

Manuals.plus /

› CHUNGHOP /

› CHUNGHOP SAIA Universal DC/AC Inverter A/C Controller Board Instruction Manual

## CHUNGHOP SAIA

# CHUNGHOP SAIA Universal DC/AC Inverter A/C Controller Board Instruction Manual

Model: SAIA

## INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of the CHUNGHOP SAIA Universal DC/AC Inverter A/C Controller Board. This product is designed to replace the control system in 1-1.5P (12000 BTU) split air conditioning units, offering a universal solution for AC repair and system upgrades. Please read this manual thoroughly before installation and use to ensure proper function and safety.

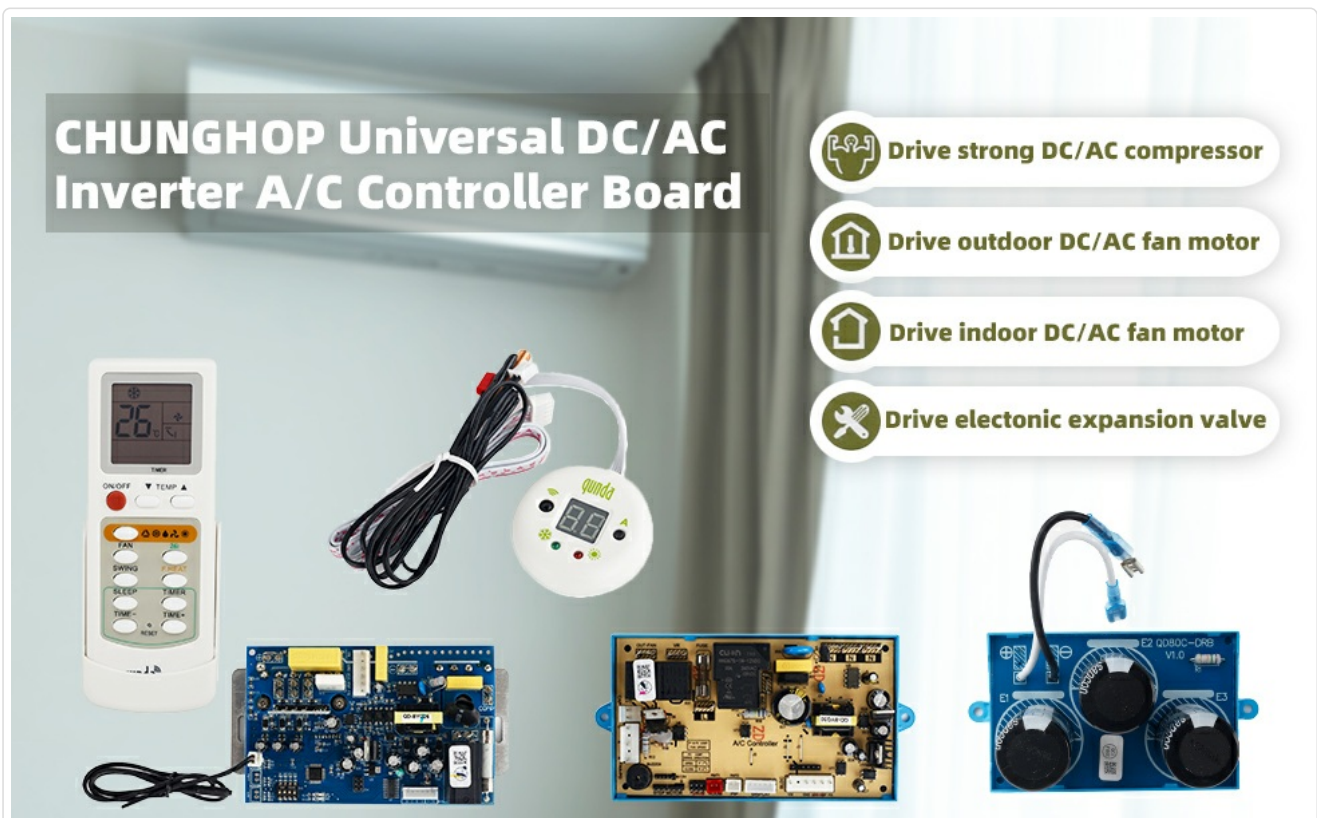


Image: Overview of the CHUNGHOP Universal DC/AC Inverter A/C Controller Board components, including the main board, display, and expansion valve.



highlighting relays, fuses, and various connection points for fan motors and sensors.



Image: The remote control unit for the CHUNGHOP SAIA system, featuring an LCD display and various function buttons.



Image: The small display unit with integrated sensor and connection cables, showing a digital temperature display and indicator lights.

## SETUP AND INSTALLATION

---

Installation of the CHUNGHOP SAIA Universal DC/AC Inverter A/C Controller Board requires technical expertise. It is strongly recommended that installation be performed by a certified HVAC professional.

