

SDD-320 SERVICE NOTES

First Edition

•SPECIFICATIONS

SDD-320 DIMENSION D

Input Level
 NOMINAL +4dBm
 MAXIMUM +14dBm

Input Impedance
 BALANCED 26kΩ
 UNBALANCED 13kΩ

Output Level
 NOMINAL +4dBm

Load Impedance
 BALANCED greater than 600Ω
 UNBALANCED greater than 600Ω

Gain
 (MODE = OFF) 0dB

S/N
 ("A" WEIGHTED) greater than 95dB
 [0dBm = 0.775V RMS]

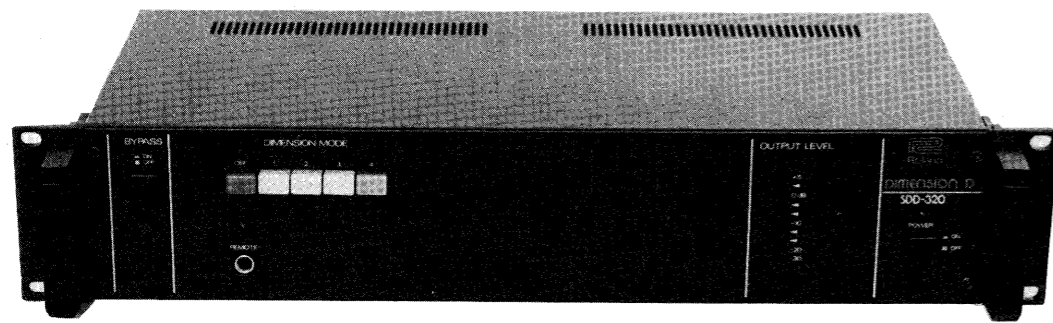
■ **Switches**
 DIMENSION MODE (OFF, 1, 2, 3, 4)
 BYPASS (ON, OFF)
 INPUT MODE (STEREO, MONO)

