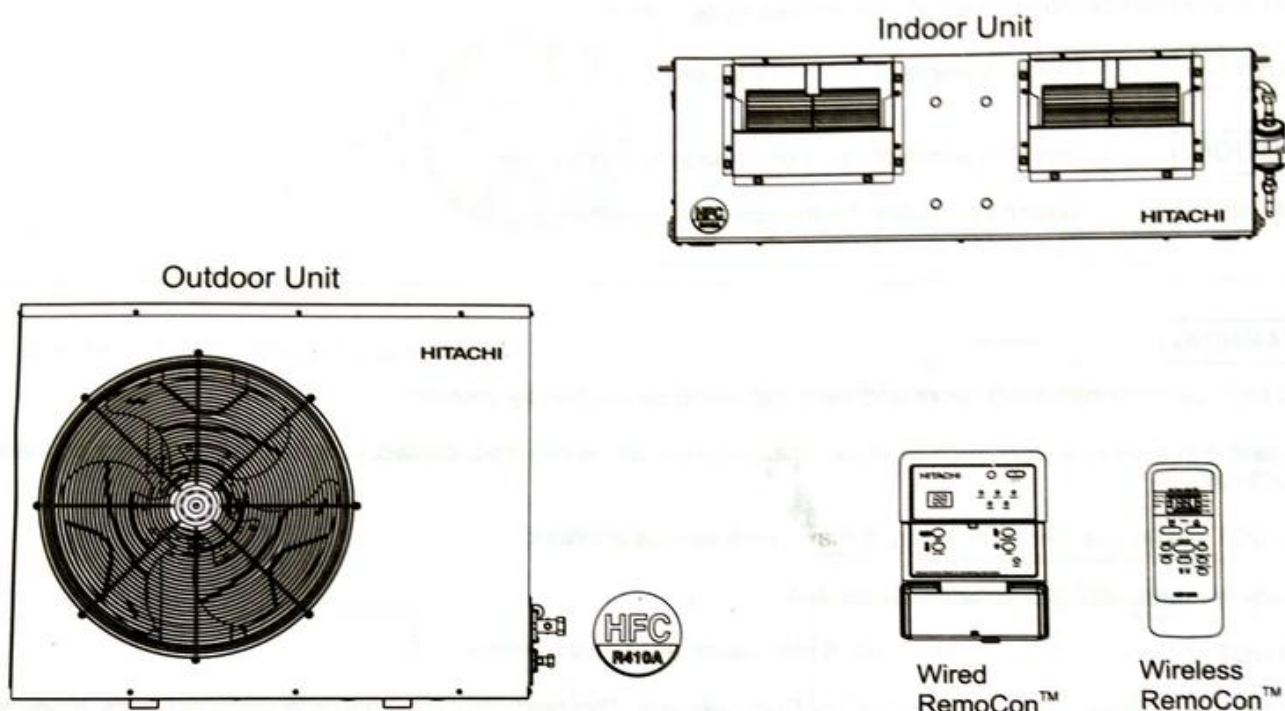


HITACHI

Installation , Operation and Maintenance INSTRUCTION MANUAL

DUCTABLE SPLIT PACKAGE AIR CONDITIONER



Your unit may not be exactly same as depicted herein

CONTENTS

• Unit Description.....	1
• Know Your Air Conditioner.....	4
• Description of Hand Set.....	6
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NOTE: READ AND UNDERSTAND THIS INSTRUCTION MANUAL BEFORE USING THIS AIRCONDITIONER.
KEEP THIS MANUAL FOR FUTURE REFERENCE.

IMPORTANT NOTICE AND SAFETY INSTRUCTION

IMPORTANT NOTICE

- Johnson Controls-Hitachi Air Conditioning India Ltd. herein after referred to as JCH-IN pursues a policy of continuing improvement in design and performance of products. The right is therefore reserved to vary specification without notice.
- It is important to note the caution references through out these instructions. These cautions will help you to alert from dangers which may result in personal injury, burns, fire and electrical shock and will also help you to avoid actions which could result in product damage.
- JCH-IN cannot anticipate every possible circumstance that might involve a potential hazard.
- No part of this manual may be reproduced without written permission.

⚠ WARNING : This sign warns of death or serious injury

⚠ CAUTION : This sign warns of injury or damage to property only.

NOTE : Useful information for the operation / maintenance.

⚠ WARNING

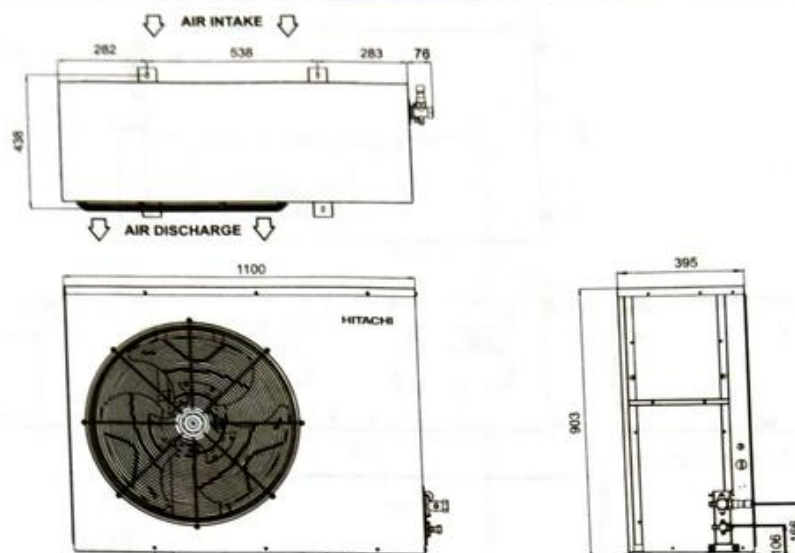
- DO NOT perform installation work and electrical wiring connection by yourself.
- In case that a service work such as repair, maintenance, etc. is required, contact your nearest distributor or dealer of JCH-IN.
- DO NOT modify the electrical wiring. It may cause serious accident.
- Check the earth wiring is securely connected.
- DO NOT operate switches by wet hand. It may cause an electrical shock.
- DO NOT pour water into the RemoCon™ or Controller box. This product is equipped with electrical parts. If poured, it will cause a serious electrical shock.

⚠ CAUTION

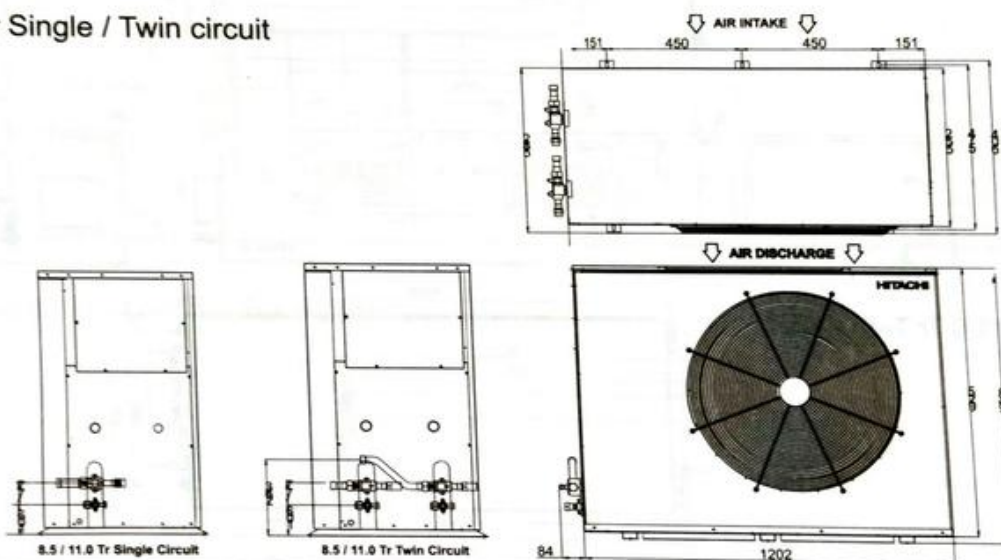
- In case that the protective devices often function or the operation switches do not function well, turn OFF the main power.
- Supply and contact your nearest distributor or dealer of JCH-IN.
- In case that other abnormalities are found, stop the system, turn OFF the main power supply and contact your nearest distributor or dealer of JCH-IN.
- DO NOT install the indoor unit, outdoor unit, remote controller and cable at places such as:
 - (1) Where there is oil vapour and the oil is dispersed.
 - (2) Where the hot springs are near in a sulphuric environment.
 - (3) Where heat generation, flowing, staying, leaking of flammable gas or water is detected.
 - (4) Where the sea is closer (in the salty environment).
 - (5) Acid or alkaline environment.
- DO NOT install the indoor unit, outdoor unit, remote controller and cable within approximately 3 meters from strong electromagnetic have radiation such as medical equipment.
- Do not run any cable for transmission and signal along the power line (220~240V, 380~415V).
- Do not run any cable for transmission and signal along other cable for transmission and signal.
 - If the cable are required to be run along, keep a distance more than 30 cm. between each cables or insert the cables for each transmission system into the metal conduit tube and ground one end of the conduit tube.
 - If the transmission cable are required to run along power cable keep a distance of 30cm.(1Ft) between transmission and power cable.

