HITACHI

Window Type Air Conditioner

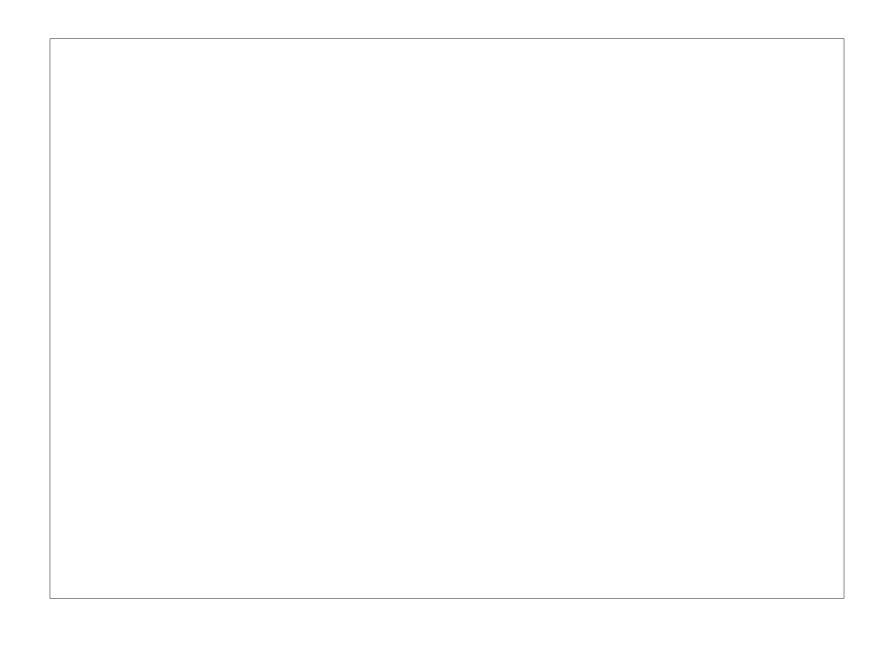
RA-18RDF

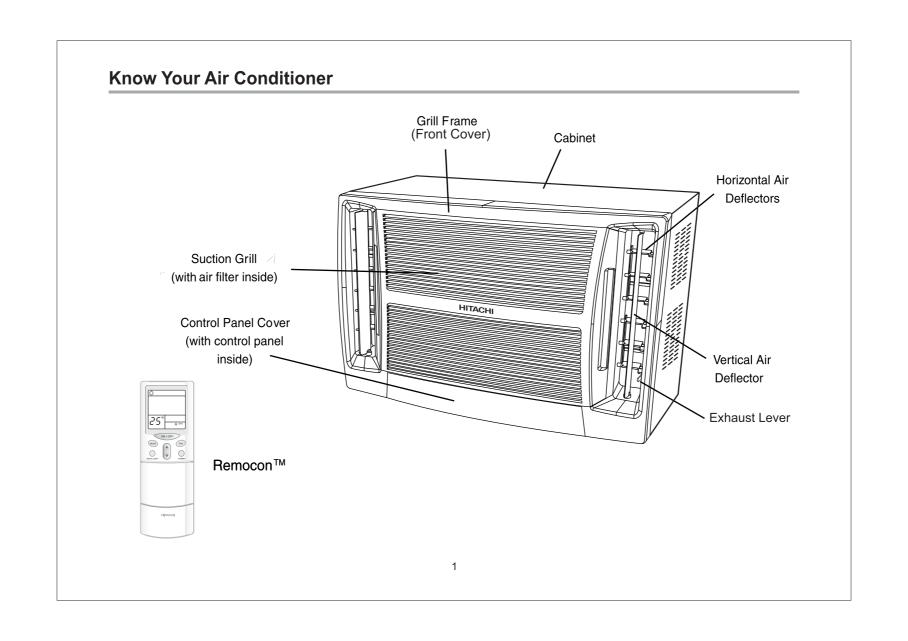
Your unit may not be exactly same as depicted herein

Remote Control Manual

CONTENTS

- 1. Know Your Air Conditioner.. 2. RemoCon™ Parts And Description..... 3. Remote Control Operations..... ...6-19
- 4. How To Replace The Batteries In The Remote Control....
 - NOTE:
 Before using your air conditioner, please read these operation instructions and keep this book in a safe place for future reference.
 To obtain the best performance and ensure years of trouble free use, please read this instruction manual completely.

