MITSUBISHI ELECTRIC

Changes for the Better

SPLIT-TYPE AIR CONDITIONERS

No. OC240
REVISED EDITION-B

TECHNICAL & SERVICE MANUAL

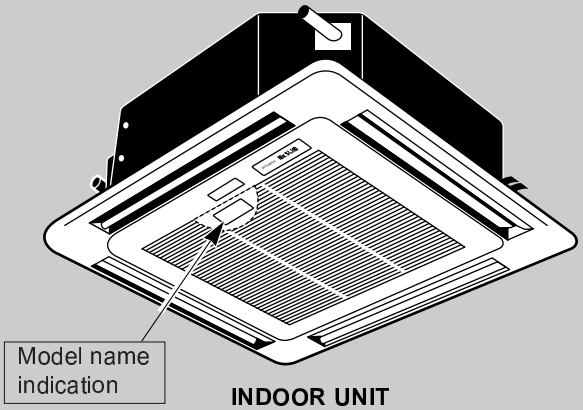
Series PLA Ceiling Cassettes R407C

Indoor unit [Model names]	[Service Ref.]
PLA-P1.6KA	PLA-P1.6KA.UK PLA-P1.6KA1.UK
PLA-P2KA	PLA-P2KA.UK PLA-P2KA1.UK
PLA-P2.5KA	PLA-P2.5KA.UK PLA-P2.5KA1.UK

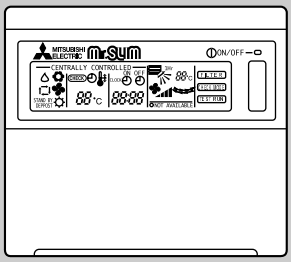
Revision:
- "**12. PARTS LIST**" has been modified.
- Program timer <PAC-YT32PTA> has been added in "**13. OPTIONAL PARTS**".

Note:
- Refer to the OCT03 REVISED EDITION-E as for control relation. This manual does not cover outdoor units. When servicing them, please refer to the service manual No.OC180 REVISED EDITION-A OC261 and this manual in a set.

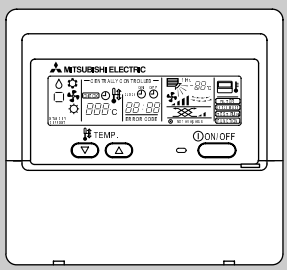
- Please void OC240 REVISED EDITION-A.



