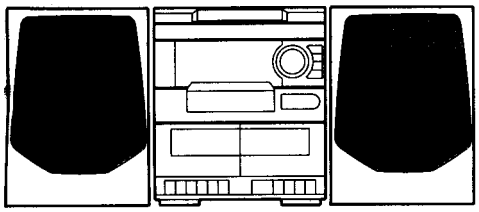
aiwa

aiwa SERVICE

XG-S10
NSX-S9
NSX-S10

SERVICE MANUAL



COMPACT DISC STEREO
CASSETTE RECEIVER

- BASIC TAPE MECHANISM : TN-21ZSW-1716
- BASIC CD MECHANISM : 4ZG--1 BDLNC
- TYPE : EZ,G (S9)
  D,EZ,HR,HS,V (S10)

製品コード： 87NY9 - 0197 (ST)

SYSTEM	CD – CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX–S9 (TYPE : EZ,G)	CX – NS9	SX – NS10	RC UNIT, 6AS14
XG–S10 (TYPE : D)	CX – NS10		
NSX–S10 (TYPE : EZ,HR,HS,V)			

•If requiring information about the CD mechanism, see Service Manual of 4ZG-1, S/M Code No. 09-965-128-10T.

S/M Code No. 09–979–212–6FP

TABLE OF CONTENTS

SPECIFICATIONS (HR,HS)

<FM Tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	16.8 dBf
Antenna terminals	75 ohms (unbalanced)

<MW Tuner section> (HR)

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

<SW Tuner section> (HR)

Tuning range	5.9000 MHz - 17.900 MHz
Antenna	Wire antenna

<AM Tuner section> (HS)

Tuning range	531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity	350 uV/m
Antenna	Loop antenna

<Amplifier section>

Power output	Rated: 12 W +12 W (T.H.D.1 %, 6 ohms,1 kHz) Reference: 15 W +15 W(T.H.D 10 %, 6 ohms,1 kHz)
Total harmonic distortion	0.3 % (6 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 400 mV
Outputs	SPEAKERS: accept speakers of 6 ohms or more PHONES (stereo jack) : accepts headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz - 10000 Hz
Recording system	AC bias
Heads	Deck 1 : Recording/playback/ erase head x 1 Deck 2 : Playback head x 1

<Compact disc player section>

Laser	Semiconductor laser (λ =780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	90 dB (1 kHz, 0 dB)
Harmonic distortion	0.03% (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

<Speaker system SX-NS10>

Cabinet type	2 way, bass reflex (magnetic shielded type)
Speakers	Woofer : 120 mm cone type Tweeter : 10 mm ceramic type
Impedance	6 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	220 x 302 x 238 mm
Weight	2.5 kg (5lbs 8 oz)

<General>

Power requirements	HR: 120 V/220 V-240 V AC, (switchable) 50/60 Hz HS: 220V AC, 60 Hz
Power consumption	HR: 50 W HS: 75 W
Dimensions of main unit (W x H x D)	260 x 308 x 335 mm
Weight of main unit	4.4 kg

• Design and specifications are subject to change without notice.

SPECIFICATIONS (9EZ,G,10EZ,V)

<FM Tuner section> (9EZ,10EZ,9G)

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	16.8 dBf
Antenna terminals	75 ohms (unbalanced)

<FM Tuner section> (V)

Tuning range	FM1 (OIRT) 65 MHz to 74 MHz (10 kHz step) FM2 (CCIR) 87.5 MHz to 108 MHz (50 kHz step)
Antenna terminals	Wire antenna

<MW Tuner section>

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

<LW Tuner section>

Tuning range	144 kHz to 290 kHz
Usable sensitivity	1400 uV/m
Antenna	Loop antenna

<Amplifier section>

Power output	Rated: 12 W +12 W (T.H.D.1 %, 6 ohms 1 kHz/DIN 45500) Reference: 15 W + 15 W (6 ohms, T.H.D. 10%, 1 kHz/DIN 45324) DIN MUSIC POWER 35 W + 35W
Total harmonic distortion	0.3 % (6 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 400 mV
Outputs	SPEAKERS: accept speakers of 6 ohms or more PHONES (stereo jack) : accepts headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz - 10000 Hz
Recording system	AC bias
Heads	Deck 1 : Recording/playback/ erase head x 1 Deck 2 : Playback head x 1

<Compact disc player section>

Laser	Semiconductor laser (λ =780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	90 dB (1 kHz, 0 dB)
Harmonic distortion	0.03% (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

<Speaker system SX-NS10>

Cabinet type	2 way, bass reflex (magnetic shielded type)
Speakers	Woofer : 120 mm($4^3/_4$ in.) cone type Tweeter : 10 mm($^{13}/_{32}$ in.) ceramic type
Impedance	6 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	220 x 302 x 238 mm ($8^3/_4$ x 12 x $9^3/_8$ in.)
Weight	2.5 kg (5 lbs 8oz)

<General>

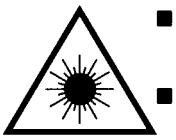
Power requirements	230 V AC, 50 Hz
Power consumption	80 W
Dimensions of main unit (W x H x D)	260 x 308 x 335 mm ($10^1/_4$ x $12^1/_4$ x $13^1/_4$ in.)
Weight of main unit	4.4 kg (9 lbs 11oz)

• Design and specifications are subject to change without notice.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saataa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

ATTENTION
L'utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL
Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

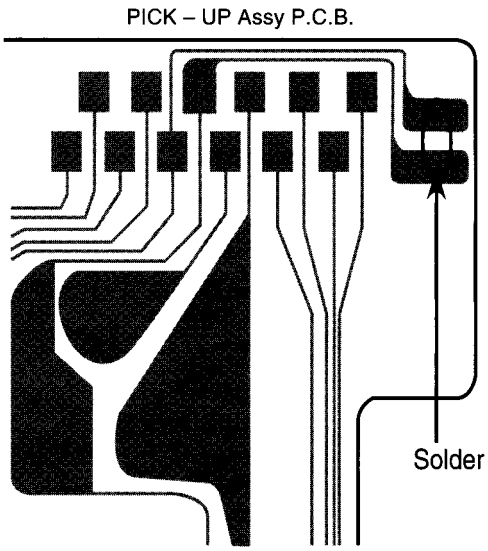
This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

Precaution to replace Optical block (KSS – 213B)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.



ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST "

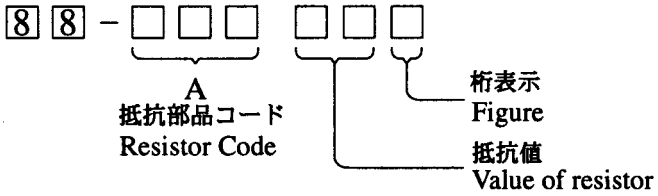
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	86-NFZ-701-010	--	IC,UPD78044HGF-021-3B9<EXP 10EZ>
	86-NFZ-706-010		IC,UPD78045HGF-017-3B9<10EZ>
	87-A20-593-010	1B	IC,SPS-442-1-A
	87-A20-754-010	--	IC,BA4558N-DX
	87-017-804-010	1B	IC,BU4052BC
	87-A20-312-010	--	IC,M62420SP
	87-A20-502-010		IC,BU1920<10EZ>
	86-NFZ-655-010	1C	IC,LC72131D(Z)
	86-NFZ-654-010	--	IC,LA1836(Z)
	87-017-914-010		IC,BU4094<10EZ>
	87-017-300-010		IC,NJM2100L<10EZ>
	87-002-641-010	--	IC,TA8124P<D>
TRANSISTOR			
	89-213-702-010	1A	TR,2SB1370E
	87-026-610-080	0E	TR,KTC3198GR
	87-026-609-080	0E	TR,KTA1266GR
	87-026-286-080	0E	TR,DTA143ES
	87-026-214-080	0E	TR,DTA114YS
	89-420-612-010	--	TR,2SD2061E
	87-026-218-080	--	TR,DTC144ES
	87-026-292-080	--	TR,DTA144WS
	89-406-555-080	0E	TR,2SD655E
	87-026-289-080	--	TR,DTC143XS
	87-A30-092-080	--	FET,2SK439E/F
	89-305-352-380	--	TR,2SC535(B/C)
	89-319-233-080	0E	TR,2SC1923O<HR,D,HS>
	89-320-011-080		TR,2SC2001K<EXP D,HS>
	87-026-269-080		TR,DTA114ES<EXP D>
	87-026-462-080		TR,2SC1740SRS<HR>
	87-026-463-080		TR,2SA933SRS<HR>
	89-A30-083-080	0E	TR,CSD1489B
	87-026-215-080	--	TR,DTC114YS<D,10EZ>
	87-026-219-080	--	TR,DTA144ES<D>
	86-NFZ-658-080		TR,2SC2785F<EXP D,HS>
DIODE			
	87-070-178-090	--	DIODE,1N5402
	87-070-274-080	0E	DIODE,1N4003 SEM
	87-A40-309-080	--	ZENER,DZ24M
	87-A40-291-080	--	DIODE,1N4148(CPT)
	87-A40-308-080	--	ZENER,DZ10M
	87-A40-235-080	--	ZENER,MTZJ9.1C
	87-A40-234-080	--	ZENER,MTZJ5.6A
	87-A40-226-080	--	VARI-CAP,SVC251SPA<HR,HS,D>
	87-002-843-080		DIODE,1SS108<10EZ>
	87-A40-304-080	--	ZENER,DZ6.2M
	87-020-465-080	0E	DIODE,1SS133
	87-070-136-080	0E	ZENER,MTZJ5.1B
MAIN C.B			
	85-NF5-617-010	--	CABLE,FFC 6P-1.25<D>
	86-NFZ-785-010		CABLE,FFC 6P-1.25<HR,10EZ>
C102	87-A10-570-090	--	CAP,E 3300-25 SME
C103	87-A10-515-090	--	CAP,E 2200-25 SME
C105	87-018-127-080	--	CAP,CER 470P-50V
C106	87-010-260-080	0E	CAP,E 47-25 SME
C107	87-010-101-080	OE	CAP,E 220-16 SME
C108	87-010-381-080	0E	CAP,E 330-16 SME
C109	87-010-384-080	OE	CAP,E 100-25 SME
C110	87-010-384-080	0E	CAP,E 100-25 SME
C111	87-010-247-080	0E	CAP,E 100-50 SME
C112	87-010-263-080	0E	CAP,E 100-10 SME
C113	87-010-403-080	0E	CAP,E 3.3-50 SME
C114	87-010-374-080	--	CAP,E 47-10 SME
C151	87-018-134-080		CAP,TC U 0.01-16YN<10EZ,9EZ,V,G>
C200	87-018-211-080		CAP,TC U 0.01-50<10EZ,9EZ,G>
C201	87-010-545-080	0E	CAP,E 0.22-50 SME
C202	87-010-545-080	0E	CAP,E 0.22-50 SME
C203	87-018-199-089	--	CAP,CER 3300P
C204	87-018-199-089	--	CAP,CER 3300P
C205	87-018-199-089	--	CAP,CER 3300P<D,HR,HS>
C205	87-018-196-080		CAP,CER 1500P<10EZ,9EZ,V,G>
C206	87-018-199-089	--	CAP,CER 3300P<D,HR,HS>
C206	87-018-196-080		CAP,CER 1500P<10EZ,9EZ,V,G>
C207	87-010-545-080	0E	CAP,E 0.22-50 SME
C208	87-010-545-080	0E	CAP,E 0.22-50 SME
C209	87-010-221-080	--	CAP,E 470-10 SME
C210	87-010-221-080	--	CAP,E 470-10 SME
C211	87-018-024-080		CAP,TCU 47P-50J SL<10EZ,9EZ,V,G>
C212	87-018-024-080		CAP,TCU 47P-50J SL<10EZ,9EZ,V,G>
C213	87-018-104-080		CAP,TCU 10P-50J SL<10EZ,9EZ,V,G>
C214	87-018-104-080		CAP,TCU 10P-50J SL<10EZ,9EZ,V,G>
C219	87-010-544-080	--	CAP,E 0.1-50 SME
C220	87-010-544-080	--	CAP,E 0.1-50 SME
C221	87-018-134-080		CAP,TCU 0.01-16 NY<10EZ,9EZ,V,G>
C222	87-018-134-080		CAP,TCU 0.01-16 NY<10EZ,9EZ,V,G>
C225	87-016-586-080	--	CAP,E 470-25 M SSL
C226	87-010-408-089	0E	CAP,E 47-50 SME
C227	87-010-405-080	0E	CAP,E 10-50 SME
C292	87-018-134-080		CAP,TCU 0.01-16 NY<10EZ,9EZ,V,G>
C300	87-018-209-080	0E	CAP,CER 0.1-50<D,HR,HS>
C300	87-018-134-080		CAP,TC U 0.01-16 NY<10EZ,9EZ,G>
C301	87-018-195-080	--	CAP,CER 1200P-16V
C302	87-018-195-080	--	CAP,CER 1200P-16V
C303	87-010-263-080	0E	CAP,E 100-10 SME
C304	87-010-263-080	0E	CAP,E 100-10 SME
C309	87-010-546-080	--	CAP,E 0.33-50 SME
C310	87-010-546-080	--	CAP,E 0.33-50 SME
C311	87-018-130-080	--	CAP,TC U 820P-50 K B UP050
C312	87-018-130-080	--	CAP,TC U 820P-50 K B UP050
C314	87-010-260-040	0E	CAP,E 47-25 SME
C345	87-018-115-080		CAP,TCU 47P-50J SL<10EZ,9EZ,V,G>
C349	87-018-209-080		CAP,TCU 0.1-50 ZF<10EZ,9EZ,V,G>
C351	87-018-195-080	--	CAP,CER 1200P-16V
C352	87-018-195-080	--	CAP,CER 1200P-16V
C353	87-010-263-080	0E	CAP,E 100-10 SME
C354	87-010-263-080	0E	CAP,E 100-10 SME
C360	87-010-370-089	0E	CAP,E 330-6.3 SME
C390	87-018-209-080		CAP,TCU 0.1-50 ZF<10EZ,9EZ,V,G>
C391	87-018-115-080		CAP,TCU 47P-50J SL<10EZ,9EZ,V,G>
C395	87-018-209-080	--	CAP,TC U 0.1-50 ZF<HS,D,HR>
C395	87-018-134-080		CAP,TC U 0.01-16 YN<10EZ>
C400	87-018-134-080		CAP,TC U 0.01-16 NY<10EZ,9EZ,G>
C401	87-010-401-080	0E	CAP,E 1-50 SME
C402	87-010-401-080	OE	CAP,E 1-50 SME
C403	87-018-118-080	--	CAP,TC U 82P-50 J B UP050
C404	87-018-118-080	--	CAP,TC U 82P-50 J B UP050
C452	87-010-385-080	--	CAP,E 220-25 SME
C458	87-018-131-080	--	CAP,CER 1000P-50V
C459	87-018-128-080	--	CAP,CERA-SOL SS560P
C461	87-018-126-080	--	CAP,TC U 390P-50 K B UP050
C462	87-018-126-080	--	CAP,TC U 390P-50 K B UP050
C505	87-010-401-080	0E	CAP,E 1-50 SME
C506	87-010-401-080	0E	CAP,E 1-50 SME
C510	87-010-405-080	0E	CAP,E 10-50 SME
C511	87-010-260-040	0E	CAP,E 47-25 SME
C512	87-010-260-040	0E	CAP,E 47-25 SME
C513	87-010-221-080	--	CAP,E 470-10 SME
C515	87-015-951-080	--	CAP,E 1-50 M LL
C516	87-015-951-080	--	CAP,E 1-50 M LL
C517	87-018-134-080		CAP,TC U 0.01-16 YN<10EZ>
C518	87-018-134-080	0E	CAP,TC U 0.01-16 YN
C551	87-018-115-080		CAP,TC U 47P-50 J SL UP050<10EZ>
C552	87-018-115-080		CAP,TC U 47P-50 J SL UP050<10EZ>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C553	87-018-115-080		CAP,TCU 47P-50 J SL UP050<10EZ>
C700	87-018-198-010		CAP,TC U 2700P-16<10EZ,9EZ,G>
C701	87-010-404-080	0E	CAP,E 4.7-50 SME
C704	87-018-131-080		CAP,CER 1000P-50V<10EZ,9EZ,V,G>
C711	87-010-260-040	0E	CAP,E 47-25 SME
C712	87-010-112-040	0E	CAP,E 100-16 SME
C722	87-018-149-080	--	CAP,TC U 15P-50 J CH UP050
C728	87-010-248-040	0E	CAP,E 220-10 SME
C730	87-018-134-080		CAP,TC U 0.01-16 YN<10EZ>
C733	87-018-148-080	--	CAP,TC U 12P-50 J CH UP050
C741	87-010-401-080	0E	CAP,E 1-50 SME<D,10EZ,9EZ,V,G>
C741	87-010-546-080		CAP,E 0.33-50 SME<HR,HS>
C742	87-010-401-080	0E	CAP,E 1-50 SME<D,10EZ,9EZ,V,G>
C742	87-010-546-080		CAP,E 0.33-50 SME<HR,HS>
C743	87-010-404-080	0E	CAP,E 4.7-50 SME<D>
C744	87-010-260-080	0E	CAP,E 47-25 SME<D>
C745	87-010-401-080	0E	CAP,E 1-50 SME<D>
C746	87-010-401-080	0E	CAP,E 1-50 SME<D>
C747	87-018-134-080	0E	CAP,TC U 0.01-16 N YU<D>
C748	87-018-205-080	--	CAP,CERA-SOL SS 0.022<D>
C749	87-010-248-040	0E	CAP,E 220-10 SME<D>
C752	87-018-107-080	--	CAP,TC U 18P-50 SL UP050<D>
C753	87-010-402-080	0E	CAP,E 2.2-50 SME<D>
C754	87-018-147-080	--	CAP,TC U 10P-50 J CH UP050<D>
C755	87-010-402-080	0E	CAP,E 2.2-50 SME<D>
C760	87-010-401-080	0E	CAP,E 1-50 SME<D>
C761	87-010-401-080	0E	CAP,E 1-50 SME<D>
C771	87-010-405-040	0E	CAP,E 10-50 SME
C773	87-018-208-080	--	CAP,0.047-50F
C774	87-010-263-080	0E	CAP,E 100-10 SME
C775	87-010-405-040	0E	CAP,E 10-50 SME
C777	87-010-400-089	0E	CAP,E 0.47-50 SME
C778	87-010-401-080	0E	CAP,E 1-50 SME
C779	87-010-401-080	0E	CAP,E 1-50 SME
C781	87-010-402-080	0E	CAP,E 2.2-50 SME<D>
C782	87-010-402-080	0E	CAP,E 2.2-50 SME<D>
C783	87-018-208-080	--	CAP,0.047-50F<D>
C784	87-018-208-080	--	CAP,0.047-50F<D>
C791	87-010-401-080	0E	CAP,E 1-50 SME
C792	87-018-196-080	--	CAP,CER 1500P-16V<D,HR,HS,V>
C794	87-010-260-080	0E	CAP,E 47-25 SME
C795	87-018-208-080		CAP,0.047-50F<10EZ,9EZ,V,G>
C796	87-010-403-080	0E	CAP,E 3.3-50 SME
C799	87-010-405-040	0E	CAP,E 10-50 SME
C801	87-018-102-089	--	CAP,TC U 6.8P-50K SL<D,HR,HS>
C806	87-018-101-089	--	CAP,TC U 5.6P-50K SL<D,HR,HS>
C807	87-018-102-089	--	CAP,TC U 6.8P-50K SL<D,HR,HS>
C808	87-018-098-080	--	CAP,TC U 3.3P-50K SL<D,HR,HS>
C809	87-018-119-080	--	CAP,TC U 100P-50K B<D,HR,HS>
C811	87-018-107-080		CAP,TC U 18P-50 J SL<HR,HS>
C811	87-018-103-080	--	CAP,CER 8.2P-50V<D>
C815	87-018-134-080	0E	CAP,TCU 0.01-16NY<HR,D,10EZ,HS>
C820	87-010-260-080		CAP,E 47-25 SME<10EZ,9EZ,V,G>
C821	87-018-105-080	--	CAP,TC U 12P-50 J SL<D,HR,HS>
C821	87-018-134-080		CAP,TCU 0.01-16NY<10EZ,9EZ,V,G>
C822	87-018-111-080	--	CAP,CERA-SOL 27P<D,HR,HS>
C823	87-018-111-080	--	CAP,CERA-SOL 27P<D,HR,HS>
C823	87-018-134-080		CAP,TCU 0.01-16NY<10EZ,9EZ,V,G>
C824	87-018-109-080		CAP,TCU 22P-50J SL UP050<HR,HS>
C824	87-018-100-080	--	CAP,CER 4.7P-50V<D>
C825	87-018-209-080		CAP,TCU 0.1-50 ZF<10EZ,9EZ,V,G>
C849	87-018-134-080		CAP,TCU 0.01-16NY<10EZ,9EZ,V,G>
C851	87-018-131-080		CAP,TCU 1000P-50B<10EZ,9EZ,V,G>
C852	87-018-131-080		CAP,TCU 1000P-50K<10EZ,9EZ,V,G>
C861	87-018-131-080		CAP,TCU 1000P-50K<10EZ>
C862	87-010-132-080		CAP,TCU 2200P-16N X UP050<10EZ>
C863	87-018-127-080		CAP,TCU 470P-50 K B UP050<10EZ>
C864	87-010-405-040		CAP,E 10-50 SME<10EZ>
C865	87-018-209-080		CAP,TC U 0.1-50 ZF UP050<10EZ>
C866	87-010-405-040		CAP,E 10-50 SME<10EZ>
C867	87-018-134-080		CAP,TC U 0.01-16 N YU<10EZ>
C868	87-018-111-080		CAP,TCU 27P-50 J SL<10EZ>
C869	87-018-111-080		CAP,TCU 27P-50 J SL<10EZ>
C903	87-010-401-080	0E	CAP,E 1-50 SME<HR,D,HR,HS>
C941	87-018-107-080		CAP,TC U 18P-50 J SL UP050<HR>
C942	87-018-141-080		CAP,TCU 3.3P-50CH<10EZ,9EZ,V,G>
C942	87-018-104-080	--	CAP,TC U 10P-50 J SL<D,HS>
C943	87-018-134-080		CAP,TC U 0.01-16 N Y<HR>
C944	87-014-051-010		CAP PP 560P-100 J<HR>
C945	87-018-134-080		CAP,TC U 0.01-16 N Y<HR>
C946	87-010-401-080		CAP,E 1-50 SME<10EZ,9EZ,V,G>
C949	87-014-049-080		CAP PP 470P-100 J<10EZ,9EZ,V,G>
C950	87-014-073-010		CAP PP 4700P-100 J<HR>
C952	87-018-134-080		CAP,TCU 0.01-16NY<10EZ,9EZ,V,G>
C953	87-018-134-080		CAP,TC U 0.01-16 N Y<HR>
C954	87-010-400-080		CAP,E 0.47-50 SME<HR>
C955	87-018-134-080		CAP,TCU 0.01-16NY<10EZ,9EZ,V,G>
C956	87-010-263-080		CAP,E 100-10 SME<HR>
C957	87-018-104-080		CAP,TCU 10P-50 J SL<10EZ>
C958	87-018-134-080		CAP,TCU 0.01-16NY<10EZ,9EZ,V,G>
C960	87-018-209-080		CAP,TC U 0.1-50ZF<10EZ,9EZ,V,G>
C980	87-018-134-080		CAP,TC U 0.01-16 NY<10EZ,9EZ,G>
C999	87-018-209-080		CAP,TC U 0.1-50 ZF UP050<HR>
CF801	87-008-423-080		FLTR,SFE10.7MS3<10EZ,9EZ,G>
CF801	87-008-261-010	1A	FLTR,CFSFE10.7MA5<D,HR,HS,V>
CF802	82-785-747-080		CF,MS2 6HY,R<10EZ,9EZ,G>
CF802	87-008-261-010		FLTR,CFSFE10.7MA5<V>
CON351	85-CF5-660-010	--	CONN ASSY,8P-RPB
FFE801	A8-6ZA-195-030		6ZA-1 YFEENM<10EZ,9EZ,G>
FFE801	A8-6ZA-197-030		6ZA-1 YFEVNM<V>
J201	87-A60-024-010	1B	JACK,DIA 6.3 BLK W/WS KM
J202	87-A60-238-010	1A	TERMINAL,SP 4P (MSC)
J203	87-A60-354-010	--	JACK,PIN 2P
J801	87-033-235-010		TERMINAL,ANT 4P CJ-9028<HR>
J802	87-033-241-010		TERMINAL,ANT 2P<10EZ,9EZ,G>
L201	87-005-366-010		COIL,1uH K<10EZ,9EZ,V,G>
L202	87-005-366-010		COIL,1uH K<10EZ,9EZ,V,G>
L451	87-007-342-010	0E	COIL,OSC 85KHZ
L741	87-A50-015-010	--	COIL,FM DET (TOK)
L742	87-A90-245-010		FLTR,CFAZH-450(TOK)<EXP HR,D>
L742	87-A90-052-010		FLTR,CFMT-450A(TOK)<HR>
L742	87-A90-053-010	--	FLTR,PCFMT-060(TOK)<D>
L801	87-A50-110-010		COIL,FM BPF EX<HR,HS>
L801	87-A50-152-010	--	COIL,FM BPF D<D>
L802	87-006-244-010	--	COIL,RF FM 3-1/2T L4<D,HR,HS>
L803	87-006-246-010		COIL,RF FM 3-1/2T L4<HR,HS>
L803	87-A50-154-010	--	COIL,RF FM 3-3/4T D<D>
L804	86-NFZ-694-010	--	COIL,2.2uH K CECS<D,HR,HS>
L805	87-A50-111-110		COIL,FM OSC EX<HR,HS>
L805	87-A50-153-010	--	COIL,FM OSC D<D>
L806	86-ZA1-604-110	--	IFT,FM IFT7-6.2<D,HR,HS>
L807	86-NFZ-694-010	--	COIL,2.2uH K CECS<D,HR,HS>
L832	87-005-847-080		COIL,2.2uH K CECS<10EZ,9EZ,V,G>
L850	87-005-847-080		COIL,2.2uH K CECS<10EZ>
L901	86-NF4-666-010		COIL,AM PACK 3 (TOK)<HR>
L901	86-NFZ-634-110	--	COIL,AM PACK 4 (TOK)<D,HS>
L941	87-A50-020-010		COIL,ANT LW<10EZ,9EZ,V,G>
L941	87-A50-022-010		COIL,ANT SW<HR>
L942	87-A50-019-010		COIL,OSC LW<10EZ,9EZ,V,G>
L942	87-A50-021-010		COIL,OSC SW<HR>
L943	87-005-372-080		COIL,1mH K LAL03<HR>
L944	87-003-131-080		COIL,10mH J EL0607<HR>
L981	86-NF4-665-010		COIL,AM PACK1<10EZ,9EZ,V,G>
⚠ PR401	87-A90-246-080		PROTECTOR 0.25A 60V<EXP D>
⚠ PR401	87-035-515-080	--	PROTECTOR 0.25A 125V<D>
R245	87-022-050-080	--	RES,M/F 0.22-1W J
R246	87-022-050-080	--	RES,M/F 0.22-1W J
SFR451	87-A90-557-080	--	SFR,33K H HOKU
SFR452	87-A90-557-080	--	SFR,33K H HOKU
SFR722	87-A90-500-080	--	SFR,10K H NVZ6TLTA

