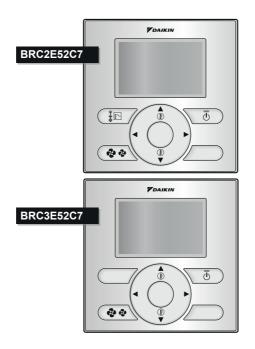


WIRED REMOTE CONTROLLER

INSTALLATION MANUAL



Be sure to read this installation manual before conducting the installation of this product.

Contents

1. Safety Precautions	. 2
2. Accessories	. 4
3. Remote controller installation procedure	. 4
4. Functions and menu items of the remote controller buttons	10
5. Power-on	12
6. Field settings	15
7. Test operation method (SkyAir only)	19
8. Checking procedure of Error History	23
9. Registration method of the Maintenance Contact information	24
10. Confirmation of registered details	25
11. Clock & Calendar	26
12. Language	27
13. Prohibit Buttons	28
14. Function Prohibition	30
15. Prohibit Mode	31
16. External Input Interlock Function	33
17. Single and Dual setpoint mode	39
18. Other Service Settings	40
19. Software update with Updater	42

1. Safety Precautions

The original instructions are written in English. All other languages are translations of the original instructions.

Also see the installation manual attached to the indoor unit.

Please read these Safety Precautions carefully before installing the remote controller.

• This manual classifies the precautions into WARNING and CAUTION. They both contain important information regarding safety. Be sure to follow all the precautions below.

Failure to follow these instructions properly may result in personal injury or loss of life.
Failure to observe these instructions properly may result in property damage or personal injury, which may be serious depending on the circumstances.

• After completing the installation, conduct a trial operation to check for faults and explain to the customer how to operate the air conditioner with the aid of the operation manual. Ask the customer to store the installation manual along with the operation manual for future reference.

Ask your dealer or qualified personnel to carry out installation work.

Do not attempt to install the remote controller yourself. Improper installation may result in water leakage, electric shocks or fire.

Consult your local dealer regarding relocation and reinstallation of the remote controller. Improper installation work may result in leakage, electric shocks or fire hazards.

Install the remote controller in accordance with the instructions in this installation manual. Improper installation may result in water leakage, electric shocks or fire.

Be sure to use only the specified accessories and parts for installation work.

Failure to use the specified parts may result in the unit falling down, water leakage, electric shocks or fire.

Install the remote controller on a foundation strong enough to withstand the weight of the remote controller.

Insufficient strength may result in the remote controller falling down and causing injury.

Electrical work must be performed in accordance with the relevant local and national regulations and with the instructions in this installation manual.

Be sure to use a dedicated power supply circuit only. Insufficient power circuit capacity and improper workmanship may result in electric shocks or fire.

Always perform installation work with the power turned off.

Touching electric parts may result in electric shock.

Do not disassemble, reconstruct or repair.

This may result in electric shock and/or fire.

Make sure that all wiring is secured, the specified wires are used and that there is no strain on the terminal connections or wires.

Improper connections or securing of wires may result in abnormal heat build-up or fire.

The choice of materials and installations must comply with the applicable national and international standards.

To avoid leakage and electric shock due to entry of water or insects, fill the wiring through hole with putty.

To avoid electric shocks, do not operate with wet hands.

Do not wash the remote controller with water, as this may result in electric shocks or fire.

Install the indoor and outdoor units, power cord and connection wires at least 1 meter away from televisions or radios to prevent interference and noise.

(Depending on the incoming signal strength, a distance of 1 meter may not be sufficient to eliminate noise.)

Do not install the air conditioner in the following locations:

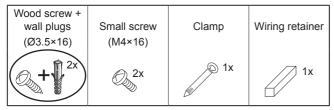
- 1. Where there is a high concentration of mineral oil spray or vapour (e.g. a kitchen). Plastic parts may deteriorate and fall off which could result in water leakage.
- 2. Where corrosive gas, such as sulphurous acid gas, is produced. Corroding of copper pipes or soldered parts may result in refrigerant leakage.
- Near machinery emitting electromagnetic radiation. Electromagnetic radiation may disturb the operation of the control system and result in malfunctioning of the unit.
- 4. Where flammable gas may leak, where there is carbon fibre or ignitable dust suspensions in the air or where volatile flammables such as paint thinner or gasoline are handled. Operating the unit in such conditions may result in fire.
- 5. High temperature areas or direct flames. Overheating and/or fire may occur.
- Moist areas or places which may be exposed to water.
 If water enters the remote controller, electric shock may be caused and the inner electronics may fail.

When the thermostat function of the remote controller is used, select the installation location while considering it should be a place:

- Where the average temperature in the room can be detected.
- Which is not exposed to direct sunlight.
- Which is not near a heat source.
- Which is not affected by the outside air or air draught due to, for example, opening/closing of doors, the air outlet of the indoor unit or the like.

2. Accessories

The following accessories are included.

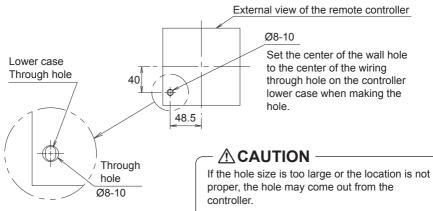


3. Remote controller installation procedure

3-1 Determine where to install the remote controller.

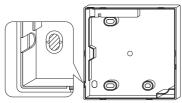
Make sure to follow "1. Safety Precautions" when determining the location.

3-2 Make a wiring through hole on the wall if the wires are coming out from the rear.



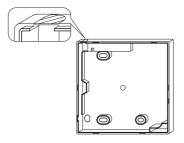
3-3 Determine the direction of the controller wiring outlet (rear outlet, left outlet, top left outlet, top center outlet).

3-3-1 Rear outlet



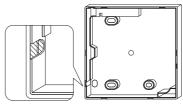
Cut off the resin area (hatched area).

3-3-3 Top left outlet



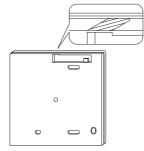
Cut off the thin area (hatched area) with nippers or the like and then remove the burrs with a file or the like.

3-3-2 Left outlet



Cut off the thin area (hatched area) with nippers or the like and then remove the burrs with a file or the like.

3-3-4 Top center outlet



Cut off the thin area (hatched area) with nippers or the like and then remove the burrs with a file or the like.

3-4 Conduct wiring.

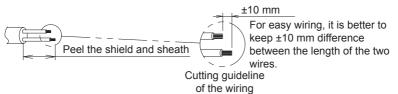
- 1. The switchbox and the transmission wiring should not be attached.
- 2. Do not directly touch the remote controller PCB.

Wiring Specifications

Wiring Type	Sheathed vinyl cord or cable
Wiring Size	0.75~1.25 mm ²
Wiring Length	Max. 500 m ^(*)

*This is the total length in the system when using group control.

The sheath part in the remote controller case should be stripped following these instructions.