INDOOR UNIT



PLA-P1.6,2,2.5KA.UK



PLA-P1.6,2,2.5KA1.UK

REMOTE CONTROLLER

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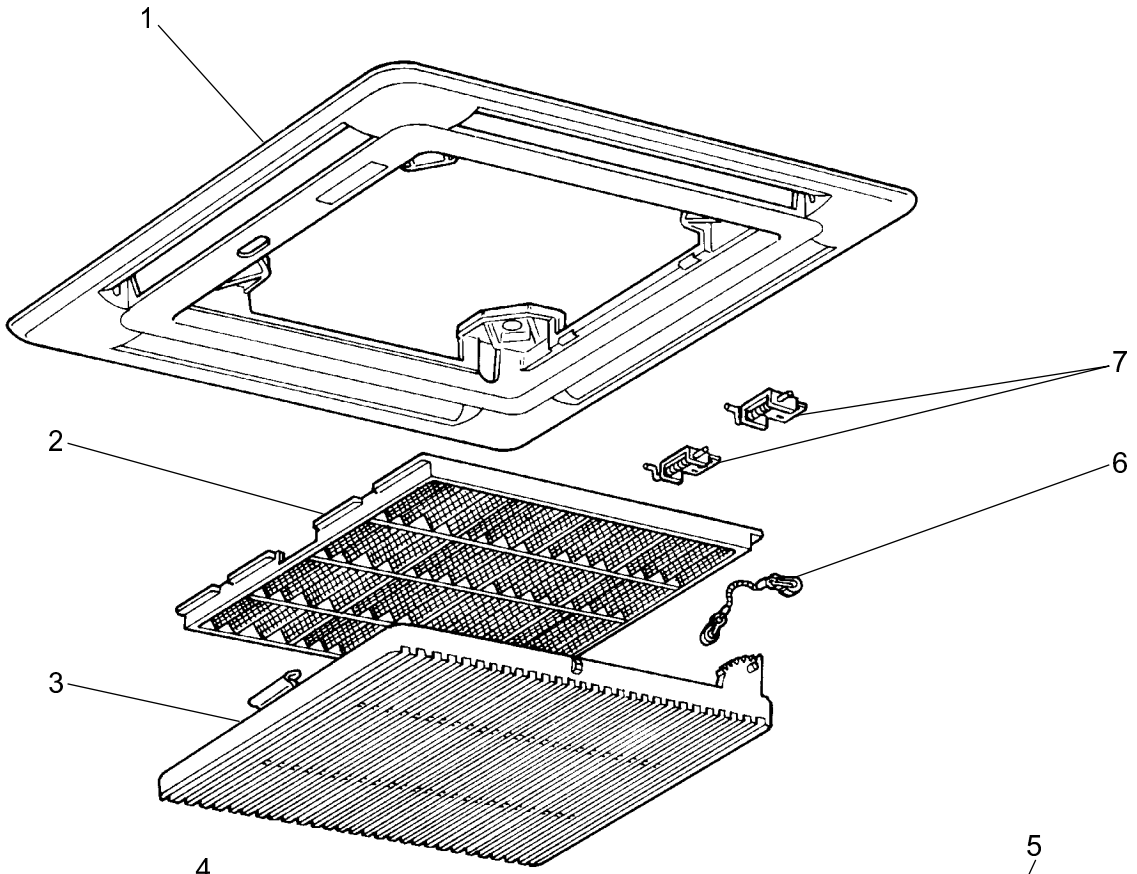
12 PARTS LIST

