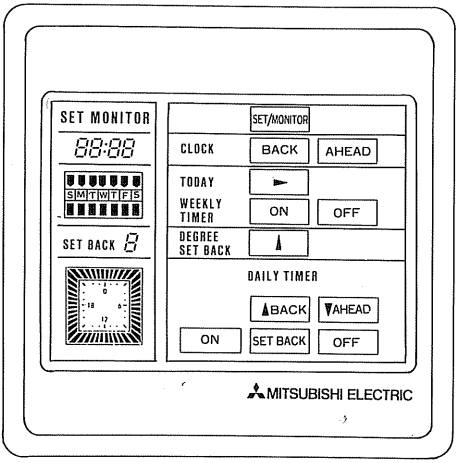
MITSUBISHI AIR CONDITIONER
OPTIONAL PARTS
Parts No.
PACSK65PT
PROGRAM TIMER OPERATION MANUAL



CONTENTS

Carefully read this manual before use.

It is recommended to safe keep this manual for future reference.

Thank you for purchasing PROGRAM TIMER for Mitsubishi air conditioner. This program timer has the following functions.

(1) DAILY TIMER FUNCTION

Timer operations of 3 patterns, ON/ OFF/SET BACK can be selected dividing the 24 hours in 30 minutes unit.

(2) WEEKLY TIMER FUNCTION

The above Daily Timer operation pattern can be selected for each day of the week.

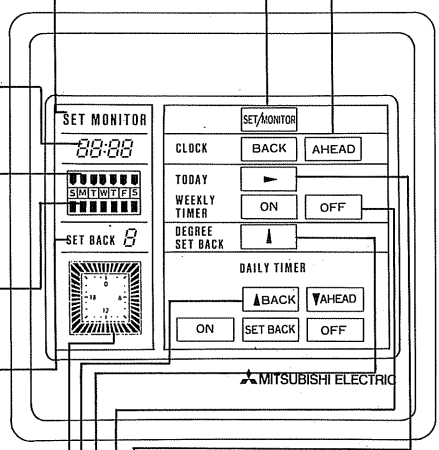
(3) If you use this unit together with a centralized remote controller, you can set the timer of the centralized control system to a desired setting.

* * * SPECIFICATIONS * * *

PROGRAM TIMER SPECIFICATIONS

Parts name	: Program timer
Parts No.	: PACSK65PT
Applicable models	: Models with "K" control
Exterior dimensions(inch)	: 4-23/32×4-23/32×19/32 (120×120×15mm)
Installation	: Wall mount
Type of clock	: Quartz
Clock accuracy	: ±50s /month
Display -Time -Week -Timer setting	: Liquid crystal display : Liquid crystal display : Liquid crystal display
Program cycle	: 24 hours
Timer setting unit	: 30 minutes
No. of set points	: 48/day
Power rating	: 5V DC

* * * NAMES AND FUNCTIONS * * *



Mode display

Current time display

Current week day display

Weekly timer display

Set back display

Daily timer display

NOTE : Display above is only an example.

● **Mode selector button** : Using this button select "MONITOR" or "SET" mode.

"MONITOR" : Indicates the current timer setting. All buttons except [SET/MONITOR] are invalidated then. This is the normal status.

"SET" : Set to "SET" mode for clock adjustment, change of week day, daily and weekly timer setting.

● **Clock adjustment button** : Used for adjustment of the current time.

Push [AHEAD] button to advance the time. Each time the button is pushed the time advances by 1 minute, pushing continuously advances 1 minute at 0.5 second interval, and when the lower digit of minute decomes 0 the indication advances in 10 minutes unit.

[BACK] button 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 interval, and when the lower digit of minute becomes 0 the indication reverses in 10 minites unit.

● **Week day setting button** : Used for week day setting.

Pushing [▶] button moves the week day light display in the order of S → M → T → W →····· enabling to set the week day.

● **Weekly timer button** : Used for setting timer in day of week unit.

● **Set back setting button** : Used for set back setting.

Set back can be done in the range of 2 to 18°F (1 to 9°C) in 2°F (1°C) unit.

● **Daily timer button** : Used for timer setting in 30 minutes unit.

* * * TIME ADJUSTMENT * * *

(1) Push [SET/MONITOR] button to select "SET" mode.

