Thermistor Resistance Chart

	MODELS	: ALL R410	A INDOOR	UNITS	MODELS: ALL R410A OUTDOOR UNITS				
	Room T Thermistor	Room T Thermistor w/ board	Indoor Pipe Thermistor	Indoor Pipe Thermistor w/ board	Discharge/ Compressor Thermistor	Outdoor Pipe Thermistor	Outdoor Temperature Thermistor	Heat Sink Thermistor	2/3 Way Valve Thermisto
Temp °F(°C)	Ohms kΩ	Ohms kΩ	Ohms kΩ	Ohms kΩ	Ohms kΩ	Ohms kΩ	Ohms kΩ	Ohms kΩ	Ohms kΩ
-4(-20)						49.20	115.24		
5(-15)						36.58	84.21		
14(-10)						27.51	62.28		312
23(-5)						20.91	46.58		233
32(0)	33.62	8.29	176.03	39.48	175.70	16.05	35.21	16.1	176
41(5)	25.93	-	134.23	-	134.93	12.44	26.88	12.4	134
50(10)	20.18	7.12	103.34	34.10	104.59	9.73	20.72	9.73	103
59(15)	15.84	-	80.28	-	81.79	7.67	16.12	7.67	80.3
68(20)	12.54	5.86	62.91	28.14	64.50	6.10	12.64	6.10	62.9
77(25)	10.00	5.24	49.70	25.15	51.27	4.89	10.00	-	-
86(30)	8.04	4.64	39.57	22.26	41.07	3.95	7.97	3.95	39.6
95(35)	6.51	-	31.74	-	33.13	3.21	6.40	-	-
104(40)	5.30	3.58	25.64	17.05	26.91	2.62	5.18	2.62	25.6
113(45)	4.35	-	20.85	-	22.01	2.16	4.21	-	-
122(50)	3.59	2.71	17.06	12.78	18.10	1.79	3.45	1.79	17.1
131(55)	2.98	-	14.10	-	14.98	1.49	2.85	-	-
140(60)	2.47	2.03	11.64	9.47	12.47	1.25	2.36	1.25	11.6
149(65)	2.09		9.69		10.44	1.05	1.97	-	-
158(70)	1.76		8.12		8.78	0.89	1.65	0.89	8.12
167(75)	1.49		6.83		7.42	0.76	1.39	-	-
176(80)	1.27		5.78		6.31	0.65	1.18	0.65	5.78
185(85)	1.09		4.91		5.38	0.56	1.00	-	-
194(90)	0.93		4.19		4.61	0.48	0.85	0.48	4.19
203(95)	0.81		3.59		3.97	0.41	0.73	-	-
212(100)	0.70		3.09		3.43	0.36	0.63	0.36	3.09
221(105)					2.98			-	
230(110)					2.59			0.27	
239(115)					2.26			-	
248(120)					1.99			0.21	
284(140)					1.21				
320(160)					0.77				
356(180)					0.51				

Indoor Ceiling Cassettes MODELS: AUU18RCLX, AUU24RCLX, AUU36RCLX, AUU42RCLX

	JONGLA, AUG-ZRULA
Error Code	Error Contents
01	Indoor unit doesn't accept signal from outdoor unit
02	Room temperature sensor open
03	Room temperature sensor short-circuited
04	Indoor heat exchanger temperature sensor open
05	Indoor heat exchanger temperature sensor short circuited
06	Outdoor heat exchanger temperature sensor
08	Power source connection error
09	Float switch operated
0A	Outdoor temperature sensor error
0c	Discharge pipe temperature sensor
11	Model abnormal/Indoor EPROM Abnormal
12	Indoor fan abnormal
13	Outdoor unit doesn't accept the signal from indoor unit
14	Excessive outdoor pressure (permanent stop)
15	Compressor temperature sensor
16	Pressure switch error
17	IPM error
18	CT error
19	Active filter module (AFM) error
1A	Compressor does not operate
1b	Outdoor unit fan error
1c	Communication error (inverter to multi controller)
1d	2 way valve sensor error
1E	Expansion valve error
1F	Connection indoor unit error

Outdoor Cassette & Ceiling Suspended MODELS: AOU18RLX, AOU24RLX, AOU36RLX, AOU42RLX

LED	Error Contents
1 flash	Communication error (Indoor unit to Outdoor unit)
2 flash	Discharge pipe temperature sensor
3 flash	Outdoor heat exchanger temperature sensor
	Outdoor temperature sensor
7 flash	Compressor temperature sensor
	Heat sink temperature sensor
9 flash	Pressure switch abnormal
	IPM error
13 flash	Compressor rotor position cannot detect
	Compressor cannot operate/Start up error
	Outdor fan abnormal (upper fan)
	Outdoor fan abnormal (lower fan)
Lighting	No error



HIGH-SEER R410A MINI-SPLITS TROUBLESHOOTING GUIDE 2013 - 2014



FUJITSU GENERAL AMERICA, INC.

