

AKAI SERVICE MANUAL

S1100



MIDI STEREO DIGITAL SAMPLER

MODEL S1100

SPECIFICATIONS

Display	Backlit 320 characters/240 × 64 graphic LCD	AES/EBU (Digital out)	RS-422 level
Disk drive	3.5" dual density drive, 2Mbyte capacity (2HD), 1Mbyte capacity (2DD)	Connectors	
Memory	2Mbyte expandable to 32Mbyte	Front panel	REC INPUT
Data format	16 bit linear		CANON PLUG x2 (L ch., R ch.)
Maximum number of samples	200		MIC PLUG x2 (Lch., R ch.)
Maximum number of programs	100	Rear panel	STEREO HEADPHONE x1
Sampling rates	44.1/22.05 kHz, switchable		STEREO OUT x2, EFFECT SEND x1, ASSIGNABLE MIX OUT x8, EFFECT RETURN x2, FOOT SW x1, MIDI IN x1, MIDI OUT x1, MIDI THRU x1
Sampling time (unexpanded memory) ...	23.76 sec. (mono/sampling rate 44.1 kHz) 47.52 sec. (mono/sampling rate 22.05 kHz) 11.88 sec. (stereo/sampling rate 44.1 kHz) 23.76 sec. (stereo/sampling rate 22.05 kHz)	Power requirement	AC 100 V, 50/60 Hz for Japan AC 120 V, 60 Hz for USA and Canada AC 220 V, 50 Hz for Europe except UK AC 240 V, 50 Hz for UK and Australia
Frequency response	20 Hz to 20 kHz (sampling rate 22.05 kHz) 20 Hz to 10 kHz (sampling rate 22.05 kHz)	Power consumption	J:32W. A:50W. E,V:32W
Pitch shift	Interpolation and decimation digital algorithm (24 bit algorithm/custom LSI) ±2 octave changeable, 1 cent/step	Dimensions	483(W) × 133(H) × 425(D)mm (EIA 3U size)
Filter	Digital moving low pass filter (-18 dB/oct)	Weight	10.1kg
Envelope generator	2 sets/digital ADSR	Options	
Levels/impedance		EXM005	Memory expansion board(2M bytes)
REC INPUT	HI: -58 dBm	EXM008	Memory expansion board(8M bytes)
(L. R./MIC PLUG)	MID: -38 dBm LOW: -18 dBm	IB104	AES/EBU Digital audio interface board
STEREO OUT (L/mono & R CH)	-5dBm/600 ohms	BL1000	3.5 inch 2HD blank disk
EFFECT SEND	-5dBm/600 ohms		
CH 1 to CH 8 OUT	-5dBm/600 ohms	Standard accessories	
		Sound library disk	4
		AC cord	1
		Operator's manual	1

* For improvement purposes, specifications and design are subject to change without notice.

★ SAFETY INSTRUCTIONS

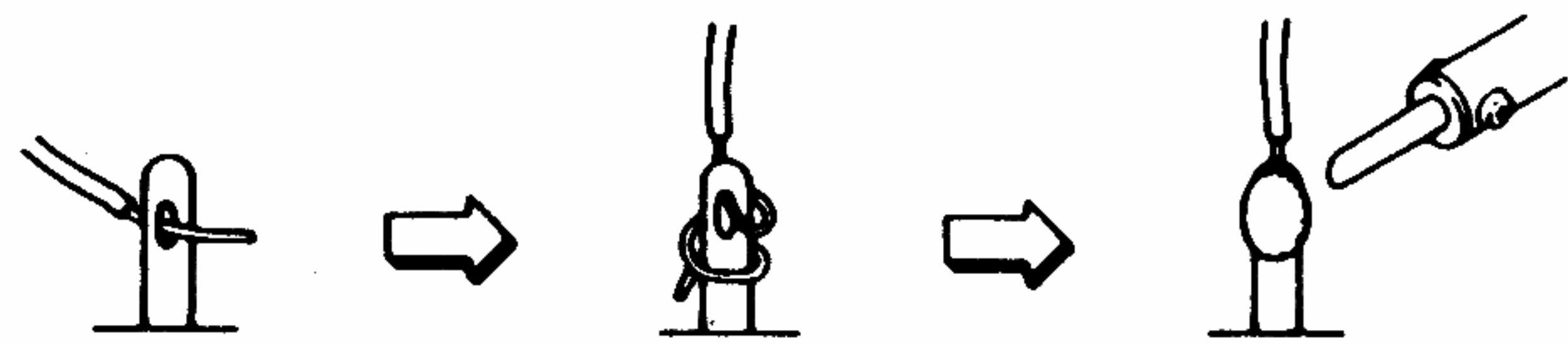
PRECAUTIONS DURING SERVICING

- 1. Parts indentified by the $\triangle$ (*) symbols are critical for safety Replace only with parts number specified.
- 2. In addition to safety, other parts and assemblies are specified forconformance with such regulations as those applying to spurious radiation.
These must also be replaced only with specified re-
placements.
Examples: RF converters, tuner units, antenna selector
switches, RF cables, noise blocking capacitors, noise
blocking filters, etc.
- 3. Use specified internal wiring note especially:
 - 1) Wires covered with PVC tubing
 - 2) Double insulated wires
 - 3) High voltage leads
- 4. Use specified insulating materials for hazardous live
parts. Note especially:
 - 1) Insulation Tape
 - 2) PVC tubing
 - 3) Spacers (Insulating Barriers)
 - 4) Insulation sheets for transistors
 - 5) Plastic screws for fixing microswitch (especially in
turttable)
- 5. When replacing AC primary side components(transform-
ers, power cords, noise blocking capacitors, etc.),
wrap ends of wires securely about the terminals be-
fore soldering.

- 7. Check that replaced wires do not contact sharp edged
or pointed parts.
- 8. Also check areas surrounding repaired locations.
- 9. Use care that foreign objects (screws, solder droplets,
etc.) do not remain inside the set.

SAFETY CHECK AFTER SERVICING

After servicing, make measurements of leakage-current
or resistance in order to determine that exposed parts
are acceptably insulated from the supply circuit.
The leakage-current measurement should be done be-
tween accessible metal parts (such as chassis, ground
terminal, microphone jacks, signal input/output connec-
tors, etc.) and the earth ground through a resister of
1500ohms paralleled with a 0.15 μ F capacitor, under the
unit's normal working condition. The leakage-current
should be less than 0.5 mA rms AC.
The resistance measurement should be done between
accessible exposed metalparts and power cord plug
prongs with the power switch (if included) "ON". The re-
sistance should be more than 2.2 Mohms.



- 6. Observe that wires do not contact heat producing
parts (heatsinks, oxide metal film resistors, fusible re-
sistors, etc.).

★ INFORMATION

SYMBOLS FOR PRIMARY DESTINATION

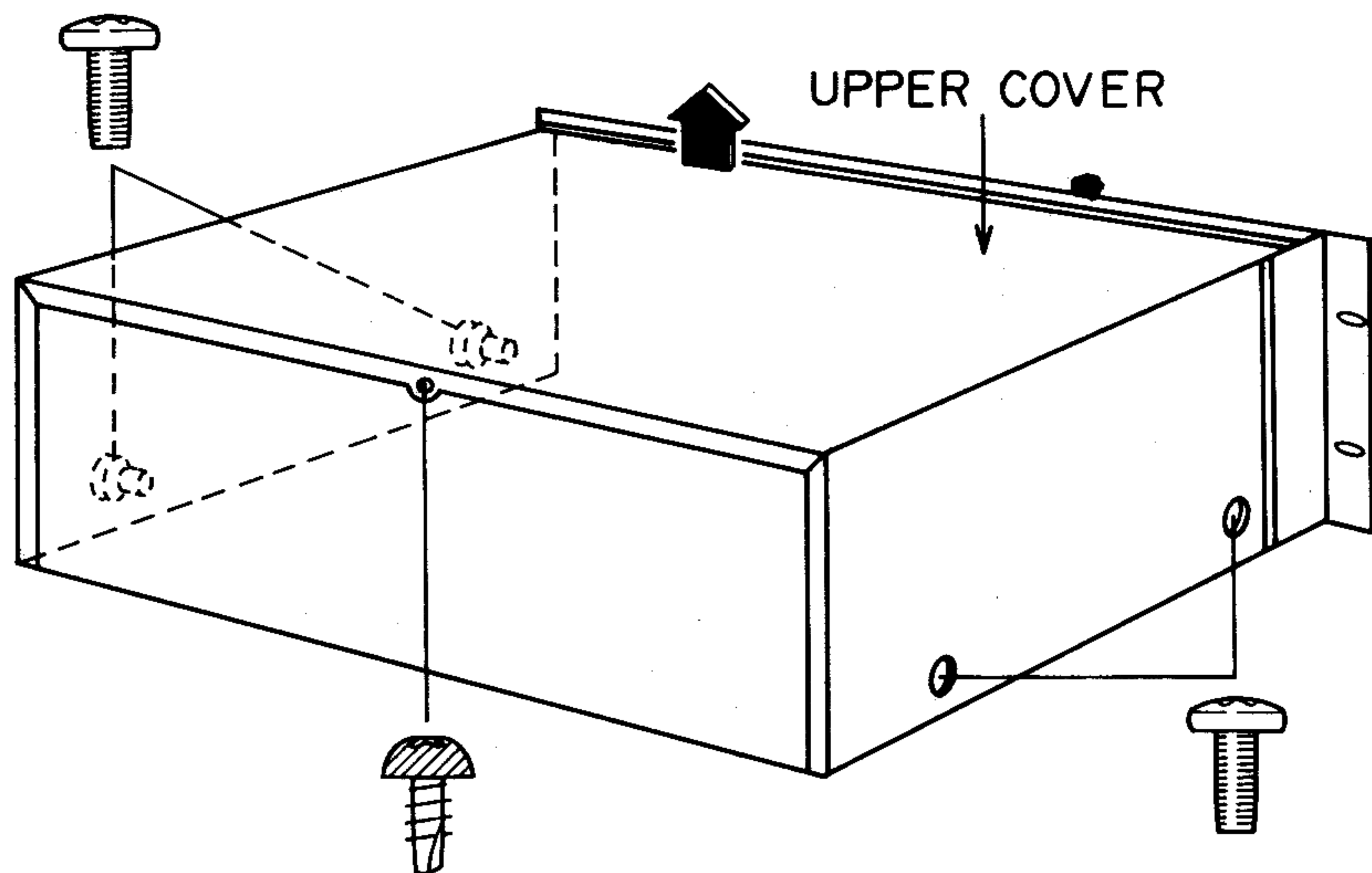
Alphabet indicates the destination of the units as listed
below.

