

TECHNICAL & SERVICE MANUAL

Series PLH Ceiling Cassettes R407C

Indoor unit
[Model names]

PLH-P1.6KAH

PLH-P2KAH

PLH-P2.5KAH

[Service Ref.]

PLH-P1.6KAH.UK
PLH-P1.6KAH₁.UK
PLH-P2KAH.UK
PLH-P2KAH₁.UK
PLH-P2.5KAH.UK
PLH-P2.5KAH₁.UK

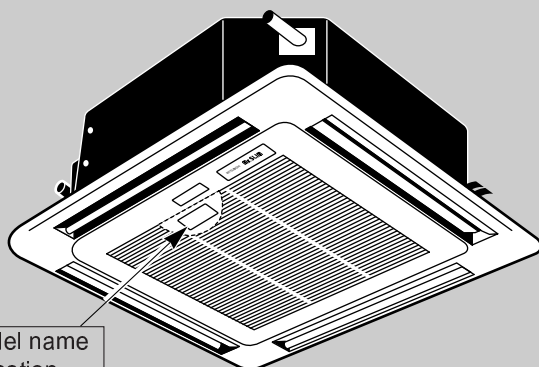
Revision:

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

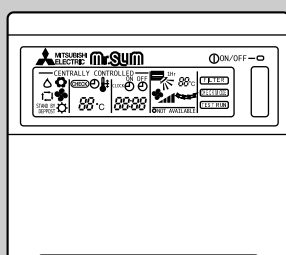
Note:

- 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.

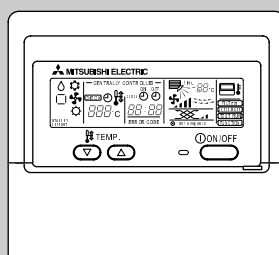
- Please void OC235 REVISED EDITION-A.



