

HITEC

RDX2 PRO



HIGH-POWER, DUAL PORT AC/DC CHARGER

Balance Charger/Discharger/Power Supply

WARNING: THE CHARGING AND DISCHARGING OF RC HOBBY BATTERIES CAN BE DANGEROUS. FAILURE TO FOLLOW THE INSTRUCTIONS AND WARNINGS IN THIS MANUAL MAY RESULT IN PROPERTY DAMAGE AND/OR LOSS OF LIFE.

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Introduction

Congratulations on purchasing Hitec's RDX2 Pro Dual Balance Charger. The RDX2 Pro features independent circuits allowing you to charge two batteries simultaneously, regardless of chemistry or capacity. The RDX2 Pro also features integrated balancing for six-cell Lithium-Polymer (LiPo), Lithium-Ferrite (LiFe) and Lithium-Ion (Li-Ion), as well as the latest high voltage Lithium-Polymer (LiHV) batteries.







Although simple to use, the RDX2 Pro does require some basic knowledge for successful and safe operation. The operating instructions included here are designed to ensure that you quickly become familiar with its functions. It is important that you read through the Operating Instructions, Warning and Safety Notes attentively and in full before attempting to use your new charger for the first time.

Please read this entire operating manual before using the RDX2 Pro Charger. If you are unsure of its proper operation after reading the manual, please seek advice from an experienced hobbyist or someone familiar with proper battery charging procedures.



THE CHARGING AND DISCHARGING OF RC HOBBY BATTERIES CAN BE DANGEROUS. FAILURE TO FOLLOW THESE EXPLICIT WARNINGS CAN RESULT IN PROPERTY DAMAGE

Warning AND/OR LOSS OF LIFE.

-  **NEVER LEAVE YOUR CHARGER UNATTENDED WHILE IN OPERATION.**
-  **NEVER CHARGE ON OR AROUND COMBUSTIBLE MATERIALS.**
-  **NEVER CHARGE A DAMAGED BATTERY PACK.**
-  **LOW COST, NO-NAME BATTERY PACKS POSE THE MOST DANGER. WE RECOMMEND YOU ONLY USE BATTERY PACKS THAT ARE SOLD AND WARRANTIED BY A REPUTABLE COMPANY.**
-  **IT IS HIGHLY RECOMMENDED THAT YOU UTILIZE A SAFETY DEVICE SUCH AS A STEEL CASE OR LIPO SACK™ WHILE CHARGING LITHIUM CHEMISTRY BATTERIES.**
-  **IT IS HIGHLY RECOMMENDED THAT YOU KEEP AN OPERABLE "CLASS A" FIRE EXTINGUISHER IN THE CHARGING AREA.**

FAILURE TO FOLLOW THESE WARNINGS CAN BE CONSIDERED NEGLIGENCE BY THE OPERATOR AND MAY NEGATE ANY CLAIMS FOR DAMAGES INCURRED.

Warnings and Safety Notes

Hitec RCD will not be held responsible for any damages or injuries that may occur by persons who fail to follow these warnings or who fail to properly follow the instructions in this manual.



Warning



Tip

Warning: Be sure to read this section for your own safety.

Caution: Be sure to read this section to prevent accidents and damage to your charger.



Note



Caution

Tip: This section will help you maximize the performance of your charger.

Note: This section will provide more detailed explanations.

These warnings and safety notes are of the utmost importance. You must follow these instructions for maximum safety. Failure to do so can damage the charger and the battery and in the worst cases, may cause a fire.



Warning

NEVER LEAVE THE CHARGER UNATTENDED WHILE IT IS CONNECTED TO ITS POWER SOURCE. IF ANY MALFUNCTION IS FOUND, TERMINATE THE PROCESS AT ONCE AND REFER TO THE OPERATION MANUAL.

 **The allowable AC input voltage is 100 - 240V AC**


 **The allowable DC input voltage is 11-18V DC.**

 **Keep the charger away from dust, damp, rain, heat, direct sunlight and excessive vibration.**

 **If the charger is dropped or suffers any type of impact, it should be inspected by an authorized service station before using it again.**

 **This charger and the battery should be put on a heat-resistant, non-flammable and non-conductive surface.**

 **Never place a charger on a car seat, carpet or similar surface. Keep all flammable volatile materials away from the operating area.**

 **Make sure you know the specifications of the battery to be charged or discharged to ensure it meets the requirements of this charger. If the program is set up incorrectly, the battery and charger can be damaged.**

 **Fire or explosion can occur due to overcharging.**

 **Never attempt to charge or discharge the following types of batteries:**

- A battery fitted with an integral charge circuit or a protection circuit
- A battery pack which consists of different types of cells (including different manufacturer's cells)

Warnings and Safety Notes

- A battery that is non-rechargeable (these pose an explosion hazard)
- A faulty or damaged battery
- Batteries installed in a device or which are electrically linked to other components
- Batteries that are not expressly stated by the manufacturer to be suitable for the currents the charger delivers during the charge process

PLEASE BEAR IN MIND THE FOLLOWING POINTS BEFORE YOU COMMENCE CHARGING:

- Did you select the appropriate program suitable for the type of battery you are charging?
- Did you set up the adequate current for charging or discharging?
- Have you checked the battery voltage? Lithium battery packs can be wired in parallel and in series, i.e. a 2-cell pack can be 3.7V (in parallel) or 7.4V (in series).
- Have you checked that all connections are firm and secure?
- Make sure there are no intermittent contacts at any point in the circuit.

Standard Battery Parameters

	LiPo	LiPo HV	Lilon	LiFe	NiCd	NiMH	Pb
Nominal Voltage	3.7V/cell	3.8V/cell	3.6V/cell	3.3V/cell	1.2V/cell	1.2V/cell	2.0V/cell
Max. Charge Voltage	4.2V/cell	4.35V/cell	4.1V/cell	3.6V/cell	1.5V/cell	1.5V/cell	2.46V/cell
Storage Voltage	3.8V/cell	3.85V/cell	3.7V/cell	3.3V/cell	n/a	n/a	n/a
Allowable Fast Charge	≤ 1C	≤ 1C	≤ 1C	≤ 4C	≤ 1-2C	≤ 1-2C	≤ 0.4C
Min. Discharge Voltage	3.0-3.3V/cell	3.1-3.4V/cell	2.9-3.2V/cell	2.6-2.9V/cell	0.1-1.1V/cell	0.1-1.1V/cell	1.8V/cell



Warning

WHEN ADJUSTING YOUR RDX2 PRO CHARGING PARAMETERS, BE SURE YOU SELECT THE PROPER BATTERY TYPE AND CELL VOLTAGE FOR THE TYPE OF CELL YOU ARE CHARGING. CHARGING BATTERIES WITH THE WRONG SETTINGS MAY CAUSE THE CELLS TO BURST, CATCH FIRE OR EXPLODE.