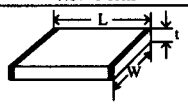
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
TC941	87-011-254-080		TRIMMER,CER 20P<HR>
TC942	87-011-253-080		TRIMMER,CER 30P<EXP D,HS>
W101	86-NFZ-705-010	--	F-CABLE,5P
X702	87-030-283-010	--	VIB,CER 3.5898 MHZ CSA<D>
X703	87-A70-044-010	--	VIB,CER CMU2-456A15
X721	86-NFZ-651-010	--	VIB,XTAL 4.500MHZ CSA-309
X850	87-A90-091-010		XTAL 4.332MHZ CSA-309<10EZ>
FRONT C.B			
	86-NFZ-787-010		FF-CABLE,13P 1.25<HR,10EZ>
	86-NFZ-637-010	--	FF-CABLE,13P CD<D>
C201	87-010-404-040	0E	CAP,E 4.7-50 SME
C202	87-010-404-040	0E	CAP,E 4.7-50 SME
C203	87-010-405-040	0E	CAP,E 10-50 M SME
C204	87-010-408-040	0E	CAP,E 47-50 M SME
C205	87-018-208-080	--	CAP,0.047-50 F
C206	87-018-208-080	--	CAP,0.047-50 F
C207	87-010-401-040	0E	CAP,E 1-50 M SME
C208	87-010-263-040	0E	CAP,E 100-10 M SME
C210	87-018-208-080	--	CAP,0.047-50 F
C211	87-010-248-040	0E	CAP,E 220-10 M SME
C212	87-018-208-080	--	CAP,0.047-50 F
C213	87-010-401-040	0E	CAP,E 1-50 M SME
C215	87-018-150-080	--	CAP,TC U 18P-50 J CH UP050
C216	87-018-147-080	--	CAP,TC U 10P-50 J CH UP050
C217	87-018-122-080	--	CAP,TC U 180P-50 B
C220	87-018-127-080	--	CAP,TC U 470P-50 K B UP050
C223	87-010-384-040	0E	CAP,E 100-25 SME
C226	87-018-134-080	0E	CAP,TC U 0.01-16 N Y UP050
C291	87-018-134-080	0E	CAP,TC U 0.01-16 N Y UP050
C292	87-018-134-080	0E	CAP,TC U 0.01-16 N Y UP050
C293	87-018-134-080	0E	CAP,TC U 0.01-16NY<9EZ,V,G>
C296	87-018-134-080	0E	CAP,TC U 0.01-16NY<9EZ,V,G>
C400	87-010-405-040		CAP,E 10-50 M SME<HR,HS>
C404	87-010-544-040		CAP,E 0.1-50 M SME<HR,HS>
C405	87-010-401-040		CAP,E 1-50 M SME<HR,HS>
C407	87-010-545-040		CAP,E 0.22-50 M SME<HR,HS>
CON201	86-NFZ-635-010	--	CONN ASSY,9P MECHA
FB201	87-008-372-080	0E	FLTR,EMIBOL RN1<HR,HS,D>
FL301	82-NF7-631-010	--	FL 7BT-185GK<EXP 10EZ>
FL301	86-NF6-661-010		FL 10BT-183GK<10EZ>
J401	87-A60-235-010		JACK,3.5MO-JT<HR,HS>
L201	86-NFZ-693-010	--	COIL,CLK 4.19MHZ
R250	87-029-129-090	--	RES,FUSE 3.3-1/4W J
S301	87-A90-095-080	0E	SW,TACT EVQ11G04M
S302	87-A90-095-080	0E	SW,TACT EVQ11G04M
S303	87-A90-095-080	0E	SW,TACT EVQ11G04M
S304	87-A90-095-080	0E	SW,TACT EVQ11G04M
S305	87-A90-095-080	0E	SW,TACT EVQ11G04M
S306	87-A90-095-080	0E	SW,TACT EVQ11G04M
S307	87-A90-095-080	0E	SW,TACT EVQ11G04M
S308	87-A90-095-080	0E	SW,TACT EVQ11G04M
S309	87-A90-095-080	0E	SW,TACT EVQ11G04M
S310	87-A90-095-080	0E	SW,TACT EVQ11G04M
S311	87-A90-095-080	0E	SW,TACT EVQ11G04M
S312	87-A90-095-080	0E	SW,TACT EVQ11G04M
S313	87-A90-095-080	0E	SW,TACT EVQ11G04M
S314	87-A90-095-080	0E	SW,TACT EVQ11G04M
S315	87-A90-095-080	0E	SW,TACT EVQ11G04M
S316	87-A90-095-080	0E	SW,TACT EVQ11G04M
S317	87-A90-095-080	0E	SW,TACT EVQ11G04M
S318	87-A90-095-080	0E	SW,TACT EVQ11G04M
S319	87-A90-095-080	0E	SW,TACT EVQ11G04M
S320	87-A90-095-080		SW,TACT EVQ11G04M<10EZ>
S321	87-A90-095-080		SW,TACT EVQ11G04M<10EZ>
S322	87-A90-095-080		SW,TACT EVQ11G04M<10EZ>
SFR201	87-A90-556-080	--	SFR,2.2K H HOKU
SW201	87-A90-392-010	--	SW,RTRY EC16B24304-20 NON
VR401	86-NFA-607-010		VR,RTRY 10K15X11V XV0121<HR,HS>
AC1 C.B			
⚠ CL1	87-A90-505-080	--	FUSE CLAMP,TP00351-5
⚠ CL2	87-A90-505-080	--	FUSE CLAMP,TP00351-5
⚠ F101	87-035-219-010		FUSE,500MA 250V T 21<HR>
⚠ F101	87-035-217-010		FUSE,315MA 250V T<10EZ,9EZ,V,G>
⚠ F101	87-035-411-010	--	FUSE,1A 250V U L<D>
⚠ F101	87-035-218-010		FUSE,400MA 250V T<HS>
⚠ PT101	87-NF9-604-010		PT,7NF9-HE<HR>
⚠ PT101	87-NF9-602-010		PT,7NF9-EKZ<10EZ,9EZ,V,G>
⚠ PT101	87-MA8-644-010	--	PT,7MA8-D<D>
⚠ PT101	87-NF9-604-010		PT,7NF9-HE<HR>
⚠ PT101	87-NF9-608-010		PT,7NF9-HS<HS>
⚠ SW101	87-A90-234-010		SW,SL 1-2-2 SW2201<HR>
⚠ T1	87-A60-317-010	0E	TERMINAL,1P MSC
⚠ T2	87-A60-317-010	0E	TERMINAL,1P MSC
AC2 C.B			
C100	87-018-134-080		CAP,TC U 0.01-16 NY<10EZ,9EZ,G>

O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) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
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

