# Rubicon & Tech

## RT-1302 Li-Ion Battery Module User's Manual



Caution: Must read User's Manual and safety instructions before using Rubicon&Tech battery module

### **RT-1302 Li-Ion Battery Module User's Manual**

For your safety and proper use of battery module, carefully read user's manual and safety instructions before using Rubicon&Tech battery module.

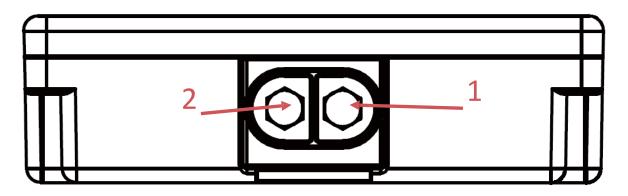
Due to transportation laws, DoD (Depth of Discharge) of Li-Ion battery module must be under 50%. Before using battery module for the first time, one must fully charged battery module using dedicated charger.

#### Rubicon&Tech RT-1302 Battery Module Specification:

- 1. Nominal voltage: DC24V
- 2. Nominal capacity: 11.5Ah
- 3. Operation voltage range: DC17.5V~29.4V
- 4. Maximum continuous discharge current : 40A
- 5. Weight (approx.): 1.75kg
- 6. Operation ambient:  $-20^{\circ}C \sim +65^{\circ}C$

#### **Instructions of using RT-1302 Battery Module:**

1. Connector specifications:



1. Output Connector of RT-1302 battery module is and only to be connected to specific connector on the electric trolley. The layout of connector and pin numbers are shown above. Main power output and input (pin 1: Pack+, pin 2: Pack-).

*Caution:* Do not short circuit the terminals with other objects, especially metals.

#### 2. Charging battery module:

- 1. The battery module can only be charged using dedicated charger provided with the accessories. Do not charged battery module with any other chargers. The charging time for a fully discharged battery module is about 4 hours.
- 2. Before using the battery module for the first time, fully charged battery module with charger.
- 3. Before charging the module, plug power cord to the main electricity. The LED indicator should display GREEN light. Connect the output supply of the charger to

the charging dock; the charging process will start automatically. The LED indicator should display RED light. When charging process is finished, the LED indicator should display GREEN light for a fully charged battery module.

#### **3.** Using the battery module:

- 1. The Rubicon&Tech RT-1302 battery module is particularly designed for Merits Electric trolley. Do not use battery module on any other equipment.
- 2. Before using the module, please firmly fasten the module to the trolley in the proper direction and make sure the connectors and plugs are firmly locked in the correct direction.
- 3. When not riding, turn off main power switch for your safety and can also lengthen the life of the battery module

*Caution:* When not using battery for an extended period, remove it from the equipment, fully charged, and store in a place with low humidity and low temperature. Recommend storage condition:  $25^{\circ}$ C.

#### ! Danger

- 1. Do not disassemble or modify Rubicon&Tech battery module.
- 2. Do not short circuit the (+) and (-) terminals with other metals.
- 3. Do not place battery in a device with the (+) and (-) in the wrong way around.
- 4. Do not put Rubicon&Tech battery module in your pockets or bags together with metal objects such as necklaces, hairpins, coins, or screws. Do not store batteries with such objects.
- 5. Do not heat or throw old, failure Rubicon&Tech battery module into a fire. Please send back to local distributer for recycling.
- 6. Do not hit with a hammer (or any solid objects), step on or throw or drop to cause strong shock. Strong shock could damage battery cells and battery management system.
- 7. Do not immerse, throw, and wet Rubicon&Tech battery module in water/ seawater.
- 8. When charging the battery module, use dedicated chargers and follow the specified conditions
- Do not use, leave battery module close to fire or inside of a car where temperature may be above 60°C. Also do not charge / discharge in such conditions.
- 10. Use Rubicon&Tech battery module only in the specified equipment.
- 11. Stop charging the battery if charging is not completed within the specified time.
- 12. Stop using the battery if abnormal heat, odor, discoloration, deformation or abnormal condition is detected.
- 13. Above conditions under abnormal usage, we don't have provide repairmen warranty.

#### ! Caution

- 1. Store battery modules out of reach of children under 8 years old.
- 2. If younger children use the battery module, their guardians should explain the proper handling.
- 3. Before using Rubicon&Tech battery module, be sure to read the user's manual and cautions on handling thoroughly.
- 4. Thoroughly read the user's manual for the charger before charging the battery.
- 5. For information on installing and removing from equipment, thoroughly read the user's manual for the specific equipment.
- 6. Batteries have life cycles. If the time that the battery powers equipment becomes much shorter than usual, the battery life is at an end. Replace the battery with a new same one.
- 7. Remove a battery whose life cycle has expired from equipment immediately.
- 8. When not using battery for an extended period, remove it from the equipment, fully charged, and store in a place with low humidity and low temperature.
- 9. While the battery is charged, used and stored, keep it away from objects or materials with static electric charges.
- 10. If the terminals of the battery become dirty, wipe with a dry clothe before using the battery.