



SERVICE NOTES

Issued by RJA

TABLE OF CONTENTS

| | | | |
|---|----|--|----|
| SPECIFICATIONS | 2 | CIRCUIT DIAGRAM (EFFECT BOARD1) | 18 |
| LOCATION OF CONTROLS | 4 | CIRCUIT DIAGRAM (EFFECT BOARD2) | 20 |
| LOCATION OF CONTROLS PARTS LIST | 5 | CIRCUIT BOARD | |
| EXPLODED VIEW | 6 | (JACK,INLET,POWER SUPPLY, | |
| EXPLODED VIEW PARTS LIST | 7 | POWER LED,MIC,VR,LED BOARD)..... | 22 |
| PARTS LIST | 8 | CIRCUIT DIAGRAM | |
| TEST MODE (HOW TO CHECK OPERATION)..... | 12 | (JACK,INLET,POWER SUPPLY, | |
| BLOCK DIAGRAM | 14 | POWER LED BOARD) | 24 |
| CIRCUIT BOARD (EFFECT BOARD) | 16 | CIRCUIT DIAGRAM (MIC,VR,LED BOARD) | 26 |



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SPECIFICATIONS

RVE-800: VOCAL ECHO

Signal Processing

AD Conversion: 24 bits

DA Conversion: 24 bits

Sampling Rate

48 kHz

Frequency Response

10 Hz to 40 kHz -2.0/+1.0 dB (Direct)

20 Hz to 20 kHz -2.0/+1.0 dB (Effect)

Nominal Input Level

-40 dBu (MIC 1, 2)

+4 dBu (INPUT)

Input Impedance

10 k ohms (MIC 1, 2)

40 k ohms (INPUT)

Non Clip Max Input Level (Effect: MAX)

+ 6.0 dBu (MIC1, 2)

+10.0 dBu (INPUT)

Input Sensitivity

-42 dBu (MIC)

+4 dBu (LINE)

Nominal Output Level

-40 / -10 / +4 dBu (selectable with Output Level Switch)

Output Impedance

500 ohms (Output Level Switch: -40 dB (MIC))

1.5 k ohms (Output Level Switch: -10 dB)

5.5 k ohms (Output Level Switch: +4 dB)

Recommended Load Impedance

3 k ohms or more

Total Harmonic Distortion

0.05 % or less (1kHz at nominal output level)

Residual Noise Level (Input: 150 ohms Terminated, MIC GAIN Volume: min, IHF-A, typ)

-100.0 dBu or less (Direct)

-83.0 dBu or less (Effect)

Dynamic Range

118 dB or greater (Direct)

93 dB or greater (Effect)

Controllers

Mic Gain Knobs (1, 2)

Balance Knob

Delay Time Knob

Repeat Knob,

Effect Mode Select Knob

Power Switch

Output Level Switch

Effects Type

STADIUM, SHORT ECHO, LONG ECHO, WARM SHORT ECHO, WARM LONG ECHO,

VOCAL ECHO, DELAY+ROOM1, DELAY+ROOM2, DELAY+HALL1, DELAY+HALL2,

DELAY+PLATE (Total: 11types)

Indicators

Power Indicator

Effect Indicator

Signal Indicator

Connectors

Mic Jacks (1, 2, phone type, unbalanced)

Input Jacks (L (MONO), R, phone type, unbalanced)

Output Jacks (L (MONO), R, phone type, unbalanced)

Effect Remote Jack

Power Supply Inlet Connector

Power Supply

AC 117 V, AC 230 V or AC 240 V

Power Consumption

8 W

Dimensions

482 (W) x 210 (D) x 44 (H) mm

19 (W) x 8-5/16 (D) x 1-3/4 (H) inches

* EIA-1U rack mount type

Weight

2.5 kg

5 lbs 9 oz

Accessories

Power Supply Cable 100V:(#02670401)

120V:(#00894378)

230V:(#00894389)

240VE:(#00907001)

240VA:(#23495124)

EURO CONVERTER PLUG (#00905234)

Rubber feet (#22350313)

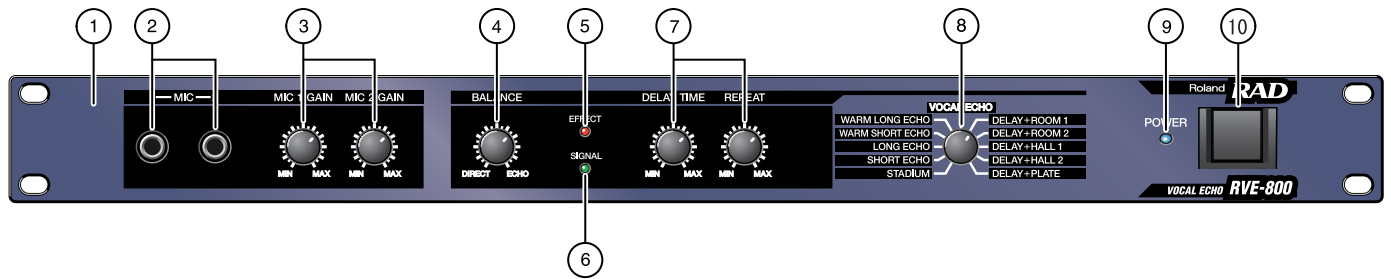
Owner's Manual English(#72122112)

Japanese(#72121989)

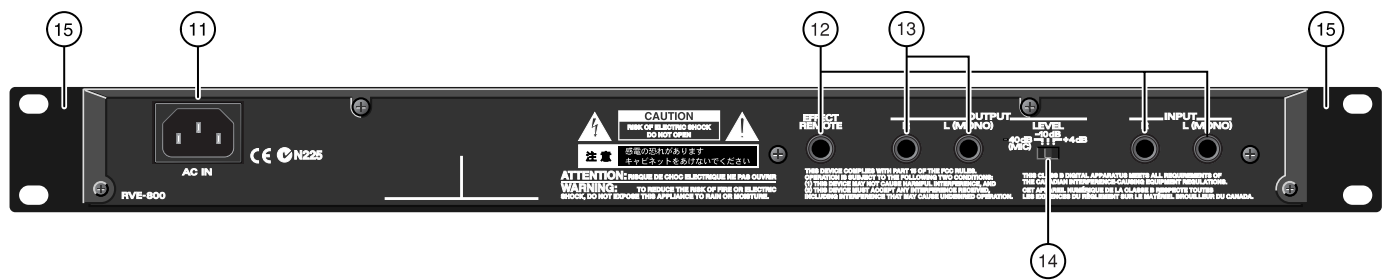
* 0 dBu = 0.775 Vrms

LOCATION OF CONTROLS

[Front]



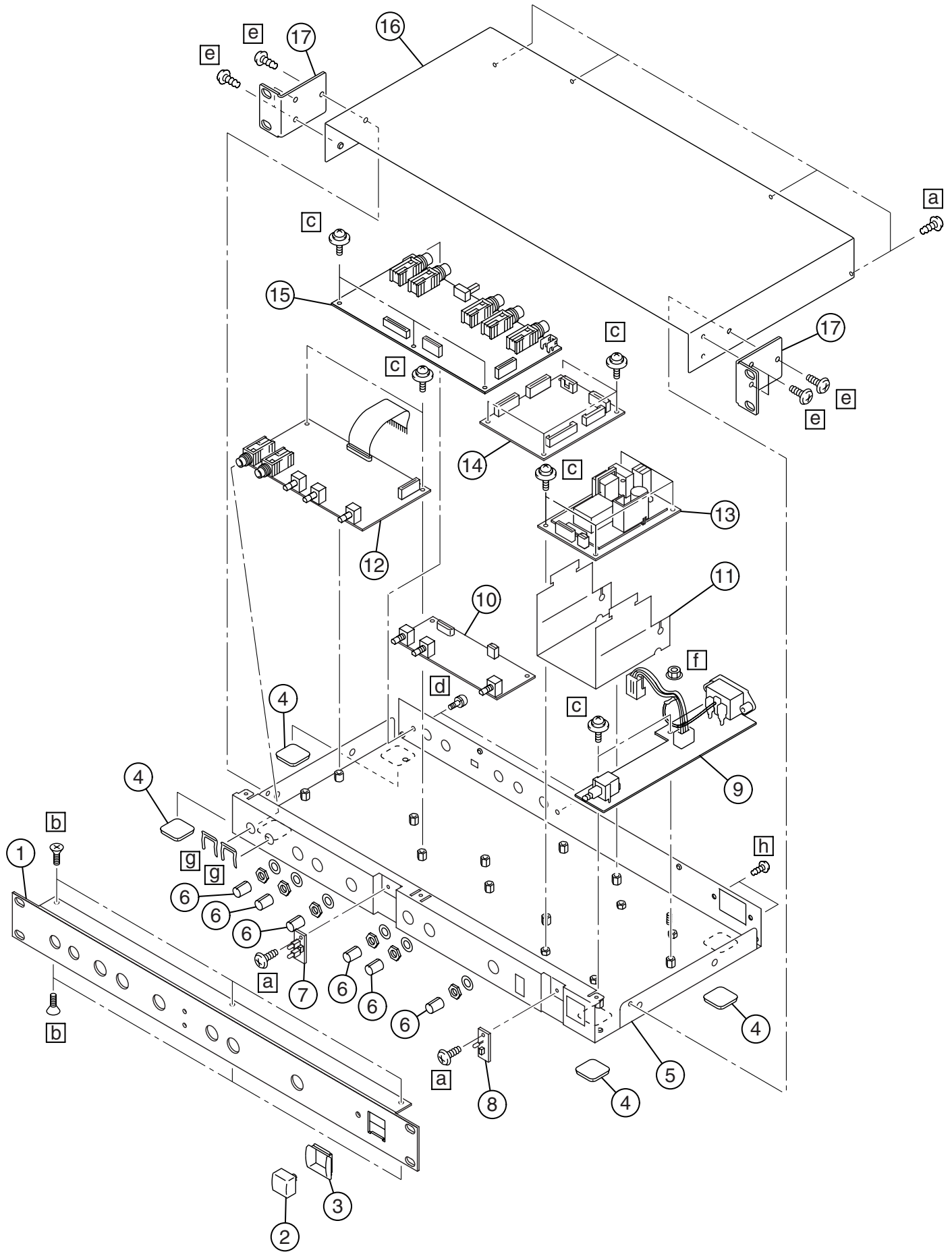
[Rear]



