

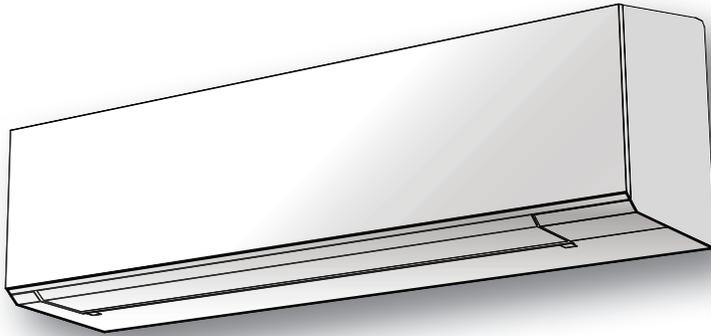
# TOSHIBA

## OWNER'S MANUAL

R32

***INVERTER***

ENGLISH



### **AIR CONDITIONER (SPLIT TYPE)**

For general public use

**Indoor unit**

**RAS-B07, 10, 13, 16J2KVSG-E**

**Outdoor unit**

**RAS-07, 10, 13, 16J2AVSG-E**

**RAS-10, 13, 16J2AVSG-E1**

## PRECAUTIONS FOR SAFETY



Read the precautions in this manual carefully before operating the unit.



This appliance is filled with R32.

### ■ Warning indications on the air conditioner unit

Warning indication	Description
<div style="border: 1px solid black; padding: 5px;">  <p><b>CAUTION</b></p> <hr/> <p><b>BURST HAZARD</b> Open the service valves before the operation, otherwise there might be the burst.</p> </div>	<p><b>CAUTION</b></p> <p><b>BURST HAZARD</b></p> <p>Open the service valves before the operation, otherwise there might be the burst.</p>

- Keep this manual where the operator can easily find it.
- Read the precautions in this manual carefully before operating the unit.
- This appliance is intended to be used by expert or trained users in shops, in light industry and on farms, or for commercial use by lay persons.
- The precautions described herein are classified as DANGER, WARNING and CAUTION. They both contain important information regarding safety. Be sure to observe all precautions without fail.

### **DANGER**

- Do not install, repair, open or remove the cover. It may expose you to dangerous voltages. Ask the dealer or the specialist to do this.
- Turning off the power supply will not prevent potential electric shock.
- The appliance shall be installed in accordance with national wiring regulation.
- Means for disconnection from the supply having a contact separation of at least 3 mm in all poles must be incorporated in the fixed wiring.
- The appliance must be stored in a room without continuously operating ignition sources (for example, open flames, an operating gas appliance or an operating electric heater).
- In order to avoid fire, explosion or injury, do not operate the unit when harmful gases (e.g. flammable or corrosive) are detected near the unit.

### **WARNING**

- Do not expose your body directly to cool or warm air for a long time.
- Do not insert your finger or any article into the air inlet/outlet.
- When an abnormality (burning smell, etc.) occurs, stop the air conditioner and disconnect the power supply or turn off the breaker.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

## PRECAUTIONS FOR SAFETY

- This appliance is not intended for use by person (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- The air conditioner must be installed, maintained, repaired and removed by a qualified installer or qualified service person. When any of these jobs is to be done, ask a qualified installer or qualified service person to do them for you.
- Children should be supervised to ensure that they do not play with the appliance.
- Do not use any refrigerant different from the one specified (R32) for complement or replacement. Otherwise, abnormally high pressure may be generated in the refrigeration cycle, which may result in a failure or explosion of the product or an injury to your body.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Be aware that refrigerants may not contain an odour.
- Do not pierce or burn as the appliance is pressurized. Do not expose the appliance to heat, flames, sparks, or other sources or ignition. Else, it may explode and cause injury or death.

### CAUTION

- Do not wash the unit with water. It may cause an electric shock.
- Do not use this air conditioner for other purposes such as preserving food, breeding animal, etc.
- Do not step or put anything on the indoor/outdoor unit. It may cause an injury or damage the unit.
- Do not touch aluminium fin because it may cause an injury.
- Before cleaning the unit, turn off the main switch or the circuit breaker.
- When the unit won't be used for a long time, turn off the main switch or the circuit breaker.
- It is recommended that maintenance be performed by a specialist when the unit has been operated for a long time.
- The manufacturer shall not assume any liability for the damage caused by not observing the description of this manual.

