

ROTEL *hi-fi*

Technical Manual

RDD 980

Digital Compact Disc Drive

SPECIFICATIONS : RDD 980 DIGITAL COMPACT DISC DRIVE

Speed Accuracy, Wow and Flutter
TOSLINK Output
Digital Output
Load Impedance

Quartz crystal precision (<0.002%)
-17 dBm @ 660 nm
0.5 Volt p-p. @ 75 ohms
75 Ohms

Power Consumption
Power Requirements (AC)

15 watts
120 volts 50/60 Hz, or
220-230-240 volts 50/60 Hz

Weight
Dimensions

4.9 Kg / 10.8 Lbs
440 mm x 72 mm x 316 mm (WxHxD)
17-3/8" x 2-7/8" x 12-7/16" (WxHxD)

All specifications are accurate at the time of printing. Rotel reserves the right to make improvements without notice.

Serial No.
Beginning

4TH FL. BUNZAN-SHINSEN BLDG., 10-10 SHINSEN-CHO,
SHIBUYA-KU, TOKYO 150 JAPAN.
3RD FL. ROTEL BLDG., NO.35 FUSHING NORTH ROAD,
TAIPEI, TAIWAN, REPUBLIC OF CHINA.

THE ROTEL CO., LTD.
ROTEL ELECTRONICS CO., LTD.

SYMBOL	PARTS NO.	DESCRIPTION
016 X-1234-01 PCB ASSEMBLY		
C101	041 UVX1C101MEA	CAP.ELEC 16V100UF
C102	043 50V ZF103	CAP.CERA 50V0.01UF
C103	041 UVX1C101MEA	CAP.ELEC 16V100UF
C104	043 50V ZF103	CAP.CERA 50V0.01UF
C105	041 UVX1C101MEA	CAP.ELEC 16V100UF
C106	043 50V ZF103	CAP.CERA 50V0.01UF
C107	044 BF014D 0224J	CAP.M.P 63V0.22UF
C108	044 MK30-63V822F	CAP.M.P 63V8200PF
C109	044 MK30-63V822F	CAP.M.P 63V8200PF
C110	044 BF014D 0102J	CAP.M.P 63V1000PF
C111	044 BF014D 0224J	CAP.M.P 63V0.22UF
C112,C113	044 BF014D 0333J	CAP.M.P 63V0.033UF
C114	041 UVX1C101MEA	CAP.ELEC 16V100UF
C115	044 BF014D 0334J	CAP.M.P 63V0.33UF
C116	044 BF014D 0473J	CAP.M.P 63V0.047UF
C121,C122	043 50V ZF103	CAP.CERA 50V0.01UF
C123,C124	041 UVX1C101MEA	CAP.ELEC 16V100UF
C125	044 MKT26-63V474J	CAP.M.P 63V0.47UF
C126	044 BF014D 0104J	CAP.M.P 63V0.1UF
C131,C132	041 UVX1C101MEA	CAP.ELEC 16V100UF
C133,C134	046 50V 473K	CAP.CERAMIC 50V0.047UF
C135	044 BF014D 0103J	CAP.M.P 63V0.01UF
C136	046 50V 473K	CAP.CERAMIC 50V0.047UF
C137	041 UVX1C101MEA	CAP.ELEC 16V100UF
C138	044 BF014D 0102J	CAP.M.P 63V1000PF
C139	044 BF014D 0473J	CAP.M.P 63V0.047UF
C140	044 BF014D 0102J	CAP.M.P 63V1000PF
C141	046 50V 101J	CAP.CERAMIC 50V100PF
C142	044 BF014D 0222J	CAP.M.P 63V2200PF
C143	044 MKT26-63V474J	CAP.M.P 63V0.47UF
C144	044 BF014D 0224J	CAP.M.P 63V0.22UF
C145	044 MKT26-63V474J	CAP.M.P 63V0.47UF
C146	044 BF014D 0472J	CAP.M.P 63V4700PF
C147	044 BF014D 0104J	CAP.M.P 63V0.1UF
C148	044 BF014D 0224J	CAP.M.P 63V0.22UF
C149	044 BF014D 0104J	CAP.M.P 63V0.1UF
C150	041 UVX1C101MEA	CAP.ELEC 16V100UF
C151	046 50V 473K	CAP.CERAMIC 50V0.047UF
C152	041 UVX1C101MEA	CAP.ELEC 16V100UF
C153	046 50V 221J	CAP.CERAMIC 50V220PF
C155,C156	043 50V ZF103	CAP.CERA 50V0.01UF
C157,C158	041 UVX1C101MEA	CAP.ELEC 16V100UF
C161	041 25BGF100M	CAP.ELEC 25V100UF
C162	046 50V 473K	CAP.CERAMIC 50V0.047UF
C163	043 50V CH470	CAP.CERA CH47PF
C164	044 MKT26-63V474J	CAP.M.P 63V0.47UF
C165	044 BF014D 0222J	CAP.M.P 63V2200PF
C166	041 UVX1C101MEA	CAP.ELEC 16V100UF
C167	043 50V ZF103	CAP.CERA 50V0.01UF
C168	044 MKY26-50V225J	CAP.M.P 50V2.2UF

