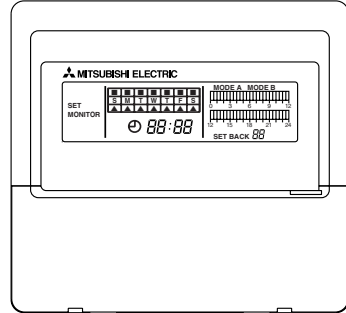


# CITY MULTI Control System and Mr. SLIM Air Conditioners

## Program Timer

## PAC-YT32PTA

FOR USER



GB

## INSTRUCTION BOOK

Carefully read this book before use. It is recommended to safe keep this book for future reference.

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## 1. Safety Precautions

- For your safety, first be sure to read “Safety Precautions” described below thoroughly and use the remote controller correctly.
- The precautions described here contain important safety information. Always observe them.
- After reading this manual, keep it and the installation manual in a place where the final user can see them whenever he or she wants to.

When the user changes, forward this manual and the installation manual to the final user.

### Symbols and Terms

 WARNING	This symbol denotes what could lead to serious injury or death if you misuse the PAC-YT32PTA.
 CAUTION	Incorrect handling may result in serious trouble, depending upon the conditions.

## Specific Precautions

### WARNING

- Ask your dealer or technical representative to install the unit.
  - Any deficiency caused by your own installation may result in an electric shock or fire.
- Securely install in a place which can withstand the weight of the controller.
  - If it is not enough, the controller may drop and cause an injury.
- Make sure that the controller is connected to a rated power supply.
  - If the controller is not connected to a rated power supply, it may cause a fire or damage to the controller.
- Stop the operation if any malfunction occurs.
  - Contact the your dealer or technical representative immediate. If the controller continues to operate after a malfunction occurs, this may cause damage, electric shock or fire. If malfunction occurs (burning smell, etc.) stop the operation and turn off the power supply.
- Ensure that installation work is done correctly following this installation manual.
  - Any deficiency caused by installation may result in an electric shock or fire.
- To dispose of this product, consult your dealer.
- Never modify or repair the PAC-YT32PTA by yourself.
  - Any deficiency caused by your repair may result in an electric shock or fire.  
Consult with your dealer about repairs.
- Stop the operation immediately and notify the your dealer if an error code is displayed or malfunction occurs.
  - Fire or damage may cause it the controller is operated in this condition.

### CAUTION

- Do not install in any place exposed to flammable gas leakage.
  - Flammable gases accumulated around the body of PAC-YT32PTA may cause an explosion.
- Do not wash with water.
  - Doing so may cause malfunction.
- Do not touch any control button with your wet hands.
  - Doing so may cause malfunction.
- Do not use the controller for special applications.
  - This product is designed for use with the CITY MULTI CONTROL SYSTEM. Do not use the system for other air condition management operation or applications. It may cause malfunctions.
- Do not apply insecticide or flammable sprays to the controller.
  - Do not place flammable spray near the controller and make sure it does not blow directly on the controller as this may cause in fire.
- Do not use in any special environment.
  - Using in any place exposed to oil (including machine oil), steam and sulfuric gas may deteriorate the performance significantly or give damage to the component parts.
- Do not press any control button using a sharp object.
  - It may cause damage and trouble.
- Operate the controller within the specified temperature range.
  - Observe the specified temperature range when operating the controller. If the controller is used outside the specified temperature range, it may cause serious damage. Be sure to check the operation temperature range in the operation manual.

Thank you for purchasing the Mitsubishi Electric program timer for CITY MULTI Control System and Mr. SLIM Air Conditioner. This program timer has the following functions.

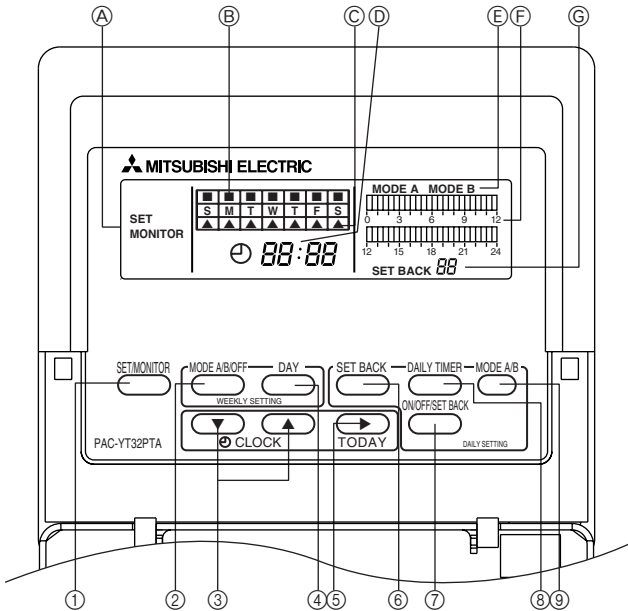
- (1) It can be set to turn the air conditioner On, Off or Set Back it over a period of 24 hours in 30 minute units. Two independent (Delay Timer Functions), or the 24-hour operation patterns can be recorded. (A Mode, B Mode)
- (2) Each day, the delay timer operation pattern, A Mode or B Mode in (1) above can be selected. (Weekly Timer Function)

