

aiwa



XR-M70 XR-M75

COMPACT DISC STEREO SYSTEM

• BASIC CD MECHANISM: KSM-542 ABA

• TYPE: U

SIMPLE MANUAL

Replace this Service Manual with "Revision Publishing" when it is issued.

S/M Code No. 09-987-270-4T1

MANUAL
SERVICE

SPECIFICATIONS

MAIN UNITS

FM tuner section

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

AM tuner section

Tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity	350 μ V/m
Antenna	Loop antenna

Amplifier section

Power output	16 watts per channel, Min. RMS at 8 ohms, from 60 Hz to 20 kHz, with no more than 1% Total Harmonic Distortion
Total harmonic distortion	0.1 % (10 W, 1 kHz, 8 ohms, DIN AUDIO)
Inputs	TAPE IN: 500 mV AUX IN: 500 mV
Outputs	SUPER WOOFER: 1.7 V SPEAKERS: accept speakers of 8 ohms or more LINE OUT: 340 mV PHONES (stereo minijack): accepts headphones of 32 ohms or more

Compact disc player section

Laser	Semiconductor laser ($\lambda = 780$ nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

SPEAKER SYSTEM (XR-M70)


Cabinet type	2 way, bass reflex (magnetic shielded type)
Speakers	Main speaker: 100 mm (4 inches) cone type Cardioid Speaker: 60 mm (2 3/8 inches) cone type
Impedance	8 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	144 x 202 x 185 mm (5 3/4 x 8 x 7 3/8 inches)
Weight	1.8 kg (3 lb. 15 oz)

SPEAKER SYSTEM (XR-M75)

Cabinet type	2 way, bass reflex (magnetic shielded type)
Speakers	Woofer: 100 mm (4 inches) cone type Tweeter: 25 mm (1 inch) cone type
Impedance	8 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	140 x 202 x 190 mm (5 3/4 x 8 x 7 1/2 inches)
Weight	1.9 kg (4 lb. 3 oz)

General

Power requirements	120 V AC, 60 Hz
Power consumption	40 W
Dimensions (W x H x D)	CD player unit 144 x 101.5 x 176.1 mm (5 3/4 x 4 x 7 inches) Tuner/amplifier unit 144 x 101.5 x 208 mm (5 3/4 x 4 x 8 1/4 inches)
Weight	CD player unit 0.88 kg (1 lb. 15 oz) Tuner/amplifier unit 2.4 kg (5 lb. 5 oz)