POWER Switch
 ■ **Indicators**
 OUTPUT LEVEL
 EFFECT
 POWER Pilot Lamp

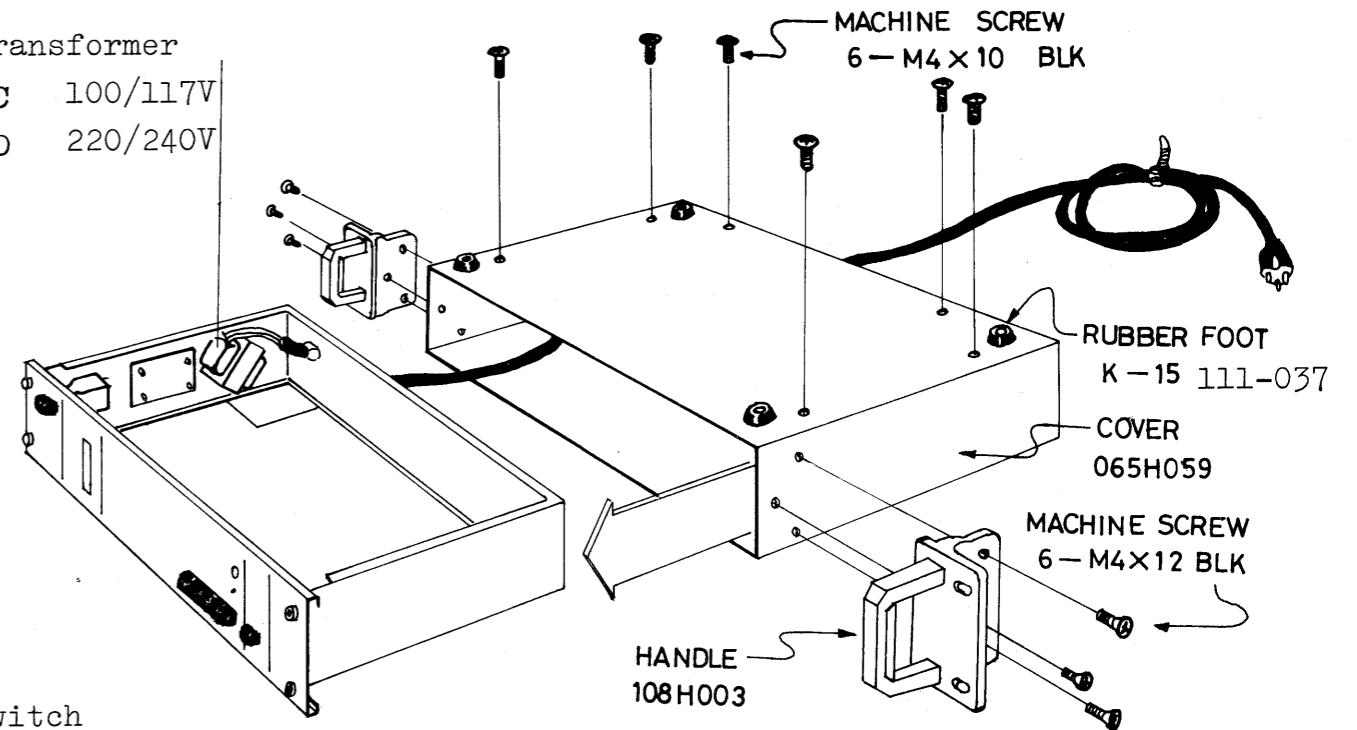
POWER CONSUMPTION
 8W

DIMENSIONS
 482(W) x 92(H) x 252(D) mm
 Type EIA-2U rack mount

Weight
 4kg



Power Transformer
 022-086C 100/117V
 022-086D 220/240V



Power Switch
 SDG5P001-1 (001-215) 100V
 SDG5P001-2 (001-216) 117V
 SDG5P502 (001-217) 220/240V
