

Gens ace IMARS D300

Gens Ace IMARS D300 G-Tech Series Smart Dual Lipo Charger User Manual

Model: IMARS D300

1. INTRODUCTION

Thank you for choosing the Gens Ace IMARS D300 G-Tech Series Smart Dual Lipo Charger. This advanced charger is designed for efficient and safe charging of various battery chemistries, featuring G-Tech smart technology for automatic battery recognition and optimized charging parameters. Please read this manual thoroughly before operation to ensure proper use and maximize the lifespan of your charger and batteries.

2. IMPORTANT SAFETY INFORMATION

Failure to follow these safety instructions may result in fire, property damage, or personal injury.

- Always operate the charger in a well-ventilated area, away from flammable materials.
- Do not leave the charger unattended during operation.
- Ensure the charger's input voltage matches your power source (AC100-240V or DC7-30V).
- Only charge battery types supported by the charger (LiPo/Li-ion/LiHV/LiFe 1-6S; NiMH/Cd 1-16S).
- Do not attempt to charge damaged or swollen batteries.
- Keep the charger away from water, moisture, and extreme temperatures.
- This product is not a toy. Keep out of reach of children.
- The charger features UL94-V0 Flame Retardant Grade materials for enhanced safety.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

- Gens ace iMars D300 Dual Charger
- AC Input Cable
- XT60-T adapter (x2)
- XT60-EC5 adapter (x2)
- XT60-EC3 adapter (x2)



Image: Gens Ace IMARS D300 Dual Charger with all included cables and adapters.

4. PRODUCT OVERVIEW

The IMARS D300 features a compact design with dual charging channels (CHA and CHB), a clear IPS LCD display, and intuitive controls for easy operation.



Image: Front view of the IMARS D300 charger highlighting its dual mode and dual channel capabilities, along with smart features.

4.1 Components

- **2.4 inch IPS LCD Display:** Shows real-time charging information, settings, and status.
- **Control Buttons:** For navigation and selection within the menu.
- **Charging Ports (CHA & CHB):** Dual output ports for connecting batteries.
- **Balance Ports (2S-6S):** For balancing multi-cell LiPo/Li-ion/LiHV/LiFe batteries.
- **AC Input Port:** For connecting to AC power (100-240V).
- **DC Input Port:** For connecting to DC power (7-30V).

5. SETUP

5.1 Connecting to Power

1. **AC Power:** Connect the supplied AC input cable to the charger's AC input port and then to a wall outlet.
2. **DC Power:** Connect a DC power source (7-30V) to the charger's DC input port. Ensure correct polarity.

5.2 Connecting a Battery

1. Identify the correct charging port (CHA or CHB) and the appropriate adapter for your battery.
2. Connect the battery's main discharge plug to the charger's main output port (CHA or CHB).
3. For LiPo/Li-ion/LiHV/LiFe batteries, connect the battery's balance lead to the corresponding balance port (2S-6S) on the charger. Ensure the balance lead is inserted correctly.



Image: The IMARS D300 charger with two batteries connected, illustrating the plug-and-play functionality of G-Tech smart batteries.

6. OPERATING MODES

The IMARS D300 offers 7 versatile operating modes:

- **Charge:** Standard charging mode for various battery types.
- **Discharge:** Discharges the battery to a set voltage.
- **Balance:** Balances the voltage of individual cells in multi-cell batteries.

- **Storage:** Charges or discharges LiPo/Li-ion/LiHV/LiFe batteries to their optimal storage voltage.
- **ExtDischarge:** External discharge mode (requires external discharge device, not included).
- **SyncCharging:** Allows synchronized charging of two identical batteries on both channels.
- **Digital Power Supply:** The charger can function as a stable DC power supply.

6.1 G-Tech Smart Charging

The IMARS D300 features built-in G-Tech Smart Chip technology. When a G-Tech smart battery is connected, the charger automatically identifies its information (e.g., cell count, capacity) and sets optimal charging parameters. This eliminates the need for manual settings, ensuring safe and efficient charging, and automatically stops when fully charged.



Image: The IMARS D300 charger demonstrating smart charging capabilities with G-Tech batteries, showing automatic recognition and optimization.

6.2 High Power Charging

The charger provides significant power output for fast charging. It supports up to 300W AC input and 350W*2 DC input, with a maximum charging current of 16A per channel. The display shows real-time information such as total voltage, charging/discharging current, and working time.

HIGH POWER CHARGING

AC 300W DC 350W *2

Compared to the Imars Dual, AC input supports up to 300W, achieving a 50% increase in power. DC input reaches a maximum of 350W *2 charging power, increasing by 16%.

Image: The IMARS D300 charger connected to batteries, illustrating its high power charging capabilities with AC 300W and DC 350W*2.

7. MAINTENANCE

- Keep the charger clean and free from dust and debris. Use a soft, dry cloth for cleaning.
- Do not use harsh chemicals or abrasive cleaners.
- Store the charger in a cool, dry place when not in use.
- Regularly inspect cables and connectors for any signs of wear or damage. Replace if necessary.
- Ensure proper ventilation during operation to prevent overheating. The internal fans will activate as needed.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
---------	----------------	----------

Problem	Possible Cause	Solution
Charger does not power on.	No power supply; incorrect power connection.	Check AC cable or DC input connection. Ensure power source is active.
Battery not recognized.	Incorrect battery connection; non-G-Tech battery (manual settings required); damaged battery.	Ensure main and balance leads are securely connected. For non-G-Tech batteries, manually set parameters. Inspect battery for damage.
Charging process stops prematurely.	Battery full; safety cutoff triggered (over-voltage, over-current, over-temperature); poor connection.	Check battery status on display. Verify connections. Allow charger to cool if overheated.
Error message on display.	Specific error condition (e.g., "Cell Voltage Error", "Connection Error").	Refer to the specific error code on the display for detailed instructions. Usually indicates a battery or connection issue.

