

FM-AM SIGNAL GENERATOR

**SG-5260**

SERVICE MANUAL

(TEMPORARY VERSION)

KENWOOD CORPORATION

SG-5260

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P A R T S L I S T

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Y77-1350-00

REF. NO	PARTS NO	NAME & DESCRIPTION
	A01-1269-08	CASE, TOP
	A01-1270-08	CASE, BOTTOM
	A13-0989-08	EXTRUDING, UP/DOWN
	A13-0990-08	DIE CASTING, LEFT/RIGHT
	A50-0522-08	EXTRUDING, BOTH SIDES
	A63-0105-08	PANEL, FRONT
	A83-0058-08	PANEL, REAR
	B09-0407-08	HANDLE CAP
	B63-0083-00	INSTRUCTION MANUAL; JAPANESE
	B63-0084-00	INSTRUCTION MANUAL; ENGLISH
	B73-0065-08	LABEL
	E04-0266-08	BNC CONNECTOR; OUTPUT
	E04-0267-08	BNC CONNECTOR; EXT MODULATION
	E04-0268-08	RCA-JACK
	E30-1818-05	JIS POWER CORD SET
	E30-1819-15	IEC POWER CORD SET
	E30-1820-05	UL/CSA POWER CORD SET
	E30-1821-15	SAA POWER CODE SET
	E30-1929-05	BS POWER CORD
	E58-0625-08	REMOTE CONNECTOR
	E68-0608-08	VOLTAGE SELECTOR/FUSE HOLDER
	F01-2313-08	HEAT SINK
	F05-1023-05	FUSE (6X32MM) 1A/250V
	F06-5015-05	FUSE (5X20MM) 0.5A250V
	F07-0973-08	COVER PLATE; GP-1B
	F07-0974-08	COVER, SHIELD CAN ROD
	F10-1667-08	SHIELD PLATE
	F11-1262-08	SHIELD PLATE, FRONT
	F11-1263-08	SHIELD PLATE, BACK
	F11-1264-08	SHIELD CASE, TOP
	F11-1265-08	SHIELD CASE, TOP
	F11-1266-08	SHIELD CASE, BOTTOM
	F11-1267-08	SHIELD BOTTOM CASE COVER
	F11-1268-08	SHIELD CASE, PLL DETECTOR
	F19-0747-08	ATT BOTTOM CASE
	F19-0748-08	ATT TOP CASE
	F19-0749-08	RF CAN TOP CASE (PLL)
	F19-0750-08	RF CAN BOTTOM CASE
	F19-0751-08	AMP CAN TOP CASE
	F19-0752-08	AMP CAN BOTTOM CASE
	F19-0753-08	PLL CAN TOP CASE (MAIN VCO)
	F19-0754-08	RF CAN TOP CASE (FM VCO)
	F19-0755-08	PLL CAN TOP CASE (DOWN)
	G13-0742-08	RUBBER CUSHION, T=0.8, BLACK
	H10-2866-08	FORMED STYRENE PAD
	H25-0836-08	VINYL COVER
	H53-0085-04	CARTON BOX
	J02-0531-08	RUBBER FOOT
	J19-1678-08	CORD WRAP
	J21-4813-08	BRACKET, TRANS
	J21-4814-08	BRACKET, TRANS HOLDER
	J29-0527-08	BRACKET, FOR PCB
	J29-0528-08	BRACKET, FOR PCB
	J29-0529-08	BRACKET, FOR TOP CONDENSOR
	J29-0530-08	BRACKET, FOR PCB
	J29-0531-08	BRACKET, FOR PCB
	J32-1206-08	ROD, POWER SW
	J39-0541-08	SPACER, ROD COVER
	J90-0507-08	CAP; POWER SW, WHITE

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Y77-1350-00

REF. NO	PARTS NO	NAME & DESCRIPTION
	K01-0553-08	HANDLE
	K21-0922-03	KNOB, FREQUENCY
	K29-0822-08	BUTTON; 「A」, WHITE
	K29-0823-08	BUTTON; 「B」, WHITE
	K29-0824-08	BUTTON; 「C」, WHITE
	K29-0825-08	BUTTON; 「D」, WHITE
	K29-0826-08	BUTTON; 「1」, WHITE
	K29-0827-08	BUTTON; 「2」, WHITE
	K29-0828-08	BUTTON; 「3」, WHITE
	K29-0829-08	BUTTON; 「4」, WHITE
	K29-0830-08	BUTTON; 「5」, WHITE
	K29-0831-08	BUTTON; 「6」, WHITE
	K29-0832-08	BUTTON; 「7」, WHITE
	K29-0833-08	BUTTON; 「8」, WHITE
	K29-0834-08	BUTTON; 「9」, WHITE
	K29-0835-08	BUTTON; 「0」, WHITE
	K29-0836-08	BUTTON; 「.」, WHITE
	K29-0837-08	BUTTON; 「(-)」, WHITE
	K29-0838-08	BUTTON; 「EXT」, WHITE/HOLE
	K29-0839-08	BUTTON; 「1KHZ」, WHITE/HOLE
	K29-0840-08	BUTTON; 「400HZ」, WHITE/HOLE
	K29-0846-08	BUTTON; 「FM」, WHITE/HOLE
	K29-0847-08	BUTTON; 「AM」, WHITE/HOLE
	K29-0850-08	BUTTON; GRAY
	K29-0851-08	BUTTON; GRAY/HOLE
	K29-0852-08	BUTTON; 「SEQ」, GRAY
	K29-0853-08	BUTTON; 「STO」, GRAY
	K29-0854-08	BUTTON; 「RTN」, GRAY
	K29-0855-08	BUTTON; 「RCL」, GRAY
	K29-0856-08	BUTTON; 「 」, BLUE
	K29-0857-08	BUTTON; 「<」, BLUE
	K29-0858-08	BUTTON; 「<<」, BLUE
	K29-0859-08	BUTTON; POWER SW, YELLOW
	K29-0876-08	BUTTON; WHITE
	L07-1504-08	POWER TRANSFORMER
	N09-4503-08	SCREW, FLUSH HD M3X5
	N09-4503-08	SCREW, FLUSH HD M3X5
	N09-4505-08	SCREW, FLUSH HD M4X16
	N10-2030-41	NUT, HEX M3
	N16-0036-41	SPRING WASHER
	N16-0060-41	SPRING WASHER
	N19-0741-08	WASHER, EXTERNAL TOOTHED, M3
	N19-0742-08	WASHER, EXTERNAL TOOTHED, M4
	N19-0742-08	WASHER, EXTERNAL TOOTHED, M4
	N19-0742-08	WASHER, EXTERNAL TOOTHED, M4
	N30-3025-41	SCREW, PAN HD M3X25
	N30-3025-41	SCREW, PAN HD M3X25
	N30-4030-41	SCREW, PAN HD M4X30
	N34-4012-41	SCREW, TRUSS HD M4X12
	N35-2004-41	SCREW, BINDING M2X4
	N35-3005-41	SCREW, BINDING M3X5
	N35-3005-41	SCREW, BINDING M3X5
	N35-3005-41	SCREW, BINDING M3X5
	N35-3005-41	SCREW, BINDING M3X5
	N35-3005-41	SCREW, BINDING M3X5
	N35-3005-41	SCREW, BINDING M3X5
	N35-3006-41	SCREW, BINDING M3X6
	N35-3008-41	SCREW, BINDING M3X8
	N35-3008-41	SCREW, BINDING M3X8
	N35-3012-41	SCREW, BINDING M3X12

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Y77-1350-00

REF. NO	PARTS NO	NAME & DESCRIPTION
	N35-3014-41	SCREW, BINDING M3X14
	N35-3016-41	SCREW, BINDING M3X16
	N52-3006-41	SCREW, PAN HD TAPPING 3X6
	S68-0626-08	PUSH SWITCH
	W02-2167-08	CPU UNIT
	W02-2168-08	KEY & DISPLAY UNIT
	W02-2169-08	POWER UNIT
	W02-2170-08	RF UNIT
	W02-2171-08	PLL UNIT
	W02-2172-08	AF UNIT
	W02-2173-08	ATT UNIT
	W02-2174-08	RF-SUB UNIT



## CPU UNIT

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W02-2167-08

REF. NO	PARTS NO	NAME & DESCRIPTION			
	E02-0165-08	IC SOCKET	40P		
	J73-0205-08	PCB (UNMOUNTED)			
AR1	R90-1131-08	RES. ARRAY	8X10K	5%	
AR2	R90-1131-08	RES. ARRAY	8X10K	5%	
C1	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C2	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C3	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C4	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C5	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C6	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C7	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C8	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C9	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C10	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C11	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C12	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C13	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C14	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C15	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C16	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C17	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V
C18	CE04EW1C101M	CAP. ELECTRO	100	20%	16V
C19	CE04EW1C470M	CAP. ELECTRO	47	20%	16V
D1	B30-3003-08	LED			
JP1	E40-7259-08	PIN CONNECTOR	2P		
JP2	E40-7260-08	RIBBON CABLE CONNECTOR	10X2		
JP3	E40-7261-08	PIN CONNECTOR	12P		
JP4	E40-7266-08	PIN CONNECTOR	10P		
JP5	E40-7263-08	PIN CONNECTOR	2P		
JP6	E40-7263-08	PIN CONNECTOR	2P		
L1	L39-0541-08	COIL, TROIDAL	30UH		
L2	L39-0541-08	COIL, TROIDAL	30UH		
R1	RN14BK2E3300F	RES. METAL FILM	330	1%	1/4W
R2	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R3	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R4	RN14BK2E4701F	RES. METAL FILM	4.7K	1%	1/4W
R5	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R6	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R7	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R8	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R9	RN14BK2C3300F	RES. METAL FILM	330	1%	1/6W
R10	RN14BK2C3300F	RES. METAL FILM	330	1%	1/6W
R11	RN14BK2C3300F	RES. METAL FILM	330	1%	1/6W
R12	RN14BK2C3300F	RES. METAL FILM	330	1%	1/6W
R13	RN14BK2C3300F	RES. METAL FILM	330	1%	1/6W
R14	RN14BK2C3300F	RES. METAL FILM	330	1%	1/6W
R15	RN14BK2C3300F	RES. METAL FILM	330	1%	1/6W
R16	RN14BK2C3300F	RES. METAL FILM	330	1%	1/6W
R17	RN14BK2C3300F	RES. METAL FILM	330	1%	1/6W
R18	RN14BK2C3300F	RES. METAL FILM	330	1%	1/6W
R19	RN14BK2C3300F	RES. METAL FILM	330	1%	1/6W
R20	RN14BK2C3300F	RES. METAL FILM	330	1%	1/6W
R21	RN14BK2C3300F	RES. METAL FILM	330	1%	1/6W
R22	RN14BK2C3300F	RES. METAL FILM	330	1%	1/6W

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W02-2167-08

REF. NO	PARTS NO	NAME & DESCRIPTION
R23	RN14BK2C3300F	RES. METAL FILM 330 1% 1/6W
R24	RN14BK2C3300F	RES. METAL FILM 330 1% 1/6W
R25	RN14BK2C3300F	RES. METAL FILM 330 1% 1/6W
R26	RN14BK2C3300F	RES. METAL FILM 330 1% 1/6W
R27	RN14BK2C3300F	RES. METAL FILM 330 1% 1/6W
R28	RN14BK2C3300F	RES. METAL FILM 330 1% 1/6W
R29	NO USE	
R30	RN14BK2C3300F	RES. METAL FILM 330 1% 1/6W
R31	RN14BK2C3300F	RES. METAL FILM 330 1% 1/6W
U1	PST518A	IC, SYSTEM RESET
U2	SN75160BN	IC, OCTAL GP-IB TRANSCEIVER
U3	SN75161BN	IC, OCTAL GP-IB TRANSCEIVER
U4	M5L8255AP-5	IC, PROG. PERIPHERAL INTERFACE
U5	MC74HC139N	IC, DUAL 1-OF-4 DECODER/DE-MPX
U6	HD74LS08P	IC, QUAD 2 INPUT AND GATE
U7	Z80CPU	IC, CPU
U8	T93-0803-08	IC PROGRAMMED ROM
U9	MC74HC4078N	IC, 8-INPUT NOR/OR GATE
U10	MC14028B	IC, BCD TO DECIMAL DECODER
U11	HD74HC32P	IC, QUAD 2 INPUT OR GATE
U12	HD74HC32P	IC, QUAD 2 INPUT OR GATE
U13	TMS9914ANL	IC, GP-IB ADAPTOR
U14	DS1220Y-170	IC, SRAM
U15	SN74LS14	IC, HEX SCHMITT TRIGGER
XT1	L77-1077-08	CRYSTAL RESONATOR

# KEY & DISPLAY UNIT

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W02-2168-08

REF. NO	PARTS NO	NAME & DESCRIPTION				
	J73-0288-08	PCB (UNMOUNTED)				
AR1	R90-1131-08	RES. ARRAY	8X10K	5%		
AR2	R90-1131-08	RES. ARRAY	8X10K	5%		
AR3	R90-1131-08	RES. ARRAY	8X10K	5%		
C1	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V	
C2	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V	
C3	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V	
C4	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V	
C5	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V	
C6	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V	
C7	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V	
C8	CK45F1H102K	CAP. CERAMIC	1000P	10%	50V	
C9	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V	
C10	CK45F1H102K	CAP. CERAMIC	1000P	10%	50V	
C11	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V	
C12	CK45F1H102K	CAP. CERAMIC	1000P	10%	50V	
C13	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V	
C14	CK45F1H102K	CAP. CERAMIC	1000P	10%	50V	
C15	CK45F1E104Z	CAP. CERAMIC	0.1	10%	25V	
C16	CK45F1H102K	CAP. CERAMIC	1000P	10%	50V	
C17	CE04EW1A101M	CAP. ELECTRO	100	20%	10V	
C21	CE04EW1A101M	CAP. ELECTRO	100	20%	10V	
C22	CK45B1H103Z	CAP. CERAMIC	0.01	10%	50V	
C23	CK45B1H103Z	CAP. CERAMIC	0.01	10%	50V	
C24	CK45B1H103Z	CAP. CERAMIC	0.01	10%	50V	
C25	CK45B1E222K	CAP. CERAMIC	2200P	10%	25V	
C26	CK45B1E222K	CAP. CERAMIC	2200P	10%	25V	
D1	B30-3012-08	LAMP				
D2	B30-3012-08	LAMP				
D3	B30-3012-08	LAMP				
D4	B30-3012-08	LAMP				
D5	B30-3012-08	LAMP				
D6	B30-3012-08	LAMP				
D7	B30-3012-08	LAMP				
D8	B30-3012-08	LAMP				
D9	B30-3012-08	LAMP				
D10	B30-3012-08	LAMP				
D11	B30-3012-08	LAMP				
D12	B30-3012-08	LAMP				
D13	B30-3012-08	LAMP				
D14	B30-3012-08	LAMP				
D15	B30-3012-08	LAMP				
D16	B30-3012-08	LAMP				
D17	B30-3012-08	LAMP				
D18	B30-3012-08	LAMP				
D19	B30-3012-08	LAMP				
D20	1N4148	DIODE				
D21	1N4148	DIODE				
DSP1	B38-0412-08	ONE DIGIT NUMERIC LEDS				
DSP2	B38-0413-08	TWO DIGIT NUMERIC LEDS				
DSP3	B38-0412-08	ONE DIGIT NUMERIC LEDS				
DSP4	B38-0413-08	TWO DIGIT NUMERIC LEDS				
DSP5	B38-0412-08	ONE DIGIT NUMERIC LEDS				
DSP6	B38-0412-08	ONE DIGIT NUMERIC LEDS				
DSP7	B38-0412-08	ONE DIGIT NUMERIC LEDS				

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W02-2168-08

REF. NO	PARTS NO	NAME & DESCRIPTION
DSP8	B38-0412-08	ONE DIGIT NUMERIC LEDS
DSP9	B38-0412-08	ONE DIGIT NUMERIC LEDS
J1	E40-7263-08	PIN CONNECTOR 2P
J2	E40-7265-08	RIBBON CABLE CONNECTOR 10X2
Q1	2SA1267	TR. SI, PNP
Q2	2SA1267	TR. SI, PNP
Q3	2SA1267	TR. SI, PNP
Q4	2SA1267	TR. SI, PNP
Q5	2SA1267	TR. SI, PNP
Q6	2SA1267	TR. SI, PNP
Q7	2SA1267	TR. SI, PNP
Q8	2SC3402	TR. SI, NPN
R1	RN14BK2E1002F	RES. METAL FILM 10K 1% 1/4W
R2	RN14BK2E1002F	RES. METAL FILM 10K 1% 1/4W
R3	RN14BK2E1002F	RES. METAL FILM 10K 1% 1/4W
R4	RN14BK2E1000F	RES. METAL FILM 100 1% 1/4W
R5	RN14BK2E1003F	RES. METAL FILM 100K 1% 1/4W
R6	RN14BK2E1003F	RES. METAL FILM 100K 1% 1/4W
R7	RN14BK2E1000F	RES. METAL FILM 100 1% 1/4W
R8	RN14BK2E1003F	RES. METAL FILM 100K 1% 1/4W
R9	RN14BK2E1003F	RES. METAL FILM 100K 1% 1/4W
R10	RN14BK2E1002F	RES. METAL FILM 10K 1% 1/4W
R11	RN14BK2E1002F	RES. METAL FILM 10K 1% 1/4W
R12	RN14BK2E3300F	RES. METAL FILM 330 1% 1/4W
R13	RN14BK2E3300F	RES. METAL FILM 330 1% 1/4W
R14	RN14BK2E2002F	RES. METAL FILM 20K 1% 1/4W
R15	RN14BK2E5600F	RES. METAL FILM 560 1% 1/4W
R16	RN14BK2C4701F	RES. METAL FILM 4.7K 1% 1/6W
SW1	S68-0611-08	PUSH BUTTON SW, WITH LED
SW2	S68-0612-08	PUSH BUTTON SW
SW3	S68-0612-08	PUSH BUTTON SW
SW4	S68-0612-08	PUSH BUTTON SW
SW5	S68-0612-08	PUSH BUTTON SW
SW6	S68-0611-08	PUSH BUTTON SW, WITH LED
SW7	S68-0612-08	PUSH BUTTON SW
SW8	S68-0612-08	PUSH BUTTON SW
SW9	S68-0612-08	PUSH BUTTON SW
SW10	S68-0611-08	PUSH BUTTON SW, WITH LED
SW11	S68-0611-08	PUSH BUTTON SW, WITH LED
SW12	S68-0612-08	PUSH BUTTON SW
SW13	S68-0611-08	PUSH BUTTON SW, WITH LED
SW14	S68-0611-08	PUSH BUTTON SW, WITH LED
SW15	NO USE	
SW16	S68-0611-08	PUSH BUTTON SW, WITH LED
SW17	S68-0611-08	PUSH BUTTON SW, WITH LED
SW18	S68-0611-08	PUSH BUTTON SW, WITH LED
SW19	S68-0611-08	PUSH BUTTON SW, WITH LED
SW20	S68-0612-08	PUSH BUTTON SW
SW21	S68-0611-08	PUSH BUTTON SW, WITH LED
SW22	S68-0612-08	PUSH BUTTON SW
SW23	S68-0612-08	PUSH BUTTON SW
SW24	S68-0612-08	PUSH BUTTON SW
SW25	S68-0612-08	PUSH BUTTON SW
SW26	S68-0612-08	PUSH BUTTON SW
SW27	S68-0612-08	PUSH BUTTON SW

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W02-2168-08

REF. NO	PARTS NO	NAME & DESCRIPTION
SW28	S68-0612-08	PUSH BUTTON SW
SW29	S68-0612-08	PUSH BUTTON SW
SW30	S68-0612-08	PUSH BUTTON SW
SW31	S68-0612-08	PUSH BUTTON SW
SW32	S68-0612-08	PUSH BUTTON SW
SW33	S68-0612-08	PUSH BUTTON SW
SW34	S68-0612-08	PUSH BUTTON SW
SW35	S68-0612-08	PUSH BUTTON SW
SW36	S68-0612-08	PUSH BUTTON SW
SW37	S68-0612-08	PUSH BUTTON SW
SW38	S68-0611-08	PUSH BUTTON SW, WITH LED
SW39	S68-0612-08	PUSH BUTTON SW
SW40	S68-0612-08	PUSH BUTTON SW
SW41	S68-0611-08	PUSH BUTTON SW, WITH LED
SW42	S68-0612-08	PUSH BUTTON SW
SW43	S68-0612-08	PUSH BUTTON SW
SW44	S68-0612-08	PUSH BUTTON SW
SW45	S68-0612-08	PUSH BUTTON SW
SW46	S68-0612-08	PUSH BUTTON SW
SW47	S68-0612-08	PUSH BUTTON SW
SW48	S68-0612-08	PUSH BUTTON SW
SW49	S68-0612-08	PUSH BUTTON SW
SW50	S68-0612-08	PUSH BUTTON SW
SW51	S68-0612-08	PUSH BUTTON SW
SW52	S68-0612-08	PUSH BUTTON SW
SW53	S68-0612-08	PUSH BUTTON SW
SW54	NO USE	
SW55	S68-0611-08	PUSH BUTTON SW, WITH LED
SW56	W02-2175-08	ROTARY SW

U1	MC14532BCB	IC, 8-BIT PRIORITY ENCODER
U2	MC14532BCB	IC, 8-BIT PRIORITY ENCODER
U3	SN74HC244N	IC, OCTAL 3-STATE BUS BUFFERS
U4	SN74HC138N	IC, 3 TO 8 DECODERS/DE-MPX
U5	MC14093B	IC, QUAD 2-INPUT NAND SCHMITT
U6	MC14528B	IC, DUAL MONOSTABLE MULTIVIB.
U7	MM5450V	IC, LED DISPLAY DRIVERS
U8	MM5450V	IC, LED DISPLAY DRIVERS
U9	MM5450V	IC, LED DISPLAY DRIVERS
U10	MM5450V	IC, LED DISPLAY DRIVERS
U11	MM5450V	IC, LED DISPLAY DRIVERS

## POWER UNIT

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## P A R T S L I S T

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W02-2169-08

REF. NO	PARTS NO	NAME & DESCRIPTION
	J73-0289-08	PCB (UNMOUNTED)
BD1	BL406	DIODE
BD2	BL406	DIODE
BD3	BL406	DIODE
C1	CK45B1H222K	CAP. CERAMIC 2200P 10% 50V
C2	CK45B1H222K	CAP. CERAMIC 2200P 10% 50V
C3	CK45B1H222K	CAP. CERAMIC 2200P 10% 50V
C4	CE04EW1E101M	CAP. ELECTRO 100 20% 25V
C5	CE04EW1E101M	CAP. ELECTRO 100 20% 25V
C6	CE04EW1E101M	CAP. ELECTRO 100 20% 25V
C7	CE04EW1E101M	CAP. ELECTRO 100 20% 25V
C8	CE04EW1E472M	CAP. ELECTRO 4700 20% 25V
C9	CE04EW1E472M	CAP. ELECTRO 4700 20% 25V
C10	CE04EW1E472M	CAP. ELECTRO 4700 20% 25V
C11	CE04EW1E101M	CAP. ELECTRO 100 20% 25V
C12	CE04EW1E472M	CAP. ELECTRO 4700 20% 25V
CN1	E40-7263-08	PIN CONNECTOR 2P
CN2	E40-7263-08	PIN CONNECTOR 2P
CN3	E40-7386-08	PIN CONNECTOR 6P
U2	MC7915T	IC, VOLTAGE REGULATOR -15V
U3	MC7805T	IC, VOLTAGE REGULATOR +5V
U4	MC7805T	IC, VOLTAGE REGULATOR +5V
U5	MC7805T	IC, VOLTAGE REGULATOR +5V
U6	MC7815	IC, VOLTAGE REGULATOR +15V