Warnings and Safety Notes

Charging

Before charging your batteries, it is critical that you determine the maximum allowable charge rate for your batteries. The RDX2 Pro is capable of charging at high rates that may not be suitable or safe for your particular batteries. For example, Lithium cells are typically safe to charge at 1C, or the total mAh ÷ 1000. A 1200mAh battery would have a 1C charge rate of 1.2 amps. A 4200mAh battery would have a 1C charge rate of 4.2 amps. Some manufacturers are offering Lithium cells that can be charged at greater than 1C but this should ALWAYS be verified before charging a Lithium battery at rates higher than 1C. Voltage is just as critical as the charging amperage rate and this is determined by the number of cells in series, or “S”. For example, a 3S LiPo is rated at 11.1 volts (“S” multiplied by a single LiPo cell with a nominal voltage of 3.7 volts DC. 3 cells x 3.7 volts each equals 11.1 volts DC).

Connect the battery’s main leads to the charger output: red is positive and black is negative. Keep in mind that the gauge or thickness of your charging leads from the RDX2 Pro to your battery must be of an acceptable current rating to handle the applied charge current. For maximum safety and charging effectiveness, always match or exceed the main battery lead rating when assembling or selecting your charging leads. If you charge a battery at a high current rate (amperage) with a charging lead not rated for the chosen amperage, the wire could get hot, catch fire, short out and/or potentially destroy your battery and the charger. When in doubt, always use a higher gauge wire (lower AWG number). It is common to see charging leads constructed of 14AWG, 16AWG or 18AWG wire.

Always refer to recommendations from your battery manufacturer for your specific battery type and size before initiating a charge or discharge process.

Do not attempt to disassemble or modify ANY battery packs.

Discharging

The RDX2 Pro discharging functions are for two specific purposes:

- Refreshing the capacity of a Nickel-based battery that has lost capacity over time (NiMH or NiCd).
- Reducing the voltage of a Lithium battery for safe storage.



Warning

LITHIUM CHEMISTRY BATTERY PACKS SHOULD ONLY BE DISCHARGED TO THEIR MINIMUM SAFE VOLTAGE, NO LOWER. DEEP DISCHARGING A LITHIUM CELL WILL DO PERMANENT DAMAGE. REFER TO THE STANDARD BATTERY PARAMETERS TABLE ON PAGE 5 OF THIS MANUAL FOR MINIMUM DISCHARGE VOLTAGES.

LiPo & LiHV Charge/Discharge Cycling

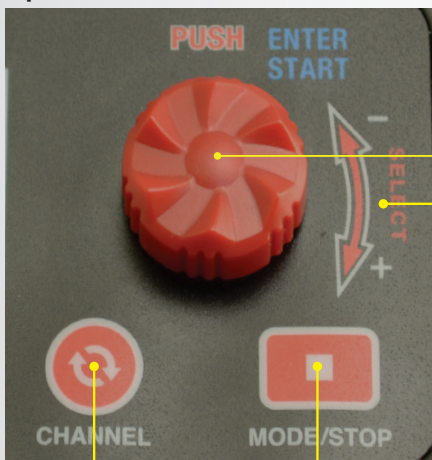
Lithium batteries are known to reach full capacity after a break-in period of about 10 charge/discharge cycles. We do not recommend you use the RDX2 Pro charger to do this; normal use and recharging will achieve the same results. If you wish to perform a Lithium break-in on the bench with the RDX2 Pro, discharging to minimum acceptable voltages and performing a balance charge at 1C maximum rate is recommended. If you choose to break in your Lithium batteries under normal use, charging at only 1C for the first ten cycles will help ensure full performance and service life from your Lithium cells.

Contents of Charger Package



1. RDX2 Pro Charger
2. DC Cable with Clips
3. XT60 to T-Type Adapter x 2
4. Universal Balance Board
5. Balance Board Lead
6. XT60 to RX Battery Adapter
7. AC Cable

Input Buttons



CHANNEL

Switch from Channel A to B or from Channel B to A.

MODE/STOP

Stop the progress of the current action or cycle back to the previous step / screen.

ENTER/START

Push the Jog Dial to ENTER a menu or store a setting. Push and hold the Jog Dial for 3 seconds to START a charge process, activate the Power Supply or to reset to Factory Default in System Settings.

INCREASE/DECREASE

Turn the Jog Dial to SCROLL through the menus, increase or decrease a value, or change a parameter as needed.



Tip: For a more detailed description of using the Jog Dial, refer to “Charger Operations” on page 14.

Charger Layout | Specifications



Input Voltage	AC 100-240V/DC 11-18V
Charge Circuit Power	130W x 2 (260 Watts total)
Discharge Circuit Power	10W x 2
Charge Current Range	0.1-14A x 2
Discharge Current Range	0.1-2A x 2
Current Drain for Balancing Port	Max. 500mA/cell
DC Power Supply Output	5-25V/130W x 2
LiPo/LiFe/LiIon/LiHV Battery Cell Count	1-6S
Pb Battery Voltage	2-20V
NiMH/NiCd Battery Cell Count	1-15S
Dimension	6.1 x 5.9 x 2.7 in.
Net Weight	2.13 lbs.

Features

Battery Memory (Data Store/Load):

The RDX2 Pro can store up to 10 different charge profiles per port for your convenience. Users can keep the data pertaining to any program setting for any battery to facilitate seamless charging or discharging. Saved profiles can be accessed and recalled, as necessary.

Terminal Voltage Control (TVC):

For experienced users ONLY, the charger's end voltage can be reset up to 0.05v/cell higher.



Default setting is recommended. ONLY change in a controlled environment. ALWAYS monitor the battery during the charge process.

Warning

Twin-Channel Charger:

Hitec's RDX2 Pro allows you to plug two batteries into the charger simultaneously. The batteries being charged do not need to have the same configuration. You can connect different battery chemistries (NiMH/NiCd/LiPo/LiFe/LiLo/LiHV/Pb) into any of the charging ports.

Internal Independent Lithium Battery Balancer:

The RDX2 Pro employs an individual-cell-voltage balancer. It is not necessary to connect an external balancer for balance charging.

Independent Cell Balancing While Discharging:

During the discharge process, the RDX2 Pro can monitor and balance each cell of the battery individually. If the voltage of any single cell reads abnormally, an error message will display and end the process automatically.

Adaptable to Various Types of Lithium Batteries:

The RDX2 Pro will charge a variety of Lithium batteries such as LiPo, LiFe, LiLo and the new higher voltage LiHV batteries.

Multiple Lithium Battery Charge Modes:

Balance Charge:

In this mode, each cell is monitored and if some are at higher voltages than the others, they are discharged to equalize the voltage between all the cells and keep the pack in optimum condition. We highly recommend using Balance Charge as it is the safest and best way to charge Lithium batteries.

Charge:

This mode charges the pack without balancing the cells. Connecting the balance lead is still recommended so you can monitor each cells voltage manually by scrolling to the left with the Jog Dial. Note: If the cells are more than 0.02v off from each other, Balance Charge should be used to equalize the pack.

