



Manuals.plus /

› XCHANG /

› XCHANG Air Conditioner Outdoor Inverter PCB Assembly EBR36932808 / EAX37052502 Instruction Manual

## XCHANG EBR36932808 / EAX37052502

# XCHANG Air Conditioner Outdoor Inverter PCB Assembly Instruction Manual

Model: EBR36932808 / EAX37052502

Brand: XCHANG

## 1. INTRODUCTION

---

This manual provides essential information for the proper installation, operation, and maintenance of the XCHANG Air Conditioner Outdoor Inverter Printed Circuit Board (PCB) Assembly, compatible with LG VRF systems. This PCB, identified by part numbers EBR36932808 and EAX37052502, is a critical component for controlling the outdoor unit's inverter compressor in air conditioning systems. Please read this manual thoroughly before handling or installing the product.

## 2. PRODUCT OVERVIEW AND KEY FEATURES

---

The XCHANG Outdoor Inverter PCB Assembly is designed to manage the complex operations of an air conditioner's outdoor unit. Its advanced features ensure efficient and reliable performance:

- **Compatibility:** Specifically designed to be compatible with LG VRF Inverter systems, including outdoor models such as ARUN076DT2, ARUB154DT2, and ARUB076DT2.
- **Wind Speed Control:** Facilitates various wind speed adjustment options via the control panel, allowing users to select appropriate settings for optimal air circulation and comfort.
- **Timer Functionality:** Includes a timer for automatic on/off scheduling, preventing unnecessary long-term operation and enhancing energy efficiency.
- **Fault Diagnosis:** Equipped with a fault diagnosis system that detects malfunctions and displays corresponding error codes, aiding in quick identification and resolution of issues.
- **Communication Interface:** Features communication interfaces for potential integration with smart home devices or central control systems, enabling remote monitoring and control capabilities.

