

1.6 Interface Adaptor for DIII-NET Use (RA) <KRP928B2S>

1.6.1 Functions

Type	BRC1C62	KRP928B2S
Group/Zone	One Group	Unified control for all Zone
Item		
ON/OFF	Possible	Possible
Temp. setting	Possible	Possible
Airflow rate setting	Possible	Impossible
Airflow direction setting	Possible	Impossible
Timer setting twice a day	Possible	Impossible
Mode setting	Possible	Possible
Filter sign reset	Possible	Impossible
Inspection/Test operation	Possible	Operation display only by lamps

<Overview, Features and Compatible Models>

This kit is the interface required when connecting the centralized control equipment and a Daikin Room Air Conditioner. Use of the centralized control equipment makes it possible to perform the following monitoring and operations. It is compatible with room air conditioners which have an HA connector S21.

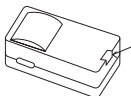
- 1.Run / stop for the centralized control equipment and wired remote controller, operating mode selection, and temperature can be set.
- 2.The operating status, any errors, and the content of those errors can be monitored from the centralized control equipment and wired remote controller.
- 3.Run / stop for the centralized control equipment and wireless remote controller, operating mode selection, and the temperature setting can be limited by the centralized control equipment.
- 4.Zone control can be performed from the centralized control equipment.
- 5.The unit can remember the operating status of the air conditioner before a power outage and then start operating in the same status when the power comes back on.
- 6.Card keys, operating control panels, and other constant / instantaneous connection-compatible equipment can be connected.
- 7.The Operating / error signals can be read.
- 8.HA JEM-A-compatible equipment can be connected.
- 9.The indoor temperature can be monitored from the intelligent Touch Manager.

Precaution

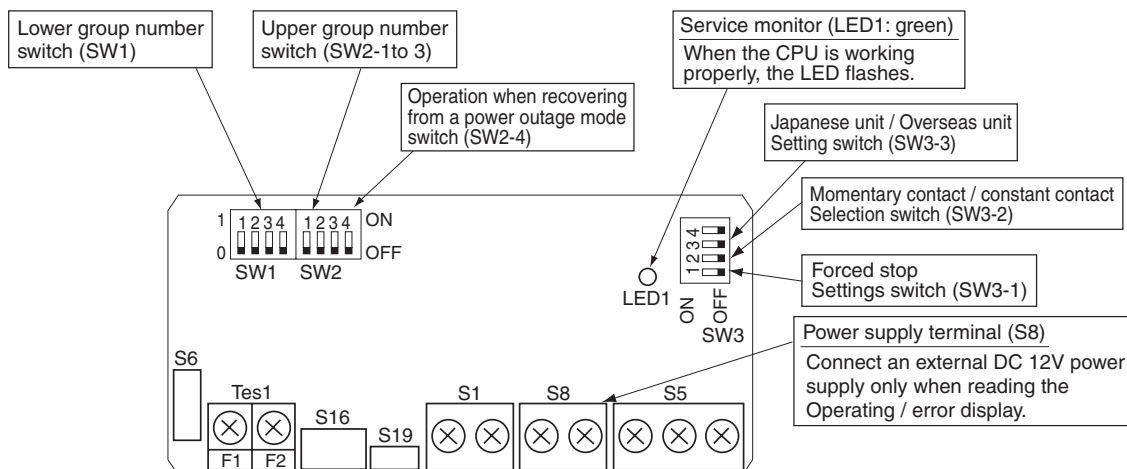
- 1.When reading the Operating / error signals, a separate external power supply (DC 12V) is needed.
- 2.A separate timer power supply (DC 16V) is needed when using the schedule timer independently, and not in conjunction with other centralized control equipment.
- 3.The range of temperatures that can be set from the centralized control equipment is 18°C to 32°C in cooling and 14°C to 28°C in heating.
- 4.Fan operation cannot be selected from the centralized control equipment or wired remote controller.
- 5.Group control (i.e., control of multiple indoor units with a single remote controller) is not available.
- 6.Monitoring is not available of the thermo. status, compressor operating status, indoor fan operating status, electric heater, or humidifier operating status.
- 7.Forced thermo. off, filter sign display and reset, fan direction and speed settings, air conditioning fee management, energy savings instructions, low-noise instructions, and demand instructions cannot be made.

