

RE-800

DIGITAL ECHO

SERVICE NOTES

First Edition

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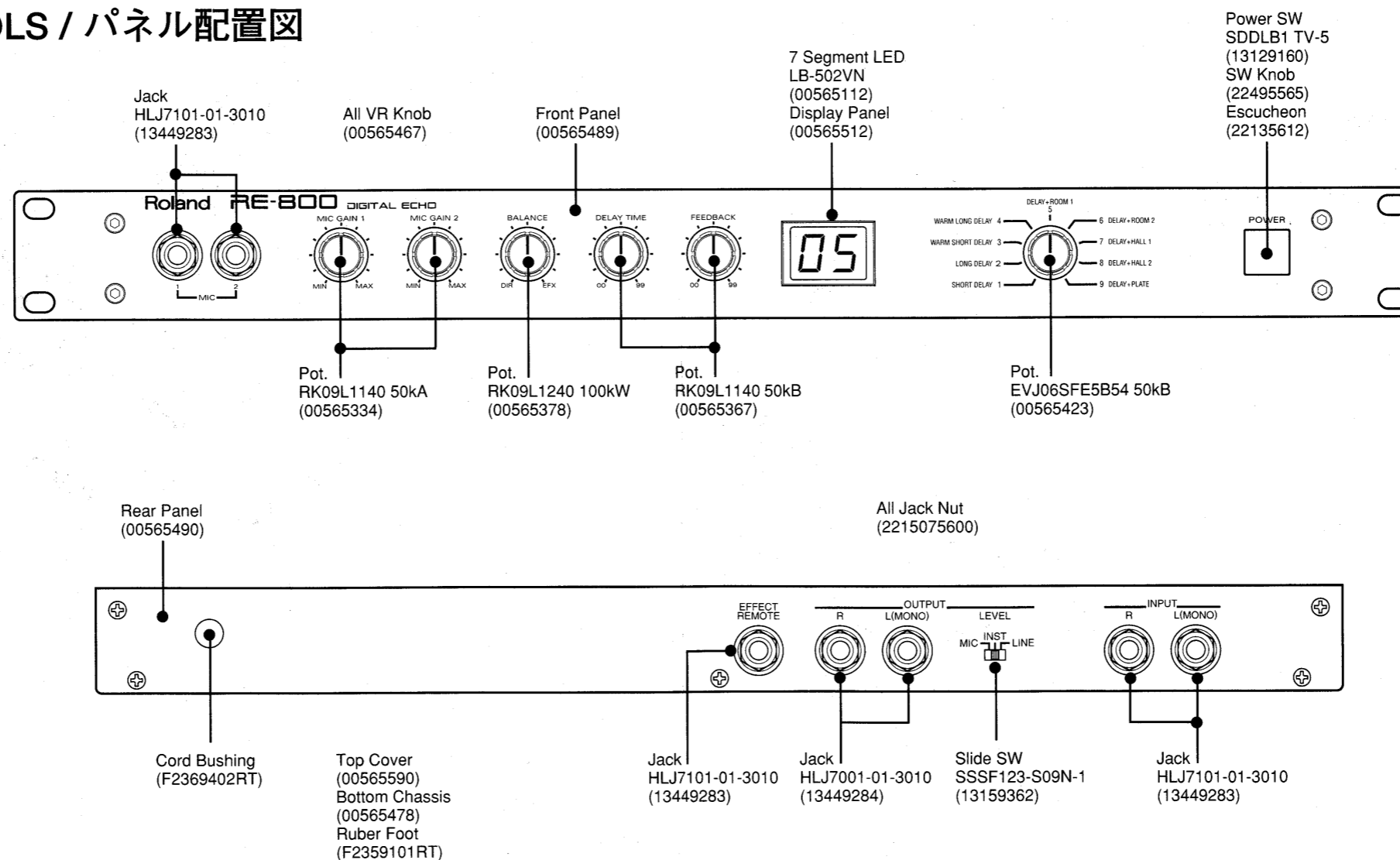
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SPECIFICATIONS / 仕様

