

HITACHI

PSC-5S

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 ANVÄNDNING
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.
Udfør ikke installationsarbejder uden først at konsultere vores vejledning.
Voer geen enkele handeling 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

ENGLISH

ESPAÑOL

DEUTCH

FRANÇAIS

ITALIANO

PORTUGUES

DANSK

NEDERLANDS

SVENSKA

ΕΛΛΗΝΙΚΑ





DANGER – Immediate hazard which WILL result in severe injury or death.

PELIGRO – Peligros inmediatos que DARÁN como resultado graves lesiones o incluso la muerte.

GEFAHR – Ernsthafte Gefahrenquelle, die zu schweren Verletzungen oder zum Tod führt.

DANGER – Dangers instantanés de blessures personnelles sévères ou de mort.

PERICOLO – Pericolo immediato che AVRÀ come esito lesioni gravi o il decesso.

PERIGO – Problemas inmediatos que IRÃO resultar em ferimentos pessoais graves ou morte.

FARE – Overhængende fare, som VIL resultere i alvorlig personskade eller dødsfald.

GEVAAR – Directe gevaren die ernstig letsel of de dood tot gevolg ZULLEN hebben.

FARA – Omedelbar risk som medför svår personskada eller död.

KINAYNO – Άμεσος κίνδυνος που ΘΑ έχει ως αποτέλεσμα σοβαρές σωματικές βλάβες ή θάνατο.



WARNING – Hazards or unsafe practices which COULD result in severe personal injuries or death.

ADVERTENCIA – Peligros o prácticas poco seguras que PODRÁN dar como resultado graves lesiones o incluso la muerte.

WARNUNG – Gefahrenquellen oder leichtfertige Vorgehensweisen, die schwere Verletzungen verursachen oder zum Tod führen können.

AVERTISSEMENT – Utilisation dangereuse ou sans garantie de sécurité qui PEUT provoquer de sévères blessures ou la mort.

AVVERTENZA – Pericoli o azioni pericolose che POTREBBERO avere come esito lesioni fisiche gravi o il decesso.

AVISO – Perigos e procedimentos perigosos que PODERÃO PROVOCAR danos pessoais graves ou morte.

ADVASEL – Farer eller farlig brug, som KAN resultere i alvorlig personskade eller dødsfald.

WAARSCHUWING – Gevaren of onveilige praktijken die ernstig persoonlijk letsel of de dood tot gevolg KUNNEN hebben.

WARNING – Risker eller osåkra tillvägagångssätt som KAN leda till svåra personskador eller dödsfall.

ΠΡΟΕΙΔΟΠΟΙΗΣΗ – Κίνδυνοι ή επικίνδυνες πρακτικές, οι οποίες ΜΠΟΡΕΙ να έχουν ως αποτέλεσμα σοβαρές σωματικές βλάβες ή θάνατο.



CAUTION – Hazards or unsafe practices which COULD result in minor personal injury or product or property damage.

PRECAUCIÓN – Riesgos o prácticas poco seguras que PODRÍAN provocar lesiones personales de menor importancia o daños en el producto u otros bienes.

VORSICHT – Gefahrenquellen oder leichtfertige Vorgehensweisen, die geringfügige Schäden am Produkt oder an Sachen oder leichte Verletzungen verursachen können.

ATTENTION – Utilisation dangereuse ou sans garantie de sécurité qui PEUT provoquer des blessures mineures ou des dommages au produit ou aux biens.

ATTENZIONE – Pericoli o azioni pericolose che POTREBBERO avere come esito lesioni fisiche minori o danni al prodotto o ad altri beni.

CUIDADO – Perigos e procedimentos perigosos que PODERÃO PROVOCAR danos pessoais ligeiros ou danos em produtos e bens.

FORSIGTIG – Farer eller farlig brug, som KAN resultere i mindre skade på personer, produkt eller ejendom.

LET OP – Gevaren of onveilige praktijken die licht persoonlijk letsel of beschadiging van het product of eigendommen tot gevolg KUNNEN hebben.

OBS! – Risker eller farliga tillvägagångssätt som KAN leda till mindre personskador eller skador på produkten eller på egendom.

ΠΡΟΣΟΧΗ – Κίνδυνοι ή επικίνδυνες πρακτικές που ΜΠΟΡΕΙ να έχουν ως αποτέλεσμα ελαφριές σωματικές βλάβες, υλικές ζημιές ή ζημιές στο προϊόν.

ENGLISH

ESPAÑOL

DEUTSCH

FRANÇAIS

ITALIANO

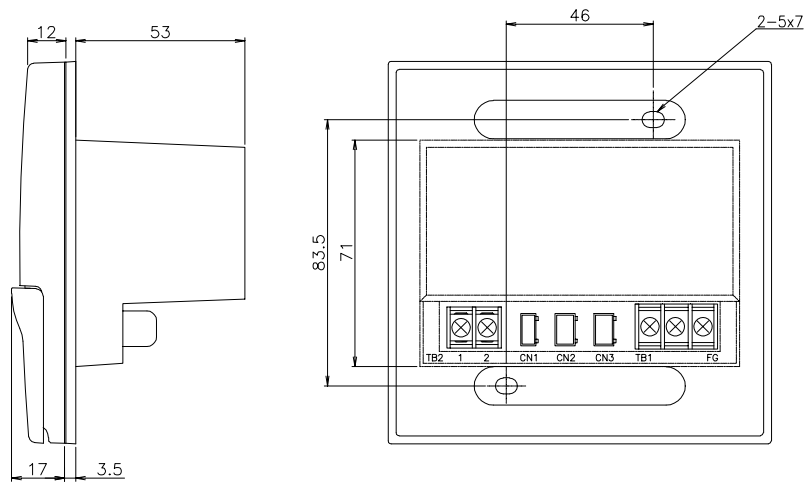
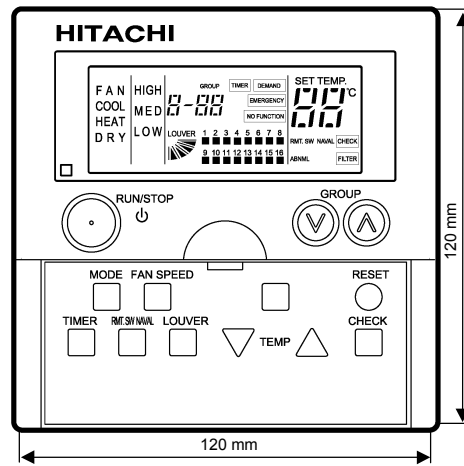
PORTUGUÊS

DANSK

NEDERLANDS

SVENSKA

ΕΛΛΗΝΙΚΑ



1. SAFETY SUMMARY


DANGER:

DO NOT pour water into the central station. 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, central station and cable 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 environment)
 - an acid or alkaline environment
- DO NOT install the indoor unit, outdoor unit, central station and cable within approximately 3 meters from strong electromagnetic wave radiators such as medical equipment. In case that the central station is installed in a place where there is electromagnetic wave radiation, shield the controller and cables by covering with the steel box and running the cable through the metal conduit tube.
- In case that there is electric noise at the power source for the indoor unit, provide a noise filter.

2. INSTALLATION WORK


CAUTION:



Follow the national regulations for the right assembly of the PSC-5S in the wall.