Fast Charge:

This mode reduces the charge time by approximately 25% as the charge process stops after the terminal voltage is reached. This will provide about 85% -90% of the rated capacity.

Storage:

This mode charges or discharges the pack to 50% capacity so that it can be safely stored when not in normal use. If you do NOT plan on using your Lithium pack within 24-48 hours of being fully charged or fully discharged, Storage Mode is recommended to optimize maximum lifespan and performance and reduce the risk of the gasses forming, causing the pack to puff.

Re-Peak Mode of NiMH/NiCd Batteries:

In Re-Peak charge mode, the charger can peak charge the battery once, twice, or three times in a row automatically. This function is useful for ensuring a full battery charge.

Cyclic Charging / Discharging:

A battery can be cycled 1 to 5 times consecutively. This process is normally used for NiCd or NiMH packs that have lost capacity over time. It is not recommended for Lithium packs.

NiMH / NiCd Auto Charging:

Charging current is determined by the charger up to the maximum set by the user by evaluating the internal resistance of the pack so as not to charge at too high of a rate. This mode is recommended when charging NiMH or NiCd batteries where you are unsure of the optimal rate at which to charge.

Delta-Peak Sensitivity for NiMH/NiCd:

This function determines the amount of voltage drop in MV that must be achieved for the Delta-Peak algorithm to automatically terminate the charge process. This can be raised for packs that have a tendency to "False Peak" at the default setting.

Battery Meter:

The user can check not only the MAIN pack voltage, but the highest and lowest voltage is also stored, as well as each individual cell.

Battery Resistance:

The user can also check the battery's total internal resistance and the internal resistance of each cell. This is helpful when determining the health of a pack.

Capacity Cut-Off Limit:

This feature allows the user to set a limit for the maximum mAh's that can be put into the pack. Once this limit is reached, the charge process will automatically terminate, and "OVER CHARGE CAPACITY LIMIT" will be displayed. Default is 5000mAh, so set this accordingly to the rated capacity of the pack. To ensure the pack gets fully charged, this setting should be at least 10% higher than the rated capacity on the pack or turned to off.

Safety Timer:

Protect your battery by setting a maximum time limit for charging. Once this limit is reached, the charge process will automatically terminate, and "OVER TIME LIMIT" will be displayed. Default is 120 minutes, so adjust as needed depending on the charge rate and capacity of the pack.

USB Power 5V/2.1A:

You can charge your phone, tablet or any other USB-powered devices using the built-in USB port.

Battery Charge Percentage:

The battery charge percentage is displayed in real time once you are charging. To view, SCROLL to the left with the Jog Dial to monitor.

Power Supply:

With the built in Power Supply function, you can power devices with up to 25W @130W.



Note

NOTE: IF THE POWER SUPPLY FUNCTION IS ACTIVATED, CHARGING IS DISABLED.

Charger Connections

1.) Connecting to a power source

The Hitec RDX2 Pro features a built-in switching power supply. You can connect the AC power cord directly to an AC socket (100-240V AC) or use an 11-18V DC power source (such as an automotive battery or 12 Volt power supply).

2.) Connecting the battery



Note

NOTE: Before connecting any battery, it is absolutely essential to check one last time that the parameters were set correctly. If the settings are incorrect, the battery may be damaged and, in worse case scenarios, could even burst into flames or explode.

3.) Balance Socket

The balance wire attached to the battery must be connected to the charger, with the black wire aligned with the negative marking. Take care to maintain correct polarity. (See photo below)

This photo shows the correct way to connect your battery to the Hitec RDX2 Pro when charging in the balance charge program mode.



Warning

FAILURE TO CONNECT AS SHOWN IN THIS PHOTO WILL DAMAGE YOUR CHARGER. TO AVOID A SHORT CIRCUIT BETWEEN THE CHARGE LEAD, ALWAYS CONNECT THE CHARGE CABLE TO THE CHARGER FIRST, THEN CONNECT THE BATTERY. REVERSE THE SEQUENCE WHEN DISCONNECTING.



Note

THE NEGATIVE (BLACK) LEADS SHOULD ALWAYS BE JUSTIFIED TO THE RIGHT OF THE CONNECTION.



Getting Started

Initial Setup of the Charger

After connecting the battery you are now ready to setup the charger to charge your specific type of battery. When the charger is first powered on, the last program selected will be displayed. If this is not the battery you plan on working with then you will need to make changes to the operation programming based on the following instruction.



Warning

BEFORE SELECTING AN OPERATION, IT IS CRITICAL THAT YOU KNOW THE TYPE OF BATTERY YOU ARE WORKING WITH AND WHAT THE MANUFACTURER RECOMMENDATIONS ARE FOR CHARGING OR DISCHARGING. FAILURE TO FOLLOW THE MANUFACTURERS RECOMMENDATIONS CAN RESULT IN DAMAGE TO THE BATTERY AND POSSIBLE EXPLOSION.

Available Operations

Depending on battery type, different operations will be available. This chart shows which operations are available for the different types of batteries the RDX2 Pro is capable of working with.

Battery Type	Operation	Operation Description
LiPo Lilon LiFe LiHV	CHARGE	The charge mode is for charging LiPo/LiFe/Lilon/LiHV batteries in normal mode.
	DISCHARGE	This mode is for discharging LiPo/LiFe/Lilon/LiHV batteries.
	STORAGE	This program is for charging or discharging a lithium battery which will not be used again for an extended period of time.
	FAST CHG	A fast charge will result in a smaller than usual charging capacity but will reduce the total charge time.
	BAL CHARGE	This mode is for balancing the voltage of LiPo battery cells while charging.

Getting Started

Available Operations (continued)

Battery Type	Operation	Operation Description
NiMH NiCd	CHARGE	The charger will charge NiMH and NiCd batteries using the charge current set by the user.
	AUTO CHG	In this program, the charger detects the condition of the connected battery and automatically charges the battery. Note: You should set the upper limit of the charge current to avoid damage by excessive charging current. The RDX2 Pro may not be able to detect the charge capacity of low resistance batteries.
	DISCHARGE	This mode is for discharging a NiMH/NiCd battery
	RE-PEAK	In re-peak charge mode, the charger can peak charge the battery once, twice, or three times in a row automatically. This is good for confirming the battery is fully charged and for checking how well the battery receives fast charges.
	CYCLE	Automatically charges/discharges the battery up to 5 times. This process can restore the performance of NiMH/ NiCd batteries.
Lead Acid Pb	CHARGE	This mode is for charging a Pb battery.
	AGM CHARGE	This mode is for charging an Absorbent Glass Mat (AGM) battery.
	COLD CHARGE	This mode is for charging a Pb battery at low temperatures (<-32°F/0°C).
	DISCHARGE	This mode is for discharging a Pb battery.

