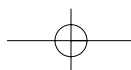
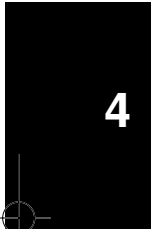


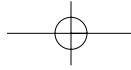
4-1. Meaning of Alarm Messages

ON: ○ Blinking: ☀ OFF: ●

Possible cause of malfunction			Wired remote control display	Wireless remote controller receiver display		
				Operation	Timer	Standby for heating
Serial communication errors Mis-setting	Remote controller is detecting error signal from indoor unit	Error in receiving serial communication signal (Signal from main indoor unit in case of group control) Outdoor system address, indoor system address, or indoor unit individual/main/sub setting is not set (Automatic address setting is not completed) Auto address is not completed	E01			
		Error in transmitting serial communication signal	E02	☀	●	●
	Indoor unit is detecting error signal from remote controller (and system controller)		E03			
	Improper setting of indoor unit or remote controller	Indoor unit address setting is duplicated	E08			
		Remote controller setting is duplicated	E09			
	Indoor unit is detecting error signaled from signal option	Error in transmitting serial communications signal	E10			
		Error in receiving serial communications signal	E11			
	Setting error	Main unit duplication in simultaneous-operation multi control (detected by outdoor unit)	E14			
	Indoor unit is detecting error signaled from outdoor unit	Error in receiving serial communications signal	E04			
		Error in transmitting serial communications signal	E05			
	Outdoor unit is detecting error signaled from indoor unit	Error in receiving serial communications signal (including unit quantity verification failure)	E06	●	●	☀
		Error in transmitting serial communications signal	E07			
	Automatic address setting failed	Indoor unit capacity too low	E15			
		Indoor unit capacity too high	E16			
		No indoor units connected	E20			
An indoor unit detected trouble in the signal from another indoor unit	Error in transmitting serial communications signal	E17	☀	●	●	
	Error in receiving serial communications signal	E18				
Communications trouble between units	Communications failure with MDC	E31	●	●	☀	
Mis-setting	Setting error	Indoor unit group settings error	L01			
		Indoor/outdoor unit type mismatch	L02	☀	●	☀
		Main unit duplication in group control (detected by indoor unit)	L03		☀	☀
		Outdoor unit address duplication (system address)	L04	☀	○	☀
		Group wiring connected for independent indoor unit	L07		☀	☀
		Address not set or group not set	L08	☀	●	☀
		Indoor unit capacity not set	L09		☀	☀
		Outdoor unit capacity not set or setting error	L10	☀	○	☀
		Miswiring in group control wiring	L11		☀	☀
Indoor unit type setting error (capacity)	L13					

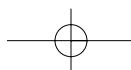
Continued

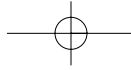




ON: ○ Blinking: ☀ OFF: ●

Possible cause of malfunction			Wired remote control display	Wireless remote controller receiver display			
				Operation	Timer	Standby for heating	
Ceiling panel connection failure			P09				
Activation of protective device	Indoor protection	Fan protective thermostat	P01	●	☀	☀	
		Float switch	P10	┌ Alternately ┐			
	Outdoor protection	Discharge temperature trouble	P03				
		Open phase detected, AC power trouble	P05				
		No gas	P15				
		4-way valve locked	P19				
		High cooling load	P20	☀	●	☀	
		Outdoor fan trouble	P22	┌ Alternately ┐			
		Inverter compressor trouble (HIC PCB)	P26				
		Inverter compressor trouble (MDC)	P29				
		Simultaneous-operation multi control trouble	P31				
		Compressor current failure (overload)	H01	●	☀	●	
Thermistor fault	Thermistor open circuit • Short circuit (indoor)	Indoor heat exchanger temperature sensor (E1)	F01				
		Indoor heat exchanger temperature sensor (E2)	F02	☀	☀	●	
		Indoor temperature sensor	F10	┌ Alter. ┐			
	Thermistor open circuit • Short circuit (outdoor)	Discharge temperature (TD)	F04				
		Outdoor heat exchanger temperature (C1)	F06				
		Outdoor heat exchanger temperature (C2)	F07	☀	☀	○	
		Outdoor air temperature (TO)	F08	┌ Alter. ┐			
		Intake temperature (TS)	F12				
		Indoor EEPROM error	F29	☀	☀	●	
		Outdoor EEPROM error	F31	☀	☀	○	
						┌ Simul. ┐	
						┌ Simul. ┐	