Symbols	Principal Destinations
A	USA
B	UK
C	Canada
E	Europe (except UK)
J	Japan
S	Australia
V	W. Germany only
U	Universal Area
Y*	Custom version

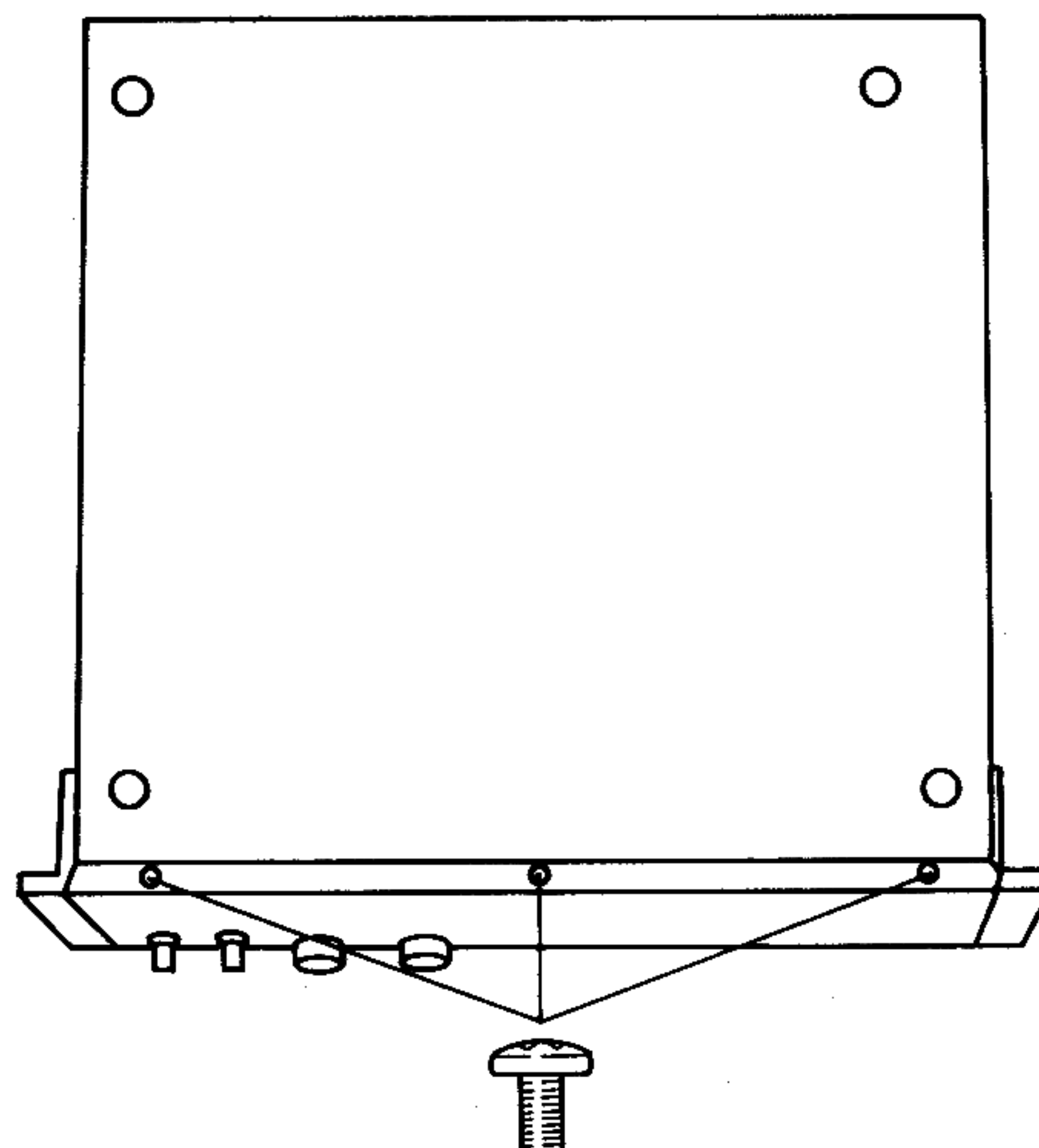
I. DISASSEMBLY

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the illustrations.
Reassemble in the reverse order.

1. Removal of UPPER COVER

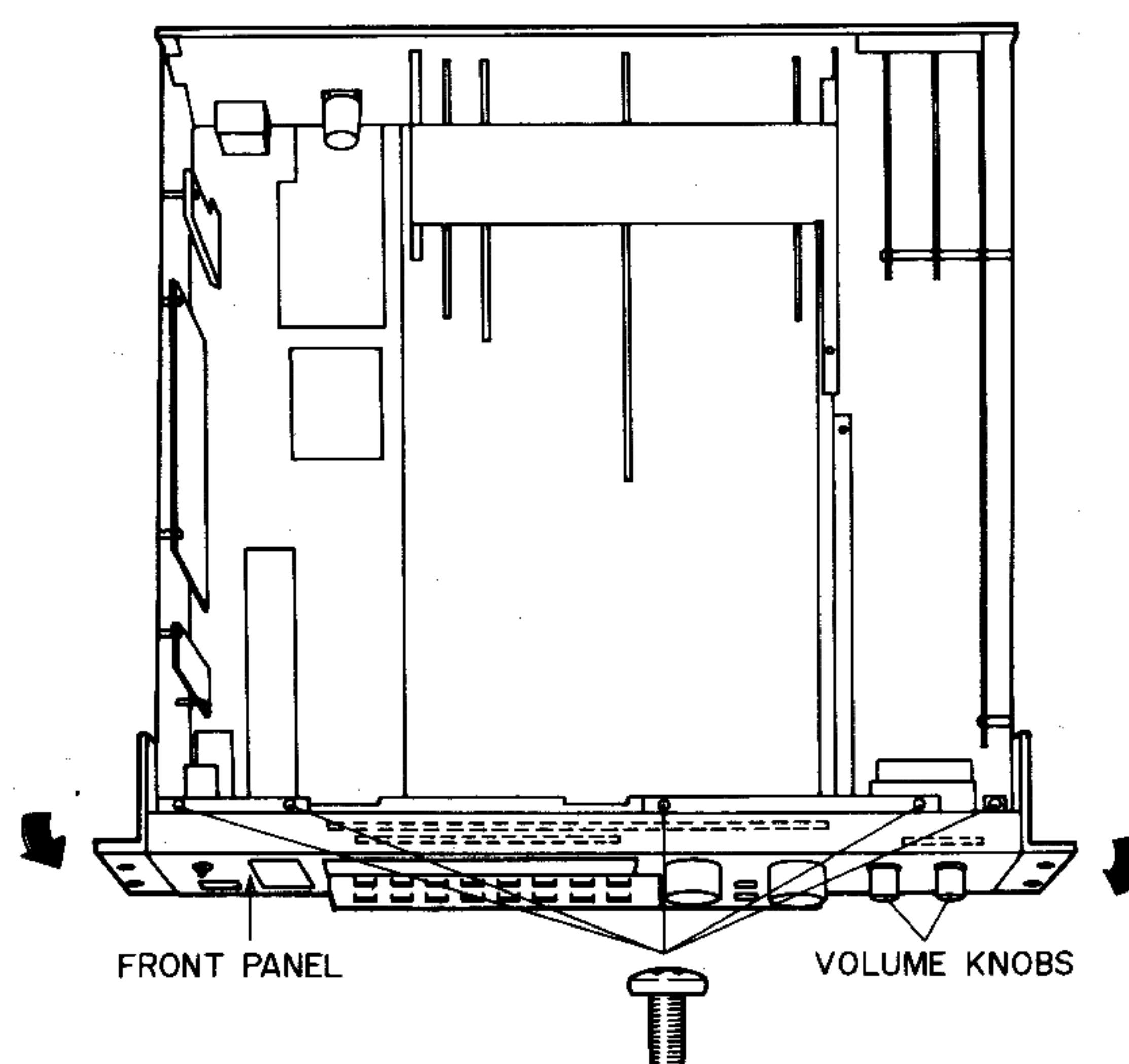


2. Removal of FRONT PANEL BLK



Bottom view

* Remove MAIN VOLUME KNOBS first, then remove the FRONT PANEL.



II. PRINCIPAL PARTS LOCATION

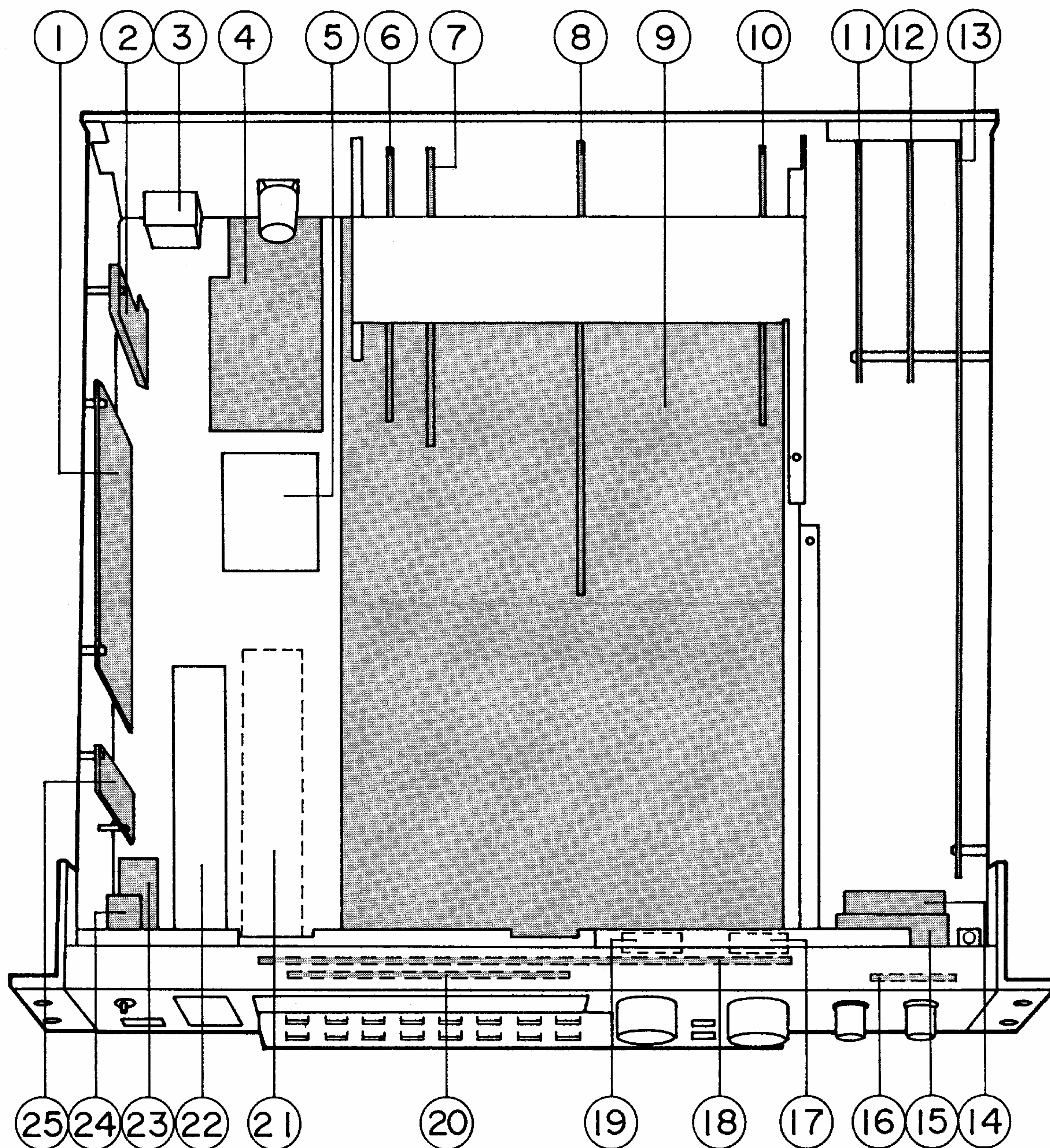


Fig. 2-1

- | | |
|----------------------------|-------------------------------------|
| 1. SWITCHING REGULATOR BLK | 14. INPUT JACK PCB |
| 2. FILTER PCB | 15. VR PCB |
| 3. AC INLET | 16. REC GAIN PCB |
| 4. POWER SUPPLY PCB | 17. ROTARY ENCODER (DATA) |
| 5. POWER TRANSFORMER | 18. PANEL PCB |
| 6. S1100 SCSI PCB | 19. ROTARY ENCODER (CURSOR) |
| 7. SMPTE PCB | 20. LCD BLK |
| 8. DSP PCB | 21. HARD DISK DRIVE UNIT (Optional) |
| 9. CPU PCB | 22. FDD BLK |
| 10. MEMORY PCB | 23. POWER SW PCB |
| 11. VOICE (2) PCB | 24. DISPLAY VR PCB |
| 12. VOICE (1) PCB | 25. INVERTOR PCB |
| 13. A D PCB | |