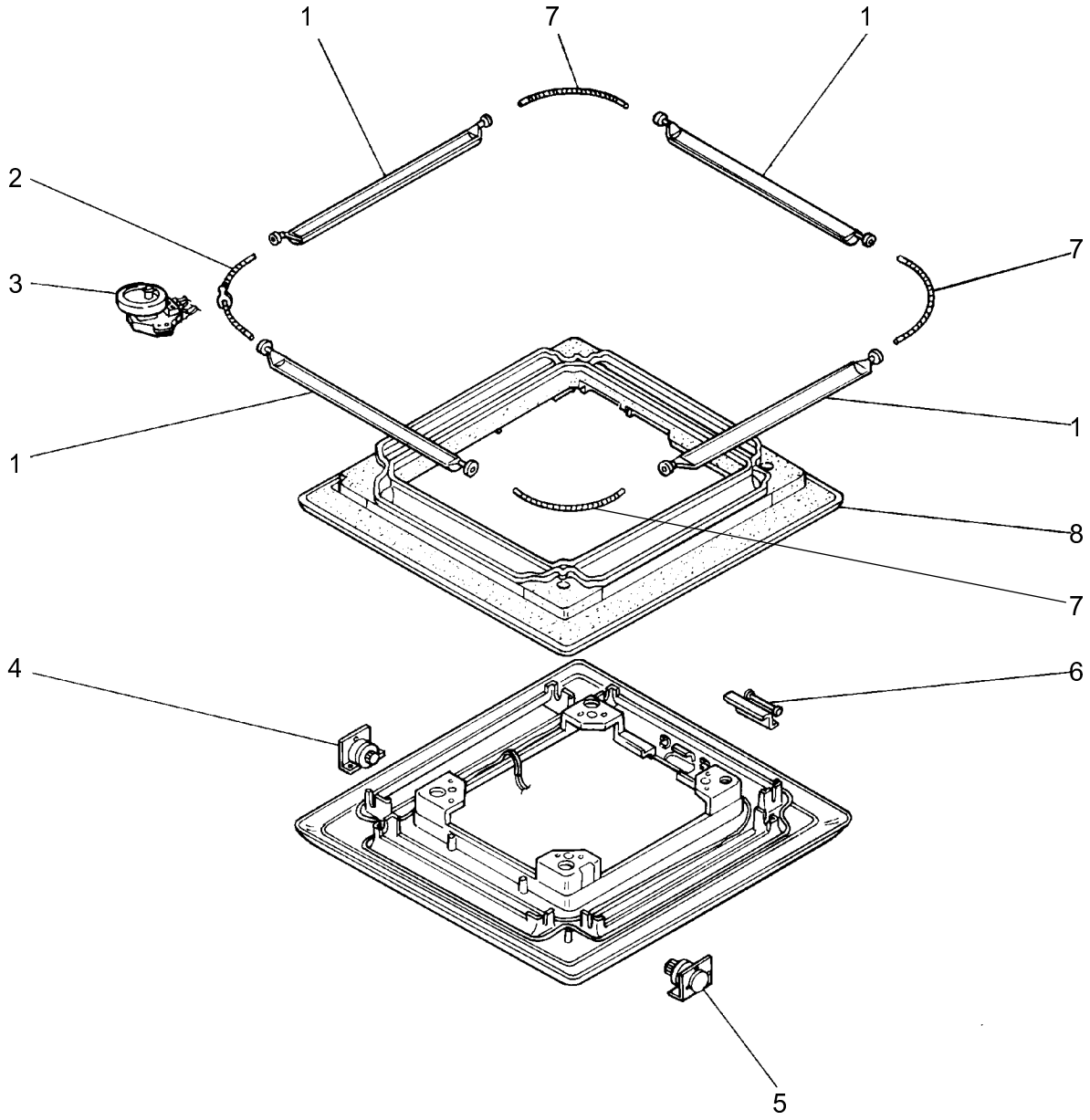
PANEL PARTS
PLA-P1.6KA.UK, PLA-P2KA.UK, PLA-P2.5KA.UK
PLA-P1.6KA$_1$.UK, PLA-P2KA$_1$.UK, PLA-P2.5KA$_1$.UK