- Controls : MIC GAIN 1 Knob, MIC GAIN 2 Knob, BALANCE Knob, DELAY TIME Knob, FEEDBACK Knob, MODE Knob, POWER Switch, LEVEL Switch
- Display : 7 segments, 2 characters (LED)
- Jacks : MIC Jacks 1/2, INPUT Jacks L(MONO)/R, OUTPUT Jacks L(MONO)/R, EFFECT REMOTE Jack
- Nominal Input Level : +4dBm
- Input Impedance : 10kΩ (MIC 1/2)
47kΩ (INPUT L/R)
- Nominal Output Level : LINE(+4dBm)/INST(-20dBm)/MIC(-40dBm)
(selectable with LEVEL Switch)
(Load Impedance:100kΩ)
- Output Impedance : 5kΩ (LEVEL Switch:LINE (+4dBm))
1kΩ (LEVEL Switch:INST (-20dBm))
600Ω (LEVEL Switch:MIC (-40dBm))
- AD Conversion : 16 bit Linear 128 times Oversampling $\Delta\Sigma$ modulation
Adaptive Focus Method
- DA Conversion : 16bit Linear
- Dynamic Range : 114dB or greater (direct:1kHz)
90dB or greater (effect:1kHz)
- Power Supply : AC 100V, AC 117V, AC 230V, AC 240V
- Power Consumption : 6.5W (AC 100V, AC 117V, AC 230V, AC 240V)
- Dimensions : 482(W)×207(D)×44(H)mm
19(W)×8-3/16(D)×1-3/4(H)inches
- Weight : 2.5kg/5lbs 9oz
- Accessories : Owner's Manual Japanese (00565167)
Owner's Manual English / Mandarin (00565156)