2.1. SELECTION OF INSTALLATION PLACE

- Select a suitable place for handling and determine the installation place of the controller with the customer's acceptance.
- Do not install the central station at such places as;
 - where children can touch
 - where the air from the air conditioner is directly discharged

2.2. BEFORE INSTALLATION

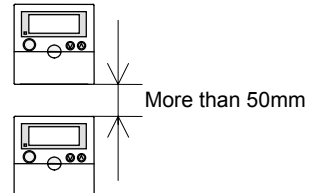
This packing contains the following parts:

	
Central Station	2 screws M4x16L For fixing the Holding Bracket onto the wall

2/2 INSTALLATION WORK

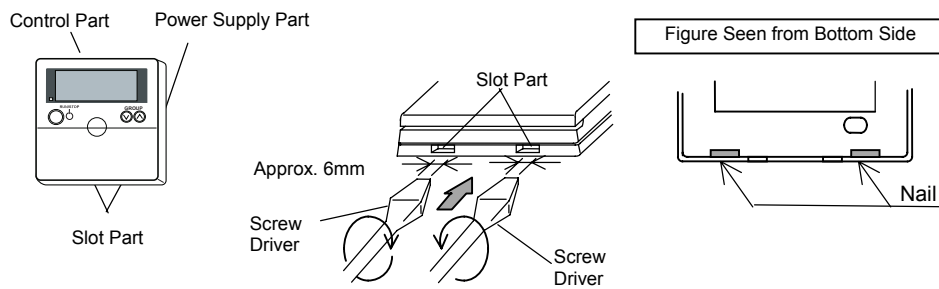
2.3. INSTALLATION SPACE

In case of installing the central stations in the vertical direction, keep a distance more than 50mm between the central stations vertically. If the distance is insufficient, the front cover of the central station can not open wide enough.

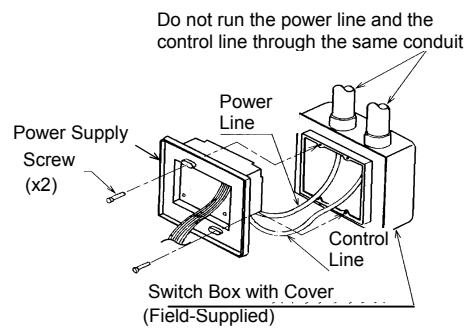


2.4. INSTALLATION PROCEDURES

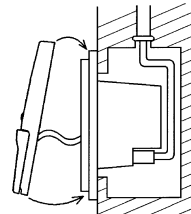
1. Insert the edge of the screwdriver into the slot parts at the bottom of the case, push and turn the screwdriver and remove the control part from the power supply part. Do not insert the screwdriver into the nail near the slot part, or the nail will be damaged.



2. Attach the power supply part to the switch box.



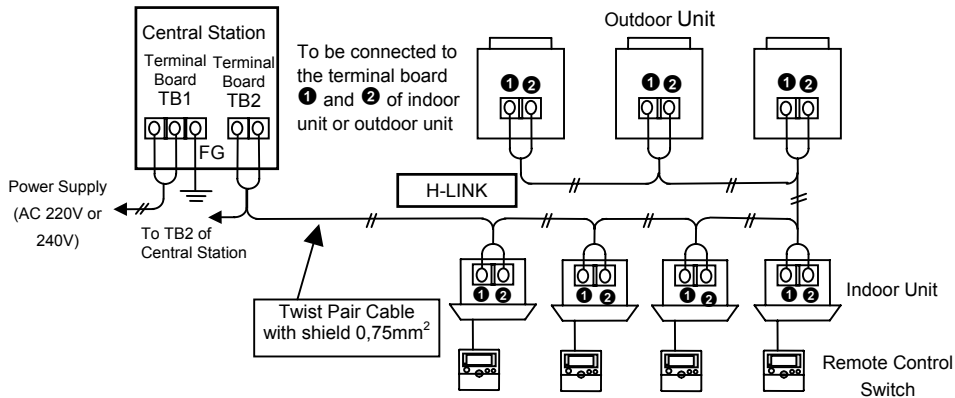
3. Attach the control part onto the power supply part. At first, attach the upper side, and then the lower side.



3. ELECTRICAL WIRING

3.1. ELECTRICAL WIRING

Up to 8 Central Stations can be connected to the H-LINK.



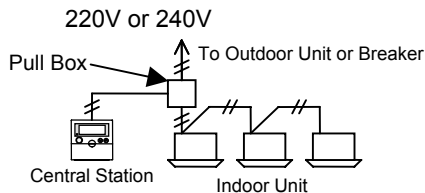
3.2. SETTING OF DIP SWITCH

Set the DSW1 as shown below.
Address setting is required when the central station (Max. 8 units) is connected on H-LINK.
(The setting of dip switches is all OFF before shipping.)

■ DSW1 (Address Setting)

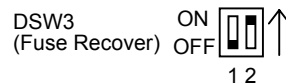
Address 1	Address 2	Address 3	Address 4
ON 1 2 3 4	ON 1 2 3 4	ON 1 2 3 4	ON 1 2 3 4
Address 5	Address 6	Address 7	Address 8
ON 1 2 3 4	ON 1 2 3 4	ON 1 2 3 4	ON 1 2 3 4

Divide the power line for the central station from the main power line by a pull box as shown in the figure.



CAUTION:

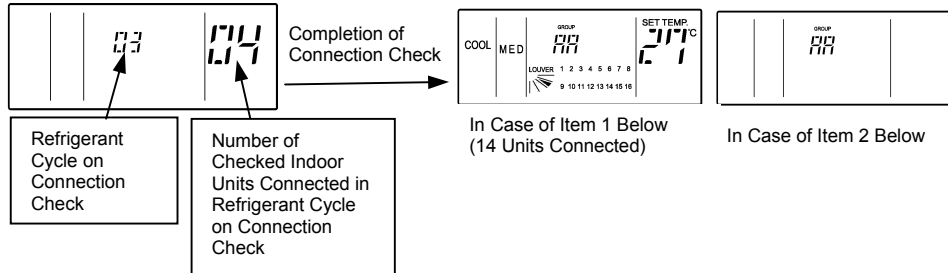
- Check to ensure that the wiring is correct. Incorrect wiring may cause malfunction of the central station.
- Turn OFF the power supply of the air conditioner and the central station when performing the wiring work.
- If the wiring work is performed while the power supply of the central station is being supplied, it may cause malfunction of the central station.
- DO NOT run all the transmission cable for the central station along the power line and other transmission cables, or malfunction may occur due to the noise, etc. If the transmission cable for the central station is required to be run along the power line and other transmission cables, separate the cable more than 15cm away from other cables, or run the cable through a metal tube and earth the tube.
- In case of applying high voltage to the TB2, the fuse on the PCB is blown out. In such a case, firstly correct the wiring to TB1, and then set No.2 pin ON.



4/4 GROUP SETTING

4. GROUP SETTING

In case that group setting is not performed, the indication of the central station is as shown below for checking indoor unit connection after turning ON the power supply.