III. ELECTRICAL ADJUSTMENT

3-1. INSTRUMENT CONNECTION

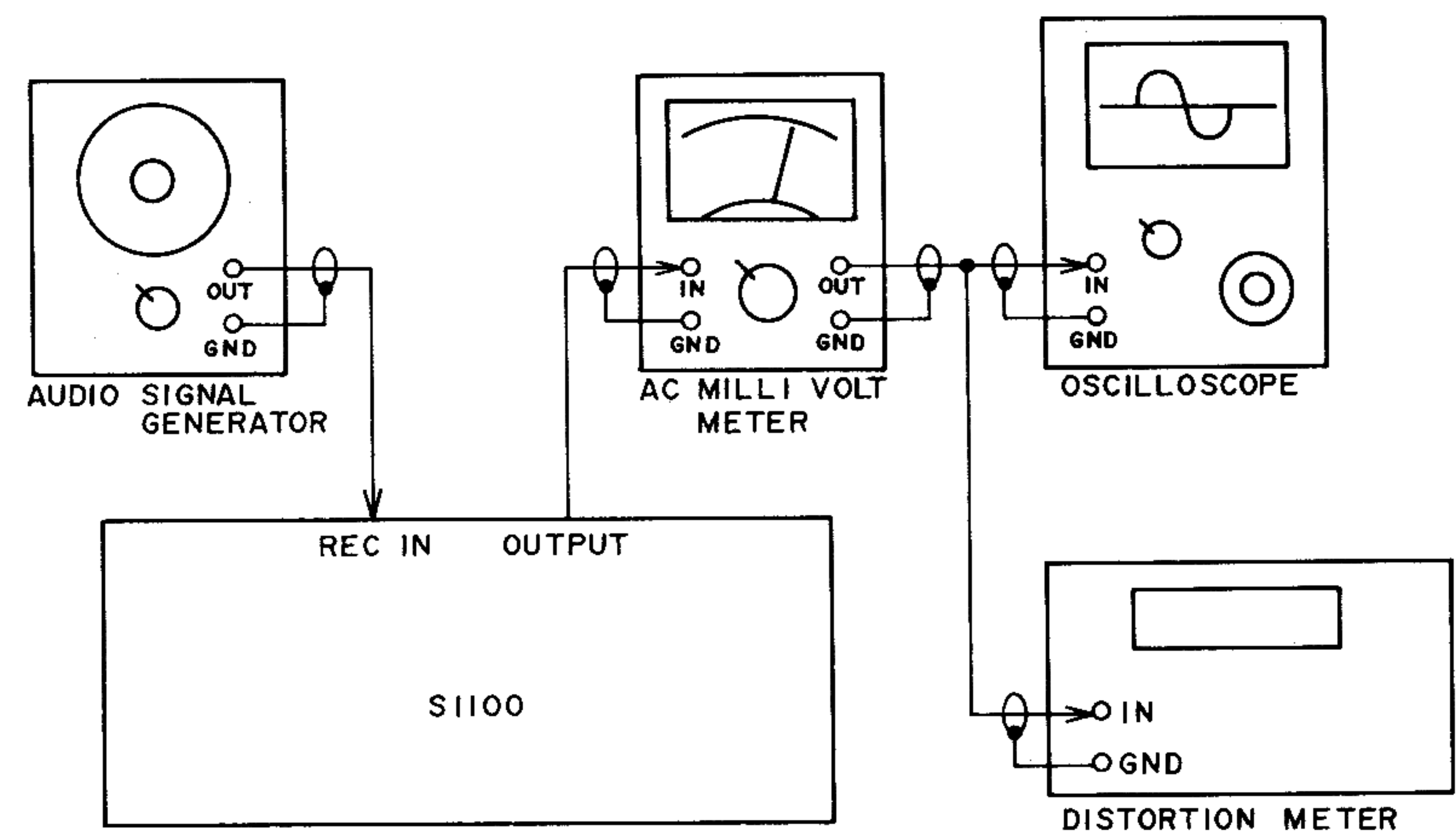


Fig. 3-1 Instrument connection

3-2. LOCATION OF ADJUSTMENT POINTS

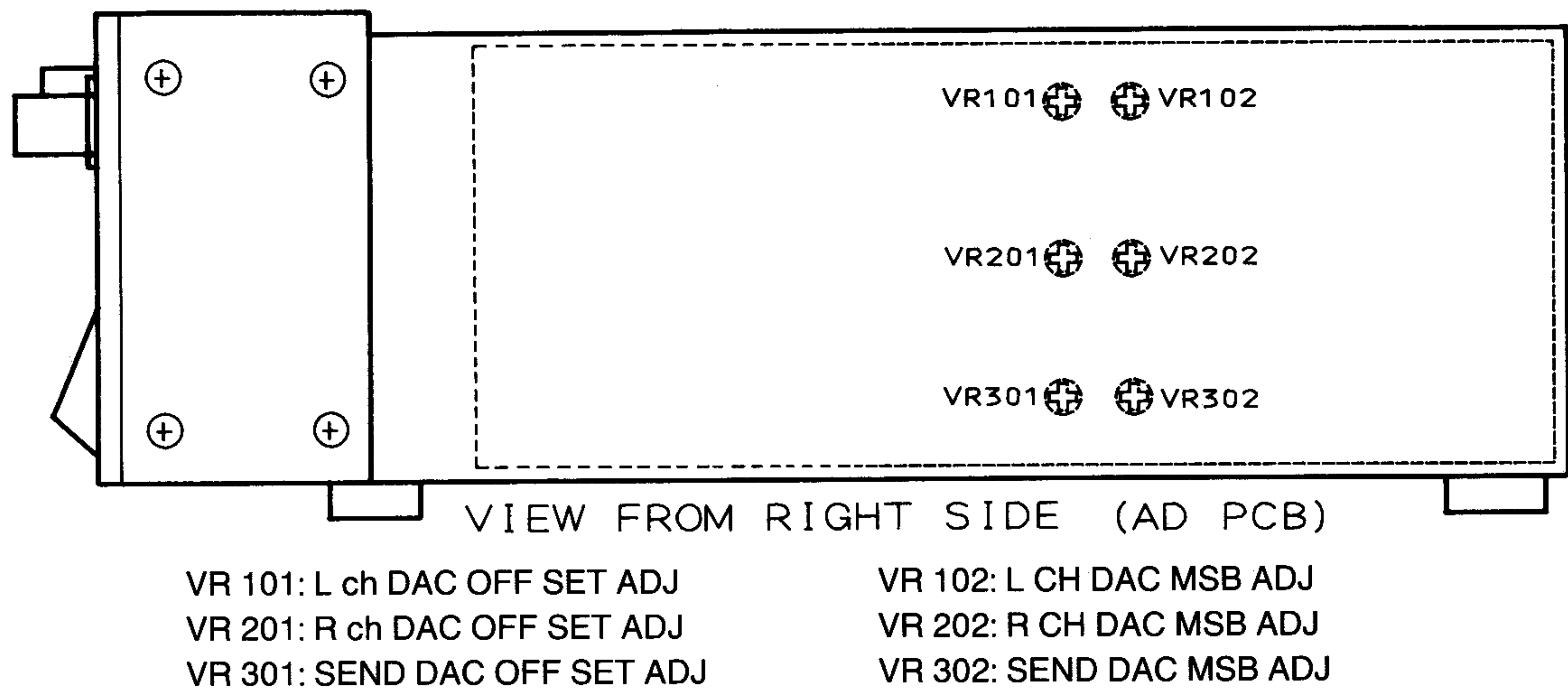


Fig. 3-2 View from right side

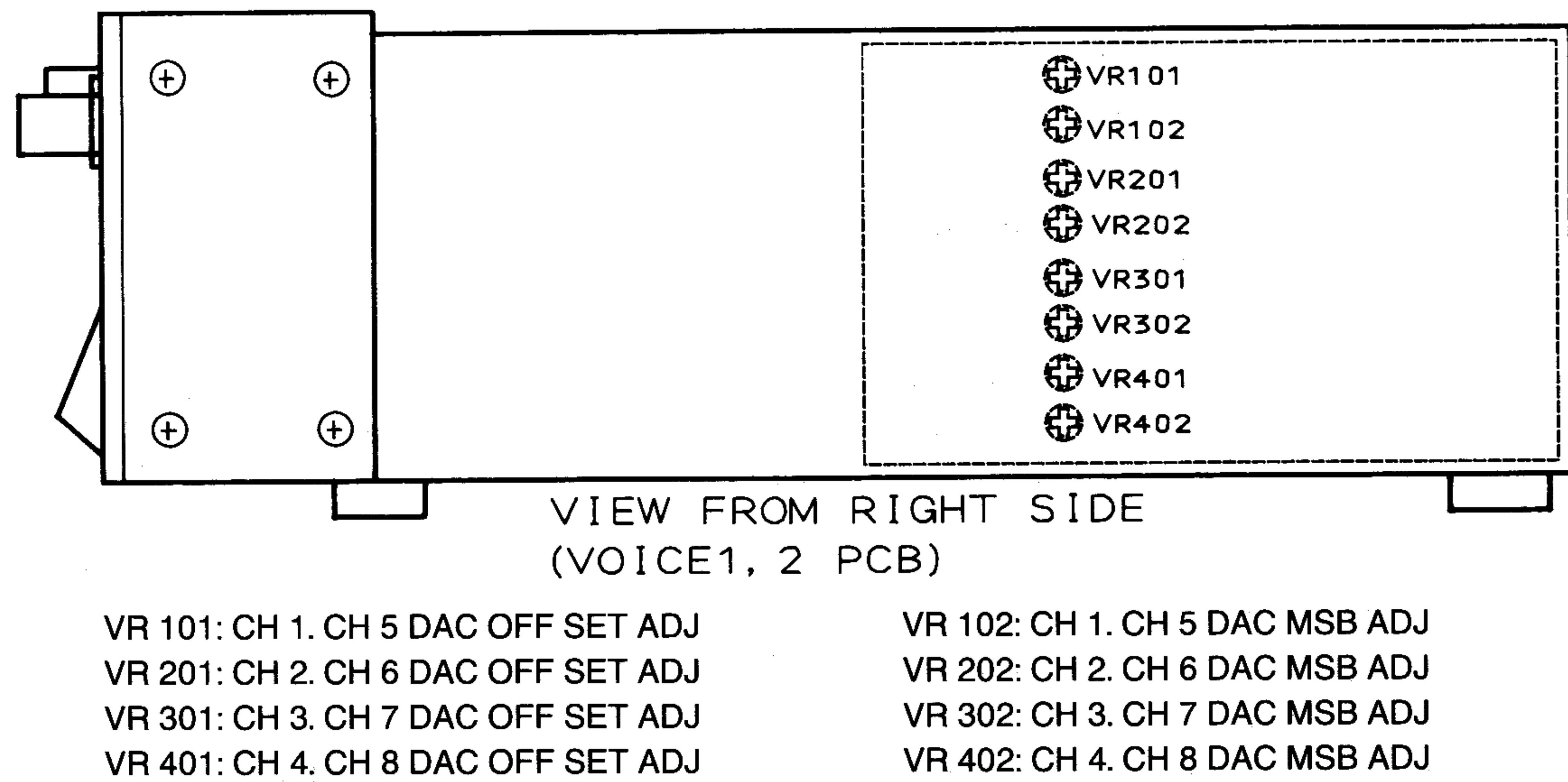


Fig. 3-3 View from right side

3-3. HARDWARE TEST

THE HARDWARE TEST MODE

* This test mode is used for inspecting the unit.

[HOW TO SET THE HARDWARE TEST MODE]

- 1) Turn on the power, press the "MARK/#" and "NAME" buttons at the same time (all red indicators will light), then press the "+/ <" button.
- 2) The following menu (refire to Fig. 3-4) will appear on the LC-display when the model S1100 is set to the HARDWARE TEST mode.

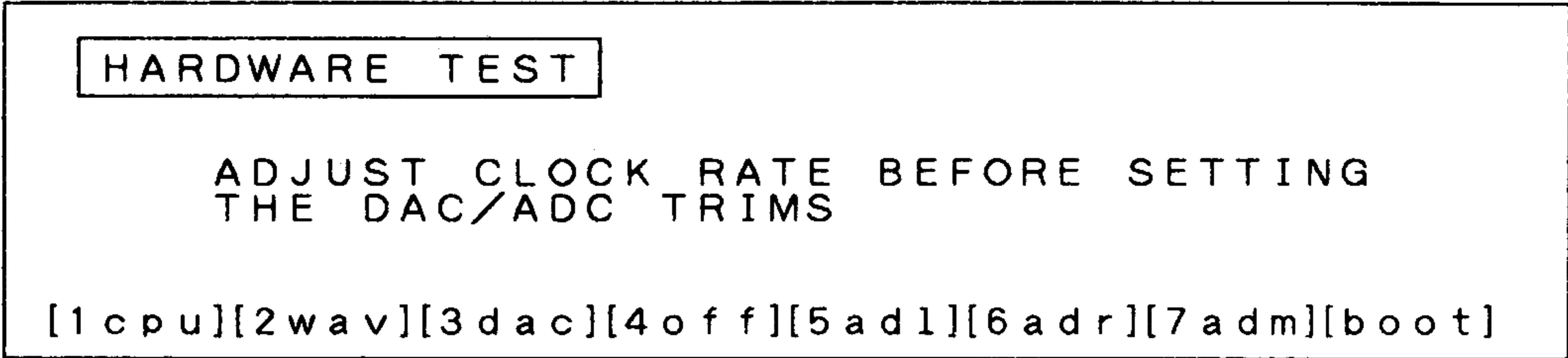


Fig. 3-4

[THE PROGRAM NUMBERS AND PROGRAM NAMES]

[HOW TO RELEASE FROM THE HARDWARE TEST MODE]

S1100 HARDWARE TEST

PROG. No.	CONTENTS
1	CPU MEMORY TEST
2	WAVEFORM MEMORY TEST
3	NOT USED
4	NOT USED
5	LEFT ADC OFF-SET NULL
6	RIGHT ADC OFF-SET NULL
7	NOT USED

※ During the HARDWARE TEST mode, press the "F8/H" button.

