is in progress
- Miniature white *Nano* LED can be powered by the battery

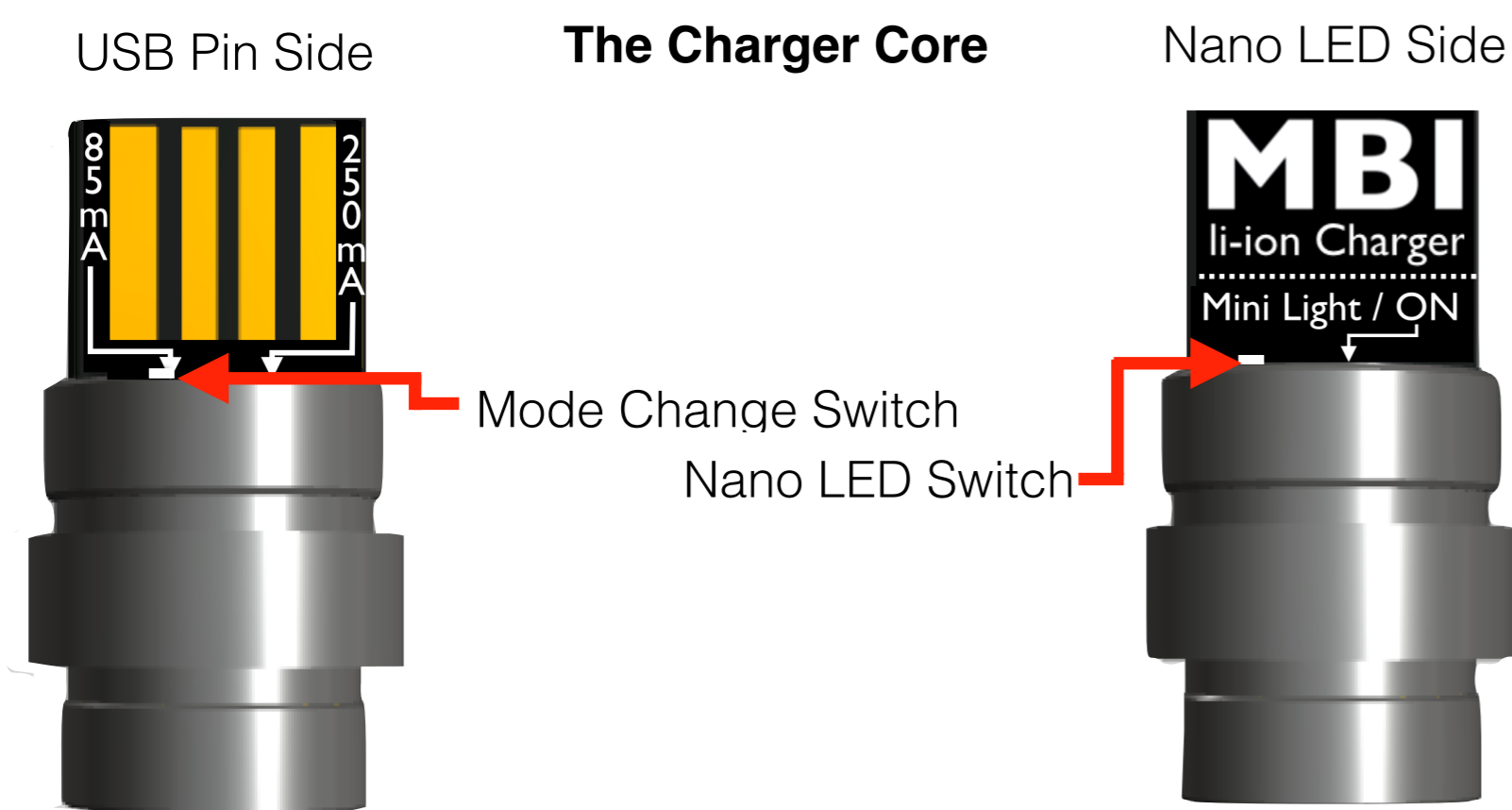
Extendable Body Version:

