D260 Ultimate Duo 260W
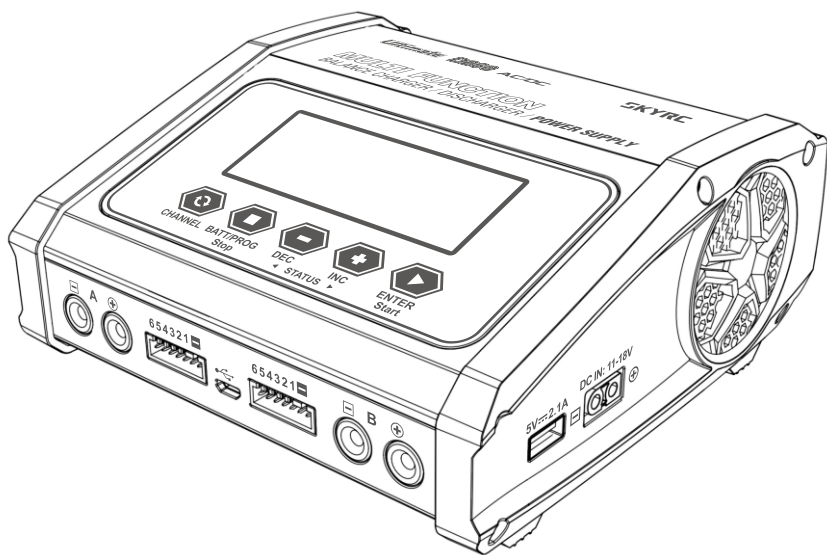### BALANCE CHARGER / DISCHARGER / **POWER SUPPLY**

Instruction Manual
[Version 1.00]

SKYRC

Table of Contents

WARNING:

This charger is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the charger.

Do not recharge non-rechargeable batteries!

During charging, the battery must be placed in a well-ventilated area!

Never leave the charger unattended when charging the battery.

Congratulations on your choice of SKYRC D260 AC/DC Dual Balance Charger/ Discharger/Power Supply. This unit is simple to use, but the operation of a sophisticated automatic charger such as SKYRC D260 does require some knowledge on the part of the user. These operating instructions are designed to ensure that you quickly become familiar with its functions. It is therefore important that you read right through the Operating Instructions, Warning and Safety Notes before you attempt to use your new charger for the first time. We hope you have many years of pleasure and success with your new battery charger.

SKYRC D260 is a twin-channel charger with two independent circuits which can charge batteries of varying chemistries (LiPo/LiFe/Lilon/LiHV/NiMH/NiCd/ Pb) simultaneously. Capable of operating as a power supply with the maximum output of 130W helps the hobbyists to power other DC equipments.

Please BE SURE to read these INSTRUCTIONS, WARNING and SAFETY NOTES before you use the charger for the first time.

It can be dangerous to mis-handle batteries and battery chargers, as there is always a risk of batteries catching fire and exploding.

Mishandling batteries and battery chargers is extremely dangerous, which may cause fire and explosion.

Introduction

Please read this entire operating manual completely and attentively before using this product, as it covers a wide range of information on operating and safety. Or please do use this product in company with a specialist!

Dot Matrix 128x64
LCD Display

Switch from
Channel A to B or
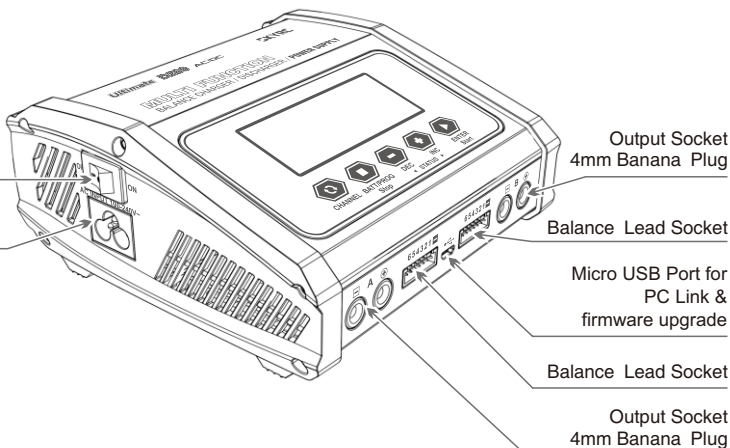Channel B to A

Scroll Through the
Main Menu Stop Any
Charge Processes

Alter Values
See the Status of Individual
Cells in Balance Charge Mode

Resume or Start
Charge Processes

Cooling Fan

DC Input: 11-18V
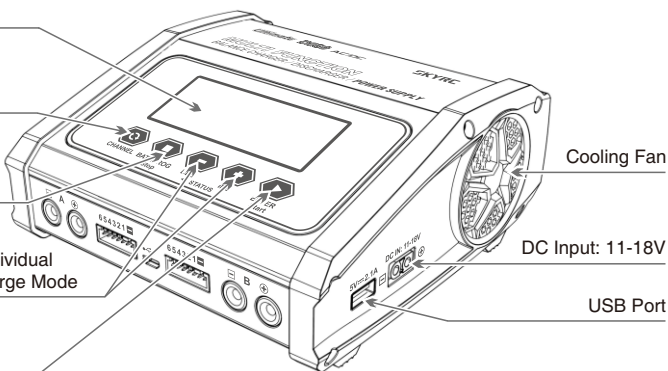
USB Port

Power Switch

AC Input
100-240V

Output Socket
4mm Banana Plug

Balance Lead Socket

Micro USB Port for
PC Link &
firmware upgrade

Balance Lead Socket

Output Socket
4mm Banana Plug

Twin-channel Charger

SKYRC D260 allows you to plug 2 batteries into one charger simultaneously, and it will intelligently and automatically charge 2 battries at once to their maximum capacity. To top of it, the batteries being charged do not even need to have the same configuration. You can connect different chemistry (LiPo/LiFe/LiIon/LiHV/NiMH/NiCd/Pb) batteries into any of the charging ports.
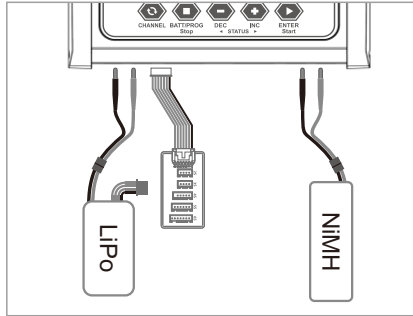
Dual Input

The input of the charger is AC 100-240V and DC 11-18V. In both AC and DC mode, the power of each channel is 130W. Total power is 260W.

Optimized Operating Software

SKYRC D260 features the so-called AUTO function that sets the feeding current during the process of charging or discharging. Especially for lithium batteries, it can prevent the overcharging which may lead to an explosion due to the user's fault. It can disconnect the circuit automatically and alarm once detecting any malfunction. All the programs of this product were controlled through two way linkage and communication, to achieve the maximum safety and minimize the trouble. All the settings can be configured by users!

DC Power Output Supported

With the unique feature of DC power source, the user does not have to carry additional big and heavy power supply to the racing track or flying filed.

Battery Memory (Data Store/Load)

The charger can store up to 10 different charge/discharge profiles for each channel. You can keep the data pertaining to program setting of the battery of continuous charging or discharging. Users can call out these data at any time without any special program setting.

Terminal Voltage Control(TVC)

The charger allows user to change the end voltage. (for expert user only)

Special Features

Balancing Individual Cells Battery During Discharging
During the process of discharging, SKYRC D260 can monitor and balance each cell of the battery individually. Error message will be indicated and the process will be ended automatically if the voltage of any single one cell is abnormal.

