

# INTERACTIVE AIR CONDITIONER

## **OWNER'S GUIDE**



SPLIT AC WITH

INTERACTIVE REMOTE



**TRANE SPLIT AC** 





#### **Dear Customer**

We are **TRANE**<sup>®</sup>, a global leader in heating, ventilation and air conditioning equipment. We come from the house of **Ingersoll Rand**<sup>®</sup>, a \$14 billion company with around hundred manufacturing facilities worldwide. Our 1500 patents for heating, air conditioning and ventilation products are testimony to our spirit of innovation. Today we bring innovation to your home.

At **TRANE**<sup>®</sup>, we create products that are intuitive and easy to operate. They are simple, yet technologically evolved for modern living. **TRANE**<sup>®</sup> Interactive AC is one such product. The **TRANE**<sup>®</sup> Interactive AC assesses, manages and gives feedback on your in-home climate. The ultra slim design brings together simplicity and elegance that complements your home. Once it's in your home, a whole new world of evolved living experiences will open up to you. The 'Trane mode' optimizes comfort and efficiency. 'Efficiency meter' on the remote keeps you updated on energy consumption, and therefore, keeps bills in check. The intelligent cooling sets the most suitable temperature for your home by analyzing the temperature outside. **TRANE**<sup>®</sup> AC creates home environment that promises new levels of comfort, efficiency and convenience.

Welcome to the family of **TRANE**<sup>®</sup>.



## Contents

1. About this manual	4
1.1. Safety Information	5
1.2. Product Overview	10
2. Operation	11
2.1. Remote Operation	11
2.2. Manual and Auto Restart Operation	11
2.3. Indicators	12
2.3.1. Indoor	12
2.3.2. Remote	12
2.4. Remote Controls	13
2.4.1. Range of Operation	14
2.4.1.1. Lock and Indoor Unit range	14
2.4.1.2. Remote and Indoor Unit range	14
2.4.2. Functions	14
2.4.2.1. TRANE Mode	14
2.4.2.2. Cool Mode	15
2.4.2.3. Dry Mode	15
2.4.2.4. Fan Mode	
2.4.2.5. Sleep Mode	15
2.4.2.6. Turbo Mode	16
2.4.2.7. Fan speed	
2.4.2.8. Night latch Mode (Only for units with "TRANE Lock")	
2.4.2.9. Multi Room	16
2.4.2.10. Swing Control	17
2.4.2.11. Power ON and OFF	
2.4.3. Replacement of Batteries	
2.5. Stabilizer Detail	17
3. Maintenance	18
3.1. Cleaning air filter	18
3.2. Maintenance (Unit not in use for long duration)	
3.3. Checks before operation	19
4. Troubleshooting	20
4.1. Error Messages and Actions	21
Warranty	23



#### 1. About this manual

This manual is given as a guide to good practice for operating and periodic maintenance of TRANE Air Conditioners.

This does not contain the full servicing procedures necessary for continued, or successful operation of this equipment. The services of a qualified service personnel must be employed, through medium of maintenance contract with a TRANE service company.

Do not operate before reading manual(s) supplied with this product.

**Cautions** as applicable are shown in this manual. Personal safety and proper operation of this unit require that you follow them carefully. The manufacturer assumes no liability for installations or servicing performed by unauthorised personnel. Always install, operate, inspect and maintain this product in accordance with all applicable standards and regulations (local, state, country, federal, etc.). Keep this user manual carefully for future reference.



## 1.1. Safety Information

	Indica
<b>↑</b> WADMING	IIIuica

Indicates a potentially hazardous situation which, if not avoided, could result in serious injury.

