



Technical Manual

STEREO CONTROL AMPLIFIER RC-1070-3

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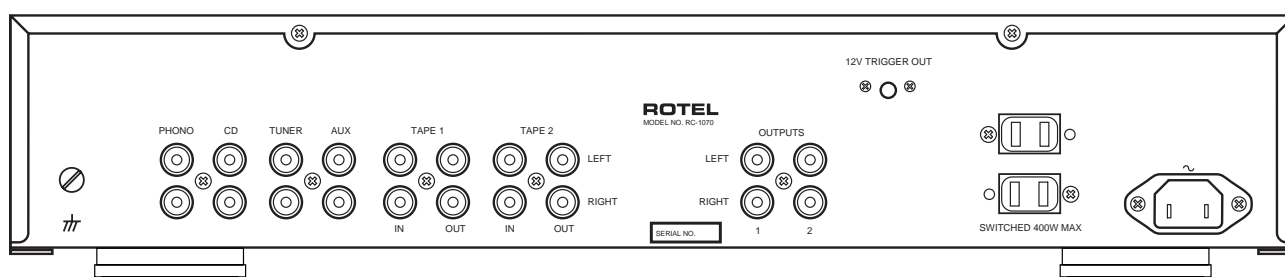
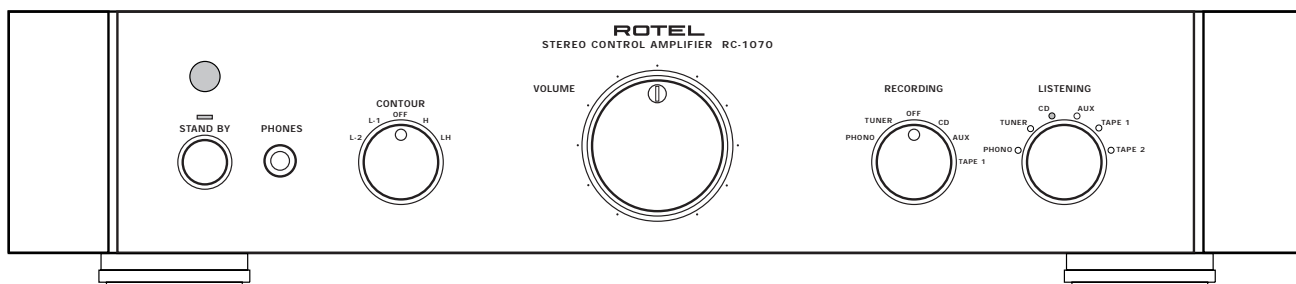
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Specification

Total Harmonic Distortion (20 Hz-20 kHz)	< 0.006%
Intermodulation Distortion	< 0.006% at 1 V output (60 kHz:7 kHz, 4: 1)
Input Sensitivity / Impedance	Line Level: 150 mV / 24 kOhms Phono (MM): 1.2 mV / 68 kOhms
Output Level/Impedance	1 V / 100 Ohms
Usable Headphone Impedance	8 - 2,000 Ohms
Frequency Response	Line Level : 4 Hz - 100 kHz, +0, -3dB Phono: 20 Hz - 20 kHz, 0.5 dB
Signal to Noise Ratio (IHF "A" weighted)	Line Level: 95 dB Phono: 70 dB
Phono Overload:	70 mV
Power Requirements	USA: 115 Volts, 60 Hz CE: 230 Volt, 50 Hz
Power Consumption	10 Watts
Dimensions (W x H x D)	432 x 92 x 344 mm 17" x35/8" X 135/8"
Weight (net)	5.4 kg, 11.9 lbs.