SYMBOL	PARTS NO.	DESCRIPTION
C169	041 UVX1C101MEA	CAP.ELEC 16V100UF
C170	043 50V ZF103	CAP.CERA 50V0.01UF
C171	044 MKT26-100V153J	CAP.M.P 100V0.015UF
C172	044 BF014D 0334J	CAP.M.P 63V0.33UF
C173	044 BF014D 0222J	CAP.M.P 63V2200PF
C175,C176	043 50V ZF103	CAP.CERA 50V0.01UF
C177,C178	041 UVX1C101MEA	CAP.ELEC 16V100UF
C191	041 UVX1C101MEA	CAP.ELEC 16V100UF
C192	043 50V ZF103	CAP.CERA 50V0.01UF
C193,C194	043 50V CH330	CAP.CERA CH33PF
C195	041 U50V10	CAP.ELEC 50V10UF
C196	044 BF014D 0104J	CAP.M.P 63V0.1UF
C197,C198	043 50V ZF103	CAP.CERA 50V0.01UF
C199	041 U16V470	CAP.ELEC 16V470UF
C200	041 U25V100	CAP.ELEC 25V100UF
C221	041 25BGF 47M	CAP.ELEC 25V47UF
C222	044 BF014D 0103J	CAP.M.P 63V0.01UF
C223	041 25BGF100M	CAP.ELEC 25V100UF
C224,C225	046 50V 473K	CAP.CERAMIC 50V0.047UF
C226	041 25BGF100M	CAP.ELEC 25V100UF
C227	044 BF014D 0104J	CAP.M.P 63V0.1UF
C231	046 50V 473K	CAP.CERAMIC 50V0.047UF
C232	041 25BGF100M	CAP.ELEC 25V100UF
C233,C234	043 50V CH330	CAP.CERA CH33PF
C235	041 U50V10	CAP.ELEC 50V10UF
C236	041 U25V47	CAP.ELEC 25V47UF
C901-C921	043 500VZF103	CAP.CERA 500V0.01UF
C931,C932	041 UVX1C472MHA1AA	CAP.ELEC 16V4700UF
C935,C936	043 50V ZF103	CAP.CERA 50V0.01UF
C941	041 U10V1000	CAP.ELEC 10V1000UF
C951	041 U50V4R7	CAP.ELEC 50V4.7UF
C961	041 NS2G35V4700	CAP.ELEC 35V4700UF
C962	041 UVX1E222MHA1AA	CAP.ELEC 25V2200UF
C963	041 25BGF470M	CAP.ELEC 25V470UF
C964	041 UVX1C101MEA	CAP.ELEC 16V100UF
C965	046 50V 473K	CAP.CERAMIC 50V0.047UF
C966	043 50V ZF103	CAP.CERA 50V0.01UF
C971	041 U25V2200	CAP.ELEC 25V2200UF
C972	041 U50V2200	CAP.ELEC 50V2200UF
C973	041 U25V100	CAP.ELEC 25V100UF
C974	041 U35V100	CAP.ELEC 35V100UF
C975,C976	043 50V ZF103	CAP.CERA 50V0.01UF
C984	043 500VZF103	CAP.CERA 500V0.01UF
C986	043 500VZF103	CAP.CERA 500V0.01UF
C989	043 500VZF103	CAP.CERA 500V0.01UF
C991	043 500VZF103	CAP.CERA 500V0.01UF
C994,C995	043 500VZF103	CAP.CERA 500V0.01UF
C997	043 50V ZF103	CAP.CERA 50V0.01UF
D121,D122	034 RD6.8JST1	ZENER DIODE
D161,D162	034 1N4148TA-B	DIODE

