

## CHAPTER 2

### MAIN FRAME

#### Contents

	Paragraph
INTRODUCTION	1
PARTS LIST	5
Main Frame Assembly	
ECU Decoupling PCB	
Interface PCB	

#### Tables

	Table No.
Main Frame Interconnections	1

#### Illustrations

	Figure No.
Major Assembly Location	1
Transceiver : Interconnection Diagram	2
Interface PCB : Component Location	3
Extended Control Unit Decoupling PCB: Component Location	4

## CHAPTER 2

### MAIN FRAME

#### INTRODUCTION

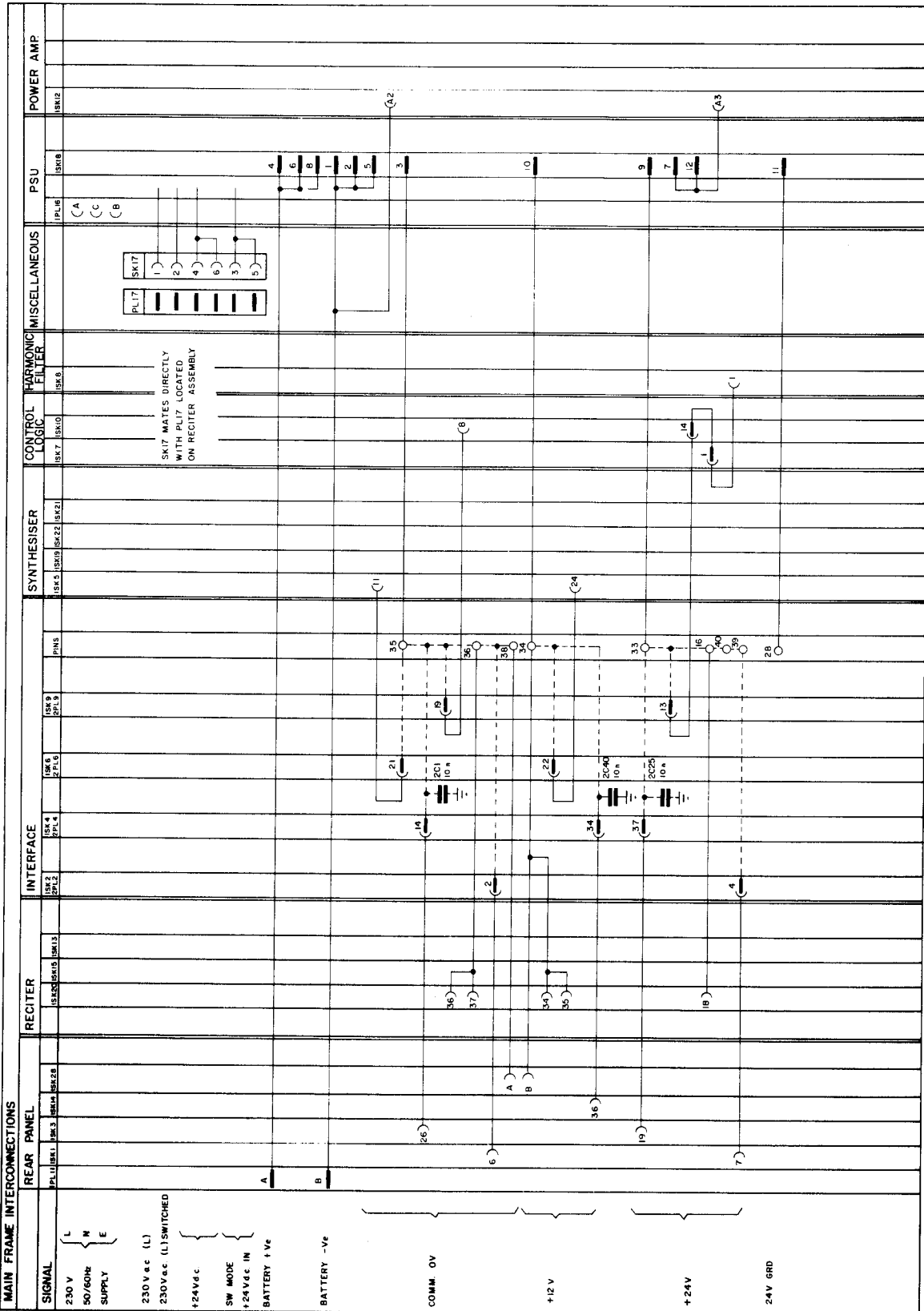
1. The units listed below are mounted on the Main Frame.

