



21700 PCB Battery Pack - V2 USER MANUAL



Welcome to the 21700 PCB Battery Pack Manual!

Please read and understand **ALL THE INFORMATION** included in this manual, before assembling or operating the battery pack. Failure to follow the instructions and safety precautions outlined in this document may result in damage to the product, personal property or serious injury.

This product must be operated with caution, common sense and in accordance with any regulations in place. Assembly and use of the product requires mechanical and electrical ability. Failure to operate this product in a safe and responsible manner may result in damage to the product, personal property or serious injury.

Do not attempt disassembly, use with incompatible components or augment product in a way without given approval by the manufacturer.

This manual contains instructions for safety operation and maintenance. It is essential to read all the instructions and warnings in the manual, prior to assembly, setup or use, in order to ensure to operate correctly and avoid damage or serious injury.

This product is not intended for use by children!

Only to be used by adults with mechanical and electrical ability and knowledge.

Lithium batteries are dangerous and special skills are required to handle them safely.

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Warning Messages

Throughout the manual the following terms will be used to indicate the various levels of potential harm when assembling or operating this device.

NOTICE: Procedures which if not properly followed, create a possibility of physical property damage and little or no possibility of injury.

CAUTION: Procedures which if not properly followed as described in this manual, create the probability of physical property damage and a possibility of serious injury.

WARNING: Procedures which if not properly followed, create the probability of property damage, collateral damage, and serious injury or creates a high probability of superficial injury.



WARNING: This device may not be used for applications requiring fulfilment of special safety standards. Among others this includes: Vehicles, aircraft, certain machines and operation in safety critical environments such as medical, nuclear and military!

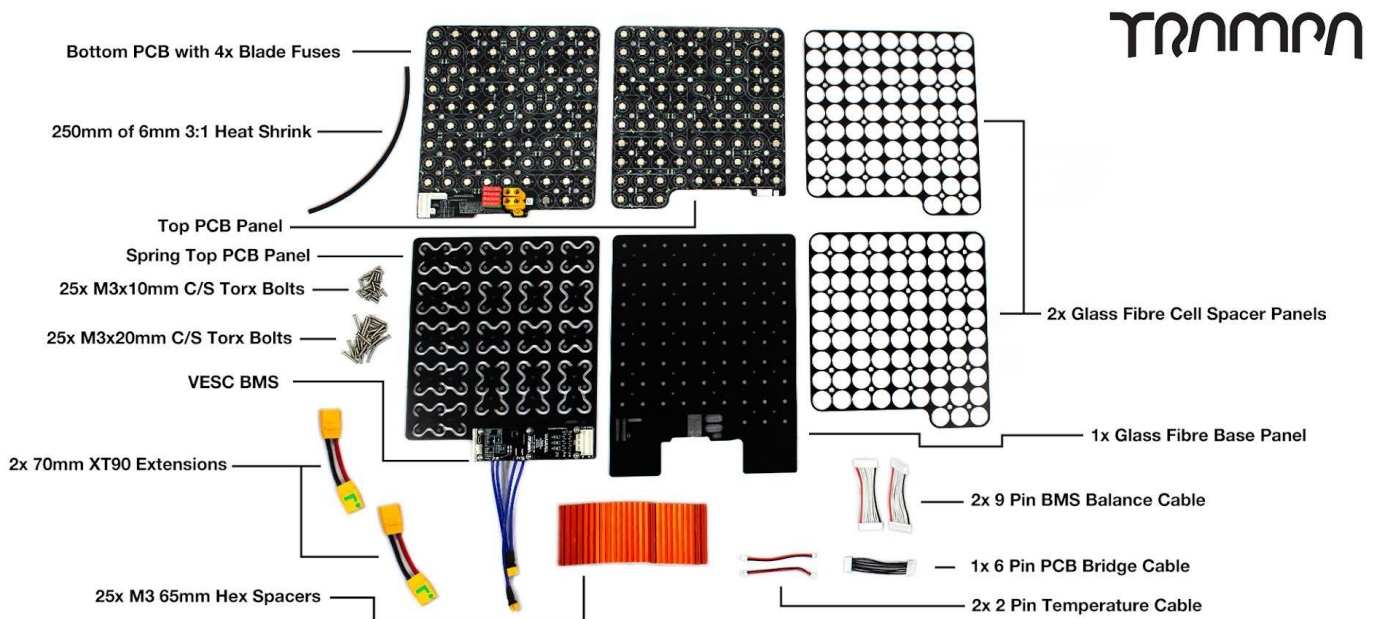
WARNING: For safety reasons do not assemble the product inside or in close proximity to a building. Keep sufficient distance to inflammable things such as trees, cars etc.

If you have any doubts, get in touch with us!
SUPPORT@TRAMPBOARDS.COM

List of Components

- | | |
|------------------------------------|---|
| 1 X Top PCB | 2 X 2 Pin temperature cables |
| 1 X Bottom PCB | 2 X 30A fuses
(Already installed on lower PCB) |
| 1 X Glass fibre spring top panel | 2 X 40A fuses
(Already installed on lower PCB) |
| 1 X Glass fibre base panel | 25 X M3x65mm Hex Spacers |
| 2 X Glass fibre cell spacer panels | 25 X M3x20mm C/S Torx bolts |
| 2 X 70mm XT90 extensions | 25 X M3x10mm C/S Torx bolts |
| 1 X 6 Pin PCB bridge cable | 250mm of 6mm 3:1 heat shrink |
| 2 X 9 Pin BMS Balance cables | |

84 x 21700 Cells are Required (Not included)



Tools for Assembly

T10 Torx Screwdriver

T10 Torx Bit fitted to a Torque Wrench / Screwdriver

6mm Spanner

Nitrile gloves

Scissors

Multimeter

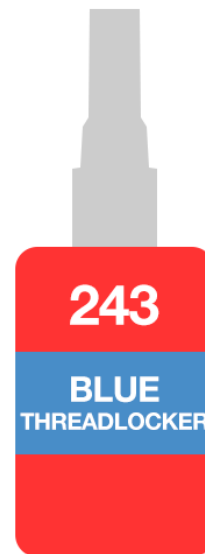
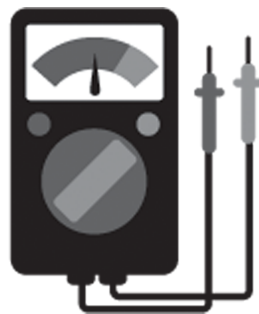
Isopropyl Alcohol

Lint Free Wipes

Ruler

Blue Loctite 243

Micro USB Cable



Mechanical Assembly Steps

It is HIGHLY recommended to ensure the area where assembly is taking place is clean and free of any small debris or dust.

Before assembling please place a pair of nitrile gloves on to protect the terminals and contacts on the batteries or PCBs.

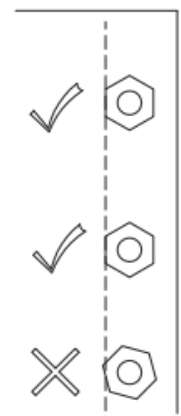
1. Using a T10 Torx driver and a 6mm spanner, mount all 25 hex spacers to the base panel using M3x10mm C/S bolts with medium (blue) threadlock on them.

Ensure that all the hex spacers are aligned such that the flat edge is parallel to the long edges of the base panel.

Use the edge of a ruler to check that all the rows of hex spacers are parallel.

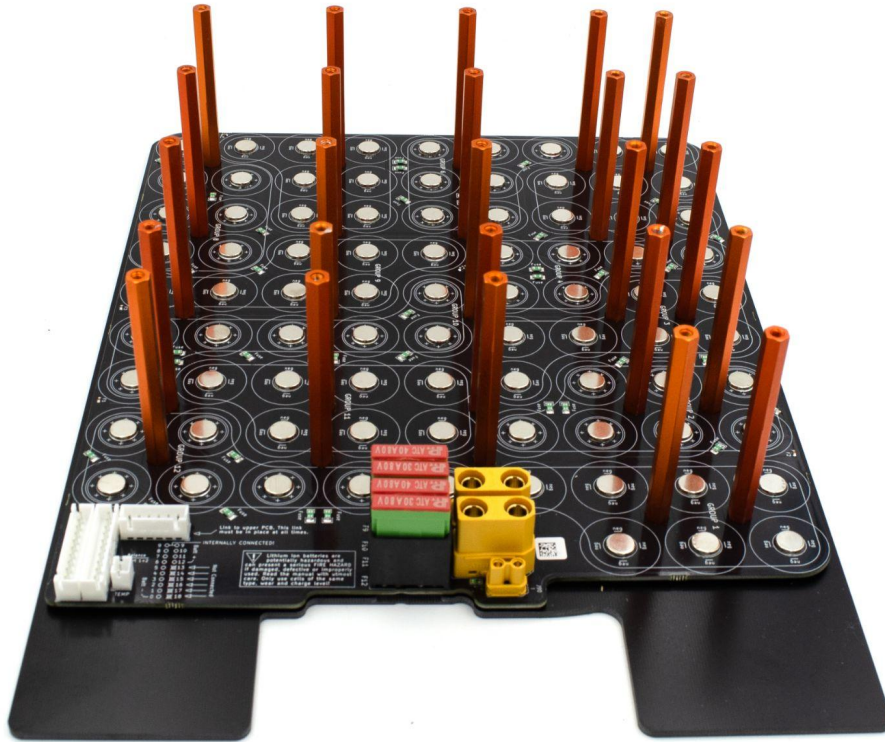


short side

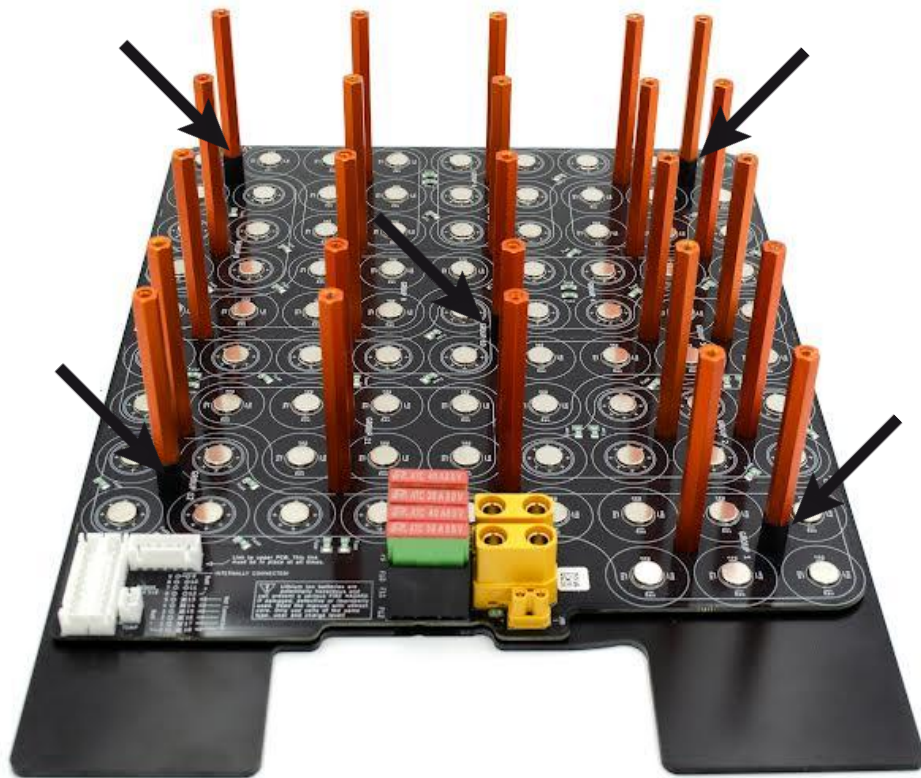
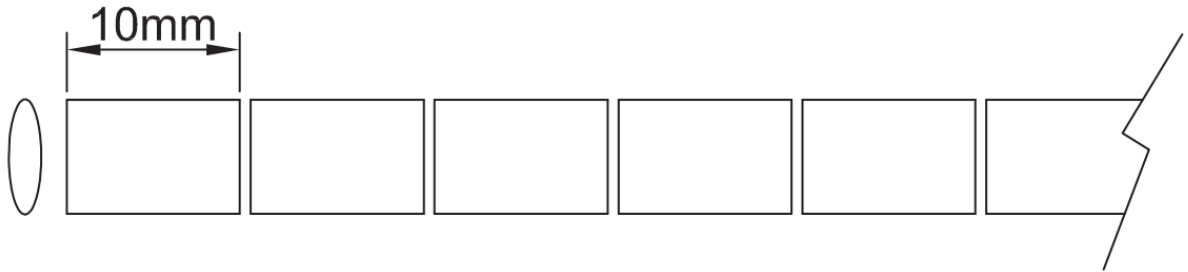


2. Slide the lower PCB over the hex spacers until the PCB rests completely flat on the base panel.

If the PCB does not slide down easily, check the alignment of all the hex spacers and realign accordingly.