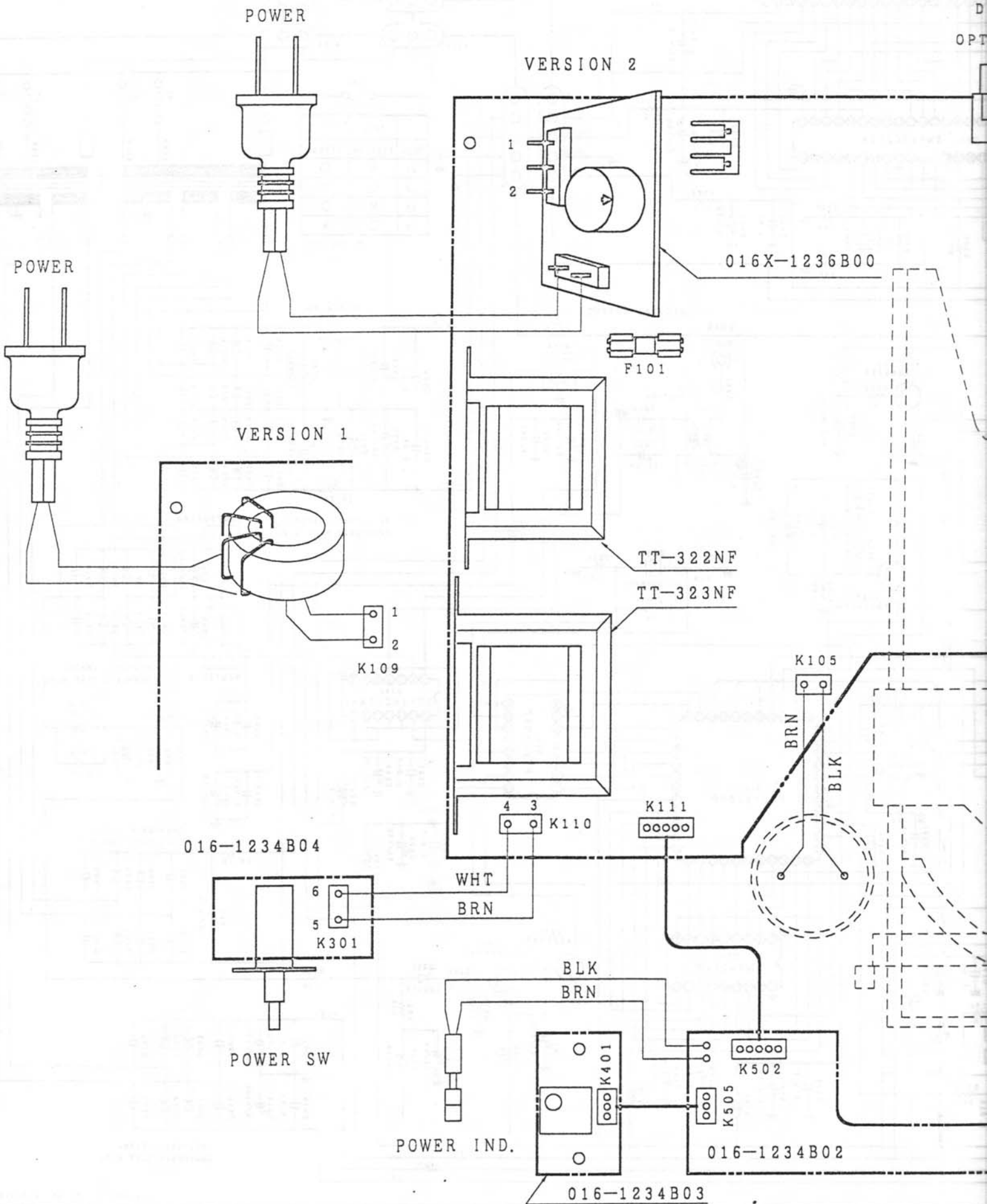
SYMBOL	PARTS NO.	DESCRIPTION
D171,D172	034 SB10-03A3BT	DIODE
D191	034 RD5.1JST1	ZENER DIODE
D192	034 RD3.9HST1	ZENER DIODE
D193,D194	034 1N4003-TB	DIODE
D231,D232	034 1N4148TA-B	DIODE
D901-D921	034 1N4003-TB	DIODE
D971	034 RD20JST1	ZENER DIODE
F101	036 (U)F1A	FUSE US
	036 (S)T500mA	FUSE EUROPE UK
	036 (S)T500mA	FUSE AUSTRALIA
K107	066 4TR-2487#4	1P PIN JACK
K108	066 GP1F32T	OPTICAL TARMINAL
L122	022 TT-323NF	POWER TRANSFORMER
L123	022 TT-322NF	POWER TRANSFORMER
L161,L162	021 TLR-361	MICRO INDUCTOR 4.7UH
L221	021 TC1027-04	OUTPUT TRANSFOMER
L222,L223	021 TLR-361	MICRO INDUCTOR 4.7UH
L231	021 TLR-361	MICRO INDUCTOR 4.7UH
R101-R103	054 NFR25 2R2J	FUSIBLE RESISTOR 2.2R
R104	054 MK2 022KFECZ	R.METAL 1% 22K
R105	054 MK2 047KFECZ	R.METAL 1% 47K
R106	054 MK2 015KFECZ	R.METAL 1% 15K
R107	054 MK2 220KFECZ	R.METAL 1% 220K
R108	054 MK2 01K8FECZ	R.METAL 1% 1.8K
R109	054 MK2 05K1FECZ	R.METAL 1% 5.1K
R110	054 MK2 018KFECZ	R.METAL 1% 18K
R111	054 MK2 220KFECZ	R.METAL 1% 220K
R112	054 MK2 012KFECZ	R.METAL 1% 12K
R121,R122	054 NFR25 2R2J	FUSIBLE RESISTOR 2.2R
R123,R124	054 MK2 003KFECZ	R.METAL 1% 3K
R125	054 MK2 033RFECZ	R.METAL 1% 33R
R126	054 MK2 03R3FECZ	R.METAL 1% 3.3R
R131,R132	054 NFR25 2R2J	FUSIBLE RESISTOR 2.2R
R133	054 MK2 012KFECZ	R.METAL 1% 12K
R134	054 MK2 024KFECZ	R.METAL 1% 24K
R135	054 MK2 04K7FECZ	R.METAL 1% 4.7K
R136	054 MK2 100KFECZ	R.METAL 1% 100K
R137	054 MK2 100RFECZ	R.METAL 1% 100R
R138	054 MK2 01K0FECZ	R.METAL 1% 1K
R139	054 MK2 01K0FECZ	R.METAL 1% 1K
R140	054 MK2 010KFECZ	R.METAL 1% 10K
R141	054 MK2 05K6FECZ	R.METAL 1% 5.6K
R143	054 MK2 011KFECZ	R.METAL 1% 11K
R144	054 MK2 150KFECZ	R.METAL 1% 150K
R145	054 MK2 120KFECZ	R.METAL 1% 120K
R147	054 MK2 03M3FECZ	R.METAL 1% 3.3M
R148	054 MK2 390KFECZ	R.METAL 1% 390K
R149	054 MK2 056KFECZ	R.METAL 1% 56K
R150	054 MK2 100KFECZ	R.METAL 1% 100K
R151	054 MK2 018RFECZ	R.METAL 1% 18R