Operating the Charger

First, familiarize yourself with the Jog Dial which is the main way you will interact with the charger and its programming. Turning the Jog Dial allows you to “SCROLL” through the main menus, functions, and to change parameters. Pushing the Jog Dial in the center allows you to “ENTER” the menu you are choosing. Once you are in a menu, turn the Jog Dial to SCROLL through to different functions. When you want to select a function, press the Jog Dial again to ENTER. Once you come upon a value that needs to be changed, push the Jog Dial to highlight it. The value will now start blinking. To change the value, simply turn the Jog Dial clockwise to increase, or counterclockwise to decrease. Once you have the proper setting, press it to store the value. When you are ready to charge, push and hold the Jog Dial down for 3 seconds to start the charge process.

The MODE/STOP button allows you to “go back.” Before you begin charging your first battery, it is recommended that you SCROLL through all the menus and then enter them one by one to get a feel for how the interface works. Do not forget you will use the MODE/STOP button to revert back. Remember, you can always reload the factory settings in the System Setting menu under “Load Factory Settings” by pushing and holding the Jog Dial for 3 seconds. We will use the term “SCROLL” when you will turn the Jog Dial, and “ENTER” when you will push the Jog Dial. Now... Let's get charging!



Warning

BEFORE YOU BEGIN CHARGING YOUR BATTERY, MAKE SURE YOU HAVE READ AND UNDERSTOOD ALL OF THE WARNINGS AND SAFETY INFORMATION CONTAINED ON PAGES 4-6.

Selecting the Battery Type: After powering on the RDX2 Pro, the charger will display the last charging mode used. Press the MODE/STOP button to get to the BATT/PROGRAM menu and SCROLL with the Jog Dial until you reach the battery type you wish to charge. Press the Jog Dial to access the charge programs.

Lithium Battery Charging: The RDX2 Pro can charge all Lithium battery types and the programming procedures are identical for them all. These instructions will use the most common LiPo BATT (Lithium Polymer) program to walk you through step by step, the set up for charging Lithium packs.

BATT/PROGRAM LiPo BATT: Battery Type Select: Use the Jog dial to SCROLL through until you find LiPo BATT. Once there, press the Jog Dial (ENTER) to select the battery type and access the charging mode programming.

A BATT/PROGRAM
LiPo BATT

A LiPo BALANCE
2.0A 11.1V C3S0



Press the MODE/STOP button twice if you are stuck in another menu.

Operating the Charger

A LiPo BALANCE
2.0A 11.1v (3S)

Charge MODE Select: Once you have selected the proper battery type, SCROLL through the charge modes which include Balance, Charge, Fast Charge, Storage & Discharge. It is highly recommended to use the Balance mode to keep your packs in the best condition. Instruction on how to use the most common LiPo Balance mode is described below. If you plan to use a different mode, the programming is identical.

BATTERY Setting: Once you have selected the Charge mode, the amperage and voltage will be shown on the lower line. These values will be what was entered previously or defaulted.



Tip: If you are recharging the same pack, you will not have to re-do these settings.

A LiPo BALANCE
2.0A 11.1v (3S)

*FLASHING

The first step is to set the amperage. Push the Jog Dial to “ENTER” and the setting will start to blink. SCROLL clockwise to increase or counterclockwise to decrease the value and press “ENTER” to confirm your setting. Note: As a general rule, this value should be set to a 1C rate, meaning “1” multiplied by the Capacity (I.E.: 2000mah = 2A). Once you confirm the amperage setting, the cell count next to the voltage will start to blink. SCROLL to change the value to the exact voltage/cell count of your pack and press “ENTER” to confirm.

A LiPo BALANCE
2.0A 11.1v (3S)

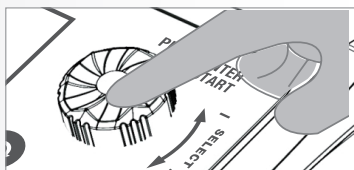
A LiPo BALANCE
2.0A 11.1v (3S)

A BATTERY CHECK
.....

Program Start: Verify that these settings match the ratings on your pack (I.E. 2000Mah = 2A 11.1V = 3 Cells). Once confirmed, press and hold the Jog Dial for 3 seconds to start. The charger will perform a quick check to detect the number of cells. **R** shows the number of cells detected by the charger while **S** is the number of cells set by the user. If the numbers are not identical, press STOP to go back to the previous screen and recheck the number of cells in the battery pack before proceeding. If correct, press the Jog Dial “ENTER” to confirm and start the charging process.

A R: 3SER S: 3SER
CONFIRM (Enter)

A R: 3SER S: 3SER
CANCEL (STOP)



Operating the Charger

Charging Status Monitor: Once the charge process is started, the real-time status will be shown which includes: Cell Count, Amperage, Voltage, Timer, mAh of Charged Capacity. SCROLL to view a variety of other useful information. Scrolling counterclockwise will display the FUEL=% & Cell Voltage.

▲ LP3s 2.0A 12.14V
BAL 000:50 00022

This shows how full the pack is from 0% - 100% and the Average Cell voltage. Continue scrolling to show each individual cell voltage. This is helpful in determining how well balanced the pack is.

▲ FUEL = 90%
Cell = 4.07V

These should be no more than .02v from each other. A significant disparity is a sign that there are one or more bad cells.

▲ 4.07 4.06 4.07 V
0.00 0.00 0.00 U

Further scrolling will show the settings for:

Capacity CUT-OFF

▲ CAPACITY CUT-OFF
ON 5000mAh

Safety Timer

▲ SAFETY TIMER
ON 120 MIN

Internal Temperature of the Charger

▲ Int. Temp 94° F

Input Power Voltage

▲ IN POWER VOLTAGE
15.8V

End Voltage

▲ END VOLTAGE
12.60V (3S)

Charge Process Complete: Once the battery is fully charged, the screen will read "END: FINISH" and the charger will emit an audible "ring" sound. Battery voltage, mAh capacity and elapsed time will be displayed.

▲ [END FINISH]
12.60V 2000mAh

Program Stop: You can press the MODE/STOP at any time throughout the charge or discharge process to stop the process.

▲ [TIME: 00:45:32]
12.60V 2000mAh

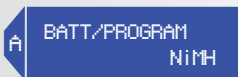
NiMH/NiCd Battery Program

The RDX2 Pro can charge NiMH and NiCd battery packs. The programming procedures are identical for both. These instructions refer to the most common NiMH (Nickel Metal Hydride) battery packs and provide step by step set up directions for charging NiMH or NiCd packs. These programs are only suitable for charging discharging NiMH/NiCd batteries.



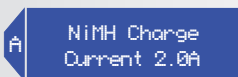
Warning

WARNING: NEVER CHARGE A LITHIUM BATTERY IN THIS MODE FOR ANY REASON, AS THEY MAY CATCH FIRE AND EXPLODE.



