■ SCHEMATIC DIAGRAM

NOTICE
(U)····· U.S.A model
(C)····· Canadian model
(A)····· Australian model
(G)····· European model
(B)····· British model
(R)····· General model

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (1/6W)
☑	CARBON FILM RESISTOR
△	METAL OXIDE FILM RESISTOR
▲	METEL FILM RESISTOR
☒	METEL PLATE RESISTOR
◪	FIRE PROOF CARBON FILM RESISTOR
□	SEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

CAPACITOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
NO MARK	CERAMIC CAPACITOR
⊛	POLYESTEL FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
ⓘ	MICA CAPACITOR
⊜	POLYPROPYLENE FILM CAPACITOR
●	SEMICONDUCTIVE CERAMIC CAPACITOR

MAIN

NO	TR
Q501-502	2SC535(A,B,C)
Q503-506-517	2SA970(GR,BL)
Q507-508	2SC2240(GR,BL)
Q509-510	2SC1815(Y)
Q511-514	2SC3416
Q515-516	2SA1352
Q520	2SD400
Q518-519	2SC2603(E,F) or2SC3302(R,S,T) or2SC3300(S)
Q521-522	2SA1115(E,F) or2SA1312(R,S,T) or2SA1317(S)

SUB

NO	TR
Q301-302-307-308	2SA1349(GR,BL)
Q303-304-305-306	2SC3381(GR,BL)
Q309-310	2SA970(GR,BL)
Q311-312-333-334	2SC2240(GR,BL)
Q313-314	2SC3298B
Q315-316	2SA1306B
Q329-330-337-338	2SA1145(O,Y)
Q331-332-335-336	2SC2705(O,Y)
Q339-340	2SC3421
Q341-342	2SA1358
Q317-318-321-322	2SC3280
Q319-320-323-324	
Q327-328	2SA1301
Q343-344-347-348	2SC3281
Q345-346-349-350	2SA1302

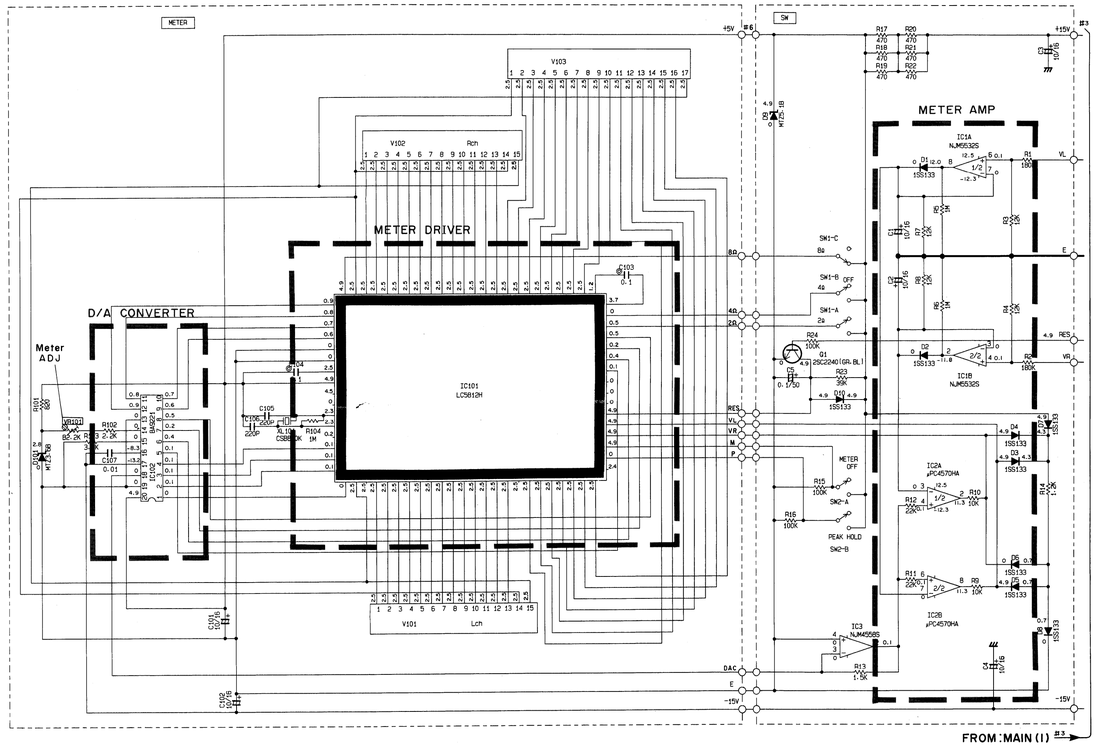
MAIN

	U	C	B	A	B-G
#1	μPC8036	IC7636			IC7660
#2	μPC8036	IC7636			IC7670
#3	C551-562	DTA			470P/100
#4	R553-564	DTA			0.01/100
#5	R533-534	DTA			2.2
#6	R561-564	2SD5[illegible]			2SB[illegible]
#7	Q662	DTA			DTA
#8	R565	DTA			DTA

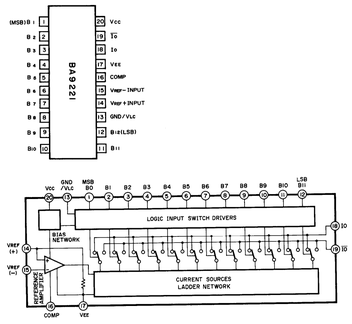
SUB

	U	C	B	A	B-G
#1	C301	10A250V			10A250V
#2	C302		DTA		10A250V
#3	C346	DTA	5.01	DTA	
#4	Q651	KRA403S	DTA	KRA403S	
#5	Q652	DTA			IC13620
#6	Q653	DTA	IC13615		

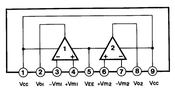
* All voltages are measured with a 10MΩ/DC electric volt meter.
* Components having special characteristics are marked △ and must be replaced with parts having specifications equal to those originially installed.
* Schematic diagram is subject to change without notice.