**A** CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or property damage.

#### Obey the following points to prevent electrical shock or fire:

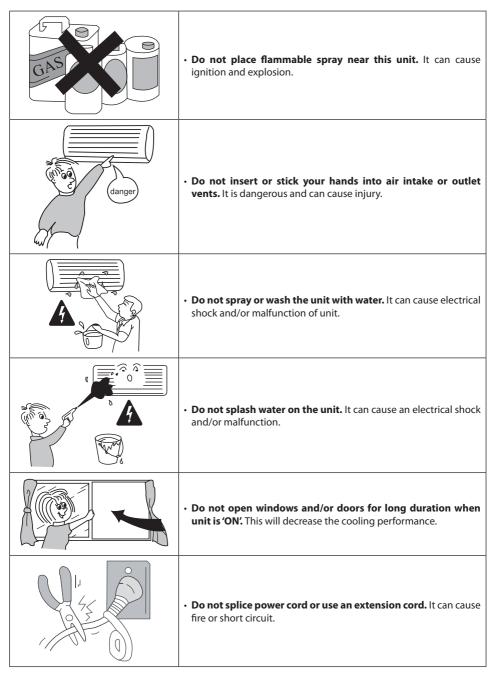
# Don'ts • Do not remove power plug while the unit is in operation. It can cause an electrical shock or fire. · Do not operate this unit with wet hands. It can cause an electrical shock. • Do not pull power cord to remove power plug. It can cause fire.

**↑** WARNING

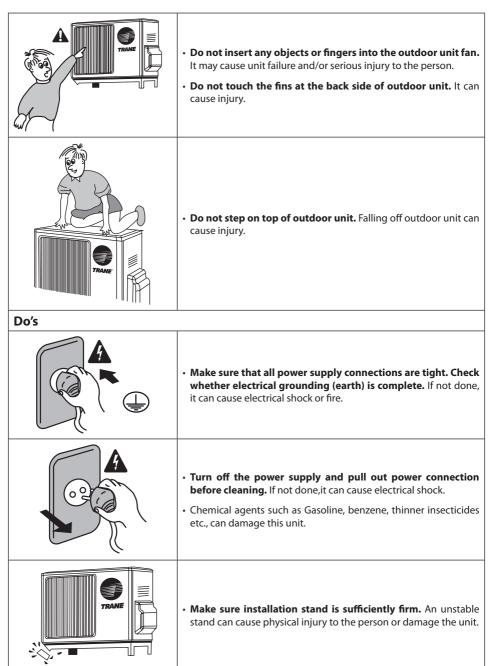
5 48626782

 Do not use longer power cord and/or share a same socket with other electrical appliances. It can cause electrical shock or fire.

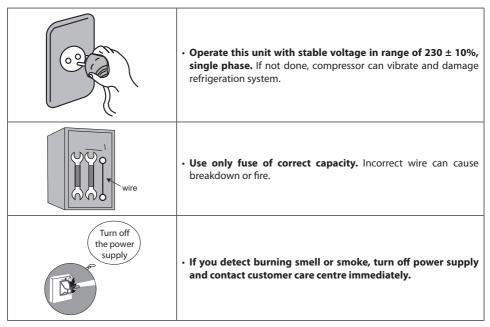


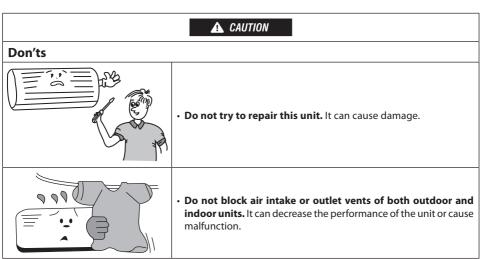




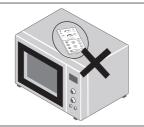












 Do not keep remote on any metals, electronic or heating devices like oven, TV, etc. for a longer period. It may decrease the life of remote.



Do not expose your body to cold air for a long duration.
 It can cause deterioration in physical condition and health problems.

- Do not use water at a temperature above 45 °C to clean, it can deform or discolour front panel.
- Do not dry filters near fire. It can ignite or deform them.
- **Do not drop or throw remote control.** It can cause malfunctioning or breakage.
- Do not use remote under direct sun light. It can create display issues.