LOCATION OF CONTROLS PARTS LIST

| No | PART CODE | Part name | Description | Q'TY |
|----|-----------|------------------------|---------------------------|------|
| 1 | 02906390 | FRONT PANEL | | 1 |
| 2 | 00675256 | HLJ7100-01-3010 | 6.5MM JACK | 2 |
| 3 | 02781667 | VR RK09L1120(50KA) KAI | 9M/M ROTARY POTENTIOMETER | 2 |
| | 22485188 | M R-KNOB | 248-188 MF BLK | 2 |
| 4 | 02906567 | RK09L12B0 50KW CC | 9M/M ROTARY POTENTIOMETER | 1 |
| | 22485188 | M R-KNOB | 248-188 MF BLK | 1 |
| 5 | 00785856 | LED(RED)SLR-342VR3F | | 1 |
| | 00453223 | LED SPACER | LDS-70G | 1 |
| 6 | 02015623 | LED(GREEN)SLR-342MG3F | | 1 |
| | 00453223 | LED SPACER | LDS-70G | 1 |
| 7 | 13289229 | RK09L1120 10KB | 9MM ROTARY POTENTIOMETER | 2 |
| | 22485188 | M R-KNOB | 248-188 MF BLK | 2 |
| 8 | 02906590 | RK0971110 10KB | 9M/M ROTARY POTENTIOMETER | 1 |
| | 22485188 | M R-KNOB | 248-188 MF BLK | 1 |
| 9 | 02905990 | LED(BLUE)LNW9A8BYBZ | | 1 |
| 10 | 01459789 | BUTTON ESCUTCHEON | F B-ESCT MX1H-A BLK | 1 |
| | 22495565 | F S-BUTTON | MX BLK | 1 |
| 11 | 02675701 | WIRING ASSY | WIRING W3(AC INLET+GND) | 1 |
| 12 | 13449283 | HLJ7101-01-3010 | 6.5MM JACK | 3 |
| 13 | 13449284 | HLJ7001-01-3010 | 6.5MM JACK | 2 |
| 14 | 13159362 | SSSF123-S09N-1 | SLIDE SWITCH | 1 |
| 15 | 22123568 | RACK MOUNT ANGLE 1U | 212-568 | 2 |

EXPLODED VIEW



EXPLODED VIEW PARTS LIST

[Parts]

| No | PART CODE | Part name | Description | QTY |
|----|-----------|-------------------------|---------------------|-----|
| 1 | 02906390 | FRONT PANEL | | 1 |
| 2 | 22495565 | F S-BUTTON | MX BLK | 1 |
| 3 | 01459789 | BUTTON ESCUTCHEON | F B-ESCT MX1H-A BLK | 1 |
| 4 | 22350313 | FOOT MKS | | 4 |
| 5 | 02906401 | BOTTOM CHASSIS | | 1 |
| 6 | 22485188 | M R-KNOB | 248-188 MF BLK | 6 |
| 7 | 72122089 | LED BOARD ASSY | | 1 |
| 8 | 72122090 | POWER LED BOARD ASSY | | 1 |
| 9 | 72122078 | INLET BOARD ASSY | | 1 |
| 10 | 72122056 | VR BOARD ASSY | | 1 |
| 11 | 02894367 | INSULATING COVER | DA-2496 SW-PS | 1 |
| 12 | 72122045 | MIC BOARD ASSY | | 1 |
| 13 | 72122067 | POWER SUPPLY BOARD ASSY | | 1 |
| 14 | 72122001 | EFFECT BOARD ASSY | | 1 |
| 15 | 72122034 | JACK BOARD ASSY | | 1 |
| 16 | 02906445 | TOP COVER | | 1 |
| 17 | 22123568 | RACK MOUNT ANGLE 1U | 212-568 | 2 |

[SCREWS]

| No | PART CODE | Part name | Description | QTY |
|----|-----------|------------|---------------------------|-----|
| a | 40011090 | SCREW 3X6 | BINDING TAPTITE B BZC | 6 |
| b | 40011145 | SCREW 3X6 | FLAT TAPTITE B BZC | 6 |
| c | 40017934 | SCREW M3X6 | PAN MACHINE W/SW+PW FE ZC | 15 |
| d | 40011490 | SCREW M3X6 | PAN MACHINE W/SW BZC | 2 |
| e | 40012345 | SCREW 4X10 | BINDING TAPTITE B BZC | 6 |
| f | 40011745 | HEX NUT M4 | SPRING NUT FE ZC | 1 |
| g | 40016434 | SNAP PLATE | HLJ-480 | 2 |
| h | 40012490 | SCREW 4X10 | BINDING TAPTITE P BZC | 2 |

PARTS LIST

SAFETY PRECAUTIONS:

The parts marked Δ have safety-related characteristics. Use only listed parts for replacement.

CONSIDERATION ON PARTS ORDERING

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

| Ex. | QTY | PART NUMBER | DESCRIPTION | MODEL NUMBER |
|-----|-----|-------------|---------------|--------------|
| | 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.

NOTE: The parts marked # are new. (initial parts)

CASING

| | | | | |
|---|----------|---------------------|---------|---|
| | 22123568 | RACK MOUNT ANGLE 1U | 212-568 | 2 |
| # | 02906445 | TOP COVER | | 1 |
| # | 02906390 | FRONT PANEL | | 1 |

CHASSIS

| | | | | |
|---|----------|----------------|--|---|
| # | 02906401 | BOTTOM CHASSIS | | 1 |
|---|----------|----------------|--|---|

KNOB, BUTTON

| | | | | |
|--|----------|-------------------|---------------------|---|
| | 22495565 | F S-BUTTON | MX BLK | 1 |
| | 22485188 | M R-KNOB | 248-188 MF BLK | 6 |
| | 01459789 | BUTTON ESCUTCHEON | F B-ESCT MX1H-A BLK | 1 |

SWITCH

| | | | | | |
|--|----------|----------------|--------------|--------------------|---|
| | 13159362 | SSSF123-S09N-1 | SLIDE SWITCH | SW1 on JACK BOARD | 1 |
| | 01676512 | SDKLA1-B | PUSH SWITCH | SW2 on Inlet Board | 1 |

JACK, EXT TERMINAL

| | | | | | |
|--|----------|-----------------|------------|---------------------------|---|
| | 13449283 | HLJ7101-01-3010 | 6.5MM JACK | JK3,JK4,JK5 on JACK BOARD | 3 |
| | 13449284 | HLJ7001-01-3010 | 6.5MM JACK | JK1,JK2 on JACK BOARD | 2 |
| | 00675256 | HLJ7100-01-3010 | 6.5MM JACK | JK6,JK7 on MIC BOARD | 2 |

POWER SUPPLY UNIT

| | | | | | |
|--|----------|-------------------|---------------------|------------------------------|---|
| | 02457745 | A1DU2L3B104 VER.3 | SWITCHING REGULATOR | BOARD1 on POWER SUPPLY BOARD | 1 |
|--|----------|-------------------|---------------------|------------------------------|---|

NOTE: Replacement A1DU2L3B104 VER.3 should be made on a unit base.

