

FLOOR STANDING TYPE SPLIT UNIT

CEC CEC	±±±±±±±±±±±±±±±±±±±±±±±±±±±±±±±±±±±±±

TRUST AIR CONDITIONING EQUIPMENT CO. Prepared By: Engineering & R & D Department.

Shiraz- May 2017



Troubleshooting

1.Electrical Control Function	1
2. Troubleshooting	6
3. Controller	21





1. Electrical Control Function

1.1 Definition

- T1: Indoor room temperature
- T2: Coil temperature of evaporator
- T3: Coil temperature of condenser
- T4: Outdoor ambient temperature
- T5: Compressor discharge temperature
- Ts: Setting temperature

1.2 Main Protection

1.2.1 Time delay at restart for compressor.

1.2.2 Sensor protection at open circuit and breaking disconnection.

1.2.3 Phase check function(for 3-phase models)

If the phase sequence is detected wrong or lack of 1 or 2 phase, the unit won't start and there is error code displayed on outdoor PCB.

1.2.4 Low pressure check function(for 48-60K models)

The low pressure switch should be always closed. If it is open, the system will stop until the fault is cleared. Within 5 minutes after the compressor starts and 4 minutes after defrosting ends, low pressure switch won't be checked.

Note: If this protection occurs 3 times within 20 minutes, it won't recover automatically until the main power is cut off.

1.2.5 Over-current protection(for 48-60K models)

When compressor is running, if the current is over twice of the rated for 3 seconds, the compressor will stop and an error code will be displayed on the outdoor PCB. If the current becomes normal, the compressor will restart after 3 minutes.

1.3 Operation Modes and Functions 1.3.1 Fan mode

(1) Outdoor fan and compressor stop.

(2) Temperature setting function is disabled, and no setting temperature is displayed.

(3) Indoor fan can be set to

high/(medium)/low/auto.

(4) The louver operates same as in cooling mode.

(5) Auto fan:

For floor standing units:

Auto fan will be controlled in line with cooling auto

fan with temperature set to be 24°C.

For other units:



1.3.2 Cooling Mode

1.3.2.1 Compressor running rules

Once the compressor starts up, it will follow the below rules:

When T1-Ts is higher than setting value, the compressor and outdoor fan will shut off. When T1-Ts is lower than setting value, the compressor and outdoor fan will start up.



1.3.2.2 Outdoor fan running rules

For single-fan units:

The outdoor fan will run following the compressor For double-fan units:

The outdoor fan will run according to the value of temp. of T3.





1.3.2.3 Indoor fan running rules

In cooling mode, indoor fan runs all the time and the speed can be selected as high, (medium), low and auto.

The auto fan:

For floor standing units:



For other units:



1.3.2.4 Low evaporator coil temperature T2 protection



When the evaporator coil temp.T2 keeps lower than setting value for setting time, the compressor and outdoor fan will shut off.

1.3.2.5 Condenser high temperature T3 protection(excluding 18~48k cooling only models)



When high condenser temp. T3 is more than setting value, for setting time the compressor will stop.

1.3.3 Heating Mode(For heat pump models) 1.3.3.1 Compressor running rules:

Once the compressor starts up, it keeps running 7 minutes, then it will follow the below rules:

When T1-Ts is higher than setting value, the compressor and outdoor fan will shut off. When T1-Ts is lower than setting value, the compressor and outdoor fan will start up.



1.3.3.2 Outdoor fan running rules:

For single-fan units:

The outdoor fan will run following the compressor For double-fan units:

The outdoor fan will run according to the value of temp. of T4.

Electrical Control Function

T4



1.3.3.3 Indoor fan running rules:

When the compressor is on, the indoor fan can be set to high/(medium)/low/auto. And the anti-cold wind function has the priority.

Auto fan action:

For floor-standing units:

For other units:



1.3.3.4 Defrosting mode:

AC will enter the defrosting mode according to the value of temp. of T3 and the value range of temp. change of T3 and also the compressor running time.

• Defrosting action:

For 60K units:

During the defrosting mode, the compressor keep running, indoor and outdoor motor will stop,

1.3.3.5 High evaporator coil temp.T2 protection:

Compressor off

For floor-standing units:

Compressor and outdoor fan on

For Ceiling &floor type:

Compressor and Outdoor fan on Outdoor fan on Outdoor fan on











For other units:



1.3.4 Auto-mode

This mode can be chosen with remote controller and the setting temperature can be changed between $17 \sim 30^{\circ}$ C.