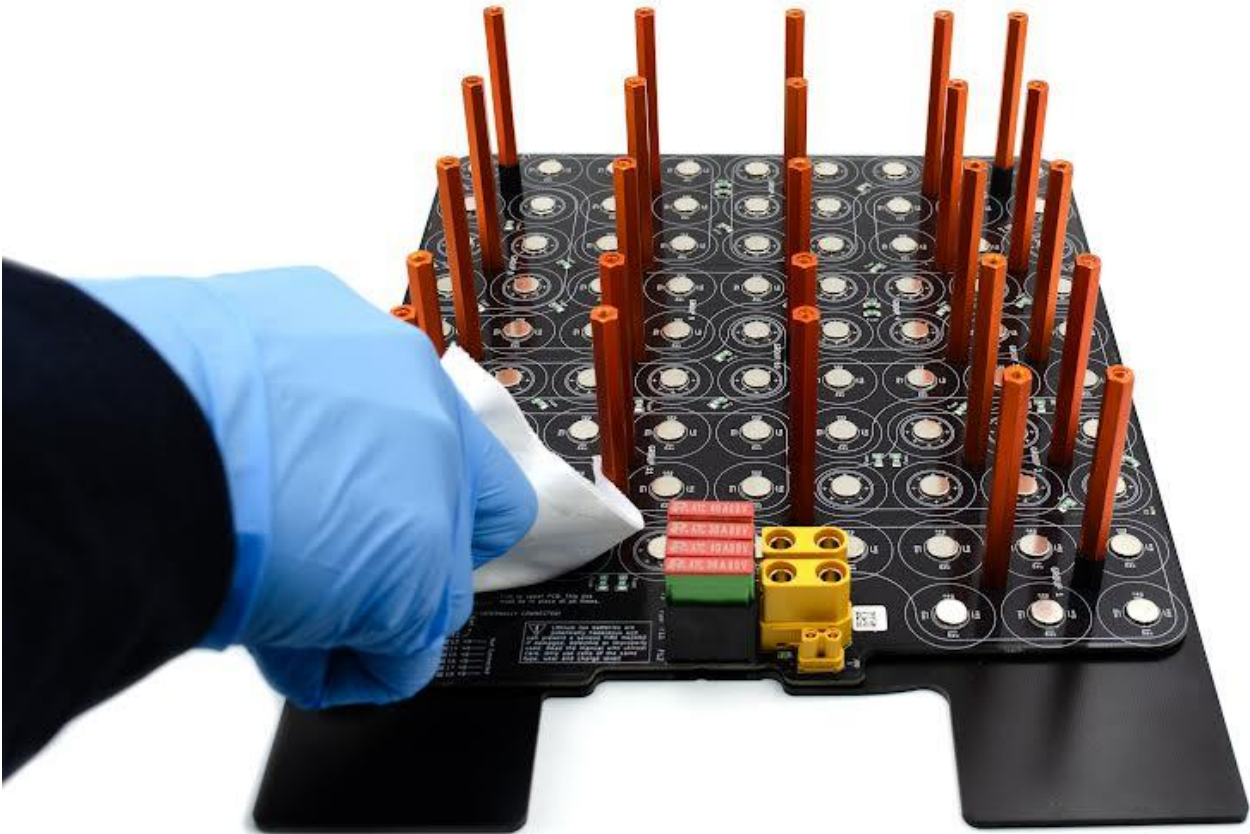


- Cut five 10mm lengths of heat shrink and place them over the four corner hex spacers and the centre hex spacer until they rest on the lower PCB.



- Using a lint free wipe and Ethanol or isopropanol alcohol, clean the battery contacts on the lower PCB.

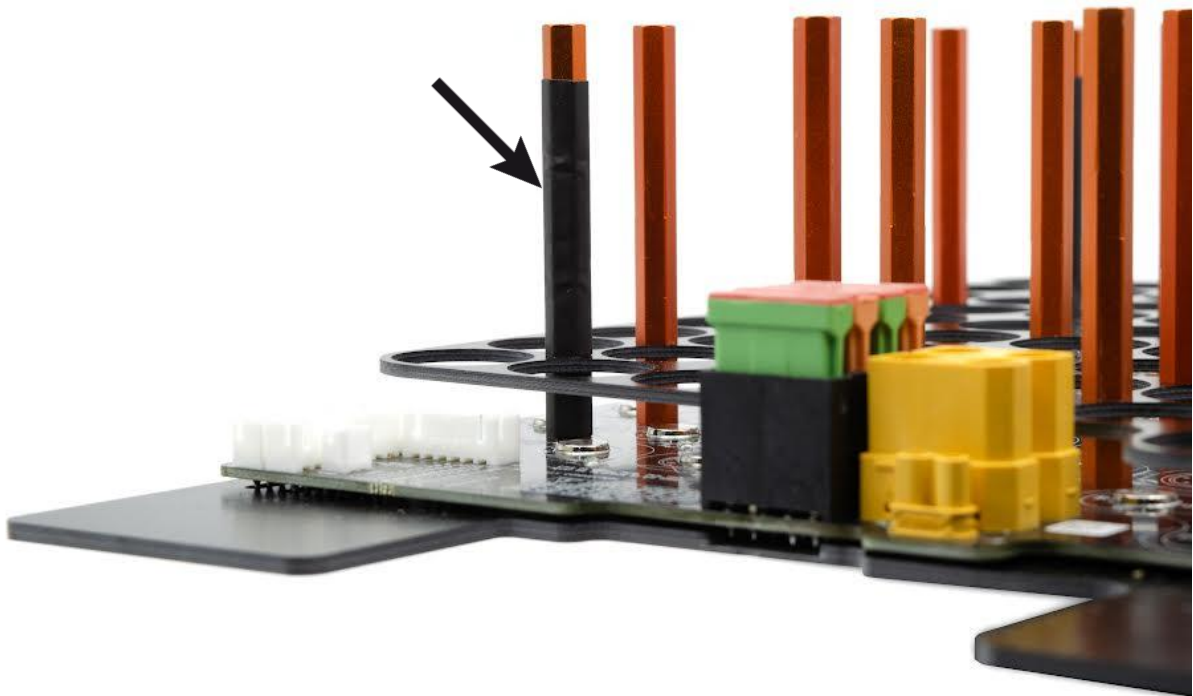
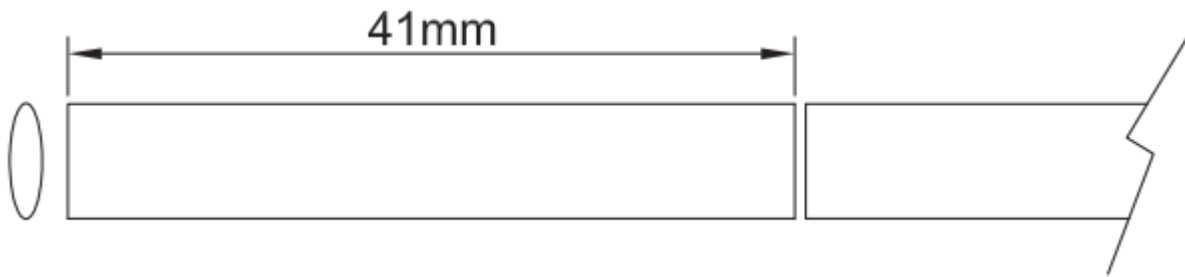
AVOID TOUCHING them afterwards and clean any contacts again if necessary.



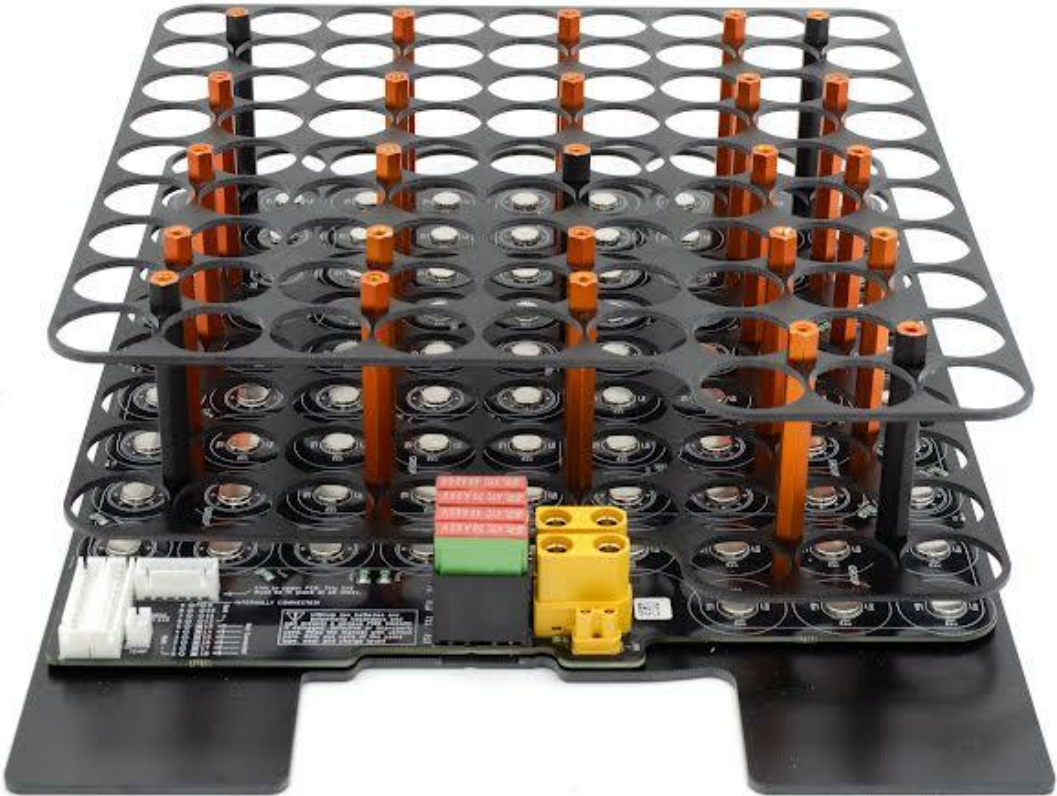
- 5. Slide one of the glass fibre cell spacer panels over the hex spacers until the panel rests level on top of the heatsink.



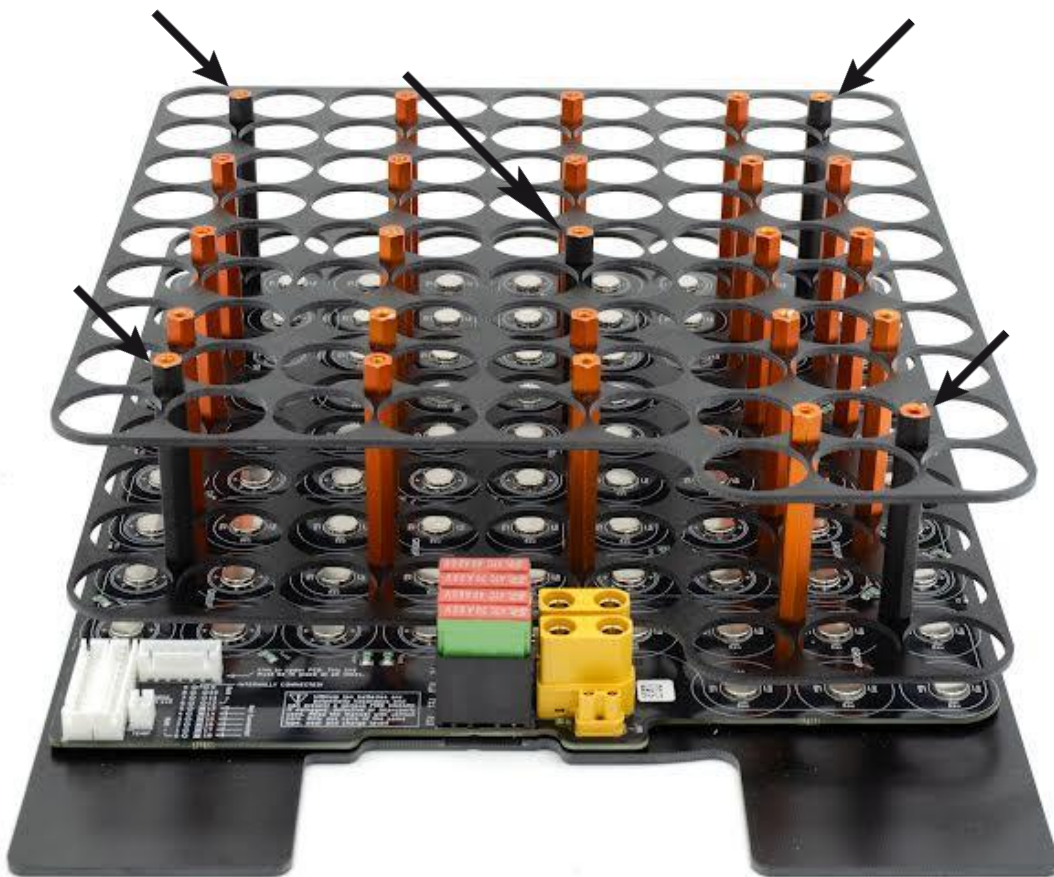
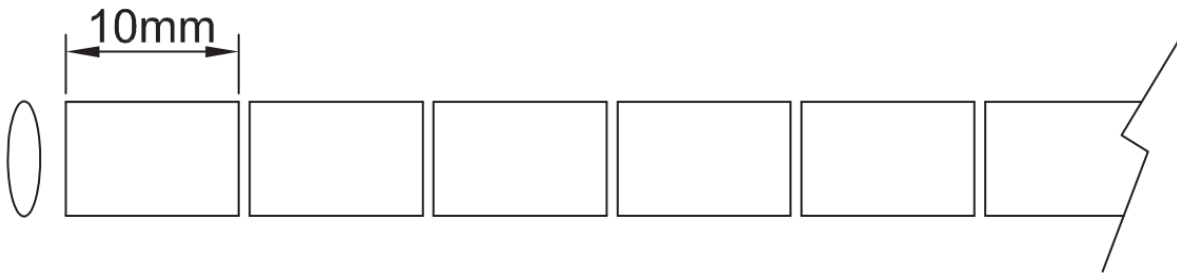
- Cut five 41mm lengths of heat shrink and place them over the four corner hex spacers and the centre hex spacer until they rest on the glass fibre cell spacer panel.