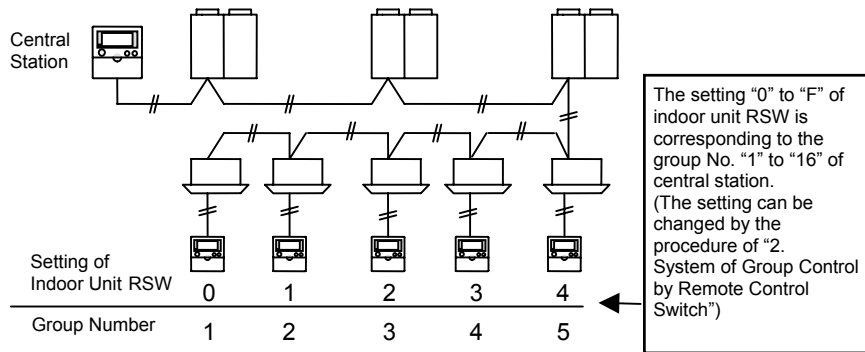


NOTE:

The checked number of connected indoor units may be more than the actual number according to the condition of transmission.
After the connection check, the indications of "GROUP" and "SET TEMP." may be "- -" temporarily.

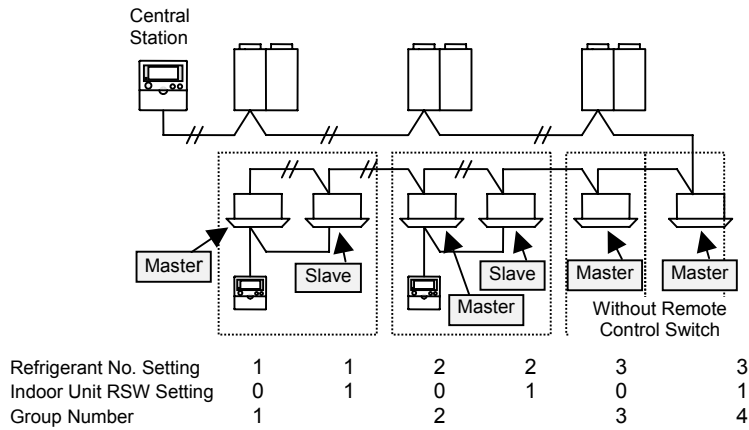
4.1. SYSTEM OF INDIVIDUAL CONTROL FOR UP TO 16 INDOOR UNITS

Group setting is automatically performed by the indoor unit address regardless of the refrigerant cycle address. Set the indoor unit address without duplication of address.



4.2. SYSTEM OF GROUP CONTROL BY REMOTE CONTROL SWITCH

In this case, the group setting by central station is required. Group setting is for master unit (directly connected to remote control switch) and slave unit (connected by extension cable). In case that the remote control switch is not connected, the group setting by remote control switch is not available and only one master unit is controlled as one group. In case of up to 16 indoor units connected, the group setting is automatically performed as described in "1. System of Individual Control for up to 16 Indoor Units". In this case, correct the group setting by the procedure below.



4.2.1. GROUP SETTING PROCEDURE

■ Changing to Group Setting Mode

1. Depress the "CHECK" switch for 3 seconds during the units of all groups are stopped. The central station is changed to the check mode and the "CHECK" indication is turned ON. And the "1" (Main Unit Setting Mode) is indicated at the 7 segment indicator for checking.
2. Depress the "CHECK" switch, and the indication on the 7 segment indicator for checking is changed to "2" (Sub Unit Setting Mode).
3. Depress the "RESET" switch, and the check mode is changed to the normal mode.



ATTENTION:

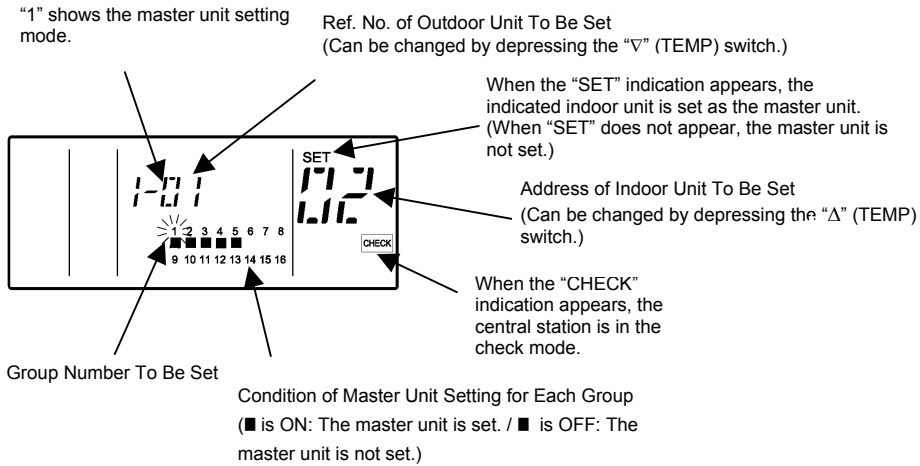
- When there is a group in operation, the central station can not be changed to the check mode.
- When the group setting is performed, use the check table for group setting (page 9), and you can also write down the group number on the surface inside of the switch cover.

■ Setting of Master Unit

Indication of Master Unit Setting Mode

When the central station is changed to the master unit setting mode, the LCD indication on the central station is as shown below. The indication of the group to be set is flickered. The refrigerant cycle number (hereafter called "Ref. No.") and the indoor unit address (hereafter called "I.U. Add.") indicates the address of the indoor unit which is set as the master unit of the group to be set. The "■" indication of group flickers in case that the master unit of the group is set. When the "SET" indication appears, the indoor unit indicated on LCD is set as the master unit. In case that the master unit is not set, "- -" is indicated at Ref. No. and I.U. Add., and the "SET" indication does not appear.

4/6 GROUP SETTING

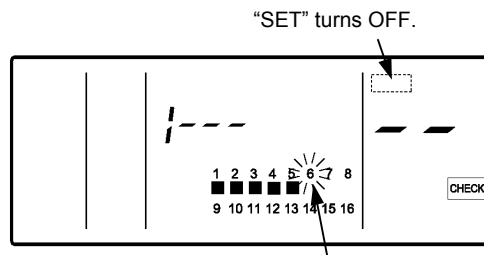


■ Procedure of Master Unit Setting

Set the master unit for each group as followings.

1. Selection of Group To Be Set:

Select the group to be set by depressing "GROUP" switch.
The flickering indication of group number is moved every time when the "GROUP" switch is depressed.
When the main unit of the selected group is already set, the Ref. No. and I.U. Add. of the main unit already set are indicated and the "SET" indication appears.



The flickering indication of group number is moved (ex. When selecting group No.6).

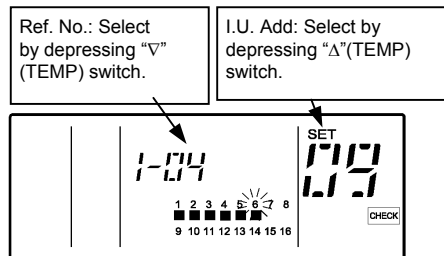
2. Selection of Indoor Unit To Be Set:

Change Ref. No. by depressing “▽” (TEMP) switch and I.U. Add. by “△” (TEMP) switch, and select the indoor unit to be set. The indication is changed in order as shown below.