PCB ASSY

| | | | | |
|---|----------|----------------------|--|---|
| # | 72122001 | EFFECT BOARD ASSY | | 1 |
| # | 72122034 | JACK BOARD ASSY | | 1 |
| # | 72122045 | MIC BOARD ASSY | | 1 |
| # | 72122056 | VR BOARD ASSY | | 1 |
| # | 72122067 | POWER SUPPLY BOARD | | 1 |
| # | 72122078 | INLET BOARD ASSY | | 1 |
| # | 72122089 | LED BOARD ASSY | | 1 |
| # | 72122090 | POWER LED BOARD ASSY | | 1 |

IC

| | | | | | |
|---|----------|----------------------|--------------------------|------------------------------|---|
| # | 03010745 | HD6413006VF | IC (16BIT CPU) | IC1 on Effect Board | 1 |
| | 02565501 | TC220CCA0AF-B01(MR3) | IC (DSP) | IC3 on Effect Board | 1 |
| | 02453389 | LC32V4265T-25 | IC (DRAM) | IC16 on Effect Board | 1 |
| | 01783123 | LH28F400BVE-BL85 | IC (FLASH MEMORY /BLANK) | IC2 on Effect Board | 1 |
| | 02451434 | AK4552VT | IC (AD/DA) | IC8 on Effect Board | 1 |
| | 01348912 | TC7SH08FU(TE85L) | IC (CMOS) | IC15 on Effect Board | 1 |
| | 01898023 | TC7WH241FU(TE12L) | IC (CMOS) | IC4 on Effect Board | 1 |
| | 00346445 | NJM2100M(TE3) | IC (BIPOLAR OP AMP) | IC7 on Effect Board | 1 |
| | 15289105 | UPC4570G2-E2 | IC (BIPOLAR OP AMP) | IC10,IC9 on Effect Board | 2 |
| | 01458445 | UPC29M33T-T1 | IC (REGULATOR) | IC12 on Effect Board | 1 |
| | 02897778 | S-80130ALMC-JAP-T2 | RESET IC | IC6 on Effect Board | 1 |
| | 15189250 | M5218AL | IC (BIPOLAR OP AMP) | IC2,IC1 on JACK BOARD | 2 |
| | 02123612 | UPC2933HF | IC (REGULATOR) | | 1 |
| | 15189189 | UPC4570HA | IC (BIPOLAR OP AMP) | IC7,IC6,IC5,IC4 on MIC BOARD | 4 |

TRANSISTOR

| | | | | | |
|--|----------|----------------|------------|-------------------------|---|
| | 15309101 | 2SA1037AKT146R | TRANSISTOR | Q9 on Effect Board | 1 |
| | 15319101 | 2SC2412KR T146 | TRANSISTOR | Q10,Q12 on Effect Board | 2 |

| TRANSISTOR | | | | | |
|----------------------|------------|-------------------------|---------------------------|--|----------------|
| | 15329512 | DTB123TKT146 | DIGITAL TRANSISTOR | Q1 on Effect Board | 1 |
| | 15329516 | DTC114EKT146 | TRANSISTOR | Q2,Q11 on Effect Board | 2 |
| | 15129152 | 2SC2878-A(TPE2) | TRANSISTOR | Q1,Q2 on JACK BOARD | 2 |
| | 15129184 | RN1207-TPE4 | DIGITAL TRANSISTOR | Q4,Q3 on EFFECT VR BOARD | 2 |
| DIODE | | | | | |
| | 01897189 | MA147-(TX) | ARRAY DIODE | DA1 on Effect Board | 1 |
| | 01340012 | UDZS TE-17 9.1B | ZENER DIODE | D1 on Effect Board | 1 |
| | 15019126 | 1SS133 T-77 | SWITCHING DIODE | D2,D3,D1,D4,D5,D7,D8,D6 on JACK BOARD ,D12,D10,D9,D11 on MIC BOARD | 8 +4 |
| | 15019443 | RD20ES-T1 AB2 | ZENER DIODE | D13,D14,D15,D16 on JACK BOARD | 4 |
| | 02239567 | SLR-342VRT32 | LED | LED3 on LED BOARD,LED5,LED4 on MIC BOARD | 2 |
| | 00785856 | SLR-342VR3F | LED | | 1 |
| # | 02015623 | SLR-342MG3F | LED | LED2 on LED BOARD | 1 |
| # | 02905990 | LNW9A8BYBZ BLUE | LED | LED1 on POWER LED BOARD | 1 |
| RESISTOR | | | | | |
| | 00566867 | RPC05T 100 J | MTL.FILM RESISTOR | R29 on Effect Board | 1 |
| | 00567023 | RPC05T 101 J | MTL.FILM RESISTOR | R12,R11,R119,R121 on Effect Board | 4 |
| | 00567112 | RPC05T 471 J | MTL.FILM RESISTOR | R91 on Effect Board | 1 |
| | 00567156 | RPC05T 102 J | MTL.FILM RESISTOR | R89 on Effect Board | 1 |
| | 00567412 | RPC05T 104 J | MTL.FILM RESISTOR | R1,R116,R115,R114,R4,R2,R3 on Effect Board | 7 |
| | 00566967 | RPC05T 470 J | MTL.FILM RESISTOR | R118,R107,R105,R98,R97,R96,R95 on Effect Board | 7 |
| | 00567067 | RPC05T 221 J | MTL.FILM RESISTOR | R103,R104 on Effect Board | 2 |
| | 00567189 | RPC05T 182 J | MTL.FILM RESISTOR | R40,R48 on Effect Board | 2 |
| | 00567201 | RPC05T 272 J | MTL.FILM RESISTOR | R38,R31 on Effect Board | 2 |
| | 00567212 | RPC05T 332 J | MTL.FILM RESISTOR | R41,R42,R49,R50 on Effect Board | 4 |
| | 00567245 | RPC05T 472 J | MTL.FILM RESISTOR | R117,R17,R20 on Effect Board | 3 |
| | 00567289 | RPC05T 103 J | MTL.FILM RESISTOR | R88,R71,R87,R68 on Effect Board | 4 |
| | 00567312 | RPC05T 183 J | MTL.FILM RESISTOR | R39,R47 on Effect Board | 2 |
| | 00567323 | RPC05T 223 J | MTL.FILM RESISTOR | R64,R33,R27 on Effect Board | 3 |
| | 00567334 | RPC05T 273 J | MTL.FILM RESISTOR | R30,R37 on Effect Board | 2 |
| | 00567378 | RPC05T 473 J | MTL.FILM RESISTOR | R8,R9,R86,R10,R13,R15,R16,R113,R26,R109,R110,R111,R112,R21,R99 on Effect Board | 15 |
| | 00567456 | RPC05T 224 J | MTL.FILM RESISTOR | R35,R45,R53 on Effect Board | 3 |
| | 00567556 | RPC05T 105 J | MTL.FILM RESISTOR | R18 on Effect Board | 1 |
| | 02675512 | RPC05T 203 J | MTL.FILM RESISTOR | R14 on Effect Board | 1 |
| | 01011856 | RPC05T 0R0 J | MTL.FILM RESISTOR | R28,R94,R32,R34,R43,R44,R51,R52,R93,R19,R5 on Effect Board | 11 |
| | 00126101 | EXBV8V221JV | RESISTOR ARRAY | RA7,RA6 on Effect Board | 2 |
| | 01566190 | EXBE10C473J | R-ARRAY | RA5,RA3,RA2 on Effect Board | 3 |
| | 01566267 | EXBV8V473JV | R-ARRAY | RA4 on Effect Board | 1 |
| | 13749759T0 | SR25TRE 270 J | CARBON RESISTOR | | 2 |
| | 13749789T0 | SR25TRE 471 J | CARBON RESISTOR | | 2 |
| | 13749797T0 | SR25TRE 102 J | CARBON RESISTOR | | 2 |
| | 13749799T0 | SR25TR 122J | CARBON RESISTOR | | 2 |
| | 13749813T0 | SR25TRE 472 J | CARBON RESISTOR | | 4 |
| | 13749817T0 | SR25TRE 682 J | CARBON RESISTOR | | 2 +8 |
| | 13749821T0 | SR25TRE 103 J | CARBON RESISTOR | | 2 +6 |
| | 13749837T0 | SR25TRE 473 J | CARBON RESISTOR | | 2 +2 |
| | 13749845T0 | SR25TRE 104 J 1/4W | CARBON RESISTOR | | 4 |
| | 13749853T0 | SR25TRE 224 J 1/3W 1/4W | CARBON RESISTOR | | 3 +2 |
| | 13749781T0 | SR25TRE 221 J | CARBON RESISTOR | | 12 +4 +3 |
| | 13749835T0 | SR25TRE 393 J | CARBON RESISTOR | | 2 |
| | 13749773T0 | SR25TRE 101 J | CARBON RESISTOR | | 2 |
| | 13749809T0 | SR25TRE 332 J 1/6W | CARBON RESISTOR | | 4 |
| | 13749815T0 | SR25TRE 562 J | CARBON RESISTOR | | 1 |
| | 13749823T0 | SR25TRE 123 J | CARBON RESISTOR | | 4 |
| | 13749833T0 | SR25TRE 333 J | CARBON RESISTOR | | 1 |
| | 13749783T0 | SR25TRE 271 J | CARBON RESISTOR | | 2 |
| POTENTIOMETER | | | | | |
| # | 02781667 | VR RK09L1120(50KA) KAI | 9M/M ROTARY POTENTIOMETER | VR1,VR3 on MIC BOARD | 2 |
| # | 02906567 | RK09L12B0 50KW CC | 9M/M ROTARY POTENTIOMETER | VR2 on MIC BOARD | 1 |
| # | 02906590 | RK0971110 10KB | 9M/M ROTARY POTENTIOMETER | VR6 on EFFECT VR BOARD | 1 |
| | 13289229 | RK09L1120 10KB | 9MM ROTARY POTENTIOMETER | VR4,VR5 on EFFECT VR BOARD | 2 |
| CAPACITOR | | | | | |
| | 01674423 | ECUV1H471JCV | CERAMIC CAPACITOR | C118 on Effect Board | 1 |