In auto mode, the machine will choose operation mode according to ΔT (ΔT =T1-Ts).

T1-Ts	
	Cooling
	Fan only
	Heating*

Indoor fan will run at auto fan of the relevant mode. The louver operates same as in relevant mode.

If the machine switches mode between heating and cooling, the compressor will keep stopping for 15 minutes and then choose mode according to T1-Ts. If the setting temperature is modified, the machine will choose running function again.

1.3.5 Drying mode

1.3.5.1 The indoor fan will keep running at low speed.

1.3.5.2 All protections are active and the same as that in cooling mode.

1.3.5.3 The louver operates the same as in cooling mode.

1.3.6 Timer function

1.3.6.1 Timing range is 24 hours.

1.3.6.2 Timer on. The machine will turn on automatically when reaching the setting time.

1.3.6.3 Timer off. The machine will turn off automatically when reaching the setting time.

1.3.6.4 Timer on/off. The machine will turn on automatically when reaching the setting "on" time, and then turn off automatically when reaching the setting "off" time.

1.3.6.5 Timer off/on. The machine will turn off automatically when reaching the setting "off" time, and then turn on automatically when reaching the setting "on" time.

1.3.6.6 The timer function will not change the AC current operation mode. Suppose AC is off now, it will not start up firstly after setting the "timer off" function. And when reaching the setting time, the timer LED will be off and the AC running mode has not been changed.

1.3.6.7 The setting time is relative time.

1.3.7 Economy function

1.3.7.1 It is valid in cooling, heating and auto mode.1.3.7.2. Turning off, changing mode or setting fan speed will cancel economy function.

1.3.7.3 Operation process in sleep mode is as follow:

After pressing ECONOMIC or SLEEP button on the controller, the machine will go into economy mode.

When cooling, the setting temperature rises 1°C every hour, 2 hours later the setting temperature stops rising.

For heat pump models, when they are in heating, the setting temperature reduces 1°C every hour, 2 hours later the setting temperature stops reducing.

1.3.7.4 In this mode, the fan speed is forced into AUTO mode.

1.3.8 Auto-Restart function

The indoor unit is equipped with auto-restart function, which is carried out through an auto-restart module. In case of a sudden power

4

Electrical Control Function

failure, the module memorizes the setting conditions before the power failure. The unit will resume the previous operation setting automatically after 3 minutes when power returns.

1.3.9 Drain pump control (For cassette)

1.3.9.1 Water level check

The water lever will be checked every 5 seconds, if the feedback signal is abnormal, it will be considered as drain water full by the control system.

1.3.9.2 Drain pump control

If there is no water full error, the drain pump will be on when the unit is in cooling mode (including auto-cooling and forced cooling) and dry mode. It will be off when the unit is in heating mode, fan only mode or off state (if the pump is on before the unit is off, it will delay 3 minutes to be off).

If there is a water full error, the drain pump will be on when the error occurs. Afterwards:

If the error disappears in 3 minutes, the drain pump will work as normal state. (if it is necessary to turn off the pump, it will be off in 1 minute delay.)

If the error is still there in 3 minutes, the drain pump will be off as well as the AC unit. The error can be cleared only when the power of the unit is cut off.



2. Troubleshooting

2.1 Display board

2.1.1 Display board of A5 Duct & HSPD



2.1.2 Display board of super slim cassette

or fan only indicator(cooling only type)

2.1.3 Display board of auto-lifting panel of 4 way cassette

2.1.4 Display board of ceiling & Floor

GTRUST

2.1.6 Display board of GA floor-standing

Ind	licators		
	Auto operation display	\sim	Swing operation display
(auto	Auto operation display	Ċ	Sleep operation display
*	Cooling operation display	B	Turbo operation display
≜ ⁴	Dry operation display	TIMER ON	On timer operation display
*	Heating operation display	TIMER OFF	Off timer operation display
	ricating operation display	Ł	Lock operation display
*	Fan operation display	* * *	Fan speed display

2.1.7 Display board of M floor-standing

2.1.8 Display board of J2 floor-standing

 \bigtriangledown

 \triangle

Indicators

- ^{auto} Auto operation display
- Cooling operation display
- () Dry operation display
- ※ Heating operation display
- \gg Fan operation display