(2) To advance the time push [AHEAD] (CLOCK) button.
The clock advances by 1 minute each the button is pushed. Keeping the button pushed continuously advances the time by 1 minute at each 0.5 seconds interval, then when the lower digit of the minute becomes "0" the time advances in 10 minutes unit.
Time display is in 24 hour system.

(3) To reverse the time push [BACK] (CLOCK) button.
Each time the button is pushed the clock reverses by 1 minute. Keeping the button pushed continuously reverses the time by 1 minute at each 0.5 seconds interval, then when the lower digit of the minute becomes"0"the time reverses in 10 minutes unit.

(4) Setting in units of seconds is not possible, however, each time the [AHEAD] or [BACK] (CLOCK) button is pushed "0" second sets starting the clock.

(5) When setting ends, push [SET/MONITOR] button and return to "MONITOR" mode.

(6) Even if mode display indicates "SET" mode,the current time displays unless either [AHEAD] of [BACK] (CLOCK) button is pushed.

* * * WEEK DAY SETTING * * *

(1) Push [SET/MONITOR] button and select "SET" mode.

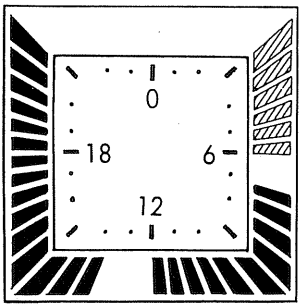
(2) Pushing [▶] (TODAY) button moves the light display in the order of S → M → T → W……
While watching the display current week day display set the correct day of the week.

(3) When setting ends push [SET/MONITOR] button to return to "MONITOR" mode.

* * * TIMER SETTING * * *

(1) Daily timer setting

a) Display



As shown at left 24 hours is divided into 48 blocks and each block expresses 30 minutes. The block display consists of 3 patterns as shown below.

Lit block : Unit running command
Blinking : Unit set back operation command
Off : Unit stopping command

Example shown at left means the following :

7:00～12:00, 13:30～21:00 Lit→Unit running
3:00～6:00 (hatched) Blink→Set back operation
21:00～3:00, 6:00～7:00, 12:00～13:30 } Off→Unit stopping

b) Daily timer setting

① Push [SET/MONITOR] button and select "SET" mode.

② Since the block for current time is blinking move the blinking block to a time desired for timer setting by pushing [▲ BACK] (DAILY TIMER) button or [▼ AHEAD] (DAILY TIMER) button.
(if set back operation is already set, that block is also blinking but at a slower interval).

③ Specify the timer setting pattern in the following manner.
〔For running〕 →Push [ON] (DAILY TIMER) button→that block lights →the blinking block moves to the next.
〔For set back operation〕 →Push [SET BACK] (DAILY TIMER) button →that block blinks→the blinking block moves to the next.
〔for stopping〕 →Push [OFF] (DAILY TIMER) button→that block goes out→the blinking block moves to the next.
A continuous timer pattern can be set by pushing [ON] button, [SET BACK] button or [OFF] button continuously.

④ When timer pattern setting ends push [SET/MONITOR] button and return to "MONITOR" mode.

(2) Set back setting

① Push [SET/MONITOR] button and select "SET" mode.

② Push [▲] (DEGREE SET BACK) button. Each time the button is pushed the set back goes up by 2°F(1°C). Set back can be done in the range of 2 to 18°F (1 to 9°C) in 2°F (1°C) unit.

The set back display indicates the setting in the range of "1" to "9" then returns to "1" after "9" is indicated.

③ When setting ends push [SET/MONITOR] button and return to "MONITOR" mode. When in "MONITOR" mode set back will not be displayed unless set back pattern is set by step(1)-b) above.

SET BACK RANGE

1 : 2 deg(°F)/(1 deg(℃))
2 : 4 deg(°F)/(2 deg(℃))
3 : 6 deg(°F)/(3 deg(℃))
4 : 8 deg(°F)/(4 deg(℃))
5 : 10 deg(°F)/(5 deg(℃))
6 : 12 deg(°F)/(6 deg(℃))
7 : 14 deg(°F)/(7 deg(℃))
8 : 16 deg(°F)/(8 deg(℃))
9 : 18 deg(°F)/(9 deg(℃))

NOTE : Set back operation

Set back operation is a method which reduces the air conditioner running cost by controlling the operation with specified time band for lowered load. In other words the unit operates at a few degrees higher for cooling and a few degrees lower for heating in the specified time band. Set back can be specified in the range of 2 to 18°F (1 to 9℃).