UNIT DESCRIPTION : OUTDOOR UNIT

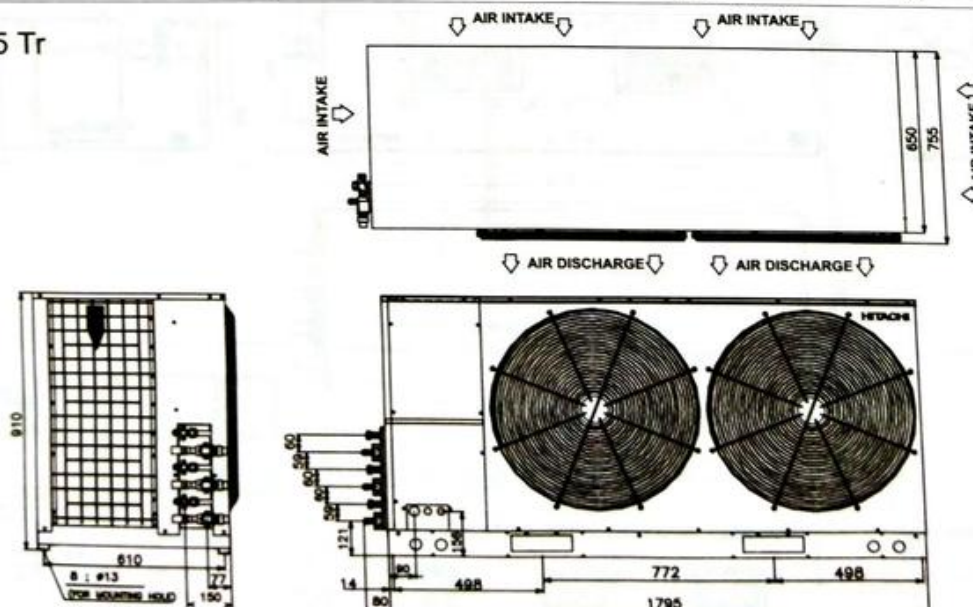
• 5.5 Tr



• 8.5 Tr / 11.0 Tr Single / Twin circuit



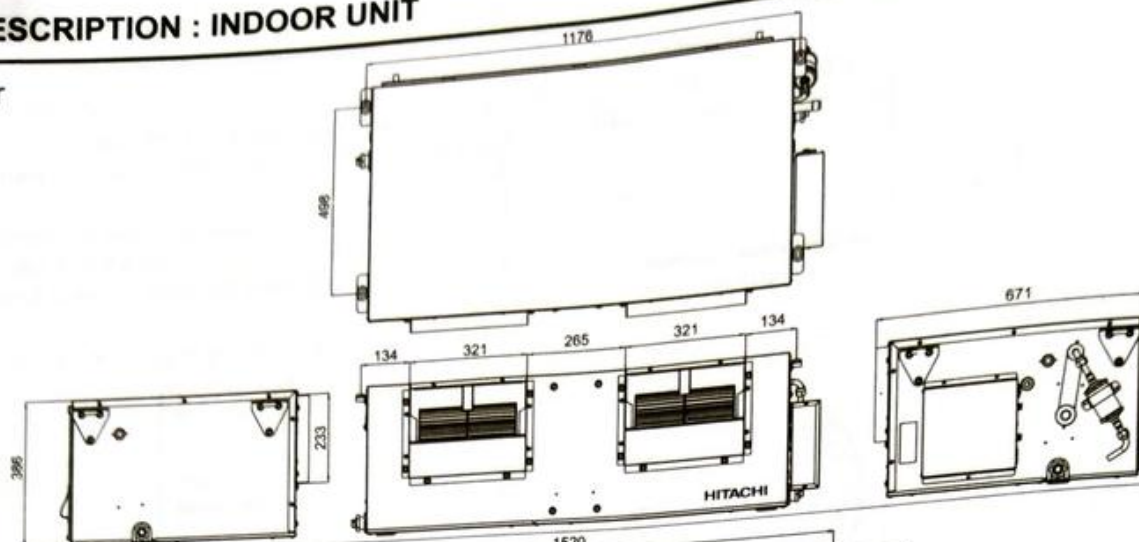
• 16.5 Tr



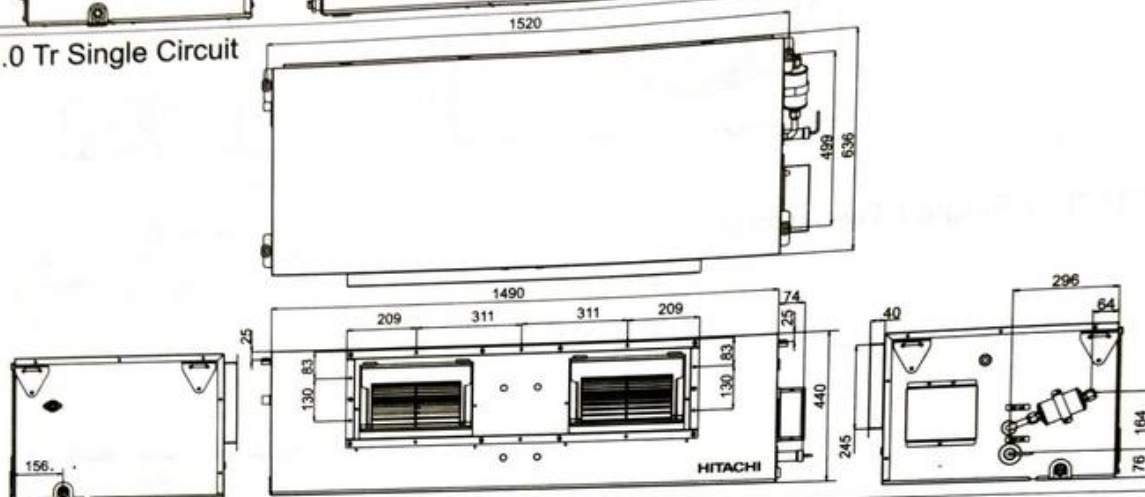
All dimensions are in mm unless otherwise specified.