THE ROTEL CO., LTD
 SHINSEN-BLD. 4F 10-10 SHINSEN-CHO, SHIBUYA-KU,
 TOKYO 150-0045, JAPAN

Serial. NO. Beginning



SYMBOL	PARTS NO.	DESCRIPTION
	016X-1295D01-06 PCB ASSY (MAIN)	
	501X-1295	PCB ASSY
X701	023 CSALF4M19G55BO	CERAMIC RESONATOR
IC703	031 LB1641	I C (MOTOR DRIVE)
IC601	031 NJM4556AD	I C (OPE DUAL)
IC901	031 NJM7805FA(KIA7805API-U)	I C (REGULATOR +5VDC)
IC903	031 NJM7815FA	I C (REGULATOR +15VDC)
IC902	031 NJM7915FA	I C (REGULATOR -15VDC)
IC502,503	031 OPA2134PA	I C (OPE DUAL)
IC501	031 OPA2604AP	I C (OPE DUAL)
IC702	031 TC74HC595AP	I C (8BIT SHIFT REGISTER/LATCH)
IC701	031 TMP47C400BN-1	I C (TMP47C400BN-1A57)
Q906	032 TA1016-FG	TRANSISTOR
Q401-406	032 TA1345	TRANSISTOR
Q407-412	032 TC3399	TRANSISTOR
Q907	032 TC3708-ST	TRANSISTOR
Q639,905	032 TC536-FG	TRANSISTOR
Q904	032 TD863-EF	TRANSISTOR
Q902	033 B631-EF	TRANSISTOR
Q901	033 D600-EF	TRANSISTOR
D701-706	034 SEL2410E	LED (GREEN)
D701-706	034 SEL2E10C	LED (BLUE)
D901-903,910-917	034 T1N4004-TB	DIODE
D401-406,617,707-712,714-718	034 T1N4148-86	DIODE
D722,724,726-730,904-906,918,919	034 T1N4148-86	DIODE
D909	034 TRD12JST1	ZENER DIODE
D907,908	034 TRD18JST1	ZENER DIODE
D723	034 TRD5.6JST1	ZENER DIODE
F603-605	036 5ST500-R	FUSE 250VT500mA
C905,906	041 50USP472	ELECTORLYTIC CAPACITOR 50V4700uF
C451,452	041 BPUE1E4R7-FB	ELECTROLYTIC CAPACITOR 25V4.7UF
C907,908,453,454	041 EEUFC1E101SB	ELECTROLYTIC CAPACITOR FC 25V100UF
C507-510,523,524	041 EEUFC1E221B	ELECTROLYTIC CAPACITOR FC 25V220UF
C909,910	041 EEUFC1E471B	ELECTROLYTIC CAPACITOR FC 25V470UF
C501,502,505,506,536,537	041 EEUFC1H100LB	ELECTROLYTIC CAPACITOR FC 50V10UF
C705	041 TUTES0J222-7TS	ELECTORLYTIC CAPACITOR 6.3V2200UF
C920	041 TUTES1A101-7TF	ELECTORLYTIC CAPACITOR 10V100UF
C619,620,918,919,921,922	041 TUTES1E101-7TF	ELECTORLYTIC CAPACITOR 25V100UF
C710	041 TUTES1E470-7TF	ELECTORLYTIC CAPACITOR 25V47UF
C925	041 TUTES1H010-7TF	ELECTORLYTIC CAPACITOR 50V1UF
C401	041 TUTES1H220-7TF	ELECTORLYTIC CAPACITOR 50V22UF
C711	041 TUTES1H2R2-7TF	ELECTORLYTIC CAPACITOR 50V2.2UF
C625,626,703	041 TUTES1H4R7-7TF	ELECTORLYTIC CAPACITOR 50V4.7UF
C926,927	041 TUTES1V101-7TF	ELECTORLYTIC CAPACITOR 35V100UF
C924	041 TUTES1V471-7TS	ELECTORLYTIC CAPACITOR 35V470UF
C627,628	042 TP50V103J	MYLAR CAPACITOR 50V0.01UF
C901-904,911-917,923	043 TC500V103	CERAMIC CAPACITOR 500V0.01uF
C707-709	043 TC50V103	CERAMIC CAPACITOR 50V0.01uF
C701,702	043 TC50VCH330	CERAMIC CAPACITOR 50V33pF
C521,522,525-529	044 50MSAN104J	SF CAPACITOR 50V0.1uF
C513,514	044 50MSAN154J	SF CAPACITOR
C511,512,517,518	044 50MSAN824J	SF CAPACITOR