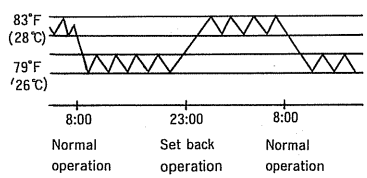
EXAMPLE : Air conditioning in a hotel operating 24 hours

8 : 00～23 : 00 Cooling 79°F (26℃) setting

23 : 00～8 : 00 Set back operation

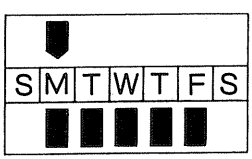
4°F (2℃) set back→83°F (28℃)

As shown in the graph the thermostat setting automatically rises 4°F (2℃) during the set back specified time, then returns to normal setting when the time ends.



④ Even during set back operation the temperature setting display on the remote controller remains unchanged.

(3) Weekly timer setting



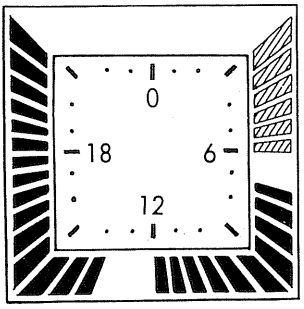
Weekly timer setting is used for selection of if or not the one day operation pattern set by (1)-b) is to be applied in week day unit. In the week day display lit in the upper row indicates the current week day and the lower row indicates the week day so selected for operation (in the example at left Monday through Friday are selected for timer operation while Saturday and Sunday are not selected).

① Push [SET/MONITOR] button and select "SET" mode.

② At this time lower row section of the current week day blinks. If weekly timer operation is to be selected push [ON] (WEEKLY TIMER) button, and if not to be selected push [OFF] (WEEKLY TIMER) button. Subsequently the next week day starts blinking, thus repeat the same procedure for selection.

③ When the Weekly timer setting ends push [SET/MONITOR] button and return to "MONITOR" mode.

* * * TIMER OPERATION * * *



This section explains the timer operation using the following examples of set patterns.

Lit -Air conditioner unit running command.
Blinking -Air conditioner unit set back operation command.
Off -Air conditioner unit stopping command.

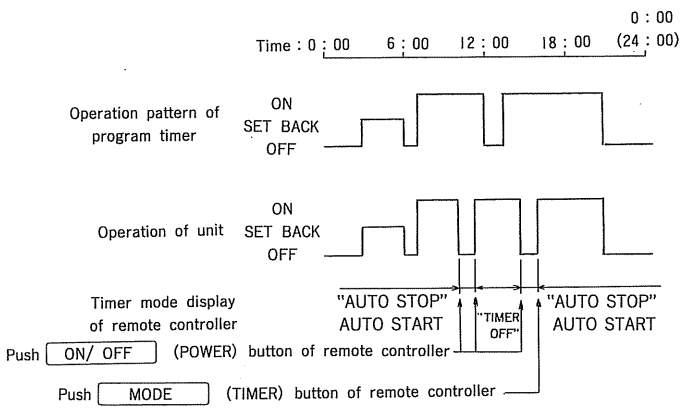
In the example at left,

7:00～12:00, 13:30～21:00 Lit –Unit running
3:00～6:00 (hatched) Blink-Set back operation
21:00～3:00, 6:00～7:00, 12:00～13:30 } Off –Unit stopping

(1) When connected to a remote controller

1) Push [MODE] (TIMER) button of the remote controller and set "AUTO STOP / AUTO START" mode. The unit operates in the pattern set with program timer. Selecting "TIMER OFF" mode invalidates the program timer operation pattern.
If program timer is connected, 24 hours ON/OFF timer of the remote controller can not be used.

2) Pushing [ON/OFF] (POWER) button while remote controller is used in "AUTO STOP / AUTO START" mode, changes the mode to "TIMER OFF" and the unit comes to a stop.
If program timer operation is required again push [MODE] (TIMER) button and select "AUTO STOP / AUTO START" mode.