## 1 INDOOR UNIT DISPLAY



- ① ECO (White)
- ② Wi-Fi access (White) \*
- ③ Hi-Power (White)
- ④ Timer (White)
- ⑤ Operation mode  
- Cool (Blue)  
- Heat (Orange)

- Display brightness can be adjusted, follow procedure on 16.
- \* Require Wireless LAN connecting adapter which available as accessory.

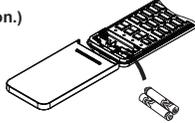
## 2 PREPARATION BEFORE USE

### Preparing Filters

1. Open the air inlet grille and remove the air filters.
2. Attach the filters. (see detail in the Installation Manual).

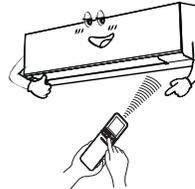
### Loading Batteries (when use wireless operation.)

1. Remove the slide cover.
2. Insert 2 new batteries (AAA type) following the (+) and (-) positions.



### Clock Setup

1. Push **CLOCK** by tip of the pencil.  
If timer indication is flashing, go to the next step 2.
2. Press **ON** or **OFF** : adjust the time.
3. Press **SET** : Set the time.



### Remote Control Reset

- Push **RESET** by tip of the pencil or
1. Remove the batteries.
  2. Press **POWER**.
  3. Insert the batteries.

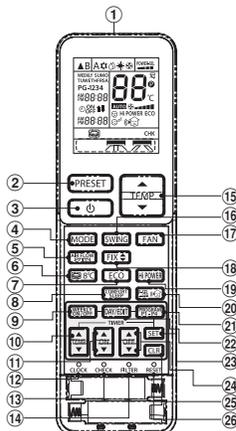
## 3 AIR FLOW DIRECTION

1	Press <b>FIX</b> : Move the louver in the desired vertical direction.	
2	Press <b>SWING</b> : Swing the air automatically and press again to stop.	
3	For horizontal direction, adjust manually.	

- Note:**
- Do not move the louver manually by others.
  - The louver may automation positioning by some operation mode.

## 4 REMOTE CONTROL

- ① Infrared signal emitter
- ② Memory and Preset button (PRESET)
- ③ Start/Stop button
- ④ Mode select button (MODE)
- ⑤ Air flow button
- ⑥ Fireplace/8°C button
- ⑦ ECO button
- ⑧ Comfort sleep button (COMFORT SLEEP)
- ⑨ Weekly timer (ON/OFF)
- ⑩ Temp for Weekly timer
- ⑪ On timer button (ON)
- ⑫ Set clock button (CLOCK)
- ⑬ Check button (CHECK)
- ⑭ Filter reset button (FILTER)
- ⑮ Temperature button (TEMP)
- ⑯ Swing louver button (SWING)
- ⑰ Fan speed button (FAN)
- ⑱ Set louver button (FIX)
- ⑲ High power button (HI-POWER)
- ⑳ Power selection/Silent button (P-SEL/SILENT)
- ㉑ Program P1 - P4
- ㉒ Day/Edit button
- ㉓ Setup button (SET)
- ㉔ Off timer button (OFF)
- ㉕ Clear button (CLR)
- ㉖ Reset button (RESET)



- Note:**
- The provided Remote Controller is a wireless type, which also can be used as a wire. Please see "How to Connect The Remote Controller for Wired Operation", located in installation instruction, in case of wired control is required.
  - In wire operation, remote controller will return to initial condition (PRESET, TIMER and CLOCK will return to initial condition) when user shutdown power supply of Air conditioner.

## 5 COOLING / HEATING / FAN ONLY OPERATION

1. Press **MODE** : Select Cool ❄️, Heat ☀️ or Fan only 🌀.
2. Press **TEMP** : Set the desired temperature. Min. 17°C, Max. 30°C, Fan Only: No temperature indication
3. Press **FAN** : Select AUTO, LOW, LOW+, MED, MED+, HIGH or QUIET.

