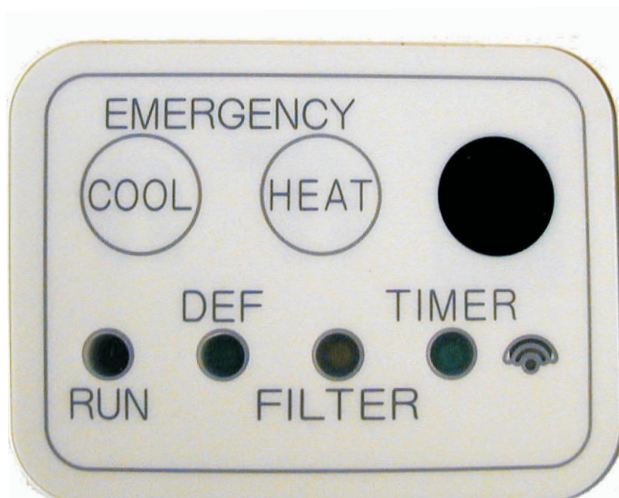


INSTALLATION AND OPERATION MANUAL
MANUAL DE INSTALACIÓN Y FUNCIONAMIENTO
INSTALLATIONS- UND BETRIEBSHANDBUCH
MANUEL D'INSTALLATION ET DE FUNCTIONNEMENT
MANUALE D'INSTALLAZIONE E D'USO

MANUAL DE INSTALAÇÃO E DE FUNCIONAMENTO
BRUGER- OG MONTERINGSVEJLEDNING
INSTALLATIE- EN BEDIENINGSHANDLEIDING
HANDBOK FÖR INSTALLATION OCH ANVÄNDING
ΕΓΧΕΙΡΙΔΙΟ ΕΓΚΑΤΑΣΤΑΣΗΣ ΚΑΙ ΛΕΙΤΟΥΡΓΙΑΣ



Do not perform installation work, without referring to our installation manual.
No realice la instalación de este equipo, sin antes consultar este manual de instalación.
Bei der Installation unbedingt die Hinweise in der Installationsanleitung beachten.
Consulter notre manuel avant de réaliser une quelconque installation.
Realizzare l'installazione, seguendo quanto indicato in questo manuale.
Nao inicie os trabalhos de montagem, sem consultar o nosso manual de montagem.
Udfor ikke installationsarbejder uden først at konsultere vores vejledning.
Voer geen enkele handling uit om de apparatuur alvorens deze handleiding te hebben doorgelezen.
Utför inte några installationsarbeten utan att först läsa var installationsmanual
Μην ήσετε στην εγκατάσταση, χωρίς πριν να έχετε συμβουλευθεί αυτο το εγχειρίδιο εγκατάστασης

1. SAFETY SUMMARY

DANGER

DO NOT pour water into the remote control switch (hereafter called "controller"). This product is equipped with electrical parts. If poured, it will cause a serious electrical shock.

WARNING

DO NOT perform installation work and electrical wiring connection by yourself. Contact your distributor or dealer of HITACHI and ask them for installation work and electrical wiring by service person.

CAUTION

DO NOT install the indoor unit, outdoor unit, at such places as:

- Where there is oil vapor and the oil is dispersed.
- Where the hot springs are near (in a sulfuric environment).
- Where generation, flowing, staying or leaking of flammable gas is detected
- Where the sea is near (in the salty, acid or alkaline environment).

DO NOT install the indoor unit, outdoor unit, within approximately 3 meters from strong electromagnetic wave radiators such as medical equipment.

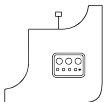
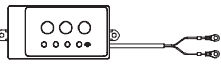
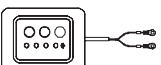
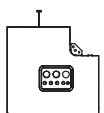
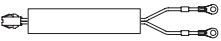
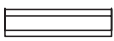
In case that there is electric noise at the power source for the indoor unit, provide a noise filter.

Do not turn ON the power source, unless the preparation for test running is completed.

Read this manual carefully before installation work for correct performance.

2. BEFORE INSTALLATION AND OPERATION

◆ The packing contains the following parts. Check the contents and the number of the parts.