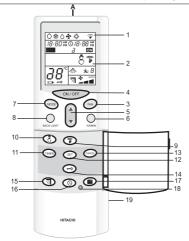




RemoCon[™] -A convenient ergonomically designed RemoCon[™]

This controls the operation of the air conditioner

The range of control is about 7 meters when operating from front side of unit. If indoor lighting is controlled electronically, the range of control may be shorter



A CAUTION :

- 1 Do not expose the RemoCon TM.
- To direct sunlight
- To any heating elements
 Handle the RemoConTM carefully:
- Do not drop
- Protect it from water
- 3. Once the compressor stops, it will not restart for about 3 minutes. This is a feature to protect the air conditioner and does not indicate any
- 4. All the indications are for reference.
- 16. Clock Key
 Use this key to display clock and to change real time values.
- 17. Filter Key
 Use this key to reset the filter clean indication.
- Reset Key
 Use this key to carry out hardware reset of RemoCon[™]. (Refer to Page No. 18)
- 19. Identifier Key Use this key to set identification to the unit. (Refer to Page No. 19)

A IR Transmitter

Point this window towards the air conditioner to send signal.

- Transmission signal
 - The transmission sign blinks when signal is sent.
- 2. LCD Display

This indicates the modes, set temp. selected, ON/OFF, timer, current time and fan speed.

3. Fan Speed Key

Use this key to select fan speed.

4. ON/OFF Key

Use this key to switch ON/OFF your air conditioner.

DigiTemp[™] Key
 Use this key to set temp., timer as well as password.

Use this key to select the Kaimin[™] function. (Refer to Page No. 13)

Use this key to select operating modes. Every time you press, the mode will change from $AUTO \rightarrow COOL \rightarrow DRY \rightarrow FAN \rightarrow POWERFUL \rightarrow AUTO$

Back light

Use this key to turn on the back light. Back light will glow for about 10 sec. on every press of back light key. (Refer to Page No.18)

- Use this key to select / cancel silent function. (Refer to Page No.12)
- 10. Super Cool Key

Use this key to select / cancel Super Cool function. (Refer to Page No.11)

11. Timer Key

Use this key to select ON/OFF timer. (Refer to Page No.14)

12. Set Key Use this key to set ON/OFF timer, password, as well as clock values

13. Cancel Key

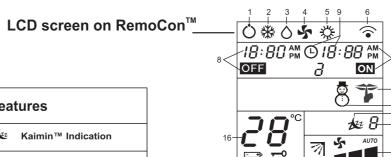
Use this key to cancel ON/OFF timer as well as for coming out of programming password.

14. Digilock[™] Key

Use this key to change password, to apply password and to lock password. (Refer to Page No.16)

15. Swing Key

Use this key to swing horizontal deflector. Press this key again to stop the deflector from operating.



DISPLAY INDICATION ON LCD SCREEN

	Features		Features	
1	O AUTO POWER SAVE MODE	10	Kaimin™ Indication	
2	₩ COOL MODE	11	Kaimin™ Hour Indication	
3	O DRY MODE	12	Swing Indication	
4	FAN MODE	13	SILENT Indication	
5	☆ POWERFUL MODE	14	FAN SPEED Indication	
6	R Indication	15	SUPER COOL Indication	
7	18:88 AM ON TIMER ON SEGMENT	16	TEMPERATURE Indication	
8	18:80 PM OFF TIMER OFF SEGMENT	17	→0 LOCK Indication	
9	© 18:88 AM RTC (Real Time Clock)			

NOTE: 1. Set the current time when you start the RemoCon™ at the first time or when everytime battery is replaced or reset key is pressed.