UNIT DESCRIPTION : INDOOR UNIT

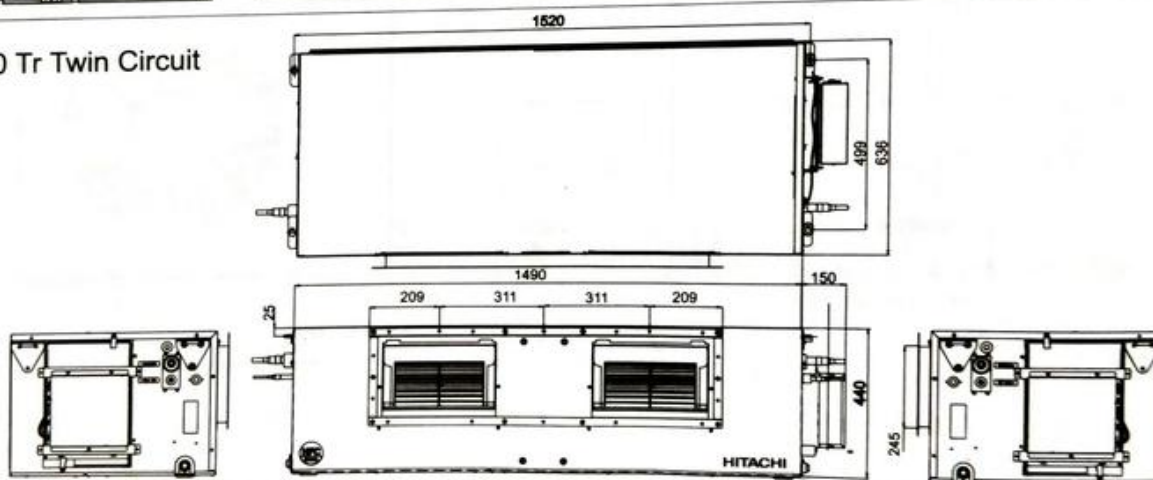
• 5.5 Tr



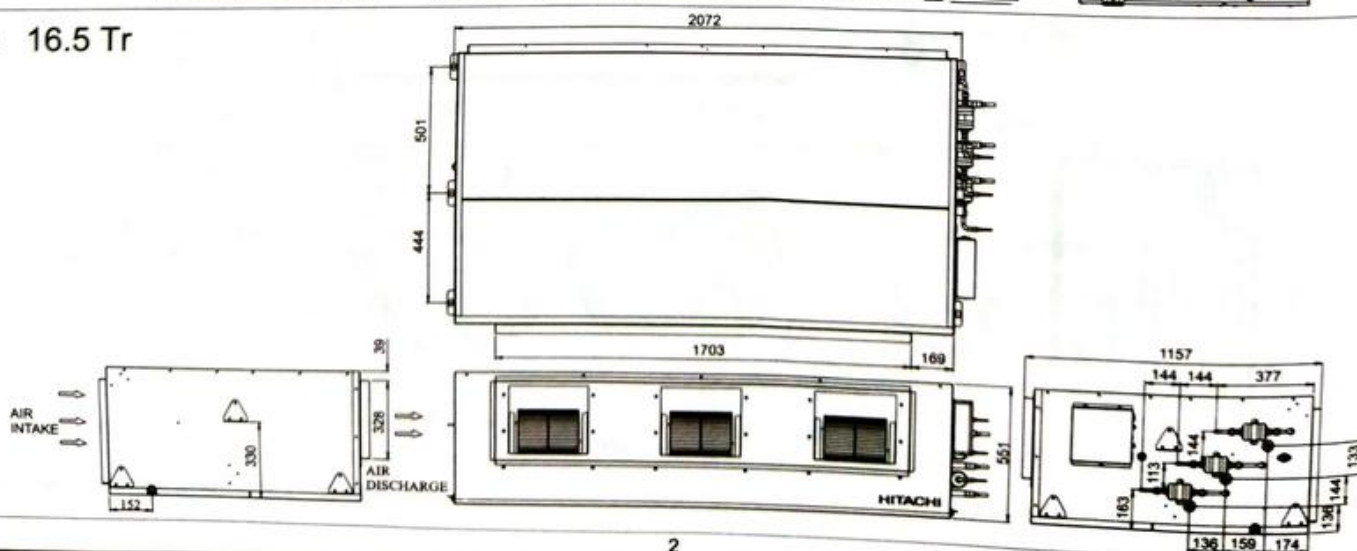
• 8.5 Tr / 11.0 Tr Single Circuit



• 8.5 Tr / 11.0 Tr Twin Circuit

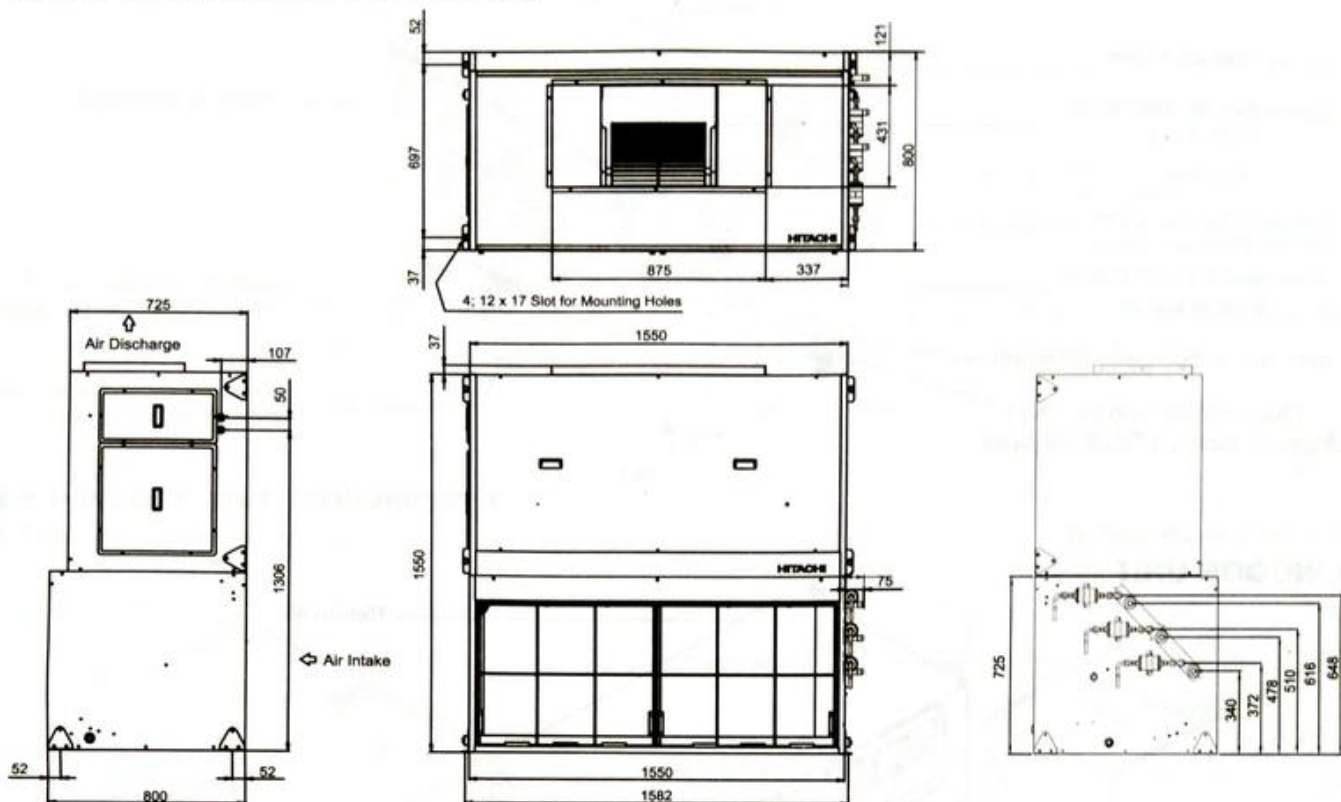


• 16.5 Tr

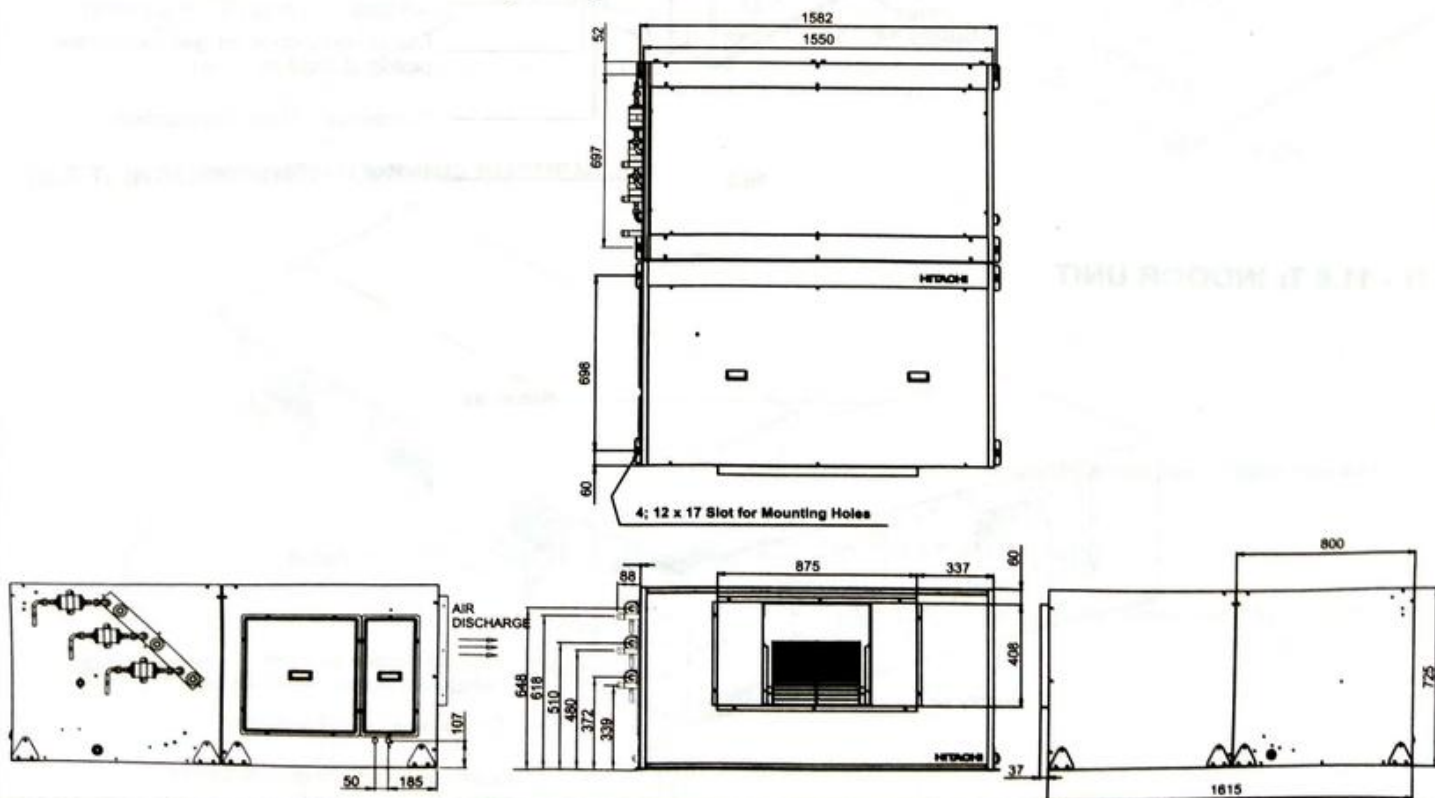


UNIT DESCRIPTION : INDOOR UNIT

- 16.5 Tr Convertible : Floor standing



- 16.5 Tr Convertible : Ceiling Suspended



KNOW YOUR AIRCONDITIONER

5.5 Tr- 11.0 Tr OUTDOOR UNIT

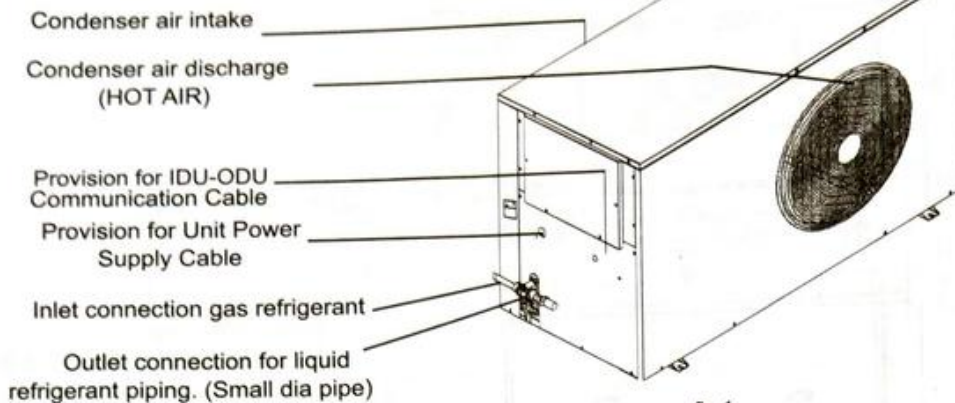


fig.1

5.5 Tr INDOOR UNIT

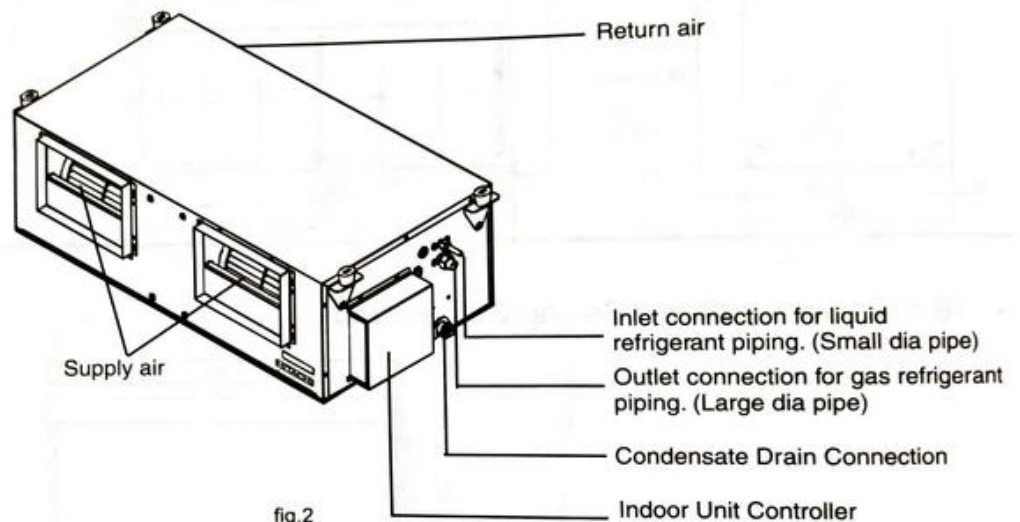


fig.2

8.5 Tr - 11.0 Tr INDOOR UNIT

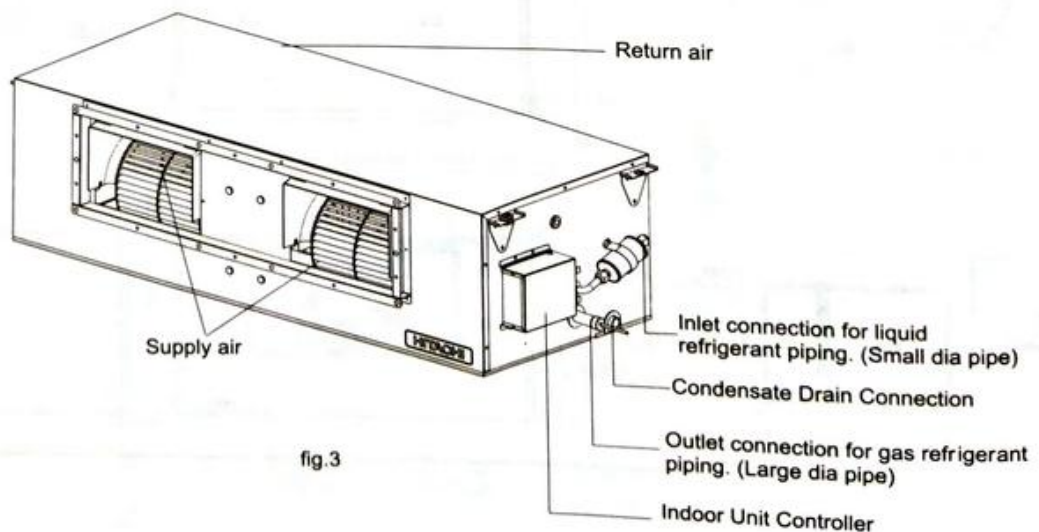
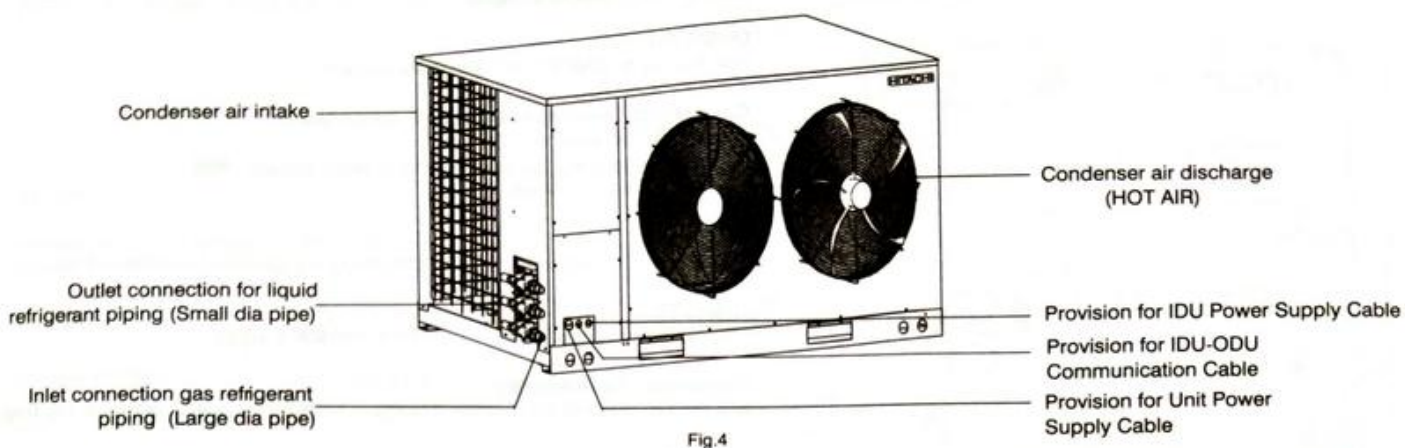


fig.3

KNOW YOUR AIRCONDITIONER

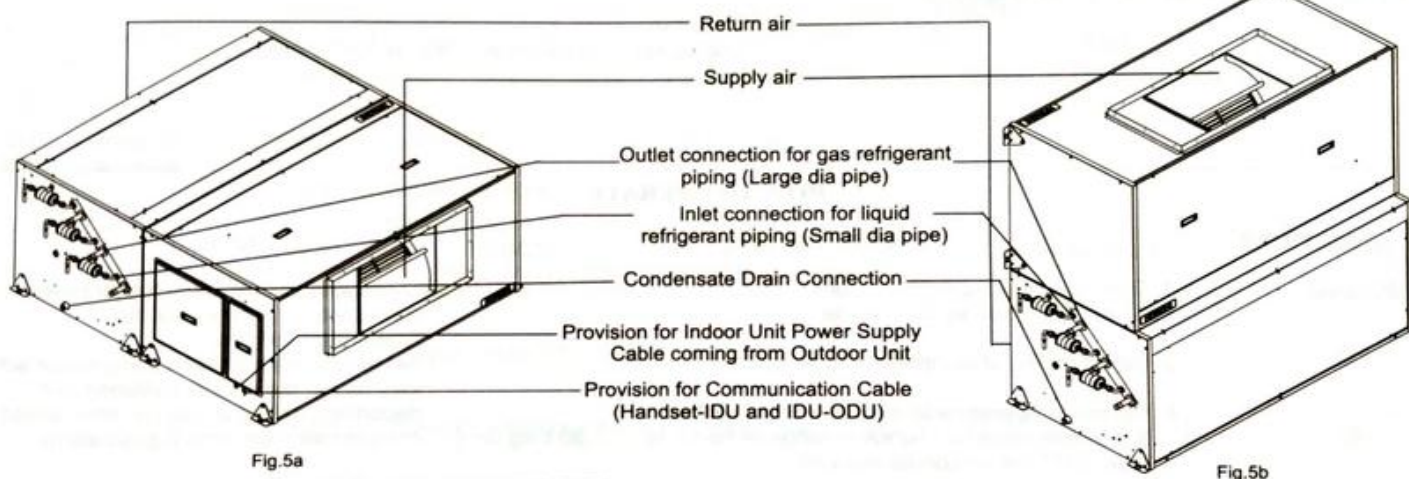
16.5 Tr OUTDOOR UNIT



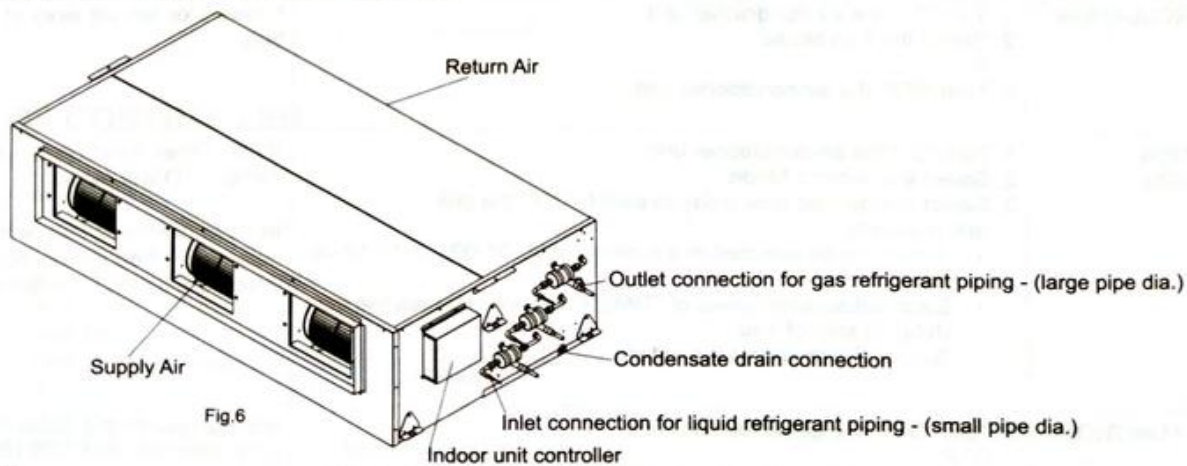
16.5 Tr INDOOR UNIT - CONVERTIBLE

(a) Ceiling suspended indoor unit.