Parts List 2/4

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SYMBOL	PARTS NO.	DESCRIPTION
C503,504	044 FSC160V470H	POLYSTYLENE CAPACITOR
C704	044 KT18-2A104K	M.P CAPACITOR
C519,520	044 S50V1000PG	STYROL CAPACITOR
C530-533	044 S50V22PJ	STYROL CAPACITOR 22P
C534,535,623,624	044 S50V47PJ	STYROL CAPACITOR 47P
C515,516	044 S50V560PJ	STYROL CAPACITOR 560P
VR501	051 C-4170A33	VR 50KAX2
R707	053 CR14-102J-A	CARBON RESISTOR 1K
R918	053 CR14-103J-A	CARBON RESISTOR 10K
R680,703,704,713,714,911	053 CR14-104J-A	CARBON RESISTOR 100K
R705	053 CR14-124J-A	CARBON RESISTOR 120K
R910,915,916	053 CR14-223J-A	CARBON RESISTOR 22K
R917	053 CR14-272J-A	CARBON RESISTOR 2.7K
R405,678	053 CR14-331J-A	CARBON RESISTOR 330R
R909	053 CR14-332J-A	CARBON RESISTOR 3.3K
R701,702,715	053 CR14-472J-A	CARBON RESISTOR 4.7K
R706,913	053 CR14-473J-A	CARBON RESISTOR 47K
R709	053 CR16-100J-A	CARBON RESISTOR 10R
R710	053 CR16-102J-A	CARBON RESISTOR 1K
R711,712,716	053 CR16-104J-A	CARBON RESISTOR 100K
R903,905,906	054 1WS100JF	METAL OXIDE FILM RESISTOR 100R
R908	054 1WS10JF	METAL OXIDE FILM RESISTOR 10R
(R912)	054 1WS10KJF	METAL OXIDE FILM RESISTOR 10K
R904	054 1WS150JF	METAL OXIDE FILM RESISTOR 150R
(R912)	054 1WS6.8KJF	METAL OXIDE FILM RESISTOR 6.8K
R522	054 TMF16-1001	MF RESISTOR 1/6W 1K
R525,526,529-538	054 TMF16-1002	MF RESISTOR 1/6 10K
R548,549	054 TMF16-1003	MF RESISTOR 1/6 100K
R517-520,523,524,527,528	054 TMF16-2202	MF RESISTOR 1/6 22K
R539,540	054 TMF16-4702	MF RESISTOR 1/6 47K
R541,542	054 TMF16-5602	MF RESISTOR 1/6 56K
R521,629,630	054 TMF1001	METAL RESISTOR 1K
R631,632	054 TMF1002	METAL RESISTOR 10K
R627,628	054 TMF1003	METAL RESISTOR 100K
R633,634	054 TMF1500	METAL RESISTOR 150R
R453,454	054 TMF2700	METAL RESISTOR 270R
R635,636	054 TMF4702	METAL RESISTOR 47K
R401-404	054 TMFR4001K	STANDARD METAL RESISTOR MFR4 1K
R547	054 TMFR4010R	STANDARD METAL RESISTOR MFR4 10R
R515,516,451,452	054 TMFR4027K	STANDARD METAL RESISTOR MFR4 27K
R901,902	054 TMFR403K3	STANDARD METAL RESISTOR MFR4 3.3K
R507,508	054 TMFR403K9	STANDARD METAL RESISTOR MFR4 3.9K
R513,514,543,544	054 TMFR405K6	STANDARD METAL RESISTOR MFR4 5.6K
R511,512	054 TMFR409K1	STANDARD METAL RESISTOR MFR4 9.1K
R509,510	054 TMFR4100K	STANDARD METAL RESISTOR MFR4 100K
R545,546	054 TMFR4100R	STANDARD METAL RESISTOR MFR4 100R
R505,506	054 TMFR4680R	STANDARD METAL RESISTOR MFR4 680R
R503,504	054 TRC55C1003F	RESISTOR RC55C 100K
R501,502	054 TRC55C1500F	RESISTOR RC55C 150R
S901	061 4TR-2947	PUSH SWITCH
S701	062 C-4174A13	ROTARY SWITCH
S401	062 C-4174A17	FUNCTION SWITCH
S501	062 C-4174A21	FUNCTION SWITCH