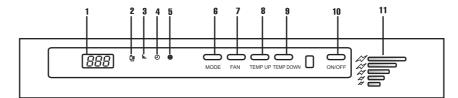
- 2. If current time is not set, other functions cannot be accessed.
- If unit is put to OFF mode by using ON/OFF key on RemoCon[™], only selected mode and timer will be visible on LCD screen. Most of the functions are selectable while RemoCon[™] is in OFF mode.

Controls And Indications

Control Panel

- 1. Display Screen: It displays the selected mode, set temperature (16-32°C) and fan speed (Refer to Table 1).
- 2. Compressor ON/OFF Indication Lamp: This indication lamp will glow when compressor is ON.
- 3. Kaimin™ Indication Lamp: This indication lamp is ON when Kaimin™
- 4. **Timer Indication Lamp :**This indication lamp will glow when ON/OFF timer is set.
- 5. Clean Time™ Filter Indication Lamp : This indication lamp will glow periodically to remind to clean the air filter. (Refer IM/OM)
- 6. Mode Key:

User can select different modes (Auto, Cool, Dry, Fan & Powerful) with this key.



- 7. Fan Key: User can select the FAN speed(turbo/comfort/quiet/auto) with this key.
- 8. **TEMP UP Key**: Temperature can be increased from 16°C to 32°C by this key.
- 9. **TEMP DOWN Key**: Temperature can be decreased from 32°C to 16°C by
- 10. ON/OFF Key: By pressing this key, the air conditioner can be switched ON/OFF.
- 11. Power Index LED: Power Index indicates how much relative power is being consumed at particular time based on selected mode .

Display Indication of Control Panel

Mode (R. E. d. For ₽) will be displayed as per selected mode.(Refer to Table 1)

This shows the unit is in OFF condition. Display indicates "@FF"

Super Cool:

This shows that super cool feature is selected. Display indicates "5" at fan speed segment.

Temperature Indication:

Temperature Indication range from 16 - 32°C LOC:

This shows the machine is

password protected. Display indicates "L 0 E"

This shows that silent feature is selected. Display indicates "¿" at fan speed segment.

Table 1

Table 1	
PARAMETER	DISPLAY
AUTO POWER SAVE	A**
COOL-turbo/comfort/quiet/auto	C **
DRY MODE	d**
POWERFUL MODE	P**
FAN-turbo/comfort/quiet	F**
SET TEMPERATURE	16-32
STAND BY (OFF)	OFF
LOCKED	LOC

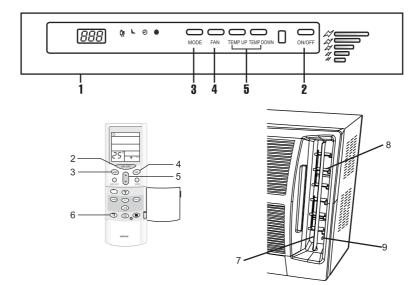
NOTE: All indications are for reference.

^{**} For FAN SPEED display for selected modes, please refer to Page No.6-10.

How To Operate Your Air Conditioner

By Control Panel or By RemoCon™

- 1 The Control Panel is located inside the transparent Control Panel Cover and this consists of Control Panel with basic keys & display lamps.
- 2 Use the ON/OFF key to start the air conditioner when it is not running and to stop the air conditioner when it is running.
- 3 Use the Mode key to select mode.
- 4 Use the FAN key to select desired fan speed.
- 5 Use TEMP UP/DOWN key to set the desired room temperature.
- To operate auto swing, press the SWING key on the RemoCon[™] for evenly distributing cold air or concerntrating air flow.
- Vertical air deflectors sweep air from left to right across the room, for better air distribution. The deflectors can be set to a position by pressing the SWING key.
- When you want to deflect the air to upward or downward direction, move the Horizontal Air Deflectors by hand. This is necessary when the air conditioner is installed either above the window sill level or below the window sill level.
- For fresh air intake, pull the Exhaust Lever down to "Open" vent. Part of the room air shall be exhausted. Pull the Exhaust lever up, to "Close" vent.



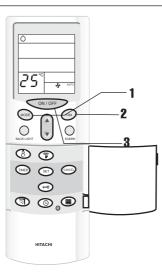
▲ IMPORTANT

During normal operation, keep Exhaust Lever in closed position.