SYMBOL	PARTS NO.	DESCRIPTION
R152	054 MK2 022RFECZ	R.METAL 1% 22R
R153,R154	054 NFR25 2R2J	FUSIBLE RESISTOR 2.2R
R155	054 RSS2X-82F	R.METAL 2W 82R
R156	054 MK2 100RFECZ	R.METAL 1% 100R
R157	054 MK2 012RFECZ	R.METAL 1% 12R
R161	054 EE10-222	R.METAL 2.2K
R162	054 MK2 022KFECZ	R.METAL 1% 22K
R163	054 EE10-750	R.METAL 75R
R164	054 MK2 04K7FECZ	R.METAL 1% 4.7K
R165	054 MK2 01K6FECZ	R.METAL 1% 1.6K
R166	054 MK2 03K6FECZ	R.METAL 1% 3.6K
R171	054 MK2 04K7FECZ	R.METAL 1% 4.7K
R172	054 MK2 100KFECZ	R.METAL 1% 100K
R173	054 MK2 056KFECZ	R.METAL 1% 56K
R174	054 MK2 091KFECZ	R.METAL 1% 91K
R175	054 MK2 03K3FECZ	R.METAL 1% 3.3K
R176	054 MK2 05K6FECZ	R.METAL 1% 5.6K
R177	054 MK2 150KFECZ	R.METAL 1% 150K
R178	054 MK2 082KFECZ	R.METAL 1% 82K
R179	054 MK2 680KFECZ	R.METAL 1% 680K
R180	054 MK2 033KFECZ	R.METAL 1% 33K
R181	054 MK2 200KFECZ	R.METAL 1% 200K
R182	054 MK2 01K2FECZ	R.METAL 1% 1.2K
R183,R184	054 NFR25 2R2J	FUSIBLE RESISTOR 2.2R
R185,R186	054 MK2 04K7FECZ	R.METAL 1% 4.7K
R191	054 MK2 220RFECZ	R.METAL 1% 220R
R192	054 MK2 01K0FECZ	R.METAL 1% 1K
R193	054 MK2 010KFECZ	R.METAL 1% 10K
R194	054 NFR25 2R2J	FUSIBLE RESISTOR 2.2R
R195	054 MK2 022KFECZ	R.METAL 1% 22K
R196	054 SE8223J	R.ARRAY 22K-8P
R197	054 MK2 01K0FECZ	R.METAL 1% 1K
R198	054 MK2 022KFECZ	R.METAL 1% 22K
R199	054 MK2 022KFECZ	R.METAL 1% 22K
R201	054 MK2 220KFECZ	R.METAL 1% 220K
R202	054 MK2 022KFECZ	R.METAL 1% 22K
R203	054 MK2 015KFECZ	R.METAL 1% 15K
R204	054 MK2 01K0FECZ	R.METAL 1% 1K
R205	054 MK2 02K2FECZ	R.METAL 1% 2.2K
R206	054 MK2 04K7FECZ	R.METAL 1% 4.7K
R207	054 MK2 047KFECZ	R.METAL 1% 47K
R208	054 MK2 06K8FECZ	R.METAL 1% 6.8K
R209,R210	054 MK2 022KFECZ	R.METAL 1% 22K
R211,R212	054 MK2 022KFECZ	R.METAL 1% 22K
R213	054 MK2 220RFECZ	R.METAL 1% 220R
R215,R216	054 NFR25 2R2J	FUSIBLE RESISTOR 2.2R
R221	054 MK2 075RFECZ	R.METAL 1% 75R
R231	054 EE10-105	R.METAL 1M
R232	054 MK2 022KFECZ	R.METAL 1% 22K
R233	054 MK2 100RFECZ	R.METAL 1% 100R