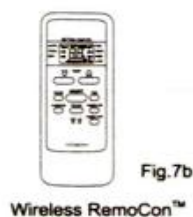
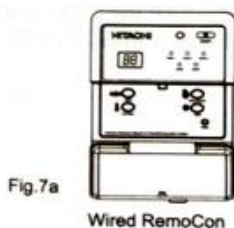
(b) Floor standing indoor unit



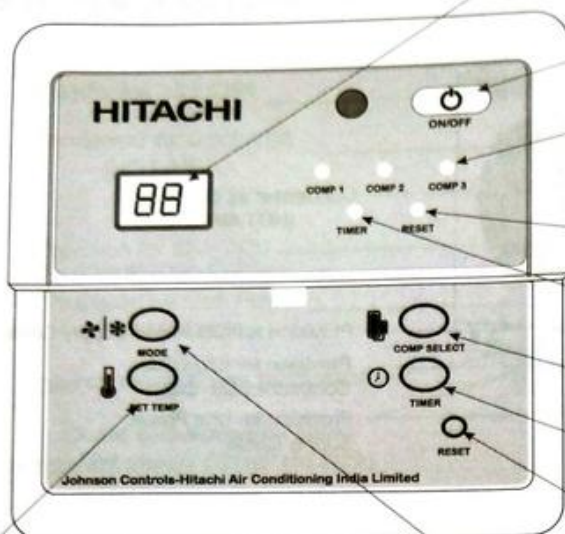
16.5 Tr INDOOR UNIT - CEILING SUSPENDED



REMOTE



DESCRIPTION OF HANDSET



7 Segment Display
The selected Mode, Set Temperature, Compressor Selection & Off Timer hours are displayed on 7-segment display

On/Off Key
Use this key to 'ON/OFF' the air conditioner unit.

Compressor Selection LED (for each compressor)
Compressor not selected : OFF
Compressor selected, but stopped on thermistor request : Red
Compressor is ON : Green

Reset LED
LED will glow in Red colour, if any compressor is tripped on Low System Pressure.

Timer LED
LED will glow in Green colour, if Off Timer function is active.

Compressor Selection Key
Use the key to select the number of compressor to be operated together at any time.

Timer Key
Use this key to set the time delay to switch OFF the unit automatically.

Reset Key
Use this key to reset pressure fault alert manually. Handset should be in OFF mode.

Mode Key
Use this key to set the unit in "COOL" or "FAN" mode.

Set Temp.
Use the key to set room temperature in normal operation.

Fig.8

HOW TO OPERATE

FUNCTIONS	PROCEDURE	NOTE
COOLING	<ol style="list-style-type: none"> 1. Turn "ON" the air-conditioner unit. 2. Select the Mode as Cool Mode. C 3. Select the no of compressor to be operated . 1C 2C 3C 4. Set the temperature to desired level of cooling. Set temperature can be set in range of 16-17-18.....30 Deg C. 5. Turn "OFF" the air-conditioner unit. 	<ol style="list-style-type: none"> a) Overcooling will result in higher power consumption. Don not set the temperature too low. b) Set temperature of each compressor will vary as per the priority assigned to it depending on the actual run time of that compressor (Run time Equalization)
AIR-CIRCULATION	<ol style="list-style-type: none"> 1. Turn "ON" the air-conditioner unit. 2. Select the Fan Mode. F 3. Turn "OFF" the air-conditioner unit. 	Evaporator fan will work at single speed only.
OFF TIMER FUNCTION	<ol style="list-style-type: none"> 1. Turn "ON" the air-conditioner unit. 2. Select the desired Mode. 3. Select the desired time delay to switch "OFF" the unit automatically. <ul style="list-style-type: none"> • Timer can be selected in the range of 00-01-02.....-11-12-00 hrs. • Each subsequent press of "TIMER" key.will increase the time delay in step of 1 hr. • Select "00" to cancel the timer 	<p>If Off Timer function is selected then Timer LED will glow.</p> <p>In case of Power failure if OFF timer is selected, when Power resumes, OFF timer function will be remembered.</p>
RESET FUNCTION	<ol style="list-style-type: none"> 1. Turn "OFF" the air-conditioner unit. OFF 2. Press RESET key. RESET LED will turn off & compressor LED will stop flashing 3. Turn "ON" the air-conditioner unit C 	<p>Manual resetting is possible for two times only. After this MASTER RESET has to be done.</p> <p>PLEASE INFORM THE NEAREST SERVICE STATION IN THIS CASE.</p>

SERVICE MODE & ERROR CODES

Service modes and Error code are as tabulated below :

SERVICE MODES	
MODE	HOW TO ACCESS
Room Temp. Display	When the unit is OFF & display is "OF", press MODE key once and then press SET TEMP. key within 5 sec.
Comp Run hour Display	When the unit is OFF & display is "OF", press MODE key once and then press TIMER key within 5 sec. To display run hour of each comp. , press TIMER key subsequently.
Master RESET	Keeping RESET key pressed continuously for 5 secs during POWER ON , RESET works as Master RESET. Need to use master reset if unit is tripped more than 3 times on Low Pressure.

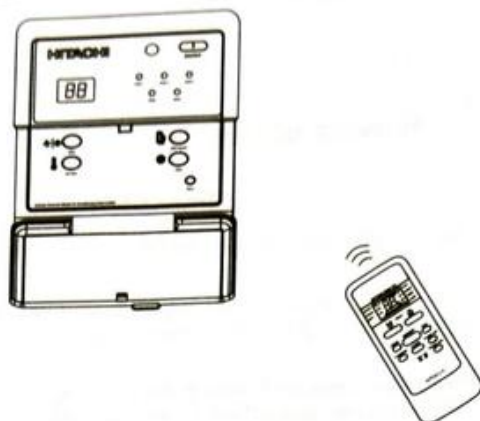
ERROR CODES						
Error Codes in Handset	Following error codes are displayed in handset during power ON startup. EE - EEPROM Error (Memory faulty) E1 - Room Sensor Faulty					
	COMP1, COMP2 , COMP3, RESET LED blink - HP/LP fault in respective compressor cycle of unit.					
Error Codes in ODU Controller	In abnormal condition LED will glow in ODU PCB . Errors are tabulated below ,					
	LED	FUNCTION	STATUS	LED	FUNCTION	STATUS
	LED1	ODU PCB POWER	ON	LED4	OVERCURRENT-3 FAULT	ON/BLINK
	LED2	OVERCURRENT-1 FAULT	ON/BLINK	LED5	SPPR FAULT	ON
	LED3	OVERCURRENT-2 FAULT	ON/BLINK	LED6	OVERVOLTAGE FAULT	ON
				LED7	UNDERVOLTAGE FAULT	ON

FEATURES OF CONTROLLER

- Microprocessor based design
- Memory back up (Auto restart function)
- Restart delay for compressor : 2.5 mins.
- Delay between starting of two compressor
- Compressor Run Time indication and resetting
- Run Time Equalization.
- Automotive Part Load Operation
- LP Protection
- Overload Protection
- Single Phasing / Reverse Phasing / Phase Imbalance protection

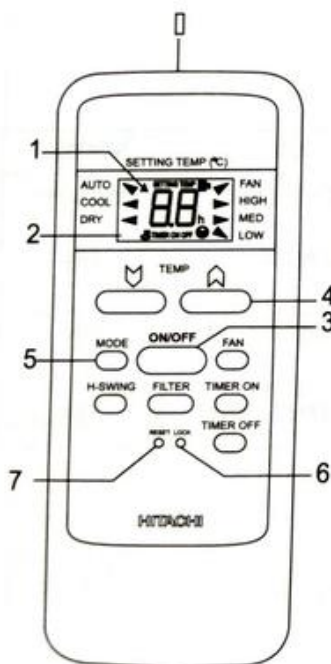
Description of Wireless Sensing RemoCon™ (Applicable to select models only)

Wireless Sensing Function :



RemoCon™ - A convenient ergonomically designed RemoCon™

This controls the operation of the Air Conditioner. The range of control is about 7 meters when operated from side of wired handset. If Indoor side lighting is controlled electronically, the range of control may be shorter. Sensing time between two successive commands from Remocon™ is about 2 seconds, time interval of 2 seconds must be ensured while giving command by Remocon™.



A IR Transmitter

Point this window towards the Air-Conditioner to send signal.

1. Transmission signal

The transmission sign blinks when signal is sent.

2. LCD display

This indicates the Mode, selected set temp., ON/OFF timer and Fan speed And Lock.

3. ON/OFF Key

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

4. DigiTemp™ Key

Use this key to decrease or increase Indoor temperature setting .

5. MODE Key

Use this key to select operating modes. Each time the button is pressed , the operation mode is shifted in direction of arrow :

AUTO → COOL → DRY → FAN → AUTO

NOTE : Wire Handset will display COOL mode ('C') when AUTO or DRY mode is selected from RemoCon™.

6. LOCK™ Key

Use this recessed key to lock all current setting on RemoCon™ and it does not accept any operation except that of the LOCK. Press again the cancel the LOCK mode.

7. RESET Key

When you press the RESET button , all current setting on RemoCon™ are cancelled and the RemoCon™ will return to the factory settings.

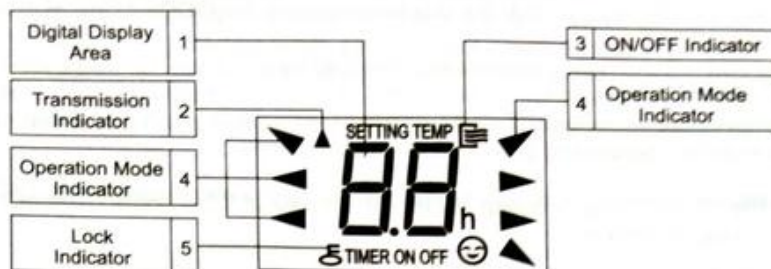
NOTE : Key other than mentioned above will not be functional.

CAUTION

- Do not expose the RemoCon™ :
 - To direct sunlight.
 - To any eating elements.
- Handle the RemoCon™ carefully:
 - Do not drop.
 - Protect it from water.
- Once the compressor stops, it will not restart for 3 minutes to protect the Air conditioner and does not indicates any failure.
- All the indications are for references.
- Interferences from Electrical Products
 - To avoid the interference , please place the indoor unit and its remote controller at least 1 m away from electrical products.

Description of Wireless Sensing RemoCon™

LCD screen on RemoCon™

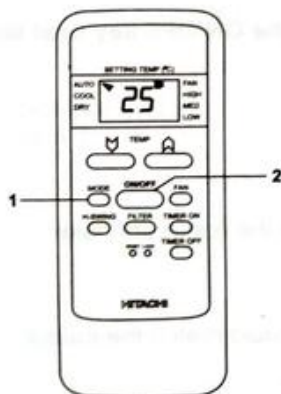


1. **DIGITAL DISPLAY area:**
This area will show the set temperature and. If the FAN mode, nothing will appear.
2. **TRANSMISSION Indicator:**
This indicator flashes one time when remote controller transmits signal to the indoor unit.
3. **LOCK Indicator :**
LOCK display is displayed by pushing the LOCK button . Push the LOCK button again to clear display.
4. **OPERATION MODE Indicator :**
When press the MODE button, it shows the current operating mode- :
"AUTO" , "COOL" , "DRY" , or "FAN".
5. **ON/OFF Indicator :**
This symbol appears when the unit is turned on by the RemoCon™ and disappear when the unit is turned off.

NOTE : All signs in the above figure is for the purpose of clear presentation . But during the actual operation only the relative functional signs are shown on the display panel.

AUTO POWER SAVE MODE - Ideal For Power Saving

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



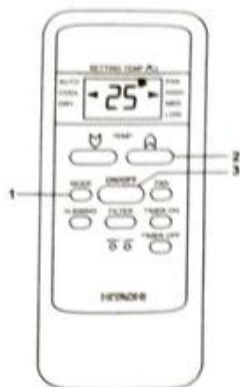
1. Press the MODE key so that the display indicates the AUTO mode of operation .
When AUTO is selected , the device will automatically set itself to ideal comfort temperature (about 25°C) . DigiTemp™ will not work at this time.
2. Press the ON/OFF key. AUTO Operation starts with a beep .
(To stop operation , press the key again)
As the settings are stored in memory in the RemoCon™ , you only have to press the ON/OFF key next time.
3. Wired RemoCon™ shows 'E' code during Auto mode selection by Wireless RemoCon™

NOTE:

If Air-Conditioner is in OFF mode, user can select the desired setting on RemoCon™ , after that press ON/OFF key, Air-Conditioner will start settings displayed on LCD screen.