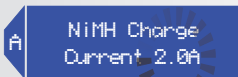
Selecting the Battery Type:

After powering on the RDX2 Pro, press the MODE/STOP button and SCROLL with the Jog Dial until you reach the appropriate program for the battery type you wish to charge. Press the Jog Dial ENTER button to enter the Charge Mode menu.



Selecting the Charge Mode:

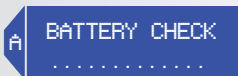
The RDX2 Pro offers the following NiMH/NiCd charge modes: Charge, Auto Charge, Discharge, Re-Peak and Cycle.



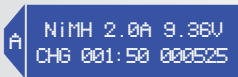
*FLASHING

NiMH Charge:

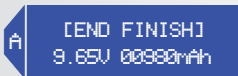
This is the most common mode as the amperage is selected by the user. The first step is to set the amperage. Push the Jog Dial to ENTER and the setting will start to blink. SCROLL clockwise to increase or counterclockwise to decrease the value and press Jog Dial ENTER to confirm your setting.



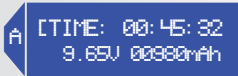
Now, press and hold the Jog Dial ENTER button for 3 seconds to start charging.



Once charging has commenced, the charger will display the following real-time information: battery type, charging current, battery voltage, "CHG (Charging)", elapsed time and charged capacity.



Once the battery is fully charged, the screen will read "END: FINISHED" and the charger will emit an audible "ring" sound.



You can press the STOP button at any time during the charging process to stop charging.

NiMH/NiCd Battery Program

NiMH AUTO CHARGE : After selecting the correct battery type, SCROLL to select the 'AUTO CHARGE' mode. Press the Jog Dial ENTER and the amp rate value will begin flashing. SCROLL to adjust the value to the desired rate. In the 'AUTO CHARGE' mode, you are selecting the highest amperage that you feel should be the maximum. The charger will then calculate the highest amperage appropriate, based on the internal resistance of that pack and will set the rate accordingly.

Press and hold the START button for 3 seconds to start charging.

Once charging has commenced, the charger will display the following real-time information: battery type, charging current, battery voltage, CHG, elapsed time and charged capacity.

Once the battery is fully charged, the screen will read "END: FINISHED" and the charger will emit an audible "ring" sound. It will also display the final voltage, and charged capacity. You can press the STOP button at any time during the charging process to stop charging.

Å NiMH Auto Charge
Current 1.3A

Å NiMH Auto Charge
Current 1.3A

*FLASHING

Å BATTERY CHECK
.....

Å NiMH 1.3A 5.42V
AUT 002:22 00106

Å [END FINISH]
6.75V 01900mAh

Å [TIME: 00:45:32]
6.75V 01900mAh

NiMH Discharge: After selecting the correct battery type, SCROLL to select the 'DISCHARGE' mode. Press the Jog Dial to ENTER and the amp rate value will begin flashing. SCROLL to adjust the value to the desired discharge rate. Press Jog Dial ENTER again, and the voltage cut-off will begin to flash. SCROLL to adjust the value to the desired rate.



Note

NOTE: 1V/CELL IS SUGGESTED (I.E. 5V CUT-OFF FOR A 5-CELL PACK).

Now, press and hold the Jog Dial ENTER button for 3 seconds to start discharging.

Once discharging has commenced, the charger will display the following real-time information: battery type, discharging current, battery voltage, "DCH (Discharging)", elapsed time and discharged capacity in mAh.

Å NiMH DISCHARGE
1.3A CUT: 5.0V

Å NiMH DISCHARGE
1.3A CUT: 5.0V

*FLASHING

Å NiMH DISCHARGE
1.3A CUT: 5.0V

Å BATTERY CHECK
.....

Å NiMH 1.3A 6.25V
DCH 002:22 00106

NiMH/NiCd Battery Program

A [END: CUTOFF-VOL]
5.00V 01980mAh

A [TIME: 01:04:04]
5.00V 01980mAh

Once the battery is fully discharged, the screen will read “END: CUTOFF-VOL” and the charger will emit an audible “ring” sound. It will also display the Time Elapsed, End Voltage and Capacity in mAh that was removed.

You can press the STOP button at any time during the discharging process to stop discharging.

A NiMH RE-PEAK
1

NiMH/NiCd Re-Peak Mode:

Applicable to NiMH and NiCd batteries only, in Re-Peak Mode, the charger can top off the battery once, twice, or three times in a row automatically. This process is good for confirming that the battery is fully charged after it had been previously charged and sitting for a while. A five-minute cool-down delay occurs after each Re-Peak Charge.



Note

NOTE: IN RE-PEAK MODE, THE RDX2 PRO USES THE CHARGE AMPERAGE AND VOLTAGE SETTINGS ENTERED IN CHARGE MODE.

A NiMH RE-PEAK
1
*FLASHING

After selecting the correct battery type, SCROLL to select the ‘RE-PEAK’ mode. Press the Jog Dial ENTER and the Re-Peak cycle number 1 begins to flash on the screen. SCROLL to adjust the cycle count between 1 and 3.

A BATTERY CHECK
.....

Press and hold the START button for 3 seconds to start the Re-Peak process.

A NiMH 1.3A 6.42V
RPC 004:04 0088S

Once the Re-Peak process has begun, the charger will display the following real-time information: battery type, charging current, battery voltage, RPC (Re-Peak Charge mode), elapsed time and charged capacity.

A [END: RE-PEAK]
6.75V 00980mAh

Once the Re-Peak process is completed, the screen will read “END: RE-PEAK” and the charger will emit an audible “ring” sound.

A [TIME: 00:05:32]
6.75V 00980mAh

It will also display the final voltage, and charged capacity.

NiMH/NiCd Battery Program

NiMH/NiCd Cycle Mode: The RDX2 Pro makes cycling of NiMH/NiCd batteries easy. The process of charging, discharging and recharging (cycling) can be performed automatically with one simple step and will improve the performance of NiMH/NiCd batteries. We strongly recommend cycling any battery that has been discharged and stored for a long period of time or has lost capacity over time. This will increase the remaining usable battery life and improve the batteries performance.



Note

Note: Since the Cycle mode uses the Charge and Discharge settings from those modes, make sure you have them set to correlate with the batteries you are planning to cycle.



Tip

TIP: TAKE NOTE OF THE CAPACITY. ONCE THE NEXT CYCLE BEGINS, IT WILL DISAPPEAR.

After selecting the correct battery type, SCROLL to select the “CYCLE” mode. The Cycle Mode gives you two cycling options: “DCHG>CHG” or “CHG>DCHG.” The “DCHG>CHG” option will first discharge the battery and then recharge the battery. The ‘CHG>DCHG’ option will first charge the battery and then discharge the battery. Press the Jog Dial ENTER and this setting will begin flashing. SCROLL to change this setting to the option you want.

Press Jog Dial ENTER again and the cycle count begins flashing. SCROLL to change this to the number of cycles you want, up to a maximum of 5 times consecutively.