* Although displayed,the contents are disregarded. Fig.3-5

3-3-1. CPU MEMORY TEST

- 1) During the HARDWARE TEST mode, press the "F1/A" button. The following display will appear on the LC-display(refer to Fig. 3-6).

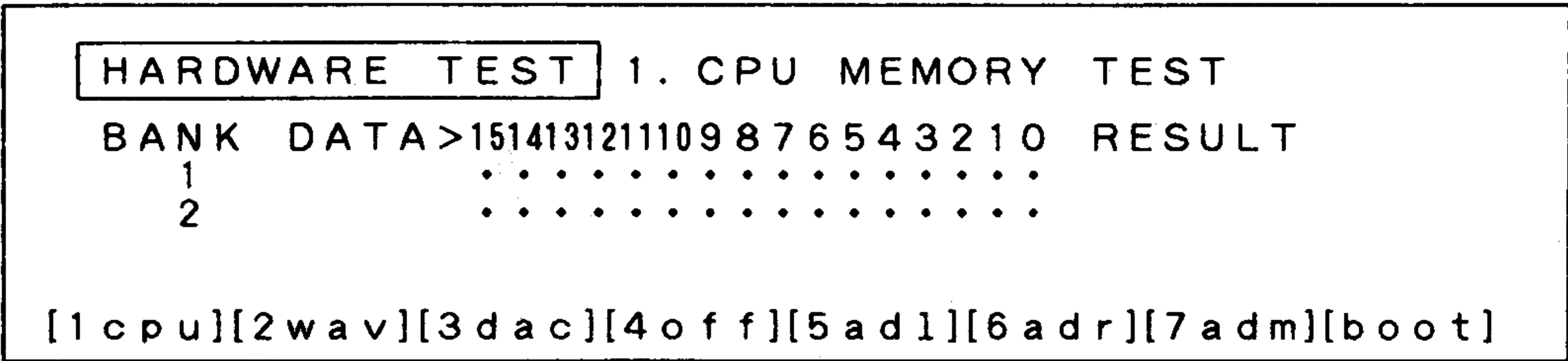


Fig. 3-6

- 2) A few second later, the LC-display will show the message "OK" as in Fig. 3-7. If the message "OK" does not appear on the LC-display, it means a malfunction in the memory circuit. In this case check the memory circuit and LSI.

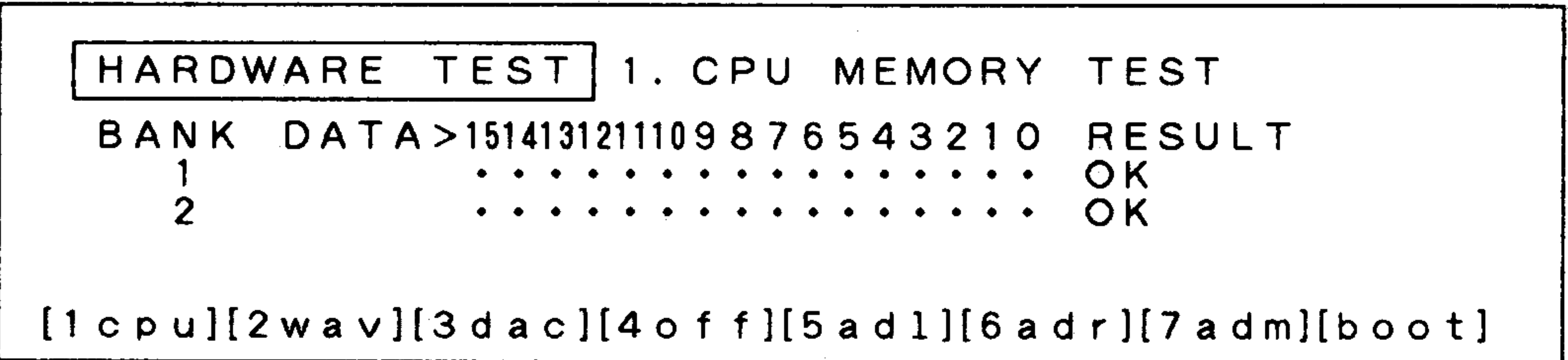


Fig. 3-7

3-3-2. WAVEFORM MEMORY TEST

- 1) During the HARDWARE TEST mode, press the "F2/B" button. The following display will appear on the LC-display(refer to Fig. 3-8).

```

HARDWARE TEST 2. WAVEFORM MEMORY TEST
BANK DATA>1514131211109876543210 RESULT
1          ..... testing 35sec
2          EEEEEEEEEEEEEEEEEEE
3          EEEEEEEEEEEEEEEEEEE
4          EEEEEEEEEEEEEEEEEEE
[1cpu][2wav][3dac][4off][5ad1][6adr][7adm][boot]

```

Fig. 3-8

- 2) After 35 seconds the LC-display will show the message as shown Fig. 3-9. If this message does not appear on the LC-display, it means a malfunction in the waveform memory circuit. Check the waveform memory circuit and LSI.

```

HARDWARE TEST 2. WAVEFORM MEMORY TEST
BANK DATA>1514131211109876543210 RESULT
1          ..... OK
2          EEEEEEEEEEEEEEEEEEE NO CARD?
3          EEEEEEEEEEEEEEEEEEE NO CARD?
4          EEEEEEEEEEEEEEEEEEE NO CARD?
[1cpu][2wav][3dac][4off][5ad1][6adr][7adm][boot]

```

Fig. 3-9

3-3-3. ADC OFF-SET NULL CONFIRMATION

- 1) During the HARDWARE TEST mode, press the "F5/E" button. The following display will appear on the LC-display(refer to Fig. 3-10).

```

HARDWARE TEST 5. LEFT ADC OFFSET NULL
SET MIN. REC. LEVEL. LOW GAIN, SHORT INPUTS
ADJUST LEFT INPUT OFFSET TRIM
TO ZERO THE OFFSET:-          0
                               |
                               +1
[1cpu][2wav][3dac][4off][5ad1][6adr][7adm][boot]

```

Fig. 3-10

- 2) Next, press the "F6/F" button. The following display will appear on the LC-display (refer to Fig. 3-11).

```

HARDWARE TEST 6. RIGHT ADC OFFSET NULL
SET MIN. REC. LEVEL. LOW GAIN, SHORT INPUTS
ADJUST RIGHT INPUT OFFSET TRIM
TO ZERO THE OFFSET:-          0
                               |
                               +1
[1cpu][2wav][3dac][4off][5ad1][6adr][7adm][boot]

```

Fig. 3-11

* Although the display instruct to adjust the OFF-SET TRIM, this is confirmation only. No adjustment is necessary.

3-4. DAC OFF-SET ADJUSTMENT

(PRECAUTIONS BEFORE ADJUSTMENT)

- For connection of test equipment refer to Fig. 3-1.
- Set the MAIN VOLUME to the maximum position.
- Set the REC LEVEL to the maximum position and the REC GAIN switch to the "MID" position.
- Let the unit warm up for at least 5 minutes before proceeding with the following adjustments.
- Be sure to connect the plugs to the L CH and R CH outputs, otherwise L-R mixed output will be obtained from both outputs.

3-4-1. DAC OFF-SET ADJUSTMENT

- 1) After turning the unit on, press the EDIT SAMPLE button. Next use the DATA knob to select "SINE," then press the [REC 2] F3/C button. Connect the audio signal generator to the LEFT input and sample a 1KHz sine wave. Adjust the signal level so that the output is -6dBm. Select "tim: s" with the CURSOR knob, then select "10.00" with the DATA knob. Next press the [ARM] F8/H button to sample a 1KHz tone.
- 2) Press the EDIT PROGRAM button, then press the [KGRP] F2/B button. Select "change number of KEYGROUPS" with the CURSOR knob, then select "12" with the +/-< button. Next select "note on sample COHERENCE" with the CURSOR knob and select "ON" with the DATA knob.
- 3) Press the [SLCT] F1/A button, then press the [OUT] F4/D button. Next select "loudness" with the CURSOR knob and press the ENT/PLAY button. Set the DATA knob so that the output from OUTPUT (L CH, R CH) is + 11dBm. Select "eft out" with the CURSOR knob, and 14% with the DATA knob only when adjusting the send level.
- 4) Press the ENT/PLAY button and adjust the VR101 (LEFT), VR201 (RIGHT) and VR301 (SEND) on the AD PCB so that DISTORTION is less than 1%.
- 5) Select "mono out" with the CURSOR knob. Use the DATA knob to select channels between CH1-CH8 and adjust the appropriate VR (refer to following list) so that the distortion of each channel is less than 1%.

On VOICE 1 PCB:

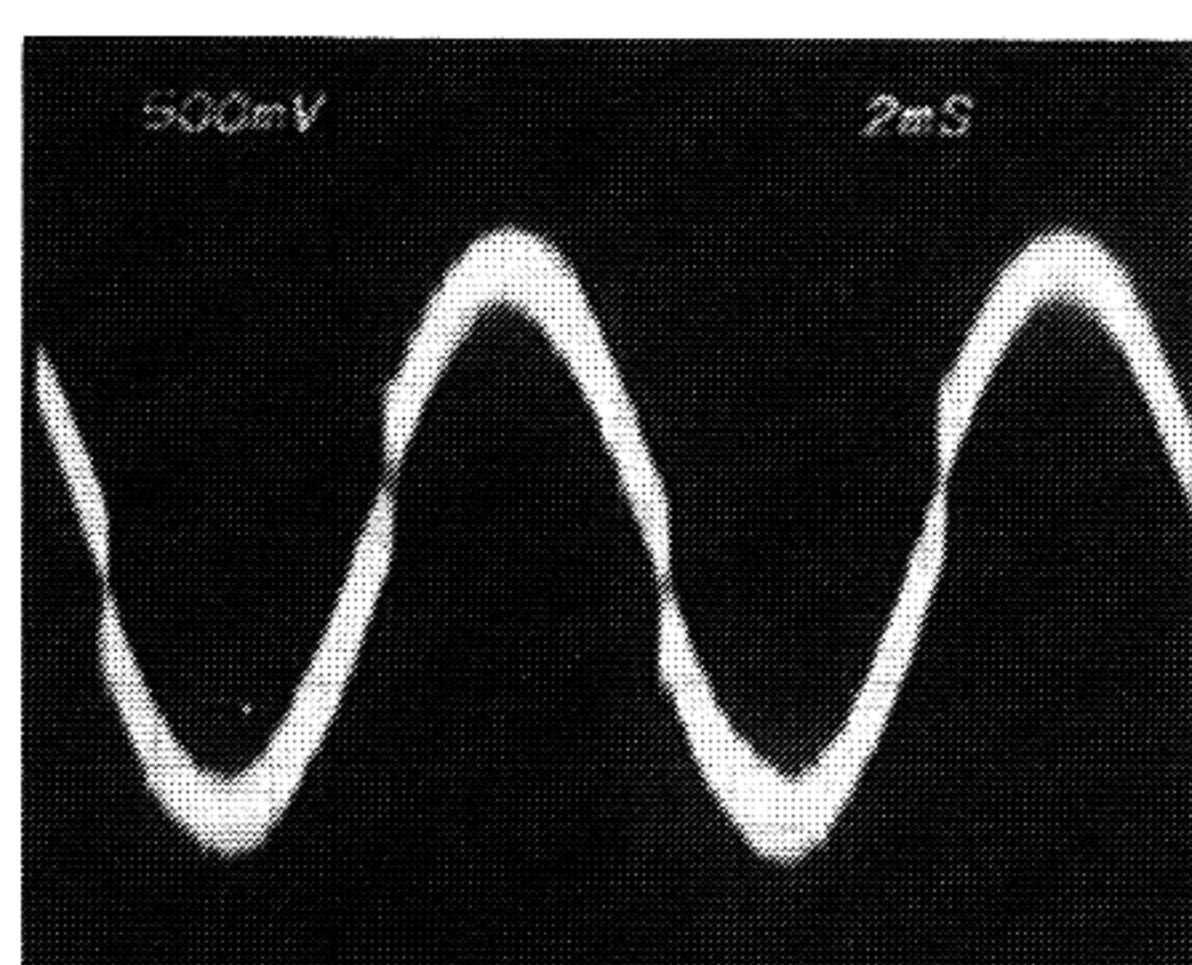
VR101 (CH 1)
VR201 (CH 2)
VR301 (CH 3)
VR401 (CH 4)