4-2. LED Indicator Messages on Outdoor Control PCB

	LED 1	LED 2	Remarks
Power ON sequence 1. No communication from indoor units in system 2. Communication received from 1 or more indoor units in system 3. Regular communication OK (Capacity and unit quantity match)	○ ● ●	○ ○ ●	If it is not possible to advance to 3, repeats 1 → 2. At 3, changes to normal control.
Normal operation EEPROM error (F31) Pre-trip (insufficient gas) Pre-trip (P20) Pre-trip (other)	○ ☀ (0.25/0.75) ☀ (0.75/0.25) ☀	☀ ● ● ●	Displayed during automatic address setting 1 and initial communication. After these are completed, alarm F31 is displayed. P03
Alarm	Alternate blinking during alarms LED 1 blinks M times, then LED 2 blinks N times. The cycle then repeats. M = 2: P alarm 3: H alarm 4: E alarm 5: F alarm 6: L alarm N = Alarm No. * Refer to "1. Examples of alarm display" below.		
Insufficient gas indicator	☀	●	
Refrigerant recovery mode	☀	●	
Automatic address setting Automatic address setting in progress Automatic address setting alarm (E15) Automatic address setting alarm (E20) Automatic address setting alarm (Other than E15 and E20)	☀ ☀ (0.25/0.75) ☀ (0.75/0.25) ☀	☀ ☀ (0.25/0.75) ☀ (0.75/0.25) ☀	Blinking alternately Blinking simultaneously Blinking simultaneously Blinking simultaneously

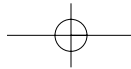
- : ON
- ☀ : **Blinking (0.25/0.75)** indicates that the lamp illuminates for 0.25 seconds, and then is OFF for 0.75 seconds. Unless otherwise indicated, the blinking is (0.5/0.5).
- : OFF

Examples of alarm display (other than E15, E16, and E20)

Alarm / Display	LED 1 ← Alternately → LED 2
P03	☀ (Blinks 2 times) ☀ (Blinks 3 times)
P04	☀ (") ☀ (Blinks 4 times)
P05	☀ (") ☀ (Blinks 5 times)
P31	☀ (") ☀ (Blinks 31 times)
H01	☀ (Blinks 3 times) ☀ (Blinks 1 times)
H02	☀ (") ☀ (Blinks 2 times)
H03	☀ (") ☀ (Blinks 3 times)
•	•
E04	☀ (Blinks 4 times) ☀ (Blinks 4 times)
•	•
F07	☀ (Blinks 5 times) ☀ (Blinks 7 times)
•	3
L13	☀ (Blinks 6 times) ☀ (Blinks 13 times)
•	•

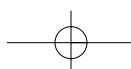
Note:
This table shows example alarms. Other alarms may also be displayed.

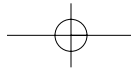




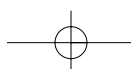
4-3. Symptoms and Parts to Inspect

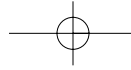
Remote controller alarm display	Alarm contents	Judgment condition	Clear condition	Judgment and correction
P03	Abnormal discharge temperature • Discharge temp. detected at or above the specified value.	Stops when temp. exceeds 111°C.	Recovery at restart	1. Check refrigerant cycle (gas leak). 2. Electronic control valve trouble 3. Check tubing sensor (TD).
P05	Missing phase detected. (CT disconnected or AC power trouble)	Current value sent from MDC on outdoor unit control PCB is low. No AC power input for 3 minutes or longer: pre-trip - 5	Recovery at restart	1. Check R/S/T power. 2. Check inverter control PCB. 3. Check outdoor unit control PCB.
P15	Insufficient gas level detected.	The following conditions continue for 1 minute. • Discharge temp. is 95°C or higher. • Electronic control valve is at step 480. • Current value from MDC is 1.7 A (3-phase) or 1.0 A (1-phase) or less.	Recovery at restart	Check refrigerant cycle (gas leak).
P19	4-way valve locked • Judgment occurs after compressor has been ON for 5 minutes.	Indoor heat exchanger temp. drops although compressors are ON in heating mode: [min(E1, E2)] ≤ 10°C. Indoor heat exchanger temp. rises although compressors are ON in cooling mode: E2 ≥ 40°C	Recovery at restart	1. Check 4-way valve. 2. Check 4-way valve wiring. 3. Check outdoor unit control PCB.
P20	High-pressure protection trouble detected from cooling high-load C2 temp.	Temp. exceeds 64°C and subsequently does not drop to 55°C or below. • Continuously for 30 seconds → Alarm is output when this occurs once. • Continuously for less than 30 seconds → Inverter stops.	Recovery at restart	1. Refrigerant cycle overload operation 2. Outdoor coil temperature sensor C2
P22	Outdoor unit fan motor trouble • Inverter protection circuit was activated, or lock was detected, at outdoor unit fan motor.	Inverter stops after alarm is detected	Recovery at restart	1. Position detection trouble 2. Overcurrent protection circuit at outdoor unit fan motor was activated. • Check outdoor unit control PCB. • Refer to outdoor unit fan judgment methods.
P26	Inverter protection circuit was activated, or G-Tr short-circuit (short time: 0.8 s or less) in inverter control	Inverter stops after alarm is detected. Alarm is output when inverter stops (pre-trip) consecutively 4 times.	Recovery at restart	1. Stops immediately when restarted. • Layer short in the compressor 2. Check inverter control PCB. • Wiring trouble