- Horizontal airflow display \square
- \$ Sleep operation display
- Electrical heating operation display
- TIMER ON On timer operation display
- TIMER OFF Off timer operation display
 - 1 Lock operation display

2.1.10 Display board of E2 floor-standing

Room Temp/Set Temp/Set Timer display Fan speed operation display

Indicators

- Ò Auto operation display
- * Cooling operation display
- \heartsuit Dry operation display
- Đ. Heating operation display
- Fan operation display \$
- Lock operation display ፁ

- Ü On timer operation display
- Turbo operation display(optional) a
- (≽ Vertical airflow display(optional)
- ٣ Off timer operation display
- 割 Sleep operation display
- Horizontal airflow display 八

2.2. Self-diagnosis

Indoor unit's LED indication

During malfunction or protection, the indicators and digital LED displays as follow:

For floor-standing type:

Codes	Contents
P4	Temperature protection of evaporator
P5	High temperature protection of condenser
P9	Anti-cold air(for S2, it means defrosting)
E1	Open or short circuit of T1 temperature sensor
E2	Open or short circuit of T2 temperature sensor
E3	Open or short circuit of T3 temperature sensor
E6	Outdoor unit malfunction
HS	Defrosting

LEDs' for the indication of outdoor trouble(for 48-60K models)

Туре	Contents	LED1	LED2	LED3
Trouble	Phase sequence	Flash	Off	Off
Trouble	Lack of phase(A,B)	Flash	Off	Off
Trouble	Lack of phase(C)	Off	Off	Off
Trouble	Low pressure protection	Flash	Flash	Off
Trouble	Overload of current	Off	Off	Flash
Trouble	Open or short circuit of T3	Off	Flash	Flash
Trouble	Open or short circuit of T4 or T5 or high pressure protection	Off	Flash	Off
Trouble	High temperature protection of condenser	Flash	Flash	Flash

Note:

1. If the LED1-LED3 are flashing slowly, means the system is stand-by.

2. T3: Outdoor condenser temperature sensor3. T4: Outdoor ambient temperature sensor

2.3. Solving steps for typical malfunction

(1) For indoor unit

a. Open or short circuit of T1 or T2 temperature sensor

b. Open or short circuit of T3 temperature sensor

Troubleshooting

c. **EEPROM** malfunction

EEPROM: An electrically erasable programmable read-only memory whose contents can be erased and reprogrammed using a pulsed voltage.

For the super-slim cassette with up-down panel

a. Communication error between indoor unit and up-down panel

(2) For the outdoor unit

a. Phase sequence error:

b. Lack of phase

c. Overload of current

d. Protection of pressure or temp.

f. High temperature protection of condenser

Appendix 1 Temperature Sensor Resistance Value Table (°C--K)

Ċ	K Ohm	ĉ	K Ohm	°C	K Ohm	ĉ	K Ohm
-20	115.266	20	12.6431	60	2.35774	100	0.62973
-19	108.146	21	12.0561	61	2.27249	101	0.61148
-18	101.517	22	11.5000	62	2.19073	102	0.59386
-17	96.3423	23	10.9731	63	2.11241	103	0.57683
-16	89.5865	24	10.4736	64	2.03732	104	0.56038
-15	84.2190	25	10.000	65	1.96532	105	0.54448
-14	79.3110	26	9.55074	66	1.89627	106	0.52912
-13	74.5360	27	9.12445	67	1.83003	107	0.51426
-12	70.1698	28	8.71983	68	1.76647	108	0.49989
-11	66.0898	29	8.33566	69	1.70547	109	0.48600
-10	62.2756	30	7.97078	70	1.64691	110	0.47256
-9	58.7079	31	7.62411	71	1.59068	111	0.45957
-8	56.3694	32	7.29464	72	1.53668	112	0.44699
-7	52.2438	33	6.98142	73	1.48481	113	0.43482
-6	49.3161	34	6.68355	74	1.43498	114	0.42304
-5	46.5725	35	6.40021	75	1.38703	115	0.41164
-4	44.0000	36	6.13059	76	1.34105	116	0.40060
-3	41.5878	37	5.87359	77	1.29078	117	0.38991
-2	39.8239	38	5.62961	78	1.25423	118	0.37956
-1	37.1988	39	5.39689	79	1.21330	119	0.36954
0	35.2024	40	5.17519	80	1.17393	120	0.35982
1	33.3269	41	4.96392	81	1.13604	121	0.35042
2	31.5635	42	4.76253	82	1.09958	122	0.3413
3	29.9058	43	4.57050	83	1.06448	123	0.33246
4	28.3459	44	4.38736	84	1.03069	124	0.32390
5	26.8778	45	4.21263	85	0.99815	125	0.31559
6	25.4954	46	4.04589	86	0.96681	126	0.30754
7	24.1932	47	3.88673	87	0.93662	127	0.29974
8	22.5662	48	3.73476	88	0.90753	128	0.29216
9	21.8094	49	3.58962	89	0.87950	129	0.28482
10	20.7184	50	3.45097	90	0.85248	130	0.27770
11	19.6891	51	3.31847	91	0.82643	131	0.27078
12	18.7177	52	3.19183	92	0.80132	132	0.26408
13	17.8005	53	3.07075	93	0.77709	133	0.25757
14	16.9341	54	2.95896	94	0.75373	134	0.25125
15	16.1156	55	2.84421	95	0.73119	135	0.24512
16	15.3418	56	2.73823	96	0.70944	136	0.23916
17	14.6181	57	2.63682	97	0.68844	137	0.23338
18	13.9180	58	2.53973	98	0.66818	138	0.22776
19	13.2631	59	2.44677	99	0.64862	139	0.22231

