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ADDITIONAL INSTRUCTION MANUAL

T30 V.2 ACTIVE POWER
DIGITAL CHARGER, DISCHARGER AND CYCLER

T30 V.2 Additional Instruction Manual for $LiFePo_4$ (A123) and LiPo

Congratulations! You have bought the newly upgraded Tahmazo T30 V.2 Charger.
The T30 V.2 charger is packed with more capabilities to bring you greater value.

This additional instruction manual highlights the additional features
and capabilities of the Tahmazo T30 V.2.

T30 V.2 Specifications:

	Description
Input voltage	11-15V
Battery type	1-30 cells NiCd & NiMH batteries 1-12 Lithium Polymer batteries 1-12 Lithium Iron Phosphate batteries ($LiFePo_4$) 1-12 cells Lead-Acid batteries
Charge current	0.1 – 10.0A Adjustable or up to 2C charge for Lithium Polymer or $LiFePo_4$
Charge method	Automatic, Normal, Linear and Reflex
Charge termination	Peak detection & zero delta V for NiCd & NiMH batteries Constant-current/Constant Voltage for Lithium Polymer/ Lead-Acid/ Lithium Iron Phosphate batteries
Delta peak sensitivity	0-25mV adjustable
Trickle charge current	0-500mAH only for NiCd and NiMH batteries
Discharge current	0.1 – 5.0A adjustable
Discharge cutoff voltage	0.1 – 1.1 per cell for NiCd & NiMH batteries 2.5 – 3.7V per cell for Lithium Polymer batteries 2.9 – 3.3V per cell for $LiFePo_4$
Temperature cutoff	10 – 65°C (50 – 150°F)
Cycle count	1 – 10 cycles adjustable
Cycle cool-off delay	1 – 30minutes adjustable
Battery memories	10 battery memories
Display type	LCD with backlight
Dimension	156.5 x 143 x 55mm
Weight	740g

T30 V.2 Quick Start

Output Battery Connections
Connect the battery leads to the output connections of the charger
OUT 1 – OUTPUT1 can be used to charge NiCd, NiMH, Lithium Polymer, Lead-Acid or LiFePo4 batteries

Select Battery Type
Rotate the Dial and move the cursor to “Batt. Type” and push the Dial.
Then, select the type of battery (NiCd, NiMH, LiPo, Pb or LiFe).
Once selected, push the Dial to confirm.

Set Parameters for Charging/Discharging
Rotate the Dial and move the cursor to the following parameters. Push the Dial to set the parameter and push the Dial for the second time to confirm the value.

Battery volt (For LiPo, Pb and LiFePo4)	Set the voltage of the battery pack
Capacity	Set the capacity of the battery pack in mAh
CHG CURR. (Charging Current)	Set the charging current in amp (A)
DCHG CURR. (Discharging Current)	Set the discharging current in amp (A)
DCHG VOLT	Set the cutoff voltage of each cell when discharging the battery pack! REFER TO THE SPECIFICATION OF THE BATTERY PACK (from the battery manufacturer or agent). DO NOT DISCHARGE THE BATTERY BELOW THE ALLOWABLE VOLTAGE AS SPECIFIED BY THE MANUFACTURER.

Charging Setup Menu
Push and hold the Dial to display the charging method. Rotate the Dial to select:

Charge	1. VC-CC (for LiPo, Pb and LiFePo4)
D-charge (denotes discharge)	1. Automatic 2. Normal 3. Linear
Cycle	1. Charge then Discharge 2. Discharge then Charge Cycle Time: 1 – 10 cycles Cool-off Delay time: 1 – 30 minutes

Start Charging, Discharging or Cycling
Push and Hold the Dial to start the selected operation.

View Data
You can view the charging or discharging data by pressing the ESC and MODE buttons.

To stop the charging or discharging process, press and hold the ESC button for 5 seconds.

T30 V.2 Battery Setup Menu

Display Of Setup Menu For The Different Battery Type

[0] BATTERY NAME..
BATT. TYPE : LiFe
BATT. VOLT : 3S 9.9V
CAPACITY : 2100mAh
CHG CURR. : 2.1A
DCHG CURR. : 2.1A
DCHG VOLT. : 3.3V/C
CUT-TEMP : 55°C
MAX-CAP. : 120%

Parameters of the Different Battery Type

Parameter	Li-Polymer	LiFe
Battery cells or voltage	3.7V(1S) ~ 44.4V(12S)	3.3V(1S) ~ 39.6V(12S)
Capacity	100 ~ 20000mAh	100 ~ 20000mAh
Charge current	0.1 ~ 10.0A	0.1 ~ 10.0A
Discharge voltage	0.1 ~ 5.0A	0.1 ~ 5.0A
Peak sensitivity	Not Applicable	Not Applicable
Trickle charge current	CV-CC charge trickle	CV-CC charge trickle
Temperature cut-off	10 – 65°C 1°C/step 50 – 150°F 2°F/step	10 – 65°C 1°C/step 50 – 150°F 2°F/step
Max-charge capacity	10% ~ 120% 10% step	10% ~ 120% 10% step
Pre-peak delay	Not applicable	Not applicable

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T30 ACTIVE POWER

DIGITAL CHARGER, DISCHARGER AND CYCLER

INSTRUCTION MANUAL

T30 Manual Contents

LEGENDS

PRESS Press the jog dial.

PRESS 2 SEC Press and hold the jog dial.

ESC Press the ESC button.

ESC 2 SEC Press and hold the ESC button.

MODE Press the MODE button.

Rotate the jog dial.

T30 ACTIVE POWER
DIGITAL CHARGER, DISCHARGER AND CYCLER

Introduction

Thank you for purchasing this T30 Active Power digital all-in-one charger, discharger and cycler. We are sure you will be pleased with its performance. In order to ensure you obtain the maximum from its operation, please read the following instructions carefully.

Features

01 Capable of handling NiCd/NiMh/Lithium Polymer and Lead-Acid batteries.

02 8-line, 21 character large LCD with backlight.

03 Graphical displays of charge and discharge curves.

04 Intuitive program menu with dial and pushbutton control.

05 Intelligent cooling fan control system.

06 Versatile charging methods.

07 "Constant current/constant voltage" charge method for Lithium Polymer and Lead-Acid batteries.

08 Storing up to 10 different battery configurations and allows you to name each configuration.

09 Allows you to customize charger including battery profile, LCD contrast, charger startup name, temperature scale and sound alerts.