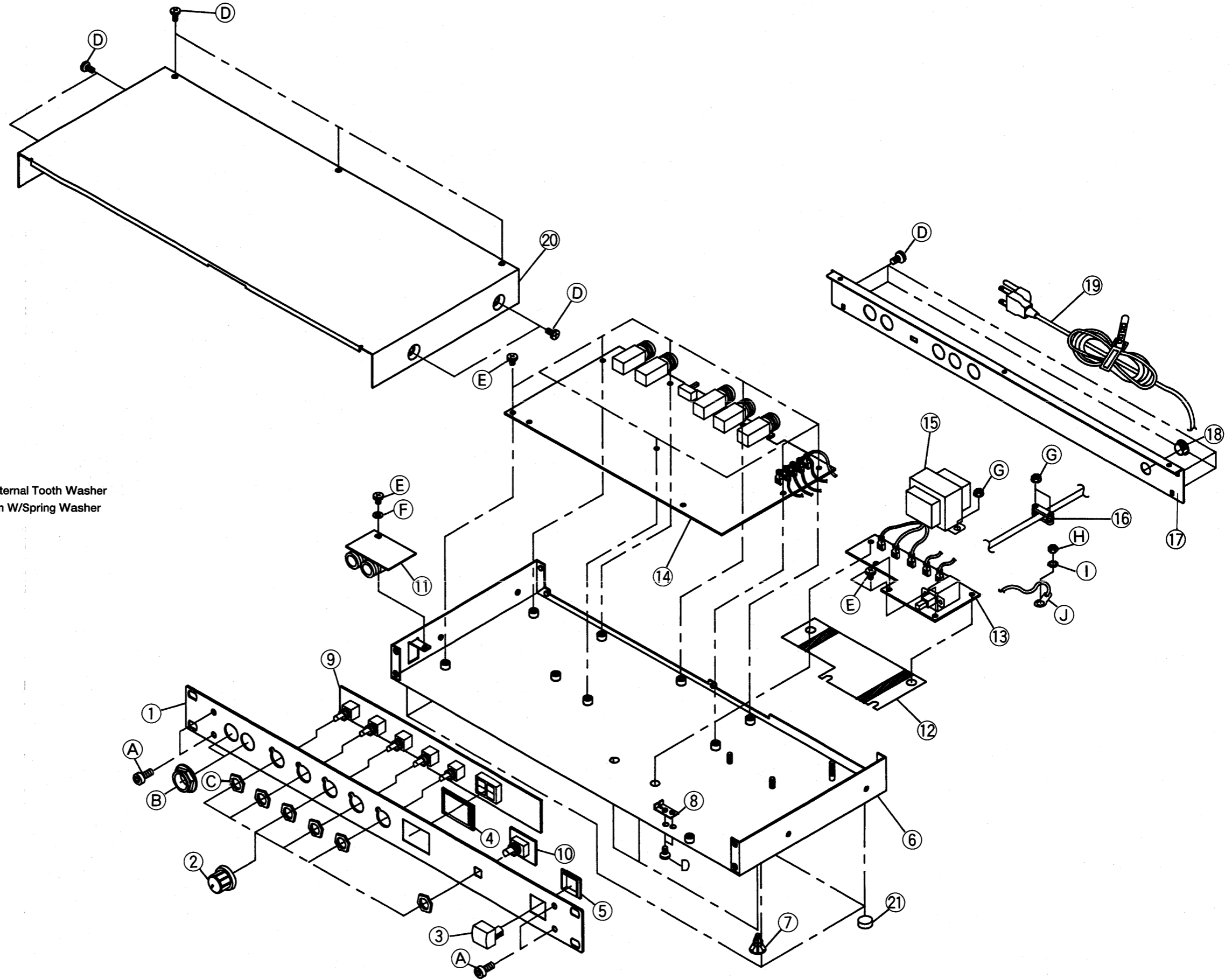
LOCATION OF CONTROLS / パネル配置図



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

EXPLODED VIEW / 分解図

-No.-	-PARTS No.-	-Parts Name and Description-
①	00565489	RE-800 FRONT PANEL
②	00565467	VR KNOB (black)
③	22495565	SW KNOB (black)
④	00565512	RE-800 DISPLAY PANEL
⑤	22135612	ESCUCHEON
⑥	00565478	RE-800 BOTTOM CHASSIS
⑦	F2199102	PCB Joint (black)
⑧	00565501	RE-800 PWB HOLDER
⑨	-----	LED Board ASSY
⑩	-----	VR Board ASSY
⑪	-----	JK Board ASSY
△12	00565534	RE-800 INSULATING SPACER
⑬	-----	SW Board ASSY
⑭	70356151	MAIN Board ASSY
⑮	G2457101RT	Power Transformer 100/117V
△16	G2457102RT	Power Transformer 220/240V
⑰	12361410	Line Cord Strain Relief 1702B
⑱	00565490	RE-800 REAR PANEL
△18	F2369402RT	Cord Bushing
△19	G3497103RT	Power Cord 100V (black)
△	G3497102RT	Power Cord 117V (black)
△	G3497101RT	Power Cord 230V (black)
△	G3497104RT	Power Cord 240VA (black)
△	G3497105RT	Power Cord 240VE (black)
⑳	00565590	RE-800 TOP COVER
㉑	F2359101RT	Rubber Foot
A	H5029806RT	4X10 Hex Sokcket Cap Screw FeBc
B	2215075600	Jack Nut
C	40120923	M9 VR Nut
D	40011401	3X8 Bind Head Machine Screw W/Internal Tooth Washer
E	40011390	3X6 Bind head Machine Screw FeCm W/Spring Washer
F	40011956	M3 Washer FeCm
G	40011756	M3 Hex Flange Nut FeCm
H	40011767	M4 Hex Flange Nut FeCm
I	40011889	M4 External Tooth Washer FeCm
J	4503970200	PIN (B-6)



PARTS LIST / パーツリスト

SAFETY PRECAUTION:
 The parts marked Δ have safety-related characteristics. Use only listed parts for replacement.
安全上の注意:
 Δ が付いている部品は、安全上特別な規格で作られたものです。交換の際は、指定された部品番号以外の部品は使わないようにして下さい。

CONSIDERATIONS ON PARTS ORDERING
 When ordering any parts listed in the parts list, please specify the following items in the order sheet.