On VOICE 2 PCB:

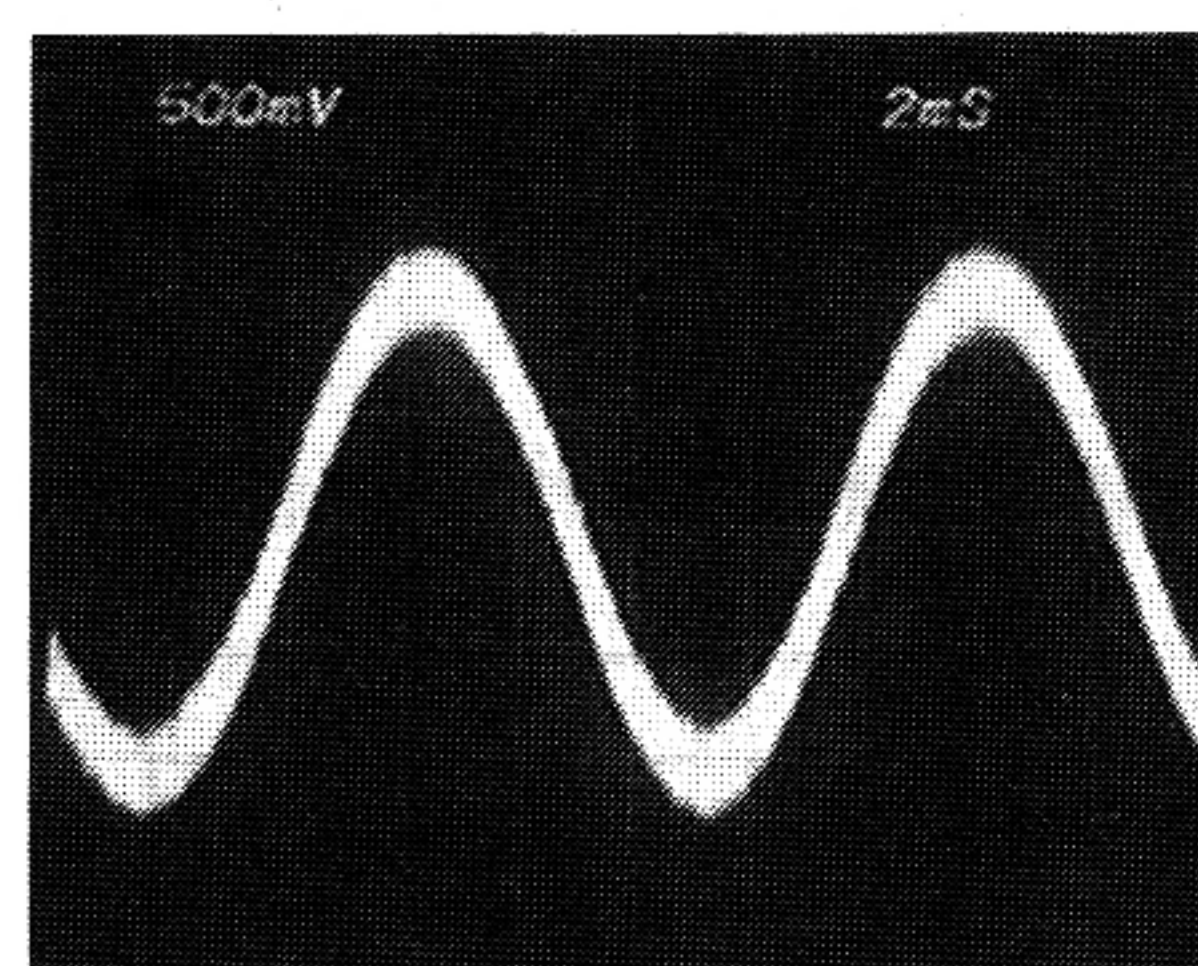
VR101 (CH 5)
VR201 (CH 6)
VR301 (CH 7)
VR401 (CH 8)

3-4-2. DAC MSB ADJUSTMENT

- 1) Press the "MARK/#" and "NAME" buttons at the same time then press the "-/▷" button to set the default values. Press the EDIT SAMPLE button. Next use the DATA knob to select "SINE", then press the [REC 2] F3/C button. Connect the audio signal generator to the LEFT input and sample a 100Hz sine wave. Adjust the signal level so that the output is -20dBm. Select "tim: s" with the CURSOR knob, then select "10.00" with the DATA knob. Next press the [ARM] F8/H button to sample a 100Hz tone.
- 2) Press the EDIT PROGRAM button, then press the [OUT] F4/D button. Select "loudness" with the CURSOR knob and press the ENT/PLAY button. Set the output to -60dBm with the DATA knob.
- 3) Adjust the VR102 (LEFT), VR202 (RIGHT), VR302 (SEND) on AD PCB so that the waveform becomes a continuous sine wave at -60dBm output level.



INCORRECT



CORRECT

Fig. 3-12

- 4) Select "mono out" with the CURSOR knob. Use the DATA knob to select channels between CH1-CH8 and adjust the appropriate VR (refer to following list) so that the waveform of each channel becomes a continuous sine wave at -60dBm output level.

On VOICE 1 PCB:

VR102 (CH1)
VR202 (CH2)
VR302 (CH3)
VR402 (CH4)

On VOICE 2 PCB:

VR102 (CH5)
VR202 (CH6)
VR302 (CH7)
VR402 (CH8)

IV. PARTS LIST

ATTENTION

- 1. When placing an order for parts, be sure to list Part No., Model No. and the description of eachpart. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
- 2. Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.
- 3. Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

- 1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resis-tors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
- 2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly import-ant for service.
- 3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
- 4. How to read the Parts List.

a) Mechanism Block

2. HEAD BASE BLOCK

Ref.No.	Part No.	Description
1	BH-T2023A320A	HEAD BASE BLOCK
2	HP-H2206A010A	HEAD R/P PR4-8FU C
3	ZS-477876	PAN20×03STL CMT
4	ZS-536488	BID20×08STL CMT
5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification
This number corresponds with the individ-
ual parts index number in that figure.

The available PC Board Blocks are listed separately.

b) PC Board

6. MAIN PC BOARD

Ref.No.	Part No.	Description
IC1	EI-324536	IC HD14049BP
IC2	EI-336801	IC MB8841-564M
C1A	EC-338399	C MMY V 223M 250AC [U,E,B,S]
C1B	EC-350949	C MMY V 223M 250DC [J]
C1C	EC-338397	C MMY V 223M 125AC [C,A]
X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination
[A] : AAL (U.S.A) [S] : SAA (Australia)
[B] : BEAB (England) [U] : U/T (Universal Area)
[C] : CSA (Canada)
[E] : CEE (Europe) [V] : VDE (W. Germany)
[J] : JPN (Japan) [Y] : Custom Version
SP (Service Parts) Classification
These reference symbols correspond
with component symbols in the
Schematic Diagrams.

WARNING

⚠ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY
CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

⚠ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE
SÉCURITÉDE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE
FABRICANT.

1.RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

Ref.No.	Part No.	Description
1	BB-393291J	FLOPPY DISK FD-235HF-270
2	*BP-397454J	SW POW PMC50E4XULA 100/200
3	*BT-396271J	TRANS POW S1100(C,A)
4	*BT-396272J	TRANS POW S1100(E,V,B,S)
5	*BT-396269J	TRANS POW S1100(J)
6	ED-359863	D LED LN81CV-(LF) AK ORANGE
7	ED-330319	D SILICON DBA10B 100/1.0A
8	ED-389834J	D SILICON DS135E-FB2 F12 100/1
9	ED-301911	D SILICON H DS448
10	ED-344280	D SILICON H GMA-01-FY2 F05
11	ED-378219	DETECTOR PC 6N137
12	*EF-358974	FUSE BET T 250V 630MA [B]
13	*EF-601964	FUSE SEMKO T 250V 1.60A [E,V,S]
14	*EF-601942	FUSE SEMKO T 250V 630MA [E,V,S]
15	*EF-306949	FUSE TSC A 250V 1.25A [J]
16	*EF-311839	FUSE TSC A 250V 1.60A [J]
17	*EF-309392	FUSE TSC 125V 1.25A [A,C]
18	*EF-308847	FUSE TSC 125V 1.60A [A,C]
19	EH-388603J	COMP R EXB-RA13 221J
20	EH-388604J	COMP R EXB-RA13 331J
21	EH-397281J	FILTER EMI DSS306-54B 101M CUT
22	EH-397365J	FILTER EMI DSS306-55B 221M CUT
23	EH-397279J	FILTER EMI DSS310-55B 101M CUT
24	EH-396514J	FILTER LC LP 258BLV-5571N
25	EI-396532J	IC ADR6021
26	EI-386308J	IC AK5326
27	EI-397343J	IC AM27C256-150DC
28	EI-389142J	IC CD74AC541E
29	EI-396535J	IC CD74AC573E
30	EI-388792J	IC CXD1211P
31	EI-386343J	IC DSP56001FE-20
32	EI-384770J	IC FLR-L6009
33	EI-396503J	IC HD63B03RP
34	EI-389061J	IC HD74AC04P
35	EI-396537J	IC HD74AC08P
36	EI-396536J	IC HD74AC138P
37	EI-386293J	IC HD74AC139P
38	EI-386292J	IC HD74AC153P
39	EI-386290J	IC HD74AC157P
40	EI-389050J	IC HD74AC32P
41	EI-388711J	IC HD74HC00P
42	EI-387934J	IC HD74HC04P
43	EI-386303J	IC HD74HC08P
44	EI-393703J	IC HD74HC10P
45	EI-386289J	IC HD74HC138P
46	EI-393701J	IC HD74HC139P
47	EI-397093J	IC HD74HC157P
48	EI-396513J	IC HD74HC165P
49	EI-396510J	IC HD74HC173P
50	EI-393699J	IC HD74HC195P
51	EI-393697J	IC HD74HC259P
52	EI-393700J	IC HD74HC279P
53	EI-388709J	IC HD74HC32P
54	EI-393698J	IC HD74HC365P
55	EI-396512J	IC HD74HC368P
56	EI-396504J	IC HD74HC375P
57	EI-386295J	IC HD74HC541P
58	EI-388567J	IC HD74HC573P
59	EI-393702J	IC HD74HC595P
60	EI-387937J	IC HD74HC74P
61	EI-386694J	IC HM511000P-10S
62	EI-360954	IC IR9311
63	EI-384771J	IC ITP-L6009
64	EI-379461	IC LC3517ASL-15
65	EI-378276	IC LC7981
66	EI-396550J	IC LM2940CT-12
67	EI-396559J	IC LM7912CT