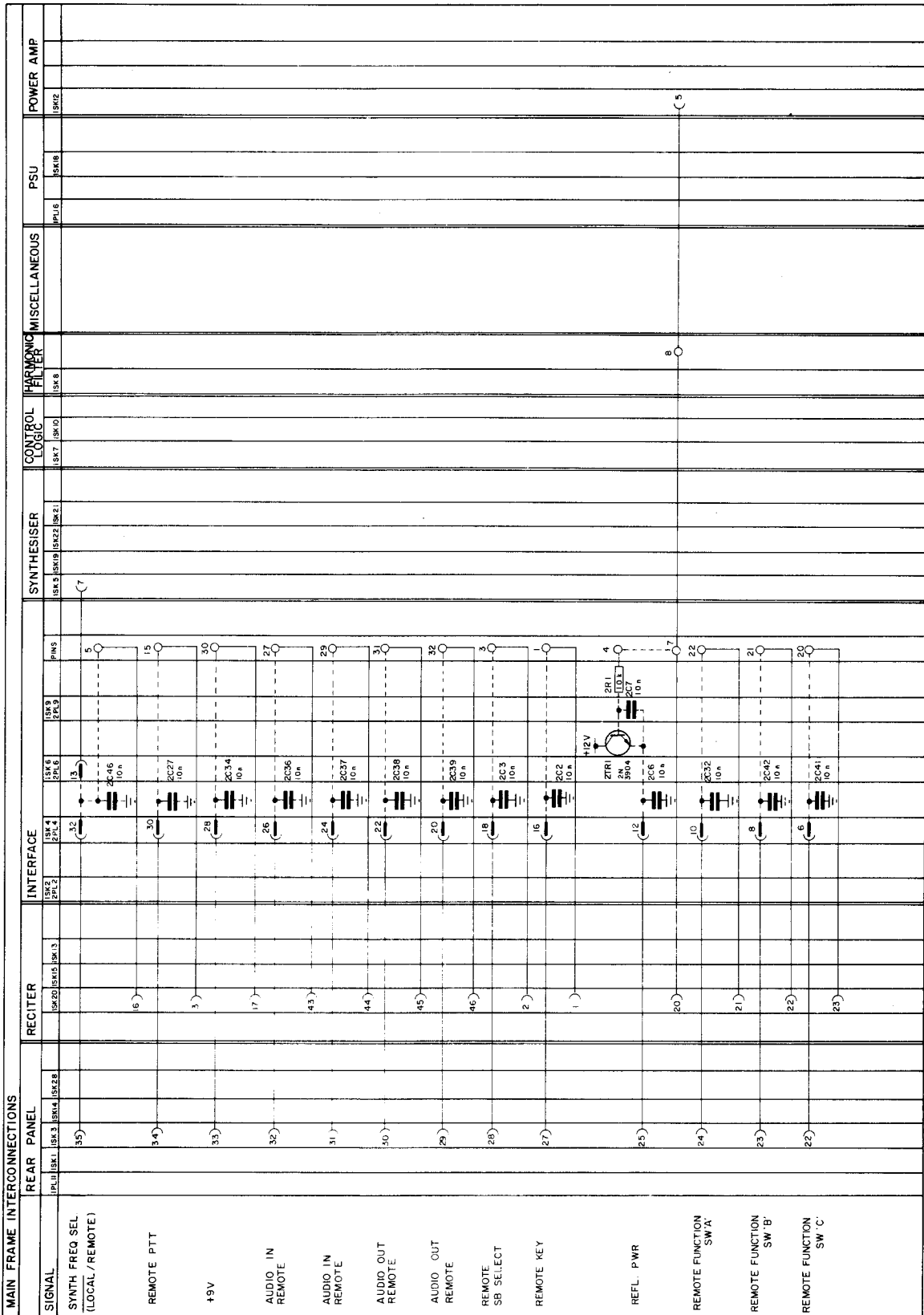
- (a) Reciter/Control Panel
- (b) Power Amplifier
- (c) Control Logic
- (d) Harmonic Filter
- (e) Power Supply
- (f) Extended Control Unit Decoupling PCB

The Synthesiser is mounted within the reciter assembly.

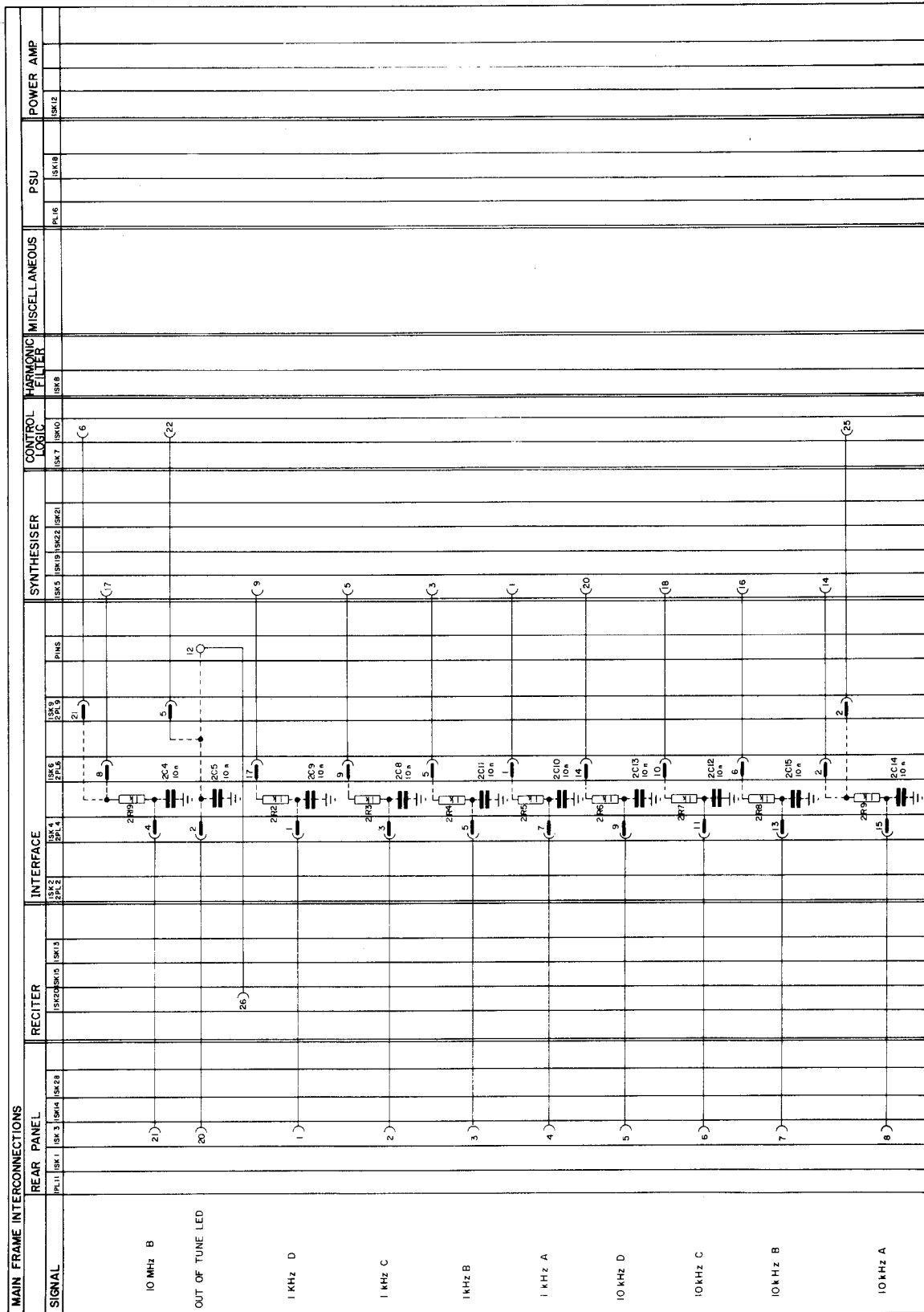
2. The relative locations of individual units are shown in Figure 1 and the connections between assemblies are shown in Figure 2.
3. The interconnections between sub-assemblies are detailed in Table 1. This includes the connections to the Synthesiser assembly.
4. The Parts List at the end of the chapter includes all sub-assemblies, the Interface p.c.b. (which is an integral part of the Main Frame interconnections) and the components mounted on the Interface p.c.b.