QTY	PART NUMBER	DESCRIPTION	MODEL NUMBER
Ex. 10	22575241	Sharp key	C-20/50
15	2247017300	Knob (orange)	DAC-15D

 Failure to completely fill the above items with correct number and description will result in delayed or even undelivered replacement.
パーツ発注に関するお願い
 オーダーシートには、必ず下記の4項目は正確に記入して下さい。(例外は除く)

必要数	パーツナンバー	品名	使用機種
例 10	22575241	Sharp key	C-20/50
15	2247017300	Knob (orange)	DAC-15D

 もし記入洩れ、誤記等有る場合、必要部品が発送できなかったり、大幅な遅れの原因になります。御協力をお願いします。

MN ==> MAIN BOARD ASSY LD ==> LED BOARD ASSY SW ==> SW BOARD ASSY
 VR ==> VR BOARD ASSY JK ==> JACK BOARD ASSY

CASING / ケース

00565512	RE-800 DISPLAY PANEL
00565590	RE-800 TOP COVER
00565478	RE-800 BOTTOM CHASSIS
00565489	RE-800 FRONT PANEL
00565490	RE-800 REAR PANEL
00565501	RE-800 PWB HOLDER
00565534	RE-800 INSULATING SPACER
22135612	ESCUCHEON

KNOB, BUTTON / ツマミ、ツマミ

00565467	VR KNOB
22495565	SW KNOB

SWITCH / スイッチ

13129160	SDDL1 TV-5	Power Switch	SW
13159362	SSSF123-S09N-1	Slide Switch	MN

JACK, SOCKET / ジャック、ソケット

13449283	HLJ7101-01-3010	MIC 1/2, INPUT L/R, REMOTE	JK, MN
13449284	HLJ7001-01-3010	OUTPUT L/R	MN

PCB ASSY / 基板完成品

70356151	MAIN BOARD ASSY	(PCB 00565134)
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NOTE1 : Replacement MAIN BOARD ASSY includes the LED BOARD ASSY, SW BOARD ASSY, VR BOARD ASSY, JACK BOARD ASSY.
 注1 : 補修用MAIN BOARD ASSYは、LED BOARD ASSY, SW BOARD ASSY, VR BOARD ASSY, JACK BOARD ASSYを含みます。

IC

00565078	M37470M2-314SP	CPU Mask	IC11	MN
00346723	TC25SC080AU-104	DSP	IC12	MN
00565067	M5M44256BP-7	DRAM	IC14	MN
or 00341378	MSM514256B-70RS			
00347145	LC8390M	A/D Convertor	IC9	MN
00347156	μ PD6379	D/A Convertor	IC10	MN
00565089	M51951A	RESET	IC13	MN
00670801	NJM2100D	OP Amp	IC6	MN
00565812	M5220P	OP Amp	IC1	MN
15189251	M5218AP	OP Amp	IC2, 3, 4, 5, 7	MN
00565123	M66310P	LED Driver	IC19	LD
15199212	TA7805S	Regulator	IC16	MN
15199147	M5F7815L-01	Regulator	IC17	MN
15199148	M5F7915L-01	Regulator	IC18	MN

INDUCTOR, COIL, FILTER / インダクタ、コイル、フィルター

22445240	BL02RN2-R62	EMI Filter	L1, 2, 3, 4	MN
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TRANSISTOR / トランジスタ

15119144	2SA-1048GR	Q5	MN
15119143	2SA-1335GR	Q1, 2	MN
15129179	2SC-2458GR	Q6, 7	MN
15129210	2SC2878-A	Q3, 4	MN

DIODE / ダイオード

15019126	1SS133		MN	
15019209RT	1N4004	D15, 16, 17, 18	MN	
15039111RT	PB154M	Bridge Diode	D19	MN
15019428	RD7.5ESB2-T	Zenner Diode	D10	MN
00565112	LB-502VN	7Segment LED	LED1	LD
15029293RT	L-32HDSL	LED (red)	LED2, 3	MN
or 15029198	LN-28RP			

POTENTIOMETER / ポリウム

00565367	RK09L1140	50kB	VR4, 5	LD
00565334	RK09L1140	50kA	VR1, 2	LD
00565378	RK09L1140	100kW \times 2	VR3	LD
00565423	EVJ06SFE5B54	50kB with Detent	VR6	VR
00565101	RH0615CJ3J	Trimmer 2.2k	RT1	MN

CRYSTAL, RESONATOR / クリスタル、発振子

00565090	AT-49 24.576MHz	Xtal	X1	MN
15299159	CST4.00MGW	Cera rock	X2	MN

WIRING, CABLE / ワイヤリング、ケーブル

00565545	RE-800 WIRING A	3P	CN1	LD, MN
00565556	RE-800 WIRING B	9P	CN2	LD, MN
00565567	RE-800 WIRING C	9P	CN3	LD, MN
00565578	RE-800 WIRING SHIELD		MG1,2	JK, MN