353 Route 46 West Fairfield, NJ 07004 (866) 952-8324 (973) 575-0381 Service Center Phone (973) 836-0449 Service Center Fax Email: ServiceHVAC@fujitsugeneral.com

Wall Mounted

SYSTEMS: 9CQ, 9RQ, 9R2, 9RLQ, 9RL, 9RLS, 12CQ, 12RQ, 12R2, 12RLQ, 12RL, 12RLS, 15RLQ, 15RLS, 18CL, 18RL, 18RLQ, 18RLXQ, 18RLXS, 24CL, 24CL1, 24RLQ, 24RLXQ, 24RLXS, 30RLX, 30CLX, 30CLX1, 30RLXQ, 36CLX, 36CLX1

Error Ind	ication							
Operation	Timer	Wired Remote	Error	Diagnosis Method				
	0.5 sec 2 Times	01	Serial reverse transfer error at start up operation	Communication error - At Start Up, Evaporator and Condenser are not communicating. -Check wiring from panel to condenser, condenser to evaporator. Wire nuts and splices are not recommended. Check for correct voltage at panel, condenser and evaporator. Refer to the Service Instruction manual - Serial Signal troubleshooting for further details.				
	0.5 sec 3 Times	01	Serial reverse transfer error during operation	Communication error - During operation, Evaporator and Condenser did not communicate for 10 consecutive seconds. -Check wiring from panel to condenser, condenser to evaporator. Check for correct voltage at panel, condenser and evaporator. Refer to the Service Instruction manual - Serial Signal troubleshooting for further details.				
OFF	0.5 sec 4 Times	13	Serial forward transfer error at start up operation	Communication error - At the start up, Evaporator and Condenser are not communicating. -Reset power. If error code reappears check wiring from panel to condenser, condenser to evaporator. Check for correct voltage at panel, condenser and evaporator. Refer to the Service Instruction manual - Serial Signal troubleshooting for further details.				
	0.5 sec 5 Times	13	Serial forward transfer error during operation	Communication error - During operation, Evaporator and Condenser did not communicate for 10 consecutive seconds. -Reset power. If error code reappears check wiring from panel to condenser, condenser to evaporator. Check for correct voltage at panel, condenser and evaporator. Refer to the Service Instruction manual - Serial Signal troubleshooting for further details.				
	0.5 sec 8 Times 00		Wire Remote Controller error	Communication error - Evaporator and wire remote controller are not communicatingCheck wiring between evaporator and wire remote controllerCheck for DC 12V at evaporator connector. If voltage present replace wire remote control.				
0.5 sec	0.5 sec 2 Times	02	Room temperature thermistor error	Room temperature thermistor detected an abnormal temperature. -Check thermistor for open or short. Check thermistor resistance value (Refer to "Thermister characteristics table"). -Controller PCB defective.				
2 Times			Indoor heat exchanger thermistor error	Evaporator pipe thermistor detected an abnormal temperatureCheck thermistor for open or short. Check thermistor resistance value (Refer to "Thermister characteristics table")Controller PCB defective.				
	0.5 sec 2 Times	0C	Discharge thermistor error	Condenser discharge thermistor detected an abnormal temperature. -Check thermistor for open or short. Check thermistor resistance value (Refer to "Thermister characteristics table"). -Controller PCB defective.				
0.5 sec 3 Times	0.5 sec 3 Times	06	Outdoor heat exchanger thermistor error	Condenser pipe thermistor detected an abnormal temperature. -Check thermistor for open or short. Check thermistor resistance value (Refer to "Thermister characteristics table"). -Controller PCB defective.				
3 Times	0.5 sec 4 Times	0A	Outdoor temperature thermistor error	Condenser ambient thermistor detected an abnormal temperature. -Check thermistor for open or short. Check thermistor resistance value (Refer to "Thermister characteristics table"). -Controller PCB defective.				
	0.5 sec 8 Times	15	Compressor Temperature Thermistor Error	Condenser ambient thermistor detected an abnormal temperature. -Check thermistor for open or short. Check thermistor resistance value (Refer to "Thermister characteristics table"). -Controller PCB defective.				

