

# Malfunction Code

\* Refer the service manual of each model for more detail Trouble-Shooting.



## Simple Self-Diagnosis by malfunction code

	0	1	2	3	4	5	6	7	8	9	A	H	C	J	E	F			
Indoor Unit	A	External protection devices activated	Indoor unit PCB assembly failure	Interlock error for fan	Drain level system error	Temp. of heat exchanger(1) error	Temp. of heat exchanger(2) error	Fan motor locked, overload, over current	Swing flap motor error	Over current of AC input	Electronic expansion valve drive error	Heater overheat	*Dust collector error *No-maintenance filter error		Capacity setting error (Indoor)	Shortage of water supply	Malfunctions of a humidifier system (water leaking)		
	C	Malfunctions in a sensor system			Sensor system of drain water error	Heat exchanger (1) (Liquid pipe) thermistor system error	Heat exchanger (2) (Gas pipe) thermistor system error	Sensor system error of fan motor locked, overload	Sensor system of swing flap motor error	Sensor system of over-current of AC input	Suction air thermistor error	Discharge air thermistor system error	Contamination sensor error	Humidity sensor error	Remote control thermistor error	Radiation sensor error	High pressure switch error		
Outdoor Unit	E	Protection devices activated	Outdoor unit PCB assembly failure		High pressure switch (HPS) activated	Low pressure switch (LPS) activated	Overload of inverter compressor motor	Over current of STD compressor motor	Overload of fan motor	Over current of AC input	Electronic expansion valve drive error	Four way valve error	Pump motor over current	Water temperature abnormal	(Site installed) Protection device activated	Malfunctions in a drain water	Ice thermal storage unit error		
	H	Malfunctions in a sensor system	Air temperature thermistor error	Sensor system of power supply error	High Pressure switch is faulty	Low pressure switch is faulty	Compressor motor overload sensor is abnormal	Compressor motor over current sensor is abnormal	Overload or over current sensor of fan motor is abnormal	Sensor system of over-current of AC input	Outdoor air thermistor system error	Discharge air thermistor system error	Pump motor sensor system of over current is abnormal	Water temperature sensor system error		Sensor system of drain water is abnormal	Ice thermal storage unit error (alarm)		
	F	No.1 and No.2 common protection device operates.	No.1 protection device operates.	No.2 protection device operates.	Discharge pipe temperature is abnormal				Temp. of heat exchanger(1) abnormal					Discharge pressure abnormal		Oil temperature is abnormally high	Suction pressure abnormal	Oil pressure abnormal	Oil level abnormal
	J	Sensor system error of refrigerant temperature	Pressure sensor error	Current sensor error	Discharge pipe thermistor system error	Low pressure equivalent saturated temp. sensor system error	Suction pipe thermistor system error	Heat exchanger(1) thermistor system error	Heat exchanger(2) thermistor system error	Oil equalizer pipe or liquid pipe thermistor system error	Double tube heat exchanger outlet or gas pipe thermistor system error	Discharge pipe pressure sensor error	Oil temperature sensor error	Suction pipe pressure sensor error		Oil pressure sensor error	Oil level sensor error		
	L	Inverter system error			Temperature rise in a switch box	Radiation fin (power transistor) temperature is too high	Compressor motor grounded or short circuit, inverter PCB fault	Compressor motor grounded or short circuit	Over current of all inputs	Compressor over current, compressor motor wire cut	Stall prevention error (start-up error) Compressor locked etc.			Communication error between inverter and outdoor control unit					
	P	Shortage of refrigerant (thermal storage unit)	Power voltage imbalance, open phase		Sensor error of temperature rise in a switch box	Radiation fin temperature sensor error	DC current sensor system error	AC or DC output current sensor error	Total input current sensor error							Capacity setting error (Outdoor)			
	U	Low pressure drop due to insufficient refrigerant or electronic expansion valve error, etc.	Reverse phase, Open phase	Power voltage failure Instantaneous power failure	Failure to carry out check operation, transmission error	Communication error between indoor unit and outdoor unit, communication error between outdoor unit and BS unit	*Communication error between remote control and indoor unit *Remote control board failure or setting error for remote control	Communication error between indoor units	*Communication error between outdoor units *Communication error between outdoor unit and ice thermal storage unit	*Communication error between other indoor unit and outdoor unit in the same system *Combination error of other indoor unit/remote control in the same system (model)	*Communication error between other indoor unit and indoor/outdoor unit	Combination error of indoor/BS/outdoor unit (model, quantity etc.), setting error of spare parts PCB when replaced	Improper connection of transmission wiring between outdoor and outdoor unit outside control adaptor	Centralized address duplicated	Attached equipment transmission error	Communication error between indoor unit and centralized control device	Failure to carry out check operation Indoor-outdoor, outdoor-outdoor communication error etc.		
	M		Centralized remote controller PCB error								Communication error between centralized remote control devices	Centralized remote control devices inappropriate combination		Centralized remote controller address setting error					
Others	3		The humidity sensor of return air sensor	Outdoor air humidity sensor error	Supply air temp. sensor error	Return air temp. sensor error	Outdoor air temp. sensor error	Remote controller temp. sensor error					Water leakage sensor 1 error	Water leakage sensor 2 error	Dew condensation sensor error				
	4	Humidifying valve error	Chilled water valve error	Hot water error	Heat exchanger of chilled water error	Heat exchanger of hot water error													
	5		Fan motor of supply air over current or overload	Fan motor of return air over current Fan motor of return air overload	Inverter system error (supply air side)	Inverter system error (return air side)													
	6	All system error	PC board error	Ozone density abnormal	Contamination sensor error	Indoor air thermistor system error	Outdoor air thermistor system error				HVU error (Ventiair dustcollecting unit)		Damper system error	Door switch error	Replace the humidity element	Replace the high efficiency filter	Replace the deodorization catalyst	Simplified remote controller error	