NAME		Q'TY				REMARKS
		PC-ALH	PC-ALHD	PC-ALHZ	PC-ALHC	
Receiver kit		1				With connection wire
			1			
				1		
					1	
Connecting cable		1			1	-
Screw			2			For fixing receiver kit
				4		
				2		For fixing clamp.
Clamp				2		For fixing cable
Cover		1			1	For protection connecting cable
Band		3	2	1	2	For fixing cable

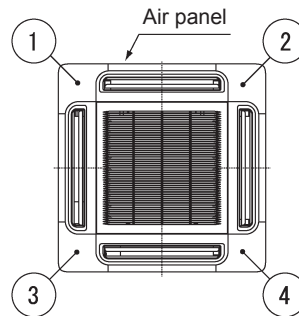
3. INSTALLATION OF WIRELESS RECEIVER KIT

CAUTION

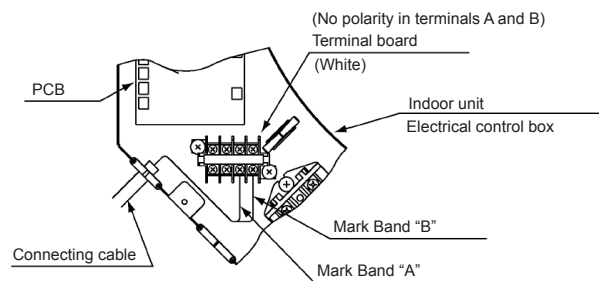
Pay attention to the following installation procedures. If not, it may drop from the panel, resulting in a serious accident.

◆ PC-ALH

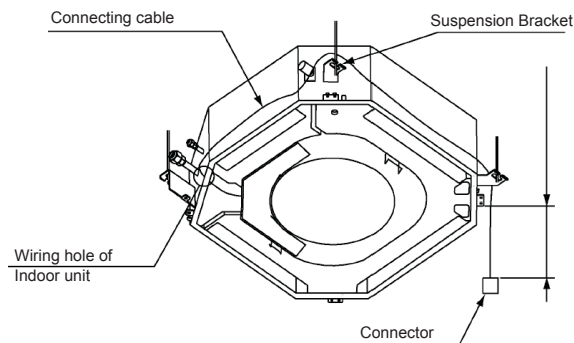
1. Install the wireless receiver kit, the indoor unit and the air panel at the same time.
2. In case that the wireless receiver kit is installed after installing the indoor unit, turn off the power source of the indoor unit and remove the air panel.
3. This receiver kit can be installed at the position 1,2,3 or 4



4. Remove the cover of indoor unit electrical control box and connect the cable to the terminal board as shown below.



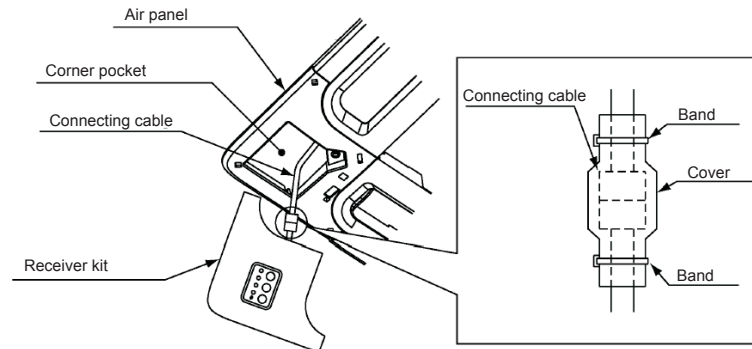
5. Draw out the connecting cable from the wiring hole of the indoor unit, and lead the cable over the suspension bracket of the indoor unit to the installing position of the receiver kit. Bundle the extra cable with a band.



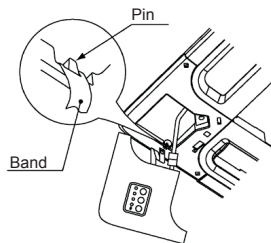
6. Install the air panel (option) onto the indoor unit.

7. Attach the receiver kit in the following procedure.

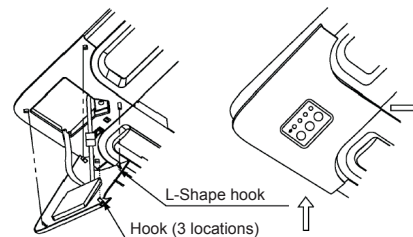
- ① Draw out the connecting cable from the pocket and connect the connecting cable and the wire of the receiver kit. After connecting the cable, wrap the connector with the cover and fix them with a band.