| CAPACITOR | | | | | |
|------------------------|----------|-------------------------------|-------------------------|---|---------------------|
| # | 01674545 | ECJ1VB1H392K | CERAMIC CAPACITOR | C22 on Effect Board | 1 |
| | 01674712 | ECJ1VF1A105Z | CERAMIC CAPACITOR | C104,C103,C102 on Effect Board | 3 |
| | 01674190 | ECUV1H150JCV | CERAMIC CAPACITOR | C43,C36 on Effect Board | 2 |
| | 01674612 | ECJ1VB1H103K | CERAMIC CAPACITOR | C106,C127,C126,C125,C123,C107,C124,C105,C121,C122 on Effect Board | 10 |
| | 01674701 | ECJ1VF1E104Z 0.1UF/16VK | CERAMIC CAPACITOR(CHIP) | C96,C64,C45,C18,C19,C20,C14,C23,C95,C38,C98,C100,C9,C8,C7,C25,C31,C32,C21,C11,C70,C15,C1,C16,C108,C66,C17,C12,C65,C2,C3,C37,C10,C72,C79,C93,C6,C13 on Effect Board | 38 |
| | 02129534 | ECJ1VB1H102K | CERAMIC CAPACITOR | C101 on Effect Board | 1 |
| | 01674212 | ECUV1H220JCV | CERAMIC CAPACITOR | C27 on Effect Board | 1 |
| | 01674223 | ECUV1H270JCV | CERAMIC CAPACITOR | C26 on Effect Board | 1 |
| | 01015845 | ECHU1H181JB5 | FILM CAPACITOR | C52,C47 on Effect Board | 2 |
| | 15359779 | ECHU1H272JB5 | POLYEST CAPASITOR | C55,C50 on Effect Board | 2 |
| # | 02014378 | ECEV0JA331P | CHEMICAL CAPACITOR | C73 on Effect Board | 1 |
| | 02345134 | RV2-16V470M-R | CHEMICAL CAPACITOR | C90 on Effect Board | 1 |
| | 02345145 | RV2-16V101M-R | CHEMICAL CAPACITOR | C67,C71 on Effect Board | 2 |
| | 02345234 | RV2-6V101M-R | CHEMICAL CAPACITOR | C63 on Effect Board | 1 |
| | 02345101 | RV2-16V100M-R | CHEMICAL CAPACITOR | C44,C49,C119,C117,C92,C80,C53,C40,C48,C46,C41,C4,C39,C35,C34,C24,C5,C54 on Effect Board | 18 |
| | 13519625 | DD104-989B221K50 220PF 50V | CERAMIC CAPACITOR | C22,C16,C17,C7 on JACK BOARD ,C64,C78 on MIC BOARD | 4 +2 |
| | 13519667 | DD104-989SL470J50 | CERAMIC CAPACITOR | C11,C20 on JACK BOARD ,C68,C57,C60,C70,C73,C79,C83,C58 on MIC BOARD | 2 +8 |
| | 13519671 | DD104-989SL101J50 100PF 50VK | CERAMIC CAPACITOR | C1,C9 on JACK BOARD | 2 |
| | 13529509 | DD106-999F103Z50 | CERAMIC CAPACITOR | C71,C74,C75 on EFFECT VR BOARD ,C30,C26 on JACK BOARD | 2 +3 |
| | 13519452 | DD306-959F104Z25(100NF/25V Z) | CERAMIC CAPACITOR | C66 on EFFECT VR BOARD ,C105,C46,C48,C50,C51,C32,C104,C45,C19,C106,C18,C10,C8,C6,C5,C53,C24,C31,C29,C28,C27,C47,C25,C44,C23,C33,C34,C35,C39,C40,C42 on JACK BOARD ,C102,C81,C95,C99,C98,C97,C100,C94,C91,C86,C92,C80,C67,C61,C88,C89 on MIC BOARD | 31 +1 6 +1 |
| | 01900823 | RA2-16V100M-T2 | CHEMICAL CAPACITOR | | 4 +8 |
| | 01909678 | RA2-16V330M-T2 | CHEMICAL CAPACITOR | C65 on EFFECT VR BOARD ,C2,C14,C21,C15,C13,C12,C3,C4 on JACK BOARD ,C59,C76,C72,C63,C56,C69 on MIC BOARD | 8 +6 +1 |
| | 02014890 | RA2-16V221MT2 | CERAMIC CAPACITOR | | 4 +2 |
| INDUCTOR, COIL, FILTER | | | | | |
| | 01909645 | EXCML16A270U | FERRITE-BEAD | L1,L2,L3,L5,L6,L8,L9 on Effect Board | 7 |
| | 12449347 | EXC ELDR35V | FERRITE-BEAD | L6,L1,L2,L3,L4,L5 on JACK BOARD | 6 |
| CRYSTAL, RESONATOR | | | | | |
| | 01455201 | MA-406 12.288MHZ | CRYSTAL | X1 on Effect Board | 1 |
| CONNECTOR | | | | | |
| # | 02906534 | CONNECTOR B5B-PH-SM3-TB | CONNECTOR | CN3 on Effect Board | 1 |
| # | 02906545 | CONNECTOR B7B-PH-SM3-TB | CONNECTOR | CN8 on Effect Board | 1 |
| # | 02906556 | B10B-PH-SM3-TB | CONNECTOR | CN7,CN6 on Effect Board | 2 |
| | 13369541 | B10B-PH-K-S JST | CONNECTOR | CN2 on JACK BOARD ,CN7 on MIC BOARD | 1 +1 |
| | 13369592 | B7B-XH-A(7P) JST | CONNECTOR | CN3 on JACK BOARD ,CN13 on POWER SUPPLY BOARD | 1 +1 |
| | 13369606 | 52147-1110(11P) | WIRE TRAP | | 1 |
| | 13429300 | 51048-1100(11P) | CABLE HOLDER | CN6 on MIC BOARD | 1 |
| | 13369568 | JST B3B-PH-K-S JST | CONNECTOR | CN9 on EFFECT VR BOARD ,CN4 on POWER SUPPLY BOARD | 1 +1 |
| | 13369898 | B2P3-VH 7A /250V | CONNECTOR | CN12 on POWER SUPPLY BOARD | 1 |
| WIRING, CABLE | | | | | |
| # | 02343790 | WIRING | 10X50-P2.0-PHR-PHR-F | | 1 |
| | 02343801 | WIRING | 10X100-P2.0-PHR-PHR-F | | 1 |
| # | 02906456 | WIRING3 | 7X230-P2.5-XHP-XHP | | 1 |
| # | 02906578 | RIBBON CABLE | JWV 11 X 50-P2.0 | | 1 |
| # | 02906601 | WIRING2 | 7X220-P2.0-KR-DA | CN8 on EFFECT VR BOARD | 1 |
| | 02675701 | WIRING ASSY | WIRING W3(AC INLET+GND) | JK8 on Inlet Board | 1 |
| # | 02906612 | WIRING4 | 2X80-P3.96-SDN-VHR | CN11 on Inlet Board | 1 |
| # | 02906623 | WIRING1 | 3X110-P2.0-KR-KR | CN10 on LED BOARD ,CN5 on POWER LED BOARD | 1 |

| SCREW | | | | |
|-------------------------------|----------|---------------------|------------------------------|---------|
| | 40012345 | SCREW 4X10 | BINDING TAPTITE B BZC | 6 |
| | 40011090 | SCREW 3X6 | BINDING TAPTITE B BZC | 6 |
| | 40011145 | SCREW 3X6 | FLAT TAPTITE B BZC | 6 |
| | 40011490 | SCREW M3X6 | PAN MACHINE W/SW BZC | 2 |
| | 40017934 | SCREW M3X6 | PAN MACHINE W/SW+PW FE ZC | 15 |
| | 40016434 | SNAP PLATE | HLJ-480 | 2 |
| | 40011745 | HEX NUT M4 | SPRING NUT FE ZC | 1 |
| | 40012490 | SCREW 4X10 | BINDING TAPTITE P BZC | 2 |
| PACKING | | | | |
| | 02238323 | PAD | | 1 |
| # | 02906367 | PACKING CASE | | 1 |
| | 02456045 | OUTER PACKING CASE | AR SRQ | 1 |
| MISCELLANEOUS | | | | |
| | 02894367 | INSULATING COVER | DA-2496 SW-PS | 1 |
| | 12199584 | GROUNDING TERMINAL | M1698 | 2 |
| | 01347923 | GROUNDING TERMINAL | MEP1866-A | 1 |
| | 00453223 | LED SPACER | LDS-70G | 2 |
| | | | TER1,TER2 on JACK BOARD | |
| | | | TER3 on POWER SUPPLY BOARD | |
| ACCESSORIES (STANDARD) | | | | |
| △ | 02670401 | AC CORD SET | 100V YA-101/YP-3N/YC-13 | 1 |
| △ | 00894378 | AC CORD SET | 120V SP301+IS14 SJT18/3 | 1 |
| △ | 00894389 | AC CORD SET | 230V SP22+IS14 H05VV-F3G1.0 | 1 |
| △ | 00907001 | AC CORD SET | 240VE KP-610 GTTBS-3 KS-31A | 1 |
| △ | 23495124 | AC CORD SET | 240VA SC-144-JO1 ES303-10HMA | 1 |
| △ | 00905234 | EURO CONVERTER PLUG | ECP01-5A (PLUG FOR BRC-230T) | 1 |
| # | 72121989 | OWNER'S MANUAL SET | JAPANESE | 1 |
| # | 72122112 | OWNER'S MANUAL SET | ENGLISH | 1 |
| | 22350313 | FOOT MKS | | 235-313 |
| | 40232334 | WARRANTY CARD | MOCHIKOMI JAPAN ONLY | 1 |

TEST MODE (HOW TO CHECK OPERATION)

What is required

1. • Amplifier
 2. • Speaker (or headphones)
 3. • Transmitting device (such as a CD player)
 4. • Microphone
 5. • Foot switch (such as FS-5L)
- * Can be substituted with mono standard plug with signal and ground lines short-circuited.
6. • Standard plug audio cable

-40dB(MIC) Min.