Error Code	Description of Problem	Trouble Part				Error Contents	Objects		
		Except PCB	Printed Circuit Board	Indoor Unit	Remote Controller		Room Air Conditioner	SkyAir	VRV
A1	Micro-computer in PCB is not working	—	—	○	—	PCB assembly fault or external factor (noise etc.)	—	○	○
A3	Drain level is too high	◎	—	—	—	Clogging of dirt in drain pipe, insufficient drain pipe slope, faulty drain pump	○	○	○
A5	Heating; Overheating of indoor unit heat exchanger, Cooling; Freeze up of indoor unit heat exchanger	◎	—	—	—	Dirty air filter, Short circuit or Sensor trouble of heat exchanger	○	—	—
A6	Fan motor error	◎	—	△	—	Fan motor lock, overload or faulty connection	○	○	○
A7	Swing flap motor error	◎	—	△	—	Faulty swing flap motor, faulty connection	—	○	○
AH	Dust collector error	◎	—	—	—	Faulty dust collector or dirty element	—	○	○
AJ	Capacity setting error	—	—	○	—	Faulty capacity setting or address setting error	—	○	○
C3	The resistance of the water level sensor is abnormal.	◎	—	△	—	Faulty water level sensor, cable disconnection or short circuit of sensor	—	○	○
C4	The resistance of the indoor unit heat exchanger thermistor is abnormal.	◎	—	△	—	Faulty heat exchanger thermistor, cable disconnection or short circuit of thermistor	○	○	○
C9	The resistance of the indoor unit suction air thermistor is abnormal.	◎	—	△	—	Faulty suction air thermistor, cable disconnection or short circuit of thermistor	○	○	○
CE	The resistance of the indoor unit radiation thermistor is abnormal.	◎	—	△	—	Faulty radiation thermistor, cable disconnection or short circuit of thermistor	—	○	○
CJ	The resistance of the remote controller thermistor is abnormal.	—	—	—	○	Faulty remote controller thermistor (built in remote controller)	—	○	○
E0	Outdoor unit protection devices activated	◎	—	—	—	Clogging of refrigerant piping system, insufficient refrigerant or compressor/fan motor fault	—	○	○
E3	High pressure is too high (HPS activation)	◎	—	—	—	Condenser air shot circuit, overload or dirty heat exchanger	○	○	○
E4	Low pressure is too low (LPS activation)	◎	—	—	—	Clogging of refrigerant piping system, insufficient refrigerant or faulty LPS switch	—	○	○
E5	Overheating of compressor (OL activation)	◎	—	—	—	Clogging of refrigerant piping system, insufficient refrigerant, faulty OL or connection	○	—	—
F3	Outdoor unit discharge temperature is too high	◎	—	—	—	Clogging of refrigerant piping system, insufficient refrigerant or faulty discharge temp. thermistor	—	○	○
H9	The resistance of the outdoor air temp. thermistor is abnormal.	◎	△	—	—	Faulty outdoor air thermistor, cable disconnection or short circuit of thermistor	○	○	○
J5	The resistance of the suction pipe temp. thermistor is abnormal.	◎	△	—	—	Faulty suction pipe thermistor, cable disconnection or short circuit of thermistor	○	○	○
J6	The resistance of the outdoor heat exchanger thermistor is abnormal.	◎	△	—	—	Faulty outdoor heat exchanger thermistor, cable disconnection or short circuit of thermistor	○	○	○
P1	Power voltage imbalance, open phase	◎	△	—	—	3 phase power voltage imbalance or open phase	—	○	○
U0	Suction pipe temperature is too high	◎	—	—	—	Clogging of refrigerant piping system, insufficient refrigerant or expansion valve fault etc.	○	○	○
U1	Reverse phase	◎	—	—	—	Reverse phase of 3 phase power supply	○	○	○
U2	Open phase or power voltage imbalance	◎	—	—	—	Open phase or voltage imbalance of power supply, instantaneous power failure, DC voltage to fan motor too low	○	○	○
U4	Communication error between indoor and outdoor units or outdoor and BS units	◎	○	○	—	Interconnection wire mistake, external factor (noise etc.), indoor or outdoor PCB fault	○	○	○
U5	Communication error between indoor unit and remote controller	◎	—	○	○	Interconnection wire mistake, external factor (noise etc.), indoor or remote controller PCB fault	○	○	○
U9	Combination error of indoor/BS/outdoor unit (model, quantity etc.), Setting error of spare parts PCB when replaced	◎	—	—	—	Incorrect combination of indoor/BS/outdoor unit (model, quantity etc.), Setting error of spare parts PCB when replaced	○	○	○