<Component Parts and Separately-Sold Parts which are Required>

This kit includes the following components. Check to ensure that none of these are missing.

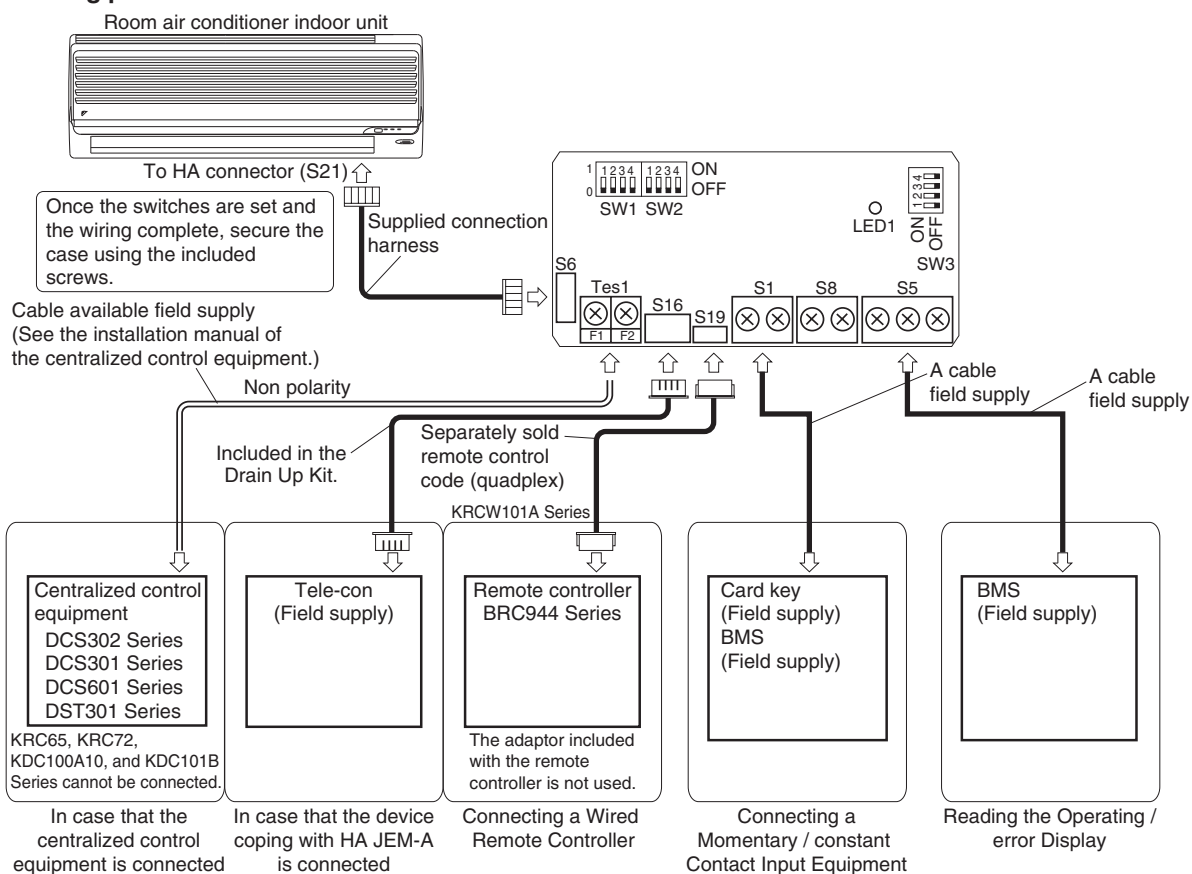
Parts	Q'ty	Parts	Q'ty
Kit assy PCB is in the housing.  Screw cover	1	Connection harness (about 1.6m)	1set
		Mounting screws	3pcs.
		Binding band	1pc.
		Installation manual	1set

1.6.2 Part Names and Functions



1.6.3 Electric Wiring Work and Initial Settings

<Wiring procedure>



<Switch Settings>

NOTE

Turn the power on after all the switches have been set.
Settings made while the power is on are invalid.