Remote controller alarm display	Alarm contents	Judgment condition	Clear condition	Judgment and correction
P29	Current detection circuit trouble • AC current value is high even when compressor is stopped.	Inverter stops after alarm is detected. Alarm is output when inverter stops (pre-trip) consecutively 4 times.	Recovery at restart	1. Stops immediately when restarted. • Layer short in the compressor 2. Check inverter control PCB. • Wiring trouble
	Compressor motor output trouble, Inverter compressor trouble, MDC trouble	Inverter stops after alarm is detected.	Recovery at restart	1. Refrigerant cycle trouble, overload operation 2. Loose screws and contact failure between HIC control PCB and radiating plate 3. Cooling failure of radiating plate 4. Check outdoor unit PCB wiring.
	Compressor does not run. (Overcurrent protection circuit activates after a certain period of time following compressor start.)	Inverter stops after alarm is detected.	Recovery at restart	1. Compressor trouble (locked, etc.) • Replace the compressor. 2. Compressor wiring trouble (missing phase)
	Compressor breakdown • Starts to operate but operating frequency drops and compressor stops.	Inverter stops after alarm is detected.	Recovery at restart	1. Check power voltage: AC 200 V \pm 20 V. 2. Refrigerant cycle overload operation 3. Check AC current detection circuit.
	Inverter control PCB position detection circuit trouble	Inverter stops after alarm is detected.	Recovery at restart	Position detection circuit is activated even when the compressor 3P connector is disconnected and the compressor operated. • Replace the inverter control PCB.
F04	Disconnection, open circuit, or short circuit in discharge temp. sensor (TD)	Sensor detection trouble (90°C or higher when 15 minutes have elapsed after compressor stopped). (Open circuit)	Automatic recovery	1. Check discharge temp. sensor (TD). 2. Check outdoor unit control PCB.
F06	Disconnection, open circuit, or short circuit in outdoor heat exchanger temp. sensor (C1)	Open circuit or short circuit	Automatic recovery	1. Check outdoor heat exchanger temp. sensor (C1). 2. Check outdoor unit control PCB.
F07	Disconnection, open circuit, or short circuit in outdoor heat exchanger temp. sensor (C2)	Open circuit or short circuit	Automatic recovery	1. Check outdoor heat exchanger temp. sensor (C2). 2. Check outdoor unit control PCB.
F08	Disconnection, open circuit, or short circuit in outdoor air temp. sensor (TO)	Open circuit or short circuit	Automatic recovery	1. Check outdoor air temp. sensor (TO). 2. Check outdoor unit control PCB.
F12	Disconnection, open circuit, or short circuit in intake temp. sensor (TS)	Open circuit or short circuit	Automatic recovery	1. Check intake temp. sensor (TS). 2. Check outdoor unit control PCB.





Remote controller alarm display	Alarm contents	Judgment condition	Clear condition	Judgment and correction
F31	EEPROM trouble	Reading/writing failure	Recovery at power reset	1. Check EEPROM (IC901). 2. Check outdoor unit control PCB.
L02	Mismatch of indoor and outdoor unit types (Espacio, Multi, GHP)	Indoor unit judges that type does not match outdoor unit type.	Recovery at power reset	1. Check indoor unit EEPROM. 2. Check indoor unit control PCB.
L04	Settings failure	Duplicated outdoor unit address (system address)	Automatic recovery	1. Check outdoor unit system address. 2. Check inter-unit control wiring.
L07	Settings failure	Group control wiring is connected to an independent-control indoor	Recovery at power reset	1. Check inter-unit control wiring. 2. Check indoor unit EEPROM.
L10	Settings failure	Outdoor unit capacity not set.	Recovery at power reset	Check outdoor unit EEPROM.
L13	Indoor-outdoor unit types	Outdoor unit judges that type does not match indoor unit type.	Recovery at power reset	1. Check indoor unit EEPROM. 2. Check outdoor unit control PCB.
E06	Outdoor unit detected abnormal signal from indoor unit.	Serial signal receiving failure (including failure to verify No. of units)	Automatic recovery	1. Check inter-unit control wiring. 2. Check outdoor unit
E07	Outdoor unit sending failure to indoor unit	Serial signal sending failure	Automatic recovery	1. Check inter-unit control wiring. 2. Check outdoor unit control PCB.
E14	Settings failure	Duplicated master unit in simultaneous-operation multi control (Detected by outdoor unit)	Recovery at power reset	1. Check inter-unit control wiring. 2. Check indoor unit combination.
E15	Automatic address setting failure	Indoor unit capacity too low.	Recovery at power reset	1. Check inter-unit control wiring. 2. Check outdoor unit control PCB.
E16	Automatic address setting failure	Indoor unit capacity too high.	Recovery at power reset	1. Check inter-unit control wiring. 2. Check outdoor unit control PCB.
E20	Automatic address setting failure	Outdoor unit cannot receive any serial signals from indoor units.	Recovery at power reset	1. Check inter-unit control wiring. 2. Check outdoor unit control PCB.
E31	Communications trouble within unit	No communication possible with MDC for 3 minutes or longer.	Automatic recovery	Check outdoor unit control PCB.
H01	Overcurrent	Inverter stops after alarm is detected.	Recovery at restart	1. Refrigerant cycle trouble, overload operation 2. Loose screws between HIC control PCB and radiating plate 3. Cooling failure of radiating plate 4. Check outdoor unit PCB wiring.