SYMBOL	PARTS NO.	DESCRIPTION
RY401-406,RY603	063 EA2-24NU	RELAY
RY901	063 DG1U-24	RELAY
RY902	063 DH2U-24	RELAY
HJ2	065 YKB21-5406N	HEAD PHONE JACK
PJ1-PJ5	066 4TR-2408#3	PIN JACK 4P
JP5B,JP7B	068 4TR-2787#3	PC JOINER CONNECTOR 3P
JP3B	068 4TR-2787#4	PC JOINER CONNECTOR 4P
JP1B,JP2B	068 4TR-2787#6	PC JOINER CONNECTOR 6P
JP8A	068 4TR-2787#7	PC JOINER CONNECTOR 7P
D003	068 B2B-EH	CONNECTOR WAFER
CON2	068 C-3683#1	WRAPPING PIN TERMINAL 2P P=7.5
CON4	068 C-3683#4	WRAPPING PIN TERMINAL 5P P=7.5
D001	068 C-3963#21	LED HOUSING WIRH WIRE BRN/BLK
CON1	068 C-4422A01	WRAPPING PIN TERMINAL 2P P=10
SKT1	068 PS-1101-32	CONNECTOR PC TALL
AC01	069 C-4372A01	AC OUTLET SOCKET
SKT1	092 RPB-1M	PHONO PCB ASSY
	016 E-1355A00 PCB ASSY (HEAD PHONE)	
	501E-1355-A00	PCB ASSY
JP0	068 B7B-EH	CONNECTOR BASE 7P
HJ1	065 H2098S050S	HEAD PHONE JACK 6.5F 9P (YKB26-5078)
	016E-1466A00 PCB ASSY (REMOTE RECEIVER)	
	501E-1466A-1	PCB ASSY
IC704	031 IC0019200	IC
C706	041 TUTES1E470-7TF	ELECTROLYTIC CAPACITOR
R708	053 CR16-101J-A	CARBON RESISTOR
	OTHERS	
	011 FP-532-B	BLACK PANEL ASSY
	011 FP-532-S	SILVER PANEL ASSY
	011 TF3-01B00	H/S PANEL
	012 C-4710A01	KNOB 25F(BLACK)
	012 C-4710A02	KNOB 25F NO MARK (BLACK)
	012 C-4711A01	KNOB 43F W/LED (BLK)
	012 C-4711A01S	KNOB 43F W/LED (SLV)
	012 C-4771A01	KNOB 25F(SILVER)
	012 C-4771A02	KNOB 25F NO MARK (SILVER)
	012 RV4-09A00	PUSH BUTTON 14F (BLACK)
	012 RV4-09A01	PUSH BUTTON 14F (SILVER)
	014 C-4713C02	UPPER COVER
	019 4TSH-19#2	PLASTIC FOOT 50F BLACK
	022 T-1056N02	POWER TRANSFORMER
	034 SEL1124R	LED (RED) 1X5
	034 SEL1E24W	LED (BLU) 1X5
	069 C-4629A01	AC INLET 6102.3100 (WIRING)
	072 4TR-2875	PIN PLUG OFC CORD
	072 C-4621A03	AC CORD SET SJT for USA
	072 C-4622A02	AC CORD SET for AUSTRALIA
	072 C-4623A02	AC CORD SET for U.K
	072 C-4624A03	AC CORD SET for EUROPE
	081 TG3-05B00	INSIDE CARTON
	081 TG3-06B00	SHIPPING CARTON

