## TOSHIBA

## Carrier

# REMOTE CONTROLLER FOR AIR CONDITIONER (SPLIT TYPE)

### **Remote Controller**

#### Model name:

Wireless remote controller kit

## RBC-AX31U(W)-UL

| Generic model name | Wireless remote controller<br>and signal receiving unit  |
|--------------------|--|
| RBC-AX31U(W)-UL    | WX-TA01UES<br>(Wireless remote controller<br>model name) |



Thank you very much for purchasing TOSHIBA/Carrier Remote controller for Air Conditioner.

Please read this owner's manual carefully before using your Remote controller for Air Conditioner

• Be sure to obtain the "Owner's manual" and "Installation manual" from constructor (or dealer).

Request to constructor or dealer

• Please clearly explain the contents of the Owner's manual and hand over it.

## Contents

| 1  | PRECAUTIONS FOR SAFETY2                               |
|----|---|
| 2  | PART NAMES AND FUNCTIONS                              |
| 3  | CORRECT USAGE   |
| 4  | TIMER OPERATION                                       |
| 5  | HOW TO ADJUST AIR DIRECTION10                         |
| 6  | SLIDE SWITCH  |
| 7  | HOW TO INSERT BATTERIES11                             |
| 8  | HOW TO HANDLE THE REMOTE CONTROLLER 12                |
| 9  | HOW TO USE THE REMOTE CONTROLLER CORRECTLY $\dots$ 13 |
| 10 | ADDRESS14   |
| 11 | HOW TO PERFORM EMERGENCY OPERATION15                  |
| 12 | BEFORE ASKING FOR REPAIR WORK                         |

## **1** PRECAUTIONS FOR SAFETY

### 🕂 WARNING

#### WARNINGS ABOUT INSTALLATION

• Make sure to ask the qualified installation professional in electric work to install the remote controller.

If the remote controller is inappropriate installed by yourself, it may cause electric shock or fire, etc.

Make sure to install the air conditioner specified by TOSHIBA/Carrier and ask the
exclusive dealer when installing. If the air conditioner is installed by yourself, it may cause
electric shock or fire, etc.

#### WARNINGS ABOUT OPERATION

- Prevent any liquid from falling into the remote controller. Do not spill juice, water or any kind of liquid. It may cause malfunction, electric shock or fire, etc.
- When you are aware of any error with the air conditioner (smells like something burning, etc.), immediately turn off the circuit breaker to stop the air conditioner, and make contact with the dealer.

If the air conditioner is continuously operated with an error, it may cause malfunction, electric shock or fire, etc.

#### WARNINGS ABOUT MOVEMENT AND REPAIR

- Do not repair any unit by yourself. Whenever the air conditioner needs repair, make sure to ask the dealer to do it. If it is repaired imperfectly, it may cause electric shock or fire, etc.
- When reinstalling the air conditioner, contact with the dealer. If the installation is insufficient, it may cause electric shock or fire, etc.

## 

#### **CAUTIONS ABOUT INSTALLATION**

- · Do not install the remote controller in a place where its signals do not reach the indoor unit.
- Do not install the remote controller in the place under the direct sunlight and close to any heat source. It may cause malfunction.
- The fluorescent lamp with rapid start system or inverter system may disturb the signal reception. For details, contact with the dealer of the air conditioner you have purchased.

#### CAUTIONS ABOUT OPERATION

- Do not drop or apply strong shock to the air conditioner. It may cause malfunction of the remote controller.
- · Use batteries that meet the specifications.

EN

## **2** PART NAMES AND FUNCTIONS

### ■ Remote Controller (WX-TA01UES)

• Up to 8 indoor units in a group can be controlled by one remote controller. (See page 14)

Illustration of LCD shown below is for explanation. It may differ from the actual LCD.



**1** Transmitting unit

#### 2 ON/OFF button

Starts and stops the air conditioner alternately.

**3** Mode button Selects desired operation mode.

#### 4 Fan speed button

#### **5** Timer set button

Used to setup the timer. (See page 9)

6 Filter button

No function

- 7 ACL button Used after batteries are replaced or the slide switch is switched. (See page 11)
- 8 Slide switch (See page 11)
- 9 Battery compartment (See page 11)

#### 10 Cover

Slide the cover downward holding its both sides.

#### 11 Remote controller sensor

Senses the ambient temperature when the remote controller is selected with the sensor button.

#### 12 LCD

Displays the air conditioner operation mode. (This illustration shows all display contents.)

#### 13 AUTO louver display differs according to the installed unit. (See page 10)

#### 14 Setup temperature button

Adjust the set point. Set a desired set point by pushing § (a) or  $\bigcirc$  .