Fast Charge and Storage Mode of Lithium Battery
Function of the two modes differs from each other. "*FAST CHG*" minimizes battery charge time, while "*STORAGE*" has the capacity to control the final battery voltage, which is necessary and helpful for a rarely used battery.

Re-Peak Mode of NiMH/NiCd Battery
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 making the battery fully charged.

Delta-peak Sensitivity for NiMH/NiCd
Delta-peak sensitivity for NiMH/NiCd battery: The automatic charge termination program based on the principle of the Delta-peak voltage detection. When the battery's voltage exceeds the threshold, the process will be terminated automatically.

Cyclic Charging/Discharging
1 to 5 cyclic and continuous process of charge > discharge or discharge > charge is operable for battery refreshing and balancing to stimulate the battery's activity.

Automatic Charging Current Limit
You can set up the upper limit of the charging current when charging your NiMH or NiCd battery, it is useful for the NiMH battery of low impedance and capacity in the 'AUTO' charging mode.

Battery Voltage Meter
The user can check battery's total voltage, the highest voltage, the lowest voltage and each cell's voltage.

Battery Internal Resistance Meter
The user can check battery's total internal resistance and each cell's internal resistance.

Capacity Limit
The charging capacity is always calculated as the charging current multiplied by time. If the charging capacity exceeds the limit, the process will be terminated automatically when you set the maximum value.

Processing Time Limit:
You can also limit the maximum process time to avoid any possible defect.

USB Power 5V/2.1A
You can charge your phone and tablet using the built-in USB power output port.

Warning And Safety Notes

These warnings and safety notes are particularly important. Please follow the instructions for maximum safety; otherwise the charger and the battery can be damaged or at worst it can cause a fire.

⚠ Never leave the charger unattended when it is connected to its power supply. If any malfunction is found, TERMINATE THE PROCESS AT ONCE and refer to the operation manual.

⚠ Keep the charger well away from dust, damp, rain, heat, direct sunshine and vibration. Never drop it.

⚠ The allowable DC input voltage is 11~18V DC.

⚠ The allowable AC input voltage is 100~240V AC.

⚠ This charger and the battery should be put on a heat-resistant, non-inflammable and non-conductive surface. Never place them on a car seat, carpet or similar. Keep all the inflammable volatile materials away from 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 may be damaged .It can cause fire or explosion due to overcharging.

Standard Battery Parameters

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

Be very careful to choose the correct voltage for different types of battery otherwise you may cause damage to the batteries. Incorrect settings could cause the cells to fire or explode.

D260 · 05 ·

Warning And Safety Notes

⚠ **Never attempt to charge or discharge the following types of batteries.**
A battery pack which consists of different types of cells (including different manufacturers)
A battery that is already fully charged or just slightly discharged.
Non-rechargeable batteries (Explosion hazard).
Batteries that require a different charge technique from NiCd, NiMH, LiPo or Gel cell (Pb, Lead acid).
A faulty or damaged battery.
A battery fitted with an integral charge circuit or a protection circuit.
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 commencing charging:**
Did you select the appropriate program suitable for the type of battery you are charging?
Did you set up 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.

⚠ **Charging**
During charge process, a specific quantity of electrical energy is fed into the battery. The charge quantity is calculated by multiplying charge current by charge time. The maximum permissible charge current varies depending on the battery type or its performance, and can be found in the information by the battery manufacturer. Only batteries that are expressly stated to be capable of quick-charge are allowed to be charged at rates higher than the standard charge current.

Connect the battery to the terminal of the charger: red is positive and black is negative. Due to the difference between resistance of cable and connector, the charger can not detect resistance of the battery pack, the essential requirement for the charger to work properly is that the charge lead should be of adequate conductor cross-section, and high quality connectors which are normally gold-plated should be fitted to both ends.

Always refer to the manual by battery manufacturer about charging methods, recommended charging current and charging time. Especially, the lithium battery should be charged according the charging instruction provided by the manufacturer strictly.

Attention should be paid to the connection of lithium battery especially.

Do not attempt to disassemble the battery pack arbitrarily.

Please get highlighted that lithium battery packs can be wired in parallel and in series. In the parallel connection, the battery's capacity is calculated by multiplying single battery capacity by the number of cells with total voltage stay the same. The voltages imbalance may cause fire or explosion .Lithium battery is recommended to charge in series.

❗ Discharging

The main purpose of discharging is to clean residual capacity of the battery, or to reduce the battery voltage to a defined level. The same attention should be paid to the discharging process as charging. The final discharge voltage should be set up correctly to avoid deep-discharging. Lithium battery can not be discharged to lower than the minimum voltage, or it will cause a rapid loss of capacity or a total failure. Generally, lithium battery doesn' t need to be discharged. Please pay attention to the minimum voltage of lithium battery to protect the battery.

Some rechargeable batteries have a memory effect. If they are partly used and recharged before the whole charge is accomplished, they remember this and will only use that part of their capacity next time. This is a memory effect. It is said that NiCd and NiMH batteries are suffering from memory effect. NiCd has more memory effect than NiMH.

Program Flow Chart

Note: The flow chart is taking one channel for example as the flow chart for the two channels (Channel A and Channel B) are identical.

INC | DEC

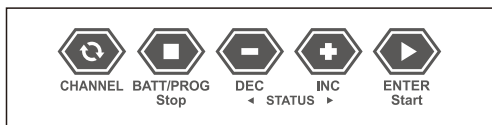| BATT/PROGRAM LiPo BATT | START ENTER | LiPo BALANCE 2.0A 7.4V (2S) | INC DEC | LiPo CHARGE 2.0A 7.4V (2S) | INC DEC | LiPo FAST CHG 2.0A 7.4V (2S) | INC DEC | LiPo STORAGE 2.0A 7.4V (2S) | INC DEC | LiPo DISCHARGE 2.0A 7.4V (2S) |

INC | DEC

| BATT/PROGRAM LiFe BATT | START ENTER | LiFe BALANCE 2.0A 6.6V (2S) | INC DEC | LiFe CHARGE 2.0A 6.6V (2S) | INC DEC | LiFe FAST CHG 2.0A 6.6V (2S) | INC DEC | LiFe STORAGE 2.0A 6.6V (2S) | INC DEC | LiFe DISCHARGE 2.0A 6.6V (2S) |

INC | DEC

| BATT/PROGRAM LiIon BATT | START ENTER | LiIon BALANCE 2.0A 7.2V (2S) | INC DEC | LiIon CHARGE 2.0A 7.2V (2S) | INC DEC | LiIon FAST CHG 2.0A 7.2V (2S) | INC DEC | LiIon STORAGE 2.0A 7.2V (2S) | INC DEC | LiIon DISCHARGE 2.0A 7.2V (2S) |

INC | DEC

| BATT/PROGRAM LiHV BATT | START ENTER | LiHV BALANCE 2.0A 7.6V (2S) | INC DEC | LiHV CHARGE 2.0A 7.6V (2S) | INC DEC | LiHV FAST CHG 2.0A 7.6V (2S) | INC DEC | LiHV STORAGE 2.0A 7.6V (2S) | INC DEC | LiHV DISCHARGE 2.0A 7.6V (2S) |

INC | DEC

| BATT/PROGRAM NiMH BATT | START ENTER | NiMH CHARGE CURRENT 2.0A | INC DEC | NiMH AUTO CHARGE CURRENT 2.0A | INC DEC | NiMH DISCHARGE 0.1A CUT: 1.0V | INC DEC | NiMH RE-PEAK 1 | INC DEC | NiMH CYCLE CHG>DISCHG 1 |

INC | DEC

| BATT/PROGRAM NiCd BATT | START ENTER | NiCd CHARGE CURRENT 2.0A | INC DEC | NiCd AUTO CHARGE CURRENT 2.0A | INC DEC | NiCd DISCHARGE 0.1A CUT: 1.0V | INC DEC | NiCd RE-PEAK 1 | INC DEC | NiCd CYCLE CHG>DISCHG 1 |