◎ : The possibility of failure is large. ○ : The possibility of failure. △ : In most cases, it is normal — : There is not possibility of failure.

# SkyAir or VRV

## Self-Diagnosis by Wired Remote Controller

### Explanation

The following modes can be selected by using the [Inspection/Test] button on the remote control.



Be sure to turn off power switch before connect or disconnect connector, or parts damage may be occurred.

Indoor unit settings can be made

- Filter sign time
- Air flow direction
- Others

**Local setting mode**

Depress [Inspection/Test] button for more than 4 seconds.

**Service mode**

Service data can be obtained.

- Malfunction code history
- Temperature data of various sections
- Service settings can be made.
- Forced fan ON
- Air flow direction/volume setting

Depress [Inspection/Test] button for more than 4 seconds.

**Normal mode**

Press [Inspection/Test] button once.

Press [Inspection/Test] button once.

**Inspection mode**

Following codes can be checked.

- Malfunction codes
- Indoor model code
- Outdoor model code

After 10 seconds

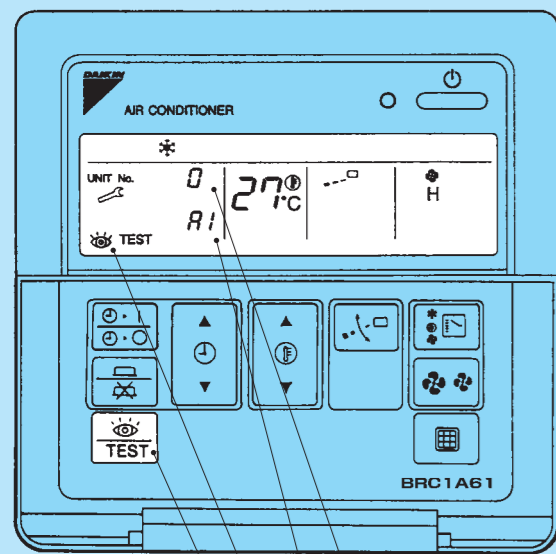
**Test operation mode**

Thermostat is forcibly turned on.