Troubleshooting

Appendix 2

Unit: ℃K			Discharge temp. sensor table				
-20	542.7	20	68.66	60	13.59	100	3.702
-19	511.9	21	65.62	61	13.11	101	3.595
-18	483	22	62.73	62	12.65	102	3.492
-17	455.9	23	59.98	63	12.21	103	3.392
-16	430.5	24	57.37	64	11.79	104	3.296
-15	406.7	25	54.89	65	11.38	105	3.203
-14	384.3	26	52.53	66	10.99	106	3.113
-13	363.3	27	50.28	67	10.61	107	3.025
-12	343.6	28	48.14	68	10.25	108	2.941
-11	325.1	29	46.11	69	9.902	109	2.86
-10	307.7	30	44.17	70	9.569	110	2.781
-9	291.3	31	42.33	71	9.248	111	2.704
-8	275.9	32	40.57	72	8.94	112	2.63
-7	261.4	33	38.89	73	8.643	113	2.559
-6	247.8	34	37.3	74	8.358	114	2.489
-5	234.9	35	35.78	75	8.084	115	2.422
-4	222.8	36	34.32	76	7.82	116	2.357
-3	211.4	37	32.94	77	7.566	117	2.294
-2	200.7	38	31.62	78	7.321	118	2.233
-1	190.5	39	30.36	79	7.086	119	2.174
0	180.9	40	29.15	80	6.859	120	2.117
1	171.9	41	28	81	6.641	121	2.061
2	163.3	42	26.9	82	6.43	122	2.007
3	155.2	43	25.86	83	6.228	123	1.955
4	147.6	44	24.85	84	6.033	124	1.905
5	140.4	45	23.89	85	5.844	125	1.856
6	133.5	46	22.89	86	5.663	126	1.808
7	127.1	47	22.1	87	5.488	127	1.762
8	121	48	21.26	88	5.32	128	1.717
9	115.2	49	20.46	89	5.157	129	1.674
10	109.8	50	19.69	90	5	130	1.632
11	104.6	51	18.96	91	4.849		
12	99.69	52	18.26	92	4.703		
13	95.05	53	17.58	93	4.562		
14	90.66	54	16.94	94	4.426		
15	86.49	55	16.32	95	4.294	B(25/50)=3950K
16	82.54	56	15.73	96	4.167		
17	78.79	57	15.16	97	4.045	R(90 ℃)=	=5KΩ±3%
18	75.24	58	14.62	98	3.927		
19	71.86	59	14.09	99	3.812		

3. Controller

3.1 Wireless Remote Controller 3.1.1 RG51C/E

Remote Controller Specifications

Model	RG51C/E
Rated Voltage	3.0V
Lowest Voltage of CPU Emitting Signal	2.0V
Reaching Distance	8m (when using 3.0 voltage, it can get 11m)
Environment Temperature Range	-5℃ ~60 ℃

Introduction of Function Buttons on the Remote Controller

- **1. Adjust** ▼ : Decrease the set temp. Keeping pressing will decrease the temp with 1 °C per 0.5s.
- **2.** Adjust \triangleq : Increase the set temp. Keeping pressing will increase the temp with 1 °C per 0.5s.
- 3. MODE: Once pressing, running mode will be selected in the following sequence:

AUTO -- COOL -- DRY -- [HEAT] -- FAN-

NOTE: No heating mode for cool only type unit.