#### Do's



• Set the unit at TRANE mode for efficient performance. It will save energy.

• It is suggested to use TRANE recommended stabilizer. For stabilizers check with local TRANE distributor.



## 1.2. Product Overview

#### Indoor unit

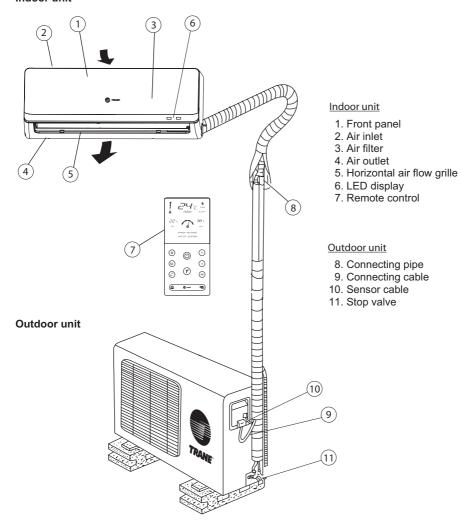


Figure - 1



## 2. Operation

### 2.1. Remote Operation

- · Make sure power is ON
- Select the room which needs to be controlled.
- Refer section 2.4.2 for different functions of remote.

## 2.2. Manual and Auto Restart Operation

Manual operation can be used temporarily in case remote controller is not available.

• Lift Front panel up to an angle, keeping it attached until it makes a clicking sound (Refer Figure - 2).

#### NOTE

Do not lift front panel at an angle above 60 degrees. Do not apply too much force.



Figure - 2

• When you press manual control button (Figure - 3), the unit is switched on at the following default conditions

MODE: COOL	FAN SPEED: MEDIUM	SWING: AUTO	SET TEMP: 24 °C	

• Lower the front panel to its initial position.

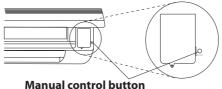


Figure - 3

#### NOTE

- Use object not more than 5mm in diameter to press manual control button.
- To restore remote control operation, use remote control directly.
- The Display LED status will not change when unit is operated through manual control button.

#### **Auto Restart Function**

- · Power cut during operation will stop the unit completely.
- · Unit starts automatically with all previous settings saved in memory function when the power is restored.

#### NOTE

Remote will be in sleep condition after 20 second from last key pressed. Remote wakes up from sleep condition on first key pressed and does not sends command to AC unit and update just the display settings.



## 2.3. Indicators

## 2.3.1. Indoor

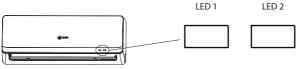


Figure - 4

#### **LED Indication**

Unit status	LED1	LED2
Stand by	OFF	OFF
Stand by + Error on PCB	OFF	RED
Operating without TRANE mode	GREEN	OFF
Operating without TRANE mode and Error on PCB	GREEN	RED
TRANE mode active	GREEN	GREEN
TRANE mode active + Error on PCB	GREEN	GREEN and RED Blinks alternately
Button press on remote	GREEN blink once	No change

#### **Sound Indication**

Unit status	Buzzer
Unit powered ON – in stand by state	One short beep
(Mains Power ON)	
Unit powered ON – in operating state	One short beep
(Mains Power ON)	
Unit powered OFF (stand by) / ON using remote	One long beep
Button press on remote	One short beep

#### 2.3.2. Remote



Trane Mode

Figure - 5



#### 2.4. Remote Controls



Figure - 6

Symbol	Button	Function	Display	Description
<b>(\$5</b> )	Fan speed adjustment	Air flow rate adjustment.	<b>.</b> ⊗	Shows fan speed
(7)	Swing adjustment	Changes the air flow direction	NA*	Changes the air flow direction
<b>©</b>	SLEEP / TURBO mode activation	Toggles between SLEEP, TURBO and Default.	SLEEP / TURIIO	Shows mode selection (SLEEP/TURBO)
<ul><li>♦</li><li>♦</li></ul>	Temperature UP/DOWN	Increase and decrease the set temperature	22 °c ser	Shows temperature selection