## 6 AUTOMATIC OPERATION

To automatically select cooling, heating or fan only operation

1. Press **MODE** : Select Auto A.
2. Press **TEMP** : Set the desired temperature. Min. 17°C, Max. 30°C
3. Press **FAN** : Select AUTO, LOW, LOW+, MED, MED+, HIGH or QUIET.

## 7 DRY OPERATION

For dehumidification, a moderate cooling performance is controlled automatically.

1. Press **MODE** : Select Dry ☁️.
2. Press **TEMP** : Set the desired temperature. Min. 17°C, Max. 30°C

**Note :** DRY mode fan speed is set to Auto only.

## 8 HI-POWER OPERATION

To automatically control room temperature and airflow for faster cooling or heating operation (except in DRY and FAN ONLY mode)

Press **HI-POWER** : Start and stop the operation.

## 9 ECO OPERATION

To automatically control room temperature to save energy (except in DRY and FAN ONLY mode)

Press **ECO** : Start and stop the operation.

**Note :** Cooling operation; the set temperature will increase automatically 1 degree/hour for 2 hours (maximum 2 degrees increase).  
For heating operation the set temperature will decrease.

## 10 FIREPLACE AND 8°C HEATING OPERATION

### Fireplace Operation

Keep indoor unit's fan blowing continuously during thermo off, to circulate heat from other sources over the room. There are three setting parameters: Default setting > Fireplace 1 > Fireplace 2

### Fireplace 1:

During thermo off period, the indoor unit's fan will continue to run by the same speed, previously selected by end-user.

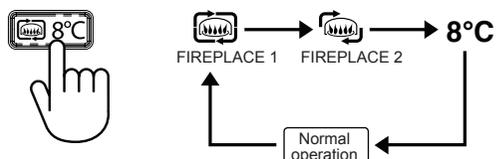
### Fireplace 2:

During thermo off period, the indoor unit's fan will continue to run at super-low speed, programmed from factory.

### 8°C Heating Operation (8°C)

Heat mode operation for keep room temperature (5-13°C) with less of energy usage.

### Fireplace and 8°C Heating Operation



**Note:**

- While Fireplace operation on heating mode, indoor unit fan always runs and cold air breezing might be occurred.
- Fireplace and 8°C will operate in Heating mode only.
- Fireplace doesn't work with IMS multi system combination.

## 11 COMFORT SLEEP OPERATION

For comfortable sleep, automatically control air flow and automatically turn OFF (Except in DRY mode).

1. Press : Select 1, 3, 5 or 9 hrs for OFF timer operation.
2. Press to cancel the comfort sleep operation.

**Note:** The cooling operation, the set temperature will increase automatically 1 degree/hour for 2 hours (maximum 2 degrees increase). For heating operation, the set temperature will decrease.

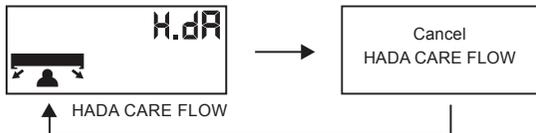
## 12 HADA CARE FLOW OPERATION

### HADA CARE FLOW

Air flow upward to the ceiling, provide Indirect air flow to body and homogenize room temperature.

### HADA CARE FLOW operation

Press For start and stop HADA CARE FLOW



### Note:

- During HADA CARE FLOW mode, FIX and SWING button cannot active

## 13 POWER-SELECTION AND SILENT OPERATION (OUTDOOR UNIT)

### Power-Selection (P-SEL)

This function is used when the circuit breaker is shared with other electrical appliances. It limits the maximum current and power consumption to 100%, 75%, or 50% and can be implemented by POWER-SELECTION. The lower percentage, the higher saving and also longer compressor lifetime.

### Note:

- When the level is selected, POWER-SEL level flashes on remote LCD display for 3 seconds.  
In case of 75% and 50% level, number "75" or "50" also flashes for 2 seconds.
- Due to the reason that POWER-SELECTION function limits the maximum current, inadequate cooling or heating capacity may occur.