TABLE 1: MAIN FRAME INTERCONNECTIONS

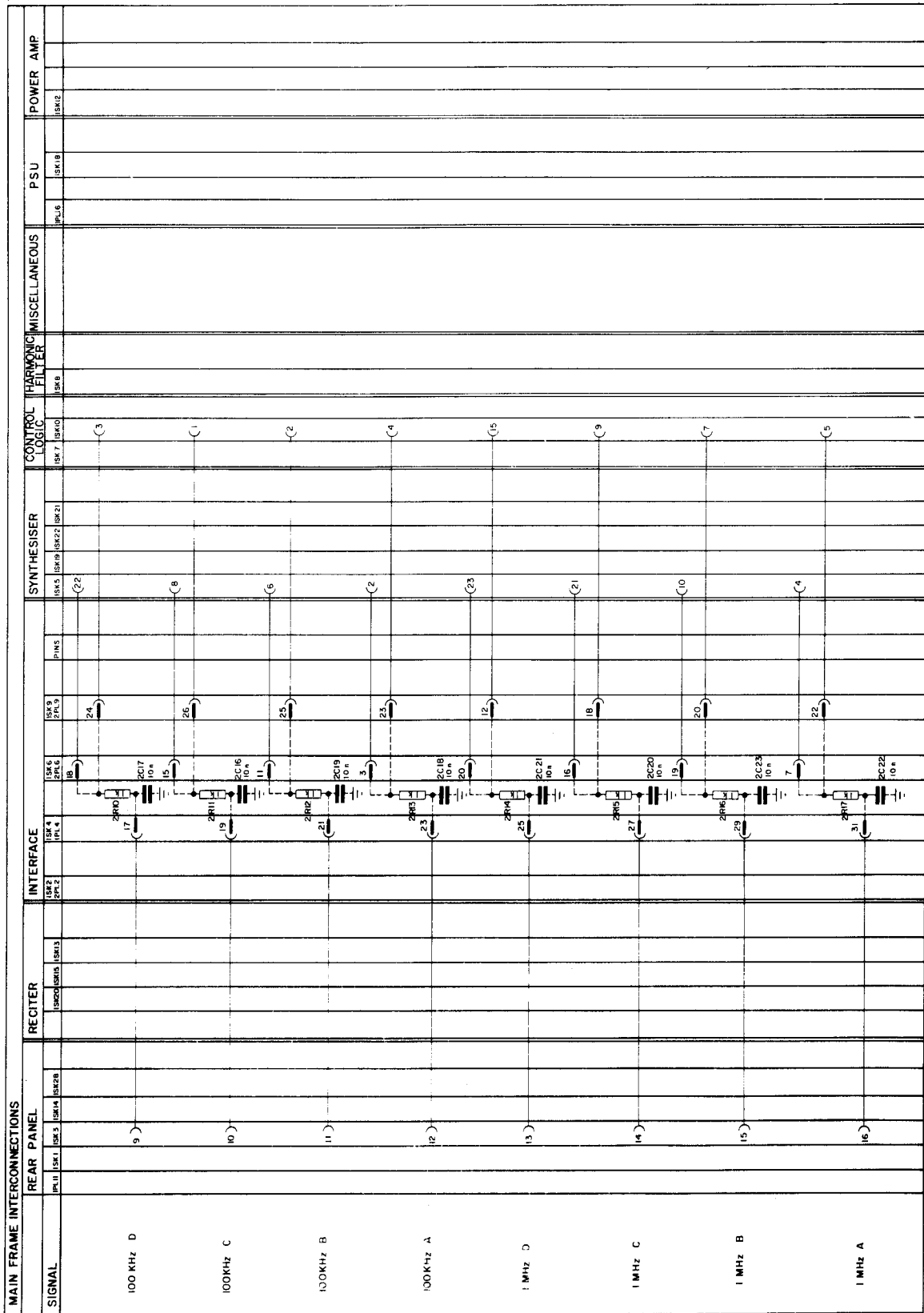




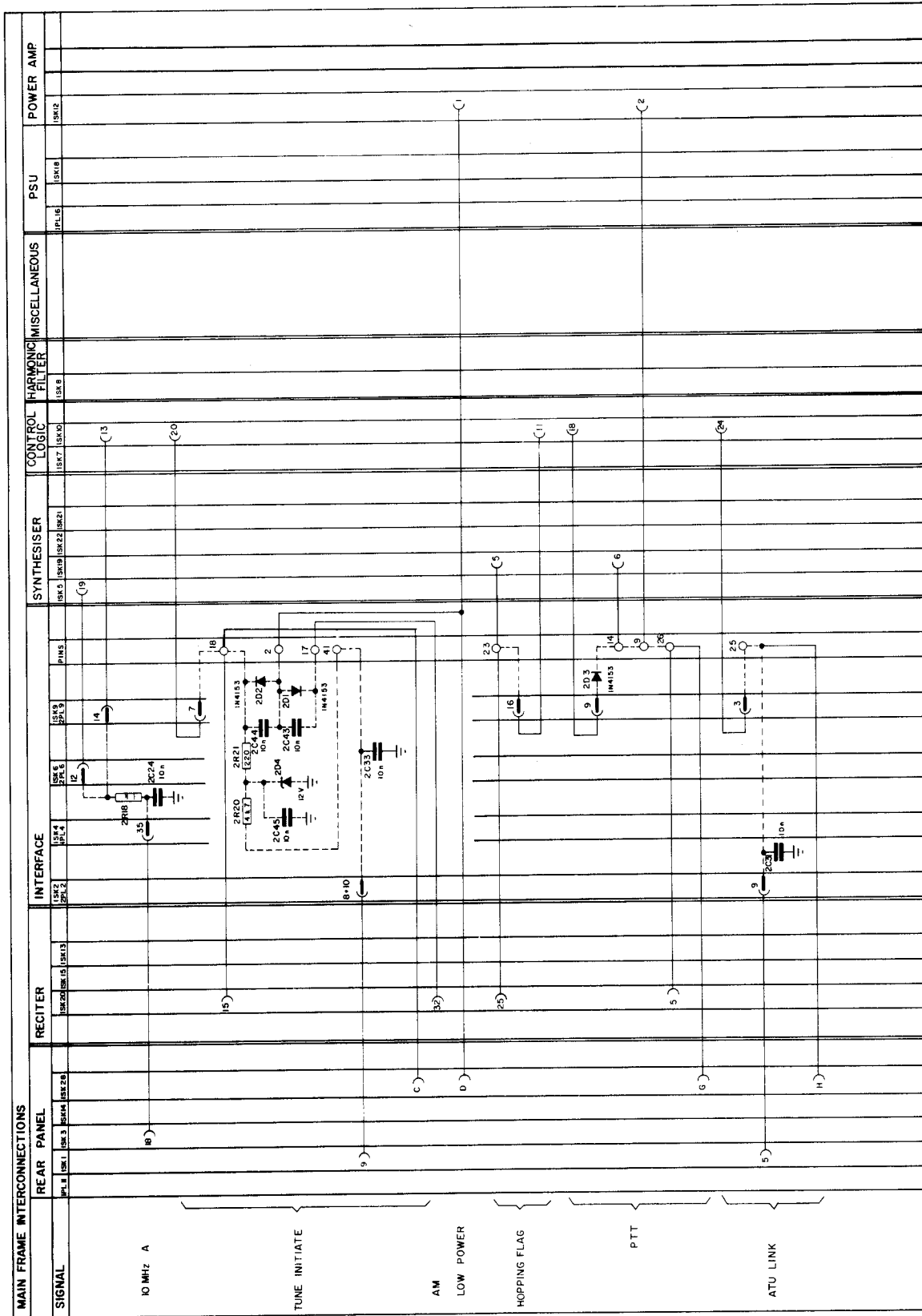
NOTES: 1. INTERCONNECTIONS SHOWN DASHED ARE ON INTERFACE PCB  
 2. REFERENCES OF MAINFRAME COMPONENTS ARE PREFIXED BY I.  