 Button no.9 (016-009) blk

Receptacle male
 NC-3MP (010-264)

Jack HLJ-264-01-030 (009-030)

Jack HLJ-261-01-030 (009-037)

Receptacle NC-3FP female (009-263)

Slide Switch SBN-22-06 (001-135)

Push Switch SUE-12 (001-288)
 Button no.9 blk (016-009)

CHASSIS 061-260B

OP-154B (149-154B)

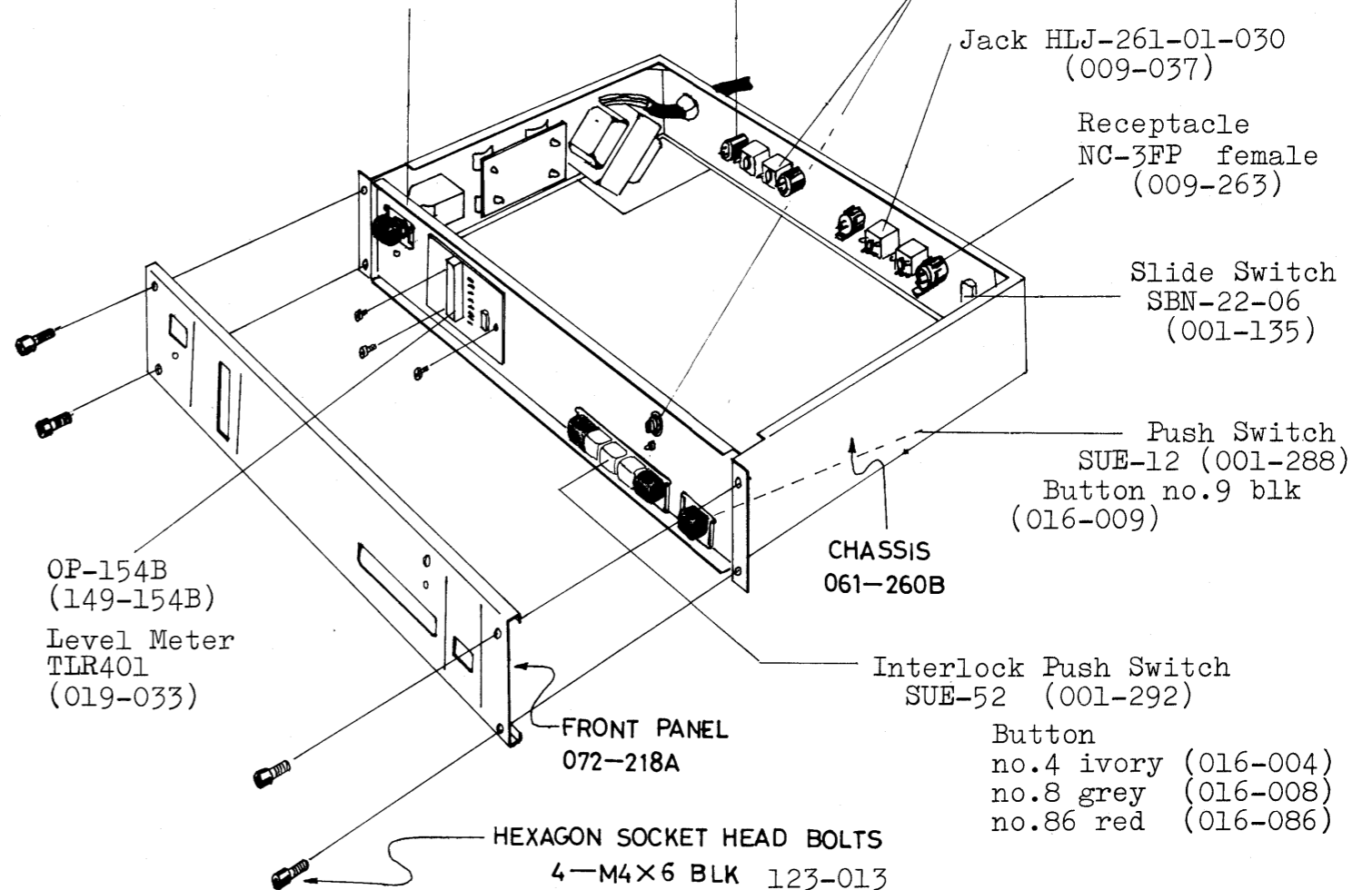
Level Meter TLR401 (019-033)