# RF UNIT

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W02-2170-08

REF. NO	PARTS NO	NAME & DESCRIPTION			
	J73-0290-08	PCB (UNMOUNTED)			
C1	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C2	CE04EW1E220M	CAP. ELECTRO	22	20%	25V
C3	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C4	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C5	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C6	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C7	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C8	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C9	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C10	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C11	CC45CH1H390J	CAP. CERAMIC	39P	5%	50V
C12	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C13	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C14	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C15	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C16	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C17	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C18	CC45CH1H390J	CAP. CERAMIC	39P	5%	50V
C19	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C20	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C21	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C22	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C23	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C24	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C25	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C26	CE04EW1E220M	CAP. ELECTRO	22	20%	25V
C27	CE04EW1E220M	CAP. ELECTRO	22	20%	25V
C28	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C29	CQ92M1H102K	CAP. MYLAR	1000P	10%	50V
C30	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C31	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C32	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C33	CC45CH1H050C	CAP. CERAMIC	5P	0.25P	50V
C34	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C35	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C36	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C37	CC45CH1H050C	CAP. CERAMIC	5P	0.25P	50V
C38	CC45CH1H050C	CAP. CERAMIC	5P	0.25P	50V
C39	CC45CH1H270J	CAP. CERAMIC	27P	5%	50V
C40	CC45CH1H680J	CAP. CERAMIC	68P	5%	50V
C41	CC45CH1H220J	CAP. CERAMIC	22P	5%	50V
C42	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C43	CK45B1H101K	CAP. CERAMIC	100P	10%	50V
C44	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C45	CC45CH1H050C	CAP. CERAMIC	5P	0.25P	50V
C46	CC45CH1H050C	CAP. CERAMIC	5P	0.25P	50V
C47	CC45CH1H270J	CAP. CERAMIC	27P	5%	50V
C48	CC45CH1H820J	CAP. CERAMIC	82P	5%	50V
C49	CK45B1H221K	CAP. CERAMIC	220P	10%	50V
C50	CC45CH1H220J	CAP. CERAMIC	22P	5%	50V
C51	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C52	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C53	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C54	C91-2532-08	CAP. CERAMIC	1	20%	25V
C55	C91-2532-08	CAP. CERAMIC	1	20%	25V
C56	CE04EW1E220M	CAP. ELECTRO	22	20%	25V
C57	CE04EW1E220M	CAP. ELECTRO	22	20%	25V
C58	NO USE				

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W02-2170-08

REF. NO	PARTS NO	NAME & DESCRIPTION				
C59	CE04EW1E220M	CAP. ELECTRO	22	20%	25V	
C60	C91-2532-08	CAP. CERAMIC	1	20%	25V	
C61	CC45CH1H080D	CAP. CERAMIC	8P	0.5P	50V	
C62	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V	
C63	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V	
C64	CC45CH1H680J	CAP. CERAMIC	68P	5%	50V	
C65	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V	
C66	CQ92M1J105K	CAP. MYLAR	1	10%	63V	
C67	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V	
C68	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V	
C69	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V	
C70	CC45CH1H050C	CAP. CERAMIC	5P	0.25P	50V	
C71	CC45CH1H050C	CAP. CERAMIC	5P	0.25P	50V	
C72	CC45CH1H050C	CAP. CERAMIC	5P	0.25P	50V	
C73	CC45CH1H050C	CAP. CERAMIC	5P	0.25P	50V	
C74	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V	
C75	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V	
C76	CE04EW1E220M	CAP. ELECTRO	22	20%	25V	
C77	CE04EW1E220M	CAP. ELECTRO	22	20%	25V	
C78	CE04EW1E220M	CAP. ELECTRO	22	20%	25V	
C79	C91-2532-08	CAP. CERAMIC	1	20%	25V	
C80	CC45CH1H080D	CAP. CERAMIC	8P	0.5P	50V	
C81	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V	
C82	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V	
C83	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V	
C84	CC45CH1H270J	CAP. CERAMIC	27P	5%	50V	
C85	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V	
C86	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V	
C87	C91-2532-08	CAP. CERAMIC	1	20%	25V	
C88	CE04EW1E220M	CAP. ELECTRO	22	20%	25V	
C89	CE04EW1E220M	CAP. ELECTRO	22	20%	25V	
C90	CE04EW1E220M	CAP. ELECTRO	22	20%	25V	
C91	C91-2532-08	CAP. CERAMIC	1	20%	25V	
C92	CC45CH1H080D	CAP. CERAMIC	8P	0.5P	50V	
C93	CE04EW1E220M	CAP. ELECTRO	22	20%	25V	
C94	CC45CH1H040C	CAP. CERAMIC	4P	0.25P	50V	
C95	CC45CH1H060D	CAP. CERAMIC	6P	0.5P	50V	
C96	CC45CH1H080D	CAP. CERAMIC	8P	0.5P	50V	
C97	CE04EW1E220M	CAP. ELECTRO	22	20%	25V	
C98	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V	
C99	CC45CH1H270J	CAP. CERAMIC	27P	5%	50V	
C100	NO USE					
C101	CE04EW1E101M	CAP. ELECTRO	100	20%	25V	
C102	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V	
C103	CC45CH1H470J	CAP. CERAMIC	47P	5%	50V	
C104	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V	
C105	CE04EW1E101M	CAP. ELECTRO	100	20%	25V	
C106	CK45B1H222K	CAP. CERAMIC	2200P	10%	50V	
C107	CC45CH1H270J	CAP. CERAMIC	27P	5%	50V	
C108	CK45B1H101K	CAP. CERAMIC	100P	10%	50V	
C109	CE04EW1E101M	CAP. ELECTRO	100	20%	25V	
C110	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V	
C111	CE04EW1E101M	CAP. ELECTRO	100	20%	25V	
C112	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V	
C113	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V	
C114	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V	
C115	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V	
C116	CC45CH1H030J	CAP. CERAMIC	3P	5%	50V	
C117	NO USE					



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W02-2170-08

REF. NO	PARTS NO	NAME & DESCRIPTION				
C118	CC45CH1H390J	CAP.	CERAMIC	39P	5%	50V
C119	CK45B1H222K	CAP.	CERAMIC	2200P	10%	50V
C120	CC45CH1H470J	CAP.	CERAMIC	47P	5%	50V
C121	CC45CH1H820J	CAP.	CERAMIC	82P	5%	50V
C122	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C123	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C124	CK45B1E102K	CAP.	CERAMIC	1000P	10%	25V
C125	CC45CH1H390J	CAP.	CERAMIC	39P	5%	50V
C126	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C127	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C128	CE04EW1E220M	CAP.	ELECTRO	22	20%	25V
C129	CE04EW1E220M	CAP.	ELECTRO	22	20%	25V
C130	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C131	CC45CH1H050C	CAP.	CERAMIC	5P	0.25P	50V
C132	CC45CH1H050C	CAP.	CERAMIC	5P	0.25P	50V
C133	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C134	CC45CH1H180J	CAP.	CERAMIC	18P	5%	50V
C135	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C136	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C137	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C138	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C139	CC45CH1H820J	CAP.	CERAMIC	82P	5%	50V
C140	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C141	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C142	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C143	CC45CH1H820J	CAP.	CERAMIC	82P	5%	50V
C144	CK45B1H101K	CAP.	CERAMIC	100P	10%	50V
C145	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C146	CC45CH1H330J	CAP.	CERAMIC	33P	5%	50V
C147	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C148	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C149	CK45B1H101K	CAP.	CERAMIC	100P	10%	50V
C150	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C151	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C152	CE04EW1E220M	CAP.	ELECTRO	22	20%	25V
C153	CE04EW1E220M	CAP.	ELECTRO	22	20%	25V
C154	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C155	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C156	CK45B1H821K	CAP.	CERAMIC	820P	10%	50V
C157	CK45B1H151K	CAP.	CERAMIC	150P	10%	50V
C158	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C159	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C160	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C161	CK45B1E102K	CAP.	CERAMIC	1000P	10%	25V
C162	CC45CH1H470J	CAP.	CERAMIC	47P	5%	50V
C163	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C164	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C165	CK45B1H221K	CAP.	CERAMIC	220P	10%	50V
C166	CC45CH1H150J	CAP.	CERAMIC	15P	5%	50V
C167	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C168	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C169	CC45CH1H220J	CAP.	CERAMIC	22P	5%	50V
C170	CC45CH1H220J	CAP.	CERAMIC	22P	5%	50V
C171	CE04EW1E220M	CAP.	ELECTRO	22	20%	25V
C172	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C173	CE04EW1H4R7M	CAP.	ELECTRO	4.7	20%	50V
C174	CC45CH1H470J	CAP.	CERAMIC	47P	5%	50V
C175	CQ92M1E103M	CAP.	MYLAR	0.01	20%	25V
C176	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V

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## P A R T S L I S T

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W02-2170-08

REF. NO	PARTS NO	NAME & DESCRIPTION			
C177	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C178	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C179	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C180	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C181	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C182	CE04EW1E220M	CAP. ELECTRO	22	20%	25V
C183	CE04EW1E220M	CAP. ELECTRO	22	20%	25V
C184	CC45CH1H390J	CAP. CERAMIC	39P	5%	50V
C185	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C186	CC45CH1H050C	CAP. CERAMIC	5P	0.25P	50V
C187	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C188	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C189	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C190	CC45CH1H220J	CAP. CERAMIC	22P	5%	50V
C191	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C192	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C193	CQ92M1H102K	CAP. MYLAR	1000P	10%	50V

CN1	E40-7266-08	PIN CONNECTOR	10P
CN2	E40-7263-08	PIN CONNECTOR	2P

D1	1N4148	DIODE
D2	1N4148	DIODE
D3	1N4148	DIODE
D4	1S2186	DIODE
D5	1S2186	DIODE
D6	1S2186	DIODE
D7	1S2186	DIODE
D8	1S2186	DIODE
D9	1S2186	DIODE
D10	5082-2835	DIODE
D11	1N753	DIODE
D12	1N4148	DIODE
D13	1N4148	DIODE
D14	1SS97	DIODE
D15	1S2186	DIODE
D16	1S2186	DIODE
D17	1S2186	DIODE
D18	1SV34	DIODE
D19	1SV34	DIODE
D20	1S2186	DIODE
D21	1S2186	DIODE
D22	1S2186	DIODE
D23	1N4148	DIODE
D24	1N4148	DIODE
D25	1S2186	DIODE
D26	1S2186	DIODE
D27	1SV101	DIODE
D28	1S2186	DIODE
D29	1S2186	DIODE
D30	1S2186	DIODE
D31	1N4148	DIODE
D32	1N4148	DIODE
D33	1N4148	DIODE
D34	1N4148	DIODE
D35	1SV69	DIODE
D36	1SV69	DIODE
D37	1SV69	DIODE
D38	1SV69	DIODE

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W02-2170-08

REF. NO	PARTS NO	NAME & DESCRIPTION
D39	1SV69	DIODE
D40	1SV69	DIODE
D41	1SV69	DIODE
D42	1SV69	DIODE
D43	1SV69	DIODE
D44	1SV69	DIODE
D45	1SV69	DIODE
D46	1SV69	DIODE
L1	L39-0573-08	COIL 0.18UH
L2	L39-0573-08	COIL 0.18UH
L3	L39-0565-08	COIL 10UH
L4	L39-0565-08	COIL 10UH
L5	L39-0565-08	COIL 10UH
L6	L39-0571-08	COIL 8.2UH
L7	L39-0572-08	COIL 0.15UH
L8	L39-0573-08	COIL 0.18UH
L9	L39-0567-08	COIL 470UH
L10	L39-0567-08	COIL 470UH
L11	L39-0567-08	COIL 470UH
L12	L39-0579-08	COIL
L13	L39-0578-08	COIL 2.2MH
L14	L39-0565-08	COIL 10UH
L15	L39-0565-08	COIL 10UH
L16	L39-0565-08	COIL 10UH
L17	L39-0572-08	COIL 0.15UH
L18	L39-0573-08	COIL 0.18UH
L19	L39-0570-08	COIL 0.20
L20	L39-0571-08	COIL 8.2UH
L21	L39-0572-08	COIL 0.15UH
L22	L39-0573-08	COIL 0.18UH
L23	L39-0567-08	COIL 470UH
L24	L39-0566-08	COIL 33UH
L25	L39-0565-08	COIL 10UH
L26	L39-0565-08	COIL 10UH
L27	L39-0567-08	COIL 470UH
L28	L39-0566-08	COIL 33UH
L29	L39-0569-08	COIL 68UH
L30	L39-0565-08	COIL 10UH
L31	L39-0565-08	COIL 10UH
L32	L39-0565-08	COIL 10UH
L33	L39-0577-08	COIL 100MHZ
L34	L39-0565-08	COIL 10UH
L35	L39-0574-08	COIL 50MHZ
L36	L39-0564-08	COIL 0.33UH
L37	L39-0576-08	COIL 100MHZ
L38	L39-0574-08	COIL 50MHZ
L39	L39-0564-08	COIL 0.33UH
L40	L39-0566-08	COIL 33UH
L41	L39-0568-08	COIL 47UH
L42	L39-0566-08	COIL 33UH
L43	L39-0566-08	COIL 33UH
L44	L39-0568-08	COIL 47UH
L45	L39-0565-08	COIL 10UH
L46	L39-0565-08	COIL 10UH
L47	L39-0565-08	COIL 10UH
L48	L39-0575-08	COIL
L49	L39-0575-08	COIL

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## P A R T S L I S T

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W02-2170-08

REF. NO	PARTS NO	NAME & DESCRIPTION			
Q1	2SC1815 (GR)	TR. SI, NPN			
Q2	2SC2408	TR. SI, NPN			
Q3	2SC2408	TR. SI, NPN			
Q4	2SC1215	TR. SI, NPN			
Q5	2SA1015 (GR)	TR. SI, PNP			
Q6	2SC1215	TR. SI, NPN			
Q7	2SC1815 (GR)	TR. SI, NPN			
Q8	2SA1015 (GR)	TR. SI, PNP			
Q9	BFQ68	TR. SI, NPN			
Q10	2SC1815 (GR)	TR. SI, NPN			
Q11	2SA1015 (GR)	TR. SI, PNP			
Q12	MFR559	TR. SI, NPN			
Q13	2SA1015 (GR)	TR. SI, PNP			
Q14	2SC1815 (GR)	TR. SI, NPN			
Q15	2SC2498	TR. SI, NPN			
Q16	2SC2498	TR. SI, NPN			
Q17	2SC2498	TR. SI, NPN			
Q18	2SC2498	TR. SI, NPN			
Q19	2SA1015 (GR)	TR. SI, PNP			
Q20	2SA1015 (GR)	TR. SI, PNP			
Q21	2SA1015 (GR)	TR. SI, PNP			
Q22	2SA1015 (GR)	TR. SI, PNP			
Q23	2SA1015 (GR)	TR. SI, PNP			
Q24	2SA1015 (GR)	TR. SI, PNP			
Q25	2SA1015 (GR)	TR. SI, PNP			
Q26	2SA1015 (GR)	TR. SI, PNP			
Q27	2SC1815 (GR)	TR. SI, NPN			
Q28	2SK113	FET, N-CHANNEL			
Q29	2SK113	FET, N-CHANNEL			
Q30	2SK113	FET, N-CHANNEL			
Q31	2SC1730	TR. SI, NPN			
Q32	2SC1730	TR. SI, NPN			
Q33	2SC1730	TR. SI, NPN			
Q34	NO USE				
Q35	2SC1730	TR. SI, NPN			
Q36	2SC1730	TR. SI, NPN			
Q37	2SC1730	TR. SI, NPN			
Q38	2SC1815 (GR)	TR. SI, NPN			
Q39	2SC1815 (GR)	TR. SI, NPN			
Q40	2SA1015 (GR)	TR. SI, PNP			
Q41	2SC1815 (GR)	TR. SI, NPN			
Q42	2SC2369	TR. SI, NPN			
R1	RN14BK2E2001F	RES. METAL FILM 2K	1%	1/4W	
R2	RN14BK2E2001F	RES. METAL FILM 2K	1%	1/4W	
R3	RN14BK2E3900F	RES. METAL FILM 390	1%	1/4W	
R4	RN14BK2E1001F	RES. METAL FILM 1K	1%	1/4W	
R5	RN14BK2E5100F	RES. METAL FILM 510	1%	1/4W	
R6	RN14BK2E5100F	RES. METAL FILM 510	1%	1/4W	
R7	RN14BK2E4360F	RES. METAL FILM 436	1%	1/4W	
R8	RN14BK2E4360F	RES. METAL FILM 436	1%	1/4W	
R9	RN14BK2E4360F	RES. METAL FILM 436	1%	1/4W	
R10	RN14BK2E2700F	RES. METAL FILM 270	1%	1/4W	
R11	RN14BK2E4360F	RES. METAL FILM 436	1%	1/4W	
R12	RN14BK2C1000F	RES. METAL FILM 100	1%	1/6W	
R13	RN14BK2E5100F	RES. METAL FILM 510	1%	1/4W	
R14	RN14BK2E5100F	RES. METAL FILM 510	1%	1/4W	
R15	RN14BK2C22R0F	RES. METAL FILM 22.0	1%	1/6W	
R16	RN14BK2C1201F	RES. METAL FILM 1.2K	1%	1/6W	

\* \* \* P A R T S L I S T \* \* \*

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REF. NO	PARTS NO	NAME & DESCRIPTION			
R17	RN14BK2C1000F	RES. METAL FILM 100	1%	1/6W	
R18	RN14BK2C1001F	RES. METAL FILM 1K	1%	1/6W	
R19	RN14BK2C1001F	RES. METAL FILM 1K	1%	1/6W	
R20	RN14BK2C1201F	RES. METAL FILM 1.2K	1%	1/6W	
R21	RN14BK2C22R0F	RES. METAL FILM 22.0	1%	1/6W	
R22	RN14BK2E1000F	RES. METAL FILM 100	1%	1/4W	
R23	RN14BK2E3901F	RES. METAL FILM 3.9K	1%	1/4W	
R24	RN14BK2E52R3F	RES. METAL FILM 52.3	1%	1/4W	
R25	RN14BK2E9980F	RES. METAL FILM 998	1%	1/4W	
R26	RN14BK2E52R3F	RES. METAL FILM 52.3	1%	1/4W	
R27	RN14BK2C1000F	RES. METAL FILM 100	1%	1/6W	
R28	RN14BK2C10R0F	RES. METAL FILM 10.0	1%	1/6W	
R29	RN14BK2C1201F	RES. METAL FILM 1.2K	1%	1/6W	
R30	RN14BK2C1201F	RES. METAL FILM 1.2K	1%	1/6W	
R31	RN14BK2C10R0F	RES. METAL FILM 10.0	1%	1/6W	
R32	RN14BK2C2700F	RES. METAL FILM 270	1%	1/6W	
R33	RN14BK2C1000F	RES. METAL FILM 100	1%	1/6W	
R34	RN14BK2E0000F	RES. METAL FILM 000	1%	1/4W	
R35	RN14BK2E1501F	RES. METAL FILM 1.5K	1%	1/4W	
R36	RN14BK2C10R0F	RES. METAL FILM 10.0	1%	1/6W	
R37	RN14BK2C10R0F	RES. METAL FILM 10.0	1%	1/6W	
R38	RN14BK2E2001F	RES. METAL FILM 2K	1%	1/4W	
R39	RN14BK2E1001F	RES. METAL FILM 1K	1%	1/4W	
R40	RN14BK2E51R0F	RES. METAL FILM 51.0	1%	1/4W	
R41	RN14BK2E1501F	RES. METAL FILM 1.5K	1%	1/4W	
R42	RN14BK2E1501F	RES. METAL FILM 1.5K	1%	1/4W	
R43	RN14BK2C4300F	RES. METAL FILM 430	1%	1/6W	
R44	RN14BK2E2001F	RES. METAL FILM 2K	1%	1/4W	
R45	RN14BK2E1000F	RES. METAL FILM 100	1%	1/4W	
R46	RN14BK2E4700F	RES. METAL FILM 470	1%	1/4W	
R47	RN14BK2E3900F	RES. METAL FILM 390	1%	1/4W	
R48	RN14BK2E1000F	RES. METAL FILM 100	1%	1/4W	
R49	RN14BK2E4703F	RES. METAL FILM 470K	1%	1/4W	
R50	RN14BK2E2201F	RES. METAL FILM 2.2K	1%	1/4W	
R51	RN14BK2E1001F	RES. METAL FILM 1K	1%	1/4W	
R52	RN14BK2E1001F	RES. METAL FILM 1K	1%	1/4W	
R53	RN14BK2E1001F	RES. METAL FILM 1K	1%	1/4W	
R54	RN14BK2C1001F	RES. METAL FILM 1K	1%	1/6W	
R55	RN14BK2C2200F	RES. METAL FILM 220	1%	1/6W	
R56	RN14BK2C1001F	RES. METAL FILM 1K	1%	1/6W	
R57	RN14BK2E50R0F	RES. METAL FILM 50	1%	1/4W	
R58	RN14BK2E4703F	RES. METAL FILM 470K	1%	1/4W	
R59	RN14BK2E1002F	RES. METAL FILM 10K	1%	1/4W	
R60	RN14BK2E1001F	RES. METAL FILM 1K	1%	1/4W	
R61	RN14BK2E4703F	RES. METAL FILM 470K	1%	1/4W	
R62	RN14BK2E3301F	RES. METAL FILM 3.3K	1%	1/4W	
R63	RN14BK2E6R80F	RES. METAL FILM 6.8	1%	1/4W	
R64	RN14BK2C1001F	RES. METAL FILM 1K	1%	1/6W	
R65	RN14BK2C1001F	RES. METAL FILM 1K	1%	1/6W	
R66	RN14BK2C1001F	RES. METAL FILM 1K	1%	1/6W	
R67	RN14BK2E2900F	RES. METAL FILM 290	1%	1/4W	
R68	RN14BK2E4360F	RES. METAL FILM 436	1%	1/4W	
R69	RN14BK2E1501F	RES. METAL FILM 1.5K	1%	1/4W	
R70	RN14BK2E68R0F	RES. METAL FILM 68.0	1%	1/4W	
R71	RN14BK2C47R0F	RES. METAL FILM 47.0	1%	1/6W	
R72	RN14BK2E1000F	RES. METAL FILM 100	1%	1/4W	
R73	RN14BK2C33R0F	RES. METAL FILM 33.0	1%	1/6W	
R74	RN14BK2C33R0F	RES. METAL FILM 33.0	1%	1/6W	
R75	RN14BK2C33R0F	RES. METAL FILM 33.0	1%	1/6W	