SCREW / ネジ類

40011390	3 \times 6mm Binding head FeCm Spring Washer
40011401	3 \times 8mm Binding head FeBc Internal Tooth Washer
H5019410ZL	3 \times 20mm Binding head FeBc Spring Washer
H5029806RT	4 \times 10mm Hex Sokcket Cap Screw FeBc
40011945	M4 \times 0.45 Internal Tooth Washer FeBc
40011756	M3 Hex Flange Nut FeCm
2215075600	JACK NUT
-----	M9 VR Nut
40011956	M3 Washer FeCm
40011767	M4 Hex Flange Nut FeCm
40011889	M4 External Tooth Washer

MISCELLANEOUS / その他

F2359101RT	Rubber Foot	Heattsink
4503970200	PIN (B-6)	
H5039701RT	1741BS-2	Quick Slide Terminal
12469158	PC2116-7-PT	Heatsink
00565145	RE-800 Packing Case	
G2647101RT	RE-1000 Pad	

ACCESSORIES / 標準付属品

00565167	RE-800 MANUAL (Japanese)
00565156	RE-800 MANUAL (English/Mandarin)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

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MAIN BOARD

ASSY 70356151
(PWB 00565134)

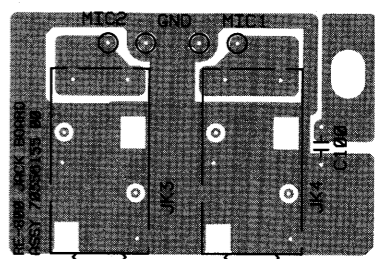
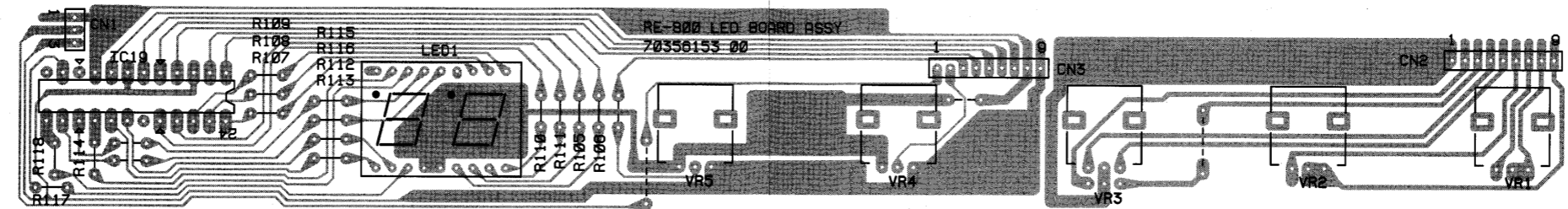
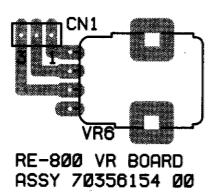
NOTE

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補修用MAIN BOARD ASSYは、LED BOARD ASSY, SW BOARD ASSY, VR BOARD ASSY, JACK BOARD ASSYを含みます。