INDOOR UNIT



PLH-P1.6, 2, 2.5KAH.UK



PLH-P1.6, 2, 2.5KAH.UK

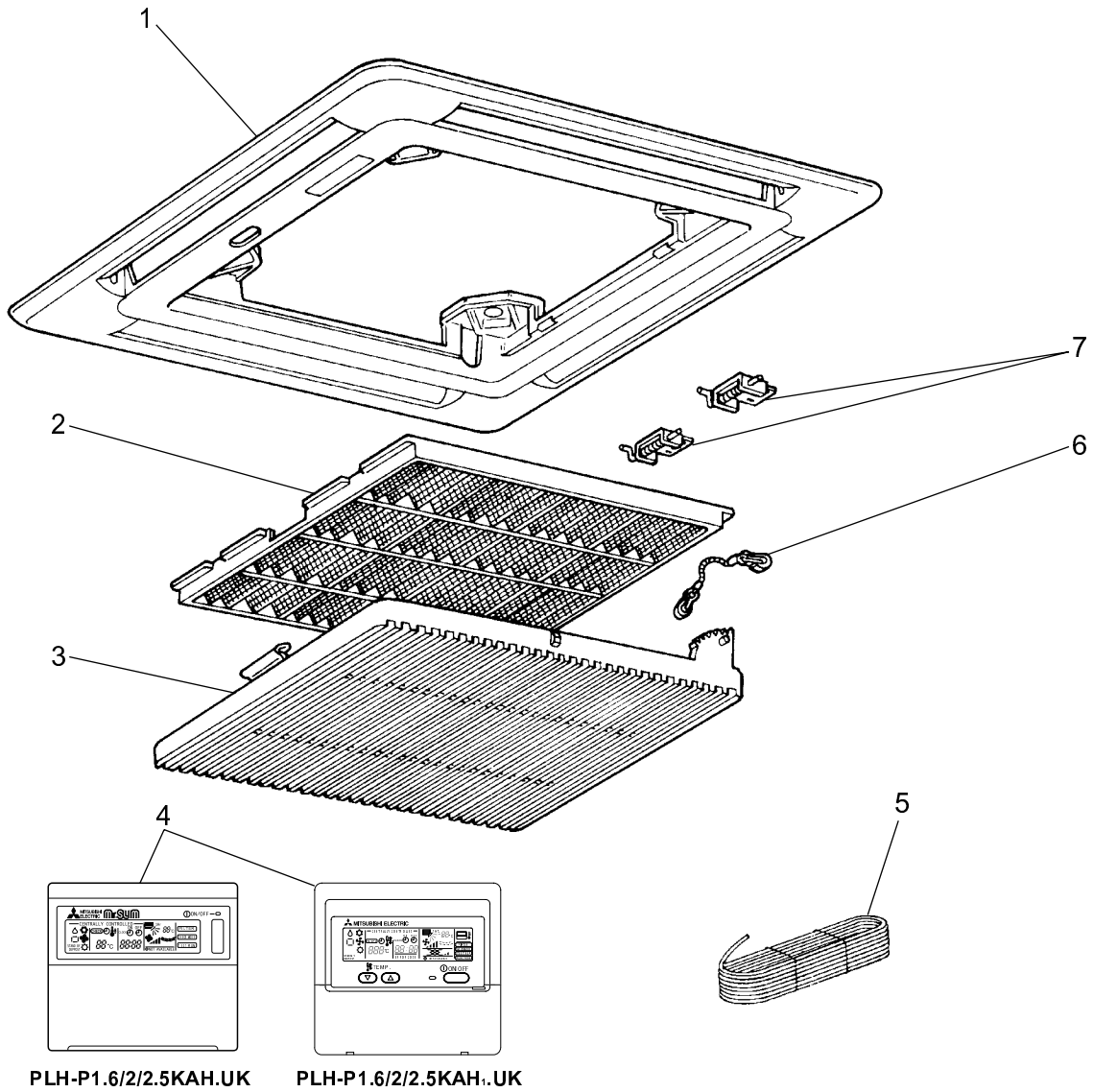
REMOTE CONTROLLER

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PANEL PARTS

PLH-P1.6KAH.UK, PLH-P2KAH.UK, PLH-P2.5KAH.UK
 PLH-P1.6KAH₁.UK, PLH-P2KAH₁.UK, PLH-P2.5KAH₁.UK

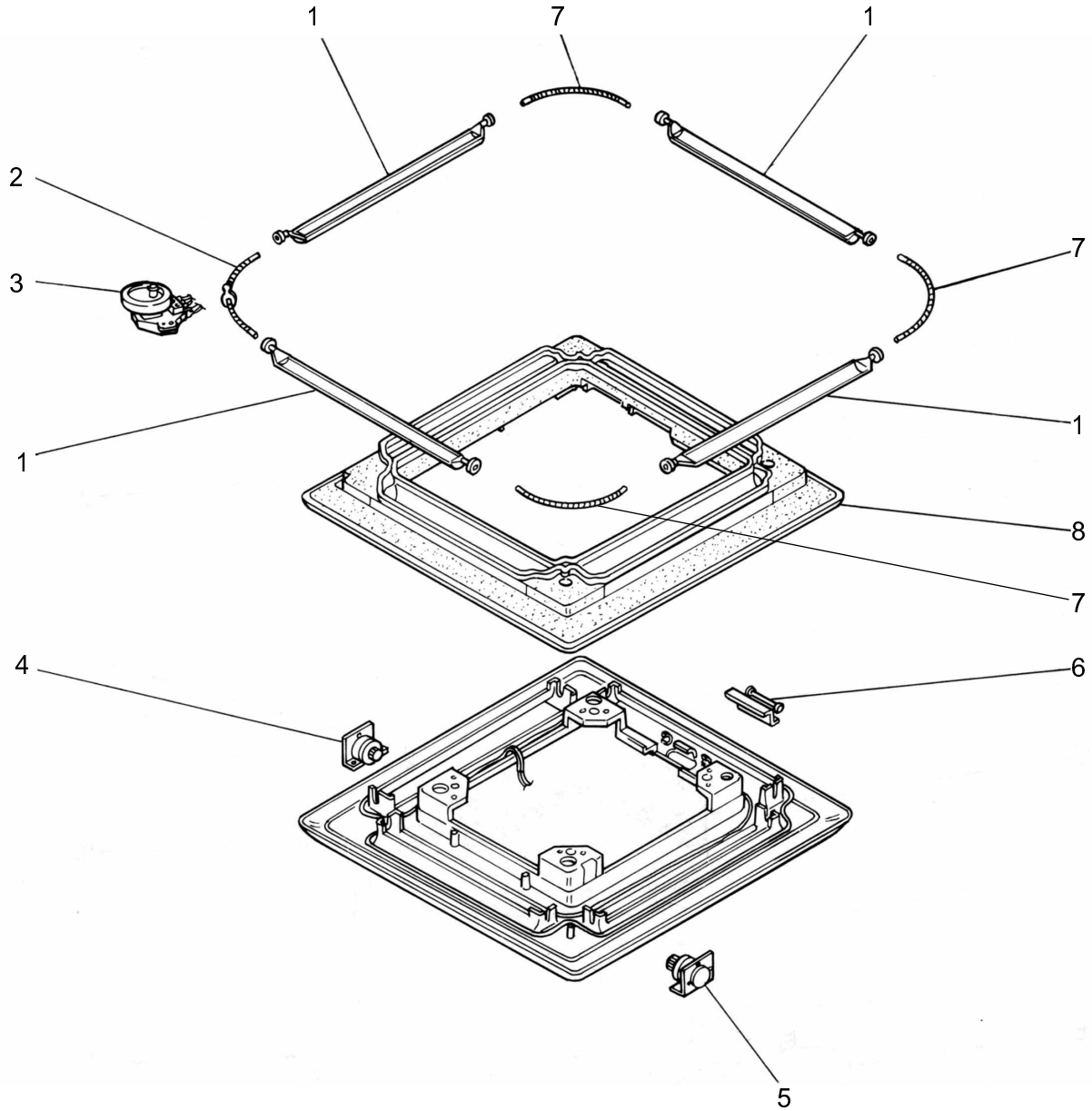


No.	Part No.	Part Name	Specification	Q'ty/set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PLH-P1.6/2/2.5					Unit	Amount