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## P A R T S L I S T

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REF. NO	PARTS NO	NAME & DESCRIPTION			
R76	RN14BK2C33R0F	RES. METAL FILM	33.0	1%	1/6W
R77	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R78	RN14BK2C6800F	RES. METAL FILM	680	1%	1/6W
R79	RN14BK2C1002F	RES. METAL FILM	10K	1%	1/6W
R80	RN14BK2C3302F	RES. METAL FILM	33K	1%	1/6W
R81	RN14BK2C1501F	RES. METAL FILM	1.5K	1%	1/6W
R82	RN14BK2C1501F	RES. METAL FILM	1.5K	1%	1/6W
R83	RN14BK2C1501F	RES. METAL FILM	1.5K	1%	1/6W
R84	RN14BK2E1001F	RES. METAL FILM	1K	1%	1/4W
R85	RN14BK2E1001F	RES. METAL FILM	1K	1%	1/4W
R86	RN14BK2E15R0F	RES. METAL FILM	15.0	1%	1/4W
R87	RN14BK2C3901F	RES. METAL FILM	3.9K	1%	1/6W
R88	RN14BK2C1001F	RES. METAL FILM	1K	1%	1/6W
R89	RN14BK2C1001F	RES. METAL FILM	1K	1%	1/6W
R90	RN14BK2C18R0F	RES. METAL FILM	18.0	1%	1/6W
R91	RN14BK2C1001F	RES. METAL FILM	1K	1%	1/6W
R92	RN14BK2C1001F	RES. METAL FILM	1K	1%	1/6W
R93	RN14BK2C2700F	RES. METAL FILM	270	1%	1/6W
R94	RN14BK2C3302F	RES. METAL FILM	33K	1%	1/6W
R95	RN14BK2C1002F	RES. METAL FILM	10K	1%	1/6W
R96	RN14BK2C1002F	RES. METAL FILM	10K	1%	1/6W
R97	RN14BK2C6800F	RES. METAL FILM	680	1%	1/6W
R98	RN14BK2C3901F	RES. METAL FILM	3.9K	1%	1/6W
R99	RN14BK2C1001F	RES. METAL FILM	1K	1%	1/6W
R100	RN14BK2C1000F	RES. METAL FILM	100	1%	1/6W
R101	RN14BK2C3302F	RES. METAL FILM	33K	1%	1/6W
R102	RN14BK2C3302F	RES. METAL FILM	33K	1%	1/6W
R103	RN14BK2C1000F	RES. METAL FILM	100	1%	1/6W
R104	RN14BK2C3301F	RES. METAL FILM	3.3K	1%	1/6W
R105	RN14BK2C3901F	RES. METAL FILM	3.9K	1%	1/6W
R106	RN14BK2C1001F	RES. METAL FILM	1K	1%	1/6W
R107	RN14BK2C1000F	RES. METAL FILM	100	1%	1/6W
R108	RN14BK2C3302F	RES. METAL FILM	33K	1%	1/6W
R109	RN14BK2C3302F	RES. METAL FILM	33K	1%	1/6W
R110	RN14BK2C1000F	RES. METAL FILM	100	1%	1/6W
R111	RN14BK2C3301F	RES. METAL FILM	3.3K	1%	1/6W
R112	RN14BK2C3302F	RES. METAL FILM	33K	1%	1/6W
R113	RN14BK2C5100F	RES. METAL FILM	510	1%	1/6W
R114	RN14BK2C3302F	RES. METAL FILM	33K	1%	1/6W
R115	RN14BK2C5100F	RES. METAL FILM	510	1%	1/6W
R116	RN14BK2C3302F	RES. METAL FILM	33K	1%	1/6W
R117	RN14BK2C5100F	RES. METAL FILM	510	1%	1/6W
R118	RN14BK2C3302F	RES. METAL FILM	33K	1%	1/6W
R119	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R120	RN14BK2C3302F	RES. METAL FILM	33K	1%	1/6W
R121	RN14BK2C4701F	RES. METAL FILM	4.7K	1%	1/6W
R122	RN14BK2C4701F	RES. METAL FILM	4.7K	1%	1/6W
R123	RN14BK2C1001F	RES. METAL FILM	1K	1%	1/6W
R124	RN14BK2E27R0F	RES. METAL FILM	27.0	1%	1/4W
R125	RN14BK2E7501F	RES. METAL FILM	7.5K	1%	1/4W
R126	RN14BK2C1001F	RES. METAL FILM	1K	1%	1/6W
R127	RN14BK2C68R0F	RES. METAL FILM	68	1%	1/6W
R128	RN14BK2C47R0F	RES. METAL FILM	47.0	1%	1/6W
R129	RN14BK2C1001F	RES. METAL FILM	1K	1%	1/6W
R130	RN14BK2E1001F	RES. METAL FILM	1K	1%	1/4W
R131	RN14BK2E1001F	RES. METAL FILM	1K	1%	1/4W
R132	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R133	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R134	RN14BK2C1001F	RES. METAL FILM	1K	1%	1/6W

\* \* \* P A R T S L I S T \* \* \*

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REF. NO	PARTS NO	NAME & DESCRIPTION				
R135	RN14BK2E3901F	RES.	METAL	FILM	3.9K	1% 1/4W
R136	RN14BK2C1001F	RES.	METAL	FILM	1K	1% 1/6W
R137	RN14BK2C3000F	RES.	METAL	FILM	300	1% 1/6W
R138	RN14BK2C47R0F	RES.	METAL	FILM	47.0	1% 1/6W
R139	RN14BK2E1000F	RES.	METAL	FILM	100	1% 1/4W
R140	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R141	RN14BK2E1000F	RES.	METAL	FILM	100	1% 1/4W
R142	RN14BK2E8200F	RES.	METAL	FILM	820	1% 1/4W
R143	RN14BK2E3300F	RES.	METAL	FILM	330	1% 1/4W
R144	RN14BK2E1001F	RES.	METAL	FILM	1K	1% 1/4W
R145	RN14BK2E1001F	RES.	METAL	FILM	1K	1% 1/4W
R146	RN14BK2E3001F	RES.	METAL	FILM	3K	1% 1/4W
R147	RN14BK2E1803F	RES.	METAL	FILM	180K	1% 1/4W
R148	RN14BK2E2201F	RES.	METAL	FILM	2.2K	1% 1/4W
R149	RN14BK2E47R0F	RES.	METAL	FILM	47.0	1% 1/4W
R150	RN14BK2E2201F	RES.	METAL	FILM	2.2K	1% 1/4W
R151	RN14BK2E6800F	RES.	METAL	FILM	680	1% 1/4W
R152	RN14BK2C3301F	RES.	METAL	FILM	3.3K	1% 1/6W
R153	NO USE					
R154	RN14BK2C47R0F	RES.	METAL	FILM	47.0	1% 1/6W
R155	RN14BK2E47R0F	RES.	METAL	FILM	47.0	1% 1/4W
R156	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R157	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R158	RN14BK2E6200F	RES.	METAL	FILM	620	1% 1/4W
R159	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R160	RN14BK2E1003F	RES.	METAL	FILM	100K	1% 1/4W
R161	RN14BK2E1003F	RES.	METAL	FILM	100K	1% 1/4W
R162	RN14BK2E5100F	RES.	METAL	FILM	510	1% 1/4W
R163	RN14BK2C2700F	RES.	METAL	FILM	270	1% 1/6W
R164	RN14BK2E1502F	RES.	METAL	FILM	15K	1% 1/4W
R165	RN14BK2E1000F	RES.	METAL	FILM	100	1% 1/4W
R166	RN14BK2C3301F	RES.	METAL	FILM	3.3K	1% 1/6W
R167	RN14BK2E4701F	RES.	METAL	FILM	4.7K	1% 1/4W
R168	RN14BK2E0000F	RES.	METAL	FILM	000	1% 1/4W
R169	RN14BK2E4703F	RES.	METAL	FILM	470K	1% 1/4W
R170	RN14BK2E47R0F	RES.	METAL	FILM	47.0	1% 1/4W
R171	RN14BK2C47R0F	RES.	METAL	FILM	47.0	1% 1/6W
R172	RN14BK2C3302F	RES.	METAL	FILM	33K	1% 1/6W
R173	RN14BK2C1003F	RES.	METAL	FILM	100K	1% 1/6W
R174	RN14BK2C4702F	RES.	METAL	FILM	47K	1% 1/6W
R175	RN14BK2C1503F	RES.	METAL	FILM	150K	1% 1/6W
R176	RN14BK2C47R0F	RES.	METAL	FILM	47.0	1% 1/6W
R177	RN14BK2C2700F	RES.	METAL	FILM	270	1% 1/6W
R178	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R179	RN14BK2E1003F	RES.	METAL	FILM	100K	1% 1/4W
R180	RN14BK2E1003F	RES.	METAL	FILM	100K	1% 1/4W
R181	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R182	RN14BK2E1003F	RES.	METAL	FILM	100K	1% 1/4W
R183	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R184	RN14BK2E4701F	RES.	METAL	FILM	4.7K	1% 1/4W
R185	RN14BK2E3300F	RES.	METAL	FILM	330	1% 1/4W
R186	RN14BK2E2000F	RES.	METAL	FILM	200	1% 1/4W
R187	RN14BK2E7500F	RES.	METAL	FILM	750	1% 1/4W
R188	RN14BK2C3301F	RES.	METAL	FILM	3.3K	1% 1/6W
R189	RN14BK2C2201F	RES.	METAL	FILM	2.2K	1% 1/6W
R190	RN14BK2C1001F	RES.	METAL	FILM	1K	1% 1/6W
R191	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R192	RN14BK2E1003F	RES.	METAL	FILM	100K	1% 1/4W
R193	RN14BK2E47R0F	RES.	METAL	FILM	47.0	1% 1/4W

\* \* \* P A R T S L I S T \* \* \*

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REF. NO	PARTS NO	NAME & DESCRIPTION			
R194	RN14BK2E47R0F	RES. METAL FILM	47.0	1%	1/4W
R195	RN14BK2E2201F	RES. METAL FILM	2.2K	1%	1/4W
R196	RN14BK2E1003F	RES. METAL FILM	100K	1%	1/4W
R197	RN14BK2E1001F	RES. METAL FILM	1K	1%	1/4W
R198	RN14BK2E1001F	RES. METAL FILM	1K	1%	1/4W
R199	RN14BK2E2201F	RES. METAL FILM	2.2K	1%	1/4W
R200	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R201	RN14BK2E1501F	RES. METAL FILM	1.5K	1%	1/4W
R202	RN14BK2E1001F	RES. METAL FILM	1K	1%	1/4W
R203	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R204	RN14BK2E3301F	RES. METAL FILM	3.3K	1%	1/4W
R205	RN14BK2E1001F	RES. METAL FILM	1K	1%	1/4W
R206	NO USE				
R207	RN14BK2E2200F	RES. METAL FILM	220	1%	1/4W
R208	RN14BK2E1001F	RES. METAL FILM	1K	1%	1/4W
R209	RN14BK2E2200F	RES. METAL FILM	220	1%	1/4W
R210	RN14BK2E3301F	RES. METAL FILM	3.3K	1%	1/4W
R211	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R212	RN14BK2E1001F	RES. METAL FILM	1K	1%	1/4W
R213	RN14BK2C5100F	RES. METAL FILM	510	1%	1/6W
R214	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R215	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R216	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R217	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R218	RN14BK2E6000F	RES. METAL FILM	600	1%	1/4W
R219	RN14BK2E1001F	RES. METAL FILM	1K	1%	1/4W
R220	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R221	RN14BK2E5602F	RES. METAL FILM	56K	1%	1/4W
R222	RN14BK2E3301F	RES. METAL FILM	3.3K	1%	1/4W
R223	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R224	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R225	RN14BK2E2202F	RES. METAL FILM	22K	1%	1/4W
R226	RN14BK2E2702F	RES. METAL FILM	27K	1%	1/4W
R227	RN14BK2E4701F	RES. METAL FILM	4.7K	1%	1/4W
R228	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R229	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R230	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R231	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R232	RN14BK2E6800F	RES. METAL FILM	680	1%	1/4W
R233	RN14BK2E4702F	RES. METAL FILM	47K	1%	1/4W
R234	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
RY1	S76-0621-08	RELAY			
RY2	S76-0622-08	RELAY			
RY3	S76-0622-08	RELAY			
RY4	S76-0621-08	RELAY			
T1	L19-0436-08	CONVERTOR TRANSFORMER			
T2	L19-0436-08	CONVERTOR TRANSFORMER			
U1	HD10209	IC, DUAL 4-5 INPUT OR/NOR GATE			
U2	HD10231	IC, DUAL D-TYPE MASTER SLAVE FF			
U3	HD10209	IC, DUAL 4-5 INPUT OR/NOR GATE			
U4	UPC1651G	IC, WIDEBAND AMP			
U5	LM301AJ	IC, OPERATIONAL AMPLIFIERS			
U6	HD10231	IC, DUAL D-TYPE MASTER SLAVE FF			
U7	MC14504B	IC, HEX LEVEL SHIFTER			
U8	CA3028A	IC, 8 TO 5 STYLE DIFFERENTIAL AM			
U9	SN76514N	IC, DOUBLE BALANCED MIXER			

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\* \* \* P A R T S L I S T \* \* \*

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REF. NO	PARTS NO	NAME & DESCRIPTION
U10	MC14584B	IC,HEX SCHMITT TRIGGER
U11	MC14094B	IC,8-STAGE SHIFT/STORE LATCH
U12	MC1494L	IC,FOUR-QUADRANT MULTIPLIER
U13	UPB551	IC,HIGH SPEED PRESCALER
U14	NO USE	
U15	MC14094B	IC,8-STAGE SHIFT/STORE LATCH
U16	SN76514N	IC,DOUBLE BALANCED MIXER
U17	MC14069UB	IC,HEX INVERTER
U18	TL084CN	IC,JFET INPUT OP AMP
U19	LM301AJ	IC,OPERATIONAL AMPLIFIERS
U20	UPB551	IC,HIGH SPEED PRESCALER
U21	LF356A	IC,MONOLTHIC JFET OP AMP
U22	MC1458	IC,DUAL OP-AMP
U23	NO USE	
U24	SN76514N	IC,DOUBLE BALANCED MIXER
U25	MC14013B	IC,DUAL D FLIP-FLOP
VR1	R12-8523-08	RES. SEMI FIXED 1M
VR2	R12-1583-08	RES. SEMI FIXED 2K
VR3	R12-1583-08	RES. SEMI FIXED 2K
VR4	R12-0860-08	RES. SEMI FIXED 200
VR5	R12-7513-08	RES. SEMI FIXED 500K
VR6	R12-3580-08	RES. SEMI FIXED 10K
VR7	R12-3580-08	RES. SEMI FIXED 10K
VR8	R12-4526-08	RES. SEMI FIXED 50K

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PLL UNIT

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PARTS LIST

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W02-2171-08

REF. NO	PARTS NO	NAME & DESCRIPTION			
	J73-0291-08	PCB (UNMOUNTED)			
C1	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C2	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C3	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C4	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C5	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C6	CE04EW1E221M	CAP. ELECTRO	220	20%	25V
C7	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C8	C91-2570-08	CAP. METAL FILM	1	10%	250V
C9	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C10	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C11	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C12	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C13	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C14	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C15	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C16	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C17	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C18	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C19	CE04EW1E221M	CAP. ELECTRO	220	20%	25V
C20	CQ92M1H473K	CAP. MYLAR	0.047	10%	50V
C21	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C22	C91-2572-08	CAP. POLYESTER	0.1	10%	63V
C23	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C24	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C25	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C26	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C27	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C28	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C29	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C30	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C31	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C32	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C33	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C34	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C35	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C36	CK45B1H102K	CAP. CERAMIC	1000P	10%	50V
C37	CK45B1H102K	CAP. CERAMIC	1000P	10%	50V
C38	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C39	NO USE				
C40	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C41	NO USE				
C42	CK45B1H102K	CAP. CERAMIC	1000P	10%	50V
C43	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C44	NO USE				
C45	CK45B1H151K	CAP. CERAMIC	150P	10%	50V
C46	CC45CH1H040C	CAP. CERAMIC	4P	0.25P	50V
C47	CC45CH1H040C	CAP. CERAMIC	4P	0.25P	50V
C48	CC45CH1H040C	CAP. CERAMIC	4P	0.25P	50V
C49	CC45CH1H040C	CAP. CERAMIC	4P	0.25P	50V
C50	CK45B1H102K	CAP. CERAMIC	1000P	10%	50V
C51	CC45CH1H040C	CAP. CERAMIC	4P	0.25P	50V
C52	CC45CH1H040C	CAP. CERAMIC	4P	0.25P	50V
C53	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C54	CK45F1H104Z	CAP. CERAMIC	0.1	20%	50V
C55	CC45CH1H680J	CAP. CERAMIC	68P	5%	50V
C56	CC45CH1H390J	CAP. CERAMIC	39P	5%	50V
C57	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C58	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V

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REF. NO	PARTS NO	NAME & DESCRIPTION				
C59	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C60	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C61	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C62	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C63	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C64	CK45B1H102K	CAP.	CERAMIC	1000P	10%	50V
C65	CC45CH1H270J	CAP.	CERAMIC	27P	5%	50V
C66	CC45CH1H050C	CAP.	CERAMIC	5P	0.25P	50V
C67	CK45B1H102K	CAP.	CERAMIC	1000P	10%	50V
C68	CC45CH1H150J	CAP.	CERAMIC	15P	5%	50V
C69	CC45CH1H150J	CAP.	CERAMIC	15P	5%	50V
C70	CK45B1H102K	CAP.	CERAMIC	1000P	10%	50V
C71	CK45B1H102K	CAP.	CERAMIC	1000P	10%	50V
C72	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C73	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C74	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C75	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C76	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C77	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C78	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C79	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C80	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C83	CK45B1H102K	CAP.	CERAMIC	1000P	10%	50V
C84	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C85	NO USE					
C86	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C90	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C91	CE04EW1E100M	CAP.	ELECTRO	10	20%	25V
C92	CC45CH1H330J	CAP.	CERAMIC	33P	5%	50V
C93	NO USE					
C94	CC45CH1H150J	CAP.	CERAMIC	15P	5%	50V
C95	CK45B1H101K	CAP.	CERAMIC	100P	10%	50V
C96	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C97	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C98	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C99	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C100	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C101	CC45CH1H080D	CAP.	CERAMIC	8P	0.5P	50V
C102	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C103	CC45CH1H330J	CAP.	CERAMIC	33P	5%	50V
C104	CC45CH1H270J	CAP.	CERAMIC	27P	5%	50V
C105	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C106	CC45CH1H390J	CAP.	CERAMIC	39P	5%	50V
C107	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C108	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C109	C05-0487-08	CAP.	TRIMMER	10P		
C110	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C111	CC45CH1H270J	CAP.	CERAMIC	27P	5%	50V
C112	CC45CH1H010C	CAP.	CERAMIC	1P	0.25P	50V
C113	CC45CH1H100J	CAP.	CERAMIC	10P	5%	50V
C114	CK45B1H121K	CAP.	CERAMIC	120P	10%	50V
C115	NO USE					
C116	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C117	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C118	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C119	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C120	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V

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REF. NO	PARTS NO	NAME & DESCRIPTION				
C121	CK45B1H101K	CAP.	CERAMIC	100P	10%	50V
C122	CC45CH1H330J	CAP.	CERAMIC	33P	5%	50V
C123	CK45B1H101K	CAP.	CERAMIC	100P	10%	50V
C124	CK45B1H101K	CAP.	CERAMIC	100P	10%	50V
C125	CK45F1H180J	CAP.	CERAMIC	180P	5%	50V
C126	CC45CH1H080D	CAP.	CERAMIC	8P	0.5P	50V
C127	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C128	CC45CH1H270J	CAP.	CERAMIC	27P	5%	50V
C129	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C130	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C131	NO USE					
C132	CC45CH1H150J	CAP.	CERAMIC	15P	5%	50V
C133	CQ92M1H473K	CAP.	MYLAR	0.047	10%	50V
C134	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C135	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C136	CE04EW1E470M	CAP.	ELECTRO	47	20%	25V
C137	CE04EW1E470M	CAP.	ELECTRO	47	20%	25V
C138	CC45CH1H100J	CAP.	CERAMIC	10P	5%	50V
C139	CC45CH1H120J	CAP.	CERAMIC	12P	5%	50V
C140	CC45CH1H120J	CAP.	CERAMIC	12P	5%	50V
C141	CE04EW1E100M	CAP.	ELECTRO	10	20%	25V
C142	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C143	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C144	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C145	CQ92M1H332K	CAP.	MYLAR	3300P	10%	50V
C146	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C147	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C148	CC45CH1H330J	CAP.	CERAMIC	33P	5%	50V
C149	CC45CH1H680J	CAP.	CERAMIC	68P	5%	50V
C150	CC45CH1H680J	CAP.	CERAMIC	68P	5%	50V
C151	NO USE					
C152	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C155	CK45B1H151K	CAP.	CERAMIC	150P	10%	50V
C156	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C157	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C158	C05-0488-08	CAP.	TRIMMER	90P		
C159	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C160	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C161	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C162	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C163	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C164	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C165	C90-3147-08	CAP.	ELECTRO	10	1%	100V
C166	CE04EW1H4R7M	CAP.	ELECTRO	4.7	20%	50V
C167	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C168	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C169	CK45F1H104Z	CAP.	CERAMIC	0.1	20%	50V
C170	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C171	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C172	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V
C173	CE04EW1H010M	CAP.	ELECTRO	1	20%	50V
C174	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C175	CE04EW1E100M	CAP.	ELECTRO	10	20%	25V
C176	CE04EW1E101M	CAP.	ELECTRO	100	20%	25V
C177	C91-2571-08	CAP.	POLYESTER	1	10%	63V
C178	C91-2571-08	CAP.	POLYESTER	1	10%	63V
C179	C91-2571-08	CAP.	POLYESTER	1	10%	63V
C180	CK45F1H103Z	CAP.	CERAMIC	0.01	20%	50V

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W02-2171-08

REF. NO	PARTS NO	NAME & DESCRIPTION			
C181	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C182	CE04EW1E220M	CAP. ELECTRO	22	20%	25V
C183	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C184	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
C185	CK45F1H103Z	CAP. CERAMIC	0.01	20%	50V
CN2	E40-7263-08	PIN CONNECTOR	2P		
CN3	E40-7388-08	PIN CONNECTOR	8P		
CN4	E40-7263-08	PIN CONNECTOR	2P		
D1	1N4148	DIODE			
D2	1N4148	DIODE			
D3	1N4148	DIODE			
D4	1N4148	DIODE			
D5	1SS97	DIODE			
D6	1SV68	DIODE			
D7	1SV34	DIODE			
D8	1SV68	DIODE			
D9	1SV68	DIODE			
D10	1SV68	DIODE			
D11	1SV68	DIODE			
D12	1SV68	DIODE			
D13	1SV68	DIODE			
D14	1SV68	DIODE			
D15	1SV68	DIODE			
D16	1SV68	DIODE			
D17	1SV68	DIODE			
D18	1SV68	DIODE			
D19	1SV68	DIODE			
D20	1SV97	DIODE			
D21	1SV97	DIODE			
D22	1N4148	DIODE			
D23	1N4148	DIODE			
D24	B30-3003-08	LED			
D25	1N751A	DIODE, ZENER			
D26	1N4148	DIODE			
D27	1N4148	DIODE			
D28	1N4148	DIODE			
D29	1N4148	DIODE			
D30	1N4148	DIODE			
D31	1N4148	DIODE			
D32	B30-3003-08	LED			
D33	1SV68	DIODE			
D34	1N4148	DIODE			
D35	1N4148	DIODE			
D36	1N4148	DIODE			
J1	E40-7387-08	RECEPTACLE	2P		
J2	E40-7387-08	RECEPTACLE	2P		
L1	L39-0565-08	COIL	10UH		
L2	L39-0565-08	COIL	10UH		
L3	L39-0565-08	COIL	10UH		
L4	L39-0565-08	COIL	10UH		
L5	L39-0565-08	COIL	10UH		
L6	L39-0565-08	COIL	10UH		
L7	L39-0565-08	COIL	10UH		
L8	L39-0565-08	COIL	10UH		
L9	L39-0565-08	COIL	10UH		