Description of Handset :Wireless RemoCon™

COOL MODE: Ideal For Comfort Setting



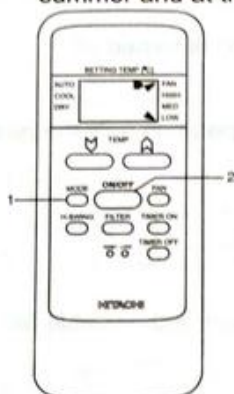
1. Press the MODE key , so that the display indicates the COOL mode of operation .
2. Set the desired room temperature with the DigiTemp™ key. The range 25-28°C is recommended as the room temperature for cooling . If the temperature setting is 25°C , the room temperature will be controlled at around 25°C. The temperature setting and the actual room temperature may vary somewhat depending on environment conditions.
3. Press the ON/OFF key , cooling starts with display of "L" on wired RemoCon™ . Press the key again to stop operation.

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 RemoCon™, you only have to press the ON/OFF key next time
3. Selecting DRY mode on RemoCon™ will work same as COOL mode with all above mentioned function.
4. 31°C & 32°C setting by RemoCon™ will be accepted as 30°C on wired RemoCon™.

FAN MODE - Ideal For Quick Room Air Circulation

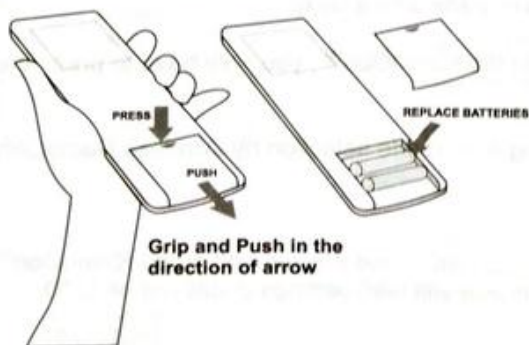
You can use the device simply as an air circulation. Use this function to dry the interior of the cooling unit at the end of summer and at the beginning of season.



1. Press the MODE key so that the display indicates the FAN mode of operation.
2. 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 RemoCon™ , you only have to press the ON/OFF key next time

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.

CAUTION

1. 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.
4. Everytime batteries are replaced, RemoCon™ will go to the factory setting, user has to set personalized setting.

MAINTENANCE

AIR FILTER

Clean the air filter, as the dust accumulates on it as a result of suction of the dust inside the room. It should be cleaned at least every 15 days. However in areas having more dust content, Air filter should be cleaned every 7 to 10 days.

In case the air filter remains uncleaned the air flow will decrease and the cooling capacity will be reduced.

1. Remove the air filter from the suction grill by sliding out.
 2. Wash the air filter, but do not use hot water above 40°C, and then replace it.
 3. When washing it, shake off moisture completely and dry it in shade.
- Do not expose it directly to sun.

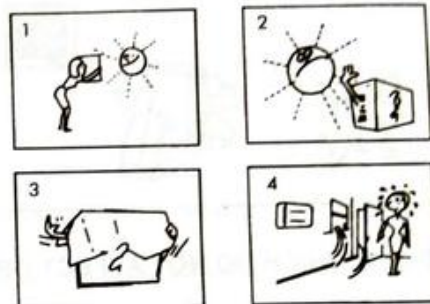


MAINTENANCE AT BEGINNING OF OFF-SEASON

1. Run the unit by setting the operation mode in "FAN" mode for a particular period of time on a fine sunny day.

WHEN IT DOES NOT COOL

1. Is the air filter full of dust?
2. Does the sunlight fall directly on the condensing unit?
3. Is the air flow of the condensing unit obstructed?
4. Are the doors or windows open, or if there any additional source of heat added in the room.



PRECAUTIONS :

The following items required special attention.

Read the entire text carefully, as there are many points and contact your local dealer for service.

In any of the following cases, put off the main power supply and contact your local dealer for service.

- If the switches don't work properly.
- If the safety mechanism (fuse or circuit breaker) is actuated frequently.
- If something is dropped in the air conditioner.
- If water is accidentally enter into air conditioner.
- If the air conditioner malfunctions.



Use the correct power (voltage and frequency) indicated on the unit operate the air conditioner, and only fuses with specified capacity. Don't use pieces of wire instead of fuse.

Do not insert the objects in to the air inlet or outlet when the air conditioner is running. Damage or personal injury may result. Pay special attention when children are around.

- Don't put any obstacles in front of air outlet of the condenser. Also ensure no obstructions in the suction side.
- Don't put plants / pets at the condenser air outlet.
- Don't channel the cool airflow directly at the people, infants, aged or handicapped.
- Install the indoor unit at least 1 metre (about 3 ft.) away from TV set or radio to avoid interference to TV image and noise trouble.



FOR A LONG SERVICE LIFE

Adhere to following points for safe and comfortable operation.

INSTALLATION LOCATION:

- Install the indoor and outdoor units at a strong, stable and level place.
- Consult with your nearest dealer/service man for right installation for the silent and efficient operation of the air conditioner.
- Choose a well ventilated and dry location for the outdoor units.
- Make sure air flows freely around the indoor and outdoors units.
- Avoid location with danger or inflammable gas leakage.

PAY ATTENTION TO NOISE

- While installing select a location with sufficient strength to withstand the units weight and also does not amplify the unit's noise or vibration.
- Choose a location where hot air and noise emitted by the outdoor unit will not disturb the neighbours.
- Do not place objects near the units air outlets. They can cause lowered performance or amplify the noise.
- Consult your local dealer if any noise is noted during operation.

Avoid using the air conditioner in a harsh environment such as :

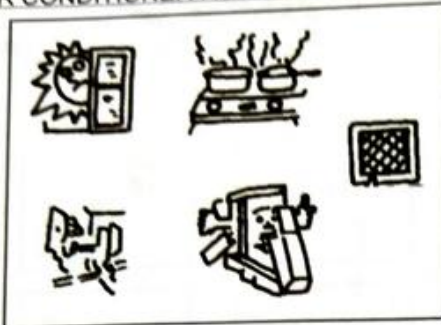
- Where there is lot of machine oil.
- Hot spring reasons.
- Where there is much salt in the air, for example near beaches etc.
- Where there is exposure of sulphur gases. The environment itself can cause a machine malfunction. For details, consult your local dealer.

BEFORE CONTACTING THE SERVICEMAN (TROUBLESHOOTING)

Check the following. You may find the solution to your problem and save your time and money.
No Operation

Check if the power supply main switch OFF
Check if the fuse has blown.
Check if you have a power failure.
Check the Control panel switched ON.

AIR CONDITIONER RUNS BUT DOES NOT COOL:



Is the temperature setting wrong ?

Is the set temperature higher than the room temperature ?

Is window or door open ?

Any obstruction blocking the air outlet or inlet of INDOOR / OUTDOOR Units

Is there any external heat in the room ?

Is the filter clogged ?

PROBLEM WHICH DO NOT AFFECT OPERATION

A gas flow noise may be heard after starting or stopping of the cooling cycle. This is due to the contraction/ expansion of the refrigeration which occurs following the temperature, but is not functional problem.

START UP AFTER EXTENDED SHUT DOWN

Get the air conditioner serviced regularly by
"JCH-IN" approved Dealer.

Remove any accumulated dirt from the OUTDOOR and INDOOR coils.

Clean and / or replace AIR FILTER every 15 days.

Tighten all wiring connection and access panels.



ATTENTION:

This product shall not be mixed with general household waste at the end of its life and it shall be retired accordingly to the appropriated local or national regulations in a environmentally correct way.
Due to refrigerant, oil and other components contained in the Air Conditioner ,its dismantling must be done by a professional installers accordingly to applicable regulations.

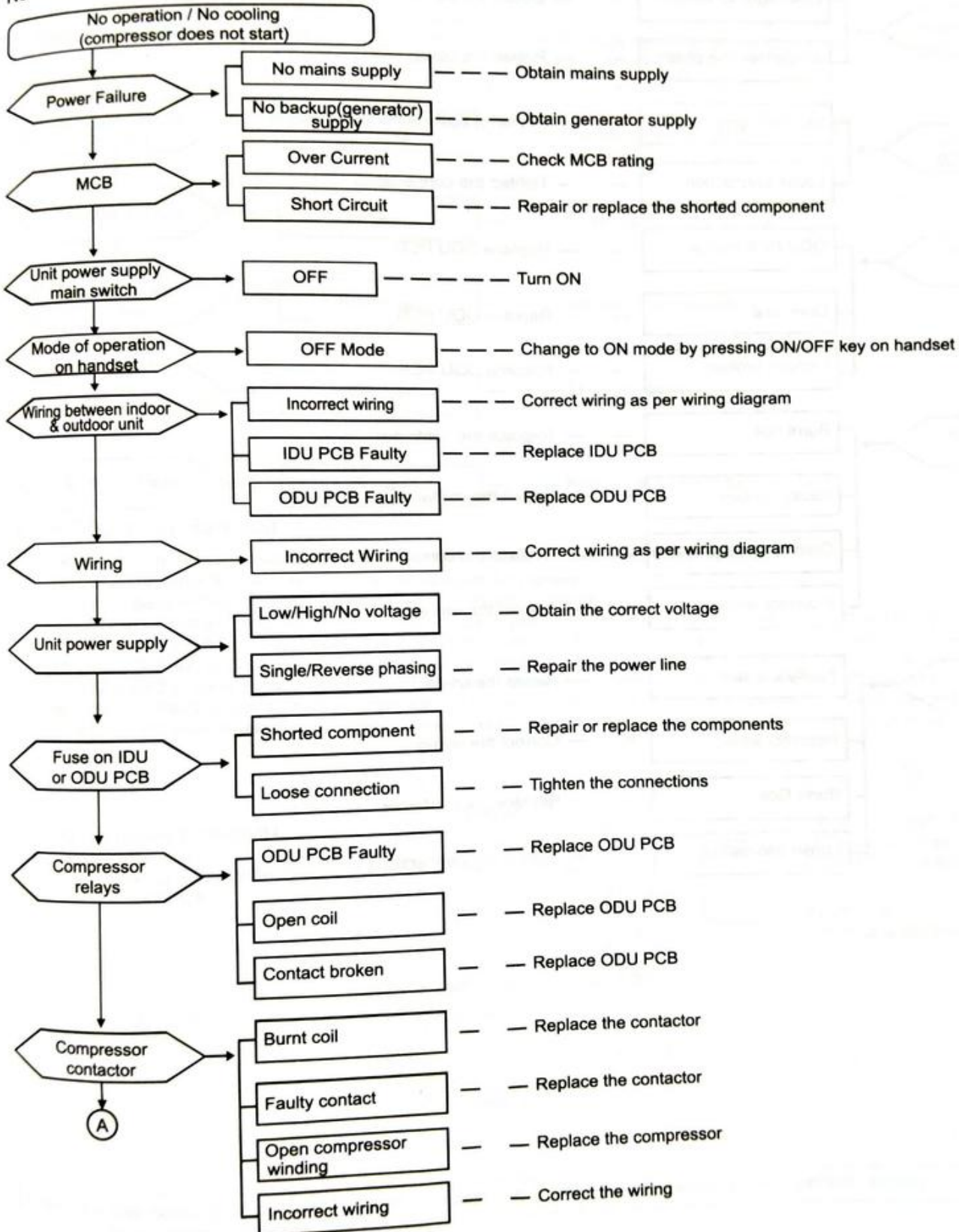
Contact the Hitachi Customer Care for more information.