INC | DEC

| BATT/PROGRAM Pb BATT | START ENTER | Pb NORMAL CHG 2.0A 2.0V (1P) | INC DEC | Pb AGM CHG 0.1A 2.0V (1P) | INC DEC | Pb COLD CHG 2.0A 2.0V (1P) | INC DEC | Pb DISCHARGE 0.1A 2.0V (1P) |

INC | DEC

| BATT/PROGRAM DC POWER SUPPLY | START ENTER | POWER SET U=0.0V I=0.0A | INC DEC | POWER SET U=5.0V I=2.0A | START ENTER | U=5.0V I=2.0A POWER: 010W |

INC | DEC

| BATT/PROGRAM BATT METER | START ENTER | 4.20 4.19 4.19 V 0.00 0.00 0.00 V | INC DEC | MAIN 0.00V H0.000V L0.000V | START ENTER >3" | 3975 3980 3978mV 3975 3980 3978mV |

INC | DEC

| BATT/PROGRAM BATT RESISTANCE | START ENTER | 005 003 003 mΩ 005 mΩ | INC DEC | TATAL: 16mΩ H: 5mΩ L: 3mΩ |

INC | DEC

| BATT/PROGRAM SYSTEM SETTING-> | START ENTER | SAFETY TIMER ON 120Min | INC DEC | CAPACITY CUT-OFF ON 5000mAH | INC DEC | TEMPERATURE UNIT CELSIUS | INC DEC | REST TIME CHG>DISCHG 10Min | INC DEC | NiMH SENSITIVITY D.PEAK 4mV | INC DEC | KEY BEEP ON BUZZER ON |

INC | DEC

INC | DEC | STOP BATT TYPE | VERSION HW:1.00 FW: 2.00 | INC DEC | LOAD FACTORY SET ENTER | INC DEC | DC INPUT LOW CUT-OFF 11.0V |

| BATT/PROGRAM BATT MEMORY | START ENTER | [BATT MEMORY 1] ENTER SET-> | START ENTER | BATT TYPE LiPo | INC DEC | BATT VOLTAGE 7.4V (2S) | INC DEC | CHARGE CURRENT 4.9A | INC DEC | DISCH CURRENT 2.2A | INC DEC | DISCHG VOLTAGE 3.0V/CELL |

INC | DEC

STARG/ENTER-3 Seconds | [BATT MEMORY 1] C:4.9A D:2.2A | [BATT MEMORY 1] LiPo 7.4V (2S) | SAVE PROGRAM SAVE.... | START ENTER | SAVE PROGRAM ENTER | INC DEC | TVC=YOUR RISK ! 4.20V |

| ENTER CHARGE LOAD...... | LiPo BALANCE 4.9A 7.4V(2S) | INC DEC | LiPo CHARGE 4.9A 7.4V(2S) | INC DEC | LiPo FAST CHG 4.9A 7.4V(2S) | INC DEC | LiPo STORAGE 4.9A 7.4V(2S) | INC DEC | LiPo DISCHARGE 2.2A 7.4V(2S) |

ENTER START | [BATT MEMORY 2] ENTER SET-> | START ENTER | BATT TYPE NiMH | INC DEC | BATT VOLTAGE 2.4V (2S) | INC DEC | CHARGE CURRENT 3.3A | INC DEC | TRICKLE 100mA | INC DEC | PEAK DELAY 1Min |

INC | DEC

[BATT MEMORY 2] C:1.0A D:1.0A | [BATT MEMORY 2] NiMH 2.4V (2S) | SAVE PROGRAM SAVE.... | START ENTER | SAVE PROGRAM ENTER | INC DEC | DISCHG VOLTAGE 1.1V/CELL | INC DEC | DISCHG CURRENT 2.2A |

START ENTER > 3s | ENTER CHARGE LOAD...... | NiMH CHARGE CURRENT 1.0A | INC DEC | NiMH AUTO CHARGE CURRENT 1.2A | INC DEC | NiMH DISCHARGE 1.0A CUT: 2.0V | INC DEC | NiMH RE-PEAK 2 | INC DEC | NiMH CYCLE DISCHG>CHG 1 |

ENTER START | [BATT MEMORY 3] ENTER SET-> | START ENTER | BATT TYPE Pb | INC DEC | BATT VOLTAGE 4.0V (2P) | INC DEC | CHARGE CURRENT 3.3A | INC DEC | DISCHG CURRENT 1.5A | INC DEC | DISCHG VOLTAGE 1.7V/CELL |

INC | DEC

| Pb NORMAL CHG 3.3A 4.0V(2P) | ENTER CHARGE LOAD...... | [BATT MEMORY 3] C:3.3A D:1.5A | [BATT MEMORY 3] Pb 4.0V (2P) | SAVE PROGRAM SAVE.... | START ENTER | SAVE PROGRAM ENTER |

STARG/ENTER-3s

| Pb AGM CHG 0.1A 2.0V (1P) | Pb COLD CHG 0.1A 2.0V (1P) | Pb DISCHARGE 1.5A 4.0V(2P) |

CH A/CH B:

It is used to switch from Channel A to B or vice versa.

BATT PROG / STOP Button:

It is used to stop the progress or go back to previous step/screen

DEC Button:

It is used to go through the menus and decrease the parameter value

INC Button:

It is used to go through the menus and increase the parameter value

ENTER / START Button:

It is used to enter parameter, store parameter on screen and start the program.

When you are willing to alter the parameter value in the program, press the START/ENTER button to make it blink then change the value by pressing DEC and INC button. The value will be stored by re-pressing the START/ENTER button. If there is another parameter can be altered in the same screen, when you confirm the first parameter value, the next parameter value will start to blink which means it is ready to alert.

When you are willing to start the process, press and hold the START/ENTER button for 3 seconds. When you are willing to stop the progress or go back to previous step/screen, press the BATT PROG/STOP button once.

Power and Battery Connection

1. **Connecting to power source**

   There are two kinds of inputs for SKYRC D260, DC 11-18V and AC 100-240V.

   AC 100-240V power source connection.
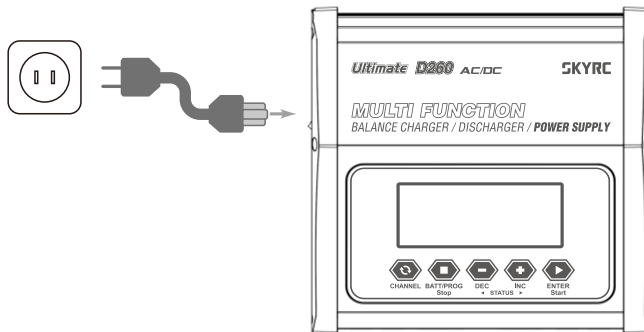
   12V DC Battery / DC power supply connection.

   * 12V DC battery or 11~18V DC, 30 amp power supply
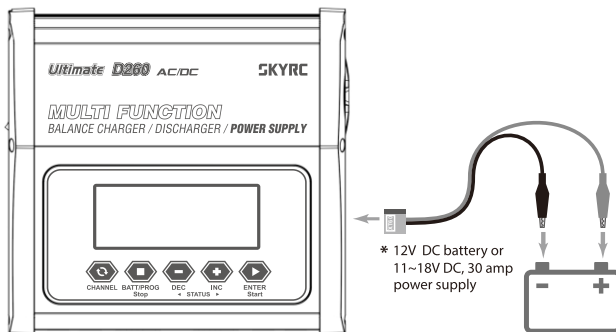
Power and Battery Connection

Note: We will explain the operating procedure of one channel as the procedure for channel A and B is identical.

