

# TERMINATION OF INTER-PBX CIRCUIT

P.M.B.X. 1A & 1B INSTALLATIONS: SIGNALLING GROUP L:

S.S.A.C. 13 (IVF)

N 760

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ISSUE B

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## REFERENCES

Relay Set 1/SA 8299	Diagrams SA 8299	SAW 82990 & SAJ 82990
Relay Set 2/SA 8299	SA 8299	SAW 82990 & SAJ 82990
Relay Set SA 7570	SA 7570	SAW 75700 & SAJ 75700
* Oscillator No.119A	SA 8295	SAW 82950
* PBX Alarm	SA 8296	SAW 82960
* PBX Tone Distribution	SA 8292	SAW 82920
Ø Receiver VF No.4A	SA 8297	SAW 82970
Ø Capacitor Unit No.14A	SA 8291	SAW 82910
✓ Filter Frequency No.176A	SA 8294	SAW 82940
Power Unit No.50A	N 635	
Power Unit No.51A	N 636	
Power Unit No.52A	N 637	
Lamp Alarm Indicating No.4	N 2304	
Supervisory Flashing Circuit	N 990, SA 7521	
Description of S.S.A.C.13	T.I. C3 P 5000	
Circuit Operation	Diagram Notes SA 7570, SA 8299	

- \* Part of Equip. Signalling No.24/...
- Ø Part of Relay Set 1/SA 8299
- Ø Part of VF. Receiver
- ✓ Only when required in lieu of Capacitor Unit  
(See Notes on Lining-up)

P.O.E.D. S BCH.	ISSUE		
PAPER: W CIRC'L TN: GENERAL	B	LINING UP PROCEDURE CHANGED. <i>MWH</i>	13.3.73
	A	MINOR AMDTS. <i>De J.</i>	16.10.67
		<i>P.C.J. R. Giller</i> S 3/2	18.8.67

TABLE 1. STORES LIST

Number of Inter-PBX Ccts.	Stores Required (See also Note 4)								
	Equip. Signalling	Power Unit	R/S SA7570	R/S 1/SA8299	R/S 2/SA8299	Covers (See Note C)	Lamp Alarm Indic.No.4	Case No.24 (See Note 3)	UAA N990 (See Note 4)
1	No.24/1A	No.50A	1 OFF	1 OFF	1 OFF	D 92416	1 OFF	1 OFF	1 OFF
2	No.24/2A	No.51A	2 OFF	2 OFF	2 OFF	D 92417	1 OFF	1 OFF	1 OFF
3	No.24/3A	No.52A	3 OFF	3 OFF	3 OFF	D 92418	1 OFF	1 OFF	1 OFF

TABLE 2. CABLING SCHEDULE FOR FIG.1

Straps per Circuit to be provided on Strip Connexion on Equip. Sig. No.24/....	Cable			
	From	To	Colour	Cable Type
SC SC				
1 - 41	SC 82	Term. JT	W/B	Cable Distn. 35... per Circuit to Equip. P.B.X. No. ....
2 - 42	SC 73	Term. JR	B	
3 - 35	SC 62	Term. AC2	W/O	
7 - 47	SC 59	Term. S	O	
8 - 48	SC 64	Term. L	W/G	
9 - 39	SC 81	Term. FS	G	
11 - 61	SC 24	Term. FR	W/BN	
12 - 34	SC 25	Term. FT	BN	
13 - 83	SC 18	Term. JT	W/S	
14 - 46	SC 63	Term. JR	S	
16 - 86	SC 66	Term. S	W/B-W	
17 - 37	SC 69	Term. L	B-W	
18 - 44	SC 85	Line A	W/B	Cable Distn. 35... per Circuit to Line
19 - 43	SC 84	Line B	B	
20 - 50	Misc.100	Term. A	W/B	Cable Distn. 35... to L.A. Ind. No.4
27 - 36	Fuse	PBX. Batt.		Cable Egmt. 49... Equip. Sig. No.24/... & P.B.X. Batt.
32 - 45	PBX-VE	24V-VE	BK	
	PBX+VE	24V+VE	R	
	Fuse	PU		
61 - 67	50V-VE	50V-VE	BK	Cable Egmt. 49... No. ... & 50V Fuse & Eth.
61 - 65	50V+VE	50V+VE	R	
	Eth.	P.U./Rect. +VE	-	Wire Earthing 9141 or 9142.

TABLE 2. CABLING SCHEDULE FOR FIG. 1 (Contd.)

