

# BOSS CE-2/CE-2B

## SERVICE NOTES *First Edition*

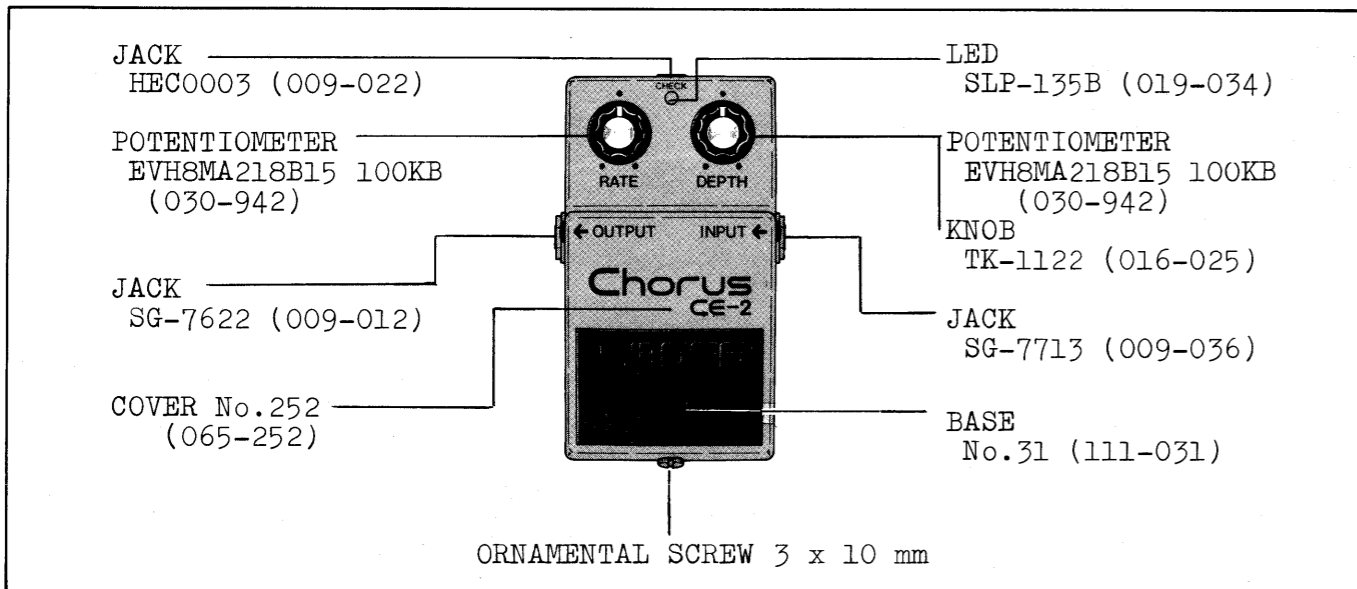
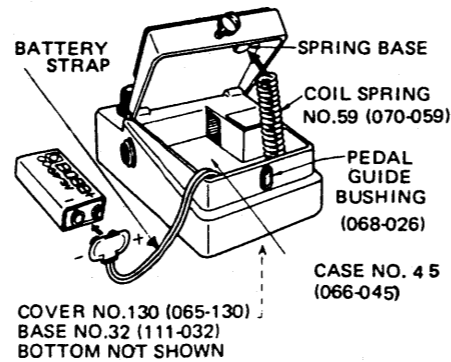
ET-50B(151-050B) (PCB 052-516B)

### CE-2

※This notes includes the contents of the CE-2 First Edition and makes it obsolete.  
 ※CE-2のサービスノート第一版は廃版とし本サービスノートに併合します。

### SPECIFICATIONS

|                         |  |
|-------------------------|--|
| Power                   | Battery 9V (1), AC Adaptor   |
| Current requirements    | DC9V, 9mA  |
| Control                 | Rate, Depth  |
| Others                  | Normal/Effect Changeover Switch, Effect Indicator (also for confirmation of Battery Check) |
| Jack                    | Input, Output, AC Adaptor  |
| S/N                     | 90dB or more (IHF-A)   |
| Maximum allowable input | 0dBm (100Hz), -10dBm (1kHz)  |
| Input impedance         | 470kΩ  |
| Output load impedance   | Over 10kΩ  |
| Dimensions              | 70(W) x 55(H) x 125(D)mm (2.8" x 2.2" x 4.9")  |
| Weight                  | 400g (0.88lbs.)  |



