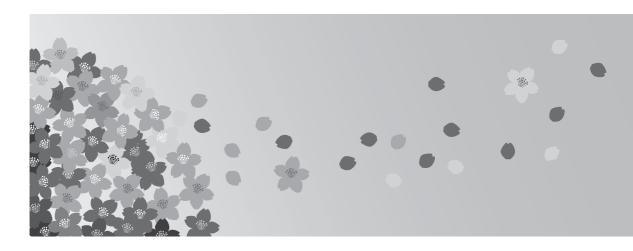
Save These Instructions!
Conserver ce mode d'emploi
Bewahren Sie bitte diese
Bedienungsanleitung auf.
Conservate queste istruzioni
Guarde estas instruções
Φυλάξτε τις οδηγίες αυτές
Guarde estas instrucciones
Bewaar deze gebruiksaanwijzing!

# **TOSHIBA**



## **TCB-EXS21TLE**

	-		-
Sch	edu	le T	imer

Temporisateur

Zeitplangeber

**Timer programmatore** 

**Temporizador** 

Χρονοδιακόπτης προγραμματισμού

Temporizador de programas

**Tijdklok** 

- INSTRUCTION MANUAL
- MODE D'EMPLOI
- BEDIENUNGSANLEITUNG
- ISTRUZIONI PER L'USO
- MANUAL DE INSTRUÇÕES
- ΕΓΧΕΙΡΙΔΙΟ ΟΔΗΓΙΩΝ
- MANUAL DE INSTRUCCIONES
- HANDLEIDING

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## **Product Information**

If you have problems or questions concerning your Air Conditioner, you will need the following information. Model and serial numbers are on the nameplate on the bottom of the cabinet.

Model No	TCB-EXS21TLE	_ Serial No	
Date of purcha	se		
Dealer's addres	SS		
		Phone number	

#### **DECLARATION OF CONFORMITY**

This product is marked «**((**\*) as it satisfies EEC Directive No. 72/23/EEC, 89/336/EEC, 92/31/EEC and 93/68/EEC, and conforms with following standards.

EN60335-1 EN55014-1 EN60335-2-40 EN55014-2

This declaration will become void in case of misusage and/or from non observance though partial of Manufacturer's installation and/or operating instructions.

# Alert Symbols

The following symbols used in this manual, alert you to potentially dangerous conditions to users, service personnel or the appliance:



This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.



This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

OI-915-2-EG

## Installation Location

 We recommend that this schedule timer be installed properly by qualified installation technicians in accordance with the Installation Instructions provided with the schedule timer.



- Do not install this schedule timer where there are fumes or flammable gases, or in an extremely humid space such as a greenhouse.
- Do not install the schedule timer where excessively high heatgenerating objects are placed.

## **Electrical Requirements**

- All wiring must conform to the local electrical codes. Consult your dealer or a qualified electrician for details.
- 2. Wiring must be done by a qualified electrician.



To warm up the system, the power mains must be turned on at least twelve (12) hours before operation. Leave the power mains ON unless you will not be using this appliance for an extended period.



# Safety Instructions

- Read this Instruction carefully before using this schedule timer. If you still have any difficulties or problems, consult your dealer for help.
- The air conditioner is designed to give you comfortable room conditions. Use this only for its intended purpose as described in this Instruction Manual.



- · Never touch the unit with wet hands.
- Never use or store gasoline or other flammable vapor or liquid near the air conditioner — it is very dangerous.
- The air conditioner has no ventilator for intaking fresh air from outdoors. You must open doors or windows frequently when you use gas or oil heating appliances in the same room, which consume a lot of oxygen from the air. Otherwise there is a risk of suffocation in an extreme case.

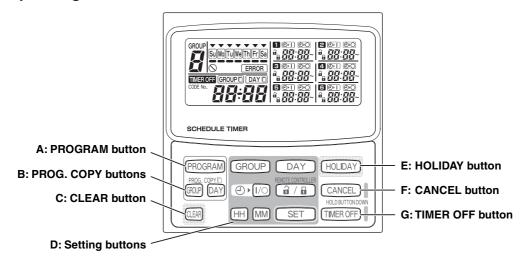


- Do not turn the air conditioner on and off from the power mains switch. Use the ON/OFF operation button.
- Do not stick anything into the air outlet of the outdoor unit. This is dangerous because the fan is rotating at high speed.
- Do not let children play with the air conditioner.
- Do not cool or heat the room too much if babies or invalids are present.