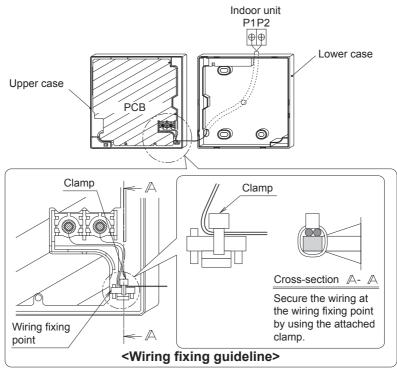


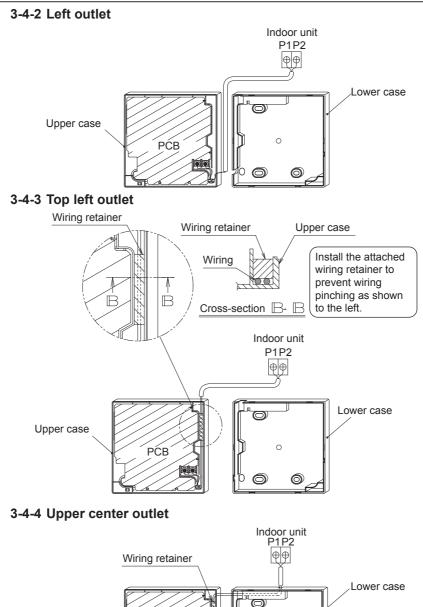
Sheath stripping length:

- ±150 mm for top left outlet
- ±200 mm for top center outlet

Connect the terminals (P/P1, N/P2) of the remote controller to the terminals (P1, P2) of the indoor unit. (P1 and P2 have no polarities.)

3-4-1 Rear outlet





Upper case

PĆB

0

0

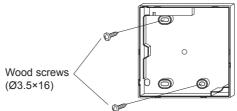
- Do not perform wiring close to a power line in order to avoid electrical noise (external noise).
- Seal the wiring draw-in port securely with putty (field supply) to prevent the entry of insects or the like.

3-5 Fixing procedure of the lower case.

In the case of wiring a remote controller through the top center outlet or rear outlet, perform the wiring through the outlet hole in the lower case before it is installed on the wall.

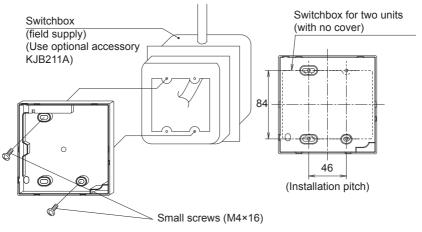
3-5-1 Wall mounting

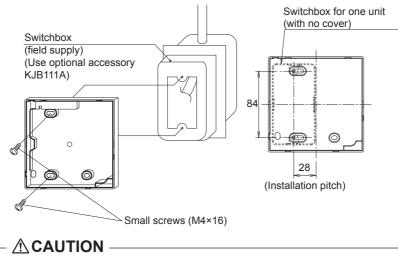
Secure by using the attached wood screws (2×).



3-5-2 Switchbox mounting

Secure by using the attached small screws (2×).

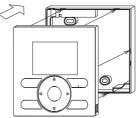




- Select a flat surface for installation if possible.
- Do not tighten the installation screws too much to avoid deforming the lower case.

3-6 Attach the upper case.

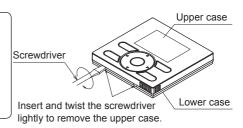
- Align the upper case with the tabs of the lower case (6 points) and insert the upper case.
- Be careful not to pinch the wiring when attaching.
- Peel off the protective seal which is attached to the upper case.



3-7 Remove the upper case.

Insert a slot screwdriver into the slots in the lower case (2 places) to remove the upper case.

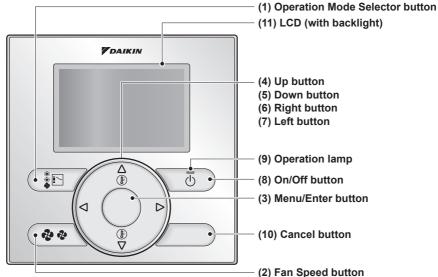
- The remote controller PCB is installed on the upper case. Be careful not to damage the PCB with the slot screwdriver.
- Take care that dust or moisture does not touch the PCB of the removed upper case.



9

4. Functions and menu items of the remote controller buttons

4-1 Functions and menu items



(1) Operation Mode Selector button

- Only available on the BRC2E
- This button is disabled by default for the BRC3E. To enable, refer to "13. Prohibit Buttons" on page 28.
- Press this button to select the operation mode of your preference.
- Available modes may vary with the connected model.

(2) Fan Speed button

- Used to change the fan speed.
- Available fan speeds may vary with the connected model.

(3) Menu/Enter button

- This button is disabled by default. To enable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.
- Used to display the main menu or enter the selected item. (For details on the main menu, see the operation manual.)

Main menu*

Airflow Direction Individual Air Direction Quick Start Ventilation Energy Saving Options Schedule Filter Auto Clean Maintenance Information Configuration Current Settings Clock & Calendar Language

*Available menu items are depending on the connected model.

(4) Up button ▲

- Used to raise the set temperature.
- The next item on the upper side will be highlighted. (Keep pressing the button to cycle through the values or items.)
- Used to change the selected item.

(5) Down button ▼

- Used to lower the set temperature.
- The next item on the lower side will be highlighted.
 (Keen pressing the butten to evel thread

(Keep pressing the button to cycle through the values or items.)

• Used to change the selected item.

(6) Right button ►

- Used to highlight the next item on the right-hand side.
- The display contents are changed to the next screen.

(7) Left button ◀

- Used to highlight the next items on the left-hand side.
- The display contents are changed to the previous screen.

(8) On/Off button

• Press to start or stop the air conditioner.

(9) Operation lamp (Green)

- This lamp lights up during operation.
- This lamp will blink if an error occurs.
- This lamp is not lit when the unit operation is OFF.

(10) Cancel button

- This button is disabled by default. To enable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.
- Used to return to the previous screen.
- Press and hold this button for 4 seconds or longer to display the Service Settings menu.

- To operate the Up/Down/Left/Right button, always press ▲, ▼, ◄, or ►.
- The Menu/Enter and the Cancel button are disabled by default. To enable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.
- The Menu/Enter and Cancel button need to be disabled again after changes are made.
- For the BRC3E, the Operation Mode Selector button is locked by default. To unlock, refer to "13. Prohibit Buttons" on page 28.

(11) LCD (with backlight)

- The backlight will be lit for approximately 30 seconds when one of the buttons is pressed.
- The actions linked to the buttons, except for the On/Off button, are not carried out when the backlight is not lit.
- When two remote controllers are used to control a single indoor unit, the backlight of the remote controller which is operated first will be lit.

Service Settings menu*

Test Operation Maintenance Contact Field Settings Min Setpoints Differential External Input Interlock Group Address Indoor unit Airnet Address Outdoor unit Airnet Address Error History Indoor Unit Status Outdoor Unit Status Forced Fan ON Switch Main Sub Controller Filter Indicator Test Filter Auto Clean Brush/Filter Ind **Disable Filter Auto Clean**

*Available menu items are depending on the connected model.

