

[Manuals.plus](#) /

> [OVONIC](#) /

> OVONIC Mate2 LiPo Balance Charger User Manual

OVONIC Mate2

OVONIC Mate2 LiPo Balance Charger User Manual

Model: Mate2 | Brand: OVONIC

1. INTRODUCTION

Welcome to the user manual for the OVONIC Mate2 LiPo Balance Charger. This document provides essential information for the safe and efficient operation of your charger. Please read it thoroughly before use to ensure proper handling and to maximize the lifespan of your batteries and charger.



Image: Comparison of OVONIC Mate2's high-definition display with the previous Mate 1 model, illustrating enhanced parameter clarity and ease of operation.

2. IMPORTANT SAFETY INSTRUCTIONS

Operating battery chargers and handling batteries, especially LiPo batteries, requires strict adherence to safety guidelines. Failure to follow these instructions can result in property damage, personal injury, or fire.

- **Never leave charging batteries unattended.** Always monitor the charging process.
- Charge batteries in a fire-safe area, away from flammable materials. Use a LiPo safety bag for LiPo batteries.
- Do not charge damaged, swollen, or punctured batteries. Dispose of them properly.
- Ensure the correct battery type (LiPo, Li-ion, LiHV, LiFe, NiMH) and cell count are selected on the charger before

starting any operation. Incorrect settings can lead to overcharging or damage.

- Verify correct polarity when connecting batteries to the charger. Reverse polarity can cause severe damage to the charger and battery.
- Keep the charger away from moisture, water, and extreme temperatures.
- Disconnect the charger from the power source when not in use.
- Keep out of reach of children.

The OVONIC Mate2 charger is equipped with multiple safety protections:

- **Built-in Voltage Stabilizer:** Maintains stable voltage during operation.
- **Overtemperature Protection:** Prevents overheating of the charger.
- **Overcharge Protection:** Stops charging when the battery reaches full capacity.
- **Overcurrent Protection:** Safeguards against excessive current flow.
- **Short Circuit Protection:** Protects against short circuits in the charging circuit.
- **Reverse Polarity Protection:** Prevents damage from incorrect battery connection.