- Slide the other glass fibre cell spacer panel over the hex spacers until the panel rests level on top of the heatsink.

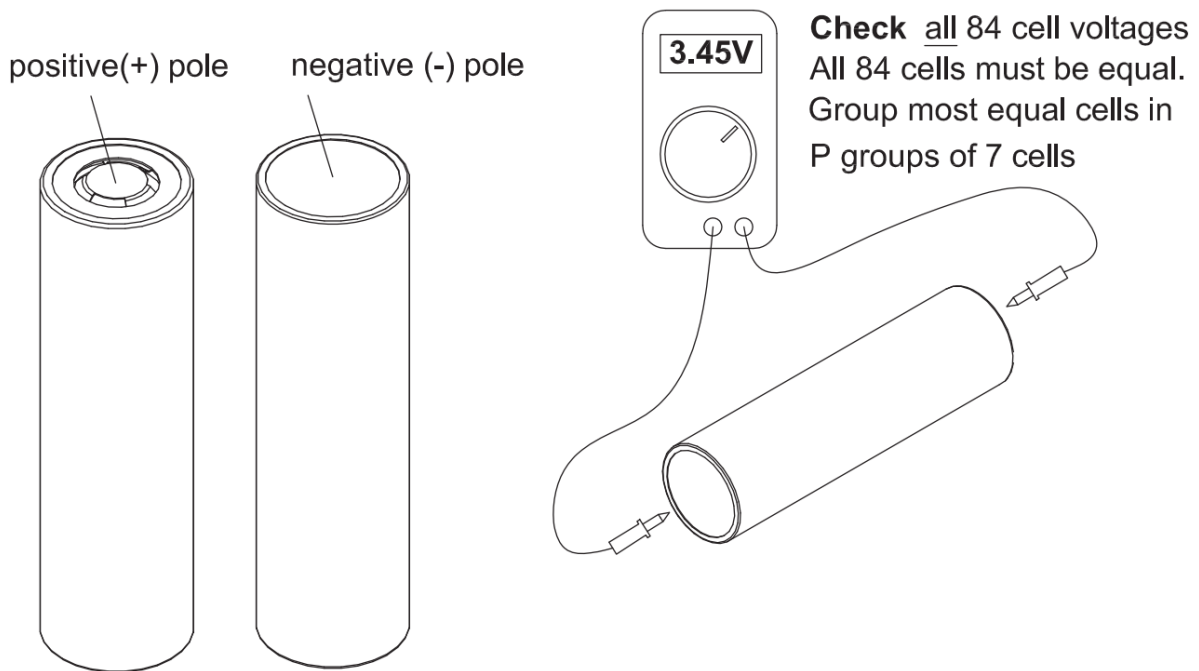


- Cut five 10mm lengths of heat shrink and place them over the four corner hex spacers and the centre hex spacer until they rest on the glass fibre cell spacer panel.



9. Check the Voltage of all 84 21700 cells using a multimeter. The cells must be grouped into 12 groups of 7 cells of most equal voltages.

All cells in each parallel group must have very similar Voltage - It is recommended for all the cells to be within 0.01V.



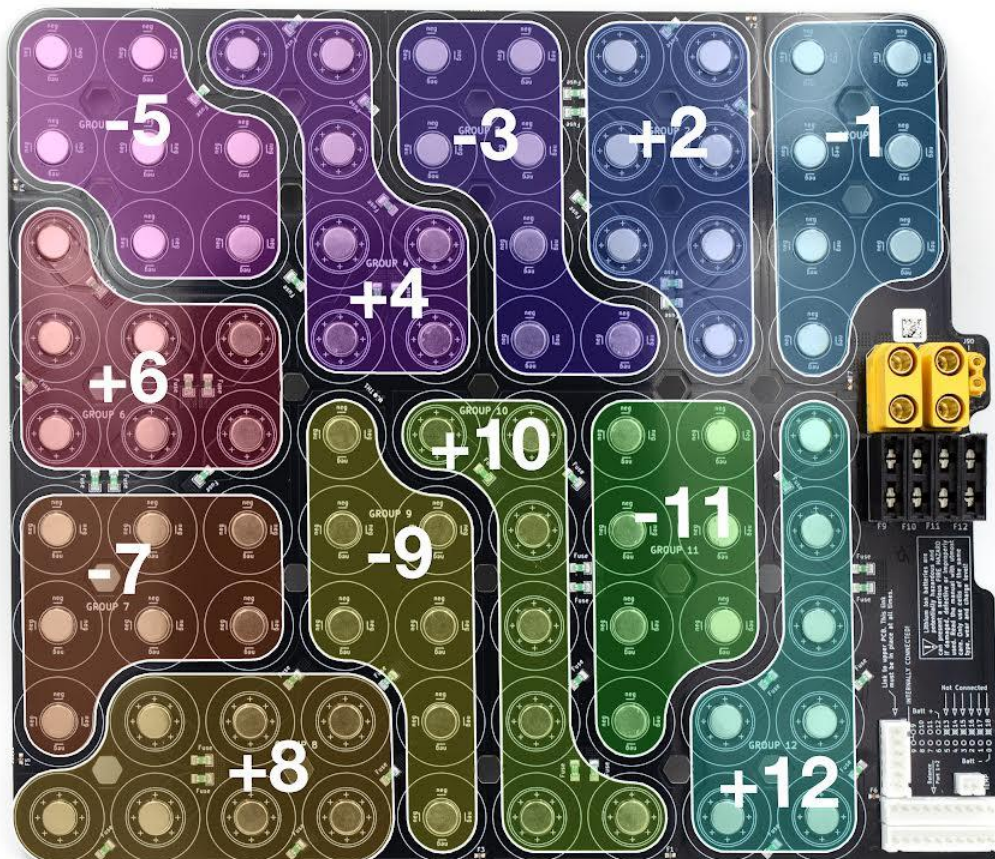
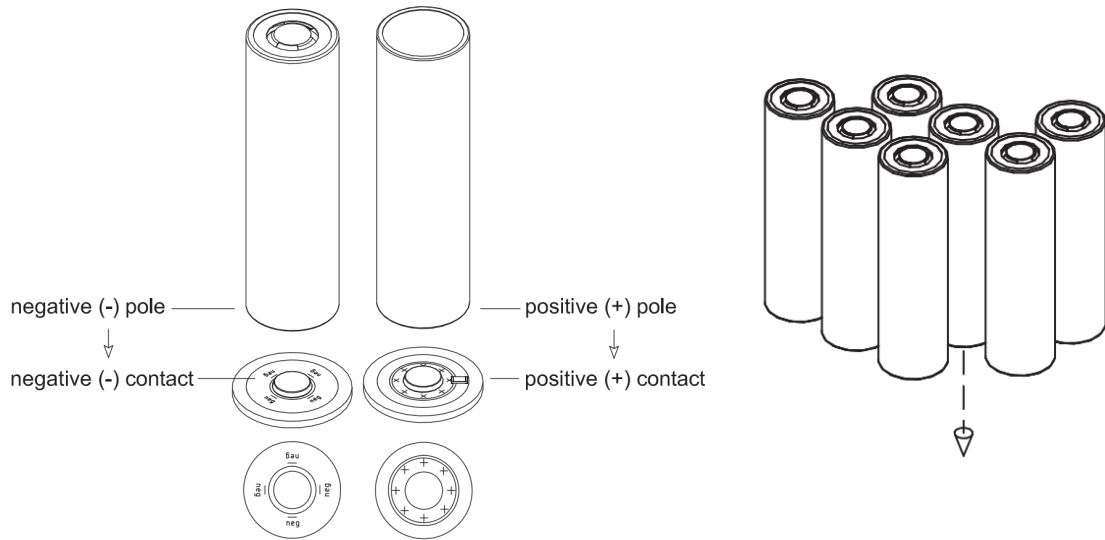
10. Clean both the positive and negative terminals of all 84 cells using a lint free wipe and ethanol or isopropanol alcohol.

AVOID TOUCHING the cells afterwards and clean any terminals again if necessary.

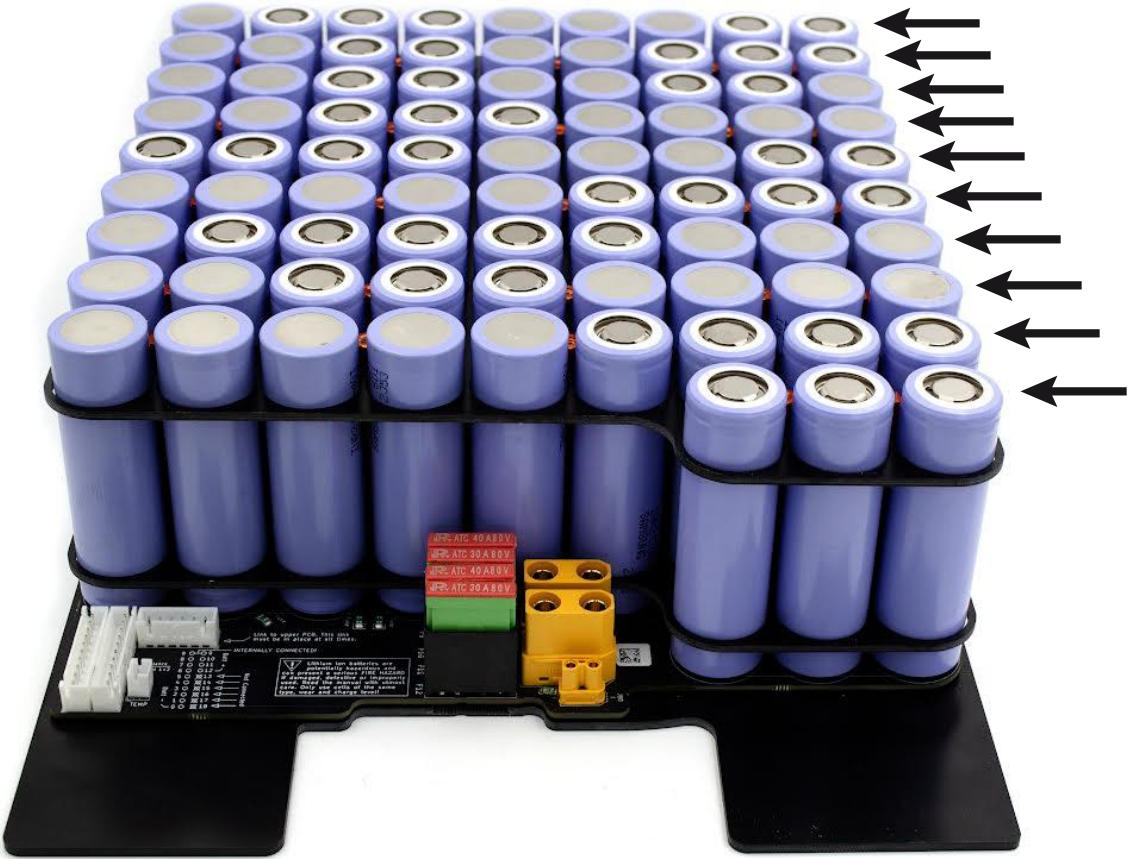


- Check the polarity and locate the group positions labelled on the lower PCB, and insert the grouped cells into the assembly accordingly.

Each group of 7 cells has the same polarity. Ensure each group of cells are facing the same way



12. After placing all the cells in position, double check the cell polarity is correct. Do this by comparing to the top PCB and checking all the cells row by row.