PLA-P1.6/2/2.5KA.UK PLA-P1.6/2/2.5KA$_1$.UK

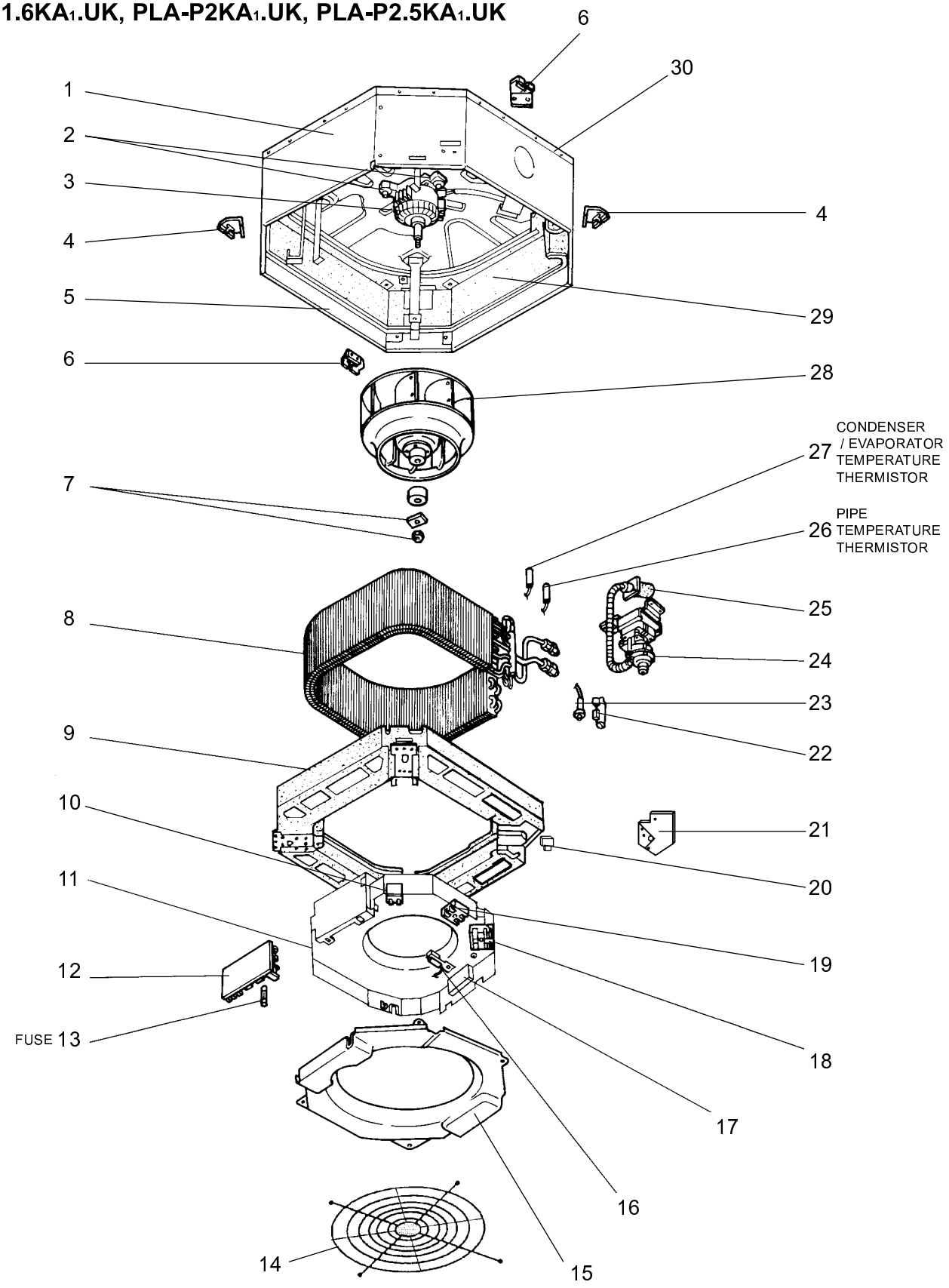
No.	Part No.	Part Name	Specification	Q'ty/set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price	
				PLA-P1.6/2/2.5					Unit	Amount
				KA.UK	KA$_1$.UK					
1	S70 560 003	AIR OUTLET GRILLE		1	1					
2	S70 29H 500	AIR FILTER		1	1					
3	S70 29H 691	INTAKE GRILLE		1	1					
4	S70 E00 713	REMOTE CONTROLLER	PAR-S27A-E	1			R.B			
	S70 E13 713	REMOTE CONTROLLER	PAR-20MAA-E		1		R.B			
5	S70 58A 246	CORD		1	1					
6	S70 29H 098	GRILLE HANGER		1	1					
7	S70 29H 061	HINGE		2	2					

PANEL PARTS
PLA-P1.6KA.UK, PLA-P2KA.UK, PLA-P2.5KA.UK
PLA-P1.6KA$_1$.UK, PLA-P2KA$_1$.UK, PLA-P2.5KA$_1$.UK



No.	Part No.	Part Name	Specification	Q'ty/set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom-mended Q'ty	Price	
				PLA-P1.6/2/2.5					Unit	Amount
				KA.UK	KA$_1$.UK					
1	S70 29H 002	AUTO VANE		4	4					
2	S70 31H 063	SPRING JOINT 2		1	1					
3	S70 29H 223	VANE MOTOR		1	1		MV			
4	S70 29H 041	GRILLE GEAR LEFT		1	1					
5	S70 29H 040	GRILLE GEAR RIGHT		1	1					
6	S70 29H 056	PUSH BUTTON		1	1					
7	S70 29H 063	SPRING JOINT 1		1	1	<3/SET>				
8	S70 29H 085	AIR GUIDE		1	1					

FUNCTIONAL PARTS
PLA-P1.6KA.UK, PLA-P2KA.UK, PLA-P2.5KA.UK
PLA-P1.6KA1.UK, PLA-P2KA1.UK, PLA-P2.5KA1.UK



Part numbers that is circled is not shown in the figure.