Built-in Voltage Stabilizer



Overtemperature Protection



Overcharge Protection



Overcurrent Protection



Short Circuit Protection



Reverse Polarity Protection

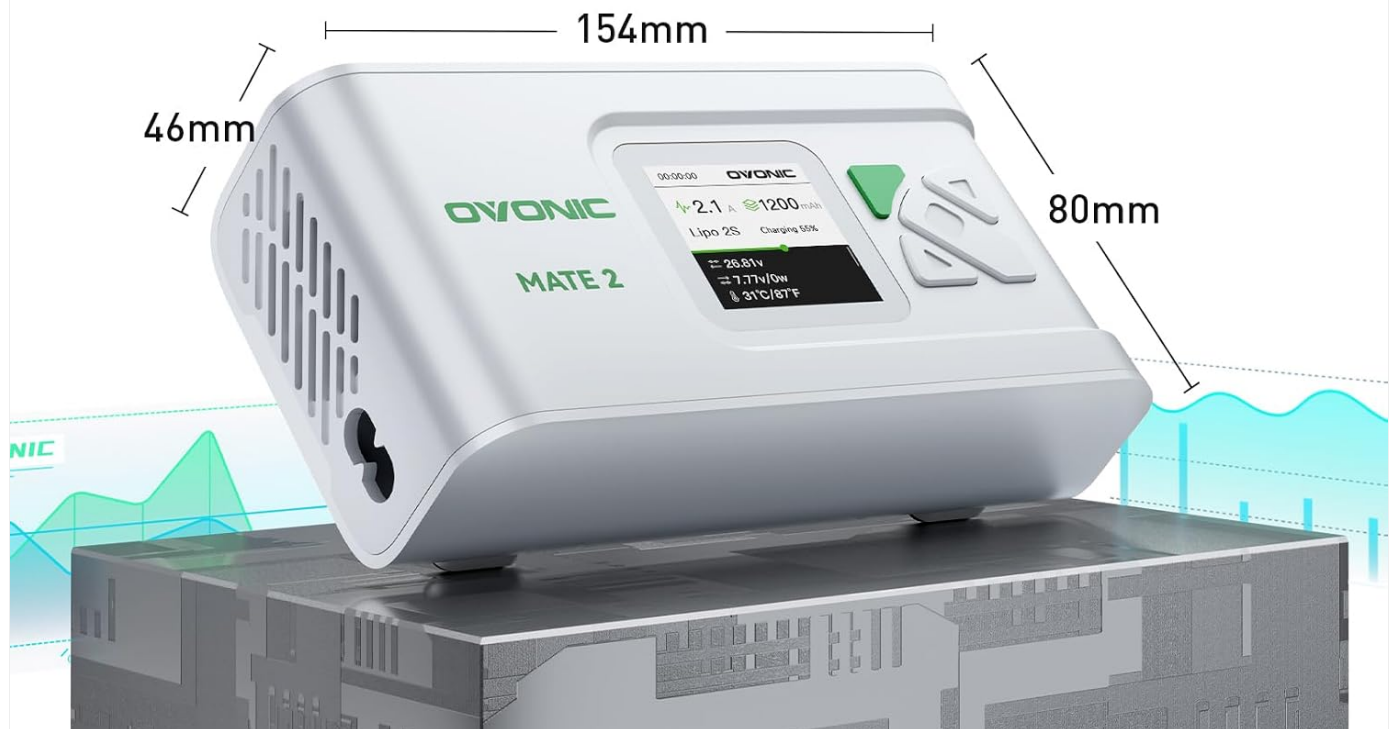


Image: OVONIC Mate2 charger dimensions and visual representation of its comprehensive safety protections.

3. PACKAGE CONTENTS

Please verify that all items listed below are included in your package:

- OVONIC Mate2 Balance Charger (x1)
- Packaging Box (x1)
- LiPo Safety Bag (x1)
- User Manual (x1)
- AC Input Cable (x1)
- 8-in-1 Adapter Cable (x1)