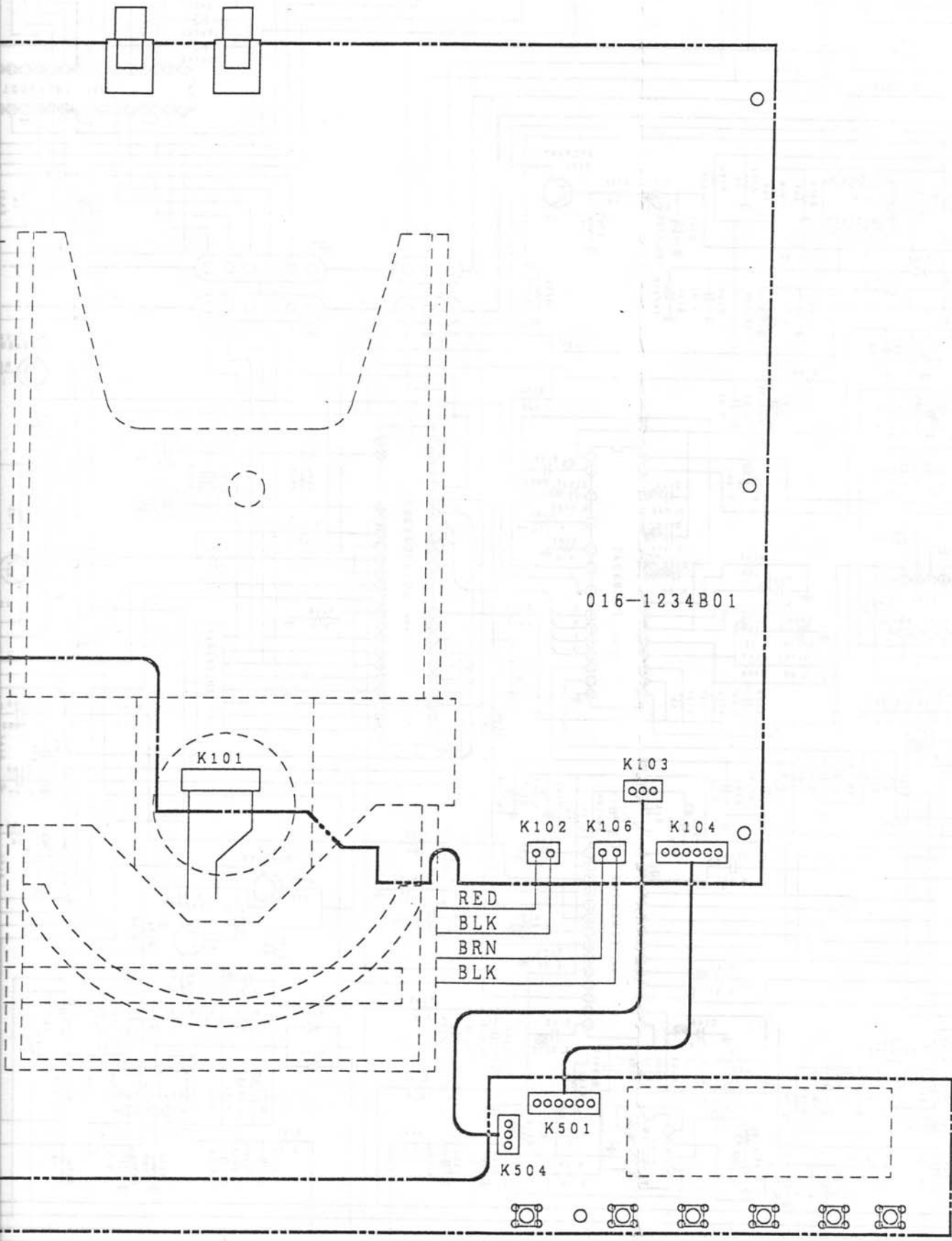
SYMBOL	PARTS NO.	DESCRIPTION
R502	054 MK2 022KFECZ	R.METAL 1% 22K
R503,R504	054 NFR25 2R2J	FUSIBLE RESISTOR 2.2R
R505	054 MK2 330RFECZ	R.METAL 1% 330R
R511,R512	054 MK2 001RFECZ	R.METAL 1% 1R
S501-S506	061 4TR-2343	TACT SWITCH
U501	031 MP47C212AN	IC
X501	023 CSA4.00MHZ	CERAMIC FILTER
C301	X-1234-03 PCB ASSEMBLY	
	044 DE7150F472M	SPARK KILLER
S301	061 C-3600B	POWER SWITCH
C401	X-1234-04 PCB ASSEMBLY	
C402	043 50V ZF103	CAP.CERA 50V0.01UF
	041 U25V100	CAP.ELEC 25V100UF
R401	054 NFR25 2R2J	FUSIBLE RESISTOR 2.2R
U401	031 SBX1610-02	IC
C999	043 500VZF103	CAP.CERA 500V0.01UF
L991	016 X-1236-00 PCB ASSEMBLY	
	019 TRL-356	COIL
D509	OTHERS	
	034 SEL1124R	LED
	072 4TR-670#4	AC CORD US
	072 C-3039	AC CORD EUROPE
	072 4TR-3083	AC CORD UK
	072 C-3763C01	AC CORD AUSTRALIA
	011 TFP-739	FRNT PANEL
	014 3TTS-6#4	UPPER COVER
	019 4TSH-19#2	PLASTIC FOOT
	011 4TRPE-11	DOOR PANEL
	092 CDM9-STD	MECHA
	092 RR-924	REMORT UNIT