2. Connecting the battery

⚠️ **WARNING!** **TO AVOID SHORT CIRCUITS, ALWAYS CONNECT THE CHARGE LEADS TO THE CHARGER FIRST, AND THEN TO THE BATTERY. REVERSE THE SEQUENCE WHEN DISCONNECTING THE PACK.**

1) LiPo Battery Connection with Balance Adapter
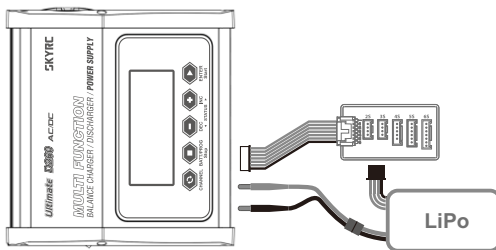
Balance Socket

For safety reasons, the default setting for charging Lithium (LiPo, LiIon, LiFe and LiHV) battery is using balance adaptor to connect battery and charger in Charge, Fast Charge, Balance Charge, Discharge and Storage modes. But if the battery comes without balance wire, please proceed with the prompting message "No balance cable detected, push enter to continue".

The balance wire attached to the battery must be connected to the charger with the black wire aligned with the negative marking. Ensure correct polarity!

2) NiMH/NiCd or Pb Battery Connection
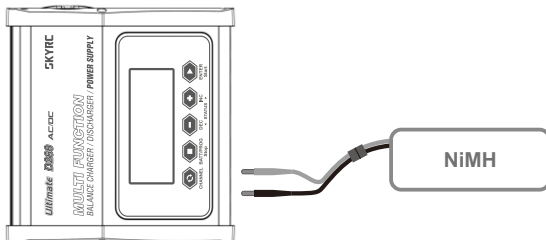
Operating Program

Here is the detailed procedure to make the charger work. All the screens and operations will take Li-Po BALANCE CHARGE program for example,

> **Note: We will explain the operating procedure of one channel as the procedure for channel A and B is identical..**

1. **Connection**

   1). **Connecting to power source**

      There are two kinds of inputs for SKYRC D260, DC 11-18V and AC 100-240V.

      A. Operating in AC mode

      SKYRC D260 comes with built-in switching power supply. You can connect the AC power cord directly to the main AC socket. (100-240V AC).

      > **Note: The output power in AC/DC mode is rated 130W for both Channel A and Channel B.**

      B. Operating in DC mode

      Please connect SKYRC D260 with AC/DC power supply by supplied DC input cable. Also you could use terminal clips with DC connectors, for attaching directly to 12V car batteries. It is critically important that you use either a fully charged 13.8V car battery or a high-quality AC/DC power supply in the range of 11-18V DC output with minimum power 350W or higher to insure reliable performance.

   2). **Connecting the battery**

      Important!!! Before connecting a battery it is absolutely essential to check one last time that you have set the parameters correctly. If the settings are incorrect, the battery may be damaged, and could even burst into flames or explode. To avoid short circuits between the banana plugs, always connect the charge leads to the charger first, and only then to the battery. Reverse the sequence when disconnecting the pack.

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 the wiring diagram below.)

This diagram shows the correct way to connect your battery to the SKYRC D260 while charging.
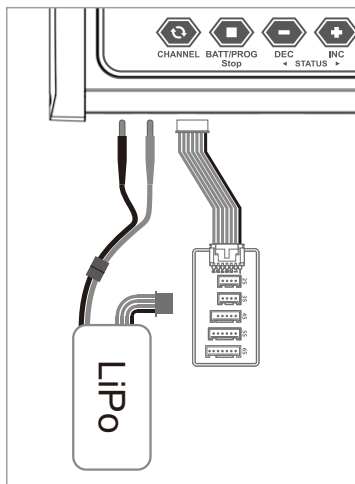

WARNING:

To avoid short circuit between the charge lead always connect the charge cable to the charger first, then connect the battery. Reverse the sequence when disconnecting.

Lithium Battery Program *(LiPo/LiFe/LiIon/LiHV)*

(1) A memory profile is available for setting and storing pertinent information for up to 20 different program sets; each channel can store 10 program. Once a battery program is stored into memory, it will be retained until changed again manually. Recalling a program memory number makes the charger instantly ready to go!

(2) If you do not wish to use the battery program memories, this charger can be manually set before each use.

The following flowchart shows how the program is set manually:

BATT/PROGRAM
LiPo BATT
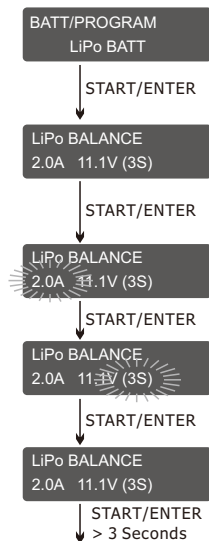
↓ START/ENTER

BATT/PROGRAM Select

Press INC and DEC to go through all the programs and press START/ENTER to enter LiPo BATT Program.

LiPo BALANCE
2.0A 11.1V (3S)

↓ START/ENTER

Mode Select

Press INC and DEC to go through all the modes and press START/ENTER to enter LiPo Balance Charge Mode.

LiPo BALANCE
2.0A 11.1V (3S)

↓ START/ENTER

Battery Setting

Press START/ENTER, the present value will start to blink. Press INC and DEC to change the value and press START/ENTER to confirm your setting.

At the same time, the battery pack's cell count will start to blink, press INC and DEC to change the value and press START/ENTER to confirm your setting.

LiPo BALANCE
2.0A 11.1V (3S)

↓ START/ENTER

LiPo BALANCE
2.0A 11.1V (3S)

↓ START/ENTER
> 3 Seconds

Program Start

Press and hold START/ENTER for 3 seconds to start the program.
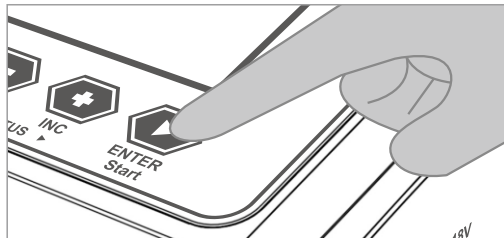
Lithium Battery Program(*LiPo/LiFe/LiIon/LiHV*)

BATTERY CHECK
WAIT...

The charger is detecting the battery cell.

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

R shows the number of cells detected by the charger and S is the number of cells set by you on the previous screen. If the two numbers are not identical, press STOP to go back to the previous screen to recheck the number of cells of the battery pack that you set before going ahead.

R:3SER S:3SER
CONFIRM(ENTER)

R shows the number of cells detected by the charger and S is the number of cells set by you on the previous screen. If the two numbers are identical, press START/ENTER to start the charging process.

↓ START/ENTER

Lp3s 1.5A 12.14V
BAL 000:50 00022

Charging Status Monitor
During charge process, real-time status will be shown as seen on the left.

[END: FINISH]
16.8V 2600mAh

Program Complete

Once the battery is fully charged, the screen will read "END: FINISH" and the charger will emit a ringing sound. The charger also displays battery voltage, charged capacity and elapsed time.

[Time: 00: 45: 32]
16.8V 2600mAh

Program Stop
During the charging process, press STOP to stop the charging process.
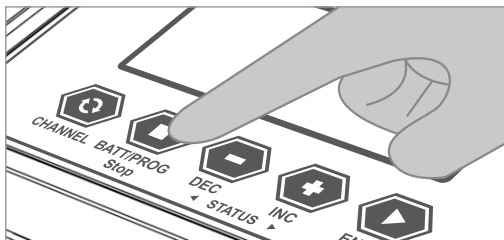
Please scan and watch the tutorial video about how to charge LiPo battery in balance mode.