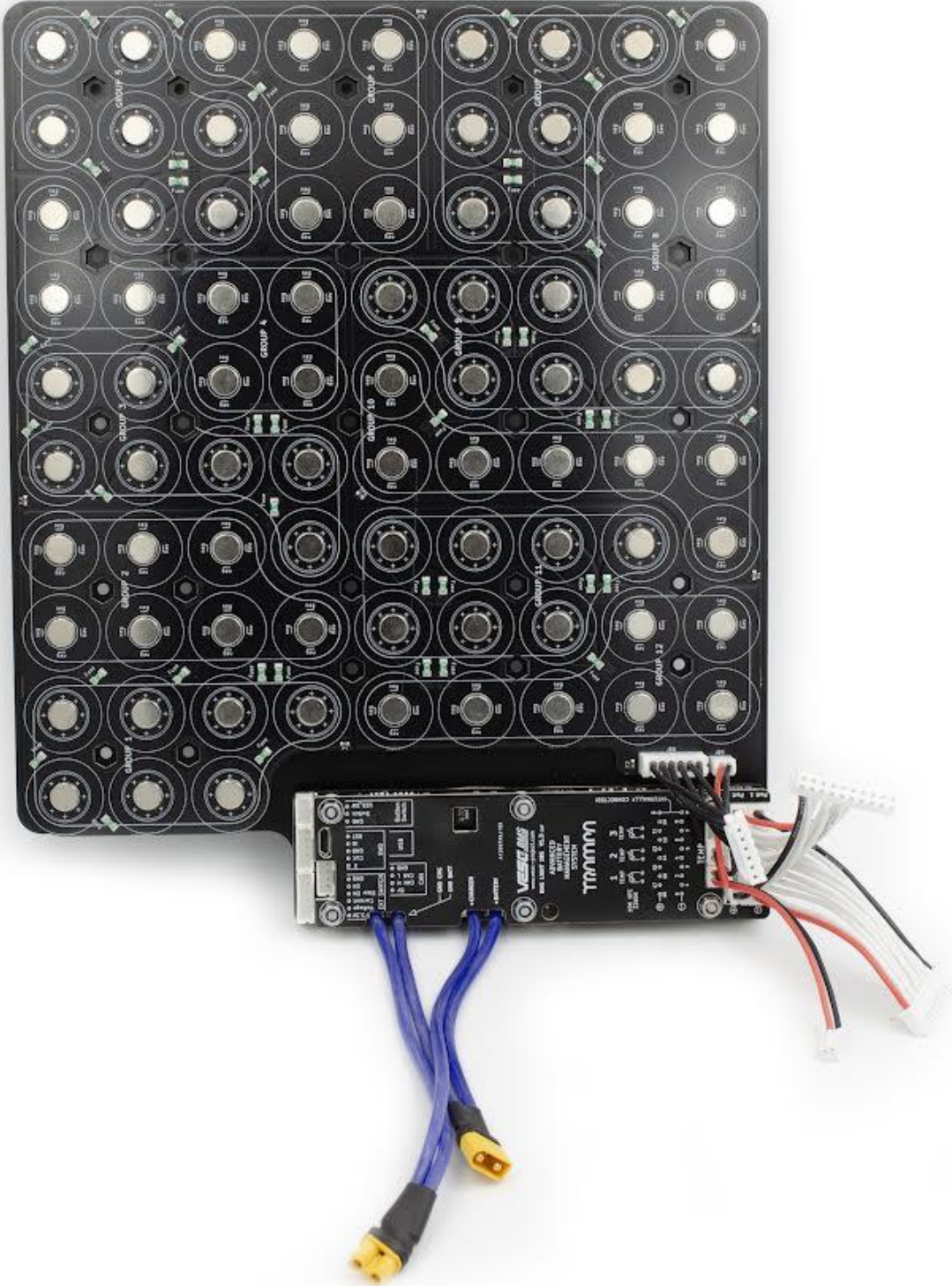


- Using a lint free wipe and ethanol or isopropanol alcohol, clean the battery contacts on the top PCB.

AVOID TOUCHING the contacts afterwards and clean any contacts again if necessary.



14. Place the upper PCB first on top of the spring panel. You know when it is seated correctly as there will be none or minimal lateral movement.



15. While holding the upper PCB and spring panel together, flip them so that the upper PCB is facing down towards the top of the cells.



CAUTION: Align the upper PCB & spring panel with the main assembly and proceed to place it directly on top of the cells.

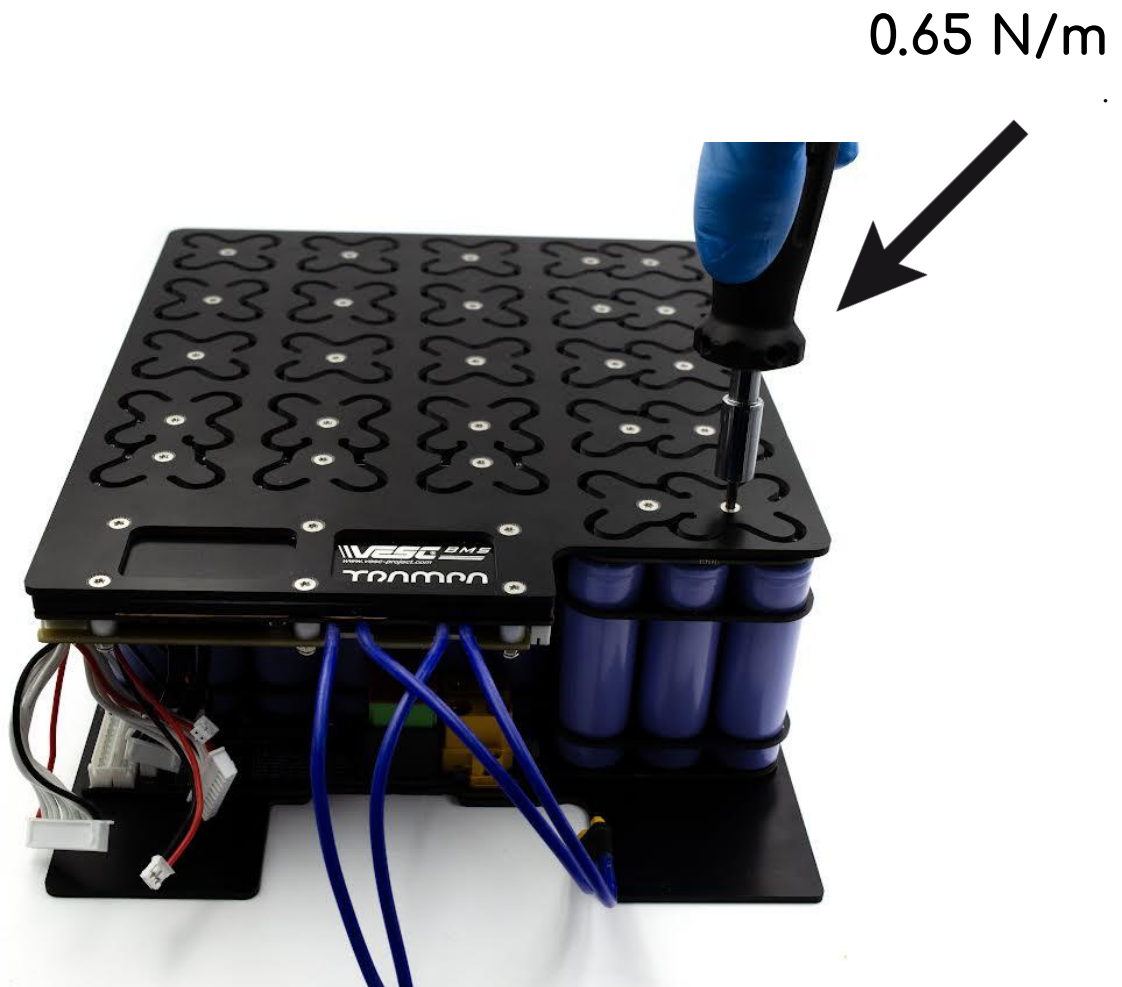
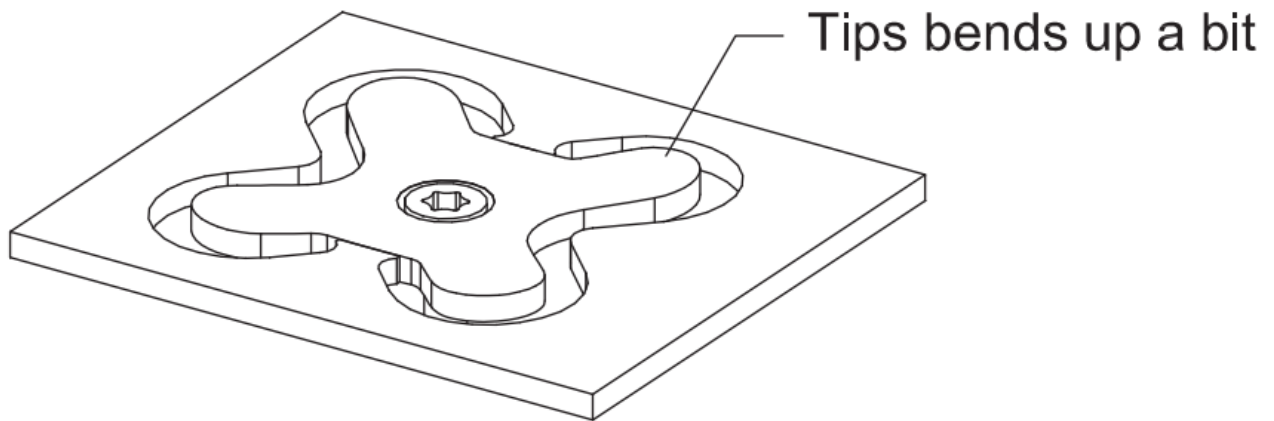
Make sure to align the top PCB panel & spring panel carefully when presenting it to the assembly! Do not shift it sideways during assembly!

It is recommended to fit the four corner M3 x 20mm bolts with some medium (blue) threadlock on to prevent the top PCB from moving.



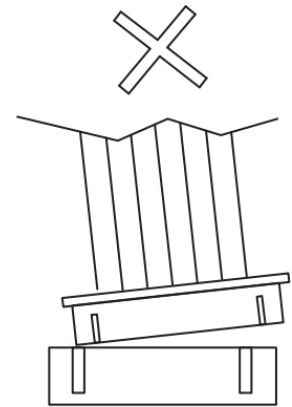
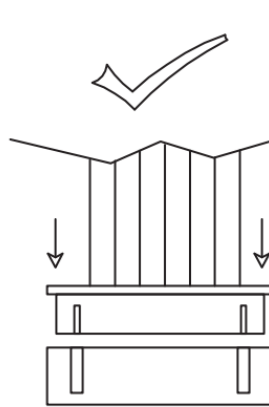
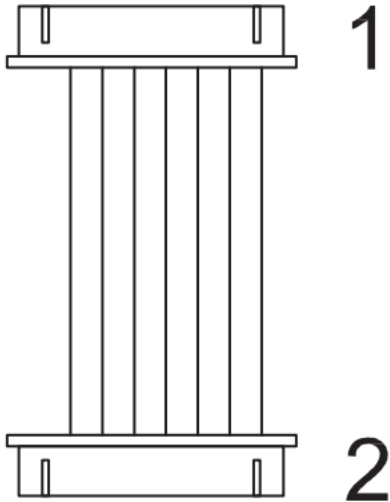
16. Secure the PCB and spring panel to the assembly using the 21 remaining M3x20mm bolts with medium (blue) threadlock on and a T10 screwdriver bit fitted to a torque wrench set to 0.65 N/m.

Triple check that all 25 bolts have been tightened to 0.65 N/m by going up and down each row individually.



17. **WARNING:** Make sure to 100% line up the male and female connectors in the correct orientation and location before establishing a final connection!

Follow the order in which the following instructions are written!



Connect the PCB panels together by first plugging the 6 pin PCB bridge cable into the top PCB followed by the bottom PCB.





18. Connect the XT90 extensions into the bottom PCB.

Connect the Male XT30 connector from the BMS (mounted on the spring panel) to the bottom PCB.

19. Connect the BMS Balance Cables into the BMS followed by the slots directly below on the bottom PCB.

Connect the temperature cables from the top PCB to the BMS followed by the temperature cable for the bottom PCB.

Ensure that all connectors are pushed all the way into the slot on both the top and bottom PCBs and the BMS.



Congratulations, your cell pack is now assembled.



Before the first use, the pack should be allowed to balance all cells to the same charge level/voltage. You can manually start the balancing process in the VESC-Tool Software (See Next Section). If the cells are within 0.015V then balancing will not happen even if you start the process manually.

After balancing you should charge up the pack and check for balance during that process. If the pack goes out of balance during the charge cycle, some cells might have a bad contact. Stop the charge process if you see a drift in cell balance. In that case either there is some small debris on the contacts and/or the spring panel has not been fitted tight enough.

Check contacts and spring panel tension of the group in question.
Repeat step 9 of this manual to identify which cells are affected.

VEESC Tool

This device may only be configured via the VEESC-Tool!

To start you'll need to download the VEESC Tool software on a platform you have available to you.

Do not change any parameters unless you are 100% aware of the consequences. Use the latest firmware, delivered with the latest stable release of the VEESC-Tool.

The VEESC Tool is available on iOS, Android, and desktop versions (Windows, Linux).