LASER MECH ASSY

SYMBOL	PARTS NO.	DESCRIPTION
R234	054 MK2 100KFECZ	R.METAL 1% 100K
R235	054 MK2 022KFECZ	R.METAL 1% 22K
R236	054 MK2 047KFECZ	R.METAL 1% 47K
R237	054 MK2 033KFECZ	R.METAL 1% 33K
R941	054 RSS2X-10F	R.METAL 2W 10R
R951	054 MK2 022KFECZ	R.METAL 1% 22K
R971	054 RSS2X-820F	R.METAL 2W 820R
T131	032 2SC2274K-EF	TRANSISTOR
T161	032 2SA1016K-FG	TRANSISTOR
T171,T172	032 2SA608K-FG	TRANSISTOR
T191	032 2SC536K-FG	TRANSISTOR
T192	032 2SA608K-FG	TRANSISTOR
T231	032 2SA608K-FG	TRANSISTOR
T232	032 2SC536K-FG	TRANSISTOR
U101	031 TDA8809T	IC
U103	031 TDA8808T	IC
U113	031 NJM78L05	IC
U117	031 NJM78M05FA	IC
U118	031 NJM79L05	IC
U121	031 TCA0372DP1	IC
U132	031 TCA0372DP1	IC
U161	031 SAA7310G	IC
U162	031 MN4264P	IC
U171	031 TCA0372DP1	IC
U191	031 TCA0372DP1	IC
U192	031 MC68HC05DP9P	IC
U221	031 TC74HCU04AP	IC
U231	031 PCF2705P	IC
X191	023 CSA4.00MHZ	CERAMIC FIRTER
X231	023 49U11.2896	CRYSTAL OSC. 11,2896MHZ
C501,C502	016 X-1234-02 PCB ASSEMBLY	
C503	043 50V ZF103	CAP.CERA 50V0.01UF
C504	041 U25V100	CAP.ELEC 25V100UF
C505,C506	041 U35V100	CAP.ELEC 35V100UF
	043 50V CH330	CAP.CERA CH33PF
C507	041 U50VAR7	CAP.ELEC 50V4.7UF
C998	043 500VZF103	CAP.CERA 500V0.01UF
D501-D503	034 1N4148TA-B	DIODE
O501	035 6BT165GK	F.L TUBE
R501	054 MK2 001MFECZ	R.METAL 1% 1M