				KAH.UK	KAH ₁ .UK					
1	S70 560 003	AIR OUTLET GRILLE		1	1					
2	S70 29H 500	AIR FILTER		1	1					
3	S70 29H 691	INTAKE GRILLE		1	1					
4	S70 E00 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

PLH-P1.6KAH.UK, PLH-P2KAH.UK, PLH-P2.5KAH.UK

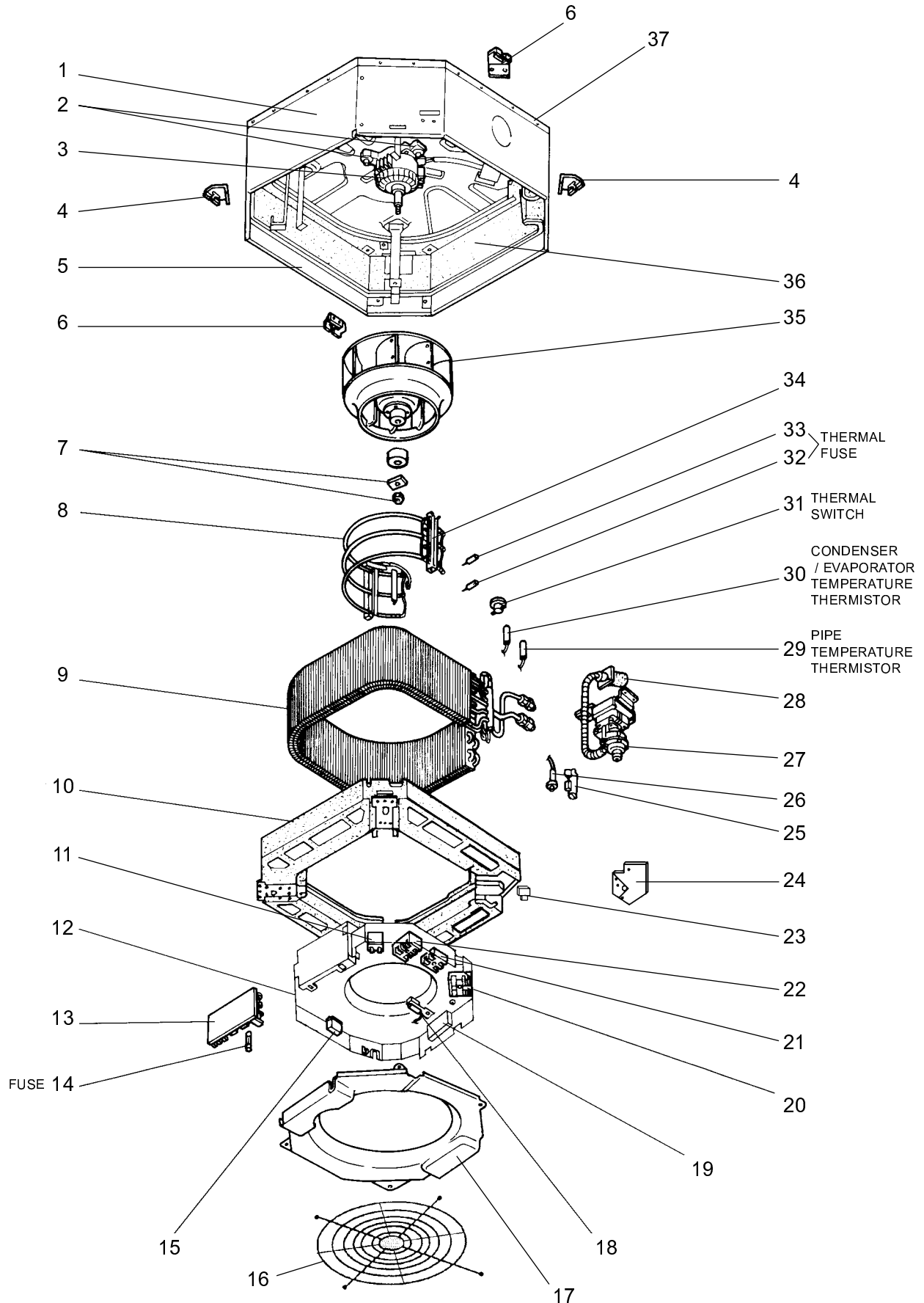
PLH-P1.6KAH₁.UK, PLH-P2KAH₁.UK, PLH-P2.5KAH₁.UK