- ② Hook the band on the rear side of the receiver kit at the pin of the air panel as shown below.



- ③ Hook L-shaped nail on the rear side of receiver kit at the square hole of the air panel.

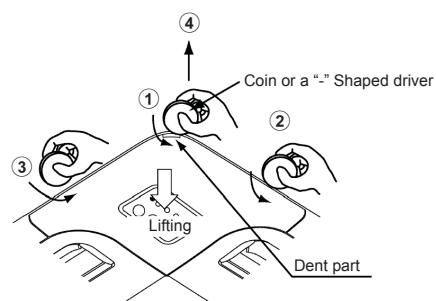


8. Hook other fixing nails (3 positions) at square holes of air panel.

NOTE:

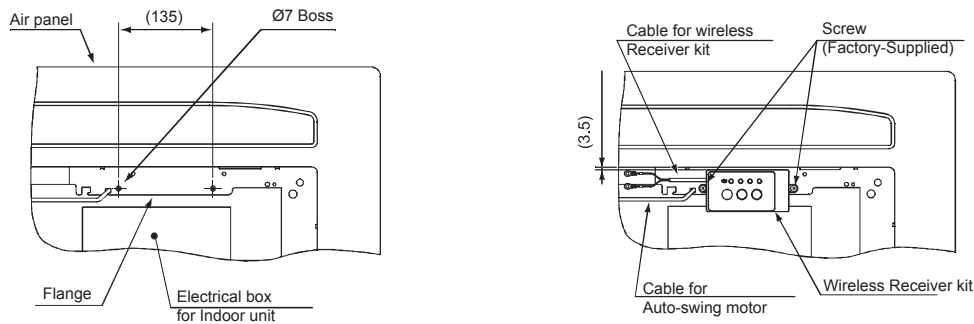
When removing the receiver kit after installing the air panel.

- a) The corner position of the receiver kit can be lifted when a coin or a "-" shaped driver is inserted into the dent part ① and twisted downward. With ① lifted, twist a coin or a "-" shaped driver at the positions of ② and ③, the whole receiver kit can be lifted.
- b) After disconnecting the fixing nails (3 positions), slide the receiver kit in the arrow direction ④, and remove the receiver kit.

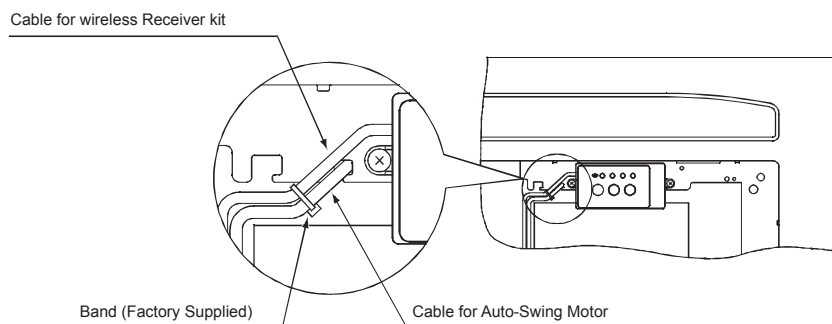


◆ PC-ALHD

1. Install the wireless receiver kit, the indoor unit and the air panel at the same time.
2. In case that the wireless receiver kit is installed after installing the indoor unit, turn off the power source of the indoor unit and remove the air inlet grille.
3. Fix the wireless receiver kit to the air panel by screws.
(The tightening torque must be 0.8 Nm.)