Straps per Circuit to be provided on Strip Connexion on Equip. Sig. No.24/....	Cable			
	From	To	Colour	Cable Type
* Exchange Line Prohibition	PBX 24V-VE 24V+VE	LA Indic. No.4 Term. - Term. E	BK R	} Cable Distn. 35... P.B.X. Batt.& Eth. to LA Indic.No.4 Cord Flexible 250V P.V.C. 3 Core
	PU No.:	Mains Plug	-	

TABLE 3. DIMENSIONS OF EQUIPMENT SIG. No.24/...

	Equip. Sig. No.24/1A	Equip. Sig. No.24/2A	Equip. Sig. No.24/3A
Overall Rack Dimensions	3'9 $\frac{7}{8}$ " x 1'9" x 10 $\frac{1}{2}$ "	5'3 $\frac{7}{8}$ " x 1'9" x 10 $\frac{1}{2}$ "	6'10 $\frac{7}{8}$ " x 1'9" x 10 $\frac{1}{2}$ "
Overall Cover Dimensions	3'10" x 1'9 $\frac{1}{4}$ " x 1'6 $\frac{5}{8}$ "	5'4" x 1'9 $\frac{1}{4}$ " x 1'6 $\frac{5}{8}$ "	6'11" x 1'9 $\frac{1}{4}$ " x 1'6 $\frac{5}{8}$ "

## INFORMATIVE NOTES

### A. Equipment Signalling No.24/...

Equipments Signalling No.24/... comprise open type racks, Rack Apparatus No.74/... catering for one, two or three Inter-PBX S.S.A.C. 13 circuits and are supplied complete with shelving, shelf wiring and jacks on which the appropriate relay sets, power units and covers are mounted.

Table 1 gives a list of stores required for one, two or three circuit installations and Fig.1 shows the mounting positions of, and Table 2 the cabling schedule to these items.

### B. Inter-PBX 1VF (S.S.A.C.13) Circuits.

When it is known that additional Inter-PBX S.S.A.C.13 circuits may be required in the near future an Equipment Signalling No.24/... large enough to cater for these extra circuits should be provided. In these cases it may be more economic to provide the size of power unit appropriate to that Equipment Signalling No.24/... to avoid changing the power unit at a later date.

### C. Covers.

Covers finished in Elephant Grey colour are available as shown in Table 1 to encase the Equipments Signalling No.24/... These should only be provided when it is considered that the extra cost can be justified by local circumstances.

### D. Operating Instructions.

The operating staff should be instructed to report to the engineers the "Oscillator Failed" condition so that the maintenance engineer may take a spare oscillator to the installation.

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#### INSTALLATION NOTES.

##### 1. Equipment Signalling No.24/...

The Equipment Signalling No.24/... should be sited taking into account the following:-

- A. Maintenance access to the front and rear of the rack.
- B. Floor loading.
- C. Cabling access.
- D. Possible growth.

The Equipment Signalling No.24/... shall be secured to the floor by means of suitable screws or bolts and supported at the top by fixing to an adjacent wall or rack. To achieve this at some installations it may be necessary to use suitable locally made metal straps.

Before connecting battery supplies to the Equipment Signalling No.24/... check that all relay armatures on the equipment and in the relay sets are correctly positioned on their knife edges.

##### 2. Power Supply.

With the exception of Relay Set(s) SA 7570 the apparatus on Equipment Signalling No.24/... is operated from a mains connected power Unit providing a 50V. D.C. output. R/S SA 7570 is operated from the PBX battery supply.

Suitable three pin mains plug and Cord Flexible 250V to be purchased and fitted locally to the power unit. Fused mains plug must be fitted with 2 Amp. fuse.

P.O. earth to be independent of mains earth. Must be Wire Copper Soft 3/20 direct to power unit/rectifier, not to be taken via any other cabling.

##### 3. Lamp Alarm Indicating No.4.

The Lamp Alarm Indicating No.4 may be mounted in the Cable Turning Section or in a Case No.24. The labels should be reversed and sign-written or marked with similar wording but substituting the word "Oscillator" for "Power".

The appropriate Resistor Coil No.12 should be fitted in accordance with Table 1 of Diagram N2304.

##### 4. Supervisory Flashing Circuit.

Units Auxiliary Apparatus N990 and associated apparatus should be provided and mounted in accordance with Diagram SA 7521, the mounting arrangements are shown in Fig.4 and the circuitry is similar to that shown in Figs.1 and 2.