Video Tutorial

Lithium Battery Program *(LiPo/LiFe/LiIon/LiHV)*

VARIOUS INFORMATION DURING THE PROCESS

Press INC or DEC during the charging or discharging process to view further pertinent information on the LCD screen.

LP3S 1.5A 12.14V BAL 000:50 00022	Real-time status: battery type, battery cell count, charge current, battery pack total voltage, working mode, elapsed time and charged capacity.
↕ INC ▶	
4.07 4.06 4.11 V 0.00 0.00 0.00 V	Voltage of each cell in the battery pack when the battery is connected with balance lead.
▶ ↕ INC	
FUEL= 90% CELL= 4.10V	Charged capacity percentage and average cell voltage of the battery pack.

- -

LP3S 1.5A 12.14V BAL 000:50 00022	
◀ ↕ DEC	
END VOLTAGE 　　12.6V(3S)	Final voltage when the program ends.
◀ ↕ DEC	
IN POWER VOLTAGE 　　12.56V	Input voltage.
◀ ↕ DEC	
INT. TEMP　37°C	Internal temperature.
◀ ↕ DEC	
SAFETY TIMER ON　200MIN	Safety timer ON and duration of time in minutes.
◀ ↕ DEC	
CAPACITY CUT-OFF ON　5000MAH	Capacity cut-off ON and value of the set capacity limit.

NiMH/NiCd:

This program is only suitable for charging/discharging NiMH/NiCd batteries. The D260 offers the following NiMH/NiCd charge modes: Charge, Auto Charge, Discharge, Re-Peak and Cycle.

Selecting the Battery Type:

After powering on the D260, press the INC or DEC button repeatedly until you reach the appropriate program for the battery type you wish to charge. For this example we have chosen the "NiMH BATT" or "NiCd BATT" program. Now press the ENTER button to enter the desired program.

⚠️ **WARNING!** **BEFORE YOU BEGIN CHARGING YOUR BATTERY, MAKE SURE YOU ARE CHARGING NIMH/NICD BATTERIES. CHARGING LIPO BATTERY UNDER NIMH/ NICD BATTERY PROGRAM WILL CAUSE FIRE.**

NiMH/NiCd Charge Mode:

BEFORE YOU BEGIN CHARGING YOUR BATTERY, MAKE SURE YOU HAVE READ AND UNDERSTOOD ALL OF THE WARNINGS AND SAFETY INFORMATION CONTAINED ON PAGES 06-08.

After selecting the correct battery type, if the screen does not read "CHARGE", use the DEC or INC buttons to change it to the "CHARGE" mode.

```
NiMH CHARGE
CURRENT   2.0A
```

START/ENTER

```
NiMH 2.0A  5.42V
CHG 002:22 00106
```

Press the ENTER button and the amp rate value will begin blinking. Use the DEC or INC button to adjust the value to the desired rate. Follow the instructions provided on your battery when setting the charge current.
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, charging current, battery voltage, working mode, elapsed time and charged capacity. Once the battery is fully charged, the screen will read "END: FINISHED" and the charger will emit a ringing sound. You can press the STOP button at any time during the charging process to stop charging.

NiMH/NiCd Auto Charge Mode:

In this mode, the charger automatically detects the connected NiMH or NiCD battery and determines the proper full charge and cut-off thresholds. Setting the upper charge current limit for safe levels based on your battery specifications will ensure safe charging of your specific battery. If you are unsure of the maximum allowable charge rates, set the charger to a maximum of 1C (battery mAh/1000, e.g. 3200mAh = 3.2A).

NiMH/NiCd Battery Program

```
NiMH Auto CHARGE
CURRENT 1.3A
```

|
START/ENTER
|
↓

```
NiMH 1.3A 5.42V
AUT 002:22 00106
```

After selecting the correct battery type, use the INC or DEC button to change the charge mode to the "Auto CHARGE" setting.

Press the START button and the amp rate value will begin flashing. Use the INC or DEC button to adjust the value to the desired rate. Follow the instructions provided on your battery when setting the upper charge amperage rate.

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, elapsed time and charged capacity.

Once the battery is fully charged, the screen will read "END: FINISHED" and the charger will emit a ringing sound. You can press the STOP button at any time during the charging process to stop charging.

NiMH/NiCd Discharge Mode:

```
NiMH DISCHARGE
1.3A CUT:9.6V
```

|
|
↓

```
NiMH 1.3A 10.42V
AUT 002:22 00106
```

After selecting the correct battery type, use the INC or DEC button to select the "DISCHARGE" mode. Press the START button and the amp rate value will begin flashing. Use the INC or DEC buttons to adjust the value to the desired discharge rate. Press the START button again and the voltage cut-off will begin to flash. Use the INC or DEC button to adjust the value to the desired rate.

Follow the instructions provided on your battery when setting the voltage cut-off. The D260 will stop discharging when the battery has reached the preset voltage cut-off.

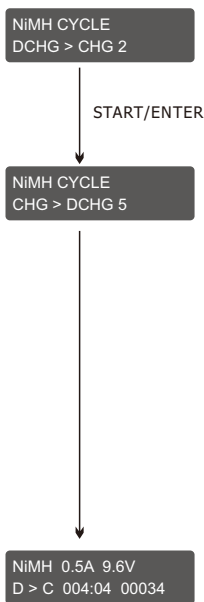Press and hold the START button for 3 seconds to start discharging. Once discharging has commenced, the charger will display the following real-time information: battery type, discharging current, battery voltage, working mode, elapsed time and discharged capacity.

[TIME: 00:04:04]
9.6V 00640mAh

When discharging is complete, the screen will read "END: CUTOFF-VOL" and the charger will emit a ringing sound.

The charger will display the elapsed time, end voltage and the discharged capacity in mAh.

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

NiMH/NiCd Re-Peak Mode:

Applicable to NiMH and NiCD batteries only, in re-peak mode the charger can peak-charge the battery once, twice, or three times in a row automatically. This process is good for confirming that the battery is fully charged and for verifying how well the battery can accept a fast charge. A five-minute cool-down delay occurs after each re-peak charge.

IN RE-PEAK MODE, THE D260 USES THE CHARGE AMPERAGE AND VOLTAGE SETTINGS ENTERED IN CHARGE MODE.

NiMH RE-PEAK
2

START/ENTER

NiMH 1.3A 10.42V
RPC 004:04 00686

After selecting the correct battery type, use the INC or DEC button to select the "RE-PEAK" mode. Press the START button and the Re-peak cycle number 1 begins to flash on the screen. Use the INC or DEC button to scroll through the cycle count and set a number between 1 and 3.

Press and hold the START button for 3 seconds to start the re-peak process.

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

Once the Re-Peak process has completed, the screen will read "END: RE-PEAK" and the charger will emit a ringing sound. The charger will display the charge/discharge capacity for each cycle. Using the + and - buttons, you can scroll through the history data of each cycle.

NiMH/NiCd Battery Program

NiMH/NiCd Cycle Mode:

The D260 makes cycling of NiMH/NiCd batteries easy. The process of 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 period of time. This will increase the remaining usable battery life and also improve the battery performance.

```
NiMH CYCLE
DCHG > CHG 2
```

START/ENTER

```
NiMH CYCLE
CHG > DCHG 5
```

```
NiMH 0.5A 9.6V
D > C  004:04  00034
```

After selecting the correct battery type, use the INC or DEC button 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. If this screen does not show your desired cycling option, press the START button once and this setting will begin flashing. Use the INC or DEC button to change this setting.

Pressing the START button again will cause the cycle count to begin flashing. Use the INC or DEC button to change this to the number of cycles you want the D100v2 to run. The D260 can cycle the battery 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. You will also see "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 cycling process is complete, the screen will read "END: CYCLE" and the charger will emit a ringing sound. The D100v2 will display the charged/discharged capacity for each cycle. Using the + and - buttons, you can scroll through this data for each cycle.