 3. REFERENCES OF COMPONENTS MOUNTED ON INTERFACE PCB ARE PREFIXED BY 2.



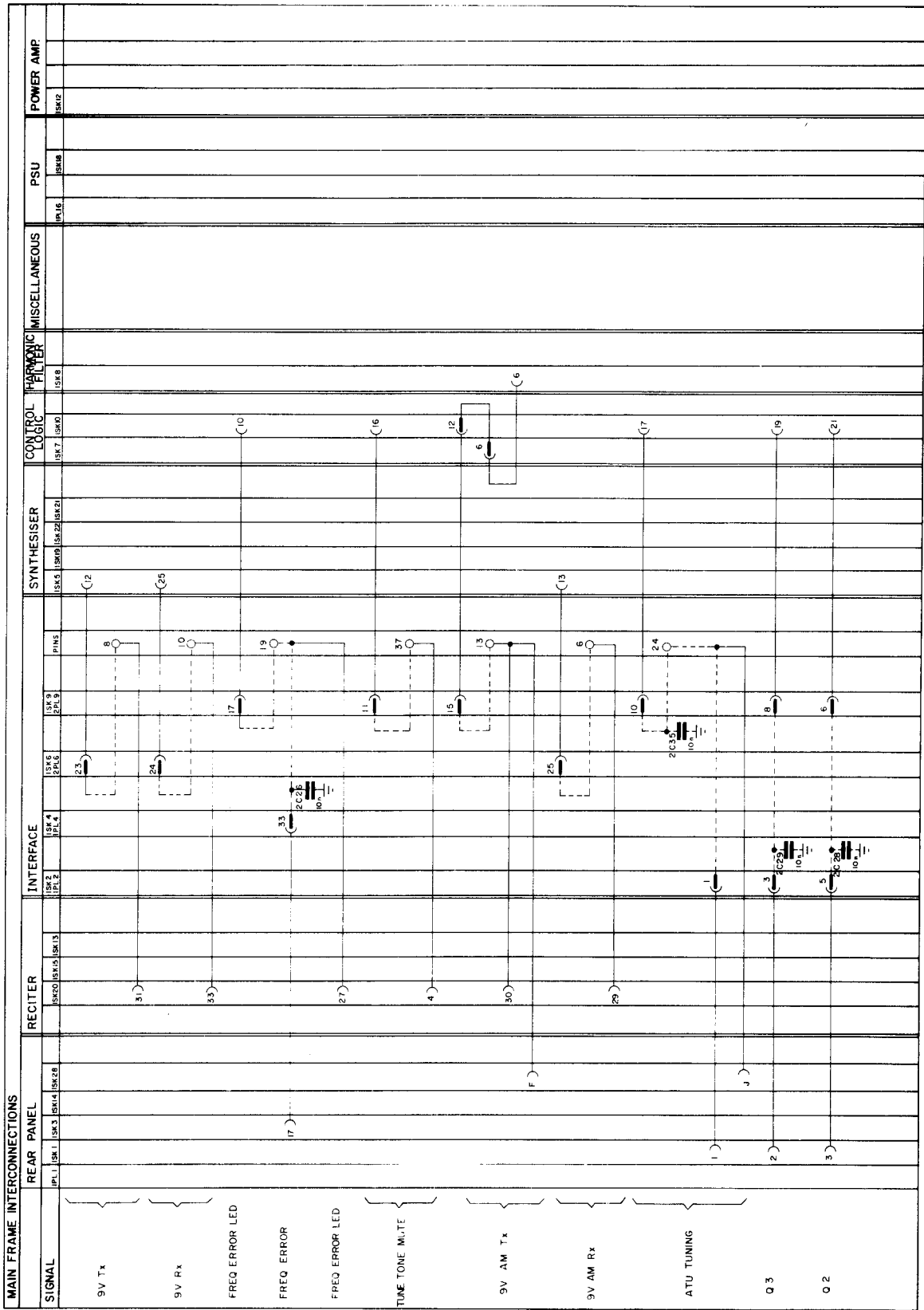
NOTES: 1 INTERCONNECTIONS SHOWN DASHED ARE ON INTERFACE PCB  
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### PARTS LIST