Power-on

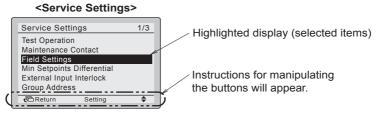
4-2 Enable/disable the Menu/Enter and Cancel button

To enable the Menu/Enter and Cancel button in the Basic screen, proceed as follow:

- 12. Keep the ► button pressed.
 - Push the 3 indicated keys simultaneously while keeping the ► button pressed.

To disable the Menu/Enter and Cancel button in the Basic screen, follow the same procedure.

4-3 Description of button operation



5. Power-on

- It is not possible to use two remote controllers and the Digital Input Adapter BRP7A* together. The Digital Input Adapter will not work and will be in an error state when a sub remote controller is detected.
- When controlling one indoor unit with two remote controllers, one remote controller needs to be set as the main remote controller and one as the sub remote controller. This selection needs to be made once during start up and can be changed afterwards in the Service Settings menu.
- Check that the indoor/outdoor unit wiring is completed.
- Check that the switchbox cover of the indoor and outdoor units are closed before powering on.

If one indoor unit is controlled by a remote controller

- **5-1** Turn on the power.
- **5-2** "Checking the connection. Please stand by." is displayed.

<Main remote controller>



NOTE -

When the text on the left is displayed, the backlight does not light up when one of the buttons is pressed.

5-3 The Basic screen is displayed.



<u>や</u>



5 - 3

- **5-4** Put on the power.
- **5-5** "Checking the connection. Please stand by." is displayed.

<Main remote controller>

<Sub remote controller>

```
5-5 Checking the connection.
Please stand by.
Main RC
```

Checking the connection. Please stand by.

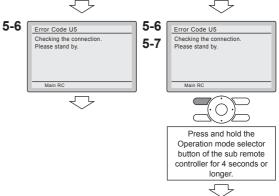
Main RC

NOTE

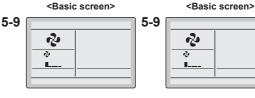
When the above text is displayed, the backlight does not light up when one of the buttons is pressed.

5-5

- 5-6 If the sub remote controller is not set when powering on when one indoor unit is controlled by two remote controllers, "Error code U5" is displayed in the connection checking screen.
- 5-7 Select the sub remote controller by pressing the Operation Mode Selector button of either one of the remote controllers for 4 seconds or longer.



- 5-8 When the display is changed from Main RC to Sub RC, the setting is completed **NOTE**If the Basic screen is not displayed more than 2 minutes after the "Sub RC" display, turn off the power and check the wiring.
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-8
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
 5-9
- **5-9** The Basic screen is displayed.



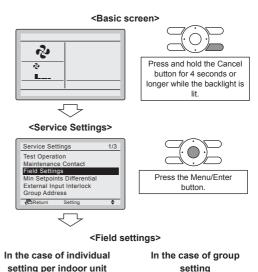
It's only possible to use a main and a sub remote controller of the same type. The BRC2E and BRC3E model are the same type and can only be used with each other.

NOTE

- When selecting a different language, refer to "12. Language" on page 27.
- The following functions cannot be set in the sub remote controller. Set them in the main remote controller:
 - Individual Airflow Direction
 - · "Auto" operation mode (switches to cooling or heating)
 - Energy Saving Options
 - Schedule
 - Service Settings (only Test Operation, Maintenance Contact and Switch Main Sub Controller are available).

6. Field settings

- 6-1 Enable the Menu/Enter and Cancel button.To enable, refer to "4-2 Enable/disable the Menu/ Enter and Cancel button" on page 12.
- 6-2 Press and hold the Cancel button for 4 seconds or longer. The Service Settings menu is displayed.
- **6-3** Select Field Settings and press **6-3** the Menu/Enter button.



- 6-4 Highlight the "Mode No.", and select the desired "Mode No." by using the ▲▼ (Up/Down) buttons. For the most commonly-used field settings, refer to page 18.
- 6-5 In the case of configuring the indoor units individually during group control (When Mode No. such as 20, 21, 22, 23, 25 are selected), highlight the unit No. and select the "Indoor unit Number" to be set by using the ▲ V (Up/Down) buttons. (In the case of configuring as a group, this operation is not needed.)

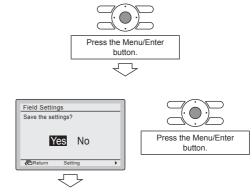
6-4 6-4 Field Settings Field Settings Mode Unit No. Mode 6-5 6-6 20 10 0-01 1-00 2-00 3-00 6-6 11— 10 15-12-13 **4**\$} Return Setting (**1**) SECOND CODE NO. FIRST CODE (SW) NO.

NOTE _____

- In the case of individual configuration per indoor unit, the current settings are displayed.
- SECOND CODE NO. " " means that there is no function available
- In the case of configuring as a group, all SECOND CODE NO. which may be set are displayed as " * "

- 6-6 Highlight the SECOND CODE NO. of the FIRST CODE NO. to be changed and select the desired SECOND CODE NO. by using the ▲▼ (Up/Down) buttons. Multiple identical mode number settings are available.
- **6-7** Press the Menu/Enter button. The **6-7** confirmation screen is displayed. **6-8**
- **6-8** Select Yes and press the Menu/ Enter button. The settings are saved and the Field settings screen returns.
- **6-9** When multiple settings need to be changed, repeat "6-3" to "6-8".
- **6-10** After all changes are completed, press the Cancel button twice.
- **6-11** The backlight goes out and "Checking the connection. Please stand by" is displayed during initialization. After the initialization, the Basic screen returns.
- **6-12** Disable the Menu/Enter and Cancel button when no other settings need to be changed. To disable, refer to "4-2 Enable/ disable the Menu/Enter and Cancel button" on page 12.

- When an optional accessory is installed on the indoor unit, the settings of the indoor unit may be changed. See the manual of the optional accessory.
- For the details on the field settings of the indoor unit, see the installation manual attached to the indoor unit.
- The outdoor unit field settings can only be configured on the outdoor PCB. Refer to the installation manual attached to the outdoor unit.



<Field Settings>

- Though the configuration is performed for the whole group, set the Mode No. in parenthesis when performing an individual configuration per indoor unit or when checking after the configuration is finished.
- The SECOND CODE NO. at factory shipment depends on the indoor unit model. Default values can be found in the respective Service Manual of the respective units. For the following settings, the value is the same for all indoor units.
 - Thermostat sensor used for the "Auto" operation mode and the Setback function (room temperature on detailed display):"02".
 - Setback function: "04"
 - External input B1: "02"
 - External input B2: "02"
- Functions which are unavailable for the connected indoor unit(s) are not displayed.