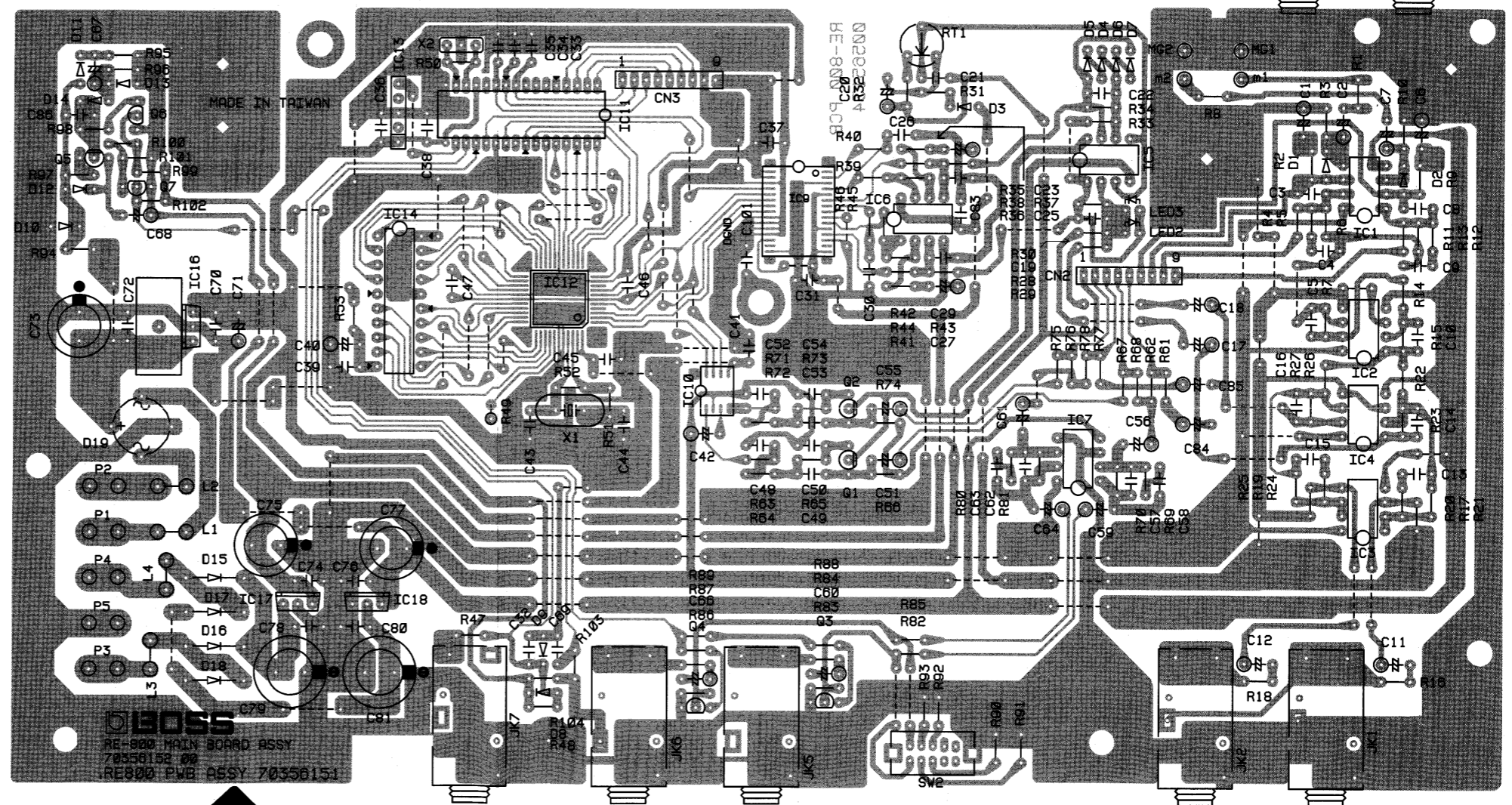
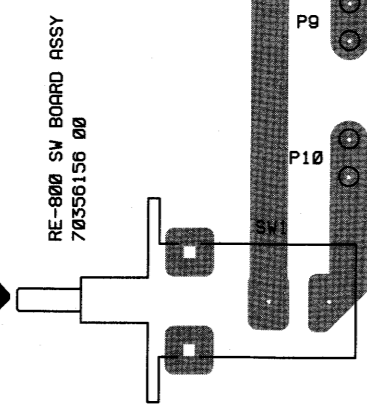
LED BOARD