- NOTE : 1. Set the current time when you start the RemoCon™ for the first time or everytime battery is replaced or reset key is pressed.
 - 2. If current time is not set, other functions cannot be accessed.
 - If unit is put to OFF mode using ON/OFF key on RemoCon[™], only selected mode and timer will be visible on LCD screen. Most of the functions are selectable while RemoCon[™] is in OFF mode.

AUTO POWER SAVE MODE-Ideal For Power Saving

The device will automatically select to the comfortable temperature and will maintain comfortable temperature with suitable fan speed. The set temperature cannot be altered in **AUTO POWER SAVE MODE**.



NOTE:

- 1 If air conditioner is in OFF mode, user can select the desired setting on RemoCon[™]. After pressing ON/OFF key, air conditioner will start with settings displayed on LCD screen.
- 2 Super cool and Silent functions are selectable in AUTO POWER SAVE MODE.
- 3 Fan speed is selected automatically depending on room temperature.

Press the MODE key so that the display indicates the AUTO mode of operation.
When AUTO is selected, the device will automatically set itself to ideal comfort temperature (about 25°C). DigiTemp™ will not work at this time.

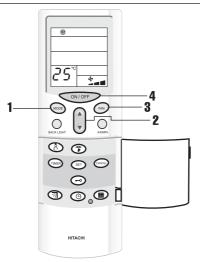
- 2 The FAN SPEED selector does not work at this time FAN SPEED is set to auto.
 The Air circulation intensity alters automatically according to room temperature to provide comfortable temperature and air flow.
 Fan speed operation shall be as per the condition of table below.
- Press the ON/OFF key. AUTO operation starts with a beep.
 (To stop operation, press the key again)
 As the settings are stored in memory in the remote control, you only have to press the ON/OFF key next time.

Condition of AUTO POWER SAVE operation

Condition of Actor Civility CAVE operation				
Initial room temperature (approx)	Fan Speed	Display on Control Panel		
About 27°C	turbo	88		
Between 25 ~ 27°C	comfort	88		
Below 25°C	quiet	88		

COOL MODE - Ideal For Comfort Setting

Use the device for cooling when the outdoor temperature is 22-52°C. If indoor humidity is very high (over 80%), some dew may form on the air outlet deflector of the cooling unit.

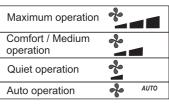


NOTE:

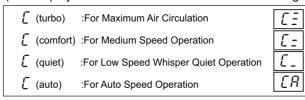
- 1 The cooling function does not start if the temperature setting is higher than the current room temperature. The cooling function will start as soon as you set the temperature below the current room temperature.
- 2 As the settings are stored in memory in the remote control, you only have to press the ON/OFF key next time.

- 1 Press the MODE key, so that the display indicates the COOL mode of operation.
- Set the desired room temperature with the DigiTemp™ key. The range of 25-28°C is recommended as the room temperature for cooling. If the temperature setting is 25°C, the room temperature will be controlled at around 25°C. The temperature setting and the actual room temperature may vary somewhat depending on environmental conditions.
- Set the desired FAN SPEED with FAN key ()

(The display indicates the setting)



(The display in the Control Panel indicates this setting

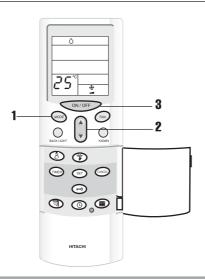


- Press the ON/OFF key, cooling operation starts with a beep. Press the key again to stop operation.
- ★ Run the unit at super high condition to get Maximum Energy Efficiency (C.O.P.)

7

DRY MODE - Ideal For Humid Condition And During Rainy Season

Use the device for dehumidifying when the room temperature is over 16°C.

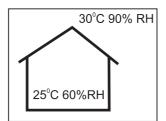


- 1 Press the MODE key so that the display indicates the DRY mode of operation. The fan speed is set at quiet operation automatically.
- 2 Set the desired room temperature with the DigiTemp™ key (the display indicates the setting). The range of 20-26°C room temperature is recommended.
- Press the ON/OFF key. Dehumidifying operation starts with a beep. To stop operation, press the key again.