5. The component tolerances and ratings given in these parts list are optimum. However if such components are not immediately available alternatives with closer tolerances and/or higher wattage or voltage ratings may be used in manufacture or supplied as replacements.
6. When ordering replacements please quote the full description including the circuit reference and the Order Number.

MAIN FRAME ASSEMBLY

FIG. NO.	REF.	ORDER NO.	CODIFICATION	ITEM	DESCRIPTION	NO/UNIT
		<b>1300-0880</b>		<b>ASSEMBLY</b>	<b>MAIN FRAME</b>	
		1300-0969		Sub-Assemblies	Reciter/Control Panel	
		1100-0853			Power Amplifier	
		1300-0872			Control Logic	
		1300-0876			Harmonic Filter	
		1100-0587			Power Supply	
		1300-0868			Frequency Processing Unit	
		1300-0154			ECU Decoupling PCB	
		1300-0963			Interface PCB	
		1300-0961			Rear Panel Assy (Lower)	
		1400-0861		Cable Assemblies	SK1-SK2	
		1400-0862			SK3-SK4	
		1400-0863			SK5-SK6	
		1400-0864			SK7-SK8	
		1400-0865			SK9-SK10	
		3300-2082		Connectors	Connector, 2 Pin, Panel Mtg.	
	PL11	1200-2088			Connector, Painton, 12-w	
	PL18	3300-1117			Connector, 9-way	
	SK1	3300-1286			Connector, DBM9W45, 9-w	
	SK12	3300-1401			Connector, Coaxial, Mil 39012/67, 003	
	SK13	3300-1298			Connector, Coaxial, DM 53742-5006	
	SK14	3300-1401			Connector, Coaxial, Mil 39012/67, 003	
	SK15	3300-1292			Connector, CANNON DDM 50 S, 50-w	
	SK20	3300-0870			Connector, 10-way	
	SK28					

MAIN FRAME ASSEMBLY (Cont.)

FIG. NO. REF.	ORDER NO.	CODIFICATION	ITEM	DESCRIPTION	NO/UNIT
1X1	4000-0004		Toroids	Toroid	
1X2	4000-0004			Toroid	
1X3	4000-0004			Toroid	
1X4	4000-0004			Toroid	
1X5	4000-0004			Toroid	
1X6	4000-0004			Toroid	
1X7	4000-0006			Toroid, FX 3011	

ECU Decoupling PCB

FIG. NO. REF.	ORDER NO.	CODIFICATION	ITEM	DESCRIPTION	NO/UNIT
	1300-0154		PCB	ECU Decoupling	
C1	2600-2502		Capacitors	Ceramic	10nF
C2	2600-2502			Ceramic	10p.c. 10p.c. 50V 50V
T1	3100-0131		Transformer	Transformer	

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INTERFACE PCB

FIG. NO.	REF.	ORDER NO.	CODIFICATION	ITEM	DESCRIPTION	NO/UNIT
		1300-0963		PCB	INTERFACE	
	C1	2600-2534		Capacitors	Ceramic	10nF
	C2	2600-2534			Ceramic	10p.c.
	C3	2600-2534			Ceramic	10nF
	C4	2600-2534			Ceramic	10p.c.
	C5	2600-2534			Ceramic	10nF
	C6	2600-2534			Ceramic	10p.c.
	C7	2600-2534			Ceramic	10nF
	C8	2600-2534			Ceramic	10p.c.
	C9	2600-2534			Ceramic	10nF
	C10	2600-2534			Ceramic	10p.c.
	C11	2600-2534			Ceramic	10nF
	C12	2600-2534			Ceramic	10p.c.
	C13	2600-2534			Ceramic	10nF
	C14	2600-2534			Ceramic	10p.c.
	C15	2600-2534			Ceramic	10nF
	C16	2600-2534			Ceramic	10p.c.
	C17	2600-2534			Ceramic	10nF
	C18	2600-2534			Ceramic	10p.c.
	C19	2600-2534			Ceramic	10nF
	C20	2600-2534			Ceramic	10p.c.
	C21	2600-2534			Ceramic	10nF
	C22	2600-2534			Ceramic	10p.c.
	C23	2600-2534			Ceramic	10nF
	C24	2600-2534			Ceramic	10p.c.

INTERFACE PCB (Cont.)