- Design and specifications are subject to change without notice.
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PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
 If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
△	S4-000-010-000		AC CONTACT TERMINAL		S8-CL1-070-000		CHASSIS CD
	S0-27N-F90-000		ANT, LOOP AM		S8-CL1-220-000		CHASSIS PANEL CONTROL
	S0-524-181-200		B-B HEADER 12P		S8-CL1-460-020		CLAMP CABLE
	S0-524-180-800		B-B HEADER 8PI		87-003-097-010		COIL, 1UH
	S0-524-180-900		B-B HEADER 9PI		87-003-147-010		COIL, 22UH
	S0-532-901-200		B-B RECEPTACLE 12P		S0-035-341-000		COIL, BEAD 100MHZ
	S0-532-900-800		B-B RECEPTACLE 8P		S0-055-301-200		CONN, BOARD TO BOARD 12P
	S0-532-900-900		B-B RECEPTACLE 9P		S0-528-060-700		CONN, FFC 7P
	S8-CL1-800-000		BADGE AIWA		S0-528-070-700		CONN, FFC 7P
	S8-CL1-620-000		BELT, PULLEY AMP		S0-401-400-000		CONN, PIN 4P
	S8-CL1-630-000		BELT, PULLEY CD 48-1.6-1.6		S0-500-502-000		CONN, PIN 5P
	S8-CL1-680-000		BKT DISPLAY LCD		S0-000-151-510		CONN, SNAP-IN 15P
	S8-CL1-660-000		BRACKET CORD AC		S0-011-171-700		CONN, SOCKET FFC 17P
	S8-CL1-240-020		BRACKET FAN	△	S1-000-900-090		COOLING FAN
	S0-408-000-030		BUSHING CORD AC		S1-171-201-100		CORD, POWER 6.5
	89-502-094-080		C-FET, 2SK209Y		S7-CD3-400-000		COVER OPTICAL
	89-111-625-080		C-TR, 2SA1162GR		82-596-799-010		DI, 1N4001B
	89-327-126-080		C-TR, 2SC2712GR		S0-254-010-000		DIODE, 1N5401BL
	89-327-143-080		C-TR, 2SC2714		82-135-799-010		DIODE, IN4148
	89-502-114-080		C-TR, 2SK211-Y/GR		87-070-276-010		DIODE, SE1003-C
	87-026-230-010		C-TR, DTA114YK		S8-CL1-080-200		DOOR, CD
	87-026-239-080		C-TR, DTC114TK/TKA		S0-904-100-000		EL BACKLIGHT 114-36
	87-026-213-010		C-TR, DTC114YK		87-010-263-080		ELECT CAP 100-10V
	S8-CL1-060-020		CAB, BOTTOM AMP		87-010-406-080		ELECT CAP 22-50V
	S8-CL1-050-020		CAB, BOTTOM CD		87-010-248-080		ELECT CAP 220-10V
	S8-CL1-040-200		CAB, TOP AMP(B)		S1-78C-L12-000		FC CONN-PLUG SMK 17P
	S8-CLB-030-100		CAB, TOP CD		S0-701-801-000		FFC CABLE 7P 180MM
	S0-871-300-200		CABLE HOLDER 2P		S0-702-501-000		FFC CABLE 7P 250MM
	S0-871-300-400		CABLE HOLDER 4P		S0-37N-F90-100		FM FEEDER-ANT/PE TWIN WIRE
	S0-871-300-500		CABLE HOLDER 5P		S8-CL1-640-000		FOOT, RUBBER 10-10-3
	S0-871-300-700		CABLE HOLDER 7P	△	S7-900-000-000		FUSE HOLDER
	87-010-545-010		CAP, E 0.22-50V	△	S0-125-200-050		FUSE, 1.25A/250V
	87-010-546-080		CAP, E 0.33-50V	△	S0-250-100-010		FUSE, 2.5A 125V
	87-010-053-810		CAP, E 1-50V		87-081-438-010		FW, 3-6-0.4
	87-010-071-040		CAP, E 1-50V		87-078-044-010		FW, 3.2-8-1
	87-010-401-010		CAP, E 1-50V		S8-CL1-150-000		GEAR, DOOR CD
	87-010-494-010		CAP, E 1-50V		S8-CL1-160-000		GEAR, DOOR CD
	87-010-075-040		CAP, E 10-16V		S8-CL1-170-000		GEAR, DOOR CD
	87-010-037-010		CAP, E 10-50V		S8-CL1-180-000		GEAR, DOOR CD
	87-010-112-010		CAP, E 100-16V		S8-CL1-420-000		GEAR, TRAY
	87-A10-818-040		CAP, E 100-16V		S2-001-WR0-700		HEADER 7P
	87-010-045-010		CAP, E 100-25V		S0-000-020-210		HEADER JST 2P
	87-010-393-010		CAP, E 100-35V		S0-000-020-230		HEADER JST 2P(BLU)
	87-010-047-010		CAP, E 100-50V		S0-000-020-220		HEADER JST 2P(RED)
	87-010-079-010		CAP, E 100-6.3V		S0-532-650-200		HEADER MOLEX 2P
	87-010-237-010		CAP, E 1000-16V		S0-052-670-500		HEADER MOLEX 5P
	87-010-388-010		CAP, E 1000-25V		S0-510-161-700		HOLDER CABLE 17P 1.5MM
	87-010-035-010		CAP, E 2.2-50V		S7-CD3-390-000		HOLDER OPTICAL
	87-015-716-010		CAP, E 22-16V		S8-CL1-450-000		HOLDER REMOTE SENSOR
	87-010-038-010		CAP, E 22-25V		S0-035-183-500		HP, JACK ST 3.5MM
	87-A10-189-080		CAP, E 220-10V		S0-58C-L12-500		HSG, 170MM
	87-015-975-010		CAP, E 220-6.3V		S0-38C-L13-500		HSG, 195MM(RED)
	87-010-398-090		CAP, E 2200-35V		S0-201-700-010		HSG, 2P
	87-010-403-010		CAP, E 3.3-50V		S0-78C-L12-000		HSG, JST 200MM
	87-010-399-090		CAP, E 3300-35V		S0-48C-L12-000		HSG, JST 250MM SHIELD
	87-010-234-070		CAP, E 4-16V		S0-28C-L11-500		HSG, JST 70MM
	87-010-074-080		CAP, E 4.7-35V		S0-28C-L11-510		HSG, JST 70MM
	87-010-404-010		CAP, E 4.7-50V		S0-28C-L12-000		HSG, JST PHR 50MM
	87-010-380-010		CAP, E 47-16V		S0-38C-LB2-000		HSG, WIRE SHIELD 150MM
	87-010-549-010		CAP, E 47-6.3V		87-A20-056-010		IC, BA3880S
	87-010-221-010		CAP, E 470-10V		87-001-607-080		IC, BA4558F-E2
	87-010-249-010		CAP, E 470-16V		S4-038-540-000		IC, BH3854AFS
	87-010-782-010		CAP, E 47000-5.5V		87-017-726-080		IC, BU4052BCF
	S8-CL1-430-000		CENTER GEAR TRAY		S3-351-840-000		IC, KS51840-C7D
	S0-001-070-010		CER, FILTER		87-022-899-010		IC, STR4122MK2
	S0-016-930-000		CER, RESO		S8-320-570-000		IC, TA2057N
	S0-008-000-000		CER, RESO 8 MHZ		87-070-134-010		IC, TA2065F
	87-008-246-010		CER, RESO CSB455EB		87-A20-157-010		IC, TA2092N
	S6-004-560-050		CER, RESO CSB456F29		87-001-982-010		IC, TA7291S
	S6-010-700-010		CER, RESO7MG43-A		87-070-101-010		IC, TC9284AF