Mode	FIRST	Description of the setting		T SECOND CODE NO. (Note 2)					
No. (Note 1)	CODE NO.				01	02		03	04
			Ultra long life filter		±10.000 hrs.		±5.000 hrs.		
	0	air filter" icon is shown (when filter contamination	Long life filter	Light	±2.500 hrs.	Heavy	±1.250 hrs.	_	_
		is heavy the time to clean the air filter is to be halved).	Standard filter		±200 hrs.		±100 hrs.		
10 (20)	1	Long-life filter type (setting sign indication time). (Change setting when a u filter is installed).	-	L	ong-life filter	U	ltra-long life filter	_	_
	2	Thermostat sensor in the controller.	remote		se combined (with indoor thermistor)	1	Do not use	Use exclusively	_
	3	Setting for when the filter to be displayed.	•		Display	Do	o not display	_	—
11 (21)	0	Number of connected SkyAir simultaneous operation indoor units (setting for simultaneous operation system).			Pair		Twin	Triple	Double twin
40 (00)	 External On/Off input from outside (setting for when forced On/Off is to be operated from somewhere else). 		1	Forced OFF		On/Off operation	Emergency	Forced OFF	
12 (22)	2	Thermostat differential changeover (setting for when using a remote sensor).			1°C		0.5°C	_	_
	0	High air outlet velocity (for high ceiling applications).			$h \le 2.7 \text{ m}$		2.7 m < h ≤ 3.0 m	3.0 m < h ≤ 3.5 m	_
	1	Selection of airflow direction (setting for when a kit has been installed that blocks the airflow).			4-way flow	:	3-way flow	2-way flow	_
13 (23)	3	Selection of airflow function (setting for when using a decoration panel at the outlet).			Equipped	N	ot equipped	_	_
	4	Airflow direction range set			Upper		Normal	Lower	—
	6	The external static pressu (setting according to the c duct resistance).			Normal		High static pressure	Low static pressure	_
	FHYK: follow the high ceiling setting.			Normal	ŀ	High ceiling	_	—	
15 (25)	3	Drain pump operation with humidifying.			Equipped	N	ot equipped		_
1c	1	Thermostat sensor used for the "Auto" operation mode and the Setback function (room temperature on detailed display).		t	Indoor thermistor (intake emperature)		Remote controller thermistor	_	_
1c	12	External input B1.			Do not use		Use		—
1c	13	External input B2.			Do not use		Use	_	—
1e	2	Setback function.			Do not use		Heat only	Cool only	Cool and Heat

7. Test operation method (SkyAir only)

* In the case of VRV, see the manual attached to the outdoor unit.

Also see the installation manuals attached to the indoor unit and the outdoor unit.

- Check that the wiring of the indoor unit and the outdoor unit is completed.
- Check that the switchbox cover of the indoor unit and the outdoor unit is closed.
- After refrigerant piping, drain piping and electric wiring are completed, clean the inside of the indoor unit and the decorative panel.
- Perform the test operation according to the following procedure.

NOTE

- The backlight will be lit for approximately 30 seconds when pressing one of the operation buttons.
- Operate the buttons only when the backlight is lit. However, the On/Off button can be operated when the backlight is not lit.
- 7-1 Make sure to turn on the power at least 6 hours before starting test operation to protect the compressor.

Make sure that the outer panel and piping cover are closed before operation (danger of electric shock).

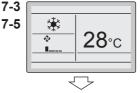
7-2 Confirm that both the liquid and gas stop valves are opened.

NOTE

After the air purge of the vacuum pump, the refrigerant pressure may not rise even though the stop valve is opened. The reason is that the refrigerant system of the outdoor unit is blocked by the electrical expansion valve or the like. Operation is no problem.

- **7-3** Set the operation mode to cooling by using the Operation Mode Selector button.
- 7-4 Enable the Menu/Enter and Cancel button. To enable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.
- **7-5** Press and hold the Cancel button for 4 seconds or longer. The Service Settings menu is displayed.

<Basic screen>



<Service Settings>



Press and hold the Cancel button for 4 seconds or longer while the backlight is lit.

1/3

7-6 Select **Test Operation** and press the Menu/Enter button. The Basic screen returns and "Test operation" is displayed.

7-6

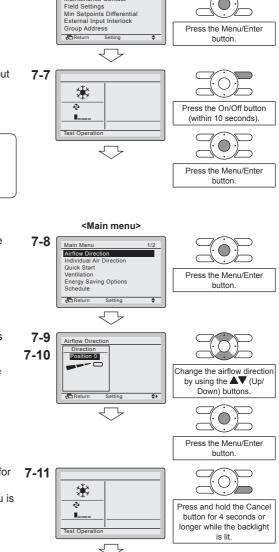
Service Settings

Test Operation Maintenance Contact

7-7 Press the On/Off button within about 10 seconds. Test operation starts. Check the operation condition for 3 minutes.

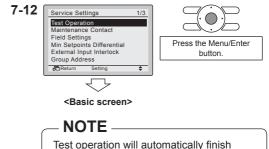
- NOTE Test operation can also be started by first performing 7-7 followed by 7-6.

- **7-8** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.
- **7-9** Select Airflow Direction and press the Menu/Enter button.
- **7-10** Press the ▲▼ buttons to select the desired airflow direction and press the Menu/Enter button. The Basic screen returns.
- **7-11** Press and hold the Cancel button for 4 seconds or longer in the Basic screen. The Service Settings menu is displayed.



<Service Settings menu>

7-12 Select Test Operation in the Service 7-12 Settings menu and press the Menu/ Enter button. The Basic screen returns and normal operation is possible.



- **7-13** Check the functions according to the operation manual.
- **7-14** When the decoration panel is not installed, turn off the power after test operation finishes.

- If the interior work is not completed when the test operation is finished, explain to the customer
 that he should not operate the unit until the interior work is completed in order to protect the
 indoor unit.
- (If the indoor unit is operated, the indoor unit may be contaminated with the materials which arise from paints or adhesives during the interior work and water splash or water leak may occur.)

- If it is not possible to operate the unit due to any malfunction, refer to Malfunction diagnosis method.
- When the test operation finishes, check that the error code history is not displayed in the Maintenance Information screen according to the following procedure.
- **7-15** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.

<Basic screen>

after 30 minutes.



<Main menu>

Press the Menu/Enter button.

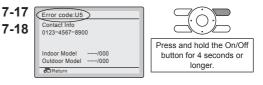
7-16 Select Maintenance Information and 7-16 press the Menu/Enter button.



- **7-17** The Maintenance Information screen is displayed. Check that the last error code is not displayed in the screen.
- **7-18** If the last error code is displayed, conduct the malfunction diagnosis referring to "Error code list" in the installation manual of the indoor unit. After the malfunction diagnosis finishes, press and hold the On/Off button for 4 seconds or longer in the "Maintenance Information" screen to erase the error code history.
- 7-19 Disable the Menu/Enter button when no other settings need to be changed. To disable, refer to "4-2 Enable/ disable the Menu/Enter and Cancel button" on page 12.

Malfunction diagnosis method

- When the remote controller displays any item in the following table, inspect the details in the table.
- If an error occurs, "A" is displayed. Conduct the malfunction analysis referring to "Error code list" in the installation manual of the indoor unit. When the unit No. which detected the error during group control is confirmed, refer to "8. Checking procedure of Error History".



