



FORD & DOONAN
Air Conditioning Systems

Operating Instructions

for your Ford & Doonan Ducted System



Congratulations!

Congratulations on your new Ford & Doonan Air Conditioning System. You can rest assured you have received a system of the highest quality, backed by the very best customer service. Before operating the air conditioner, please read this operating manual carefully. It will advise you on how to operate the unit correctly, understand the air conditioner's advanced features and help you in the unlikely event that a problem should occur.

Please keep this manual in a safe place for future reference.

Thank you
for purchasing
Ford & Doonan
Air Conditioning



FORD & DOONAN
Air Conditioning Systems

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Scan to view our Operation Videos on our website or visit fordanddoonan.com.au/operation-videos-and-manuals

1. Important Safety Instructions

Never remove any fixed covers on the indoor or outdoor unit. Removal of the covers may expose fast moving fan blades or electrical components operating at a hazardous voltage. Contact with the blades or high voltage components may result in injury or electric shock.

Never insert any objects into the openings of the indoor or outdoor unit. This may damage the product or result in injury to the person inserting the object.

Do not expose the indoor unit or remote controller to rain or moisture. Water or other fluids on the electrical components may result in fire or electric shock.

Always replace any blown fuse with a fuse of the same specification. The use of the

wrong fuse may allow the electrical wiring to overheat and catch on fire. If the correct type of fuse continues to blow, or the circuit breaker continues to trip, contact Ford & Doonan Service Department.

Never operate the air conditioner without the return air filter(s) in place. Operating the unit without the filter(s) will allow dust to enter the indoor unit and build up on the heat exchanger coil and fan motor. This will cause a malfunction of the unit, which will not be covered by warranty.

This electrical appliance is not intended for use by young children. Young children should be supervised to ensure that they do not play with the outdoor unit.



Main switch

Ensure you are familiar with the location of the main switches for the air conditioning system. These switches are normally located adjacent to the outdoor unit and in the fuse box/switchboard.

If the air conditioner is not going to be used for an extended period of time or you are going away on holidays, the main

switch should be turned off to prevent accidental operation of the air conditioner. When turning the system back on, the main switch must be turned on at least 6 hours before the air conditioner is operated to warm up the compressor. Failure to do so may result in damage to the compressor, which will not be covered by warranty.

2. Zone Operation

Applicable when your new system has zones fitted

- For operational instructions please refer to the attached sub manual (if applicable).
- It is possible to run all zones at the same time, however, the system will not be running very efficiently.
- You may operate two or more zones at once, depending on the capacity of your unit, design and heat load. For example, under maximum heat load (a hot day) it is better to have fewer zones on than under a low heat load (at night) when an extra zone may be turned on.
- We recommend turning on the living areas during the day and closing any bedrooms and other zones that are not needed. At night it is best to turn off any living areas and keep the bedroom zones open. This will allow the best efficiency of the system.
- The zones can take up to 2 minutes to open or close.
- If some zones do not have enough air flow check how many zones are open. Close off any zones that are not needed and see if air flow increases.



3. Outlets

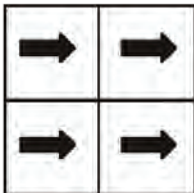
Multi-Directional outlets

Multi-Directional outlets (if applicable) are designed to give maximum adjustment to airflow. Each of the four cores (called louvre panels) is adjustable by lifting and turning to direct air from one direction to another. For the distribution of cool air, the louvre panels are set to deflect air horizontally across the ceiling. For high ceilings and heating systems the louvre panels are adjusted to achieve 40% downward flow. For spot cooling and heating, the louvre panels oppose each other for a vertical down airflow. The outlets can be manually closed during winter if the

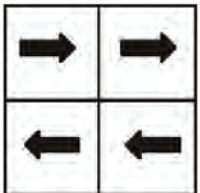
system is not used for heating, although this is not a necessity.

Sidewall registers

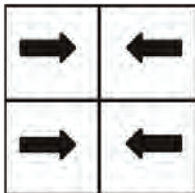
Sidewall registers (if applicable) have vertical and horizontal blades that are adjustable. The blades are manufactured not to rattle. Any adjustments are required to be done with the assistance of long nose pliers with insulation tape wrapped around the ends so the paint of the register is not damaged. Gently move the blades to the desired position.



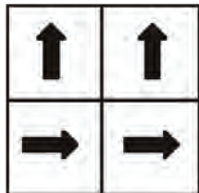
ONE WAY



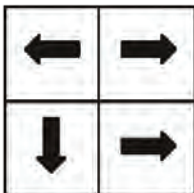
TWO WAY



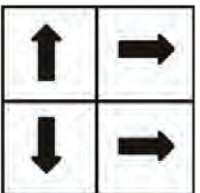
TWO WAY



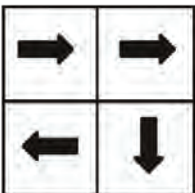
TWO WAY



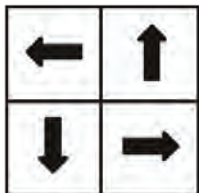
THREE WAY



THREE WAY



THREE WAY



FOUR WAY



4. Maintenance

1. Cleaning the air filter

If you have a clean air filter pack, please call your Ford & Doonan store to purchase a replacement filter. We recommend replacing the filter every 12 months, if you have allergies or pets, we recommend replacing the filter every 6 months.

To clean your filter, remove the filter, hose it down and leave it a couple of hours to dry. Once this is done do not forget to press the filter reset button on your air conditioning controller.

2. Cleaning the outside panel

Cleaning of the outside panel is easy, by using a soft cloth or a cloth dampened by a neutral detergent solution. Never use paint thinner, other chemical products, or polishing powder when cleaning the outside panel. A good quality car polish can be applied to the painted surfaces to increase the paint's durability.

3. When the unit is not being used for an extended period

- Switch off the main power switch.

- Rust preventative coating has been applied to the outside cover. If corroded, repair by painting.
- Clean the condenser to remove dust and excess waste (leaves, paper, etc.).

4. Maintenance service contract recommended

To ensure your system delivers cool, fresh air throughout the year and that your warranty is valid, it's essential you maintain it regularly. Preventative maintenance by qualified technicians has been proven to reduce the risk of failure of plant and equipment and maintain the efficiency of the overall installation.

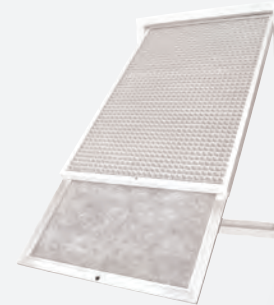
Servicing by a qualified Ford & Doonan technician is recommended. For domestic operation of the air conditioning system we recommend an annual service. If equipment is subjected to heavy use a bi-annual service frequency is desirable.

Contact your Service Department (9331 8800) to set up automatic service reminders and ask about our three year service packages at a reduced cost.

We recommend replacing your disposable filter every 12 months



DISPOSABLE filter



WASHABLE filter

5. Common Queries

If the air conditioning is not running or the cooling effect cannot be achieved as desired, check the following points before requesting repair or service.

If the air conditioner does not function please check the following:

Is the power switched ON?

Has the power fuse failed?

Is power supplied?

Has the circuit breaker tripped?

Is the temperature indicator set in the correct operating position, or to a position which is too high for the cooling operation?

How to perform a reboot of your air conditioning system

Before calling the Service Department please perform a reset of your air conditioning system. As any electrical appliance, power dropouts or surges can interrupt the operation of the system. In most cases a reboot is all that is required. In case the system has never been used before, make sure that the main switch has been turned on for at least 6 hours before using the air conditioning unit.

Locate the isolator switch at the outdoor unit. It is a big white switch at the outdoor unit. Turn it off and wait 3 minutes before turning it back on.

If the system does not reboot, or the fault still appears please call the Ford & Doonan Service Department.

Not cooling or heating as desired please check the following:

Is the thermostat set to the proper position to heating or cooling?

Is there an obstruction near the air intake or outlet port?

Is the air filter free from clogging by dust, dirt, etc.?

Are doors and windows completely closed?

Smoke coming from outdoor unit?

In cold weather you may see what appears to be smoke coming from the unit. This is just steam being released when the unit is in de-ice mode. Further you may notice the unit icing up and appearing frozen. This is normal as long as the system completes a de-ice cycle.

“Filter clean” displays

If a small tap or spanner symbol appears, this indicates it is time to clean or replace the filter. Press this switch to reset and clear the symbol once you have cleaned or replaced the filter. Please see Maintenance for more information on how to clean your filter. If the spanner symbol appears with a fault code, it is advising you of a problem and you will need to contact your Service Department.

Faults:

If the **“CHECK”** indicator starts flashing, this means there is a fault at hand.

In this case, or if fault codes appear, please call your Service Department with the fault code, explain the problem and they will be able to assist with the issue.

6. Performance Expectations

Hot weather

Heat load calculations and manufacturers capacity ratings are based on an outside temperature of 36°C. When the temperature exceeds this, the performance of your air conditioner will fall away the hotter it gets and room temperatures will increase accordingly.

Cold weather

Heat load calculations and manufacturers capacity ratings are based on an outside temperature of 7°C. When the temperature is lower than this, the performance of your air conditioner will fall away the colder it gets and room temperatures will decrease accordingly. The above conditions do occur in Perth and there will be nothing wrong with your air conditioning unit when it happens.

Heating performance

Hot air rises and the room temperatures at different levels will be different. It is normal that some parts of the room will be warmer than others. The same applies on cooling mode but to a lesser degree.

Return air

Your system will usually be designed with one only return air grille. The area around the return air grille will always be drafty, and in Winter, always much cooler than the rooms. This is why we select hallways or other “non occupied rooms”. You will have to leave any room’s entry door ajar to allow the conditioned air to come back to the grille. You cannot close the door as performance will be affected. We have options to overcome these situations, so please discuss this with your consultant.

Zones

If we have installed zones, then they cannot all be turned on together without effecting performance. On low load days or nights your air conditioner can handle a larger area at one time. Your air conditioner can only handle the percentage of the home we mention in our letter at typical design temperatures. Turning on less zones will effectively increase the available capacity you have.



7. Performance Tips

1. Temperature setting on your air conditioning unit

We recommend that in summer you set the cooling cycle at 24 degrees and in Winter the heating at 21 degrees. On very hot days (above 36 degrees) or cold days (below 7 degrees) one can increase the temperature in Summer and decrease in Winter, to keep the efficiency of the air conditioning.

2. To keep the comfortable temperature without extra heat loading

The easiest solution to start your air conditioner earlier in the day by using your timer setting. On hot days start the air conditioner before your heat load increases so the air conditioner can get a head start. On cold days start the air conditioner whilst it is still warm outside (above 12-15°C). This will let the air conditioner deliver maximum capacity before performance falls away. If your system has zones (residential only) reduce the number of zones turned

on when the external conditions are extreme. The smaller the area being air conditioned, the better it can cope.

3. Close doors of rooms that are not being air conditioned

When operating an air conditioning system that utilises the zoning technique, remember the system has only a certain capacity, therefore the idea is to air condition the areas you are occupying at the time. With this in mind, it becomes prudent to habitually close the doors that lead to a non air conditioned area, thereby reducing the total area being subjected to air conditioning. This will enhance the effectiveness of the machine.

4. Allow air flow to return air grille

You will notice that the larger return air grill is normally located in a central position in the building. It is important to encourage the airflow towards this grille. This grille is drawing the total air capacity of the system through it and therefore



requires unrestricted airflow. Depending upon the building, you may need to open or close doors around this area to keep the air flowing to this grille.

5. Regular cleaning of the filter is important

The return air grille in most cases also contains an air filter. This air filter, depending on the system usage and other air quality factors, will need to be cleaned regularly. To do this, simply open the grille and slide out the filter. In most cases it is best to hose the filter clean, although some people prefer to vacuum the filter. Remember, regular cleaning of the filter will improve the system efficiency.