ATTENTION:

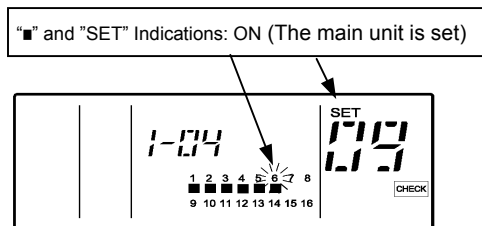
- When the indication of Ref. No. is “- -”, the indication of I.U. Add. is also “- -”. In such a case, I.U. Add. can not be changed although the “△” (TEMP) switch is depressed.
- Ref. No. with no indoor unit connected and I.U. Add. not connected are not indicated.
- The indoor unit already set as the master unit is not indicated.



(ex. When selecting indoor unit of Ref. No. 4 and I.U. Add. 9)

3. Setting Procedure:

Depress the “RUN/STOP” switch after selecting indoor unit, the indicated unit is set as the master unit, and the “■” and “SET” indications appear. (Every time the “RUN/STOP” switch is depressed, the master unit is set and canceled alternately.)



CAUTION:

- Only one indoor unit can be set as the master unit in one group. Other indoor unit can not be set as the master unit for the group with the master unit set already. For setting the master unit as the master unit for another group, cancel the present master unit setting and perform the setting for another group.
- In case that there are indoor units with auto-louver and indoor units without auto-louver in the same group, set the indoor unit with auto-louver as the master unit. If the indoor unit without auto-louver is set as the master unit, the auto-louver setting is not available for all the units of the group.

4/8 GROUP SETTING

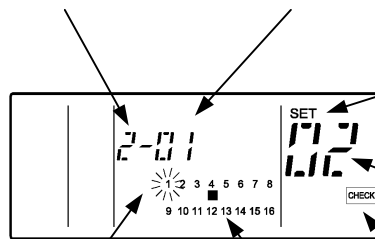
■ Setting of Slave Unit

■ Indication of Slave Unit Setting Mode

When the central station is changed to the slave unit setting mode, the LCD indication on the central station is as shown below. The indication of the group to be set is flickered. The Ref. No. and I.U. Add. indicates the address of the indoor unit with the smallest address among the slave units of the group to be set. The "■" indication of group flickers in case that the slave units of the group are already set. In case that the slave units are not set, "-" is indicated at Ref. No. and I.U. Add.

"2" shows the slave unit setting mode.

Ref. No. of Indoor Unit To Be Set
(Can be changed by depressing the "▽" (TEMP) switch.)



When the "SET" indication appears, the indicated indoor unit is set as the slave unit. (When "SET" does not appear, the slave unit is not set.)

Address of Indoor Unit To Be Set
(Can be changed by depressing the "Δ" (TEMP) switch.)

When the "CHECK" indication appears, the central station is in the check mode.

Only the group with the master unit already set is indicated. The group to be set is flickered.

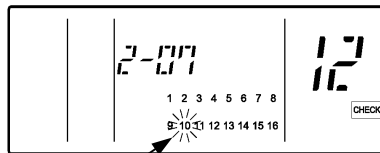
"■" shows the group with indoor units to be set (The above figure shows that the indoor unit of Ref. No.1 and I.U. Add. 2 is set as the slave unit of No.4 group).

■ Procedure of Slave Unit Setting

Set the master unit for each group as followings.

1. Selection of Group To Be Set

Select the group to be set by depressing "GROUP" switch. The flickering indication of group number is moved every time when the "GROUP" switch is depressed. The group with no setting of master unit can not be selected.



The flickering indication of group number is moved (ex. When selecting group No.10).

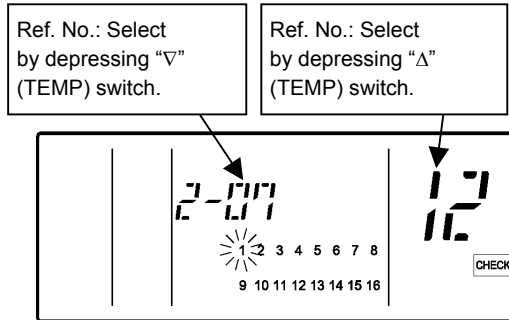
2. Selection of Indoor Unit To Be Set

Change Ref. No. by depressing “▽” (TEMP) switch and I.U. Add. by “Δ” (TEMP) switch, and select the indoor unit to be set. The indication is changed in order as shown below.



ATTENTION:

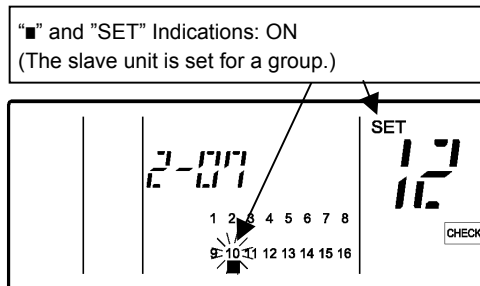
- Ref. No. with no indoor unit connected and I.U. Add. not connected are not indicated.
- When the selected unit is already set as slave unit, the group number indication “■” of the unit and “SET” indication appear.
- The indoor unit already set as the master unit is not indicated.



3. Setting Procedure

Depress the “RUN/STOP” switch after selecting indoor unit, the indicated unit is set as the slave unit, and the “■” and “SET” indications appear.

(Every time the “RUN/STOP” switch is depressed, the slave unit is set and canceled alternately.)



(ex. When selecting indoor unit of Ref. No. 4 and I.U. Add. 9)

5/10 INPUT/OUTPUT FUNCTION



CAUTION:

- Up to 15 slave units can be set in one group (Max. 16 units (including the master unit) in one group).
- For changing the setting of slave unit to another group, cancel the present slave unit setting and perform the setting for another group.
- In case that all the units are set as the master unit, the central station can not be changed to the slave unit setting mode.

5. INPUT/OUTPUT FUNCTION

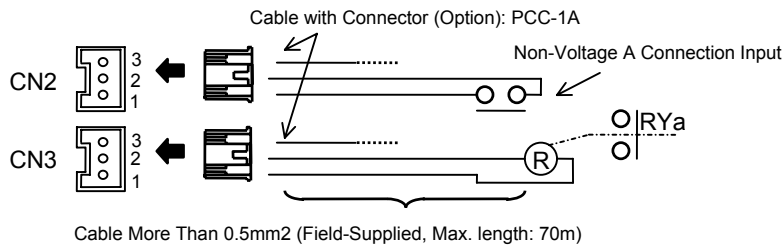
The central station has two input functions and two output functions as shown below.

Table A. Input / Output Setting Mode and Connector

Mode	Port	Setting of DSW2		
		ON OFF	ON OFF	ON OFF
Input 1	CN2 1-2	1	2	3
Input 2	CN2 2-3	1	2	3
Output 1	CN3 1-2	1	2	3
Output 2	CN3 1-3	1	2	3

Specifications of Required Components:

- DC12V Non-voltage A Connection
- OMRON MY Relay
- PCC-1A



As for demand input, the group to be controlled can be set when signal is input.