Press and hold the START button for 3 seconds to start the Cycle Mode.

Once cycling has commenced, the charger will display the following real-time information: battery type, charging/discharging current, battery voltage, working mode, elapsed time and charged/discharged capacity in mAh.

The working mode is displayed as either ‘D>C’ or ‘C>D.’ This will indicate which cycling order you have chosen. Either ‘D’ or ‘C’ will be flashing. This flashing indicates which part of the cycle is currently being executed.

Once the battery is fully charged or discharged, the screen will read “END: CYCLE” and the charger will emit an audible “ring” sound. It will also display the Time Elapsed, End Voltage and Capacity in mAh that was removed. You can press the STOP button at any time during the charging process to stop charging.

NiMH CYCLE
DCHG > CHG 2

NiMH CYCLE
CHG > DCHG 2

NiMH CYCLE
CHG > DCHG 2

*FLASHING

BATTERY CHECK
.....

NiMH 0.5A 6.65V
D > C 004:04 00004




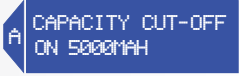

END: CYCLE
5.00V 00980mAh

TIME: 00:45:32
5.00V 00980mAh

NiMH/NiCd Battery Program

Additional NiMH/NiCd Process Information:

During the NiMH/NiCd battery charging/discharging process, the RDX2 PRO can display a variety of information. SCROLL to view the following information on these screens:

	Delta peak voltage Sensitivity setting		Input power voltage
	Internal temperature		Capacity Cut-Off
	Safety Timer setting		

Pb Lead-Acid Battery Program

Pb Lead-Acid Battery Program: This program is only suitable for charging Pb (Lead-Acid) batteries with nominal voltage ranging from 2 to 20V, which are significantly different from NiMH/NiCd batteries. Pb batteries are suggested to charge with a low current of 0.1C and cannot be used for fast charging.

Selecting the Battery Type: After powering on the RDX2 Pro, press the MODE/STOP button and SCROLL with the Jog Dial until you reach the Pb BATT program for the battery type you wish to charge. Press the Jog Dial ENTER button to enter the Charge Mode menu.

Selecting the Charge Mode: The RDX2 Pro offers the following Pb charge modes: Normal, AGM, Cold Mode, and Discharge.



PLEASE FOLLOW THE INSTRUCTIONS PROVIDED BY THE BATTERY MANUFACTURER.

Note

Pb Normal/ AGM Mode: These two modes program the same. AGM mode is referred to below. After selecting the correct battery type, turn the dial to change it to the 'AGM CHARGE' mode. Press the ENTER button and the amp rate value will begin flashing. Turn the dial to adjust the value to the desired charge rate. The amp rate should be set to 1/10th of capacity. For example, if you are charging a 15Ah battery, the charge rate should be set to 1.5A. Follow the instructions provided on your battery when setting the amp rate.

Press the ENTER button again and the nominal battery pack voltage will begin flashing. Turn the dial to set the voltage and the number of cells.

Press and hold the ENTER button for 3 seconds to start charging.

Once charging has commenced, the charger will display the following real-time information: battery type with cell count, charging current, battery voltage, working mode, elapsed time and charged capacity.

When charging is complete, the screen will read "END: FINISH" and the charger will emit an audible "ring" sound. It will also display the final voltage, and charged capacity.



Pb Lead-Acid Battery Program

Pb COLD CHG
1.5A 12.0V (6P)

*FLASHING

Pb COLD CHG
1.5A 12.0V (6P)

BATTERY CHECK
.....

P-6 1.5A 12.58V
CHG 055:10 01464

[END: FINISH]
13.58V 14260mAh

[TIME: 04:45:32]
13.58V 14260mAh

Pb COLD MODE: Press the ENTER button and the amp value will begin flashing. Turn the dial to the desired charge rate.

Press the ENTER button again and the nominal battery pack voltage will begin flashing. Turn the dial to set the voltage and the number of cells.

Press and hold the Jog Dial ENTER for 3 seconds to start charging.

Once charging has commenced, the charger will display the following real-time information: battery type, cell count, charging current, battery voltage, elapsed time and charged capacity.

When charging is complete, the screen will read "END: FINISH" and the charger will emit an audible "ring" sound.

Additional Pb Process Information:

During the Pb battery charging/discharging process, the RDX2 Pro can display a variety of information. Turn the Jog Dial and you can also view the following information:

CAPACITY CUT-OFF
ON 1500mAh

Capacity cutoff setting

IN POWER VOLTAGE
15.8V

Input voltage

SAFETY TIMER
ON 300MIN

Safety timer setting

INT. TEMP 94°F

Internal temperature

DC Power Supply

To use the RDX2 Pro as a power supply, it can be connected to either an AC or DC power source. Output voltage and current are selectable, with voltage at 5.0-25.0V and current at 0.1-14.0A. (130W Max.). The user can set appropriate voltage and current based on the device you plan to power.



Warning

WARNING: IF SELECTING A VOLTAGE OVER 12V, MAKE SURE THE DEVICE YOU PLAN TO POWER CAN ACCEPT IT. APPLYING HIGHER VOLTAGE CAN DAMAGE OR DESTROY A DEVICE NOT RATED TO OVER 12V.



Note

NOTE: THE DC OUTPUT IS ONLY FOR TEMPORARY USAGE; WE DID TEST THE DC OUTPUT TO POWER TIRE WARMERS, ENGINE WARMER, LED PIT LIGHT, MINI-FAN, AND DC-POWERED SOLDERING IRON. BUT WE CAN NOT GUARANTEE IT CAN WORK WELL ON ALL THE DC-POWERED ACCESSORIES IN THE MARKET.



Shown here is an example of an engine head heater used to warm a nitro engine.

Press the MODE/STOP button to exit any charging programs you are currently in and then SCROLL to the DC POWER SUPPLY program. Press the Jog Dial ENTER to enter the program. Press the Jog Dial ENTER again and the Output Voltage will begin to flash. SCROLL to adjust to the desired voltage (See Warning above.) Once set, press ENTER to accept, and the Amperage will flash. SCROLL to adjust to the desired Amperage for the DC charger or other devices you are planning to power. After selecting the setting, press and hold ENTER to activate the power supply.

Once activated, the charger will display the following real-time information: Output Voltage, Amp Draw, & POWER in Watts Out.

BATT./PROGRAM
DC POWER SUPPLY

POWER SET
U=12.0V I=10.0A

*FLASHING

POWER SET
U=12.0V I=10.0A

U=12.0V I=10.0A
POWER = 120W



Note

NOTE: ONCE THE POWER SUPPLY IS ACTIVATED, YOU WILL NO LONGER BE ABLE TO CHARGE ON THE OTHER PORT.

Battery Memory Set and Call Out

The RDX2 Pro charger can store up to 20 different charge/discharge profiles (10 per channel). The stored profiles can be recalled quickly without having to go through the setup process.