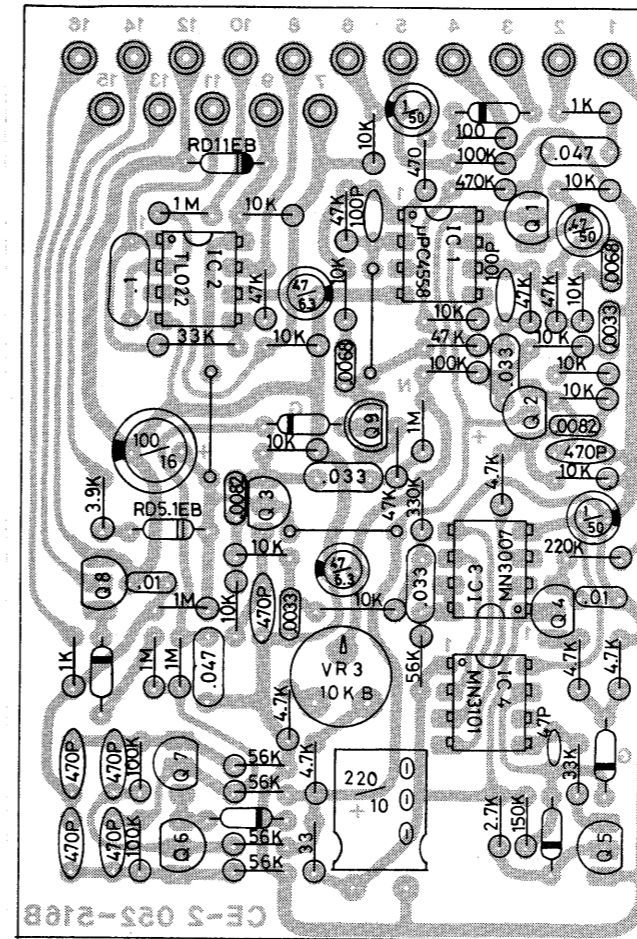
### PARTS LIST

|          |                           |
|----------|---------------------------|
| 066-045  | Case no.45 (light blue)   |
| 065-252  | Cover no.252 (light blue) |
| 065-130  | Cover no.130 bottom       |
| 111-031  | Base no.31 pedal matt     |
| 111-032  | Base no.32 bottom         |
| 068-026  | Guide bushing no.26       |
| 064-151  | Holder no.151 washer LED  |
| 107-053  | Cushion no.53 PCB         |
| 065-153  | Cover no.153 PCB          |
| 070-059  | Spring no.59 coil         |
| 016-025  | Knob no.25 TK-1122        |
| 030-942  | Pot. EVH8MA218B15 100KB   |
| 001-295  | Switch J-MO404            |
| 151-050B | PCB assy ET-50B           |
| 052-516B | PCB ET-50B less parts     |

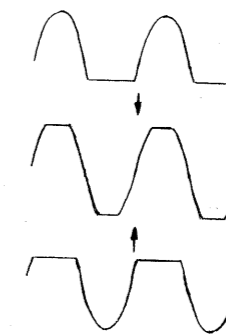
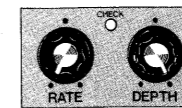
### SEMICONDUCTOR

|         |                        |
|---------|------------------------|
| 017-110 | 2SC945-P transistor    |
| 017-104 | 2SC732TM-GR transistor |
| 017-014 | 2SK30A-Y FET           |
| 018-014 | 1S2473 Diode           |
| 018-075 | RD5.1EB zener          |
| 018-039 | RD11EB zener           |
| 019-034 | SLP-135B LED           |
| 020-097 | μPC4558C IC            |
| 020-164 | TL022CP IC             |
| 020-213 | MN3007 BBD             |
| 020-224 | MN3101 BBD driver      |
| 009-022 | Jack HEC-0003 adaptor  |
| 009-012 | Jack SG-7622           |
| 009-036 | Jack SG-7713           |