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## P A R T S L I S T

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W02-2171-08

REF. NO	PARTS NO	NAME & DESCRIPTION
L10	L39-0565-08	COIL 10UH
L11	L39-0582-08	COIL 100UH
L12	L39-0588-08	COIL 47UH
L13	L39-0588-08	COIL 47UH
L14	L39-0566-08	COIL 33UH
L15	L39-0566-08	COIL 33UH
L16	L39-0566-08	COIL 33UH
L17	L39-0571-08	COIL 8.2UH
L18	L39-0565-08	COIL 10UH
L19	L39-0571-08	COIL 8.2UH
L20	L39-0592-08	COIL
L21	L39-0592-08	COIL
L22	L39-0593-08	COIL
L23	L39-0565-08	COIL 10UH
L24	L39-0572-08	COIL 0.15UH
L25	L39-0565-08	COIL 10UH
L26	L39-0580-08	COIL 1.2UH
L27	L39-0581-08	COIL 1.5UH
L28	L39-0580-08	COIL 1.2UH
L29	L39-0584-08	COIL 12UH
L30	L39-0566-08	COIL 33UH
L31	L39-0594-08	COIL 20MHZ
L32	NO USE	
L33	L39-0565-08	COIL 10UH
L34	L39-0565-08	COIL 10UH
L35	L39-0565-08	COIL 10UH
L36	L39-0565-08	COIL 10UH
L37	L39-0585-08	COIL 22UH
L38	L39-0566-08	COIL 33UH
L39	L39-0565-08	COIL 10UH
L40	L39-0565-08	COIL 10UH
L41	L39-0565-08	COIL 10UH
Q1	2SC1815 (GR)	TR. SI, NPN
Q2	2SA1015 (GR)	TR. SI, PNP
Q3	2SA1015 (GR)	TR. SI, PNP
Q4	2SC1815 (GR)	TR. SI, NPN
Q5	2SA1346	TR. SI, PNP
Q6	2SC3401	TR. SI, NPN
Q7	2SA1346	TR. SI, PNP
Q8	2SA1346	TR. SI, PNP
Q9	2SC3401	TR. SI, NPN
Q10	2SC3401	TR. SI, NPN
Q11	2SC23369	TR. SI, NPN
Q12	2SC1395	TR. SI, NPN
Q13	2SC2498	TR. SI, NPN
Q14	2SC2498	TR. SI, NPN
Q15	2SC2498	TR. SI, NPN
Q16	2SC2498	TR. SI, NPN
Q17	2SC2498	TR. SI, NPN
Q18	2SC2498	TR. SI, NPN
Q19	2SC1260	TR. SI, NPN
Q20	2SC1395	TR. SI, NPN
Q21	2SC1395	TR. SI, NPN
Q22	2SC1395	TR. SI, NPN
Q23	2SC1395	TR. SI, NPN
Q24	NO USE	
Q25	2SC1395	TR. SI, NPN
Q26	2SC1395	TR. SI, NPN

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W02-2171-08

REF. NO	PARTS NO	NAME & DESCRIPTION
Q27	2SC1395	TR. SI, NPN
Q28	NO USE	
Q29	2SC1395	TR. SI, NPN
Q30	2SK125	FET, N-CHANNEL
Q31	2SK125	FET, N-CHANNEL
Q32	2SC1395	TR. SI, NPN
Q33	2SC1815 (GR)	TR. SI, NPN
Q34	2SC1395	TR. SI, NPN
Q35	2SC1395	TR. SI, NPN
Q36	2SK113	FET, N-CHANNEL
Q37	2SK30	FET, N-CHANNEL
Q38	2SA1015 (GR)	TR. SI, PNP

R1	RN14BK2E1002F	RES. METAL FILM 10K	1%	1/4W
R2	RN14BK2E6801F	RES. METAL FILM 6.8K	1%	1/4W
R3	RN14BK2E6801F	RES. METAL FILM 6.8K	1%	1/4W
R4	RN14BK2E22R0F	RES. METAL FILM 22.0	1%	1/4W
R5	RN14BK2E6801F	RES. METAL FILM 6.8K	1%	1/4W
R6	RN14BK2E2202F	RES. METAL FILM 22K	1%	1/4W
R7	RN14BK2E6801F	RES. METAL FILM 6.8K	1%	1/4W
R8	RN14BK2E1002F	RES. METAL FILM 10K	1%	1/4W
R9	RN14BK2E1503F	RES. METAL FILM 150K	1%	1/4W
R10	RN14BK2E8202F	RES. METAL FILM 82K	1%	1/4W
R11	RN14BK2E1203F	RES. METAL FILM 120K	1%	1/4W
R12	RN14BK2E22R0F	RES. METAL FILM 22.0	1%	1/4W
R13	RN14BK2E1001F	RES. METAL FILM 1K	1%	1/4W
R14	RN14BK2E1502F	RES. METAL FILM 15K	1%	1/4W
R15	RN14BK2E2200F	RES. METAL FILM 220	1%	1/4W
R16	RN14BK2E1002F	RES. METAL FILM 10K	1%	1/4W
R17	RN14BK2E2201F	RES. METAL FILM 2.2K	1%	1/4W
R18	RN14BK2E6801F	RES. METAL FILM 6.8K	1%	1/4W
R19	RN14BK2E47R0F	RES. METAL FILM 47.0	1%	1/4W
R20	NO USE			
R21	RN14BK2C2201F	RES. METAL FILM 2.2K	1%	1/6W
R22	RN14BK2C6801F	RES. METAL FILM 6.8K	1%	1/6W
R23	RN14BK2C5600F	RES. METAL FILM 560	1%	1/6W
R24	RN14BK2C1000F	RES. METAL FILM 100	1%	1/6W
R25	RN14BK2E5600F	RES. METAL FILM 560	1%	1/4W
R26	RN14BK2E6800F	RES. METAL FILM 680	1%	1/4W
R27	RN14BK2E47R0F	RES. METAL FILM 47.0	1%	1/4W
R28	RN14BK2C1002F	RES. METAL FILM 10K	1%	1/6W
R29	RN14BK2C1001F	RES. METAL FILM 1K	1%	1/6W
R30	RN14BK2C2700F	RES. METAL FILM 270	1%	1/6W
R31	RN14BK2C1002F	RES. METAL FILM 10K	1%	1/6W
R32	RN14BK2C1002F	RES. METAL FILM 10K	1%	1/6W
R33	RN14BK2C1000F	RES. METAL FILM 100	1%	1/6W
R34	RN14BK2C3301F	RES. METAL FILM 3.3K	1%	1/6W
R35	RN14BK2C1000F	RES. METAL FILM 100	1%	1/6W
R36	RN14BK2C2201F	RES. METAL FILM 2.2K	1%	1/6W
R37	RN14BK2C22R0F	RES. METAL FILM 22.0	1%	1/6W
R38	RN14BK2C2700F	RES. METAL FILM 270	1%	1/6W
R39	RN14BK2C1002F	RES. METAL FILM 10K	1%	1/6W
R40	RN14BK2C1002F	RES. METAL FILM 10K	1%	1/6W
R41	RN14BK2C2201F	RES. METAL FILM 2.2K	1%	1/6W
R42	RN14BK2C6801F	RES. METAL FILM 6.8K	1%	1/6W
R43	RN14BK2C2700F	RES. METAL FILM 270	1%	1/6W
R44	RN14BK2C1000F	RES. METAL FILM 100	1%	1/6W
R45	RN14BK2C3301F	RES. METAL FILM 3.3K	1%	1/6W
R46	RN14BK2C2201F	RES. METAL FILM 2.2K	1%	1/6W

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\* \* \* P A R T S L I S T \* \* \*

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REF. NO	PARTS NO	NAME & DESCRIPTION					
R47	RN14BK2C1000F	RES.	METAL	FILM	100	1%	1/6W
R48	RN14BK2C1002F	RES.	METAL	FILM	10K	1%	1/6W
R49	RN14BK2C1002F	RES.	METAL	FILM	10K	1%	1/6W
R50	RN14BK2C6801F	RES.	METAL	FILM	6.8K	1%	1/6W
R51	RN14BK2C1000F	RES.	METAL	FILM	100	1%	1/6W
R52	RN14BK2C22R0F	RES.	METAL	FILM	22.0	1%	1/6W
R53	RN14BK2C22R0F	RES.	METAL	FILM	22.0	1%	1/6W
R54	RN14BK2C22R0F	RES.	METAL	FILM	22.0	1%	1/6W
R55	RN14BK2C22R0F	RES.	METAL	FILM	22.0	1%	1/6W
R56	RN14BK2C22R0F	RES.	METAL	FILM	22.0	1%	1/6W
R57	RN14BK2E1003F	RES.	METAL	FILM	100K	1%	1/4W
R58	RN14BK2E47R0F	RES.	METAL	FILM	47.0	1%	1/4W
R59	RN14BK2E4700F	RES.	METAL	FILM	470	1%	1/4W
R60	RN14BK2E4700F	RES.	METAL	FILM	470	1%	1/4W
R61	RN14BK2E1800F	RES.	METAL	FILM	180	1%	1/4W
R62	RN14BK2E47R0F	RES.	METAL	FILM	47.0	1%	1/4W
R63	RN14BK2E47R0F	RES.	METAL	FILM	47.0	1%	1/4W
R64	RN14BK2C1000F	RES.	METAL	FILM	100	1%	1/6W
R65	RN14BK2C4701F	RES.	METAL	FILM	4.7K	1%	1/6W
R66	RN14BK2C1201F	RES.	METAL	FILM	1.2K	1%	1/6W
R67	RN14BK2C10R0F	RES.	METAL	FILM	10.0	1%	1/6W
R68	RN14BK2C1001F	RES.	METAL	FILM	1K	1%	1/6W
R69	RN14BK2C10R0F	RES.	METAL	FILM	10.0	1%	1/6W
R70	RN14BK2C10R0F	RES.	METAL	FILM	10.0	1%	1/6W
R71	NO USE						
R72	RN14BK2E1002F	RES.	METAL	FILM	10K	1%	1/4W
R73	RN14BK2E1003F	RES.	METAL	FILM	100K	1%	1/4W
R74	RN14BK2E1002F	RES.	METAL	FILM	10K	1%	1/4W
R75	RN14BK2E1003F	RES.	METAL	FILM	100K	1%	1/4W
R76	NO USE						
R77	RN14BK2E50R0F	RES.	METAL	FILM	50	1%	1/4W
R78	RN14BK2E1002F	RES.	METAL	FILM	10K	1%	1/4W
R79	RN14BK2E1003F	RES.	METAL	FILM	100K	1%	1/4W
R80	NO USE						
R81	RN14BK2E1002F	RES.	METAL	FILM	10K	1%	1/4W
R82	RN14BK2E1002F	RES.	METAL	FILM	10K	1%	1/4W
R83	NO USE						
R84	RN14BK2E1002F	RES.	METAL	FILM	10K	1%	1/4W
R85	RN14BK2E7500F	RES.	METAL	FILM	750	1%	1/4W
R86	RN14BK2E2702F	RES.	METAL	FILM	27K	1%	1/4W
R87	RN14BK2E5601F	RES.	METAL	FILM	5.6K	1%	1/4W
R88	RN14BK2E1500F	RES.	METAL	FILM	150	1%	1/4W
R89	RN14BK2E47R0F	RES.	METAL	FILM	47.0	1%	1/4W
R90	RN14BK2E1201F	RES.	METAL	FILM	1.2K	1%	1/4W
R91	RN14BK2E1003F	RES.	METAL	FILM	100K	1%	1/4W
R92	RN14BK2E1002F	RES.	METAL	FILM	10K	1%	1/4W
R93	RN14BK2E1003F	RES.	METAL	FILM	100K	1%	1/4W
R94	RN14BK2E1002F	RES.	METAL	FILM	10K	1%	1/4W
R97	RN14BK2E56R0F	RES.	METAL	FILM	56.0	1%	1/4W
R98	RN14BK2E2200F	RES.	METAL	FILM	220	1%	1/4W
R99	RN14BK2E1003F	RES.	METAL	FILM	100K	1%	1/4W
R100	NO USE						
R101	RN14BK2E2700F	RES.	METAL	FILM	270	1%	1/4W
R102	RN14BK2E56R0F	RES.	METAL	FILM	56.0	1%	1/4W
R103	RN14BK2E1001F	RES.	METAL	FILM	1K	1%	1/4W
R104	RN14BK2E1001F	RES.	METAL	FILM	1K	1%	1/4W
R105	RN14BK2E5100F	RES.	METAL	FILM	510	1%	1/4W
R106	RN14BK2E1501F	RES.	METAL	FILM	1.5K	1%	1/4W

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REF. NO	PARTS NO	NAME & DESCRIPTION				
R107	RN14BK2E3001F	RES.	METAL	FILM	3K	1% 1/4W
R108	RN14BK2E1000F	RES.	METAL	FILM	100	1% 1/4W
R109	RN14BK2E4701F	RES.	METAL	FILM	4.7K	1% 1/4W
R110	RN14BK2E1001F	RES.	METAL	FILM	1K	1% 1/4W
R111	RN14BK2E4300F	RES.	METAL	FILM	430	1% 1/4W
R112	RN14BK2E1001F	RES.	METAL	FILM	1K	1% 1/4W
R115	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R116	RN14BK2E1001F	RES.	METAL	FILM	1K	1% 1/4W
R117	NO USE					
R118	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R119	RN14BK2E1001F	RES.	METAL	FILM	1K	1% 1/4W
R120	NO USE					
R121	RN14BK2E2700F	RES.	METAL	FILM	270	1% 1/4W
R122	RN14BK2E3900F	RES.	METAL	FILM	39.0	1% 1/4W
R123	RN14BK2E2201F	RES.	METAL	FILM	2.2K	1% 1/4W
R124	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R125	RN14BK2E6800F	RES.	METAL	FILM	680	1% 1/4W
R126	RN14BK2E2200F	RES.	METAL	FILM	220	1% 1/4W
R127	RN14BK2E2200F	RES.	METAL	FILM	220	1% 1/4W
R128	RN14BK2E1000F	RES.	METAL	FILM	100	1% 1/4W
R129	RN14BK2E1001F	RES.	METAL	FILM	1K	1% 1/4W
R130	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R131	RN14BK2E3901F	RES.	METAL	FILM	3.9K	1% 1/4W
R132	RN14BK2E1302F	RES.	METAL	FILM	13K	1% 1/4W
R133	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R134	RN14BK2E1501F	RES.	METAL	FILM	1.5K	1% 1/4W
R135	RN14BK2E1800F	RES.	METAL	FILM	180	1% 1/4W
R136	RN14BK2E2200F	RES.	METAL	FILM	220	1% 1/4W
R137	RN14BK2E4701F	RES.	METAL	FILM	4.7K	1% 1/4W
R138	RN14BK2E6801F	RES.	METAL	FILM	6.8K	1% 1/4W
R139	RN14BK2E4300F	RES.	METAL	FILM	430	1% 1/4W
R140	RN14BK2E5600F	RES.	METAL	FILM	56.0	1% 1/4W
R141	RN14BK2E2200F	RES.	METAL	FILM	220	1% 1/4W
R142	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R143	RN14BK2E4300F	RES.	METAL	FILM	430	1% 1/4W
R144	RN14BK2E2201F	RES.	METAL	FILM	2.2K	1% 1/4W
R145	RN14BK2E1003F	RES.	METAL	FILM	100K	1% 1/4W
R146	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R147	RN14BK2E6800F	RES.	METAL	FILM	680	1% 1/4W
R148	RN14BK2E3002F	RES.	METAL	FILM	30K	1% 1/4W
R149	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R150	RN14BK2E4702F	RES.	METAL	FILM	47K	1% 1/4W
R151	RN14BK2E3302F	RES.	METAL	FILM	33K	1% 1/4W
R152	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R153	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R154	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R155	RN14BK2E1000F	RES.	METAL	FILM	100	1% 1/4W
R156	RN14BK2E1001F	RES.	METAL	FILM	1K	1% 1/4W
R157	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R158	RN14BK2E1001F	RES.	METAL	FILM	1K	1% 1/4W
R159	RN14BK2E1003F	RES.	METAL	FILM	100K	1% 1/4W
R160	RN14BK2E1002F	RES.	METAL	FILM	10K	1% 1/4W
R161	RN14BK2E1003F	RES.	METAL	FILM	100K	1% 1/4W
R162	RN14BK2E1003F	RES.	METAL	FILM	100K	1% 1/4W
R163	RN14BK2E3300F	RES.	METAL	FILM	330	1% 1/4W
R164	RN14BK2E1802F	RES.	METAL	FILM	18K	1% 1/4W
R165	RN14BK2E1501F	RES.	METAL	FILM	1.5K	1% 1/4W
R166	RN14BK2E6801F	RES.	METAL	FILM	6.8K	1% 1/4W

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## P A R T S L I S T

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REF. NO	PARTS NO	NAME & DESCRIPTION
R167	RN14BK2E2201F	RES. METAL FILM 2.2K 1% 1/4W
R168	RN14BK2E1003F	RES. METAL FILM 100K 1% 1/4W
R169	RN14BK2E2202F	RES. METAL FILM 22K 1% 1/4W
R170	RN14BK2E1002F	RES. METAL FILM 10K 1% 1/4W
R171	RN14BK2E2400F	RES. METAL FILM 240 1% 1/4W
R172	RN14BK2E1002F	RES. METAL FILM 10K 1% 1/4W
R173	RN14BK2E1002F	RES. METAL FILM 10K 1% 1/4W
R174	RN14BK2E1200F	RES. METAL FILM 120 1% 1/4W
R175	RN14BK2E2201F	RES. METAL FILM 2.2K 1% 1/4W
R176	RN14BK2E1002F	RES. METAL FILM 10K 1% 1/4W
R177	RN14BK2E2700F	RES. METAL FILM 270 1% 1/4W
R178	RN14BK2E1501F	RES. METAL FILM 1.5K 1% 1/4W
R179	RN14BK2E3301F	RES. METAL FILM 3.3K 1% 1/4W
R180	RN14BK2E1501F	RES. METAL FILM 1.5K 1% 1/4W
R181	RN14BK2E2201F	RES. METAL FILM 2.2K 1% 1/4W
R182	RN14BK2E8201F	RES. METAL FILM 8.2K 1% 1/4W
R183	RN14BK2E1002F	RES. METAL FILM 10K 1% 1/4W
R184	RN14BK2E3301F	RES. METAL FILM 3.3K 1% 1/4W
R185	RN14BK2E6200F	RES. METAL FILM 620 1% 1/4W
R200	RN14BK2E6200F	RES. METAL FILM 620 1% 1/4W
R201	RN14BK2E0000F	RES. METAL FILM 000 1% 1/4W
U1	MC14094BCP	IC, 8-STAGE SHIFT/STORE REGISTE
U2	MC14526BCP	IC, PRO. DIVIDE BY N COUNTER
U3	MC14069BCP	IC, HEX INVERTER
U4	MC14504BCP	IC, HEX LEVEL SHIFTER
U5	MC14568BCP	IC, PHASE COMPARATOR&PRO. COUNT
U6	MC14094BCP	IC, 8-STAGE SHIFT/STORE REGISTE
U7	MC14526BCP	IC, PRO. DIVIDE BY N COUNTER
U8	M74LS163AP	IC, SYNC. 4-BIT BINARY COUNTER
U9	M74LS390P	IC, DUAL DECADE COUNTER
U10	MC14568BCP	IC, PHASE COMPARATOR&PRO. COUNT
U11	LF356J	IC, MONOLITHIC JFET OP AMP
U12	MC14526BCP	IC, PRO. DIVIDE BY N COUNTER
U13	HD74LS00P	IC, QUAD 2-INPUT NAND GATE
U14	HD74LS00P	IC, QUAD 2-INPUT NAND GATE
U15	MC14094BCP	IC, 8-STAGE SHIFT/STORE REGISTE
U16	MC14526BCP	IC, PRO. DIVIDE BY N COUNTER
U17	M74LS163AP	IC, SYNC. 4-BIT BINARY COUNTER
U18	MC1741	IC, GENERAL-PURPOSE OP-AMP
U19	HD4078BP	IC, 8-INPUT NOR-OR GATE
U20	MC14526BCP	IC, PRO. DIVIDE BY N COUNTER
U21	MC14001UB	IC, QUAD 2-INPUT NOR GATE
U22	MC14011UB	IC, QUAD 2-INPUT NAND GATE
U23	MC14526BCP	IC, PRO. DIVIDE BY N COUNTER
U24	UPB555C	IC, TIMMER
U25	UPC1651G	IC, WIDEBAND AMP
U26	SBL-1	IC, DOUBLE BALANCED MIXER
U27	HD10131L	IC, DUAL D TYPE MASTER SLAVE FF
U28	CA3054	IC, DIFFERENTIAL/CASCODE AMP
U29	MC14585BCP	IC, 4-BIT MAGNITUDE COMPARATOR
U30	MC14094BCP	IC, 8-STAGE SHIFT/STORE REGISTE
U31	NE5534	IC, OP-AMP
U32	DAC0800LCN	IC, 8-BIT D/A CONVERTER
U33	TL084CN	IC, JFET INPUT OP AMP
U34	NO USE	
U35	LF356J	IC, MONOLITHIC JFET OP AMP
U36	LF356J	IC, MONOLITHIC JFET OP AMP

\* \* \* P A R T S L I S T \* \* \*

W02-2171-08

REF. NO	PARTS NO	NAME & DESCRIPTION
U37	MC1458	IC,DUAL OP-AMP
U38	MC14013BCP	IC,DUAL D-FLIP FLOP
U39	SN74LS90N	IC,DECADE COUNTER
U40	MC14568BCP	IC,PHASE COMPARATOR&PRO. COUNT
VR1	R12-1584-08	RES. SEMI FIXED 1K
VR2	R12-1584-08	RES. SEMI FIXED 1K
VR3	R12-1584-08	RES. SEMI FIXED 1K
VR4	R12-5557-08	RES. SEMI FIXED 100K
VR5	R12-3580-08	RES. SEMI FIXED 10K
X1	L77-1091-08	CRYSTAL RESONATOR (10MHZ)