As the settings are stored in memory in the remote controller, you only have to press the ON/OFF key next time.

NOTE:

The fan speed selector does not work.



DEHUMIDIFYING FUNCTION

When the room temperature is higher than the set temperature: The device will dehumidify the room and lower the room temperature to the preset level.

When the room temperature is lower than the set temperature: Dehumidification will be performed with the set temperature slightly lower than the current room temperature, whatever the temperature setting is. The fan will run at low speed.

POWERFUL MODE - Ideal For Quick Cooling

Use this operation to cool the room quickly with uniform air circulation





Press the MODE key so that the display indicates the POWERFUL mode of operation.

The air circulation speed and set temperature changes automatically to cool the room quickly.
Unit runs with new set temperature and the highest air circulation and return to set temperature and fan speed approximately after 30 minutes.

NOTE: You can direct the air flow to the desired direction by pressing 'SWING' key.



Press the ON/OFF key. POWERFUL operation starts with a beep. To stop operation, press the key

As the settings are stored in memory in the remote controller, you only have to press the ON/OFF key next time.

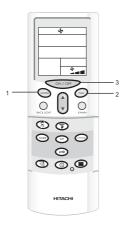
- 1 During this mode of operation, the fan speed cannot be changed in the first 30 minutes. However, the user can change the fan speed after 30 minutes.

 2 In POWERFUL mode, SUPER COOL and SILENT features are not available.

 3 Kaimin™ feature is not operational in POWERFUL mode.

FAN MODE - Ideal For Quick Room Air Circulation

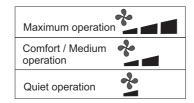
You can use the device simply as an air circulator. Use this function to dry the interior of the cooling unit at the end of summer or the beginning of season.



NOTE:

- 1 DigiTemp[™] key and Kaimin [™] key cannot be operated in this mode.
- 2 Silent function is selectable in FAN mode.

- Press the MODE key so that the display indicates the FAN mode of operation.
- Press the FAN key and select the desired FAN SPEED (The display indicates your choice).



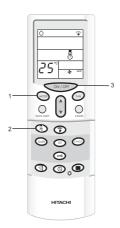
Set the desired FAN SPEED with the FAN key

Press the ON/OFF key. Fan operation starts with a beep. To stop operation, press the key again.

As the settings are stored in memory in the remote controller, you only have to press the ON/OFF key next time.

SUPER COOL FUNCTION - Ideal For Extra Strong Air Flow And Cooling

Use this function to cool the room in very hot weather or to cool the room quickly with the highest fan operation. The SUPER COOL function can be set by using the RemoCon TM .



- 1 Press the MODE key to select the auto or cool mode of operation. The display indicates the AUTO or COOL as per selection.
- Press the SUPER COOL Key so that the display indicates the SUPER COOL Symbol.
- Press the ON/OFF key, SUPER COOL function will start with a beep sound. Air circulation speed will be highest in this mode.

As the settings are stored in memory of the remote controller, you only have to press ON/OFF key next time.

NOTE:

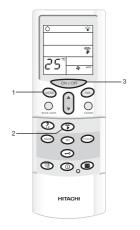
- 1. This function is available in AUTO and COOL mode only.
- 2. If mode is changed to operations other than AUTO or COOL mode, SUPER COOL function will be cancelled.
- 3. In the following conditions, SUPERCOOL function will be cancelled.

Cancel condition	Operation mode after cancellation	FAN speed after cancellation
Press (SILENT) key or	Normal mode (Auto or Cool)	SILENT
Press (SUPER COOL) key again or	Normal mode (Auto or Cool)	Previous FAN Speed
Press (FAN) key	Normal mode (Auto or Cool)	Previous FAN Speed

SILENT FUNCTION - Ideal For Quiet Cooling

Use this operation when very low noise is required. Ideal to use at night time.

The **SILENT** function can be set by using the **RemoCon™**.