FIG. NO.	REF.	ORDER NO.	CODIFICATION	ITEM	DESCRIPTION	NO/UNIT
C25		2600-2534			Ceramic	10nF
C26		2600-2534			Ceramic	10nF
C27		2600-2534			Ceramic	10nF
C28		2600-2534			Ceramic	10nF
C29		2600-2534			Ceramic	10nF
C30		2600-2534			Ceramic	10nF
C31		2600-2534			Ceramic	10nF
C32		2600-2534			Ceramic	10nF
C33		2600-2534			Ceramic	10nF
C34		2600-2534			Ceramic	10nF
C35		2600-2534			Ceramic	10nF
C36		2600-2534			Ceramic	10nF
C37		2600-2534			Ceramic	10nF
C38		2600-2534			Ceramic	10nF
C39		2600-2534			Ceramic	10nF
C40		2600-2534			Ceramic	10nF
C41		2600-2534			Ceramic	10nF
C42		2600-2534			Ceramic	10nF
C43		2600-2534			Ceramic	10nF
C44		2600-2534			Ceramic	10nF
C45		2600-2534			Ceramic	10nF
C46		2600-2534			Ceramic	10nF
D1		3600-0404		Diodes	IN4153	10p.c.
D2		3600-0404			IN4153	10p.c.
D3		3600-0404			IN4153	10p.c.
D4		3600-0293			Zener, 12VO,5p.c. BZX79C12	10p.c.

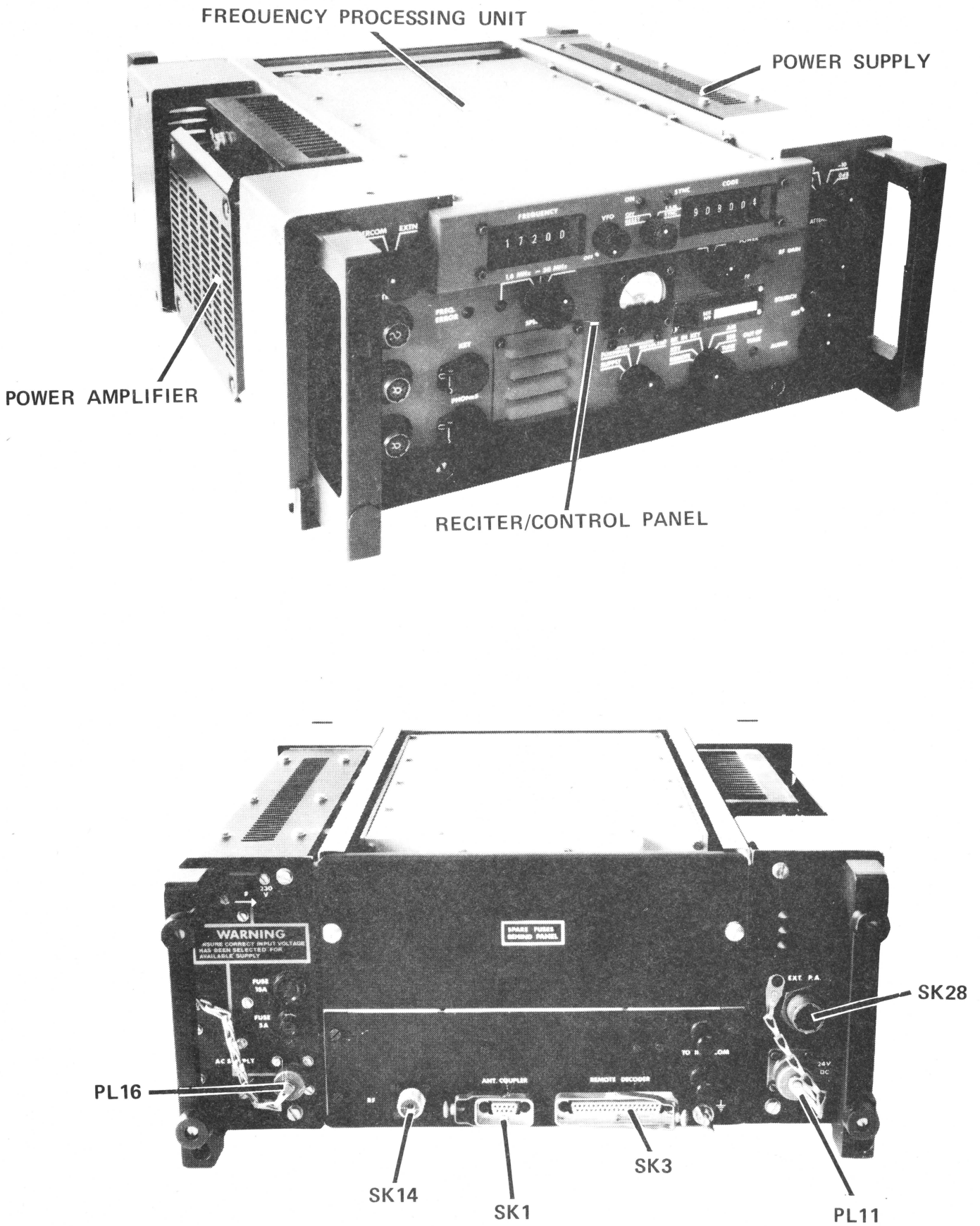


INTERFACE PCB (Cont.)