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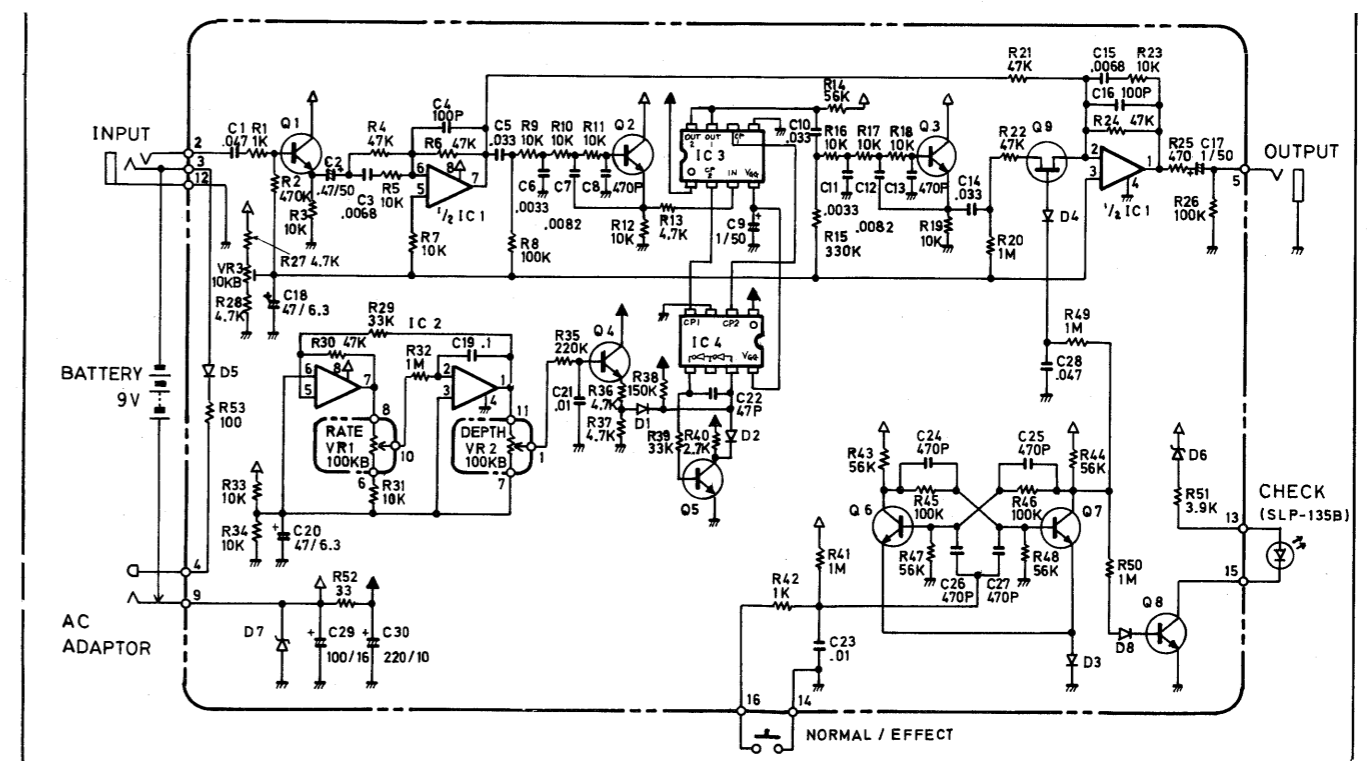
### ADJUSTMENT



Set controls as shown left.  
 Feed a signal 200Hz, + 3dBm, sine into INPUT Jack.  
 Connect an oscilloscope to Q3 emitter.  
 Determine the BBD bias by turning VR-3 to provide a centered operating-point.

- D1-D5, D8: 1S2473 or 1S1588
- D6 : RD5.1EB
- D7 : RD11EB
- IC1 : μPC4558C
- IC2 : TL022CP
- IC3 : MN3007(1024-stage)
- IC4 : MN3101(BBD driver)