Input jack check

1. Set each knob as follows.

| Knob | Setting |
|------------|---------------|
| MIC 1 GAIN | Min. (left) |
| MIC 2 GAIN | Min. (left) |
| BALANCE | DIRECT (left) |
| others | any setting |

2. POWER and EFFECT LED check

Turn on the power and check the following.

- POWER LED (blue) comes on
- EFFECT LED (red) comes on

3. MIC 1 input check

Connect a microphone to MIC 1 and input a sound signal. Check the following.

- SIGNAL LED (green) comes on
- Sound is output from OUTPUT L/R on the rear panel.
- Turn the [MIC 1 GAIN] knob and confirm that the sound volume changes.

4. MIC 2 input check

Connect a microphone to MIC 2 and input a sound signal. Check the following.

- SIGNAL LED (green) comes on
- Sound is output from OUTPUT L/R on the rear panel.
- Turn the [MIC 2 GAIN] knob and confirm that the sound volume changes.

5. INPUT L input check

Connect a line only to INPUT L on the rear panel and input a sound signal. Check the following.

- SIGNAL LED (green) comes on
- Sound is output from OUTPUT L/R on the rear panel.

6. Rear panel INPUT L/R input check

Connect a line to INPUT L/R on the rear panel and input a sound signal. Check the following.

- SIGNAL LED (green) comes on
- Sound of INPUT L is output from OUTPUT L.
- Sound of INPUT R is output from OUTPUT R.

[OUTPUT LEVEL] switch check

1. Input a sound signal from any input jack.
2. Switch the [OUTPUT LEVEL] switch on the rear panel. Check the following.
Switch setting Output level
+4dB Max.
-10dB Mid.

[BALANCE] knob check

1. Set each knob as follows.
BALANCE Center
DELAY TIME Center
REPEAT Center
Effect mode selection Any setting
2. Input a sound signal from any input jack.
3. Turn the [BALANCE] knob to change it, and check that the sound output is as follows.
Knob position Sound output
DIRECT (left) Only the sound that was input
Center Sound inputted and sound with ECHO effect
ECHO (right) Only the sound with ECHO effect

[DELAY TIME] knob check

1. Set each knob as follows.
BALANCE ECHO (right)
DELAY TIME Center
REPEAT Center
Effect mode selection SHORT ECHO (second from the left)
2. Input a sound signal from any input jack.
3. Turn the [DELAY TIME] knob from Min. to center to Max. and check that the delay time that is output changes.

[REPEAT] knob check

1. Set each knob as follows.
BALANCE ECHO (right)
DELAY TIME Center
REPEAT Center
Effect mode selection SHORT ECHO (second from the left)
2. Input a sound signal from any input jack.
3. Turn the [REPEAT] knob from Min. to center to Max. and check that the output number of sound repeated changes.

Effect mode selection knob check

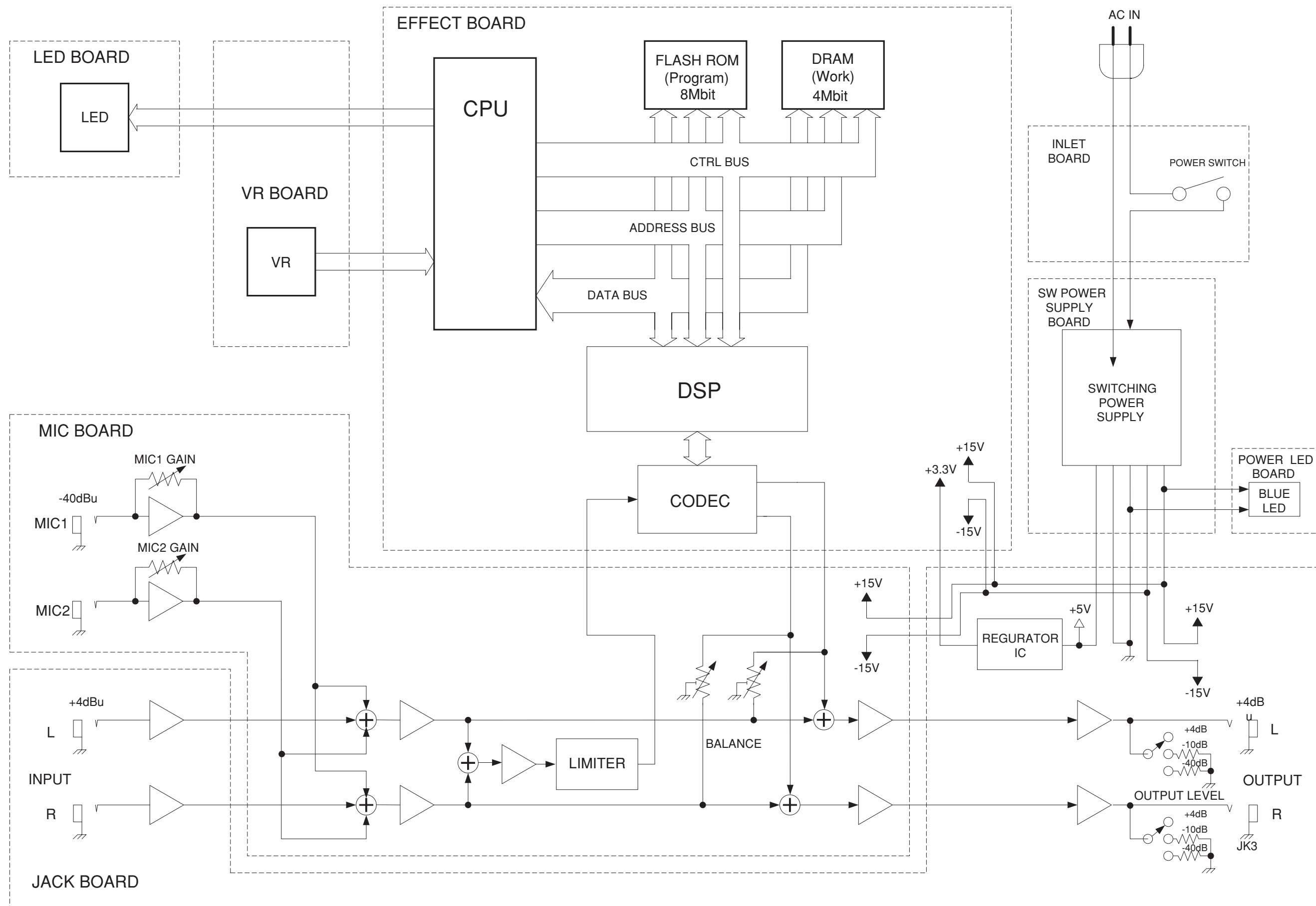
1. Set each knob as follows.
BALANCE ECHO (right)
DELAY TIME Center
REPEAT Center
Effect mode selection STADIUM (the far left)
2. Input a sound signal from any input jack.
3. Set the effect mode selection knob from [STADIUM] to [DELAY+PLATE] sequentially, and check that the effect that is output changes.

EFFECT REMOTE jack check

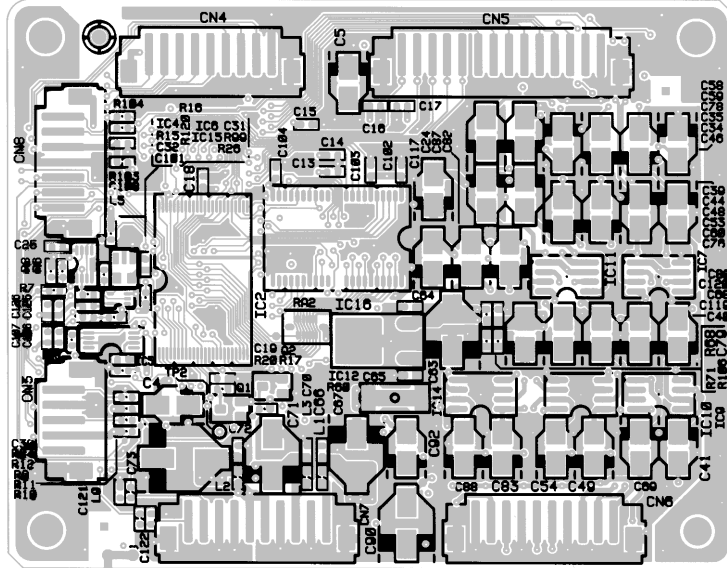
1. Set each knob as follows.
BALANCE Center
DELAY TIME Center
REPEAT Center
Effect mode selection VOCAL ECHO (center)
2. Connect a foot switch (such as FS-5L) to the EFFECT REMOTE jack on the rear panel.