### Silent Operation (SILENT)

Keep outdoor unit operating silently to ensure either yourself or neighborhood will have a tight sleep in nighttime. By this feature, the heating capacity will be optimized to deliver such silent experience. The silent operation can be selected from one of two purposes (Silent 1 and Silent 2). There are three setting parameters: Standard level > Silent 1 > Silent 2

### Silent 1:

Though operating silently, the Heating (or Cooling) capacity is still prioritized to ensure having sufficient comfort inside the room.

This setting is a perfect balance between the Heating (or Cooling) capacity and the Sound level of outdoor unit.

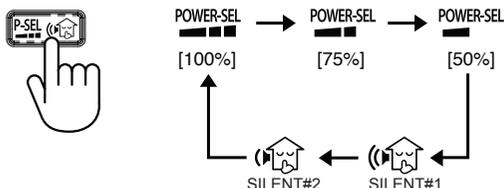
### Silent 2:

Compromising the Heating (or Cooling) capacity to the Sound level in any circumstance where the outdoor unit's sound level is highly prioritized. This setting has a purpose to reduce the maximum sound level of outdoor unit by 4 dB(A).

### Note:

- While activating of Silent operation, inadequate heating (or cooling) capacity may occur.

### Power-Selection and Silent Operation (Outdoor Unit)



## 14 TIMER OPERATION

Set the timer when the air conditioner is operating.

	Setting the ON Timer	Setting the OFF Timer
1	Press : Set the desired ON timer.	Press : Set the desired OFF timer.
2	Press : Set the timer.	Press : Set the timer.
3	Press : Cancel the timer.	Press : Cancel the timer.

### Note:

- Keep the remote control in accessible transmission to the indoor unit, otherwise, the time lag of up to 15 minutes will occur.
- The setting will be saved for the next same operation.

## 15 PRESET OPERATION

Set your preferred operation for future use. The setting will be memorized by the unit for future operation (except airflow direction).

1. Select your preferred operation.
2. Press and hold for 3 seconds to memorize the setting. The displays.
3. Press : Operate the preset operation.

## 16 DISPLAY LAMP BRIGHTNESS ADJUSTMENT

To decrease the display lamp brightness or turn it off.

1. Press and hold for 3 seconds until brightness level (d0, d1, d2 or d3) is shown on remote control LCD then release the button.
2. Press or to adjust brightness in 4 levels.

Remote control LCD	Operation display	Brightness
d3	Lamp illuminates full brightness.	100%
d2	Lamp illuminates 50% brightness.	50%
d1	Lamp illuminates 50% brightness and the operation lamp is turned off.	50%
d0	All lamps are turned off.	All turned off

- In the examples of d1 and d0, the lamp illuminates for 5 seconds before going off.

## 17 AUTO RESTART OPERATION

To automatically restart the air conditioner after the power failure (Power of the unit must be on.)

### Setting

1. Press and hold the RESET button on the indoor unit for 3 seconds to set the operation. (3 beep sound and OPERATION lamp blink 5 time/sec for 5 seconds)
2. Press and hold the RESET button on the indoor unit for 3 seconds to cancel the operation. (3 beep sound but OPERATION lamp does not blink)
  - In case of ON timer or OFF timer are set, AUTO RESTART OPERATION does not activate.

## 18 SELF CLEANING OPERATION (COOL AND DRY OPERATION ONLY)

To protect bad smell caused by the humidity in the indoor unit.

1. If the button is pressed once during "Cool" or "Dry" mode, the fan will continue to run for other 30 minutes, then it will turn off automatically. This will reduce the moisture in the indoor unit.
2. To stop the unit immediately, press the more 2 times within 30 seconds.

## 19 TEMPORARY OPERATION

In case of the misplaced or discharged remote control

- Pressing the RESET button, the unit can start or stop without using the remote control.
- Operation mode is set on AUTOMATIC operation, preset temperature is 24°C and fan operation is automatic speed.