6. Clean outdoor unit and surroundings

The condensing or outdoor unit is located in a position to best suit the building and the occupants. It is important to maintain cleanliness around the unit, for example sweeping away any build-up of leaves or general flotsam. It is critical to not inhibit the airflow coming from the condenser, therefore general garden paraphernalia or other equipment should never be

stacked on or lent against the condenser. Similarly if a garden is developing around the condenser, this can be an advantage as some of the sound from the condensing unit will be absorbed, although a robust bush can block the air flow so consideration should be given to this. It is also imperative to keep the condensing unit accessible for servicing purposes.

7. Sizing of equipment

When we recommend a unit we have completed a heat load calculation on the area. We have assumed the following:

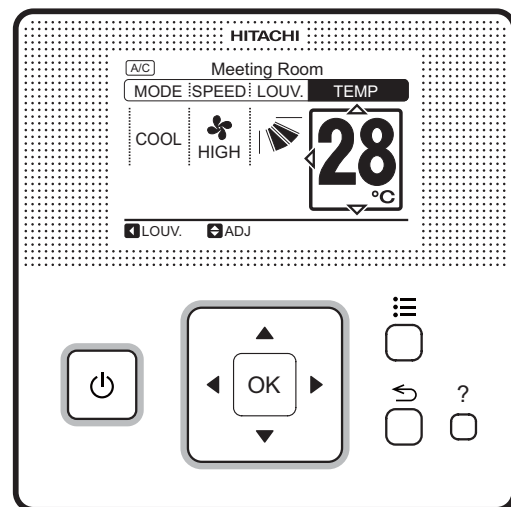
- Curtains will be drawn closed in both sunny Summer days and at night in Winter.
- Ceiling insulation has been installed directly above your ceiling (not just anti-con or sisalation)
- Doors and windows will be left closed.

If any of the above changes, your air conditioner may not be large enough to maintain acceptable room temperatures.

HITACHI
Inspire the Next

Operation Manual

- PC-ARF -



IMPORTANT:

*READ AND UNDERSTAND
THIS MANUAL BEFORE
USING THIS WIRED REMOTE
CONTROL SWITCH.
KEEP THIS MANUAL FOR
FUTURE REFERENCE.*

P5414986

IMPORTANT NOTICE

- HITACHI pursues a policy of continuing improvement in design and performance of products. The right is therefore reserved to vary specifications without notice.
- HITACHI cannot anticipate every possible circumstance that might involve a potential hazard.
- This heat pump air conditioner is designed for standard air conditioning only. Do not use this heat pump air conditioner for other purpose such as drying clothes, refrigerating foods or for any other cooling or heating process.
- Do not install the unit in the following places. It may cause a fire, deformation, corrosion or failure.
 - * where oil vapor or oil is dispersed (including machinery oil).
 - * where a lot of sulfide gas drifts such as at hot spring.
 - * where inflammable gas may be generated or flowed.
 - * where strong salty wind blows such as coast regions.
 - * with an atmosphere of acidity or alkalinity.
- Do not install the unit in the place where silicon gas drifts. If the silicon gas attaches to the surface of heat exchanger, the fin surface repels water. Drain water splashes outside of the drain pan and splashed water runs inside of electrical box. It may cause water leakage or electrical devices failure.
- Pay attention to the following points when the unit is installed in a hospital or other facilities where electromagnetic wave is generated by a medical equipment.
 - * Do not install the unit in the place where the electromagnetic wave is directly radiated to the electrical box, remote control cable or remote control switch.
 - * Install the unit at least 3 meters away from electromagnetic wave radiators such as a radio.
- Do not install the unit in the place where animals and plants are exposed to the direct blowing air from the unit. It could adversely affect the animals and plants.
- The installer and system specialist shall comply with local regulations or standards for the safety. The following standards may be applicable, if local regulations are not available. International Organization for Standardization, ISO5149 or European Standard, EN378 or Japan Standard, KHKS0010.
- No part of this manual may be reproduced without written permission.
- It is assumed that this heat pump air conditioner will be operated and serviced by English speaking people. If this is not the case, the customer should add safety such as caution and operating signs in the native language for non English speakers.
- If you have any questions, contact your distributor or dealer of HITACHI.
- This manual should be considered as a permanent part of the air conditioning equipment and should remain with the air conditioning equipment.

SAFETY SUMMARY

< Signal Words >

- Signal words are used to identify levels of hazard seriousness.
Definitions for identifying hazard levels are provided below with their respective signal words.



: DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.



: WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.



: CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

: NOTICE is used to address practices not related to personal injury.

NOTE

: NOTE is useful information for operation and/or maintenance.

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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.
- Do not operate switches with wet hand. It may cause an electrical shock.
- In case that the protective devices often function or the operation switches do not function well, turn OFF the main power supply and contact your distributor or dealer of HITACHI.
- In case that other abnormalities are found, stop the system, turn OFF the main power supply and contact your distributor or dealer of HITACHI.

WARNING

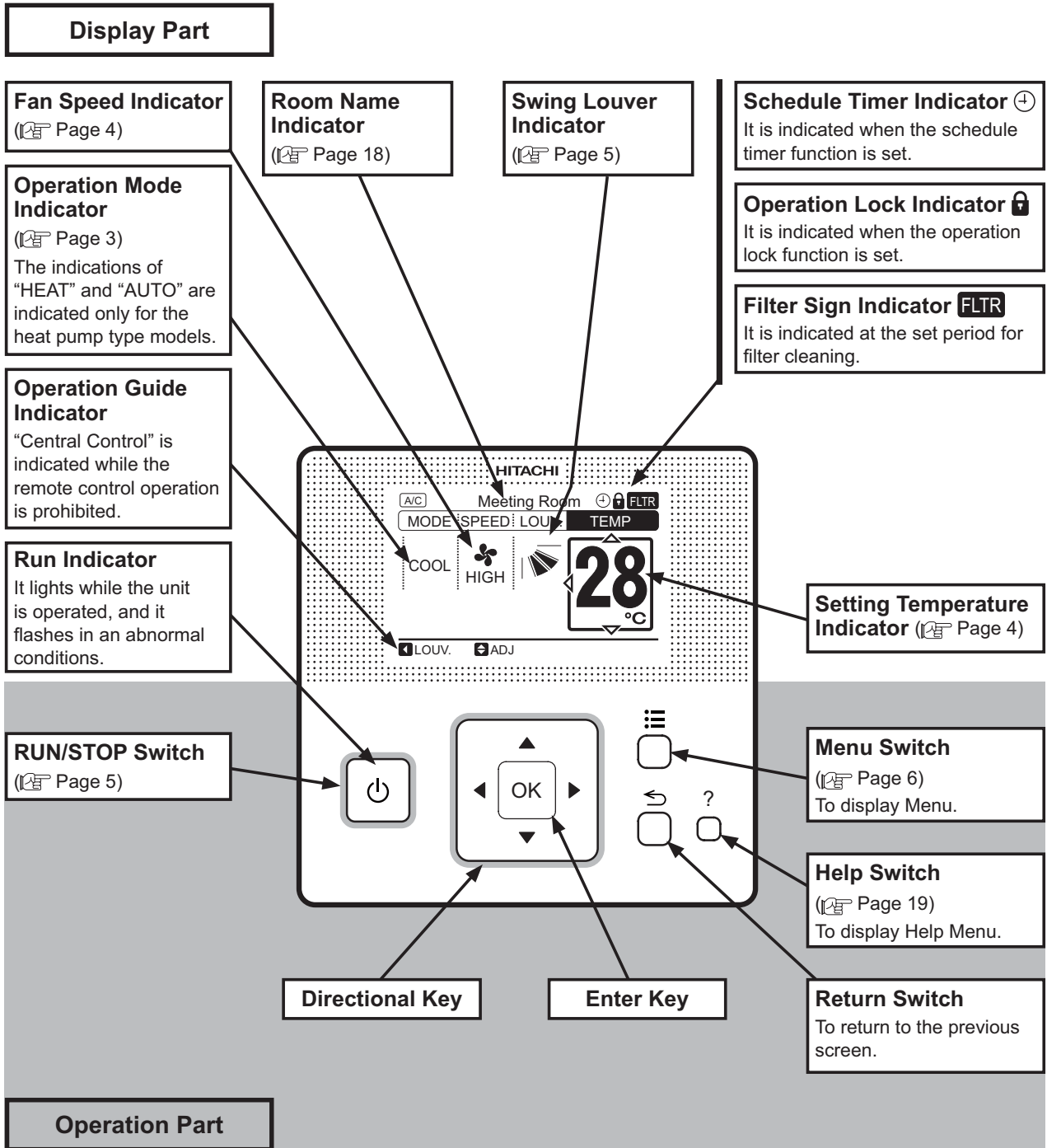
- Do not perform installation work and electrical wiring connection by yourself. Contact your distributor or dealer of HITACHI and ask them for installation work and electrical wiring by service person.
- Do not modify the electrical wiring. It may cause serious accident.

CAUTION

- Do not install the indoor unit, outdoor unit, controller and cable at such places as;
 - (1) where oil vapor or oil is dispersed
 - (2) where the hot springs are near (in a sulfuric environment)
 - (3) where generation, flowing, staying or leaking of flammable gas is detected
 - (4) where the sea is near (in the salty environment)
 - (5) an acid or alkaline environment
- Do not install the indoor unit, outdoor unit, controller and cable within approximately 3 meters from strong electromagnetic wave radiators such as medical equipment. In case that the controller 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 electric noise is applied at the power source for the indoor unit, provide a noise filter.

2. Switch Names and Functions

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



NOTE:

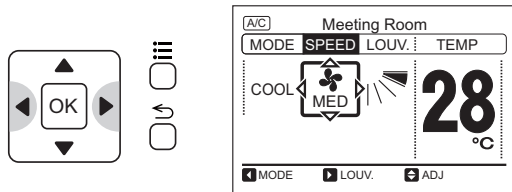
Do NOT press the switches hard or press with sharply pointed material such as a ball point pen. The operation part of the remote control switch may be damaged. Make sure that the switches are pressed softly with fingers.

3. Operation Method

3.1 Basic Operation

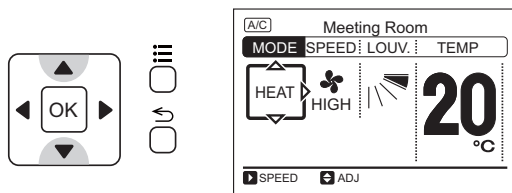
(1) Item Selection

By pressing “<” or “>”, the icon “□” will move to the next item in order of the indications “MODE”, “SPEED”, “LOUV.” and “TEMP”.



(2) Change of Settings

With the item (“MODE”, “SPEED”, “LOUV.” or “TEMP”) selected, press “Δ” or “∇”. The setting will be changed.



3.2 Operation Mode

(Cooling, Heating, Dry, Cooling/Heating Automatic and Air Flow Operation)

<Function>

- * Cooling Operation (COOL):
To decrease the room temperature.
- * Heating Operation (HEAT):
To increase the room temperature.
- * Dry Operation (DRY):
To decrease the humidity in the room.
- * Cooling/Heating Automatic Operation (AUTO):
To cooling and heating automatic changeover.
- * Air Flow Operation (FAN):
To circulate the air in the room.

ATTENTION

The recommendable set temperature is as follows;

- * Cooling Operation: 27 to 29°C
- * Heating Operation: 18 to 20°C
- * Dry Operation: 23 to 25°C

<Before Operation>

CAUTION

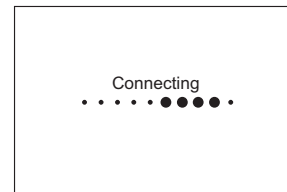
Supply the electrical power to the system for approximately 12 hours before start-up after long shutdown. Do not start the system immediately after the power supply, it may cause a compressor failure, because the compressor is not heated well.