- NOTE -

If no error code is displayed when this procedure is followed, the system has completed the test operation normally.



Remote controller display	Description
No display	 Power outage, power voltage failure or open- phase Wrong wiring (between indoor and outdoor units) Indoor PCB assembly failure Remote controller wiring disconnection Remote controller failure Blown fuse (outdoor unit)
Display "Checking the connection Please stand by" is shown.*	 Indoor PCB assembly failure Wrong wiring (between indoor and outdoor units)

* Though "Checking the connection Please stand by" is displayed for up to 90 seconds after powering on, this does not mean there is a failure. (Determine after 90 seconds.)

8. Checking procedure of Error History

8-2

8-3

8-4

- 8-1 Enable the Menu/Enter button. To enable, refer to "4-2 Enable/ disable the Menu/Enter and Cancel button" on page 12.
- 8-2 Press and hold the Cancel button for 4 seconds or longer in the Basic screen. The Service Settings menu is displayed.

<Basic screen>

28℃

*

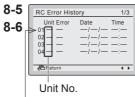
2

- 8-3 Select Error History and press the Menu/Enter button. The Error History menu is displayed.
- 8-4 Select RC Error History and press the Menu/Enter button. The error codes and unit No. can be confirmed in the RC Error History screen.
- **8-5** In the RC Error History screen the last 10 items are displayed in order.
- 8-6 Press the Cancel button in the RC Error History screen 3 times. The Basic screen returns.
- 8-7 Disable the Menu/Enter button when no other settings need to be changed. To disable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.

is lit. <Service Settings> Service Settings 2/3 Indoor Unit Airnet Address Outdoor Unit Airnet Address Error History Indoor Unit Statu Outdoor Unit Status Press the Menu/Enter Forced Fan ON Return . button Error History RC Error History Indoor Unit Error History Press the Menu/Enter Return ۵ button

Press and hold the Cancel

button for 4 seconds or longer while the backlight



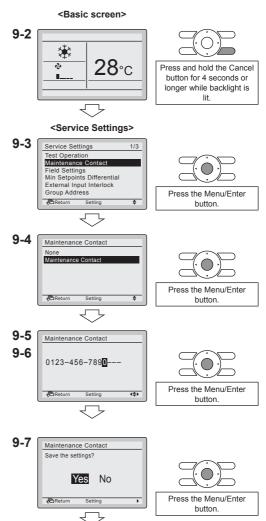


NOTE -

In the Indoor Unit Error History the error history of each indoor unit can be independently consulted. The last 5 items are displayed in order.

9. Registration method of the Maintenance Contact information

- Registration of the service contact information.
- **9-1** Enable the Menu/Enter and Cancel button. To enable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.
- **9-2** Press and hold the Cancel button for 4 seconds or longer in the Basic screen. The Service Settings menu is displayed.
- **9-3** Select Maintenance Contact and press the Menu/Enter button. The "Maintenance Contact" screen is displayed.
- **9-4** Select Maintenance Contact and press the Menu/Enter button.
- 9-5 Enter the telephone number by using the ▲▼ (Up/Down) buttons. Enter from the left to the right and blank digits should be left as " ".
- **9-6** Press the Menu/Enter button. The setting confirmation screen is displayed.
- **9-7** Select Yes and press the Menu/ Enter button. The settings are entered and the Service Settings menu returns.



<Service Settings>

- **9-8** Press the Cancel button once. The Basic screen returns.
- **9-9** Disable the Menu/Enter and Cancel button when no other settings need to be changed. To disable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.

10. Confirmation of registered details

10-2

- **10-1** Enable the Menu/Enter and Cancel button. To enable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.
- **10-2** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.

<Basic screen>



Press the Menu/Enter

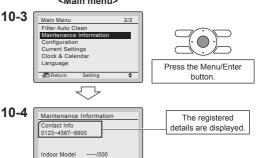
<Main menu>

Outdoor Model -

Return

-/000

- **10-3** Select Maintenance Information and **10-3** press the Menu/Enter button. The "Maintenance Information" screen is displayed.
- **10-4** Confirm that the contact information is entered correctly.



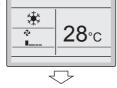
- **10-5** Press the Cancel button twice. The Basic screen returns.
- **10-6** Disable the Menu/Enter and Cancel button when no other settings need to be changed. To disable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.

11. Clock & Calendar

- **11-1** Enable the Menu/Enter and Cancel button. To enable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.
- **11-2** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.

11-2

11-3



<Main menu>

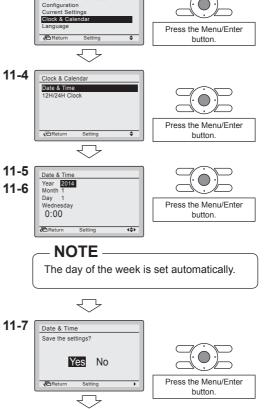
Main Menu

Filter Auto Clean Maintenance Information

<Basic screen>

Press the Menu/Enter

- **11-3** Select Clock & Calendar and press the Menu/Enter button. The "Clock & Calendar" menu is displayed.
- **11-4** Select Date & Time and press the Menu/Enter button. The "Date & Time" screen is displayed.
- Select the "Year", "Month", "Day" and time by using the ▲▶ (Left/Right) buttons and change the value by using the ▲▼ (Up/Down) buttons. When the buttons are pressed and held, the values change continuously.
- **11-6** Press the Menu/Enter button. The confirmation screen is displayed.
- **11-7** Select Yes and press the Menu/ Enter button. The settings are confirmed and the Basic screen returns.



<Basic screen>

11-8 Disable the Menu/Enter and Cancel button when no other settings need to be changed. To disable, refer to "13. Prohibit Buttons" on page 28

NOTE -

If a power outage lasts longer than 48 hours, the time is reset and needs to be set again.

12. Language

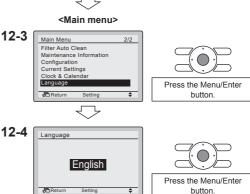
- **12-1** Enable the Menu/Enter and Cancel button. To enable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.
- **12-2** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.

12-2 * 28°c

<Basic screen>

Press the Menu/Enter button.

- **12-3** Select Language and press the Menu/Enter button. The "Language" screen is displayed.
- 12-4 Press the ▲▼ (Up/Down) buttons to select the desired language and press the Menu/Enter button. The settings are confirmed and the Basic screen returns.



<Basic screen>

12-5 Disable the Menu/Enter and Cancel button when no other settings need to be changed. To disable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.

The visible languages are depending on the installed language pack. By default, the first language pack is installed. To install another language pack, a software update needs to be done. For more information about performing a software update, refer to "19. Software update with Updater" on page 42.