JACK BOARD

VR BOARD



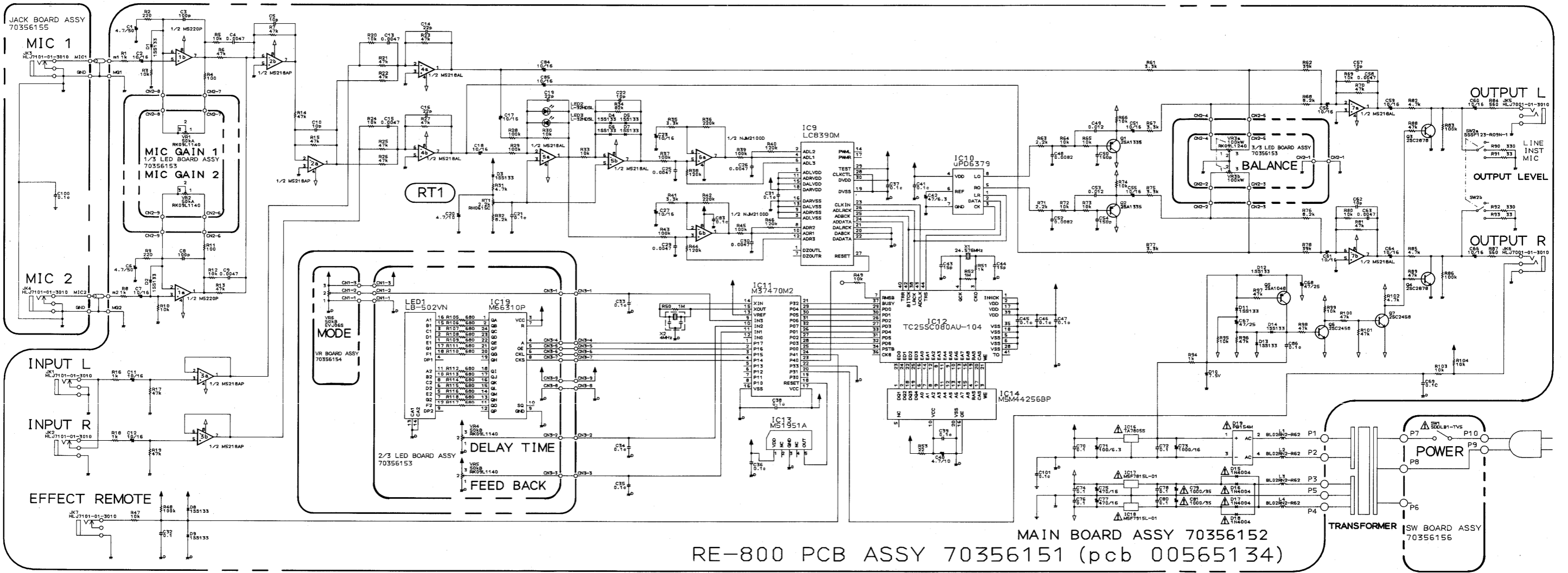
SW BOARD



MAIN BOARD
ASSY 70356151

View from components side.