4. Lead the cable along the cable for the auto-swing motor and tie them by the band.

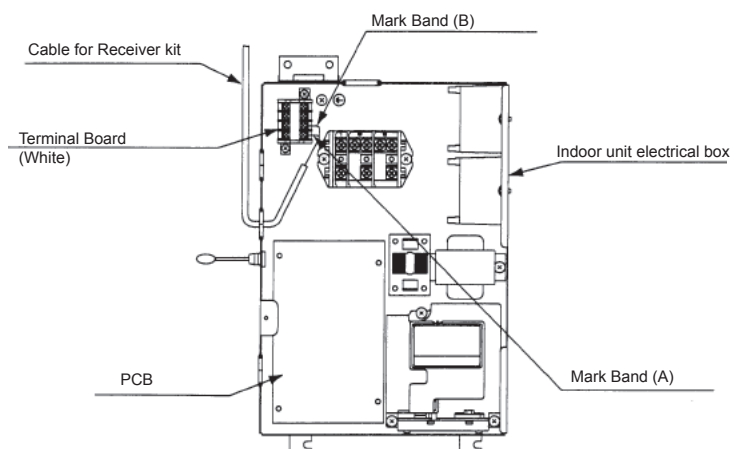


5. Remove the cover of indoor unit electrical control box and connect the cable to the terminals A and B of the terminal board.
(No polarity in terminals A and B).

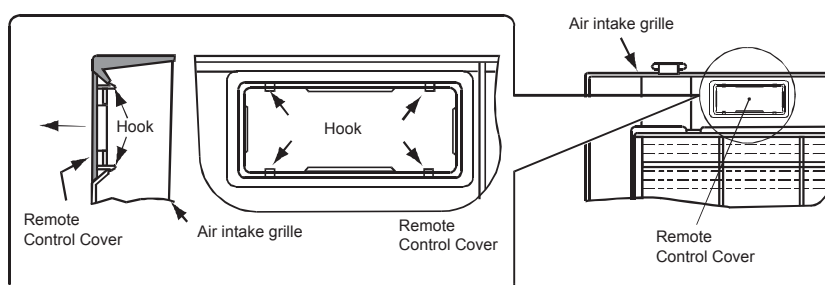


NOTE:

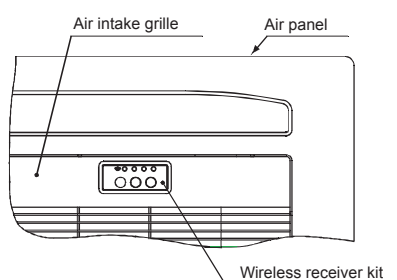
After connecting the cable, bind up the remaining cable length portion by band (Factory-Supplied) and put them in the electrical control box.



6. Remove the remote control cover of the air intake grille.
 - Press the hooks of the remote control cover by hand.



7. After fixing the air panel, attach the air intake grille to the air panel.
 - Check to ensure that the location of square hole of the air intake grille coincides with location of the wireless receiver kit of the air panel.
 - Check to ensure that the cable of the wireless receiver kit is not clamped by the square hole of the air intake grille.



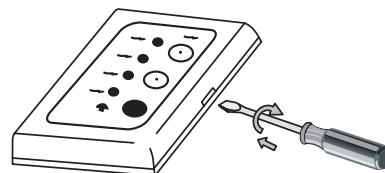
◆ PC-ALHZ



NOTE:

Install the receiver kit onto the wall or ceiling near the indoor unit.

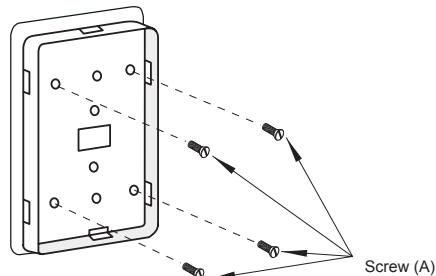
1. Install the wireless receiver kit and indoor unit at the same time.
2. In case that the wireless receiver kit is installed after installing the indoor unit, turn off the power source of the indoor unit.
3. Check to ensure that the distance between the wireless receiver kit and the indoor unit is less than 5 m.
4. Remove the cover by using minus screw-driver.



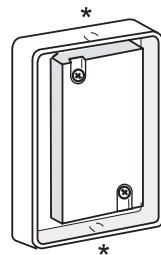
5. Install the wireless receiver kit onto the wall or ceiling as follows:

A. In Case of Exposing Cable

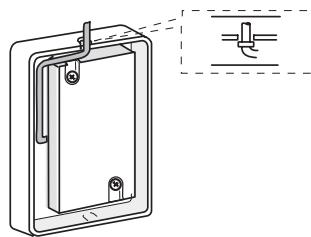
- 1 Fix the fixing bracket of kit by using screw (A) at 4 locations



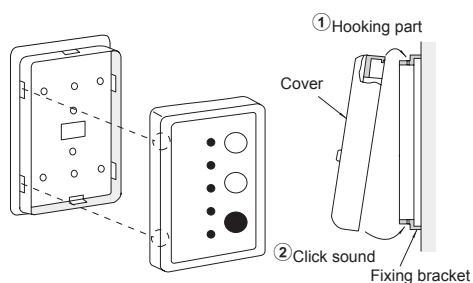
- 2 Cut one of the knockout holes (*) at the cover.