# AF UNIT

## \* \* \* P A R T S L I S T \* \* \*

W02-2172-08

REF. NO	PARTS NO	NAME & DESCRIPTION			
	J73-0292-08	PCB (UNMOUNTED)			
C1	CC45CH1H100D	CAP. CERAMIC	10P	0.5P	50V
C2	C91-2573-08	CAP. POLYESTER	0.01		
C3	CC45CH1H220J	CAP. CERAMIC	22P	5%	50V
C4	C91-2573-08	CAP. POLYESTER	0.01		
C5	CE04EW1H223M	CAP. ELECTRO	2.2	20%	50V
C6	CE04EW1H473M	CAP. ELECTRO	4.7	20%	50V
C7	C90-3148-08	CAP. METAL FILM	10	20%	50V
C8	CC45CH1H100D	CAP. CERAMIC	10P	0.5P	50V
C9	C91-2573-08	CAP. POLYESTER	0.01		
C10	CC45CH1H220J	CAP. CERAMIC	22P	5%	50V
C11	C91-2573-08	CAP. POLYESTER	0.01		
C12	CE04EW1H223M	CAP. ELECTRO	2.2	20%	50V
C13	CE04EW1H473M	CAP. ELECTRO	4.7	20%	50V
C14	C90-3148-08	CAP. METAL FILM	10	20%	50V
C15	CE04EW1H101M	CAP. ELECTRO	100	20%	50V
C16	CE04EW1H101M	CAP. ELECTRO	100	20%	50V
C17	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C18	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C19	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C20	CC45CH1H020C	CAP. CERAMIC	2P	0.25P	50V
C21	CC45CH1H100D	CAP. CERAMIC	10P	0.5P	50V
C22	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C23	CE04EW1H100M	CAP. ELECTRO	10	20%	50V
C24	CC45CH1H150J	CAP. CERAMIC	15P	5%	50V
C25	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C26	CC45CH1H100D	CAP. CERAMIC	10P	0.5P	50V
C27	CC45CH1H100D	CAP. CERAMIC	10P	0.5P	50V
C28	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C29	CC45CH1H330J	CAP. CERAMIC	33P	5%	50V
C30	CC45CH1H050C	CAP. CERAMIC	5P	0.25P	50V
C31	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C32	CC45CH1H330J	CAP. CERAMIC	33P	5%	50V
C33	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C34	CC45CH1H050C	CAP. CERAMIC	5P	0.25P	50V
C35	CC45CH1H100D	CAP. CERAMIC	10P	0.5P	50V
C36	CC45CH1H330J	CAP. CERAMIC	33P	5%	50V
C37	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C38	CE04EW1H100M	CAP. ELECTRO	10	20%	50V
C39	CE04EW1H473M	CAP. ELECTRO	4.7	20%	50V
C40	CE04EW1H473M	CAP. ELECTRO	4.7	20%	50V
C41	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C42	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C43	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C44	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C45	CE04EW1E101M	CAP. ELECTRO	100	20%	25V
C46	CK45B1E102K	CAP. CERAMIC	1000P	10%	25V
C50	CC45CH1H820J	CAP. CERAMIC	82P	5%	50V
CN1	E40-7263-08	PIN CONNECTOR	2P		
CN2	E40-7263-08	PIN CONNECTOR	2P		
CN3	E40-7266-08	PIN CONNECTOR	10P		
CN4	E40-7263-08	PIN CONNECTOR	2P		
CN5	E40-7266-08	PIN CONNECTOR	10P		
CN6	E40-7261-08	PIN CONNECTOR	12P		
CN7	E40-7263-08	PIN CONNECTOR	2P		
CN8	E40-7263-08	PIN CONNECTOR	2P		
CN9	E40-7391-08	PIN CONNECTOR	7P		

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W02-2172-08

REF. NO	PARTS NO	NAME & DESCRIPTION
D1	1N4148	DIODE
D2	1N4148	DIODE
D3	1N4148	DIODE
D4	1N4148	DIODE
D5	1N746A	DIODE, ZENER
D6	1N753A	DIODE
D7	1N4148	DIODE
D8	1N4148	DIODE
D9	1N746A	DIODE, ZENER
Q1	2SK30	FET, N-CHANNEL
Q2	2SK30	FET, N-CHANNEL
Q3	2SK113	FET, N-CHANNEL
Q4	2SK113	FET, N-CHANNEL
Q5	2SC1815 (GR)	TR. SI, NPN
Q6	2SC1815 (GR)	TR. SI, NPN
Q7	2SA1015 (GR)	TR. SI, PNP
R1	RN14BK2E1002F	RES. METAL FILM 10K 1% 1/4W
R2	RN14BK2E1003F	RES. METAL FILM 100K 1% 1/4W
R3	RN14BK2E1002F	RES. METAL FILM 10K 1% 1/4W
R4	RN14BK2E3972F	RES. METAL FILM 39.7K 1% 1/4W
R5	RN14BK2E3972F	RES. METAL FILM 39.7K 1% 1/4W
R6	RN14BK2E3302F	RES. METAL FILM 33K 1% 1/4W
R7	RN14BK2E1503F	RES. METAL FILM 150K 1% 1/4W
R8	RN14BK2E6802F	RES. METAL FILM 68K 1% 1/4W
R9	RN14BK2E1001F	RES. METAL FILM 1K 1% 1/4W
R10	RN14BK2E1501F	RES. METAL FILM 1.5K 1% 1/4W
R11	RN14BK2E1003F	RES. METAL FILM 100K 1% 1/4W
R12	RN14BK2E1003F	RES. METAL FILM 100K 1% 1/4W
R13	RN14BK2E2702F	RES. METAL FILM 27K 1% 1/4W
R14	RN14BK2E2703F	RES. METAL FILM 270K 1% 1/4W
R15	RN14BK2E4703F	RES. METAL FILM 470K 1% 1/4W
R16	RN14BK2E1002F	RES. METAL FILM 10K 1% 1/4W
R17	RN14BK2E1003F	RES. METAL FILM 100K 1% 1/4W
R18	RN14BK2E1002F	RES. METAL FILM 10K 1% 1/4W
R19	RN14BK2E1602F	RES. METAL FILM 16K 1% 1/4W
R20	RN14BK2E1602F	RES. METAL FILM 16K 1% 1/4W
R21	RN14BK2E3302F	RES. METAL FILM 33K 1% 1/4W
R22	RN14BK2E1503F	RES. METAL FILM 150K 1% 1/4W
R23	RN14BK2E6802F	RES. METAL FILM 68K 1% 1/4W
R24	RN14BK2E1001F	RES. METAL FILM 1K 1% 1/4W
R25	RN14BK2E1501F	RES. METAL FILM 1.5K 1% 1/4W
R26	RN14BK2E1003F	RES. METAL FILM 100K 1% 1/4W
R27	RN14BK2E1003F	RES. METAL FILM 100K 1% 1/4W
R28	RN14BK2E2702F	RES. METAL FILM 27K 1% 1/4W
R29	RN14BK2E2703F	RES. METAL FILM 270K 1% 1/4W
R30	RN14BK2E4703F	RES. METAL FILM 470K 1% 1/4W
R31	RN14BK2E1000F	RES. METAL FILM 100 1% 1/4W
R32	RN14BK2E1000F	RES. METAL FILM 100 1% 1/4W
R33	RN14BK2E6202F	RES. METAL FILM 62K 1% 1/4W
R34	RN14BK2E6202F	RES. METAL FILM 62K 1% 1/4W
R35	RN14BK2E2002F	RES. METAL FILM 20K 1% 1/4W
R36	RN14BK2E2002F	RES. METAL FILM 20K 1% 1/4W
R37	RN14BK2E2002F	RES. METAL FILM 20K 1% 1/4W
R38	RN14BK2E6202F	RES. METAL FILM 62K 1% 1/4W
R39	RN14BK2E6202F	RES. METAL FILM 62K 1% 1/4W
R40	RN14BK2E2002F	RES. METAL FILM 20K 1% 1/4W

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## P A R T S L I S T

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W02-2172-08

REF. NO	PARTS NO	NAME & DESCRIPTION			
R41	RN14BK2E1201F	RES. METAL FILM	1.2K	1%	1/4W
R42	RN14BK2E1201F	RES. METAL FILM	1.2K	1%	1/4W
R43	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R44	RN14BK2E1003F	RES. METAL FILM	100K	1%	1/4W
R45	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R46	RN14BK2E4701F	RES. METAL FILM	4.7K	1%	1/4W
R47	RN14BK2E4701F	RES. METAL FILM	4.7K	1%	1/4W
R48	RN14BK2E4701F	RES. METAL FILM	4.7K	1%	1/4W
R49	RN14BK2E1003F	RES. METAL FILM	100K	1%	1/4W
R50	RN14BK2E1003F	RES. METAL FILM	100K	1%	1/4W
R51	RN14BK2E2202F	RES. METAL FILM	22K	1%	1/4W
R52	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R53	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R54	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R55	RN14BK2E4701F	RES. METAL FILM	4.7K	1%	1/4W
R56	RN14BK2E1003F	RES. METAL FILM	100K	1%	1/4W
R57	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R58	RN14BK2E1001F	RES. METAL FILM	1K	1%	1/4W
R59	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R60	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R61	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R62	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R63	RN14BK2E1003F	RES. METAL FILM	100K	1%	1/4W
R64	RN14BK2E3300F	RES. METAL FILM	330	1%	1/4W
R65	RN14BK2E1301F	RES. METAL FILM	1.3K	1%	1/4W
R66	RN14BK2E2001F	RES. METAL FILM	2K	1%	1/4W
R67	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R68	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R69	RN14BK2E3301F	RES. METAL FILM	3.3K	1%	1/4W
R70	RN14BK2E1801F	RES. METAL FILM	1.8K	1%	1/4W
R71	RN14BK2E1000F	RES. METAL FILM	100	1%	1/4W
R72	RN14BK2E2401F	RES. METAL FILM	2.4K	1%	1/4W
R73	RN14BK2E1502F	RES. METAL FILM	15K	1%	1/4W
R74	RN14BK2E5101F	RES. METAL FILM	5.1K	1%	1/4W
R75	RN14BK2E1502F	RES. METAL FILM	15K	1%	1/4W
R76	RN14BK2E5101F	RES. METAL FILM	5.1K	1%	1/4W
R77	RN14BK2E1003F	RES. METAL FILM	100K	1%	1/4W
R78	RN14BK2E1003F	RES. METAL FILM	100K	1%	1/4W
R79	RN14BK2E1003F	RES. METAL FILM	100K	1%	1/4W
R80	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R81	RN14BK2E1003F	RES. METAL FILM	100K	1%	1/4W
R82	RN14BK2E8201F	RES. METAL FILM	8.2K	1%	1/4W
R83	RN14BK2E1003F	RES. METAL FILM	100K	1%	1/4W
R84	RN14BK2E8201F	RES. METAL FILM	8.2K	1%	1/4W
R85	RN14BK2E1003F	RES. METAL FILM	100K	1%	1/4W
R86	RN14BK2E1003F	RES. METAL FILM	100K	1%	1/4W
R87	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R88	RN14BK2E1001F	RES. METAL FILM	1K	1%	1/4W
R89	RN14BK2E4701F	RES. METAL FILM	4.7K	1%	1/4W
R90	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R91	RN14BK2E1002F	RES. METAL FILM	10K	1%	1/4W
R92	RN14BK2E4702F	RES. METAL FILM	47K	1%	1/4W
U1	TL084CN	IC, JFET INPUT OP AMP			
U2	TL084CN	IC, JFET INPUT OP AMP			
U3	MC14053	IC, TRIPLE 2CH ANALOG			MPX/DE-MP
U4	MC14053	IC, TRIPLE 2CH ANALOG			MPX/DE-MP
U5	MC14053	IC, TRIPLE 2CH ANALOG			MPX/DE-MP
U6	MC14053	IC, TRIPLE 2CH ANALOG			MPX/DE-MP

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W02-2172-08

REF. NO	PARTS NO	NAME & DESCRIPTION
U7	NE5534	IC, OP-AMP
U8	LM393	IC, DUAL COMPARATORS
U9	AD7533	IC, 10 BIT D/A
U10	NE5534	IC, OP-AMP
U11	LM301	IC, OPERATIONAL AMPLIFIERS
U12	AD7533	IC, 10 BIT D/A
U13	LM301	IC, OPERATIONAL AMPLIFIERS
U14	AD7533	IC, 10 BIT D/A
U15	LM301	IC, OPERATIONAL AMPLIFIERS
U16	LM301	IC, OPERATIONAL AMPLIFIERS
U17	MC14094B	IC, 8-STAGE SHIFT/STORE LATCH
U18	MC14094B	IC, 8-STAGE SHIFT/STORE LATCH
U19	MC14094B	IC, 8-STAGE SHIFT/STORE LATCH
U20	MC14094B	IC, 8-STAGE SHIFT/STORE LATCH
U21	MC14094B	IC, 8-STAGE SHIFT/STORE LATCH
U22	MC14094B	IC, 8-STAGE SHIFT/STORE LATCH
U23	KA2580A	IC, LINE DRIVE
U24	LM393	IC, DUAL COMPARATORS
U25	MC14528B	IC, DUAL MONOSTABLE MULTIVIB.
U26	MC14081	IC, B-SUFFIX SERIES CMOS GATES
U27	MC14093	IC, QUAD 2-INPUT NAND SCHMITT
U28	TL082CN	IC, JFET INPUT OP-AMP
VR1	R12-7513-08	RES. SEMI FIXED 500K
VR2	R12-7513-08	RES. SEMI FIXED 500K
VR3	R12-4526-08	RES. SEMI FIXED 50K
VR4	R12-3581-05	RES. SEMI FIXED 20K
VR5	R12-3581-05	RES. SEMI FIXED 20K
VR6	R12-5557-08	RES. SEMI FIXED 100K
VR7	R12-1583-08	RES. SEMI FIXED 2K
VR8	R12-1583-08	RES. SEMI FIXED 2K

## ATT UNIT

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## P A R T S L I S T

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W02-2173-08

REF. NO	PARTS NO	NAME & DESCRIPTION			
	F07-0987-08	COVER, TOP			
	F07-0988-08	COVER, BOTTOM			
	J73-0293-08	PCB (UNMOUNTED)			
	N35-3005-41	SCREW, BINDING	M3X5		
	N35-3025-41	SCREW, BINDING	M3X25		
C1	CC45CH1H150J	CAP. CERAMIC	15P	5%	50V
C2	CK45B1H102K	CAP. CERAMIC	1000P	10%	50V
C3	CC45CH1H150J	CAP. CERAMIC	15P	5%	50V
C4	CK45B1H102K	CAP. CERAMIC	1000P	10%	50V
C5	CC45CH1H150J	CAP. CERAMIC	15P	5%	50V
C6	CK45B1H102K	CAP. CERAMIC	1000P	10%	50V
C7	CC45CH1H150J	CAP. CERAMIC	15P	5%	50V
C8	CK45B1H102K	CAP. CERAMIC	1000P	10%	50V
C9	CC45CH1H150J	CAP. CERAMIC	15P	5%	50V
C10	CK45B1H102K	CAP. CERAMIC	1000P	10%	50V
C11	CC45CH1H150J	CAP. CERAMIC	15P	5%	50V
C12	CK45B1H102K	CAP. CERAMIC	1000P	10%	50V
C13	CC45CH1H150J	CAP. CERAMIC	15P	5%	50V
C14	CK45B1H102K	CAP. CERAMIC	1000P	10%	50V
C15	CK45B1H102K	CAP. CERAMIC	1000P	10%	50V
C16	CC45CH1H150J	CAP. CERAMIC	15P	5%	50V
C17	CC45CH1H150J	CAP. CERAMIC	15P	5%	50V
C18	CK45B1H102K	CAP. CERAMIC	1000P	10%	50V
C19	CC45CH1H150J	CAP. CERAMIC	15P	5%	50V
C20	CK45B1H102K	CAP. CERAMIC	1000P	10%	50V
C21	NO USE				
C22	CC45CH1H080D	CAP. CERAMIC	8P	0.5P	50V
C23	CC45CH1H050C	CAP. CERAMIC	5P	0.25P	50V
CN1	E40-7266-08	PIN CONNECTOR	10P		
D1	1SS97	DIODE			
D2	1SS97	DIODE			
D3	1V4148	DIODE			
D4	1V4148	DIODE			
D5	1V4148	DIODE			
D6	1V4148	DIODE			
D7	1V4148	DIODE			
D8	1V4148	DIODE			
D9	1V4148	DIODE			
D10	1V4148	DIODE			
J1	E40-7390-08	RECEPTACLE			
K1	S76-0623-08	RELAY			
K2	S76-0623-08	RELAY			
K3	S76-0623-08	RELAY			
K4	S76-0623-08	RELAY			
K5	S76-0623-08	RELAY			
K6	S76-0623-08	RELAY			
K7	S76-0623-08	RELAY			
K8	S76-0623-08	RELAY			
L1	L39-0595-08	COIL	33UH		
L2	L39-0595-08	COIL	33UH		
L3	L39-0595-08	COIL	33UH		
L4	L39-0595-08	COIL	33UH		
L5	L39-0595-08	COIL	33UH		
L6	L39-0595-08	COIL	33UH		



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W02-2173-08

REF. NO	PARTS NO	NAME & DESCRIPTION				
L7	L39-0595-08	COIL				33UH
L8	L39-0595-08	COIL				33UH
L9	L39-0595-08	COIL				33UH
L10	L39-0595-08	COIL				33UH
R1	RN14BK2E52R3F	RES.	METAL	FILM	52.3	1% 1/4W
R2	RN14BK2E9980F	RES.	METAL	FILM	998	1% 1/4W
R3	RN14BK2E52R3F	RES.	METAL	FILM	52.3	1% 1/4W
R4	RN14BK2E2200F	RES.	METAL	FILM	220	1% 1/4W
R5	RN14BK2E23R7F	RES.	METAL	FILM	23.7	1% 1/4W
R6	RN14BK2E2200F	RES.	METAL	FILM	220	1% 1/4W
R7	RN14BK2E52R3F	RES.	METAL	FILM	52.3	1% 1/4W
R8	RN14BK2E9980F	RES.	METAL	FILM	998	1% 1/4W
R9	RN14BK2E52R3F	RES.	METAL	FILM	52.3	1% 1/4W
R10	RN14BK2E1160F	RES.	METAL	FILM	116	1% 1/4W
R11	RN14BK2E52R8F	RES.	METAL	FILM	52.8	1% 1/4W
R12	RN14BK2E1160F	RES.	METAL	FILM	116	1% 1/4W
R13	RN14BK2E52R3F	RES.	METAL	FILM	52.3	1% 1/4W
R14	RN14BK2E9980F	RES.	METAL	FILM	998	1% 1/4W
R15	RN14BK2E52R3F	RES.	METAL	FILM	52.3	1% 1/4W
R16	RN14BK2E68R1F	RES.	METAL	FILM	68.1	1% 1/4W
R17	RN14BK2E1540F	RES.	METAL	FILM	154	1% 1/4W
R18	RN14BK2E68R1F	RES.	METAL	FILM	68.1	1% 1/4W
R19	RN14BK2E25R0F	RES.	METAL	FILM	25	1% 1/4W
R20	RN14BK2E1000F	RES.	METAL	FILM	100	1% 1/4W
R21	RN14BK2E1001F	RES.	METAL	FILM	1K	1% 1/4W

## RF-SUB UNIT

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## P A R T S L I S T

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W02-2174-08

REF. NO	PARTS NO	NAME & DESCRIPTION
	C91-2574-08	CAP. FEED THROUGH 1000P
	J73-0294-08	PCB (UNMOUNTED)
CN1	E40-7263-08	PIN CONNECTOR 2P
CN2	E40-7280-08	PIN CONNECTOR 6P
CN3	E40-7279-08	PIN CONNECTOR 4P
CN4	E40-7263-08	PIN CONNECTOR 2P
CN5	E40-7263-08	PIN CONNECTOR 2P
CN6	E40-7391-08	PIN CONNECTOR 7P
L1	L39-0597-08	COIL 4.7UH
L2	L39-0596-08	COIL 2.2UH
Q1	2SC1845(GR)	TR. SI, NPN
R1	RN14BK2E1001F	RES. METAL FILM 1K 1% 1/4W
R2	RN14BK2E2200F	RES. METAL FILM 220 1% 1/4W
R3	RN14BK2E1003F	RES. METAL FILM 100K 1% 1/4W

# ADJUSTMENT

To obtain the best performance, periodically calibrate the unit. Sometimes, only one mode need be calibrated, while at other times, all modes should be calibrated. When one mode is calibrated, it must be noted that the other modes may be affected. When calibrating all modes, perform the calibration in the specified sequence.

The following calibration required an accurate measuring instrument and an insulated adjusting flat blade screw-driver.

If they are not available, contact your dealer. For optimum adjustment, turn the power on and warm up the unit sufficiently (more than 30 minutes) before starting.

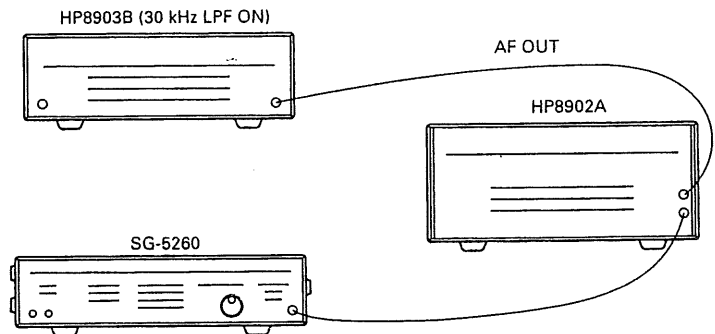
Before calibrating the unit, check the power supply voltage.

## TEST EQUIPMENT REQUIRED

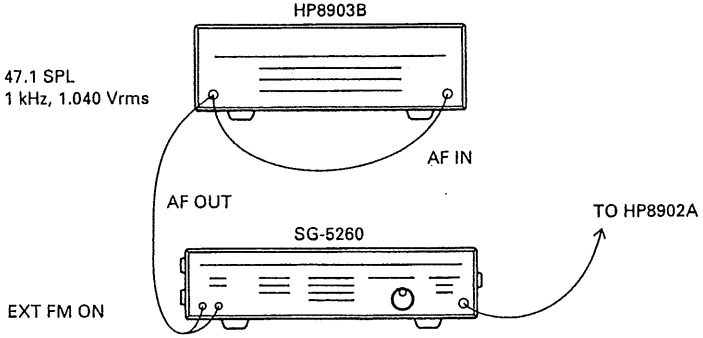
The following instrument or their equivalent should be used for making adjustment.