#### 15 Swing/air direction button (See page 10)

16 Address button (See page 14)

#### 17 Ventilation button

Use this when a ventilation fan or other unit, purchased on the market, has been connected.

#### 18 Sensor button

Selects the temperature sensor of the remote controller.

The temperature sensor of the indoor unit is selected by default. While the indoor unit temperature sensor is selected, sis displayed on the display.

### Signal Receiving Unit

- The signal receiving unit is attached to the indoor unit.
- Hereinafter, all remote controller button names are indicated with respective symbols displayed on the remote controller.

Example: ON/OFF button  $\rightarrow \bigcirc$ 



- 1 Emergency operation button (See page 15)
- 2 Signal receiving unit

Receives signals from the remote controller.

#### **3** Display lamp

Any of these lamps flashes while an error occurs. When an lamp flashes, see "BEFORE

#### ASKING FOR REPAIR WORK" on page 16.

#### 4 () lamp

This lamp illuminates when unit is on.

#### **5** 🕘 lamp

This lamp illuminates while the timer is reserved.

#### 6 🛞 lamp

- Illuminates in the heating mode at the beginning of operation or during defrosting or when the temperature controller is activated.
- Flashes during an error state.



• Even if you push (), ℕ or & when remote controller operation is disabled by the central control or other means, "pi" is heard 5 times and the button operation is not accepted.

#### EN

### Display section

All indicators are shown in the right and the lower figures for the explanation.

Only selected contents are display in actual operation.





#### **1** Transmitting indication

Displayed while operating the switches of the remote controller.

#### 2 Operation mode

The selected operation mode is displayed.

#### **3** Fan speed display

The selected fan speed is displayed.

- (AUTO) SA
- (HIGH) 🐝
- (MED.) 😘
- (LOW) 💃

#### 4 Ventilation display

This appears while the ventilation fan is operating.

#### 5 Remote control sensor display This appears when the remote control sensor is used.

#### 6 Set up temperature display

The selected set point is displayed.

### 7 Louver position display

Displays louver position.

#### 8 Swing display

Displayed during up/down movement of the louver.

#### **9** Timer display

Time of the timer is displayed.

#### 10 Timer mode display

When pushing the Timer SET IN button, the display of the timer is selected in order of [OFF]  $\textcircled{O} \rightarrow \textcircled{O} \textcircled{O}$  repeat OFF timer  $\rightarrow$  [ON]  $\textcircled{O} \vdash \rightarrow$  No display.

#### Operation section

Push each button to select a desired operation.

• The details of the operation needs to be set up once, afterward, the air conditioner can be used by pushing (1) only.



#### 1 Mode button

Selects the desired operation mode.

- **2** Fan speed button Selects a fan speed.
- **3** Timer set button Used to setup the timer. (See page 9)
- **4** ACL button

Use this button after battery exchange.

5 Setup temperature button Adjusts the set point. Set the desired set point by pushing <sup>(☉)</sup> or <sup>(☉)</sup>.

#### 6 ON/OFF button

When the button is pushed, the operation starts, and it stops by pushing the button again.

When the operation has stopped, the operation lamp and all the displays disappear.

#### 7 Filter button

No function.

#### **OPTION**:

#### Remote controller sensor

Usually the temperature sensor of the indoor unit senses the temperature.

The temperature on the surrounding of the remote controller can also be sensed. For details, contact the dealer from which you have purchased the air conditioner.

## **3** CORRECT USAGE

■ Auto ⊗, Heat \*, Dry △, Cool ≉, Fan st

#### Power

Turn on the power supply switch 12 hours before starting operation.

\* The remote controller is disabled for approx. 1 minute after the indoor unit has been powered on. This is normal. (The signal from the remote controller is received, but the receive data is discarded.)



- 1 Push () (ON/OFF button).
- 2 Push ∑ (Mode button) to select an operation mode.
  - Select Auto, Heat, Dry, Cool, or Fan.
- **3** Push **\$** (Fan speed button) to select a fan speed.
  - When the Auto mode is selected, the fan speed changes automatically. The fan speed does not change automatically in the Fan mode.
- - Temperature setting is not available for the Fan speed.

#### 5 Stop

Push () (ON/OFF button).

When the operation is stopped with the remote controller, the outdoor unit fan keeps running in some cases even after the compressor of the outdoor unit has stopped.