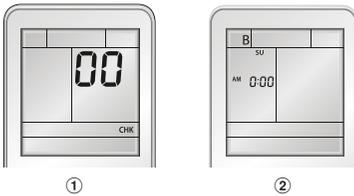
## 20 REMOTE CONTROL A-B SELECTION

To separate using of remote control for each indoor unit in case of 2 air conditioners are installed nearby.

### Remote Control B Setup.

1. Press RESET button on the indoor unit to turn the air conditioner ON.
2. Point the remote control at the indoor unit.
3. Push and hold CHECK button on the Remote Control by the tip of the pencil. "00" will be shown on the display. (Picture ①)
4. Press MODE during pushing CHECK. "B" will show on the display and "00" will disappear and the air conditioner will turn OFF. The Remote Control B is memorized. (Picture ②)

- Note:** 1. Repeat above step to reset Remote Control to be A.  
2. Remote Control A has not "A" display.  
3. Default setting of Remote Control from factory is A.



## 21 OPERATION AND PERFORMANCE

1. Three-minute protection feature: To prevent the unit from being activated for 3 minutes when suddenly restarted or switched to ON.
2. Preheating operation: Warm up the unit for 5 minutes before the heating operation starts.
3. Warm air control: When the room temperature reaches the set temperature, the fan speed is automatically reduced and the outdoor unit will stop.
4. Automatic defrosting: Fans will stop during defrost operation.
5. Heating capacity: Heat is absorbed from outdoors and released into the room. When the outdoor temperature is too low, use another recommended heating apparatus in combination with the air conditioner.
6. Consideration for accumulated snow: Select the position for outdoor unit where it will not be subjected to snow drifts, accumulation of leaves or other seasonal debris.
7. Some minor cracking sound may occur when unit operating. This is normal because the cracking sound may be caused by expansion/contraction of plastic.

**Note:** Item 2 to 6 for Heating model

### Air conditioner operating conditions

Operation	Temp.	Outdoor Temperature	Room Temperature
Heating		-15°C ~ 24°C	Less than 28°C
Cooling		-15°C ~ 46°C	21°C ~ 32°C
Dry		-15°C ~ 46°C	17°C ~ 32°C

## 22 MAINTENANCE

- ⚠ Firstly, turn off the circuit breaker.

### Indoor Unit and Remote Control

- Clean the indoor unit and the remote control with a wet cloth when needed.
- No benzene, thinner, polishing powder or chemically-treated duster.

### Air filters

Clean every 2 weeks.

1. Open the air inlet grille.
2. Remove the air filters.
3. Vacuum or wash and then dry them.
4. Reinstall the air filters and close the air inlet grille.

## 23 TROUBLESHOOTING (CHECK POINT)

### The unit does not operate.

- The power main switch is turned off.
- The circuit breaker is activated to cut off the power supply.
- Stoppage of electric current
- ON timer is set.

### Cooling or Heating is abnormally low.

- The filters are blocked with dust.
- The temperature has been set improperly.
- The windows or doors are opened.
- The air inlet or outlet of the outdoor unit is blocked.
- The fan speed is too low.
- The operation mode is FAN or DRY.
- POWER SELECTION function is set 75% or 50% (**This function is depend on remote controller.**)

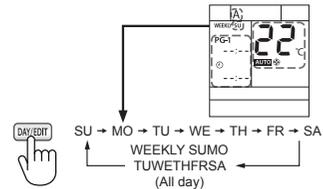
## 24 WEEKLY TIMER OPERATION

### How to set WEEKLY TIMER

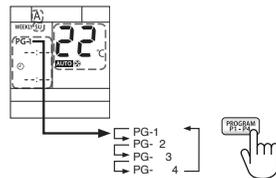
1. Press DAY/EDIT to enter WEEKLY TIMER setting.



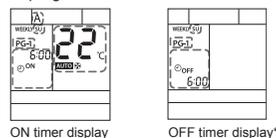
2. Press DAY/EDIT to select desired day in sequence. The sequence of day symbol appears on the LCD.



3. Press PROGRAM to select the program number.
  - The program 1 is ready for setting while DAY/EDIT is pressed PG-1 appears on the LCD.
  - Press PROGRAM to change the program number in the sequence program 1 to program 4.