Ref.No.	Part No.	Description
68	EI-386331J	IC MBM27C1001-20Z-G [BLANK ROM]
69	EI-396533J	IC MB81C4256-10PSZ-G
70	EI-379657J	IC MB89255A-P-G
71	EI-388602J	IC MB89352-P-G
72	EI-356160	IC M5216P
73	EI-360043	IC M5220P
74	EI-336995	IC NJM78L05A
75	EI-396515J	IC NJM78L06A
76	EI-360772	IC NJM79L05A
77	EI-396517J	IC NJM79L06A
78	EI-400855J	IC NJM79M05FA
79	EI-368612	IC PCM56P
80	EI-397345J	IC PEEL18CV8PC-25 L6021 B
81	EI-397344J	IC PEEL18CV8PC-25 L6021 C
82	EI-396539J	IC PEEL18CV8PC-25S L6021A
83	EI-364253	IC PST520D-2
84	EI-402127J	IC SCOE10-512 9753-004 LSB
85	EI-402128J	IC SCOE11-512 9753-005 MSB
86	EI-324691	IC TC4075BP
87	EI-400750J	IC TC55257BSPL-85
88	EI-401064J	IC TC74AC393P
89	EI-384806J	IC TC74HC4053AP
90	EI-372890J1	IC TC74HC574AP
91	EI-384769J	IC TE7730
92	EI-379593	IC UPD5200C
93	EI-386350J	IC UPD70216GF-10-3B9
94	EI-396531J	IC UPD72068GF-3B9
95	EI-397589J	IC.MBM27C1001-20Z-G V1.01-L
96	EI-397590J	IC.MBM27C1001-20Z-G V1.01-M
97	EI-396541J	OSC X'TAL HC-49/U 32.000000MHZ
98	EI-397320J	OSC X'TAL HC-49/US20.000000MHZ
99	EI-384779J	OSC X'TAL TD308C 33.8688MHZ
100	EL-728382J	EL BACK LIGHT
101	EM-382317J	IND LCD EDM-MPJ2COW
102	EO-390188J	TRANS PULSE CIT0723DIP-340B
103	EQ-348929	RELAY SIG G5A-237P 2TR 12V
104	ER-325114	R CB H S10 FS RDS 1/4W 330J
105	ER-382385J	R CB H S12 FS RDS 1/2W 100J
106	ER-367512	R CB H S12 FS RDS 1/2W 121J
107	ER-397529J	R FUSE H S12 ERQ12AJ 1/2W 4R7J
108	ES-396542J	SW DIP SLIDE SSGM14 1-4-2N
109	ES-365943	SW EWT-XDFK2550B
110	*ES-373020	SW PUSH ESB-8283V [J,A,C] [POWER SW]
111	*ES-384812J	SW PUSH SDDSA3 02-1 [E,V,B,S] [POWER SW]
112	ES-384811J	SW SLIDE ESD-32243 [REC GAIN SW]
113	ES-349474	SW TACT SKHHAM004A [SELECT PROG/1]
114	ET-397160J	TR 2SC3330 R,S,T,U,V
115	EV-384808J	VR ROTARY EWK-E9A027A14 A103X2 [REC VR]

2. P.C BOARD BLOCK

Ref.No.	Part No.	Description
1	BA-L6021A030A	PC CPU BLK S1100
2	BA-L6021A040A	PC AD BLK S1100
3	BA-L6021A050A	PC VOICE1 BLK S1100
4	BA-L6021A060A	PC VOICE2 BLK S1100
5	BA-L6021A070A	PC DSP BLK S1100
6	BA-L6021A080A	PC PANEL BLK S1100
7	BA-L6021A100A	PC SMPTE BLK S1100
8	BA-L6021A110A	PC SCSI BLK S1100
9A	BA-L6021A020A	PC(#) FILT BLK S1100(J)
9B	BA-L6021A020B	PC(#) FILT BLK S1100(E)
10	BA-L6009A020A	PC MEMORY BLK S1000

PC (#) FILT BLK CONSISTS OF FOLLOWING P.C BOARD.

- POWER SUPPLY P.C BOARD
- REC GAIN P.C BOARD
- FILTER P.C BOARD
- DISPLAY VR P.C BOARD
- INPUT JACK P.C BOARD
- POWER SW P.C BOARD
- VR P.C BOARD

3. CPU P.C BOARD

Ref.No.	Part No.	Description
D8	ED-344280	D SILICON H GMA-01-FY2 F05
D9	ED-344280	D SILICON H GMA-01-FY2 F05
FL1	EH-397279J	FILTER EMI DSS310-55B 101M CUT
FL2	EH-397279J	FILTER EMI DSS310-55B 101M CUT
FL3	EH-397279J	FILTER EMI DSS310-55B 101M CUT
FL4	EH-397279J	FILTER EMI DSS310-55B 101M CUT
FL5	EH-397365J	FILTER EMI DSS306-55B 221M CUT
FL6	EH-397365J	FILTER EMI DSS306-55B 221M CUT
FL7	EH-397281J	FILTER EMI DSS306-54B 101M CUT
FL14	EH-397279J	FILTER EMI DSS310-55B 101M CUT
IB1	EH-397364J	COMP C EXF-P12F101M
IC1	EI-386350J	IC UPD70216GF-10-3B9
IC2	EI-384769J	IC TE7730
IC3	EI-396531J	IC UPD72068GF-3B9
IC4	EI-384771J	IC ITP-L6009
IC5	EI-384770J	IC FLR-L6009
IC6	EI-396532J	IC ADR6021
IC7	EI-378276	IC LC7981
IC8	EI-388792J	IC CXD1211P
IC9	EI-379657J	IC MB89255A-P-G
IC10	EI-397589J	IC.MBM27C1001-20Z-G V1.01-L
IC10A	EI-386331J	IC MBM27C1001-20Z-G [BLANK ROM]
IC11	EI-397590J	IC.MBM27C1001-20Z-G V1.01-M
IC11A	EI-386331J	IC MBM27C1001-20Z-G [BLANK ROM]
IC12	EI-402127J	IC SCOE10-512 9753-004 LSB
IC13	EI-402128J	IC SCOE11-512 9753-005 MSB
IC14	EI-379461	IC LC3517ASL-15
IC15	EI-364253	IC PST520D-2
IC18	EI-396533J	IC MB81C4256-10PSZ-G
IC19	EI-396533J	IC MB81C4256-10PSZ-G
IC20	EI-396533J	IC MB81C4256-10PSZ-G
IC21	EI-396533J	IC MB81C4256-10PSZ-G
IC22	EI-386290J	IC HD74AC157P
IC23	EI-386290J	IC HD74AC157P
IC24	EI-386292J	IC HD74AC153P
IC25	EI-387937J	IC HD74HC74P
IC26	EI-393699J	IC HD74HC195P
IC27	EI-401064J	IC TC74AC393P
IC28	EI-393698J	IC HD74HC365P
IC29	EI-393697J	IC HD74HC259P
IC30	EI-386289J	IC HD74HC138P
IC31	EI-397093J	IC HD74HC157P
IC32	EI-387937J	IC HD74HC74P
IC33	EI-393702J	IC HD74HC595P
IC34	EI-393702J	IC HD74HC595P
IC35	EI-393698J	IC HD74HC365P
IC36	EI-393700J	IC HD74HC279P
IC37	EI-393701J	IC HD74HC139P
IC38	EI-396535J	IC CD74AC573E
IC39	EI-388567J	IC HD74HC573P
IC40	EI-388567J	IC HD74HC573P
IC41	EI-396536J	IC HD74AC138P
IC42	EI-389142J	IC CD74AC541E
IC43	EI-389142J	IC CD74AC541E
IC44	EI-393703J	IC HD74HC10P
IC45	EI-388709J	IC HD74HC32P
IC46	EI-388709J	IC HD74HC32P
IC47	EI-388711J	IC HD74HC00P
IC48	EI-386303J	IC HD74HC08P
IC49	EI-387934J	IC HD74HC04P
IC50	EI-389061J	IC HD74AC04P
IC51	EI-396537J	IC HD74AC08P
IC52	EI-389050J	IC HD74AC32P
IC53	EI-389061J	IC HD74AC04P
IC54	EI-396539J	IC PEEL18CV8PC-25S L6021A
J101	EJ-364256	DIN J M1704 3P [MIDI]
P100	EJ-384780J	SOCKET 64S-6033-0431-2 64P
P101	EJ-384780J	SOCKET 64S-6033-0431-2 64P
P102	EJ-384780J	SOCKET 64S-6033-0431-2 64P
P103	EJ-384780J	SOCKET 64S-6033-0431-2 64P
P104	EJ-384780J	SOCKET 64S-6033-0431-2 64P
P105	EJ-384780J	SOCKET 64S-6033-0431-2 64P
P106	EJ-384780J	SOCKET 64S-6033-0431-2 64P
P107	EJ-384780J	SOCKET 64S-6033-0431-2 64P
P108	EJ-384780J	SOCKET 64S-6033-0431-2 64P
P113	EJ-365834	PLUG RK-H341TD-0190 34P
P118	EJ-365891	PLUG RA-H261TD-0190 26P

Ref.No.	Part No.	Description
P120	EJ-365834	PLUG RK-H341TD-0190 34P
P121	EJ-365891	PLUG RA-H261TD-0190 26P
P122	EJ-365891	PLUG RA-H261TD-0190 26P
PH1	ED-378219	DETECTOR PC 6N137
R37	ER-382385J	R CB H S12 FS RDS 1/2W 100J
R38	ER-367512	R CB H S12 FS RDS 1/2W 121J
R39	ER-325114	R CB H S10 FS RDS 1/4W 330J
SW1	ES-396542J	SW DIP SLIDE SSGM14 1-4-2N
T1	EO-390188J	TRANS PULSE CIT0723DIP-340B
TR1	ET-397160J	TR 2SC3330 R,S,T,U,V
TR2	ET-397160J	TR 2SC3330 R,S,T,U,V
X1	EI-397320J	OSC X'TAL HC-49/US20.000000MHZ
X2	EI-396541J	OSC X'TAL HC-49/U 32.000000MHZ
X3	EI-384779J	OSC X'TAL TD308C 33.8688MHZ

4. AD P.C BOARD

Ref.No.	Part No.	Description
D1	ED-301911	D SILICON H DS448
D2	ED-301911	D SILICON H DS448
D3	ED-301911	D SILICON H DS448
D4	ED-301911	D SILICON H DS448
D401	ED-301911	D SILICON H DS448
FL3	EH-397365J	FILTER EMI DSS306-55B 221M CUT
FL4	EH-397365J	FILTER EMI DSS306-55B 221M CUT
FL101	EH-396514J	FILTER LC LP 258BLV-5571N
FL201	EH-396514J	FILTER LC LP 258BLV-5571N
FL301	EH-396514J	FILTER LC LP 258BLV-5571N
IC1	EI-360043	IC M5220P
IC2	EI-360043	IC M5220P
IC3	EI-360043	IC M5220P
IC4	EI-360043	IC M5220P
IC5	EI-360043	IC M5220P
IC6	EI-386308J	IC AK5326
IC7	EI-336995	IC NJM78L05A
IC8	EI-360772	IC NJM79L05A
IC9	EI-336995	IC NJM78L05A
IC10	EI-336995	IC NJM78L05A
IC11	EI-336995	IC NJM78L05A
IC12	EI-396515J	IC NJM78L06A
IC14	EI-360772	IC NJM79L05A
IC15	EI-396517J	IC NJM79L06A
IC23	EI-360772	IC NJM79L05A
IC101	EI-368612	IC PCM56P
IC102	EI-384806J	IC TC74HC4053AP
IC103	EI-360043	IC M5220P
IC104	EI-360043	IC M5220P
IC105	EI-360043	IC M5220P
IC201	EI-368612	IC PCM56P
IC202	EI-384806J	IC TC74HC4053AP
IC205	EI-360043	IC M5220P
IC301	EI-368612	IC PCM56P
IC302	EI-384806J	IC TC74HC4053AP
IC303	EI-360043	IC M5220P
IC401	EI-356160	IC M5216P
IC402	EI-379593	IC UPD5200C
J101	EJ-364322	PHONE J 2P HLJ0520-110 W/NUT
J201	EJ-364322	PHONE J 2P HLJ0520-110 W/NUT
J301	EJ-364322	PHONE J 2P HLJ0520-110 W/NUT
J401	EJ-353031	PHONE J 3P HLJ0520-010
J501	EJ-379523	PHONE J 3P HLJ4305-3080 S.NUT
R407	ER-321619	R OMF H S15 FS 1W 101J
R408	ER-321619	R OMF H S15 FS 1W 101J
RL401	EQ-348929	RELAY SIG G5A-237P 2TR 12V
TR401	ET-397160J	TR 2SC3330 R,S,T,U,V
VR101	EV-379061	R S-FIX H PK50 0.50W 104
VR102	EV-379061	R S-FIX H PK50 0.50W 104
VR201	EV-379061	R S-FIX H PK50 0.50W 104
VR202	EV-379061	R S-FIX H PK50 0.50W 104
VR301	EV-379061	R S-FIX H PK50 0.50W 104
VR302	EV-379061	R S-FIX H PK50 0.50W 104