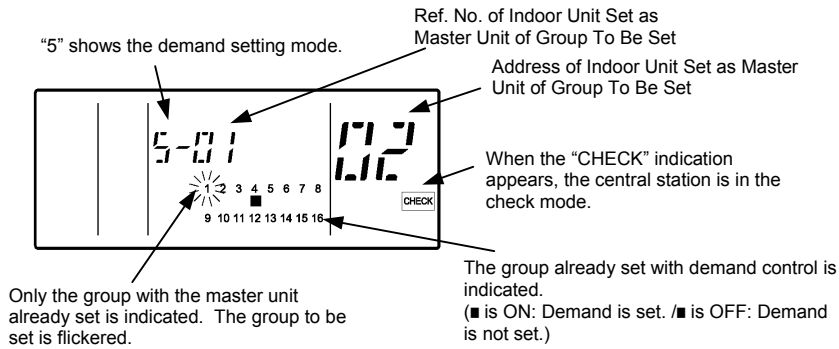
5.1. DEMAND SETTING PROCEDURE

1. Changing to Check Mode

Depress the "CHECK" switch for more than 3 seconds, and the central station is changed to the check mode.

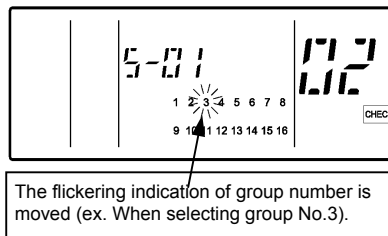
2. Changing to Demand Setting Mode

Depress the "CHECK" switch and change the 7-segment indication for check to "5" (Demand Setting Mode). The LCD indication of the central station is as shown below.



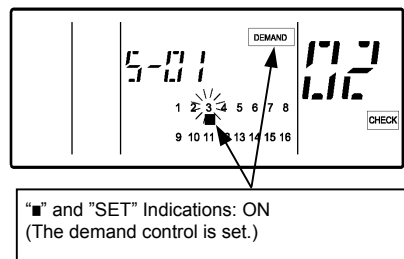
3. Selection of Group To Be Set

Select the group to be set by depressing the "GROUP" switch. The flickering indication of group number is moved every time the "GROUP" switch is depressed. The Ref. No. and I.U. Add. of the indoor unit set as main unit of the selected group to be set are indicated. The "■" indication appears at the group already set with demand control, and the "DEMAND" indication appears.



4. Setting Procedure

Depress the "RUN/STOP" switch and the selected group is set with demand control, and the "■" and "DEMAND" indications appear.
(Every time the "RUN/STOP" switch is depressed, the demand control is set and canceled alternately.)



6. OPTION SETTING**6.1. CHANGING TO OPTION SETTING MODE****■ Changing to Option Setting Mode**

1. Depress the "CHECK" switch for more than 3 seconds while all the groups are stopped. The central station is changed to the option setting mode and the "CHECK" indication appears, and "1" (Master Unit Setting Mode) is indicated on the 7-segment for check.

**ATTENTION:**

When there is a group in operation, the central station can not be changed to the check mode.

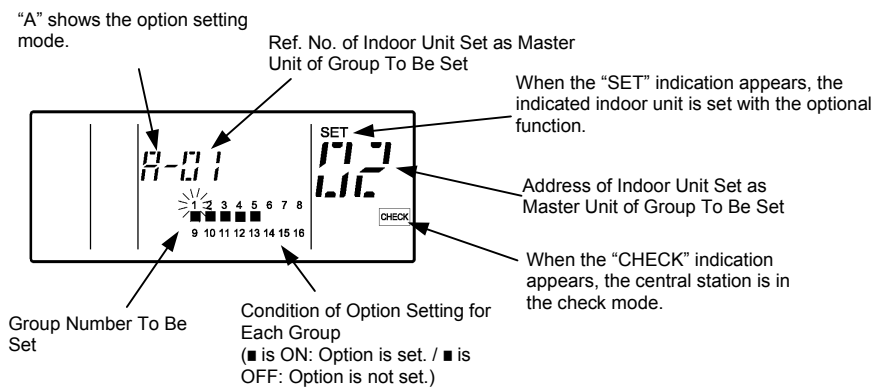
2. Depress the "CHECK" switch and change the indication of the 7-segment.

7-Segment	Function
A	Fixing Operation Mode
b	Fixing Setting Temperature
c	Fixing Cooling Only
d	Fixing Air Flow
E	Auto COOL / HEAT

3. Depress the "RESET" switch and the central station is changed to the normal mode.

■ Indication of Option Setting Mode

When the central station is changed to the slave unit setting mode, the LCD indication on the central station is as shown below. The indication of the group to be set is flickered. The Ref. No. and I.U. Add. indicates the address of the indoor unit which is set as the master unit of the group to be set. The "■" indication of group flickers in case that the option setting is already done. When the "SET" indication appears, the indoor unit indicated on LCD is already set with the optional function.



■ Setting Procedure

1. Depress the "CHECK" switch and select the setting item A – E.
2. Select the group to be set by depressing the "GROUP" switch.
3. Depress the "RUN/STOP" switch, the option setting is done. At that time, the "■" indication appears and the "SET" indication also appear. (Every time the "RUN/STOP" switch is depressed, the optional function is set and canceled alternately.)



CAUTION:

- In case that the optional functions are set by the central station, it is required to set the same optional functions for the group by the remote control switch.
- In case that the optional functions (items A – E as shown above) are set by the remote control switch, it is required to set the same optional functions for the group by the central station.

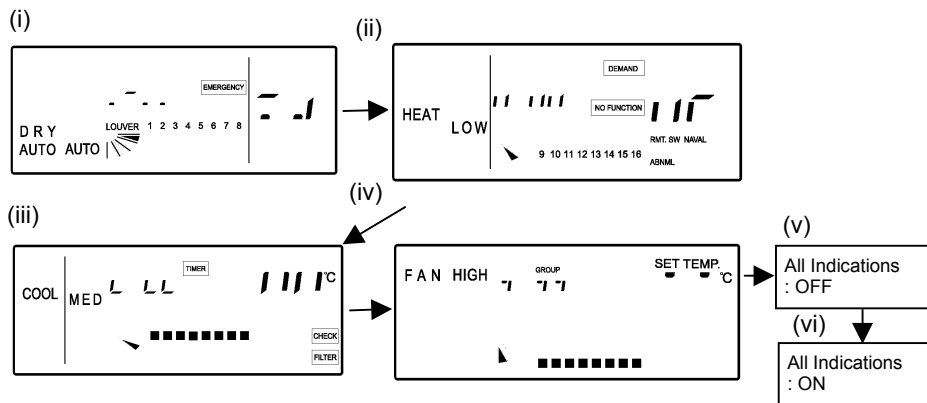
7. INITIALIZATION OF CENTRAL STATION

The procedure for initialization of the group setting and the optional setting is as follows.

1. Changing to Self Check Mode

Depress the "GROUP(∨ and ∧)" and "MODE" switches simultaneously, the central station is changed to the self check mode. In case that there is a group in operation, the "NO FUNCTION" is indicated and the central station can not be changed to the self check mode. After changing to the self check mode, the LCD indication is changed from (i) to (vi) as shown below.

Before the indication is changed to (vi), depress the "GROUP(∨ and ∧)" and "MODE" switches simultaneously again, and the central station is changed to the initializing mode.



