LiitoKala Lii-S8

LiitoKala LII-S8 Universal Battery Charger User Manual

Model: Lii-S8

1. Introduction

Thank you for choosing the LiitoKala LII-S8 Smart Universal Battery Charger. This advanced charger is designed to provide efficient and safe charging for a wide range of rechargeable batteries, including Li-ion, LiFePO4, Ni-MH, Ni-Cd, and 9V batteries. Featuring an intuitive LCD display and independent charging slots, it allows for easy monitoring and flexible charging of multiple battery types simultaneously.

2. Product Features

- **8 Bay LCD Display:** Individual LCD screens for each bay display the charging process and battery status, allowing for easy monitoring.
- **Independent Charging Slots:** 8 slots can charge various battery types simultaneously, including Li-ion (4.20V / 4.35V), IMR / INR / ICR / LiFePO4 (3.60V), NiMH / Cd (1.2V), and 9V batteries.
- **Battery Activation Function:** Capable of activating 0V batteries to restore them to a usable state.
- **Comprehensive Protection:** Built-in protection against over-charge, over-current, over-voltage, temperature fluctuations, short-circuits, and features soft start.
- **Fast Charging Capability:** Slots 1, 3, 6, and 8 support 2A fast charging for compatible batteries.
- **Multiple Charging Currents:** Offers 300mA, 500mA, 700mA, 1A, and 2A (for specific slots) charging current options.
- **Dedicated 9V Battery Charging:** Two dedicated slots for 9V batteries, charging at approximately 85mA per battery.

3. Package Contents

The package typically includes the LiitoKala LII-S8 Smart Universal Battery Charger unit, an AC power adapter for wall outlets, and a 12V car adapter for charging on the go. Please ensure all components are present upon unboxing.

- LiitoKala LII-S8 Battery Charger Unit
- AC Power Adapter
- 12V Car Adapter

4. Setup

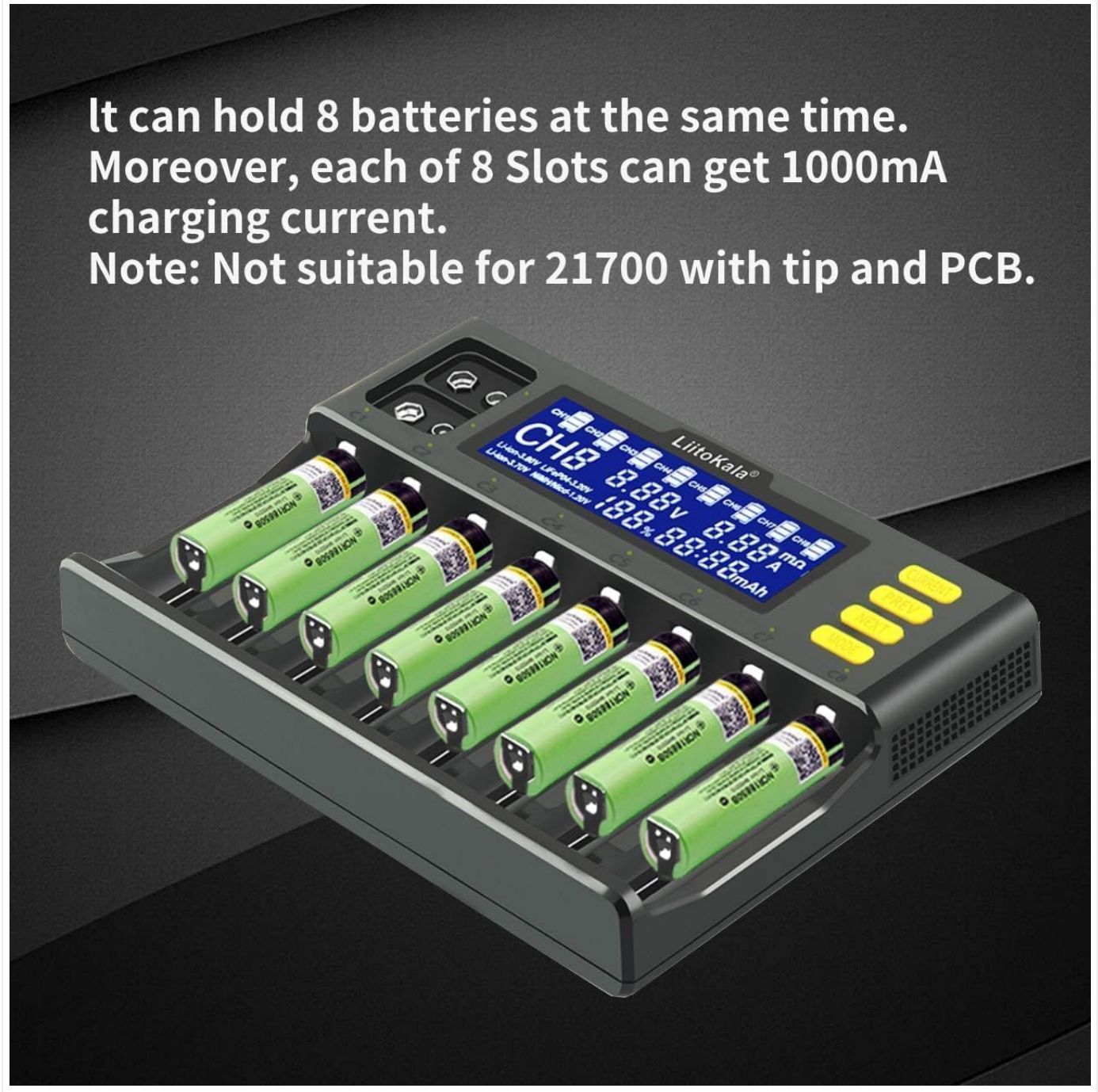
1. **Connect Power:** Plug the provided AC power adapter into a standard wall outlet, then connect the DC output plug into the charger's 12V/4A input port located at the back. Alternatively, use the 12V car adapter for in-vehicle charging.
2. **Initial Display:** Upon connecting power, the charger's LCD display will illuminate, indicating it is ready for use.