Interlock Push Switch SUE-52 (001-292)

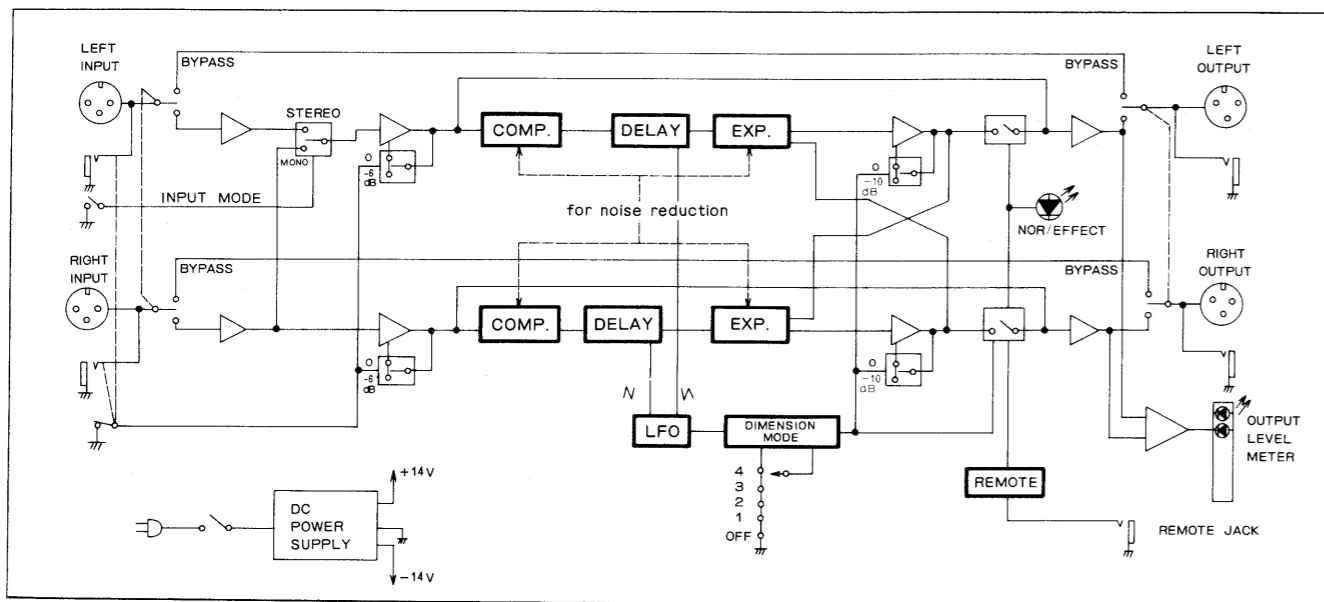
Button no.4 ivory (016-004)
 no.8 grey (016-008)
 no.86 red (016-086)