NOTE:

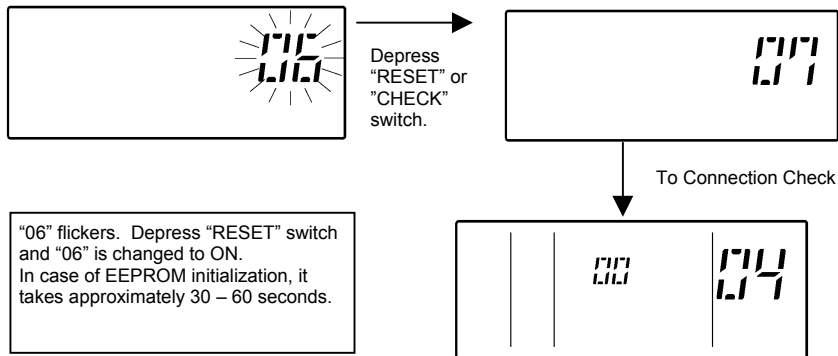
In case that the "GROUP (∨ and ∧)" and "MODE" switches are not depressed again, the self check operation continues.

7/14 INITIALIZATION OF CENTRAL STATION

2. Initialization

When the central station is changed to the initializing mode, the LCD indication on the central station is as shown below. In this condition, depress the "RESET" switch, and the flickering "06" indication is changed to ON and the initialization is performed.

(In case that initialization is not required, depress the "CHECK" switch, the LCD indication is automatically changed as shown below.)



■ Group Setting Table of Central Station

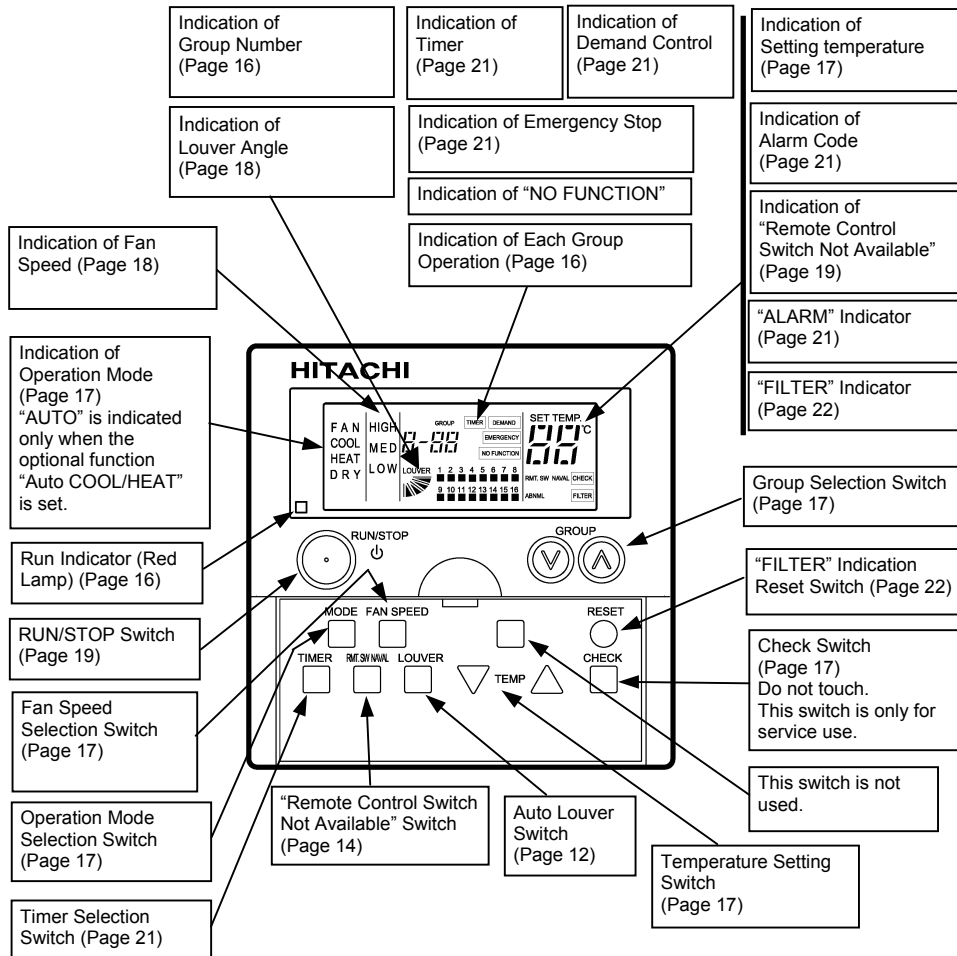
		Indoor Unit Address																
RSW of Indoor Unit		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
Refrigerant Number	Indication of PSC-5S	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
	00																	
	01																	
	02																	
	03																	
	04																	
	05																	
	06																	
	07																	
	08																	
	09																	
	10																	
	11																	
	12																	
	13																	
	14																	
	15																	

Fill the group number (1-16) in the above table.
Circle the unit number of the master unit.

8. SWITCH NAMES AND FUNCTIONS

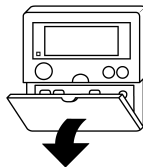
■ Liquid Crystal Display Section

The figure below shows all the indications for reference. The actual display during operation is different.



■ Operation Switch Section

The above figure shows the central station with the cover opened. When opening the cover, pull the cover toward the arrow direction.



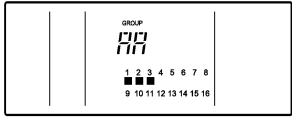
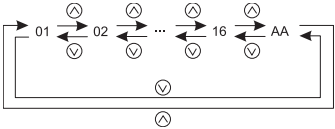
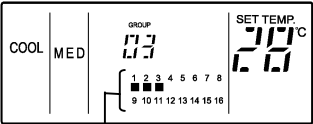
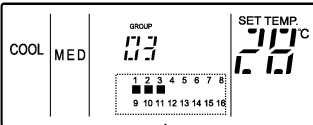
9. OPERATION PROCEDURE

■ Group Selection and Monitoring Unit Operation Status

The central station can control up to 16 groups by each group or simultaneously.
(The selected groups can be operated and the unit operation status of the groups can be monitored.)

NOTE:

The group number is changed by depressing the "GROUP" switch. The group without group setting is not indicated.

<p>1. Supply power to the unit.</p> <p>⚠ ATTENTION:</p> <ul style="list-style-type: none"> - Supply power to the unit more than 12 hours before unit operation for compressor protection. - Do not cut off power during the term of using air conditioner. 	
<p>2. Depress the "GROUP" switch.</p> <p>Every time the "GROUP" switch is depressed, the group number to be controlled is changed in the order as shown below. In case of "AA", all the units are controlled simultaneously.</p> 	<p>Group No. is changed. (ex. In case of selecting group 3)</p>  <p>Only Group Numbers Already Set are indicated.</p>
<p>3. When selecting the group, the setting conditions of each group are indicated.</p> <p>By operating by the remote control switch, the content of the setting is indicated.</p> <p>1 ■ ~ 16 ■ Show the operating conditions of each group as follows;</p> <ul style="list-style-type: none"> - Turned OFF (): Stop - Turned ON (■): Operation - Flickering (⚡): Abnormality <p>The Run indicator (Red Lamp) shows the following:</p> <ul style="list-style-type: none"> - Turned OFF: All Groups Stop - Turned ON: More than 1 Group in Operation - Flickering: More than 1 Group in Abnormal Condition. 	<p>Operating Conditions of Each Group (ex. In case of "COOL", "MED" and "28°C")</p>  <p>Operating Conditions of Each Group (ex. In case of groups 1 ~ 3 in operation)</p> <p>In case of group AA, the indications (operation mode, setting temperature, air flow, louver angle and "RMT. SW NAVAL") are indicated only when all groups are in the same setting.</p>

NOTE:

The indication of setting temperature "- -" shows no setting of temperature.