Universal Mount / Ceiling Suspended

MODELS: ABU18RULX, ABU24RULX, ABU36RSLX

Operation	Timer	Swing	Error Contents
Continuous blink	Continuous blink	OFF	Indoor EEPROM abnormal
Continous blink	Continuous blink	Continuous blink	Outdoor EEPROM abnormal
2 flashes	Continuous blink	OFF	Indoor room temperature sensor open
2 flashes	Continuous blink	Continuous blink	Indoor room temperature sensor short circuited
3 flashes	Continuous blink	OFF	Indoor heat exchanger temperature sensor open
3 flashes	Continuous blink	Continuous blink	Indoor heat exchanger temperature sensor short circuited
4 flashes	Continuous blink	OFF	Float switch operated
5 flashes	Continuous blink	OFF	Communication error (serial reverse transfer error)
5 flashes	Continuous blink	Continuous blink	Outdoor communication error (forward reverse transfer error)
6 flashes	Continuous blink	OFF	Indoor fan abnormal
Continuous blink	2 flashes	OFF	Outdoor power source connection abnormal
Continuous blink	3 flashes	OFF	Outdoor heat exchanger temperature sensor open
Continuous blink	3 flashes	Continuous blink	Outdoor heat exchanger temperature sensor short circuited
Continuous blink	4 flashes	OFF	Outdoor temperature sensor open
Continuous blink	4 flashes	Continuous blink	Outdoor temperature sensor short circuited
Continuous blink	5 flashes	OFF	Outdoor discharge pipe temperature sensor or compressor temperature sensor open
Continuous blink	5 flashes	Continuous blink	Outdoor discharge pipe temperature sensor or compressor temperature sensor short circuited
Continuous blink	6 flashes	OFF	Outdoor high pressure abnormal
Continuous blink	7 flashes	OFF	Outdoor discharge pipe temperature or compressor temperature sensor abnormal
Continuous blink	8 flashes	OFF	Compressor temperature thermistor error
Continuous blink	9 flashes	OFF	Pressure switch error
Continuous blink	10 flashes	OFF	IPM error
Continuous blink	11 flashes	OFF	CT error
Continuous blink	12 flashes	OFF	Active Filter Module Error (AFM)
Continuous blink	13 flashes	OFF	Compressor rotor location can not be detected (Permanent Stop)
Continuous blink	14 flashes	OFF	Outdoor unit fan motor error

Wall Mounted

SYSTEMS: 9CQ, 9RQ, 9R2, 9RLQ, 9RL, 9RLS, 12CQ, 12RQ, 12R2, 12RLQ, 12RL, 12RLS, 15RLQ, 15RLS, 18CL, 18RL, 18RLQ, 18RLXQ, 18RLXS, 24CL, 24CL1, 24RLQ, 24RLXQ, 24RLXS, 30RLX, 30CLX1, 30CLX1, 30RLXQ, 36CLX1

Error Inc	dication	Wired	_				
Operation	Timer	Remote Error		Diagnosis Method			
	0.5 sec 2 Times	No Display	Forced auto switch error	Forced auto switch open (pushed in) for 30 consecutive seconds or more. -Check if forced auto switch is kept pressedController PCB defective.			
	0.5 sec 3 Times	No Display	Main Relay error	After 2 minutes 20 seconds of stopped operation, the signal from the outdoor unit is received even though the main relay is OFF. -Check if Main relay is defective. -Controller PCB defective.			
0.5 sec 4 Times	0.5 sec 4 Times	No Display	Power supply frequency detection error	The power supply frequency can not be recognized after 4 seconds of Power ON. Permanent STOPController PCB defective.			
	0.5 sec 7 Times	No Display	VDD permanent STOP protection (electric air cleaner)	Electric Air Cleaner error - When the air cleanness monitor trial protection operates 4 times. -Check the front panel and ensure it is closed. -Check IAQ micro switch for open/close operation.			
	0.5 sec 8 Times	21	Reverse VDD (Electric air clean power supply circuit abnormal)	IAQ error code - The air clean operation signal was detected for 1 minute at the time of air clean mode was OFFElectric air cleaner defectiveController PCB defective.			
	0.5 sec 2 Times	17	IPM protection	Abnormal current value at the IPM is detected. Heat radiation is blocked (inlet/outlet). -Check if outdoor fan is defective (does not rotate). -IPM/Controller PCB defective. Check Refrigeration cycle for under/over charge conditions.			
	0.5 sec 3 Times	18	CT error	Current Transfer error - The current value during the operation after 1 minute from starting up the compressor drops to zero (0) Amps. -Check if CT wire is open. See Service Manual for schematic on each model. -Controller PCB defective.			
0.5 sec 5 Times	0.5 sec 5 Times	1A	Compressor location error	Compressor Detection - The compressor speed does not synchronize with the control signal. (Including start up failure of the compressor.) -Check if 2-way valve or 3-way valve are open. Check the compressor (Winding resistance value, loose lead wire). -Check Refrigeration cycle condition.			
	0.5 sec 6 Times	1B	Outdoor fan error (DC Motor)	Condenser fan motor error - Abnormal current or fan motor lock error was detected. -Check Fan motor connector loose/defective contact. Rotate fan motor by hand to ensure it is not locked. Check DC 150-380V on fan motor between Red & Black wire. Check DC 15V between Black & White wire. Voltage not present. -Controller PCB defective.			
	0.5 sec 7 Times	1F	Model Match Error Connected indoor unit error	Apparent model information error from EPROM (miss match). 3 continuous failure of lead test of EPROM at Power ON, Voltage drop or noise, etc. - Controller PCB defective.			