### General Installation Steps (for qualified technicians):

- 1. Power Disconnection:** Ensure the main power supply to the air conditioning unit is completely disconnected at the circuit breaker. Verify with a voltage tester.
- 2. Access Existing Board:** Open the indoor unit casing to access the existing control board. Document all existing wiring connections with photographs or diagrams before disconnection.
- 3. Remove Old Board:** Carefully disconnect all wires and sensors from the old control board and remove it from the unit.
- 4. Mount New Board:** Install the CHUNGHOP SAIA controller board in the designated location. Ensure it is securely mounted and does not interfere with other components.
- 5. Wiring Connections:**
  - Connect the power supply wires (L, N) to the corresponding terminals on the new board.
  - Connect the indoor fan motor wires (PG/DC fan motor) according to the provided wiring diagram.
  - Connect the outdoor unit communication and power wires.
  - Connect temperature sensors (room temperature, coil temperature) to their respective ports.
  - Connect the display unit cable to the 'DISPLAY' port.
  - Connect the electronic expansion valve (if applicable).
  - Ensure all connections are tight and insulated.
- 6. Initial Power-Up and Testing:**
  - Before closing the unit, restore power and perform initial checks.
  - Verify the display unit powers on and shows correct readings.
  - Test basic functions with the remote control (ON/OFF, Mode, Temperature adjustment).
  - Check fan operation (indoor and outdoor).
  - Monitor for any unusual noises or smells.
- 7. Final Assembly:** Once all functions are verified, carefully close the indoor unit casing.

Refer to the detailed wiring diagram included with your product for specific connection points and configurations.



Image: All components of the CHUNGHOP SAIA system laid out, including the main board, capacitor board, display unit, remote control, and various cables and connectors, illustrating the complete kit for installation.

## OPERATING INSTRUCTIONS

---

The CHUNGHOP SAIA controller board is operated using the provided wireless remote control. Ensure the remote has working batteries (not included).



Image: Detailed view of the CHUNGHOP SAIA remote control, showing button functions and LCD display.

## Remote Control Functions:

- **ON/OFF Button (Red):** Press to turn the air conditioner on or off.
- **TEMP ▲ / ▼ Buttons:** Adjust the desired temperature setting.
- **FAN Button:** Cycles through fan speed settings (Auto, Low, Medium, High).
- **MODE Button:** Selects operating modes (Cool, Heat, Dry, Fan, Auto). The icons above the button typically represent these modes.
- **SWING Button:** Activates or deactivates the automatic louver swing function.
- **SLEEP Button:** Activates the sleep mode, which adjusts temperature and fan speed for comfortable sleep.
- **TIMER Button:** Used to set the ON/OFF timer.
- **TIME- / TIME+ Buttons:** Adjusts the timer settings.
- **F.HEAT Button:** (If available) Activates a fast heating function.
- **RESET Button:** Resets the remote control settings.

Point the remote control directly at the indoor unit's display receiver for optimal communication.

## MAINTENANCE

Regular maintenance ensures the longevity and efficient operation of your air conditioning system with the CHUNGHOP SAIA controller board.

- **Remote Control:** Replace batteries annually or when the display becomes dim. Use AAA batteries.
- **Cleaning:** Keep the remote control and the indoor unit's display panel clean and free of dust. Use a soft, dry cloth. Do not use liquid cleaners directly on electronic components.
- **Professional Inspection:** It is recommended to have your air conditioning system, including the controller board, inspected by a qualified technician annually.

## TROUBLESHOOTING

If you encounter issues with your air conditioning system after installing the CHUNGHOP SAIA controller board, refer to the following common troubleshooting steps. For complex issues, contact a qualified technician.

| Problem                               | Possible Cause  | Solution   |
|---------------------------------------|---|--|
| AC unit does not turn on.             | No power supply; Remote control batteries dead; Incorrect wiring.                                     | Check circuit breaker; Replace remote batteries; Verify all wiring connections are secure and correct (professional required). |
| Remote control not responding.        | Batteries dead or incorrectly inserted; Obstruction between remote and receiver; Remote out of range. | Replace batteries; Ensure clear line of sight to indoor unit; Move closer to the indoor unit.                                  |
| Unit not cooling/heating effectively. | Incorrect mode selected; Temperature setting too high/low; Refrigerant issues; Fan motor malfunction. | Check mode and temperature settings; Consult a technician for refrigerant or motor issues.                                     |
| Display unit shows error code.        | Sensor malfunction; Communication error; Component failure.   | Note the error code and consult the product's specific error code list (if provided) or contact a qualified technician.        |

## SPECIFICATIONS

---

| Feature            | Detail  |
|--------------------|---|
| Brand              | CHUNGHOP  |
| Model Name         | SAIA  |
| Compatibility      | Universal for 1-1.5P (12000 BTU) Split AC Inverter Systems  |
| Cooling Power      | 12000 British Thermal Units   |
| Capacity           | 1 Tons  |
| Wattage            | 3517 watts  |
| Installation Type  | Split System  |
| Form Factor        | Split System  |
| Control Method     | Remote  |
| Special Features   | Remote Controlled, Inverter Compressor Support, DC/AC Fan Motor Support, Electronic Expansion Valve Support |
| Batteries Required | No (for board), Yes (for remote, not included)  |

## WARRANTY AND SUPPORT

---

The CHUNGHOP SAIA Universal DC/AC Inverter A/C Controller Board comes with a limited warranty. Please refer to the warranty card included with your product for specific terms and conditions, including coverage duration and claim procedures.

For technical support, installation assistance, or warranty claims, please contact CHUNGHOP customer service through their official website or the contact information provided in the product packaging. Always provide your product model (SAIA) and purchase details when seeking support.

**Online Resources:** For additional information and support, you may visit the CHUNGHOP Store on Amazon.