## 2. Functions

### <Program Timer Specifications>

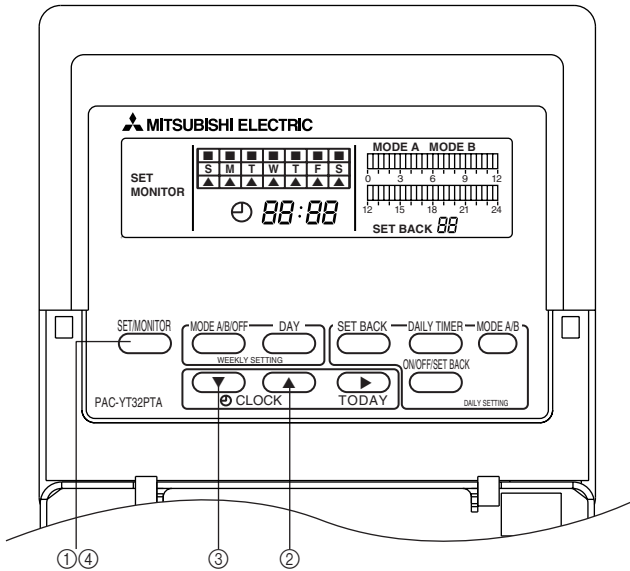
Name		Program Timer
Model		PAC-YT32PTA
External Dimensions	mm	120 × 130 × 19
	in	4-3/4 × 5-1/8 × 3/4
Installation Method		Wall Mount
Clock System		Liquid Crystal Oscillator System
Clock Accuracy		± 50 sec. /month at 25°C (77°F)
Indications	Time Display	Liquid Crystal Display
	Day Display	Liquid Crystal Display
	Timer Setting Display	Liquid Crystal Display
Program Cycle		24 hrs.
Timer Setting Units		30 min.
Number of Set Points		48 points/day
Power rating		5 V DC ± 5 % (supplied by remote controller)