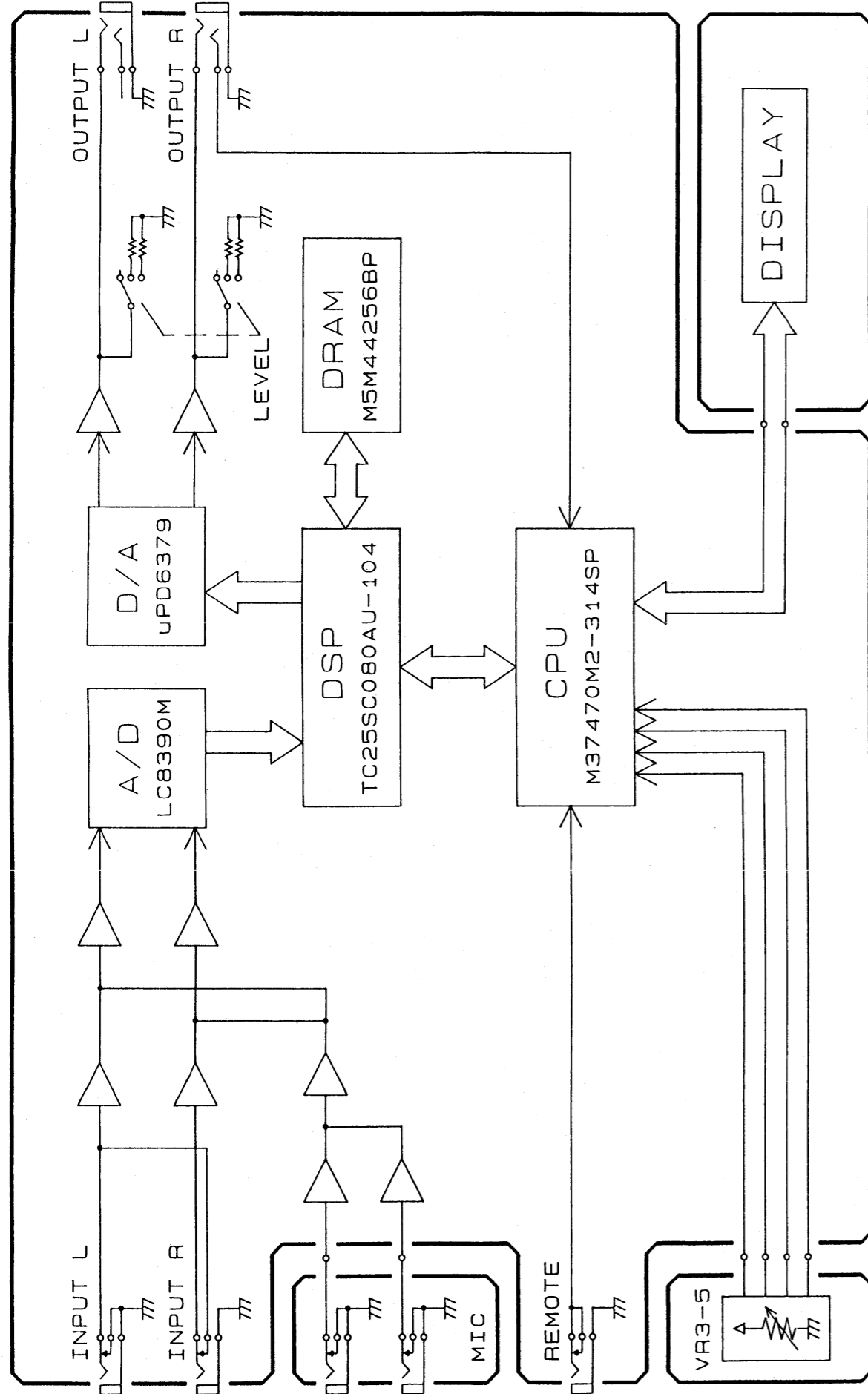
CIRCUIT DIAGRAM / 回路図



RE-800 PCB ASSY 70356151 (pcb 00565134)

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BLOCK DIAGRAM / ブロック図



ADJUSTMENT


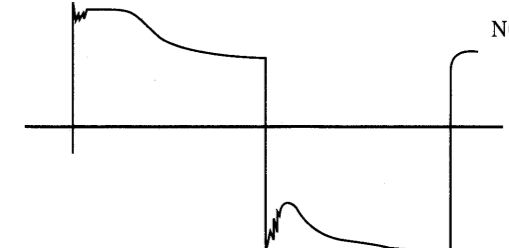
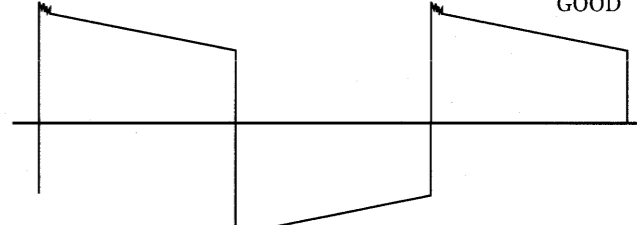
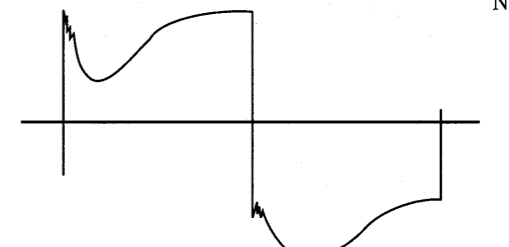
Check OUTPUT Waveform

1. Feed the signal to INPUT L of the RE-800.
2. Connect the scope to OUTPUT L of the RE-800.
3. Set the controls and adjust RT1 on MT Board for the waveform as shown below.

調整仕様

出力波形のチェック

1. INPUTにオーディオ発振器を接続します。
2. OUTPUT Lにオシロスコープを接続します。
3. セッティングして下図のような波形になるようにRT1を調節します。

INPUT L	SET CONTROLS	OUTPUT L
 <p>200Hz 20mVp-p</p>	<p>MODE :1 DELAY TIME :Min FEEDBACK :Min BALANCE :EFX</p>	 <p>NG</p>
		 <p>GOOD</p>
		 <p>NG</p>