##### 1. LINING UP PROCEDURE

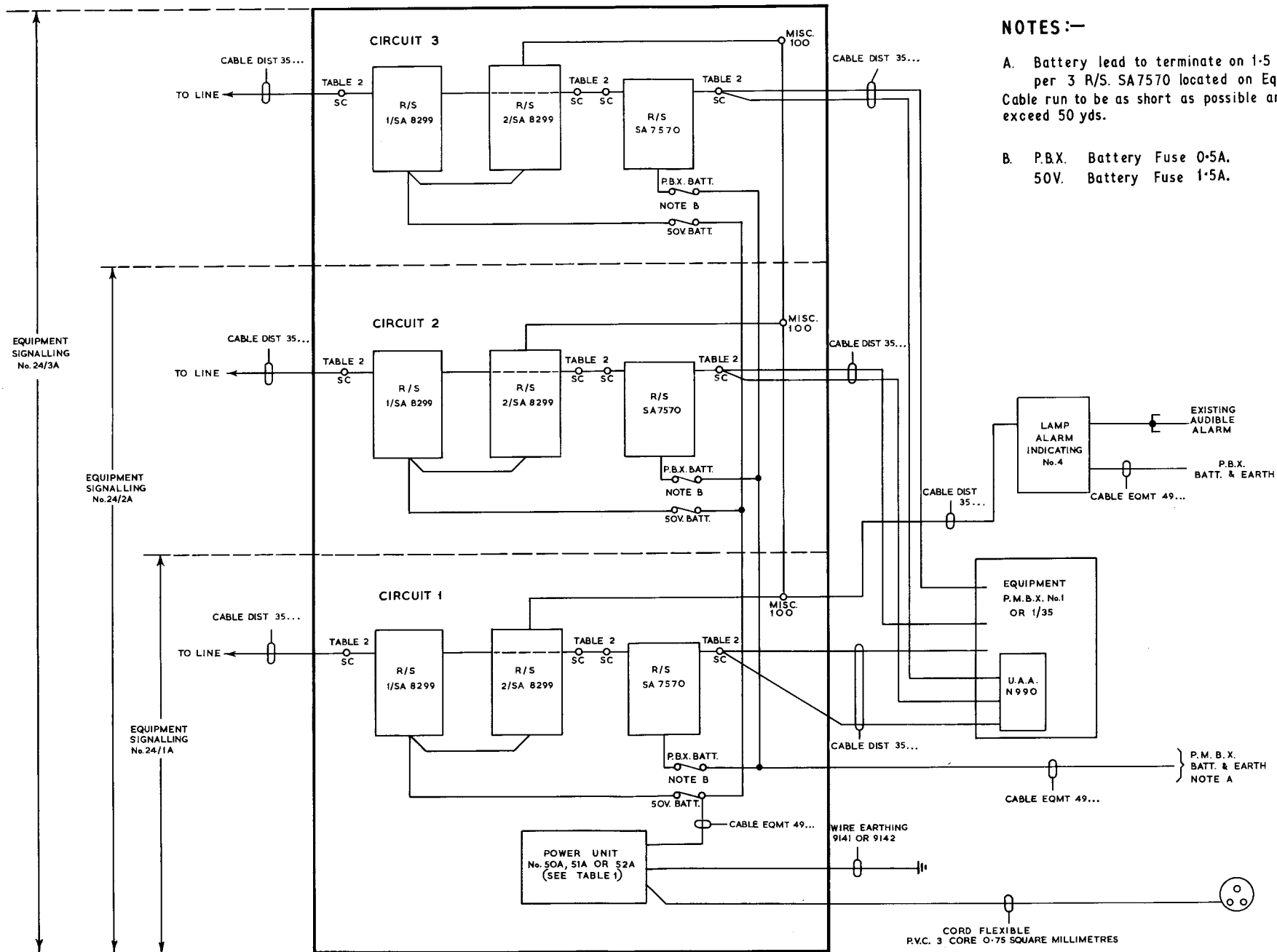
See T.I. C3 P 5001.

SPARE

# EQUIPMENT SIGNALLING No.24/-----

## FIG.1. BLOCK SCHEMATIC AND CABLING ARRANGEMENTS.

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### NOTES:—

A. Battery lead to terminate on 1.5 Amp. distribution Fuse per 3 R/S. SA7570 located on Equipment P.M.B.X. No.1/20. Cable run to be as short as possible and generally not to exceed 50 yds.

B. P.B.X. Battery Fuse 0.5A.  
50V. Battery Fuse 1.5A.