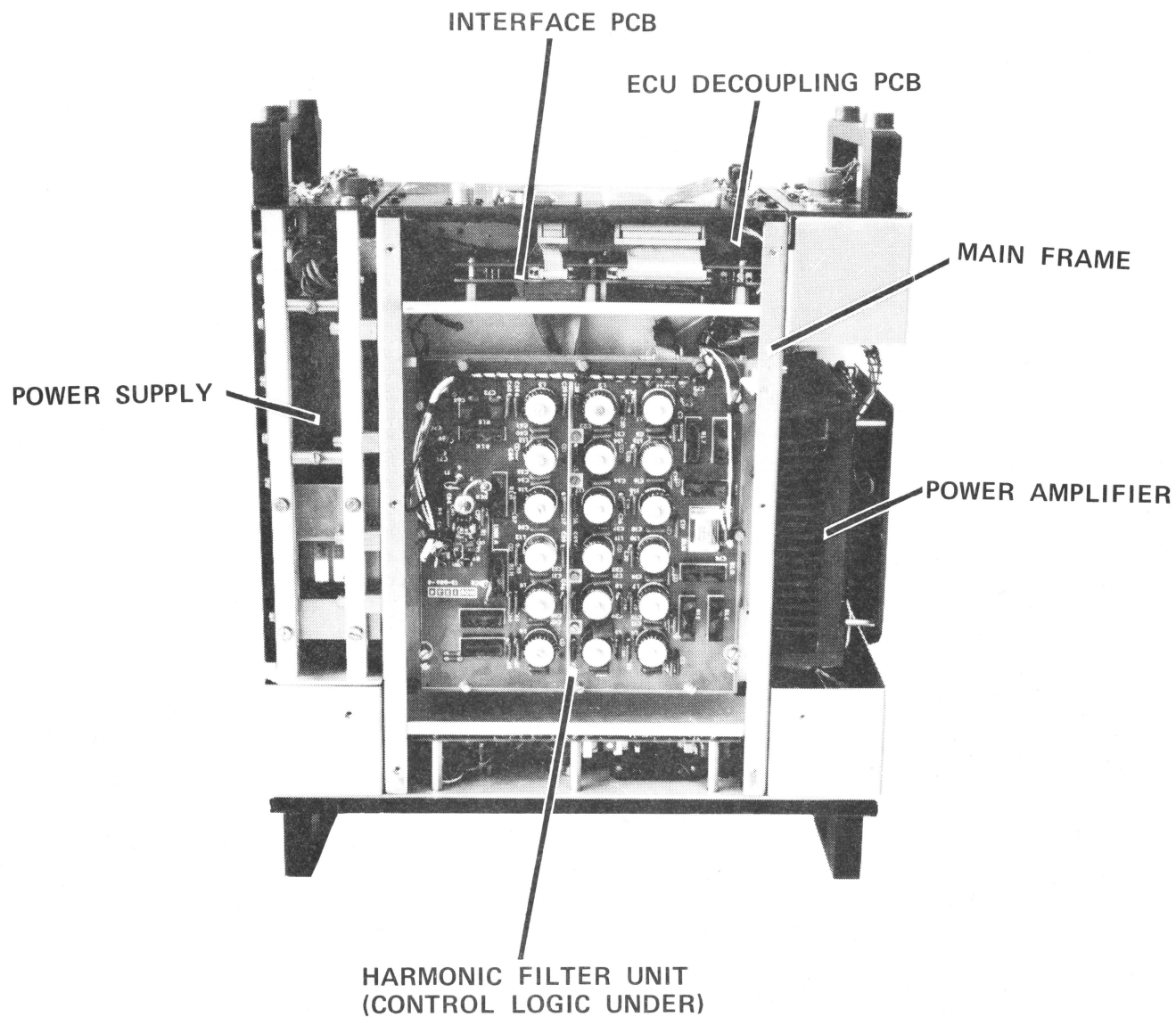
FIG. NO. REF.	ORDER NO.	CODIFICATION	ITEM	DESCRIPTION	NO./UNIT
PL2	3300-1588		Plugs	Right Angle, 10-way, 609-1002M	
PL4	3300-1582			Right Angle, 40-way, 609-4002M	
PL6	3300-1589			Straight, 26-way, 609-2622	
PL9	3300-9508			Ansley, 26-way, 609-2602M	
R1	2000-0349		Resistors	Carbon	10k 5p.c. 0,25W
R2	2000-0337			Carbon	1k 5p.c. 0,25W
R3	2000-0337			Carbon	1k 5p.c. 0,25W
R4	2000-0337			Carbon	1k 5p.c. 0,25W
R5	2000-0337			Carbon	1k 5p.c. 0,25W
R6	2000-0337			Carbon	1k 5p.c. 0,25W
R7	2000-0337			Carbon	1k 5p.c. 0,25W
R8	2000-0337			Carbon	1k 5p.c. 0,25W
R9	2000-0337			Carbon	1k 5p.c. 0,25W
R10	2000-0337			Carbon	1k 5p.c. 0,25W
R11	2000-0337			Carbon	1k 5p.c. 0,25W
R12	2000-0337			Carbon	1k 5p.c. 0,25W
R13	2000-0337			Carbon	1k 5p.c. 0,25W
R14	2000-0337			Carbon	1k 5p.c. 0,25W
R15	2000-0337			Carbon	1k 5p.c. 0,25W
R16	2000-0337			Carbon	1k 5p.c. 0,25W
R17	2000-0337			Carbon	1k 5p.c. 0,25W
R18	2000-0337			Carbon	1k 5p.c. 0,25W
R19	2000-0337			Carbon	1k 5p.c. 0,25W
R20	2000-3785			Carbon	4k7 10p.c. 0,33W
R21	2000-0329			Carbon	220 ohms 5p.c. 0,25W

INTERFACE PCB (Cont.)