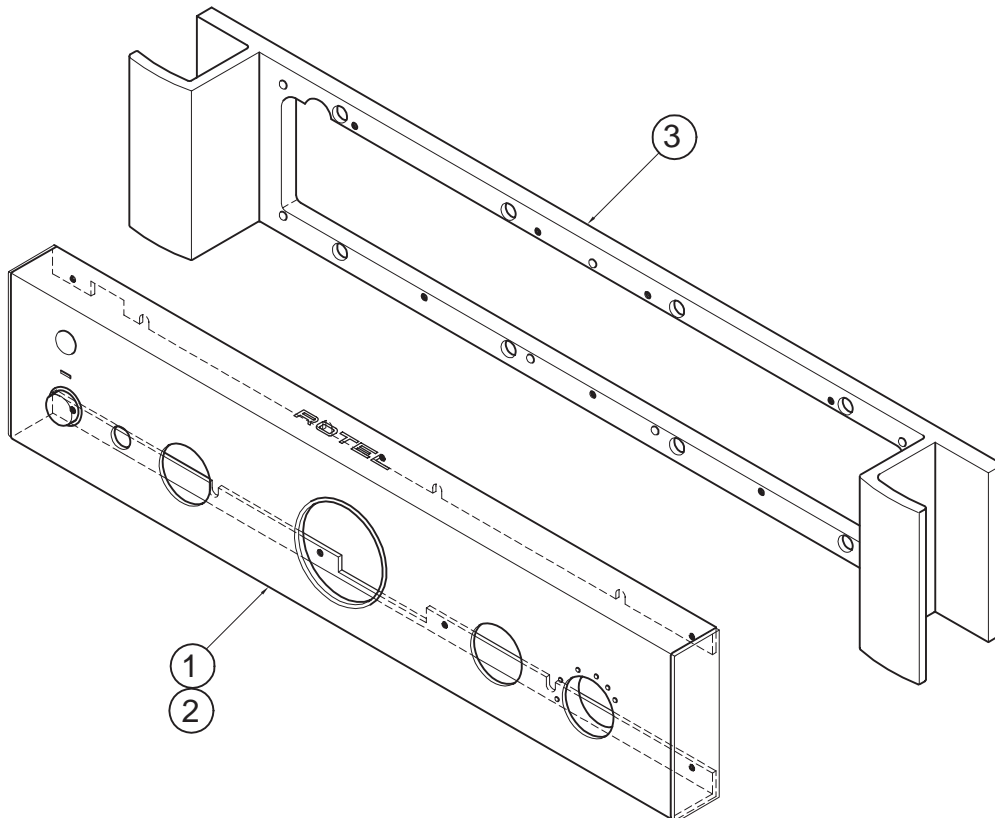
SYMBOL	PARTS NO.	DESCRIPTION
	081 ZE-204	ETHAFOAM MOULDING
	082 OMRC-1070-61	OWNER'S MANUAL (EFGSD)
	092 RR-AT94	REMOTE UNIT

Addendum List for Black and Silver

RC1070/ -3

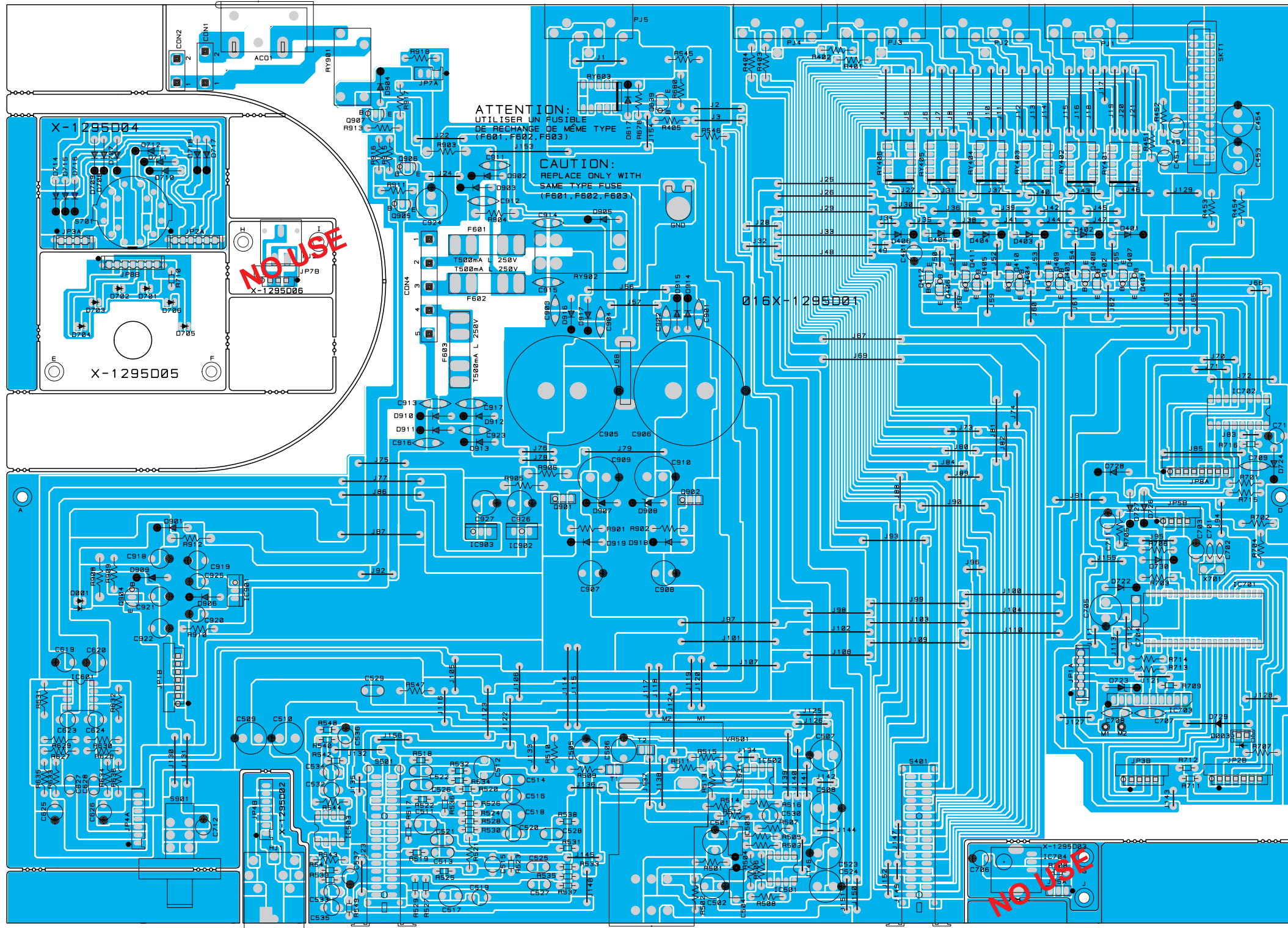
SYMBOL	PARTS	DESCRIPTION
①	011 FP-532-B	BLACK PANEL ASSY
②	011 FP-532-S	SILVER PANEL ASSY
③	011 TF3-01A00	H/S PNEL H80
	012 C-4710A01	KNOB 25F (BLACK)
	012 C-4710A02	KNOB 25F NO MARK (BLACK)
	012 C-4711A01	KNOB 43F (BLACK)
	012 C-4711A01S	KNOB 43F (SILVER)
	012 C-4771A01	KNOB 25F (SILVER)
	012 C-4771A02	KNOB 25F NO MARK (SILVER)
	012 RV4-09A00	PUSH BUTTON 14F (BLACK)
	012 RV4-09A01	PUSH BUTTON 14F (SILVER)
	034 SEL1124R	LED (RED) 1X5
	034 SEL1E24W	LED (BLUE) 1X5