Do NOT turn OFF the power supply during the seasons.

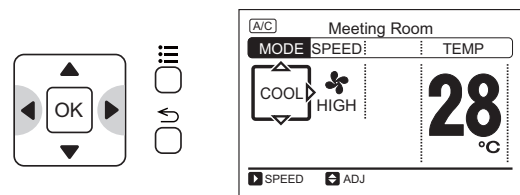
Make sure that the outdoor unit is not covered with snow or ice. If covered, remove it by using hot water (less than 50°C).

If the water temperature is higher than 50°C, it will cause damage to plastic parts.

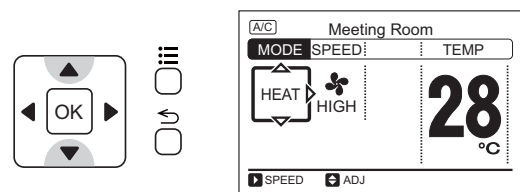
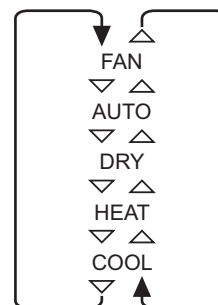
- (1) Turn ON the power supply.



- (2) Press “<” or “>” and select “MODE”.



- (3) By pressing “Δ” or “∇”, the operation mode will be changed as follows.



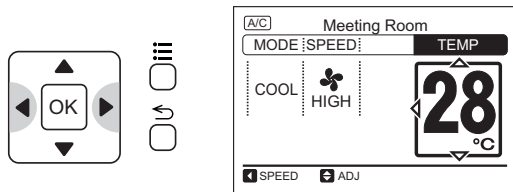
NOTE:

The advanced setting is required for the “AUTO” operation. Contact your distributor or dealer of HITACHI for detailed information.

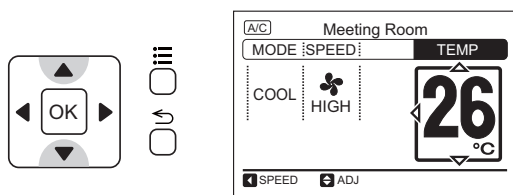
4. Setting Method

4.1 Temperature Setting

- (1) Press “◀” or “▶” and select “TEMP”.



- (2) By pressing “Δ”, the temperature is increased by 1°C. (Max. 30°C)
By pressing “∇”, the temperature is decreased by 1°C.
(Cooling, Dry, Air Flow operation: Min. 19°C)
(Heating operation: Min. 17°C)

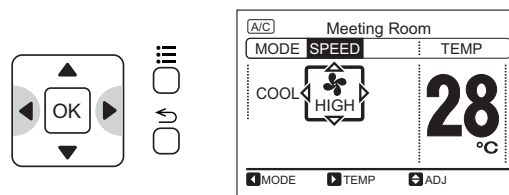


NOTE:

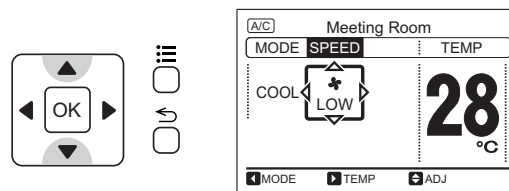
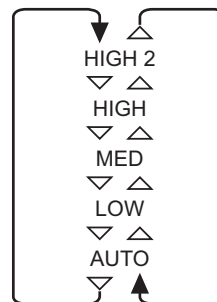
The max./min. temperature is available to change by setting the cooling lower limit for setting temperature (or heating upper limit for setting temperature) from the function selection.

4.2 Fan Speed

- (1) Press “◀” or “▶” and select “SPEED”.



- (2) By pressing “Δ” or “∇”, the fan speed will be changed as follows.

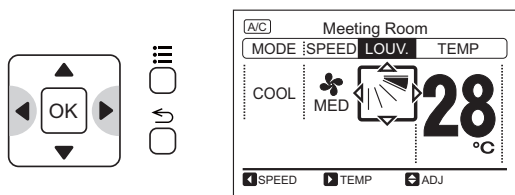


NOTES:

- During the dry operation, the fan speed is automatically changed to “LOW” and cannot be changed to other fan speed. (“LOW” will NOT be displayed on LCD (liquid crystal display) at this time. The present setting condition will be displayed on LCD.)
- The fan speed settings “HIGH 2” and (or) “AUTO” may not be available depending on the indoor unit type.

4.3 Swing Louver Direction

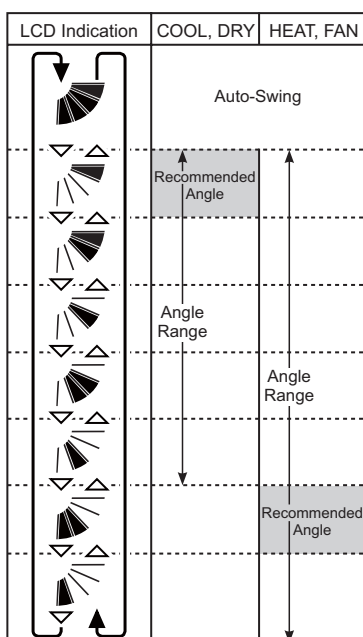
- Press "⏻" (run/stop).
Make sure that the operation is started.
Press "◀" or "▶" and select "LOUV.".



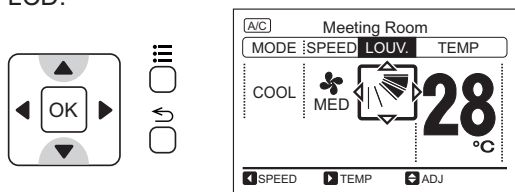
NOTE:

For the indoor unit without the auto louver mechanism, the indication of "LOUV." will NOT be displayed on LCD.

- By pressing "▲" or "▼", the louver direction will be changed as follows.



: Auto swing operation will be started. At this time, the louver will swing repeatedly on LCD.



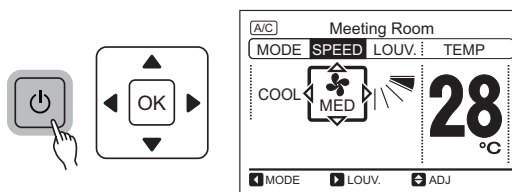
NOTES:

- The air flow angle is different for each indoor unit type. Check Installation & Maintenance Manual for Indoor Unit to be used for the detailed information.
- Louver position on LCD and the actual louver position may not match during the auto swing operation.
To fix the louver positions, set the angle after checking the position on LCD.
- The louver may NOT stop immediately right after the switch is pressed.

5. Operation

5.1 Operation Start

Press "⏻" (run/stop).
The run indicator will be turned on and the operation will be started.



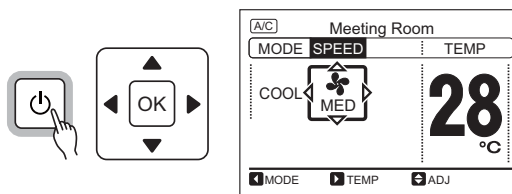
NOTE:

< Temperature/Air Flow Setting >

The setting condition will be memorized once after the setting is confirmed, therefore the daily setting is not required. In case that the setting change is required, refer to the item 3.1 to 4.3.

5.2 Operation Stop

Press "⏻" (run/stop) again.
The run indicator will be turned off and the operation will be stopped.

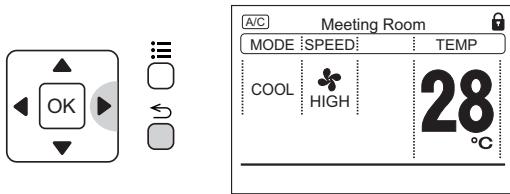


NOTE:

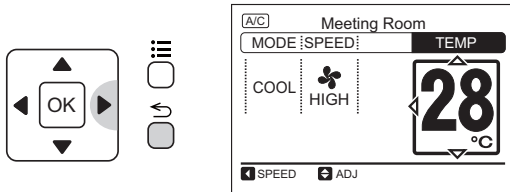
After the heating operation is stopped, the air flow operation may be activated for approximately 2 minutes.

6. Operation Lock

- This function is used to lock the setting from the remote control switch.
- The following functions are applicable.
 - (a) Operation Mode (MODE)
 - (b) Temperature Setting (TEMP)
 - (c) Fan Speed (SPEED)
 - (d) Swing Louver Direction (LOUV.)
- (1) Setting of the operation lock, press “▶” and “↵” (return) simultaneously for 3 seconds. The icon of “🔒” will be turned ON. Even when “◀” or “▶” is pressed, locked setting items will be skipped.



- (2) Cancellation of the operation lock, press “▶” and “↵” (return) simultaneously for 3 seconds. “🔒” will be turned OFF, and operation lock will be canceled.



NOTES:

- Every time pressing “▶” and “↵” (return) simultaneously for 3 seconds, the operation lock state will be switched alternately to locked/unlocked.
- Select the functions to lock at the function selection setting. Contact your distributor or dealer of HITACHI for detailed information.

7. Menu Operation

7.1 Menu

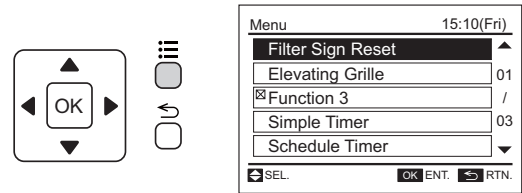
- Every setting function is displayed in the menu.
- Refer to the item 7.2 to 7.13 for each function.

NOTE:

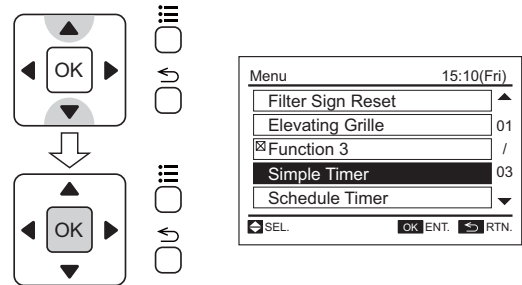
☒: Unable to set

If the function with “☒” is selected from the menu, “No Function” or “Setting Disabled” will be displayed on the lower screen.

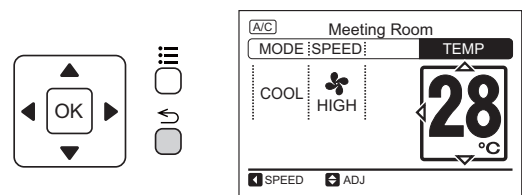
- (1) Press “☰” (menu). The menu will be displayed.



- (2) Select the function by pressing “▲” or “▼” and press “OK”. (“☒” will be displayed if the function is not available.)



- (3) Press “↵” (return) to return to the normal mode (Operation Mode Indication).



NOTE:

If the menu screen remains unchanged for approximately 10 minutes, the screen will automatically return to the normal mode.

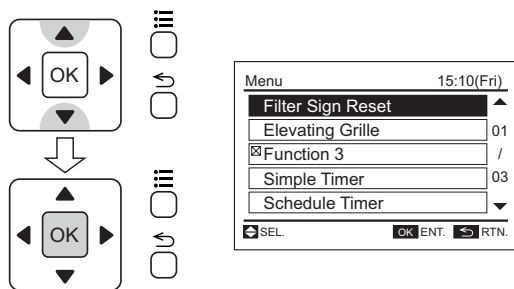
7.2 Filter Sign Reset

This function is used to turn off the filter sign indication.