- If the room is not well heated with FAN
   during heating, change the fan
   speed to FAN \$\$ or FAN \$\$.
   Although selected fan speed is displayed,
   some indoor unit types are not provided
   with the air volume change function. (Fan
   speed is constant.)
- If the unit operation cannot be stopped in the usual manner, turn off the circuit breaker and contact the dealer from whom you purchased the air conditioner.

### Automatic Cooling/Heating

When all indoor units in the same refrigerant system are under the group control, heating or cooling operation is automatically performed according to the difference between the setup temperature and the room temperature.

#### Dry operation

- Dry function may not be provided depending on the using indoor unit, even if Dry (△) is displayed on the LCD of the remote controller. (The same to Cooling operation)
- When the room temperature approaches the setup temperature, it automatically repeats running and stop operation.
- In order to not return humidity to the room as possible, the mode of indoor fan changes to LOW when the operation has stopped.
- The fan speed may not be adjustable depending on the indoor unit that you use or the room temperature.
- The Dry mode may not be used depending on the using indoor unit when the outdoor temperature is 59 °F (15 °C) or lower.

### Self cleaning

The self cleaning operation starts automatically after running the cooling/dry mode (10 minutes or more) to keep the inside of the indoor unit clean.

(For details, refer to the Owner's Manual of the indoor unit.)

To stop self cleaning forcibly, push  $({\rm U})$  twice quickly.

## **4** TIMER OPERATION

- After the timer has been set, put the remote controller at a position where signals of the remote controller can reach the signal receiving unit on the indoor unit. The timer operation signal is transmitted from the remote controller.
- Set the timer while an operation mode is displayed as follows:

| Use the timer in the following cases  |                        | Mode<br>displayed |
|---|------------------------|-------------------|
| To stop the air conditioner<br>when the preset time has<br>passed           | OFF<br>timer           | $(\mathbf{A})$    |
| To stop the air conditioner<br>each time when the<br>preset time has passed | Repeat<br>OFF<br>timer |                   |
| To operate the air<br>conditioner when the<br>preset time has passed        | ON timer               |                   |

### Timer period

The setup time increases by 0.5 hours (30 minutes) each time you push  $\blacktriangle$ . The maximum setup time is 72.0 hours. The setup time decreases by 0.5 hours (30 minutes) each time you push  $\bigtriangledown$ . The minimum setup time is 0.5 hours.

#### Timer display

Each time you push Timer (1), the timer display changes as follows:



#### <Usage Examples>

▼ Setting OFF timer

(Example) To stop operation in 30 minutes

- **1** Push Timer ①. O and the time flash on the display.
- **2** Set the time to 0.5 with TIME  $\frown$  or  $\bigtriangledown$ .
- **3** Push SET and ⊘►○ go on timer.

#### Setting repeat timer

(Example) To stop operation in every 2.5 hours

**1** Push Timer ① twice.

 $\bigcirc$  and the time flash on the display.

- 2 Set the time to 2.5 with TIME ▲ or ▼.
- 3 Push SET and C⊃ ℗▸O go on timer. The OFF timer is activated and the operation stops in 2.5 hours. When you push () again to restart the operation, it stops in 2.5 hours.

#### ▼ Setting ON timer

(Example) To start operation in 8 hours

- **1** Push Timer ① three times. ③ I and the time flash on the display.
- 2 Set the time to 8.0 with TIME  $\frown$  or  $\bigtriangledown$ .
- **3** Push SET.

The operation mode disappears, and Orland the time stop flashing.

#### ▼ Canceling timer operation

Push CL. The timer display disappears.

## **5** HOW TO ADJUST AIR DIRECTION

- Never move the louver (air direction up/down adjusting plate) which is operated on the remote controller with hands except a case of cleaning the louver.
- While the air conditioner is not working, the louver (air direction adjusting plate) is closed automatically.
- During the preparation for heating, the louver is directed upward and it starts swinging after the preparation for heating is canceled though the automatic louver display on the remote controller shows swinging even during this period.

#### To set air direction

Push I. during operation. Air direction changes each time you push the button.

#### To start swinging

Push  $\mathbb{R}$  to set the louver direction to the lowest, and then push  $\mathbb{R}$  again. Louver swinging appears on the display and air direction automatically changes up and down.

#### Heating mode

Keep the louver pointed downward so that discharged hot air reaches the floor.



#### Cooling/dry mode

Keep the louver pointed upward. Otherwise, dew drop may form around the discharge port and drop from the unit.



#### To stop swinging

Push 👫 once again while the louver is swinging. The louver can be stopped at a desired position. Then air direction can be set again from the uppermost by pushing 🗔

\* The louver does not stop while it is pointed downward during cooling or drying. Even if you attempt to stop the louver with the louver pointed downward during swinging, it stops at the third position from the uppermost direction.