TRANSISTOR ILLUSTRATION

E C B

2SC1923
2SC535
KTC3198
KTA1266

E C B

2SD655E
CSD1489B
2SC2001

E C B

DTA114YS DTC114YS
DTA144WS DTA144ES
DTC143XS 2SC2785
DTC144ES 2SA933
DTA143ES 2SC1740
DTA114ES

B C E

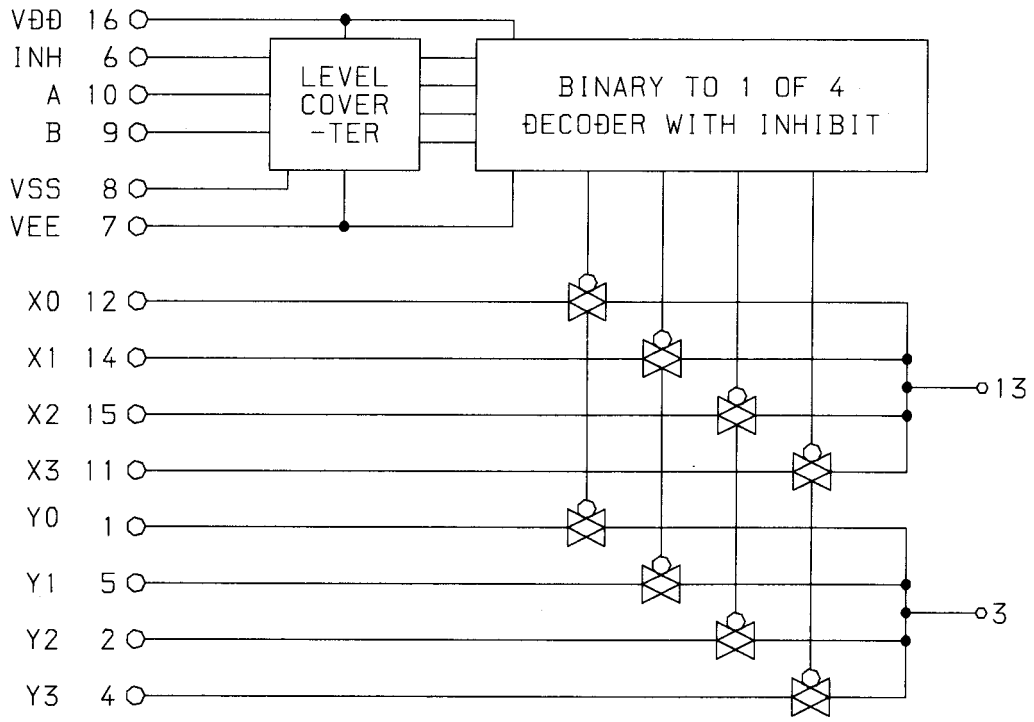
2SB1370
2SD2061

G S D

2SK439

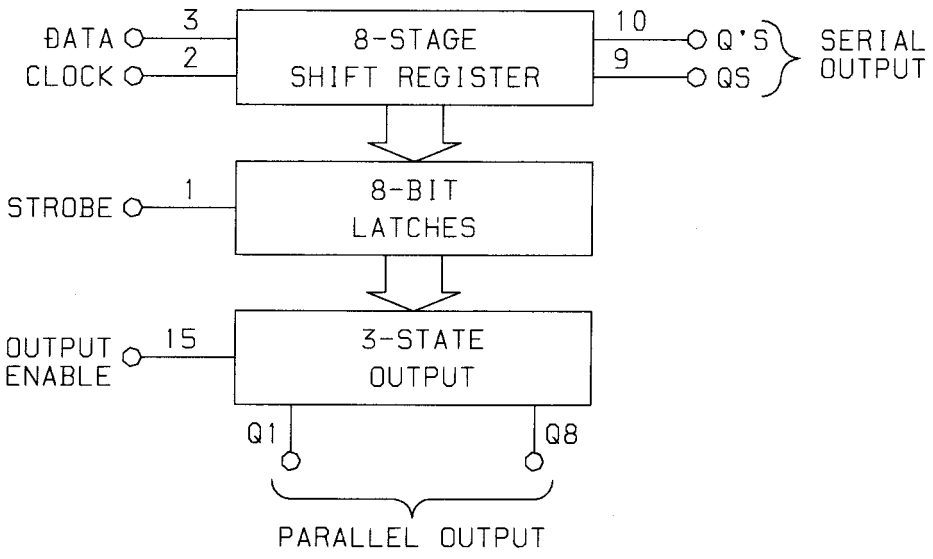
IC BLOCK DIAGRAM – 1

IC, BU4052BC

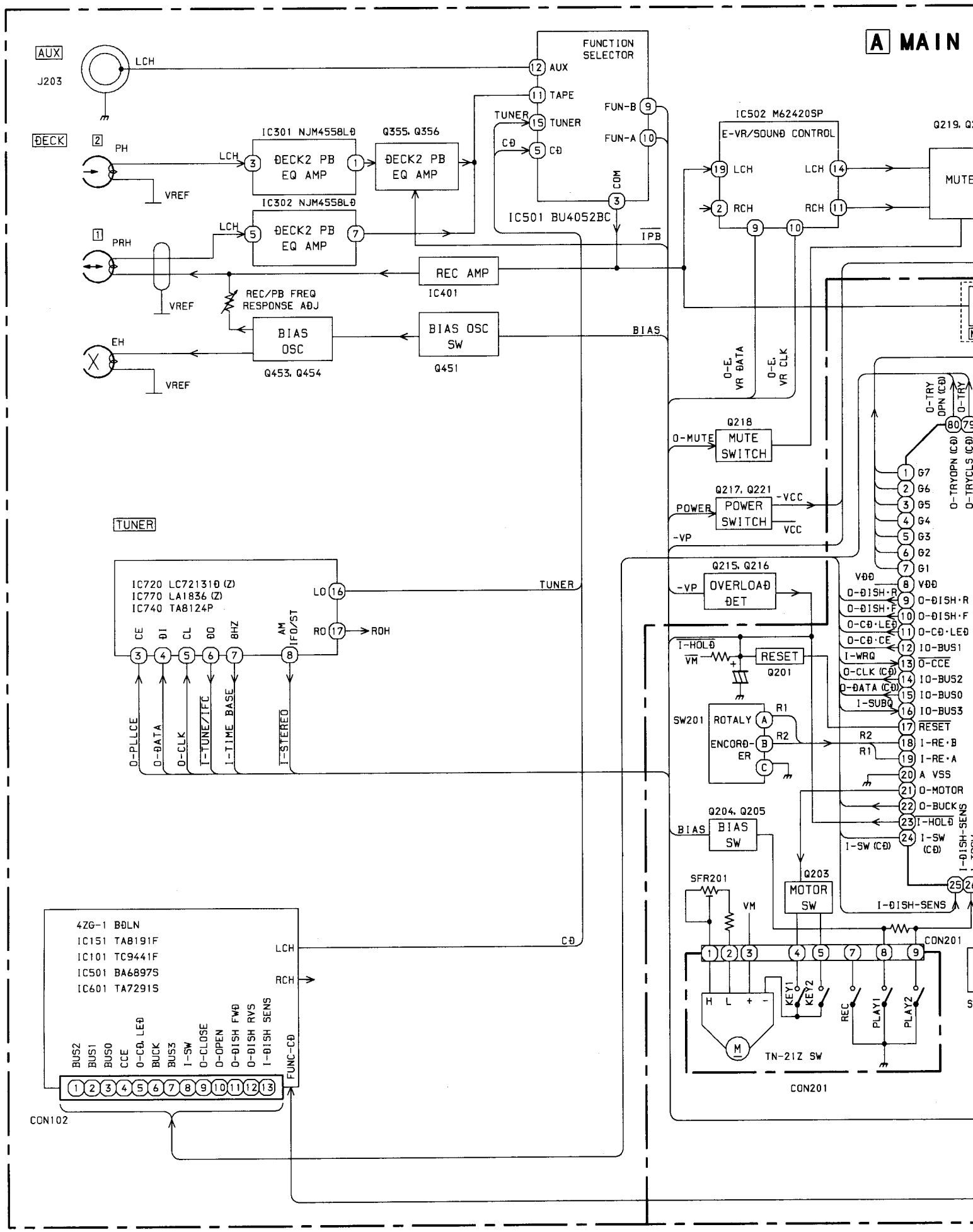


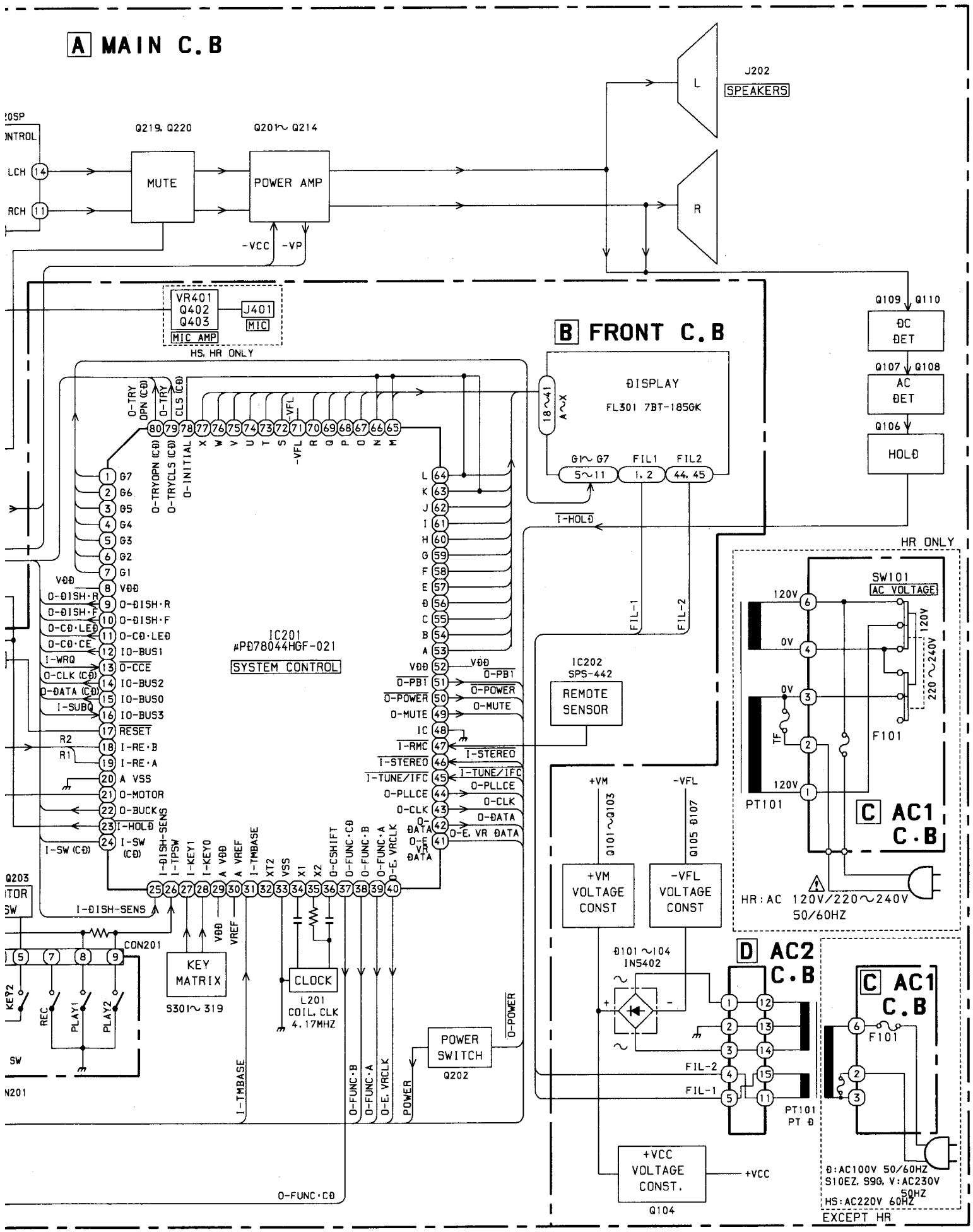
TRUTH TABLE

INHIBIT	A	B	ON SWITCH
L	L	L	X0 Y0
L	H	L	X1 Y1
L	L	H	X2 Y2
L	H	H	X3 Y3
H	X	X	NONE

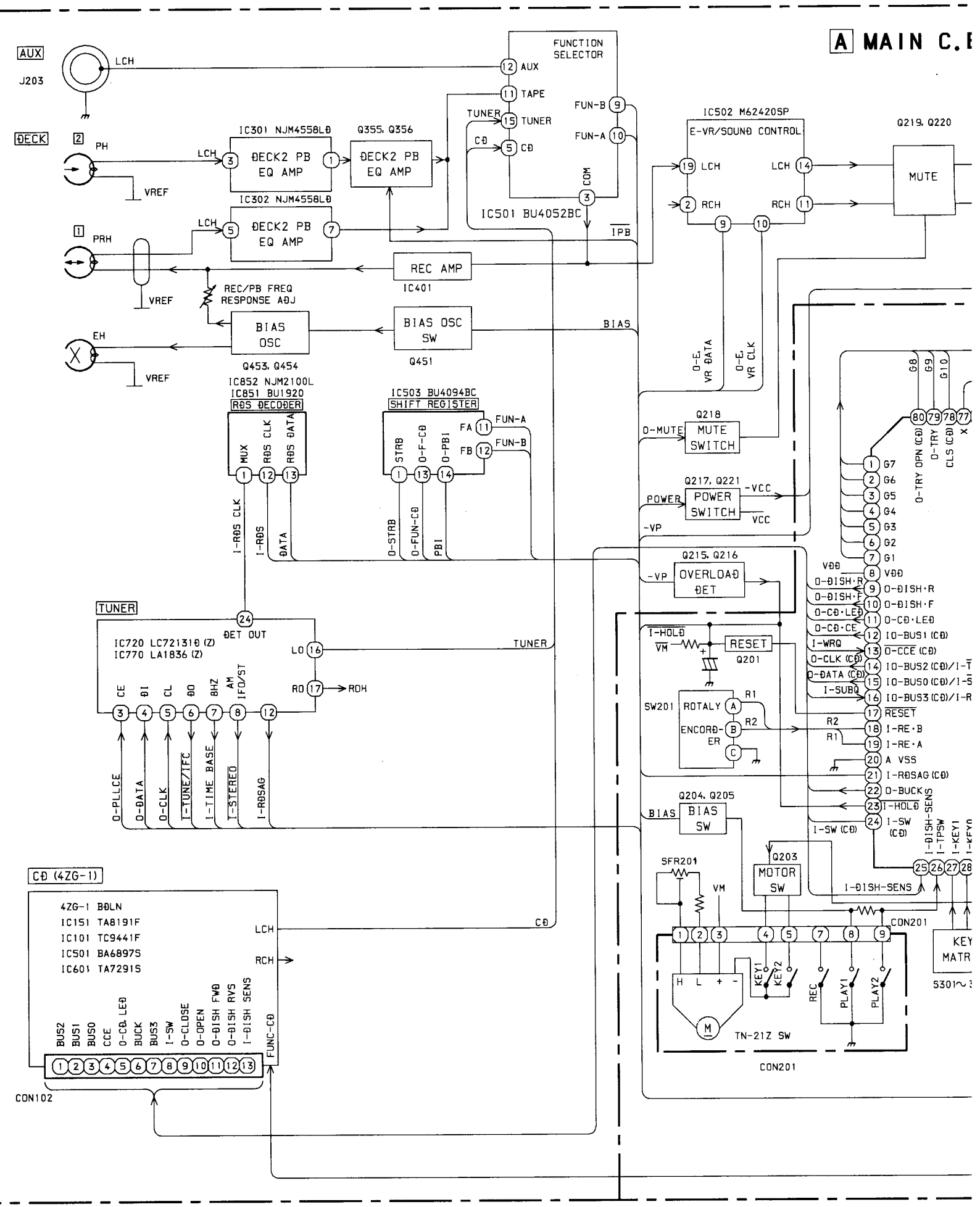


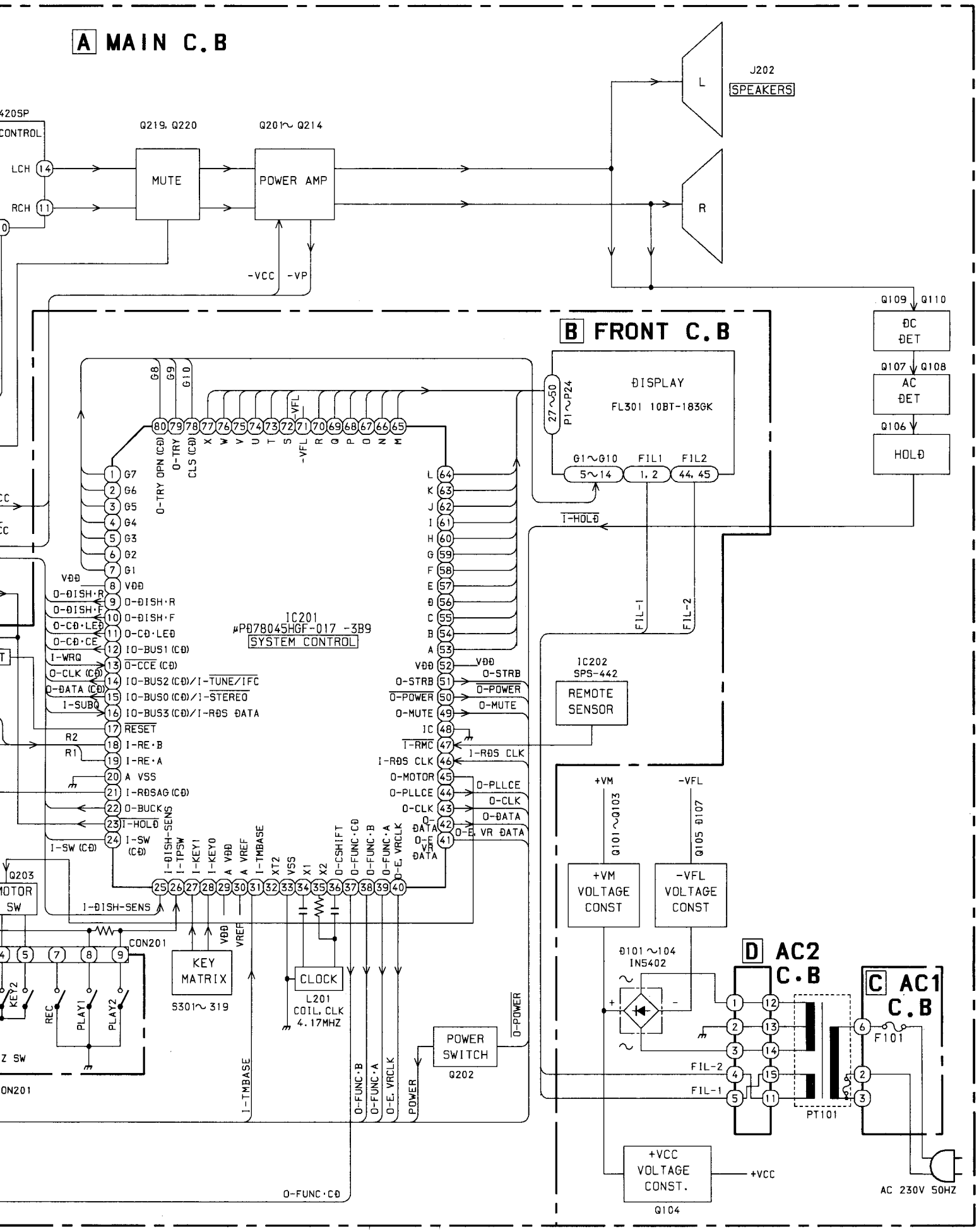
BLOCK DIAGRAM – 1 (MAIN / FRONT : EXCEPT 10EZ)