- 1 Press the MODE key to select the AUTO, COOL or FAN mode of operation.
- Press the SILENT key so that the display indicates the SILENT Symbol.
- Press the ON/OFF key, SILENT function will start with a beep sound. Air circulation speed will be at the lowest.

As the settings are stored in memory of the remote controller, you only have to press ON/OFF key next time.

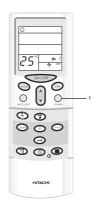
NOTE:

- 1. This function is available in AUTO, COOL and FAN mode only.,
- 2. If mode is changed to mode other than AUTO, COOL or FAN mode, SILENT function will be cancelled.
- 3. In the following conditions, SILENT function will be cancelled.

Cancel condition	Operation mode after cancellation	FAN speed after cancellation
Press (SILENT) key again or	Normal mode (AUTO, COOL or FAN)	Previous FAN Speed
Press SUPER COOL) key	Normal mode (AUTO, COOL or FAN)	SUPER COOL
(only if unit is in AUTO or COOL mode)		
Press (FAN) key	Normal mode (Auto or Cool)	Previous FAN Speed

Kaimin™ FUNCTION - Ideal For Comfortable Sleep

Use the **Kaimin**™ to control the temperature that provides optimum cooling without creating chilling effect. This is good for healthy and comfortable operation and also helps to save power.



1- Press the **Kaimin**™ key to turn ON the **Kaimin**™ function.

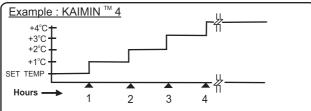
llustration:

If you set the temperature to 25°C after selecting the COOL mode with **high fan** speed and **Kaimin™** for 1 hour, the temperature shall be increased by 1°C above the set temperature after 60 minutes of running i.e. 26°C and continues to work with this set temperature through out the operation with selected fan speed to provide comfortable and quiet sleep.

The Kaimin[™] function is selectable in four different steps. With every press of Kaimin[™] key, Kaimin[™] function will change with beep sound. Select Kaimin[™] function for required hours. To cancel Kaimin[™] function, press Kaimin[™] key till no Kaimin[™] display on LCD screen.

NOTE:

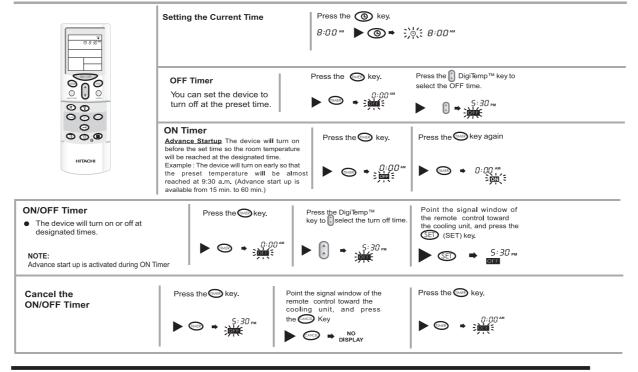
- If Kaimin[™] function is selected and unit is switched OFF/ON by ON/OFF switch on panel, Kaimin[™] function will be cancelled.
- Kaimin[™] function can be selected only during AUTO or COOL mode of operation.
- If Kaimin[™] hours of operation is changed during Kaimin[™] operation, Kaimin[™] will be reloaded.
- If power fails and regains during or after Kaimin[™] operation, Kaimin[™] remaining hours of operation and latest set temperature will be remembered by the unit.
- After completion of Kaimin[™] hours if any key from either remote control or panel is pressed, the set temperature will back to previously selected set temperature.
- After every hour of operation, the set Kaimin[™] hours on remote control will be decremented by one.



ABOUT Kaimin™ FUNCTION

The set temperature raises by 1°C in every one hour to provide comfortable sleep. This helps to save power, and user will feel comfortable during night time as the human metabolic rate goes down, in deep sleep. In order to set KaiminTM, press the ON/OFF key to switch ON the air conditioner if it is not running. If the air conditioner is running, the KaiminTM can be set in COOL & AUTO POWER SAVE mode only.