10 Voltage monitoring.

11 Individual Li-Po cell display during charging (using Tahmazo T6B-optional and not included with this charger).

12 Performs 1-10 cycles and stores capacity and voltage data for all 10 cycles.

13 Various built-in warning messages including reverse polarity on output, wrong connections and improper input voltage.

14 Packaged in a rugged aluminum case.

Specifications

	Description
Input voltage	11-15V DC
Battery type	1-30 cells Nicd & NiMh batteries 1-10 cells Lithium Polymer batteries 1-12 cells Lead-Acid batteries
Charge current	0.1-10.0A adjustable
Charge method	Automatic, Normal, Linear and Reflex
Charge termination	Peak detection & zero delta V for NiCd & NiMH batteries Constant-current/Constant Voltage for Lithium Polymer/Lead-Acid batteries
Delta peak sensitivity	0-25mV adjustable
Trickle charge current	0-500mAH Only for Nicd & NiMh batteries

	Description
Discharge current	0.1-5.0A adjustable
Discharge cutoff voltage	0.1-1.1 per cell for Nicd & NiMh batteries 2.5-3.7V per cell for Lithium polymer batteries
Temperature cutoff	10-65°C (50-150°F)
Cycle count	1-10 cycles adjustable
Cycle cool-off delay	1-30 minutes adjustable
Battery memories	10 battery memories
Display type	LCD with backlight
Dimension	156.5x143x55mm
Weight	740g

WARNING:

- DO NOT LEAVE THE T30 ACTIVE POWER CHARGER UNATTENDED WHILE IN USE.
- STOP CHARGING/DISCHARGING AS SOON AS YOU NOTICE ANY ADNORMALITY.
  IN ADDITION, STOP CHARGING/DISCHARGING WHEN THERE IS A SIGN OF RAPID INCREASE IN THE BATTERY TEMPERATURE.
- DO NOT USE A 24V BATTERY AS A POWER SOURCE.

T30 Safety Precautions

01 Do not operate or use T30 Active Power near flammable materials.

02 Do not operate T30 Active Power under wet conditions or in areas of extremely high humidity, rain or snow.

03 Do not allow T30 Active Power to get wet or operate the charger with wet hands.

04 Do not store the T30 Active Power in a dusty place.

05 Do not start charging or discharging the batteries while they are warm.

06 Do not disassemble T30 Active Power including its attached parts.

07 Keep the T30 Active Power away from physical vibrations and shocks.

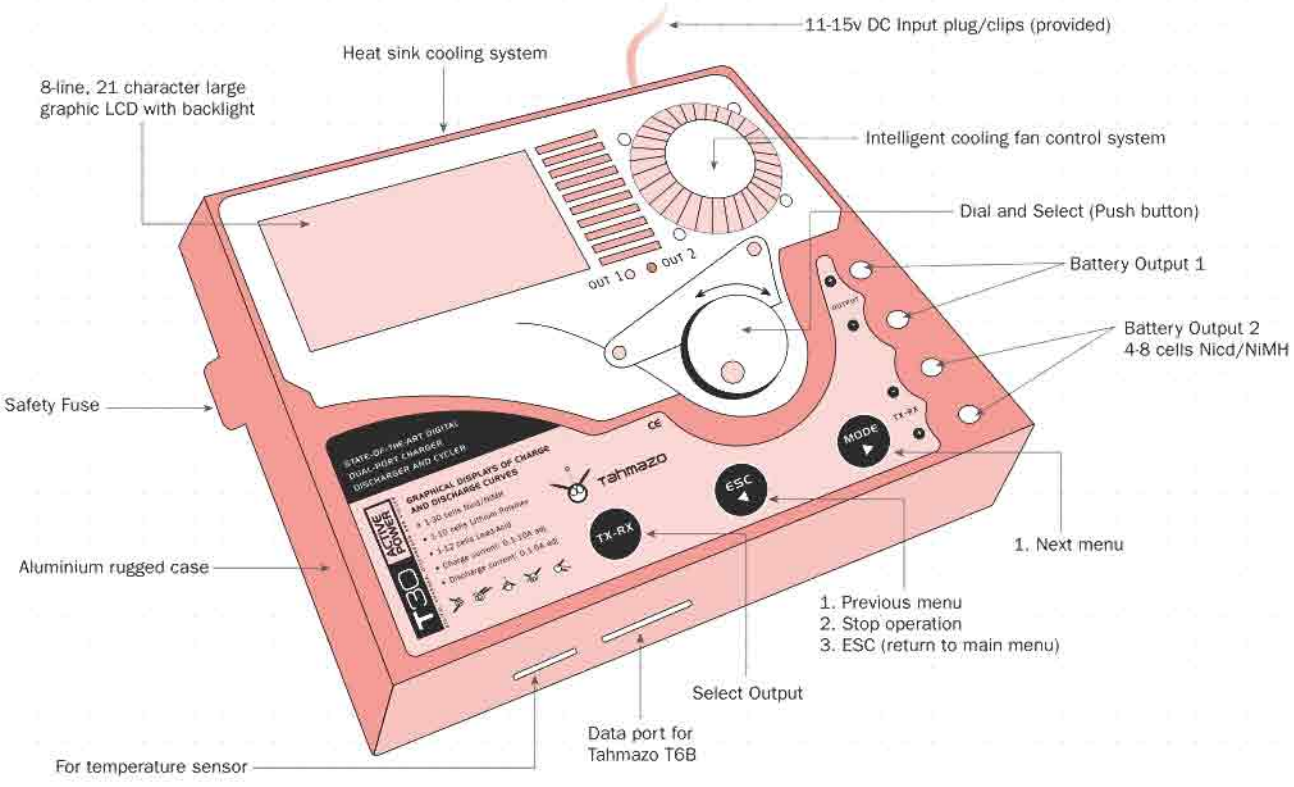
08 Keep the T30 Active Power away from direct sunlight.

09 The "Delta-Peak" detection may not work properly when charging batteries (Nicd or NiMH) that are newly acquired or left unused for a long time. Please stop charging then the temperature of the batteries starts to rise abnormally.

10 Be sure to check all parameters on the USER SETUP screen before charging/discharging and correct them if necessary.

11 Be sure to remove the batteries from the T30 Active Power immediately after the completion of charging and discharging.

Get To Know T30



Main Setup Menu

Input Power

T30 Active Power can be operated from a 12V lead-acid battery or DC 11-15V power supply. The current output capacity of the power supply should not be less than the desired charging current of the T30 Active Power.

Connect the charger's red clip to the positive (+) terminal on the power source, and black clip to the negative (-) terminal. The T30 Active Power will turn on and shows its opening screen with a beep.

Output Battery Connections

Connect the battery leads to the output connections of the charger

- OUT 1 – OUTPUT 1 can be used to charge Nicd, NiMH, Lithium Polymer or Lead-Acid battery.
- TX-RX – Output TX-RX can be used to charge your transmitter or receiver battery. This output can also be used to charge any 4-8 cells Nicd or NiMH batteries.

Select Battery Type

Rotate the Dial and move the cursor to 'BATT. TYPE' and push the Dial. Then select the type of battery (NiCd, NiMH, LiPo or Pb). Once selected, push the Dial to confirm.

Set Parameters for Charging/Discharging

Rotate the Dial and move the cursor to the following parameters. Push the Dial to set the parameter and push the Dial the second time to confirm the value.