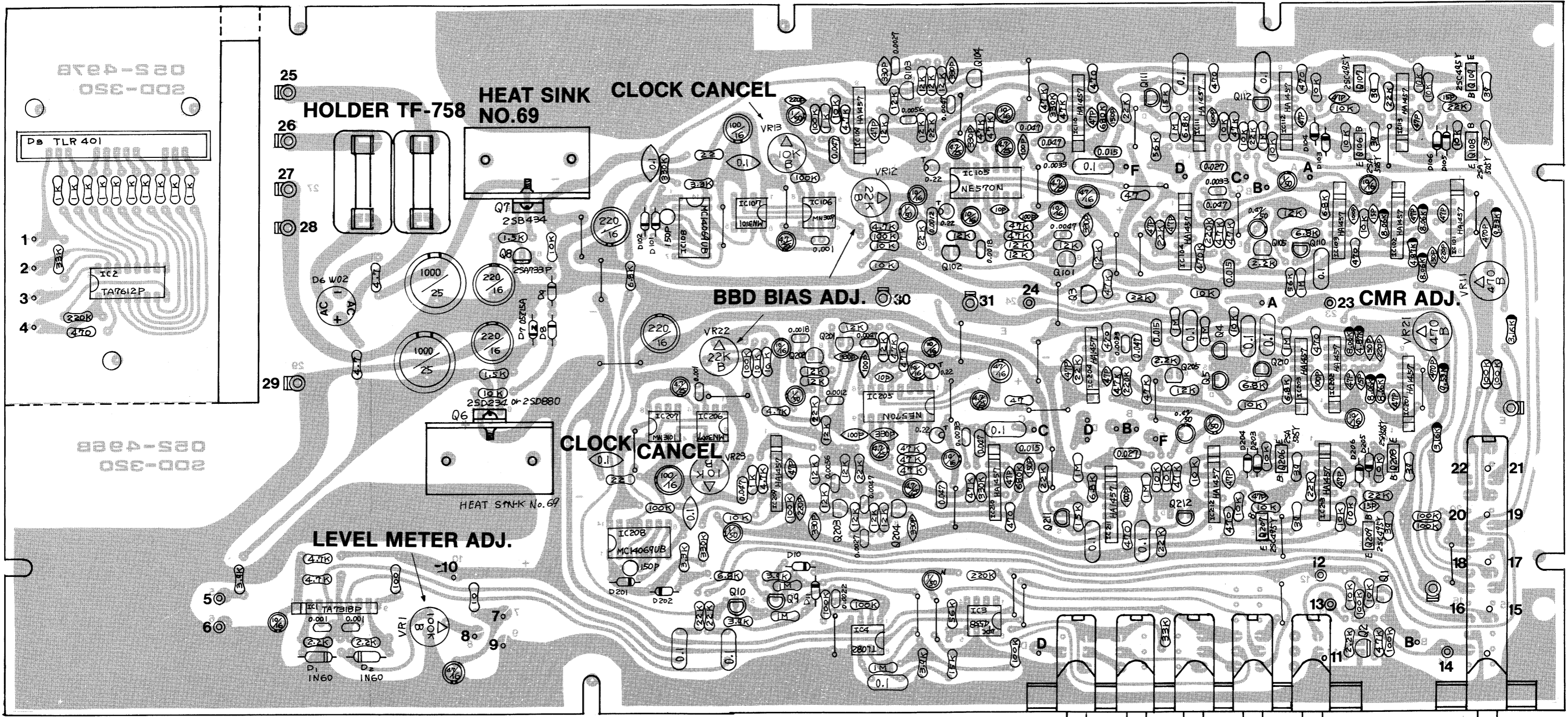
FRONT PANEL 072-218A

HEXAGON SOCKET HEAD BOLTS 4-M4x6 BLK 123-013

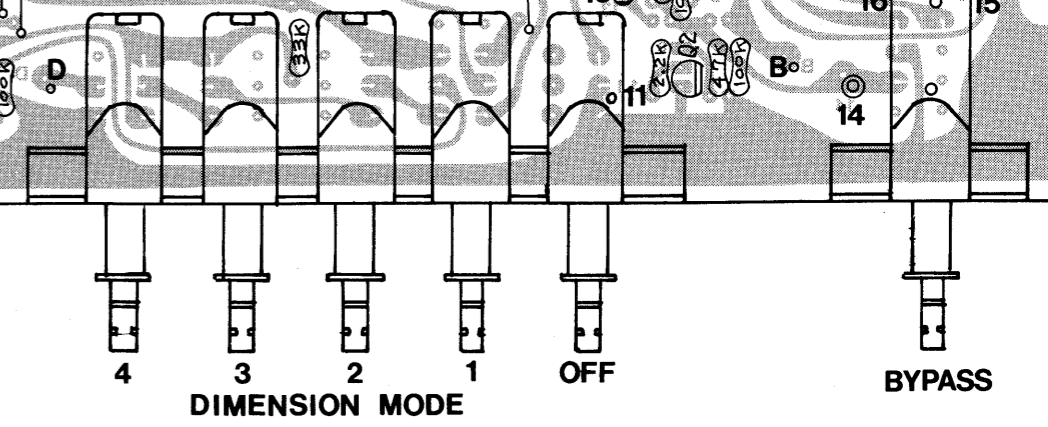


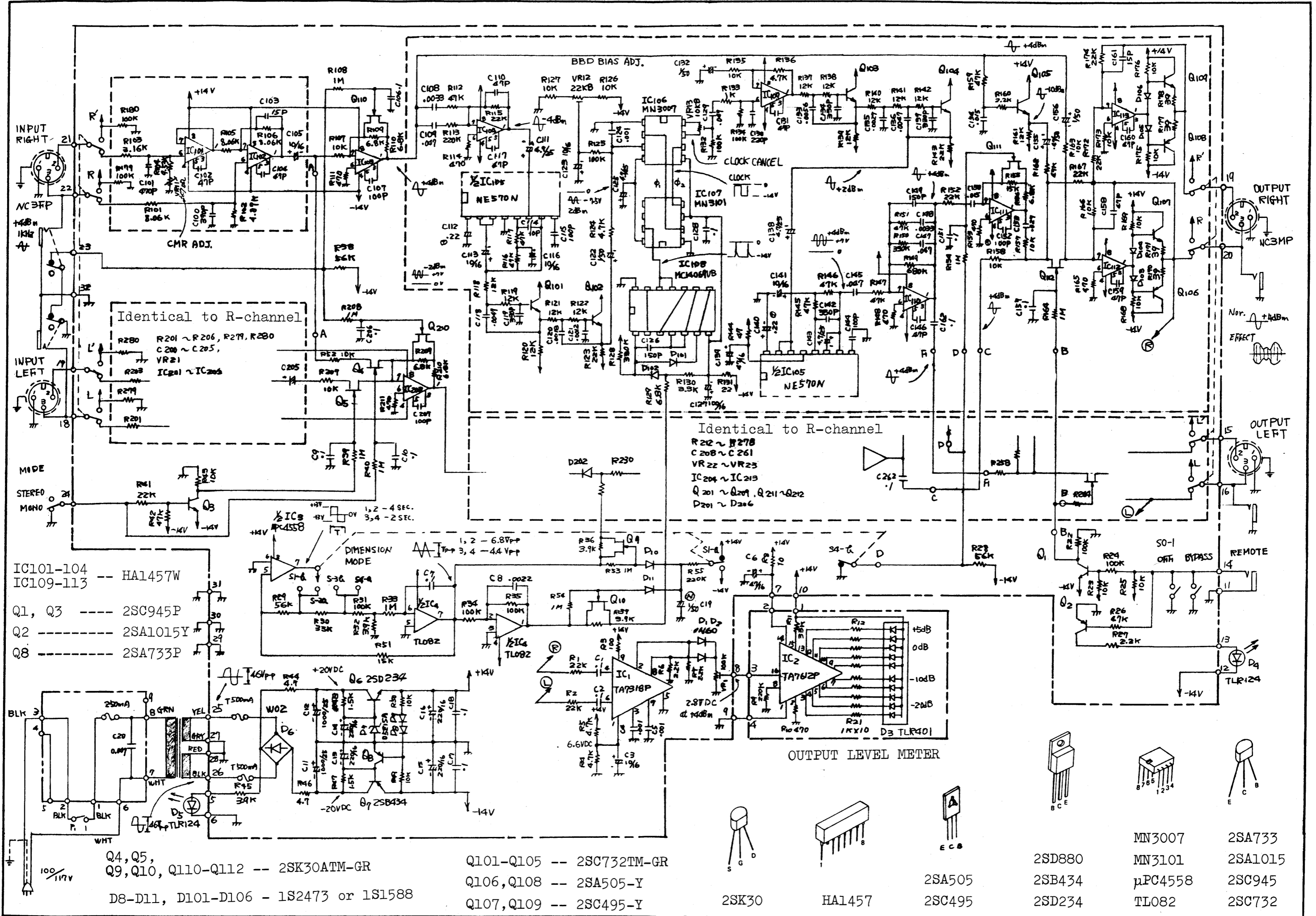
BLOCK DIAGRAM





- | | | | | | |
|--|-------------|--|------------------|--|--------------|
| | 2SK30ATM-GR | | R-25J | | Electrolytic |
| | 2SC type | | CRB4FX | | Tantalum |
| | 2SA type | | 1S1588 or 1S2473 | | Polystyren |
| | | | 05Z15A | | Mylar |
| | | | 1N60 | | Ceramic |