5. VOICE (1),(2) P.C BOARD

Ref.No.	Part No.	Description
FL101	EH-396514J	FILTER LC LP 258BLV-5571N
FL201	EH-396514J	FILTER LC LP 258BLV-5571N
FL301	EH-396514J	FILTER LC LP 258BLV-5571N
FL401	EH-396514J	FILTER LC LP 258BLV-5571N
IC1	EI-336995	IC NJM78L05A
IC2	EI-400855J	IC NJM79M05FA
IC3	EI-336995	IC NJM78L05A
IC4	EI-400855J	IC NJM79M05FA
IC5	EI-396515J	IC NJM78L06A
IC6	EI-396517J	IC NJM79L06A
IC101	EI-368612	IC PCM56P
IC102	EI-384806J	IC TC74HC4053AP
IC103	EI-360043	IC M5220P
IC104	EI-360043	IC M5220P
IC201	EI-368612	IC PCM56P
IC202	EI-384806J	IC TC74HC4053AP
IC301	EI-368612	IC PCM56P
IC302	EI-384806J	IC TC74HC4053AP
IC303	EI-360043	IC M5220P
IC304	EI-360043	IC M5220P
IC401	EI-368612	IC PCM56P
IC402	EI-384806J	IC TC74HC4053AP
J101	EJ-364322	PHONE J 2P HLJ0520-110 W/NUT
J201	EJ-364322	PHONE J 2P HLJ0520-110 W/NUT
J301	EJ-364322	PHONE J 2P HLJ0520-110 W/NUT
J401	EJ-364322	PHONE J 2P HLJ0520-110 W/NUT
VR101	EV-379061	R S-FIX H PK50 0.50W 104
VR102	EV-379061	R S-FIX H PK50 0.50W 104
VR201	EV-379061	R S-FIX H PK50 0.50W 104
VR202	EV-379061	R S-FIX H PK50 0.50W 104
VR301	EV-379061	R S-FIX H PK50 0.50W 104
VR302	EV-379061	R S-FIX H PK50 0.50W 104
VR401	EV-379061	R S-FIX H PK50 0.50W 104
VR402	EV-379061	R S-FIX H PK50 0.50W 104

6. DSP P.C BOARD

Ref.No.	Part No.	Description
IC1	EI-386343J	IC DSP56001FE-20
IC2	EI-400750J	IC TC55257BSPL-85
IC3	EI-400750J	IC TC55257BSPL-85
IC4	EI-400750J	IC TC55257BSPL-85
IC5	EI-372890J1	IC TC74HC574AP
IC6	EI-388567J	IC HD74HC573P
IC7	EI-372890J1	IC TC74HC574AP
IC8	EI-386295J	IC HD74HC541P
IC9	EI-400750J	IC TC55257BSPL-85
IC10	EI-400750J	IC TC55257BSPL-85
IC11	EI-400750J	IC TC55257BSPL-85
IC12	EI-396510J	IC HD74HC173P
IC13	EI-396504J	IC HD74HC375P
IC14	EI-396512J	IC HD74HC368P
IC15	EI-393702J	IC HD74HC595P
IC16	EI-393702J	IC HD74HC595P
IC17	EI-396513J	IC HD74HC165P
IC18	EI-396513J	IC HD74HC165P
IC19	EI-396513J	IC HD74HC165P
IC20	EI-396513J	IC HD74HC165P
IC21	EI-386293J	IC HD74AC139P
IC22	EI-397345J	IC PEEL18CV8PC-25 L6021 B
IC23	EI-397344J	IC PEEL18CV8PC-25 L6021 C
J1	EJ-384790J	PLUG 64P-6033-0431-0 64P
X1	EI-397320J	OSC X'TAL HC-49/US20.000000MHZ

7. PANEL P.C BOARD

Ref.No.	Part No.	Description
D1	ED-359863	D LED LN81CV-(LF) AK ORANGE
D2	ED-359863	D LED LN81CV-(LF) AK ORANGE
D3	ED-359863	D LED LN81CV-(LF) AK ORANGE
D4	ED-359863	D LED LN81CV-(LF) AK ORANGE
D5	ED-359863	D LED LN81CV-(LF) AK ORANGE
D6	ED-359863	D LED LN81CV-(LF) AK ORANGE
D7	ED-359863	D LED LN81CV-(LF) AK ORANGE
D8	ED-359863	D LED LN81CV-(LF) AK ORANGE
SR1	EH-384815J	COMP R RKC1/8B12 103J
SR2	EH-384817J	COMP R RKC1/8B8 102J
SW1	ES-349474	SW TACT SKHHAM004A [SELECT PROG/1]
SW2	ES-349474	SW TACT SKHHAM004A [F1/A]
SW3	ES-349474	SW TACT SKHHAM004A [3/Y]
SW4	ES-349474	SW TACT SKHHAM004A [-/]
SW5	ES-349474	SW TACT SKHHAM004A [EDIT SAMPLE/J]
SW6	ES-349474	SW TACT SKHHAM004A [F2/B]
SW7	ES-349474	SW TACT SKHHAM004A [NAME]
SW8	ES-349474	SW TACT SKHHAM004A [ENT/PLAY]
SW9	ES-349474	SW TACT SKHHAM004A [EDIT/PROG/K]
SW10	ES-349474	SW TACT SKHHAM004A [F3/C]
SW11	ES-349474	SW TACT SKHHAM004A [7/Q]
SW12	ES-349474	SW TACT SKHHAM004A [4/T]
SW13	ES-349474	SW TACT SKHHAM004A [MIDI/L]
SW14	ES-349474	SW TACT SKHHAM004A [F4/D]
SW15	ES-349474	SW TACT SKHHAM004A [8/R]
SW16	ES-349474	SW TACT SKHHAM004A [5/U]
SW17	ES-349474	SW TACT SKHHAM004A [DISK/M]
SW18	ES-349474	SW TACT SKHHAM004A [F5/E]
SW19	ES-349474	SW TACT SKHHAM004A [9/S]
SW20	ES-349474	SW TACT SKHHAM004A [6/V]
SW21	ES-349474	SW TACT SKHHAM004A [MASTER TUNE/N]
SW22	ES-349474	SW TACT SKHHAM004A [F6/F]
SW23	ES-349474	SW TACT SKHHAM004A [MARK/-]
SW24	ES-349474	SW TACT SKHHAM004A [JUMP/»]
SW25	ES-349474	SW TACT SKHHAM004A [DRUM/O]
SW26	ES-349474	SW TACT SKHHAM004A [F7/G]
SW27	ES-349474	SW TACT SKHHAM004A [2/X]
SW28	ES-349474	SW TACT SKHHAM004A [+ /]
SW29	ES-349474	SW TACT SKHHAM004A [UTILITY/P]
SW30	ES-349474	SW TACT SKHHAM004A [F8/H]
SW31	ES-349474	SW TACT SKHHAM004A [1/W]
SW32	ES-349474	SW TACT SKHHAM004A [0/Z]

8. SMPTE P.C BOARD

Ref.No.	Part No.	Description
FL1	EH-397365J	FILTER EMI DSS306-55B 221M CUT
FL2	EH-397365J	FILTER EMI DSS306-55B 221M CUT
FL3	EH-397365J	FILTER EMI DSS306-55B 221M CUT
FL4	EH-397365J	FILTER EMI DSS306-55B 221M CUT
IC1	EI-397343J	IC AM27C256-150DC
IC2	EI-360954	IC IR9311
IC3	EI-388711J	IC HD74HC00P
IC4	EI-396503J	IC HD63B03RP
IC5	EI-386289J	IC HD74HC138P
IC6	EI-379657J	IC MB89255A-P-G
IC7	EI-396504J	IC HD74HC375P
IC8	EI-324691	IC TC4075BP
J1	EJ-390189J	PHONE J 3P HLJ0544-010 W/NUT [SMPTE IN]
J2	EJ-390189J	PHONE J 3P HLJ0544-010 W/NUT [SMPTE OUT]
P1	EJ-384790J	PLUG 64P-6033-0431-0 64P

9. SCSI P.C BOARD

Ref.No.	Part No.	Description
D1	ED-389834J	D SILICON DS135E-FB2 F12 100/1
D2	ED-301911	D SILICON H DS448
FR1	EH-388603J	COMP R EXB-RA13 221J
FR2	EH-388603J	COMP R EXB-RA13 221J
FR3	EH-388604J	COMP R EXB-RA13 331J
FR4	EH-388604J	COMP R EXB-RA13 331J
IC1	EI-388602J	IC MB89352-P-G
J1	EJ-368452	PLUG 57LE-40500-7700(D12) [SCSI]
P1	EJ-384790J	PLUG 64P-6033-0431-0 64P
P2	EJ-397342J	PLUG PS-50PE-D4LT1-B1

10. POWER SUPPLY P.C BOARD

Ref.No.	Part No.	Description
D1	ED-330319	D SILICON DBA10B 100/1.0A
D2	ED-389834J	D SILICON DS135E-FB2 F12 100/1
D3	ED-389834J	D SILICON DS135E-FB2 F12 100/1
D4	ED-389834J	D SILICON DS135E-FB2 F12 100/1
D5	ED-389834J	D SILICON DS135E-FB2 F12 100/1
D6	ED-344280	D SILICON H GMA-01-FY2 F05
D7	ED-344280	D SILICON H GMA-01-FY2 F05
F2A	*EF-311839	FUSE TSC A 250V 1.60A [J]
F2B	*EF-308847	FUSE TSC 125V 1.60A [A,C]
F2C	*EF-601964	FUSE SEMKO T 250V 1.60A [E,V,S]
F2D	*EF-601964	FUSE SEMKO T 250V 1.60A [B]
F3A	*EF-311839	FUSE TSC A 250V 1.60A [J]
F3B	*EF-308847	FUSE TSC 125V 1.60A [A,C]
F3C	*EF-601964	FUSE SEMKO T 250V 1.60A [E,V,S]
F3D	*EF-601964	FUSE SEMKO T 250V 1.60A [B]
FL1	EH-397365J	FILTER EMI DSS306-55B 221M CUT
FL2	EH-397365J	FILTER EMI DSS306-55B 221M CUT
IC16	EI-396550J	IC LM2940CT-12
IC17	EI-396559J	IC LM7912CT
J3	EJ-386340J	SOCKET RECEPTACLE XLB3-32PCVM1 [DIGITAL OUT]

11. REC GAIN SW P.C BOARD

Ref.No.	Part No.	Description
SW3	ES-384811J	SW SLIDE ESD-32243 [REC GAIN SW]

12. FILTER P.C BOARD

Ref.No.	Part No.	Description
F1A	*EF-306949	FUSE TSC A 250V 1.25A [J]
F1B	*EF-309392	FUSE TSC 125V 1.25A [A,C]
F1C	*EF-601942	FUSE SEMKO T 250V 630MA [E,V,S]
F1D	*EF-358974	FUSE BET T 250V 630MA [B]
L1	*EO-389172J	COIL LF LF-4N 502

13. DISPLAY VR P.C BOARD

Ref.No.	Part No.	Description
VR3	EV-384810J	VR ROTARY EVH-CCA363B53 B502 [CONTRAST VR]

14. INPUT JACK P.C BOARD

Ref.No.	Part No.	Description
J1	EJ-379523	PHONE J 3P HLJ4305-3080 S.NUT [REC IN L]
J2	EJ-379523	PHONE J 3P HLJ4305-3080 S.NUT [REC IN R]