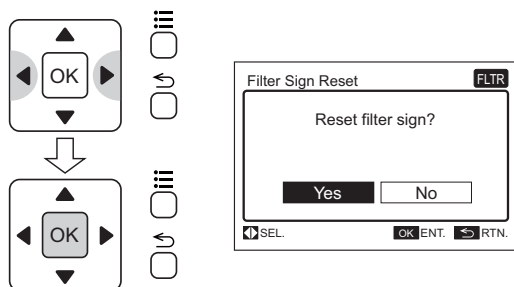
NOTE:

If the function with the indication of "☒" is selected from the menu, "Setting Disabled" will be displayed because the setting accumulated time is insufficient.

- (1) Select "Filter Sign Reset" from the menu and press "OK".
The confirmation screen will be displayed.



- (2) Select "Yes" by pressing "<" or ">" and press "OK".
The indication of "FLTR" will be turned OFF and the screen will return to the normal mode.



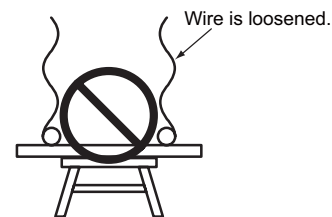
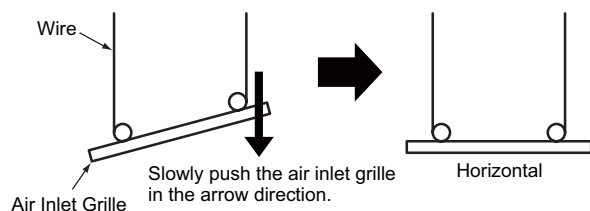
7.3 Elevating Grille

This function is available only when the elevating grille is equipped with the air panel.

CAUTION

< Caution of Setting Elevating Grille into Air Panel After Cleaning >

When the air inlet grille is set inside the air panel, ensure that the air inlet grille is horizontal and the wire is suspended tightly without loosening. After the above is ensured, set the air inlet grille. If the air inlet grille is inclined and the wire is loosened, they may be caught in the pulley. It may lead to a failure of the pulley or pulley block. In the worst happens, it may cause personal injury due to falling the air panel.

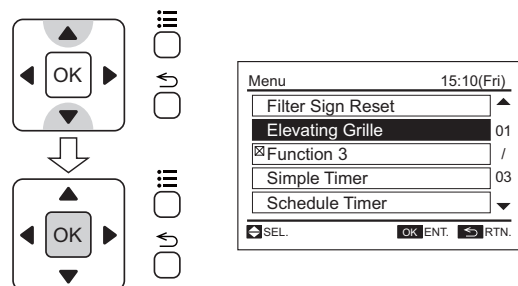


This function is for the air inlet grille automatically moves upward or downward from the air panel when cleaning the air filter and air inlet grille.

NOTES:

- This function is available only when the elevating grille is equipped with the indoor unit.
- Make sure that the unit operation is stopped before using the elevating grille.
- The elevating grille function is not available when the unit is operated.

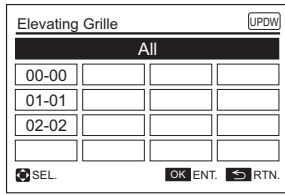
- (1) Press "☰" (menu) and select "Elevating Grille" from the menu. Press "OK".



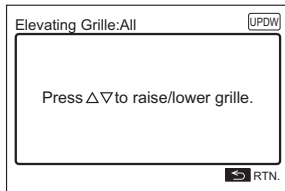
NOTE:

If the number of indoor unit connected with the remote control switch is 1 (one), (3) will be displayed after the procedure (1).

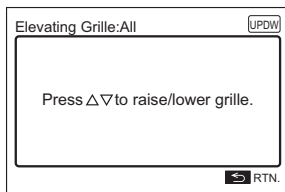
- (2) Select the indoor unit by pressing “△”, “▽”, “◀” or “▶”. Press “OK”.



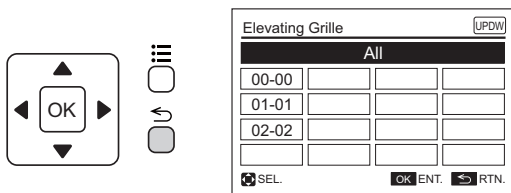
- (3) Press “▽”.
The elevating grille starts lowering.
- Once “▽” is pressed, the elevating grille lowers to the specified height.
 - If “▽” is pressed once again, the elevating grille lowers by 50cm from the present height. (When “▽” is pressed each time, the elevating grille lowers respectively by 50cm.)
 - To stop the elevating grille, press “△”.



- (4) When the cleaning is finished, press “△”.
The elevating grille starts rising. The grille will be set inside the air panel and stopped moving after 3 seconds.
(If the air inlet grille is inclined at this time, press “△” again. An inclination may be corrected.)



- (5) Press “↵” (return).
The screen will return to (2).
(If necessary, set the elevating grille for other indoor units.)
To finish the setting, press “↵” (return) again. The screen will return to the menu.
If “↵” (return) is pressed once again, the screen will return to the normal mode.



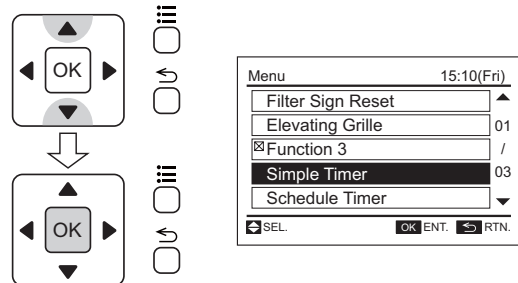
NOTE:

If the number of indoor unit connected with the remote control switch is 1 (one), the screen will return to the normal mode after “↵” (return) is pressed.

7.4 Simple Timer Operation

- This function is used to start or stop the unit operation at the setting time.
- The timer operation contents can be set from “Once” or “Everyday”.

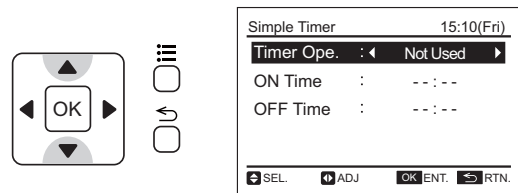
- (1) Select “Simple Timer” from the menu and press “OK”.
The simple timer setting will be displayed.



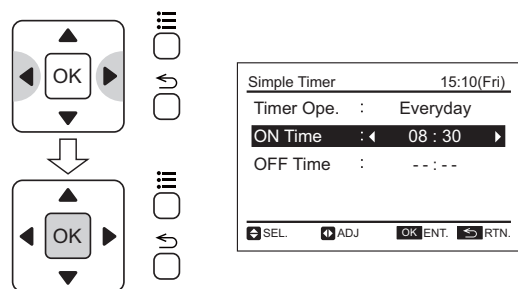
NOTE:

If the present time has not been set yet, automatically “Set Date/Time” will be displayed. Refer to the item 7.10 “Adjusting Date/Time”.

- (2) Press “△” or “▽” to select the setting items.
The setting items are displayed “Timer Ope.”, “ON Time” and “OFF Time”.



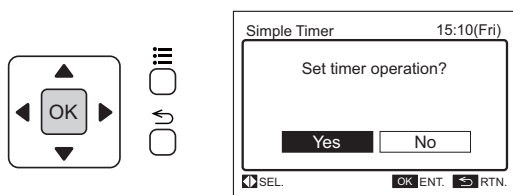
- (3) Press “◀” or “▶” to set each setting content for the selected item.
When “Timer Ope.” is selected, the setting contents are switched in order of “Not Used” ↔ “Once” ↔ “Everyday” by repeatedly pressing “◀” or “▶”.
When “ON Time” or “OFF Time” is selected, the setting time can be set every 30 minutes by pressing “◀” or “▶”. Press and hold “◀” or “▶”, the setting time can be continuously indicated.



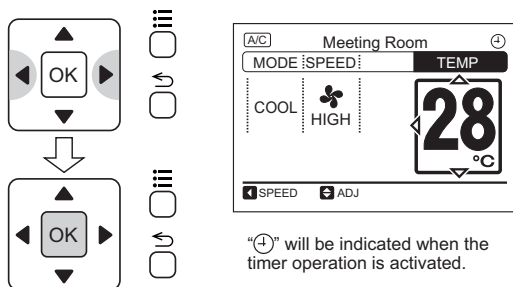
NOTE:

If “Once” of the timer operation setting is selected, the setting content will be automatically changed to “Not Used” after “Once” timer operation.

- (4) Press “OK” to finish the simple timer setting. The confirmation screen will be displayed.



- (5) Select “Yes” by pressing “◀” or “▶” and press “OK”. The setting will be confirmed and the screen will return to the normal mode.



NOTE:

In the case of the following condition, the simple timer operation is NOT available;

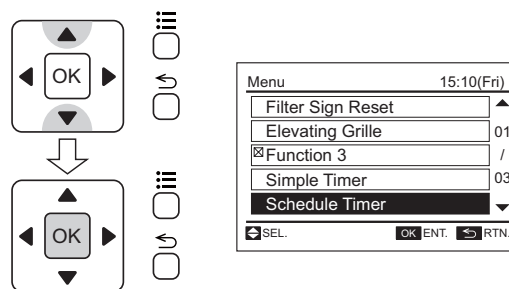
- * When the prohibiting operation by remote control switch is set from the central controller.
- * When “⊗” is indicated on LCD, the timer operation cannot perform. Set the date and time according to the item 7.10 “Adjusting Date/Time”.

7.5 Scheduled Operation

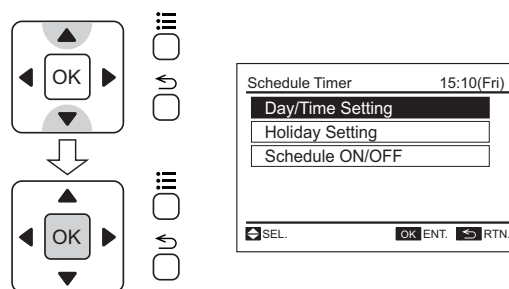
7.5.1 Schedule Setting

- This function is used to start or stop the unit operation at the setting time.
- Temperature can be also set with schedule timer operation.
- Five different schedule timers (max.) can be set for each day of the week.

- (1) Select “Schedule Timer” from the menu and press “OK”.



- (2) Select “Day/Time Setting” by pressing “Δ” or “∇” and press “OK”.



NOTE:

If the present time has not been set yet, automatically “Set Date/Time” will be displayed. Refer to the item 7.10 “Adjusting Date/Time”.

REMOTE CONTROL SWITCH

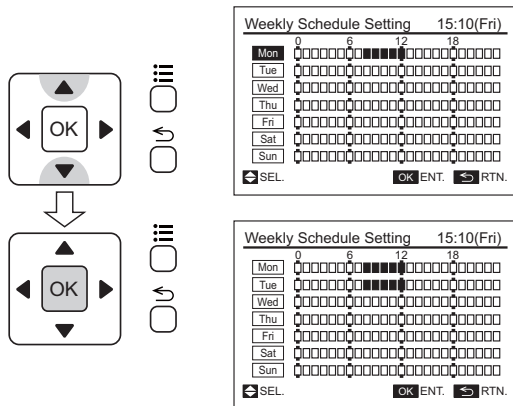
- (3) Select the day of the week (from Mon. to Sun.) by pressing “Δ” or “∇”. Press “OK”.

- “■” (run) and “□” (stop) will be displayed on LCD.
- To copy the setting contents of the previous day, press “◀” and “OK” simultaneously.