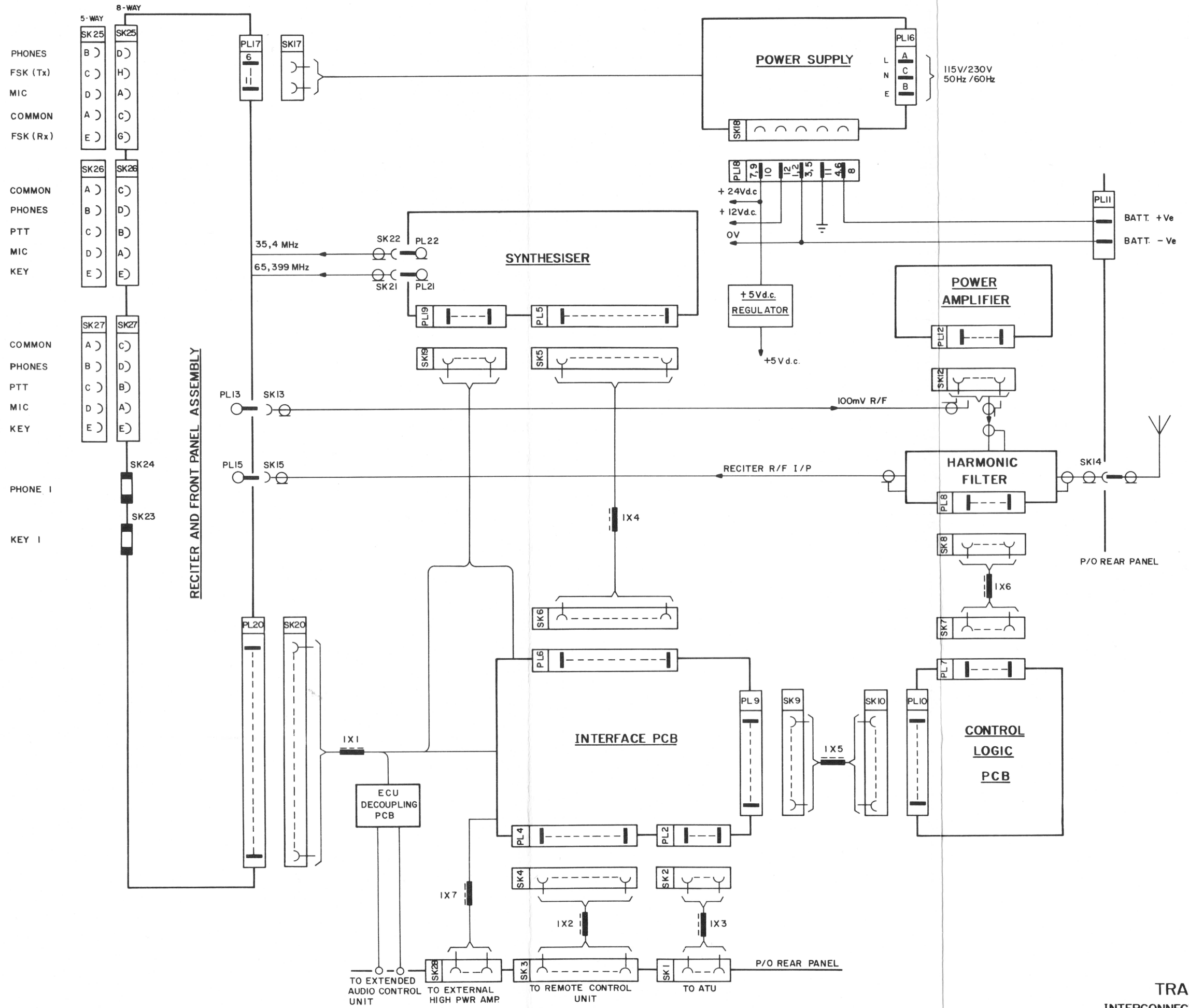
FIG. NO. REF.	ORDER NO.	CODIFICATION	ITEM	DESCRIPTION	NO/UNIT
TR1	3600-0185		Transistor	2N3904, Si, NPN	



MAJOR ASSEMBLY : LOCATION

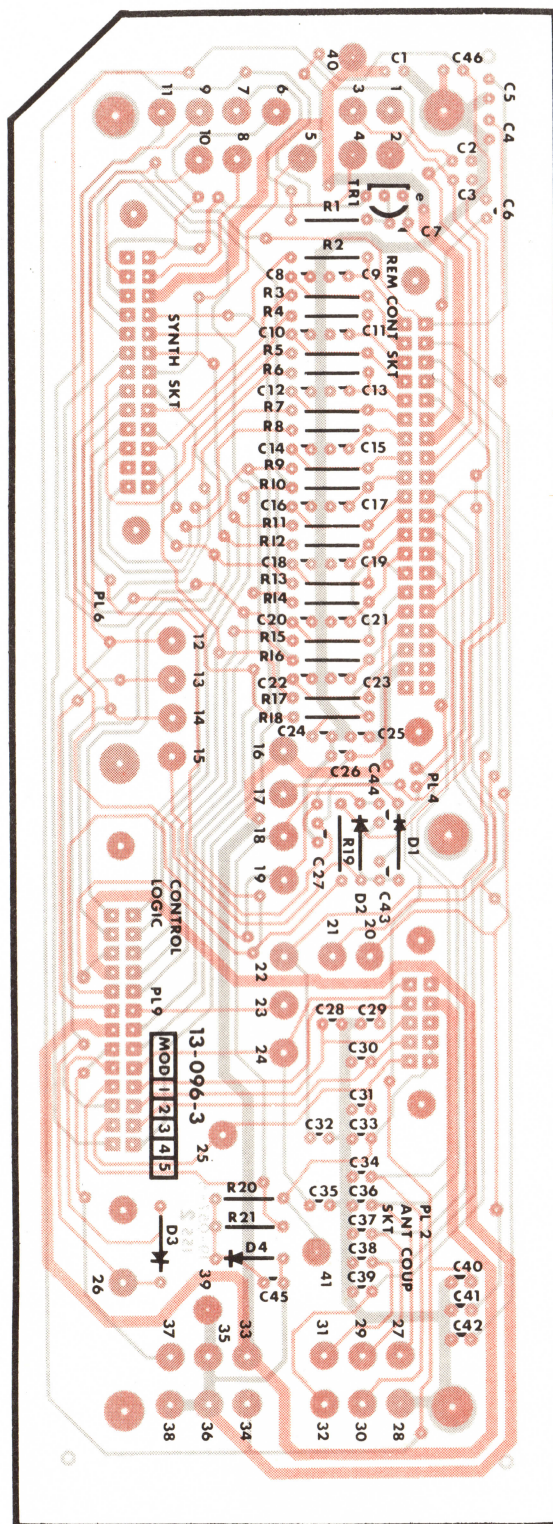


MAJOR ASSEMBLY : LOCATION

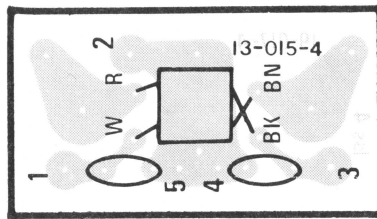


TRANSCEIVER  
INTERCONNECTION DIAGRAM

FIG. 2



INTERFACE PCB  
Component Location



PCB Track Side:

EXTENDED CONTROL UNIT DECOUPLING PCB  
Component Location