### 3. Names of Parts and their Functions



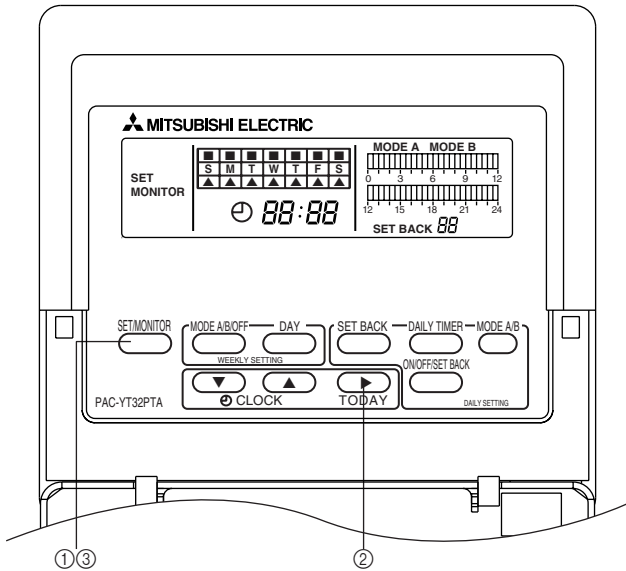
- A SET/MONITOR DISPLAY:**  
When SET is displayed, clock adjustment, change of day, and daily and weekly timer settings can be performed. When MONITOR is displayed, all switches except SET/MONITOR SW are invalidated. This is normal status.
- B WEEKLY TIMER SETTING DISPLAY:**  
Used to select whether the operation pattern set using the PATTERN SETTING can be applied to different days of the week.
- C CURRENT DAY DISPLAY:**  
Indicates the current day.
- D CURRENT TIME DISPLAY:**  
During MONITOR status, current time is display.  
During daily timer setting, a time desire for timer setting is displayed.
- E OPERATION MODE DISPLAY:**  
Indicates the operation mode.
- F DAILY TIMER SETTING DISPLAY:**  
24 hours is divided into 48 blocks and each block is expressed in 30 minutes.  
The block display consists of 3 patterns.
- G SET BACK DISPLAY**  
Indicates the set back value.
- 1 SET/MONITOR Button**  
Using this switch, select "MONITOR" or "SET" Mode.  
"MONITOR": Indicates the current timer setting. All switches except MODE SELECTOR SW are invalidated then. This is the normal status.  
"SET": Set to "SET" mode for clock adjustment, change of day and daily and weekly timer settings.
- 2 MODE A/B/OFF Button**  
Used for setting timer in day of week unit.
- 3 CLOCK ADJUSTMENT Button**  
Used for adjustment of the current time.  
Push [▲] SW to advance the time. Each time the button is pushed the time advances by 1 minute, pushing continuously advances by 1 minute at 0.5 second intervals, and when the lower digit of the minute becomes "0" the time advances in 10 minute units.  
[▼] SW is used for reversing the time. Each time the button is pushed the time reverses by 1 minute, pushing continuously reverses the time by 1 minute at 0.5 second intervals, and when the lower digit of the minute becomes "0" the time reverses in 10 minute units.
- 4 DAY SETTING Button**  
Used when setting the day.
- 5 WEEK DAY SETTING Button**  
Used for week day setting.  
Pushing [▶] SW moves the week day light display in order of **S** → **M** → **T** → **W** → ... enabling to set the week day.
- 6 SET BACK SETTING Button**  
Used for set back setting.  
Set back can be done in the range of 1, 2, 4, 6 and 8°C (2, 4, 8, 12 and 16°F).
- 7 ON/OFF/SET BACK Button**  
Used to specify the time setting pattern.
- 8 DAILY TIMER Button**  
Used for timer setting in 30 minute units.
- 9 MODE A/B Button**  
Used to set A Mode or B Mode when specifying the operation time.

## 4. Synchronizing with the current time



- ① Press the [SET/MONITOR] button and select the “SET” Mode.
- ② If the time is advancing, press the CLOCK ADJUSTMENT button [▲], then set the time.
  - Each time the [▲] button is pressed, the time advances 1 minute. If it is pressed continuously, the time advances in 1-minute units, then when the bottom digit becomes 0, it advances in 10-minute units.  
When pressed continuously, the minute digit returns to 0 and advances in 1 hour units.
- ③ To reverse the time, press the [▼] time adjust button and set the time.
  - Each time the [▼] button is pressed, the time reverses 1 minutes. If it is pressed continuously, the time advances in 1-minute units, then when the bottom digit becomes 0, it reverses in 10-minute units.  
When pressed continuously, the minute digit returns to 0 and advances in 1 hour units.
  - \* At the point when the CLOCK ADJUSTMENT buttons [▲], [▼] are pressed, the seconds digit is set at 0 and the clock starts running.
- ④ After the time adjustment is completed, press the [SET/MONITOR] button and return it to the “MONITOR” mode.
  - \* As will be explained later on, the current time display indicates the starting time of the time interval (30 minute units) that is the object of adjustment during adjustment of the daily timer (for example, in the 0:00 to 0:30 interval, 0:00 is displayed). To return the display to the current time display from the starting time interval display, press the [▲] or [▼] CLOCK ADJUSTMENT button once, or press the [SET/MONITOR] button and set the “MONITOR” mode.