OI-915-3-EG

## Names and Functions of Parts

## ■ Operating Buttons

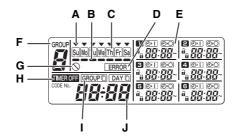


A: PROGRAM button	Use to start setting programs and to enter program settings.
B: PROG. COPY buttons	Use to copy programs to groups or specific days in a schedule. (Refer to page 12)
C: CLEAR button	Press to clear the settings of the currently displayed program.  • The current program is not cleared unless the PROGRAM button is pressed after pressing the CLEAR button.
D: Setting buttons	Use to make program settings and to set the present time.
GROUP	Press to set groups for programmed operation.
DAY	Press to set today's day and days of programmed operation.
HH MM	Press to set the present time and times used in programmed operation.
⊕•1/⊙	Use to start/stop indoor units via the timer.
REMOTE CONTROLLER	Use to enable/disable remote controller operation via the timer.
SET	<ul> <li>Use to set programmed operation trigger time.</li> <li>Program settings are not entered unless the PROGRAM button is pressed at the end of setting operations.</li> </ul>
E: HOLIDAY button	Press to set and cancel holidays during a scheduled week of operation.
F: CANCEL button	Press to cancel the current program setting operation, copying operation or holiday setting operation. When the CANCEL button is held down for 2 seconds, the current setting operation or copying operation is canceled and the normal display returns.
G: TIMER OFF button	Press to turn the timer OFF when timer operation will not be used for a long period of time. When this button is held down for 2 seconds, TIMER OFF appears on the display. Programs cannot be run until the button is again held down for 2 seconds.

 Some of the above features are disabled when the unit is installed. If the button of a disabled feature is pressed, appears on the display.
 For more information, contact your dealer.

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## ■ Display



A:	Today's day of the week (▼)	Indicates today's day of the week.	
B:	Program schedule indication (—)	Appears under days that are scheduled for program operation.	
C:	Holiday schedule indication ()	Appears around scheduled holidays. (Refer to page 16)	
D:	ERROR indication	Displayed when a mistake is made during timer setting.	
E:	Timer program	Displays set timer programs. Also, indicates the copy source/destination during group program copying.	
F:	Group No.	Up to 8 groups can be selected and displayed.	
G:	(Disabled Feature) indication	Displayed if the selected feature was disabled during installation.	
H:	TIMER OFF indication	Displayed when the timer has been turned OFF.	
I:	Copy mode indication	Displayed when copying a program into a group or day of the schedule.	
J:	Present time	Displays the present time on a 24-hour clock. Also, displays settings in the various setting modes.	

# Using the Schedule Timer

To use the schedule timer, follow the steps below.

#### STEP 1 Turn ON power to the air conditioner.

• Turn ON power to the air conditioner connected to the schedule timer. The schedule timer performs initial communications with the indoor units, during which 5£ \$\mathbb{H}\_0\$ blinks on the display.

#### NOTE

Do not turn off the power mains in heating and cooling seasons. (This keeps the crankcase heater electricity turned on, which protects the compressor at startup.) If the air conditioner has been OFF for a long period of time, turn on power 12 hours before starting operation.

#### STEP 2 Make the initial settings of the schedule timer.

Set the present time and today's day of the week. (Refer to page 6)

#### STEP 3 Set up programs of the schedule timer.

Make settings for programmed operation. (Refer to page 8)

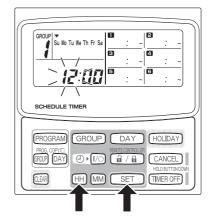
OI-915-5-EG

## ■ Setting the Present Time

Set the present time. (Example: When the present time is 12:45)

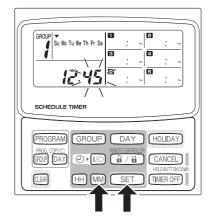
# STEP 1 Hold down the SET button and press the HH button to set the hour.

