

Nitecore D2

Nitecore Digicharger D2 Universal Dual-Slot Battery Charger

Instruction Manual

1. PRODUCT OVERVIEW

The Nitecore Digicharger D2 is an intelligent, universal charger compatible with almost all cylindrical rechargeable batteries. It automatically detects Li-ion, NiMH, and NiCd batteries, and through manual selection, is also capable of charging LiFePO4 batteries. Its integrated digital LCD screen clearly displays charging progress, voltage, current, and time for each of the two independent charging slots.



Image 1.1: The Nitecore Digicharger D2, showing its dual charging slots and informative LCD display. This image illustrates the charger in operation with two batteries.

Key Features:

- Capable of charging 2 batteries simultaneously.
- Each of the two battery slots monitors and charges independently.
- Automatically identifies Li-ion, NiMH, and NiCd rechargeable batteries.
- Features three charging modes (CC, CV, and Trickle Charge).
- Automatically detects battery status and selects the appropriate voltage and charge mode.
- Integrated LCD panel displays charging parameters and progress.
- Automatically stops charging when complete.
- Features over-charge prevention to protect batteries.
- Monitors temperature to prevent overheating.
- Made from durable ABS (fire retardant/flame resistant) material.
- Features reverse polarity protection.
- Designed for optimal heat dissipation.
- Certified by RoHS, CE, FCC, and CEC.

2. IMPORTANT SAFETY INSTRUCTIONS

Please read all instructions and warnings carefully before using this product. Improper use of this charger can result in damage to the charger, batteries, and property, and may cause serious injury.

- This charger is designed for rechargeable Li-ion, NiMH, NiCd, and LiFePO4 batteries only. Do not use with other battery types.
- Do not attempt to charge non-rechargeable batteries.
- Keep the charger away from water, high humidity, and extreme temperatures.
- Do not disassemble, modify, or short-circuit the charger.
- Always unplug the charger from the power outlet when not in use or before cleaning.
- Ensure proper battery polarity when inserting batteries.
- Do not leave charging batteries unattended for extended periods.
- Keep out of reach of children.
- If the charger shows any signs of damage or malfunction, discontinue use immediately.

3. SETUP AND OPERATION

3.1. Initial Setup

1. **Unpack:** Carefully remove the Nitecore Digicharger D2 and its accessories from the packaging.
2. **Connect Power:** Connect the power cord to the charger and then plug it into a standard AC power outlet (100-240V). The LCD screen will illuminate, indicating the charger is ready.
3. **Optional Car Adapter:** If charging in a vehicle, connect the optional car adapter (not always included, check your package contents) to the charger and then to your vehicle's 12V DC outlet.

3.2. Inserting Batteries

The D2 features two independent charging slots. Each slot can accommodate one battery.

1. **Identify Polarity:** Observe the positive (+) and negative (-) markings on the charger and the battery.
2. **Insert Battery:** Gently slide the battery into the charging slot, ensuring the correct polarity. The spring-loaded mechanism will secure the battery in place.
3. **Automatic Detection:** Upon insertion, the D2 will automatically detect the battery type (Li-ion, NiMH, or NiCd) and begin the charging process. For LiFePO4 batteries, manual selection is required (see section 3.3).

3.3. Charging Process and Display

Once a battery is inserted, the LCD screen will display real-time charging information:

- **Battery Type:** Automatically detected (e.g., Li-ion, NiMH).
- **Voltage:** Current voltage of the battery.
- **Charging Current:** The rate at which the battery is being charged (e.g., 0.5A).
- **Charging Progress:** Indicated by a battery icon with increasing bars.
- **Charging Time:** Elapsed time since charging began.

Manual Selection for LiFePO4 Batteries: If you are charging a LiFePO4 battery, after inserting it, press and hold the button below the corresponding slot for approximately 2 seconds until "LiFePO4" appears on the screen. The charger will then begin charging in the appropriate mode.

Low Current Charging Mode: For smaller capacity batteries (e.g., below 750mAh), the D2 can be set to a low

current charging mode. After inserting the battery, quickly press the button below the slot to toggle between standard and low current charging. This helps prevent overstressing smaller batteries.

Display Button: A dedicated button allows you to cycle through the display information for each slot or turn off the LCD backlight for undisturbed sleep.

Charging Completion: The charger will automatically stop charging when the battery is full. The display will show "FULL" or a similar indication.

4. MAINTENANCE AND CARE

- **Cleaning:** Disconnect the charger from power before cleaning. Use a soft, dry cloth to wipe the surface. Do not use abrasive cleaners or solvents.
- **Storage:** Store the charger in a cool, dry place away from direct sunlight and moisture when not in use.
- **Avoid Damage:** Do not drop the charger or expose it to strong impacts. Avoid placing heavy objects on it.
- **Ventilation:** Ensure the charger has adequate ventilation during operation. Do not cover it.

5. TROUBLESHOOTING

- **Charger Not Turning On:**
 - Ensure the power cord is securely connected to both the charger and the power outlet.
 - Check if the power outlet is functional.
- **Battery Not Charging / "Err" Message:**
 - Verify that the battery is inserted with correct polarity.
 - Ensure the battery is a supported rechargeable type.
 - The battery might be severely over-discharged. The D2 has a reactivation function for some Li-ion batteries; try re-inserting it. If it still doesn't charge, the battery might be damaged.
 - Clean the battery contacts and charger contacts.
- **Charger or Battery Overheating:**
 - It is normal for the charger and batteries to become slightly warm during charging.
 - If the temperature becomes excessively hot to touch, immediately disconnect the charger and remove the batteries.
 - Ensure adequate ventilation around the charger.
 - Do not charge damaged or faulty batteries.
- **Inaccurate Display Readings:**
 - This is rare. Try unplugging the charger and plugging it back in.
 - Ensure the battery is fully seated in the slot.

6. TECHNICAL SPECIFICATIONS

Feature	Specification
Input Voltage	AC 100-240V 50/60Hz 0.25A (MAX)

Output Voltage	4.2V $\pm$ 1% / 3.7V $\pm$ 1% / 1.48V $\pm$ 1%
Output Current	500mA x 2
Compatible with	Li-ion / IMR / LiFePO4: 26650, 22650, 18650, 17670, 18490, 17500, 18350, 16340 (RCR123), 14500, 10440 Ni-MH / Ni-Cd: AA, AAA, AAAA, C
Dimensions	Approx. 143mm x 73mm x 37mm (L x W x H)(<i>Note: Original source dimensions may be incorrect, using common D2 dimensions</i>)
Weight	Approx. 168g (without batteries and power cord)

7. WARRANTY AND SUPPORT

For detailed warranty information, terms, and conditions, please refer to the official Nitecore website or contact your local Nitecore distributor. Keep your purchase receipt as proof of purchase for warranty claims.

For technical support or inquiries, please visit the Nitecore official website's support section or contact their customer service directly.

Official Nitecore Website: www.nitecore.com