Mate 2 Balance Charger*1



Packaging Box*1



LiPo Bag*1



User Manual*1



AC Input Cable*1



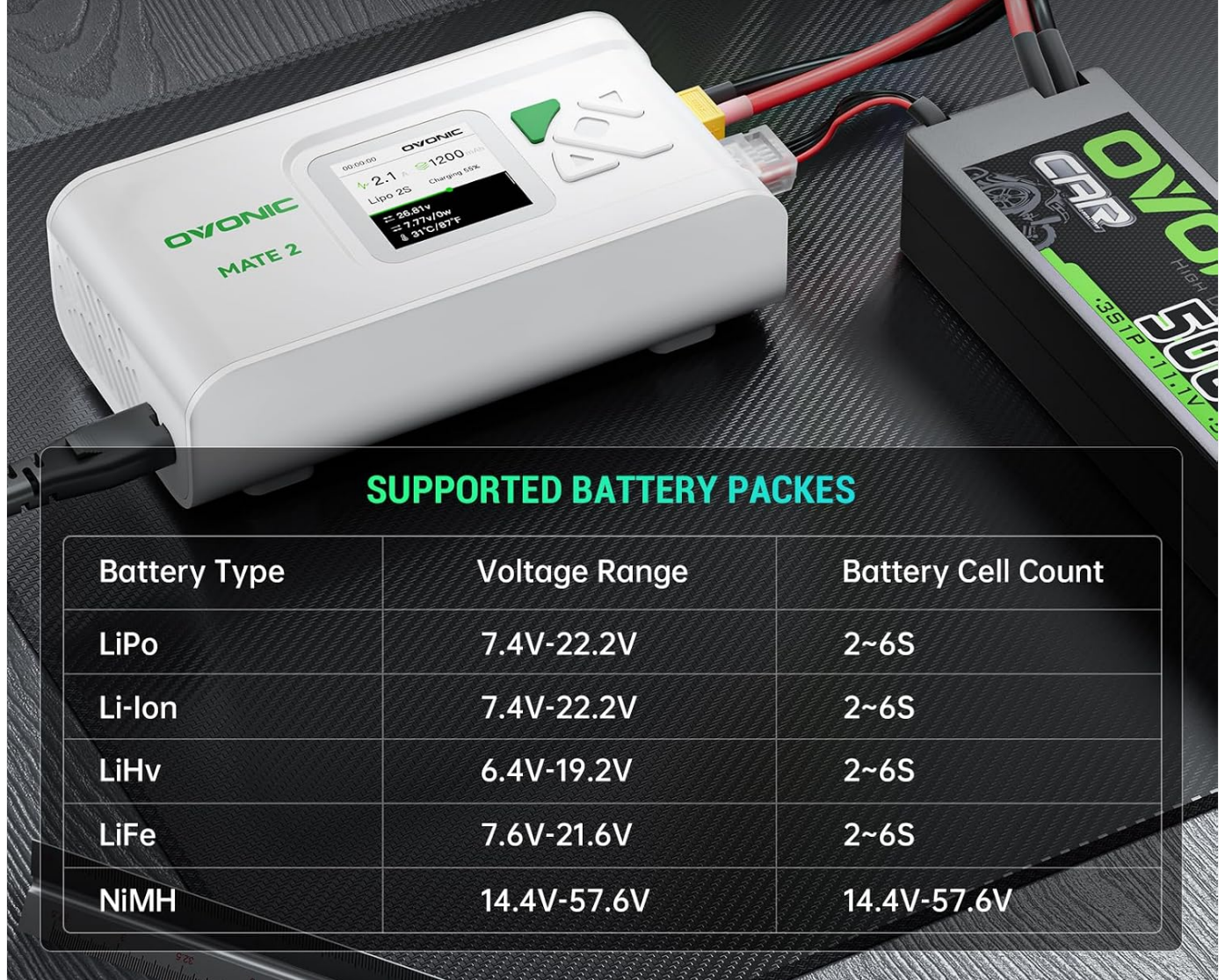
8-in-1 Adapter Cable*1

4. PRODUCT FEATURES

The OVONIC Mate2 LiPo Balance Charger is designed with advanced features for efficient and safe battery management:

- **High-Performance Charging:** Delivers 200W power and 12A output, supporting various battery types including LiPo, Li-ion, LiHV, LiFe (2-6S), and NiMH (4-15S).
- **High Conversion Efficiency:** Utilizes advanced synchronous rectification technology, achieving a conversion efficiency of up to 98%.
- **Smart Charging Functionality:** Features a digital display and multiple charging modes: fast charge, balance charging, discharge, storage mode, and digital power.
- **Comprehensive Safety Protections:** Includes overtemperature, overcharge, overcurrent, short circuit, and reverse polarity protection for secure operation.
- **Versatile 8-in-1 Adapter Cable:** Equipped with an XT60 input connector and 8 common output options: EC5, EC3, XT30, Deans, TRX, TMY, Mini TMY, and Futaba.

SUPPORTED BATTERY CHEMISTRIES



The image shows an OVONIC MATE 2 battery charger, a white rectangular device with a digital display and several buttons. The display shows 'OVONIC MATE 2' at the top, followed by '00:00:00', '2.1A', '1200mAh', 'LiPo 2S', 'Charging 50%', '28.81V', '7.77V/0W', and '31°C/87°F'. A red and black battery pack is connected to the charger via red and black cables. The background is a dark, textured surface.

SUPPORTED BATTERY PACKS

Battery Type	Voltage Range	Battery Cell Count
LiPo	7.4V-22.2V	2~6S
Li-Ion	7.4V-22.2V	2~6S
LiHv	6.4V-19.2V	2~6S
LiFe	7.6V-21.6V	2~6S
NiMH	14.4V-57.6V	14.4V-57.6V