- The hour increases one hour at a time with each single press of the HH button while the SET button is held down.
- The hour scrolls rapidly when both the SET button and HH button are held down. (Example: To set 12:00, release the HH button when "12" is displayed.)
- When the SET button is released, the hour is set and the indication changes from blinking to lighting.



# STEP 2 Hold down the SET button and press the MM button to set the minutes.

- The minutes increase one minute at a time with each single press of the MM button while the SET button is held down.
- The minutes scroll rapidly when both the SET button and MM button are held down. (Example: To set 00:45, release the MM button when "45" is displayed.)
- When the SET button is released, the minutes are set and the indication changes from blinking to lighting.



#### NOTE

Pressing just the HH or MM button does not change the time.

OI-915-6-EG

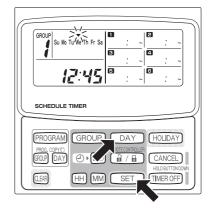
## ■ Setting Today's Day of the Week

Set today's day of the week. (Example: When today is Wednesday)

# STEP 1 Hold down the SET button and press the DAY button to set today's day of the week.

- To blinks and moves one day at a time across the days
  of the week with each single press of the DAY button
  while the SET button is held down.
- When the SET button is released, the day of the week is set and the ▼ changes from blinking to lighting.





NOTE

· Pressing just the DAY button does not change the day of the week.

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## ■ Setting Up Programmed Operations

Correctly set the present time and today's day of the week.
Unless both are correctly set, the programs will not run as expected.

- Up to 6 programmed operations can be set per day for each group and day of the week.
- A combination of the below operations can be set for each timer program.
  - Air conditioner starting/stopping
  - Remote controller operation enable/disable \*1
- To change the settings of an existing program, use the same below procedure used to set up a new program.
- \*1 The remote controller operation enable/disable setting is disabled depending on installation conditions. If so, \( \sigma\) appears on the display when the \( \frac{a}{l} / \frac{a}{l} \) button is pressed.

  For more information, contact your dealer.

#### **Example settings**



#### STEP 1 Press the PROGRAM button to select a group.

- When the PROGRAM button is pressed, the group No. and today's day of the week start blinking and the present time indication changes to a blinking "PG-1".
- Press the GROUP button to select a group for programmed operation and then press the SET button.

#### NOTE

- Group selection is disabled depending on installation conditions. If so, proceed to the next step.
- The number of selectable groups is set during installation.

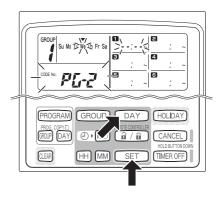
# ROUP DAY HOLDAY ROS COPYL ROP DAY HOLDAY TIMER OFF

# STEP 2 Press the DAY button and select a day of the week for programmed operation.

 When the SET button is pressed, the program schedule marker ( ) changes from blinking to lighting and, at the same time, the time set in program starts blinking. Also, the present time indication changes to a blinking "PG-2".

#### NOTE

 The currently selected day of the week blinks slowly at this time.



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#### STEP 3 Set up the program and press the SET button.

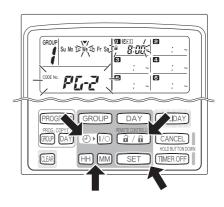
- When the SET button is pressed, the time set in program 1 changes from blinking to lighting and, at the same time, the time set in program 2 starts blinking.

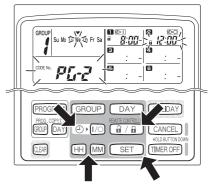
#### NOTE

- Every time the ② ► I/O button is pressed, the timer indication changes in the order of ② ► I (ON) → ② (OFF) → no indication.
- Every time the in / in button is pressed, the remote controller indication changes in the order of in (enabled) → in (disabled) → no indication.
- The remote control operation enable/disable setting is disabled depending on installation conditions. In this case, only timer ON/OFF can be set.

#### STEP 4 Set up programs 2 ~ 6 in the same way.

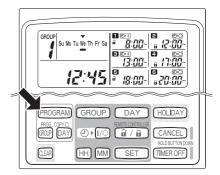
- When the SET button is pressed, settings are automatically arranged in the order of earliest time first
- If the SET button is pressed without any new settings being made in the program, program starts blinking again and settings can be changed.
- Similarly, if the SET button is pressed after setting up program , program starts blinking again.