3. Input a sound signal from any input jack.
4. Switch the foot switch on and off, and check the following.
Foot switch EFFECT LED (red) Sound that is output
OFF Comes on Only the sound that is input
ON Does not come on Sound that was input and sound with
ECHO effect
(On and off check of the foot switch can also be performed by inserting
and pulling out a standard plug with signal and ground short-circuited).

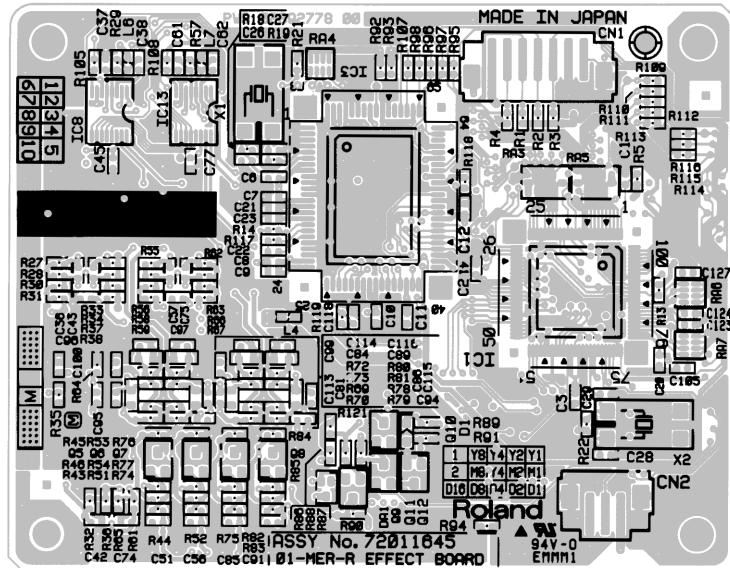
BLOCK DIAGRAM



CIRCUIT BOARD(EFFECT BOARD)

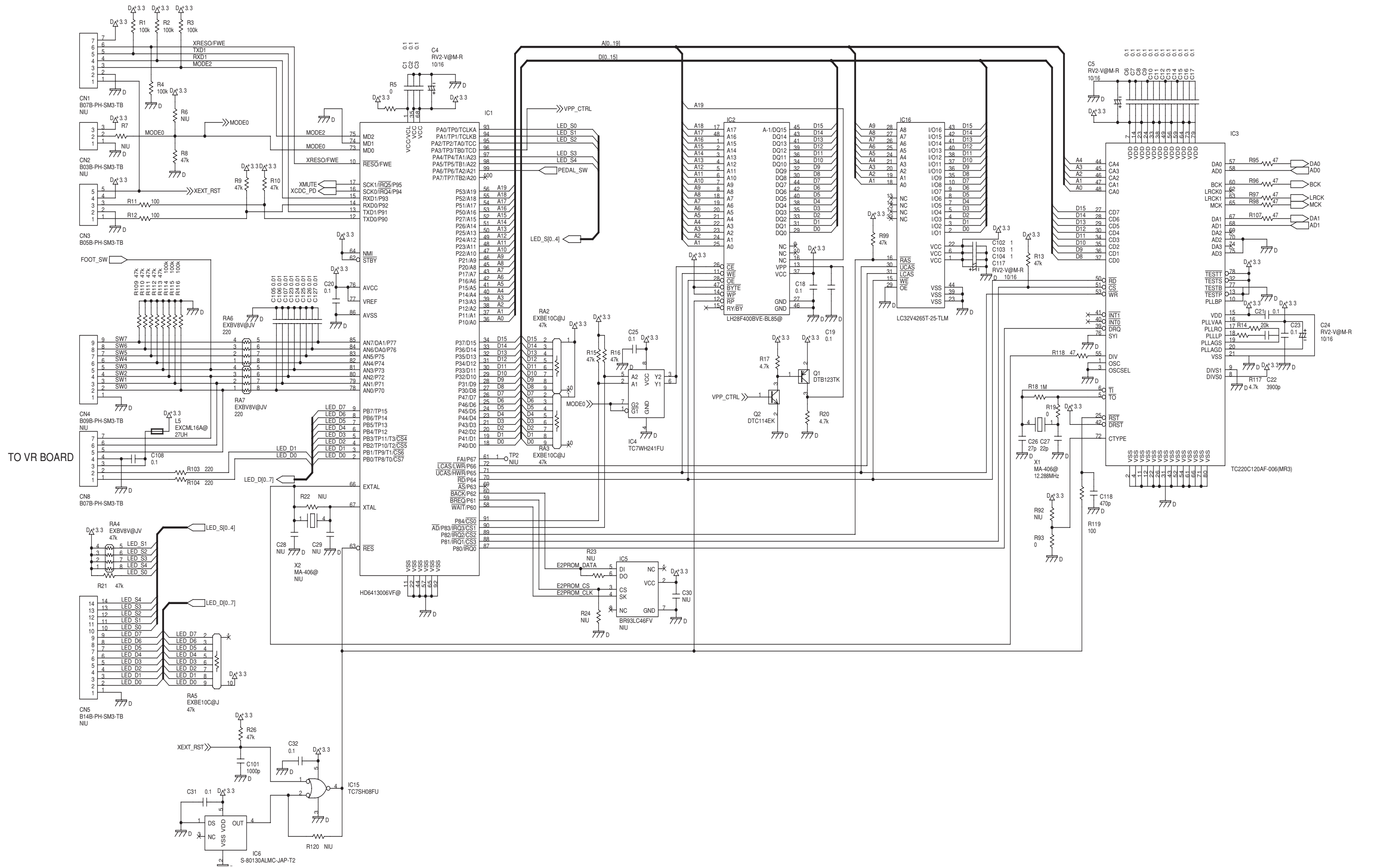


View from component side.

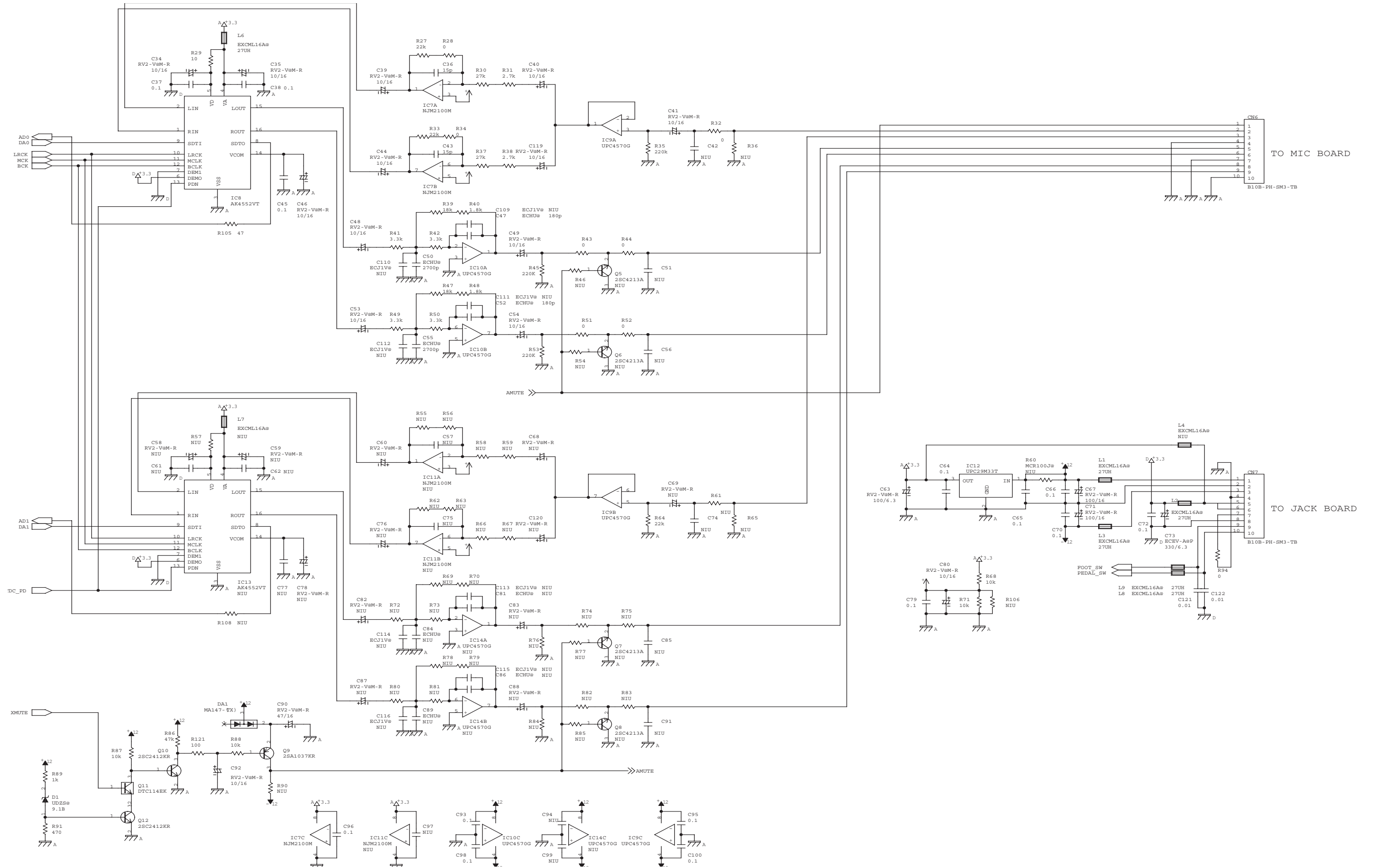


View from foil side.