Panel Assy is included:
 Side Cap
 Knob Ring
 LED

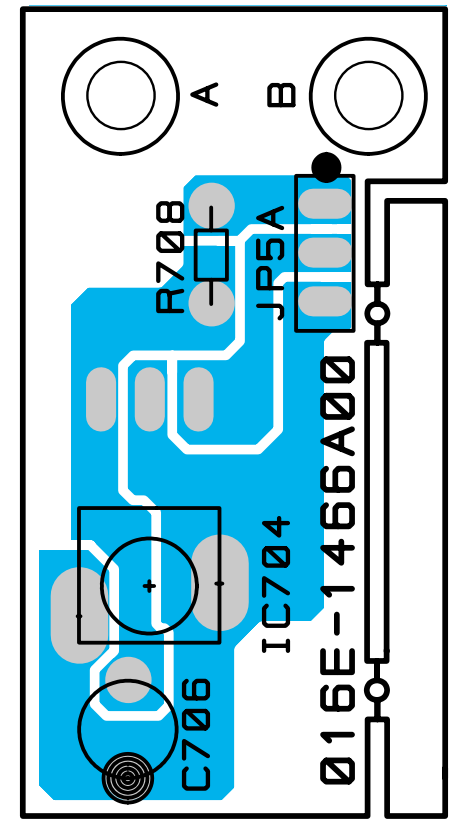


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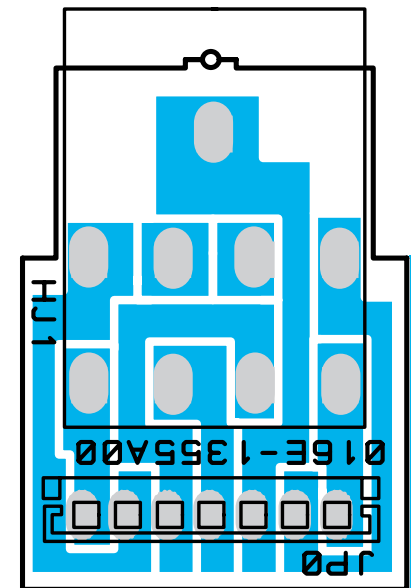
Main PCB 016 X-1295D01~05