Langua	Language Pack 1		Language Pack 2		age Pack 3
BRC	2/3E52C7				
7 Languages		7 La	inguages	7 La	nguages
1) EN	English	1) EN	English	1) EN	English
2) DE	German	2) CZ	Czech	2) RU	Russian
3) FR	French	3) HR	Croatian	3) EL	Greek
4) IT	Italian	4) HU	Hungarian	4) TR	Turkish
5) ES	Spanish	5) SL	Slovenian	5) PL	Polish
6) PT	Portuguese	6) RO	Romanian	6) SR	Serbian
7) NL	Dutch	7) BG	Bulgarian	7) SK	Slovak

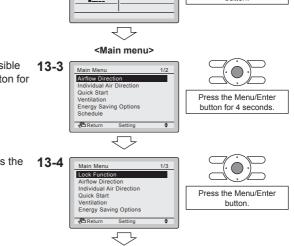
13. Prohibit Buttons

- Restriction of the number of operable buttons.
- **13-1** Enable the Menu/Enter and Cancel button. To enable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.
- **13-2** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.

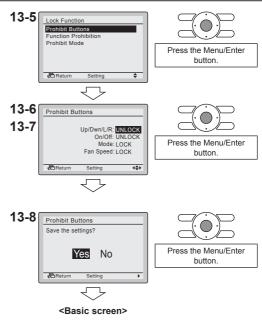




- **13-3** Lock Function can be made visible by pressing the Menu/Enter button for 4 seconds.
- **13-4** Select Lock Function and press the Menu/Enter button. The "Lock Function" menu is displayed.



- **13-5** Select **Prohibit Buttons** and press the Menu/Enter button. The "Prohibit Buttons" screen is displayed.
- 13-6 Select "Up/Dwn/L/R", "On/Off", "Mode" or "Fan Speed" by using the
 ↓ (Left/Right) buttons and "Lock/ Unlock" by using the ▲▼ (Up/Down) buttons.
- **13-7** Press the Menu/Enter button. The confirmation screen is displayed.
- **13-8** Select Yes and press the Menu/ Enter button. The settings are entered and the Basic screen returns.



13-9 Disable the Menu/Enter and Cancel button when no other settings need to be changed. To disable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.

NOTE -

If you want to restrict the number of operable buttons on the sub remote controller, start with only connecting this controller to the unit. Make sure that this controller is set to "main" (factory default) first, change the restrictions to the setting you prefer and only then set the remote controller to "sub".

14. Function Prohibition

- Restriction of the number of operable functions.
- **14-1** Enable the Menu/Enter and Cancel button. To enable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.
- **14-2** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.

<Basic screen>

14-2 * **28**℃ 2 Press the Menu/Enter button. п <Main menu> 14-3 Main Menu 1/2 Airflow Direction Individual Air Direction Quick Start Ventilation Energy Saving Options Schedule Press the Menu/Enter Return Setting 4 button for 4 seconds 14-4 Main Menu 1/3 Lock Function Airflow Direction Individual Air Direction Quick Start Ventilation Energy Saving Options Press the Menu/Enter Return 4 button 14-5 Lock Function Prohibit Buttons Function Prohibition

Prohibit Mode

Return

Return

Function Prohibition

Ventilation UNLOCK

Schedule :UNLOCH

Filter Auto Clean :UNLOCK Configuration :UNLOCK

Clock & Calendar :UNLOCK Energy Saving list :UNLOCK

14-6

14-7

- **14-3** Lock Function can be made visible by pressing the Menu/Enter button for 4 seconds.
- **14-4** Select Lock Function and press the Menu/Enter button. The "Lock Function" menu is displayed.
- **14-5** Select Function Prohibition and press the Menu/Enter button. The "Function Prohibition" screen is displayed.
- 14-6 Select the desired function by using the ◀► (Left/Right) buttons and "Lock/Unlock" by using the ▲▼ (Up/ Down) buttons.
- **14-7** Press the Menu/Enter button. The confirmation screen is displayed.

Press the Menu/Enter

button

Press the Menu/Enter

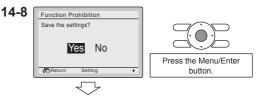
button.

-

1/2

4 ()

14-8 Select Yes and press the Menu/ Enter button. The settings are entered and the Basic screen returns.





14-9 Disable the Menu/Enter and Cancel button when no other settings need to be changed. To disable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.

NOTE -

- If you want to restrict the number of operable functions on the sub remote controller, start with only connecting this controller to the unit. Make sure that this controller is set to "main" (factory set) first, change the restrictions to the setting you prefer and only then set the remote controller to "sub".
- When a function is prohibited, the 🕶 icon will be displayed next to the function.

15. Prohibit Mode

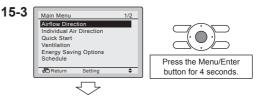
- Restriction of the number of operable modes.
- **15-1** Enable the Menu/Enter and Cancel button. To enable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.
- **15-2** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.

<Basic screen> 15-2 28°C

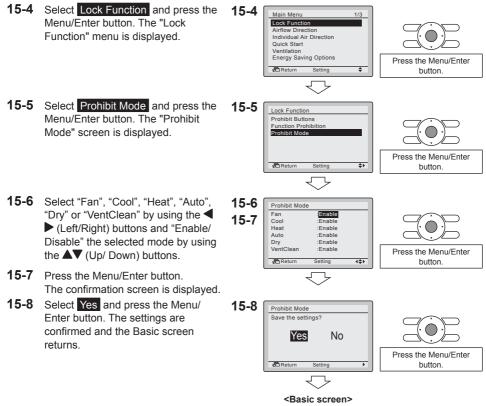
<Main menu>

Press the Menu/Enter button.

15-3 Lock Function can be made visible by pressing the Menu/Enter button for 4 seconds.



Prohibit Mode



15-9 Disable the Menu/Enter and Cancel button when no other settings need to be changed. To disable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.

- NOTE -

- When the currently active mode is locked, this mode will still be active upon returning to the Basic screen. Only when the mode is changed, the disabled mode will not be available anymore. When all modes are locked, it is not possible to change to another mode other than the currently active mode.
- If you want to restrict the number of operable modes on the sub remote controller, start with
 only connecting this controller to the unit. Make sure that this controller is set to "main" (factory
 default) first, change the restrictions to the setting you prefer and only then set the remote
 controller to "sub".

16. External Input Interlock Function

NOTE

- Only available when the optional BRP7A51 Digital Input Adapter is connected.
- In case there are communication problems or the adapter is not working correctly, the External Input Interlock menu will not be visible in the Service Settings menu.
- When a second remote controller is connected, it is not possible to use the BRP7A51 Digital Input Adapter.
- When a BRP7A51 Digital Input Adapter is connected, the schedule function will be disabled as long as the BRP7A51 Digital Input Adapter is connected.
 Note that the schedule function will be disabled when the BRP7A51 Digital Input Adapter is connected. For more information about the schedule functionality, refer to the operation manual.
- When a centralized controller is connected, the External Input Interlock function can be overruled by the centralized controller. The centralized controller has priority and works like there was no BRP7A51 Digital Input Adapter connected.
- Please make sure that the BRP7A51 Digital Input Adapter and the optional contacts (window contact and key card contact) are correctly installed. Don't forget to confirm that the "No Volt" contact on the BRP7151 Digital Input Adapter PCB is in the correct position.
- For installation and connection of the BRP7A51 Digital Input Adapter refer to the corresponding installation manual.
- **16-1** Enable the Menu/Enter and Cancel button. To enable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.
- **16-2** Press and hold the Cancel button for 4 seconds or longer. The Service Settings menu is displayed.