Multi-Zone
Models: Asu9rmlq, Asu12rmlq, Asu18rmlq, Aru9rml*, Aru12rml*, Aru18rml*, Auu9rml,
Auu12rml, Auu18rml, Aou24rml, Aou24rml, Aou24rml, Aou24rml1, Aou36rml1 *For these models, refer to the wired remote controller.

			INDO	R ERROR DIS	SPLAY	
	ERROR CONTENTS	OPERATION	TIMER	AIR CLEAN	COIL DRY	Wire Remote Code No.
	Serial Reverse Transfer Error at Start Up	Off	2 flashes	Off	Off	01
Communication Error	Serial Reverse Transfer Error During Operation	Off	3 flashes	Off	Off	00
	Forward Transfer Signal Error at Start Up	Off	4 flashes	Off	Off	13
	Indoor Unit ← Remote Control - Wired Remote Control	Off	8 flashes	Off	Off	00
Indoor Unit	Room temperature thermistor error	2 flashes	2 flashes	Off	Off	02 or 03
Temperature Error	Heat exchanger temperature thermistor error	2 flashes	3 flashes	Off	Off	04 or 05
Indoor Unit Water Drain Abnormal	Float switch tripped/pump problem	2 flashes	6 flashes	Off	Off	09
	Discharge pipe temperature thermistor error	3 flashes	2 flashes	Off	Off	0C or 0d
	Outdoor heat exchanger temp. thermistor error	3 flashes	3 flashes	Off	Off	06 or 07
Outdoor Unit Temperature Error	Outdoor temperature thermistor error	3 flashes	4 flashes	Off	Off	0A or 0b
	2 way valve temperature thermistor error	3 flashes	Off	2 flashes	Off	1d
	3 way valve temperature thermistor error	3 flashes	Off	3 flashes	Off	1E
	Heat sink temperaturethermistor error	3 flashes	7 flashes	Off	Off	0E
	Compressor temperature thermistor error	3 flashes	8 flashes	Off	Off	15
Indoor Unit Control	MANUAL AUTO button error	4 flashes	2 flashes	Off	Off	20
	Power supply 50HZ/60HZ detection error	4 flashes	4 flashes	Off	Off	08
System Error	Electronic Air clean filter error	4 flashes	7 flashes	Off	Off	21
	Electronic Air cleaner Power PCB Circuit error	4 flashes	8 flashes	Off	Off	22
	IPM error (Current trip error)	5 flashes	2 flashes	Off	Off	17
	CT error	5 flashes	3 flashes	Off	Off	18
	Compressor position error	5 flashes	5 flashes	Off	Off	1A
Outdoor Unit Control	Outdoor fan motor error	5 flashes	6 flashes	Off	Off	1b
System Error	Connected indoor unit error	5 flashes	7 flashes	Off	Off	1F
	Main CPU-sub CPU communication error	5 flashes	8 flashes	Off	Off	1C
Indoor Unit	Indoor fan motor lock error	6 flashes	2 flashes	Off	Off	12
Fan Motor Error	Indoor fan motor speed error	6 flashes	3 flashes	Off	Off	12
5.61	Discharge pipe temperature error	7 flashes	2 flashes	Off	Off	0F
Refrigerant System	Cooling High pressure abormal rise	7 flashes	3 flashes	Off	Off	14
Error	High pressure switch error	7 flashes	6 flashes	Off	Off	16
	Active filter module (AFM) error (Second Time)	8 flashes	2 flashes	Off	Off	19
Added Function Error	Active filter module (AFM) error (First Time)	8 flashes	3 flashes	-	-	
	PFC Circuit Error	8 flashes	4 flashes	-	-	
ndoor Unit Connect Error	Indoor unit error (indoor EEPROM abnormal)	Blinking	Blinking	Blinking	Blinking	11