- 3 Lead the cable through the groove and draw out the cable from the knockout hole.

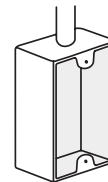


- 4 Attach the cover. Do not clamp the cable when attaching the cover.



B. In Case of Concealed Cable

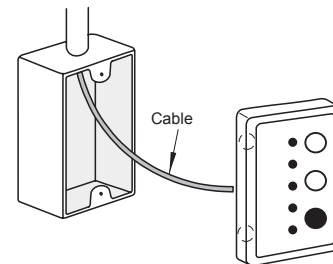
- 1 Prepare the following box. (Field-Supplied)
JIS Box (JIS C 8336-1991)



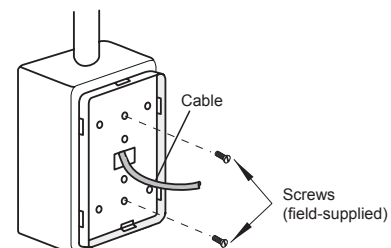
- a. Switch Box for 1 Controller (without cover)
- b. Small Switch Box for 1 Controller (without cover)
- c. Switch Box for 1 Controller (with cover)

- Rigid Metal Conduit (More than $\varnothing 20$)
- Screw (M4) (Field-Supplied)

- 2 Insert the cable into the rigid metal conduit.

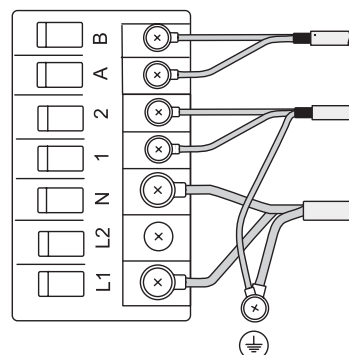


- 3 Fix the fixing bracket of kit by using screw (Field-Supplied).
This figure shows the case of Switch Box for 1 Controller.



- 4 Attach the cover same as A 4.

6. Remove the cover of indoor unit electrical control box and connect the cable to the terminals A and B of the terminal board.
(No polarity in terminals A and B)



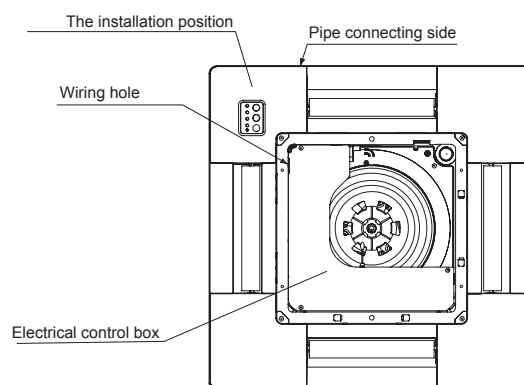
NOTE:

After connecting the cable, bind up the remaining cable length portion by band (Factory-Supplied) and put them in the electrical control box.

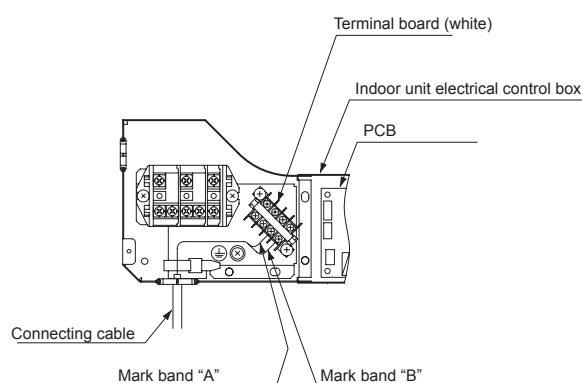
◆ PC-ALHC

1. Install the wireless receiver kit, the indoor unit and the air panel at the same time.
2. In case that the wireless receiver kit is installed after installing the indoor unit, turn off the power source of the indoor unit and remove the air panel.
3. This receiver kit can be installed only at one position.

