

CHECKING & ADJUSTMENT

Before starting any electrical adjustment, check the DC voltages:

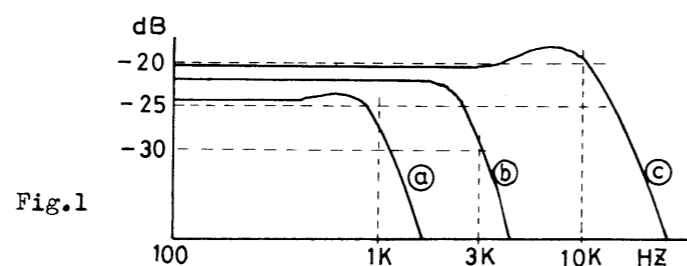
+B +13±0.5V at Q23 (2SD-234) E

-B -13.5±0.5V at Q22 (2SB-434) E

| To check or adjust | connect | to | Feed | Set | Adjust | for | Remark |
|----------------------------------|--------------------|-------------|-----------------|-----|----------|---|--|
| Clock F Low | Scope or F Counter | PCB T.P (A) | | | VR5 47K | 125usec (8kHz) | |
| Clock F High | F Counter | (A) | | | (check) | 6.25usec (160kHz) | Tolerance ±10% |
| F. C. F Duty Ratio | Scope | (B) | | | VR6 22K | | Sweep Time 5usec 5X MAG |
| CCD Clock Pulse Cancel 1st (1st) | Scope (AC range) | (C) | | | VR2 1K | | Coarse (Fine Adj. later) |
| CCD Bias | Gen | IN jack | Sine 500Hz 0dBm | | VR1 4.7K | | Without Distortions |
| | Scope | (D) | | | (check) | | |
| CCD Clock Pulse Cancel (2nd) | Scope (AC range) | (C) | | | VR2 1K | | Minimize amplitude |
| Cutoff F | VIM | (D) | | | (check) | Fig.1 | |
| Noise Killer | Amp Sp | D+E jack | | | VR4 47K | Rotating from FCW position, stop where noise suddenly reduces | |
| Intensity | Amp Mic | D+E jack | Staccato | | VR3 47K | | Multiple repetitions with constant amplitude |

Abbreviation

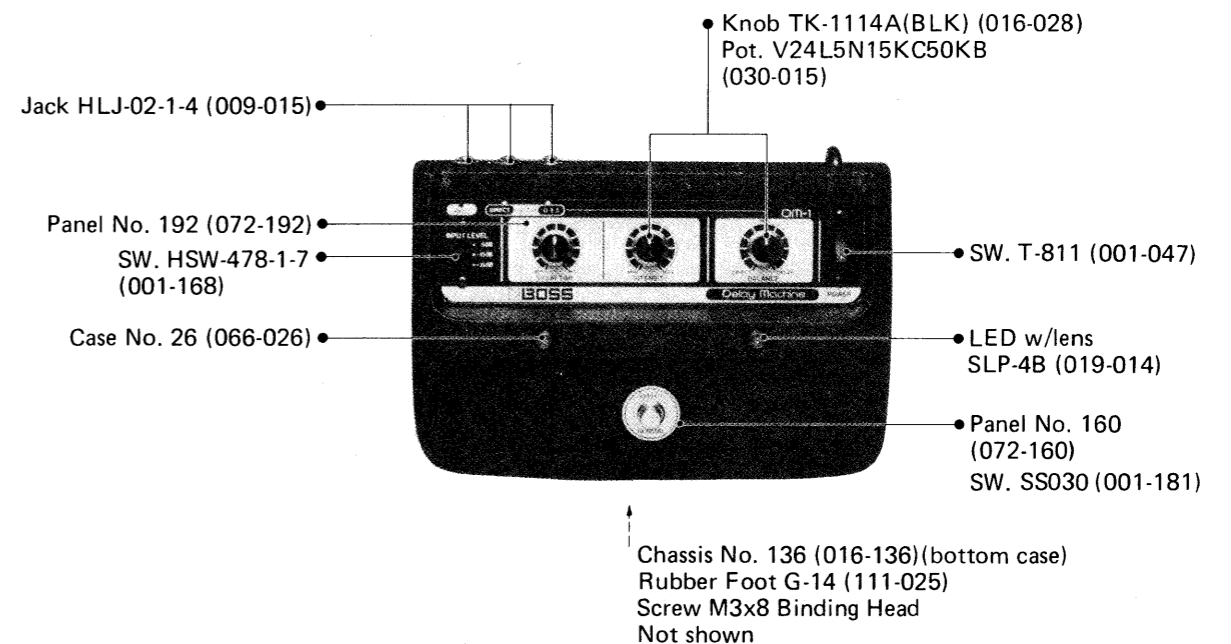
- Scope Oscilloscope
- F Frequency
- Gen Signal Generator
- VIM Voltmeter
- FCW Fullclockwise