Symbol	Button	Function	Display	Description
m	Mode Adjustment	Changes the mode as such, press once for COOL, twice for DRY and thrice for FAN.	COOL   JRY   FAN	Shows mode selection (COOL/DRY/FAN)
7	TRANE Mode	Activates TRANE mode	Refer Figure - 5	Activates TRANE mode
	Power	ON/OFF	NA*	ON/OFF
Â	Night latch mode activation/ deactivation	Activates/deactivates night latch mode on TRANE lock.	<u>.</u>	Shows night latch mode selection
Ф	Multi room (Room Configuration)	Selects the split air conditioner to control.	MRSTER BEDROOM	Shows room selection as for each room AC settings
-	NA*	-	ERROR MESSAGE	Indicates error
-	NA*	-	**************************************	Shows different efficiency zone (Refer section 2.4.2.2)
-	NA*	-	DUT	Shows current outdoor ambient temperature.
-	NA*	-	ROOM	Shows current room temperature.

<sup>\*</sup> NA: Not Applicable

#### 2.4.1. Range of Operation

#### 2.4.1.1. Lock and Indoor Unit range

Range (Indoor)	Range (Outdoor - without any obstacles)	
15 meter	1000 meter	

## 2.4.1.2. Remote and Indoor Unit range

Range (Indoor)	Range (Outdoor - without any obstacles)	
14 meter	160 to 175 meter	

#### 2.4.2. Functions

#### 2.4.2.1. TRANE Mode

- 1. Press to start or stop TRANE mode (Refer Figure 7).
- 2. The unit when powered ON by remote control starts with TRANE mode by default.
- 3. The TRANE mode will set room temperature and fan speed automatically to provide an energy efficient and comfortable environment hence the energy efficiency meter always shows dark green (Refer Figure 5)

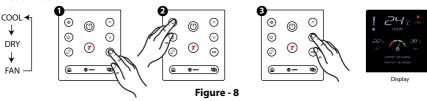


- 4. It will set room temperature automatically based on outdoor temperature.
- 5. Unit shall exit 'TRANE mode' if user changes any of the following: set point, fan speed, mode, and also if button is pressed.



- 6. Unit will not exit 'TRANE mode' if user changes any of the following: ((a) swing button, (b) multi room or (a) night latch button.
- 7. The indication of TRANE mode is **7** button with red back light and the remaining buttons with light OFF. The back light will go OFF after 20 seconds from last operation of remote controller.

#### 2.4.2.2. Cool Mode



- 1. Press MODE (m) to select cool mode, see 'COOL' shown on display (Refer Figure 8).
- 2. Press (\$4) to set fan speed (if required)
- 3. Press or w to increase or decrease set temp. Set temperature range is 17°C 30°C. This is normal mode of cooling. User can set room temperature and AC will run to attain the set temperature.

Temperature can be set based on energy consumption, Refer below table

Zone 1 - Red	Uneconomical
Zone 2 - Yellow	Higher energy consumption
Zone 3 - Light green	Economical
Zone 4 - Dark green	Lower energy consumption



Fiaure - 9

#### 2.4.2.3. Dry Mode

 Press MODE m to select dry mode, see 'DRY' shown on display (Refer Figure - 10).

In dry mode default set temperature is 25°C.

Set temperature and fan speed cannot be changed.

Unit will operate at low fan speed for maximum moisture removal.



In high humidity conditions, user can select dry mode.

#### 2.4.2.4. Fan Mode

Press MODE m to select fan mode, see 'FAN' shown on display.
 Set point temperature cannot be adjustable.
 Fan speed can be adjustable.

#### 2.4.2.5. Sleep Mode

1. Press © to activate sleep mode operation.

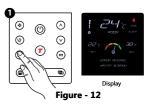
The 'set' temperature will automatically increase by 1°C for each hour for four hours.