(Drawing: without suction grill)



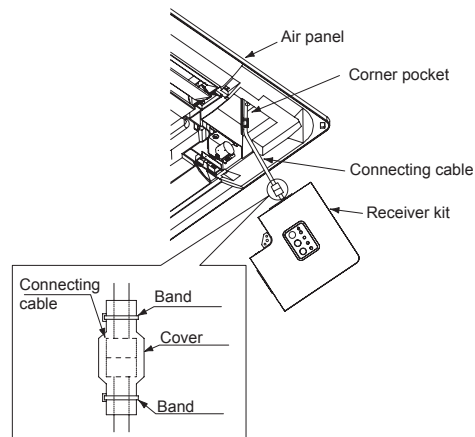
4. Remove the cover of indoor unit electrical control box and connect the cable to the terminal board (white) as shown beside.
(No polarity in terminals A and B)



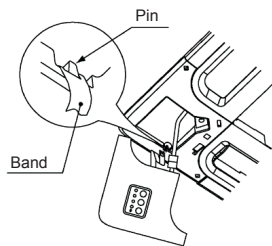
INSTALLATION OF WIRELESS RECEIVER KIT

5. Draw out the connecting cable from the wiring hole of the indoor unit, and lead the cable to the installing position of the receiver kit.
6. Install the air panel (option) onto the indoor unit.
7. Attach the receiver kit in the following procedure.

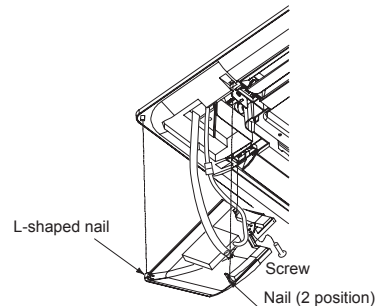
- ① Draw out the connecting cable from the pocket and connect the connecting cable and the wire of the receiver kit. After connecting the cable, wrap the connector with the cover and fix them with a band.



- ② Hook the band on the rear side of the receiver kit at the pin of the air panel as shown below.



- ③ Hook L-shaped nail on the rear side of receiver kit at the square hole of the air panel, and fix it with the screw.

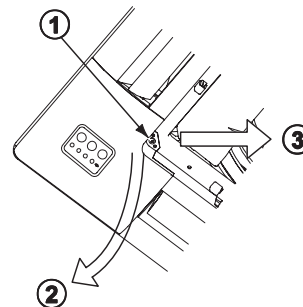


8. Attach other pocket cover (3 positions) to the air panel.

i NOTE:

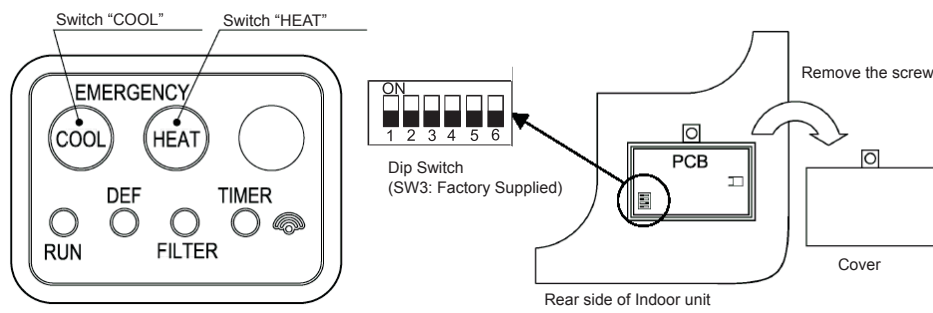
When removing the receiver kit after installing the air panel:

- a) Remove the screws of ① (4 positions) from the front side of the air panel.
- b) Move the Receiver kit with hands in the arrow direction ② and remove the nails (2 positions) of pocket cover for corner, and slide the receiver kit in the arrow direction ③.