IC102: BA9221
12-Bit Multiplying D/A Converter

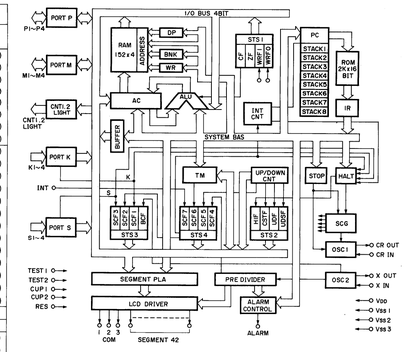


IC1: NJM5532S
IC2: μPC4570HA
IC3: NJM4558S
Dual Ope-Amp

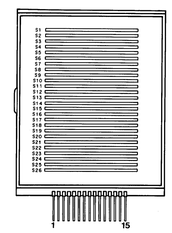


IC101: LC5812H
LCD Driver

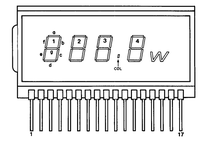
Pin No.	Pin Name	I/O	Function	Pin No.	Pin Name	I/O	Function
1	P4	I/O	D/A Converter (1pin)	40	CUP2		Capacitor terminal
2	COM2	O	LCD Common 2 output	41	CUP1		
3	COM3	O	Not used	42	seg	O	Digital meter segment output (V103, 9pin)
4	seg	O	Lch bar meter segment output (V101, 1pin)	43	seg	O	(V103, 8pin)
5	seg	O	(V101, 2pin)	44	seg	O	(V103, 7pin)
6	seg	O	(V101, 3pin)	45	seg	O	(V103, 6pin)
7	seg	O	(V101, 4pin)	46	seg	O	(V103, 5pin)
8	seg	O	(V101, 5pin)	47	seg	O	(V103, 4pin)
9	seg	O	(V101, 6pin)	48	seg	O	(V103, 3pin)
10	seg	O	(V101, 7pin)	49	seg	O	(V103, 2pin)
11	seg	O	(V101, 8pin)	50	seg	O	Rch bar meter segment output (V102, 13pin)
12	seg	O	(V101, 9pin)	51	seg	O	(V102, 12pin)
13	seg	O	(V101, 10pin)	52	seg	O	(V102, 11pin)
14	seg	O	(V101, 11pin)	53	seg	O	(V102, 10pin)
15	seg	O	(V101, 12pin)	54	seg	O	(V102, 9pin)
16	seg	O	(V101, 13pin)	55	seg	O	(V102, 8pin)
17	seg	O	Not used	56	seg	O	(V102, 7pin)
18	seg	O	Digital meter segment output (V103, 10pin)	57	seg	O	(V102, 6pin)
19	seg	O	(V103, 11pin)	58	seg	O	(V102, 5pin)
20	seg	O	(V103, 12pin)	59	seg	O	(V102, 4pin)
21	seg	O	(V103, 13pin)	60	seg	O	(V102, 3pin)
22	seg	O	(V103, 14pin)	61	seg	O	(V102, 2pin)
23	seg	O	(V103, 15pin)	62	seg	O	(V102, 1pin)
24	seg	O	(V103, 16pin)	63	COM1	O	LCD Common 1 output
25	TEST3	I	Test terminal (Not used)	64	S4	I	LOAD 8Ω SW
26	K4	I	PEAK HOLD SW	65	CNT1	O	D/A Converter (12pin)
27	K3	I	METER SW	66	CNT2	O	(11pin)
28	K2	I	Comparator Rch	67	LIGHT	O	(10pin)
29	K1	I	Comparator Lch	68	ALARM	O	(9pin)
30	RES	I	Reset input (at power ON)	69	Vss3		Power supply for LCD drive
31	INT	I	Not used	70	Vss2		GND
32	TEST2	I	Test terminal (Not used)	71	Vss1		Power supply for LCD drive
33	TEST1	I		72	VDC		+5V power supply
34	M4	I/O	D/A Converter (5pin)	73	X IN	I	Not used
35	M3	I/O	(6pin)	74	X OUT	O	
36	M2	I/O	(7pin)	75	CR IN		Ceramic resonator (800 kHz)
37	M1	I/O	(8pin)	76	CR OUT		
38	S2	I	LOAD 2Ω SW	77	S3	I	Not used
39	S1	I	LOAD 4Ω SW	78	P1	I/O	D/A Converter (4pin)
				79	P2	I/O	(3pin)
				80	P3	I/O	(2pin)



V101, 102 (Bar Meter)



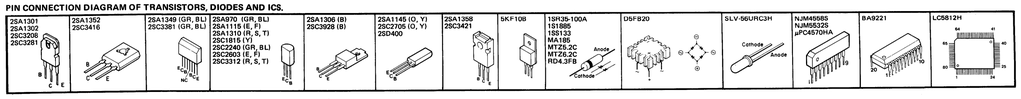
V103: (Digital Meter)



Segment Matrix

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
COM 2	–	1a	1b	1c	2a	2b	2g	2c	3a	3b	3c	COL	4a	4b	4c	W	COM
COM 1	COM	1f	1g	1e	1d	2f	2e	2d	3f	3g	3e	3d	4f	4g	4e	4d	–

Segment Matrix

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
COM 1	S1	S3	S5	S7	S9	S11	S13	S15	S17	S19	S21	S23	S25	COM	–
COM 2	S2	S4	S6	S8	S10	S12	S14	S16	S18	S20	S22	S24	S26	–	COM

PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICS.