

Daikin Air Conditioner

Wiring adaptor for electrical appendices (DS - NET adaptor)

installation manual DTA113A51

Please carefully read the "Safety Precautions" as follows and install the controller as instructed.

- The precautions given herein are classified as "1 WARNING" and "1 CAUTION". However, particular precautions which, unless they are observed in installing that could result in death and serious injury are identified by "1 WARNING". Needless to say even other precautions which are not identified by "1 CAUTION" could lead to a serious accident unless they are observed. Therefore, please do not fail to observe these precautions.
 - After completion of the installation, please conduct a test run on the controller to check that it is free from any fault and in addition simultaneously instruct the user how to operate and maintain it correctly (in accordance with the Operation Manual).
- Furthermore, request the user to keep this manual together with the Operation Manual for future reference.

WARNING

The installation work must be requested by the dealer.
Installation by user himself could cause electric shock, fire, etc.

Install correctly in accordance with this installation manual.
Incorrect installation, if any, may cause electric shock, fire, etc.

Installing/don not fail to use the accessories and specific parts which are supplied together with the indoor unit.
Failure to observe this instruction may cause electric shock, fire, etc.

Perform correctly the electric wiring connection using the specified cables and firmly clamp each terminal connector to prevent cable load from being transferred there.
Unstable and improper cable connecting and clamping could cause overheat, fire, etc.



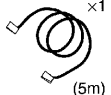
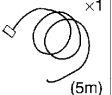
CAUTION

Avoid installing at the following locations.

1. Cuisine and other place where the controller is inevitably exposed to mineral oil, scattered oil or steam. Installing at such places could cause deterioration of the resin parts, corrosion or short circuit.
2. Where corrosive gases such as sulfur dioxide generate inevitably.
3. Where a machine as generates electromagnetic waves. Installing at such a place could cause trouble of the control line and failure of normal air-conditioning operation.
4. Where leak of combustible gas is forecast and place where volatile flammable gases such as thinner, gasoline, etc. are handled. Should such gas leak and accumulate around the devices, could cause igniting.

1 ACCESSORIES

Check if the following accessories are included in the kit.

Adaptor	Relaying wire harness		
	(1) for the power source	(2) for connecting Modem	(3) for connecting contact input of compulsory start/compulsory stop
 ×1	 ×1	 ×1	 ×1
	NOTE1	(5m)	(5m)

PC board support	×4
installation manual	×1

NOTE1

- Relaying wire harness inside the power source depends on the type of the indoor unit to which this kit is to be equipped. (The following table indicates the type of harness to be used.)
- Each of the four (4) pieces of harnesses for the power source contained has each different length, only one of which is to be used.
- Each of the four (4) pieces of harnesses for the power source is marked "A", "B", "C" and "D" for identification purpose on its connector area.

Model name of the indoor unit to which this kit is to be equipped	Harness for the power source to be used	
	Marking	Harness length
FD(Y)M~F(A)	A	500mm
FHYK-F		
FHYB-F		
FAY-F		
FHY-B	B	800mm
FVY-L		
FDY-K(A)	C	1150mm
FHYC-K		
FHYC-B		
FUY-F		
FDYB-K(A)	D	1190mm

NOTE2

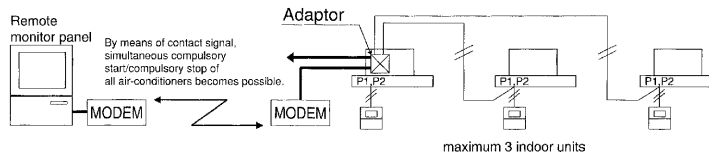
- Kits vary according to applicable models.
- A special adaptor fixing plate and box are required for the following models.

FHY-B	.....	KRP1C93
FHY-L	.....	KRP4A95
FDY-K(A),FDYB-K(A)	.....	KRP1B100
FHYC-K	.....	KRP1B98
FHYC-B	.....	KRP1C98
FUY-F	.....	KRP1B97

2 SYSTEM OUTLINE

By equipping this adaptor on the SkyAir indoor unit, controlling and monitoring of the air-conditioner becomes possible from the remote monitor panel via modem. In addition, the following control of the air-conditioner is possible even when the remote control is not available.

1. Automatic & Alternate operation..... The operation hour of the air-conditioner connected to this kit is averaged.
2. Back-up operation..... When the air-conditioner stops due to power failure or any trouble, the number of the air-conditioner operated before the stop is maintained.
3. Start control in sequence..... This prevents the simultaneous starting of the air-conditioners when all of them are to be operated.



This adaptor controls the indoor units connected to maximum 3 lines of remote controlling line (P1, P2).

[Attention]

1. A remote controller is always required for the air-conditioner to be connected to this adaptor.
2. This adaptor cannot be used together with centralized controlling equipment, BACnet Gateway, Intelligent Touch Controller, etc.
3. This adaptor cannot be used together with the adaptor for group remote control.
4. While this adaptor is being equipped, 2-remote control is not possible.

3 NAME OF PARTS AND FUNCTION

Connector for connecting contact input of compulsory start/compulsory stop (CN3)

To be used when performing compulsory start/compulsory stop of the air-conditioner by contact input.

Power source connector (CN1)

To be connected to Connector X35A located on the P-plate Assy of the indoor unit (The harness (1) contained is to be used.)

LED for selecting modem error (LED-1 Red)

Turns ON when communication with Modem becomes impossible even when the Modem has been connected (turns OFF when normal)

Monitor LED for normal operation of microcomputer

Blinks when the microcomputer is running normally. (blinking when normal)

Connector for connecting Modem (CN2)

This is used by connecting it to Modem when monitoring from remote monitor panel. (The harness (2) contained is to be used.)

Terminal block for RS485 communication

Not used for this kit.

Connector for connecting maintenance PC (CN4)

To be used when maintenance is carried out. (Not used for normal operation)

Switch for setting the terminal resistance for RS485 communication

Not used for this kit.

Button switch for starting test run (BS1)

To start a test run by pressing this button when carrying out a test run of this kit after completing all necessary wirings.

Terminal block for connecting the indoor unit

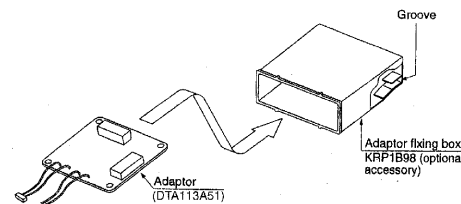
This is a terminal block for connecting to the indoor unit. To be connected to terminals P1 and P2 of the indoor unit. Can be connected to maximum 3 units.

4 INSTALLATION

{Ceiling mounted multi flow cassette type}

FHYC-K

(Fit the edge of the adaptor PCB into the grooves on the adaptor box.)

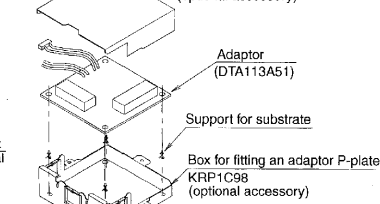


Attention)
A separate box for fitting an adaptor P-plate is required.

{Ceiling mounted multi flow cassette type}

FHYC-B

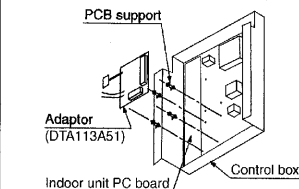
Lid of the box for fitting an adaptor P-plate KRP1C98 (optional accessory)



Attention)
A separate box for fitting an adaptor P-plate is required.

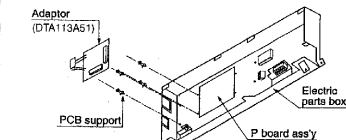
{Duct connection MSP type}

FD(Y)M~F(A)



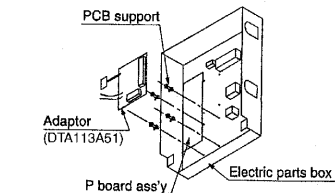
{Corner type}

FHYK-F



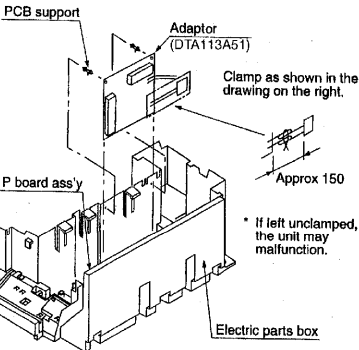
{Ceiling-mounted built-in type}

FHYB-F



{Wall-mounted type}

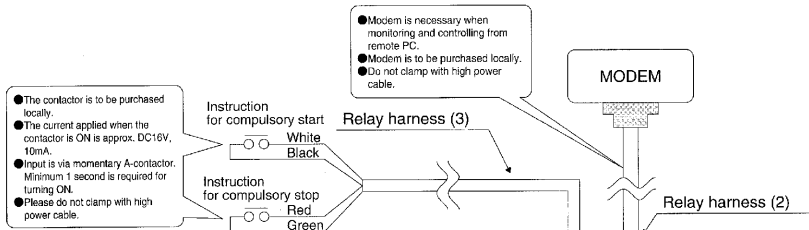
FAY-F



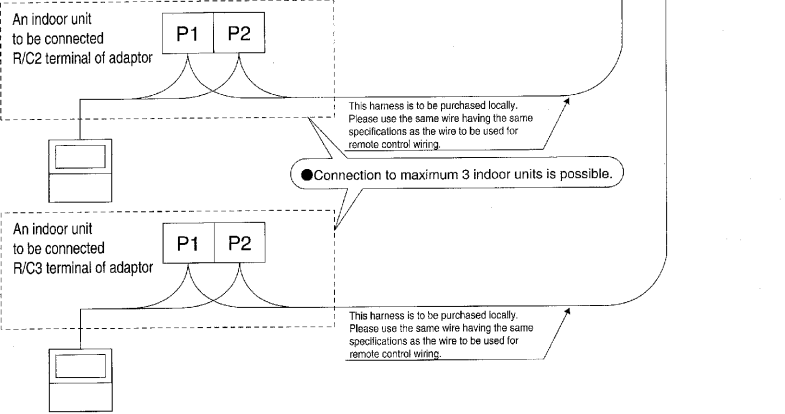
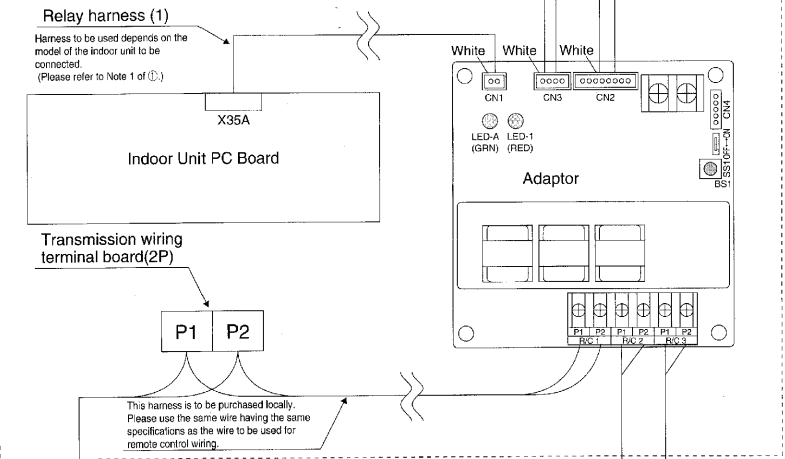
* If left unclamped, the unit may malfunction.

5 ELECTRIC WIRING

- First, carry out the wiring between indoor unit and outdoor unit, each power source and between indoor unit and remote control, and then make sure that normal operation is secured. (For details, please refer to the installing manuals for indoor unit and outdoor unit.)
- After completing the above ①, cut off the power source of the air-conditioner and start wiring of the kit.

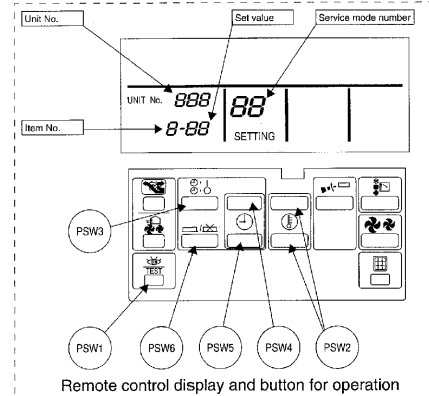


The portion surrounded by dot lines shows the inside of SkyAir indoor unit.
(An indoor unit to be connected R/C1 terminal of adaptor)



6 ABOUT SETTING

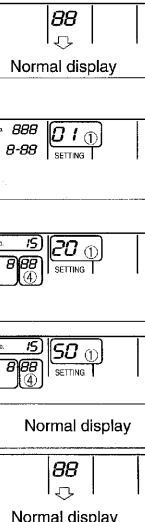
Setting is to be carried out by using the button switch BS1 located on this adaptor and the remote control that has been connected to the indoor unit equipped with this adaptor.



Procedures for setting

- By pressing BS1 of this adaptor, operation by setting from the remote control service function becomes possible and the LED-1 (Red) of this adaptor becomes blinking.
(Remote control display: After approx. 60 seconds, the remote control display shows "88". After further 15 seconds, the remote control display returns to normal.)
- When PSW1 (TEST) is kept pressed down for 4 seconds, the remote control becomes a service function display.
-The service mode number in the right Fig ① becomes "01". Here, we carry out the setting of service mode numbers 20 and 21 by means of setting procedure 3.
-If PSW1 (TEST) is further kept pressed down for 4 seconds while the service mode number is "01", the service mode number in the right Fig ① becomes "40".
-If PSW1 (TEST) is further kept pressed down for 4 seconds while the service mode number is "40", the service mode number in the right Fig ① becomes "50". Here, we carry out the setting of service mode number 50 by means of setting procedure 4.
- Here, we carry out the setting of the setting items 1, 8 and 11 in the next table.
1. By operating PSW2, please select either "Service Mode Number" 20 or 21 that you want to set. (Right Fig ①)
2. By operating PSW3, set the "Unit Number" to 15. (Right Fig ②)
3. By operating PSW4, select the "Item No." you want to set. (Right Fig ③)
4. By operating PSW5, select "11" or "12" that you want to set. (Right Fig ④)
5. Finally, please press PSW6 and fix the set value.
6. You can carry out the setting of setting items 1, 8 and 11 by repeating above 1 - 5. (In this case, Unit No. is not displayed sometimes depending on the service mode number.)
- Here, we carry out the setting of the setting item 12 in the next table.
1. By operating PSW3, set the "Unit Number" to 15. (Right Fig ②)
2. By operating PSW4, select the "Item No." you want to set. (Right Fig ③)
3. By operating PSW5, select the value that you want to set. (Right Fig ④)
4. Finally, please press PSW6 and fix the set value.
- When all of the above 2-5 settings have been completed, press PSW1 (TEST). The remote control returns to normal display from function display.
- Finally by pressing BS1 of this adaptor, the LED-1 (Red) of this adaptor turns OFF and all settings are now completed.
(Remote control display: After approx. 60 seconds, the remote control display changes to "88" display. After further 15 seconds, the remote control display returns to normal.)

Remote control display

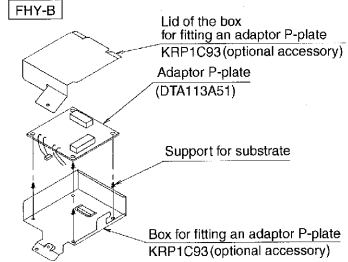


Items to be set from remote control service function

No.	Setting Items	Service Mode No.	Item No.	Set value	Unit No.	Remarks
1	Upper unit	0	1: Non 2: Available		15	In case of None for upper unit, please set at 1:None. Please do not make any change to the setting that has been made on shipment. When back-up operation is not carried out, please set at 1:None. Please do not make any change to the setting that has been made on shipment. In case of the number of minimum operational units guaranteed is two (2), set at 2:2 Unit. Range for setting: 00~99RH. OAH: No function of automatic & alternate operation is available. Setting on shipment: OAH (no automatic & alternate operation) Setting on shipment: 02:00 Please do not make any change to the setting that has been made on shipment. Setting on shipment: 0
2	Communication & Information style of upper unit	1	1: Unique specifications 2: -			
3	Communication method of upper unit	2	1: Modem method 2: -			
4	Communication interface of upper unit	3	1: RS-232 2: -			
5	Communication speed of upper unit	4	1: 2.4Kbps 2: 9.6Kbps			
6	Modem control	5	1: Non 2: Available			
7	Automatic receipt	6	1: Non 2: Available			
8	Back-up control	0	1: Non 2: Available			
9	Group control	1	1: Non 2: Available			
10	Sequence start control	2	1: Non 2: Available			
11	Minimum number of operational units guaranteed	3	1: One (1) unit 2: Two (2) units			
12	Time for automatic & alternate operation	0	Automatic & Alternate operation hour (H) 10th			
13	Regular signaling hour/time	1	Automatic & alternate operation hour (H) 1st			
		2	Regular signaling hour/time: every 10 hours			
		3	Regular signaling hour/time: every 1 hour			
		4	Regular signaling hour/time: every 10 minutes			
		5	Regular signaling hour/time: every 1 minute			
14	Air-conditioner address	6	Address upper 4 bit (to be represented by 0~15 and set)			
		7	Address lower 4 bit (to be represented by 0~15 and set)			
		8	Address upper 4 bit (to be represented by 0~15 and set)			
		9	Address lower 4 bit (to be represented by 0~15 and set)			

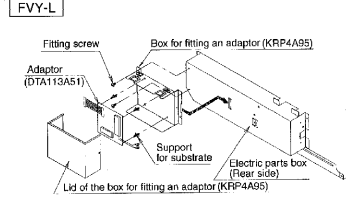
□ : Factory set

(Ceiling suspended type)



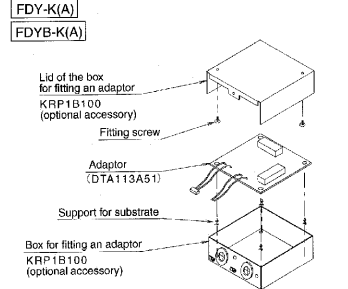
Attention)
A separate box for fitting an adaptor P-plate is required.

(Floor standing type)



Attention)
A separate box for fitting an adaptor is required.

(Duct connection type)



Attention)
A separate box for fitting an adaptor is required.

(New ceiling suspended cassette type)