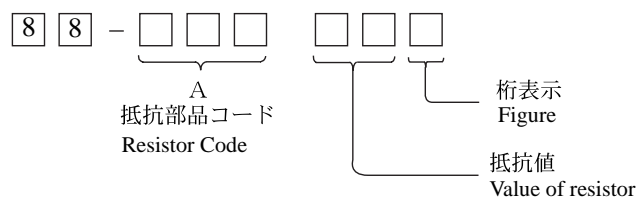
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	S9-187-230-010		IC,TMP87CM23F-2336		87-255-169-410		SCREW,4-6
	S9-187-400-020		IC,TMP87CM40AF-4A78		87-251-092-410		SCREW,M3-4
	S8-492-570-000		IC0-C9257F		87-261-094-410		SCREW,M3-6
	S7-NF8-020-240		IFT,AM PACK 4 455BFR-121		87-268-508-310		SCREW,ST1.4-3.5
	87-A90-245-010		IFT,CFAZH-450		87-067-911-010		SCREW,ST1.7-10
	87-005-696-080		INDUCTOR,100UH		87-353-533-310		SCREW,ST1.7-5
	87-005-196-080		INDUCTOR,10UH		87-B10-026-010		SCREW,ST1.7-8
	87-003-098-080		INDUCTOR,2.2UH		87-353-034-210		SCREW,ST2-5
	S8-CLB-910-110		INSTRUCTION BOOK<75U>		87-342-036-210		SCREW,ST2-8
	S8-CLB-910-210		INSTRUCTION BOOK(M70US)<70U>		87-261-075-010		SCREW,ST2.6-10MM BB
	S0-202-130-000		JACK,PIN 3P		87-342-076-010		SCREW,ST2.6-12MM PAB
	S0-202-460-010		JACK,PIN 3Px2		87-743-073-410		SCREW,ST2.6-6
	S8-CL1-230-010		KEY, JOG GREY		87-743-074-410		SCREW,ST2.6-8
	S8-CL1-560-100		KEY,RUBBER(A)		87-261-074-010		SCREW,ST2.6-8MM BB
	S8-CL1-570-100		KEY,RUBBER(B)		87-352-097-210		SCREW,ST3-12
	S8-CL1-370-100		KEY,SET-CD(GRY)		87-741-097-410		SCREW,ST3-12
	S8-CL1-380-100		KEY,SET-F.F		87-078-157-010		SCREW,ST3-16
	S8-CL1-390-010		KEY,SET-FUNCTION		87-251-094-410		SCREW,ST3-6
	S8-CL1-350-010		KEY,SOUND		87-352-095-010		SCREW,ST3-8
	S8-CL1-120-010		KNOB,EJECT CD(GRY)		87-024-176-080		SFR,100K
	S8-CL1-100-200		KNOB,PLAY SET(B)		S1-030-850-000		SFR,10K
	S8-CL1-400-010		KNOB,POWER(GRY)		87-024-171-080		SFR,5K
	S8-CL1-110-100		KNOB,SKIP		S8-CL1-720-000		SPACER DOOR CD(A)
	S0-041-510-000		LCD,DISPLAY		S0-401-540-000		SPKR,TERMINAL 4P
	87-A40-123-010		LED,SLZ-8128A-01-B		S0-000-020-000		SW,MICRO MQS-2
	S8-CL1-510-100		LENS,COVER TOP		S0-000-010-010		SW,MIRCO MLS-1
	S8-CL1-190-100		LENS,DISPLAY		SK-HH9-130-000		SW,PB(CSDSR510,515)
	S8-CL1-520-000		LENS,REMOTE		SK-HH9-010-000		SW,TACT KSM0612A
	S8-CL1-480-000		LENS,SENSOR REMOTE		S2-054-100-010		THERMISTOR T5D410K45JBPDA-0
	S1-215-370-000		MOTOR RF-370CA-15370 12V		89-213-702-010		TR,2SB1370E
	S0-611-190-000		MOTOR,FF-050SH-11190		87-026-200-080		TR,DTC114ES
	S8-CL1-200-020		PANEL CONTROL TOP		S7-805-000-020		TR,PE8050B,C,D
	S8-CL1-020-020		PANEL FRONT AMP(GRY)		S7-855-000-020		TR,PE8550B,C
	S8-CLB-040-000		PANEL FRONT CD		S8-CL1-210-000		TRAY,PANEL CONTROL
	S8-CLB-010-100		PLATE COVER FRONT CD<70U>		A8-8ZA-191-030		TUNER FM 8ZA-1
	S8-CLB-010-200		PLATE COVER FRONT CD<75U>		S8-CL1-090-000		WINDOW,CD
	S8-CLB-710-100		PLATE PANEL CONTROL		S6-072-000-000		X'TAL 7.2 MHZ
	S8-CLB-760-100		PLATE PANEL FRONT AMP		S3-327-683-000		X'TAL,32.768 KHZ
	S8-RU5-190-000		PLATE,CONTACT		S3-327-680-000		X,TAL 32.768KHZ
	S5-166-360-200		POWER TF EI-66/36 120V		87-020-511-010		ZENER,05AZ4.7V
	S1-667-260-000		PT,EL EI-16		S0-100-221-200		ZENER,2.2V
	S8-CL1-410-000		PULLEY MOTOR TRAY		87-070-136-080		ZENER,5.1V
	S0-006-380-000		RC,PHOTO RECEIVER		S0-100-560-000		ZENER,5.6V
	0		RC,RC-M70(EX)		S0-100-680-010		ZENER,6.8V MTZJ6.8B
	S2-291-030-000		RES,NETWORK EXB-Z9E103J		S0-100-821-200		ZENER,8.2V,1/2W
	SH-132-032-000		ROTARY ENCODER		S3-MTZ-J91-BM0		ZENER,9.1V
	87-253-095-410		SCREW 3-8		87-027-513-010		ZENER,IN5232B 5.6V1/2W
	87-357-036-010		SCREW ST 2-8				
	87-751-096-410		SCREW,3-10				
	87-741-096-010		SCREW,3-10MM PM				