Ⓐ [BATT MEMORY 1]
ENTER SET ->

Ⓐ BATT TYPE
LiPo

Ⓐ BATT VOLTAGE
22.2V (CS)

*FLASHING

Ⓐ CHARGE CURRENT
5.0A

Ⓐ DISCHG CURRENT
2.0A

Ⓐ DISCHG VOLTAGE
3.0V/CELL

Ⓐ TVC=YOUR RISK!
4.20V

Ⓐ SAVE PROGRAM
ENTER

Ⓐ SAVE PROGRAM
SAVE . . .

Ⓐ [BATT MEMORY 1]
LiPo 22.2V (CS)

Lithium Packs: (LiPo, LiFe, Lilon, LiHV)

Press the MODE/STOP button to exit any charging programs you are currently in and then SCROLL to the BATT MEMORY program. Press the Jog Dial ENTER to enter the program. SCROLL to select the memory #. Once set, the battery type and voltage will be displayed. If not set, it will read ENTER SET.

Press the Jog Dial ENTER to set up a new memory. BATT TYPE will be displayed, press ENTER to make it blink and then SCROLL to select the Lithium battery you want to charge. Once selected, press ENTER to store.

SCROLL to the right for BATT VOLTAGE, press ENTER to make it blink and SCROLL to adjust. Once selected, press ENTER to store. SCROLL to the right for CHARGE CURRENT, press ENTER to make it blink and SCROLL to adjust. Once selected, press ENTER to store.

SCROLL to the right for DISCHG CURRENT, press ENTER to make it blink and SCROLL to adjust. Once selected, press ENTER to store.

SCROLL to the right for DISCHG VOLTAGE, press ENTER to make it blink and SCROLL to adjust. Once selected, press ENTER to store.

SCROLL to the right for TVC=YOUR RISK!, press ENTER to make it blink and SCROLL to adjust. Once selected, press ENTER to store.



Warning

Warning: Setting the TVC (Terminal Voltage Cut Off) higher than the default is not recommended. While it will increase the output power slightly, the difference is negligible, and it will degrade the life of the pack.

Finally, SCROLL to the right for SAVE PROGRAM, press ENTER to store this memory.

Battery Memory Set and Call Out

NiMH/NiCd: Press the MODE/STOP button to exit any charging programs you are currently in and then SCROLL to the BATT MEMORY program.

Press the Jog Dial ENTER to enter the program. SCROLL to select the memory #. Once set, the battery type and voltage will be displayed. If not set, it will read ENTER SET.

Press the Jog Dial ENTER to set up a new memory. BATT TYPE will be displayed, press ENTER to make it blink and then SCROLL to select the battery you want to charge. Once selected, press ENTER to store.

SCROLL to the right for BATT VOLTAGE, press ENTER to make it blink and SCROLL to adjust. Once selected, press ENTER to store.

SCROLL to the right for CHARGE CURRENT, press ENTER to make it blink and SCROLL to adjust. Once selected, press ENTER to store.

SCROLL to the right for TRICKLE, press ENTER to make it blink and SCROLL to adjust. Once selected, press ENTER to store.

SCROLL to the right for PEAK DELAY, press ENTER to make it blink and SCROLL to adjust. Once selected, press ENTER to store.

SCROLL to the right for DISCHG CURRENT, press ENTER to make it blink and SCROLL to adjust. Once selected, press ENTER to store.

SCROLL to the right for DISCHG VOLTAGE, press ENTER to make it blink and SCROLL to adjust. Once selected, press ENTER to store.

Finally, SCROLL to the right for SAVE PROGRAM, press ENTER to store this memory.

À CBATT MEMORY 1J
ENTER SET ->

À BATT TYPE
NiMH

À BATT VOLTAGE
7.2V (6S)

À CHARGE CURRENT
5.0A

À TRICKLE
100mA

À PEAK DELAY
1MIN

À DISCHARGE CURRENT
2.0A

À DISCHG VOLTAGE
1.0V/CELL

À SAVE PROGRAM
ENTER

À SAVE PROGRAM
SAVE . . .

À CBATT MEMORY 1J
NiMH 7.2V (6S)

À CBATT MEMORY 1J
C: 2.0A D: 1.0A

*FLASHING

Battery Memory Set and Call Out

A [BATT MEMORY 1]
ENTER SET ->

PB: Press the MODE/STOP button to exit any charging programs you are currently in and then SCROLL to the BATT MEMORY program.

A BATT TYPE
Pb

Press the Jog Dial ENTER to enter the program. SCROLL to select the memory #. Once set, the battery type and voltage will be displayed. If not set, it will read ENTER SET.

A BATT VOLTAGE
12.0V (6P)

Press the Jog Dial ENTER to set up a new memory. BATT TYPE will be displayed, press ENTER to make it blink and then SCROLL to select PB. Once selected, press ENTER to store.

*FLASHING

A CHARGE CURRENT
2.0A

SCROLL to the right for BATT VOLTAGE, press ENTER to make it blink and SCROLL to adjust. Once selected, press ENTER to store.

A DISCHG CURRENT
2.0A

SCROLL to the right for CHARGE CURRENT, press ENTER to make it blink and SCROLL to adjust. Once selected, press ENTER to store.

A DISCHG VOLTAGE
1.8V/CELL

SCROLL to the right for DISCHG CURRENT, press ENTER to make it blink and SCROLL to adjust. Once selected, press ENTER to store.

A SAVE PROGRAM
ENTER

SCROLL to the right for DISCHG VOLTAGE, press ENTER to make it blink and SCROLL to adjust. Once selected, press ENTER to store.

A SAVE PROGRAM
SAVE...

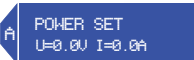

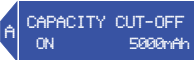

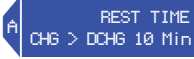
Finally, SCROLL to the right for SAVE PROGRAM, press ENTER to store this memory.

A [BATT MEMORY 1]
Pb 12.0V (6P)







A [BATT MEMORY 1]
C: 2.0A D: 1.0A

System Settings

The RDX2 Pro will be operated with the default value for the essential user settings when it is powered on for the first time. The screen displays the following information in sequence and the user can change the parameter value of each screen. To change a parameter value in the system program, press **START/ENTER** to make it blink then change the value with the dial button. The value will be stored by pressing **START/ENTER** once.

ITEM	SELECTION	DESCRIPTION
	U: 5.0-25.0V I: 0.1-14.0A	130W rated power for both Channel A and Channel B. Power supply function is available under AC/DC mode.
	OFF/ON (1-720 Min)	When you start a charge process, the integral safety timer automatically starts running at the same time. This is programmed to prevent over-charge the battery if it proves to be faulty, or if the termination circuit cannot detect the battery full. The value for the safety timer should be generous enough to allow a full charge of the battery.
	OFF/ON (100-50000 mAh)	This program sets the maximum charge capacity that will be supplied to the battery during charge. If the delta peak voltage is not detected nor the safety timer expired for any reason, this feature will automatically stop the process at the selected capacity value.
	Celsius Fahrenheit	You can choose the temperature displayed by Celsius or Fahrenheit as you like.
	1-60 Min	A rest time allowing the battery to cool down between charging/discharging cycle.