## 5. Setting the Current Day

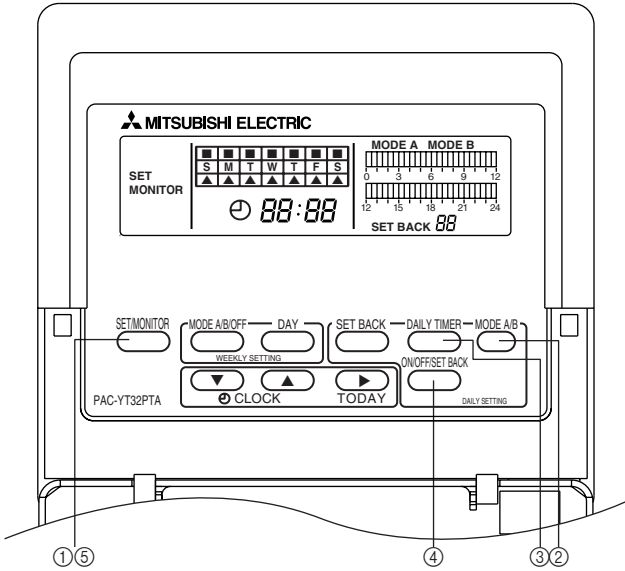


- ① Press the [SET/MONITOR] button and select the “SET” Mode.
- ② Pressing the TODAY button [▶] day setting button changes the contents of the lighted display in the order  
Sunday → Monday → Tuesday → Wednesday → . . .  
Set the current day while checking the liquid crystal display of the current day display.
- ③ When the setting operation is completed, press the [SET/MONITOR] button and return to the “MONITOR” mode.

**NOTE:**

- When the power is first switched On and if there has been a power failure for 48 hours or longer, it is necessary to set the current time and day.
- If there is a power failure that is less than 48 hours long, the clock runs from the internal battery.

## 6. Daily Timer Setting Method



- ① Press the [SET/MONITOR] button and select the “SET” Mode.
- ② Press the [MODE A/B] button and select the mode.
- ③ At this time, the block corresponding to the current time will be blinking. When you want to press the [DAILY TIMER] (advance) button for this blinking block and change the time, the starting time for that time interval is displayed in the current time display.
- ④ Set the setting button as shown below.

Each time the [ON/OFF/SET BACK] button is pressed, the display in the block changes, in the following order, “Lighting” → “Off” → “Blinking” → “Lighting” → ...

[If you desire to turn operation ON] → Press the [ON/OFF/SET BACK] button once → That block will light up.

[If you desire to turn operation OFF] → Press the [ON/OFF/SET BACK] button twice → That block will go off.

[If you desire to have set back operation] → Press the [ON/OFF/SET BACK] button three times → that block will blink.

### \* Daily Timer Setting (Example)

7:00~12:00, 13:30~21:00

Lighted → Air conditioner operation is ON

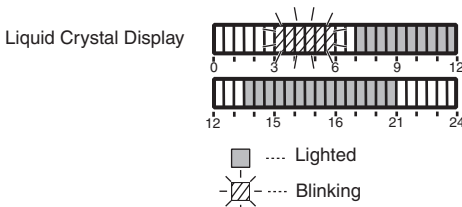
21:00~3:00, 6:00~7:00

Off → Air conditioner operation is OFF

12:00~13:30

3:00~6:00 (Shaded portion)

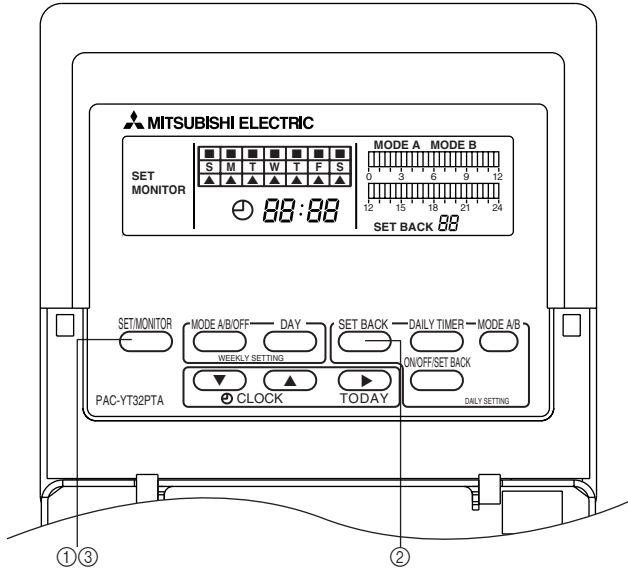
Blinking → Set back operation



- ⑤ When the setting operation is completed, press the [SET/MONITOR] button and return to the “Monitor” mode.



## 7. Setting the Amount of Set Back Operation



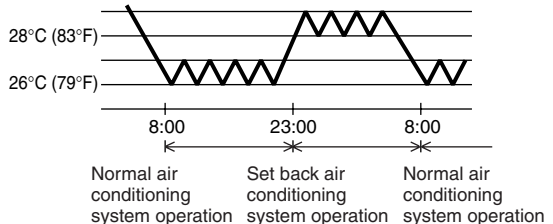
- ① Press the [SET/MONITOR] button and select the “SET” Mode.
- ② Press the [SET BACK] button, then set the amount of set back.
  - Each time the [SET BACK] button is pressed, the amount of set back becomes 1°C (2°F) greater. The amount of set back can be set at 1, 2, 4, 6 and 8°C (2, 4, 8, 12 and 16°F). If it is advanced to 8°C (16°F), it returns by 1°C (2°F).
- ③ When the setting operation is completed, press the [SET/MONITOR] button and return to the “MONITOR” mode. In the “Monitor” mode, if the set back pattern has not been set by the Daily Timer setting method in item 6, the set back amount is not displayed.
- ④ During set back operation, the set temperature display on the standard remote controller changes.