- Regarding connectors, they are not stocked as they are not the initial order items.
The connectors are available after they are supplied from connector manufacturers upon the order is received.

○ チップ抵抗部品コード / CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

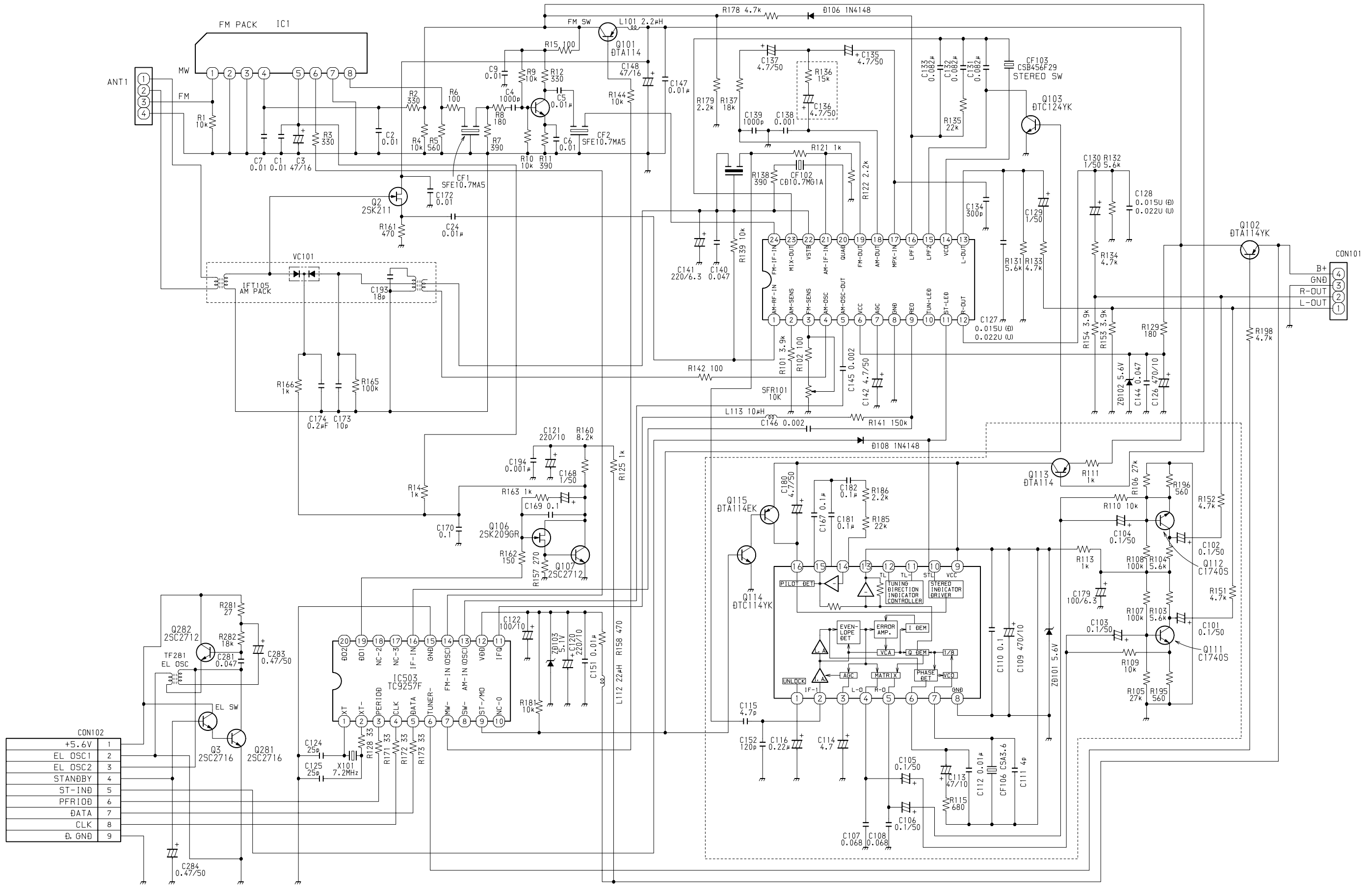
Chip Resistor Part Coding



