LIMETA R8 Air

LIMETA R8 Air 8-Bay Universal Battery Charger Instruction Manual

Model: R8 Air | Brand: LIMETA

1. Introduction

Thank you for choosing the LIMETA R8 Air 8-Bay Universal Battery Charger. This device is designed for efficient and intelligent charging of various rechargeable battery types, including AA and AAA sizes. It features 8 independent charging slots, automatic battery type detection, and app control for monitoring and advanced settings. Please read this manual thoroughly before use to ensure proper operation and safety.

2. Package Contents

- LIMETA R8 Air 8-Bay Battery Charger Unit
- USB-C Charging Cable
- Instruction Manual (this document)

3. Product Overview

The LIMETA R8 Air charger features a compact design with multiple independent charging slots and a USB-C input for power. Key components are detailed below:



Figure 3.1: LIMETA R8 Air Charger with labeled components and dimensions. This image highlights the USB-C input port, charging indicators, and the design of the AA and AAA battery shrapnel (contacts).

- **USB-C Input Port:** For connecting the charger to a power source.
- **Charging Indicators:** LED lights that display the charging status for each slot.
- **Battery Slots:** Eight independent slots compatible with AA and AAA batteries.

4. Setup

4.1 Connecting the Charger

1. Connect the provided USB-C cable to the USB-C input port on the charger.
2. Plug the other end of the USB-C cable into a compatible USB power adapter (not included). For faster charging, use a Power Delivery (PD) compatible adapter.



Figure 4.1: The LIMETA R8 Air charger connected to a wall power adapter via its USB-C cable, ready for use.

4.2 App Installation and Connection

The LIMETA R8 Air charger can be controlled and monitored via the Polying app. This app allows for real-time status updates and firmware management.

1. Download the "Polying" app from your device's app store (Google Play Store for Android, Apple App Store for iOS).
2. Ensure Bluetooth is enabled on your smartphone.
3. Open the Polying app and follow the on-screen instructions to connect to your R8 Air charger via Bluetooth.
4. Upon successful connection, the app will display the charger's status. It is recommended to check for and install any available firmware updates (e.g., V2.0 for optimized 1.5V Li-ion and NiMH battery charging).



Figure 4.2: A smartphone displaying the Polying app interface next to the LIMETA R8 Air charger, illustrating the app connection process.

5. Operating Instructions

5.1 Inserting Batteries

The R8 Air charger supports both AA and AAA size batteries. Each of the 8 slots operates independently.

1. Ensure the charger is connected to a power source.
2. Insert AA or AAA rechargeable batteries into the charging slots, observing the correct polarity (+/-). The charger will automatically detect the battery type and begin charging.



Figure 5.1: The LIMETA R8 Air charger with a mix of AA and AAA batteries inserted into its 8 independent charging slots.

5.2 Charging Process and Indicators

- The charger's LED indicators will illuminate to show the charging status for each individual battery.
- The charger automatically detects the battery type (NiMH, NiCd, Li-ion, LiFePO4) and applies the appropriate charging method.
- Charging will cease automatically once batteries are fully charged.

5.3 Using the Polying App

The Polying app provides enhanced control and monitoring capabilities:

- **Real-time Monitoring:** View the charging status, power levels, and battery type for each slot.
- **Custom Settings:** Preset battery types and charging currents (if manual override is desired).
- **Firmware Updates:** Keep your charger updated with the latest features and optimizations directly through the app.



Figure 5.2: A user monitoring the charging progress of multiple batteries via the Polying app on a smartphone.

6. Battery Compatibility

The LIMETA R8 Air charger is compatible with a wide range of rechargeable battery types and sizes, including:

- AA (NiMH, NiCd, Li-ion, LiFePO4, 1.5V constant voltage lithium)
- AAA (NiMH, NiCd, Li-ion, LiFePO4, 1.5V constant voltage lithium)
- Other compatible types: 10500, 12500 (check specific battery dimensions for fit)

