

Troubleshooting Guide

1. Error indicator(Indoor)

- The function is to self-diagnosis air conditioner and express the troubles if there is any trouble.
- Error mark is displayed on wired-remote controller and LED of outdoor unit control board.
- If more than two troubles occur simultaneously, lower number of error code is first displayed.
- **After error occurs, if error is released, error LED is also released simultaneously.**

* Indoor Error

Error Code	Contents	Case of error	Indoor Status
1	Air sensor (open/short)	Open / Short	Off
2	Inlet pipe sensor	Open / Short	Off
3	Communication(Indoor ↔ Wired R/Control)	Communication Poorly	Off
4	Drain pump/ Float switch	Float switch Open	Off
5	Communication(Indoor ↔ Outdoor)	Communication Poorly	Off
6	Outlet pipe sensor	Open / Short	Off
7	Different mode operation	Different mode operation	Off
9	EEPROM check sum	Check sum mismatching	Off
10	BLDC motor fan lock	Motor not operation	Off
15	Communication(indoor ↔ Fan)	Communication Poorly	Off

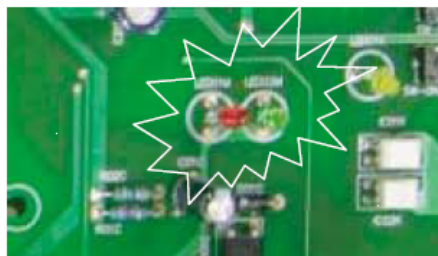
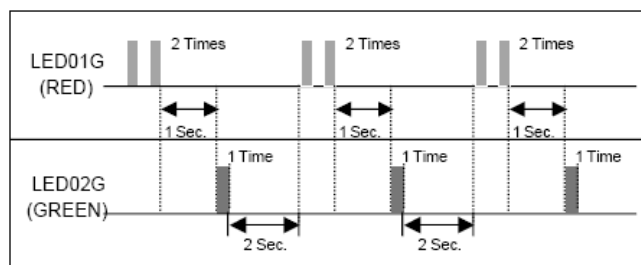
Troubleshooting Guide

2. Error indicator(Fan Board)

When CH10 or CH15 error occurs, check error indication LED on fan board.

* Fan board Error

Ex) Error 21 (IPM fault)



Error Code	Contents	LED01G (Red)	LED02G (Green)	Case of error	Outdoor Status
10	Fan Lock	1time ●		Fan malfunction, Locking	Status
21	IPM Fault (Over current)	2time ●	1time ●	Fan malfunction, Over Current	Off
22	CT 2(Max. Current)	2time ●	2time ●	Current is 6A _R	Off
23	DC Link Low Volt.	2time ●	3time ●	DC Link volt. Is 280V	Off
40	CT Circuit	4time ●		CT Circuit malfunction (20A _R)	Off
52	Communication Error	5time ●	2time ●	Communication Poorly	Off
60	EEPROM Check Sum Error	6time ●		Check sum mismatching	Off

Troubleshooting Guide

3. Control Parts

1) Troubleshooting CH10

• When CH10 error occurs , check error indication LED on FAN BOARD.

Fan board Error LED	Title	Cause of error	Check point
10	BLDC Fan Lock	<ul style="list-style-type: none"> • Mechanical Locking • Miss connection 	<ul style="list-style-type: none"> • The abnormal connection of Hall sensor • The abnormal connection of U,V,W • Mechanical Locking of Fan
21	IPM Fault (Over current)	<ul style="list-style-type: none"> • Mechanical Locking • Miss connection • Instant over current • Over Rated current • Poor insulation of IPM 	<ul style="list-style-type: none"> • Miss connection <ul style="list-style-type: none"> - The abnormal connection of Hall sensor - The abnormal connection of U,V,W • Instant Overcurrent. <ul style="list-style-type: none"> - RMS current 20A\pm - Peak current 24A\pm • Poor insulation of Fan • Overload <ul style="list-style-type: none"> - Mechanical Locking of Fan
22	CT 2 (Max.Current)	<ul style="list-style-type: none"> • Over current (6A\pm) 	<ul style="list-style-type: none"> • Check the overload condition <ul style="list-style-type: none"> - Mechanical Locking of Fan • Check the drop of power source
23	DC Link Low Volt	<ul style="list-style-type: none"> • DC link volt. is 280Vdc\pm 	<ul style="list-style-type: none"> • Check the power source. • Check the components.
40	CT Circuit OPEN/SHORT	<ul style="list-style-type: none"> • Faulty sensor (CT Open/short) • Malfunction of External power 	<ul style="list-style-type: none"> • Malfunction of current detection circuit. (Open / Short) • The voltage of "C01N" Is 4.0Vdc (20A)\pm . • Check the drop of power source .
60	EEPROM Check Sum Error	<ul style="list-style-type: none"> • Check sum error 	<ul style="list-style-type: none"> • Check the connection port. • Check the poor soldering.

2) Troubleshooting CH15

Fan board Error LED	Title	Cause of error	Check point
52	Communication Error	<ul style="list-style-type: none"> • Connector connection error • Faulty PCB • Connection wire break 	<ul style="list-style-type: none"> • Connection of wire • Noise interference