< Example >

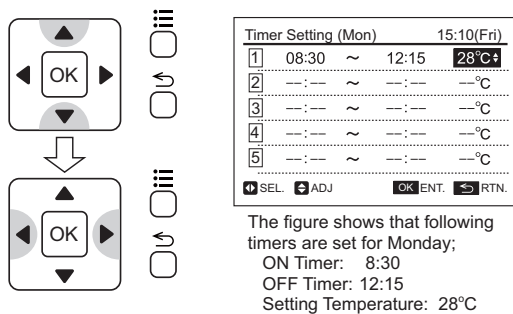
The setting contents of Monday is copied in Tuesday.

- Select “Tue”.
- Press “◀” and “OK” simultaneously.
- The setting contents of Monday are copied in Tuesday.

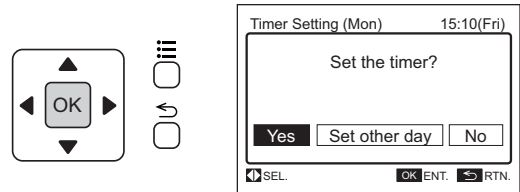


- (4) Select the schedule No. (from 1 to 5) by pressing “Δ” or “∇”. Select “ON Time”, “OFF Time” or “Setting Temperature” by pressing “◀” or “▶”. Set the ON/OFF timer and temperature by pressing “Δ” or “∇”.

- Press or keep pressing “Δ” or “∇” to adjust numbers.
- Five different schedule timers (max.) can be set for each day of the week.

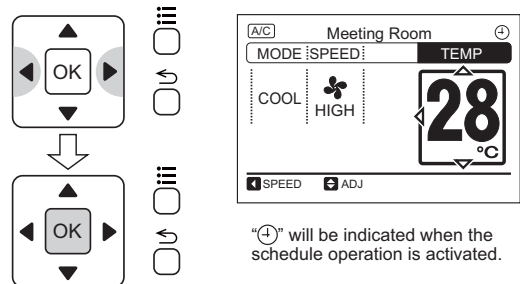


- (5) Press “OK”. The confirmation screen will be displayed.



- (6) Select “Yes” by pressing “◀” or “▶” and press “OK”. The setting will be confirmed and the screen will return to the normal mode.

To set other days of the week, select “Set other day” and press “OK”.



NOTE:

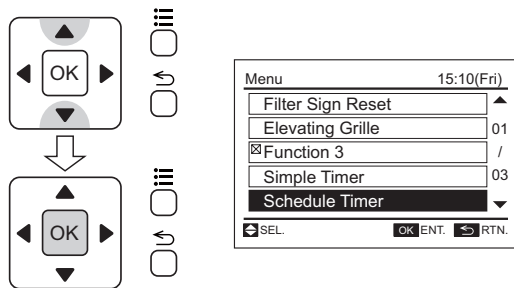
In the case of the following condition, the schedule operation is NOT available;

- * When the prohibiting operation by remote control switch is set from the central controller.
- * When “⊗” is indicated on LCD, the schedule operation cannot perform. Set the date and time according to the item 7.10 “Adjusting Date/Time”.

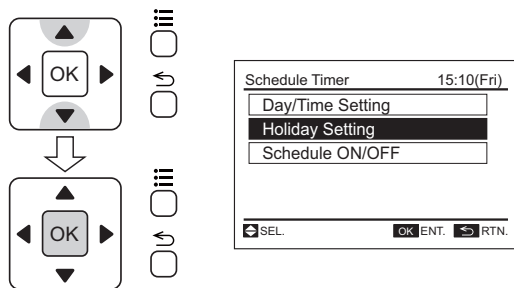
7.5.2 Holiday Setting

- This function is used to deactivate the schedule operation temporarily.
- This function is used to deactivate the schedule operation just for one day. After that, the schedule operation will recover automatically.
- This function is used to set irregular schedules such as national holidays.

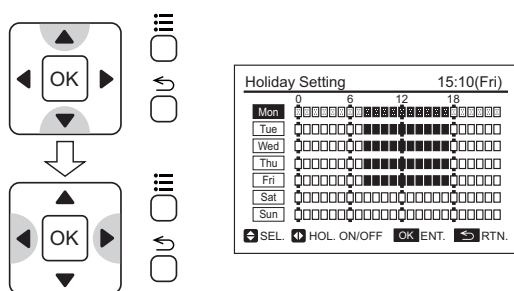
- (1) Select "Schedule Timer" from the menu and press "OK".
The schedule timer setting will be displayed.



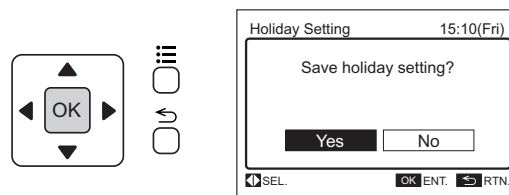
- (2) Select "Holiday Setting" by pressing "Δ" or "∇" and press "OK".



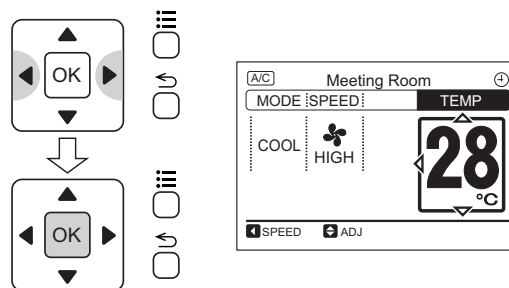
- (3) Select the day of the week to stop the operation by pressing "Δ" or "∇".
Select "HOL. ON/OFF" by pressing "◀" or "▶".
- "■" and "□" will be changed to "⊞" and "⊟" on LCD.



- (4) Press "OK" after the setting is completed.
The confirmation screen will be displayed.



- (5) Select "Yes" by pressing "◀" or "▶" and press "OK". The holiday setting will be confirmed and the screen will return to the normal mode.



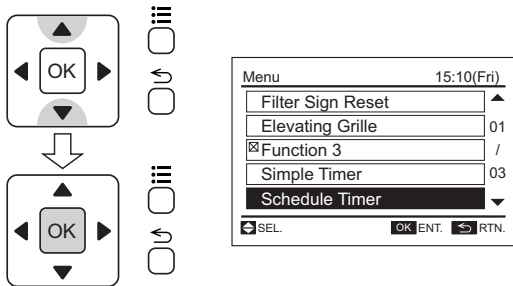
NOTE:

"⊞" will be turned off when the holiday setting is activated.

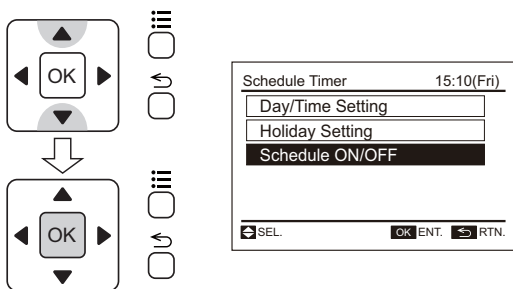
7.5.3 Schedule ON/OFF Setting

- This function is used to deactivate the schedule operation temporarily.
- The schedule operation will not be carried out when “OFF” is set in this function.
- This function is used to apply for long period of holidays.

- (1) Select “Schedule Timer” from the menu and press “OK”.

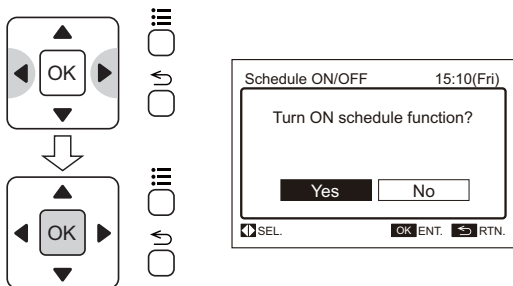


- (2) Select “Schedule ON/OFF” by pressing “Δ” or “▽” and press “OK”. The confirmation screen will be displayed.



- (3) Select “Yes” by pressing “◀” or “▶” and press “OK”. The schedule ON/OFF setting will be confirmed and the screen will return to the normal mode.

- “⊕” will be turned on when the setting of schedule operation is ON.
- “⊕” will be turned off when the setting of schedule operation is OFF.



NOTE:

Even if the setting of schedule operation is OFF, the schedule operation will be activated.

7.6 Individual Louver Setting

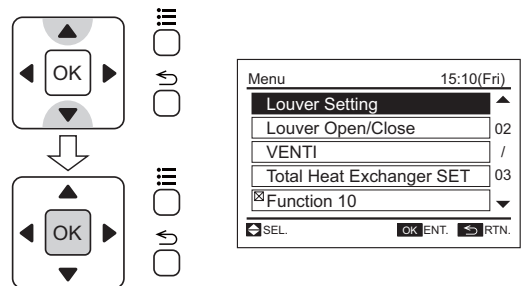
7.6.1 Setting

This setting is available only for the indoor unit adopting the individual louver. The each louver angle can be set individually.

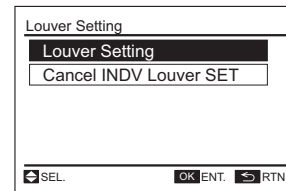
NOTES:

- This function is available only when the indoor unit corresponds to the individual louver.
- This function cannot be set when the unit is stopped.
- The fan speed will be changed to “LOW” while this function is being set. (After the setting is completed, the unit operation will be back to normal.)
- As for “Start-up of Heating Operation”, “During Defrost Operation” and “Activation of Thermo-Controller”, all the louver angles will be fixed at horizontal position automatically even when this function is activated.
- This function will not be available if 2 (two) remote control switches (including multifunctional remote control switch + wireless remote control switch) are used.

- (1) Select “Louver Setting” from the menu and press “OK”. The individual louver setting menu will be displayed.



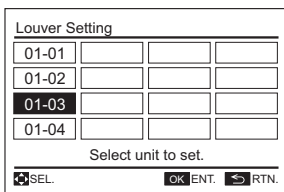
- (2) Select “Louver Setting” from the individual louver setting menu and press “OK”.



NOTE:

If the number of indoor unit connected with the remote control switch is 1 (one), (4) will be displayed after the procedure (2).

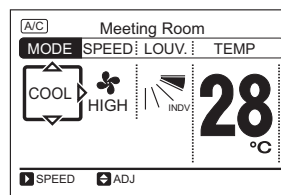
- (3) Select the indoor unit to change the louver direction by pressing “△”, “▽”, “◀” or “▶”. Press “OK”.



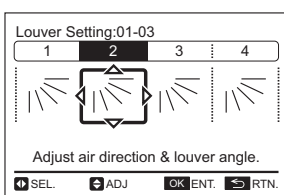
NOTE:

The indoor unit displayed on the screen flashes if the individual louver is set.

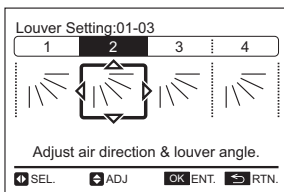
- (7) Ensure that “INDV” is turned on at the air flow section on the normal mode.



- (4) Press “◀” or “▶” and select the louver from 1 to 4. The selected louver is opened and the other louvers are closed.



- (5) Select the louver angle by pressing “△” or “▽” and press “OK”. The confirmation screen will be displayed.



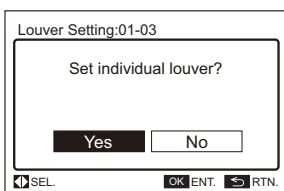
The louver angle will be changed as follows.



NOTE:

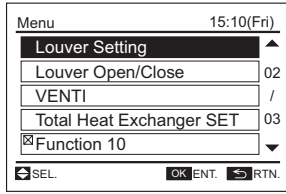
The louver direction without “INDV” will comply with the setting of the normal mode.

- (6) Select “Yes” by pressing “◀” or “▶” and press “OK”. The setting is confirmed and the screen will return to the normal mode.

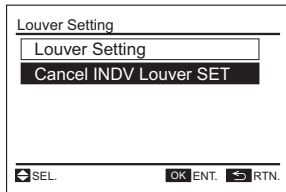


7.6.2 Cancellation of Louver Setting

- (1) Select "Louver Setting" from the menu and press "OK".