After 4 hours unit will stay at latest temperature. E.g., if the set temperature is  $24^{\circ}\text{C}$  and sleep mode is started. After first hour set temperature will increase to  $25^{\circ}\text{C}$  and at the end of fourth hour set temperature will be at  $28^{\circ}\text{C}$ . The unit will stay at  $28^{\circ}\text{C}$ .

Press @ again to disable sleep mode.

15 Set point temperature and fan speed can be adjustable.







#### 2.4.2.6. Turbo Mode

Press © to activate turbo mode. See 'TURBO' on remote display.
 Enables instant cooling by automatically adjusting fan speed to turbo level.

#### NOTE

Fan speed cannot be changed while unit is in turbo mode. The display will not show the fan speed bar (Refer Figure - 13).

User can set this mode for fast cooling. Press (again to disable turbo mode.

#### 2.4.2.7. Fan speed

1. Press fan speed (s) to change fan speed.

Fan speed can be changed as below

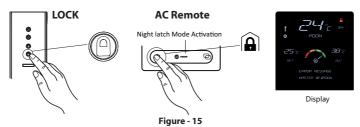
Fan speed is adjusted automatically according to set point and room temperature when FAN speed is set to AUTO mode.

## 

Figure - 14

Display

## 2.4.2.8. Night latch Mode (Only for units with "TRANE Lock")



- 2. Night latch mode helps user to prevent access to home even with valid credential. Night latch mode operates only when Lock and AC are connected on network.
- 3. Refer lock manual for night latch mode features.

#### NOTE

When night latch is activated, deand the confirmation message "NIGHT LATCH ENABLED" will be displayed. If it is not, there will be no display indication (Refer Figure - 15).

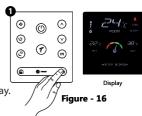
#### 2.4.2.9. Multi Room

Press ⊕ to activate multi room feature.

Multi room feature allow user to select and control two or more AC's with one remote from one room.

Press to switch and control AC in network.

Name of selected AC and its current settings shown on remote display.





#### 2.4.2.10. Swing Control



Figure - 17

- 1. Use swing (s) to adjust air flow direction. The horizontal louver changes direction at defined angle and auto swing. Vertical louver can only be adjusted manually. Move deflector rod manually to adjust air flow direction.
- 2. Adjust air flow direction properly otherwise it can cause discomfort or uneven room temperatures.

#### 2.4.2.11. Power ON and OFF

- 1. Press ON/OFF button to switch ON/OFF the unit. When power is ON, the unit operate in TRANE mode by default.
- 2. Remote back light will glow in red 7.

## 2.4.3. Replacement of Batteries

#### NOTE

- Do not use combination of old and new batteries. Life of battery is more than six months in normal usage.
- To prevent batteries from leakage of electrolyte and damaging controller, remove the batteries, if not in use for long duration.
- Batteries are to be replaced when "Low Battery" error is shown on display.
- · To Replace Batteries,
  - Slide back cover and remove old batteries.
  - Use two new AAA alkaline batteries (Recommended: Duracell®# 'AAA' batteries rated 1.5V)
  - Battery Poles must align with installation position (Refer Figure 18)

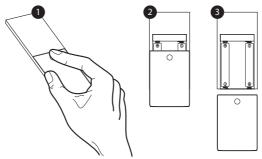


Figure - 18

#### 2.5. Stabilizer Detail

AC Tonnage	Stabilizer KVA
1.0	3
1.5	4
2	5



## 3. Maintenance

## 3.1. Cleaning air filter

Clogged air filter decreases cooling efficiency. Clean filter at interval of two weeks.

#### NOTE

Disconnect power supply before cleaning indoor unit.