No.	Part No.	Part Name	Specification	Q'ty/set						Remarks (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price	
				PLA-P·KA.UK			PLA-P·KA1.UK						Unit	Amount
				1.6	2	2.5	1.6	2	2.5					
1	S70 003 688	DRUM1 ASSY		1	1	1	1	1	1					
2	S70 29H 105	MOTOR MOUNT		3	3	3	3	3	3					
3	S70 E00 762	FAN MOTOR	PAI-V30F-1	1	1	1	1	1	1		MF			
4	S70 100 130	LEG		2	2	2	2	2	2					
5	S70 004 688	DRUM2 ASSY		1	1	1	1	1	1					
6	S70 101 130	LEG		2	2	2	2	2	2					
7	S70 08K 097	SPL WASHER		1	1	1	1	1	1					
8	S70 E23 480	HEAT EXCHANGER		1	1		1	1						
	S70 E29 480	HEAT EXCHANGER				1			1					
9	S70 A00 529	DRAIN PAN		1	1	1	1	1	1					
10	S70 29H 255	CAPACITOR	2.5μF 400V	1	1	1	1	1	1		C			
11	S70 003 502	BELL MOUTH		1	1	1	1	1	1					
12	S70 E20 310*	CONTROLLER BOARD		1	1	1	1	1	1		I.B ※			
13	S70 E00 239	FUSE	250V 4A	1	1	1	1	1	1		F1<P.B>			
14	S70 A00 675	FAN GUARD		1	1	1	1	1	1					
15	S70 003 501	CONTROL COVER ASSY		1	1	1	1	1	1					
16	S70 E10 202	ROOM TEMPERATURE THERMISTOR	S / 750XAP	1	1	1	1	1	1		TH1			
17	S70 E00 313	POWER BOARD		1	1	1	1	1	1		P.B			
18	S70 E01 716	TERMINAL BLOCK	3P(S1,S2,S3)	1	1	1	1	1	1		TB4			
19	S70 515 716	TERMINAL BLOCK	2P(1,2)	1	1	1	1	1	1		TB5			
20	S70 A48 524	DRAIN PLUG		1	1	1	1	1	1					
21	S70 002 660	CORNER COVER		1	1	1	1	1	1					
22	S70 32K 241	SENSOR HOLDER		1	1	1	1	1	1					
23	S70 31K 266	DRAIN SENSOR		1	1	1	1	1	1		DS			
24	S70 55K 355	DRAIN PUMP		1	1	1	1	1	1		DP			
25	S70 29H 523	DRAIN SOCKET		1	1	1	1	1	1					
26	S70 08K 202	PIPE TEMPERATURE THERMISTOR		1	1	1	1	1	1		TH2			
27	S70 E09 202	CONDENSER / EVAPORATOR TEMPERATURE THERMISTOR		1	1	1	1	1	1		TH5			
28	S70 41N 114	TURBO FAN		1	1	1	1	1	1					
29	S70 001 659	INNER COVER		1	1	1	1	1	1					
30	S70 002 687	BASE		1	1	1	1	1	1					
(31)	S70 W28 527	DRAIN HOSE		1	1	1	1	1	1					

※ The part name of symbol “I.B” is “SPCB”.