9. SPECIFICATIONS

VARIOUS BATTERY TYPE COMPATABILITY

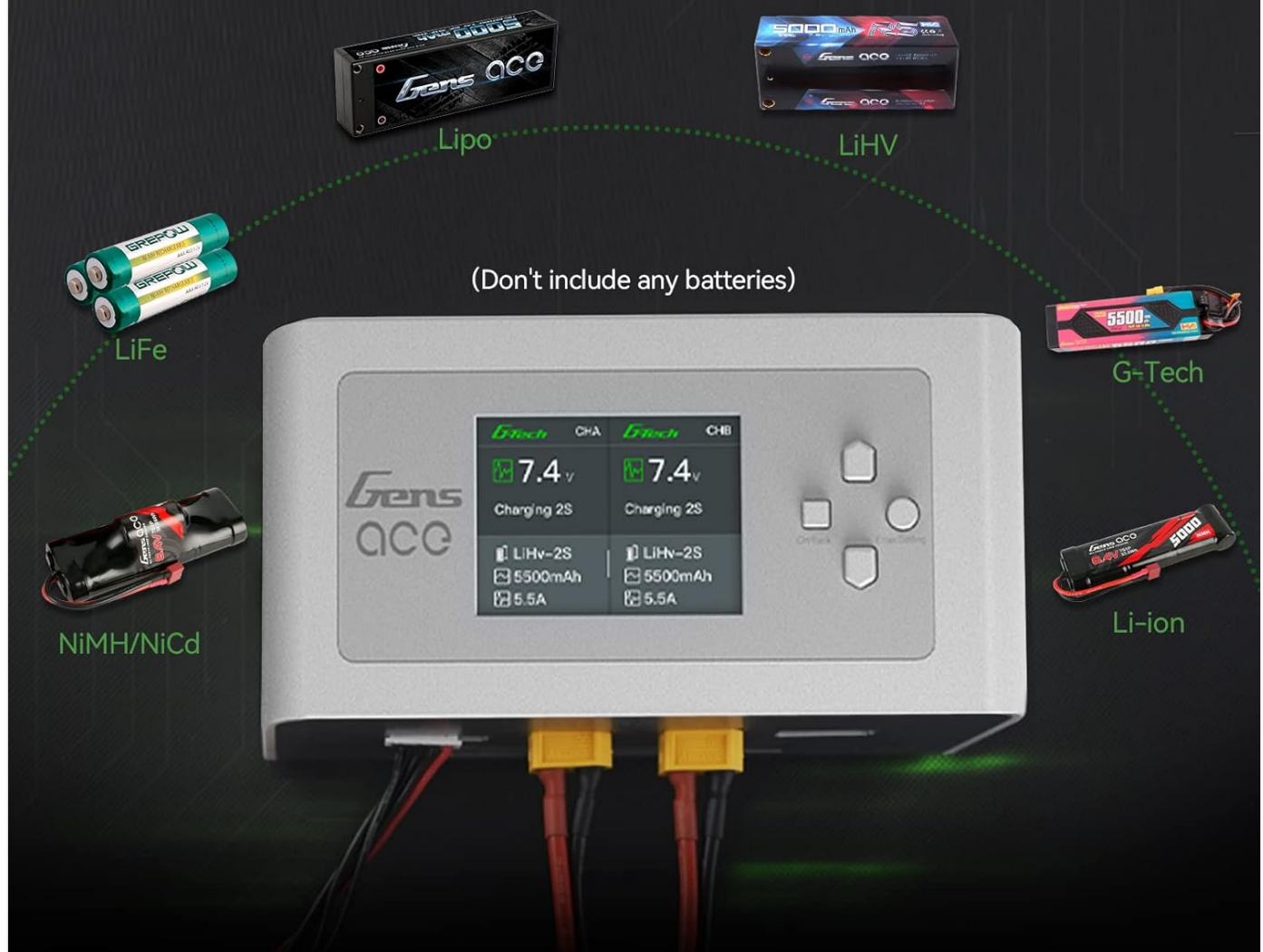


Image: Visual representation of various battery types compatible with the IMARS D300 charger.

Parameter	Value
Input Voltage	AC100-240V / DC7-30V
Output Voltage	DC 1-30V
Max. Charging Power	300W*2 (AC) / 350W*2 (DC)
Max. Discharging Power	15W*2 (Main port 6W*2, Balance port 9W*2)
Charge Current	0.1-16A*2
Discharge Current	0.1-3A*2
Cell Balancing	1-6S
Display Type	2.4 inch IPS LCD Display

Parameter	Value
Supported Battery Chemistries	LiPo/Li-ion/LiHV/LiFe 1-6S; NiMH/Cd 1-16S
Product Dimensions	7.9 x 6.4 x 3.1 inches
Item Weight	1.17 pounds

10. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Gens ace website or contact their customer service directly. Keep your purchase receipt as proof of purchase for warranty claims.

Note: No specific warranty period or direct support contact information was provided in the product data. Please consult the manufacturer's official channels for the most up-to-date information.