This image highlights the various components of the charger, including the LCD display, control buttons (CURRENT, PREV, NEXT, MODE), cooling holes, and the 9V battery charging slots. The 12V/4A power input is also indicated.

5. Operating Instructions

5.1 Inserting Batteries

Carefully insert one or more rechargeable batteries into the charging slots (C1-C8 for cylindrical batteries, 9V slots for 9V batteries). Ensure correct polarity (+ and -) as indicated on the charger and battery. The charger will automatically detect the battery type (Li-ion, LiFePO4, Ni-MH, Ni-Cd) and display its current voltage.



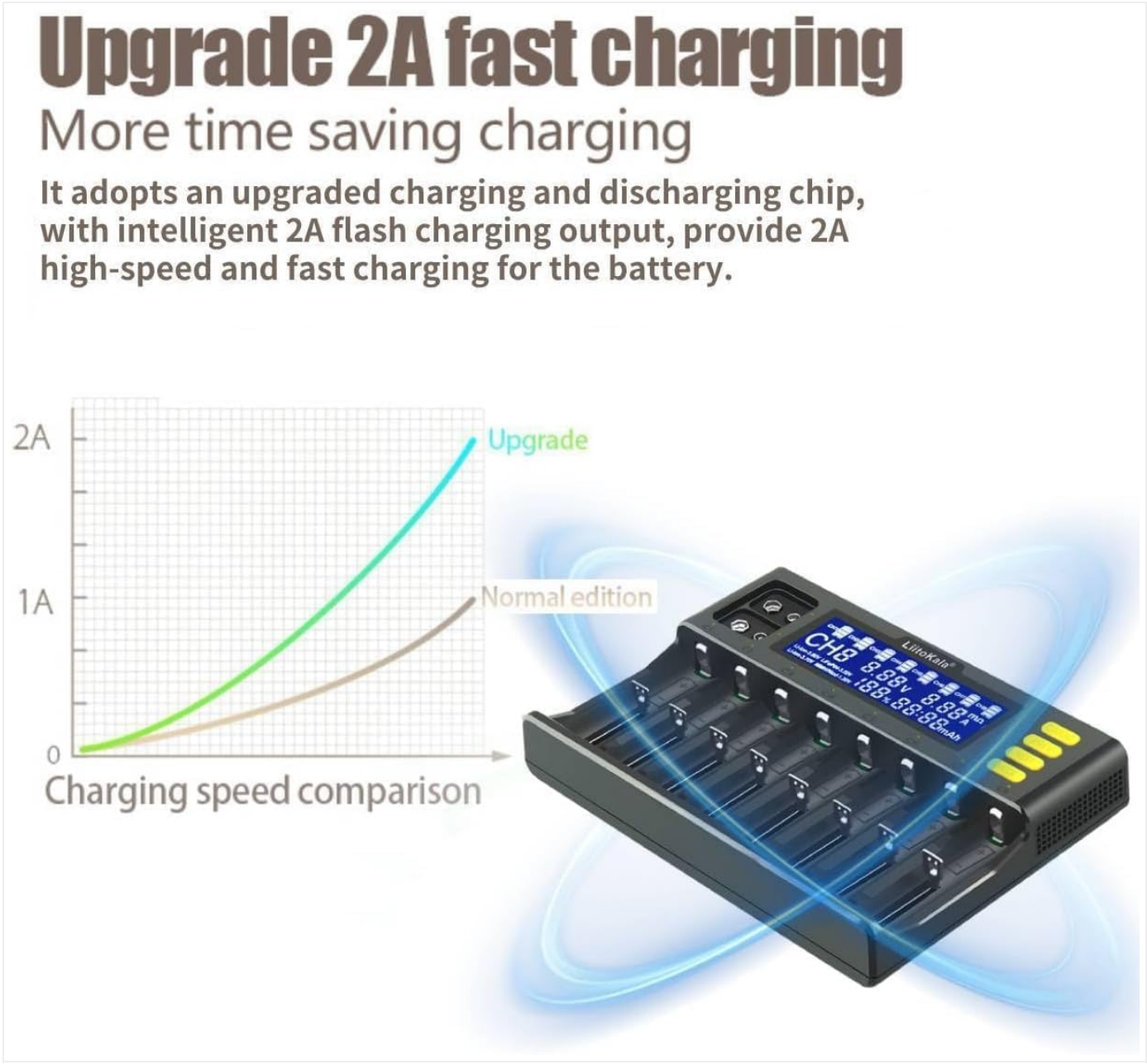
The charger can accommodate up to 8 cylindrical batteries simultaneously. Each of the 8 slots can provide a charging current of up to 1000mA. Note that this charger is not suitable for 21700 batteries with a tip and PCB.

5.2 Selecting Charging Current (for Cylindrical Batteries)

After inserting a battery, the charger will default to a standard charging current. To change the current:

1. Press the **MODE** button to cycle through available charging currents (300mA, 500mA, 700mA, 1000mA).
2. For 2A fast charging, insert batteries into slots 1, 3, 6, or 8. The 2A option is only available when charging 4 or fewer batteries in these specific slots.
3. Use the **PREV** and **NEXT** buttons to navigate between different channels (CH1-CH8) if you wish to set individual charging currents for each battery.
4. Press the **CURRENT** button to confirm the selected current for the active channel.

This image illustrates the six available charging currents: 300mA, 500mA, 700mA, 1A. It also highlights that when charging only 4 batteries, slots #1, #3, #6, and #8 can achieve a 2A output for faster charging.



This graph visually demonstrates the increased charging speed achieved with the upgraded 2A fast charging feature compared to normal charging. The charger incorporates an intelligent 2A flash charging output for time-saving.

5.3 Charging 9V Batteries

Insert 9V rechargeable batteries into the two dedicated 9V slots. The charger will automatically begin charging them at approximately 85mA per battery. The LCD display will show the charging status for these slots as well.

This image shows the dedicated 9V battery charging slots on the LiitoKala LII-S8 charger. Two 9V batteries can be charged simultaneously, each receiving a charging current of approximately 85mA.