#### Fan mode



#### Swing mode



Continuous operation

#### Display when swinging is stopped



 This remote controller has no function to set air direction individually or powersaving operation or to change the swing mode that are described in the Owner's Manual of the indoor unit.

## 6 SLIDE SWITCH

- The settings of operation mode display and air direction display vary as follows depending on the indoor unit in use.
- Use a fine-tipped tool to change the switch setting.
- Push the ACL button after the switch setting is changed.
- Do not change setting of the slide switch because a malfunction occurs by other settings.

#### 1 Louver display switch



\* Set the slide switch to "S." Otherwise the air direction adjustment and louver display are disabled.

### 2 Operation mode switch

| Operation mode display of the remote controller | A 🔅 🗘 🕸 🛠 |
|---|-----------|
| Slide switch position                           | A H C     |

• Before using the air conditioner, check that the slide switch is set as shown in this table. For details of slide switch setting, contact the dealer from whom you purchased the air conditioner.

## 7 HOW TO INSERT BATTERIES

- 1 Slide and remove the cover downward while holding both sides of the cover.
- 2 Insert two AAA alkaline batteries correctly matching the (+) and (-) polarities with the indication.
- **3** Push the ACL button with a fine-tipped tool and attach the cover.
  - Replace batteries when the display on the remote controller has become dim or when signals from the remote controller cannot be received at the normal distance from the signal receiving unit. Alkaline batteries should be replaced once a year.
  - Replace two batteries at the same time with new ones of the same type.
  - When you do not use the remote controller for a long time, take out the batteries.
  - Discard exhausted batteries at a designated place.



View with the cover removed



ACL button

# 8 HOW TO HANDLE THE REMOTE CONTROLLER

- Point the transmitting unit of the remote controller at the signal receiving unit of the indoor unit. When a signal is received normally, "pi" sound is heard once. ("Pi, pi" is heard only at the beginning of operation.)
- The standard signal receivable distance from the signal receiving unit of the indoor unit is approx. 23' (7 m). The distance varies somewhat with the battery capacity or other conditions.
- Do not put anything that blocks signals between the remote controller and the signal receiving unit of the indoor unit.
- Do not put the remote controller at a place exposed to direct sunlight or air from the indoor unit or near a heater.
- Do not drop or throw the remote controller or wipe it with water.
- Signals from the remote controller may not be accepted in a room equipped with a rapid start-type or inverter-type fluorescent light. For details, contact the dealer from whom you purchased the air conditioner.

### ■ To set the Remote Controller on the Wall

- Push () at the installation position on the wall to check that the signal from the remote controller is received correctly.
- To take the remote controller out of the holder, pull it toward you.



## 9 HOW TO USE THE REMOTE CONTROLLER CORRECTLY

• Put the remote controller within the specified distance from the signal receiving unit of the indoor unit.

Failure to do so may result in malfunction.

Be sure to put the remote controller in a room where the indoor unit is installed.

- When pushing a button on the remote controller, point the remote controller at the signal receiving unit of the indoor unit. When the signal receiving unit has correctly received a signal, it emits a "pi" sound.
- Do not put the remote controller behind a curtain or the like.

## **10** ADDRESS

When two or more indoor units controlled by the same wireless remote controller are installed in a room, a unique address can be set for each indoor unit to prevent interference.

Up to 6 indoor units can be controlled independently by the remote controller by matching the address switch setting of the signal receiving unit with the address displayed on the remote controller. From the seventh indoor unit onwards, address setting is necessary from wired remote controller. The signal receiving unit (inside the ceiling panel) has address switches for receiving addresses, and the remote controller has an address button for transmitting addresses.

For details, contact the dealer from whom you purchased the air conditioner.

#### Checking Addresses

Push ADR on the remote controller. The current address appears on the display. When this address equals the address of the address switch in the signal receiving unit (inside the ceiling panel), the buzzer sounds. When the address on the display is "ALL," the buzzer sounds and the remote controller is enabled regardless of the address switch setting in the signal receiving unit.

Transmit signals while pointing the remote controller at the signal receiving unit of the indoor unit to be controlled.