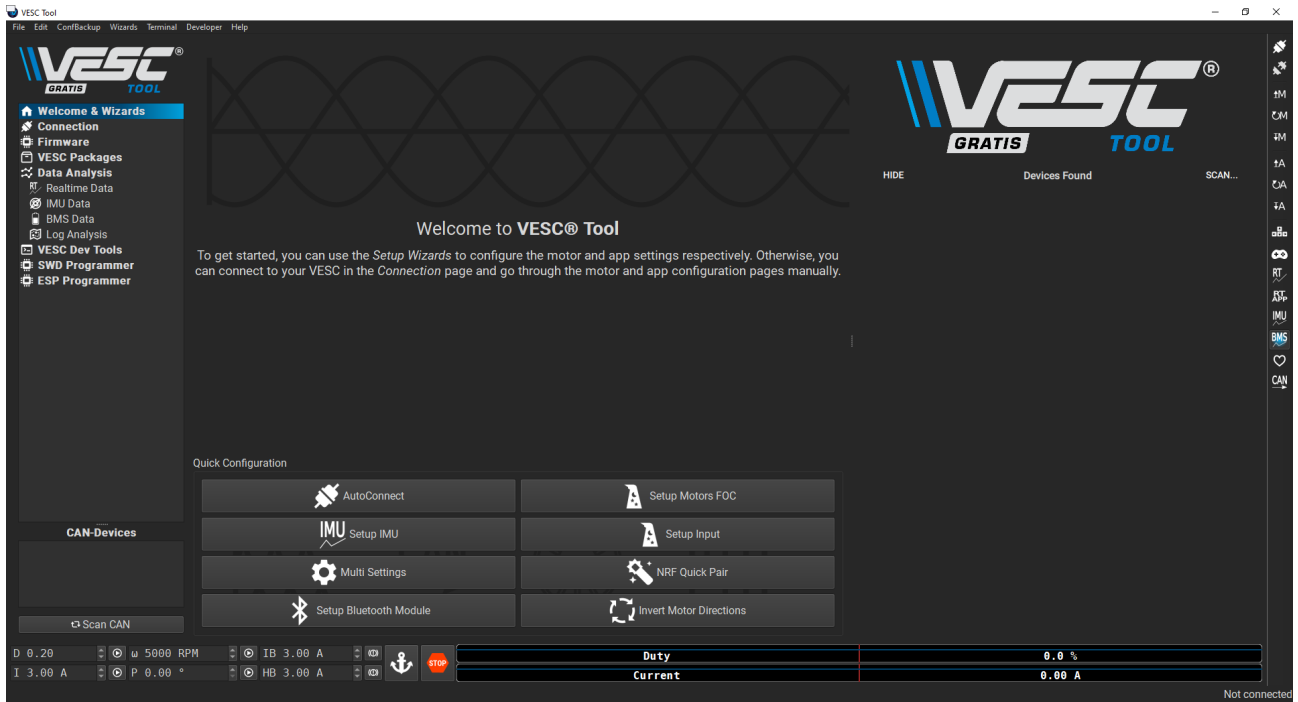
Please scan the following QR codes to download the VEESC tool.



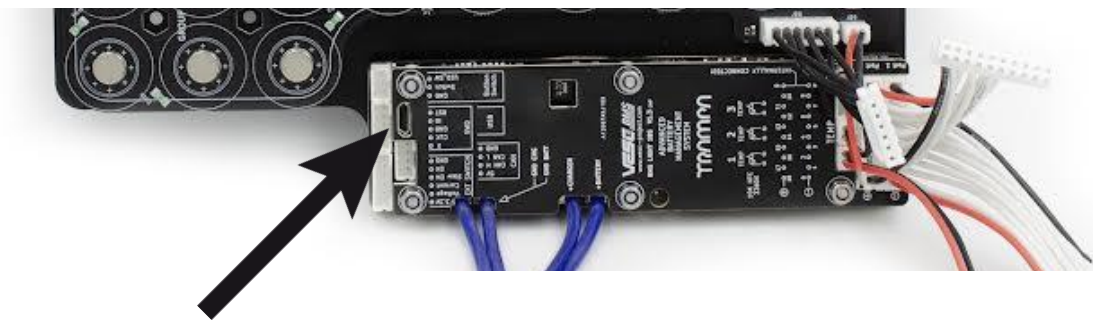
The desktop and mobile versions offer the same features in a different layout. It is however recommended to download the VEESC Tool on a mobile device for on the go adjustments, cell monitoring or troubleshooting.

Connecting the BMS to the VESC Tool Via USB

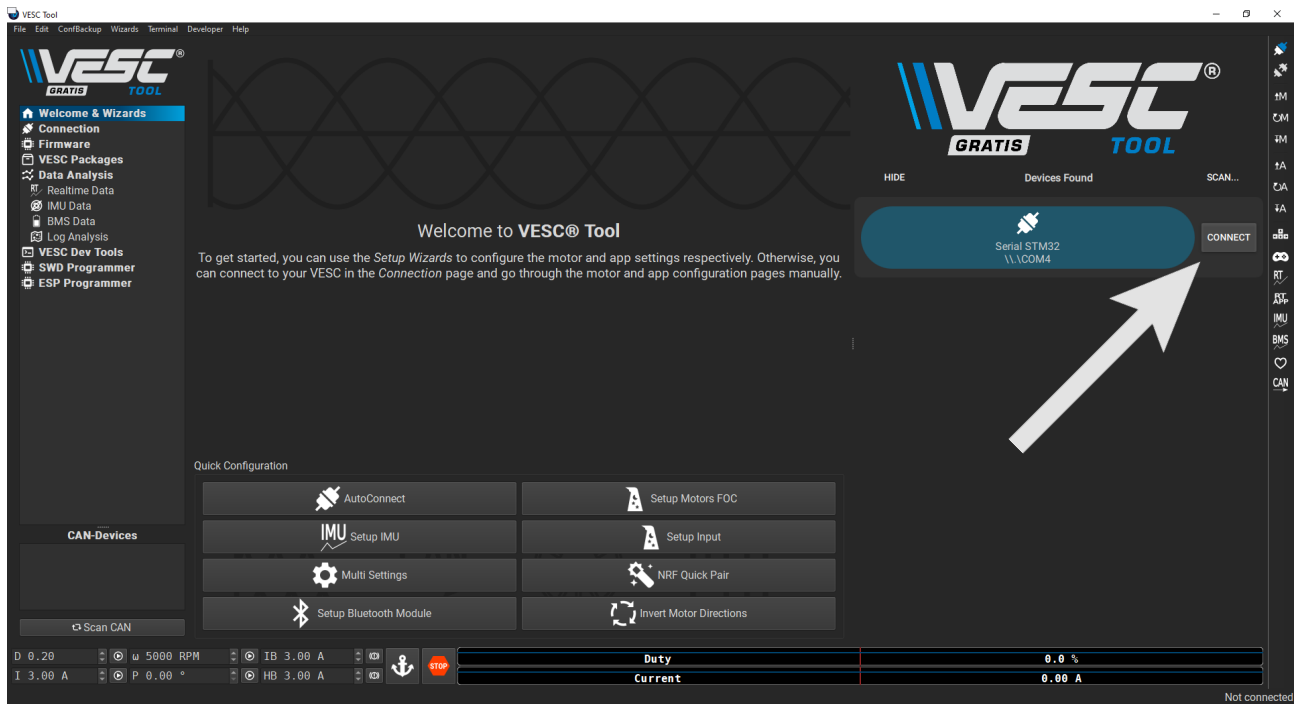
1. Open the latest desktop version of the VESC Tool.



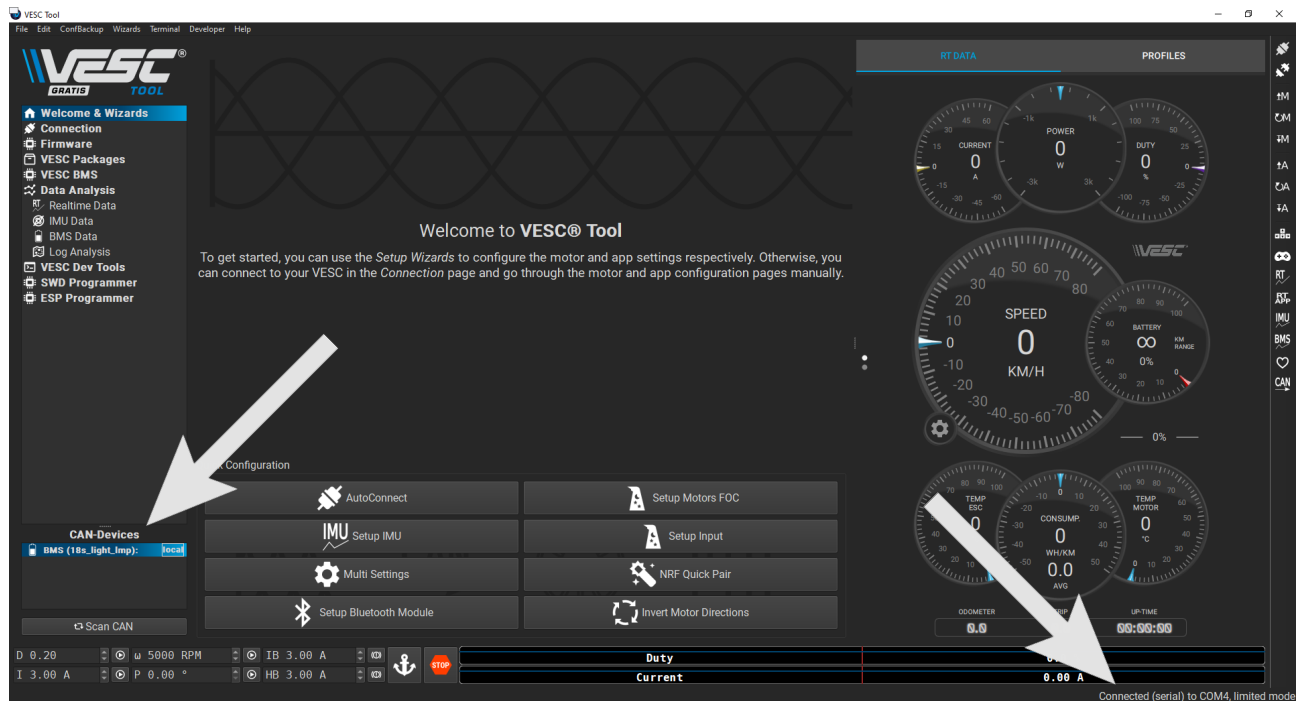
2. Insert a MicroUSB cable into the port located on the BMS mounted to the underside of the spring panel.



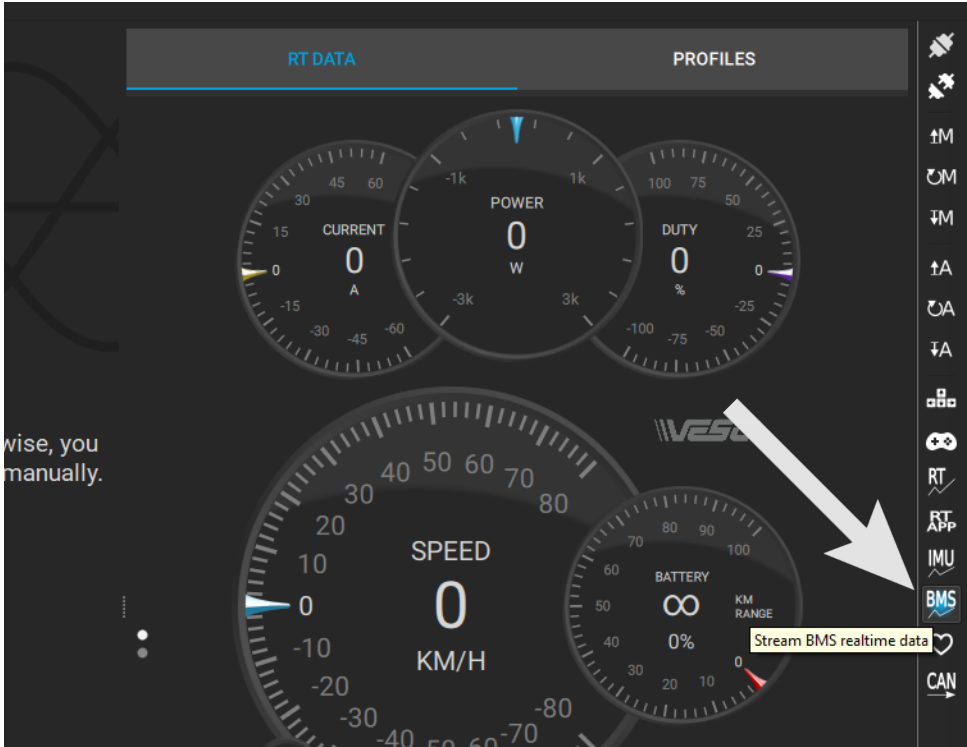
3. Open the VESC Tool to the start screen. BMS should now show up in the list of devices. Press the connect button to establish a connection.



4. Confirmation that the BMS is connected to the VESC Tool can be seen by seeing the BMS under CAN-Devices, and also "Connected" written in the bottom right corner of the screen.