チップ抵抗
Chip resistor

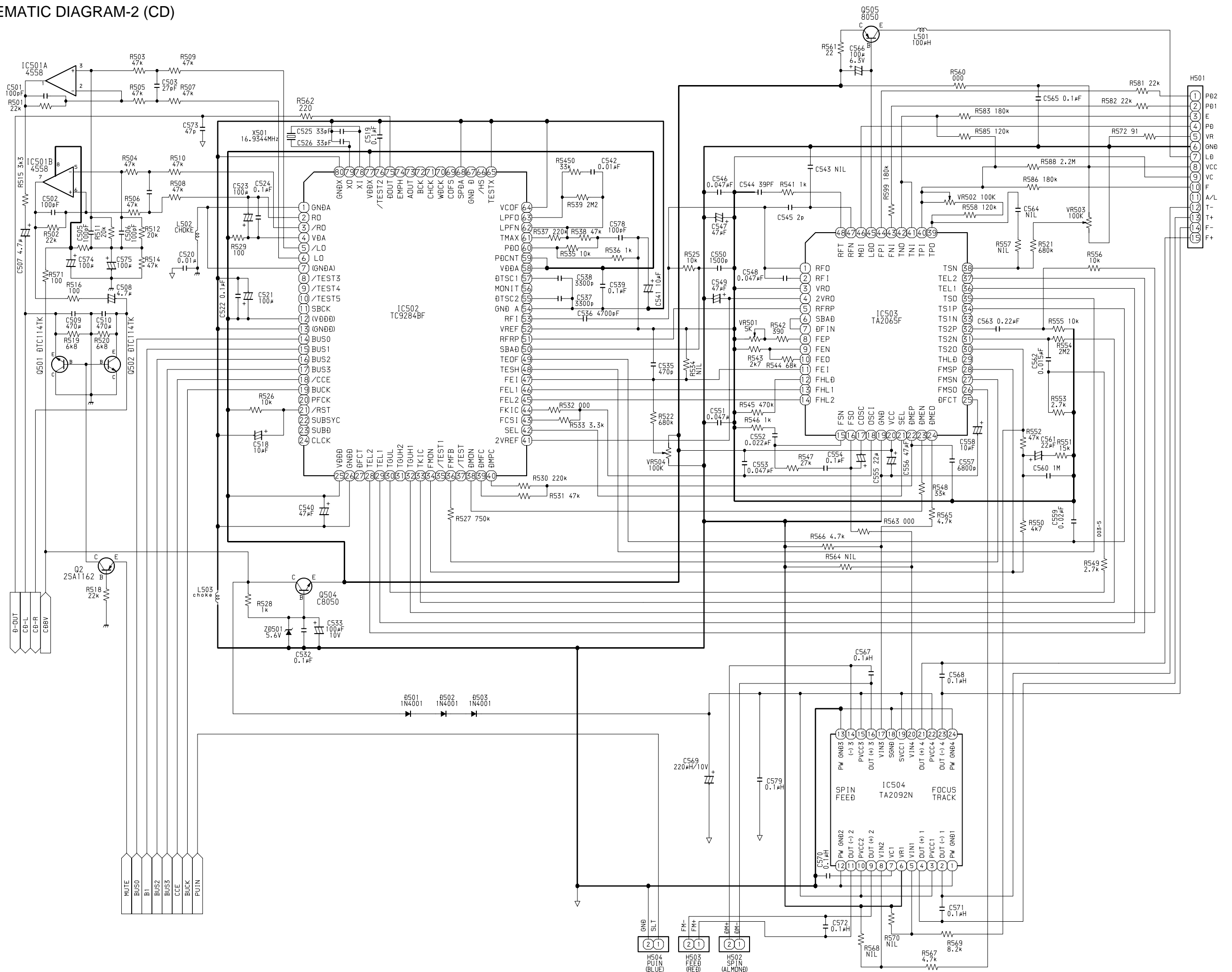
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法 / Dimensions (mm)			抵抗コード : A Resistor Code : A	
				外形 / Form	L	W		t
1/16W	1608	5%	CJ		1.6	0.8	0.45	108
1/10W	2125	5%	CJ		2	1.25	0.45	118
1/8W	3216	5%	CJ		3.2	1.6	0.55	128

SCHEMATIC DIAGRAM-1 (TUNER)