5.4 Understanding the LCD Display

The LCD display provides real-time information for each charging channel:

- **CH (Channel Number):** Indicates the active charging slot (e.g., CH1, CH2).
- **Voltage (V):** Displays the current voltage of the battery.
- **Current (mA):** Shows the charging current being applied.
- **Capacity (mAh):** Accumulates the charged capacity in milliampere-hours.
- **Percentage (%):** Provides an estimated charging progress percentage.
- **Battery Type:** Indicates the detected battery chemistry (e.g., Li-ion, LiFePO4, NiMH/NiCd).

When charging is complete, the display for that channel will typically show "FULL" or stop accumulating mAh, and the voltage will stabilize.

6. Battery Compatibility

The LiitoKala LII-S8 charger is compatible with a wide range of cylindrical rechargeable batteries and 9V batteries. It automatically identifies battery types and applies appropriate charging parameters.

Compatible Cylindrical Battery Types:

- **Li-ion (3.7V / 4.20V):** 10440, 14500, 16340 (RCR123), 17355, 17670, 18490, 18650, 22650, 26650, 20700, 21700 (*Note: Not suitable for 21700 with tip and PCB*), 18350.
- **Li-ion (3.8V / 4.35V):** Specific high-voltage Li-ion batteries.
- **LiFePO4 (3.2V / 3.60V):** Lithium Iron Phosphate batteries.
- **Ni-MH / Ni-Cd (1.2V):** AA, AAA, C.

Compatible 9V Battery Types:

- Ni-MH 9V rechargeable batteries.

7. Safety Precautions

- Use only the provided power adapters.
- Do not charge non-rechargeable batteries.
- Ensure correct battery polarity before inserting.
- Do not disassemble or modify the charger.
- Keep the charger away from water, high temperatures, and direct sunlight.
- Supervise charging, especially for the first few times.
- If any abnormal behavior (e.g., excessive heat, smoke) is observed, immediately disconnect power.
- Keep out of reach of children.

8. Maintenance

- Clean the charger's surface and charging contacts regularly with a dry, soft cloth.
- Do not use abrasive cleaners or solvents.
- Store the charger in a cool, dry place when not in use.
- Ensure the cooling holes are not obstructed during operation.

9. Troubleshooting

Problem	Possible Cause	Solution
Charger not powering on.	Power adapter not connected properly or faulty outlet.	Check power connections; try a different outlet.
Battery not charging / "NULL" displayed.	Incorrect battery insertion (polarity), battery is dead (0V) and cannot be activated, or battery is non-rechargeable.	Re-insert battery with correct polarity. Try the activation function for 0V batteries. Ensure battery is rechargeable.
Charger or battery getting excessively hot.	Poor ventilation, faulty battery, or incorrect charging current.	Ensure proper ventilation. Remove the battery immediately. Do not use faulty batteries. Check selected current.
LCD display shows abnormal readings.	Internal error or temporary glitch.	Disconnect power, remove batteries, wait a few minutes, then reconnect. If issue persists, contact support.

10. Specifications

Feature	Detail
Model	Lii-S8
Input Voltage	DC 12V/4A
Output Voltage	Li-ion: 4.2V / 4.35V, LiFePO4: 3.6V, Ni-MH/Cd: 1.48V, 9V Ni-MH: 9.0V
Charging Current (Cylindrical)	300mA / 500mA / 700mA / 1000mA / 2000mA (Slots 1,3,6,8 for 2A)
Charging Current (9V)	85mA * 2
Compatible Battery Sizes	AA, AAA, C, 10440, 14500, 16340, 17355, 17670, 18490, 18650, 22650, 26650, 20700, 21700, 18350, 9V
Product Dimensions	5.3 x 11.3 x 1.37 inches (13.46 x 28.7 x 3.48 cm)
Item Weight	1.63 pounds (0.74 kg)
Manufacturer	LiitoKala
Certifications	CE, FCC, RoHS

11. Warranty and Support

LiitoKala offers a **12-month warranty** for the LII-S8 charger. If you encounter any questions or issues during use, please contact the seller or LiitoKala customer support for assistance. Please refer to your purchase documentation for specific contact details.
For further information or to visit the official store, you may refer to the LiitoKala Store on Amazon.