Test Equipment	Model	Maker
Audio Analyzer	8903B	H.P.
Measuring Receiver	8902A	H.P.
Stereo Signal generator	MSG-211G-1	MEGURO
Sensor Module	11722A	H.P.
Oscilloscope	CS-8010	KENWOOD

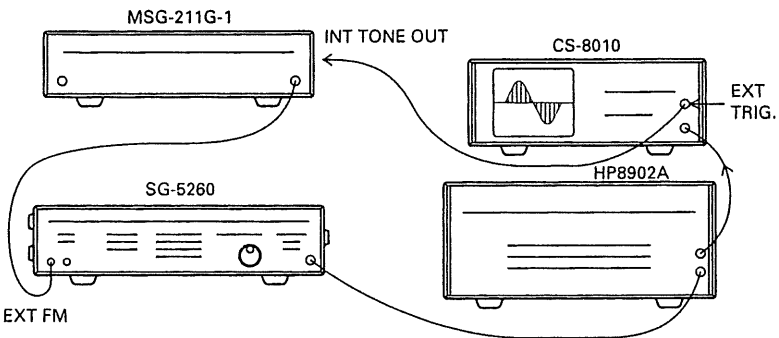
Item	Adjustment	P.C.B	Procedure
Reference Setting	10 MHz TCXO	PLL	<ul style="list-style-type: none"> <li>Set the frequency counter resolution to 1 Hz by executing "7.4 SPL" of the HP8902A.</li> <li>Set the frequency reading of the HP8902A to 100,000.00 +/- 10 Hz by adjusting 10 MHz TCXO of the PLL unit.</li> </ul>
ALC	VR1	RF	<ul style="list-style-type: none"> <li>Set the SG-5260 to AM INT 60%, then adjust VR1 of the RF Unit so that there is no difference in ALC when CF = 1 MHz (100 dBμ) and when CF = 100 MHz. Adjust so that ALC is 60%.</li> </ul>
Distortion	VR5 C109 L31	PLL	<ul style="list-style-type: none"> <li>With FM INT = 1 kHz, deviation = 75 kHz, CF = 110 kHz and Level = 100 dBu, adjust FM VCO bias VR5, trimmer C109 and 20 MHz tuning coil L31 to minimize the distortion (to below 0.02%). Adjust while observing the monitor output of a distortion meter on an oscilloscope.</li> </ul> <p>HP8902A: FM 50 μs de-emphasis, pre-display ON, Filter 300 Hz - 20 kHz            8903B: 30 kHz LPF ON, DISTN mode.</p> <ol style="list-style-type: none"> <li>HP8902A: 7.4 SPL</li> <li>AM measurement: 50 Hz - 15 kHz</li> <li>FM DIST measurement: 400 Hz - 20 kHz 50 μs pre-emphasis ON</li> </ol>



# ADJUSTMENT

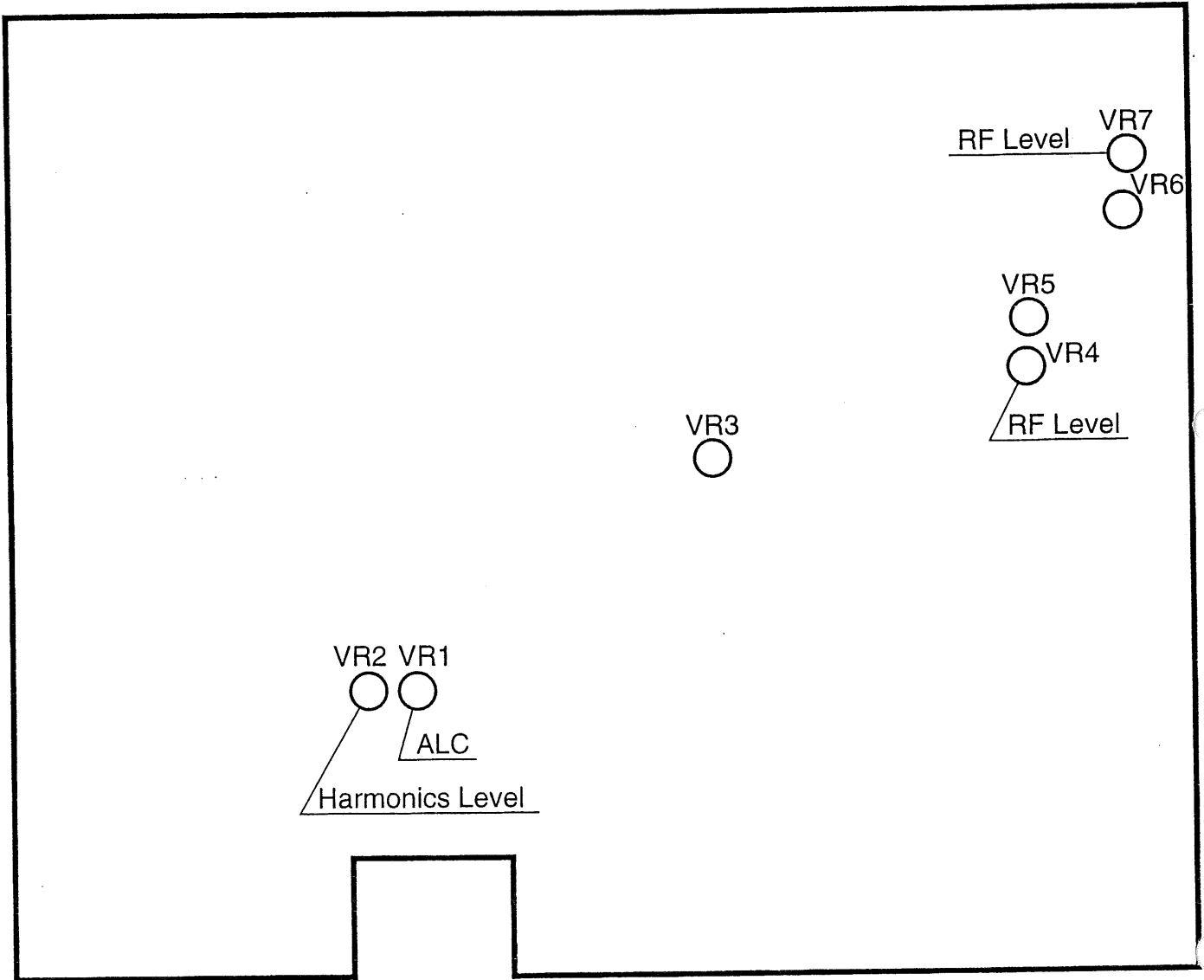
Item	Adjustment	P.C.B	Procedure
EXT LED	VR7 VR8	AF	<ul style="list-style-type: none"> <li>● Through connectors, connect the AF input and output of the HP8903B and connect its output to the EXT FM input of the SG-5260.</li> <li>● Execute "47.1 SPL" of the HP8903B and set to 1 kHz, 1.040 Vrms.</li> <li>● Set the SG-5260 for FM EXT = 75 kHz.</li> <li>● At 1.040 V, adjust VR7 of the AF Unit so that the LOW LED is ON.</li> <li>● Connect the output of the HP8903B to the EXT AM input and set the SG-5260 for EXT AM = 30%.</li> <li>● Adjust VR8 of the AR Unit so that the 1.040 Vrms LOW LED is ON.</li> </ul> <div style="text-align: center; margin-top: 10px;">  </div>
EXT FM Deviation	VR3 VR4	AF	<ul style="list-style-type: none"> <li>● Set the HP8903B so that 3 Vp-p (1.060 Vrms) is applied to the EXT FM input.</li> <li>● With CF = 100 MHz, Level = 100 dBμ and EXT FM deviation = 99.9 kHz, adjust VR3 of the AF Unit so that the FM deviation reading of the HP8902A indicates precisely 99.9 kHz dev.</li> <li>● Set the SG-5260 for FM deviation = 150 kHz, and adjust VR4 so that the HP8902A indicates a deviation of 150 kHz dev. HP8902A: FM P+, 50 Hz - 15 kHz, de-emphasis OFF.</li> </ul>
INT FM Deviation	VR2 VR1	AF	<ul style="list-style-type: none"> <li>● Set for INT 1 kHz FM with 150 kHz dev., and adjust VR2 of the AF Unit in the same manner as with the EXT FM signal, so that the HP8902A indicates a deviation of 150 kHz.</li> <li>Set VR1 for INT 400 Hz in the same way.</li> </ul>
RF Level	VR6 VR4 VR7	AF/RF	<ul style="list-style-type: none"> <li>● Set the HP8902A to the RF POWER mode.</li> <li>● Set the SG-5260 for 100 MHz, 132 dBμ, and adjust VR6 of the AF Unit so that the HP8902A indicates 126.0 dBμ.</li> <li>● Set the SG-5260 to 2.9 MHz, and adjust VR4 of the RF Unit so that the HP8902A indicates 126.0 dBu.</li> <li>● At 2.9 MHz, reduce the attenuator to 1 dB step and adjust VR7 of the RF Unit so that the HP8902A indicates values which differ by 1 dB when 126 dBu is switched to 125 dBμ or vice versa.</li> </ul>
AM Modulation	VR5 VR1	AF/RF	<ul style="list-style-type: none"> <li>● Set to AM 60%, INT 1 kHz, CF = 1 MHz and level = 100 dBμ.</li> <li>● Adjust VR5 of the AF Unit so that the AM reading of the HP8902A indicates 60%.</li> <li>● Change CF to 100 MHz and ensure that the HP8902A reading is in the range from 58.5% to 61.5%. If not, adjust VR1 of the RF Unit again and restart adjustments from the "RF Level" adjustment above. HP8902A: AM P+, 50 Hz - 15 kHz</li> </ul>
Harmonics Level	VR2 L7	RF	<ul style="list-style-type: none"> <li>● Connect the output of the SG-5260 to a spectrum analyzer and check the spurious harmonics level at all frequencies.</li> <li>● Adjust VR2 and L7 of the RF Unit so that the harmonics levels at 130 MHz and 260 MHz do not exceed -30 dBμ.</li> </ul>

# ADJUSTMENT

Item	Adjustment	P.C.B	Procedure
Separation	C158 VR2	PLL	<ul style="list-style-type: none"> <li>Connect the measuring instruments as shown below and check the EXT FM stereo characteristics.</li> </ul>  <ul style="list-style-type: none"> <li>* MSG-211G-1 INT 1 kHz PILOT OFF LEFT-ON OUTPUT LEVEL 3 Vp-p</li> <li>* HP8902A FM, PT, Filter all OFF</li> </ul> <ul style="list-style-type: none"> <li>Adjust trimmer C 158 and VR2 of the PLL Unit so that the separation is maximum when CF = 100 MHz.</li> </ul>

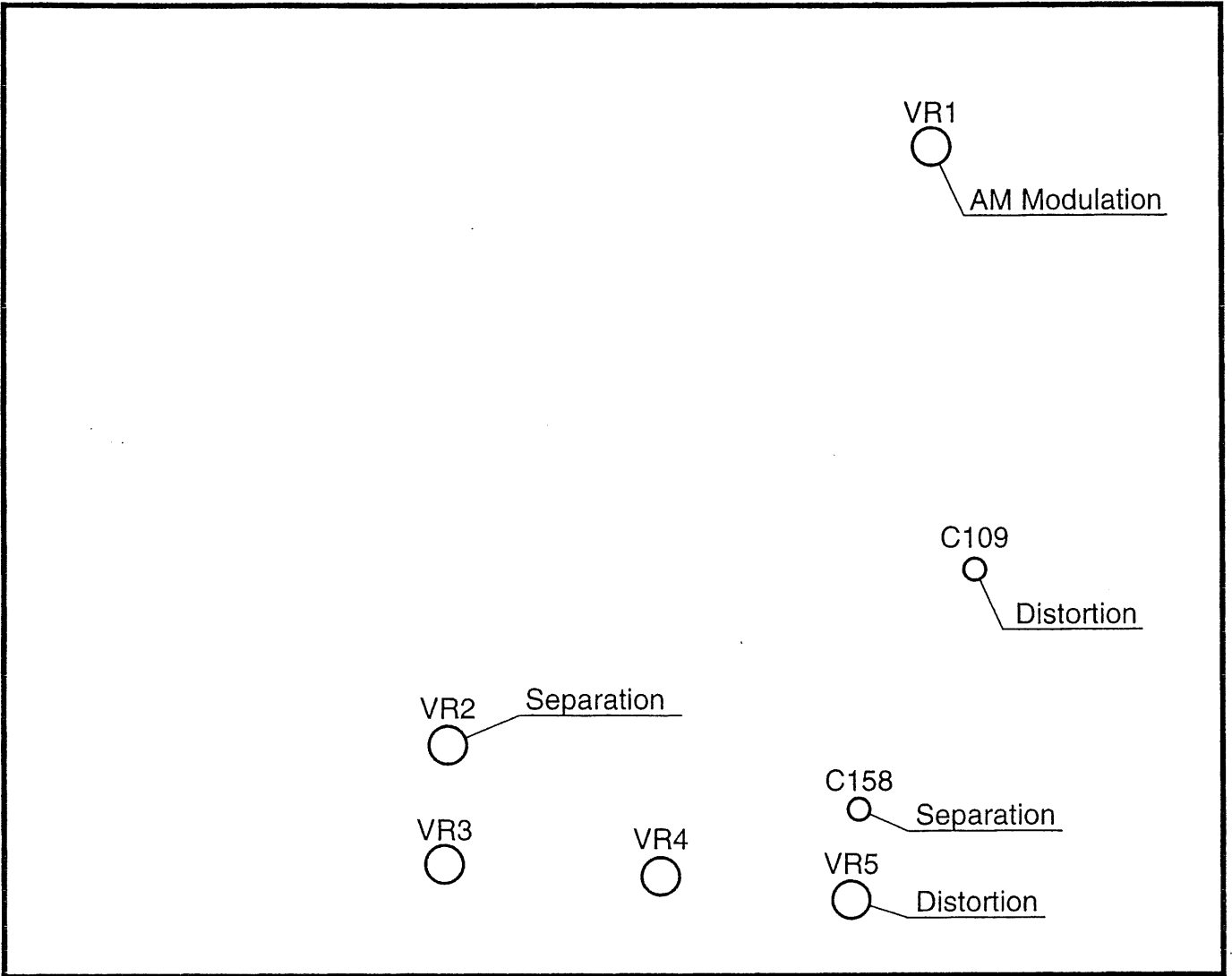
# ADJUSTMENT

RF UNIT (W02-2170-08)