- CERAMIC
- ELR-25
- Q1-3 2SC732TM-GR
- Q4-8 2SC945-P
- ELECTROLYTIC
- MYLAR



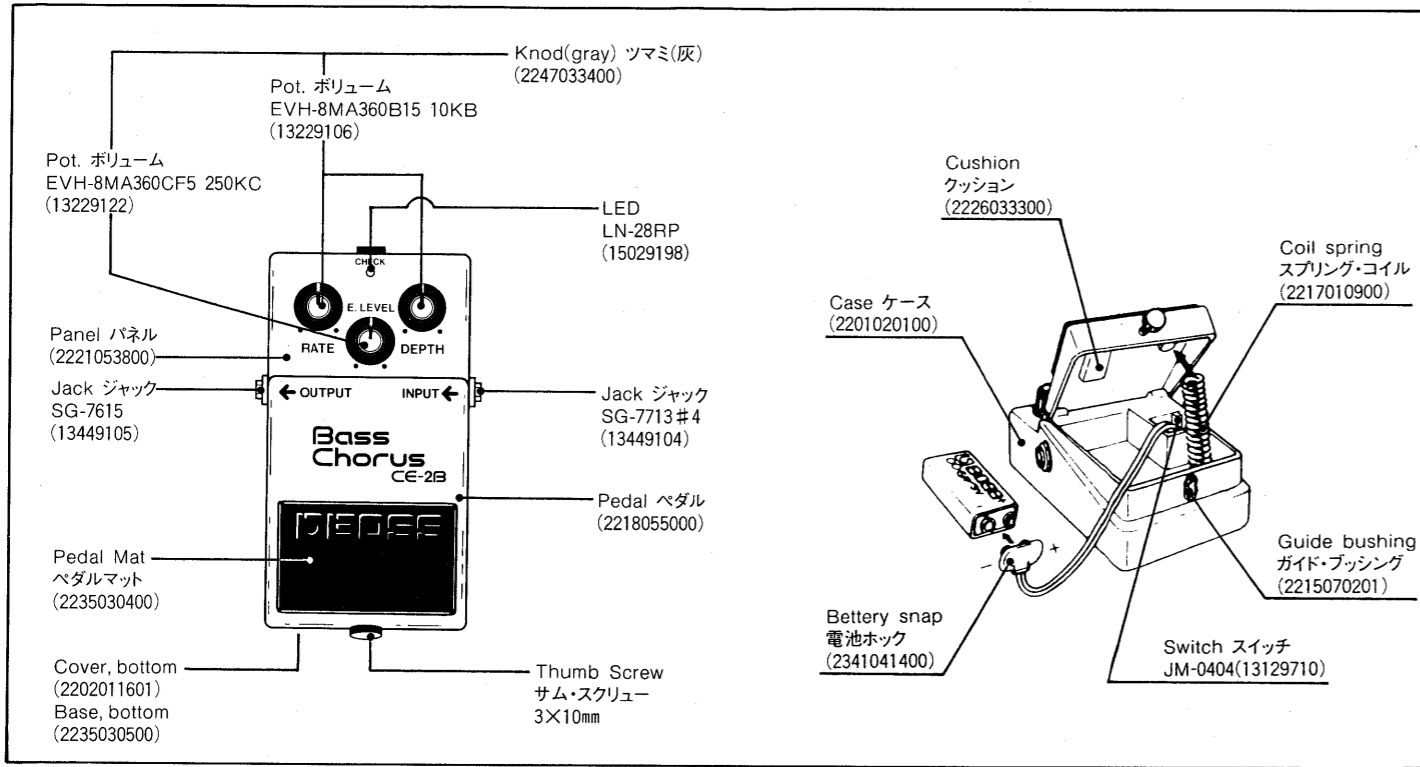
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# CE-2B

## SPECIFICATIONS

Power Source.....9V BatteryX1 or AC adaptor(BOSS ACA Series)  
 Current Draw.....10mA@9V  
 Residual Noise.....Less than -100dBm(IHF-A)  
 Maximum Input Level.....0dBm(100Hz)  
 Input Impedance.....470kΩ

Output Load Impedance.....More than 10kΩ  
 Dimensions.....70(W)×55(H)×125(D)mm  
 2-3/4(W)×2-1/4(H)×5(D)in.  
 Weight.....400g/14oz



## PARTS LIST

### CASING

|            |           |
|------------|-----------|
| 2201020100 | Case      |
| 2221053800 | Panel     |
| 2202011601 | Cover     |
| 2235030500 | Base      |
| 2218055000 | Pedal     |
| 2235030400 | Pedal Mat |

### KNOB

|            |      |
|------------|------|
| 2247033400 | grey |
|------------|------|

### PCB ASSY

|            |           |                  |
|------------|-----------|------------------|
| 7523851000 | MT Board  | (pcb 2292044000) |
| -----      | LED Board | (pcb 2291049600) |