DIGITAL OUTPUT
OPTICAL COAXIAL



016-1234B01

K101

K103

K102

K106

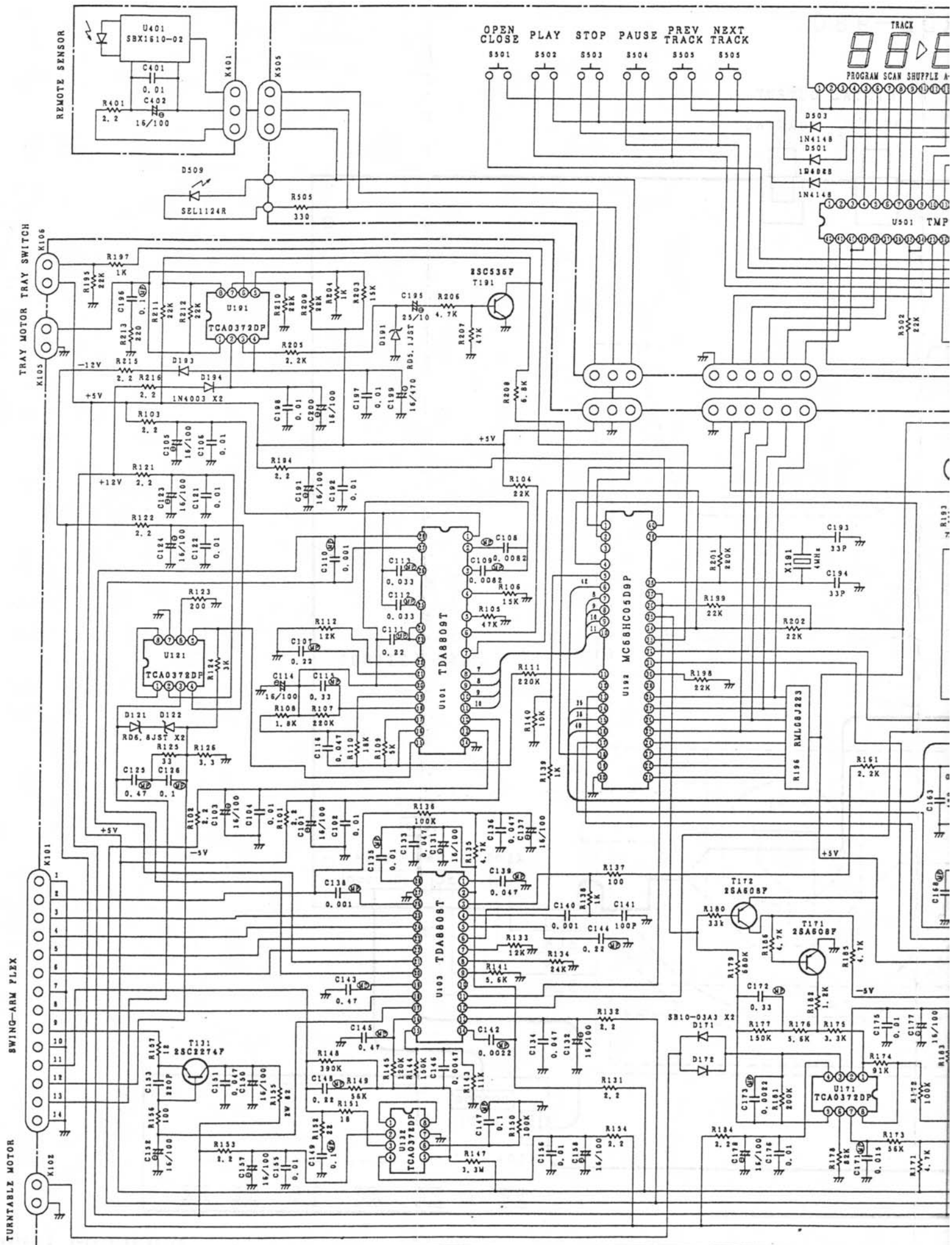
K104

RED
BLK
BRN
BLK

K501

K504

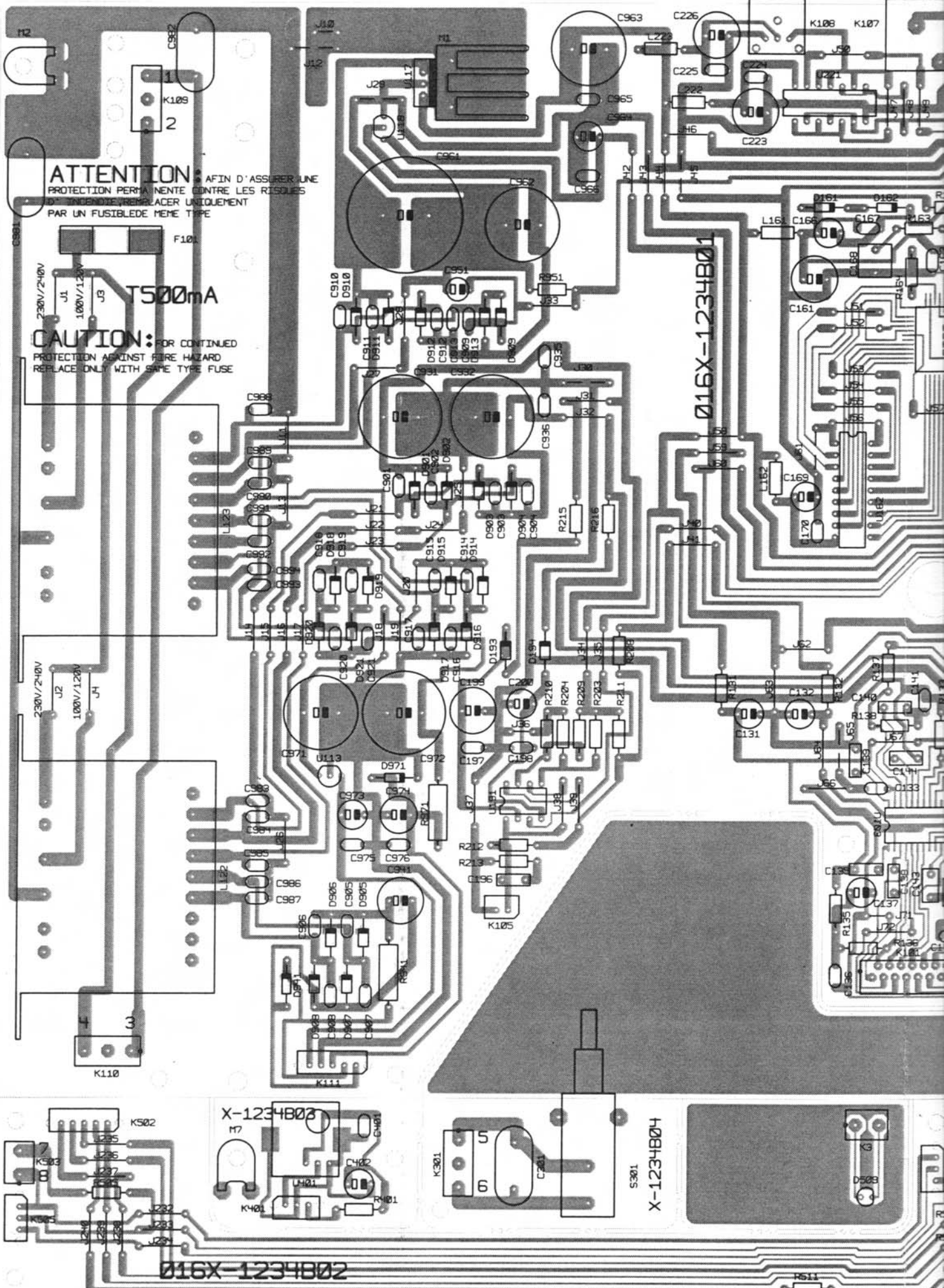
Schematic Diagram RDD-980



ATTENTION : AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE

T500mA

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD REPLACE ONLY WITH SAME TYPE FUSE