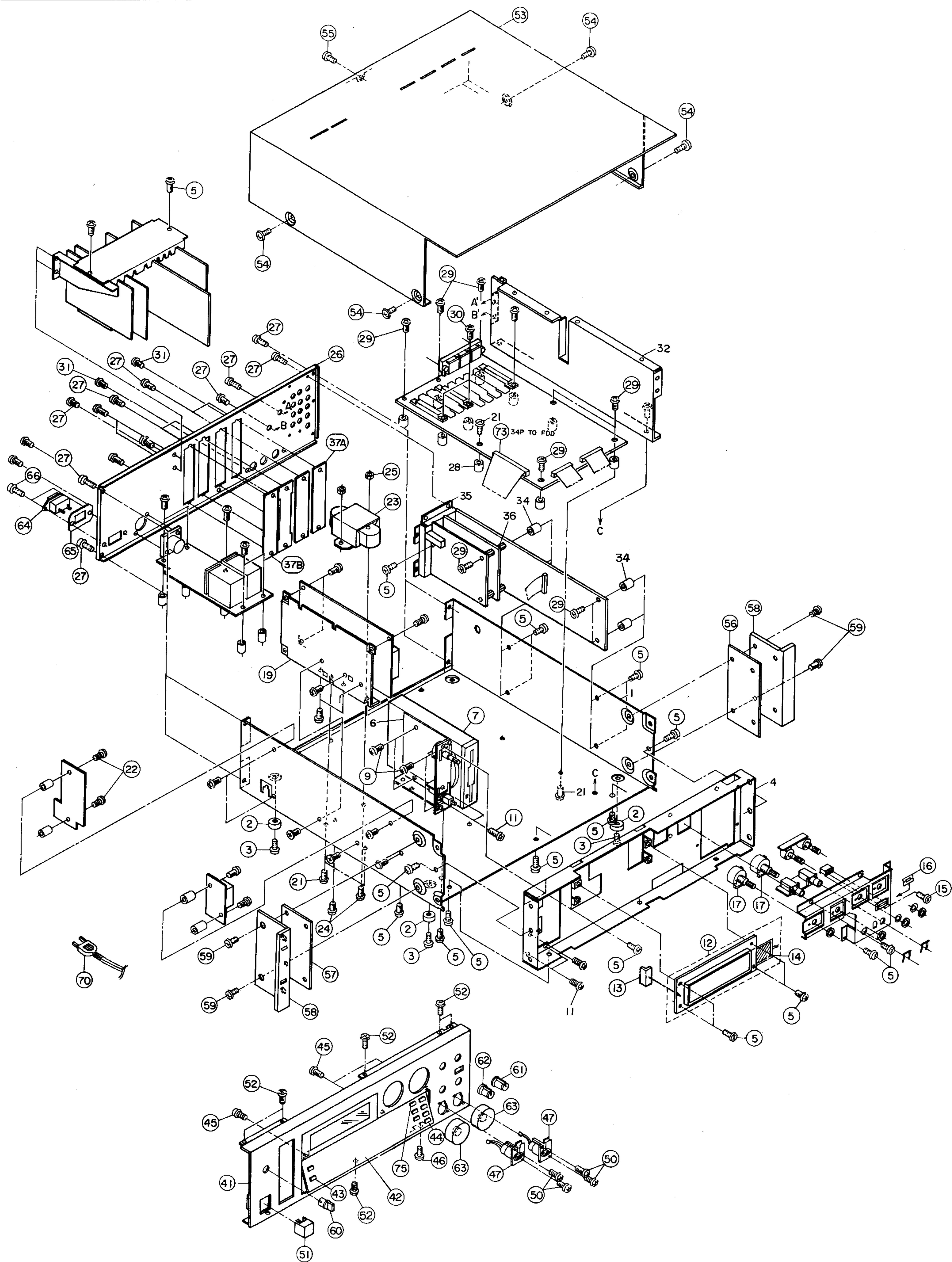
15. POWER SW P.C BOARD

Ref.No.	Part No.	Description
C1	*EC-361942	C CE V DNS103ZV V 103Z 400AC [E,V,B,S]
C2	*EC-361942	C CE V DNS103ZV V 103Z 400AC [E,V,B,S]
C3	*EC-361942	C CE V DNS103ZV V 103Z 400AC [J,A,C]
SW1	*ES-384812J	SW PUSH SDDSA3 02-1 [E,V,B,S] [POWER SW]
SW2	*ES-373020	SW PUSH ESB-8283V [J,A,C] [POWER SW]

16. VR P.C BOARD

Ref.No.	Part No.	Description
VR1	EV-384808J	VR ROTARY EWK-E9A027A14 A103X2 [REC VR]
VR2	EV-384808J	VR ROTARY EWK-E9A027A14 A103X2 [OUT PUT VR]

FINAL ASSEMBLY



PARTS LIST

17. MEMORY P.C BOARD

Ref.No.	Part No.	Description
IC1	EI-386694J	IC HM511000P-10S
IC2	EI-386694J	IC HM511000P-10S
IC3	EI-386694J	IC HM511000P-10S
IC4	EI-386694J	IC HM511000P-10S
IC5	EI-386694J	IC HM511000P-10S
IC6	EI-386694J	IC HM511000P-10S
IC7	EI-386694J	IC HM511000P-10S
IC8	EI-386694J	IC HM511000P-10S
IC9	EI-386694J	IC HM511000P-10S
IC10	EI-386694J	IC HM511000P-10S
IC11	EI-386694J	IC HM511000P-10S
IC12	EI-386694J	IC HM511000P-10S
IC13	EI-386694J	IC HM511000P-10S
IC14	EI-386694J	IC HM511000P-10S
IC15	EI-386694J	IC HM511000P-10S
IC16	EI-386694J	IC HM511000P-10S
IC17	EI-389142J	IC CD74AC541E
IC18	EI-389142J	IC CD74AC541E
IC19	EI-386295J	IC HD74HC541P
IC20	EI-386295J	IC HD74HC541P

18. INVERTOR P.C BOARD

Ref.No.	Part No.	Description
FR2	ER-397529J	R FUSE H S12 ERQ12AJ 1/2W 4R7J
T1	BT-390145J	TRANS PULSE NI05-05-5

19. FINAL ASSEMBLY

Ref.No.	Part No.	Description
2	SA-349332	FOOT
3	ZS-344754	ST PAN30X06STL CMT C080
5	ZS-320906	ST BR30X06STL CMT
7	BB-393291J	FLOPPY DISK FD-235HF-270
9	ZS-323728	BID30X05STL CMT
11	ZS-422076	PAN30X05STL CMT
12	EM-382317J	IND LCD EDM-MPJ2COW
13	EJ-378269	PLUG B10P-ER 10P
14	EL-728382J	EL BACK LIGHT
15	ZS-608095	PAN20X05STL CMT
16	SZ-388412J	MASK SLIDE SW
17	ES-365943	SW EWT-XDFK2550B
19	*BP-397454J	SW POW PMC50E4XULA 100/200
21	ZS-417150	PAN40X06STL CMT
22	ZS-379405	BID30X06STL CMT
23A	*BT-396269J	TRANS POW S1100(J)
23B	*BT-396271J	TRANS POW S1100(C,A)
23C	*BT-396272J	TRANS POW S1100(E,V,B,S)
24	ZS-345530	ST BID30X08STL CMT
25	ZW-609434	N FRANGE 30STL CMT
26	SP-396273J	PANEL REAR S1100
27	ZS-345272	ST BR30X06STL BNI
29	ZS-379405	BID30X06STL CMT
30	ZS-421806	PAN30X08STL CMT
31	ZS-350934	PT BR30X08STL BNI
37A	SC-384696J	COVER CONNECTOR(A)
37B	SC-385427J	COVER CONNECTOR(B)
41	SP-396283J	PANEL FRONT S1100 PART
42	SP-400417J1	PANEL FUNCTION(2) PART
43	SK-382418J1	KNOB PUSH(A)
44	SK-400299J	KNOB PUSH(D)
45	ZS-323728	BID30X05STL CMT
46	ZS-325495	T2BR30X06STL CMT
47	EJ-384747J	SOCKET RECEPTACLE XLR-31-F77
50	ZS-355590	CTS26X06STL NI3
51	SK-343017J	KNOB POWER (C)
52	ZS-345530	ST BID30X08STL CMT
53	SP-401684J	COVER UPEER MASKING
54	ZS-341959	ST BID40X06STL NI3
55	ZS-319460	T2BR30X06STL BZN PROJECTION
56	SC-384717J	COVER MOUNT(R)
57	SC-384718J	COVER MOUNT(L)
58	SH-362361	HANDLE RACK
59	ZS-322570	ST BID40X08STL NI3

Ref.No.	Part No.	Description
60	SK-384814J	KNOB VOL-C
61	SK-386675J	KNOB SINGLE(2)PART
62	SK-386676J	KNOB SINGLE(3)PART
63	SK-384714J	KNOB CONTROL PART
64A	*EJ-358633	SOCKET INLET SOT-17 2P
		[J]
64B	*EJ-358632	SOCKET INLET SOT-16 3P
		[C,A,E,V,B,S]
65	MZ-385430J	HOLDER INLET
66	ZS-362534	T2CTS30X10STL BNI
70A	*EW-365947	AC CORD 250 SKP210KS17B A J
		[J]
70B	*EW-368420	AC CORD200SKP30KS16 B AC
		[A,C]
70C	*EW-368421	AC CORD200SKP4819DKS16 B E
		[E,V]
70D	*EW-368422	AC CORD200 KS-116AGTBS
		[B]
70E	*EW-368418	AC CORD200SKP550KS16 B S
		[S]
73	EW-396261J	WIRE ASSY S1100 W904 34P

NOTE:

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

EXM 008

2. MEMORY P.C BOARD

Ref.No.	Part No.	Description
IC1	EI-394812J	IC HM514100ZP-10
IC2	EI-394812J	IC HM514100ZP-10
IC3	EI-394812J	IC HM514100ZP-10
IC4	EI-394812J	IC HM514100ZP-10
IC5	EI-394812J	IC HM514100ZP-10
IC6	EI-394812J	IC HM514100ZP-10
IC7	EI-394812J	IC HM514100ZP-10
IC8	EI-394812J	IC HM514100ZP-10
IC9	EI-394812J	IC HM514100ZP-10
IC10	EI-394812J	IC HM514100ZP-10
IC11	EI-394812J	IC HM514100ZP-10
IC12	EI-394812J	IC HM514100ZP-10
IC13	EI-394812J	IC HM514100ZP-10
IC14	EI-394812J	IC HM514100ZP-10
IC15	EI-394812J	IC HM514100ZP-10
IC16	EI-394812J	IC HM514100ZP-10
IC17	EI-389142J	IC CD74AC541E
IC18	EI-389142J	IC CD74AC541E
IC19	EI-386295J	IC HD74HC541P
IC20	EI-386295J	IC HD74HC541P
J1	EJ-384790J	PLUG 64P-6033-0431-0 64P

ABBREVIATIONS FOR THE SERVICE MANUAL

ABBREVIATION	EXPLANATION	ABBREVIATION	EXPLANATION
AMP (Amp)	AMPlifier	MINI	MINIum
BBD	Backet Brigade Diode	MIX	MIXer
BCD	Binary Code Decimal	MOD	MODulation
B.DOWN	Brake DOWN	M.WHEEL	Modulation WHEEL
B.UP	Back UP	OSC	OSCillator
CE	Chip Enable	RAM	Random Access Memory
CH	CHannel	RD	ReaD
COMP	COMParator	REG	REGulator
CONT	CONTrol	RESO	RESonance
CV	Control Voltage	RL	ReLay
D/A	Digital to Analogue	ROM	Read Only Memory
EG	Envelope Generator	S/H	Sample and Hold
EXT	EXTernal	SW	SWitch
FREQ	FREQuency	THRU	THRoUgh
HPF	High Pass Filter	TRANS	TRANSpose
INH	INHibit	U	Upper
INT	INTerrupt	VA	Voltage Analog
INV	INVerter	VCA	Voltage Controlled Amplifier
L	Lower	VCF	Voltage Controlled Filter
LFO	Low Frequency Oscillator	VR	Variable Resistor
MAX	MAXimum	VREF	REFerence Voltage
MEMO	MEMOry	WR	WRite
MIDI	Musical Instrument Digital Interface		

AKAI ELECTRIC CO., LTD.

ELECTRONIC MUSICAL INSTRUMENT DIV.

335 Kariyado, Nakahara-ku, Kawasaki-shi, Kanagawa, Japan

SERVICE SECT. KAWASAKI 044(434)7710 FAX 044(434)6624

Printed No. 901019-A1-350

Printed Date November 23, 1990

Printed in Japan