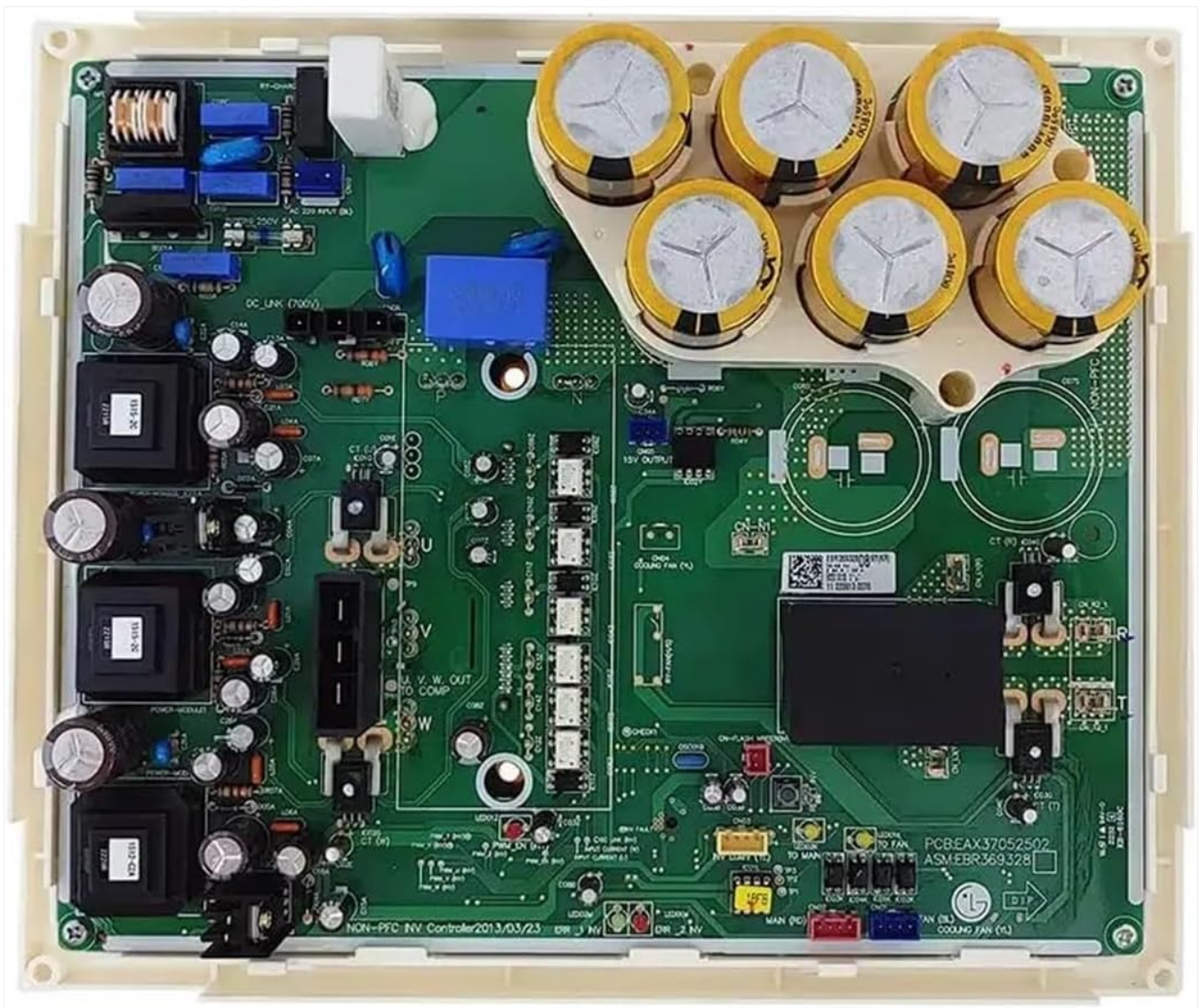


Figure 1: Top view of the XCHANG Outdoor Inverter PCB Assembly (EBR36932808 / EAX37052502). This image shows the layout of various electronic components, including capacitors, resistors, and integrated circuits, mounted on the green circuit board.

### 3. SAFETY INFORMATION

**WARNING:** Installation and servicing of this product should only be performed by qualified and experienced technicians. Improper installation or repair can result in electric shock, fire, or damage to the equipment.

- Always disconnect power to the air conditioning unit before attempting any installation, maintenance, or repair.
- Wear appropriate personal protective equipment (PPE), including insulated gloves and safety glasses.
- Handle the PCB by its edges to avoid touching components, especially integrated circuits, to prevent electrostatic discharge (ESD) damage.
- Ensure all connections are secure and correctly polarized before restoring power.
- Do not expose the PCB to moisture or extreme temperatures.

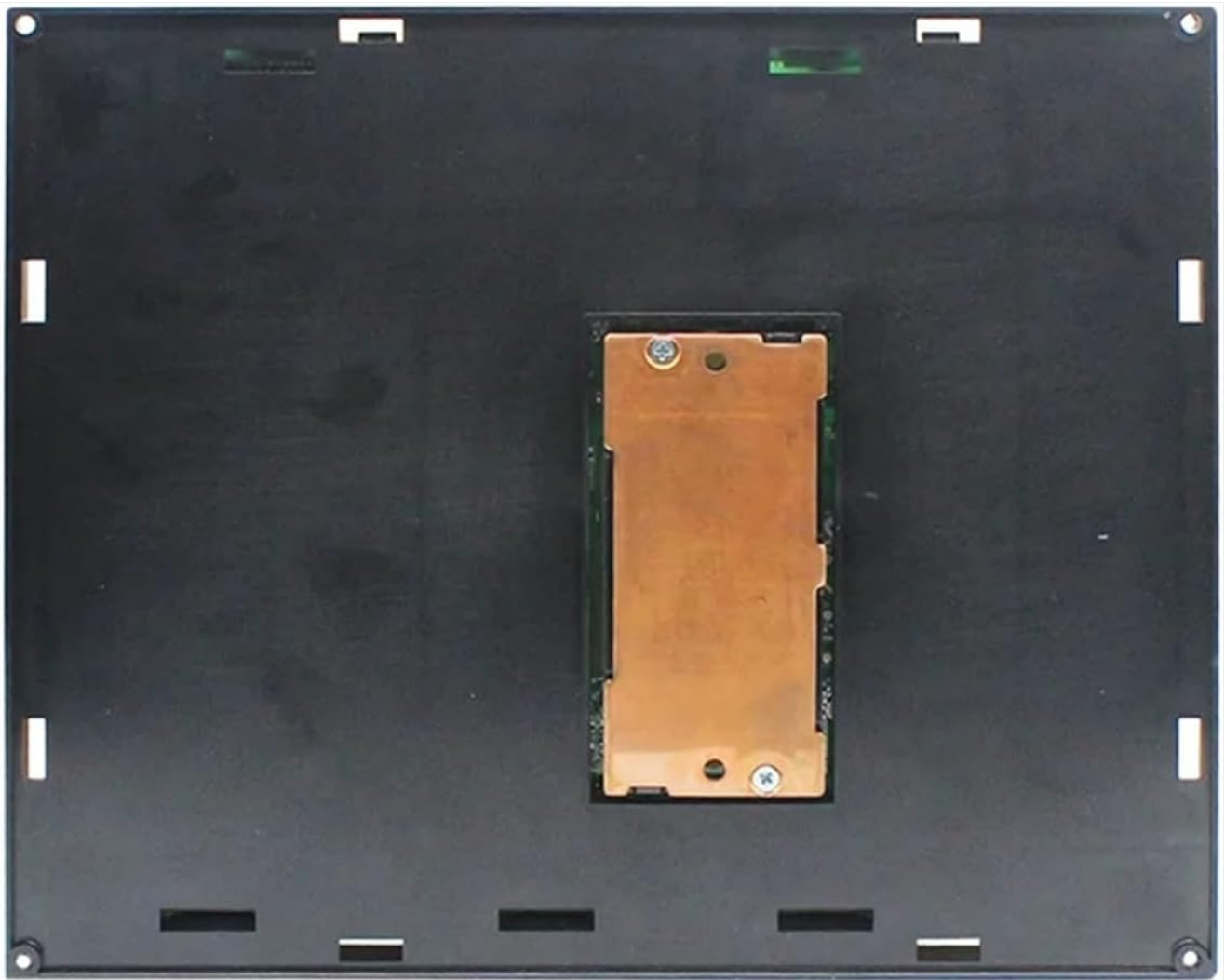
### 4. INSTALLATION GUIDE

This PCB is a replacement part for specific LG VRF outdoor units. Installation requires technical expertise. Refer to the service manual of your specific LG air conditioning unit for detailed, model-specific installation instructions.