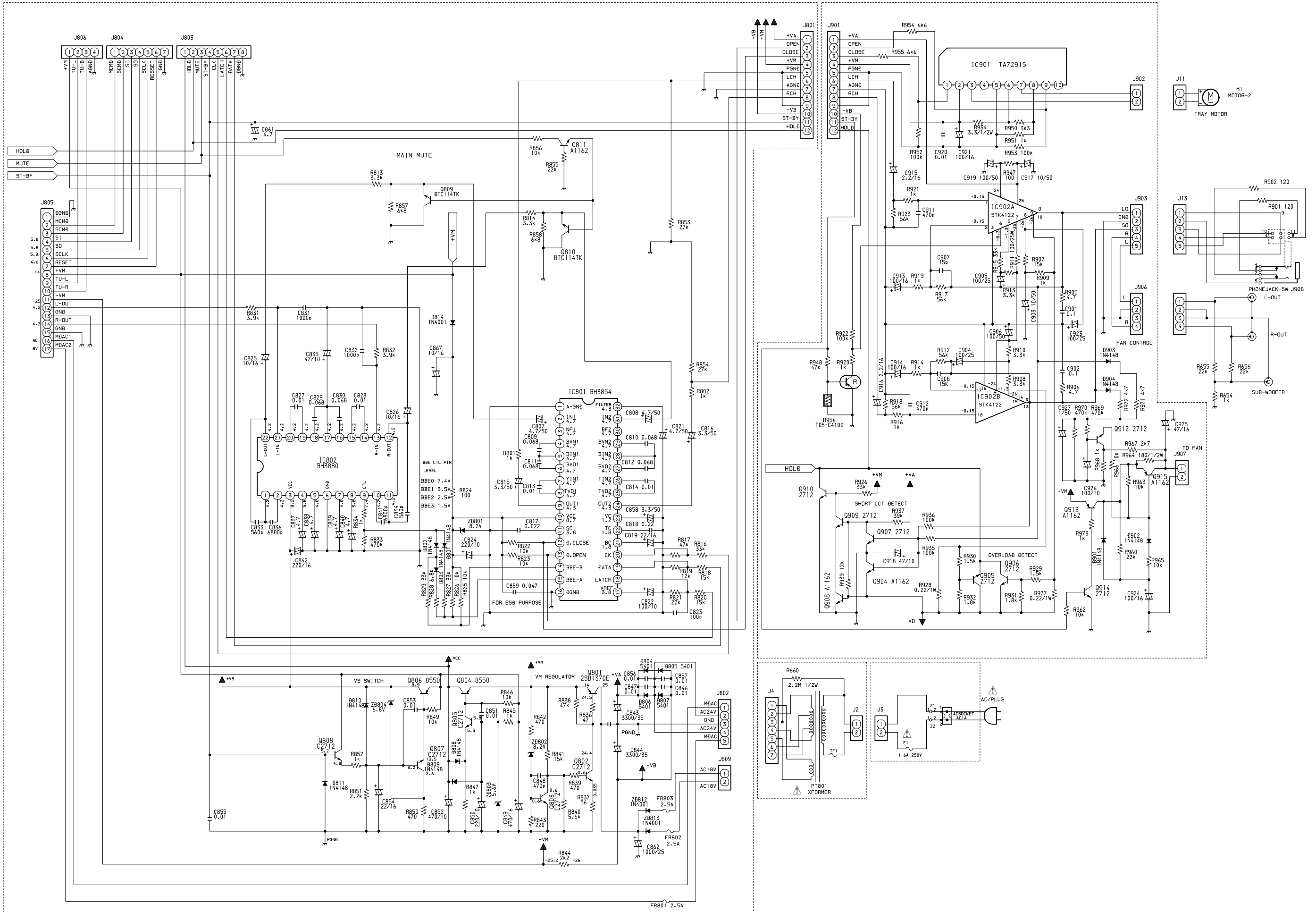


CON102	
+5.6V	1
EL OSC1	2
EL OSC2	3
STANDBY	4
ST-IND	5
PFR10B	6
DATA	7
CLK	8
D. GND	9

SCHEMATIC DIAGRAM-2 (CD)