Multi-ZoneMODELS: AOU18RLXFZ, AOU24RLXFZ, AOU36RLXFZ, AOU24RML, AOU36RML1, AOU36RML1

Error Contents		LED					
Error Contents	Α	В	С	D			
	1 flash	OFF	OFF	OFF			
Outdoor communication signal array (fanuard transfer)	OFF	1 flash	OFF	OFF			
Outdoor communication signal error (forward transfer)	OFF	OFF	1 flash	OFF			
	OFF	OFF	OFF	1 flash			
Outdoor discharge pipe temperature thermistor error	2 flashes	OFF	OFF	OFF			
Outdoor heat exchanger temperature thermistor error	3 flashes	OFF	OFF	OFF			
Outdoor temperature thermistor error	4 flashes	OFF	OFF	OFF			
2 way valve temperature thermistor A error	5 flashes	OFF	OFF	OFF			
2 way valve temperature thermistor B error	OFF	5 flashes	OFF	OFF			
2 way valve temperature thermistor C error	OFF	OFF	5 flashes	OFF			
2 way valve temperature thermistor D error	OFF	OFF	OFF	5 flashes			
3 way valve temperature thermistor A error	6 flashes	OFF	OFF	OFF			
3 way valve temperature thermistor B error	OFF	6 flashes	OFF	OFF			
3 way valve temperature thermistor C error	OFF	OFF	6 flashes	OFF			
3 way valve temperature thermistor D error	OFF	OFF	OFF	6 flashes			
Compressor temperature thermistor error	7 flashes	OFF	OFF	OFF			
Heat sink temperature thermistor error	8 flashes	OFF	OFF	OFF			
Pressure switch 1 error	9 flashes	OFF	OFF	OFF			
Pressure switch 2 error	10 flashes	OFF	OFF	OFF			
Connected indoor unit error	11 flashes	OFF	OFF	OFF			
IPM error	12 flashes	OFF	OFF	OFF			
Compressor rotor location can not detect (permanent stop)	13 flashes	OFF	OFF	OFF			
Compressor start up error (permanent stop)	14 flashes	OFF	OFF	OFF			
Outdoor unit fan motor error	15 flashes	OFF	OFF	OFF			
Main CPU sub CPU Communication error	17 flashes	OFF	OFF	OFF			
Discharge temperature error	18 flashes	OFF	OFF	OFF			
Compressor temperature error	19 flashes	OFF	OFF	OFF			
4-way valve error	20 flashes	OFF	OFF	OFF			
Outdoor unit PCB model information error	21 flashes	OFF	OFF	OFF			
Active filter error, PFC circuit error	22 flashes	OFF	OFF	OFF			

Wall Mounted

SYSTEMS: 9CQ, 9RQ, 9R2, 9RLQ, 9RL, 9RLS, 12CQ, 12RQ, 12R2, 12RLQ, 12RL, 12RLS, 15RLQ, 15RLS, 18CL, 18RL, 18RLQ, 18RLXQ, 18RLXS, 24CL, 24CL1, 24RLQ, 24RLXQ, 24RLXS, 30RLX, 30CLX, 30CLX1, 30RLXQ, 36CLX, 36CLX1

Error Inc	lication	Wired				
Operation	Timer	Remote	Error	Diagnosis Method		
0.5 sec	0.5 sec 2 Times	No Display	Indoor fan lock error	Evaporator fan motor error - The indoor fan speed is 0 RPM after 56 seconds from starting operation. -Check if Fan motor connector loose/defective contact. Rotate fan motor by hand to ensure it is not locked. -Controller PCB defective.		
6 Times	0.5 sec 3 Times	No Display	Indoor fan speed error	Evaporator fan motor error - The indoor fan speed is 1/3 of the target frequency after 56 seconds from starting operationCheck if Fan motor connector loose/defective contact. Rotate fan motor by hand to ensure it is not lockedController PCB defective.		
	0.5 sec 2 Times	0F	Discharge temperature error	The discharge temperature error is activated. Heat radiation is blocked. -Check for closed 2-way valve or 3-way valves. Check for leaks at line set, condenser and evaporator. -Refrigeration cycle defective. Check for restrictions at line set, low charge.		
0.5 sec 7 Times	0.5 sec 3 Times	24	Excessive high pressure protection on cooling	Excessive high pressure protection on cooling mode has been activated. Heat radiation is blocked. -Check for closed 3-way valves. Check for running compressor with outdoor fan OFF. -Check if outdoor fan is defective. Refrigeration cycle defective. Check for high pressure, over charged.		
	0.5 sec 5 Times	16	Pressure Switch Error	If the pressure switch is open for 10 sec. when the power is turned on - Error will reset when pressure becomes normalCheck interruption of heat radiation (Air intake/Outlet). Check outdoor fan operation (does not rotate)Check refrigerant cycle. Check for high pressure, over charged.		
0.5 sec 7 Times	0.5 sec 6 Times	2b	Compressor Temp Error	When the compressor becomes hotter than 226.4°F (108°C), unit stops. -Check for closed 2/3 way valves, EEV failure, Low Change, Compressor Thermistor failure, outdoor fan failed, outdoor heat exchanger clogged.		
	0.5 sec 2 Times	19	Active Filter Error (Permanent Stop)	Output voltage error of Active filter is detectedCheck the wiring connection (connector is loose/open. Choke coil) -Active Filter Module/Controller PCB defective.		
0.5 sec 8 Times	0.5 sec 3 Times	19	Active Filter Error	Output voltage error of Active filter is detectedCheck the wiring connection (connector is loose/open. Choke coil) -Active Filter Module/Controller PCB defective.		
	0.5 sec 4 Times	25	PFC circuit error	Excessive voltage of DC V on PFC circuit in inverter PCB is detected. -Controller PCB defective.		
ALL LED's E Operation, T Clean 0.1 s	imer, Air	11	Model Match Error	Apparent model infromation error from EPROM (miss match). 3 continuous failure of lead test of EPROM at Power ON, Voltage drop or noise, etc. -Controller PCB defective.		