BATT. CELL. (For Nicd or NiMH)	Set the number of cells in the battery pack
BATT. VOLT. (For LiPo and Pb)	Set the voltage of the battery pack
CAPACITY	Set the capacity of the battery pack in mAh
CHG CURR. (Charging Current)	Set the charging current in amp (A)
DCHG CURR. (Discharging Current)	Set the discharging current in amp (A)
DCHG VOLT	Set the cutoff voltage of each cell when discharging the battery pack I REFER TO SPECIFICATION OF THE BATTERY PACK (from the battery manufacturer or agent). DO NOT DISCHARGE THE BATTERY BELOW THE ALLOWABLE VOLTAGE AS SPECIFY BY THE MANUFACTURER.

Charging Setup Menu

Push and hold the Dial to display the charging method. Rotate the Dial to select:

Charge	1. Automatic 2. Normal 3. Linear 4. Re-flex 5. CV-CC (for LiPo and Pb)
D-charge (denotes discharge)	1. Automatic 2. Normal 3. Linear
Cycle	1. Charge then Discharge 2. Discharge then Charge Cycle Time: 1 – 10 cycles Cool-off Delay time: 1 – 30 minutes

Start Charging, Discharging or Cycling

Push and Hold the Dial to start the selected operation.

View Data

You can view the charging or discharging data by pressing the ESC and MODE buttons.

To stop the charging or discharging process, press and hold the ESC button for 5 seconds.

Display Of Setup Menu For The Different Battery Type

[0] BATTERY NAME..	
BATT. TYPE	: NiCD
BATT. CELL	: 6CELL
CAPACITY	: 3000mAh
CHG CURR.	: 3.0 A
DCHG CURR.	: 3.0 A
DCHG VOLT	: 0.9V/C
PEAK SENS.	: 8mV/C
CUT - TEMP	: 55 °C
MAX - CAP.	: 150%
PEAK DELAY	: 3 MIN
TRICKLE	: 100mA

[0] BATTERY NAME..	
BATT. TYPE	: NiMH
BATT. CELL	: 00CELL
CAPACITY	: 3300mAh
CHG CURR.	: 3.3 A
DCHG CURR.	: 3.3 A
DCHG VOLT	: 0.8V/C
PEAK SENS.	: 5mV/C
CUT - TEMP	: 55 °C
MAX - CAP.	: 150%
PEAK DELAY	: 3 MIN
TRICKLE	: 100mA

[0] BATTERY NAME..	
BATT. TYPE	: LiPo
BATT. VOLT	: 5S18.5V
CAPACITY	: 2100mAh
CHG CURR.	: 2.1 A
DCHG CURR.	: 4.2 A
DCHG VOLT	: 3.0V/C
CUT - TEMP	: 55 °C
MAX - CAP.	: 120%

[0] BATTERY NAME..	
BATT. TYPE	: Pb
BATT. VOLT	: 6S12.0V
CAPACITY	: 4500mAh
CHG CURR.	: 7.0 A
DCHG CURR.	: 5.0 A
DCHG VOLT	: 1.8V/C
CUT - TEMP	: 5805 °C
MAX - CAP.	: 120%

T30 Battery Setup Menu

Parameters Of The Different Battery Type

Parameter	NICd	NIMH	LI-Polymer	Pb
Battery cells or voltage	1 ~ 30 cell	1 ~ 30 cell	3.7V(1S) ~ 37.0V(10S)	2.0V(1S) ~ 24.0V(12S)
Capacity	100 ~ 9900mAh	100 ~ 9900mAh	100 ~ 20000mAh	500 ~ 20000mAh
Charge current	0.1 ~ 10.0A	0.1 ~ 10.0A	0.1 ~ 4.2A	0.1 ~ 10.0A
Discharge current	0.1 ~ 5.0A	0.1 ~ 5.0A	0.1 ~ 5.0A	0.1 ~ 5.0A
Discharge voltage	0.1 ~ 1.1V/cell	0.1 ~ 1.1V/cell	2.5 ~ 3.7V/cell	1.8V/cell fixed
Peak sensitivity	5 ~ 25mV/cell	3 ~ 15mV/cell, Zero Delta Peak	Not applicable	Not applicable
Trickle charge current	0 ~ 500mA 50mA/step	0 ~ 500mA 50mA/step	CV-CC charge trickle	CV-CC charge trickle
Temperature cut-off	10 ~ 65 ℃ 1 ℃/step 50 ~ 150 °F 2 °F/step	10 ~ 65 ℃ 1 ℃/step 50 ~ 150 °F 2 °F/step	10 ~ 65 ℃ 1 ℃/step 50 ~ 150 °F 2 °F/step	10 ~ 65 ℃ 1 ℃/step 50 ~ 150 °F 2 °F/step
Max charge capacity	10 ~ 150% 10%step	10 ~ 150% 10%step	10 ~ 120% 10%step	10 ~ 120% 10%step
Pre-peak delay	1 ~ 20min 1min/step	1 ~ 20min 1min/step	Not applicable	Not applicable

Delta Peak Sensitivity Setting

The Delta Peak sensitivity setting for NiCd and NiMH batteries are:

NiCd battery : 5 ~ 25mV per cell

NiMH battery : 3 ~ 15mV per cell or ZEROpk (Zero Volt Delta Peak)

Note: The battery voltage rises as charging progresses to a peak when the battery pack is fully charged then subsequently the battery voltage falls. This voltage drop or delta peak occurs once the cell is fully charged. At this point the cell enters the overcharge danger zone and the temperature begins to rise rapidly if charge current is supplied. T30 Active Power identifies the delta peak and cut off the charger when the battery has reached its full charge or switch to trickle charge.

Trickle Charge Current

If trickle charge is set, the trickle charge is activated after a full charge. If charge is finished by the selected temperature, the trickle charge should be activated only after temp falls below 2 degrees of the selected temperature.

Max Charge Capacity

The maximum charge capacity can be set according to your purpose. The default setting is 150% for NiCd/MH and 120% for Li-Ion/Pb. For example, if battery capacity is set to 3000mAh and 50% is set, the charger charges and finishes up to 1500mAh.

Setting below 100% can be used for the purpose of keeping a battery pack for a long period. It is recommended to keep a battery pack with discharged condition for the purpose of keeping for a short period, but the battery pack should be kept with 10-50% capacity for longer storage period.

T30 User Setup Menu

Display Of The User Setup Menu

[USER SETUP]
TEMP. MODE : °F
BUTTON SOUND : ON
FINISH SOUND : 5sec
MELODY : 1
LCD CONTRAST : 10
LCD BACKLIT : ON
< USER NAME.. >

Parameter	Value
Temperature mode	°F / ℃
Button sound	On/Off
Finish sound	OFF, 5sec, 15sec, 1min, ON
Melody	1 ~ 10 melodies
LCD contrast	0 ~ 15 steps (Default: 10)
LCD backlit	On/Off
User name	Up to 16 characters

Temp Mode
Temperature can be displayed in either °F or ℃.

Button Sound
Button sound can be set to either ON or OFF. Even if the button sound is set to OFF, the charger will sound when an error occurs.

Finish Sound Time
This parameter sets the duration whereby the melody is played when the charge,discharge or cycle is terminated The duration are: OFF, 5sec, 15sec, 1min, ON.