4. VERT SWING: Used to stop or start horizontal louver movement. The louver will swing up and down automatically if push this button.

AIR DIRECTION: Used to set the desired up/down air flow direction. The louver changes 6 degree in angle for each press.

5. HORIZ SWING: Used to stop or start vertical louver movement.

6. FAN SPEED+ MODE: Press the Mode and Fan speed button simultaneously for 2 seconds. The remote

controls into faceplate setting state and the LCD shows F2.Press the TEMPUP(\triangleq) to control the faceplate up and press the TEMP DOWN(\checkmark) to control the faceplate down. Press any button to exit the faceplate setting state, then the LCD back to the normal display.

7. ON/OFF: For turning on or turning off the air conditioner.

8. FAN SPEED: Fan speed will be selected in following sequence once pressing this button:

→AUTO → LOW → MED → HIGH →

9. TIME ON: For time ON setting. Once pressing this button, the time will increase by 0.5 hour. When the set time exceeds 10 hours, pressing the button will increase the time by 1 hour. Adjusting the figure to 0.00 will cancel time ON setting.

10. ECO: Select this function during the sleeping time. It can maintain the most comfortable temperature

and save energy. This function is available on COOL, HEAT or AUTO mode only .

NOTE: While the unit is running under Energy-saving mode, it would be cancelled if press MODE, FAN SPEED or ON/OFF button.

11. TIME OFF: For time OFF setting. Once pressing this button, the time will increase by 0.5 hour. When the set time exceeds 10 hours, pressing the button will increase the time by 1 hour.

Adjust the figure to 0.00 will cancel time ON setting.

12. LOCK (inner located): Push this button to lock in all the current settings, and the remote controller will not accept any operation except that of the LOCK. Use the LOCK mode when you want to prevent settings

from being changed accidentally. Press the LOCK button again to cancel the LOCK function. A lock symbol will appear on the remote controller display when the lock function is activated.

13.RESET (inner located): Once the recessed RESET button is pressed, all of the current settings will be cancelled and the controller will return to the initial settings..

3.1.2 R51I3/BGE-M

Remote Controller Specifications

Model	R51I3/BG(C)E-M
Rated Voltage	3.0V
Lowest Voltage of CPU Emitting Signal	2.0V
Reaching Distance	8m
Environment Temperature Range	-5℃ ~60 ℃

Introduction of Function Buttons on the Remote Controller

- **1. Adjust** ▼ : Decrease the set temp. Keeping pressing will decrease the temp with 1 °C per 0.5s.
- **2.** Adjust \triangleq : Increase the set temp. Keeping pressing will increase the temp with 1°C per 0.5s.
- 3. MODE: Once pressing, running mode will be selected in the following sequence:

→AUTO→COOL→DRY→HEAT→FAN→

NOTE: No heating mode for cool only type unit.

4.AIR HORIZONTAL Button: When press the button once and quickly, the air flow direction setting feature of the louver is activated. The moving angle of the louver is 60 for each press.Keep pressing the button to move the louver to the desired position. If keep pressing the button without releasing for 2 more seconds, the auto swing feature of the louver is activated. The horizontal louver would swing up/down automatically. Press it again to stop.

5. AIR VERTICAL Button: When press the button once and quickly, the air flow direction setting feature of the louver is activated. The moving angle of the louver is 60 for each press. Keep pressing the button to move the louver to the desired position. If keep pressing the button without releasing for 2 more seconds,

the auto swing feature of the louver is activated. The vertical louver would swing left and right automatically. Press it again to stop.(If the indoor unit has no this feature, there is no corresponding operation happened when press this button.)

6.RESET (inner located): Once the recessed RESET button is pressed, all of the current settings will be

cancelled and the controller will return to the initial settings..

7. LED DISPLAY Button: Press this button to clear the display on the indoor unit, press it again to light the display

8. ON/OFF: For turning on or turning off the air conditioner.

9. FAN SPEED: Fan speed will be selected in following sequence once pressing this button:

—►AUTO —► LOW —► MED —► HIGH —

10. TIME ON: For time ON setting. Once pressing this button, the time will increase by 0.5 hour. When the set time exceeds 10 hours, pressing the button will increase the time by 1 hour. Adjusting the figure to 0.00 will cancel time ON setting.