016X-1234B01

016X-1234B02

X-1234B04

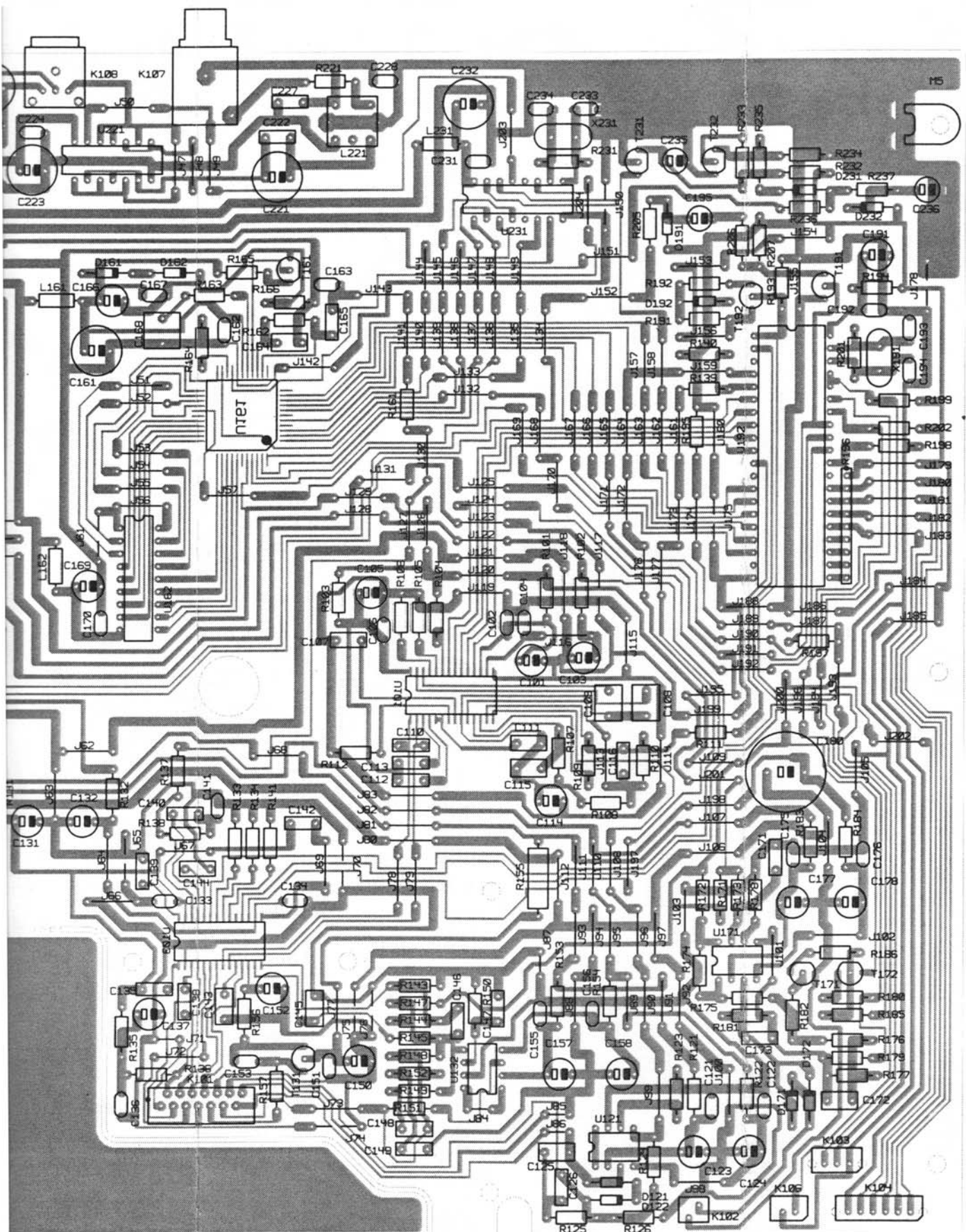
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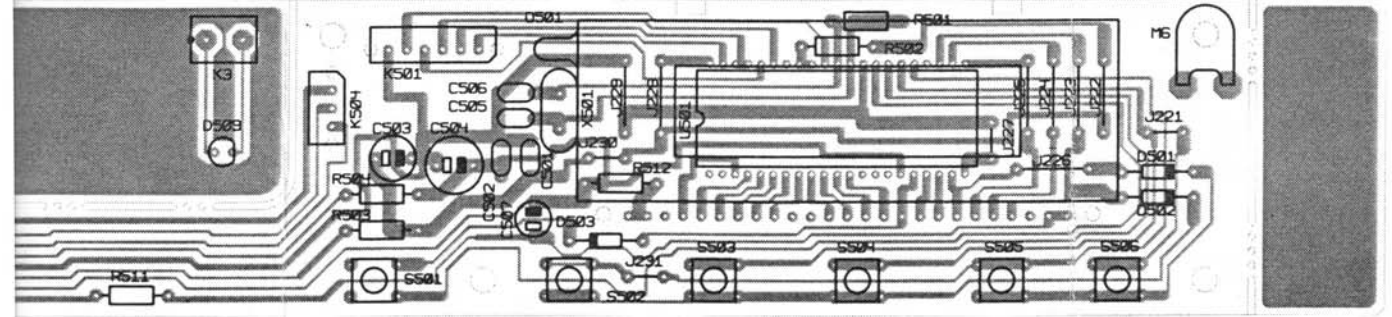
S301

D508

R511



15



16