#### STEP 5 Press the PROGRAM button.

Program settings are entered and the normal display returns.



#### STEP 6 Set up programmed operation for other groups and days of the week in the same way.

Programs that have already been set up can be copied into other groups and days of the week. (Refer to page 12)

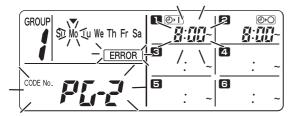
#### NOTE

- A "0:00" time setting is interpreted to mean 12:00 midnight.
- To cancel program settings during program setup (while "PG-1" or "PG-2" is blinking on the display), hold down the CANCEL button for more than 2 seconds. The normal display returns.
- If settings are canceled without pressing the PROGRAM button, settings are not entered.

## **■ Setting Errors**

If time is set as shown below while setting up a program, "ERROR" is displayed (the ERROR indication blinks). Therefore, correct the time setting.

#### If Program Times Are the Same



- STEP 1 Every time the SET button is pressed, the setting mode switches between programmed operations of the same time setting (1 and 2 in the above example), therefore select the time setting to correct.
- STEP 2 Change the time setting with the HH and MM buttons so that the times are no longer the same.
- STEP 3 Press the SET button and check "ERROR" is not displayed.
- **STEP 4** Press the PROGRAM button to end the setting mode.

#### **Example Time Settings That Do Not Cause Errors**

The below time settings do not generate an error.

1) When ON and OFF times are staggered



2) When OFF time is earlier than ON time



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## **■** How to Check Program Times

You can check the programmed times for each group and day of the week.

# STEP 1 Press the GROUP button and select a group whose time you want to check.

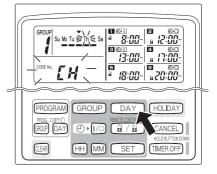
#### NOTE

 Group selection is disabled depending on installation conditions. If so, proceed to the next step.



#### STEP 2 Press the DAY button.

- When the DAY button is pressed the first time, tomorrow's day of the week starts blinking and the program settings for tomorrow are displayed.
- Every time the DAY button is pressed, the program settings change in order of the days of the week.
- Pressing the GROUP button displays the program settings of another group on that same day.

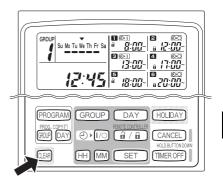


#### STEP 3 End checking.

Press the CLEAR button. The normal display returns.

#### NOTE

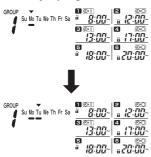
 Holding down the CANCEL button for more than 2 seconds also returns the normal display.



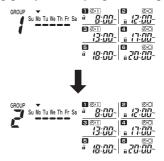
## ■ How to Copy Program Times

You can copy the already set program of one day into another day (Day Program Copying), as well as copy the entire week programmed for one group into another group (Group Program Copying).

# **Example of Day Program Copying** (Copying Monday's program into Tuesday)



# Example of Group Program Copying (Copying group No. 1's program into group No. 2)



#### **How to Copy Day Programs**

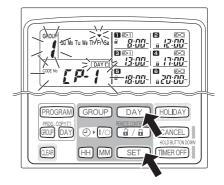
#### STEP 1 Press the PROG. COPY DAY button.

 The group No. and the vover today's day start blinking and "CP-1" starts blinking in the present time display area. In this state, select a group in which to copy day programs, using the GROUP button.



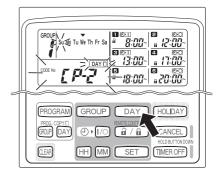
## STEP 2 Select a source day program to copy.

- Every time the DAY button is pressed, the woves across the days of the week display, therefore select a day of the week that will serve as the copy source.
- Once having selected the copy source day, press the SET button to set it. The display changes to key you to select a copy destination day.



#### STEP 3 Select a copy destination day.

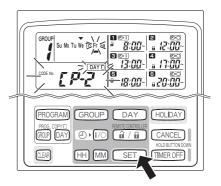
 When the schedule timer is ready for you to select a copy destination day, "CP-2" starts blinking in the present time display area, while the selected copy source day blinks in the days of the week.
 Therefore, select a day of the week as the copy destination, using the DAY button.