<Basic screen>

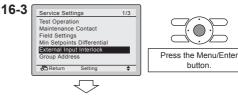




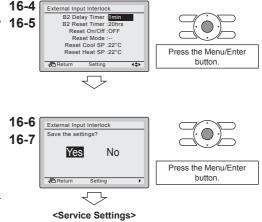
Press and hold the Cancel button for 4 seconds or longer while the backlight is lit.

16-3 Select External Input Interlock and press the Menu/Enter button. The "External Input Interlock " screen is displayed.

<Service Settings>



- 16-4 Select "B2 Delay Timer", "B2 Reset Timer", "Reset On/Off", "Reset Mode", "Reset Cool SP" or "Reset Heat SP" by using the ◀► (Left/Right) buttons and change the settings by using the ▲▼ (Up/ Down) buttons.
- **16-5** Press the Menu/Enter button. The confirmation screen is displayed.
- **16-6** Select <u>Yes</u> and press the Menu/ Enter button. The settings are entered and the Service Settings menu returns.
- **16-7** Disable the Menu/Enter button when no other settings need to be changed. To disable, refer to "4-2 Enable/ disable the Menu/Enter and Cancel button" on page 12.



Parameter	Explanation	Possible values	Default value
B2 Delay Timer Timer that starts after removing the Key Card. As long as this timer does not expire, the unit continues to operate normally.		0 - 10 minutes	"1 min"
B2 Reset Timer Timer that starts when Delay Timer has expired. When this timer expires, the previous state changes to the "Default Reset Setting" state.		0 – 20 hours	"20 hrs"
Reset On/Off	"Default Reset Setting" On/Off state.	"ON", "OFF", ""	"OFF"
Reset Mode "Default Reset Setting" operation mode.		"Auto", "Cool", "Heat", "Fan", ""	""
Reset Cool SP "Default Reset Setting" cooling setpoint.		See indoor unit's setpoint range and setpoint range limitation, "".	"22°C"
Reset Heat SP	"Default Reset Setting" heating setpoint.	See indoor unit's setpoint range and setpoint range limitation, "".	"22°C"

NOTE -

• When a parameter is "--", this means that nothing will be changed for this parameter and the current active value is kept.

External Input Interlock Function

Window contact logic:

Window contact B1	Key Card contact B2	Time	Action
Closed	Closed	1	 The unit is operating normally. The unit returns to the previous state before opening the contact.
Open	Closed	1	 The unit is forced off (operation off): No delay and reset timer functionality. No setback functionality. Not possible to turn the unit ON with the On/Off button.

Key Card contact logic:

Window contact B1	Key Card contact B2	Time	Action
Closed	Closed	 / Delay timer < Time < Reset timer Time > Reset timer 	state before opening the contact
Closed	Open	Time < Delay timer	The unit is operating normally.
Closed	Open	Time > Delay timer	 The unit is forced off (operation off): Depending on whether the setback functionality is enabled, setback will work or not. Not possible to turn the unit ON with the On/Off button. The Reset timer starts counting after the Delay timer has expired.

NOTE -

- The previous state consists of On/Off state, Operation mode, cooling and heating setpoint.
- The fan speed and the setback cooling and heating setpoint can be changed at any time without losing the changes when using the contacts.
- The fan speed is stored for the two main operation modes independantly. Heating only has its own saved fan speed and Cooling only, Dry and Fan only have their own fan speed.
- Changes made while the Key Card contact is open and the delay timer has not expired (normal operation) are not saved when closing the contact again.

Combination of window and key card contact logic:

• The window contact has priority over the delay timer and the setback functionality of the key card contact:

When the window contact is opened while the key card contact is open, the delay timer will immediately expire if it is still running and setback will not work anymore. The reset timer will immediately start counting or will not reset when it was already running.

• The reset timer functionality of the key card contact has priority over the window contact when returning to the previous state:

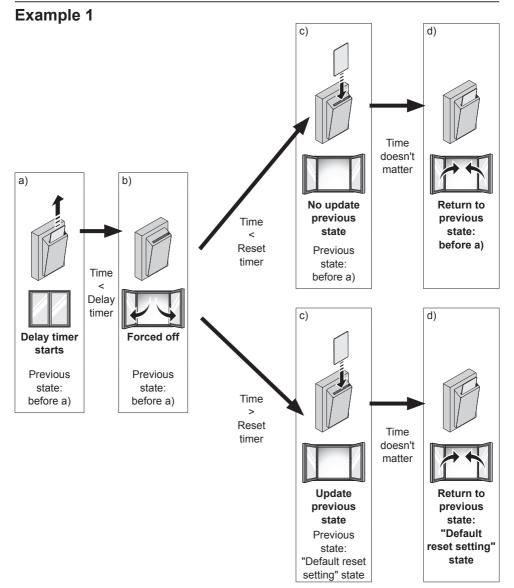
When the key card contact is opened while the window contact is open, the delay timer will start running. When the delay timer expires the reset timer will start running. When the reset timer expires, the previous state is updated to the "Default Reset Setting" state.

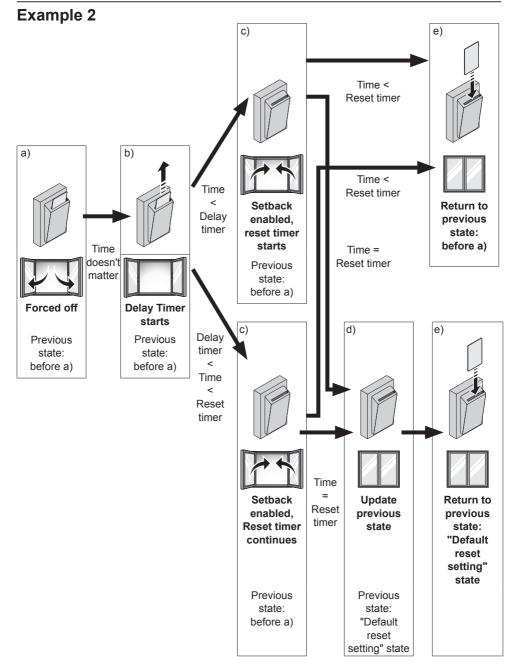
Example 1 (See "Example 1" on page 37)

- a) Remove the key card, the unit continues to work normally until the delay timer has expired.
- b) Open the window before delay timer expires, the unit stops immediately. It is not possible to turn the unit on or off, the setback functionality does not work, the delay timer stops counting and the reset timer starts counting.
- c) Insert the key card, only an update of the previous state happens. The unit is forced off and the setback functionality is still disabled (see window contact logic):
 - If the reset timer has not expired before inserting the key card, the previous state is the same as the original state because there was only a change to the forced off state.
 - If the reset timer has expired before inserting the key card, the previous state is the "Default Reset Setting" state.
- d) Close the window, the unit reverts to the previous state. The previous state is depending on the expiration of the reset timer.