Melody
10 different melodies can be set to indicate for completion or termination of T30 Active Power operation. If finish sound is set to OFF, the melody does not sound when choosing melodies.

LCD Contrast
The contrast of the LCD display can be adjusted from value 1 to 15. The factory default setting is 10.

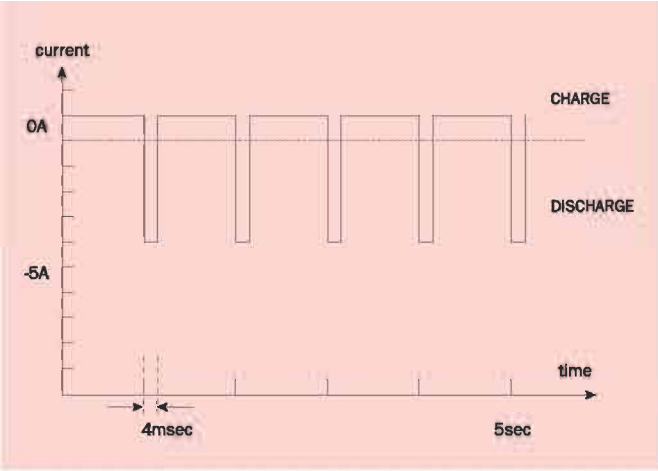
LCD Backlit
The LCD backlit can be turned ON or OFF.

User Name Setting
The user name will appear on the T30 Active Power's startup screen, and it can be customized here.

T30 Charging/Discharging Menu

Type Of Charging/Discharging Methods

A. Automatic Charge	Using the latest computerized software, T30 Active Power will automatically adjust the charging current for an optimal charge. The charge current diminishes as the voltage of the battery or battery pack builds up. This charging method is only applicable to NiCd and NiMH batteries. T30 Active Power uses data of the temp cutoff that user sets. The delta peak sensitivity are NiCd-8mV per cell and NiMH -6mV/C.
B. Automatic Discharge	Using the latest computerized software, T30 Active Power will automatically adjust the discharging current for an optimal discharge. This discharging method is only applicable to NiCd and NiMH batteries. The discharge cutoff voltage is set at 0.8V per cell.
C. Normal Charge & Discharge	Using this method, T30 Active Power will charge or discharge by checking voltage status and pulses the currents every one minute. The parameters of the charge or discharge is in accordance with parameter that user sets.
D. Linear Charge	T30 Active Power will pulse charge the battery according to the desired current set. The current will remain constant through the charging process until delta peak is detected.



< RE-FLEX CHARGE >

E. Re-flex Charge

This charge method is to charge with instant discharge every second. It is helpful to the activity of the chemistry of the battery. it applies a very short discharge pulse of 4C (up to a max of 5A), for a very short period, during the charging rest period to depolarise the cell. These pulses dislodge any gas bubbles which have built up on the electrodes during fast charging, speeding up the stabilisation process and hence the overall charging process. This method will improve both the charge rate and the battery lifetime as well as for the removal of dendrites made possible by this technique. This charging method is only applicable to NiCd and NiMH batteries.

F. Cycle Mode	In this mode, you can select the type of cycling process namely Charger then Discharge <C→D>, or Discharge then Charge <D→C>. The number of cycles can be set from 1 to 10 times. The cycle cool-off delay time is the time between the cycle and can be set from 1 to 30 minutes.
G. CC-CV Charge	CC(Constant current) - CV(Constant voltage) are for charging Lithium Polymer and Lead-Acid batteries only. Using this CC-CV method, the charger will return up as much as 80% of the previous discharge within the first 30 minutes, giving you a near-full capacity battery. Subsequentyly CV trickle charge continues to charge up to 100% of the battery pack. For charging over 5 cells of LiPo battery pack, the lithium balancer T6B MUST be connected to the charger. Otherwise, the charger does not charge over 5 cells Lithium Polymer.

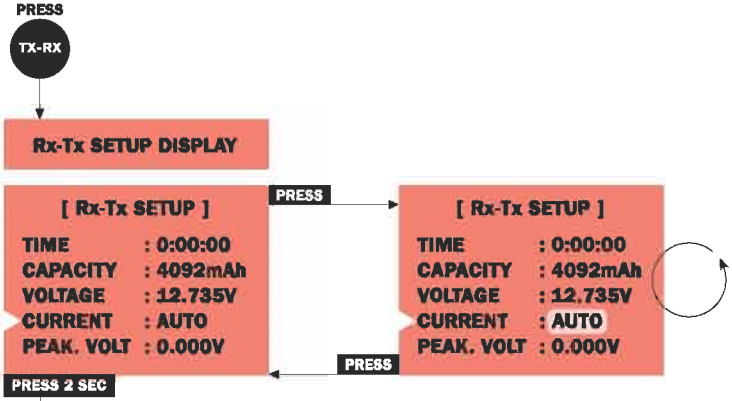
Measurement Of Battery Internal Resistance

Internal resistance is computed during AUTO CHARGE, AUTO DISCHARGE, NORMAL CHARGE, NORMAL DISCHARE, LINEAR DISCHARGE .

The time required for measuring internal resistance is:

Auto Charge, Discharge, Normal Charge, Normal Discharge	The internal resistance is AUTO calculated every 1 (one) minute, and the average value of the internal resistance is displayed.
Linear Charge	Measures one time after 10 minutes of charge.
Linear Discharge	Measures one time after 3 minutes of discharge.

T30 TX-RX Charging



Parameter	NICd & NIMH	Memo
Battery cells or voltage	1 ~ 8 cell	Auto detection
Capacity	100 ~ 9900mAh	
Charge current	AUTO, 0.1 ~ 2.0A	0.1A/step
Peak sensitivity	8mV/cell	Fixed
Pre-peak delay	3 min	Fixed

T30 Main Menu

A Press MODE

B Press ESC

POWER-ON

↓

STARTUP

T30 ACTIVE POWER V1.0
TAHMAZO PRODUCTS
< USERNAME.. >

↓

MEMORY DISPLAY ⇄ **USER SETUP DISPLAY** ⇄ **DATA VIEW DISPLAY** ⇄ **CYCLE DATA DISPLAY** ⇄ **EQUALIZER DATA DISPLAY**

[0]BATTERY NAME..
BATT. TYPE : NICd
BATT. CELL : 6CELL
CAPACITY : 3000mAh
CHG CURR. : 3.0A
DCHG CURR. : 3.0A
DCHG VOLT : 0.9 V/C
PEAK SENS. : 8mV/C

[USER SETUP]
TEMP. MODE : °C
BUTTON SOUND : ON
FINISH SOUND : 5sec
MELODY : 1
LCD CONTRAST : 10
LCD BACKLIT : ON
< USER NAME.. >

[DATA VIEW]
INPUT = 0.000V
OUTPUT = 0.000V
BATT. TEMP = No. Sens
PEAK TEMP = 0.0 °C
BAT. RES. = 0mΩ
CHG TEME = 0:00:00
DCHG TIME = 0:00:00