■ Setting of Operation Mode

<Function>

“COOL” Operation: To cool the room temperature by distributing the cooled air.

“HEAT” Operation: To heat the room temperature by distributing the heated air.

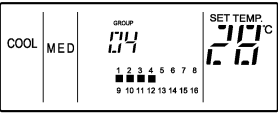
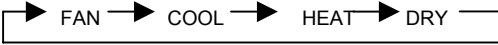
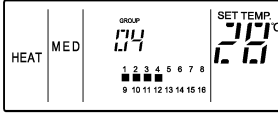
“DRY” Operation: To dehumidify more than standard cooling operation.

“FAN” Operation: To circulate the room air.

NOTE:

The recommended temperature for each operation is as follows;

“COOL” Operation: 27~29°C / “HEAT” Operation: 18~20°C / “DRY” Operation: 23~25°C

<p>1. Depress the “GROUP” switch and select the group. (Refer to item 2 of “A. Group Selection and Monitoring Unit Operation Status” in page 16.)</p>	 <p>The above figure shows the case of selecting group 4.</p>
<p>2. Depress the “MODE” switch. The operation mode is changed in the following order.</p> <div style="text-align: center; margin: 10px 0;">  </div>	 <p>The above figure shows the case of setting “HEAT” operation.</p>

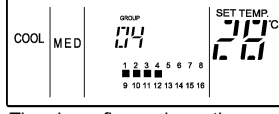
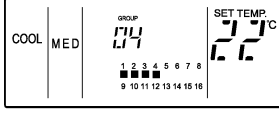
NOTE:

- *The above indications show the case of setting operation mode for group 4. The same setting procedure shall be performed for other groups. In case of the same setting for all groups, select the group number of “AA”.*
- *Some operation modes can not be set according to the unit model. Contact to HITACHI dealer or your distributor for details.*
- *The operation mode can be set while the unit is stopped or in operation.*

■ Setting of Temperature, Fan Speed and Louver Angle

NOTE:

- *Do not touch the “CHECK” switch. The “CHECK” switch is only for service use.*
- *When the “CHECK” switch is depressed by a mistake and the central station is changed to the check mode, depress the “RESET” switch to cancel.*

<p>1. Depress the “GROUP” switch and select the group. (Refer to item 2 of “A. Group Selection and Monitoring Unit Operation Status” in page 11.)</p>	 <p>The above figure shows the case of selecting group 4.</p>
<h3><TEMPERATURE></h3> <p>Set temperature by depressing “TEMP” switch. Depressing “Δ” switch, the temperature is increased by 1 °C (Maximum: 30 °C). Depressing “∇” switch, the temperature is decreased by 1 °C (Minimum: 19 °C, for Cool, Dry and Fan mode, and 17 °C for Heat mode). When depressing Δ for 3 seconds at set temperature at 30 °C, or depressing ∇ for 3 seconds at the minimum temperature, the temperature is not set and the indication of setting temperature is “--”. In this case, depress Δ or ∇, the indication of setting temperature returns to the minimum temperature or 30°C. The right figure shows the case of setting 22 °C</p>	 <p>The above figure shows the case of setting 22°C.</p>

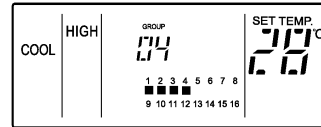
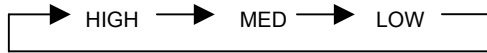
NOTE:

The above shows the setting range for standard model. The setting range may be different according to the connected unit model.

9/18 OPERATION PROCEDURE

<FAN SPEED>

Depress the "FAN SPEED" switch.
By depressing the "FAN SPEED" switch, the indication is changed in the following order;



The above figure shows the case of setting "HIGH" fan speed.

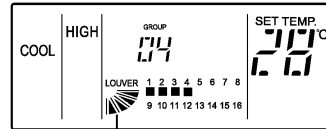
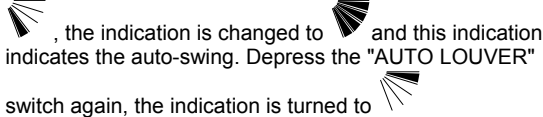
NOTE:

- In case of dry operation, the fan speed is automatically changed and fixed at the "LOW" fan speed.
- In this case, the fan speed can not be changed (The indication remains at the setting condition).

<LOUVER ANGLE>

Depress the "AUTO LOUVER" switch.
Every time the "AUTO LOUVER" switch is depressed, the indication of the louver angle is changed.

Depress the "AUTO LOUVER" switch at the position of



The above figure shows the case of setting auto-swing.

NOTE:

- The above indications show the case of setting operation mode for group 4.
- The same setting procedure shall be performed for other groups. In case of the same setting for all groups, select the group number of "AA".
- The temperature, fan speed and louver angle can be set while the unit is stopped or in operation.

In Case of 4-Way Cassette Type (Example)

LCD Indication							
Air Louver Angle	Approx. 25°	Approx. 30°	Approx. 35°	Approx. 40°	Approx. 50°	Approx. 55°	Approx. 60°
Cooling Dry		← Angle Range					→
Heat	←	← Angle Range					→

■ :Recommended Angle

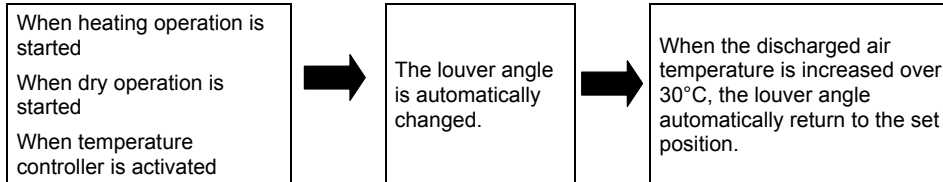
NOTE:

- The fixing angle of the louver shown above is the case of 4-way cassette type indoor unit. The fixing angle is different according to unit model. Refer to the operation manual of each model for details.
- There exists a time lag between the indicated louver position on LCD and the actual louver angle in operation. Therefore, when fixing the louver, set the angle according to the indicated louver angle on LCD.
- When the "AUTO LOUVER" switch is depressed, the louver may not stop immediately.



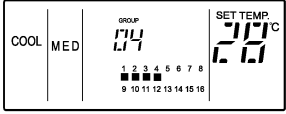
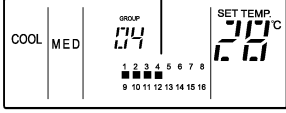
ATTENTION:

The louver angle is automatically changed during heating operation for unit control.



The LCD indication remains at the setting condition.

