

ISDT K4

ISDT K4 Smart Charger User Manual

Lipo Battery Balance Charger Discharger (AC 400W / DC 600Wx2)

1. INTRODUCTION

The ISDT K4 Smart Charger is a high-performance dual-channel battery balance charger and discharger designed for various battery types, including LiFe, Lilon, LiPo, LiHv, Pb, and NiMH/Cd. It features both AC and DC input modes, offering flexibility for different power sources. This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your ISDT K4 charger.

2. PRODUCT FEATURES

- **AC / DC Dual Mode:** Supports AC 100~240V (400W output) and DC 10~30V (600W x2 output) for versatile power input.
- **Safe Access Input:** Features a smart design where DC and AC input ports are mutually exclusive, ensuring safe operation by allowing only one input at a time.
- **High Power Synchronous Dual Channel:** Equipped with a smart high-speed processor for independent parameter delivery to each port, offering up to 600W charging power per single port.
- **2.8" IPS LCD Display:** Low power consumption display with a 178° visible angle, providing clear and distinct information even in challenging environments or strong sunlight.
- **Two-way USB Interface:** MicroUSB port for firmware upgrades via PC connection. USB Type-C interface provides 5V/2A power output for charging mobile devices.
- **BattAir Intelligent Battery Information Interconnection Technology:** Fully compatible with BattAir's technology, connecting batteries via XT60 interface to automatically recognize battery type, obtain parameters, and optimize charging algorithms.

3. SETUP AND CONNECTIONS

Before operating the charger, ensure all connections are secure and correct.

3.1 Power Input Connection

The ISDT K4 charger supports both AC and DC power inputs. Only one input can be used at a time.

All-round, continuous high-energy.

Support 1~8S LiFe, Li Ion, LiPo battery, 1~7S LiHv, ULiHv battery,
1~14S Pb battery and 1~18S NiMH/Cd battery

The maximum output power is 1200W,
continuous, high-energy output.



Image: The ISDT K4 charger displaying its DC input (top) and AC input (bottom) ports. The DC input supports 10-34V and 600W x2 output, while the AC input supports 100-240V and 400W output.

- **DC Input:** Connect a DC power supply (10-30V) to the DC input port. The maximum input current is 35A.
- **AC Input:** Connect the AC power cable to the AC input port (100-240V).

3.2 Battery Connection

Connect your battery to one of the two charging channels. Each channel independently supports 1-8S batteries.

Both channels can independently support 1~8S batteries



Image: A top-down view of the ISDT K4 charger, highlighting the two XT60 battery connection ports, indicating support for 1-8S batteries on each channel.

- Connect the main power lead of your battery to the XT60 port on the charger.
- Connect the balance lead of your battery to the corresponding balance port next to the XT60 connector.
- Ensure all connections are firm to prevent accidental disconnections during operation.

4. OPERATING INSTRUCTIONS

4.1 Basic Navigation

The charger features a 2.8" IPS LCD display and control buttons for menu navigation and parameter adjustment. Use the up/down buttons to scroll through options and the select button to confirm.

4.2 Charging Batteries

1. Connect the battery to the charger as described in Section 3.2.
2. The charger will automatically detect the battery type if it supports BattAir technology. Otherwise, manually select the battery type (LiFe, Lilon, LiPo, LiHv, Pb, NiMH/Cd) and cell count (1-8S for LiPo/LiHv, 1-12S for Pb, 1-16S for NiMH/Cd).
3. Set the desired charging current (0.2-20A per channel).
4. Confirm the settings and start the charging process. The display will show real-time charging status, including voltage, current, and temperature.



High Power Synchronous Dual Channel, with Smart Charging.

Smart High Speed Processor delivers parameter interfere to each port. Hassle Free with Maximum charging power up to 600W for single port. Choose ISDT, Powered by Innovation.

Image: The ISDT K4 charger actively charging two batteries simultaneously, demonstrating its high-power synchronous dual-channel capability.

4.3 Discharging Batteries

1. Connect the battery to the charger.
2. Select the discharge function from the menu.
3. Set the desired discharging current (0.2-3A per channel).
4. Confirm settings and start discharging.

4.4 App Remote Control (ISD Link)

The ISDT K4 charger can be monitored and controlled remotely via the ISD Link app on your smartphone. This feature allows for on-time monitoring and remote termination of charging processes.

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Video: This video demonstrates the ISDT K4 charger's integration with the BattAir system and the ISD Link app. It shows how to connect a BattAir-enabled battery, the automatic parameter adjustment, and the app's interface for monitoring and remotely ending the charging process. The video highlights the ease of use and enhanced safety features.

- Download the **ISD Link** app (not ISDT Go) from your smartphone's app store.
- Ensure your charger is powered on and Bluetooth is enabled on your phone.
- Open the app and connect to your ISDT K4 charger.

- You can monitor charging parameters, battery status, and remotely end the charging process for improved safety and convenience.

5. SPECIFICATIONS

Feature	Specification
Model No.	K4
Input Voltage	AC 100~240V / DC 10~30V
Output Voltage	DC 1~30V
Max. Input Current	DC 35A
Max. Charging Power	AC 400W / DC 600W x2
Max. Discharging Power	30W x2
Charging Current	0.2~20A x2
Discharging Current	0.2~3A x2
Balance Current	1.5A/Cell Max
Supported Battery Types & Cell Count	LiFe, Lilon, LiPo 1~8S; LiHv 1-8S; Pb 1-12S; NiMH/Cd 1-16S
Parallel Charging Power & Current	800W/35A
Parallel Discharge Power & Current	30W/3A
Abnormal Voltage Alarm	Support
Incorrect Cell Count Setting Alarm	Support
Working Temperature	0~40°C
Storage Temperature	-20°C~60°C
Dimension	142x135x64mm
Weight	About 700g

6. MAINTENANCE

- **Cleaning:** Regularly clean the charger's exterior with a soft, dry cloth. Avoid using solvents or abrasive cleaners. Ensure ventilation openings are free from dust and debris.
- **Storage:** Store the charger in a cool, dry place away from direct sunlight and extreme temperatures.
- **Firmware Updates:** Periodically check the ISDT official website for firmware updates. Connect the charger to a PC via the microUSB port to perform updates, ensuring optimal performance and access to new features.
- **Cable Inspection:** Inspect all cables and connectors regularly for any signs of wear, damage, or corrosion. Replace damaged cables immediately.

7. TROUBLESHOOTING

- **"Abnormal Voltage Alarm"**: This alarm indicates that the input or battery voltage is outside the safe operating range. Check your power supply and battery voltage. Ensure the correct battery type and cell count are selected.
- **"Incorrect Cell Count Setting Alarm"**: This alarm occurs if the charger detects a discrepancy between the actual battery cell count and the manually set cell count. Verify the battery's cell count and adjust the charger settings accordingly.
- **Charger Not Powering On**: Ensure the power cable is securely connected and the power source is active. If using DC input, verify the voltage is within the specified range (10-30V).
- **Charging Not Starting**: Check all battery connections, including the main power lead and balance lead. Ensure the battery type and charging parameters are correctly set.
- **App Connectivity Issues**: Ensure Bluetooth is enabled on your smartphone and the charger. Make sure you are using the correct app (ISD Link). Try restarting both the charger and your phone.

8. WARRANTY AND SUPPORT

The ISDT K4 Smart Charger comes with a **1-year warranty** from the date of purchase. For warranty claims, technical support, or any operational questions not covered in this manual, please contact ISDT customer service through their official website or your retailer. Keep your proof of purchase for warranty validation.