2. Troubleshooting

2.1 Outdoor Unit Malfunction Self-diagnosis Display

L4: OPERATION/STANDBY indicator

D13	D16	D15	D14	MALFUNCTION DESCRIPTION
O	✕	✕	✕	Normal Operation
☆	O	O	O	STANDBY
☆	✕	☆	O	Module Radiator Temperature Sensor Malfunction
O	O	O	✕	Module Radiator High Temperature frequency lowering
O	✕	✕	O	Module Radiator High Temperature frequency not lowering
☆	✕	✕	O	Current protection
☆	✕	✕	☆	Compressor Exhaust Temperature Sensor Malfunction
☆	✕	☆	☆	Ambient Temperature Sensor Malfunction
☆	☆	✕	☆	Pipe Temperature Sensor Malfunction
☆	O	☆	O	Outdoor voltage too high or too low
☆	✕	O	✕	IPM module fail-safe
☆	✕	O	O	Compressor Top Temperature Fail-safe
☆	O	✕	✕	1 minute's communication fail-safe
☆	O	✕	O	4 times/1 hour amp fail-safe (not available now)
☆	O	O	✕	4 times/1 hour module fail-safe
O	✕	☆	✕	Pre-heating

2.2 Self-diagnosis Function

Outdoor unit malfunction can be detected by the computer chip and displayed in LED window.

There is five LEDs among which LED0 is OPERATION indicator. LED0 illuminates indicating normal operation and flashes at 5HZ indicating abnormal operation.

D8	D9	D10	D11	D12	LED
✕	✕	✕	O	☆	Module protection
✕	✕	O	✕	☆	Compressor top temperature protection
✕	O	✕	✕	☆	Indoor temperature/evaporator temperature sensor short or open
O	✕	✕	✕	☆	Outdoor temperature sensor short or open
O	✕	✕	✕	☆	Outdoor temperature sensor short or open
✕	✕	O	O	☆	Outdoor temperature is too high or too low when cooling/heating
✕	O	✕	O	☆	Too high exhaust temperature
O	✕	✕	O	☆	Indoor heat exchanger high temperature fail-safe
✕	O	O	✕	☆	Voltage too high/too low protection
O	✕	O	✕	☆	Current protection
O	O	✕	✕	☆	Indoor heat exchanger low temperature protection
O	O	✕	O	☆	Outdoor unit communication fail-safe between chips
O	O	O	✕	☆	Communication fail-safe between Indoor Unit and Outdoor Unit
O	O	O	O	☆	Temperature fuse break
✕	✕	✕	✕	O	Normal status(frequency is zero)
O	O	✕	✕	O	Normal status(frequency is not zero)
✕	✕	✕	✕	☆	Outdoor heat exchanger high temperature protection

Remark: ✕ Extinguish; ☆ Flash at 5Hz; O (on)

7. Troubleshooting

7.1 Indoor unit

Failure phenomenon	Operation lamp	Timer lamp
Indoor fan speed has been out of control for over 1 minute	☆	X
Indoor room temp. Sensor or evaporator temp. Sensor is open circuit or short circuit	☆	On
EEPROM error	On	☆
Cross zero signal error	☆	☆

✕ Extinguish

☆ Flash at 5Hz

On Light

7.2 Outdoor unit (on mainboard)

7.2.1 1 drive 2

Failure phenomenon	LED1	LED2	LED3
Stand by	☆	☆	☆
High temp. protect of condenser		☆	☆
Temp. sensor in condenser 1 is open circuit or short circuit	☆		
Temp. sensor in condenser 2 is open circuit or short circuit		☆	

☆ Flash at 2Hz

7.2.2 1 drive 3

Failure phenomenon	LED1	LED2	LED3	Sensor in outdoor unit
High temp. protect of condenser		☆	☆	RT3B or RT3A
RT3A sensor is open circuit or short circuit	☆			RT3A
RT4 sensor is open circuit or short circuit			☆	RT4
RT3B sensor is open circuit or short circuit		☆		RT3B