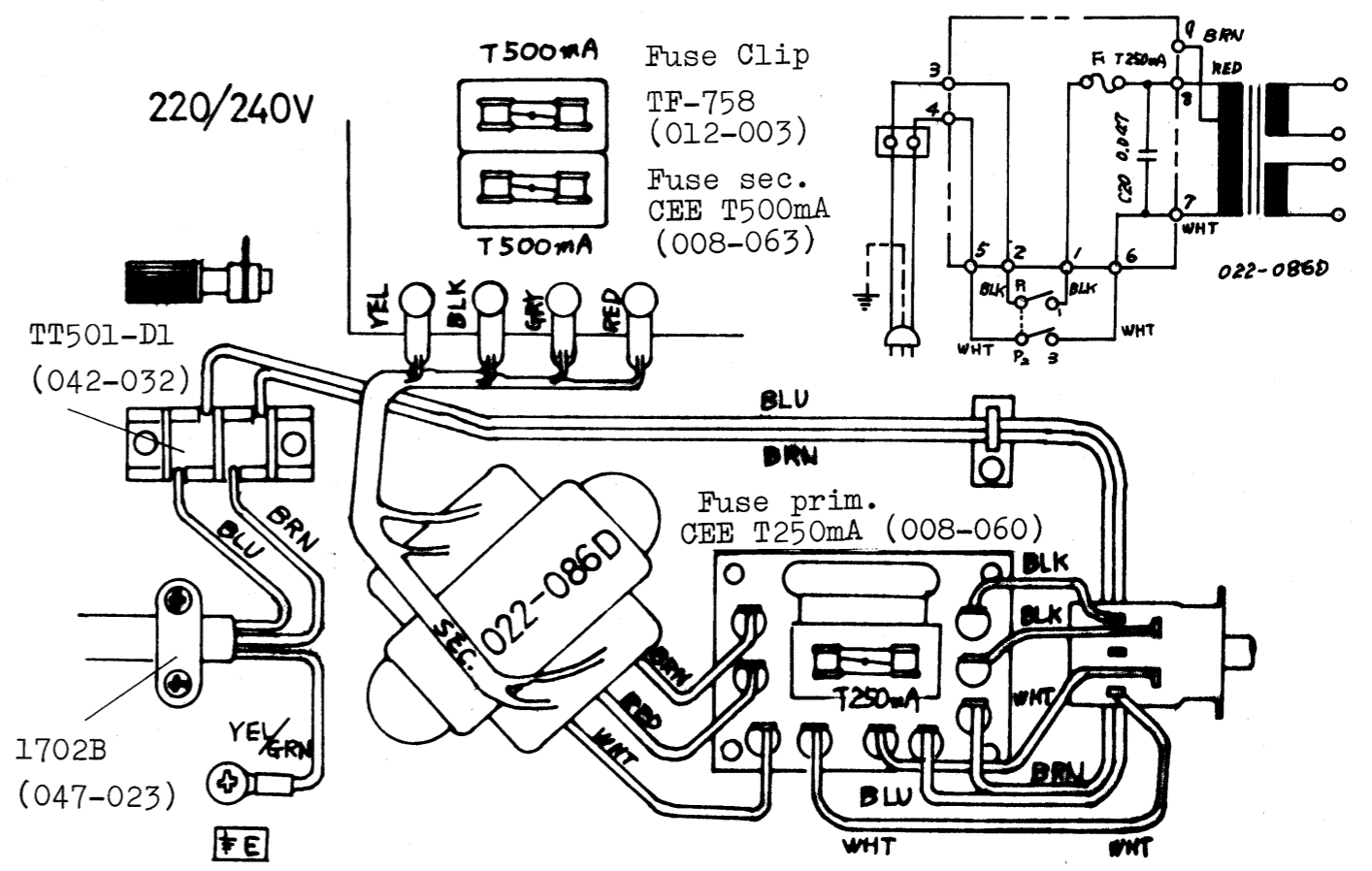
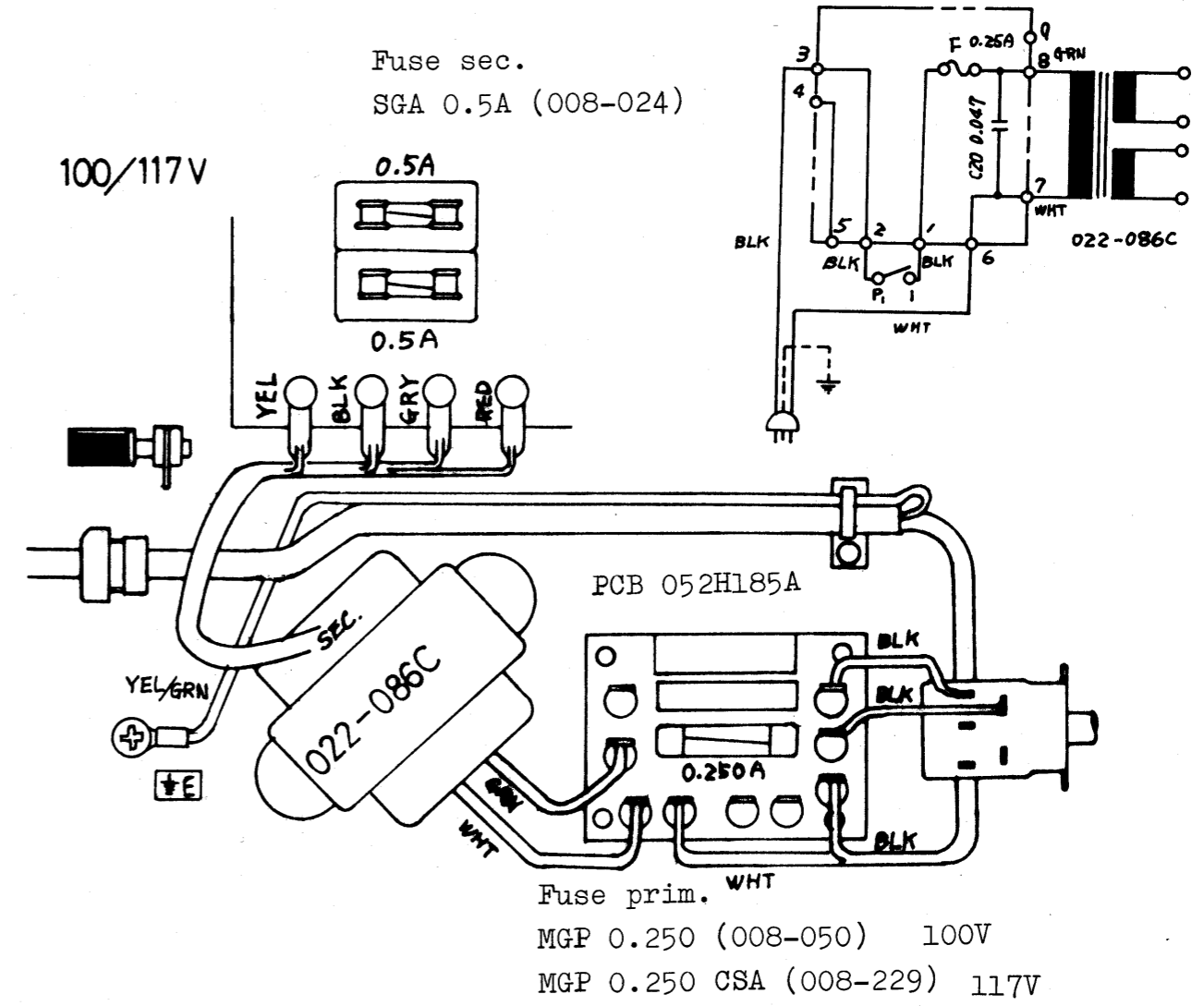
CHECKING & ADJUSTMENT