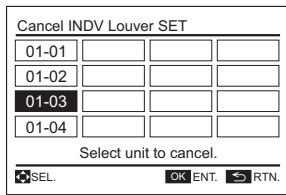
- (2) Select "Cancel INDV Louver SET" from the individual louver set and press "OK".



NOTE:

If the number of indoor unit connected with the remote control switch is 1 (one), (4) will be displayed after the procedure (2).

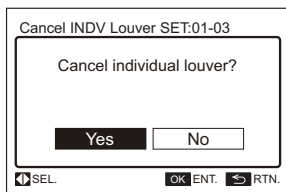
- (3) Select the indoor unit to cancel by pressing "Δ", "∇", "◀" or "▶". Press "OK". The confirmation screen will be displayed.



NOTE:

The indoor unit displayed on the screen flashes if the individual louver is set.

- (4) Select "Yes" by pressing "◀" or "▶" and press "OK". The individual louver setting will be cancelled and the screen will return to the normal mode.



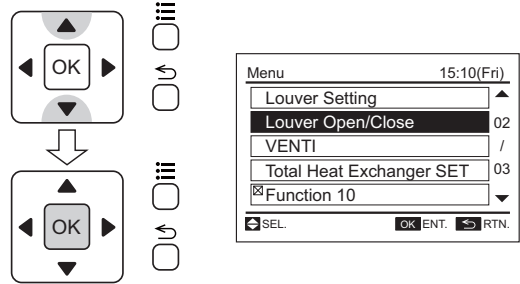
NOTE:

All the individual louver setting will be cancelled.

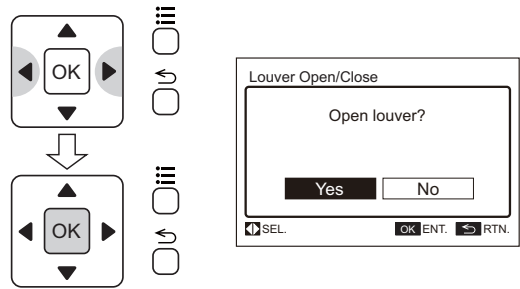
7.7 Louver Open/Close

- This function is used to fully open louver for adjusting the vertical deflector for air flow direction (manually).
- This function cannot be set when the unit is operated.

- (1) Select "Louver Open/Close" from the menu and press "OK".



- (2) Select "Yes" by pressing "◀" or "▶" and press "OK". The louver will be open (closed) and the screen will return to the normal mode.



NOTE:

Refer to Installation & Maintenance Manual for Indoor Units regarding the adjustment of air flow direction.

7.8 Ventilation

<Function>

* A/C (Air Conditioning):

To operate the air conditioner individually.

* VENTI (Ventilation):

To operate the total heat exchanger individually.

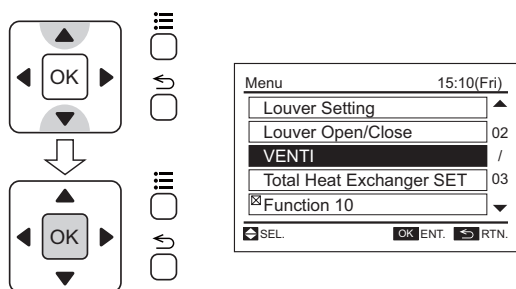
* A/C+VENTI:

To operate the air conditioner and the total heat exchanger together.

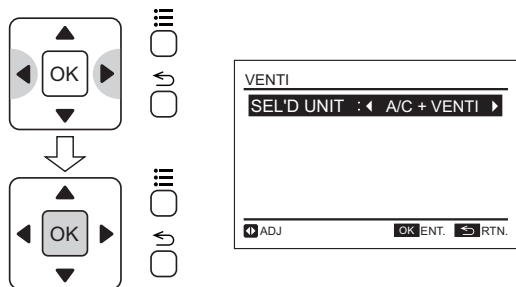
NOTE:

This function is available only when the total heat exchanger is connected.

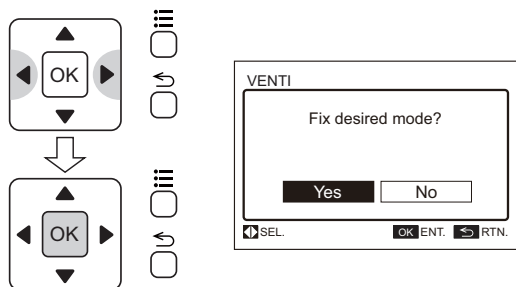
- (1) Select "VENTI" from the menu and press "OK".



- (2) By repeatedly pressing "<" or ">", the indication is changed in order of "A/C", "VENTI" and "A/C + VENTI". Select the operation target and press "OK". The confirmation screen will be displayed.



- (3) Select "Yes" by pressing "<" or ">" and press "OK". The setting will be confirmed and the screen will return to the normal mode.



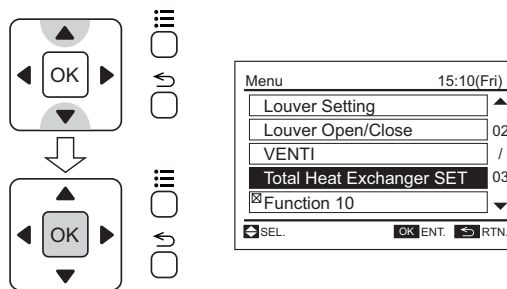
7.9 Setting of Total Heat Exchanger

This function is used to change the ventilation mode of the total heat exchanger.

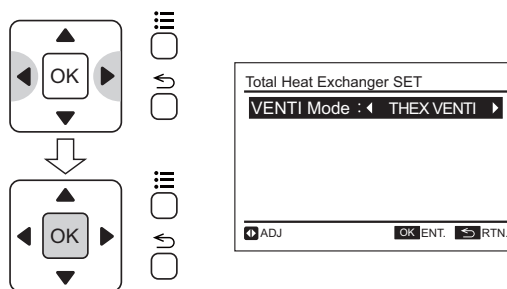
NOTE:

This function is available only when the total heat exchanger is connected. This function cannot be set when the unit is operated.

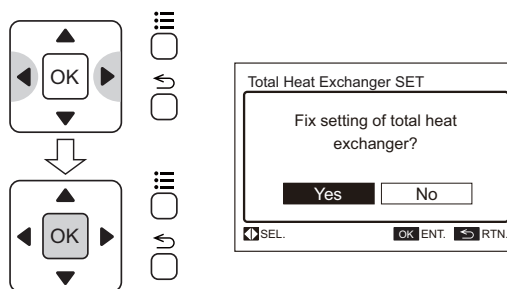
- (1) Select "Total Heat Exchanger SET" from the menu and press "OK". The total heat exchanger set will be displayed.



- (2) By repeatedly pressing "<" or ">", the indication is changed in order of AUTO VENTI ↔ THEX VENTI ↔ Normal VENTI. Select the operation target and press "OK". The confirmation screen will be displayed.



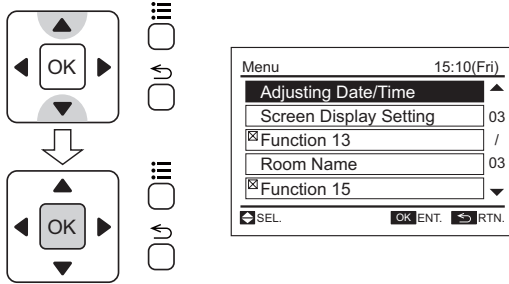
- (3) Select "Yes" by pressing "<" or ">" and press "OK". The setting will be confirmed and the screen will return to the normal mode.



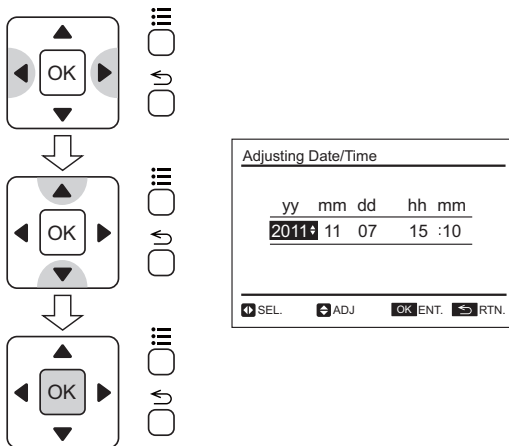
7.10 Adjusting Date/Time

- This function is used to adjust the date and time.
- Periodic time setting is recommended.
(Clock accuracy: difference within ± 70 seconds by month)
- As for this remote control switch, the clock can work up to 72 hours by embedded electric battery when power failure occurs. Reset the date and time if the remote control switch remains without power supply for longer than 72 hours or main power supply is OFF for long time.

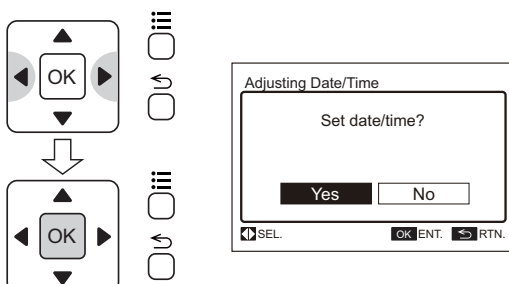
- (1) Select "Adjusting Date/Time" from the menu and press "OK".



- (2) Press "◀" or "▶" and select "yy/mm/dd/hh/mm".
- (3) Press "▲" or "▼" to change the setting. Press or keep pressing "▲" or "▼" to adjust numbers.
- (4) After the setting is completed, press "OK" and the confirmation screen will be displayed.



- (5) Select "Yes" by pressing "◀" or "▶" and press "OK". The setting will be confirmed and the screen will return to the normal mode.



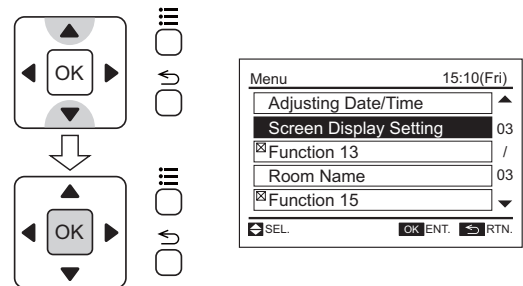
7.11 Screen Display Setting

7.11.1 Display Adjustment

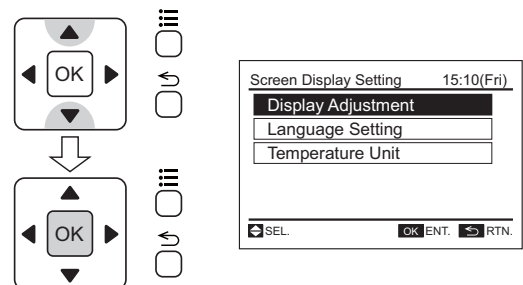
<Function>

- * Time Format:
To change the time form to 12 hour or 24 hour.
- * Brightness:
To adjust the brightness of backlight.
- * Back light:
To change the time (5, 15 or 30 seconds) between ON and OFF of backlight.
- * Contrast:
To adjust the degree of difference between light and dark parts of LCD.
- * On/Off lamp:
To adjust the brightness of run indicator.

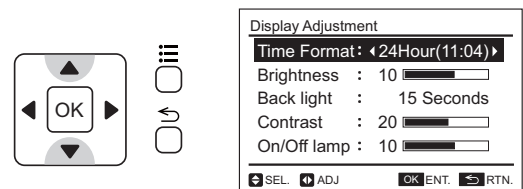
- (1) Select "Screen Display Setting" from the menu and press "OK".



- (2) Select "Display Adjustment" by pressing "▲" or "▼" and press "OK".