■ Unit Operation

1. Depress the "GROUP" switch and select the group. (Refer to item 2 of "A. Group Selection and Monitoring Unit Operation Status" in page 16.)	 <p>The above figure shows the case of selecting group 4.</p>
2. Depress the "RUN/STOP" switch. In case that the selected group is in operation, the group is stopped by depressing "RUN/STOP" switch. In case that the group is not in operation, the group is started by depressing the "RUN/STOP" switch. In case of group "AA", depress the "RUN/STOP" switch, and; - All the groups are stopped (When more than 1 group is in operation (Run lamp is ON)). - All the groups are started operation (When all the groups are stopped (Run lamp is OFF)).	<p style="text-align: center;">Turned ON</p>  <p>The above figure shows the case of group 4 operation.</p>

NOTE:

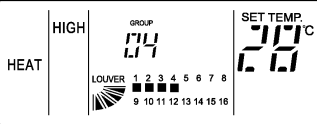
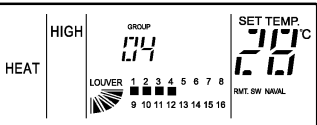
The above indications show the case of setting operation mode for group 4. The same setting procedure shall be performed for other groups. In case of the simultaneous operation for all groups, select the group number of "AA".

■ Prohibiting Operation by Remote Control Switch

<Function>

To prohibit the operation by the remote control switch.

When this function is available, the “CENTRAL” indication appears on the LCD on the remote control switch and the operation by the remote control switch is not available.

<p>1. Depress the “GROUP” switch and select the group. (Refer to item 2 of “A. Group Selection and Monitoring Unit Operation Status” in page 16.)</p>	 <p>The above figure shows the case of selecting group 4.</p>
<p>2. Depress the “RMT. SW NAVAL” switch. Every time the “RMT. SW NAVAL” switch is depressed, the “RMT. SW NAVAL” indication is turned ON and OFF alternately.</p>	<p style="text-align: right;">Turned ON</p> 



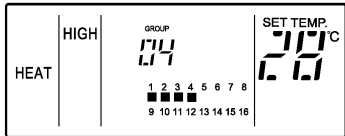
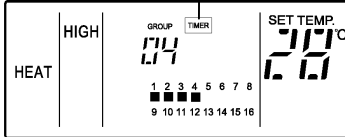
ATTENTION:

- The above indications show the case of setting operation mode for group 4. The same setting procedure shall be performed for other groups. In case of the same setting for all groups, select the group number of “AA”.
- Although the “RMT. SW NAVAL” function is set, in case of operation by the central station, the unit can be stopped by the remote control switch, and in this case, the unit can be started again by the remote control switch.
- For the unit without remote control switch, the “RMT. SW NAVAL” function shall be set.
- In case of using together with other controllers, do not set the “RMT. SW NAVAL” function. Additionally, do not set the “RMT. SW NAVAL” function by other controller or the malfunction may occur.
- In case of no setting of temperature (“-”), the temperature can be set by the remote control switch during the “RMT. SW NAVAL” function is available.

■ Timer Operation

<Function>

To set the schedule operation "available" or "not available" by the signal from the control timer in case of connection with the control timer (PSC-5T; Option).
The schedule operation can be set "available" or "not available" individually for each unit, however, the operation schedule is all the same.

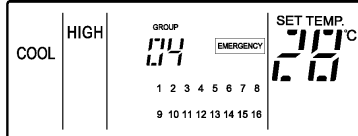
<p>1. Depress the "GROUP" switch and select the group. (Refer to item 2 of "A. Group Selection and Monitoring Unit Operation Status" in page 16.)</p>	<div style="border: 1px solid black; padding: 5px; text-align: center;">  </div> <p>The above figure shows the case of selecting group 4.</p>
<p>2. Depress the "TIMER" switch. Every time the "TIMER" switch is depressed, the "TIMER" indication is turned ON and OFF alternately. The group with timer setting is operated according to setting schedule by the signal from the control timer.</p>	<p style="text-align: center;">Turned ON</p> <div style="border: 1px solid black; padding: 5px; text-align: center;">  </div> <p>The above figure shows the case of setting timer operation.</p>

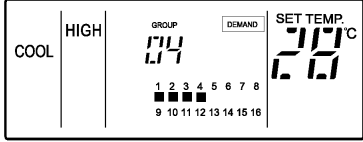
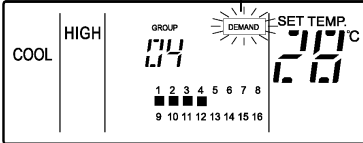
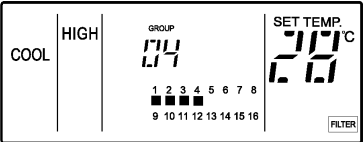
NOTE:

*The above indications show the case of setting operation mode for group 4.
The same setting procedure shall be performed for other groups. In case of the same setting for all groups, select the group number of "AA".*

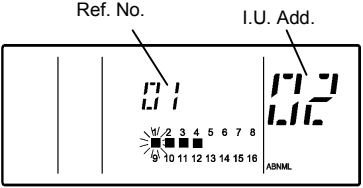
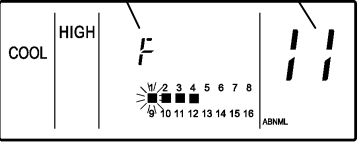
■ Other LCD Indications

Indication in Normal Conditions

<h3><EMERGENCY></h3> <p>The "EMERGENCY" is indicated when the emergency stop signal is input by the outside input function. During the emergency stoppage, indoor units are stopped and the operation by the remote control switch is not available.</p> <p>Contact your distributor or dealer of HITACHI for details.</p>	<div style="border: 1px solid black; padding: 5px; text-align: center;">  </div>
--	--

<p><DEMAND> The "DEMAND" is indicated when the demand input is set by the outside input function. The indication is indicated for the group with demand setting and the "DEMAND" indication flickers when the demand signal is input.</p> <p>Contact your distributor or dealer of HITACHI for details.</p>	 <p>In Case of Demand Setting</p> <p>Flickers</p>  <p>In Case of Demand Signal Input</p>
<p><FILTER> Filter Clogging: When the "FILTER" indication is indicated, it shows that the air filter of the indoor unit is clogged. Clean the air filter. After cleaning, depress the "RESET" switch and the "FILTER" indication is turned OFF.</p>	

■ Indication in Abnormal Conditions

<p><ABNORMAL> The Run lamp (Red lamp) is flickered when there is a group in abnormal condition. The "ALARM" is indicated on the LCD. The "■" indication of the group in abnormal condition is flickered.</p> <p>Depress the "GROUP" switch and select the group with alarm, the indication of unit No., model code, alarm code and the normal indication is repeatedly indicated (There is a case that the model code may not be indicated according to the unit model). In case that multiple units are in abnormal conditions, the above indication is indicated by turns.</p> <p>Check the contents of the LCD indication and contact your distributor or dealer of HITACHI for details.</p>	 <p>Ref. No. I.U. Add.</p> <p>Model Code Alarm Code</p> 
<p><POWER FAILURE> All the indications are disappeared. In case of unit stoppage due to the power failure, the unit is not started again after the power recovery. Perform the starting operation again. In case of instant power failure within 2 seconds, the unit is automatically started again.</p>	
<p><ELECTRICAL NOISE> All the indications are disappeared, and the unit operation may be stopped for the device protection due to the electrical noise. Perform the starting operation again.</p>	