TROUBLESHOOTING

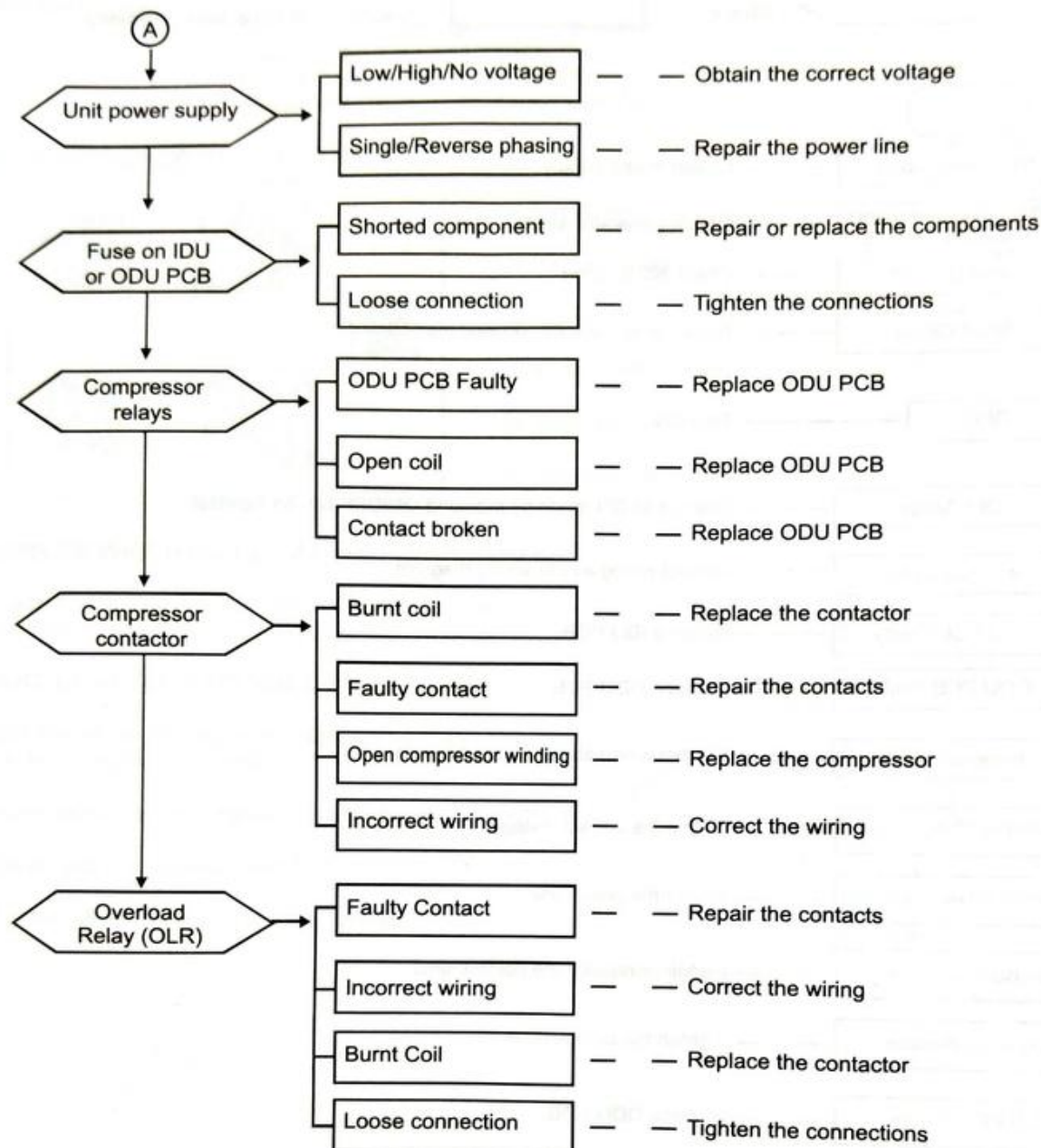
The following charts show efficient checking procedure for trouble :

 : Fault
 : Check
 : Cause
 No brackets : Remedy

No Cooling :

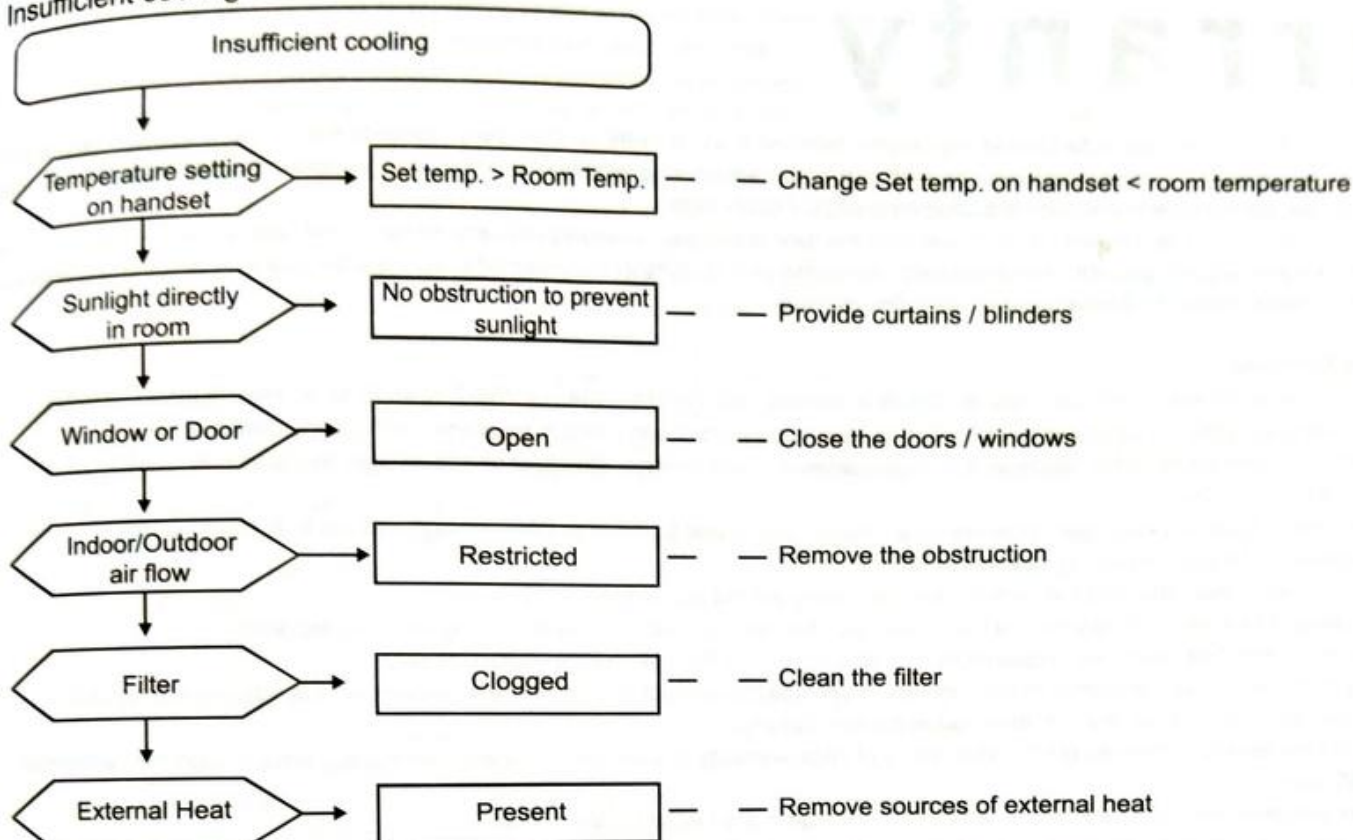


TROUBLESHOOTING



TROUBLESHOOTING

Insufficient cooling :

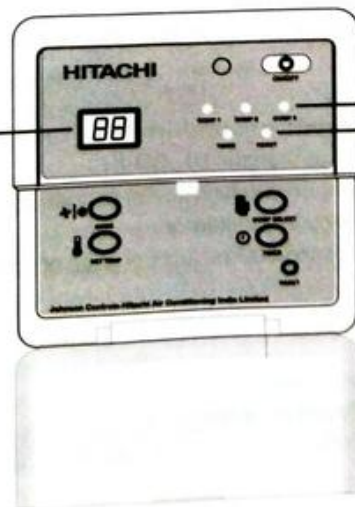


Error Codes on Handset

1. Whenever any abnormal condition occurs then handset will indicate Error Code as follows :

- EEPROM error "EE" will be displayed on handset 7-Segment display.
- Room Sensor Error "E1" will be displayed on handset 7-Segment display.
- LP1/HP1 Fault in Compressor-1 circuit will be displayed by COMP 1 LED blink and RESET LED will be ON on handset.
If LP1/HP1 Fault is sensed more than 2 times in 30 minutes Compressor-1 will be locked and master reset will be required.
- LP2/HP2 Fault in Compressor-2 circuit will be displayed by COMP 2 LED blink and RESET LED will be ON on handset.
If LP2/HP2 Fault is sensed more than 2 times in 30 minutes Compressor-2 will be locked and master reset will be required.
- LP3/HP3 Fault in Compressor-3 circuit will be displayed by COMP 3 LED blink and RESET LED will be ON on handset.
If LP3/HP3 Fault is sensed more than 2 times in 30 minutes Compressor-3 will be locked and master reset will be required.

'EE' on display if EEPROM faulty in Handset.
'E1' on display if Room Sn faulty on IDU PCB.

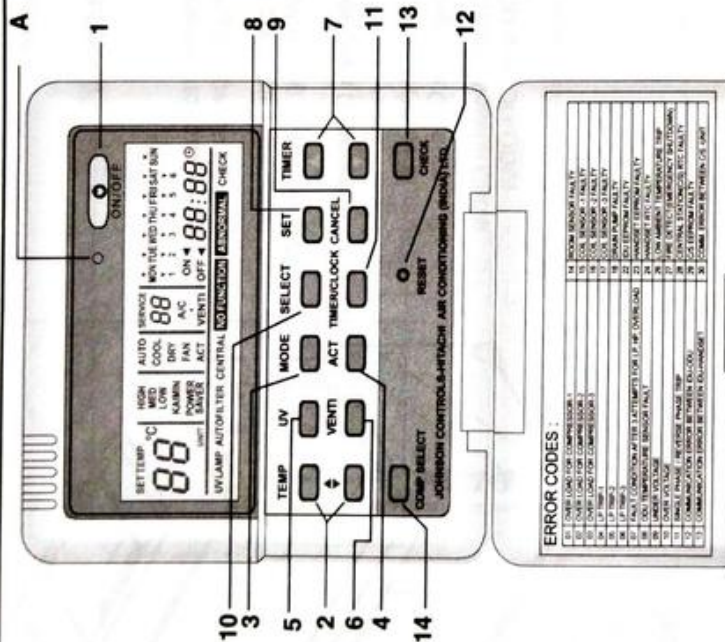


COMP1, COMP2 OR COMP3 LED's blink in case LP/HP Fault detected in respective circuits.

RESET LED ON in case of LP/HP Fault

Note : Please contact your nearest dealer in case any Error Code appears on the handset display.

This is a wired handset. Length of wire cable is about 7 meters. This controls the operation of the air conditioner. Locate this RemoCon™ in the space which is to be air conditioned.



CAUTION

1. Do not expose the RemoCon™ :
 - To direct sunlight
 - To any heating elements
2. Handle the RemoCon™ carefully. Protect it from Water
3. Once any compressor stops it will not restart for about three minutes. This is a feature to protect the air conditioner and does not indicate any failure.
4. All indications are for reference.

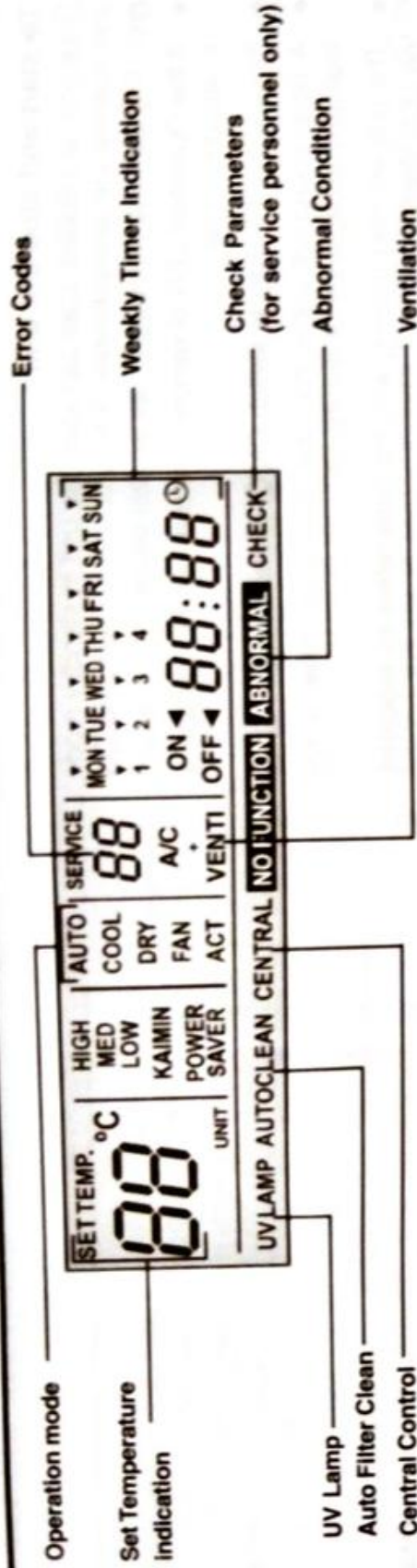
Note :

- (1) For error codes refer page no. 65

A. OPERATION LED

This LED is ON when unit is in running condition.
This LED is OFF when unit is stopped.