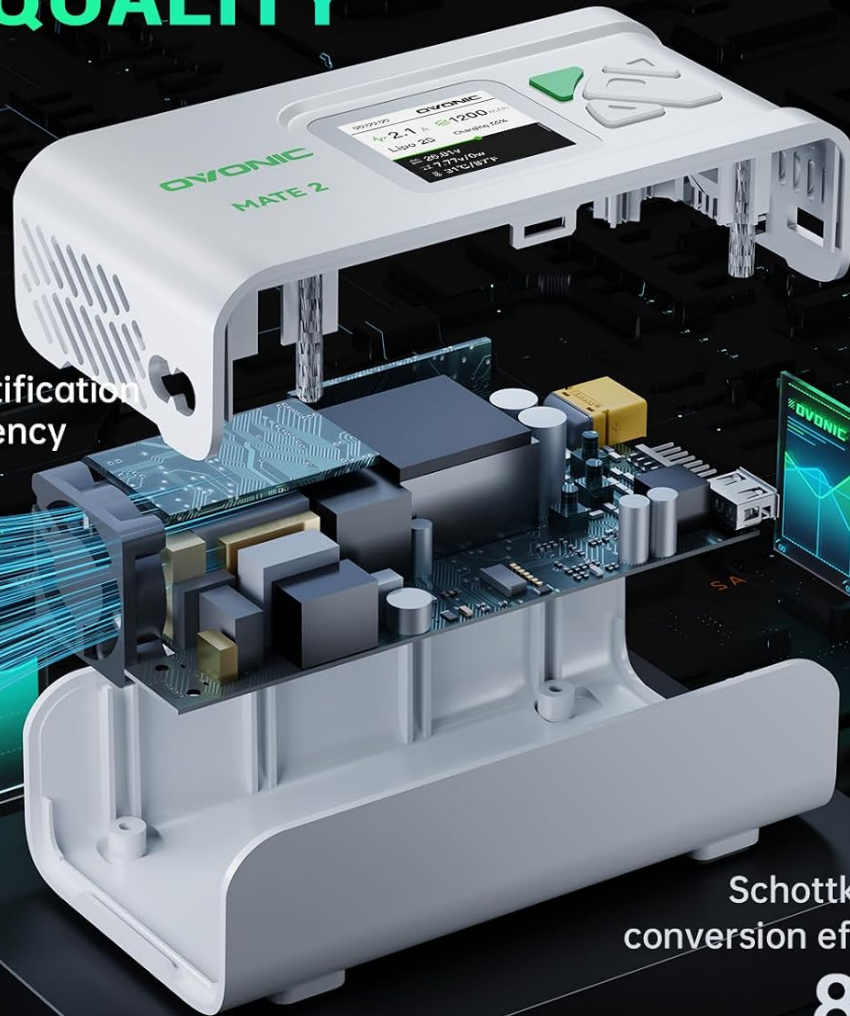
Image: Supported battery chemistries and cell counts for the OVONIC Mate2 charger.

MULTIPLE PROTECTION HIGH QUALITY

OVONIC

Synchronous rectification
conversion efficiency

UP
TO **98%**



OTHERS

Schottky diode
conversion efficiency

87%

Image: Comparison of conversion efficiency between OVONIC Mate2 and other chargers.



5. TECHNICAL SPECIFICATIONS

Specification	Value
Brand	OVONIC
Model Number	Mate2
Color	White
Product Dimensions (D x W x H)	6.1" x 3.15" x 1.69" (154mm x 80mm x 46mm)
Item Weight	0.72 kg
Input Voltage	120 volts AC
Output Voltage	Up to 42 volts DC
Current Rating	12 A
Connector Type Used on Cable	XT60 (input to adapter cable)
Number of Ports	8 (output options on adapter cable)
Certifications	UL, CE, FCC

6. SETUP

6.1 Connecting the Charger

1. Place the OVONIC Mate2 charger on a stable, level, and non-flammable surface. Ensure adequate ventilation around the unit.
2. Connect the provided AC input cable to the charger's power input port.
3. Plug the other end of the AC input cable into a standard 120V AC wall outlet.
4. The charger's display should illuminate, indicating it is powered on and ready for operation.

6.2 Connecting a Battery

1. Identify the type and cell count of the battery you intend to charge (e.g., LiPo 3S, NiMH 6S).
2. Connect the main power lead of your battery to the appropriate connector on the 8-in-1 adapter cable. Then, connect the XT60 end of the adapter cable to the charger's main output port.
3. Connect the balance lead of your battery to the corresponding balance port on the charger. Ensure the balance plug is inserted correctly according to its pin configuration.
4. Double-check all connections for security and correct polarity before proceeding.

7. OPERATING INSTRUCTIONS

7.1 Navigating the Menu

The OVONIC Mate2 features a user-friendly interface with a digital display and control buttons. Use the navigation buttons to scroll through options, select modes, and adjust parameters. The display provides real-time information on battery status and charging progress.