### Matching Addresses

Address setting on the remote controller

- 1. Push ADR for at least 4 seconds. ADR lights up on the display and the current address blinks.
- 2. Each time you push  $\boxed{\text{ADR}}$ , addresses change cyclically like  $\text{ALL} \rightarrow 1 \rightarrow 2 \rightarrow 3... \rightarrow 6 \rightarrow \text{ALL}$ . Select an address that matches the address switch setting in the signal receiving unit of the indoor unit to be controlled.
- 3. Push SET. The blinking address changes to lighting and is displayed for 5 seconds. When this address equals the address switch setting in the signal receiving unit, the buzzer sounds.

| Address displayed on<br>the remote controller<br>(The location of ADR is<br>shown on page 3.)  | Address                 | Address  | Address                                   |  | Address <b>6</b>                            |
|--|-------------------------|--|---|--|---|
| Address switch setting<br>in the signal receiving<br>unit (inside the ceiling<br>panel or indoor unit)<br>Remove the screw on<br>the back of the signal<br>receiving unit and<br>remove the cover. | * Any setting is<br>OK. | 4-6<br>3 2 1<br>3 6<br>3 6<br>54<br>2 000S   | 4-6<br>3-2-1-3-2<br>2-5-4<br>2005<br>2005 |  | 4-6<br>32732<br>4-6<br>3005<br>3005<br>2005 |
|  |                         | Set S001 to the right position (for addresses 1, 2, and 3) or to the left position (for addresses 4, 5, and 6).<br>Set S002 to the right position (for addresses 1 and 4), to the center (for addresses 2 and 5), or to the left position (for addresses 3 and 6). |   |  |   |

# **11** HOW TO PERFORM EMERGENCY OPERATION

In the event of an emergency shown below, push emergency operationeon the signal receiving unit (inside the ceiling panel) for emergency operation.

- The batteries of the remote controller have been exhausted.
- The remote controller is out of order.
- The remote controller has been lost.



#### 1 Start

Push emergency operation.

(When the emergency operation is started at a room temperature of 75°F (24°C) or more, the air conditioner enters the cooling mode. When the emergency operation is started at a room temperature below 75°F (24°C), the air conditioner enters the heating mode.)

#### 2 Stop

Push emergency operation once again.



• When the emergency operation does not work, confirm that all the bits of DIP switch S003 on the P.C. board of the receiver unit are set OFF. If any of these bits are set ON, turn them all OFF.

## **12** BEFORE ASKING FOR REPAIR WORK

Check the following before asking for repair work.

| Check again  |   |   |
|--|---|---|
| Phenomenon   | Possible cause  | Measures  |
| Operation does<br>not start even if  | The air conditioner is not working or a power failure has occurred.                             | Push ON/OFF on the remote controller again. (See page 7)                |
| the switch is turned on.   | The power switch is not turned on.  | Turn on the power switch if it is off.<br>(See page 7)                  |
|  | The air conditioner is in the ON timer operation.   | Cancel the timer operation.<br>(See page 9)                             |
|  | The batteries of the remote controller have been exhausted.                                     | Replace the batteries.<br>(See page 11)                                 |
|  | The LEDs on the signal receiving unit are not in normal state or operation mode is not correct. | Change the operation mode.<br>(See page 7)                              |
| Is not the sate of the display lamp "Disagreement of $\ensuremath{\Re}$ (cool) and $\ensuremath{\Re}$ (heat)" or "No $\ensuremath{\Im}$ "? |   | Change the slide switch setting of the remote controller. (See page 11) |
| Dual swing, cycle swing, individual louver position, or power-saving cannot be set.  |   | This type of remote controller cannot set such functions.               |

| Contact the dealer from whom you purchased the air conditioner. |  |  |  |  |
|---|--|--|--|--|
| Phenomenon  |  | Possible cause   |  |  |
| The LEDs flash.   |  | Communication error between signal receiving unit and indoor unit<br>or address setup error when the wired remote controller is used |  |  |
|   |  | Communication error between indoor unit and outdoor unit   |  |  |
|   | • <u>-</u>   | The protective device of the indoor unit is activated.   |  |  |
|   |  | The protective device of the outdoor unit is activated.  |  |  |
|   | ->-<br>->-   | Temperature sensor error   |  |  |
|   | • - <u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u> | The compressor of the outdoor unit is protected.   |  |  |
|   | -×××   | The air conditioner is performing a test run. Set the test run switch to OFF.  |  |  |

LEDs on the signal receiving unit •: OFF  $-\frac{1}{2}$ : Blinking (at intervals of 0.5 seconds) LED color (): Green (): Green (): Orange

Check these items. If any of these problems still remains, stop the operation, turn off the power, and then notifies the dealer from whom you purchased the air conditioner of the model name and details of the error (including LED flashing state). Never repair any unit by yourself as it is dangerous.

EN

## **TOSHIBA CARRIER CORPORATION**

23-17, TAKANAWA 3-CHOME, MINATOKU, TOKYO 108-0074, JAPAN

EH99677301