1. ON/OFF key
Use this key to ON/OFF your air conditioner.
2. TEMP \blacktriangle key
Use this key to set desired room temperature.
3. MODE key
Use this key to select operating modes. Every time you press it, the mode will change from AUTO \rightarrow COOL \rightarrow FAN
ACT™ (AUTO CLIMATE TECHNOLOGY) Key
Use this key to select ACT Mode.
5. UV Key
Use this key to select Ultra Violet function.
6. VENTI Key
Use this key to select Ventilation function.
7. TIMER \blacktriangle Key
Use this key to select weekly ON/OFF timers.
8. SET Key
Use this key for setting of weekly timers.
9. CANCEL Key
Use this key for cancellation of weekly timers.
10. SELECT Key
Use this key to select various parameters of weekly timers.
11. TIMER/CLOCK Key
Use this key to set Current Day/Current Time/Weekly Timers.
12. RESET key
This key is for service personnel only.
13. CHECK key
This key is for service personnel only.
14. COMP SELECT key
Use this key to select no. of compressors.



LCD screen on RemoCon™

1. Set Temperature Indication

Set temperature from 16 to 32°C can be selected.

2. Operation mode Indication

AUTO, COOL, FAN & ACT mode can be selected.

3. Weekly Timer Indication

This is used to display current day, time & timer

4. ABNORMAL

This symbol blinks when any error occurs (please inform to nearest service station in this case).

5. VENTI

This is used to indicate VENTILATION function selection.

6. UV

This is used to indicate UV Lamp function selection.

7. AUTOCLEAN

This is used to indicate Auto Filter Clean function selection.

8. CENTRAL

This is used to indicate Central Control function selection.

9. **Error code Indication

Error codes are indicated as per corresponding fault.

10. **CHECK

To check functional parameters.

Notes :

- (1) During normal operations, set temperature and mode of operation are displayed continuously on LCD of handset.
- (2) UV Lamp, Auto clean, Drain pump, Ventilation and Central control are optional features.
- (3) ** For service personnel use only.

Remote Control Operation

To start and stop the unit :

Once unit is installed user can keep the unit in standby mode and operate the airconditioner. The unit can be switched ON and OFF from the RemoCon™ as explain below :

- If the Operation LED of remote controller is OFF, the unit is in standby mode.
- Press [ON/OFF] Key to switch ON/OFF the unit.
- A beep sound will come from the remote controller which indicates acceptance of command.
- The unit will start running with the parameters as indicated on LCD display.
- To stop the unit, again press [ON/OFF] key to make the operation LED OFF.
- If the Operation LED of remote controller is OFF, the unit is not running.

To select desired mode

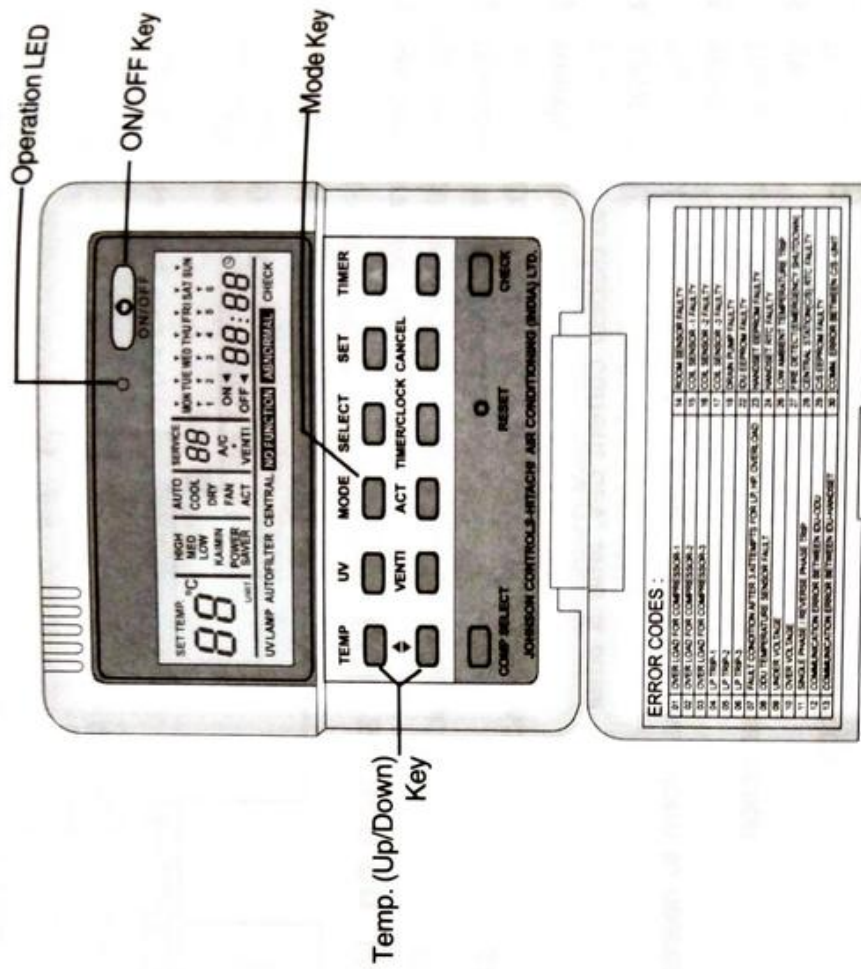
- There are three modes to select AUTO, COOL and FAN
- Changing of MODE is possible even in standby condition.
- If [MODE] key is kept pressed you can toggle in the sequence
AUTO→COOL→FAN

To set desired room temperature

- In COOL mode, press [TEMP \blacktriangle] key.
- Set temperature shall change by 1°C.
- Temperature can be selected in the range of 16 to 32°C.

Notes :

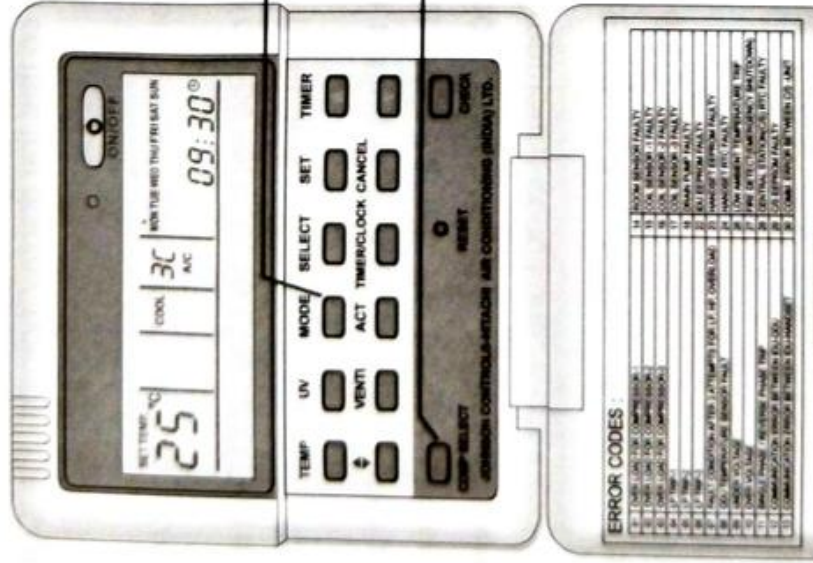
- (1) Suggested room temperature setting is 25-28°C degrees for comfortable human conditions.
- (2) Low temperature setting will result in higher power consumption.



AUTO MODE - Ideal For Power Saving

The unit will automatically select & maintain comfortable temperature. The set temperature cannot be altered in Auto Mode.

- 1 Press [MODE] key so that the display indicates the 'AUTO' symbol.
- 2 When AUTO mode is selected, the unit will automatically set itself to ideal comfort temperature (about 25°C).
- 3 Select the no. of compressors to be operated 1C, 2C or 3C.
- 4 Press [COMP SELECT] key to select no. of Compressors to be operated. 1C→2C→3C



Note :

(1) [TEMP] key will not work in AUTO MODE & FAN MODE.

COOL MODE - Ideal For Comfort Setting

Use the air conditioner for cooling when the outdoor temperature is 22 - 46°C.

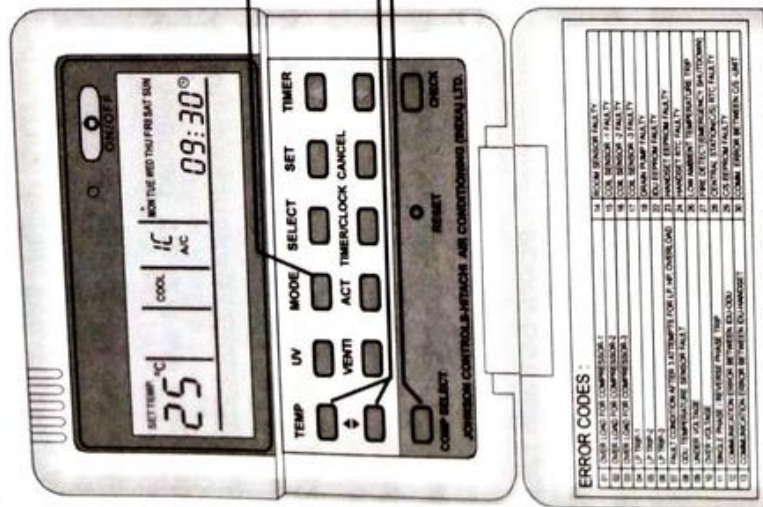
1 Press [MODE] key so that the display indicates the 'COOL' symbol.

2 Set the desired room temperature with [TEMP \updownarrow] Key.

Room temperature can be set from 16°C to 32°C. The range of 25-28°C is recommended.

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.

3 Press [COMP SELECT] key to select no. of compressors to be operated. (1C \rightarrow 2C \rightarrow 3C)

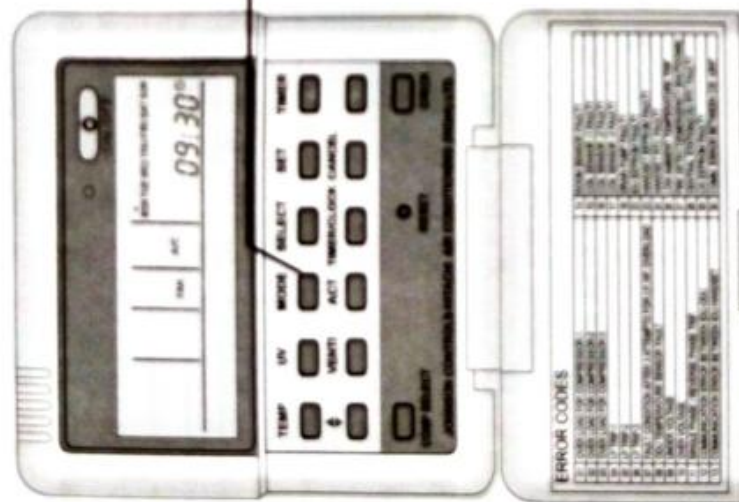


Notes :-

- (1) The cooling function does not start if the temperature setting is higher than the room temperature. The cooling function will start as soon as the set temperature selection is set below the room temperature.
- (2) Low temperature setting will result in higher power consumption.

FAN MODE - Ideal for Room Air Circulation

Use the air conditioner simply as an air circulator. Use this function to dry the interior of the indoor unit at the end of summer and at the beginning of season.

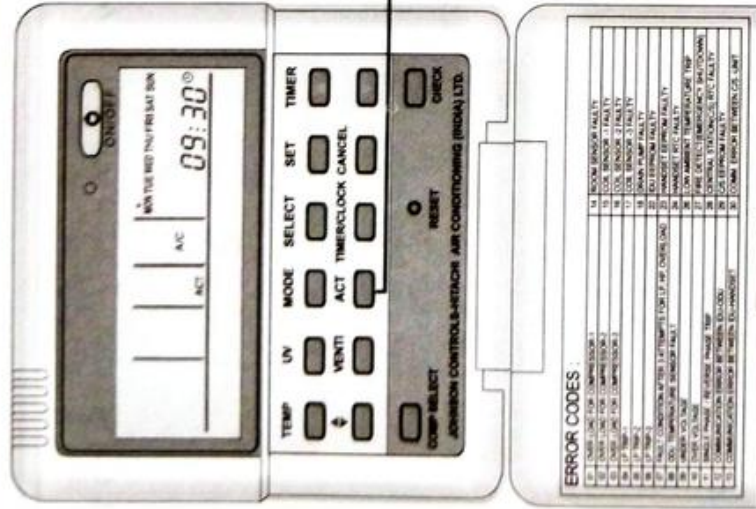


Note :

(1) [TEMP \blacktriangle] key & [COMP SELECT] key will not work in FAN MODE.