1. **Preparation:** Ensure the air conditioning unit is completely powered off and disconnected from the main power supply.
2. **Access:** Carefully open the outdoor unit's casing to access the existing PCB. Document all existing wiring

connections with photographs before disconnection.

3. **Removal:** Disconnect all wiring harnesses and mounting screws from the old PCB. Gently remove the old board.
4. **Installation:** Position the new XCHANG PCB (EBR36932808 / EAX37052502) in the designated slot. Secure it with the appropriate mounting screws.
5. **Wiring:** Reconnect all wiring harnesses to their corresponding ports on the new PCB. Double-check all connections against your documentation to ensure correct polarity and placement.
6. **Inspection:** Before closing the unit, visually inspect all connections and ensure no wires are pinched or loose.
7. **Power Restoration:** Close the unit's casing. Restore power to the air conditioning unit.
8. **Initial Test:** Perform an initial test run of the air conditioning system to verify proper operation.



*Figure 2: Bottom view of the XCHANG Outdoor Inverter PCB Assembly. This image shows the underside of the circuit board, revealing the mounting points and the protective casing for sensitive components.*

## 5. OPERATING PRINCIPLES

---

The XCHANG Outdoor Inverter PCB acts as the central control unit for the outdoor section of your air conditioning system. It manages the inverter compressor's speed to precisely match cooling or heating demands, leading to improved energy efficiency and consistent indoor temperatures.

- **Inverter Control:** Modulates the compressor's operating frequency based on the thermal load, optimizing refrigerant flow and energy consumption.
- **Sensor Integration:** Processes data from various sensors (temperature, pressure) to make real-time adjustments to system operation.
- **Communication:** Communicates with the indoor unit's control board to synchronize operations and respond to user

settings.



Figure 3: Close-up view of the power capacitors and central processing area on the PCB. These components are crucial for power regulation and the inverter's operation.

## 6. MAINTENANCE

---

The XCHANG PCB is designed for long-term reliability and generally requires minimal maintenance. However, periodic checks of the overall air conditioning unit are recommended by a qualified technician.

- **Keep Dry:** Ensure the outdoor unit's enclosure remains sealed to protect the PCB from moisture and environmental elements.
- **Cleanliness:** During routine air conditioner maintenance, ensure the PCB area is free from dust, debris, and insect nests. Use a soft brush or compressed air for cleaning, ensuring power is disconnected.
- **Visual Inspection:** Periodically inspect the board for any signs of overheating (discoloration), corrosion, or damaged components.

## 7. TROUBLESHOOTING

---

The PCB features an integrated fault diagnosis function to assist in identifying system issues. If your air conditioning unit experiences a malfunction, the control board may display specific error codes.

- **Error Code Display:** Consult your LG air conditioner's service manual to interpret any error codes displayed on the unit's control panel or diagnostic LEDs on the PCB itself.
- **Power Issues:** If the unit fails to power on, verify the main power supply and check for tripped circuit breakers.
- **Communication Errors:** If the indoor and outdoor units are not communicating, check the communication wiring for damage or loose connections.
- **Professional Assistance:** For complex issues or persistent malfunctions, contact a qualified HVAC technician. Do not attempt repairs beyond your technical capability.



Figure 4: Close-up view of various connectors and smaller components on the PCB. These connection points are crucial for system communication and power distribution.

## 8. SPECIFICATIONS

---

<b>Model Numbers</b>	EBR36932808, EAX37052502
<b>Brand</b>	XCHANG (Compatible with LG)
<b>Type</b>	Air Conditioner Outdoor Inverter PCB Assembly
<b>Application</b>	Commercial VRF Air Conditioning Systems
<b>Voltage</b>	380V (as per product description)
<b>Compatible LG VRF Models</b>	ARUN076DT2, ARUB154DT2, ARUB076DT2 (and others, contact for confirmation)
<b>Package Dimensions</b>	1.18 x 0.79 x 0.39 inches
<b>Item Weight</b>	1.76 ounces
<b>Assembly Required</b>	No (as a component, but installation into unit is required)
<b>Number of Pieces</b>	1

## 9. WARRANTY AND SUPPORT

---

**Warranty:** Specific warranty details for this XCHANG product may vary. Please refer to your purchase documentation or contact the seller directly for information regarding warranty coverage and terms.

**Technical Support:** For technical assistance, installation queries, or troubleshooting beyond the scope of this manual, please contact your authorized XCHANG dealer or the seller from whom the product was purchased. Always provide the model numbers (EBR36932808, EAX37052502) when seeking support.