13 OPTIONAL PARTS

1. Program timer (PLA-P1.6 / 2 / 2.5KA.UK)

Part No.	PAC-SC32PTA (with set back function)
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK

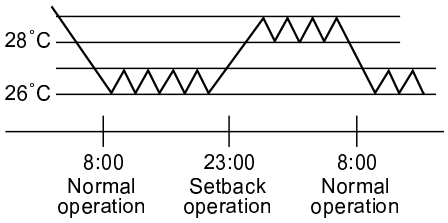
1-1 Program timer specifications

Part name	Program timer
Parts No.	PAC-SC32PTA
Exterior dimensions (inch)	5-4/32×4-23/32×23/32 (130×120×18mm)
Installation	Wall mount
Type of clock	Quartz
Clock accuracy	±50 second / month at 25°C
Display-Time	Liquid crystal display
-Week	Liquid crystal display
-Timer setting unit	Liquid crystal display
Program cycle	24 hours
Timer setting unit	30 minutes
No. of set points	48 / day
Power rating	5V DC ±5% (Supplied by Remote Controller)

1-2 Feature of program timer

(1) Daily timer function
Daily timer can be set in 30 minutes units for up to 24 hours.
Each unit can be set for unit ON, unit OFF, or setback operation.

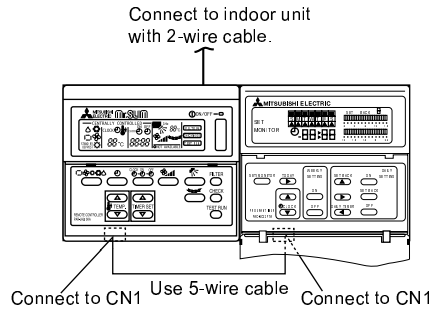
(2) Setback operation
Set back operation is useful for reducing running costs
e.g. At a hotel with a 24-hour system
8:00~23:00 Cooling operation with set temperature at 26°C
23:00~8:00 Setback operation with 2 degrees of setback
As shown in the chart on the right, the set temperature rises 2 degrees automatically during the setback operation. When the setback operation ends, normal operation will begin.



(3) Weekly timer function
Daily timer function can apply to each day of the week.

1-3 How to connect program timer

(1) Install the program timer next to the remote controller the same way as the remote controller is installed.
(2) Connect the program timer and the remote controller with a 5-wire cable as shown in the figure below



NOTE:While the program timer is connected to the remote controller, the 24hour ON/OFF timer on the remote controller will not operate.

1-4 Names and functions

<PAC-SC32PTA>

WEEKLY TIMER SETTING DISPLAY

Used for selection of if or not the day operation pattern set by PATTERN SETTING is to be applied in weekly day unit, setting.

CURRENT TIME DISPLAY

During MONITOR status,current time is display.
During Daily timer setting, a time desire for timer setting is displayed.

SET BACK DISPLAY

Indicates the setting set back range.

DAILY TIMER SETTING DISPLAY

24 hours is divided into 48 blocks and each block express 30 minutes.
The block display consists of 3 pattern.

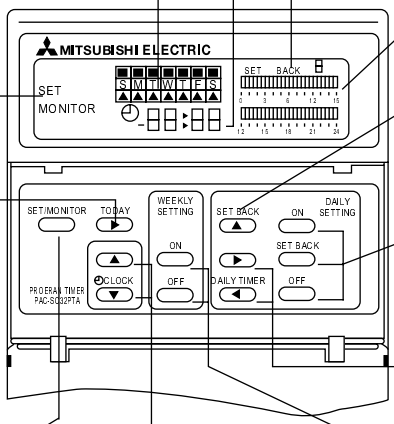
Set back can be done in the range of 1,2,4,6 and 8°C.

SET BACK SETTING SW

Used for set back setting.

SET/MONITOR DISPLAY

During SET is display, clock adjustment, change of weekly day, daily and weekly timer setting can be performed.
During MONITOR is display, all switches except SET/MONITOR SW are invalidated. This is normal status.



ON/SET BACK/OFF SW

Used to specify the time setting pattern.

WEEK DAY SETTING SW

Used for week day setting.

DAILY TIMER SW

Used for timer setting in 30 minutes unit.

MODE SELECTOR SW

Using this switch select “MONITOR” or “SET” Mode.

“MONITOR” :Indicates the current timer setting. All switch expect MODE SELECTOR SW are invalidated then.This is the normal status.
“SET”: Set to “SET” mode for clock adjustment, charge of week day, daily and weekly timer setting.