To adjust	Connect Oscilloscope to	Feed	Adjust	for
C M R (Common Mode Rejection) (Input MODE: STEREO)	R-ch IC103 pin 1 L-ch IC203 pin 1	100Hz, sine, 0dBm to R (L) INPUT connector with its 2 and 3 pins conjoined for a parallel input	R-ch VR11 L-ch VR21	minimum signal amplitude less than -60dBm
BBD BIAS (Input MODE: MONO)	R-ch IC109 pin 1 L-ch IC209 pin 1	1kHz, sine to R-ch INPUT	R-ch VR12 L-ch VR22	centered operating point Both peaks are clipping symmetrically as input signal increases.
BBD Clock Components Cancel	R-ch IC109 pin 1 L-ch IC209 pin 1	_____	R-ch VR13 L-ch VR23	minimized clock components
OUTPUT LEVEL METER (Calibration)	(DIMENSION MODE: off)	1kHz, sine to R-ch INPUT	VR1	0dB reading at + 4dBm output (@ OUTPUT jack)

CHECKING OUTPUT WAVEFORMS

Input 40Hz 1V pp square wave into R-ch INPUT with MODE in MONO.

OUTPUT WAVEFORM	DIMENSION MODE.		SWEEP RANGE	
	1	2	3	4
	a b 8ms---12ms	a b 5ms---10ms	a b 6ms---9ms	a b 6ms---9ms
	C: negative going pulse increases only MODE in 4.			



PARTS LIST

072-218A Panel no.218A front
 061-260B Chassis no.260B
 065H059 Cover H59
 108H003 Handle H3
 111-037 Rubber foot K-15

016-004 Button no.4 ivory
 016-086 Button no.86 red
 016-008 Button no.8 gray
 016-009 Button no.9 black

010-263 Receptacle NC-3FP
 female
 010-264 Receptacle NC-3MP
 male
 009-030 Jack HLJ-264-01-030
 009-037 Jack HLJ-261-01-030 w/switch

SWITCH

001-135 SBN-22-06 slide
 001-292 SUE-52 interlock push
 001-288 SUE-12 push
 001-215 SDG5P001-1 power 100V
 001-216 SDG5P001-2 power 117V
 001-217 SDG5P-502 power 220/240V

022-086C Power transformer no.86C 100/117V
 022-086D Power transformer no.86D 220/240V

FUSE. FUSEHOLDER

008-050 MGP 0.250A prim. 100V
 008-229 MGP 0.250A CSA prim. 117V
 008-060 CEE T250mA prim. 220/240V
 008-024 SGA 0.5A sec. 100.117V
 008-063 CEE T500mA sec. 220/240V
 012-003 Clip TF-758 midget

PCB

151-051B ET-51B assy (PCB 052-496B)
 149-154B OP-154B assy (PCB 052-497B)
 052H195 LED mounting less parts
 052H185A Prim. fuse mounting less parts

SEMICONDUCTOR

Transistor

017-104 2SC732TM-GR
 017-033 2SC495-Y
 017-023 2SC945-P
 017-010 2SD234-0 or 2SD880-0
 017-032 2SA505-Y
 017-105 2SA1015-Y
 017-022 2SB434-0 or 2SB596-0
 017-024 2SA733-P
 017-014 2SK30ATM-GR FET

Diode

018-024 05Z15A zener
 018-059 1S1588 or 1S2473
 018-027 1N60
 018-082 W02 rectifier bridge
 019-028 TLR-124 LED
 019-033 TLR-401 LED meter

IC

020-226 TA7612P
 020-080 HA1457-W
 020-098 NE570N
 020-213 MN3007 BBD
 020-224 MN3101 BBD driver
 020-176 MC14069UBCP or TC4069UBP
 020-225 TA7318P
 020-097 μ PC4558C
 020-100 TL082CP

TRIMMER POTENTIOMETER

030-457 SR19R 470-ohm
 030-465 SR19R 10kB
 030-467 SR19R 22kB
 030-471 SR19R 100kB

RESISTOR

044-934 CRB $\frac{1}{4}$ FX 3.16k
 044-935 CRB $\frac{1}{4}$ FX 4.87k
 044-936 CRB $\frac{1}{4}$ FX 8.06k
 044-937 CRB $\frac{1}{4}$ FX 9.53k

CAPACITOR

Polystyrene Film
 035-092 ECQS1151JZ 150pF 5%

Polypropyrene Film
 035-047 ECQ-E10473M 0.047mfd 100/220/240V
 035-319 ECQ-U1A473MC 0.047mfd 117V

Electrolytic

032-190 ECEA50VR1u 1mfd 50V non-polar
 032-232 0.22mfd 35V tantalum

OTHERS

064-200 PCB holder DLCBS-6N
 042-041 Earth terminal no.41
 048-069 Heat sink no.69
 120-015 Long nut (spacer) no.15 3x12mm
 120-002 Long nut no.2 3x16.4mm
 123-013 Hexagon head bolt 4x6mm