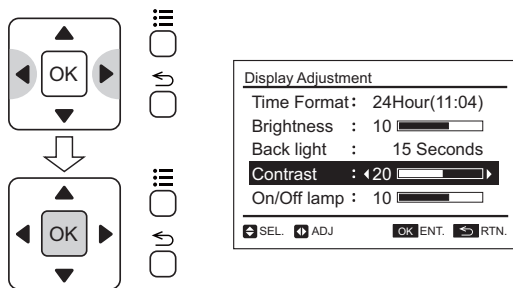
- (3) Select the setting item by pressing "▲" or "▼". The indication is changed in order of "Time Format", "Brightness", "Back light", "Contrast" and "On/Off lamp".



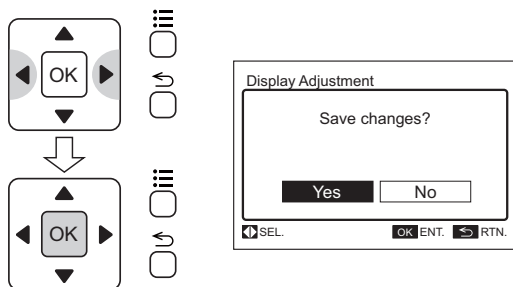
(4) Press “◀” or “▶” and set the display.

- * Time Format:
The time form is changed as follows;
12 Hour ↔ 24 Hour
- * Brightness:
Press “◀” or “▶” and the brightness of backlight is changed.
- * Back light:
The display backlight is OFF after the specified time interval of inactivity (no input from touch screen). The backlight off time interval can be selected as follows;
5 Seconds ↔ 15 Seconds ↔ 30 Seconds
- * Contrast:
Press “◀” or “▶” and the degree of difference between light and dark parts of LCD is changed.
- * On/Off lamp:
Press “◀” or “▶” and the brightness of run indicator is changed.

After the setting is completed, press “OK”.
The confirmation screen will be displayed.



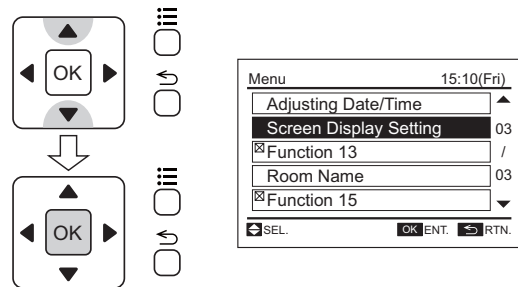
(5) Select “Yes” by pressing “◀” or “▶” and press “OK”. The setting will be confirmed and the screen will return to the normal mode.



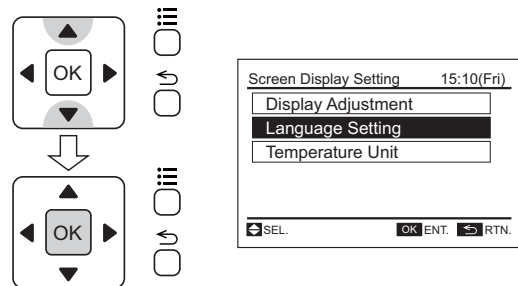
7.11.2 Language Setting

This function is used to change the displayed language.

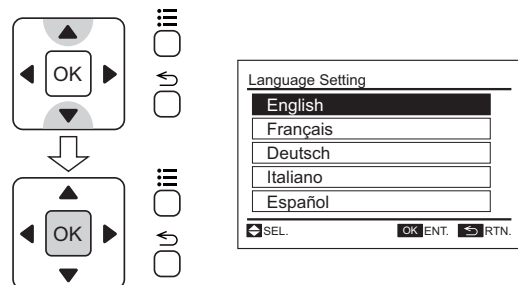
(1) Select “Screen Display Setting” from the menu and press “OK”.



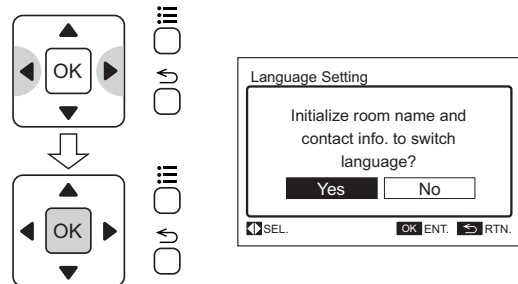
(2) Select “Language Setting” by pressing “Δ” or “∇” and press “OK”.
The language setting will be displayed.



(3) Press “Δ” or “∇” to select the language and press “OK”.
The confirmation screen will be displayed.



(4) Select “Yes” by pressing “◀” or “▶” and press “OK”. The setting will be confirmed and the screen will return to the normal mode.



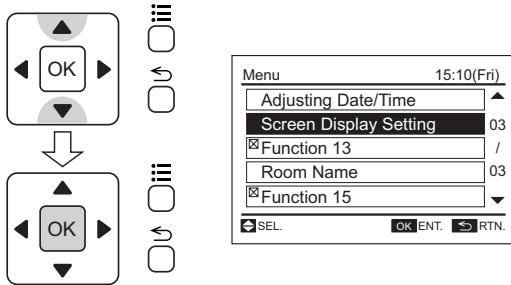
NOTE:

If displayed language is changed, the registered room name and contact information will be deleted.

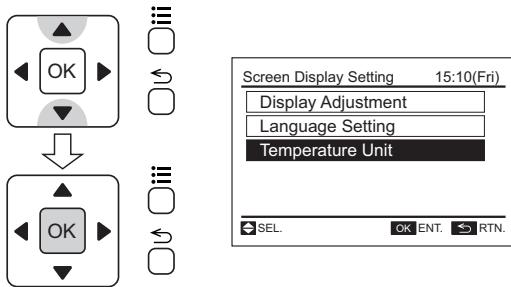
7.11.3 Temperature Unit

This function is used to change the temperature unit.

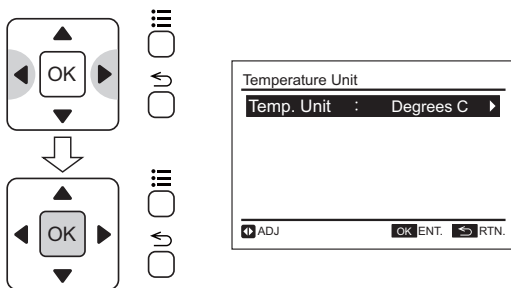
- (1) Select "Screen Display Setting" from the menu and press "OK".



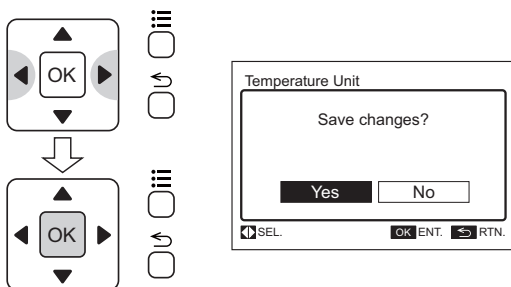
- (2) Select "Temperature Unit" by pressing "Δ" or "∇" and press "OK".



- (3) By repeatedly pressing "<" or ">", the indication is changed in order of "Degrees C" and "Degrees F". Select the operation target and press "OK". The confirmation screen will be displayed.



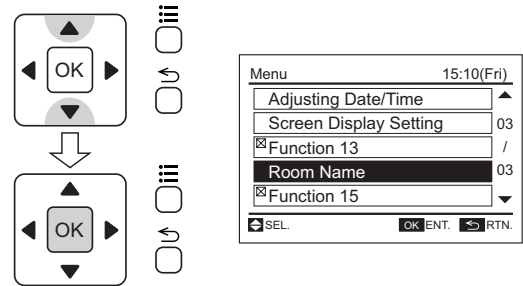
- (4) Select "Yes" by pressing "<" or ">" and press "OK". The setting will be confirmed and the screen will return to the normal mode.



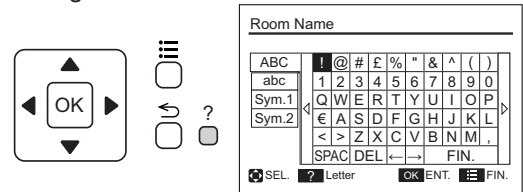
7.12 Room Name Registration

This function is used to register the name of the room (installation location of remote control switch).

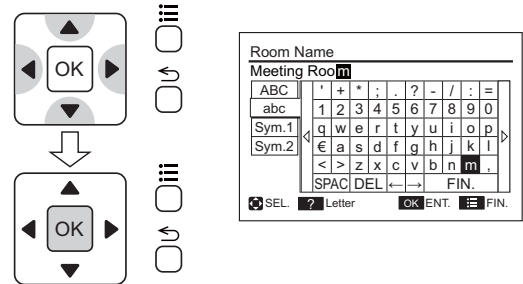
- (1) Select "Room Name" from the menu and press "OK".
The room name will be displayed.



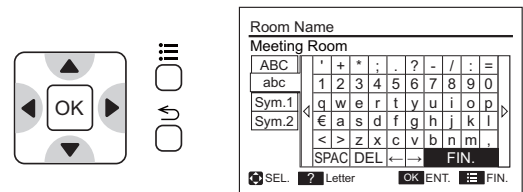
- (2) By pressing "?" (help), the letter type is changed.



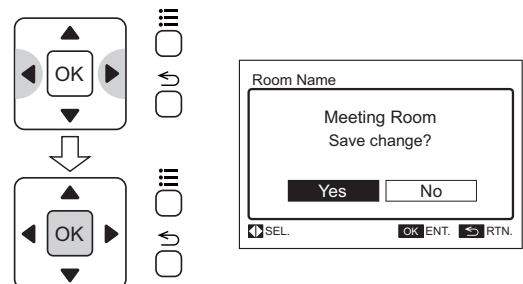
- (3) Press "Δ", "∇", "<" or ">" and select the letter. Press "OK" to confirm the selected letter. (Max. 12 letters.)



- (4) Select "FIN." by pressing "Δ", "∇", "<" or ">" and press "OK". (or simply press "≡" (menu))
The confirmation screen will be displayed.



- (5) Select "Yes" by pressing "<" or ">" and press "OK". The setting will be confirmed and the screen will return to the normal mode.

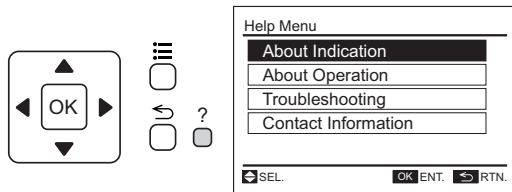


8. Help Menu

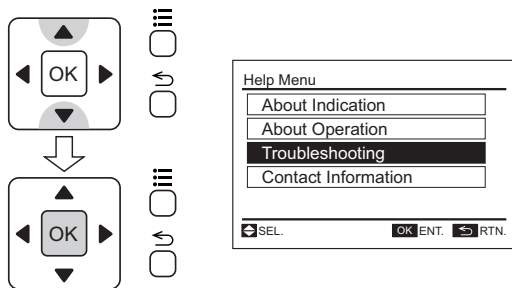
8.1 Help Menu

- The explanation of indicators on LCD and operations can be found in the help menu. The purpose of this function is to support manual operation.
- Refer to the item 8.2 to 8.5 for more details.

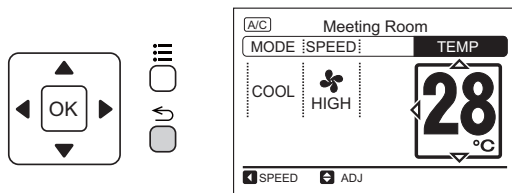
- Press “?” (help).
The help menu will be displayed.



- Select the item from the help menu by pressing “Δ” or “∇” and press “OK”.



- To return to the normal mode, press “↵” (return).