CLOCK ADJUSTMENT SW

Used for adjustment of the current time.

Push ▲ SW to advance the time. Each time the button is pushed the time advance by 1 minute, pushing continuously advances by 1 minute at 0.5 second interval, and when the lower digit of minute becomes 0 indication advances in 10 minutes unit.
▼ 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 interval, and when the lower digit of minute becomes 0 indication reverses in 10 minutes unit.

WEEKLY TIMER SW

Used for setting timer in day of week unit.

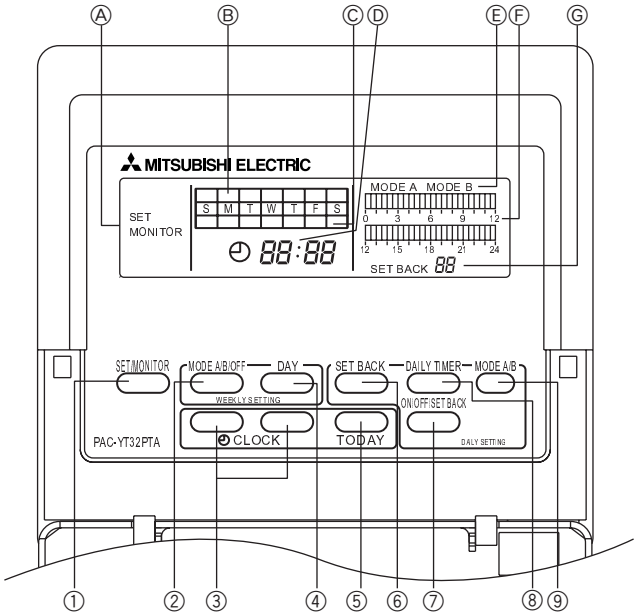
Pushing ▶ SW moves the week day light display in order of
S → M → T → W ···
enabling to set the week day.

2. Program timer (PLA-P1.6 / 2 / 2.5KA1.UK)

Part No.	PAC-YT32PTA
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA1.UK

2-1 Names and functions

<PAC-YT32PTA>



Ⓐ 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.

Ⓑ 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.

Ⓒ CURRENT DAY DISPLAY:
Indicates the current day.

Ⓓ CURRENT TIMEDISPLAY:
During MONITORstatus, current time is display.
During daily timer setting, a time desire for timer setting is displayed.

Ⓔ OPERATION MODE DISPLAY:
Indicates the operation mode.

Ⓕ 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.

Ⓖ 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 expect 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.

3. Wide Panel

Part No.	PAC-SE06WP-E
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK, PLA-P1.6 / 2 / 2.5KA$_1$.UK

4. Space Panel

Part No.	PAC-SE01AS-E
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK, PLA-P1.6 / 2 / 2.5KA$_1$.UK

5. Multi-Functional Casement (For HIGH EFFICIENCY FILTER AND FRESH AIR INTAKE)

Part No.	PAC-SE21TM-E
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK, PLA-P1.6 / 2 / 2.5KA$_1$.UK

6. High-Efficiency Filter Element

Part No.	PAC-SE13KF-E
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK, PLA-P1.6 / 2 / 2.5KA$_1$.UK

7. Grille + Wireless Remote Controller

Part No.	PLP-2.5KAL-E	PLP-2.5KLM
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK	PLA-P1.6 / 2 / 2.5KA$_1$.UK

8. Remote Sensor

Part No.	PAC-SE41TS-E
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK, PLA-P1.6 / 2 / 2.5KA$_1$.UK

9. Remote Operation Adapter

Part No.	PAC-SF40RM-E
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK, PLA-P1.6 / 2 / 2.5KA$_1$.UK

10. Remote ON/OFF Adapter

Part No.	PAC-SE55RA-E
Applied Service Ref.	PLA-P1.6 / 2 / 2.5KA.UK, PLA-P1.6 / 2 / 2.5KA$_1$.UK

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