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#### STEP 4 Press the SET button to copy.

 Press the SET button and the program schedule marker ( ) will be displayed.



#### STEP 5 Select other copy destination days if desired.

 You can copy the selected source day program into other days by repeatedly pressing the DAY button to select a day of the week followed by the SET button to set it.

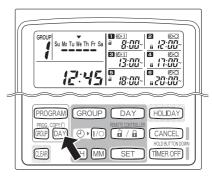
#### NOTE

 Pressing the CLEAR button extinguishes the program schedule marker ( ) and cancels the copy operation.



# STEP 6 Press the PROG. COPY DAY button to enter the copied program in the selected days.

The normal display returns.



#### NOTE

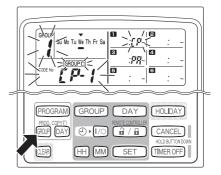
- If a program already exists in the copy destination day, the newly copied program overwrites the existing program.
- If you accidentally copy over a program in the day program copy mode, holding down the CANCEL button for more than 2 seconds returns the program to the point prior to pressing the PROG. COPY DAY button in STEP 1. (All changes and copy operations made up until that point are cleared.)

OI-915-13-EG

#### **How to Copy Group Programs**

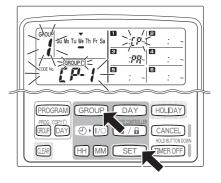
#### STEP 1 Press the PROG. COPY GROUP button.

 "CP-1" starts blinking in the present time display area and "CP" (copy) starts blinking in the program
 area to indicate the copy source.



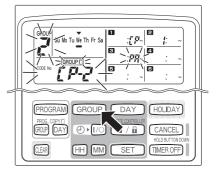
#### STEP 2 Select a source group program to copy.

- Select a copy source group using the GROUP button.
- Once having selected the copy source group, press the SET button to set it. The display changes to key you to select a copy destination group.



#### STEP 3 Select a copy destination group.

- After pressing the SET button, "CP-2" starts blinking
  in the present time display area, the copy source
  group No. set appears in the program 2 area, and
  "PA" (paste) starts blinking in the program 3 area
  to indicate the copy destination.
- Select a copy destination group using the GROUP button.

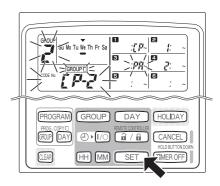


#### STEP 4 Enter the selected copy destination group.

 When the SET button is pressed, the number of the copy destination group appears in the program No. area.

#### NOTE

If a group from numbers 1 to 4 was selected as the copy destination group, that number appears in the program 4 area. If a group from numbers 5 to 8 was selected, that number appears in the program 6 area.



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#### STEP 5 Select other copy destination groups if desired.

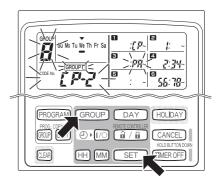
 You can copy the selected source group programs into other groups by repeatedly pressing the GROUP button to select a group followed by the SET button to set it.

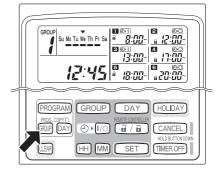
## NOTE

If a group from numbers 1 to 4 was selected as the copy destination group, that number appears in the program 4 area. If a group from numbers 5 to 8 was selected, that number appears in the program area.

# STEP 6 Press the PROG. COPY GROUP button to enter the copied programs in the selected groups.

The normal display returns.





#### NOTE

- If a program already exists in the copy destination group, the newly copied program overwrites the
  existing program.
- If you accidentally copy over a program in the group program copy mode, holding down the CANCEL button for more than 2 seconds returns the program to the point prior to pressing the PROG. COPY GROUP button in STEP 1. (All changes and copy operations made up until that point are cleared.)

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## ■ How to Set Holidays in a Scheduled Week of Operation

Operations programmed for a specific day during the week can be temporarily disabled by setting that day as a holiday.