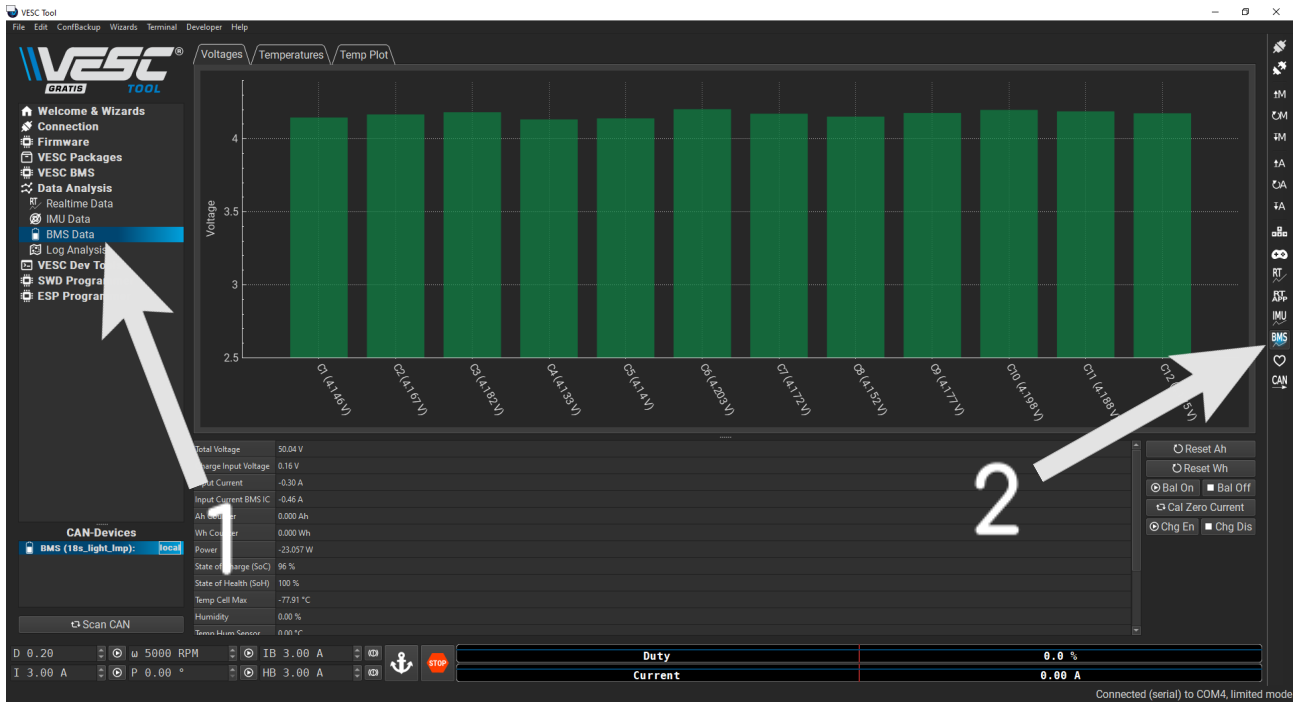


5. Enable BMS data by clicking the BMS icon on the right side of the screen.



Cell Monitoring - Desktop Version

1. The cell group voltages can be monitored by clicking on the “BMS Data” tab on the left side of the screen. Here you can check how balanced the cells are and identify whether the cells are being balanced by the BMS.
2. Ensure that BMS Data has also been enabled on the right side of the screen.

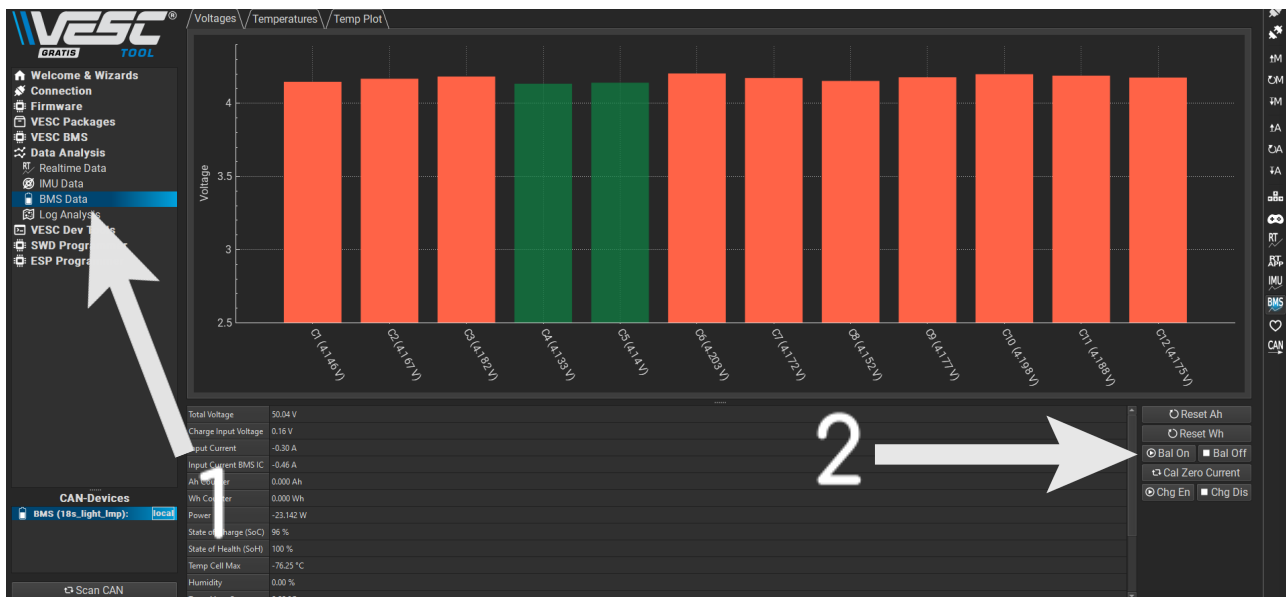


Manual Cell Balancing - Desktop Version

1. Click on the “BMS Data” tab on the left side of the screen.
2. To enable manual balancing select the “BAL On” button in the bottom right of the screen.
3. Now check the cell voltages to verify that the cells are balancing.

If the cells are within 0.015V then balancing will not happen even if you start the process manually.

Red cells indicate that they are balancing by discharging to match the voltage of the **green cells**.

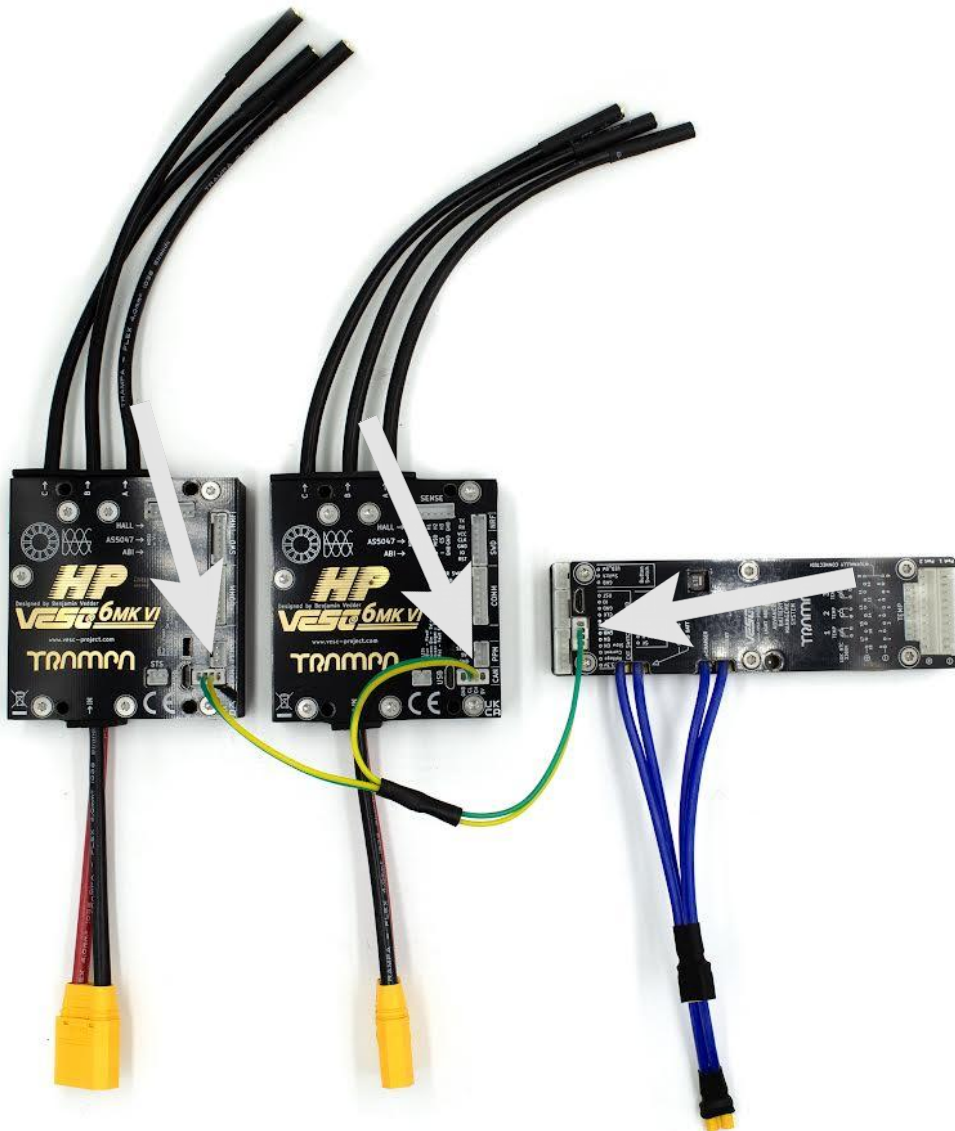


Connecting the BMS to VESC(s)

The BMS should be connected via CANBUS to all of the VESC controller(s) used within your system. This enables the BMS to communicate with the VESC controllers and additionally enables NRF communication (if wired into your VESC controller) for convenient monitoring of the BMS data via the mobile versions of the VESC Tool.

In order to connect the VESCs to the BMS, plug the CANBUS cable into the BMS then into the VESC controller(s).

A 3 way CANBUS cable should be used to connect two VESCs to the BMS.
(As seen in the image below)



To power the VESC(s) from the battery, connect one XT-90 extension cable on the lower PCB to each of the VESC controller(s).

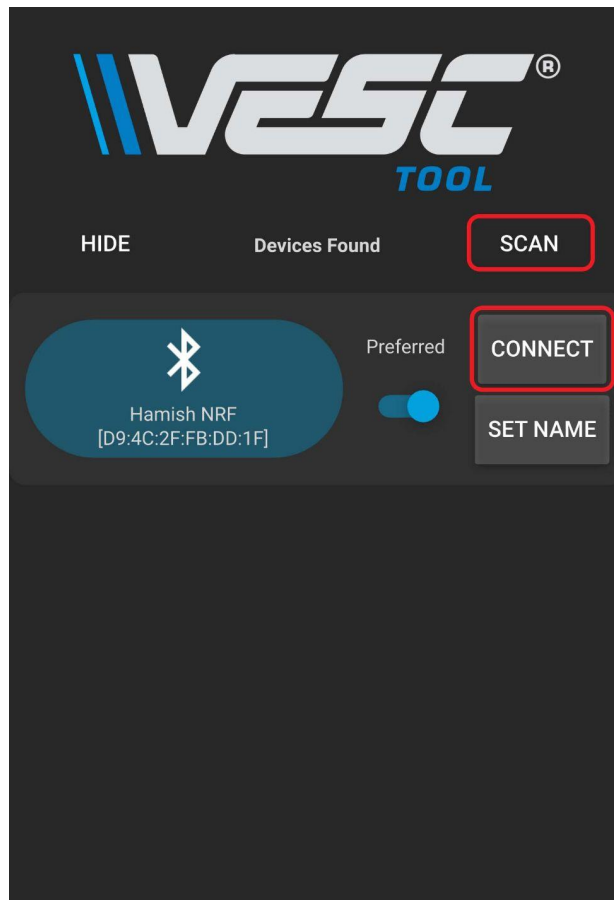
If you have a switch wired to the VESC(s), turn it on to power the VESCs on.

If there is no switch wired into the VESC(s), the controller(s) will now be turned on.

Configuring the BMS and VESC(s) via Bluetooth

1. Ensure Bluetooth is enabled on your mobile device
2. Open the VESC Tool App on your device
3. Press "SCAN" if no devices are showing up
4. Press "CONNECT" to then connect to the NRF

The NRF can also be saved as a preferred device and renamed. This is highly recommended for convenience and safety purposes, when multiple devices may be showing up.

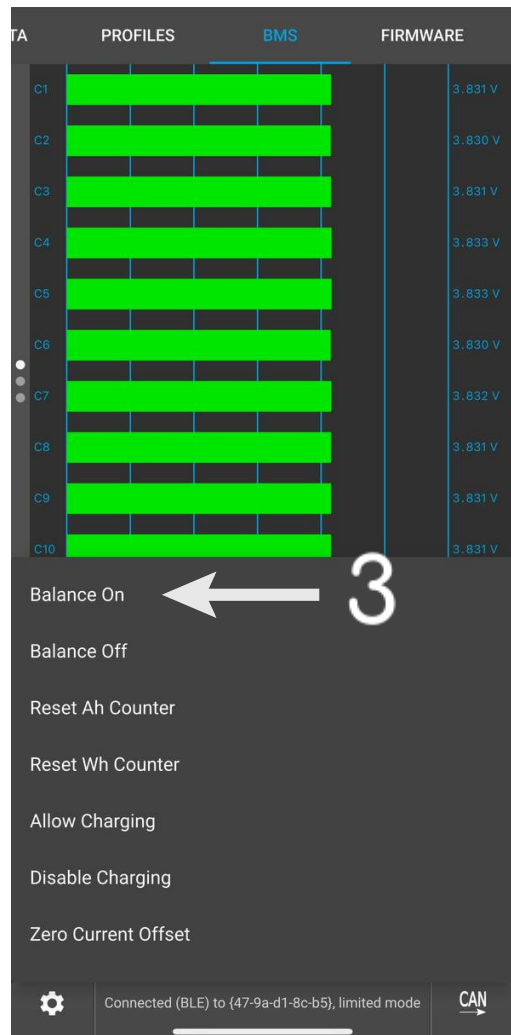
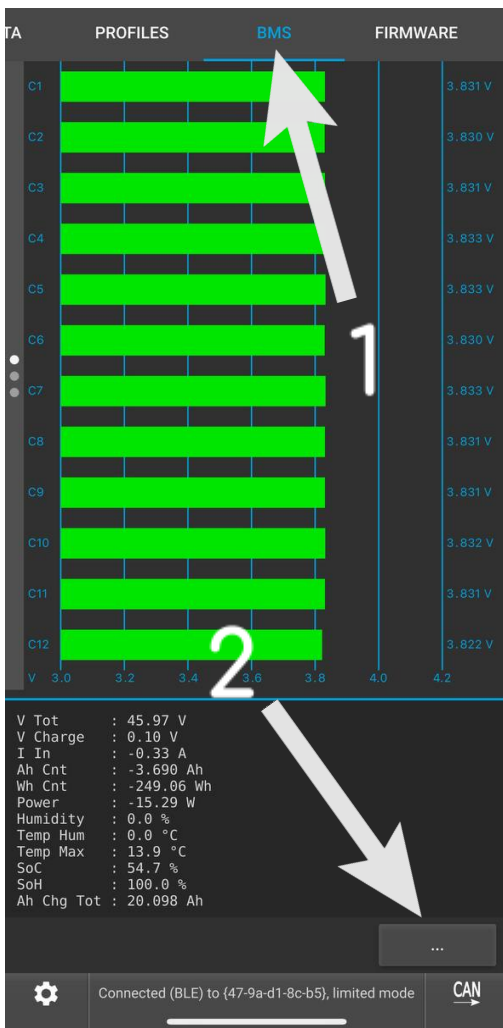


Cell Monitoring & Balancing on the Mobile VESC Tool

1. Swipe horizontally across the screen until you reach the "BMS" tab at the top of the screen.
2. To enable manual balancing select the button with "..." in the bottom right of the screen. This will bring up a list of options.
3. To enable balancing select "Balance On".
4. Now check the cell voltages to verify that the cells are balancing.