Halcyon HFI Indoor UnitS, RL2 & RLS2 Indoor Units

MODELS: ASU9RLF, ASU12RLF, ASU18RLF, ASU24RLF, ASU7RLF1, ASU9RLF1, ASU12RLF1, AUU7RLF, AUU9RLF, AUU12RLF, AUU18RLF, ARU7RLF, ARU9RLF, ARU12RLF, ARU24RLF, AGU9RLF, AGU12RLF, AGU15RLF, ASU9RL2, ASU12RL2, ASU12RLS2, ASU15RLS2

Operation (1) (1) (1) Off (1) (1) (1) (1) (2) (2) (2) (2)	Timer Off Off Off • (1) • (2) • (5) • (1) • (2) • (3) • (4) • (2) • (5) • (1)	Off Off • (3)	Controller N/A Green Light Flashing N/A 11 12 15 21 22 23 24	Mode Mismatch Multizone Defrost Mode Clean filters reminder Serial communication error Remote controller-communication error Scan error- communication error Initial setting error - Function setting Indoor unit capacity error - Function setting Connection disabled (series error) - Function setting	Diagnosis Method Operation light 1sec on, 1 sec off. When 1 or more indoor units are in auto or different modes on multi-zone systems Operation light 7 sec on, 2 sec off. Unit in defrost normal operation Remove and clean filters then press and hold manual auto butt on indoor unit for 2 seconds or more to reset. When the indoor unit cannot receive the signal from the branch unit. When the branch unit cannot receive the signal from the indoor unit Wired remote controller communication error Check operation incompletion error (normally, operation disable Wiring mistake
• (1) Off • (1) • (1) • (1) • (2) • (2) • (2) • (3) • (3) • (4)	Off Off • (1) • (2) • (5) • (1) • (2) • (3) • (4) • (2) • (5)	Off	Green Light Flashing N/A 11 12 15 21 22 23	Defrost Mode Clean filters reminder Serial communication error Remote controller-communication error Scan error- communication error Initial setting error - Function setting Indoor unit capacity error - Function setting Connection disabled (series error) -	are in auto or different modes on multi-zone systems Operation light 7 sec on, 2 sec off. Unit in defrost normal operation Remove and clean filters then press and hold manual auto butt on indoor unit for 2 seconds or more to reset. When the indoor unit cannot receive the signal from the branch unit. When the branch unit cannot receive the signal from the indoor unit Wired remote controller communication error Check operation incompletion error (normally, operation disable Wiring mistake
Off • (1) • (1) • (1) • (2) • (2) • (2) • (2) • (3) • (3) • (4)	Off • (1) • (2) • (5) • (1) • (2) • (3) • (4) • (2) • (5)	• (3)	N/A 11 12 15 21 22 23	Clean filters reminder Serial communication error Remote controller-communication error Scan error- communication error Initial setting error - Function setting Indoor unit capacity error - Function setting Connection disabled (series error) -	operation Remove and clean filters then press and hold manual auto butt on indoor unit for 2 seconds or more to reset. When the indoor unit cannot receive the signal from the branch unit. When the branch unit cannot receive the signal from the indoor unit Wired remote controller communication error Check operation incompletion error (normally, operation disable Wiring mistake
• (1) • (1) • (1) • (2) • (2) • (2) • (2) • (3) • (3) • (4)	• (1) • (2) • (5) • (1) • (2) • (3) • (4) • (2) • (5)	 ◇ ◇ ◇ ◇ ◇ ◇ 	11 12 15 21 22 23	Serial communication error Remote controller-communication error Scan error- communication error Initial setting error - Function setting Indoor unit capacity error - Function setting Connection disabled (series error) -	on indoor unit for 2 seconds or more to reset. When the indoor unit cannot receive the signal from the branch unit. When the branch unit cannot receive the signal from the indoor unit Wired remote controller communication error Check operation incompletion error (normally, operation disable Wiring mistake
• (1) • (1) • (2) • 2 • (2) • (2) • (3) • (3) • (4)	• (2) • (5) • (1) • (2) • (3) • (4) • (2) • (5)	 ◇ ◇ ◇ ◇ ◇ 	12 15 21 22 23	Remote controller-communication error Scan error- communication error Initial setting error - Function setting Indoor unit capacity error - Function setting Connection disabled (series error) -	unit. When the branch unit cannot receive the signal from the indoor unit Wired remote controller communication error Check operation incompletion error (normally, operation disable Wiring mistake
• (1) • (2) • 2 • (2) • (2) • (3) • (3) • (4)	• (5) • (1) • (2) • (3) • (4) • (2) • (5)	◊◊◊◊◊	15 21 22 23	error Scan error- communication error Initial setting error - Function setting Indoor unit capacity error - Function setting Connection disabled (series error) -	Check operation incompletion error (normally, operation disable Wiring mistake