[CYCLE DATA]		
NO CAPACITY		VOLTAGE
1 C :	0mAh	0.000V
D :	0mAh	0.000V
2 C :	0mAh	0.000V
D :	0mAh	0.000V
3 C :	0mAh	0.000V
D :	0mAh	0.000V

[EQUALIZER DATA]	
1) 0.000V	6) 0.000V
2) 0.000V	7) 0.000V
3) 0.000V	8) 0.000V
4) 0.000V	9) 0.000V
5) 0.000V	10) 0.000V

↓

PRESS 2 SEC

CHARGE/DISCHARGE/CYCLE START DISPLAY

↓

PRESS 2 SEC

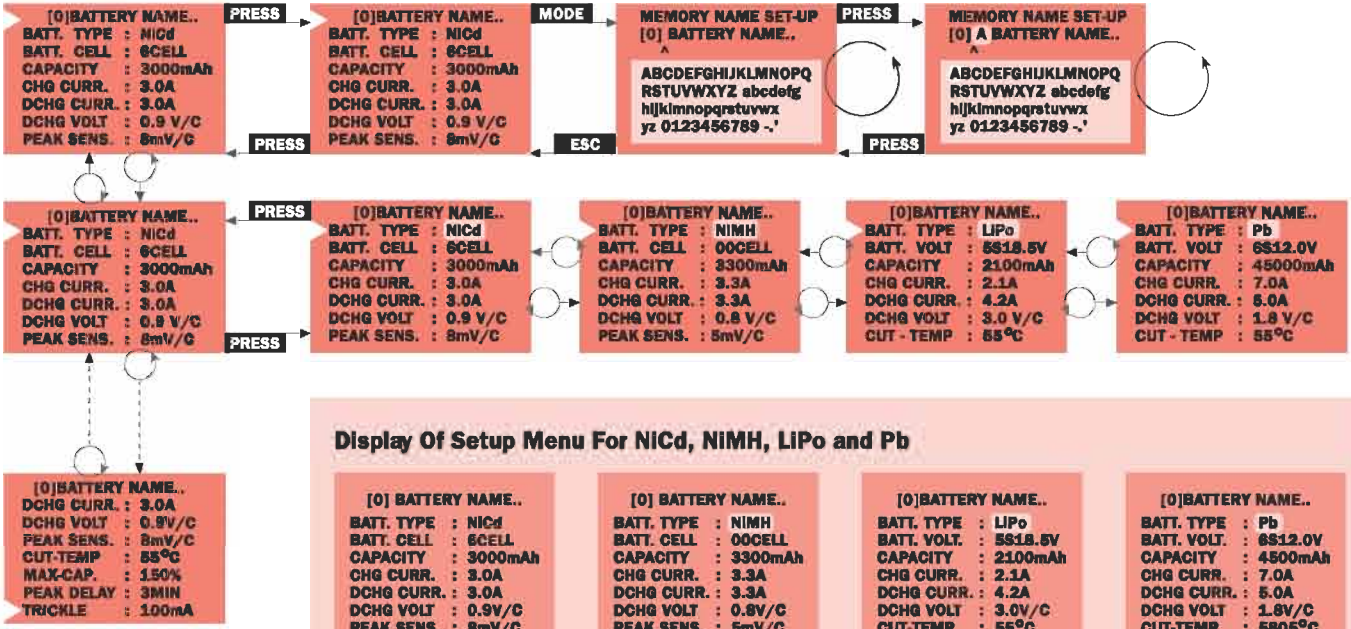
CHARGE/DISCHARGE/CYCLE OPERATION DISPLAY

↓

ESC 2 SEC

CANCEL OPERATION

T30 Battery Setup Chart



Display Of Setup Menu For NiCd, NiMH, LiPo and Pb

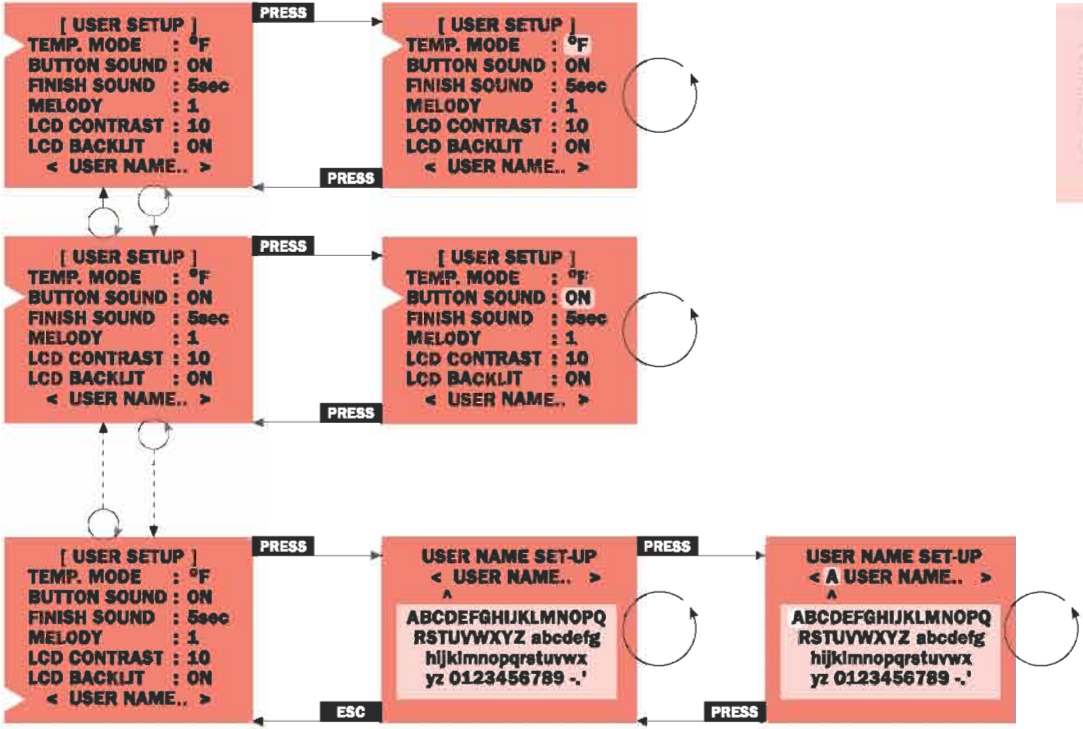
[0] BATTERY NAME..	
BATT. TYPE	: NiCd
BATT. CELL	: 6CELL
CAPACITY	: 3000mAh
CHG CURR.	: 3.0A
DCHG CURR.	: 3.0A
DCHG VOLT	: 0.9V/C
PEAK SENS.	: 8mV/C
CUT-TEMP	: 55°C
MAX-CAP.	: 150%
PEAK DELAY	: 3MIN
TRICKLE	: 100mA

[0] BATTERY NAME..	
BATT. TYPE	: NiMH
BATT. CELL	: 00CELL
CAPACITY	: 3300mAh
CHG CURR.	: 3.3A
DCHG CURR.	: 3.3A
DCHG VOLT	: 0.8V/C
PEAK SENS.	: 5mV/C
CUT-TEMP	: 55°C
MAX-CAP.	: 150%
PEAK DELAY	: 3MIN
TRICKLE	: 100mA