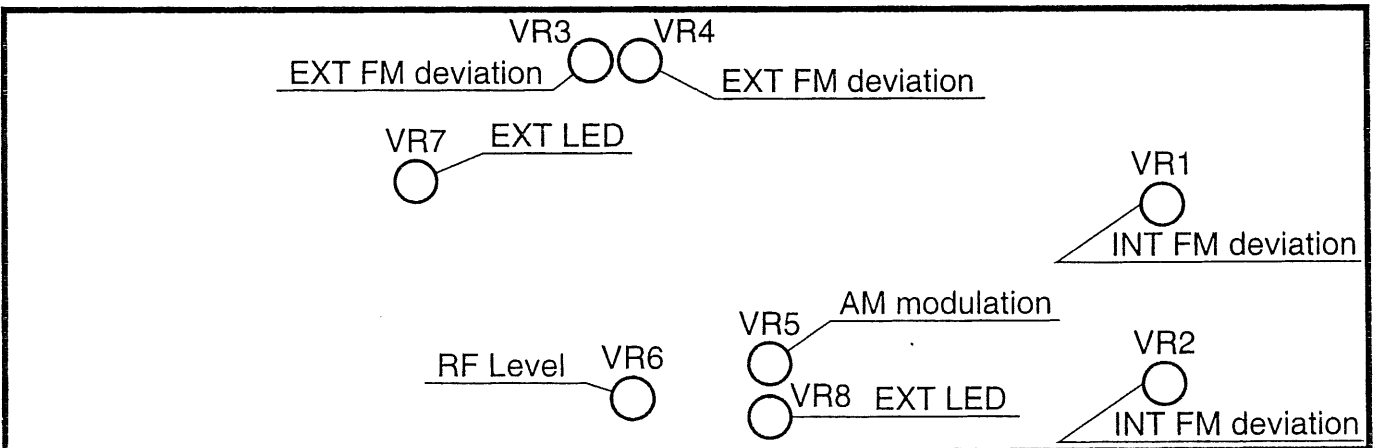


# ADJUSTMENT

## PLL UNIT (W02-2171-08)



## AF UNIT (W02-2172-08)









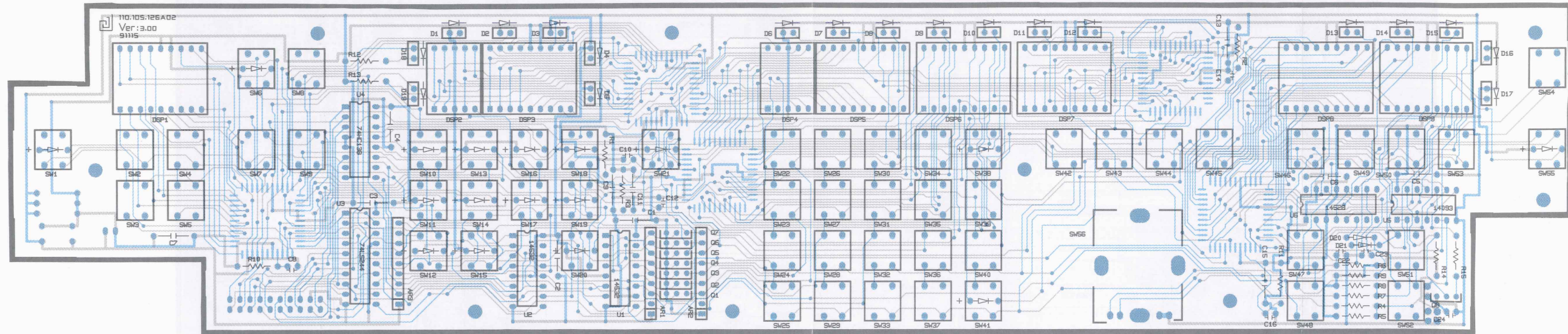




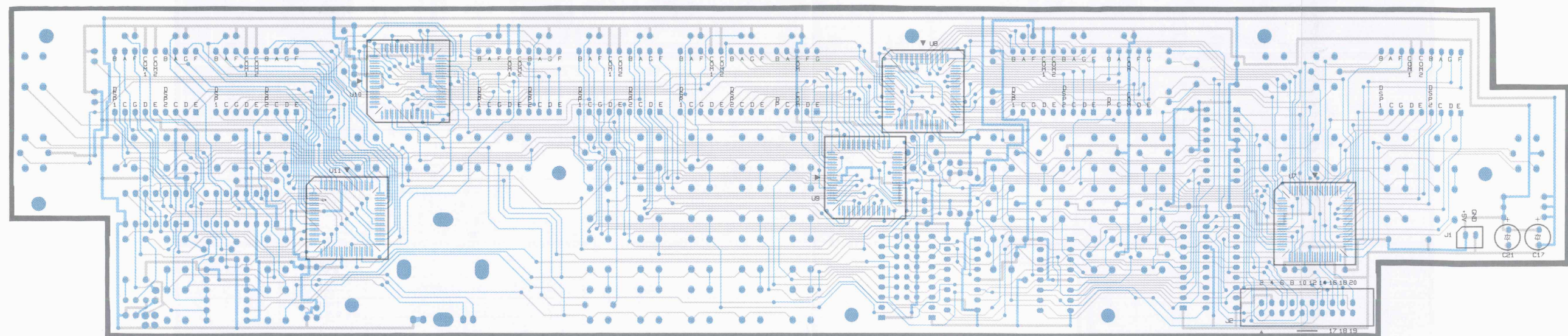
# P.C. BOARD

(80-01) (SOW) TIMU 01

### KEY DISPLAY UNIT (W02-2168-08) A



### KEY DISPLAY UNIT (W02-2168-08) B





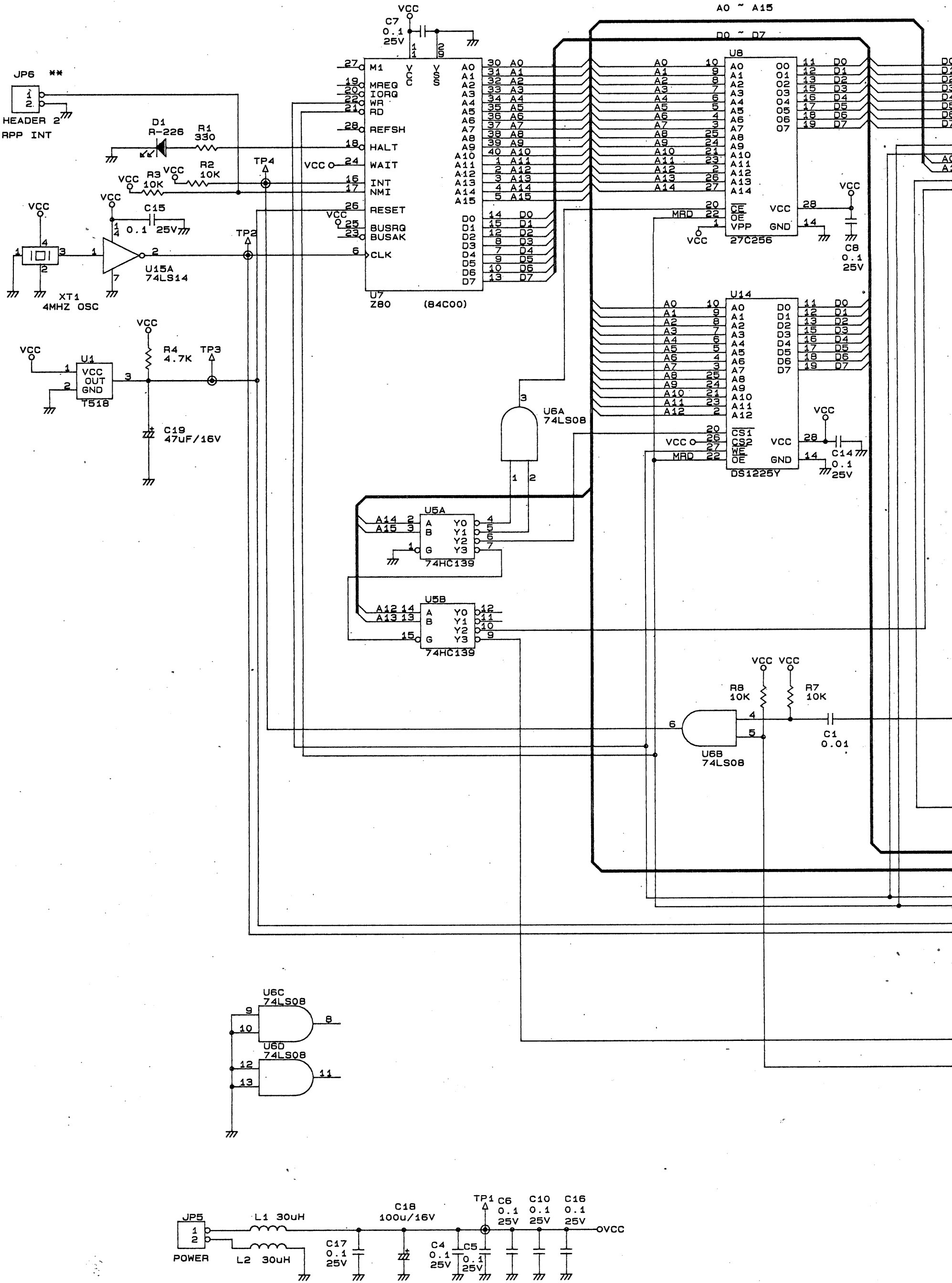




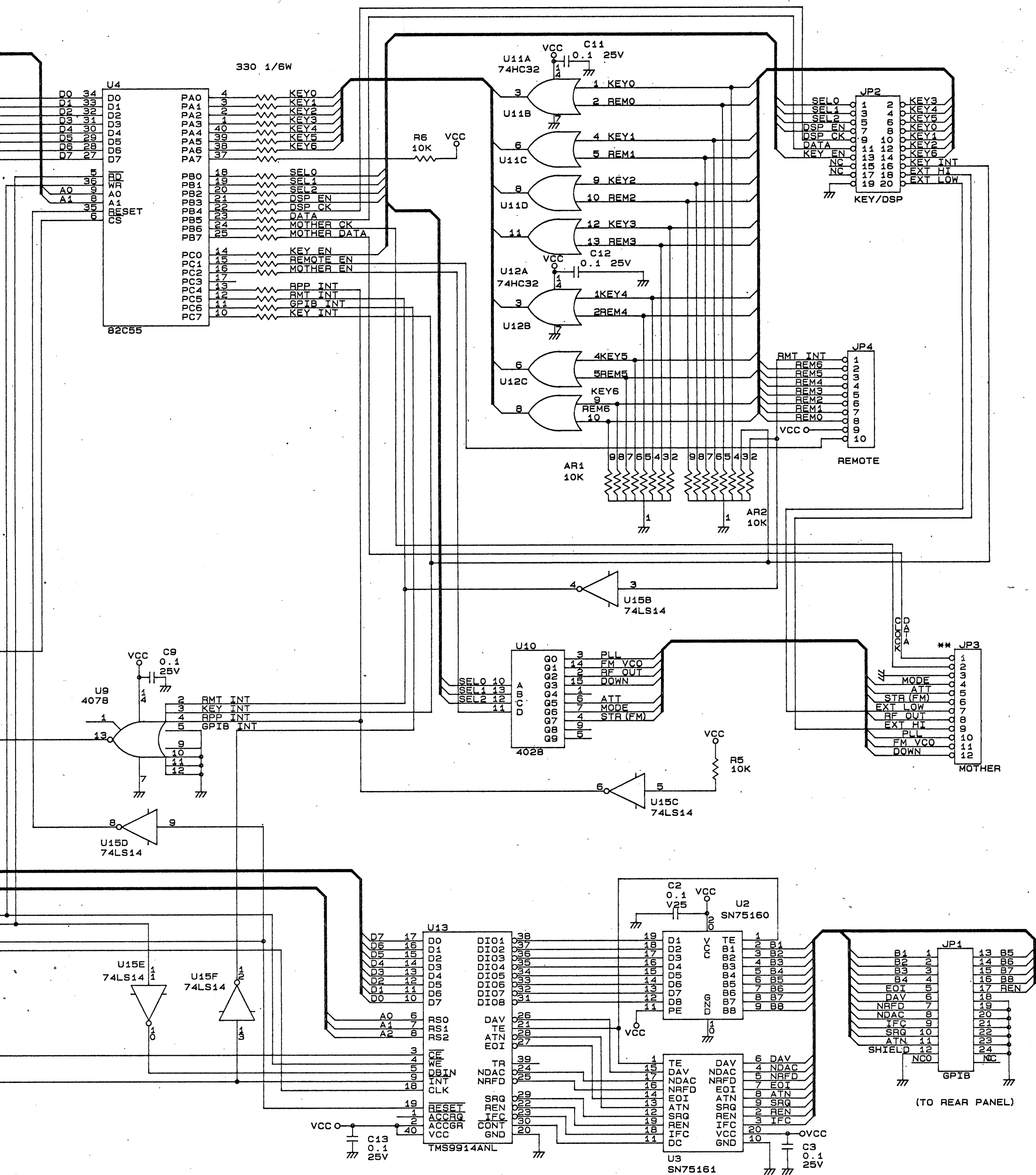




## CPU UNIT (W02-2167-08)

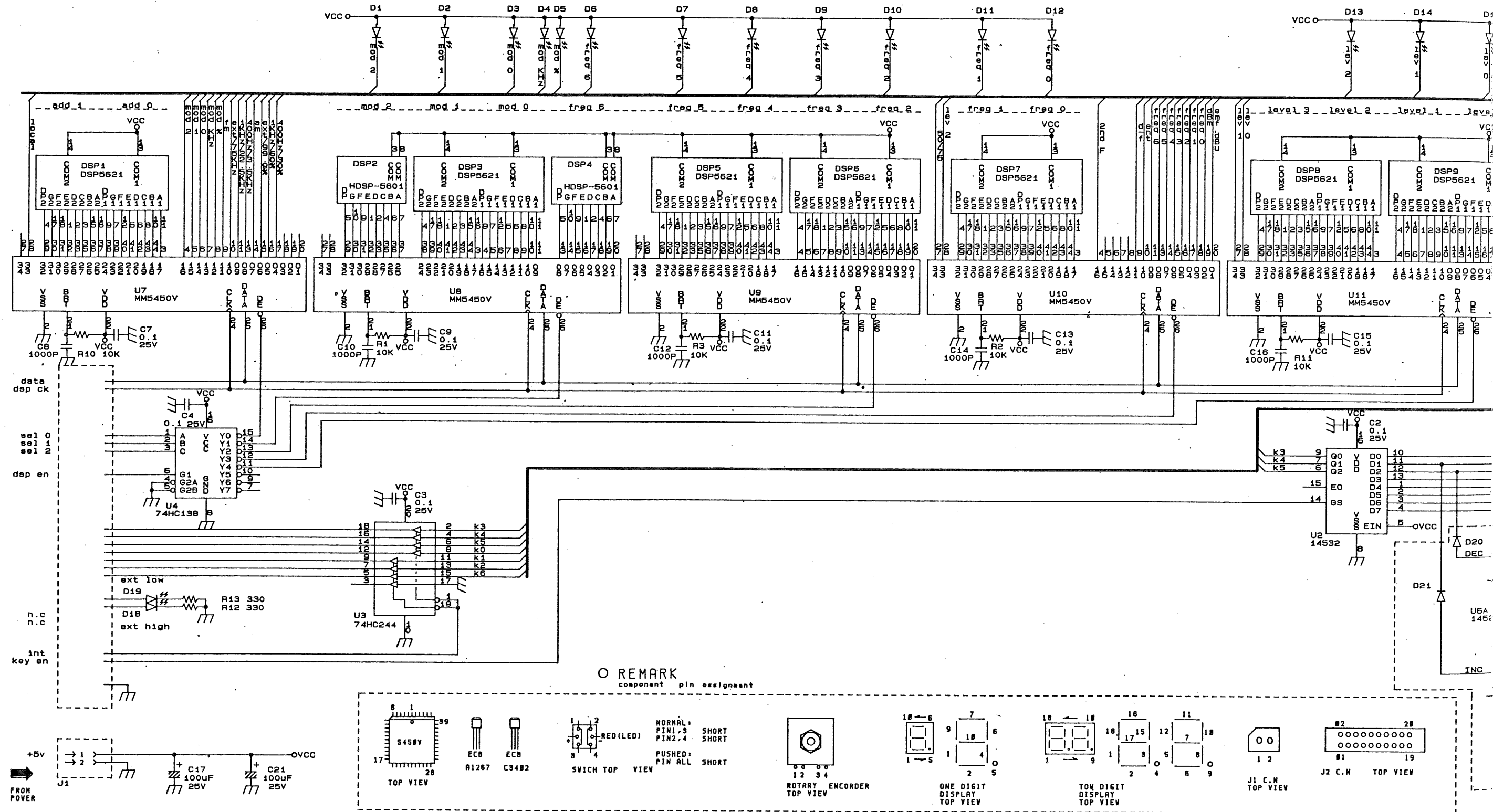


# SCHEMATIC DIAGRAM

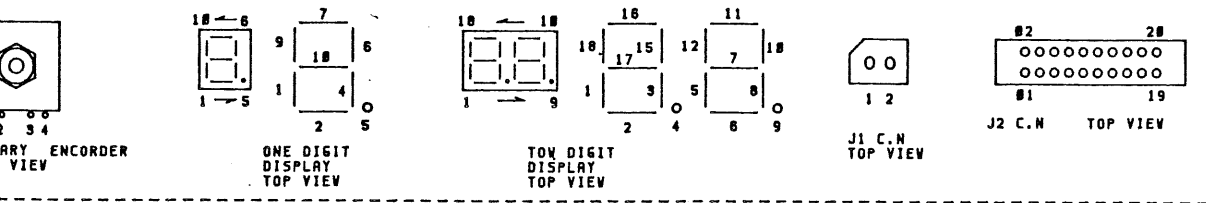
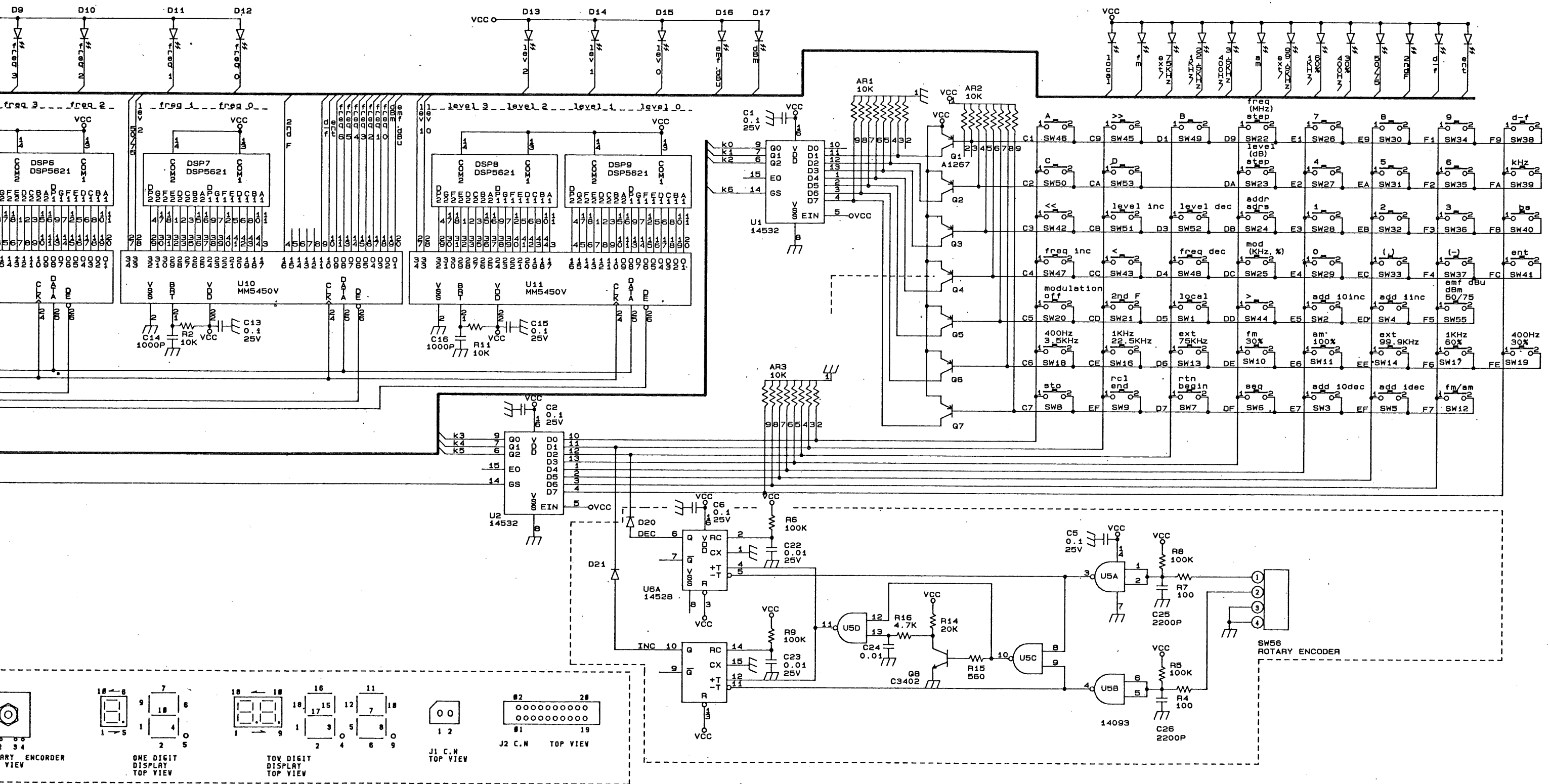


# SCHEMATIC DIAGRAM

## KEY & DISPLAY UNIT (W02-2168-08)



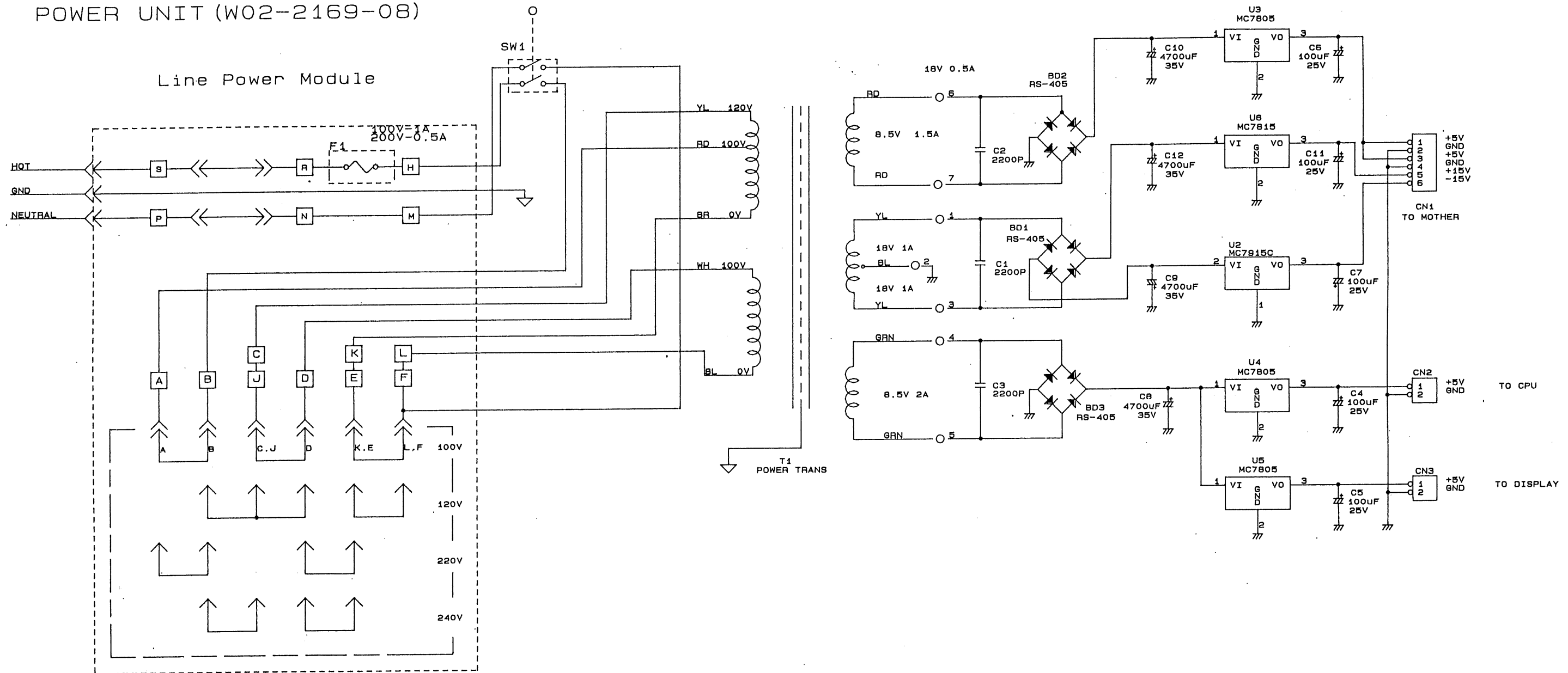
# SCHEMATIC DIAGRAM



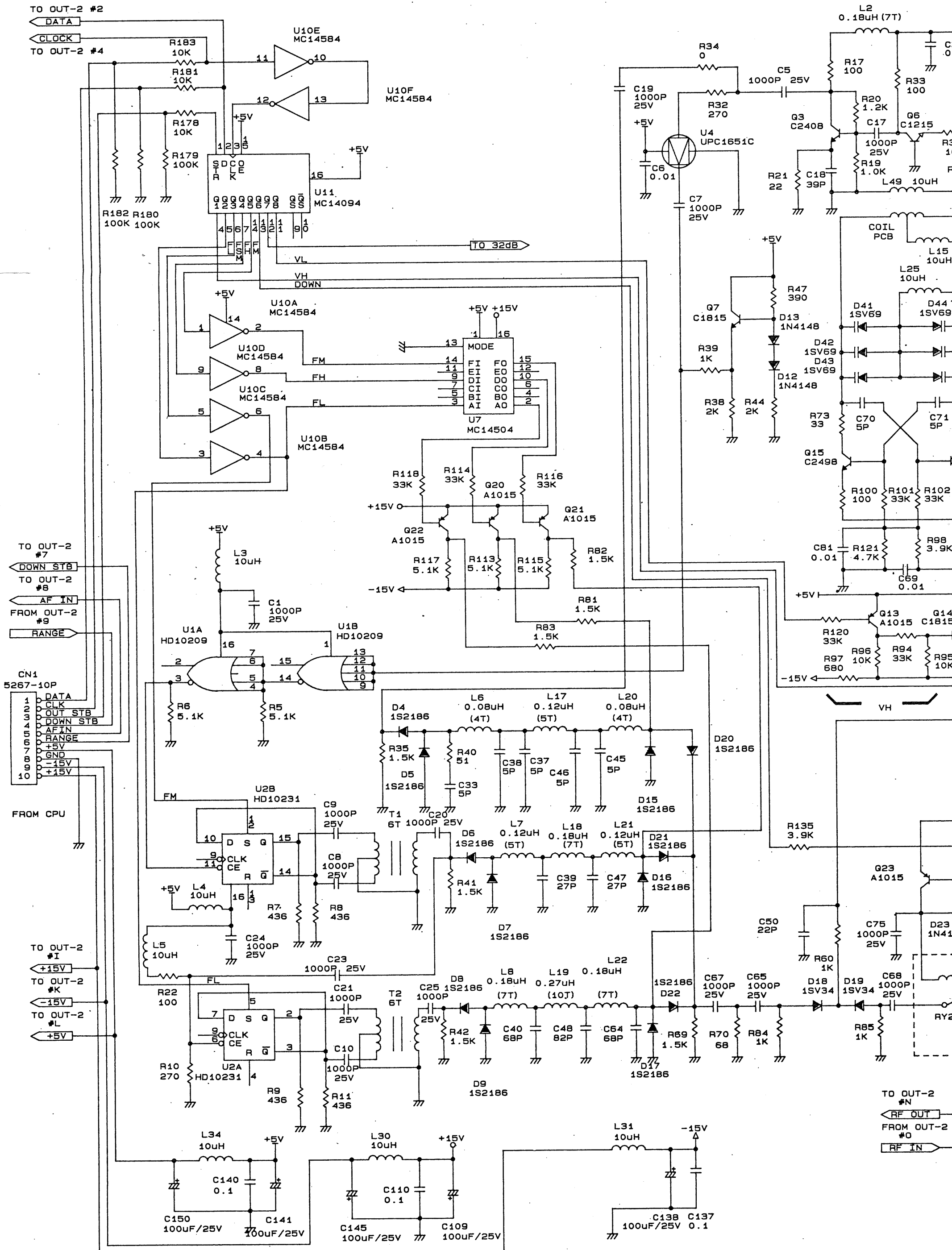


# SCHEMATIC DIAGRAM

POWER UNIT (W02-2169-08)