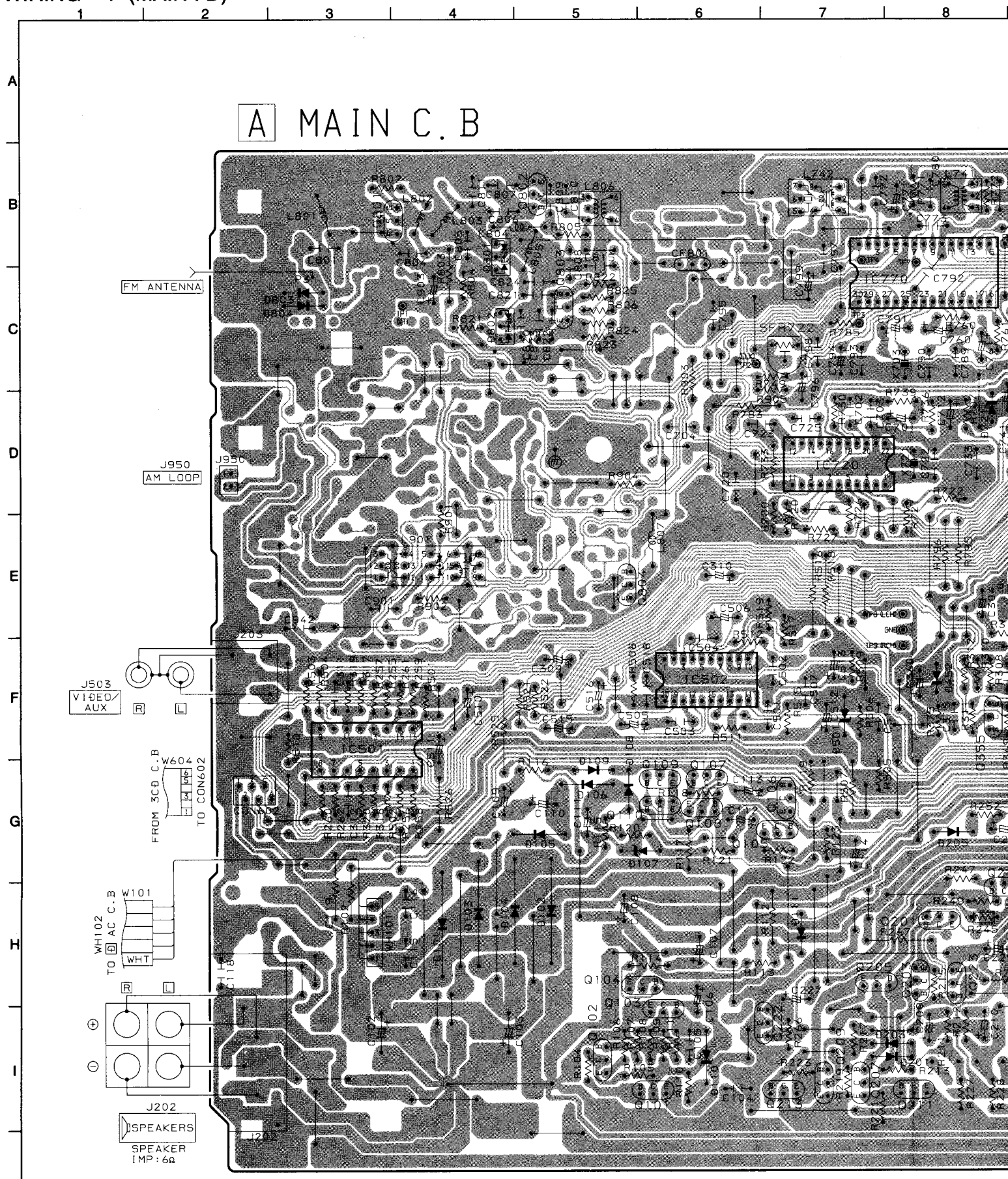


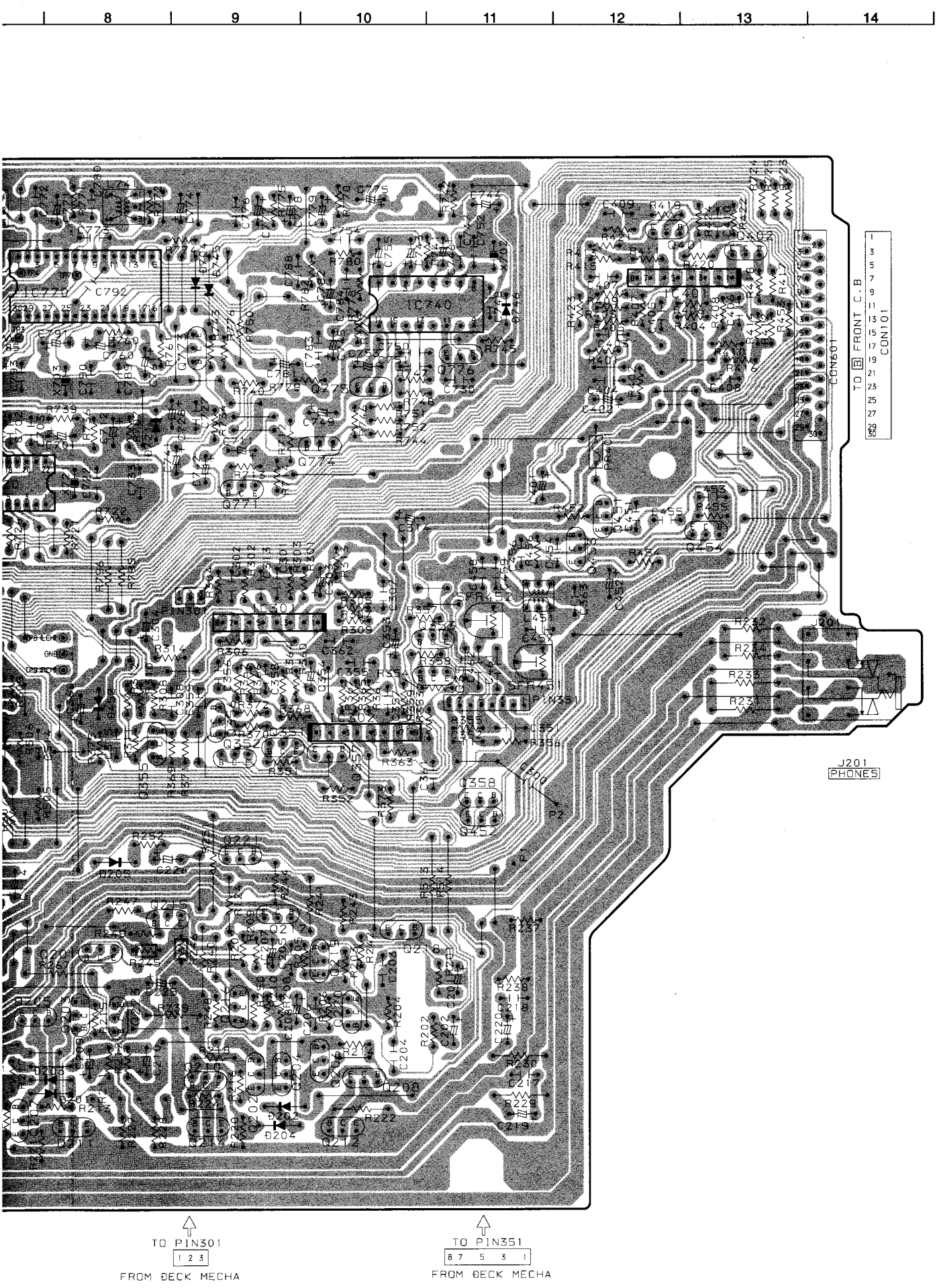

A MAIN C.B
J202
SPEAKERS
L
R
Q219, Q220
Q201~Q214
MUTE
POWER AMP
-VCC
-VP
LCH
RCH
VR401
Q402
Q403
MIC AMP
J401
MIC
HS, HR ONLY
B FRONT C.B
DISPLAY
FL301 7BT-185GK
G1~G7
FIL1
FIL2
Q109
Q110
DC DET
Q107
Q108
AC DET
Q106
HOLD
I-HOLD
HR ONLY
SW101
AC VOLTAGE
120V
0V
220~240V
F101
TF
PT101
C AC1 C.B
HR:AC 120V/220~240V
50/60HZ
IC201
μPD78044HGF-021
SYSTEM CONTROL
IC202
SPS-442
REMOTE SENSOR
FIL-1
FIL-2
+VM
-VFL
Q101~Q103
Q105 D107
+VM VOLTAGE CONST
-VFL VOLTAGE CONST
D101~104
IN5402
D AC2 C.B
PT101
PT D
+VCC VOLTAGE CONST.
Q104
+VCC
D:AC100V 50/60HZ
S10EZ, S9G, V:AC230V
50HZ
HS:AC220V 60HZ
EXCEPT HR
KEY MATRIX
S301~319
CLOCK
L201
COIL, CLK
4.17MHZ
POWER SWITCH
Q202
O-POWER
CON201
I-DISH-SENS
I-TMBASE
O-FUNC-B
O-FUNC-A
O-E, VRCLK
POWER
O-FUNC-CD
REC
PLAY1
PLAY2
KEY2
SW
N201
Q203

LOCK DIAGRAM – 2 (MAIN / FRONT : 10EZ)

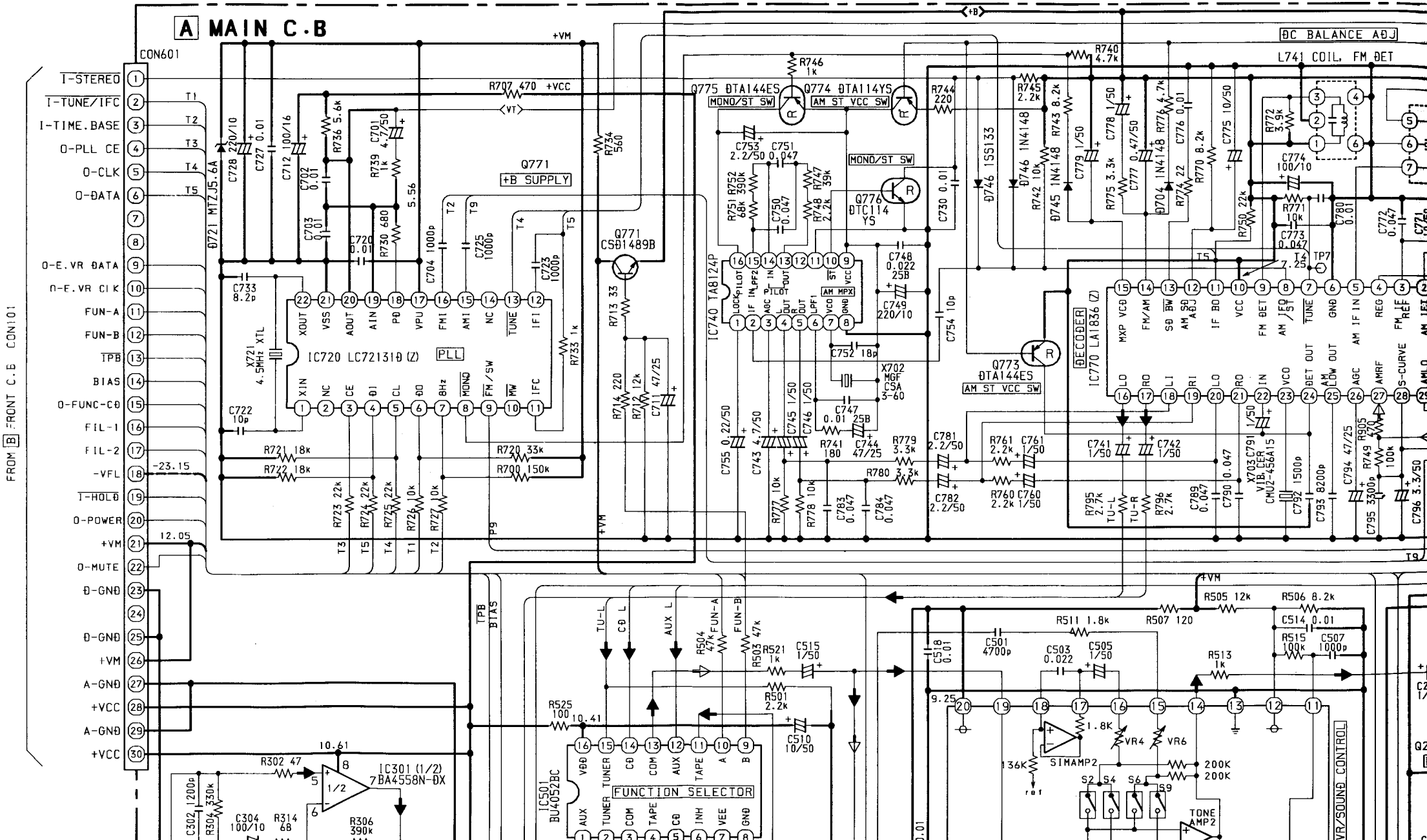


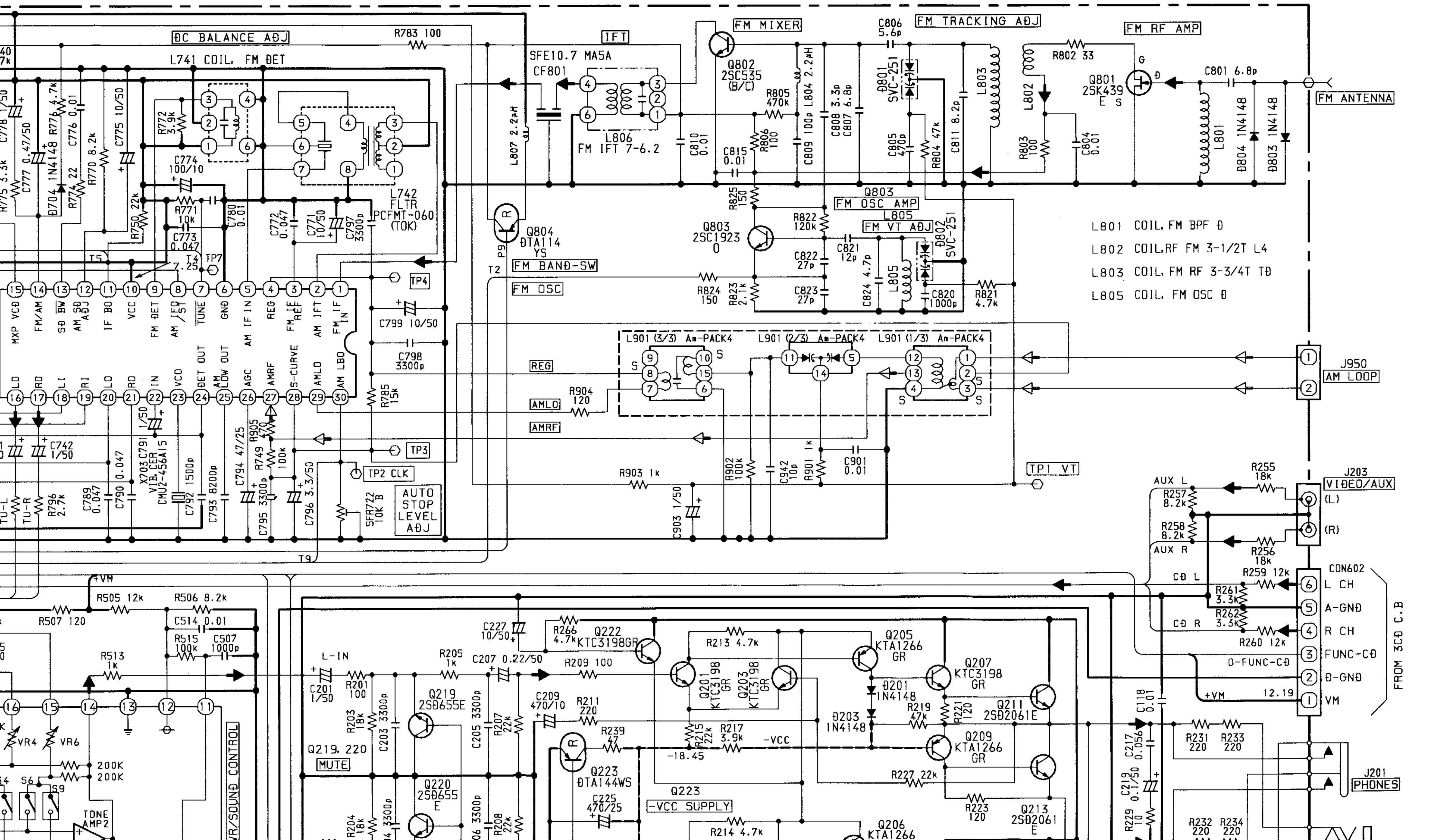

A MAIN C.B
J202
SPEAKERS
L
R
Q219, Q220
MUTE
Q201~Q214
POWER AMP
-VCC
-VP
B FRONT C.B
DISPLAY
FL301 10BT-183GK
G1~G10
FIL1
FIL2
5~14
1, 2
44, 45
I-HOLD
Q109
Q110
DC DET
Q107
Q108
AC DET
Q106
HOLD
IC201
μPD78045HGF-017 -3B9
SYSTEM CONTROL
IC202
SPS-442
REMOTE SENSOR
FIL-1
FIL-2
KEY MATRIX
S301~319
CLOCK
L201
COIL, CLK
4.17MHZ
POWER SWITCH
Q202
Q203
CON201
+VM
-VFL
Q101~Q103
Q105 D107
+VM VOLTAGE CONST
-VFL VOLTAGE CONST
D101~104
IN5402
D AC2 C.B
C AC1 C.B
F101
PT101
+VCC VOLTAGE CONST.
Q104
+VCC
AC 230V 50HZ


A MAIN C.B
FM ANTENNA
J950
AM LOOP
J503
VIDEO/
AUX
R
L
FROM 3CB C.B
W604
TO CON602
W101
WH102
TO AC C.B
WHT
J202
SPEAKERS
SPEAKER
IMP : 6Ω
IC501
IC502
IC720
IC770
TO
FROM

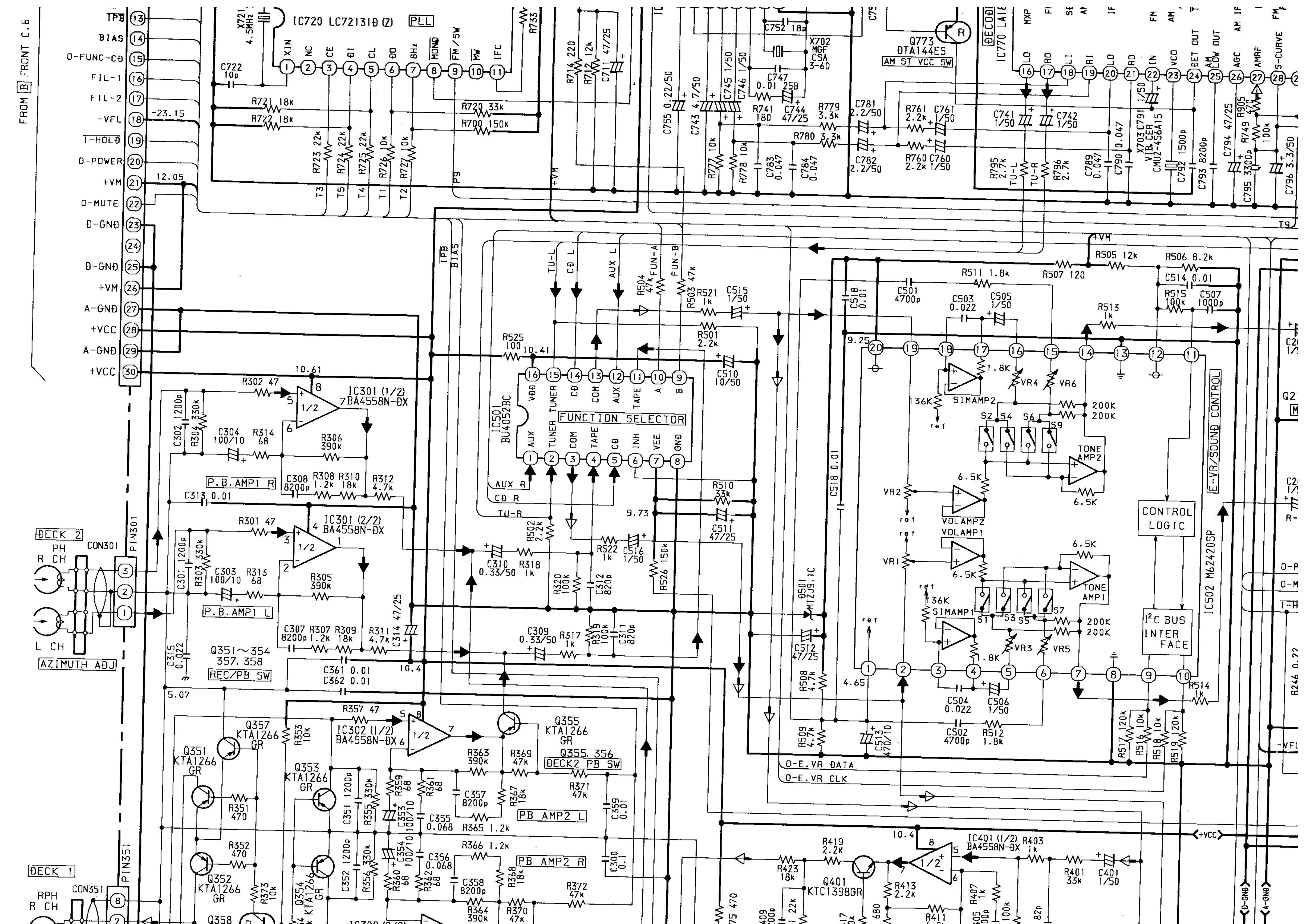

8
9
10
11
12
13
14
TO B FRONT C.B
CON101
CON501
J201
PHONES
TO PIN301
1 2 3
FROM DECK MECHA
TO PIN351
8 7 5 3 1
FROM DECK MECHA

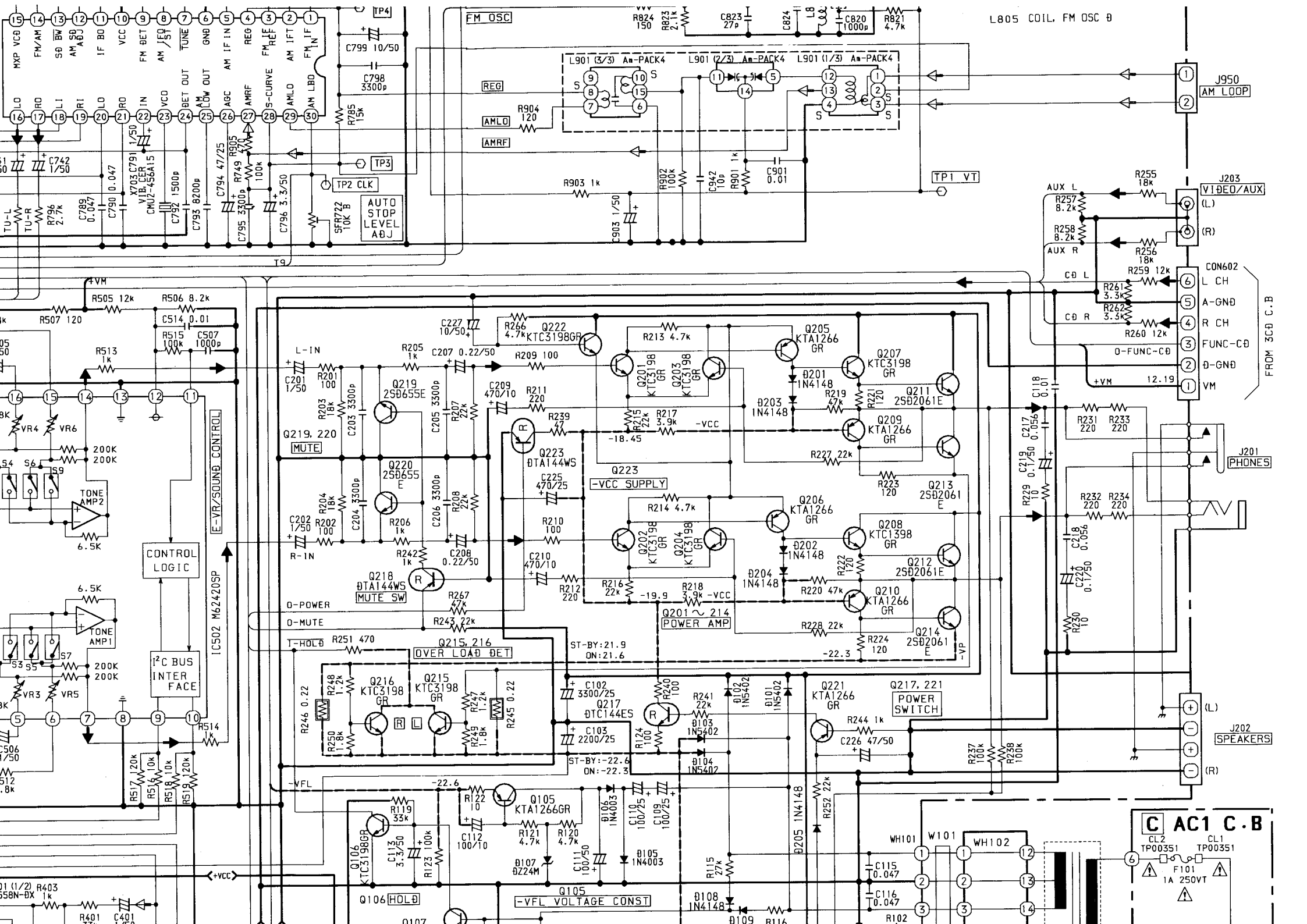
SCHEMATIC DIAGRAM – 1 (MAIN : D)