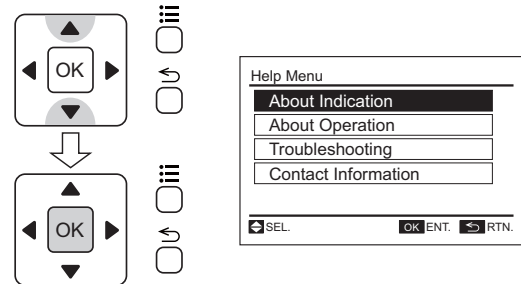
NOTE:

If the menu screen remains unchanged for approximately 10 minutes, the screen will automatically return to the normal mode.

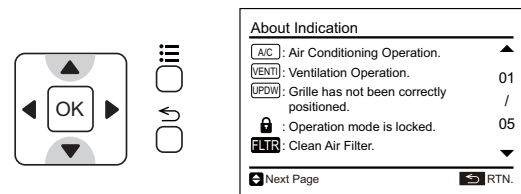
8.2 Indicators on LCD

This function is used when the explanation of each icon on LCD is required.

- Select “About Indication” from the help menu and press “OK”. The explanation of indicators on LCD will be displayed.

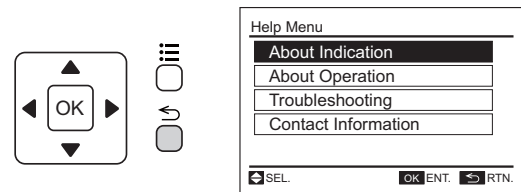


- Press “Δ” or “∇” to scroll the text up and down.



- Press “↵” (return).
The screen will return to the help menu.

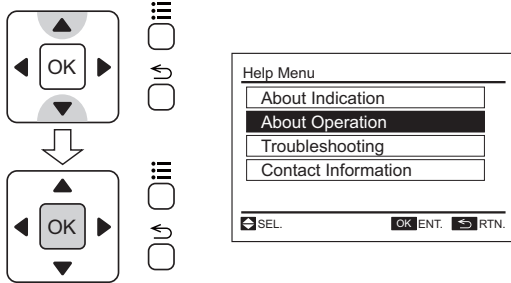
 - To return to the normal mode, press “↵” (return) again.



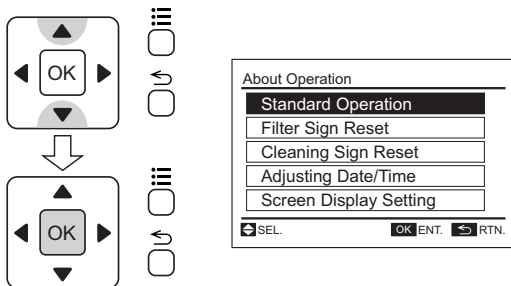
8.3 About Operation

This function is used when the explanation of operations and operation methods is required.

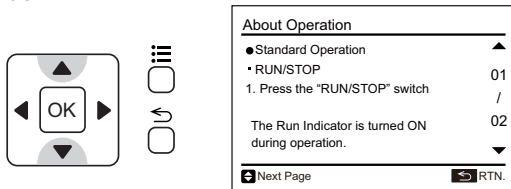
- (1) Select "About Operation" from the help menu and press "OK". The explanation of operation list will be displayed.



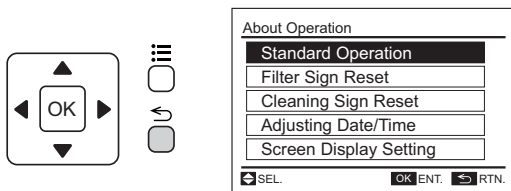
- (2) Select the operation from the list by pressing "Δ" or "∇" and press "OK". The explanation of the selected operation will be displayed.



- (3) Press "Δ" or "∇" to scroll the text up and down.

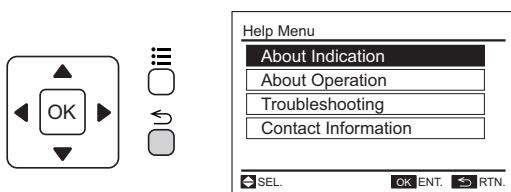


- (4) Press "↵" (return). The screen will return to the operation item.



- (5) Press "↵" (return). The screen will return to the help menu.

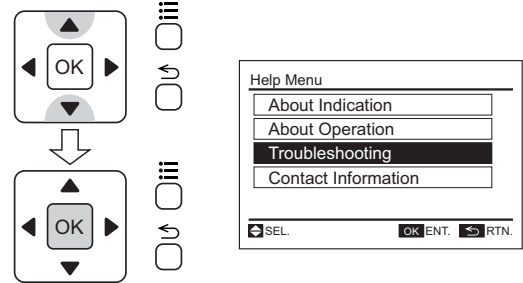
- To return to the normal mode, press "↵" (return) again.



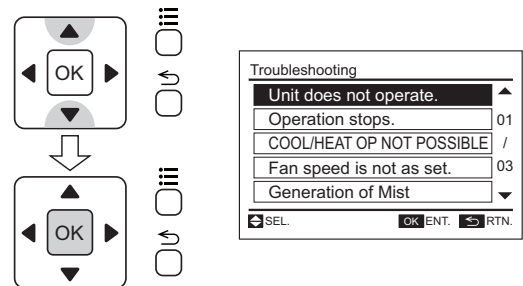
8.4 Troubleshooting

- This function is used to troubleshoot.
- Make sure that the troubleshooting is read carefully before requesting for repairs.

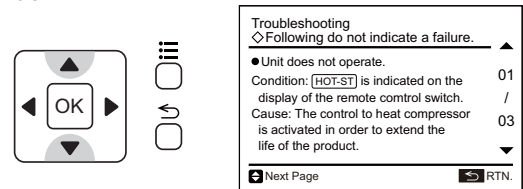
- (1) Select "Troubleshooting" from the help menu and press "OK". The list of troubleshooting will be displayed.



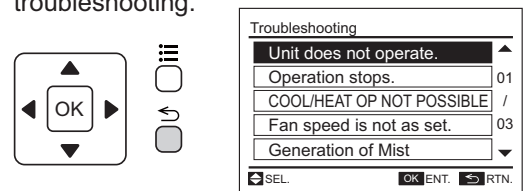
- (2) Select a problem from the list by pressing "Δ" or "∇" and press "OK". The details of the selected problem will be displayed.



- (3) Press "Δ" or "∇" to scroll the text up and down.

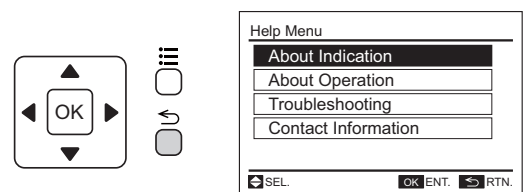


- (4) Press "↵" (return). The screen will return to the list of troubleshooting.



- (5) Press "↵" (return). The screen will return to the help menu.

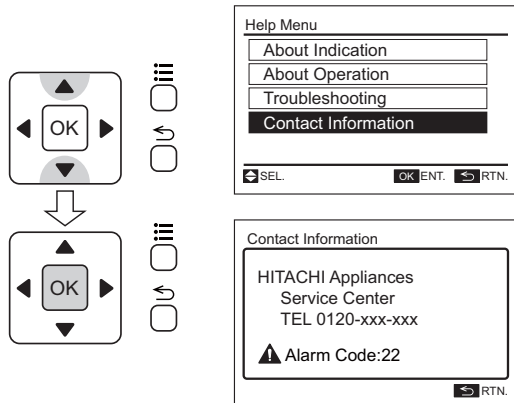
- To return to the normal mode, press "↵" (return) again.



8.5 Contact Information

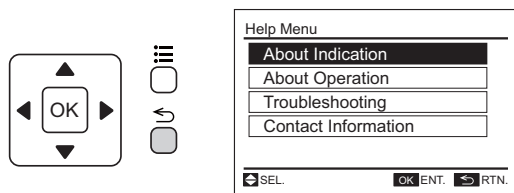
The screen will display contact information and the latest alarm code.

- (1) Select "Contact Information" from the help menu and press "OK". The contact information and the latest alarm code will be displayed.



- (2) Press "↵" (return).
The screen will return to the help menu.

 - To return to the normal mode, press "↵" (return) again.



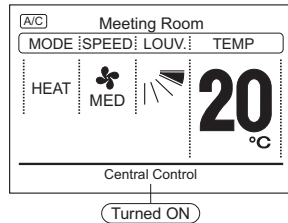
9. Other Indications

9.1 In Normal Condition

9.1.1 Central Control

“Central Control” is turned ON.

In case that the prohibiting operation by remote control switch is set from the central controller, operation, temperature setting, fan speed and direction setting are not available from the remote control switch.



9.1.2 Thermo-controller

The fan speed is changed to “LOW” at the thermo-controller actuation. However, the indication is not changed. (Only in the heating operation mode)

9.1.3 Defrost

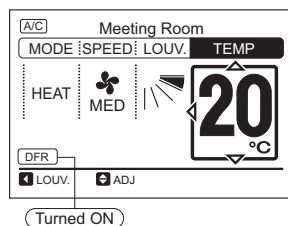
• Defrost Operation

“DFR” is turned ON during the defrosting.

The indoor fan is stopped though the indication is not changed.

The louver is fixed at the horizontal position.

However, the louver indication of LCD continues to activate.



• Operation Stoppage during Defrosting Operation

The RUN indicator (Green) is turned OFF when the operation is stopped during the defrosting.

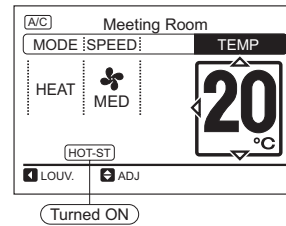
However, the operation continues with “DFR” indication, and the unit is stopped after the defrost operation is finished.

9.1.4 Operation Control

• Supplying Electrical Power

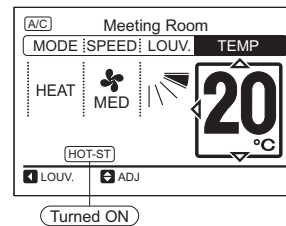
“HOT-ST” is turned ON when the electrical power is turned ON.

In this case, the compressor is under preheating. The operation may not be available for Max. 4 hours. Do not turn off the outdoor unit electrical power during the high season for Cooling/Heating operation.



• During Hot Start (Heating Operation Only)

“HOT-ST” is turned ON.

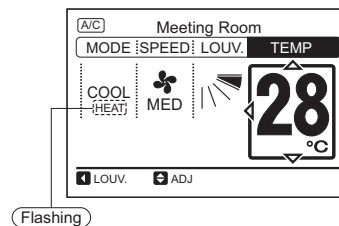


• Different Operation Mode

The operation mode set by the remote control switch is different with the outdoor unit operation mode.

(Except for the heat recovery system models.)

The indication of the actual operation mode flashes.



Indication when "COOL" operation is set by the remote control switch at the outdoor unit "HEAT" operation.

9.2 In Abnormal Condition

9.2.1 Abnormality

- The RUN indicator (Red) is flashing.
- The indoor unit number, the alarm code, the model code and the connected number of indoor units are displayed on LCD.
- In case that the plural indoor units are connected, the above items for each indoor unit are displayed one by one.

9.2.2 Power Failure

- All the indications are OFF.
- Once the unit is stopped by the power failure, the unit will not be started again although the power recovers. Perform the starting procedures again.
- In case of instantaneous power failure within 2 seconds, the unit will be started again automatically.

9.2.3 Electric Noise

There could be a case that all the indications are OFF and the unit is stopped. This is occurred by the activation of the micro computer for the unit protection from the electric noise.

Perform the starting procedures again.

Specifications in this catalog are subject to change without notice, in order that HITACHI may bring the latest innovations to their customers.

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