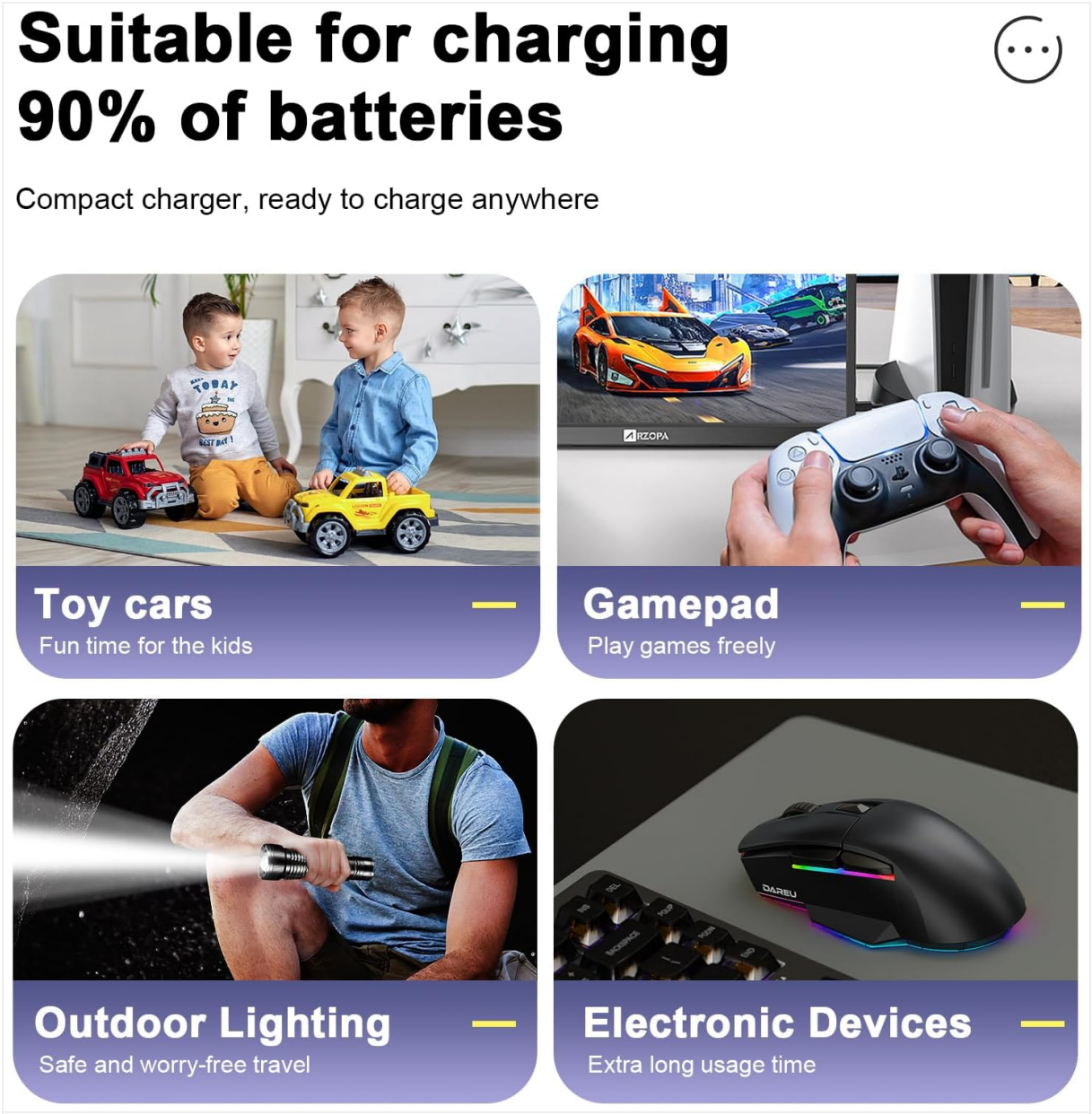


Figure 6.1: The LIMETA R8 Air charger showcasing its 8-slot universal compatibility for various battery types and sizes.

7. Safety Precautions

The R8 Air charger incorporates multiple protection features to ensure safe operation. Always adhere to the following guidelines:

- **Over Temperature Protection:** Prevents overheating during charging.
- **Short Circuit Protection:** Safeguards against short circuits.
- **Over Power Protection:** Protects against excessive power draw.
- **Over Voltage Protection:** Prevents damage from voltage spikes.
- **Timeout Protection:** Stops charging after a set duration to prevent overcharging.
- **Overcurrent Protection:** Guards against excessive current flow.
- **Over-Capacity Protection:** Prevents charging beyond battery capacity.
- **Battery Reverse Connection Protection:** Prevents damage from incorrectly inserted batteries.
- **Disposable Battery Identification:** Helps prevent charging of non-rechargeable batteries.

Important: Do not attempt to charge non-rechargeable batteries. Do not disassemble or modify the charger. Use only in dry environments. Keep out of reach of children.



Figure 7.1: Visual representation of the comprehensive protection features integrated into the LIMETA R8 Air charger for enhanced safety.

8. Maintenance

- **Cleaning:** Disconnect the charger from power before cleaning. Use a soft, dry cloth to wipe the surface. Do not use liquid cleaners or solvents.
- **Storage:** Store the charger in a cool, dry place away from direct sunlight and extreme temperatures when not in use.

9. Troubleshooting

Problem	Possible Cause	Solution
Charger not powering on.	No power supply or faulty cable/adapter.	Ensure USB-C cable is securely connected. Try a different USB power adapter or cable.
Battery not charging.	Incorrect battery insertion, non-rechargeable battery, or battery fault.	Check battery polarity. Ensure battery is rechargeable. Try a different battery.
App not connecting to charger.	Bluetooth off, app issue, or charger not powered.	Ensure charger is powered and Bluetooth is enabled on your device. Restart the app and charger.
Inaccurate battery level readings in app.	App or firmware requires update.	Update the Polying app to the latest version. Check for and install any available firmware updates for the charger via the app.

Problem	Possible Cause	Solution
1.5V Li-ion batteries not charging correctly.	Outdated firmware.	Ensure charger firmware is updated to V2.0 or later via the Polying app for optimized 1.5V Li-ion battery support.

10. Specifications

Feature	Detail
Model Number	R8 Air
Input	USB-C (27W max power)
Output Voltage	1.2 Volts (variable based on battery type)
Max Current per Slot	1.0A (actual charging current may vary)
Supported Battery Types	NiMH, NiCd, Li-ion, LiFePO4, 1.5V constant voltage lithium (AA, AAA, 10500, 12500)
Number of Slots	8 independent slots
Product Dimensions	0.98 x 2.48 x 4.66 inches (25 x 63 x 118.5 mm)
Item Weight	3.52 ounces (0.1 Kilograms)
Manufacturer	LIMETA

11. Warranty and Support

LIMETA products are covered by a standard manufacturer's warranty. For specific warranty details, please refer to the product packaging or contact LIMETA customer support.
If you encounter any issues or have questions regarding your LIMETA R8 Air charger, please contact our customer support team through the retailer where you purchased the product or visit the official LIMETA website for assistance.

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