Press [Inspection/Test] button once. Or after 30 minutes

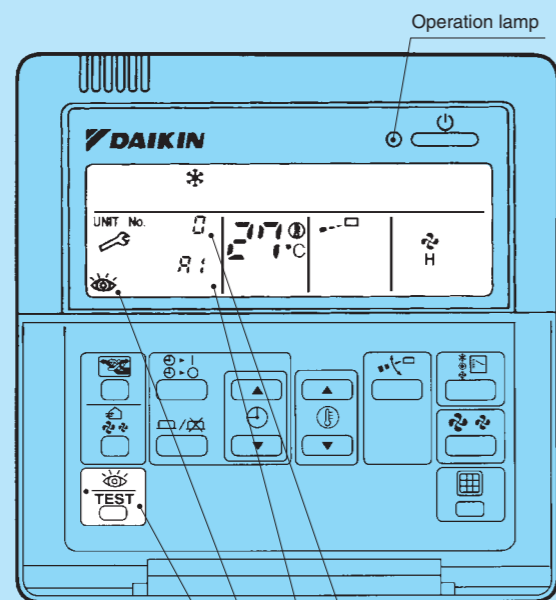
Press [Inspection/Test] button once.

If operation stops due to malfunction, the remote controller's operation LED blinks, and malfunction code is displayed. (Even if stop operation is carried out, malfunction contents are displayed when the inspection mode is entered.) The malfunction code enables you to tell what kind of malfunction caused operation to stop.



Inspection/Test button  
Inspection display  
Malfunction code  
Indoor unit No. in which a malfunction occurs

Remote controller for VRV



Inspection/Test button  
Inspection display  
Malfunction code  
Indoor unit No. in which a malfunction occurs

Remote controller for SkyAir

## Self-Diagnosis by Wireless Remote Controller

If equipment stops due to a malfunction, the operation indicating LED on the light reception section flashes. The malfunction code can be determined by following the procedure described below. (The malfunction code is displayed when an operation error has occurred. In normal condition, the malfunction code of the last problem is displayed.)

### Procedure

#### 1. Press the INSPECTION/TEST button to select "Inspection."

The equipment enters the inspection mode. The "Unit" indication lights and the Unit No. display shows flashing "0" indication.

#### 2. Set the Unit No.

Press the UP or DOWN button and change the Unit No. display until the buzzer (\*1) is generated from the indoor unit.

\*1 Number of beeps  
3 short beeps : Conduct all of the following operations.  
1 short beep : Conduct steps 3 and 4.

The continuous buzzer indicates that the malfunction code is confirmed.  
Continuous beep : No abnormality.

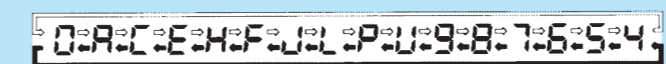
#### 3. Press the MODE selector button.

The left "0" (upper digit) indication of the malfunction code flashes.

#### 4. Malfunction code upper digit diagnosis

Press the UP or DOWN button and change the malfunction code upper digit until the malfunction code matching buzzer (\*2) is generated.

The upper digit of the code changes as shown below when the UP and DOWN buttons are pressed.



⇨ "UP" button ⇩ "DOWN" button

\*2 Number of beeps  
Continuous beep : Both upper and lower digits matched. (Malfunction code confirmed)  
2 short beeps : Upper digit matched.  
1 short beep : Lower digit matched.

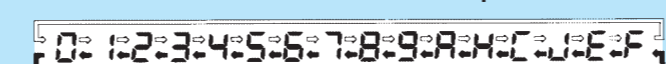
#### 5. Press the MODE selector button.

The right "0" (lower digit) indication of the malfunction code flashes.