4. OPTIONAL FUNCTIONS

◆ PC-ALH / PC-ALHC

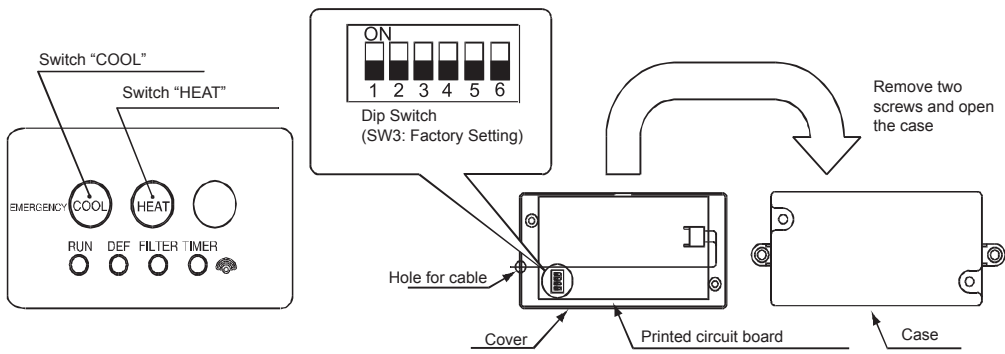


◆ Optional Setting for Dip Switch (SW3)

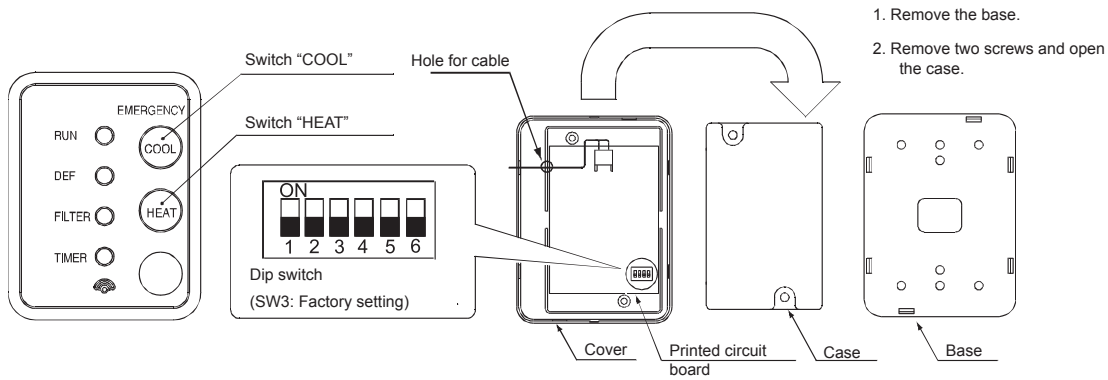
Operation function	DIP Switch Setting (SW3)
Setting of Sub Receiver kit	
Identifying of Indoor units	

NOTE:
Contact your distributor or dealer of Hitachi for details.

◆ PC-ALHD



◆ PC-ALHZ



5. OTHERS

1. In case of simultaneous operation of plural (up to 16) units by the wireless remote control switch, apply the receiver kit only to the unit to be operated, and apply the standard units (without receiver kit) to the others.
In case of applying plural receiver kit, up to 2 receiver kits can be used.
2. Proceed the "TEST RUN" mode by using "Operation & Installation Manual" for the wireless remote control switch (PC-LH3A).
- Turn OFF all power sources before setting the dip switches.
3. Emergency Operation Setting (refer to the figure of the item 4 "Optional Functions")
In case that PC-LH3A is unusable by batteries shortage, etc., perform emergency operation as follows.
 - (a). Switch "COOL": Press "COOL" so that the cooling operation is started.
Press "COOL" again so that the cooling operation is stopped.
 - (b). Switch "HEAT": Press "HEAT" so that the heating operation is started.
Press "HEAT" again so that the heating operation is stopped.



NOTE:

*During the emergency operation, the LED (yellow) blinks
(0.5 second ON / 0.5 second OFF).*

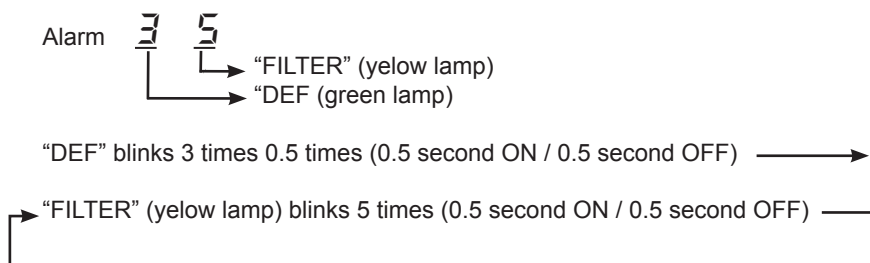
4. Alarm Code Indication

- In case that some trouble occurs because of activation of safety device, etc., "RUN" (red lamp) blinks (0.5 second ON / 0.5 second OFF).
- Refer to the Installation Manual for outdoor unit about Alarm Code List.
- Alarm Code indicates the blinking times of "DEF" (green lamp) and "FILER" (yellow lamp) as shown below.

