



# Battery Manual

VER:A

DATE:2016-01-09

## Li-ion Rechargeable Battery Manual

Product : Li-ion battery pack

Product Specification: 48V 24Ah

5C high performance 18650 cells

Prepared By/Date	Checked By/Date	Approved By/Date
Xi Jan/2015-10-29	Wen /2015-11-29	Dong/2016-01-09



# Battery Manual

VER:A

DATE:2016-01-09

## 1. Preface

The manual only applies to 48V/24Ah Li-ion battery pack supplied by TONGYU TECHNOLOGY CO.,LTD. Customized for Monobuggy Golf Scooter.

## 2. BATTERY TYPE AND SIZE

### 2.1 Product: Li-ion battery Pack

### 2.2 Type : 48V 24Ah

### 2.3 Pictures

The material of the battery pack is Metal case (285 \*150\*115 mm);



Discharge connector: Anderson connector(50A)



Charge connector:





# Battery Manual

VER:A

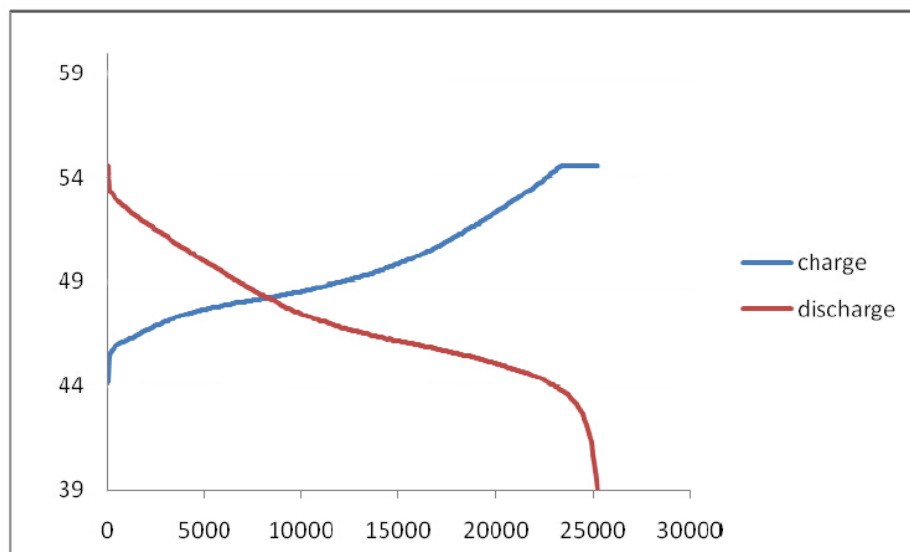
DATE:2016-01-09

## 3. Battery Pack Specification

Item		Specification
Pack assembled mode		13S12P-18650
Typical Capacity		24 ± 1.0 Ah (0.2C, 25°C)
Normal discharge current		24A
Max continuous discharge current		30A
Discharge Ending Voltage		≈ 39 V
Charge voltage		54.6 ± 0.2 V
Charge current		≤ 5 A
Charge mode		CC/CV
Inner resistance		≤ 100 m Ω
Battery case material		metal
Weight		8.6 ± 0.1 kg
Size(L*W*H)		285 * 150 * 115 mm
Operation temperature	charge	0 ~ +45 °C
	discharge	-20 ~ +60 °C
Humidity		RH ≤ 50%
Protection		Over charge protection, Over discharge protection, Over current protection, temperature protection, Balanced function

## 4. Battery Charge/discharge Curve

48V24Ah Charge-Discharge Curve ( 0.2C, 25°C )



## 5. Cautions

5.1 Please use the matching lithium battery charger ( $\leq 5A$ ) for charging within 12 hours after use and do not charging more than 24 hours.

5.2 Please put the battery in a cool and dry place when it is not used for a long time in winter. The battery need to have a charging every two months, the voltage is maintained at 49 ~ 52V.

5.3 Prohibit the positive and negative of battery short-circuit, reverse polarity and disassemble the battery.

## 6. Product-Liability

We are not responsible for the incident caused by not obeying the manual. Before using the battery, you should read the specifications, usage instruction and some attentions carefully to learn its application method and areas. If the phenomenon such as error using method or wrong circuit connection or input power data, working index are inconsistent with the manual, cause damage to the battery, load and its accessories, we are not responsible for it.



## Advarsel og Vejledning

### VIGTIGT:

1. Batteriet skal lades op indenfor 12 timer efter brug og man bør kun anvende den medfølgende 5A lader. Batteriet bør ikke være tilsluttet laderen i mere end højst 24 timer (optimalt vil være at frakoble laderen efter ca. 6 - 8 timers ladning) det forlænger batteriets levetid.
2. Batteriet bør opbevares tørt og frostfrit hvis det ikke anvendes i en længere periode. Batteriet skal oplades med ca. 2 måneders mellemrum således at det bevarer en spænding på 49 – 52V.
3. Sørg for at isolere strømstikkene under opbevaring og transport, således at der ikke sker kortslutning.
4. Et defekt batteri skal bortskaffes på forsvarlig vis, hvilket kun kan ske på den lokale genbrugsplads.

**BEMÆRK:** Batteriet er ikke omfattet af den garanti der gælder på golf scooteren.



Monobuggy