BOSS DM-1 SERVICE NOTES

SPECIFICATIONS

- Power consumption 3W
- Controls Delay time (25-500ms continuous), (Bandwidth: 10K-1KHz) Intensity, Balance
- Switches Power, Input Level Selector, (0/-15/-35dB), Normal/Effect Selector
- Others Power Pilot Lamp, Effect/Normal Indicator
- Input impedance 220KΩ
- Output load impedance Over 600Ω
- Gain UNITY 1
- S/N ratio Better than 80dB
- Dimension 260(W)x64(H)x180(D)mm 10.2(W)x2.5(H)x7.1(D)in
- Weight 1.8kg, 3.9lbs.



PARTS LIST

- 066-026 Case NO.26
- 061-136 Chassis NO136 (cover)
- 072-192 Panel NO.192
- 072-176 Panel NO.160 (E/N)
- SWITCHES**
- 001-047 T-811 power
- 001-181 SS030 push
- 001-168 HSW-478-1-7 slide
- 016-028 Knob TK-1114A (Blk)
- 009-015 Jack HLJ-02-1-4
- 151-031B PCB Assy ET-31B
- 052-313B PCB less parts
- 111-025 Rubber Foot G-14
- ICs**
- 020-087 R5101 CCD
- 020-083 TC-4016P
- 020-084 TC4069P
- 020-041 TC-4013P
- 020-064 μPC-4558C
- TRANSISTORS**
- 017-010 2SD234-O
- 017-022 2SB434-O
- 017-021 2SC900-F
- 017-012 2SA733-Q
- 017-014 2SK30A-Y FET
- 017-091 2SK30A-O FET
- DIODES**
- 018-014 2S2473 or 1S1588, 1S1555
- 018-022 1N4003
- 018-085 RD13EC or 05Z13U
- 019-014 SLP-4B LED w/lens
- POTENTIOMETERS**
- 030-015 V2415N15KC50KB
- 030-489 CR19R 1K trim.
- 030-463 SR19R 4.7K trim.
- 030-467 SR19R 22K trim.
- 030-469 SR19R 47K trim.
- 022-088C Power Transformer 100/117V
- 022-088D Power Transformer 220/240V
- 008-023 Fuse SGA 0.25A 100/117V
- 008-059 Fuse CEE 200mA 220/240V
- 008-053 Fuse CEE 50mA Prim. 220/240V

ET-31B(151-031B)

- IC1,2 uPC4558C
- IC3 R5101
- IC4 TC4013P
- IC5 TC4069P
- IC6-8 TC4016P
- Q20 2SK30A-O
- Q 1-16 2SC900-F
- Q17-19 2SA733-Q
- Q21 2SK30A-Y
- Q22 2SB434-O
- Q23 2SD234-O
- D1-5 1N4003
- D6 05Z13U or RD13EC
- D7-12 1S2473 or 1S1588
- IC socket ICL-244-S7G

- 117V GRN YEL
 - 100V BLU BLK
 - 0 WHT YEL
- N_Q88C

- 240V RED YEL
 - 220V BRN BLK
 - 0 WHT YEL
- N_Q88D