How To Set And Cancel The Timer



- NOTES:1 If any of the timer is selected (ON/OFF) and power regains after failure, unit will keep the timer in memory.

 2 Keep pressing DigiTemp™ key, timer setting can be changed rapidly.

 3 If ON or OFF timer is selected alone the remote control will remember the last timer selected.

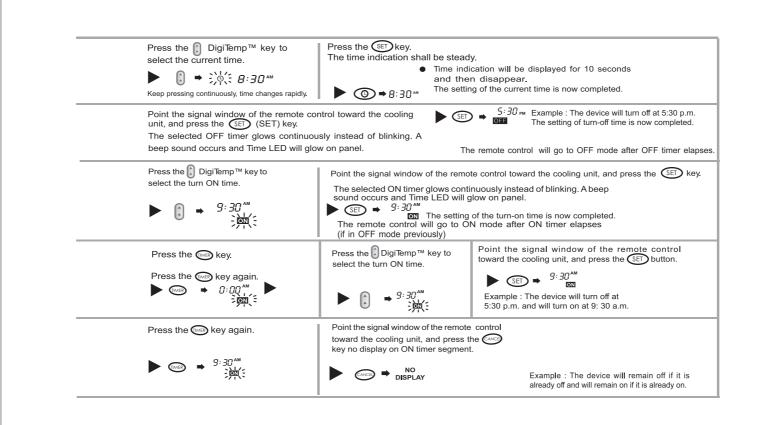
 4 While programming ON or OFF timer, press CANCEL key to come out of programming mode without selecting or changing the time.

 5 If DigiLock™ is applied and unit gets OFF because of OFF timer, it will go to LOCK mode instead of STANDBY mode.

 6 If ON timer is selected and unit is in STANDBY mode, a beep sound will come to show acceptance of new setting once pressing any key on remote control.

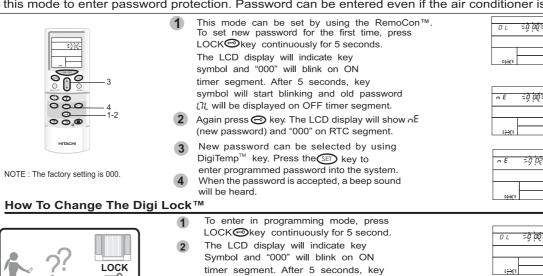
 7 If DigiLock™ is applied and unit is in LOCK mode ON timer cannot be selected.

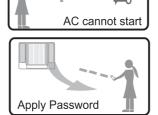
 - 8 If DigiLock™ is applied and ON timer is selected, after that if switches off unit, it will go to LOCK mode and the unit will get on at preset time.
 - $9 \ \ \text{While programming the timers RemoCon}^{\text{\tiny{TM}}} \ \text{will come out of programming, if no key is pressed for about 10 seconds.}$



How To Program The Digi Lock™

Use this mode to enter password protection. Password can be entered even if the air conditioner is in OFF mode.



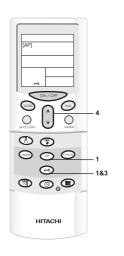


symbol will start blinking. $\ensuremath{\textit{GL}}$ will be displayed on OFF timer segment. Enter old password using DigiTemp[™] key. Now press the LOCK ⊗key again. LCD will display $n \in \mathcal{E}$ on OFF timer segment And "000" symbol on ON timer segment. New password can be selected by using DigiTemp™ key and press the key to enter programmed password into the system. When the password is accepted, a beep sound will be heard.

000 cannot be a password.
 The password can be used to lock and unlock the air conditioner.
 If old password is not remembered correctly, new password cannot be set. Call the service personnel to reset the password.
 If CANCEL key is pressed, RemoCom™ will come out of programming mode.

5 During password programming if no key is pressed for 10 seconds, RemoCon[™] will come out of programming mode.

How To Apply And Cancel The Digi Lock™



This mode can be set by using the RemoCon™.

"To apply password."