- One body supports multiple battery sizes

Getting to know your MBI Nuke Charger

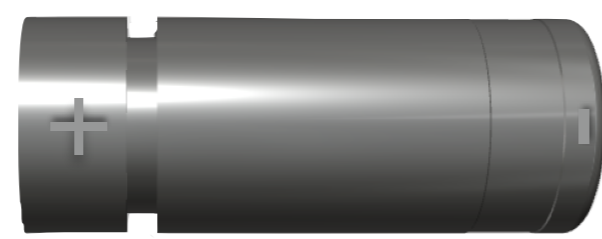


Getting to know your MBI Nuke Charger

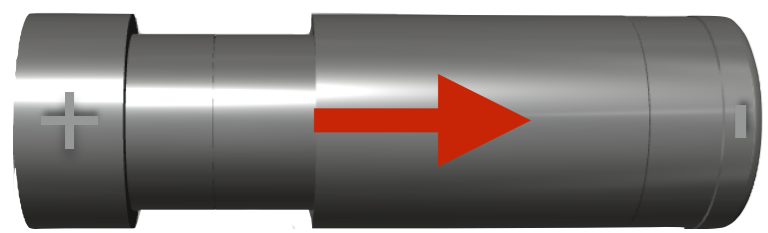


Using the Extending Body

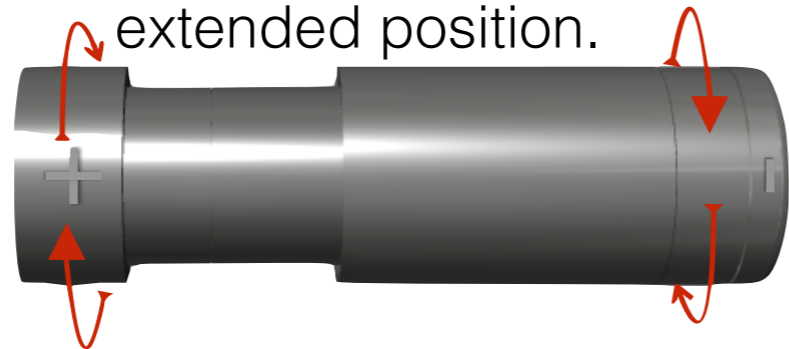
1. Holding the upper (+) part of the body, rotate the lower part towards you.



2. After approx. 3 full turns, you'll be able to pull the tube to extend it as below.



3. You can then rotate a few more turns to lock the body in extended position.



Using the Nano LED:

The Nano LED is a miniature sized low output emitter intended for emergency use only. It is not intended to be a daily use flashlight.

The Nano LED can be used as a location beacon or marker in emergencies and in ideal conditions is visible for several hundred meters. It can also be used as an emergency light source or electronic candle.

Always switch off the Nano LED during charging. This is important to avoid voltage miscalculation of the battery whilst charging.

Always switch off the Nano LED if it appears to be very dim. Leaving the Nano LED on indefinitely can risk over discharge when used with unprotected li-ion batteries.

IMPORTANT SAFETY PRECAUTIONS:

- **Never** use batteries that are faulty or damaged.
- **Never** use batteries that have been discharged to less than 2.8V.
- **Never** use in wet conditions such as rain or near running water.
- **Always** unplug the charger before inserting/removing batteries.
- **Always** insert/remove batteries by unscrewing the Charger Core.
- **Always** ensure the Nano LED is switched off during charging.
- **Always** switch off the Nano LED when it begins to dim.

Charging & Inserting Batteries:

- 1) Ensure the Charger is **NOT** plugged in to a USB power source.
- 2) **Unscrew the Charger Core** to insert a battery, with the minus (-) side of the battery pointing towards the bottom (Spring at charger base) and the plus (+) side of the battery pointing towards the Charger Core.
- 3) Screw the Charger Core back on to the body.
- 4) You can now plug the Charger into a USB power source.
- 5) Whilst charging, the RED indicator LED should be ON.
- 6) When charging has completed, the RED indicator LED and Charger will automatically turn off.

Note: The charging process will stop when batteries reach a charge of approximately 4.17 Volts.

Removing Batteries:

- 1) Ensure the Charger is **NOT** plugged in to a USB power source.
- 2) **Unscrew the Charger Core** to remove the battery.
- 3) Screw the Charger Core back on to the body (so you don't lose it).

Note: Do NOT attempt to remove the battery without unscrewing the Charger Core (eg. via the open part of the tube). There's a risk you might cause a short circuit to the battery if the plus (+) side of the battery makes contact with the charger body.



Charge Mode Selection:

The charger will correctly charge all supported batteries when in the 85mA mode.

Refer to the [Mode Selection Table](#) to know which mode to use, but when in doubt ALWAYS use the 85mA mode.

Using the 250mA mode for small sized batteries may damage the batteries permanently and must never be used when the batteries rated capacity is lower than 200mAh.

Change the mode by sliding the white switch, using a pointed object such as a toothpick, pen or fingernail.

Mode Selection Table (charge times are estimates only)

Battery Type	85mA	Charge Time	250mA	Charge Time
Generic 10180 Li-ion	✓	1hr (estimate)	✗	Not Supported
MBI 10250 Nuke™	✓	1hr (estimate)	✗	Not Supported
Generic 10280 Li-ion	✓	1hr (estimate)	✗	Not Supported
Generic 10440 Li-ion	✓	3hr (estimate)	✓	1hr (estimate)

Supported Lithium Ion Batteries:

Open Body: 10180*, 10250, 10280

Extendable Body: 10180*, 10250, 10280, 10430, 10440, 10450**

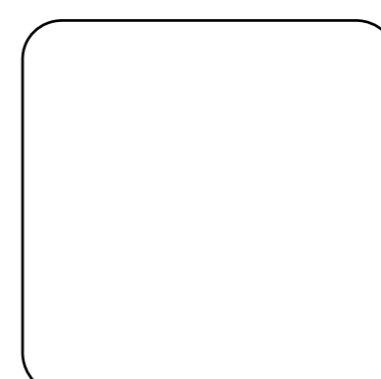
* with a magnetic spacer (not included)

** batteries that are 45mm or shorter in length

MBI Guarantee of Quality

Your MBI Nuke™ Charger was made with the utmost care and attention to detail and is guaranteed to operate without fault for 12 months.

Guy@MBI



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