Support pole	Lift Front panel up to an angle, keeping it attached until it makes a clicking sound.
	Clean units with soft, dry or moist cloth with water or cleanser.
1	Use support pole to hold the front panel at its place after lifting it.
Filter Handle	Hold the air filter handle and lift slightly to release it from holder, pull downwards to remove air filter from indoor unit.
3	Clean air filter with a vacuum cleaner or water, dry in cool place.
Air freshening filter	<ul> <li>Remove air freshening filters from its supporting frame. Clean air freshening filter monthly, and replace at an interval of 4-5 months.</li> </ul>
	<ul> <li>Install air freshening filter into its original position.</li> </ul>
5	Insert upper part of air filter and place filter into position, make sure left and right edges align correctly.



## 3.2. Maintenance (Unit not in use for long duration)

If you do not plan to use unit for a long time, perform following actions:

- · Clean indoor unit and filters.
- · Operate fan for approximately 30 minutes in order to dry inner side of unit.
- · Switch OFF the unit.
- The outdoor unit requires periodic maintenance and cleaning. The user must not do periodic maintenance of product on their own. Contact dealer or service provider.

## 3.3. Checks before operation

- · Make sure wiring is not broken or disconnected.
- Make sure air filter and front panel are installed.
- Make sure air outlet or inlet is not blocked.

#### NOTE

If air filter screen is blocked by dust or dirt, the performance of the unit will be affected, with higher operation noise and power consumption. Air filter screen should be cleaned regularly.

#### Preparation before season of use

- 1. Be sure that nothing obstructs air outlet and intake vents. (Refer Figure 19)
- 2. Examine whether ground (earth) wire is correctly connected.
- 3. Replace filters if necessary.
- 4. Replace batteries of remote if necessary.
- Examine mounting bracket of outdoor unit, if damaged contact servicing agency.

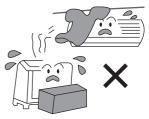


Figure - 19

#### **Ground wiring**

Connect Ground wire to exclusive device correctly, if not employ specialist to install. Grounding pole of socket should be grounded and wired reliably, breaker and air switch with enough capability should be installed in fixed lines. Do not connect grounding cable to gas pipe, water pipe, sewage pipe or any other areas deemed unreliable for this purpose.



## 4. Troubleshooting

## Before requesting service, perform following checks.

Sym	ptom	Remedy	
Waiting	Indoor unit does not give cool air immediately when unit starts.	Compressor restarts after approximately three minutes to protect itself. On compressor restarting units starts to give cool air again	
	Unusual odor blowing from outlet when unit is started.	Open the door or window for 2 minutes and run the AC in Fan mode to allow fresh air inside the room. This helps to remove odors from the room.	
	Sound of water flow during operation.	This is caused by refrigerant flowing inside the unit.	
	Formation of mist while cooling.	Room air is cooled quickly by cold air flow which looks like fog.	
4	Creaking noise during start or stop.	Deformation of plastic because of temperature change.	
OFF OFF	Unit does not operate.	Check electrical system connections, cords and fuses. Check if power supply is within ± 10% of rated supply.	
	Decreased cooling efficiency.	Check 'set temperature'. Check for obstructions in air inlet and outlet. Check air filters for dirt. Check indoor fan speed. Check any other openings in the room.	
	Remote control does not work correctly.	Check effective distance to indoor unit.  Check low battery error indication on remote display.	

If the trouble has not been corrected, please contact a local dealer or the nearest customer service centre. Be sure to inform them of the details of malfunctions and unit model number.

#### NOTE

Do not attempt to repair the unit yourself. Always consult an authorized service provider