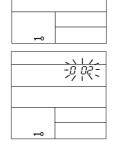
- Press LOCK and SET key together, the display will show KEY symbol and RP on OFF timer segment.
- 2 IR will be transferred from remote control and password is applied. A beep sound will come from unit for acceptance. If unit switch off from remote control it will go to LOCK mode.

"To cancel password."

- Press LOCK the display will show KEY symbol and "000" at ON timer segment.
 - Enter the password using DigiTemp™key.

 Press LOCK key to cancel the password.

 IR will be transferred from remote control and password will get cancelled. The display on panel will change from 'LOC' to 'OFF'.



沙岭

When programming is accepted by the system, there shall be a beep sound.

NOTE:

- 1 If the air conditioner is in running condition, the display on control panel remains unchanged and the air conditioner remain running in same condition and if it is switched off, unit will go to LOCK mode
- 2 If the air conditioner is in LOCK mode and power fails, at power regain, air conditioner will again go to LOCK mode.
- 3 If the air conditioner is in OFF mode and user applies the password, air conditioner will go to LOCK mode and Indication Power LED will start blinking.
- 4 Password can be applied or cancelled even if unit or RemoCon[™] is in OFF mode.

IMPORTANT If password is applied and user forgets the password, call service personnel to reset the password.

RESET Function (For Hardware Reset)

Use this function to reset your RemoCon™



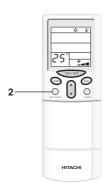
During battery replacement or any unlikely event, or if the display does not change when pressing the key or any unwanted display comes, press RESET
 key to reset your RemoCon™.

In order to reset your RemoCon[™], press RESET key **②**.

NOTE .

- 1. Use some pointed item like pen to press the reset key.
- Once the RemoCon[™] is reset by using RESET key, all the settings will reset automatically.
- 3. Once the RemoCon[™] is reset user has to set current time again.

BACKLIGHT SWITCH



- Backlight key is to see the LCD readings in the dark.
- Once pressing this key, the LCD panel lights up for a period of 10 seconds. After 10 seconds, the light will automatically switch off.
- The switch is fluorescent and is placed on the top.
- This function is independent of all other functions of the air conditioner.
- The backlight colour is orange.

NOTE

When batteries are replaced or reset key is pressed, the backlight will be on for a period of 10 seconds.

IDENTIFIER SWITCH - For Installations With Two Units together

Use this key when two units are installed in the same location and you would like to operate the units independently. By using Identifier Switch, you can provide two independent identification to two units.

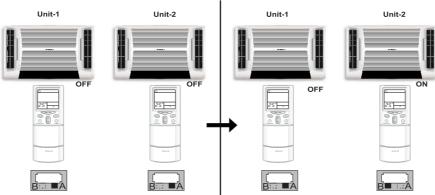


How to change unit and remote control identification from A to B.

- Switch ON only that unit whose identifier has to be changed. Switch OFF the other unit.
- 2 Open the battery cover of remote control.
- **3** Find the identifier switch in location as shown in the figure.
- Use a pen to shift position of switch from A to B as shown in the figure.

A beep sound will be heard from the unit to indicate signal acceptance of new identification for the unit.

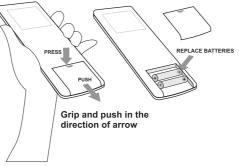
Example: User wants to set identifier B for Unit-2



NOTE:

- 1 Factory set position of remote control and unit is 'A'. So all unit will accept control signal from remote control with identifier switch A.
- 2 There is two seconds delay in changing of identifier switch and transmission of signal from remote control. This delay is provided to enable user to change identifier key position and then point towards the machine.

How To Replace The Batteries In The RemoCon™



- 1 Remove the cover as shown in the figure and take out old batteries.
- 2 Install new batteries.

 The direction of the batteries should match the marks in the case.
- 3 Press the DigiTemp™ key to select the current time.
- Press the SET key.
 The time indication shall be steady instead of blinking

CAUTIONS:

- If the air conditioner is not going to be used for a long period (2 to 3 months), remove the batteries from RemoCon™; to avoid damage due to battery leakage.
- 2. Do not use new and old batteries or different kinds of batteries together.
- 3. The batteries must be of AAA size.