No.	Part No.	Part Name	Specification	Q'ty/set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recom- mended Q'ty	Price	
				PLH-P1.6/2/2.5					Unit	Amount
				KAH.UK	KAH 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

PLH-P1.6KAH.UK, PLH-P2KAH.UK, PLH-P2.5KAH.UK
 PLH-P1.6KAH₁.UK, PLH-P2KAH₁.UK, PLH-P2.5KAH₁.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	Recom- mended Q'ty	Price	
				PLH-P-KAH.UK			PLH-P-KAH..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 A00 300	HEATER ELEMENT	467W 240V	3	3		3	3			H1			
	S70 A01 300	HEATER ELEMENT	700W 240V			3			3		H1			
9	S70 E23 480	HEAT EXCHANGER		1	1		1	1						
	S70 E29 480	HEAT EXCHANGER				1			1					
10	S70 A10 529	DRAIN PAN		1	1	1	1	1	1					
11	S70 29H 255	CAPACITOR	2.5μF 400V	1	1	1	1	1	1		C			
12	S70 003 501	CONTROL COVER ASSY		1	1	1	1	1	1					
13	S70 E20 310*	CONTROLLER BOARD		1	1	1	1	1	1		I.B ※			
14	S70 E00 239	FUSE	250V 4A	1	1	1	1	1	1		F1<P.B>			
15	S70 71G 215	RELAY	JC-1a DC12V	1	1	1	1	1	1		88H			
16	S70 A00 675	FAN GUARD		1	1	1	1	1	1					
17	S70 003 502	BELL MOUTH		1	1	1	1	1	1					
18	S70 E10 202	ROOM TEMPERATURE THERMISTOR	S/750XAP	1	1	1	1	1	1		TH1			
19	S70 E00 313	POWER BOARD		1	1	1	1	1	1		P.B			
20	S70 E01 716	TERMINAL BLOCK	3P(S1,S2,S3)	1	1	1	1	1	1		TB4			
21	S70 515 716	TERMINAL BLOCK	2P(1,2)	1	1	1	1	1	1		TB5			
22	S70 A14 716	TERMINAL BLOCK	3P(L,N,⊙)	1	1	1	1	1	1		TB2			
23	S70 A48 524	DRAIN PLUG		1	1	1	1	1	1					
24	S70 002 660	CORNER COVER		1	1	1	1	1	1					
25	S70 32K 241	SENSOR HOLDER		1	1	1	1	1	1					
26	S70 31K 266	DRAIN SENSOR		1	1	1	1	1	1		DS			
27	S70 55K 355	DRAIN PUMP		1	1	1	1	1	1		DP			
28	S70 29H 523	DRAIN SOCKET		1	1	1	1	1	1					
29	S70 08K 202	PIPE TEMPERATURE THERMISTOR		1	1	1	1	1	1		TH2			
30	S70 E09 202	CONDENSER / EVAPORATOR TEMPERATURE THERMISTOR		1	1	1	1	1	1		TH5			
31	S70 046 700	THERMAL SWITCH	OFF42°C ON32°C	1	1	1	1	1	1		26H			
32	S70 32K 706	THERMAL FUSE	77°C 250V 10A	1	1	1	1	1	1		FS2			
33	S70 33K 706	THERMAL FUSE	98°C 250V 10A	1	1	1	1	1	1		FS1			
34	S70 20J 303	INSULATOR		1	1	1	1	1	1					
35	S70 41N 114	TURBO FAN		1	1	1	1	1	1					
36	S70 002 659	INNER COVER		1	1	1	1	1	1					
37	S70 002 687	BASE		1	1	1	1	1	1					
38	S70 W28 527	DRAIN HOSE		1	1	1	1	1	1					