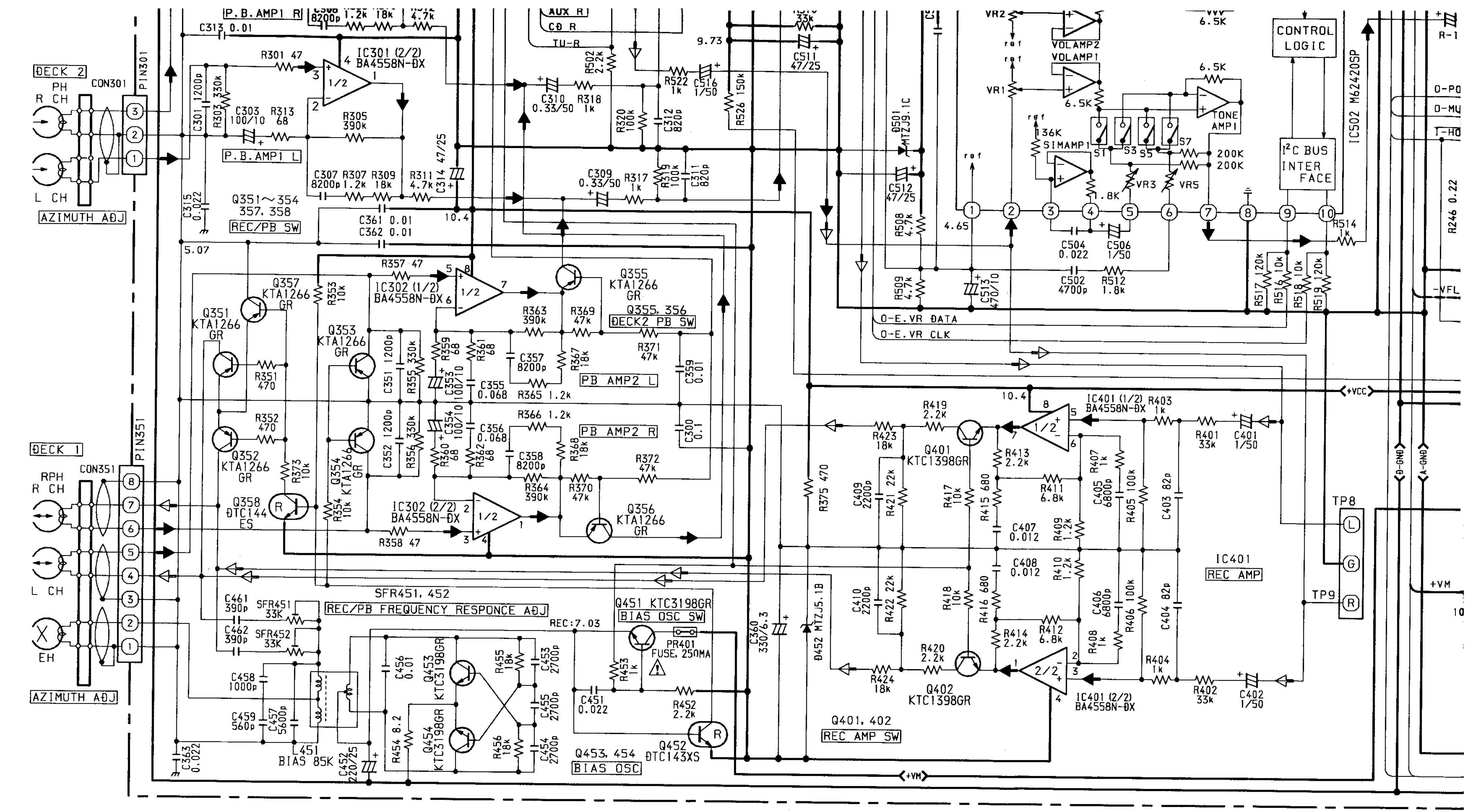


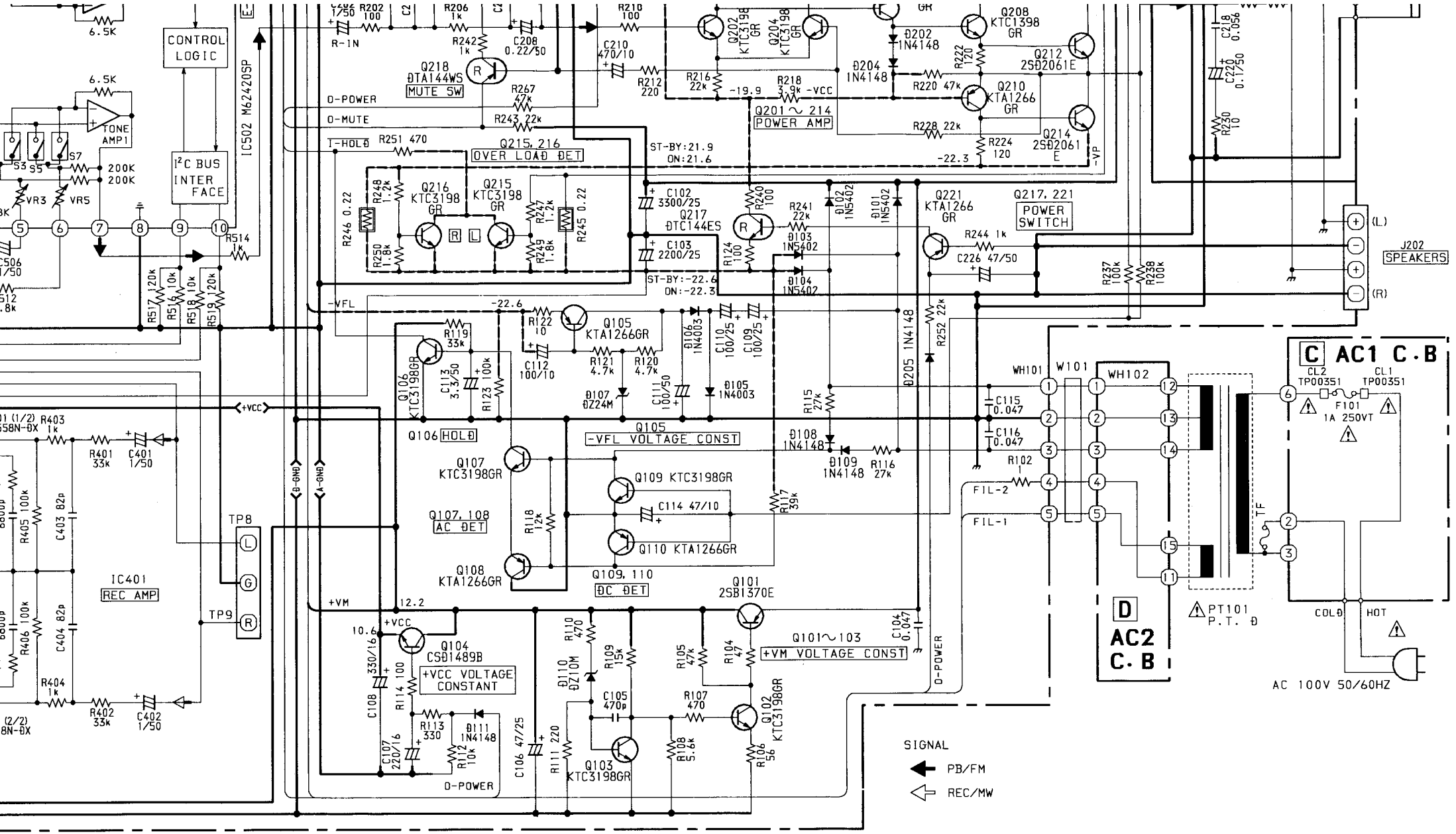


DC BALANCE ADJ
R783 100
L741 COIL, FM DET
SFE10.7 MA5A
CF801
IFT
L806
FM IFT 7-6.2
FM MIXER
Q802
2SC535
(B/C)
C806
5.6p
FM TRACKING ADJ
FM RF AMP
R802 33
Q801
2SK439
C801 6.8p
FM ANTENNA
L742
FLTR
PCFMT-060
(TOK)
Q803
FM OSC AMP
2SC1923
FM VT ADJ
Q804
DTA114
YS
FM BAND-SW
FM OSC
L801 COIL, FM BPF D
L802 COIL,RF FM 3-1/2T L4
L803 COIL, FM RF 3-3/4T TD
L805 COIL, FM OSC D
TP7
TP4
TP3
TP2 CLK
TP1 VT
MXP VCO
FM/AM
SD BW
AM SD ADJ
IF BO
VCC
FM DET
AM JFO /ST
TUNE
GND
AM IF IN
REG
FM IF REF
AM IFT
FM IF IN
DET OUT
AM LOW OUT
AGC
AMRF
S-CURVE
AMLO
AM LBO
C799 10/50
C798
3300p
REG
AMLO
AMRF
R904
120
L901 (3/3) Am-PACK4
L901 (2/3) Am-PACK4
L901 (1/3) Am-PACK4
J950
AM LOOP
AUTO
STOP
LEVEL
ADJ
SFR722
10K B
R903 1k
C903 1/50
J203
VIDEO/AUX
AUX L
AUX R
(L)
(R)
R255
18k
R256
18k
R257
8.2k
R258
8.2k
CON602
CD L
CD R
R259 12k
R260 12k
L CH
A-GND
R CH
FUNC-CD
D-GND
VM
D-FUNC-CD
+VM
12.19
FROM 3CD C.B
+VM
R505 12k
R506 8.2k
R507 120
C514 0.01
R515
100k
C507
1000p
R513
1k
L-IN
C201
1/50
R201
100
R205
1k
C207 0.22/50
R209 100
C227
10/50
R266
4.7k
Q222
KTC3198GR
R213 4.7k
Q205
KTA1266
GR
Q201
KTC3198
GR
Q203
KTC3198
GR
Q207
KTC3198
GR
D201
1N4148
D203
1N4148
R219
47k
Q211
2SD2061E
Q209
KTA1266
GR
Q219
2SD655E
Q219, 220
MUTE
Q220
2SD655
E
C209
470/10
R211
220
R239
47
Q223
DTA144WS
Q223
-VCC SUPPLY
C225
470/25
R217
3.9k
-VCC
-18.45
R227 22k
R223
120
Q213
2SD2061
E
R214 4.7k
Q206
KTA1266
R231
220
R233
220
R232
220
R234
220
J201
PHONES
VR4
VR6
200K
200K
S6
S9
TONE
AMP2

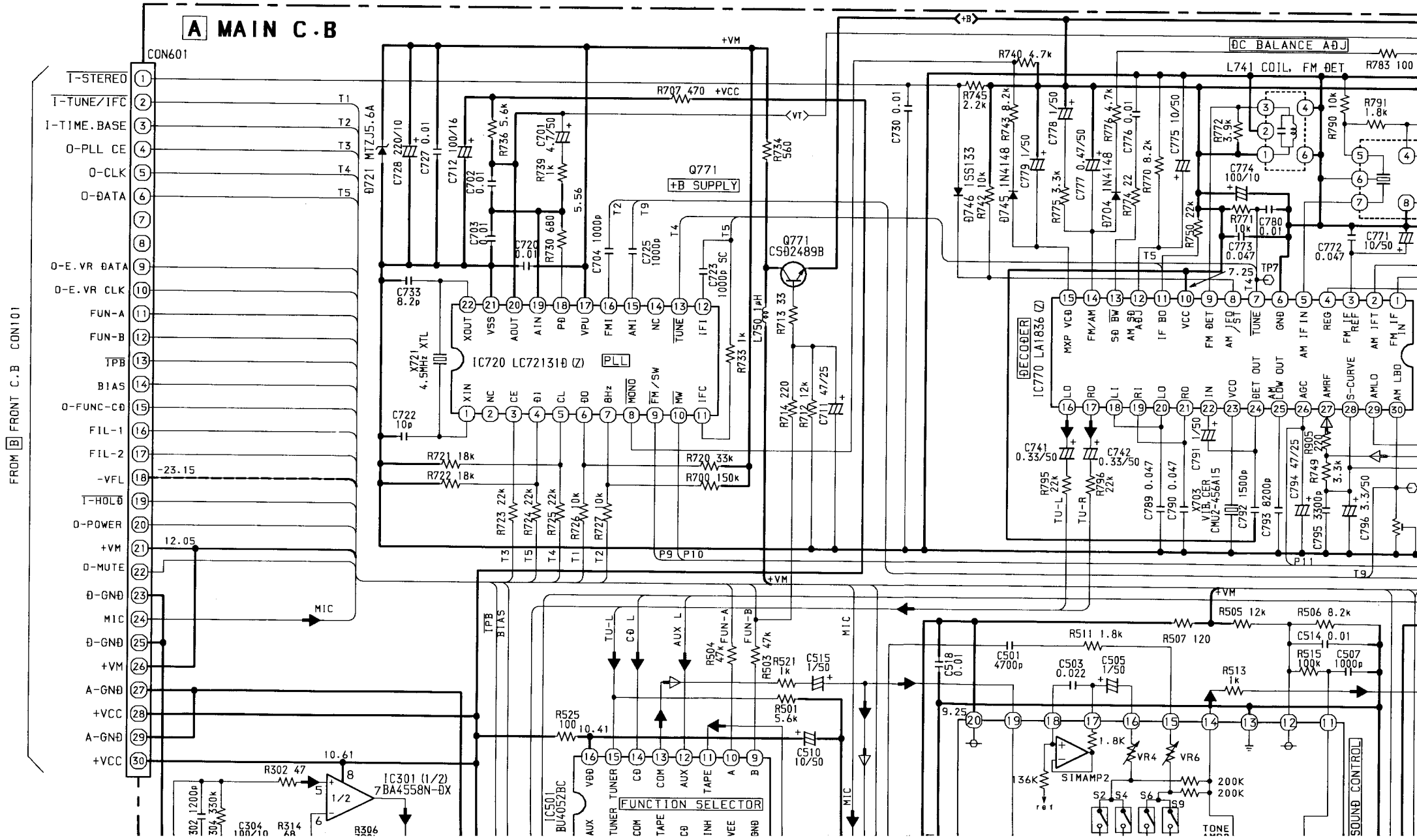

FROM B FRONT C.B
TPB
BIAS
O-FUNC-CD
FIL-1
FIL-2
-VFL
I-HOLD
O-POWER
+VM
O-MUTE
D-GND
+VM
A-GND
+VCC
IC720 LC72131D (Z)
PLL
X721 4.5MHz
Q773 DTA144ES
AM ST VCC SW
IC770 LA1
X702 MGF CSA 3-60
X703 CMU2-456A15
IC501 BU4052BC
FUNCTION SELECTOR
IC301 (1/2) BA4558N-DX
IC301 (2/2) BA4558N-DX
P.B.AMP1 R
P.B.AMP1 L
DECK 2
CON301
PIN301
R CH
L CH
AZIMUTH ADJ
Q351~354 357, 358
REC/PB SW
Q357 KTA1266 GR
Q351 KTA1266 GR
Q353 KTA1266 GR
Q352 KTA1266 GR
Q354 KTA1266 GR
Q355 KTA1266 GR
Q355, 356
DECK2 PB SW
IC302 (1/2) BA4558N-DX
PB AMP2 L
PB AMP2 R
DECK 1
CON351
PIN351
D501 MTZJ9.1C
IC502 M62420SP
E-VR/SOUND CONTROL
SIMAMP1
SIMAMP2
VOLAMP1
VOLAMP2
TONE AMP1
TONE AMP2
CONTROL LOGIC
I²C BUS INTER FACE
O-E.VR DATA
O-E.VR CLK
IC401 (1/2) BA4558N-DX
Q401 KTC1398GR

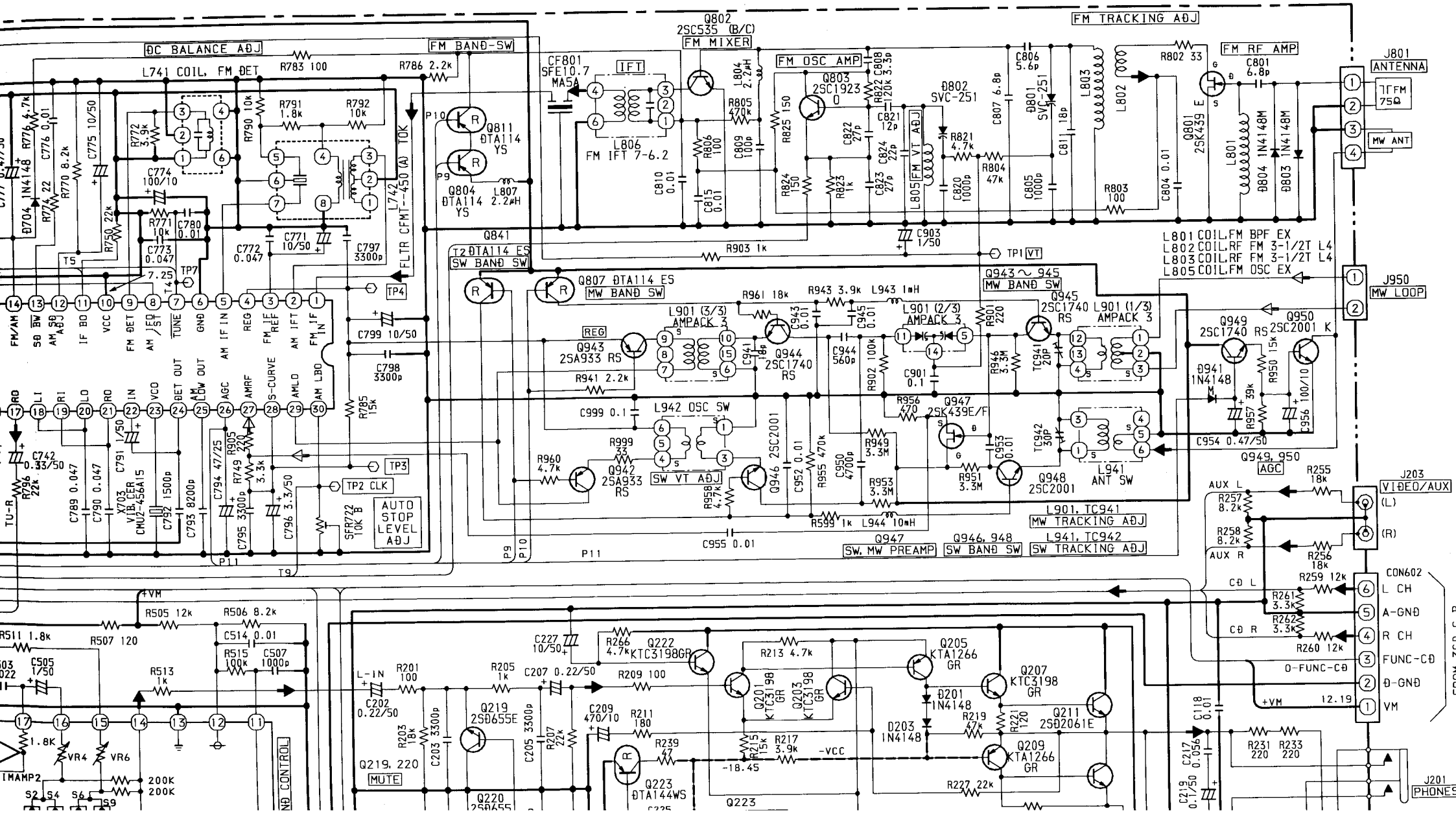

FM OSC
L805 COIL, FM OSC Ð
L901 (3/3) Am-PACK4
L901 (2/3) Am-PACK4
L901 (1/3) Am-PACK4
REG
AMLO
AMRF
TP1 VT
TP2 CLK
TP3
TP4
AUTO STOP LEVEL AÐJ
J950 AM LOOP
J203 VIÐEO/AUX
AUX L
AUX R
CÐ L
CÐ R
CON602
L CH
A-GNÐ
R CH
FUNC-CÐ
Ð-GNÐ
VM
FROM 3CÐ C.B
J201 PHONES
J202 SPEAKERS
+VM
-VCC
L-IN
R-IN
Q219, 220 MUTE
Q223 -VCC SUPPLY
Q201 ~ 214 POWER AMP
Q215, 216 OVER LOAÐ ÐET
Q217, 221 POWER SWITCH
Q218 ÐTA144WS MUTE SW
Q105 -VFL VOLTAGE CONST
Q106 HOLÐ
E-VR/SOUNÐ CONTROL
IC502 M62420SP
CONTROL LOGIC
I²C BUS INTER FACE
TONE AMP1
TONE AMP2
O-POWER
O-MUTE
I-HOLÐ
-VFL
ST-BY:21.9 ON:21.6
ST-BY:-22.6 ON:-22.3
C AC1 C.B
CL2 TP00351
CL1 TP00351
F101 1A 250VT
WH101
W101
WH102