If the cells are within 0.015V then balancing will not happen even if you start the process manually.

Red cells indicate that they are balancing by discharging to match the voltage of the **green cells**.



Discharge Settings

The battery discharge settings need to be adjusted on all of the VESC(s) in accordance with the cell used.

Use the following formula to calculate the correct "Battery Current Max" Setting:

Single Drive:

Max continuous cell discharge X 7 = Battery Current Max

Twin Drive:

Max continuous cell discharge X 3.5 = Battery Current Max

Quad Drive:

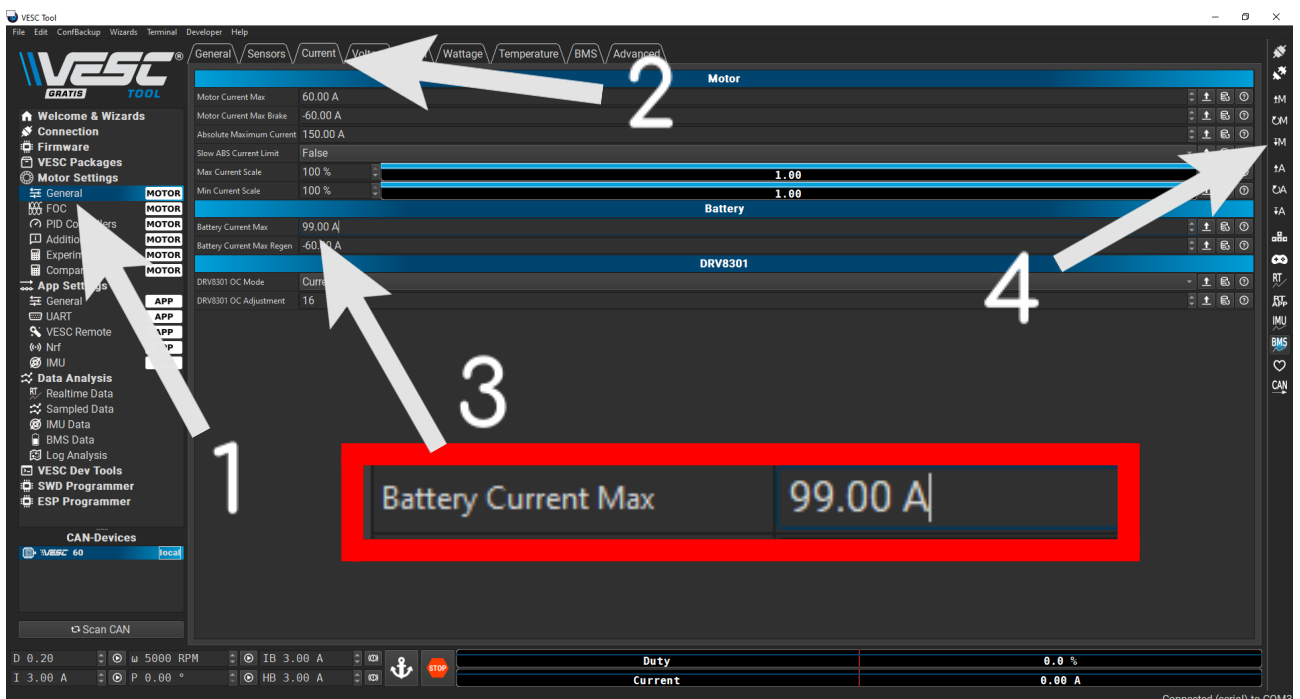
Max continuous cell discharge X 1.75 = Battery Current Max

Total discharge for the pack cannot exceed 145A peak!

The "Battery Current Max" must be applied to all VESC(s) connected via CAN. Check that the value is the same on each VESC.

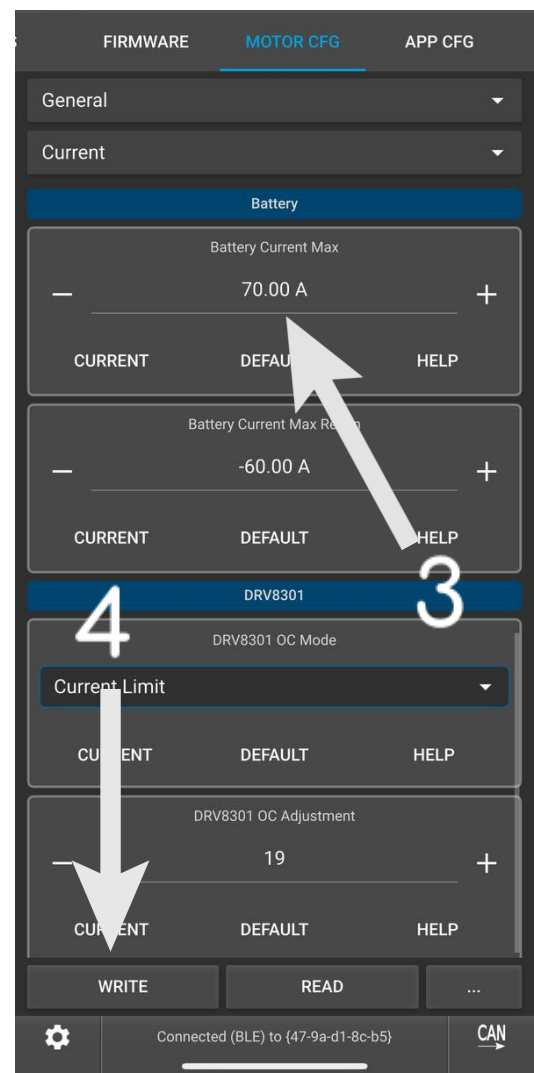
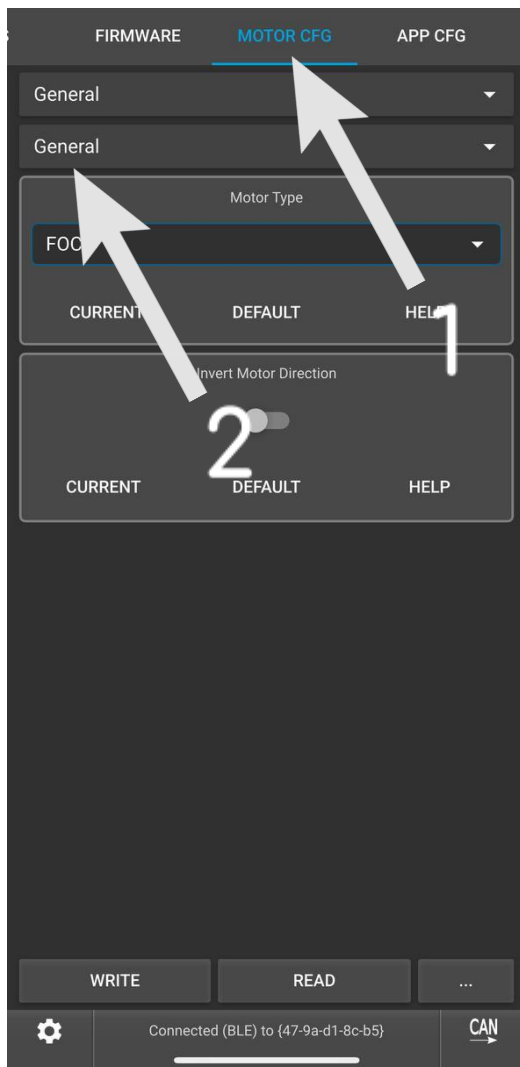
Desktop Version Instructions are as follows:

1. Click on the "General" tab below "Motor Settings" on the left side of the screen.
2. Click on the "Current" tab at the top of the screen
3. Change the Battery Current Max to your calculated value.
4. Write the changes to the VESC by pressing the "Write Motor Configuration" button on the right side of the screen.
5. Repeat steps 1 to 4 for ALL VESC(s) connected to the battery.



Mobile Version Instructions are as follows:

1. Swipe horizontally across the screen until you reach the "MOTOR CFG" tab at the top of the screen.
2. Click on the second "General" tap and select "Current" from the dropdown list.
3. Scroll down the page and change the "Battery Current Max" to your calculated value.
4. Write the changes to the VESC by pressing the "Write Motor Configuration" button at the bottom of the screen.
5. Repeat steps 1 to 4 for ALL VESC(s) connected to the battery.



Battery Charging & Storage

Battery Warning

Rechargeable Lithium-ion polymer batteries are potentially hazardous and can present a serious FIRE HAZARD, SERIOUS INJURY and/or PROPERTY DAMAGE if damaged, defective or improperly used.

READ and UNDERSTAND the CHARGER MANUAL before proceeding.

NEVER leave a battery charging unattended

KEEP the battery away from children and pets

NEVER charge a battery if it is damaged

NEVER charge a battery if you are having problems or suspect something may be wrong

NEVER charge a battery directly after it has been drained, ensure the battery has had sufficient time to cool.

ALWAYS use the appropriate charger and settings.

Whenever possible, charge the battery in an open space close to a door.

In the event of an EMERGENCY, ALWAYS CONTACT YOUR LOCAL EMERGENCY SERVICES.

Suitable Chargers

We highly recommend that you use either the **6A** or **12A**, 50.4V 12S LI ION BATTERY CHARGER pictured below and sold on our website.



6A Li-Ion Charger



12A Li-Ion Charger

Alternative chargers can also be used.

Please ensure you have read the manual for your specific charger and you are familiar with how to use the charger correctly before continuing. We hold **NO RESPONSIBILITY** for the incorrect use of a charger.

Only use suitable chargers, certified for your county, 12S Lithium-Ion Constant Current-Constant Voltage (CC/CV) Chargers!

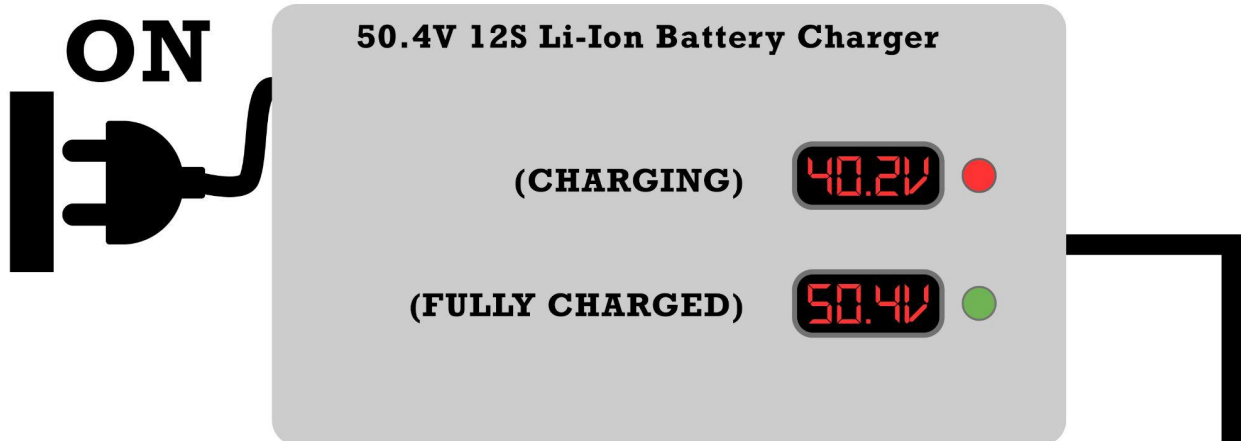
Do not use power adapters please order a charger with the correct mains wall plug for your country!

Maximum charge current must match cell charge current handling! Divide charge current by 7 to find out cell level current.