※ The part name of symbol "I.B" is "SPCB".

1. Program timer (PLH-P1.6 / 2 / 2.5KAH.UK)

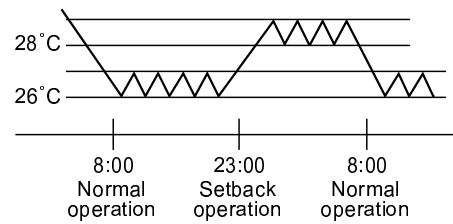
Part No.	PAC-SC32PTA (with set back function)
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK

1-1 Program timer specifications

Part name	Program timer
Parts No.	PAC-SC32PTA
Exterior dimensions (inch)	5-4/32X4-23/32X23/32 (130X120X18mm)
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)

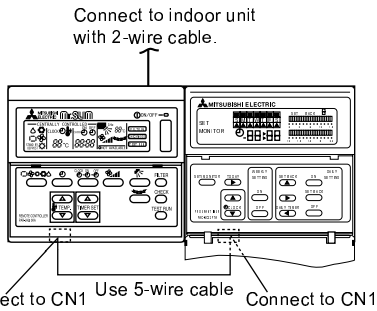
1-2 Feature of program timer

- (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

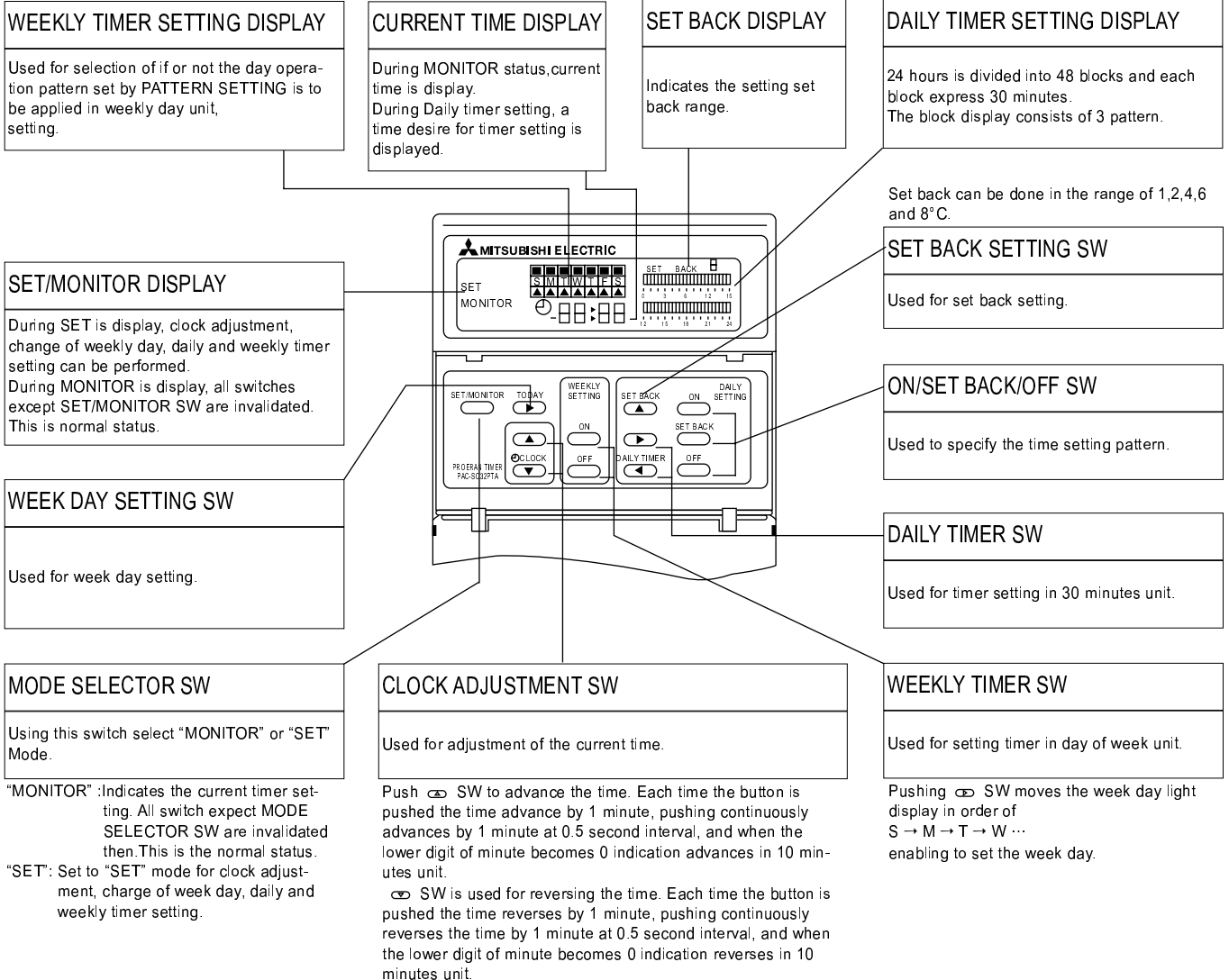
- (1) Install the program timer next to the remote controller the same way as the remote controller is installed.
- (2) Connect the program timer and the remote controller with a 5-wire cable as shown in the figure below