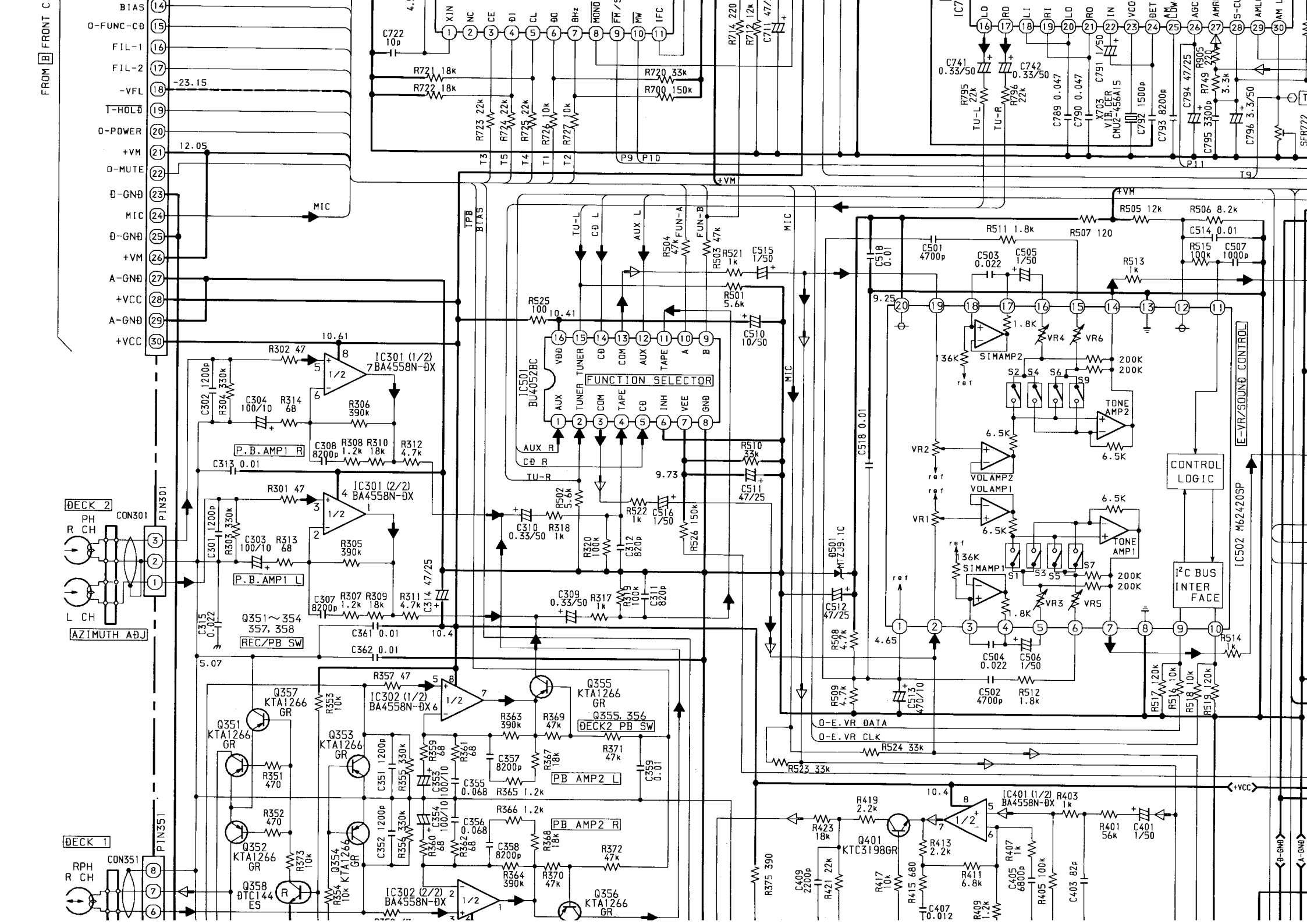

P.B.AMP1 R
P.B.AMP1 L
DECK 2
DECK 1
CON301
PIN301
CON351
PIN351
R CH
L CH
RPH
EH
AZIMUTH ADJ
AZIMUTH ADJ
IC301 (2/2)
BA4558N-DX
Q351～354
357, 358
REC/PB SW
Q357
KTA1266
GR
Q351
KTA1266
GR
Q353
KTA1266
GR
Q352
KTA1266
GR
Q354
KTA1266
GR
Q358
DTC144
ES
IC302 (1/2)
BA4558N-DX
IC302 (2/2)
BA4558N-DX
Q355
KTA1266
GR
Q356
KTA1266
GR
Q355, 356
DECK2 PB SW
PB AMP2 L
PB AMP2 R
SFR451, 452
REC/PB FREQUENCY RESPONCE ADJ
Q451 KTC3198GR
BIAS OSC SW
REC:7.03
PR401
FUSE, 250MA
Q453
KTC3198GR
Q454
KTC3198GR
Q453, 454
BIAS OSC
Q452
DTC143XS
L451
BIAS 85K
D452 MTZJ5.1B
D501
MTZJ9.1C
Q401
KTC1398GR
Q402
KTC1398GR
Q401, 402
REC AMP SW
IC401 (1/2)
BA4558N-DX
IC401 (2/2)
BA4558N-DX
IC401
REC AMP
TP8
TP9
CONTROL LOGIC
I²C BUS INTERFACE
IC502 M62420SP
VOLAMP2
VOLAMP1
TONE AMP1
SIMAMP1
VR1
VR2
VR3
VR5
O-E.VR DATA
O-E.VR CLK
+VCC
+VM
D-GND
A-GND
AUX R
CD R
TU-R
10.4
5.07
9.73
4.65

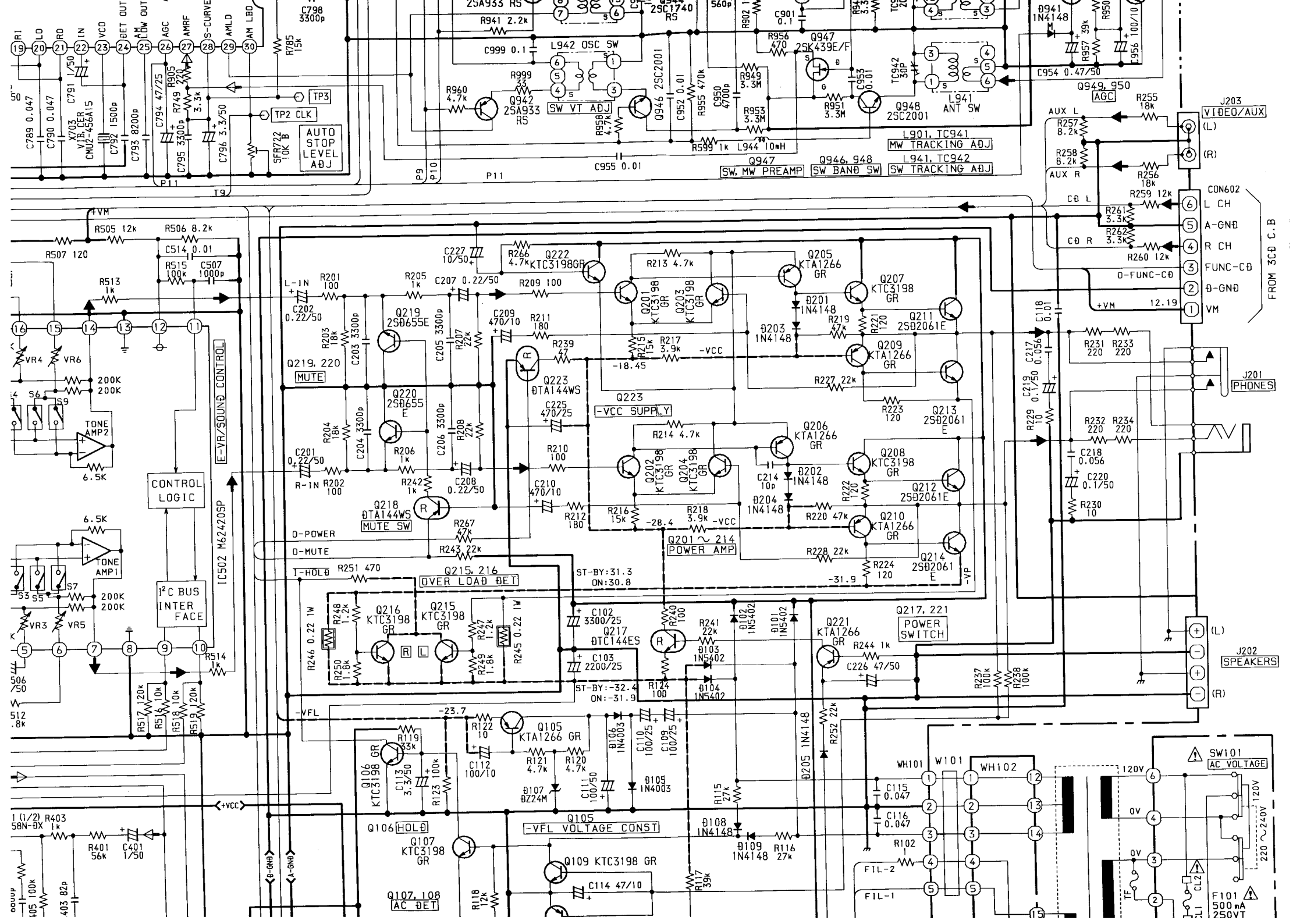

CONTROL LOGIC
I²C BUS INTER FACE
IC502 M62420SP
TONE AMP1
IC401 REC AMP
Q218 ÐTA144WS MUTE SW
Q201~214 POWER AMP
Q215, 216 OVER LOAÐ ÐET
Q217 ÐTC144ES
Q221 KTA1266 GR
Q217, 221 POWER SWITCH
Q105 -VFL VOLTAGE CONST
Q106 HOLÐ
Q107, 108 AC ÐET
Q109, 110 ÐC ÐET
Q101~103 +VM VOLTAGE CONST
Q104 CSÐ1489B +VCC VOLTAGE CONSTANT
J202 SPEAKERS
F101 1A 250VT
PT101 P.T. Ð
AC 100V 50/60HZ
SIGNAL
PB/FM
REC/MW

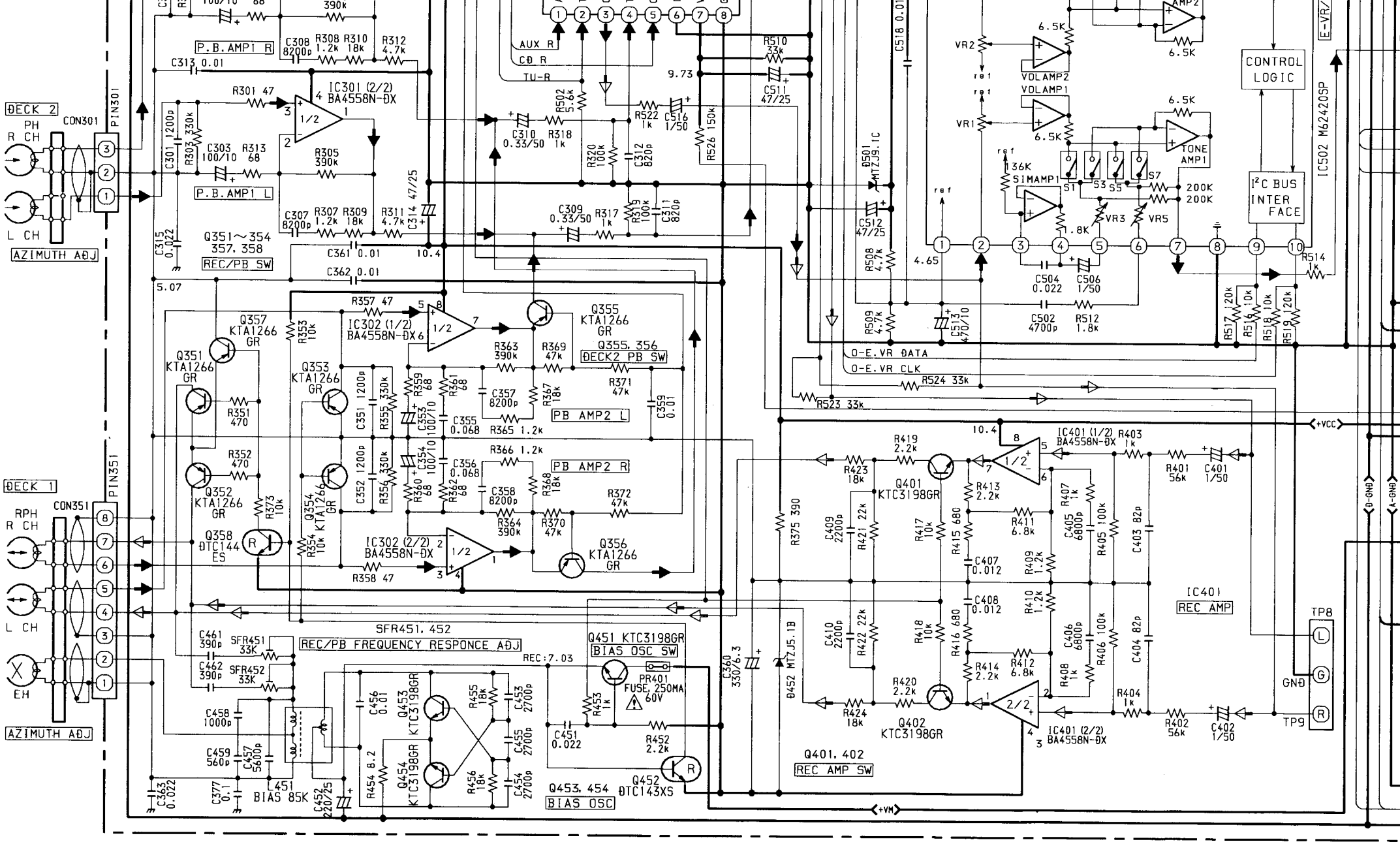
SCHEMATIC DIAGRAM – 2 (MAIN : HR)

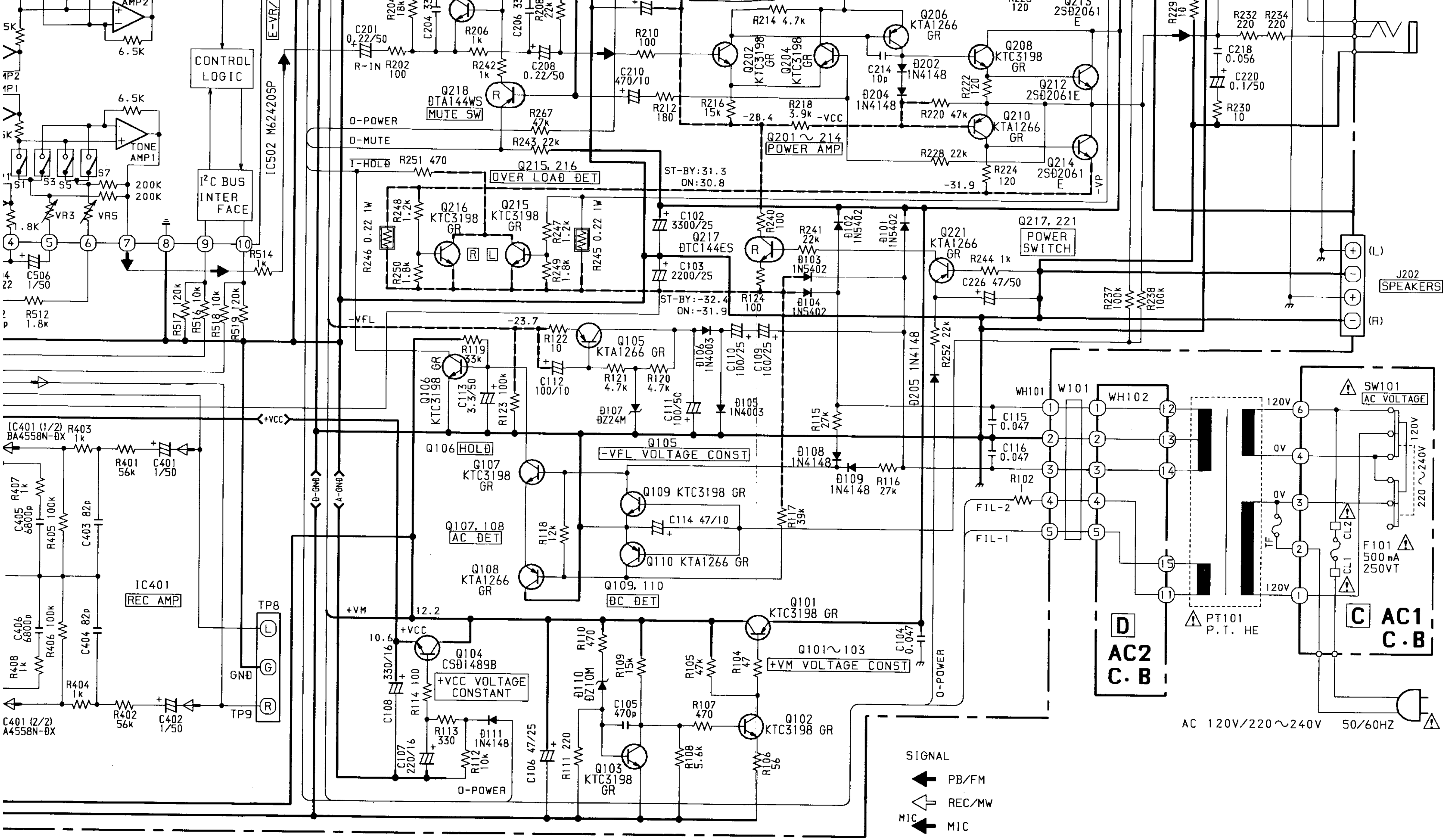



ĐC BALANCE AĐJ
L741 COIL, FM ĐET
FM BAND-SW
R783 100
R786 2.2k
CF801 SFE10.7 MA5A
IFT
L806 FM IFT 7-6.2
Q802 2SC535 (B/C) FM MIXER
FM OSC AMP
Q803 2SC1923 O
Đ802 SVC-251
FM TRACKING AĐJ
FM RF AMP
Q801 2SK439 E
J801 ANTENNA
75Ω FM
MW ANT
L801 COIL,FM BPF EX
L802 COIL,RF FM 3-1/2T L4
L803 COIL,RF FM 3-1/2T L4
L805 COIL,FM OSC EX
J950 MW LOOP
Q811 ĐTA114 YS
Q804 ĐTA114 YS
L807 2.2μH
L742 FLTR CFMT-450 (A) 10K
Q841 T2 ĐTA114 ES SW BAND SW
Q807 ĐTA114 ES MW BAND SW
Q943 ~ 945 MW BAND SW
Q945 2SC1740 RS
L901 (3/3) AMPACK 3
L901 (2/3) AMPACK 3
L901 (1/3) AMPACK 3
Q943 2SA933 RS
Q944 2SC1740 RS
Q949 2SC1740 RS
Q950 2SC2001 K
Đ941 1N4148
L942 OSC SW
Q942 2SA933 RS
SW VT AĐJ
Q946 2SC2001
Q947 2SK439E/F
Q948 2SC2001
L941 ANT SW
L901, TC941 MW TRACKING AĐJ
Q947 SW, MW PREAMP
Q946, 948 SW BAND SW
L941, TC942 SW TRACKING AĐJ
Q949, 950 AGC
J203 VIĐEO/AUX
(L)
(R)
AUX L
AUX R
CON602
L CH
A-GNĐ
R CH
FUNC-CĐ
Đ-GNĐ
VM
12.19
+VM
J201 PHONES
AUTO STOP LEVEL AĐJ
SFR722 10K B
X703 VIB.CER CMU2-456A15
TP1 VT
TP2 CLK
TP3
TP4
TP7
7.25
Q219, 220 MUTE
Q219 2SĐ655E
Q220 2SĐ655
Q222 KTC3198GR
Q223 ĐTA144WS
Q201 KTC3198 GR
Q203 KTC3198 GR
Q205 KTA1266 GR
Q207 KTC3198 GR
Q209 KTA1266 GR
Q211 2SĐ2061E
D203 1N4148
Đ201 1N4148
-VCC
-18.45
IMAMP2
VR4
VR6
200K
200K