• (2) • 2 • (2) • (2) • (3) • (3) • (4)	• (1) • (2) • (3) • (4) • (2) • (5)	♦♦♦♦	21 22 23	Initial setting error - Function setting Indoor unit capacity error - Function setting Connection disabled (series error) -	Wiring mistake
• 2 • (2) • (2) • (3) • (3) • (4)	• (2) • (3) • (4) • (2) • (5)	◊◊◊	22 23	Indoor unit capacity error - Function setting Connection disabled (series error) -	
• (2) • (2) • (3) • (3) • (4)	• (3) • (4) • (2) • (5)	♦♦♦	23	Function setting Connection disabled (series error) -	Indoor unit capacity error
• (2) • (3) • (3) • (4)	• (4) • (2) • (5)	♦♦			
• (3) • (3) • (4)	• (2) • (5)	\Q	24		Combination error
• (3) • (4)	• (5)			Connection unit number error - Function setting	Connection unit number error (indoor unit). Connection unit number error (branch unit)
• (4)			32	Indoor unit main PCB error	Indoor unit PCB Model information error
	• (1)	♦	35	Manual auto switch error - Indoor Unit	Manual auto switch error
	· ' '	\lambda	41	Room error	Inlet room temperature thermistor error
• (4)	• (2)	\	42	Indoor unit Heat Ex. sensor error	Indoor unit Heat Ex. Middle thermistor error
• (5)	• (1)	♦	51	Indoor unit fan motor error	Main fan motor lock error Main fan motor revolution speed error
• (5)	• (3)	\Q	53	Water Drain error - Indoor	Drain pump error
• (5)	• (7)	\Q	57	Damper error	Damper failure, limit switch, shorted wires, controller PCB failur on indoor
• (5)	• (8)	\lambda	58	Intake grille error	When microswitch on indoor unit is detected open, door on ind not fully closed, microswitch failure, indoor PCB failure
• (5)	• (15)	♦	5U	Indoor unit error	Indoor unit error
• (6)	• (2)	\(\)	62	Outdoor unit main PCB error	Outdoor unit PCB Model information error. Outdoor unit PCB microcomputer communication error
• (6)	• (3)	♦	63	Inverter PCB error - Outdoor	Inverter error
• (6)	• (4)	♦	64	Active filter error, PFC circuit error - Outdoor	Voltage error stoppage permanently. Voltage error (can restore Over current protected operation stoppage permanently. PFC hardware error.
• (6)	• (5)	♦	65	IPM error - Outdoor	Trip terminal L error
• (6)	• (10)	♦	6A	Display panel error - Outdoor	Microcomputers communication error
• (7)	• (1)	♦	71	Discharge thermistor error - Outdoor	Discharge thermistor 1 error
• (7)	• (2)	\(\)	72	Compressor thermistor error - Outdoor	Compressor thermistor 1 error
• (7)	• (3)	\Q	73	Outdoor unit Heat Ex. Sensor error	Outdoor unit Heat Ex. liquid thermistor error
• (7)	• (4)	\Q	74	Outdoor thermistor error - Outdoor	Outdoor thermistor error
• (7)	• (5)	\lambda	75	Suction Gas thermistor error - Outdoor	Suction Gas thermistor error
• (7)	• (7)	♦	77	Heat sink thermistor error - Outdoor	Heat sink thermistor error
• (8)	• (2)	♦	82	Sub-cool Heat Ex. Gas thermistor error - Outdoor	Sub-cool Heat Ex. gas inlet thermistor error Sub-cool Heat Ex. gas outlet thermistor error
• (8)	• (3)	\ \ \	83	Liquid pipe thermistor error - Outdoor	Liquid pipe thermistor 1 error
• (8)	• (4)	\ \ \ \ \	84	Current sensor error - Outdoor	Current sensor 1 error (stoppage permanently)
• (8)	• (6)	\lambda	86	Pressure sensor error - Outdoor	Discharge pressure sensor error. Suction pressure sensor error High pressure switch 1 error
• (9)	• (4)	♦	94	Trip detection - Outdoor	Trip detection
• (9)	• (5)	\lambda	95	Compressor motor control error - Outdoor	Rotor position detection error (stoppage permanently)
• (9)	• (7)	\lambda	97	Outdoor unit fan motor 1 error - Outdoor	Duty error
• (9)	• (9)	♦	99	4-way valve error - Outdoor	4-way valve error
• (10)	• (1)	\lambda	A1	Discharge temperature 1 error - Refrigerant System	Discharge temperature 1 error
• (10)	• (3)	\lambda	А3	Compressor temperature error - Refrigerant System	Compressor temperature error
• (10)	• (5)	♦	A5	Pressure error 2 - Refrigerant System	Low pressure error
• (13)	• (5)	♦	J2	Unit flow divider error - Branch Box	EEPROM access error Equipment type information error Serial communication error to outdoor unit Branch units serial communication error Serial communication error to indoor unit Liquid pipe thermistor error Gas pipe thermistor error Expansion valve full closure operation error Remote control communication error

Halcyon HFI Branch Boxes

MODEL: UTP-PU03A, UTP-PU03B

When an error occurs, an error description displays in the LED (No. 401 ~ 405).