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>

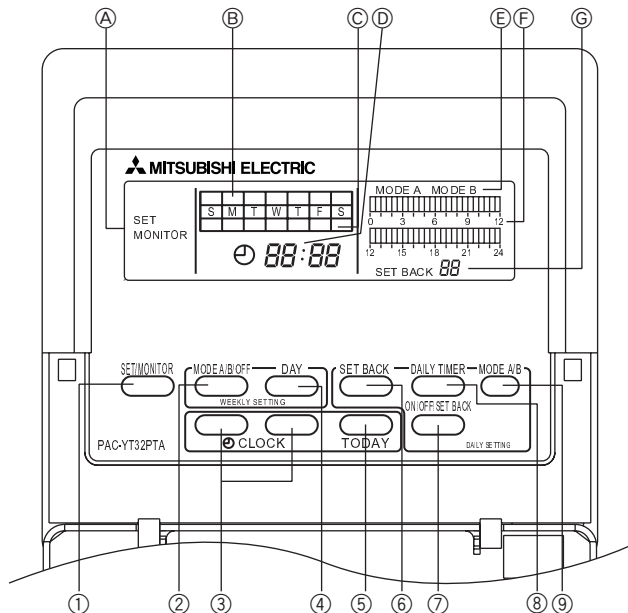


2. Program timer (PLH-P1.6 / 2 / 2.5KAH₁.UK)

Part No.	PAC-YT32PTA
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH ₁ .UK

2-1 Names and functions

<PAC-YT32PTA>



- 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 TIMEDISPLAY:**
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 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.	PLH-P1.6 / 2 / 2.5KAH.UK, PLH-P1.6 / 2 / 2.5KAH.UK

4. Space Panel

Part No.	PAC-SE01AS-E
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK, PLH-P1.6 / 2 / 2.5KAH.UK

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

Part No.	PAC-SE21TM-E
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK, PLH-P1.6 / 2 / 2.5KAH.UK

6. High-Efficiency Filter Element

Part No.	PAC-SE13KF-E
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK, PLH-P1.6 / 2 / 2.5KAH.UK

7. Grille + Wireless Remote Controller

Part No.	PLP-2.5KAL-E	PLP-2.5KLM
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK	PLH-P1.6 / 2 / 2.5KAH.UK

8. Remote Sensor

Part No.	PAC-SE41TS-E
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK, PLH-P1.6 / 2 / 2.5KAH.UK

9. Remote Operation Adapter

Part No.	PAC-SF40RM-E
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK, PLH-P1.6 / 2 / 2.5KAH.UK

10. Remote ON/OFF Adapter

Part No.	PAC-SE55RA-E
Applied Service Ref.	PLH-P1.6 / 2 / 2.5KAH.UK, PLH-P1.6 / 2 / 2.5KAH.UK

Mr. SLIM™

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