Additional NiMH/NiCd Process Information:

During the NiMH/NiCd battery charging/discharging process the D260 can display a variety of information. Using the INC or DEC buttons, you can also view the following information:

NIMH SENSITIVITY D.PEAK 4MV/CELL	Delta peak voltage Sensitivity setting	IN POWER VOLTAGE 12.56V	Input voltage
Int. Temp 37 C	Internal temperature	TEMP CUT-OFF 50 C/122 F	Temperature cut-off
SAFETY TIMER ON 200MIN	Safety timer setting	CAPACITY CUT-OFF ON 5000MAH	Capacity limit setting

Pb Lead-Acid Battery Program

Pb (Lead-Acid):

BATT/PROGRAM
Pb BATT

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. Please follow the instructions provided by the battery manufacturer.

The D260 offers the following Pb charge modes: Charge and Discharge.

Pb Charge Mode:

After selecting the correct battery type, use the INC or DEC button to change it to the "NORMAL CHG" mode.

Press the START button and the amp rate value will begin flashing. Use the INC or DEC buttons 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 20Ah battery the charge rate should be set to 2A. Follow the instructions provided on your battery when setting the amp rate.

Pb Lead-Acid Battery Program

Pb NORMAL CHG
1.5A 12.0V(6P)

↓

P-6 1.5A 13.56V
CHG 002:22 00106

Press the START button again and the nominal battery pack voltage will begin flashing. Use the INC or DEC button to set the voltage and the number of cells.

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, working mode, elapsed time and charged capacity.

When charging is complete, the screen will read "FINISHED" and the charger will emit a ringing sound.

Pb AGM Mode:

After selecting the correct battery type, use the INC or DEC button to change it to the "AGM CHARGE" mode.

Press the START button and the amp rate value will begin flashing. Use the INC or DEC buttons 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 20Ah battery the charge rate should be set to 2A. Follow the instructions provided on your battery when setting the amp rate.

Pb AGM CHG
1.5A 12.0V(6P)

↓

P-6 1.5A 13.56V
CHG 002:22 00106

Press the START button again and the nominal battery pack voltage will begin flashing. Use the INC or DEC button to set the voltage and the number of cells.

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, working mode, elapsed time and charged capacity.

When charging is complete, the screen will read "FINISHED" and the charger will emit a ringing sound.

Pb Cold Mode:

Pb COLD CHG
1.5A 12.0V(6P)

↓

Press the START button again and the nominal battery pack voltage will begin flashing. Use the INC or DEC button to set the voltage and the number of cells.

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

Pb Lead-Acid Battery Program

P-6 1.5A 13.56V
CHG 002:22 00106

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

When charging is complete, the screen will read "FINISHED" and the charger will emit a ringing sound.

Pb Discharge Mode:

After selecting the correct battery type, use the INC or DEC buttons to change it to the "DISCHARGE" mode.

Press the START button and the amp rate value will begin flashing. Use the INC or DEC buttons to adjust the value to the desired discharge rate. Follow the instructions provided with your battery when setting the amp rate.

PB DISCHARGE
1.5A 12.0V(6P)

↓

P-6 1.0A 13.56V
DCH 005:10 00964

Press the START button again and the nominal battery pack voltage will begin flashing. Use the INC or DEC buttons to set the voltage and the number of cells.

Press and hold the START button and discharging will begin.

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

When discharging is complete, the screen will read "FINISHED" and the charger will emit a ringing sound.

Additional Pb Process Information:

During the Pb battery charging/discharging process the D260 can display a variety of information. Using the INC or DEC buttons you can also view the following information:

|		
CAPACITY CUT-OFF ON 5000MAH	Capacity cut-off setting	SAFETY TIMER ON 200MIN — Safety timer setting
TEMP CUT-OFF 50 C	Temperature cut-off	INT. TEMP 37 C — Internal temperature
IN POWER VOLTAGE 12.56V	Input voltage	

DC Power Supply

To use D260 as a power supply, it is optional for the user to connect it to either AC power source or DC power source. Once the D260 is connected to power source, switch the button to turn on, then the user is free to use the power supply. Output voltage and current are selectable, with voltage at 5.0-25.0V and current at 0.1-14.0A. The user can set appropriate voltage and current based on actual practice.
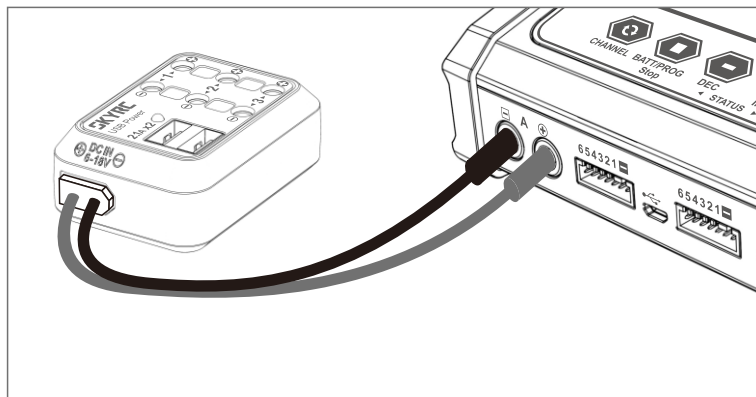
Operating Instruction

BATT/PROGRAM
DC POWER SUPPLY

Scroll through the program to enter DC POWER SUPPLY program

↓ ENTER

POWER SET
U=0.0V   I=0.0A

↓ ENTER

POWER SET
U=13.0V   I=10.0A

Set the output voltage and current for the DC charger or other devices.

After setting, press and hold ENTER button to activate the power supply.

Video Tutorial

Please scan and watch the tutorial video about using DC power supply.

Battery Memory Set and Call Out

The charger can store up to 20 different charge/discharge profiles(each channel 10 sets) for your convenience, and the stored profiles can be recalled quickly without having to go through the setup process.

When you are willing to alter the parameter value in the program, press START/ENTER to make it blink then change the value with INC or DEC. The value will be stored by pressing START/ENTER once.

Note: All following screen are taking 6S(22.2V) LiPo battery for example.

1. Battery Memory Set

```
[ BATT MEMORY 1 ]
    ENTER SET->
```
Enter the battery memory program.
(10 different charge/discharge profiles can be stored in each channel).

↓ START/ENTER

```
BATT TYPE
LiPo
```
Set the battery type(LiPo/LiFe/LiIon/LiHV/NiMH/NiCd/Pb).

◀DEC │ INC▶

```
BATT VOLTAGE
    22.2V ( 6S )
```
Set the voltage and number of cells(1S-6S).

◀DEC │ INC▶

```
CHARGE CURRENT
          5.0A
```
Set the charge current(0.1-14.0A).

◀DEC │ INC▶

```
DISCHG CURRENT
          2.0A
```
Set the discharge current (0.1A-2.0A).

◀DEC │ INC▶

```
DISCHG VOLTAGE
    3.0V/CELL
```
Set the discharge voltage(3.0-3.3V/Cell).

◀DEC │ INC▶

```
TVC=YOUR RISK!
          4.20V
```
Set the terminal voltage(4.18-4.25V).

◀DEC │ INC▶

```
SAVE PROGRAM
        ENTER
```
Press ENTER to save program.

↓ START/ENTER

Battery Memory Set and Call Out

```
SAVE PROGRAM
SAVE .
```

↓

```
[ BATT MEMORY 1 ]
LiPo   22.2V (6S)
```
Indicate the battery type and battery cell of the saved profile.