FROM B FRONT C
BIAS
O-FUNC-CD
FIL-1
FIL-2
-VFL
T-HOLD
O-POWER
+VM
O-MUTE
D-GND
MIC
D-GND
+VM
A-GND
+VCC
A-GND
+VCC
-23.15
12.05
MIC
TPB
BIAS
+VM
P9
P10
P11
T9
T3
T5
T4
T1
T2
C722 10p
R721 18k
R722 18k
R723 22k
R724 22k
R725 22k
R726 10k
R727 10k
R720 33k
R700 150k
R714 220
R712 12k
C711 47/25
C741 0.33/50
C742 0.33/50
R795 22k
R796 22k
C789 0.047
C790 0.047
C791 1/50
X703 VIBRATOR CMU2-456A15
C792 1500p
C793 8200p
C794 47/25
R749 220
R805 3.3k
C795 3300p
C796 3.3/50
R501 5.6k
R503 47k
R504 47k
R521 1k
C515 1/50
C510 10/50
R525 100
IC501 BU4052BC
FUNCTION SELECTOR
AUX R
CD R
TU-R
TU-L
CD L
AUX L
FUN-A
FUN-B
R510 33k
C511 47/25
R502 5.6k
R522 1k
C516 1/50
R526 150k
C310 0.33/50
R318 1k
R320 100k
C312 820p
C309 0.33/50
R317 1k
R319 100k
C311 820p
C518 0.01
C501 4700p
C503 0.022
C505 1/50
R511 1.8k
R507 120
R505 12k
R506 8.2k
C514 0.01
R515 100k
C507 1000p
R513 1k
R514 1k
R501 MTZJ9.1C
C512 47/25
R508 4.7k
C513 470/10
R509 4.7k
C504 0.022
C506 1/50
C502 4700p
R512 1.8k
R517 120k
R516 10k
R518 10k
R519 120k
SIMAMP2
SIMAMP1
VOLAMP2
VOLAMP1
TONE AMP2
TONE AMP1
VR1
VR2
VR3
VR4
VR5
VR6
136K
36K
1.8K
6.5K
200K
S1
S2
S3
S4
S5
S6
S7
S9
CONTROL LOGIC
I²C BUS INTER FACE
E-VR/SOUND CONTROL
IC502 M62420SP
O-E.VR DATA
O-E.VR CLK
R524 33k
R523 33k
DECK 2
PH R CH
L CH
CON301
PIN301
AZIMUTH ADJ
P.B.AMP1 R
P.B.AMP1 L
REC/PB SW
Q351~354 357, 358
IC301 (1/2) 7BA4558N-DX
IC301 (2/2) BA4558N-DX
R302 47
R304 330k
C302 1200p
C304 100/10
R314 68
R306 390k
C308 8200p
R308 1.2k
R310 18k
R312 4.7k
C313 0.01
R301 47
R303 330k
C301 1200p
C303 100/10
R313 68
R305 390k
C307 8200p
R307 1.2k
R309 18k
R311 4.7k
C314 47/25
C315 0.022
C361 0.01
C362 0.01
10.61
10.41
10.4
9.73
9.25
5.07
4.65
DECK 1
RPH R CH
CON351
PIN351
IC302 (1/2) BA4558N-DX
IC302 (2/2) BA4558N-DX
R357 47
R353 10k
R354 10k
R373 10k
Q357 KTA1266 GR
Q351 KTA1266 GR
Q352 KTA1266 GR
Q353 KTA1266 GR
Q354 KTA1266 GR
Q355 KTA1266 GR
Q356 KTA1266 GR
Q358 DTC144 ES
Q355, 356 DECK2 PB SW
PB AMP2 L
PB AMP2 R
R351 470
R352 470
R359 68
R360 68
R361 68
R362 68
R363 390k
R364 390k
R365 1.2k
R366 1.2k
R367 18k
R368 18k
R369 47k
R370 47k
R371 47k
R372 47k
C351 1200p
C352 1200p
C353 100/10
C354 100/10
C355 0.068
C356 0.068
C357 8200p
C358 8200p
C359 0.01
R355 330k
R356 330k
Q401 KTC3198GR
IC401 (1/2) BA4558N-DX
R419 2.2k
R423 18k
R401 56k
C401 1/50
R413 2.2k
R411 6.8k
R415 680
C407 0.012
R409 1.2k
R417 10k
R421 22k
C409 2200p
R375 390
R407 1k
R405 100k
C405 6800p
C403 82p
+VCC
D-GND
A-GND

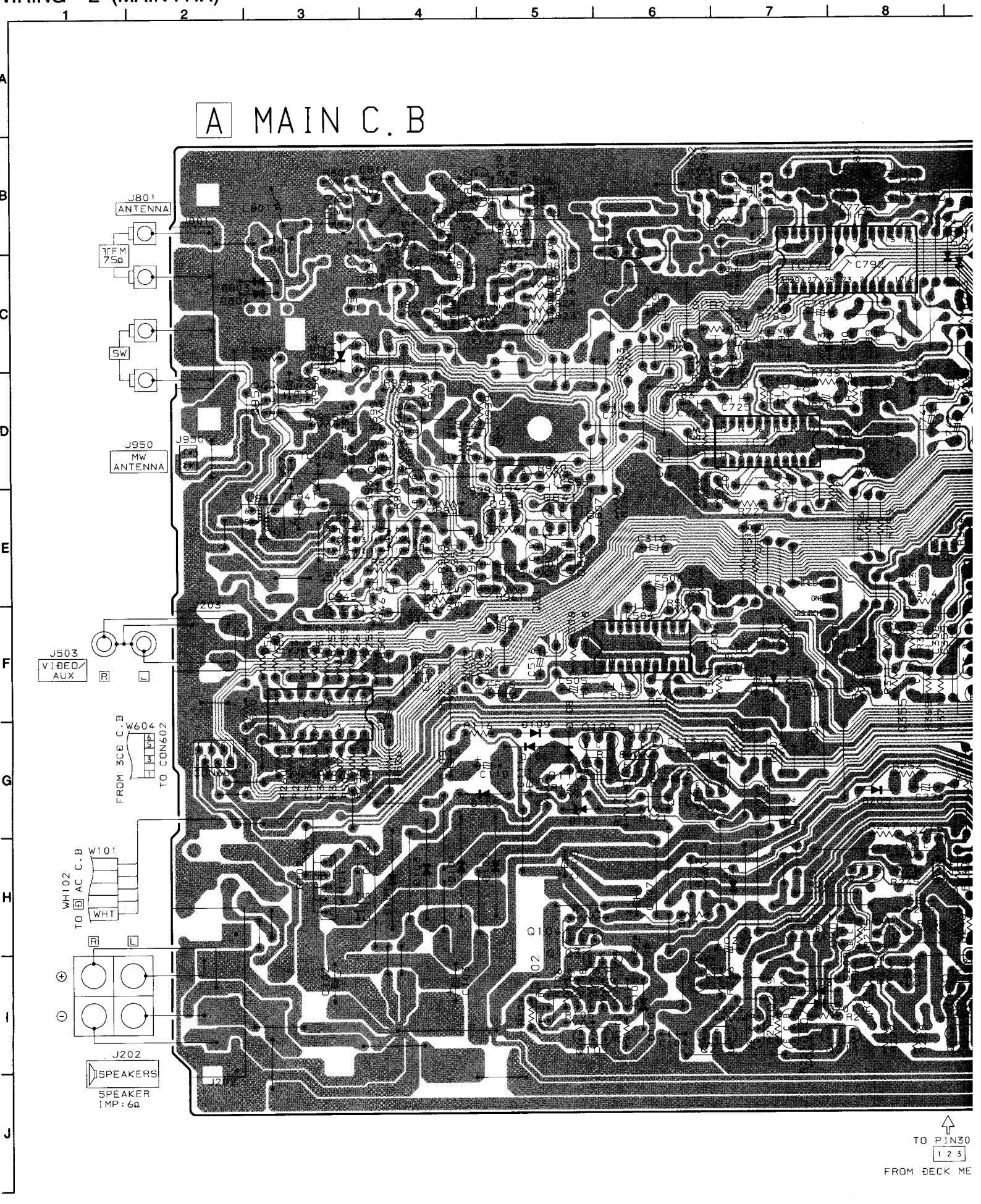

TP3
TP2 CLK
AUTO STOP LEVEL ADJ
SW VT ADJ
SW, MW PREAMP
SW BAND SW
SW TRACKING ADJ
MW TRACKING ADJ
L901, TC941
L941, TC942
L942 OSC SW
L941 ANT SW
L944 10mH
AGC
J203 VIDEO/AUX
J201 PHONES
J202 SPEAKERS
CON602
FROM 3CD C.B
L CH
A-GND
R CH
FUNC-CD
D-FUNC-CD
D-GND
VM
+VM
12.19
E-VR/SOUND CONTROL
IC502 M62420SP
CONTROL LOGIC
I²C BUS INTER FACE
TONE AMP1
TONE AMP2
MUTE
Q219, 220
MUTE SW
Q223
-VCC SUPPLY
POWER AMP
Q201 ~ 214
OVER LOAD DET
Q215, 216
POWER SWITCH
Q217, 221
-VFL VOLTAGE CONST
Q105
AC DET
Q107, 108
HOLD
Q106
D-POWER
D-MUTE
T-HOLD
-VFL
+VCC
-VCC
-VP
ST-BY:31.3
ON:30.8
ST-BY:-32.4
ON:-31.9
-18.45
-28.4
-31.9
-23.7
SW101
AC VOLTAGE
120V
240V
220 ~ 240V
F101
500mA
250VT
WH101
WH102
W101
FIL-1
FIL-2
D-GND
A-GND

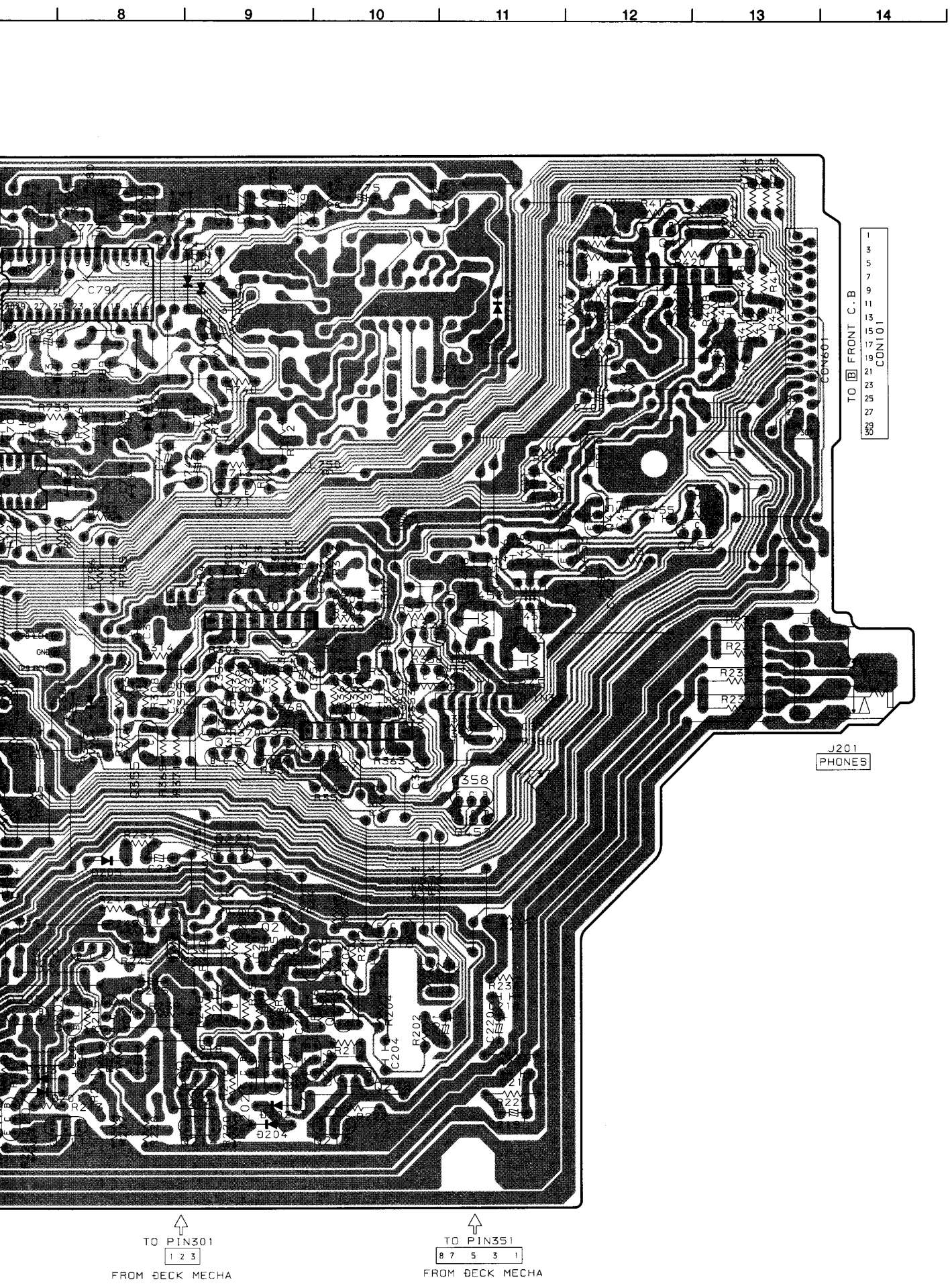

DECK 2
CON301
PIN301
PH
R CH
L CH
AZIMUTH ADJ
P.B.AMP1 R
P.B.AMP1 L
REC/PB SW
Q351~354
357, 358
IC301 (2/2)
BA4558N-DX
IC302 (1/2)
BA4558N-DX
IC302 (2/2)
BA4558N-DX
Q357
KTA1266
GR
Q351
KTA1266
GR
Q353
KTA1266
GR
Q355
KTA1266
GR
Q355, 356
DECK2 PB SW
PB AMP2 L
PB AMP2 R
Q352
KTA1266
GR
Q354
KTA1266
GR
Q358
DTC144
ES
Q356
KTA1266
GR
DECK 1
CON351
PIN351
RPH
R CH
L CH
EH
AZIMUTH ADJ
SFR451, 452
REC/PB FREQUENCY RESPONCE ADJ
L451
BIAS 85K
Q453, 454
BIAS OSC
Q451 KTC3198GR
BIAS OSC SW
PR401
FUSE, 250MA
60V
Q452
DTC143XS
AUX R
CD R
TU-R
Q401
KTC3198GR
Q402
KTC3198GR
IC401 (1/2)
BA4558N-DX
IC401 (2/2)
BA4558N-DX
IC401
REC AMP
Q401, 402
REC AMP SW
D452 MTZJ5.1B
D501 MTZJ9.1C
VOLAMP1
VOLAMP2
SIMAMP1
TONE
AMP1
AMP2
VR1
VR2
VR3
VR5
CONTROL
LOGIC
I²C BUS
INTER
FACE
IC502 M62420SP
E-VR/
O-E.VR DATA
O-E.VR CLK
+VCC
+VM
D-GND
A-GND
TP8
TP9
GND