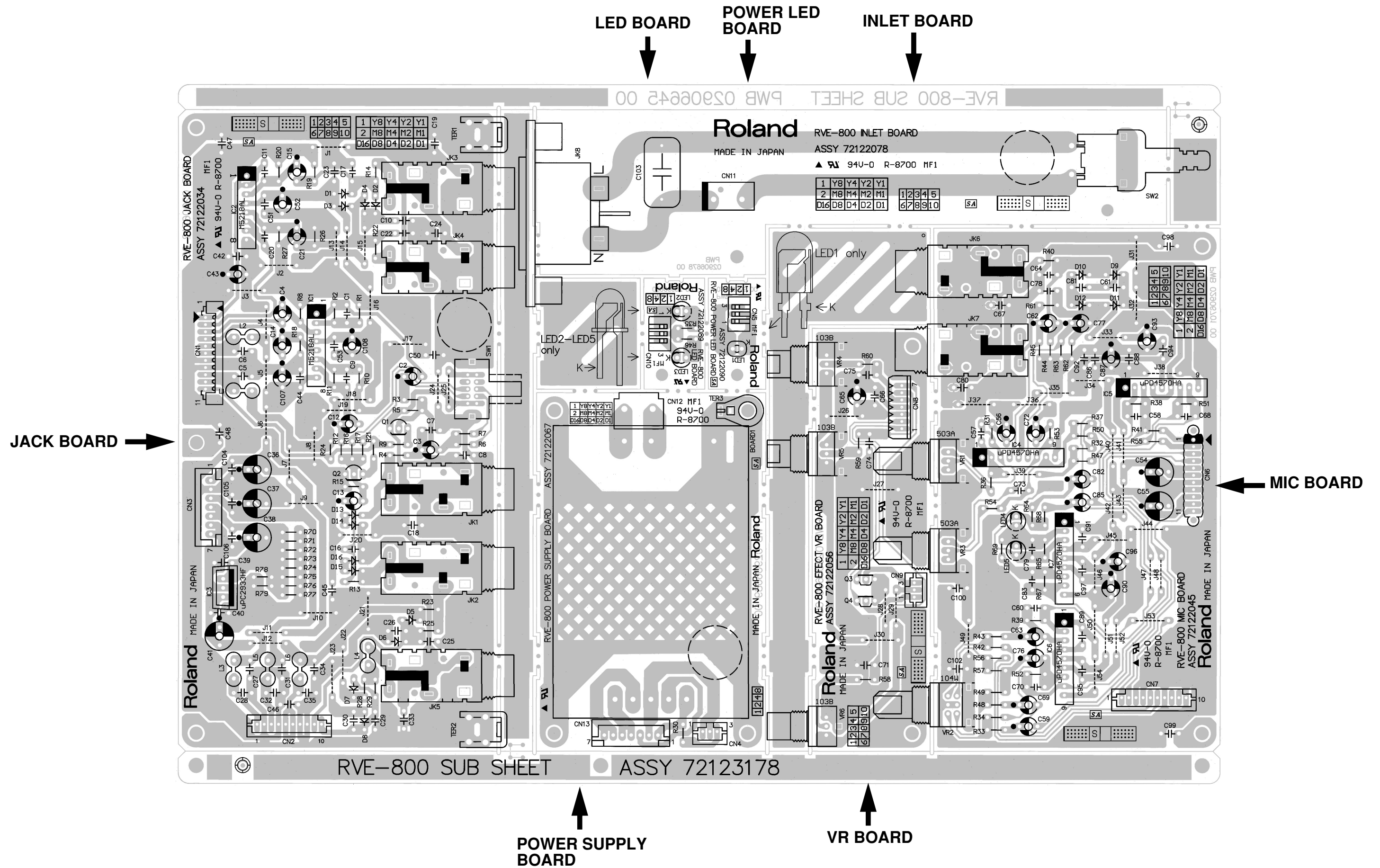
CIRCUIT DIAGRAM(EFFECT BOARD 1)



CIRCUIT DIAGRAM(EFFECT BOARD2)

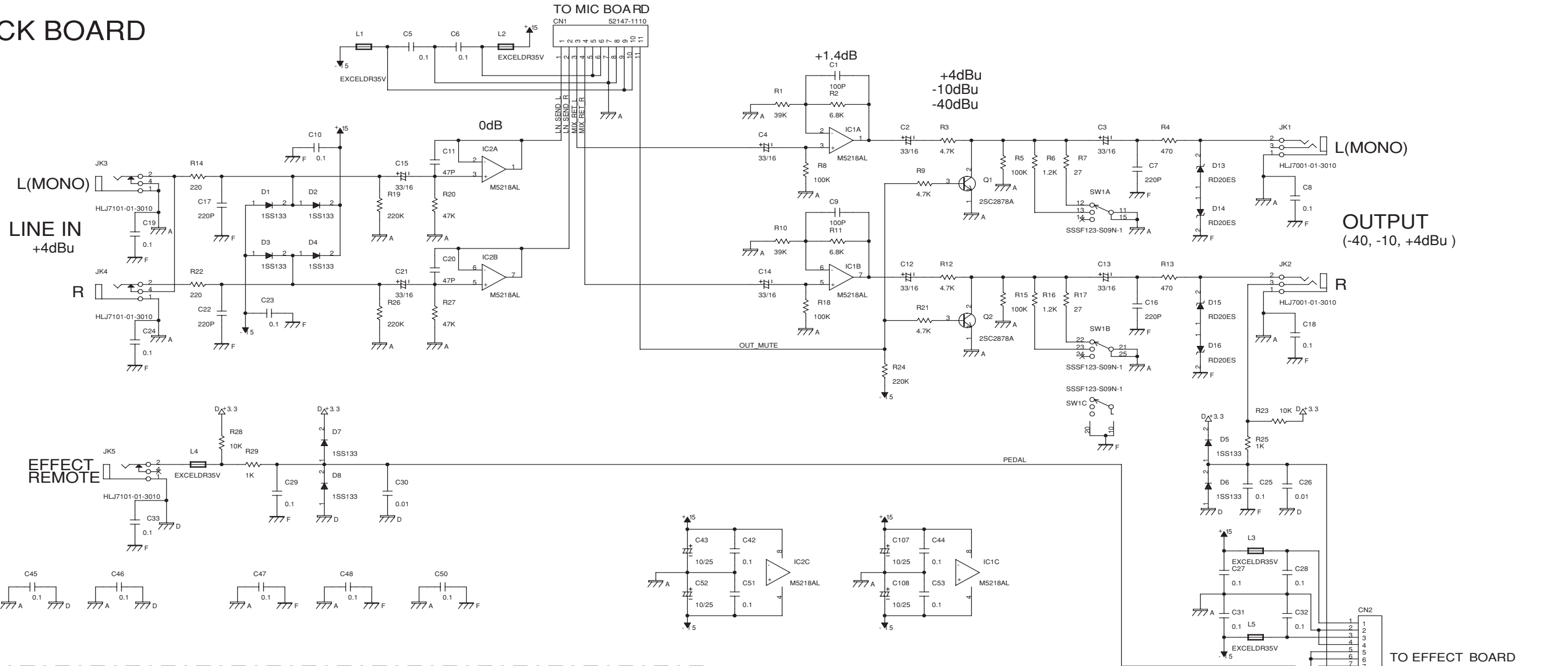


CIRCUIT BOARD(JACK,INLET,POWER SUPPLY,POWER LED, MIC,VR,LED BOARD)



CIRCUIT DIAGRAM(JACK,INLET,POWER SUPPLY,POWER LED BOARD)