[0]BATTERY NAME..	
BATT. TYPE	: LiPo
BATT. VOLT.	: 5S18.5V
CAPACITY	: 2100mAh
CHG CURR.	: 2.1A
DCHG CURR.	: 4.2A
DCHG VOLT	: 3.0V/C
CUT-TEMP	: 55°C
MAX-CAP.	: 120%

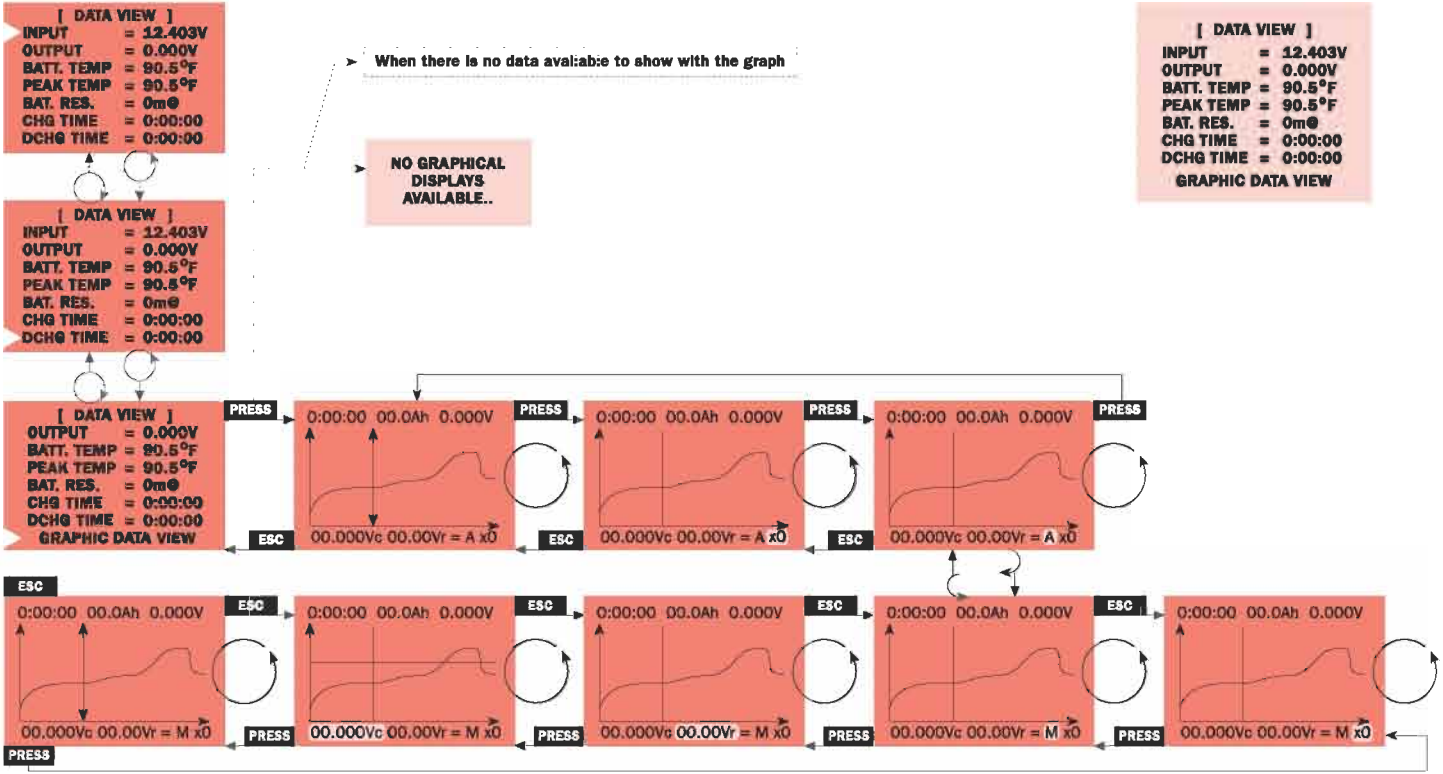
[0]BATTERY NAME..	
BATT. TYPE	: Pb
BATT. VOLT.	: 6S12.0V
CAPACITY	: 4500mAh
CHG CURR.	: 7.0A
DCHG CURR.	: 5.0A
DCHG VOLT	: 1.8V/C
CUT-TEMP	: 5805°C
MAX-CAP.	: 120%

T30 User Menu Chart



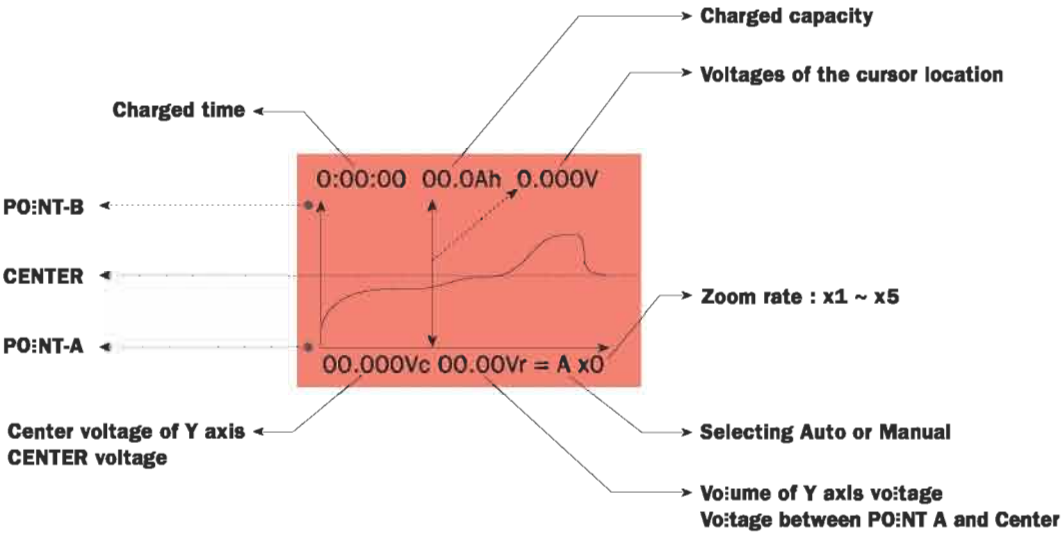
[USER SETUP]
TEMP. MODE : °F
BUTTON SOUND : ON
FINISH SOUND : 5sec
MELODY : 1
LCD CONTRAST : 10
LCD BACKLIT : ON
< USER NAME.. >