- When the set holiday passes, the holiday setting is canceled and operation is resumed as programmed the following week.
- Holidays can be selected for the week starting from today's day. If today is selected as a holiday, the holiday setting is canceled from the next programmed operation. (Depending on the program, if the program is currently running, the program may not stop.)

#### **Example Setting**



Today is Thursday and Friday is set as a holiday.

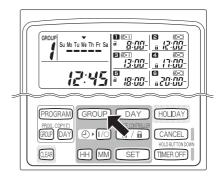
When Friday comes, the program set for that day does not run.

When Saturday comes, Friday's holiday setting is canceled.

# STEP 1 Press the GROUP button to select a group to go on holiday.

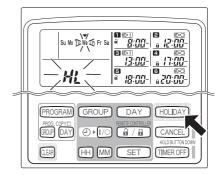
NOTE

 Depending on installation conditions, group selection is disabled or set so that all groups are automatically selected for the holiday feature. If so, proceed to the next step.



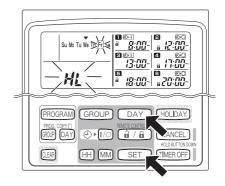
#### STEP 2 Press the HOLIDAY button.

 "HL" starts blinking in the present time display area and today's day of the week starts blinking.



# STEP 3 Select a day as the holiday using the DAY button, and press the SET button.

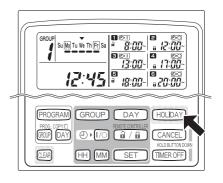
- A " | " appears over the selected holiday.
- To select other holidays, select a day using the DAY button and set it with the SET button.
- If you made a mistake or want to cancel a holiday, press the CLEAR button.



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#### STEP 4 Press the HOLIDAY button to enter the holiday.

The normal display returns.



## ■ How to Disable the Timer Operation

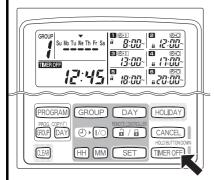
To halt programmed operation for one week or more, you can disable all timer programs.

• Once the timer has been disabled, programmed operations are not run until the below procedure is performed.

#### NOTE

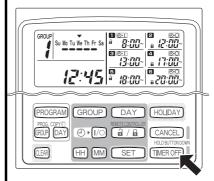
During installation, the remote controller may be set to disable the timer for individual groups. In this state, the
timer is disabled only for the selected group, therefore press the GROUP button to confirm which group is
selected.

# Hold down the TIMER OFF button for more than 2 seconds



• **TIMEROFF** appears on the display. The timer is disabled from the next scheduled program.

# To turn the timer back ON, hold down the TIMER OFF button for more than 2 seconds

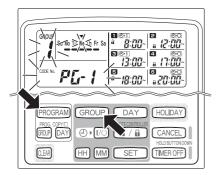


 TIMEROFF goes out and the timer is enabled from the next scheduled program.

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## **■** How to Clear Programs

Press the PROGRAM button.



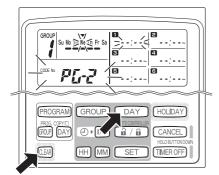
- When the PROGRAM button is pressed, the group No. and the present day of the week start blinking and the present time indication changes to a blinking "PG-1".
- Press the GROUP button to select a group to clear.

#### NOTE

- Group selection may be disabled during installation. If so, proceed to the next step.
- Holding down the CANCEL button for more than 2 seconds returns the program to the point prior to pressing the PROGRAM button. (All operations made up until that point are cleared.)

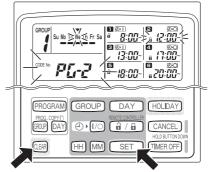


#### To cancel specific days



- Select a day to cancel using the DAY button and press the CLEAR button. All settings in programmed operations 1 through 3 are cleared. The display appears as shown above.
- Press the PROGRAM button to enter the clear operation. The normal display returns without the program schedule marker ( ) underneath the days of the week.

#### To cancel individual programs on specific days



- Select a day and press the SET button.
   Programmed operations through start blinking in rotation, therefore press the CLEAR button when the programmed operation to clear starts blinking. (The remaining programmed operations are automatically arranged in the order of earliest time first.)
- Press the PROGRAM button to enter the clear operation. The normal display returns.

