

LX-BC36VA USER MANUAL

Professional 42V 3A Intelligent Battery Charger

Compatible with 36V (10S) Lithium-ion Battery Packs

1. Feature Specification

Model LX-BC36VA

Input Voltage 100-240V AC, 50/60Hz (Universal)

Output Voltage 42V DC \pm 0.2V

Charging Current 3.0A Max

Cooling Internal High-Speed Smart Fan

Charging Mode 3-Stage: CC, CV, Automatic Cut-off

2. 6-LAYER SAFETY PROTECTION SUITE

The **LX-BC36VA** features an integrated Microcontroller (MCU) that monitors six layers of safety:

1. **Over-Current (OCP):** Limits output to 3.2A to prevent battery stress.
2. **Over-Voltage (OVP):** Precise 42V limit to prevent cell swelling or fire.
3. **Short-Circuit (SCP):** Instant power-cut with auto-recovery once cleared.
4. **Boot Soft Protection:** Gradual current ramp-up to prevent "inrush" sparks during connection.
5. **Low-Voltage (LVP):** Lockout feature prevents charging batteries discharged below 25V for safety.
6. **Temperature (OTP):** Automatic thermal throttling if internal heat exceeds 65°C.

3. ACTIVE COOLING LOGIC

To ensure reliability at 3A output, this unit uses forced-air cooling:

- **Automatic Activation:** The fan starts as soon as charging begins.
- **Thermal Flush:** The fan may continue to spin briefly after the LED turns Green to dissipate residual heat.
- **Maintenance:** Keep the intake/exhaust vents clear. Do not stick objects into the fan grill.

4. OPERATION & INDICATORS

1. Connect the **DC Plug** to your device (E-bike/Scooter).
2. Connect the **AC Power Cord** to the wall outlet.
3. Observe the **LED Indicator**:
 - ● **SOLID RED**: Charging in progress. (Fan Running)
 - □ **SOLID GREEN**: Charging complete / Standby. (Fan Stopped)
 - ▲□ **FLASHING**: Error detected (Check connections or battery health).

5. CONNECTOR COMPATIBILITY

The LX-BC36VA is supplied with 4 interchangeable/compatible tips:

- **DC Barrel (5.5x2.1mm)**: Standard Budget/Generic Scooters.
- **GX16-3 (Aviation)**: High-performance Scooters (Kaabo, Zero, etc.).
- **RCA (Lotus)**: Specialized/Commercial E-bikes.
- **3-Pin XLR**: Mobility Scooters and specialized battery packs.

6. SAFETY WARNINGS & MAINTENANCE

- **Battery Type**: Use ONLY for **36V Lithium-ion** packs. Do NOT use for Lead-Acid or LiFePO4.
- **Environment**: Indoor use only. Keep away from water, moisture, or direct sunlight.
- **Surface**: Place on a hard, flat surface. Never charge on carpet or wood covered by cloth.
- **Discharge**: Disconnect from AC power when the battery is full.

WARRANTY & REGISTRATION

Warranty Period: 12 Months from date of purchase.

Warranty Record

Model: LX-BC36VA

Date of Purchase: _____

Serial Number: _____

Retailer: _____