T30 Data View Chart



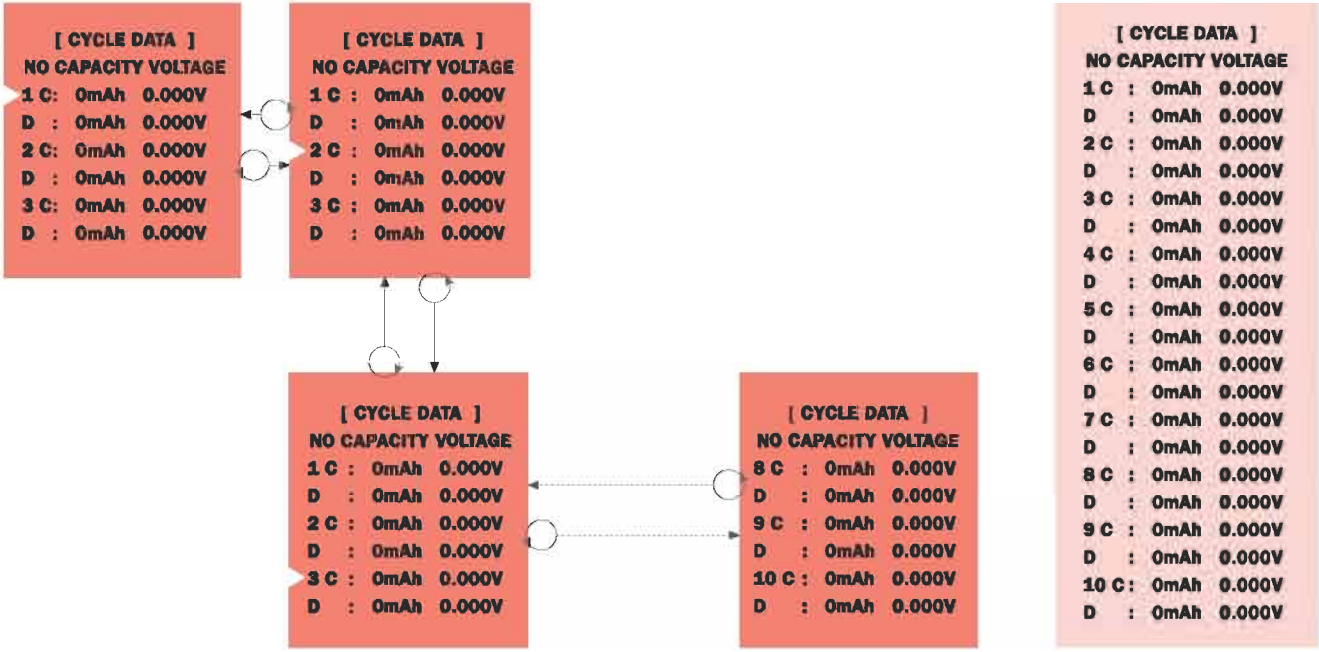
T30 Data View Chart

How Do You Read The Graphic

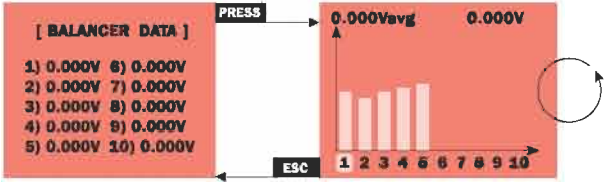


T30 Data View Chart

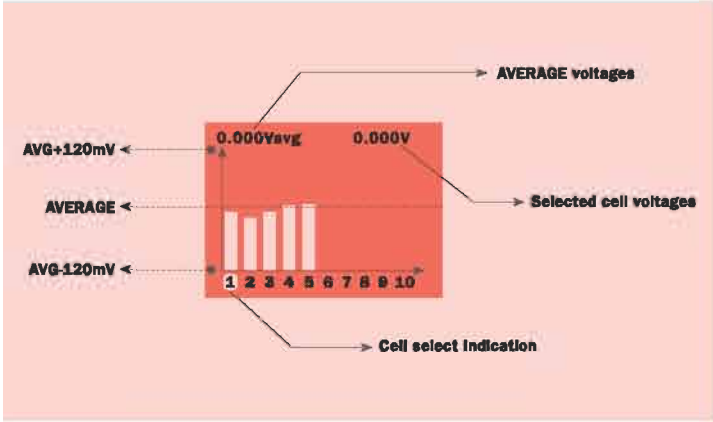
How Do You Read The Cycle Data



How Do You Read LiPo Balancer Data

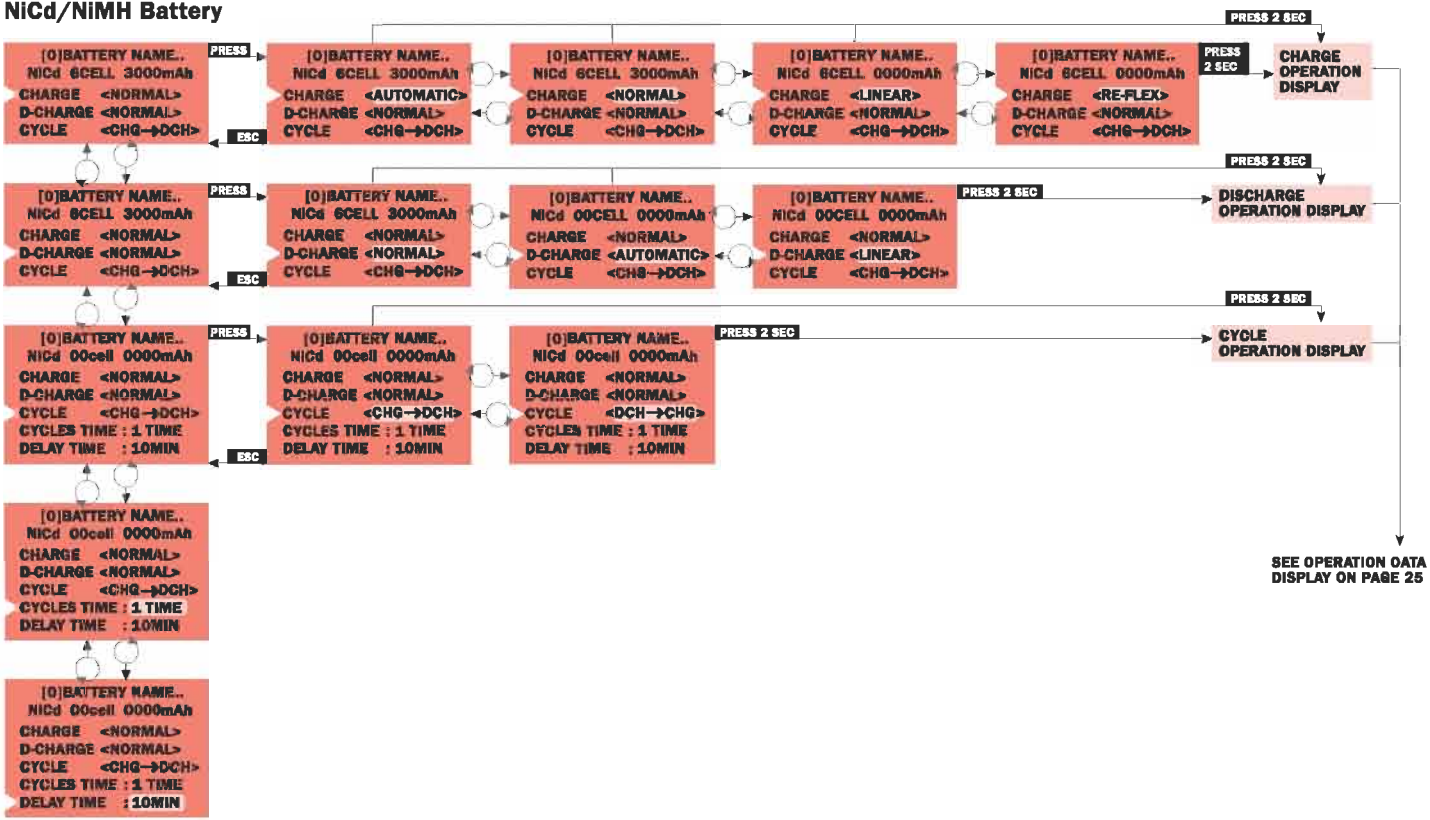


This data will only be shown when the Tahmazo T6B balancer is used with the T30 Active Power to charge LiPo. Refer to the Tahmazo T6B instruction manual for more details on how to work with a charger.



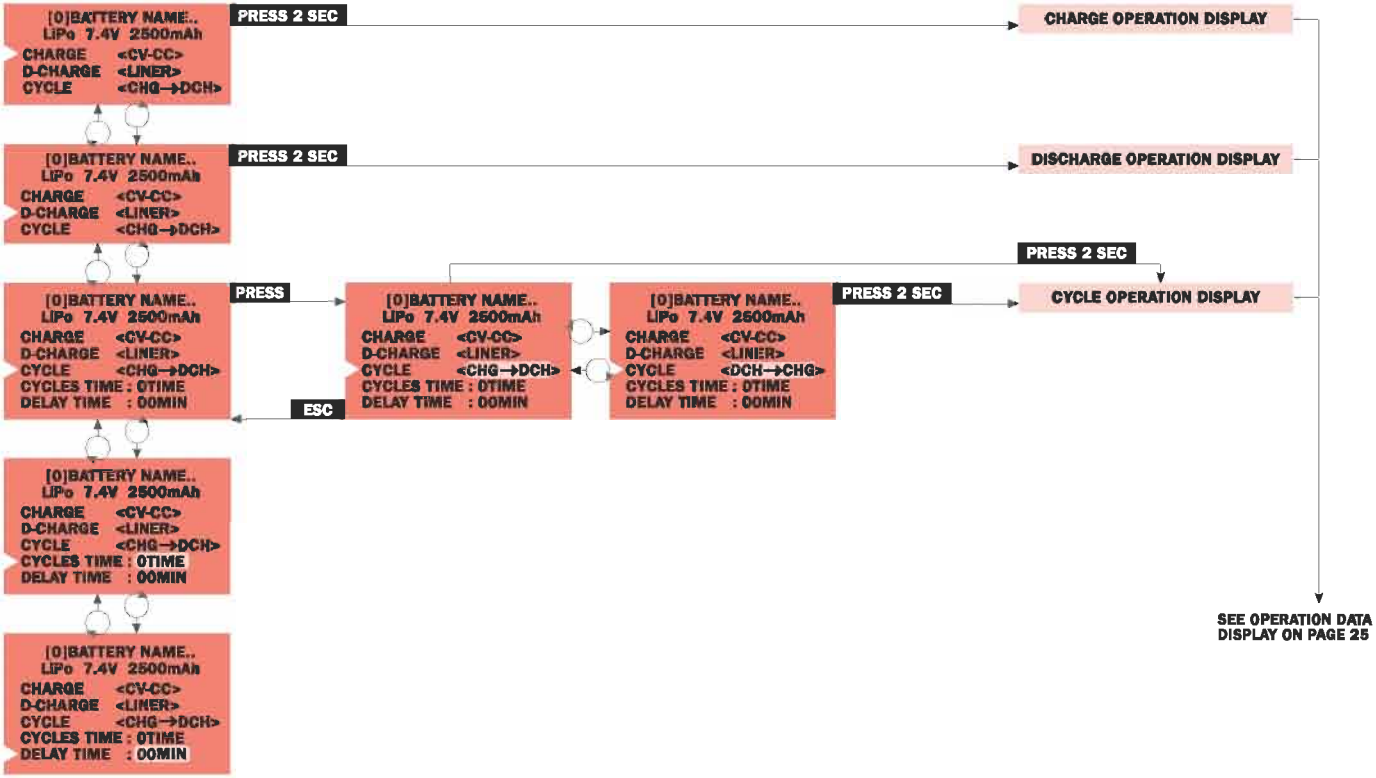
T30 Operations Chart

NiCd/NiMH Battery



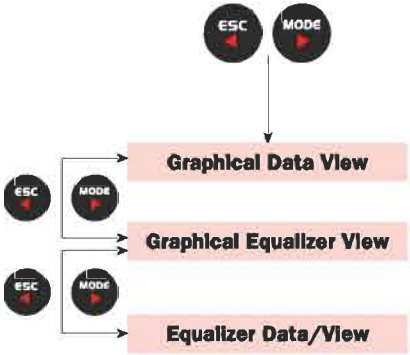
T30 Operations Chart

LiPo/Pb Battery



T30 Operations Chart

Operation Data Display



T30 Warning Messages

INPUT VOLTAGE	• There is no input voltage present. • The input voltage is not 11-15v.
NO BATTERY	• A battery is not connected to the output. Please connect the battery to the output and restart. • The Tahmazo T6B is not 'disconnected'. Please press the MODE button on the Tahmazo T6B once, then you can start operation.
REVERSE POLARITY	• A battery is connected to the output in reverse polarity.
OPEN CIRCUIT	• A battery is disconnected during the operation. Please reconnect the battery and restart.