## 4.1. Error Messages and Actions

Error Code	Error Description	Error Displayed on Remote	Unit Response	Action to be taken by user
0x01	EEPROM ERROR	ERROR 01 EEPROM communication error contact service technician	- Unit stops working	Contact service technician
0x02	COMPRESSOR FAILURE ERROR OR Refrigerant Leakage Error	Error 02 Compressor failure or refrigerant leakage contact service technician		
0x03	FILTER CHOKE ERROR	Error 03 Filter choke error -Clean the filter	Unit operates as per user settings	Clean filters
0x04	INDOOR TEMP SENSOR ERROR (Room)	Error 04 Room temp sensor failure contact service technician	Cool mode or Dry mode: Unit operate with Compressor OFF Fan mode: Operates as per user setting	. Contact service
0x05	OUTDOOR TEMP SENSOR ERROR	Error 05 outdoor temp sensor failure contact service technician	Operates indoor unit and outdoor unit as per user setting. If TRANE mode is activated unit should operate at set point 24 °C.	technician
0x06	INDOOR COIL SENSOR ERROR	Error 06 Indoor temp sensor failure contact service technician	Cool mode or Dry mode: Unit operate with Compressor OFF Fan mode: Operates as per user setting	Contact service technician
0x08	COMMUNICATION ERROR	Error 08 Communication error contact service technician	Stop indoor unit and outdoor unit	
0x09	BATTERY LOW ERROR	Error 09 Low battery please change the battery	Operates indoor unit and outdoor unit as per user setting.	Change battery
0x0A	INPUT POWER ERROR	ERROR 10 IDU ERROR - INPUT POWER PROBLEM	Unit stops working	Check the power cord / Contact service technician
0x0B	FAN FAILURE ERROR	ERROR 11 IDU ERROR - FAN FAILURE		Contact service technician



Error Code	Error Description	Error Displayed on Remote	Unit Response	Action to be taken by user		
-	Remote not in network range	NETWORK NOT FOUND	Unit operates as per previous settings.	Remote must be in network range		
-	Connect to network (if user did factory reset on the remote)	CONNECT TO NETWORK	Unit operates as per previous settings	Contact service technician		
-	AC switched OFF (main power OFF)	SET POINT TEMP + INFRARED ACTIVATED + NO NETWORK FOUND		Switch ON main power/check the plug		
Lock	Lock with AC					
-	Lock not installed	NIGHT LATCH FAILED LOCK NOT INSTALLED		Lock is not in network		
-	Night latch not operating	NIGHT LATCH FAILED PLEASE CHECK YOUR LOCK		Change Battery of Lock or Check Lock is in Network by doing Home/ Away Operations		
-	Door Open	NIGHT LATCH FAILED DOOR OPEN		Close door		

Refer Section 2.3.1 for LED indications



## Warranty

#### **Terms & Conditions**

**Ingersoll-Rand** (hereinafter referred to as 'the company') warrants to the purchaser that this **TRANE split air conditioner** ("Product") carries a warranty for the period mentioned above, commencing from the date of purchase. The company will repair or replace free of charge any part or parts of the Product, if the defect is due to the defective material or workmanship. Warranty involves repairing of defective product/parts and does not entitle the purchaser for the replacement for a new product.

#### **Preventive Maintenance:**

Maintenance check up will be carried out 2 times in a period of 12 months from the date of invoice on request from the customer and will include:

- General cleaning and brushing up of dirt and muck.
- · Cleaning of air filter.
- · Checking of electronic parts and its contacts.

#### **Breakdown Complaints**

 Company will put in reasonable efforts to promptly attend to any breakdown complaint lodged by the customer at company's authorized sales and service dealer or branch office or at the centralized customer care centre.

#### **Compressor Warranty Clause:**

The 5 year compressor warranty will continue even after the expiry of 1 year period from the date of purchase. This warranty covers the compressor only. Gas charging is included only when the compressor is defective & inoperative. During the additional warranty period it does not cover parts or any part such as

- Condenser Coil
- · Evaporator Coil
- Capillary
- Suction Line
- Electronic Parts