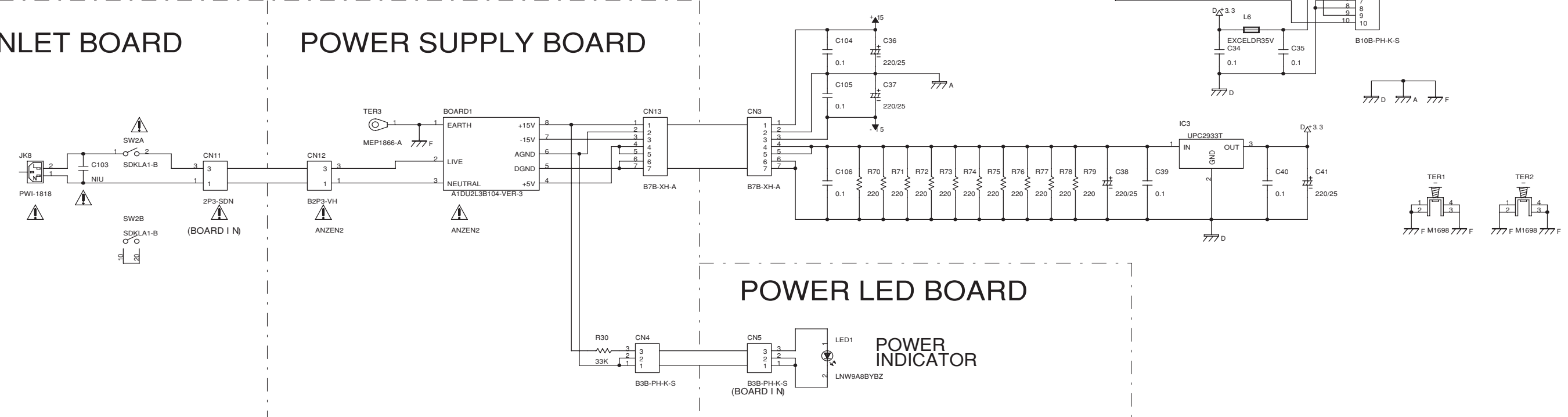
JACK BOARD



INLET BOARD

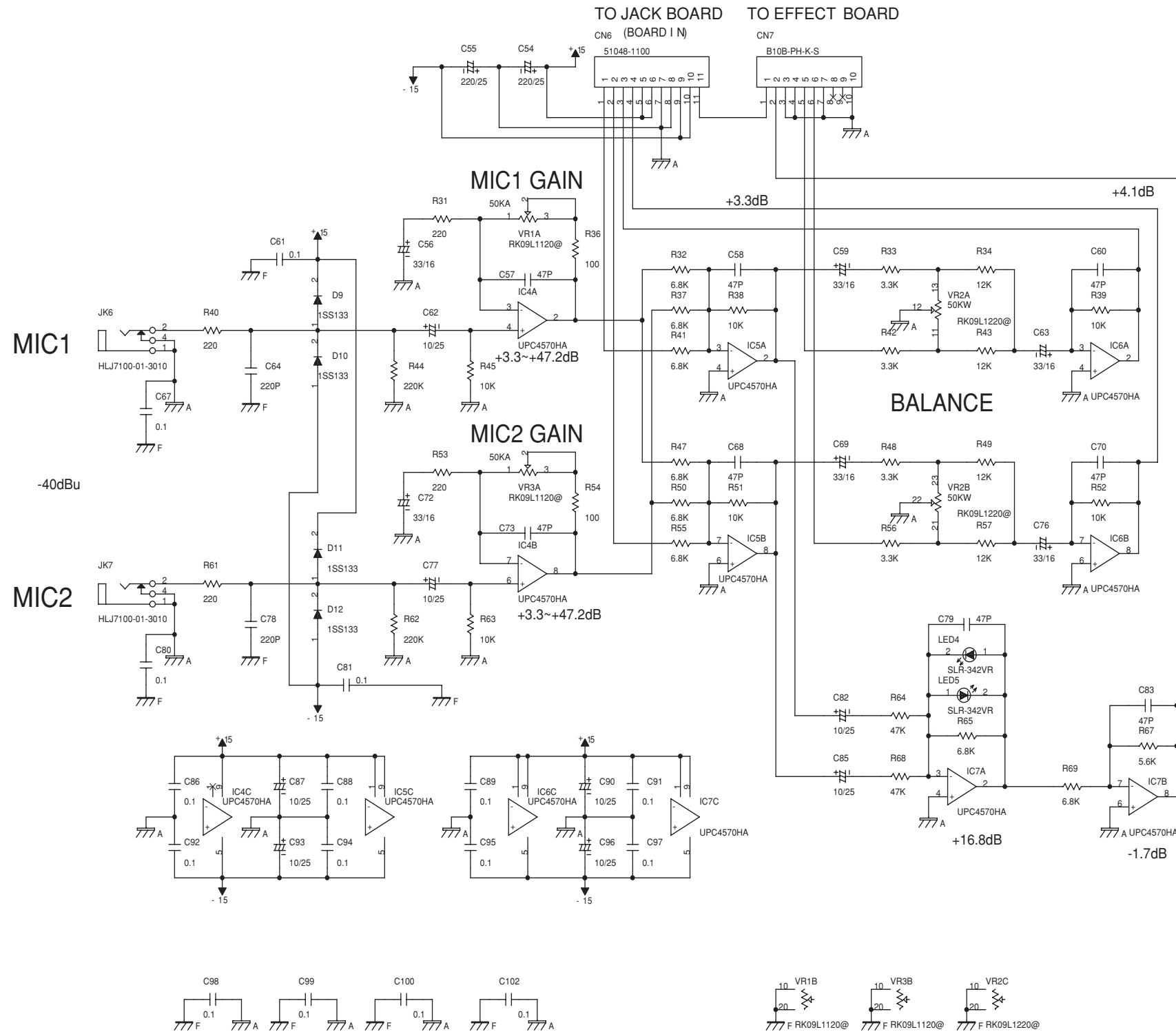
POWER SUPPLY BOARD

POWER LED BOARD

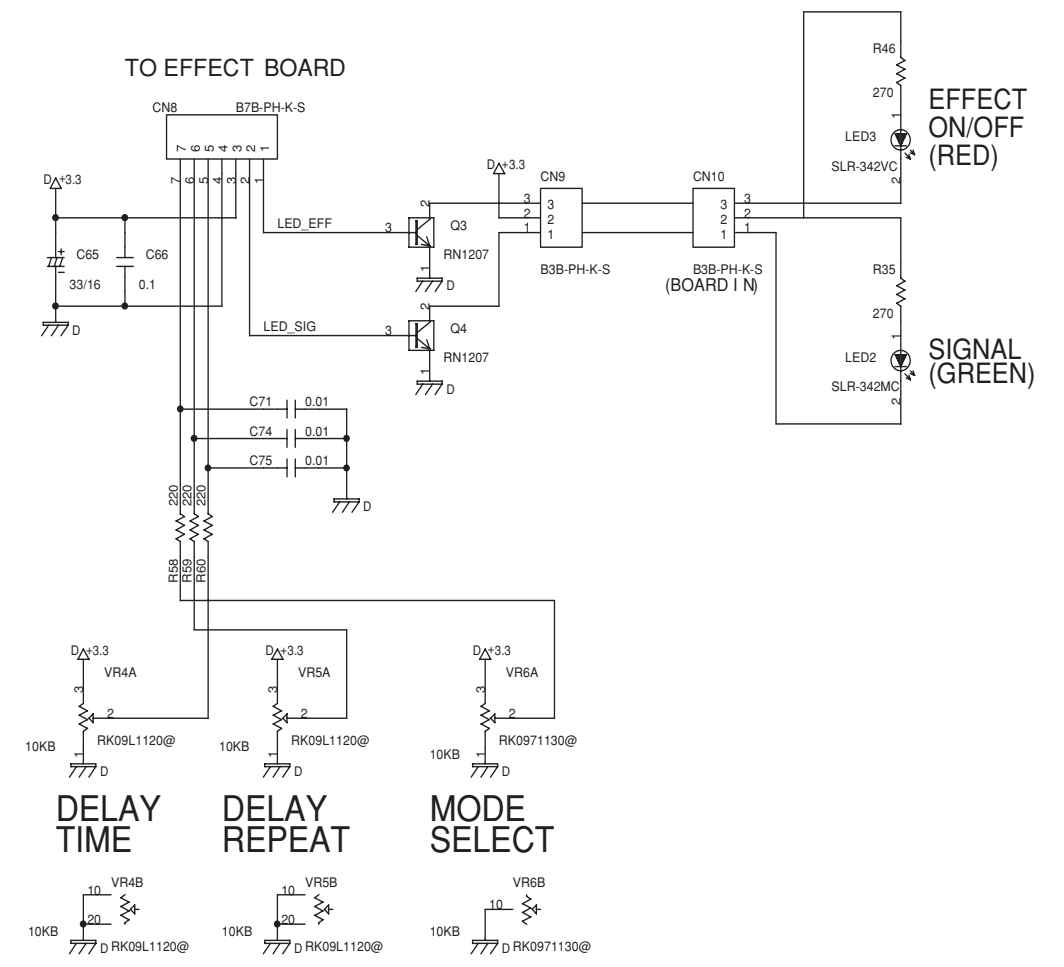


CIRCUIT DIAGRAM(MIC,VR,LED BOARD)

MIC BOARD



VR BOARD



LED BOARD