SHORT CIRCUIT	• Output connectors are short-circuited. Please ensure that the output connectors are not in contact or are not simultaneously connected to any conductive material.
LOW OUTPUT VOLTAGE	• The output voltage is lowered than the selected cells or voltages. Please select proper cell or voltage.
HIGH OUTPUT VOLTAGE	• Output voltage is higher than the selected cells or voltages. Please select proper cell or voltage.
TEMPERATURE SENSOR	• The temperature sensor is connected in reverse or is defective. • The temperature sensor is defective.
BAT TEMP TOO LOW	• The battery temperature is too low to be charged.
BAT TEMP TOO HIGH	• The battery temperature is too high to be charged.
CHARGER TOO HOT	• Charger is too hot >70 deg C. Please wait for the charger to cool down before using it.
INTERNAL TEMP	• The internal temperature of the charger is too hot. Do not use the charger and please contact your nearest Tahmazo dealer.
DATA RANG OVER	• The selected values/parameters are incorrect. • More than 5 Lithium Polymer batteries are connected to the T30 Active Power without connecting to the balancer. Please connect the LiPo battery pack using the Tahmazo T6B balancer to charge.
BID CHECKSUM **BID DATA WRITE** **ID CONNECTION**	• Please contact your nearest Tahmazo dealer for assistance.