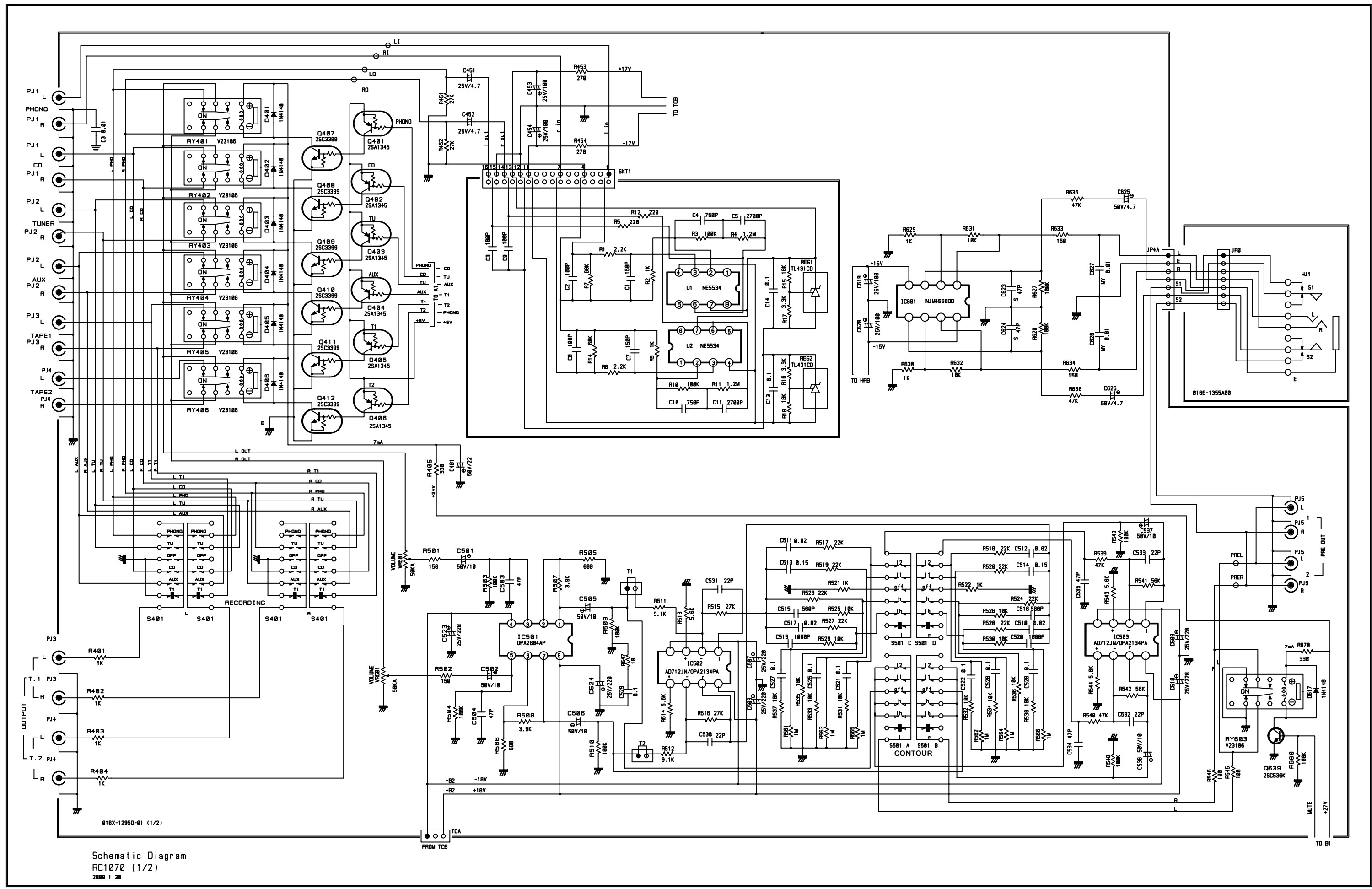


Remote IC PCB
016 E-1466A00

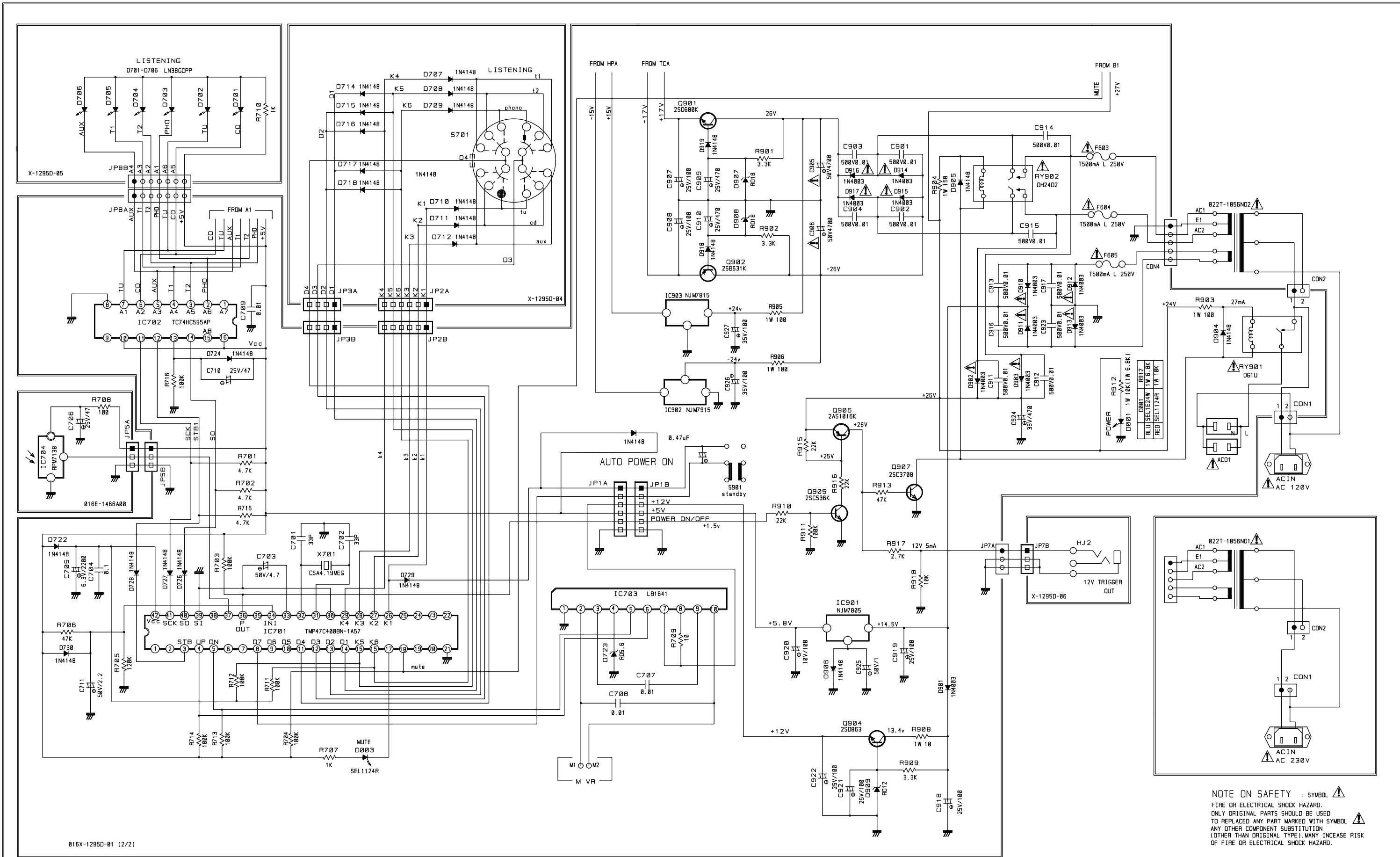


Head Phone PCB
016 E-1355A00





Schematic Diagram
RC1070 (1/2)
2888 1 38



NOTE ON SAFETY : SYMBOL ⚠
 FIRE OR ELECTRICAL SHOCK HAZARD.
 ONLY ORIGINAL PARTS SHOULD BE USED
 TO REPLACE ANY PART MARKED WITH SYMBOL ⚠
 (OTHER THAN ORIGINAL TYPE). MANY INCREASE RISK
 OF FIRE OR ELECTRICAL SHOCK HAZARD.

Schematic Diagram
 RC1070 (2/2)
 2006. 2. 28