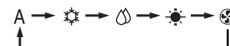


4. Press ON or OFF to select the desired time.
  - The time can be set between 0:00 and 23:50 in 10 minute intervals.
  - Press and hold the button to change setting time for 1 hr.
  - Only one of ON or OFF timer can be set on each program.



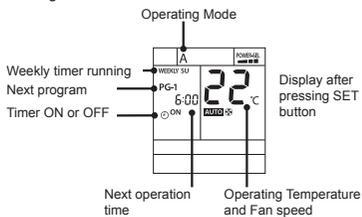
\*OFF timer is used to stop the air conditioner only. The display does not show Operation mode, Temperature, Fan speed and others.

5. Press MODE to select desired operation.



6. Press TEMP or +/- to select desired temperature.
  - The temperature can be set between 17°C and 30°C.
7. Press FAN to select the desired fan speed.
8. Add operations, if required.
  - Press 8°C to use 8°C operation.
  - (Notes: Fireplace cannot select and memorize in weekly function)
  - Press ECO to use ECO operation.
  - Press Hi-POWER to use Hi-POWER operation.
  - Press SILENT to use Silent operation.

- Adding or editing the program.  
The program can be set to perform on all the required days until **[SET]** is pressed to confirm the setting.
- If adding or editing a program is required, please repeat steps 2 - 8 before setting confirmation.
- After adding or editing, press **[SET]** to confirm the setting\*.



\*Point remote control at air conditioner receiving module then, press SET button until you hear the "PiPi" sound. This means the setting operation has been completed. As the air conditioner is receiving the signal, you will hear separate "Pi" sounds corresponding to the number of days in the selected setting. An incomplete setting is indicated if the TIMER lamp is blinking. Press **[SW/TBY]** twice.

#### Notes :

- Place the remote control where the indoor unit can receive the signal. This will increase the accuracy of the timing between the remote control and the air conditioning unit.
- The ON/OFF timer can be set during the WEEKLY TIMER operation. In this situation, the air conditioner will first follow the normal timer until it is complete; then, it will return to the WEEKLY TIMER function.
- During WEEKLY TIMER operation, all of operation such as MODE, TEMP, FAN, HI-POWER, ECO and etc., can be adjusted but when the clock reaches the program setting, the operation will return to the set items in the program.
- When the remote control is sending a signal to the air conditioner, avoid interference from objects that can block the signal.

#### Edit Weekly timer program

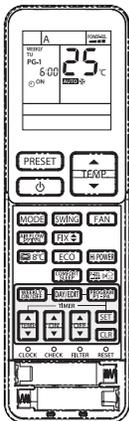
To edit the program after confirming the weekly timer setting, follow steps 1 - 3 below.

- Press **[DAY/EDIT]**.
  - The day of the week and the program number of the current day will be displayed.
- Press **[DAY/EDIT]** to select the day of the week and press **[PROGRAM]** to select program number to be confirmed.
  - Resetting the operation.
- Press **[SET]** to exit confirming mode.

#### Deactivating WEEKLY TIMER operation

Press **[SW/TBY]** while "WEEKLY" is displayed on the LCD.

- The "WEEKLY" indicator will disappear from the LCD. However, the program will remain in the remote control.
- The TIMER lamp goes off.
- To reactivate the WEEKLY TIMER operation again, press **[SW/TBY]** again, LCD shows the next program. The program, after reactivation, is related to the clock time.



#### To delete programs

##### The individual program

- Press **[DAY/EDIT]**.
  - The day of the week and the program number is displayed.
  - Select the day to delete the program.
- Press **[PROGRAM]** to select the program number to be deleted.
- Press **[CLR]**.
  - ON or OFF timer will be cleared and the LCD will blink.
- Press **[SET]** to delete the program.
  - Press **[SET]** while the LCD is blinking. The program has now been deleted.

##### All programs

- Press **[DAY/EDIT]**.
  - The day of the week and the program number will be displayed.
- Press **[CLR]** and hold for 3 seconds.
  - All programs will be deleted and LCD displays current operation.

#### Notes :

Make sure the remote control receiving module on the air conditioner receives the signal from the remote control.

**TOSHIBA**