"DEF" (green lamp): the blinking is shown at the 2 digit of Alarm Code

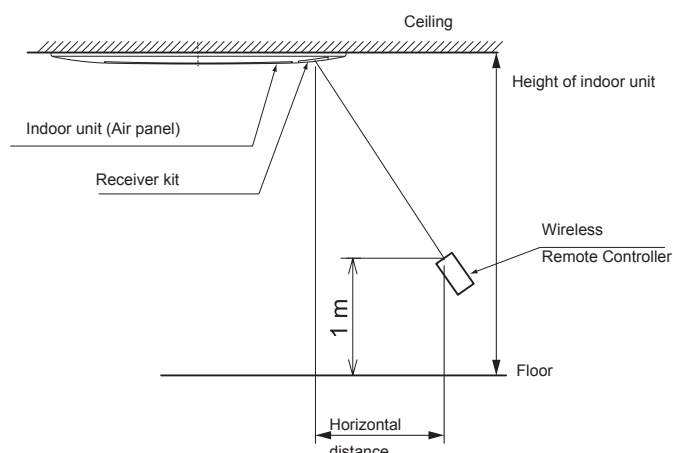
"FILER" (yellow lamp): the blinking is shown at the 1 digit of Alarm Code
(Alphabet Code: A=10 times, B=11 times, C=12 times, ...)

Example:



- "RUN" (red lamp) (1 second ON / 1 second OFF) indicates abnormal transmitting between Indoor Units and Outdoor Unit

5. Horizontal distance limit of remote controller:



- Horizontal distance limit of remote control (in the case that height of remote controller from floor is 1 m):

◆ RCIM

Height of indoor unit (m)	2.7	3.0	3.5	4.0
Horizontal distance (m)	2.9	3.5	4.0	4.5

◆ RCI

Height of indoor unit (m)	2.7	3.0	3.5	4.0	4.5	5.0
Horizontal distance (m)	2.9	3.5	4.0	4.5	4.5	4.5

◆ RCD/RPI

Height of indoor unit (m)	2.5	3.0	3.5	3.8
Horizontal distance (m)	2.5	3.5	4.0	4.0

6. Checking of command reception. ☹️Lamp (yellow) of receiver part in receiver kit blinks when receiver kit receive commands from wireless remote controller. If ☹️ lamp does not blink, commands are not sent correctly. Send commands again.

i NOTE:

- Beep as well as lamp blink when commands are received correctly.
- The beep may not be heard due to the ambient noise.

7. Other Receiver Kit indications:

(For gas heat pump air conditioner only)

When using a gas heat pump air conditioner, “FILTER” LED (yellow) and “TIMER” LED (green) may blink at the same time. This does not mean abnormality, but indicates the periodical checking of the engine is coming soon or has already passed.

“FILTER” (yellow) and “TIMER” (green) lamps blink slowly (every two seconds). Indicates that the periodical checking of the engine is coming soon.

“FILTER” (yellow) and “TIMER” (green) lamps blink rapidly (every 0.5 seconds). Indicates that the timing of periodical checking of the engine has already passed.

Ask for periodical checking when these indications appear.

8. Wall mount (RPK) Dip Switch setting:

- The factory setting of SW1 is “Wireless”. To use with a receiver kit, slide SW1 to change to “Wired”.
- Dip switch shall be set when both Indoor and Outdoor unit power is OFF. Setting configured with Indoor and/or Outdoor unit power ON will be invalid.

9. The temperature setting is available from 17°C to 30°C by using a wireless remote control switch. The temperature range is different depending on the indoor unit model. For the unit with the temperature setting range is 19°C to 30°C, 17°C and 18°C can not be set by the wireless remote switch.