•	Lit
© (n)	Flashing (number of flashing)
0	Unlit

Normal status

Green		Re	ed	Comment			
LED401	LED402	LED403	LED404	LED405	Comment		
•	0	0	0	0	This box is functioning properly.		

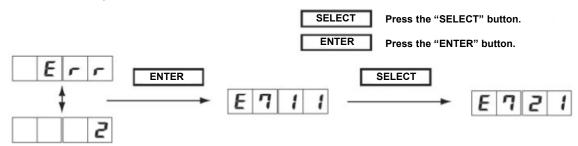
Error status

Green	Red				Error Description			
LED401	LED402	LED403	LED404	LED405	Error Description			
•	•	•	•	•	Connected combination error			
•	•	•	•	0	Power frequency error			
•	•	•	0	•	1 ower inequality entor			
	©(1)	0	0	0	EEPROM access error			
	⊚ (2)	0	0	0	Model information error			
Branch Box identifying	⊚(3)	0	0	0	Serial communication error between outdoor unit and branch box Serial communication error between branch boxes			
display	◎ (4)	0	0	0	Serial communication error between branch boxes			
Drimon	©(5)	•	0	0	Serial communication error between Indoor Unit A and branch box			
Primary unit		0	•	0	Serial communication error between Indoor Unit B and branch box			
:©(1)			0	•	Serial communication error between Indoor Unit C and branch box			
(1)	⊚(6)	•	0	0	Indoor Unit A, liquid pipe thermistor error (CN309)			
Secondary		0	•	0	Indoor Unit B, liquid pipe thermistor error (CN309)			
unit1		0	0	•	Indoor Unit C, liquid pipe thermistor error (CN310)			
:@(2)	⊚(7)	•	0	0	Indoor Unit A, gas pipe thermistor error (CN309)			
		0	•	0	Indoor Unit B, gas pipe thermistor error (CN309)			
Secondary		0	0	•	Indoor Unit C, gas pipe thermistor error (CN310)			
unit2 :©(3)	©(8)	•	0	0	Indoor Unit A, EEV control error (CN305)			
		0	•	0	Indoor Unit B, EEV control error (CN306)			
		0	0	•	Indoor Unit C, EEV control error (CN307)			
	©(9)	0	0	0	Remote controller communication error			

Halcyon HFI Outdoor Unit MODEL: AOU48RLXFZ

- When error occurs, "Err" and "Number of error occurred" are alternately displayed in 7 seg. display.
- The latest error code can be confirmed by pressing the ENTER button.
- When error codes are displayed, all the error codes can be confirmed by pressing the SELECT button.

Example: When "Discharge thermistor error" and "Compressor thermistor error" are occurred



CODE				DESCRIPTION		CO	DE		DESCRIPTION
Е	1	1	3	Serial communication error		7	5	1	Suction gas thermistor error
Е	1	1	4	Senai communication en o	E	7	7	1	Heat sink thermistor error
Е	1	5	6	Check run unfinished		8	2	1	Sub-cool heat EX gas inlet thermistor error
Е	2	1	2	Number of wires and pipes error		8	2	2	Sub-cool heat EX gas outlet thermistor error
Е	2	2	1	Indoor unit capacity error		8	3	1	Liquid pipe thermistor error
E	2	4	2	Number of indoor units error	Е	8	4	1	Current sensor error
E	2	4	3	Number of Branch boxes error	Е	8	6	1	Discharge pressure sensor error
Е	5	U	1	Indoor unit error	Е	8	6	3	Suction pressure sensor error
E	6	2	1	Outdoor unit model information error	Е	8	6	4	High pressure switch error
E	6	3	1	Inverter error	E	9	4	1	Over current error
E	6	4	1	A.F. voltage error	Е	9	5	1	Compressor control error
E	6	5	3	I.P.M. error	E	9	7	3	Outdoor unit fan motor error
E	6	Α	1	Display P.C.B. communication error	E	9	9	1	4-way valve error
E	7	1	1	Discharge thermistor error	Е	Α	1	1	Discharge temp. error
E	7	2	1	Compressor thermistor error	Е	Α	3	1	Compressor temp. error
E	7	3	3	Heat EX. liquid outlet thermistor error		Α	5	1	Low pressure error
Е	7	4	1	Outdoor thermistor error		J	2	U	Branch boxes error