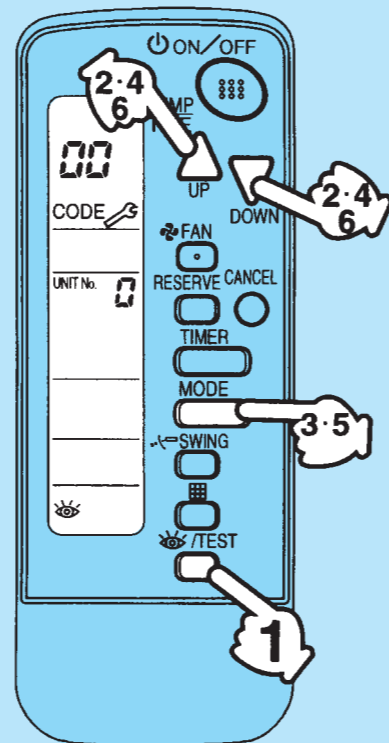
#### 6. Malfunction code lower digit diagnosis

Press the UP or DOWN button and change the malfunction code lower digit until the continuous malfunction code matching buzzer (\*2) is generated.

The lower digit of the code changes as shown below when the UP and DOWN buttons are pressed.



⇨ "UP" button ⇩ "DOWN" button



Normal status  
Enters inspection mode from normal status when the INSPECTION/TEST button is pressed.

1 Press INSPECTION/TEST button.

If no button is pressed for 1 minute, equipment returns to normal status.

When MODE selector button is pressed or no button is pressed for 1 minute, equipment returns to normal status.

3 Press MODE selector button.

If no button is pressed for 1 minute, equipment returns to normal status.

5 Press MODE selector button.

# Room Air Conditioner

## Self-Diagnosis by Wireless Remote Controller

In the ARC433A series remote controller, the temperature display sections on the main unit indicate corresponding codes.

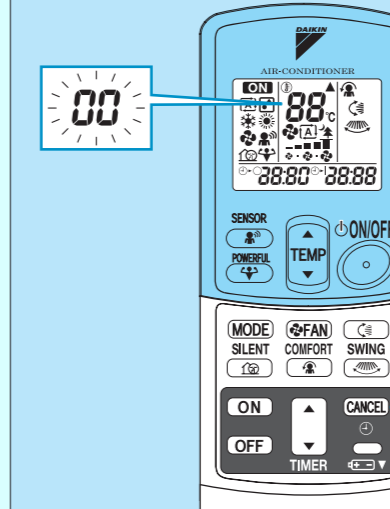
### Check Method 1

1. When the timer cancel button is held down for 5 seconds, a "00" indication flashes on the temperature display section.

2. Press the timer cancel button repeatedly until a continuous beep is produced.

The code indication changes in the sequence shown below, and notifies with a long beep.

No.	Code	No.	Code	No.	Code
1	00	12	F6	23	A1
2	U4	13	C7	24	E1
3	L5	14	A3	25	U8
4	E6	15	H8	26	U8
5	H6	16	H9	27	P4
6	H0	17	C9	28	L3
7	A6	18	C4	29	L4
8	E7	19	C5	30	H7
9	U0	20	J3	31	U2
10	F3	21	J6	32	E8
11	A5	22	E5	33	A8



TIMER CANCEL button  
It cancels the timer setting.



<ARC433A41>

### Note:

1. A short beep and two consecutive beeps indicate non-corresponding codes.
2. To cancel the code display, hold the timer cancel button down for 5 seconds. The code display also cancels itself if the button is not pressed for 1 minute.

### Check Method 2

#### 1. Enter the diagnosis mode.

Press the 3 buttons (TEMP▲, TEMP▼, MODE) simultaneously.

The digit of the number of tens blinks.

★ Try again from the start when the digit does not blink.

#### 2. Press the TEMP button.

Press TEMP▲ or TEMP▼ and change the digit until you hear the sound of "beep" or "pi pi".

#### 3. Diagnose by the sound.

★ "pi" : The number of tens does not accord with the error code.

★ "pi pi" : The number of tens accords with the error code.

★ "beep" : The both numbers of tens and units accord with the error code.

#### 4. Enter the diagnosis mode again.

Press the MODE button. The digit of the number of units blinks.

#### 5. Press the TEMP button.

Press TEMP▲ or TEMP▼ and change the digit until you hear the sound of "beep".

#### 6. Diagnose by the sound.

★ "pi" : The both numbers of tens and units do not accord with the error code.

★ "pi pi" : The number of tens accords with the error code.

★ "beep" : The both numbers of tens and units accord with the error code.

#### 7. Determine the error code.

The digits indicated when you hear the "beep" sound are error code.

#### 8. Exit from the diagnosis mode.

Press the MODE button.