Example 2 (See "Example 2" on page 38)

- a) Open the window, the unit stops immediately. The unit cannot be turned on with the On/Off button, the setback functionality does not work and the delay timer does not start counting.
- b) Remove the key card. The delay timer starts counting.
- c) Close the window. The state is the same as if the window was never opened (setback will work if enabled).
 - If the delay timer expires before closing the window, the reset timer starts counting. Closing the window has no influence on the reset timer.
 - If the delay timer has not expired before closing the window, the delay timer will expire immediately and the reset timer starts counting.
- d) When the reset timer expires, the previous state is updated to the "Default Reset Setting" state.
- e) Insert key card.
 - If the reset timer has not expired before inserting the key card, the unit returns to the state before the window was opened (last on state).
 - If the reset timer has expired before inserting the key card, the unit goes to the "Default Reset Setting" state.

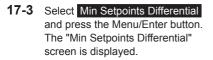




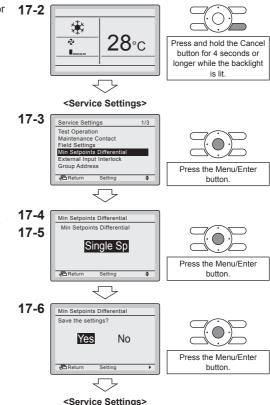
17. Single and Dual setpoint mode

NOTE —

- When a centralized controller is connected, the remote controller is forced to single setpoint mode. It is not possible to change to dual setpoint mode.
- Switch between Single setpoint mode and Dual setpoint mode
- Single setpoint mode is set by selecting "Single SP"
- Dual setpoint mode is set by selecting "0°C" "8°C"
- **17-1** Enable the Menu/Enter and Cancel button. To enable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.
- **17-2** Press and hold the Cancel button for 4 seconds or longer. The Service Settings menu is displayed.



- 17-4 Select "None", "Single Sp" or "0°C" – "8°C" by using the ▲▼ (Up/ Down) buttons.
- **17-5** Press the Menu/Enter button. The confirmation screen is displayed.
- **17-6** Select Yes and press the Menu/ Enter button. The settings are confirmed and the Service Settings menu returns.



<Basic screen>

17-7 Press the Cancel button once. The remote controller restarts and the Basic screen returns.

17-8 Disable the Menu/Enter and Cancel button when no other settings need to be changed. To disable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 12.

- NOTE -

- In Single setpoint mode both cooling and heating setpoints are the same. Changing one setpoint automatically changes the other setpoint.
- In Dual setpoint mode there is always a limitation for the heating and cooling setpoint:
 - Cooling setpoint ≥ heating setpoint + minimum setpoints differential.
 When the cooling setpoint is lowered below the heating setpoint + minimum setpoints differential, the heating setpoint is automatically lowered.
 - Heating setpoint ≤ cooling setpoint minimum setpoints differential.
 When the heating setpoint is increased above the cooling setpoint minimum setpoints differential, the cooling setpoint is automatically increased.

18. Other Service Settings

18-1 Group Address

- Assign the group address and unit number for centralized control.
- The group and unit address can only be set when a centralized controller is connected. This menu is only visible when a centralized controller is connected.
- The group and unit address can be "set" and "released".

NOTE -

Don't forget to release the group address before disconnecting the centralized controller because the menu will not be accesible afterwards.

18-2 Indoor and outdoor unit Airnet Address

• Set the indoor and outdoor unit Airnet Address.

18-3 Indoor Unit Status

• Consult the indoor unit thermistor temperatures.

	SkyAir	VRV
Th1	Suction air thermistor	Suction air thermistor
Th2	Heat exchanger thermistor	Heat exchanger liquid pipe thermistor
Th3	-	Heat exchanger gas pipethermistor
Th4	Discharge air thermistor	Discharge air thermistor
Th5	-	-
Th6	-	-

18-4 Outdoor Unit Status

• Consult the outdoor unit thermistor temperatures.

	SkyAir	VRV
Th1	Outdoor air thermistor	-
Th2	Heat exchanger thermistor	-
Th3	Discharge pipe thermistor	-
Th4	-	-
Th5	-	-
Th6	-	-

18-5 Forced Fan ON

- Force the fan(s) ON for the individual indoor units.
- This function can be used to check which indoor unit number is associated with which indoor unit.

18-6 Switch Main Sub Controller

• Swap the main and sub remote controller designation.

- NOTE -

• Changing the main/sub designation requires to turn the power OFF and ON again.

18-7 Filter Indicator

• Resets the timer of the filter indicator for all indoor units.

18-8 Test Filter Auto Clean

- Test if filter auto clean works.
- This function is only available if the Self Cleaning Decoration Panel is installed.
- When Filter Auto Clean is disabled (Disable Filter Auto Clean), the message "Auto filter clean is disabled" will be shown when opening the Test Filter Auto Clean screen.

18-9 Brush/Filter Ind

- Resets the timer of the filter indicator for all indoor units.
- This function is only available if the Self Cleaning Decoration Panel is installed.

18-10 Disable Filter Auto Clean

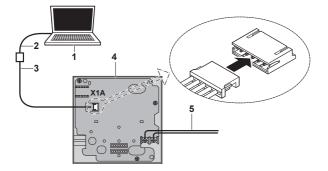
- Enable/disable the use of the Filter Auto Clean function.
- When disabled, the message "Auto filter clean is disabled" will be shown when opening the Test Filter Auto Clean and Filter Auto Clean screen.
- This function is only available if the Self Cleaning Decoration Panel is installed.

19. Software update with Updater

- The BRC2E52C7/BRC3E52C7 software includes by default language pack 1.
- Other language packages can be installed with the "PC USB cable" option (EKPCCAB3) + updater software.
- Prerequisites:
 - Updater software: please contact your local dealer for the correct version.
 - "PC USB cable" EKPCCAB3 or higher: includes wire harness and cables 4P344073-1- and 4PW64322-1A (both are needed during the installation).

Installation instructions:

- 1. Make sure that the indoor unit is powered off.
- 2. Connect the cables.
 - See the figure below for how to connect the cables.
- 3. Power on the indoor unit.
- 4. Start the updater on the PC.
- 5. Proceed to the "Update Procedure Selection" window. The remote controller software is automatically detected.
- 6. Fill in the model name "BRC" in the filter box and select the desired language pack.
- 7. Follow the onscreen instructions (additionally, during installation, cable 4P344073-1 is needed).



- 1) PC with updater
- 2) PC USB cable
- 3) 4PW64322-1A cable
- 4) Remote controller PCB
- 5) To indoor unit P1/P2

More information about the available languages can be found in "12. Language" on page 27.



Zandvoordestraat 300, B-8400 Oostende, Belgium

4P368041-1 2014.02