AUTO CLIMATE TECHNOLOGY(ACT™)MODE - Intelligent mode for Comfort setting

In ACT™ mode comfort settings shall be selected automatically based on programmed area code and current time.



- 1 Press [ACT™] key to select the ACT™ mode.
- 2 [ACT™] key is toggle key. So, if it is pressed again then it gets deselected and previous mode gets selected.

For efficient working of Auto Climate Technology (ACT™) Mode

1. Please program the unit for the area where it has been installed. (See table on Page 23)
2. Please set current time accurately before selecting the ACT™ Mode. (Refer to page 26)

PROGRAMMING THE AREA CODE -For Auto Climate Technology (ACT™) Mode

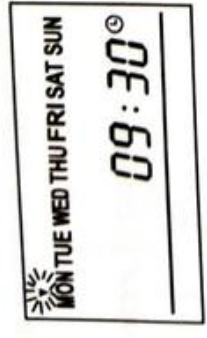
Set the area code at the time of installation or when you shift your air-conditioner to different location Follow the instructions below:

- 1 Keep [ACT™] key pressed continuously for 5 seconds.
- 2 After 5 seconds the display shall be blinking with default value of Area Code.
- 3 Using [TEMP] key select the Area code from 1 to 8 as per the city group in which the unit has been installed. (See table on Page 23)
- 4 Press the [ACT™] key again, a beep sound will come to ensure the acceptance of setting.

HOW TO SET CURRENT TIME / DAY

SET CURRENT DAY

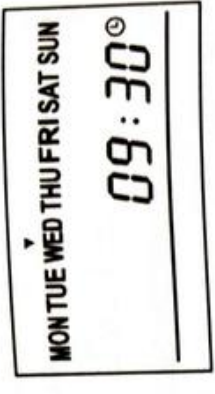
- 1 Press [TIMER/CLOCK] Key to set Timer / Day.



- 2 Press [TIMER \blacktriangleleft] Key to select current day. Blinking arrow indication above the day will be shifted as shown below.



- 3 After selecting current day press [TIMER/CLOCK] Key to select current time further or press [SET] key to come out of setting.

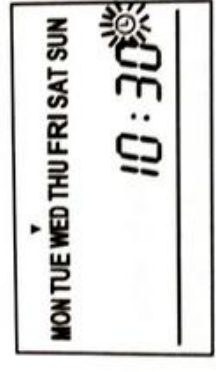


SET CURRENT TIME

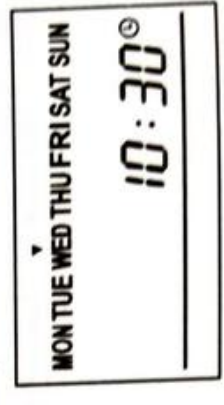
- 1 After setting current day press [TIMER/CLOCK] Key instead of SET Key.



- 2 Press [TIMER \blacktriangleleft] Key to select current time. Clock indication will be blinking as shown below.



- 3 Press [SET] Key to accept new changes, Handset will come out of TIME/DAY setting or press [TIMER/CLOCK] Key to go into weekly timer setting mode.



Notes :-

- (1) While setting time & day if no key is pressed for about 30 seconds handset will come out of the setting without accepting the changes.
- (2) Current time value can be set in step of 1 minute. If [TIMER \blacktriangleleft] key is pressed continuously for some time then time will increment in step of 10 minutes.
- (3) After power failure unit will update its current time in memory.
- (4) Clock symbol will be indicated while setting Current Time / Day.

WEEKLY TIMER

After setting Current Time/Day, press [TIMER/CLOCK] Key instead of [SET] Key to start Weekly Timer Setting.

MON	TUE	WED	THU	FRI	SAT	SUN
ON						
OFF						

Maximum 7 days & 4 timers for each day can be set . In weekly timer programming there are two types of setting.

- Separate Setting:** This is used if we want to program timers of each day separately.
- Same Setting:** This is used if we want to program more than one day with same timer setting.

SEPARATE SETTING EXAMPLE

DAY/Timer	MON	TUE	WED	THU	FRI	SAT	SUN
Timer-1	08:00 (ON)		09:00 (ON)	08:00 (ON)		09:00 (ON)	
Timer-2	13:30 (OFF)		14:00 (OFF)			20:30 (OFF)	
Timer-3			15:30 (ON)				
Timer-4			20:00 (OFF)				

- Here from Monday to Sunday timer setting is different & for Tuesday, Friday & Sunday timers are not set. So for this type of requirement use Separate timer Setting.

SAME SETTING EXAMPLE

DAY/Timer	MON	TUE	WED	THU	FRI	SAT	SUN
Timer-1	08:00 (ON)	08:00 (ON)		08:00 (ON)	08:00 (ON)		
Timer-2	13:30 (OFF)	13:30 (OFF)		13:30 (OFF)	13:30 (OFF)		
Timer-3	15:30 (ON)						
Timer-4	20:00 (OFF)						

- Here for Monday, Tuesday, Thursday & Friday timer setting is same & for Wednesday, Saturday & Sunday timers are not set. So for this type of requirement use Same timer setting.

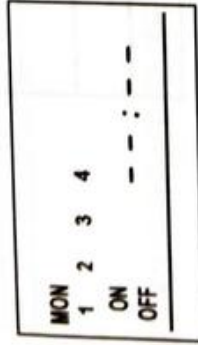
Notes:

- While setting timer if no key is pressed for about 30 seconds handset will come out of the setting without accepting the changes.
- ON/OFF Timer value can be set in step of 10 minutes. If this key is pressed continuously then time will increment faster.
- If any of the timer is selected (ON/OFF) and power regains after failure unit will keep the timers in memory.
- Clock symbol will disappear while setting weekly timer.

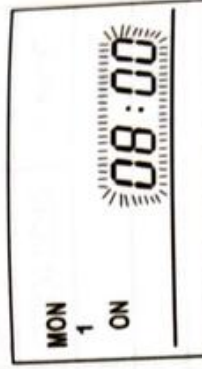
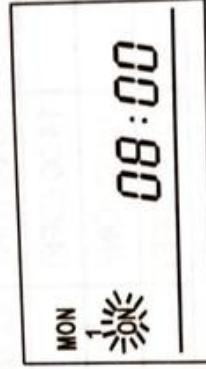
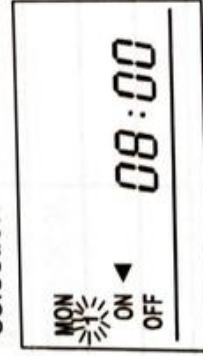
WEEKLY TIMER - SEPARATE SETTING

As explained in Current Time & Day setting after setting Current Time/Day press **TIMER/CLOCK** Key instead of **SET** Key.

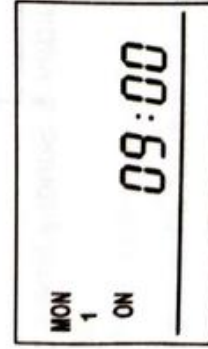
- 1 Press [TIMER \blacktriangleleft] key to select day. Press [SET] Key to confirm required day.



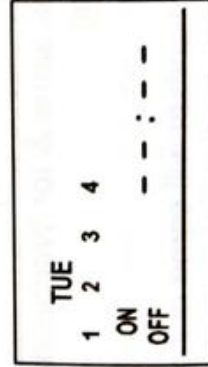
- 2 Press [TIMER \blacktriangleleft] Key to select required timer no. then press [SET] key to confirm selected timer. Timer no. indication will be blinking while selection & will be steady after selection.



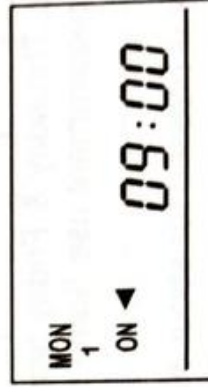
- 5 Press [TIMER \blacktriangleleft] Key to select another timer and set the timer as explained in steps 2 to 4 or press [SET] Key again to go for another day setting.



- 6 Press [TIMER \blacktriangleleft] Key to select another day OR Press [TIMER/CLOCK] Key to come out of weekly timer setting.



- 7 Handset will show current day & time for some time then it will show next immediate timer as shown in screen.



WEEKLY TIMER - SAME SETTING

As explained in Current Time / Day setting after setting Current Time/Day press [TIMER/CLOCK] Key instead of [SET] Key.

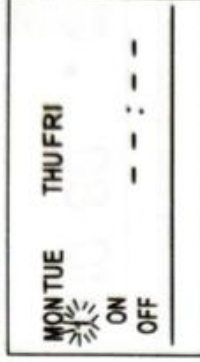
- 1 If user wants to do same timer setting for more than one day than press [SELECT] Key. Arrow indication will start blinking over the day during selection.



- 2 Press [TIMER] Key to select required day. Then Press [SELECT] Key to confirm selection. On 2nd press of [SELECT] Key arrow will disappear and day will be deselected.



- 3 After selecting required days, press [SET] Key to confirm selection of days. Press [TIMER] Key to select required timer no. then press [SET] Key to confirm selection. Timer no. indication will be blinking while selection & will be steady after selection.



- 4 Press [TIMER] Key to select ON/OFF timer. Press [SET] Key to confirm selected timer type. ON/OFF will be blinking while selection & will be steady after selection.



- 5 Press [TIMER] Key to change time value. Press [SET] Key to confirm selected time.



- 6 Press [TIMER] Key to select another timer and set it as explained in steps 3 to 5 or press [SET] Key to confirm all changes & then press [TIMER/CLOCK] key to come out of weekly timer setting.

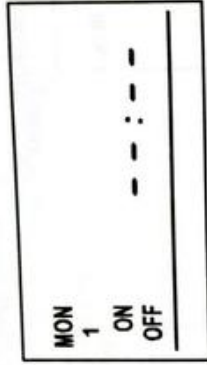
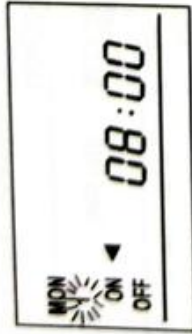


- 7 Handset will show current day & time for some time then it will show next immediate timer as shown in screen.

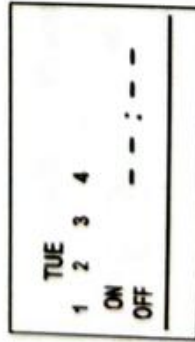


WEEKLY TIMER - HOW TO CANCEL A TIMER OF A DAY

- 1 Select the required timer which user wants to cancel as explained in steps 1 & 2 of separate setting for weekly timer.



- 3 Press [TIMER \blacktriangleleft] Key to select other required day.



- 4 Cancel required timers for selected day as explained in steps 1 to 3. Press [TIMER/CLOCK] Key to come out of weekly timer setting.

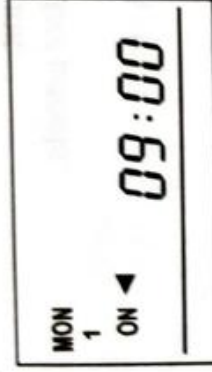
- 2 Press [CANCEL] Key to cancel selected timer.

Press [TIMER \blacktriangleleft] Key to go to other timers of same day and similarly cancel them OR Press [SET] key to go to next day.

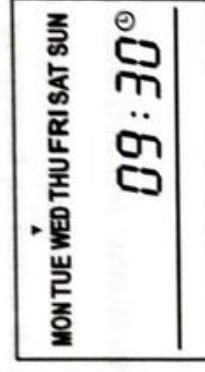
WEEKLY TIMER - HOW TO CANCEL & SET WEEKLY TIMER SETTING

Use this function to deactivate unit operations as per timers for some days out of weekly schedule and again resume with previous timer settings after deactivated days are over.

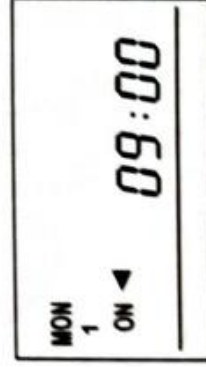
- 1 Once any type of weekly timer is set in the unit then unit works as per timer setting. In this case display will be as shown in screen indicating next immediate timer.



- 2 Press [CANCEL] Key continuously for 5 seconds to cancel weekly timer setting. Then unit will not work as per timer setting. Display will be as shown in screen indicating current time and day marked by clock symbol.



- 3 Press [SET] Key continuously for 5 seconds to set weekly timer setting again. Then unit will work as per weekly timer setting. Display will be as shown in screen indicating next immediate timer.



Notes:

- (1) When weekly timer setting is cancelled, the unit ON/OFF automatic operation as per timers is disabled but all the weekly timer setting values is remembered in the memory.
- (2) When weekly timer setting is set, the unit ON/OFF automatic operation as per timer is enabled and all the previous weekly timer setting values is restored from the memory.