Open the Kit's case and set the switches on the circuit board.

(1) For Overseas / Japanese unit setting (SW3-3)

Room air conditioners, different methods are used for setting the temperature in automatic mode, so this switch needs to be set.

Destination	SW3-3 setting	What Happens
Japan	OFF (Factory setting)	<ul style="list-style-type: none"> “Automatic” operation is not available from the centralized control equipment. When using “automatic” operation using the wireless remote controller, the centralized control equipment displays automatic cooling (heating) and 25°C. Even if the temperature is changed, it will return to 25°C after a while.
Other countries	ON	<ul style="list-style-type: none"> “Automatic” operation is available from the centralized control equipment.

(2) Group number settings (SW1 and SW2-1 to SW2-3)

Set these when using the centralized control equipment. (Set to the ■ side.) Do not set more than one unit to the same number.

However, these settings do not need to be made when using the schedule timer independently.

(The settings are needed when used in conjunction with another DCS Series centralized control equipment.)

In this case, the schedule timer performs an auto address after the power is turned on, so new group numbers are automatically set. Settings made using the switches will be overwritten.

SW2 setting	Upper group No.	SW1 setting	Lower group No.	SW1 setting	Lower group No.
1	1—	1	0 0	1	0 8
2	2—	2	0 1	2	0 9
3	3—	3	0 2	3	1 0
4	4—	4	0 3	4	1 1
5	5—	5	0 4	5	1 2
6	6—	6	0 5	6	1 3
7	7—	7	0 6	7	1 4
8	8—	8	0 7	8	1 5

NOTE also that a separate timer power supply is needed when using the schedule timer independently.

Power supply specs: DC 16V, +10%, -15%, 200mA.

Recommended power supply: Omron S82J-01015A. (Should be used with the output voltage adjusted to the center, DC 16V.)

(3) Settings when recovering from a power outage (SW2-4)

This selects whether to restart operation when the power comes back on after a power outage occurred during operation. This setting is given priority in cases where the indoor unit has an auto start ON / OFF jumper. Note also that regardless of whether switch SW2-4 is on or off, the operating mode, set temperature, fan direction and speed settings, and remote control prohibition status are stored.

SW2-4 setting	What Happens
OFF (Factory setting)	Stops after recovering from a power outage
ON	Stops if the unit was stopped before the power outage and runs if it was running.

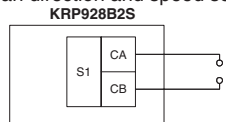
(4) Contact input function settings (SW3-1 to SW3-2)

When using contact input (S1), choose one of the following functions.

S1 operating mode	SW3-1 setting	SW3-2 setting	What Happens	Control mode
Instantaneous contact input (factory setting)	OFF	OFF	The operating status of the air conditioner is reversed by an instantaneous input of 100 msec or more.	Last command priority
Constant contact input		ON	Contact - Open to close: air condition runs. Close to open: air conditioner is stopped (NOTE 1.).	ON / OFF control is rejected (operate / stop / timer prohibition) (NOTE 2.).
Forced stop or remote controller permission input	ON	Invalid	Contact - Open to close: air condition stops (forced stop). Close to open: no change in operating status.	During a forced stop, all remote controller actions are prohibited.

Note:

- Since centralized control equipment and HA JEM-A-compatible equipment both use last command priority, the contact status and operating status of the air conditioner might not match sometimes.
Example: If the unit is run from the centralized control equipment while the air conditioner is stopped with an open contact, the contact will be open and the unit will be running.
- Operating mode and fan direction and speed settings can be changed.



