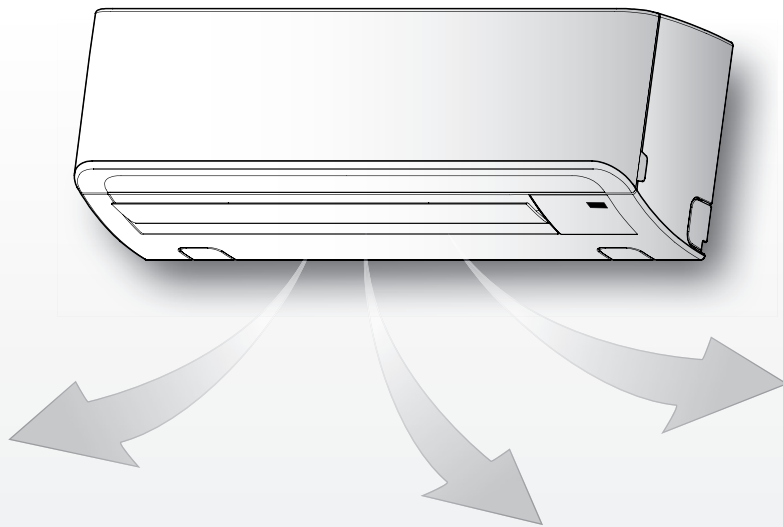


TOSHIBA

OWNER'S MANUAL



AIR CONDITIONER (SPLIT TYPE)

For general public use

Indoor unit




RAS-10, 13, 16N3KVP Series

Outdoor unit

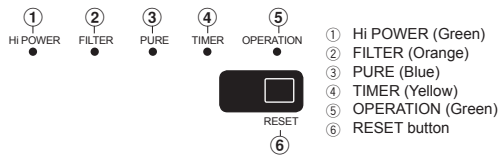
RAS-10, 13, 16N3AVP Series

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PRECAUTIONS FOR SAFETY

 DANGER	<ul style="list-style-type: none"> 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.
 WARNING	<ul style="list-style-type: none"> Do not expose your body directly to cool 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 is not intended for use by persons (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. Children should be supervised to ensure that they do not play with the appliance. Do not use any refrigerant different from the one specified 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.
 CAUTION	<ul style="list-style-type: none"> 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



2 PREPARATION BEFORE USE

Preparing Filters

- Open the air inlet grille and remove the air filters.
- Attach the filters. (see detail in the accessory sheet).

Loading Batteries

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

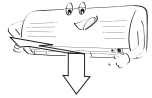


Clock Setup

- Push **CLOCK** by tip of the pencil.
- Press **TEMP**: adjust the time.
- Press **SET**: Set the time.

Remote Control Reset

Press **RESET** for reset.

3 AIRFLOW DIRECTION

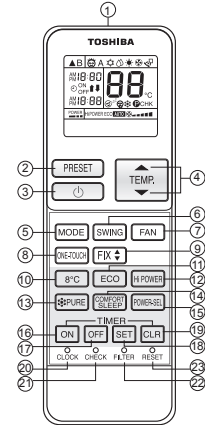
1	Press FIX : Move the louver in the desired vertical direction.	
2	Press SWING : Swing the air automatically and press again to stop.	
3	For horizontal direction, adjust manually.	

Note:

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

4 REMOTE CONTROL

- Infrared signal emitter
- Memory and preset button (PRESET)
- Start/Stop button
- Temperature up/down and Timer or clock up/down button (TEMP.)
- Mode select button (MODE)
- Swing louver button (SWING)
- Fan speed button (FAN)
- One Touch button (ONE-TOUCH)
- Set louver button (FIX)
- 8 degree celcius operation button (8°C)
- Economy button (ECO)
- High power button (HI-POWER)
- Plasma Air Purifier button (PURE)
- Comfort sleep button (COMFORT SLEEP)
- Power selection button (POWER-SEL)
- On timer button (ON)
- Off timer button (OFF)
- Setup button (SET)
- Clear button (CLR)
- Clock setup button (CLOCK)
- Check button (CHECK)
- Filter reset button (FILTER)
- Reset button (RESET)



5 ONE-TOUCH

Press the "ONE-TOUCH" button for fully automated operation that is customised to the typical consumer preferences in your region of the world. The customised settings control temperature air flow strength, air flow direction and other settings to provide you alternate contact with "ONE-TOUCH" of the button. If you prefer other settings you can select from the many other operating functions of your Toshiba unit.

Press **ONE-TOUCH**: Start the operation.

6 AUTOMATIC OPERATION

To automatically select cooling, heating, or fan only operation

- Press **MODE**: Select A.
- Press **TEMP**: Set the desired temperature.
- Press **FAN**: Select AUTO, LOW, LOW+, MED, MED+, HIGH, or Quiet.

7 COOLING / HEATING / FAN ONLY OPERATION

- Press **MODE**: Select Cool, Heat, or Fan only.
- Press **TEMP**: Set the desired temperature.
Cooling: Min. 17°C, Heating: Max. 30°C, Fan Only: No temperature indication
- Press **FAN**: Select AUTO, LOW, LOW+, MED, MED+, HIGH, or Quiet.