System Settings

ITEM	SELECTION	DESCRIPTION
 NiMH SENSITIVITY D. PEAK 4mV	Default: 4mV/Cell 3-15mV/Cell	This program is for NiMH/NiCd battery only. When the charger detects the delta peak value reaches the value you set, the charger will say the battery is fully charged.
 NiCd SENSITIVITY D. PEAK 4mV		
 KEY BEEP ON BUZZER ON	OFF/ON	This program allows you to select whether or not the RDX2 Pro beeps when you push buttons, and if the buzzer sounds to alert you when a charge/discharge operation is complete.
 DC INPUT LOW: CUT-OFF 11.0V	10.0-12.0V	This program monitors the voltage of input battery. If the voltage drops below the value you set the operation is forcibly terminated to protect the input battery.
 LOAD FACTORY SET ENTER		Press and hold ENTER for 3 seconds to load factory default settings.
 VERSION HW: 1.00 SW: 1.00		It indicates the hardware and firmware version.

Battery Voltage Meter

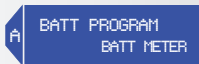
The user can check the battery's total voltage, the highest voltage, the lowest voltage and each cell's voltage. Connect the battery via the charger's main battery lead to the battery socket; and the balance wires to the balance socket as shown below.

The display below indicates the current Main Voltage, Percentage of Charge, Individual Cell Voltage, and the Highest and Lowest voltages of the pack's cells.

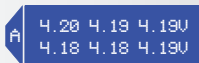


This photo shows the correct way to connect your battery to check the voltage.

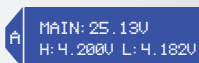
Press the **ENTER/START** to enter the Lithium Battery Meter program.



The screen indicates each cell's voltage.



The screen indicates the total voltage, the highest voltage and the lowest voltage.



Battery Resistance Meter

The user can check each cell's resistance as well as the battery's total resistance. Connect the battery via the charger's main battery lead to the battery socket; and the balance wires to the balance socket as shown below.



This photo shows the correct way to connect your battery to check the resistance.

⏏ BATT/PROGRAM
BATT RESISTANCE

Press **ENTER** to start the Lithium Battery Resistance program.

⏏ BATTERY CHECK
.....

⏏ 4.7 5.9 4.7m
0.0 0.0 0.0m

This screen indicates each cell's resistance.

⏏ MAIN: 15.3m

PRESS ENTER for the total resistance.

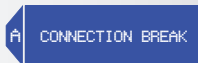
Warning and Error Messages

In case of an error the screen will display the cause of error and emit an audible sound.

Incorrect polarity connected.



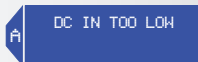
The battery is interrupted.



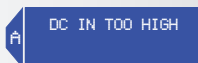
The battery connection is wrong.



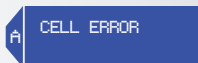
Input voltage less than 11V.



Input voltage higher than 18V.



Cell setting is wrong, or the voltage of one cell in the battery is invalid.



Warning and Error Messages

Charging is disabled if the charger entered into DC power supply mode.

⚠ DC MODE DISAGREE
CHARGE

The voltage difference is higher than 300mV between the highest and the lowest one.

⚠ BLANCE VOLT DIFF
TOO HIGH

The internal temperature of the unit goes too high.

⚠ INT. TEMP. TOO HI

The battery capacity is more than the maximum capacity which the user has set.

⚠ OVER CHARGE
CAPACITY LIMIT

The charging time is longer than the maximum charging time which the user has set.

⚠ OVER TIME LIMIT

The battery voltage is higher than the maximum voltage which the user sets when charging in balance mode.

⚠ BATTERY WAS FULL

Regulatory Information/Compliance

FCC Note:

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or change to this equipment. Such modifications or change could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

Hitec's RDX2 Pro complies with FCC Part 15 Subpart B: 2019.

Warranty, Service, Disposal and Prop 65 Warning

LIABILITY EXCLUSION

This charger is designed and approved exclusively for use with the types of batteries stated in this Instruction Manual. Hitec RCD accepts no liability of any kind if the charger is used for any purpose other than that stated. We are unable to ensure that you follow the instructions supplied with the charger, and we have no control over the methods you employ for using, operating and maintaining the device. For this reason, we are obliged to deny all liability for loss, damage or costs which are incurred due to any misuse or operation of our products. Unless otherwise prescribed by law, our obligation to pay compensation, regardless of the legal argument employed, is limited to the invoice value of Hitec RCD products which were immediately and directly involved in the event in which the damage occurred.

ONE YEAR LIMITED WARRANTY

For a period of one year from the date of purchase, HITEC RCD shall REPAIR OR REPLACE, at our option, defective equipment covered by this warranty. Otherwise, the purchaser and/or consumer is responsible for any charges for the repair or replacement of the charger. This warranty does not cover cosmetic damages and damages due to acts of God, accident, misuse, abuse, negligence, improper installation, or damages caused by alterations by unauthorized persons or entities. This warranty only applies to the original purchaser of this product and for products purchased and used in the United States of America, Canada and Mexico. Plastic cases are not covered by this warranty.

THIS WARRANTY IS IN LIEU OF ANY AND ALL OTHER WARRANTIES, WHETHER FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND WHETHER EXPRESS OR IMPLIED. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY. HITEC RCD, INC. SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY RELATING TO THIS PRODUCT, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED TO THE DURATION OF THIS WARRANTY, REPAIR AND SERVICE.

SERVICE AND REPAIR INFORMATION

To have your Hitec charger serviced:

1. Visit the Hitec website at www.hitecrcd.com and download the service request form (under Support section).
2. Fill out the service request form completely and include a copy of your original receipt showing the purchase date.
3. Package your product in its original packaging or use a suspension-type packaging (foam peanuts or crumpled newspaper). Hitec RCD shall not be responsible for goods damaged in transit.
4. Ship prepaid (COD or postage-due returns will not be accepted) via a traceable common courier (UPS, insured parcel post, FedEx, etc.) to:

Hitec RCD Customer Service Center, 9320 Hazard Way, Suite D. San Diego, CA 92123



This symbol indicates that when this type of electronic device reaches the end of its service life, it cannot be disposed of with normal household waste and must be recycled. To find a recycling center near you, refer to the internet or your local phone directory for electronic waste recycling centers.

STATE OF CALIFORNIA PROPOSITION 65 WARNING:

This product contains chemicals known to the State of California to cause cancer. Use caution when handling this product and avoid exposure to any electronic components or internal assemblies.

www.hitecrd.com

MADE IN CHINA