#### Other terms

- 1. This warranty is confined to the first Purchaser of the Product only & is non transferable.
- The warranty for both machine and compressor will terminate upon expiry of the warranty period irrespective of whether or not the Product has been in use for any reason whatsoever.
- 3. The warranty for both Product and the compressor will automatically be terminated on the date of expiry of the warranty period. No notice of expiry of warranty will be given at any time.
- 4. Compressor warranty will be applicable only if the Product is maintained by authorized dealers of the company.
- 5. For Products installed beyond the municipal limits of the jurisdiction of the authorized service centre/company's service centre/ authorized dealer's service centre, all expenses incurred in collection of the Product or part/s thereof from the company's service centre/authorized service centre/authorized dealer's service centre, as well as expenses incurred in connection with deputing of service personnel/ technicians towards to and fro travel, conveyance and other incidentals etc. (together referred to as "Transportation and Handling Expenses") shall be borne by the Purchaser.
- The company or the authorized sales and service dealer will advise the Purchaser whether to effect repairs/replacement at the site of installation or at the company or authorized sales and service dealer's premises and the decision of the representative shall be final.
- The company reserves the right to replace the defective part with a substitute equivalent part without affecting the performance of the Product.
- 8. In case of any transit damage, the Product shall be repaired by the concerned service centre on charges and warranty for the unexpired period will continue.
- 9. In the event of repairs/replacement of any part/s of the Product, this warranty will thereafter continue and remain in force only for the unexpired period of the warranty. Moreover, the time taken for repair/replacement and in transit whether under the warranty or otherwise shall not be excluded from the warranty period.
- 10. The warranty extended herein is in lieu of implied conditions and warrants under the law & is confined to the repair or replacement of defective parts and does not cover any consequential or resulting liability, damage or loss arising from such defects. Also, the warranty in no case shall extend to payment of any monetary consideration whatsoever or replacement or return of the Product as a whole.
- 11. The company's obligation under this warranty shall be limited to repair or providing replacement of part/s only. The maximum claim/s if entertained by the company will be subject to the maximum retail price of the Product purchased or the purchase price, whichever is lower.
- 12. Any change of Address of the purchaser will be intimated to the concerned service centre/dealer for continuation of warranty.
- 13. The company shall not be liable or deemed to be in default for any delay or failure in performance resulting directly or indirectly from causes beyond its reasonable control including delay in repairing due to non-availability of any part/component, labour problem, presence of any foreign object or living creature (e.g. Rat, lizard, Insects, Ants etc.) inside the unit, use of harmful chemicals, usage of unit in an abnormally corrosive alkaline/acidic atmosphere, restrictions and regulations of the Govt., public movement, war and any other unavoidable circumstances vis-a-vis the import of supplies and raw material or if the company is otherwise prevented from performing its functions under this warranty.



- 14. While the company undertakes responsibility to supply only the compressor free of cost during warranty period, cost of labour, transportation and other incidental expenditures shall be borne by the customer after the lapse of first year Product warranty.
- 15. In areas where voltage fluctuates +/-10% of rated or usable voltage, customer is advised to use a branded voltage stabilizer which steps up or down the incoming voltage to give an output of 230V. For any fluctuation beyond the reasonable specified limit, the company shall not be responsible and this warranty shall immediately stand terminated.
- 16. Earthing provision is necessary for safety. Improper domestic wiring leading to hazards such as shock or fire is not covered under this warranty.
- 17. While the Company will make every effort to carry out the repairs at the earliest, it however is made expressly clear that the company is under no obligation to do so in a specified period of time.
- 18. Any special, indirect or consequential property or commercial damage of any nature whatsoever is not covered under this warranty.
- The warranty is issued at Bangalore, and Courts at Bangalore shall have exclusive jurisdiction over matters covered or flowing from this
  warranty.
- 20. The 1 year warranty is applicable to all parts except for Plastic & Rubber parts.

#### Warranty is null and void in the following cases:

- 1. Warranty card is not duly filled and mailed back to the service centre for registering the Product within three months of purchase.
- 2. Complete warranty card is not presented to authorized personnel at the time of repair.
- 3. Product is not used according to the instructions given in the user manual.
- 4. Original serial number is removed/tampered with.
- 5. Modification or alteration of any nature whatsoever is made in the electrical circuit/physical construction of/to the Product.
- 6. Installation/repair work carried out by person/agency other than authorized agency.
- 7. Site conditions that do not confirm to the recommended operating conditions of machine.

For any product related assistance, please call on Toll free number: 1800 102 9986.