2. Battery Memory Call Out

```
[ BATT MEMORY 1 ]
C:5.0A    D:2.0A
```
Press the DEC/INC to select memory number.

◄DEC | INC►

↓

```
[ BATT MEMORY 1 ]
C:5.0A    D:2.0A
```
e.g. Select memory 1
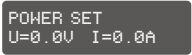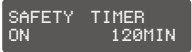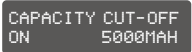Press and hold the START/ENTER for 2 seconds to call out the memory.

START/ENTER
>2 Seconds

↓

```
LiPo BALANCE CHG
5.0A    22.2V(6S)
```
Press START/ENTER for 3 seconds to start the process.

System Setting

It will be operated with the default value of 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 value of parameter on each screen.

When you are willing to alter the parameter value in the program, press START/ENTER to make it blink then change the value with INC or DEC. The value will be stored by pressing START/ENTER once.

ITEM	SELECTION	DESCRIPTION
`POWER SET` `U=0.0V  I=0.0A`	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.
`SAFETY  TIMER` `ON      120MIN`	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 overcharge 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.
`CAPACITY CUT-OFF` `ON      5000MAH`	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 by any reason, this feature will automatically stop the process at the selected capacity value.
`TEMPERATURE UNIT` `        CELSIUS`	Celsius Fahrenheit	You can choose the temperature displayed by Celsius or Fahrenheit as you like.

System Setting

ITEM	SELECTION	DESCRIPTION
REST TIME CHG>DCHG 10MIN	1-60Min	A rest time allowing the battery to cool down between charging/discharging cycle.
NIMH SENSITIVITY D.PEAK 4MV NICD 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.
KEY BEEP ON BUZZER ON	OFF/ON	The beep sounds at every time touching the buttons to confirm your action. The beep or melody sounded at various times during operation to alert different mode changes.
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 forcibly terminated to protect the input battery.
LOAD FACTORY SET ENTER		Press ENTER to load factory default setting.
VERSION HW:1.00 SW: 1.00		It indicates the hardware and firmware version.

Battery Voltage Meter

The user can check battery's total voltage, the highest voltage, the lowest voltage and each cell's voltage.
Please connect the battery to the charger main battery lead to battery socket and balance wires to balance socket.

This diagram shows the correct way to connect your battery to check the voltage.
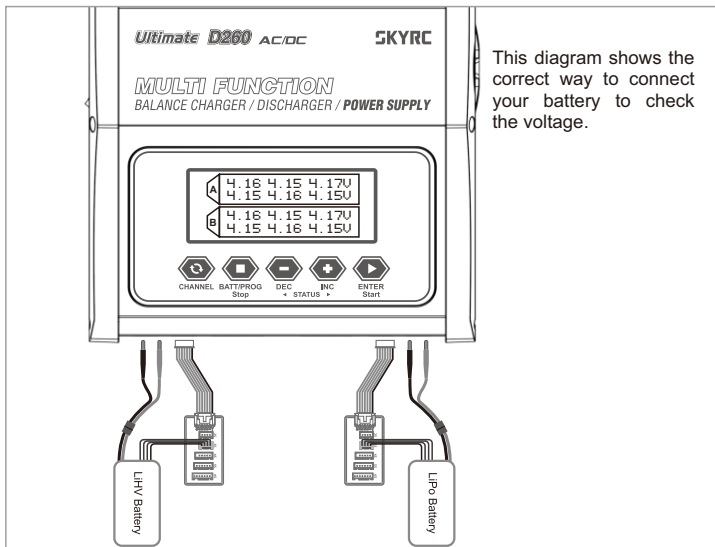
BATT/PROGRAM
BATT METER

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

START
ENTER

4.20 4.19 4.19 V
4.18 4.18 4.19 V

The screen indicate each cell's voltage.

INC ↕ DEC

MAIN 25.13V
H4.200V L4.182V

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

Battery Resistance Meter

The user can check battery's total resistance, the highest resistance, the lowest resistance and each cell's resistance.
Please connect the battery to the charger main battery lead to battery socket and balance wires to balance socket.

This diagram shows the correct way to connect your battery to check the resistance.
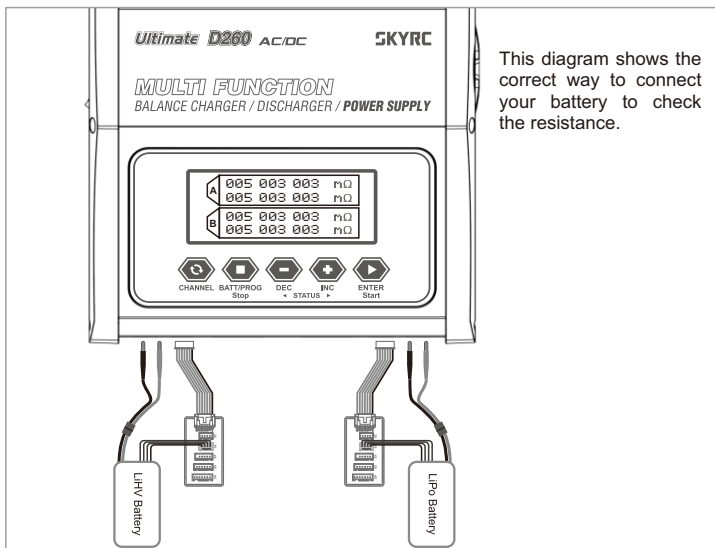
| BATT/PROGRAM |
| BATT RESISTANCE |

Press the START/ENTER to enter the Lithium Battery Resistance program.

Start
Enter

| 012 005 005   mΩ |
| 006   mΩ |

The screen indicate each cell's resistance.

INC ↕ DEC

| TATAL: 28mΩ |
| H: 12mΩ   L: 5mΩ |

The screen indicate the total resistance, the highest resistance and the lowest resistance.

Warning and Error Message

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

REVERSE POLARITY — Incorrect polarity connected.

CONNECTION BREAK — The battery is interrupted.

CONNECT ERROR CHECK MAIN PORT — The battery connection is wrong.

DC IN TOO LOW — Input voltage less than 11V.

DC IN TOO HIGH — Input voltage higher than 18V.

CELL ERROR LOW VOLTAGE — Voltage of one cell in the battery pack is too low.

CELL ERROR HIGH VOLTAGE — Voltage of one cell in the battery pack is too high.

CELL ERROR VOLTAGE-INVALID — Voltage of one cell in the battery pack is invalid.

INT.TEMP.TOO HI — The internal temperature of the unit goes too high.

OVER CHARGE CAPACITY LIMIT — The battery capacity is more than the maximum capacity which the user sets.
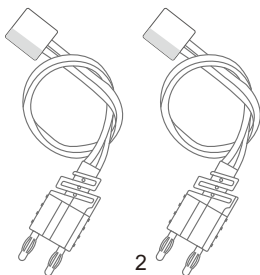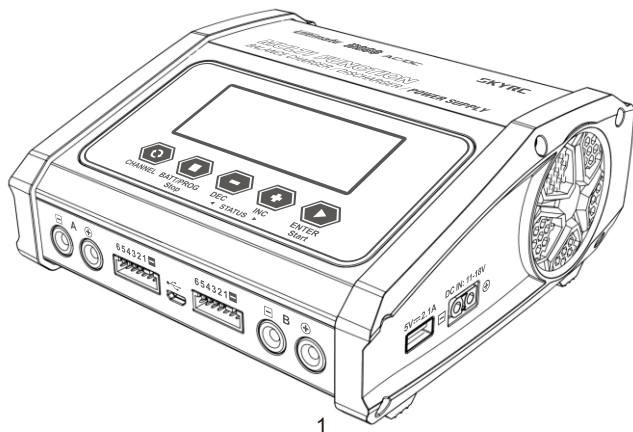
OVER TIME LIMIT — The charging time is longer than the maximum charging time which the user sets.