11. SLEEP Button: Press this button to activate the Energy-Saving mode. Press again to stop the function. This function is available on COOL, HEAT or AUTO mode only and maintain the most comfortable temperature for you.

12. TIME OFF: For time OFF setting. Once pressing this button, the time will increase by 0.5 hour. When the set time exceeds 10 hours, pressing the button will increase the time by 1 hour.

Adjust the figure to 0.00 will cancel time ON setting.

13. LOCK (inner located): Push this button to lock in all the current settings, and the remote controller will not accept any operation except that of the LOCK. Use the LOCK mode when you want to prevent settings

from being changed accidentally. Press the LOCK button again to cancel the LOCK function. A lock symbol will appear on the remote controller display when the lock function is activated.

14. TURBO Button: Push this button to activate the speed cooling function(Speed cooling operates at super high fan speed in cooling mode). For the unit adopts PTC, when press TURBO button in heating mode, the PTC heater is energized and brings stronger and faster heating operation.

3.1.3 R51M/(C)E

Remote Controller Specifications

Model	R51M/(C)E
Rated Voltage	3.0V
Reaching Distance	8m
Environment Temperature Range	-5℃ ~60 ℃

Introduction of Function Buttons on the Remote Controller

1. Adjust \blacksquare : Decrease the set temp. Keeping pressing will decrease the temp with 1 °C per 0.5s.

2. Adjust \triangleq : Increase the set temp. Keeping pressing will increase the temp with 1 °C per 0.5s.

3. MODE: Once pressing, running mode will be selected in the following sequence:

-AUTO -- COOL -- DRY -- HEAT -- FAN-

NOTE: No heating mode for cool only type unit.

4. SWING: Used to stop or start horizontal louver movement. The louver will swing up and down

automatically if push this button.

5. RESET (inner located): Once the recessed RESET button is pressed, all of the current settings will be cancelled and the controller will return to the initial settings.

6. AIR DIRECTION: P Press this button to change the swing angle of the louver. The swing angle of the louver is 60 for each press. When the louver swing at a certain angle which would affect the cooling and heating effect of the air conditioner, it would automatically change the swing direction . No symbol will appear in the display area when press this button. (Not applicable to units without this function).

7. LED: Press this button to clear the digit display in the air conditioner, press it again to activate it (Not

available for the units without LED display window).

8. FAN SPEED: Fan speed will be selected in following sequence once pressing this button:

9. ON/OFF: For turning on or turning off the air conditioner

10. TIME ON: For time ON setting. Once pressing this button, the time will increase by 0.5 hour. When the set time exceeds 10 hours, pressing the button will increase the time by 1 hour. Adjusting the figure to 0.00 will cancel time ON setting.

11.SLEEP: Press this button to go into the Energy-Saving operation mode. Press it again to cancel. This function is only can be used on COOL, HEAT and AUTO mode and maintain the most comfortable temperature for you.

12. TIME OFF: For time OFF setting. Once pressing this button, the time will increase by 0.5 hour. When the set time exceeds 10 hours, pressing the button will increase the time by 1 hour.

Adjust the figure to 0.00 will cancel time ON setting.

13. LOCK (inner located): Push this button to lock in all the current settings, and the remote controller will not accept any operation except that of the LOCK. Use the LOCK mode when you want to prevent settings

from being changed accidentally. Press the LOCK button again to cancel the LOCK function. A lock symbol will appear on the remote controller display when the lock function is activated.

14. TURBO: Push this button to activate/cancel the Turbo function which enables the unit to reach the preset temperature in the shortest time. On cooling mode, the unit will blow strong cooling air with super high fan speed. On heating mode (applicable to the unit adopts PTC only), the PTC will bring fast heating operation.

3.2 Wired Remote Controller

3.2.1 KJR-12B

Name and functions of buttons on the wire controller

1. Mode button: When press this button, the operation mode change as the following sequence: →AUTO→COOL→DRY→EHEAT → FAN→

Remark: For the cooling only model, the heating mode is skipped.