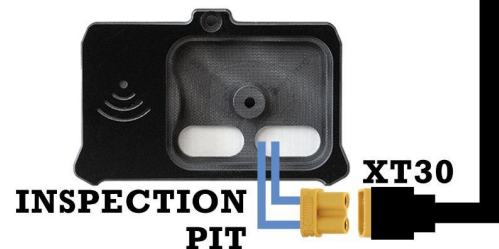
Lithium Battery Voltages

	1 Cell (1S)	12 Cells (12S)
0%	3.00V	36.00V
Recommended minimum	3.35V	40.20V
Storage	3.80V	45.60V
100%	4.20V	50.40V

Charge Process



1. PLUG IN and TURN ON the CHARGER BEFORE connecting any batteries to the charger.
2. Remove the THUMB SCREW and INSPECTION PIT LID on the top of MONSTER BOX.
3. PLUG the XT30 EXTENSION from the charger into the XT30 inside the INSPECTION PIT.
4. The charger LED will change to RED (wait 5 seconds) and 12A chargers also display the battery's Voltage - Indicating the battery is now charging.
5. Once the battery is CHARGED the LED will be GREEN and the display will show 50.4V on the 12A chargers.
6. Unplug the XT30 connecting the charger to the trike.
7. Place the LID back on ensuring no cables have been trapped.
8. Put the THUMB SCREW back on and tighten.
9. Turn OFF the CHARGER and UNPLUG from the wall.



Maintenance

Do not store the battery pack near flammables or a built up environment.

Always store the battery pack in a clean, dry, open space away from children and pets.

After every 5-10 charge / discharge cycles, check the cell voltages to ensure they are still balanced.

Do not leave the battery pack without any use for longer than 6 weeks. After 6 weeks of no use, you will need to check the cells and charge to storage voltage accordingly.

Li-Ion & LiPo Battery Care & Safety information

PLEASE READ CAREFULLY

Do not purchase lithium batteries before reading and understanding all of the safety precautions outlined in this section!

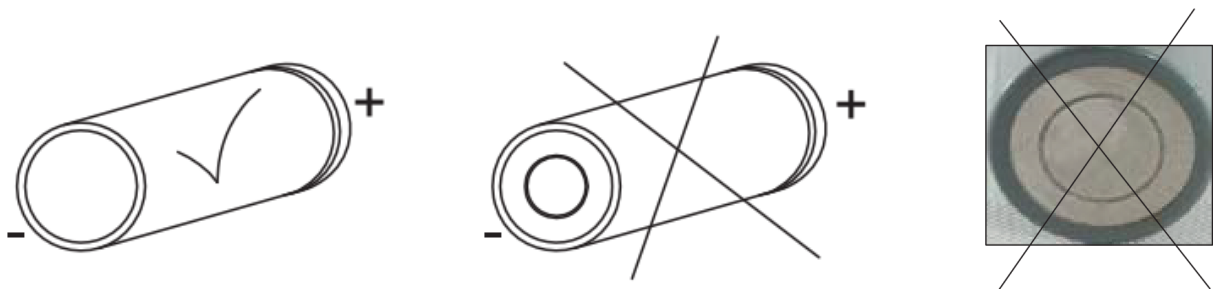
Suitable Battery Cells

The 21700 battery kit is designed for high discharge cells only. They have been tested with the following cells - use other cells at your own risk!

Samsung INR2100-40T 4000mAh
Molicel IMR 21700-P42A

Battery Venting Systems:

Lithium based cells feature overpressure valves. Most cells have their overpressure valve on the positive (+) pole. Some cells have the overpressure valve on the bottom side, the negative (-) pole. Those cells are not suitable in combination with this kit!!



Lithium-Ion Battery Hazards

Lithium batteries have high energy densities. Lithium-ion & Lithium Polymer battery fire hazards are associated with the high energy densities coupled with the flammable organic electrolyte. This creates challenges for use, storage, and handling. Physical damage, electrical abuse such as short circuits and overcharging, exposures to elevated temperature, manufacturer's defects such as imperfections and or contaminants in the manufacturing process can all cause a thermal runaway. This means a rapid self-heating from a chemical reaction that can result in a chain reaction thermal runaway of adjacent cells. The reaction vaporises the organic electrolyte and pressurises the cell casing. If (or when) the case fails, the flammable and toxic gases within the cell are released resulting in combustion and the ignition of the cell(s).

With this in mind it is essential that you read carefully and fully understand the following information.

Li-Ion & LiPo Battery Usage

Procurement

- Purchase batteries from a reputable manufacturer or supplier.
- Avoid batteries shipped without protective packaging.
- Inspect batteries on receipt and safely dispose of damaged batteries.

Handling and Use

- Handle batteries and or battery-powered devices cautiously to not damage the battery casing or connections.
- Keep batteries away from contact with conductive materials, water, seawater, strong oxidizers and strong acids.
- Do not place batteries in direct sunlight, on hot surfaces or in hot locations.
- The cell must stay within the operating temperatures outlined in the cell data sheet
- inspect batteries for signs of damage before use. Never use damaged cells and promptly dispose of damaged or puffy batteries.
- Keep all flammable materials away from the battery operating area.
- Allow time for cooling before charging a battery that is still warm from usage.
- Allow a battery that is still warm from charging to cool before using.
- The cell must not exceed voltage, current, and other ratings in its data sheet.
- Be careful not to short circuit – this is when exposed terminals come into contact with metal objects or from poor wiring practices or abuse. Short circuits discharge very quickly and will heat the battery to high temperatures due to the high current flow.
- Do not keep in the sun in a hot car or anywhere with direct heat
- If you notice an unusual odour, rusty deformation, damaged surfaces or fluid discharge, especially on first use, discontinue use.
- Keep cells away from animals and children.
- If the cell is attached to a PCB, keep it away from high static environments.

Charging

- Use chargers or charging methods designed to charge in a safe manner li-ion cells or LiPo battery packs at the specified parameters.
- Before using a charger or electronic device, read their user manuals.
- Only charge in an area free from any material which can catch fire. The ideal surface for charging batteries is concrete or ceramic.
- Charge and store batteries in a fire-retardant container when practical.
- Only use the charging method Constant Voltage/ Constant Current CVCC. (The charger limits the amount of current to a pre-set level until the battery reaches a pre-set voltage level. The current then reduces as the battery becomes fully charged).
- Confirm terminals are aligned correctly before inserting cell into charger or device
- Do not exceed either the max charge voltage or max current voltage or charge operating temperatures. Overcharge is greater than 4.2V for most batteries or over-discharge (below 3V) batteries.
- Do not charge near high temperatures or flammable materials.
- Discontinue charging after exceeding charge time outlined in the user manual or data sheet.
- Disconnect batteries immediately if, during operation or charging, they emit an unusual smell, develop heat, change shape/geometry, or behave abnormally. Dispose of the batteries.

- Do not parallel charge batteries of varying age and charge status; chargers cannot monitor the current of individual cells and initial voltage balancing can lead to high amperage, battery damage, and heat generation. Check voltage before parallel charging; all batteries should be within 0.5 Volts of each other.
- If the cell does not increase its charge after a prolonged time in the charger, discontinue use and dispose of the cell.
- Your charger or device should have a warning for over voltage, over current and over temperature, and should also have a control of overcharge and charge timer.
- Remove cells and pack from chargers promptly after charging is complete. Do not use the charger as a storage location.
- Never charge a primary one time use battery.
- Never charge with a cigarette lighter charger or directly by electrical outlet.

Discharging

- Discharge within the recommended temperature range (between -20°C and +60°C)
- Do not exceed maximum continuous discharge current, as detailed in the cell data sheet.
- Do not discharge below 3.0V per cell. Over discharge can damage battery performance
- When nominal capacity after full discharge cycle is less than 80% of rated capacity, discontinue use.

Storage

- Store batteries away from combustible materials.
- If practical, store batteries in a fire-retardant container.
- Store the batteries at temperatures between 5°C and 20°C (41°F and 68°F).
- Separate fresh and depleted cells (or keep a log).
- Store one-time use batteries separately from rechargeable batteries.
- Visually inspect the battery in storage weekly.
- Charge batteries in storage to approximately 30-50% of capacity at least once every six months.
- Charge or discharge the battery to approximately 30-50% of capacity before long-term storage.

Disposal

- Dispose of damaged cells and cells that no longer hold a substantial charge. To check the general condition of your cells, charge them, let them rest for an hour, then measure the voltage. If your cells are close to 4.2V, the cells are in good condition.
- Dispose of used batteries by following proper disposal protocols and taking them to a household e-waste collection point or battery-recycling drop off location.
- Cover terminals with insulating tape before disposal

Prohibited

- Do not exceed any of the rated specifications
- Do not charge or discharge near flammable materials or gas
- Do not leave to charge unattended, if a battery becomes puffy, smokes or catches fire you need to be able to immediately handle the situation. Walking away for just 5 minutes can spell disaster.
- Do not let batteries get wet or submerged
- Do not allow the positive or negative poles to connect with conductive materials

- Do not reverse polarity
- Do not insert insulation or other objects between the metal plate, cell or other components
- Do not overheat or overload
- Do not mix different battery brands or models
- Do not solder directly on the cell
- Do not touch a leaking cell
- Do not throw, puncture, or incinerate
- Do not ingest

What to do in an Emergency

Follow these steps if there is evidence of a battery malfunction (e.g. swelling, heating, or irregular odours).

- Use personal protective equipment, such as gloves, goggles/safety glasses and lab coat.
- If batteries are showing evidence of thermal runaway failure, be very cautious because the gases may be flammable and toxic and failure modes can be hazardous.
- Disconnect the battery (if possible).
- Remove the battery from the equipment/device (if possible).
- Place the battery in a metal or other container away from combustibles.
- Contact the local fire department and ask for advice on how to proceed.
- If a lithium battery fire occurs, use a CO₂ (Class BC) or Dry Powder (Class ABC) fire extinguisher. Lithium batteries do not have actual lithium metal so do not use a Class D fire extinguisher.

Please note:

Because batteries utilise a chemical reaction, battery performance will deteriorate over time even if stored for long periods without use. The performance and life expectancy of batteries depends heavily on usage conditions such as charge, discharge and ambient temperature, if the batteries are not maintained within the specified ranges then the life expectancy of the battery will be shortened.

Warranty Policy

Trampa Boards Ltd. goods and services are supplied in accordance with our Standard Terms and Conditions. This policy sets out the Warranty Period and exclusions which apply to all products purchased from the Trampa Boards Ltd. website. This policy is subject to our Standard Terms and Conditions and should be read in conjunction with those terms, particularly clause 5 of the Terms and Conditions.

Warranty

Subject to the exclusions set out below and in Clause 5 of the Terms and Conditions, faulty parts, products and workmanship will be replaced or repaired free of charge by Trampa Boards Ltd, or its Distributor or Service Provider where such faults arise during the applicable Warranty Period.

Claims

- If the claim is justified, the product(s) or part(s) will be repaired or replaced or a credit issued. It is our policy to replace parts wherever possible.
- Trampa Boards Ltd will pay for the shipping expenses, Trampa Boards Ltd can charge for returned products that are not found to be defective or non-conforming, in addition to associated shipping, test and handling costs.

Warranty Periods

This warranty is limited to a period of 180 days from the date of purchase.

*Spare parts are warranted for 180 days where fitted to the manufacturer's instructions and specifications and subject to the Terms and Conditions.

Exclusions:

1. This policy only applies where
 - i) The product is installed and used strictly in accordance with the Terms and Conditions and the instructions supplied with the product, and
 - ii) The failure is not due to accident, misuse, abuse, negligence, accidents, unsuitable water conditions, or to any alteration, modification, repair by any party not expressly nominated by Trampa Boards Ltd.
2. This warranty does not cover damage resulting from non-operation of the product or consequential damage to any other goods, furnishings or property.
3. This warranty does not cover any wear and tear of perishable items or damages incurred during assembly or maintenance.
4. This warranty does not cover damages incurred during transportation.
5. This warranty does not cover buyer's remorse.
6. This warranty does not cover theft or loss of the product.
7. This warranty does not cover inappropriate use such as entering competitions, races, exhibitions, or commercial events. Trampa Boards Ltd. products are not designed to be used to do jumps and stunts.

Claim Procedure

- Claims for defective merchandise must be made to Trampa Boards (support@trampaboards.com) within 180 days from the invoice date. Claims for missing parts must be made within 30 calendar days after the merchandise is received.
- Any claims for defective merchandise returns must be returned according to our returns policy**
- We reserve the right to specify that items be returned to Trampa HQ in Nottingham, UK for inspection.
- Details of the defective product with accompanying pictures (and videos if possible) are required to claim defective merchandise along with a copy of the original invoice.
- For products purchased anywhere other than the Trampa Boards website, please revert back to your supplier.

Service Work:

Ad hoc repairs by Trampa Boards Ltd. are covered under Warranty for 30 days in relation to the original fault only.

**Returns Policy

Trampa Boards Ltd do not accept return deliveries unless we have:

- i) authorised the return and
- ii) sent you a return label to use. Trampa Boards Ltd reserves the right to charge for any costs incurred by customers not following the Returns Policy guidance.

Contact

Our emails are checked regularly, however if your problem is urgent or you feel you need to speak to us in person then please WhatsApp or call 7am - 4pm, Monday - Saturday. Please remember if you are not in the UK then there is a time difference to consider.

Email: support@trampboards.com

Phone: 0044 7734 905883

Website: trampboards.com

Address:

We DO NOT ACCEPT RETURNS without first speaking with our customer support team.

Trampa Boards
Unit 16, Centre Court
33 Little Tennis Street
Colwick, Nottingham
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