Note: QUIET is super low fan speed for quiet operation.

8 DRY OPERATION (COOLING ONLY)

For dehumidification, a moderate cooling performance is controlled automatically.

- Press **MODE**: Select Dry.
- Press **TEMP**: Set the desired temperature.

9 AIR PURIFYING OPERATION

During air conditioner operation

Press **PURE** to start and stop plasma air purifier and air ionizer operation. The plasma air purifier and air ionizer can be activated or deactivated during air conditioner is stopped and the air ionizer starts in conjunction with plasma air purifier operation.

Note: The FILTER indicator (orange) turns on after PURE operation is performed for about 1000 hours.

10 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.

11 ECO OPERATION

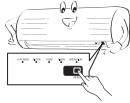
To automatically control room to save energy (except in DRY and FAN ONLY mode)

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.

12 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 25°C and fan operation is automatic speed.



13 TIMER OPERATION

Setting the ON Timer		Setting the OFF Timer	
1	Press for enter ON timer setting	Press for enter OFF timer setting	
2	Press for select desired ON timer.	Press for select desired OFF timer.	
3	Press for set timer.	Press for set timer.	
4	Press for cancel timer.	Press for cancel timer.	

Daily timer allows the user to set both the ON & OFF timers and will be activated on a daily basis.

Setting Daily Timer

1	Press for enter ON timer setting	4	Press for select desired OFF timer.
2	Press for select desired ON timer.	5	Press
3	Press for enter OFF timer setting	6	Press again during the (↑ or ↓) blink.

- During the daily timer is activating, both arrows (↑, ↓) are indicated.
- 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.

14 PRESET OPERATION

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

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

15 AUTO RESTART OPERATION

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

Setting

- 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)
 - 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.

16 POWER-SELECTION OPERATION

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

- Press : Select: (for 100%), (for 75%), (for 50%)
- When the level is selected, PWR-SEL level flashes on 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 SELECT FUNCTION limits the maximum current, inadequate capacity may occur.

17 COMFORT SLEEP OPERATION

To save energy while sleeping, automatically control air flow and automatically turn OFF.

- Press : Select 1, 3, 5 or 9 hrs for OFF timer 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.

18 8°C OPERATION

- Press button to change to 8°C set temperature heating operation.
- Press to adjust setting temperature from 5°C to 13°C.

Note: 8°C will operate in Heating mode only. If Air conditioner performs in cooling operation (including automatic cooling) or dry operation it will change to heating operating.

19 MAINTENANCE

- ⚠ Firstly, turn off the circuit breaker.

Filter Reset (Some models only)

FILTER lamp lights on; the filter must be cleaned.

To turn off the lamp, push the RESET button on the indoor unit or the FILTER button on the remote control.

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.

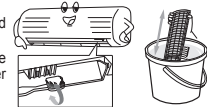
Cleaning the air ionizer (Once every six months)

- Turn off air conditioner using remote control and power supply.
- Fully open the vertical air flow louvers by hand.
- Use a toothbrush to rub the ends of metal pin three or four times.

Note: Do not use cotton swabs or other objects with fluff.

Cleaning the plasma air purifier unit (About 1000 hours performed)

- Turn off air conditioner using remote control and power supply.
- Take out the air inlet grille (See detail in installation manual).
- Take out the plasma air purifier by grasp the handle, and the pull it out.
- Soak in hot water at 40°C to 50°C for about 10 to 15 minutes and rub up, down, left, right and rub surface gently with a sponge.
- Allow to dry thoroughly in the shade.
- Attach the plasma air purifier by grasp the handle and insert into the right and left guide rails.
- Press both ends of the plasma air purifier until the protrusions on both sides of the plasma air purifier are completely inserted.
- Attach the air filter, and then close the air inlet grille.



20 SELF CLEANING OPERATION (COOL AND DRY OPERATION ONLY)

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

- 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.
- To stop the unit immediately, press the more 2 times within 30 seconds.

21 OPERATION AND PERFORMANCE

- Three-minute protection feature: To prevent the unit from being activated for 3 minutes when suddenly restarted or switched to ON.
- Preheating operation: Warm up the unit for 5 minutes before the heating operation starts.
- Warm air control: When the room temperature reaches the set temperature, the fan speed is automatically reduced and the outdoor unit will stop.
- Automatic defrosting: Fans will stop during defrost operation.
- 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.
- 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.
- 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	-10°C ~ 46°C	21°C ~ 32°C
Dry	-10°C ~ 46°C	17°C ~ 32°C

22 TROUBLESHOOTING (CHECK POINT)

The unit does not operate.	Cooling or Heating is abnormally low.
<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 SELECT FUNCTION is set at 75% or 50%.

23 REMOTE CONTROL A-B SELECTION

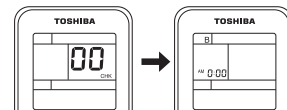
To separate using of remote control for each indoor unit in case of 2 air conditioner are installed nearby.

Remote Control B Setup.

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

Note:

- Repeat above step to reset Remote Control to be A.
- Remote Control A has not "A" display.
- Default setting of Remote Control from factory is A.



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