### IC

|          |           |            |
|----------|-----------|------------|
| 15189102 | NJM4558DD | Op amp     |
| 15189115 | TL022CP   | Op amp     |
| 15219205 | MN3007    | BBD        |
| 15169504 | MN3101    | BBD driver |

### TRANSISTOR

|          |            |     |
|----------|------------|-----|
| 15129120 | 2SC2240-GR |     |
| 15129113 | 2SC1740    |     |
| 15139101 | 2SK30A-Y   | FET |

### DIODE

|            |           |       |
|------------|-----------|-------|
| 15019107   | DS-442    |       |
| 15019209T0 | S-5500G   | zener |
| 15019526   | RD5.6EB-3 | LED   |
| 15029198   | LN-28RP   | LED   |

### JACK

|          |                 |            |
|----------|-----------------|------------|
| 13669704 | HEC-0749-01-010 | AC adaptor |
| 13449105 | SG-7615         |            |
| 13449104 | SG-7713#4       |            |

### SWITCH

|          |         |
|----------|---------|
| 13129710 | JM-0404 |
|----------|---------|

### POTENTIOMETER

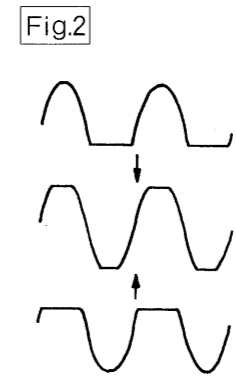
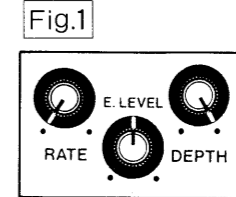
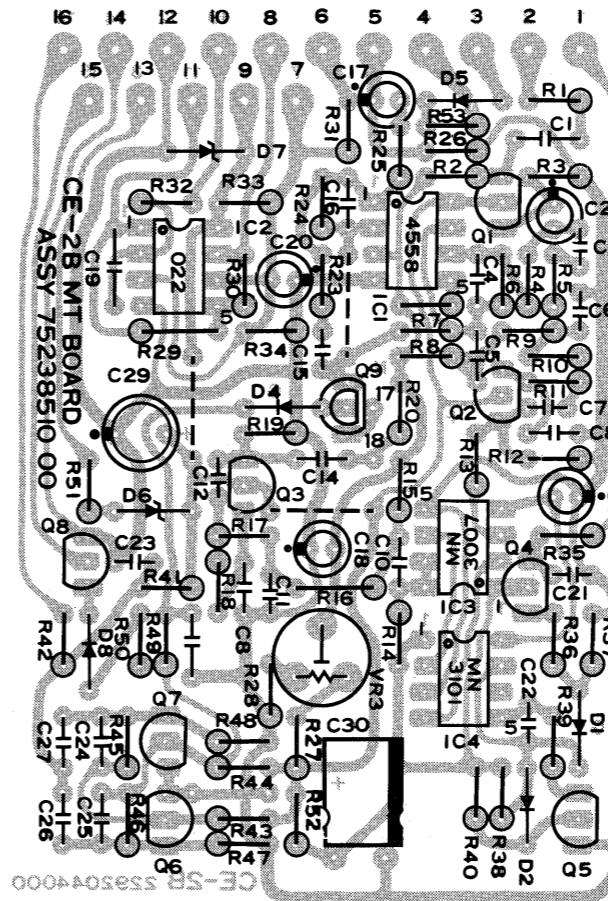
|          |               |       |             |
|----------|---------------|-------|-------------|
| 13229106 | EVH-8MA360B15 | 10KB  | RATE, DEPTH |
| 13229122 | EVH-8MA360CF5 | 250KC | E. LEVEL    |
| 13299195 | EVN-D4AA00B14 | 10KB  | trimmer     |

### MISCELLANEOUS

|            |               |       |
|------------|---------------|-------|
| 2215070201 | Guide Bushing |       |
| 2226033300 | Cushion       |       |
| 2217010900 | Coil Spring   |       |
| 2341041400 | Battery Snap  |       |
| 2216052900 | Plastic Sheet | clear |

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## MT BOARD 7523851000 (pcb 2292044000)