Run / stop Input
Contact specs
No-voltage minute electric current contact
(Minimum applicable load DC 12V, 1mA or lower)
Total wire length max: 100m

<Control Codes>

When using the centralized control equipment, the operating codes can be used to limit operation from wireless remote controllers.

○ : permitted; x: prohibited

S1 operating mode	Control mode	Control code	Operations from the remote controller								Operations from the centralized control equipment, contact input and HA JEM-A input			
			“Run” control from the centralized control equipment				“Stop” control from the centralized control equipment							
			Run / timer	Stop	Operating mode temperature	Fan direction and fan speed	Run / timer	Stop	Operating mode temperature	Fan direction and fan speed				
Instantaneous contact mode	ON / OFF control is rejected	0,1,3	x	x	○	○	x	x	○	○	○			
		10,11	x	x	x		x	x	x					
	Only OFF control is accepted	2 12–19	x	○	x		x	○	x					
	Central priority	4	○	○	○		x	○	x					
		5	○	○	○		x	x	○					
	Last command priority	6,7	○	○	○		○	○	○					
		8	○	○	○		x	○	x					
	Timer operation is accepted by remote controller	9	(Only during timer operation)				○	○	○			x	x	○
			(Only during timer operation)				x	x	○					
							x	x	○					
Constant contact mode			x	x	○	x	x	○						
Forced stop			x	x	x	x	x	x	x					

The remote controller permission / prohibition settings using the intelligent Touch Manager are as follows.

○ : permitted; x: prohibited

S1 pin operating mode	intelligent Touch Manager settings			Operations from the remote controller				Operations from the centralized control equipment, contact input and HA JEM-A input
	Start / stop	Change operating mode	Change set temperature	Run / timer	Stop	Operating mode temperature	Fan direction and fan speed	
Instantaneous contact mode	ON / OFF control is rejected	permitted	permitted	x	x	○	○	○
			prohibited	x	x	○		
		prohibited	permitted	x	x	x		
			prohibited	x	x	x		
Constant contact mode	Only OFF control is accepted	permitted	permitted	x	x	○		
			prohibited	x	○	x		
		prohibited	permitted	x	○	x		
			prohibited	x	○	x		
Instantaneous contact mode	Last command priority	permitted	permitted	○	○	○		
			prohibited	○	○	○		
		prohibited	permitted	x	○	x		
			prohibited	x	○	x		
Constant contact mode		permitted	permitted	x	x	○		
			prohibited	x	x	○		
		prohibited	permitted	x	x	x		
			prohibited	x	x	x		
Forced stop	Does not affect settings			x	x	x	x	

<Read Operating / Error Display Signal>

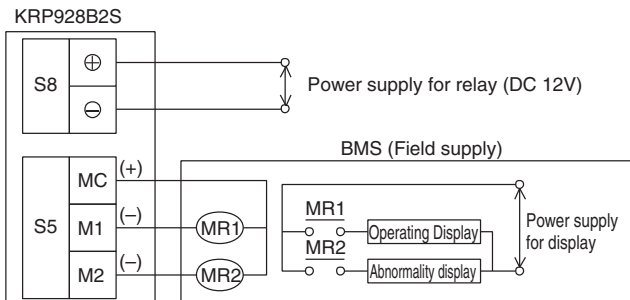
The Operating / error signals can be read from the contact output (S5).

Output specs

M1: Turn MR 1 ON when the air conditioner is running.

M2: Turn MR 2 when a communication error has occurred between the KRP928B2S and the air conditioner, or MR 1 is ON and the unit has stopped after an error.

MR 2 is not turned ON during a warning.



Relay specs (MR1 and MR2)
 Coil voltage: DC 12V
 Coil resistance: $160\Omega \pm 10\%$
 (Matsushita Electric HC Relay, Omron MY Relay)
 Wiring length
 Max: 100m

C: 3P157704-2A