- 2. Timer on button: Press this button, timer on function is active. Then every press, the time increase 0.5h, after 10h, 1h increasement after each press. If cancel this Function, just set it to "0.0"
- 3. Timer off button: Press this button, timer off function is active. Then every press, the time increase 0.5h, after 10h, 1h increasement after each press. If cancel this function, just set it to "0.0".
- 4. Follow me button: When under cool, heat and auto mode, press this button, follow me function is active. Press again, this function is ineffective.
- 5. Electrical heater button: If press this button in heat mode, electrical heater function become ineffective.
- 6. Reset button (hidden): Use a 1mm stick to press in the little hole , then the current setting is canceled . The wire controllers enter into original state.
- 7. ON/OFF button: When in off state, press this button, the indicator is on, the wire controller enter into on state, and send setting information to indoor PCB. When in on state, press this button, the indicator is off, and send instruction. If timer on or timer off has been set, it cancel this setting then send instruction to stop the machine.

- 8. Adjust button: Set indoor temperature up. If press and hold on, it will increase at 1degree per 0.5 second.
- 9. Adjust button: Set indoor temperature down. if press and hold on, it will decrease at 1degree per 0.5 Second.
- 10. Swing button: First press, start swing function; second press, stop swing. (Match to some model with swing function).
- 11. Economy operation button: press this button, the indoor unit operates in economy mode, press again, exit this mode (it may be ineffective for some models)
- 12. Fan speed button: press this button consecutively; the fan speed will circle as follow:

13. Lock button (hidden): When you push the LOCK button, all current settings are locked in and the wire controller does not accept any operation except that of the LOCK button. Use the lock mode when you want to prevent setting from being changed accidentally or play fully. Push the LOCK button again when you want to cancel the LOCK mode.

Name and function of LCD on the wire controller

1. Operation mode indication: When press" MODE" button, the following mode can be selected in circle. Auto Cool Dry Heat Fan only Auto.

Auto \rightarrow Cool \rightarrow Dry \rightarrow Heat \rightarrow Fan only \rightarrow Auto

For cooling only model, heat mode is skipped.

- 2. Timer: When adjust setting on time or only on time is set, the "ON" is lighted. When adjust setting off time or only off time is set, the "OFF" is lighted. If on and off timer are both set, the "ON" and "OFF" are both lighted.
- 3. Follow me function: There is a temperature sensor inside the wire controller, after setting temperature, it will compare the two temperatures, and the space of wire controller will be the same as setting temperature. It is available under cooling, heating, auto mode.
- 4 ON/OFF indication: When it is on, the icon display, otherwise it is extinguished.
- 5. Fan speed indication: There are four fan modes: low, middle, high, auto. For some models, no middle fan then the middle fan is seen as high speed.
- 6. Lock: When the "LOCK" button is pressed, the icon appears and other buttons is unable, press again, the icon disappears.
- 7. Temperature display zone: Generally it displays setting temperature; it can be adjusted by press temperature button▲and▼.But in fan mode, no display here.

Remark:

The wired controller will reset to factory setting with auto mode, auto fan and 24°C setting temperature when the air conditioner restarts after power failure.

And this may cause inconsistent displays on the wired controller and on the air conditioner. You need to readjust the running status through the wired controller.

Installation

Wiring Principle Sketch:

Installation Notice:

When the air conditioner needs the constant frequency wire controller, be sure adding a wire joint with 5 terminal named A, B, C, D, E in indoor unit, and fixing an infrared emitter whose anode and cathode connecting with A and B near the receiver in the indoor unit switch board, then connecting the terminal +5v, GND, Run in the switch board to C,D,E respectively.

NOTE

• The connecting wire should be a little longer as to take away the switch board easily for maintenance.

The connecting wire should be a little longer as to take away the controller easily for maintenance.

Air Conditioning Systems

Cooling & Heating

TRUST AIR-CONDITIONING EQUIPMENT CO. Shiraz office: 8 th floor, Alvand Blog., Dostan St., Moaliabad Ave., SHIRAZ, IRAN., Post code: 71877-14446 Tel.: +98-71-36341070 Fax.: +98-71-36341094 Tehran office: No. 19- koohe nour St.- Motahhari St.-**TEHRAN, IRAN., Post code: 15876-73111** Tel.: +98-21-89389 Fax.: +98-21-88541903 Ahwaz office: No. 309- Kaveh St.- AHWAZ, IRAN., Post code: 61939-47911 Tel.: +98-61-32230647-8 E-mail: info@trustacs.com Fax.: +98-61-32230647 برترین نام و نشسان های تجاری ایران Web site: http://www.trustacs.com

ISO 9001 REGISTERED MGMT SYS RVA CO2

برتر در اولین جشنواره بین المللی