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

The Set Contains

1. SKYRC D260 Charger
2. Charging Cable X 2
3. Power Cord
4. Instruction Manual

      D260
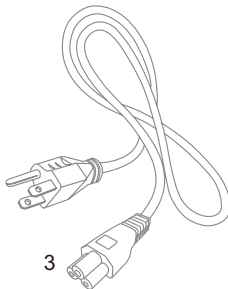
Specification

- DC Input Voltage : 11-18V
- AC Input Voltage: 100-240V
- Display Type: 128x64 LCD
- Display Backlight: Cool White
- Case Material: Metal & Plastic
- Controls: Five Buttons
- Case Size: 160x150x71mm
- Weight: 896g
- DC Power Supply Output: 130W Per Channel
- PC Communications: USB Port for Firmware Upgrade
- External Port: 2-6S Balance Socket-XH, Micro USB Port for Firmware Upgrade,
                 Battery Socket, AC/DC Input, DC Output,
                 5V-2.1A USB Output.
- Delta Peak Detection for NiMH/NiCd: 3-15mV/cell / Default: 4mV/cell
- Charge Cut-off Temperature: 20ºC/68ºF-80ºC/176ºF(adjustable)
- Charge Voltage: NiMH/NiCd: Delta peak detection
                 LiPo: 4.18-4.25V/cell   LiIon: 4.08-4.2V/cell
                 LiFe: 3.58-3.7V/cell   LiHV: 4.25-4.35V/cell
- Balance Current: 500mA/cell
- Reading Voltage Range: 0.1-26.1V
- Battery Types/Cells: LiPo/LiIon/LiFe/LiHV: 1-6cells
                 NiMH/NiCd: 1-15cells
                 Pb: 2-20V
- Battery Capacity Range: NiMH/NiCd: 100-50000mAh
                 LiPo/LiIon/LiFe/LiHV: 100-50000mAh
                 Pb: 100-50000mAh
- Charge Current: (0.1A-14.0A) x2
- Safety Timer: 1-720minutes / OFF
- Charge Wattage: 130Wx2
- Discharge Current: (0.1A-2.0A) x2
- Discharge Cut-off Voltage: NiMH/NiCd: 0.1-1.1V/cell
                 LiPo: 3.0-3.3V/cell   LiIon: 2.9-3.2V/cell
                 LiFe: 2.6-2.9V/cell   LiHV: 3.1-3.4V/cell
                 Pb: 1.8-2.0V/cell
- Discharge Wattage: 10Wx2
- Balance Cells: 2-6 cells
- Memory: 10x2 Different Charge/Discharge Profiles
- Charge Method: CC/CV for Lithium Types and Lead (Pb) Batteries
                 Delta-peak Sensitivity for NiMH/NiCd.

Regulatory Information

SkyRC D260 complies with all relevant and mandatory EC directives and FCC Part 15 Subpart B.

Test Standards	Title	Result
EN 55014-1:2017 Electromagnetic compatibility	Requirements for Household Appliances, electric tools, and similar apparatus –Part 1: Emission	Conform
EN 55014-2:2015 Electromagnetic compatibility	Requirements for Household Appliances, electric tools, and similar apparatus – Part 2: Immunity-Product family standard	Conform
EN 61000-3-2:2014 Electromagnetic compatibility (EMC)	Part 3-2: Limits-Limits for harmonic current emissions (equipment input current up to and including 16 A per phase	Conform
EN 61000-3-3:2013 Electromagnetic compatibility (EMC)	Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current $\leqslant$ 16 A per phase and not subject to conditional connection	Conform

Test Standards	Title	Result
EN 60335-2-29:2004+A2:2010+ A11:2018 to be used in conjunction with EN 60335-1:2012+A11:2014+ A13:2017	Safety of household and similar electrical applicances	Conform

Test Standards	Title	Result
FCC Rules Part 15 Subpart B	Unintentional Radiators	Conform

This symbol means that you must dispose of electrical from the General household waste when it reaches the end of its useful life. Take your charger to your local waste collection point or recycling centre. This applies to all countries of the European Union, and to other European countries with a separate waste collection system.

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.

Commonly Used Terms

Commonly used terms

Final charge voltage: the voltage at which the battery's charge limit (capacity limit) is reached. The charge process switches from a high current to a low maintenance rate (trickle charge) at this point. From this point on further high current charging would cause overheating and eventual terminal damage to the pack.

Final discharge voltage: the voltage at which the battery's discharge limit is reached. The chemical composition of the batteries determines the level of this voltage. Below this voltage the battery enters the deep discharge zone. Individual cells within the pack may become reverse polarized in this condition, and this can cause permanent damage.

A, mA: unit of measurement relating to charge or discharge current.1000 mA = 1 A (A=Ampere,mA=Milliampere)

Ah, mAh: unit of measurement for the capacity of a battery (Amperes x time unit; h = hour). If a pack is charged for one hour at a current of 2 A, it has been fed 2 Ah of energy. It receives the same quantity of charge (2 Ah) if it is charged for 4 hours at 0.5 A, or 15 minutes (=1/4 h) at 8 A.

'C'-rating: Capacity is also referred to as the 'C' rating. Some battery suppliers recommend charge and discharge currents based on the battery 'C' rating. A battery's '1C' current is the same number as the battery's rated capacity number, but noted in mA or amps. A 600mAh battery has a 1C current value of 600mA, and a 3C current value of (3 x 600mA) 1800mA or 1.8A. The 1C current value for a 3200mAh battery would be 3200mA (3.2A).

Nominal voltage(V): The nominal voltage of the battery pack can be determined as follows;
-.NiCd or NiMH: multiply the total number of cells in the pack by 1.2. A 8-cell pack will have a nominal voltage of 9.6 volts (8x1.2).
-.LiPo: multiply the total number of cells in the pack by 3.7. A 3-cell LiPo wired in series will have a nominal voltage of 11.1 volts (3x3.7).
-.LiIo: multiply the total number of cells in the pack by 3.6. A 2-cell LiIo wired in series will have a nominal voltage of 7.2 volts (2x3.6).
-.LiFe: multiply the total number of cells in the pack by 3.3. A 4-cell LiIo wired in series will have a nominal voltage of 13.2 volts (4x3.3).
-.LiHV: multiply the total number of cells in the pack by 3.7V. A 4-cell LiHV wired in series will have a nominal voltage of 14.8 volts (4x3.7).
If the nominal voltage of the battery is not printed on the battery's label, consult your battery manufacturer or supplier. Do not guess the rated voltage of battery.

Liability exclusion

This charger is designed and approved exclusively for use with the types of battery stated in this Instruction Manual. SkyRC 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 the incompetent or incorrect use and operation of our products, or which are connected with such operation in any way.Unless otherwise prescribed by law, our obligation to pay compensation, regardless of the legal argument employed, is limited to the invoice value of those SkyRC products which were immediately and directly involved in the event in which the damage occurred.

Warranty and service

We guarantee this product to be free of manufacturing and assembly defects for a period of one year from the time of purchase. The warranty only applies to material or operational defects, which are present at the time of purchase. During that period, we will repair or replace free of service charge for products deemed defective due to those causes.

This warranty is not valid for any damage or subsequent damage arising as a result of misuse, modification or as a result of failure to observe the procedures outlined in this manual.

Note:

1. The warranty service is valid in China only.

2. If you need warranty service overseas, please contact your dealer in the first instance, who is responsible for processing guarantee claims overseas. Due to high shipping cost, complicated custom clearance procedures to send back to China. Please understand SkyRC can't provide warranty service to overseas end user directly.

3. If you have any questions which are not mentioned in the manual, please feel free to send email to info@skyrc.cn