(2) When connected to a centralized remote controller

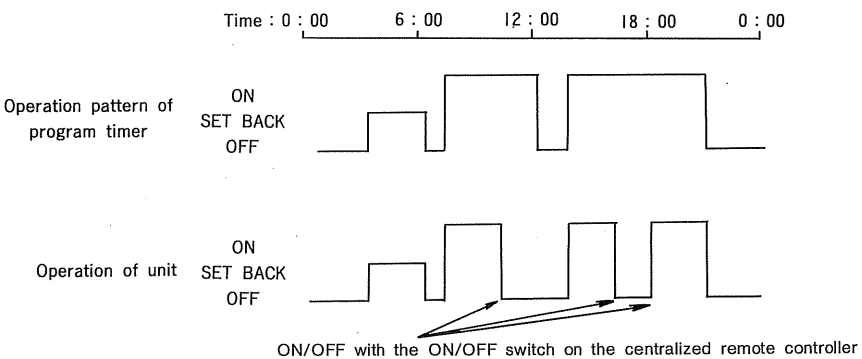
1) Set the centralized remote controller to adjustment mode, specify a group number, and push the program timer selector switch [ACTIVE/BYPASS] to enter ACTIVE mode. If you enter BYPASS mode, the operation pattern of the program timer will be invalid.

2) If this unit is connected to the centralized remote controller, settings in ACTIVE mode and those in the operation pattern of the program timer will be effective on a group basis and on an independent basis.

The operation pattern displayed on the program timer corresponds to the group number indicated at that time on the centralized remote controller.

After you have set the operation pattern of every group number to a desired setting, set the centralized remorte controller to MONITOR mode, then set the program timer to MONITOR mode.

3) Even while you are operating this unit in ACTIVE mode, you can switch ON and OFF a group of, or all, machines with the centralized remote controller ([ON/OFF] switch). Then, when the operation pattern has changed, this unit will operate according to a specified operation pattern (figure below).



* * * BATTERY REPLACEMENT * * *

When program timer is backed up by battery

With a program timer, clock function can be backed up with batteries at power failure.

Battery back up is good for a total of 30 days of power failure, however, batteries should be replaced when the use exceeds 5 years.

(1) Replacement batteries required

Alkaly button batteries SR44×3 pieces

(2) Replacement procedure

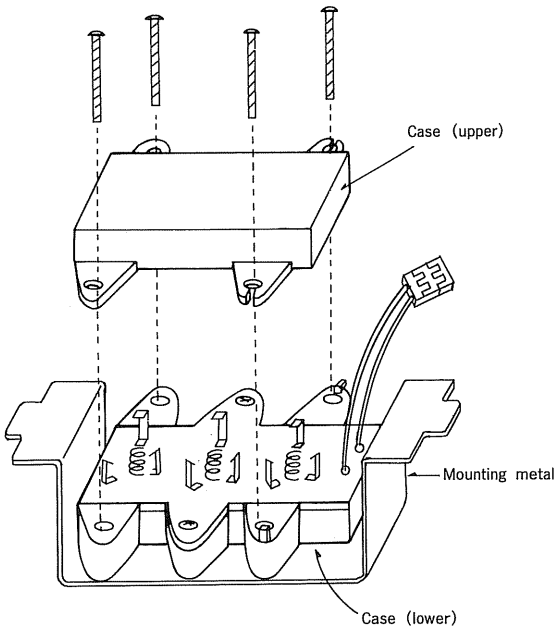
① If batteries are mounted on the back side of the program timer casing, detach the program timer and remove the battery case.

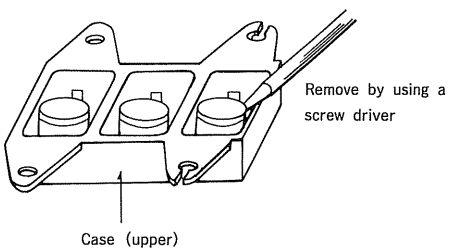
② Remove 4 battery case mounting screws.
(2 screws at the center need not be removed)

③ Three batteries are contained in the case (upper).
Using a screw driver remove them.

④ Set new batteries in position then attach the battery case in its original state.

NOTE : Always replace all 3 pieces.





MEMO

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