

TROUBLESHOOTING

When below list for identification of error code occurs, please turn off air conditioner and disconnect power, and then contact the qualified professionals for service.

Error code	TROUBLESHOOTING
E0	Indoor unit EEPROM parameter error
E1	Indoor / outdoor units communication error
E2	Zero-crossing signal detection error
E3	Indoor fan speed has been out of control
E4	Indoor room temperature sensor T1 open circuit or short circuit
E5	Evaporator coil temperature sensor T2 open circuit or short circuit
EC	Refrigerant leakage detection
F1	Outdoor temperature sensor T4 open circuit or short circuit
F2	Condenser coil temperature sensor T3 open circuit or short circuit
F3	Compressor discharge temperature sensor T5 open circuit or short circuit
F4	Outdoor unit EEPROM parameter error
F5	Outdoor fan speed has been out of control
P0	IPM malfunction or IGBT over-strong current protection
P1	Over voltage or over low voltage protection
P2	High temperature protection of compressor top diagnosis and solution
P4	Inverter compressor drive error

 When below phenomenon occurs, please turn off air conditioner and disconnect power immediately, and then contact the dealer or qualified professionals for service.

- Power cord is overheating or damaged.
- There's abnormal sound during operation.
- Circuit break trips off frequently.
- Air conditioner gives off burning smell.
- Indoor unit is leaking.
- Do not repair or refit the air conditioner by yourself.
- If the air conditioner operates under abnormal conditions, it may cause
- malfunction, electric shock or fire hazard.

1. Diagnosis and Solution

1.1 EEPROM parameter error diagnosis and solution(E0/F4)

Error Code	E0/F4
Malfunction decision conditions	Indoor or outdoor PCB main chip does not receive feedback from EEPROM chip.
Supposed causes	Installation mistakePCB faulty
Troubleshooting:	
Shut off the power supply an turn it on 5 seconds later. Is still displaying the error code Yes If the EEPROM chip is welded on main PCB, replace the main PCB directly. Otherwise, check whether the EEPROM chip plugged in main PCB well? Yes	dit?

EEPROM: a read-only memory whose contents can be erased and reprogrammed using a pulsed voltage. For the location of EEPROM chip, please refer to the below photos.



Note: The two photos above are only for reference, it's may be not same totally with the ones on your side.

1.2 Indoor / outdoor unit's communication diagnosis and solution(E1)

Error Code	E1
Malfunction decision conditions	Indoor unit does not receive the feedback from outdoor unit during 110 seconds and this condition happens four times continuously.
Supposed causes	Wiring mistake Indoor or outdoor PCB faulty



1.3 Zero crossing detection error diagnosis and solution(E2)

Error Code	E2
Malfunction decision conditions	When PCB does not receive zero crossing signal feedback for 4 minutes or the zero crossing signal time interval is abnormal.
Supposed causes	Connection mistakePCB faulty



1.4 Fan speed has been out of control diagnosis and solution(E3)

Error Code	E3
Malfunction decision	When indoor fan speed keeps too low (300RPM) for certain time,
conditions	the unit will stop and the LED will display the failure.
Supposed causes	Wiring mistake
	Fan ass'y faulty
	Fan motor faulty
	PCB faulty



1.5 Open circuit or short circuit of temperature sensor diagnosis and solution(E5)

Error Code	E5
Malfunction decision conditions	If the sampling voltage is lower than 0.06V or higher than 4.94V, the LED will display the failure.
Supposed causes	Wiring mistakeSensor faulty



1.6 Refrigerant Leakage Detection diagnosis and solution(EC)

Error Code	EC
Malfunction decision conditions	Define the evaporator coil temp.T2 of the compressor just starts running as Tcool. In the beginning 5 minutes after the compressor starts up, if T2 <Tcool 28.4°F(-2 °C) does not keep continuous 4 seconds and this situation happens 3 times, the display area will show "EC" and AC will turn off.
Supposed causes	 T2 sensor faulty Indoor PCB faulty System problems, such as leakage or blocking.



1.7 IPM malfunction or IGBT over-strong current protection diagnosis and solution(P0)

Error Code	P0
Malfunction decision	When the voltage signal that IPM send to compressor drive chip
conditions	Is abnormal, the display LED will show "P0" and AC will turn off.
Supposed causes	Wiring mistake; IPM malfunction; Outdoor fan ass'y faulty
	Compressor malfunction; Outdoor PCB faulty



1.8 Over voltage or too low voltage protection diagnosis and solution(P1)

Error Code	P1
Malfunction decision conditions	An abnormal voltage rise or drop is detected by checking the specified voltage detection circuit.
Supposed causes	 Power supply problems. System leakage or block



1.9 High temperature protection of compressor top diagnosis and solution(P2)

Error Code	P2
Malfunction decision	If the sampling voltage is not 5V, the LED will display the failure.
conditions	
Supposed causes	Power supply problems.
	 System leakage or block



1.10 Inverter compressor drive error diagnosis and solution(P4)

Error Code	P4
Malfunction decision conditions	An abnormal inverter compressor drive is detected by a special detection circuit, including communication signal detection, voltage detection, compressor rotation speed signal detection and so on.
Supposed causes	Wiring mistake; IPM malfunction; Outdoor fan ass'y faulty Compressor malfunction; Outdoor PCB faulty