### \* Set Back Operation

In this operation, a time interval when the air conditioning load becomes lower is designated, and during this time interval, the temperature during air conditioning is set so that it is several degrees higher than the normally set temperature, and during heating, the temperature is set so that it is several degrees lower than the normally set temperature. Through this kind of operation control, running costs can be reduced. The amount of set back can be set at 1, 2, 4, 6 and 8°C (2, 4, 8, 12 and 16°F).

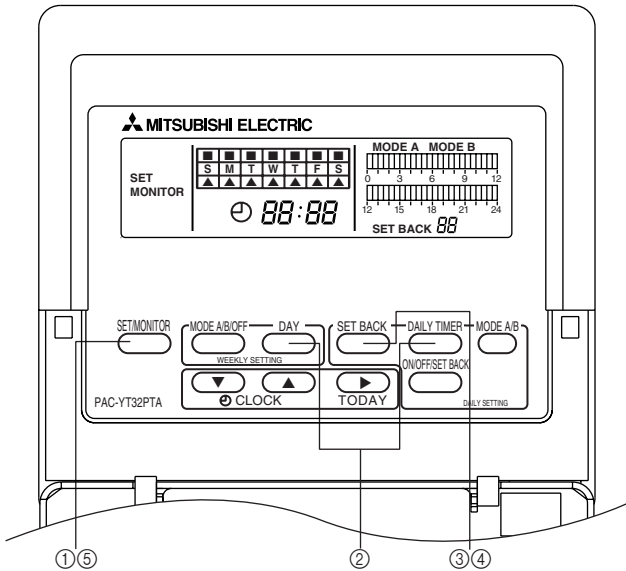
Example) In the case of hotel air conditioning, etc., with 24-hour operation

8:00 ~ 23:00	Air conditioning system operation setting 26°C (79°F)
23:00 ~ 8:00	Set Back Operation
	Set Back Amount: 2°C (4°F)



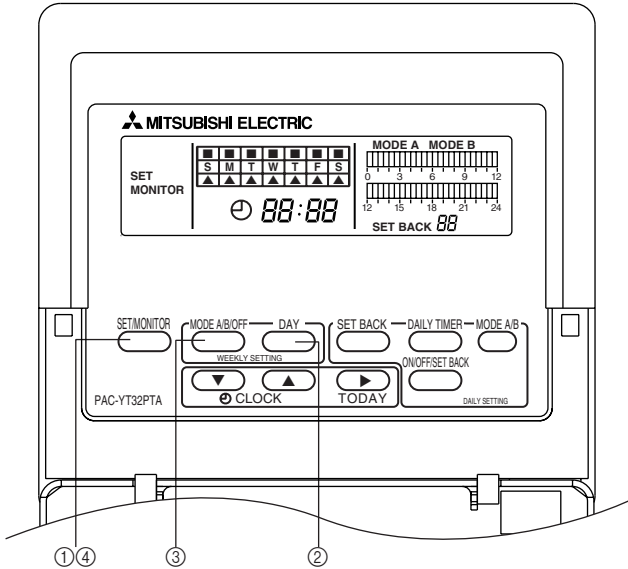
As shown in the graph at right, during the time specified for set back, the thermostat setting rises automatically by 2°C (4°F). The setting then returns to the normal setting after the set back time is ended.

## 8. Setting Centigrade (°C)/Fahrenheit (°F) at Set Back Operation



- ① Press the [SET/MONITOR] button and select the “SET” mode.
- ② Press the [DAY] and [DAILY TIMER] buttons simultaneously and select the “C/F” mode.
  - Release the “C/F” mode by operating a button other than the [SET BACK] button.
  - If no operation is performed within 3 minutes in the “C/F” mode, the set mode is released.
- ③ During the “C/F” mode, [SET BACK] blinks.  
At this time, the SET BACK display changes SET BACK C ↔ SET BACK F each time the [SET BACK] button is pressed. Set to match the connected remote controller.
  - If a Centigrade type remote controller is connected, set to “SET BACK C”.
  - If a Fahrenheit type remote controller is used, set to “SET BACK F”.
- ④ At the end of setting, press a button other than the [SET BACK] button and switch from the “C/F” setting mode to the “SET” mode.
- ⑤ Press the SET/MONITOR button and return to the “MONITOR” mode.