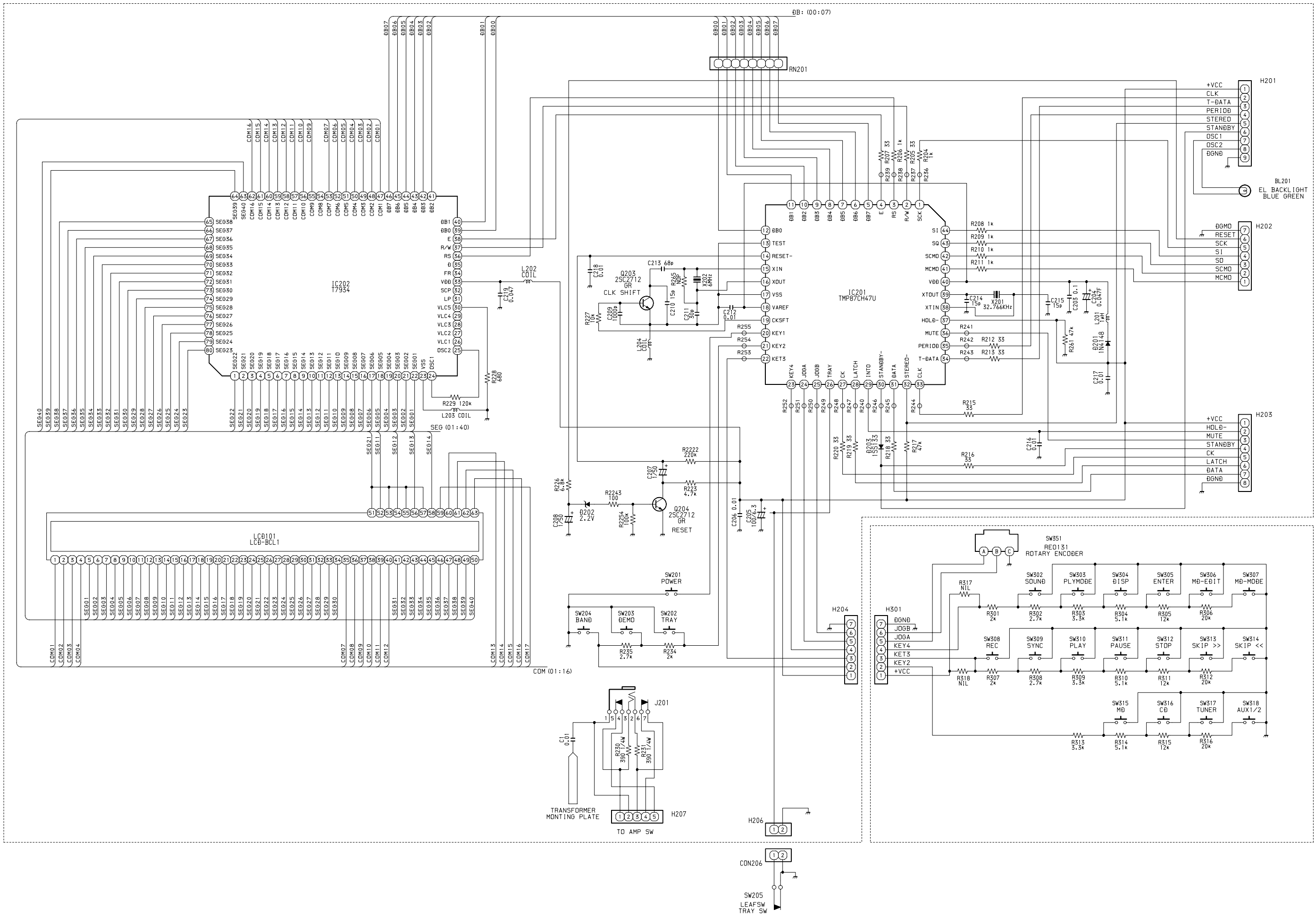


SCHEMATIC DIAGRAM-3 (AUDIO/POWER)

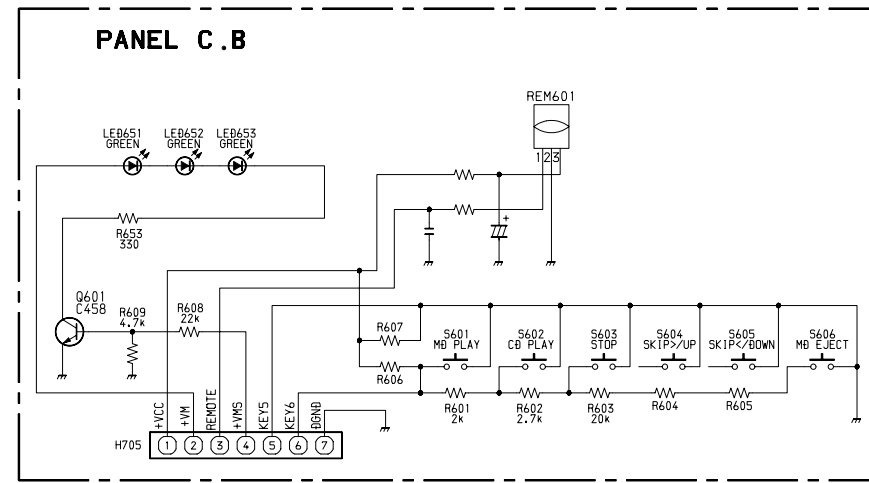
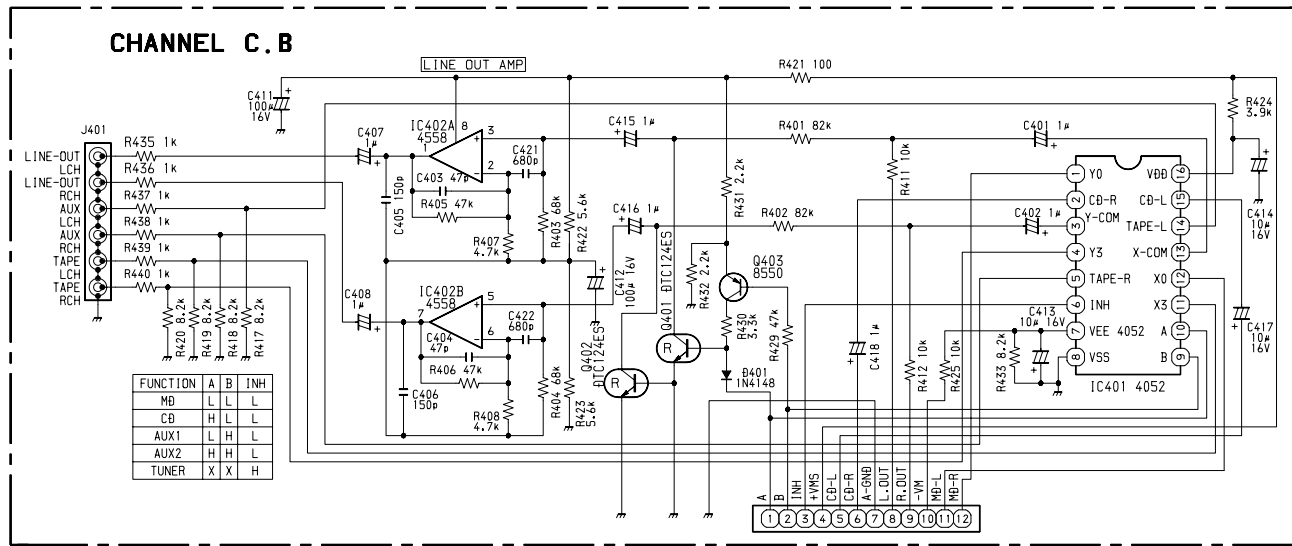