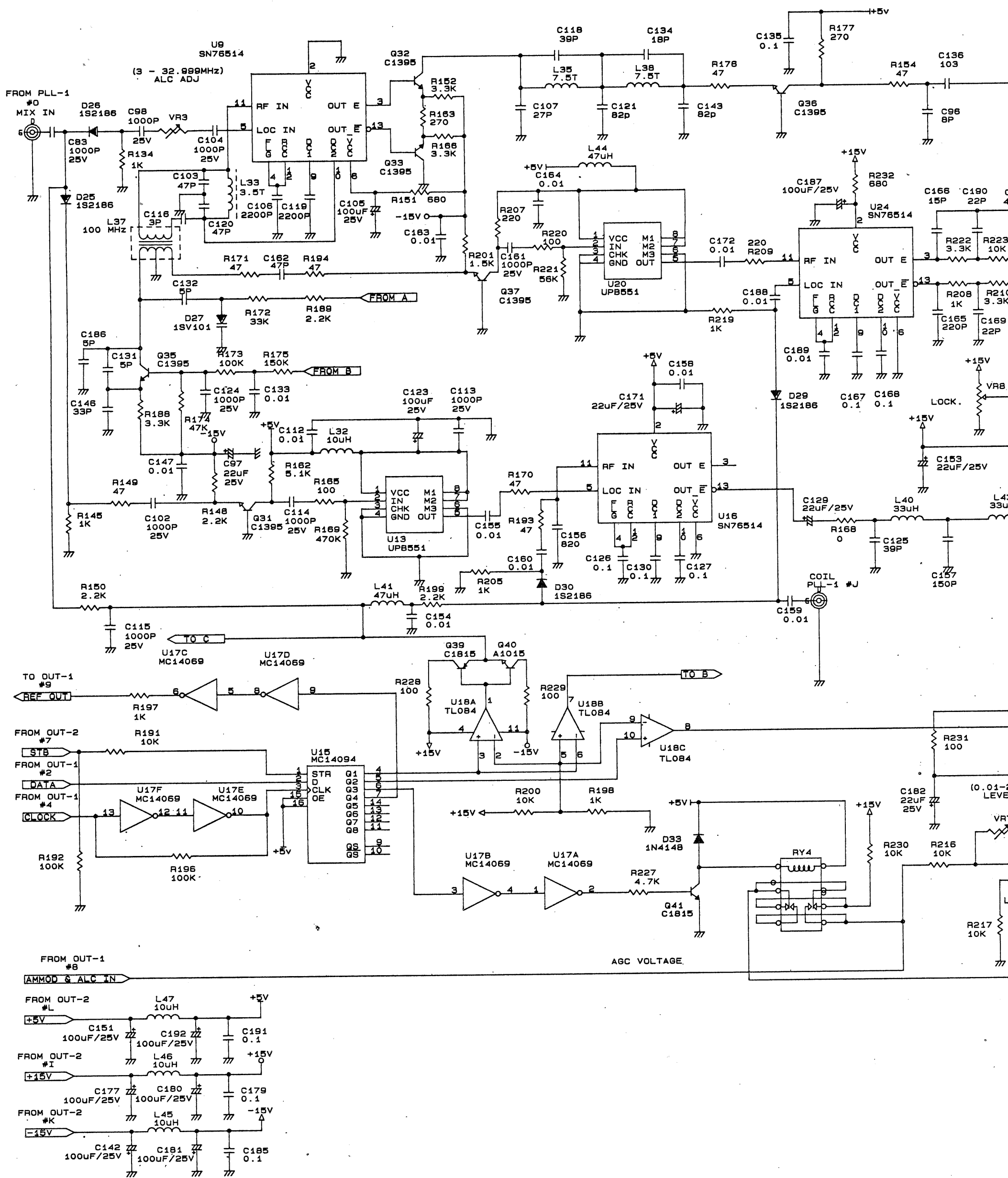
RF UNIT (W02-2170-08) A



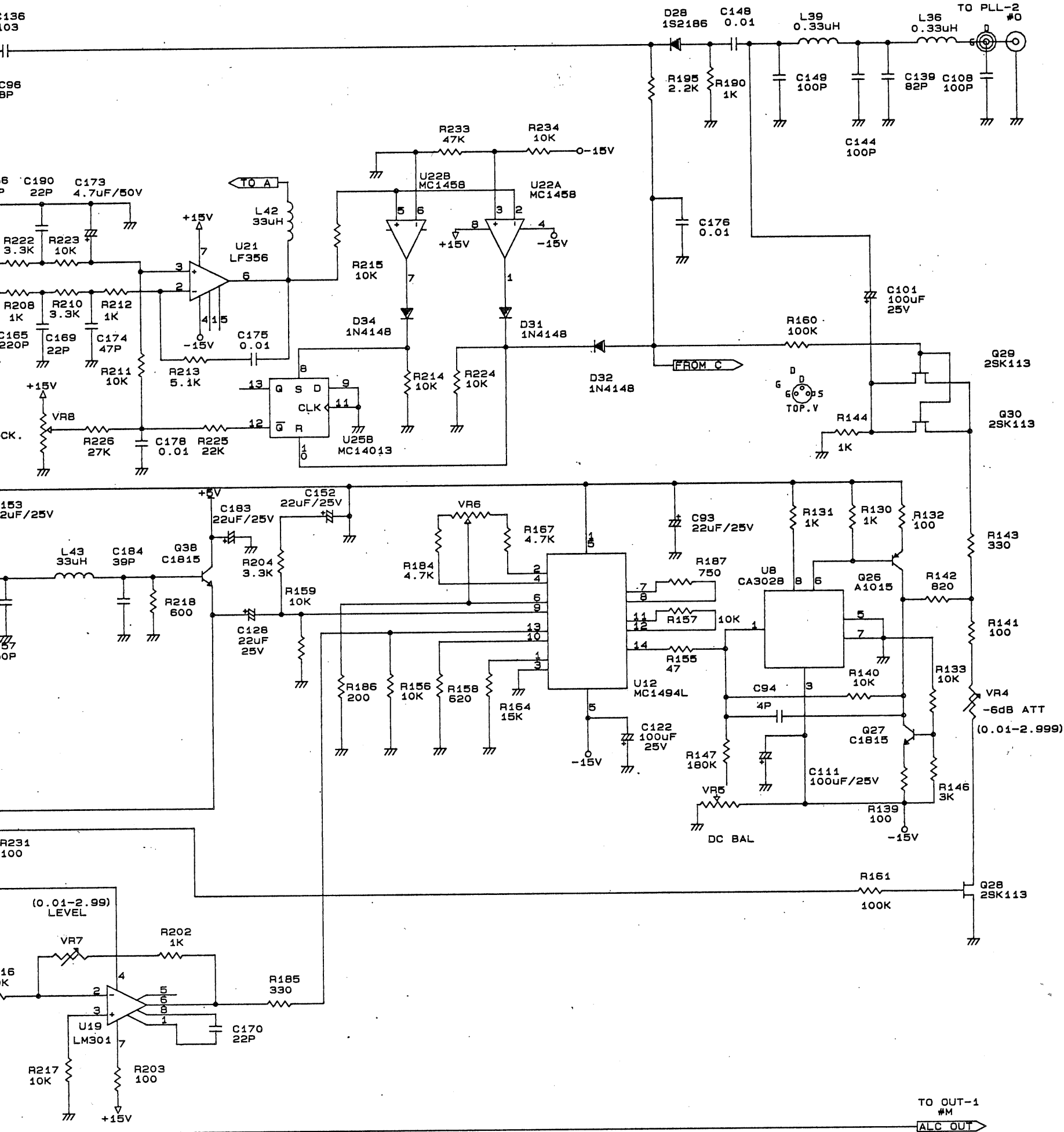


# SCHEMATIC

## RF UNIT (W02-2170-08) B



# ATI DIAGRAMC

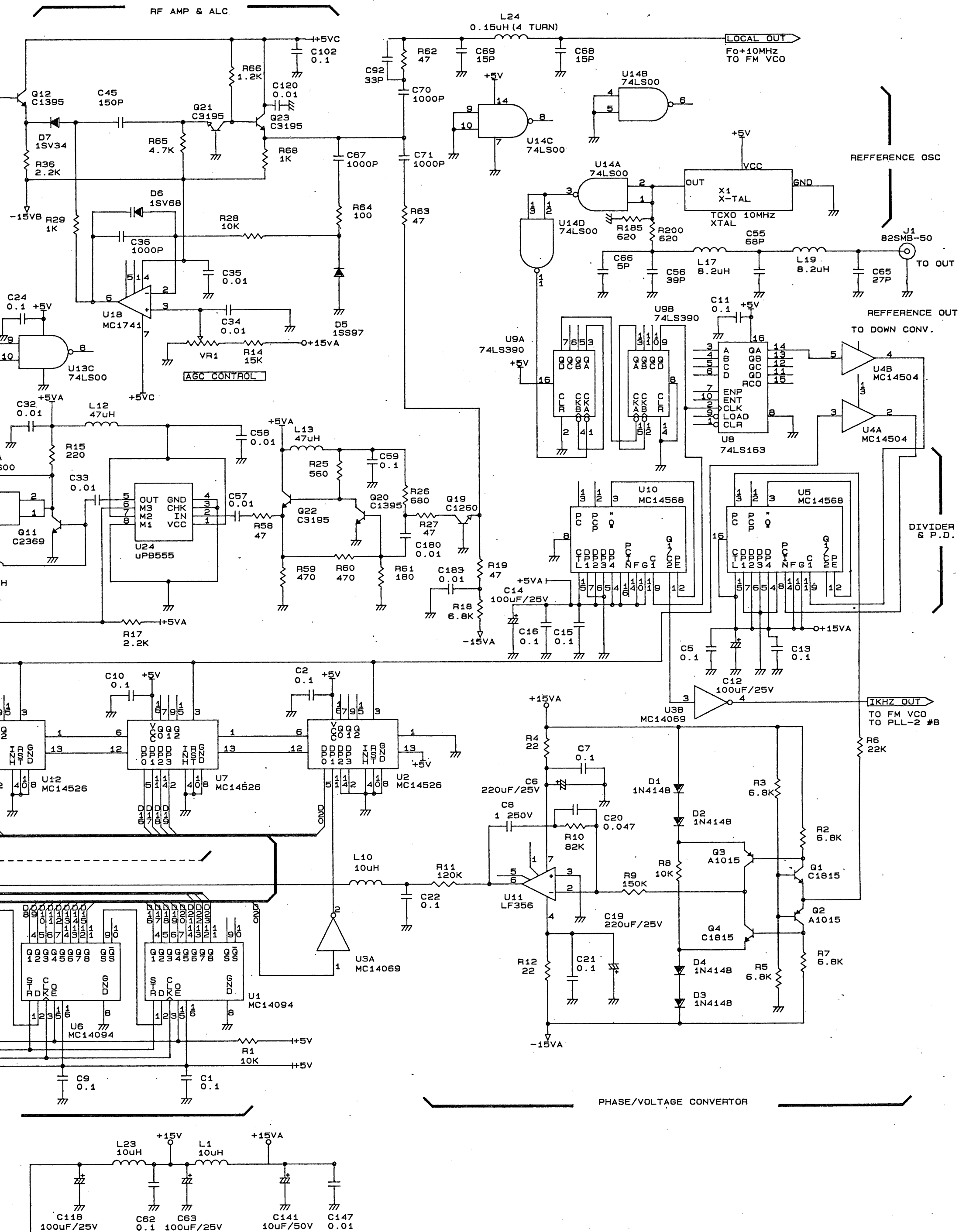


0.01-32.999MHz

TO OUT-1  
#M  
ALC OUT

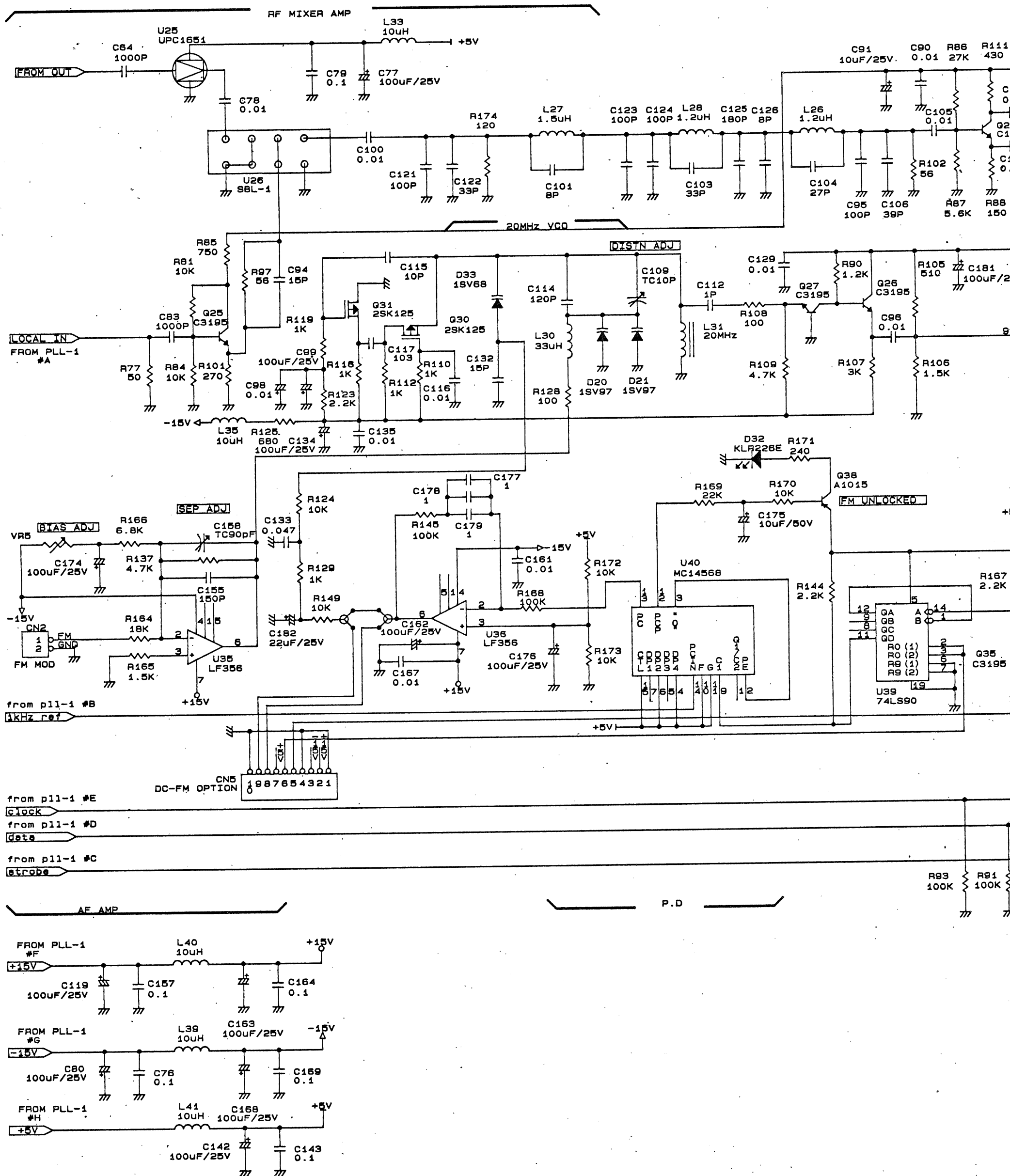


# TIC DIAGRAM



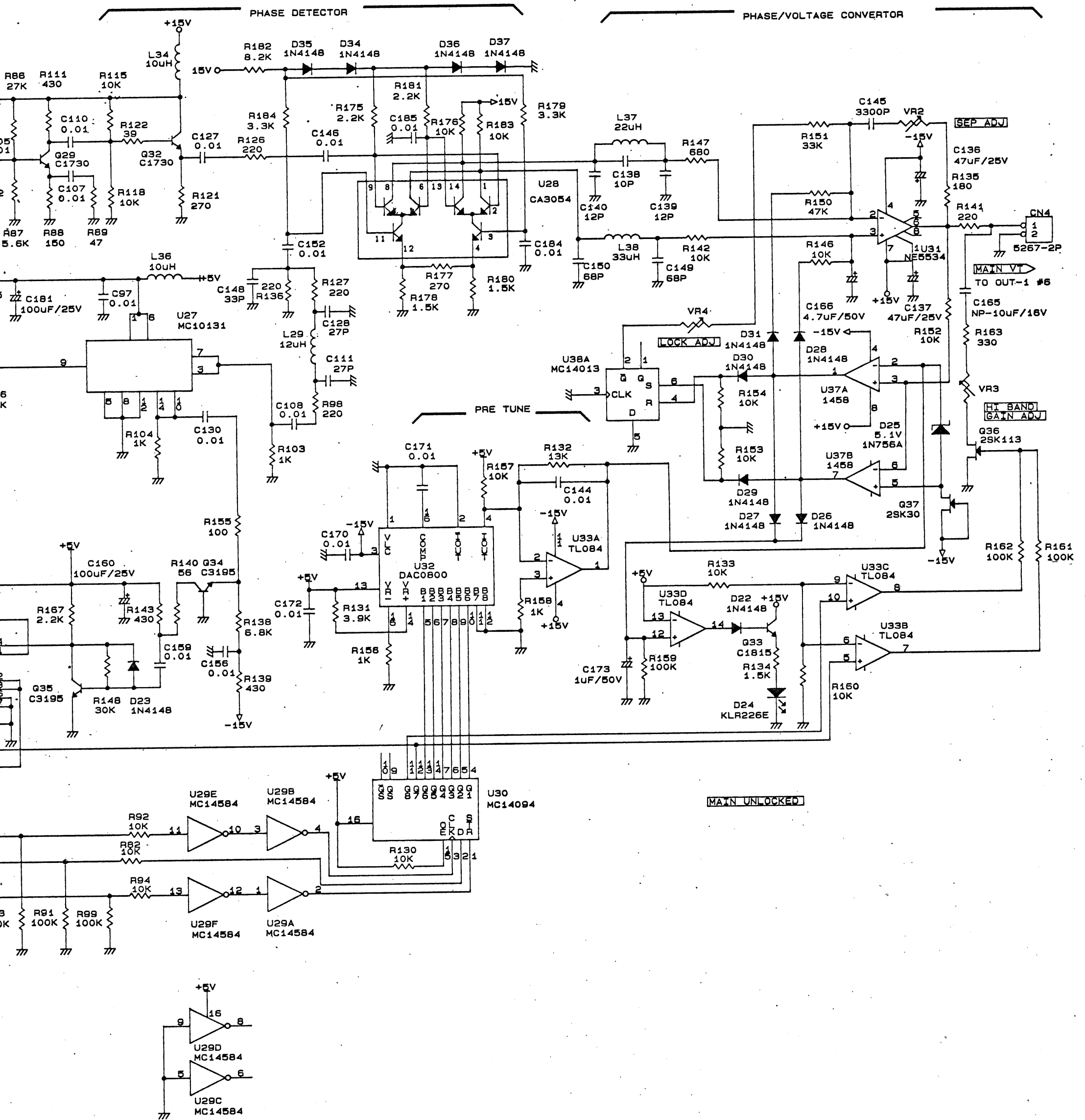
# SCHEMATIC

## PLL UNIT (W02-2171-08) B



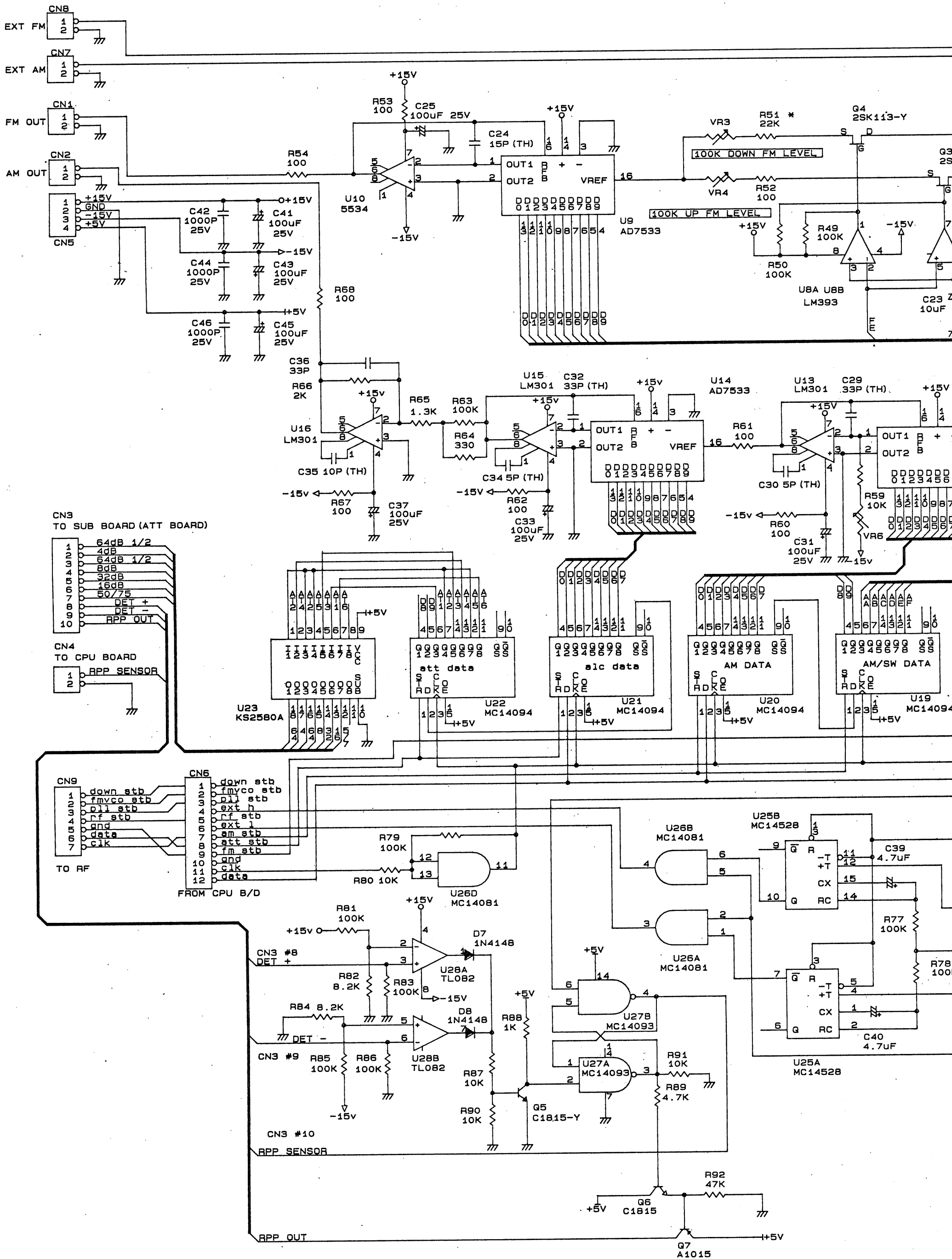


# IC DIAGRAM

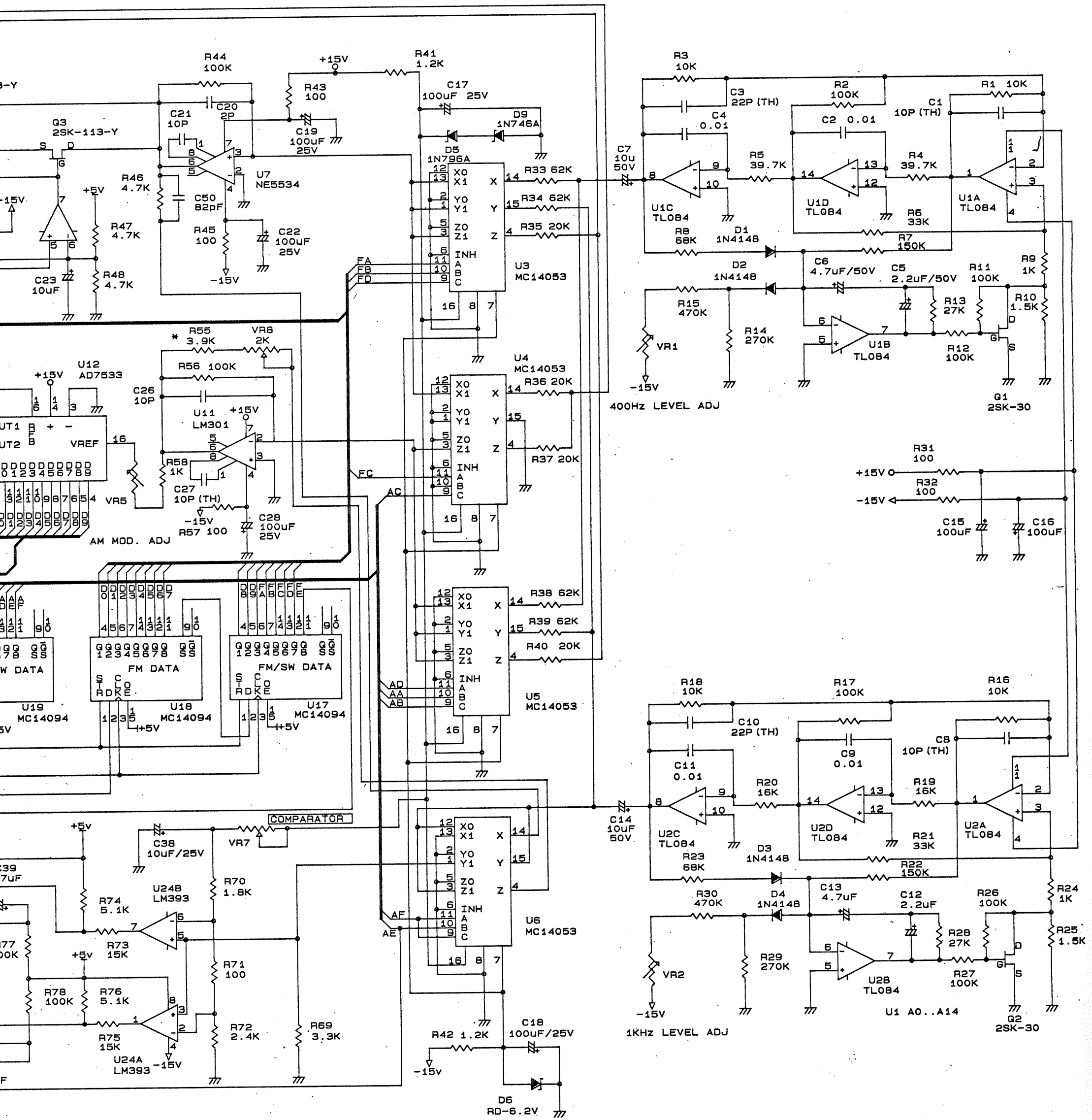


# SCHEMATIC

## AF UNIT (W02-2172-08)



# TIC DIAGRAM



# SCHEMATIC DIAGRAM

ATT UNIT (W02-2173-08)