## 9. Weekly Timer Setting Method



- ① Press the [SET/MONITOR] button and select the "SET" Mode.
- ② At this time, the upper portion of the current day display blinks. Press the [DAY] button for this blinking block and set the desired day.
- ③ The setting button specifies the setting as follows.  
Each time the [MODE A/B/OFF] button is pressed, the display in the block changes, in the following order "Lighted" → "Off" → "Blinking" → "Lighted" → ...  
A Mode: Lighted      B Mode: Blinking      OFF Mode: Off
- ④ After the setting operation is completed, press the [SET/MONITOR] button and return to the "MONITOR" mode.

### \* Weekly Timer Setting (Example)

Monday, Tuesday, Thursday ..... A Mode Operation  
 Wednesday, Friday ..... B Mode Operation  
 Saturday, Sunday ..... Stopped

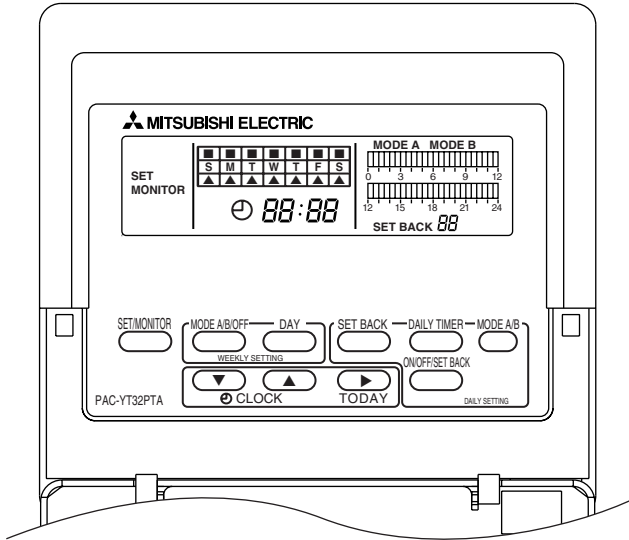
Liquid Crystal Display

	■	■	▨	■	▨	
S	M	T	W	T	F	S
	▲					

■ .... Lighted

▨ .... Blinking

# 10. Explanation of Timer Operation



(1) If connected to the remote controller.

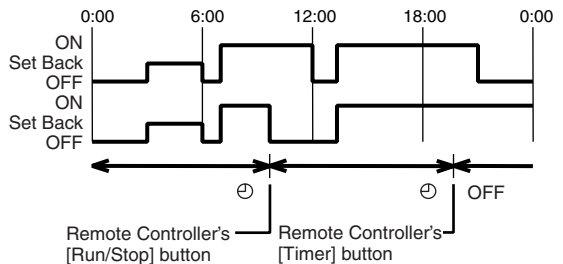
- ① Press the remote controller's [Timer/Continuous] or [Timer] MODE button and set the system in the "Timer" mode.  
If it is not in the "Timer" mode, the program timer's operation pattern becomes disabled. If the program timer is connected, the 24-hour On/Off timer on the remote controller cannot be used.
- ② If the Run/Stop button on the remote controller is pressed during operation in the "Timer" mode, the system stops. Also, If the Run/Stop button is pressed while in the "Timer" mode, the system begins operation in the "Timer" mode.

Explanation is given using the following setting pattern

In the case of the diagram at right

- |                            |   |
|----------------------------|---|
| 7:00~12:00, 13:30~21:00    | Lighted → Air conditioner operation is ON |
| 3:00~6:00 (Shaded portion) | Blinking → Set back operation             |
| 21:00~3:00, 6:00~7:00      | Off → Air conditioner operation is OFF    |
| 12:00~13:30                |   |

Program Timer's Operation Pattern  
  
Unit Operation  
  
Remote Controller's Timer Mode Display



## 11. Power Failure Compensation Time

With the program timer, the time function can be backed up by the internal battery during a power failure.

- Power Failure Compensation Time ..... Approx. 48 hours (25°C (77°F))

**NOTE:** When first turning the power on and after a power failure that has lasted more than 48 hours, it takes approximately 30 minutes until the backup battery is fully recharged.