7.2 Charging Modes

The charger offers several operational modes to suit different battery management needs:

- **Balance Charge:** This is the recommended mode for multi-cell lithium batteries (LiPo, Li-ion, LiHV, LiFe). It charges the battery while simultaneously balancing the voltage of each individual cell, ensuring optimal performance, safety, and battery longevity.
- **Fast Charge:** Charges the battery at a higher rate without balancing individual cells. Use this mode with caution and only when time is critical. It is advisable to perform a balance charge periodically if using fast charge frequently.
- **Discharge:** Discharges the battery to a user-defined or factory-set safe voltage level. This is useful for preparing batteries for storage or for cycling purposes.
- **Storage Mode:** Charges or discharges the battery to a specific voltage level (typically around 3.8V-3.85V per cell for LiPo) ideal for long-term storage. This helps preserve battery health and prevents degradation.
- **Digital Power:** Allows the charger to function as a stable DC power supply for other compatible devices.

7.3 Starting a Charge Cycle

1. After connecting the battery, use the navigation buttons to select the desired charging mode (e.g., "Balance Charge").
2. Confirm the battery type and cell count displayed on the screen match your connected battery. Adjust if necessary.
3. Set the charging current (Amperage) according to your battery's specifications. Refer to your battery's manufacturer guidelines for recommended charge rates (often expressed as 'C' rating, e.g., 1C).
4. Once all parameters are set, initiate the charging process. The charger will begin to charge, and the display will show real-time data such as current, voltage, and elapsed time.
5. Monitor the charging process. If any error messages appear, refer to the Troubleshooting section.
6. Upon completion of the charge cycle, the charger will typically emit an audible alert. Disconnect the battery from the charger immediately.

8. MAINTENANCE

Proper maintenance ensures the longevity and reliable performance of your OVONIC Mate2 charger:

- **Cleaning:** Keep the charger's exterior clean using a soft, dry cloth. Do not use solvents or abrasive cleaners. Ensure ventilation openings are free from dust and debris.
- **Storage:** When not in use, store the charger in a cool, dry environment, away from direct sunlight, moisture, and extreme temperatures.
- **Cable Inspection:** Regularly inspect all cables and connectors for any signs of wear, fraying, or damage. Replace damaged cables immediately to prevent hazards.
- **Avoid Impact:** Protect the charger from drops or impacts, which can damage internal components.

9. TROUBLESHOOTING GUIDE

If you encounter issues with your OVONIC Mate2 charger, refer to the following common troubleshooting steps:

9.1 Charger Does Not Power On

- Ensure the AC input cable is securely connected to both the charger and a functional wall outlet.
- Test the wall outlet with another device to confirm it is supplying power.
- Check for any visible damage to the AC input cable or charger.

9.2 Battery Not Charging or Charging Slowly

- Verify that both the main power lead and the balance lead of the battery are correctly and securely connected to the charger.
- Confirm that the selected battery type and cell count on the charger match the connected battery.
- Check the set charging current (Amperage). Ensure it is appropriate for your battery's capacity and C-rating.
- Inspect the battery for any signs of damage (e.g., swelling, punctures). Do not attempt to charge damaged batteries.
- Ensure the charger's ventilation is not obstructed, as overheating can reduce charging efficiency or halt the process.

9.3 Charger Displays an Error Message

- Note the specific error code or message displayed on the screen.
- Consult the OVONIC website or contact customer support with the error message for detailed explanations and solutions.
- Common errors often relate to incorrect battery connections, incorrect battery type/cell count settings, or internal faults.

10. WARRANTY AND CUSTOMER SUPPORT

10.1 Warranty Information

The OVONIC Mate2 LiPo Balance Charger is covered by a **2-Year Quality Warranty** from the date of purchase. This warranty covers manufacturing defects and issues arising from normal use. It does not cover damage caused by misuse, accidents, unauthorized modifications, or failure to follow the instructions in this manual.

10.2 Contacting Support

For any product-related questions, technical assistance, or warranty claims, please contact OVONIC customer service:

- **Online Support:** The most efficient way to contact us is through your purchase platform.
- **Steps to Contact Seller:**
 - a. Log in to your account on the platform where you purchased the charger.
 - b. Navigate to "Your Orders".
 - c. Locate your OVONIC Mate2 charger order and click on the "Contact Seller" option.
- OVONIC customer service aims to respond to all inquiries within 24 hours. Please provide your order number and a detailed description of the issue to expedite support.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

<https://manuals.plus/asin/B0DK2XY6LM>

More documents and user manuals: **<https://manuals.plus/>**