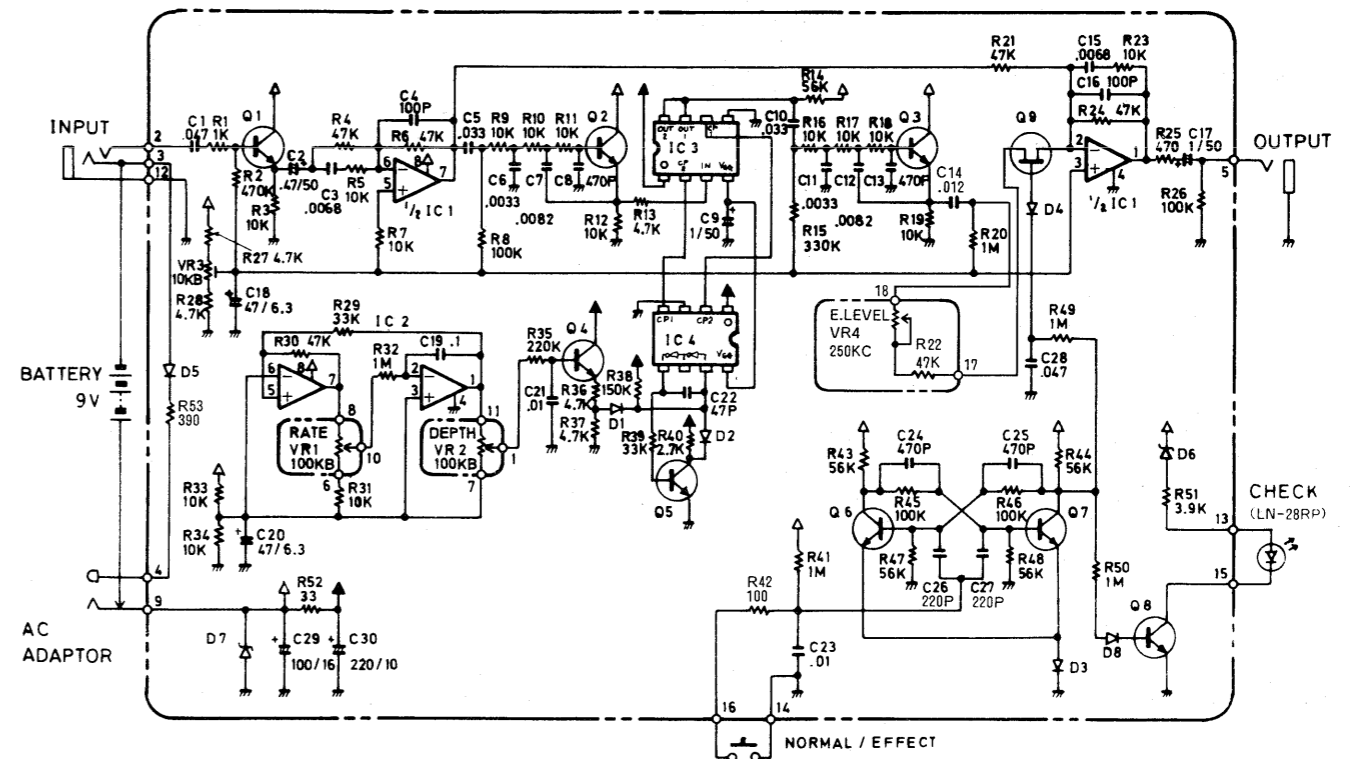


## ADJUSTMENT

1. Set controls as shown in Fig.1.
2. Feed a signal 200Hz, +3dBm, sine into INPUT Jack.
3. Connect an oscilloscope to Q3 emitter.
4. Determine the BBD bias by turning VR-3 to provide a centered operating-point as shown in Fig.2.

## 調整仕様

1. Fig-1の様にツマミ類をセットする。
2. INPUTに200Hz, +3dBmのサイン波を加える。
3. オシロスコープをQ3のエミッタに接続する。
4. VR-3を調整して波形がFig-2の様に上下対称になる様にする。



IC-1: NJM4558DD Q1-Q3: 2SC2240GR D1-D5, D8: 1S2473  
 IC-2: TL022CP Q4-Q8: 2SC945P D6 :RD-5.6EB3  
 IC-3: MN3007(1024stag) Q9 :2SK30A-Y D7 :S5500G  
 IC-4: MN3101(BBD Driver)