SCHEMATIC DIAGRAM-4 (DISPLAY)

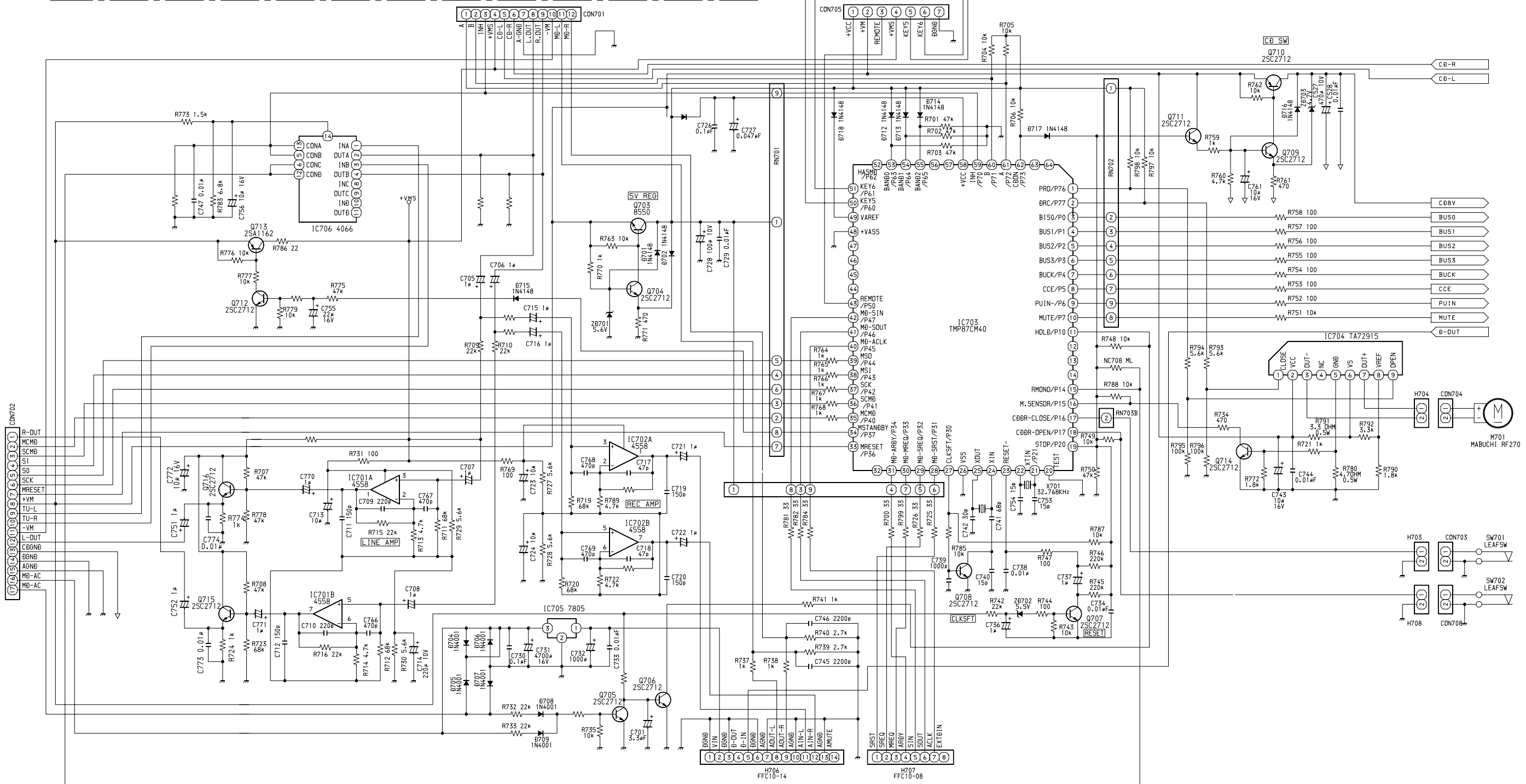
○ =PULL-UP



SCHEMATIC DIAGRAM-5 (MECHA CONTROL)



VERSION	B714	B713	B712
FM/AM (U)	0	0	0
FM/MW/SW	0	X	0
FM/MW/LW	X	0	0
FM1/FM2/MW/LW	X	X	0
FM/MW/LW	0	0	X
FM/AM STEREO	X	0	X
FM/AM	X	X	X



REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

サービス技術ニュース	
番号	連絡内容
G- -	
G- -	
G- -	

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