Example:
Display after clearing
programmed operation
above



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## Important Information to Remember

## 1. Schedule Timer and Air Conditioner Operation

Air conditioners operate either according to operations programmed from the schedule timer (starting/stopping and remote control operation enable/disable) or according to a connected remote controller or system controller.

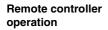
#### Schedule timer settings (Example)

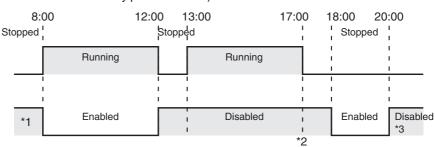


#### Operation without system controller operation

If remote controller operation is enabled, the air conditioner can be started/stopped from the remote controller. (The air conditioner responds to the most recently pressed button.)

Air conditioner operation

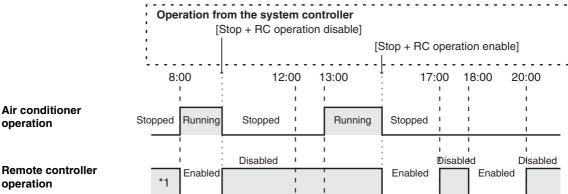




- \*1 Whether remote controller operation is enabled or disabled depends on the setting of the previous day.
- \*2 Since remote controller operation is disabled, operation remains disabled.
- \*3 The remote controller remains disabled the next day and thereafter until it is enabled in the remote controller operation enable/disable setting.

#### Operation with system controller operation

- If remote controller operation is enabled, the air conditioner can be started/stopped from the remote controller. (The air conditioner responds to the most recently pressed button.)
- The remote controller operation enable/disable set from the system controller (Centralized control 1 to 4) is canceled according to programmed operations.



Remote controller operation

> \*1 Whether remote controller operation is enabled or disabled depends on the setting of the previous day.

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## 2. Power Outages

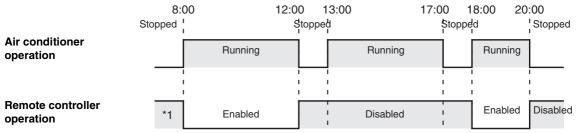
If the air conditioner is running when power is lost, the air conditioner remains OFF when power is restored. Also, if remote controller operation was disabled when power was lost, it is enabled for a few minutes when power is restored.

- · Programmed operations scheduled for times that come after power is restored run as usual.
- Program settings are retained in the non-volatile memory of the schedule timer, therefore they are not cleared in
  the event of a power outage. Also, the present time and today's day of the week are retained for a maximum of
  100 hours by the internal battery.

#### Schedule timer settings (Example)

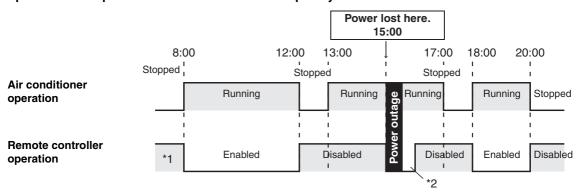


#### Operation when power is not lost



<sup>\*1</sup> Whether remote controller operation is enabled or disabled depends on the setting of the previous day.

#### Operation when power is lost at 15:00 and subsequently restored



- \*1 Whether remote controller operation is enabled or disabled depends on the setting of the previous day.
- \*2 Remote controller operation is enabled for a few minutes after power is restored.

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# Troubleshooting

Before requesting servicing, check the following.

Trouble		Cause/Remedy
ervicing	ናር Яո blinks on the display.	The schedule timer is performing initial communications with connected indoor units. Wait for communications to finish.
sting se	Air conditioners do not operate as scheduled when the set time comes.	The timer has been disabled. (Refer to page 17) A holiday has been scheduled. (Refer to page 16)
re reques	Air conditioners can be started and stopped from the remote controller even though the program disables remote controller operation.	Power to the air conditioner was lost and subsequently restored. (Refer to page 20)
Check before requesting servicing	BB:BB blinks in the present time display area.	Power to the air conditioner was lost for a long period of time. Set the present time and today's day of the week again. (Refer to page 6 and 7)

If trouble persists despite taking the above action, stop the schedule timer, turn off the unit and report the serial number and problem to your dealer. Never service the unit yourself as this is dangerous.

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