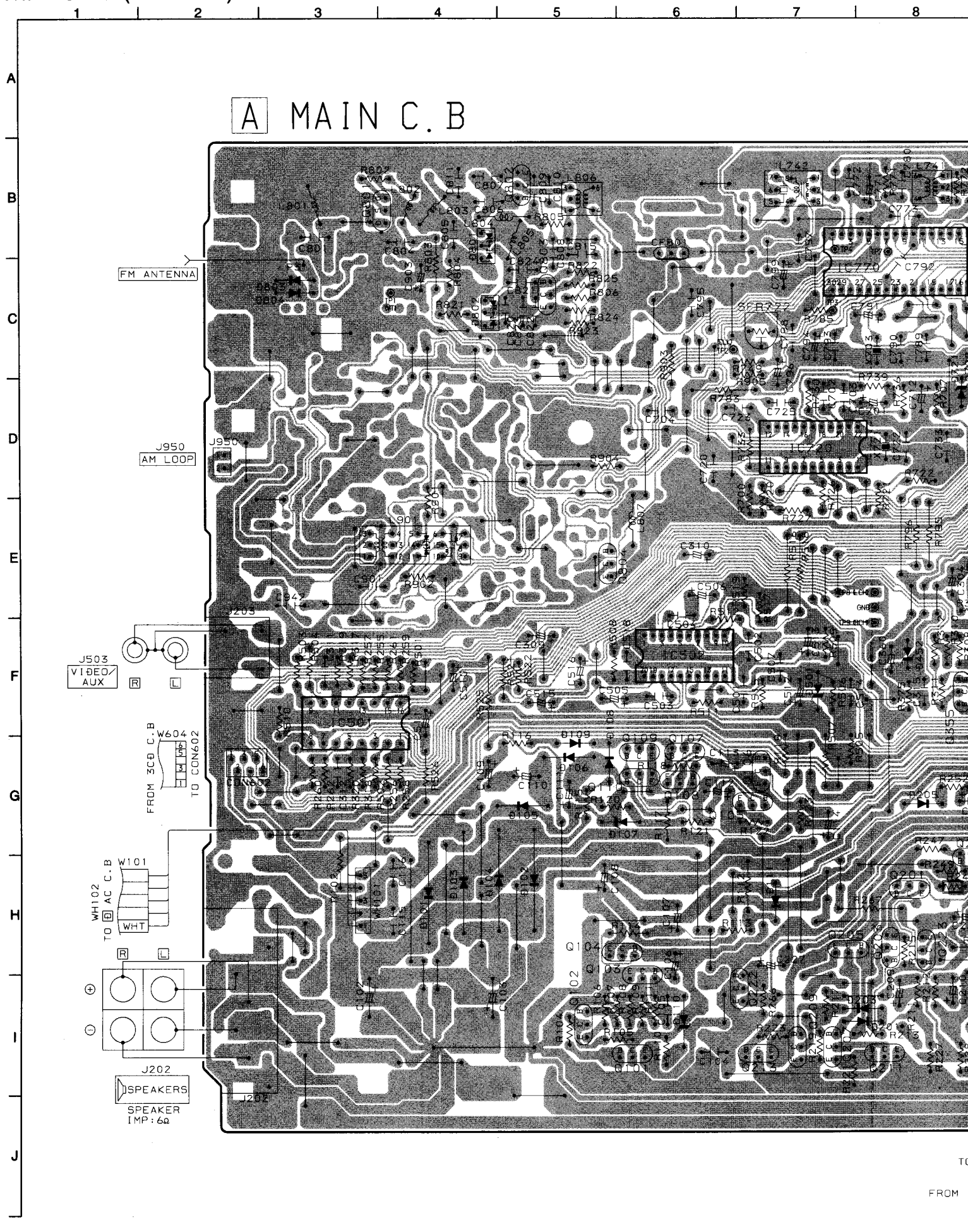
CONTROL LOGIC
I²C BUS INTER FACE
IC502 M62420SP
E-VR/
TONE AMP1
AMP2
6.5K
200K
VR3
VR5
S1
S3
S5
S7
R514 1k
C506 1/50
R512 1.8k
R517 120k
R516 10k
R518 10k
R519 120k
C201 0.22/50
R-IN
R202 100
R206 1k
R242 1k
C208 0.22/50
Q218 DTA144WS
MUTE SW
O-POWER
O-MUTE
R267 47k
R243 22k
T-HOLD
R251 470
R210 100
C210 470/10
R212 180
R214 4.7k
Q202 KTC3198 GR
Q204 KTC3198 GR
Q206 KTA1266 GR
C214 10p
D202 1N4148
D204 1N4148
R216 15k
R218 3.9k
-28.4
-VCC
Q201～214
POWER AMP
Q208 KTC3198 GR
R222 120
Q212 2SD2061E
R220 47k
Q210 KTA1266 GR
R228 22k
R224 120
Q214 2SD2061 E
-31.9
-VP
R232 220
R234 220
C218 0.056
C220 0.1/50
R230 10
Q215, 216
OVER LOAD DET
Q216 KTC3198 GR
Q215 KTC3198 GR
R246 0.22 1W
R248 1.2k
R250 1.8k
R247 1.2k
R249 1.8k
R245 0.22 1W
ST-BY:31.3
ON:30.8
C102 3300/25
Q217 DTC144ES
C103 2200/25
ST-BY:-32.4
ON:-31.9
R240 100
R241 22k
D103 1N5402
D104 1N5402
R124 100
D102 1N5402
D101 1N5402
Q221 KTA1266 GR
Q217, 221
POWER SWITCH
R244 1k
C226 47/50
R237 100k
R238 100k
R252 22k
(L)
(R)
J202
SPEAKERS
-VFL
-23.7
R122 10
Q105 KTA1266 GR
C112 100/10
R121 4.7k
R120 4.7k
D106 1N4003
C110 100/25
C109 100/25
D107 DZ24M
C111 100/50
D105 1N4003
D205 1N4148
R115 27k
R119 33k
Q106 KTC3198 GR
C113 3.3/50
R123 100k
Q106 HOLD
Q105
-VFL VOLTAGE CONST
D108 1N4148
D109 1N4148
R116 27k
Q107 KTC3198 GR
Q109 KTC3198 GR
C114 47/10
R117 39k
Q107, 108
AC DET
R118 12k
Q108 KTA1266 GR
Q110 KTA1266 GR
Q109, 110
DC DET
D-GND
A-GND
<+VCC>
IC401 (1/2) BA4558N-DX
R403 1k
R401 56k
C401 1/50
R407 1k
C405 6800p
R405 100k
C403 82p
IC401
REC AMP
TP8
C406 6800p
R406 100k
C404 82p
R408 1k
R404 1k
GND
R402 56k
C402 1/50
TP9
IC401 (2/2) BA4558N-DX
+VM
12.2
10.6
+VCC
Q104 CSD1489B
+VCC VOLTAGE CONSTANT
C108 330/16
R114 100
R113 330
D111 1N4148
C107 220/16
R112 10k
O-POWER
C106 47/25
R111 220
R110 470
D110 DZ10M
R109 15k
C105 470p
Q103 KTC3198 GR
R105 47k
R104 47
R107 470
R108 5.6k
Q101 KTC3198 GR
Q101～103
+VM VOLTAGE CONST
Q102 KTC3198 GR
R106 56
C104 0.047
C115 0.047
C116 0.047
R102 1
FIL-2
FIL-1
WH101
W101
WH102
D
AC2 C.B
PT101 P.T. HE
SW101
AC VOLTAGE
120V
0V
220～240V
TF
CL1
CL2
F101 500mA 250VT
C
AC1 C.B
AC 120V/220～240V 50/60HZ
SIGNAL
PB/FM
REC/MW
MIC

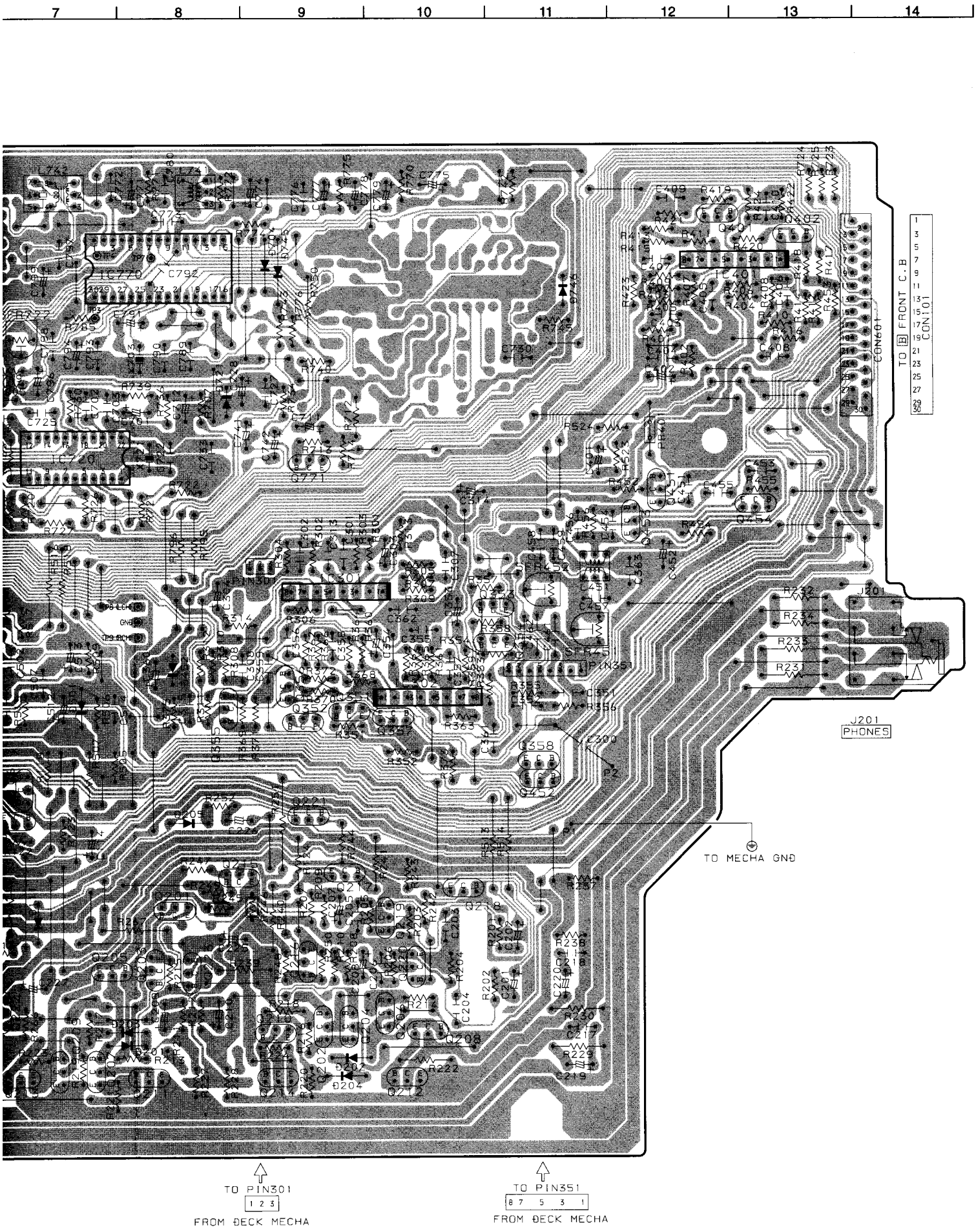
WIRING – 2 (MAIN : HR)



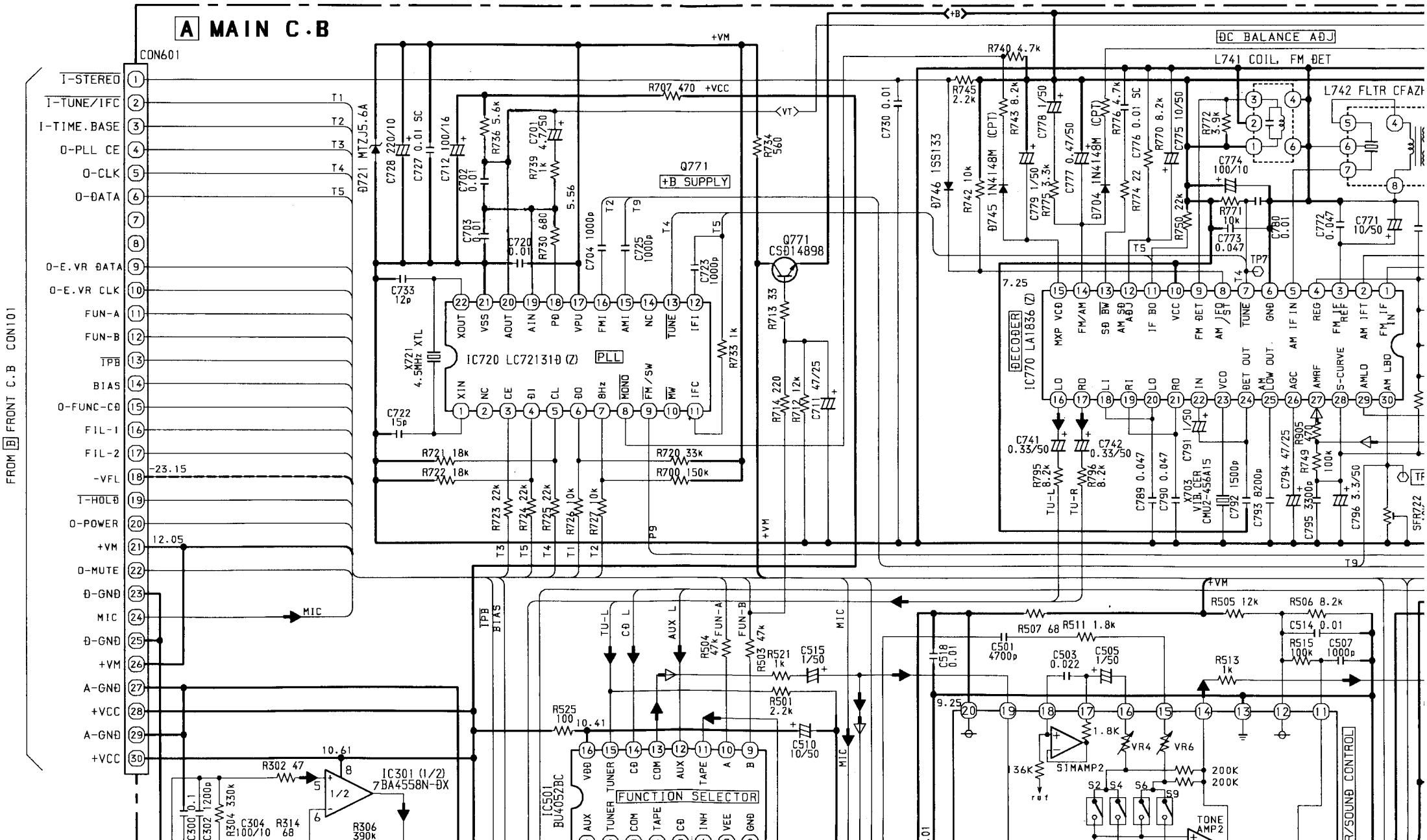

8
9
10
11
12
13
14
TO B FRONT C.B
CON101
CON601
J201
PHONES
TO PIN301
1 2 3
FROM DECK MECHA
TO PIN351
8 7 5 3 1
FROM DECK MECHA

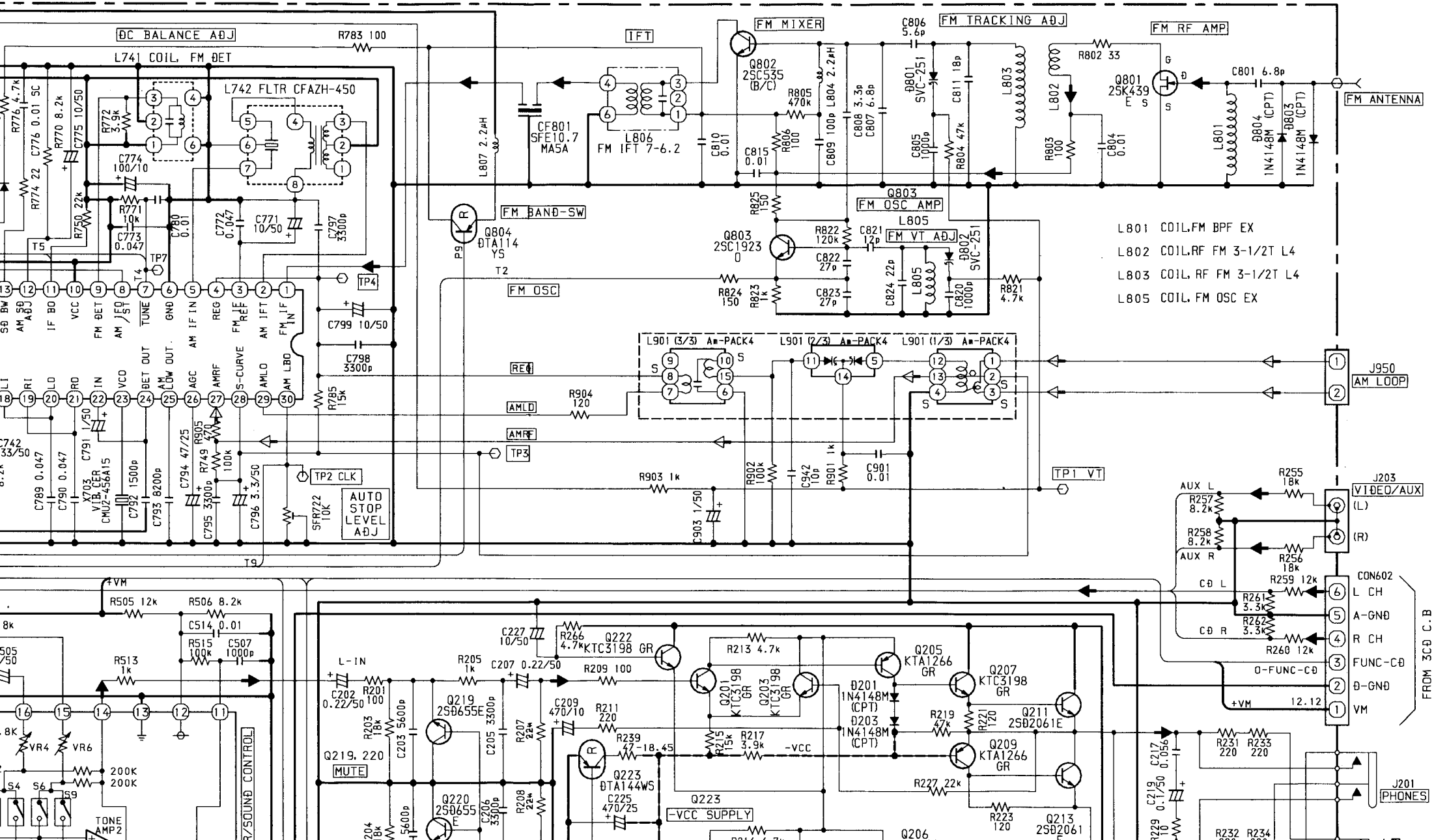
WIRING – 3 (MAIN : HS)

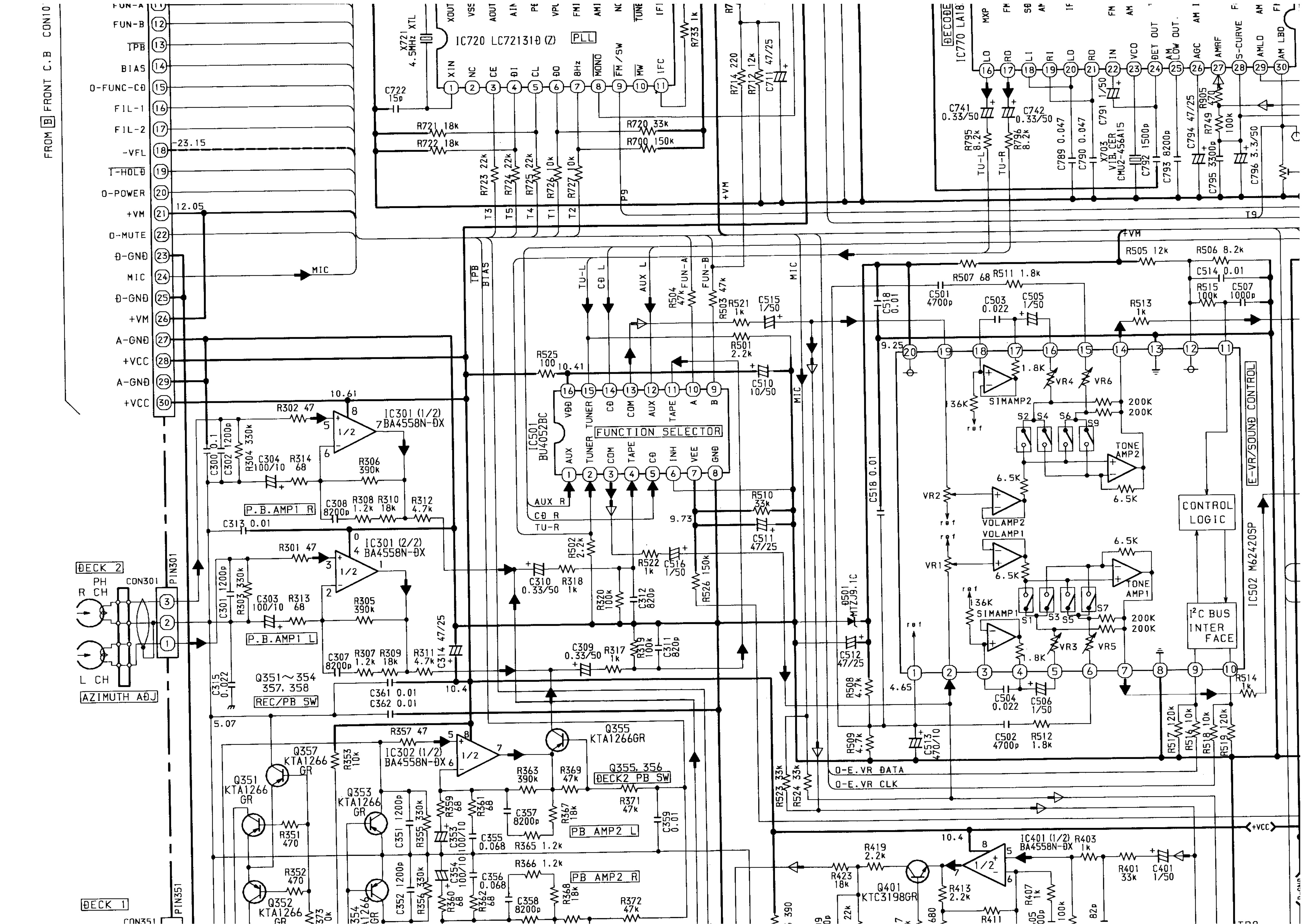



7
8
9
10
11
12
13
14
TO B FRONT C.B
CON101
CON601
J201
PHONES
TO MECHA GND
TO PIN301
1 2 3
FROM DECK MECHA
TO PIN351
8 7 5 3 1
FROM DECK MECHA

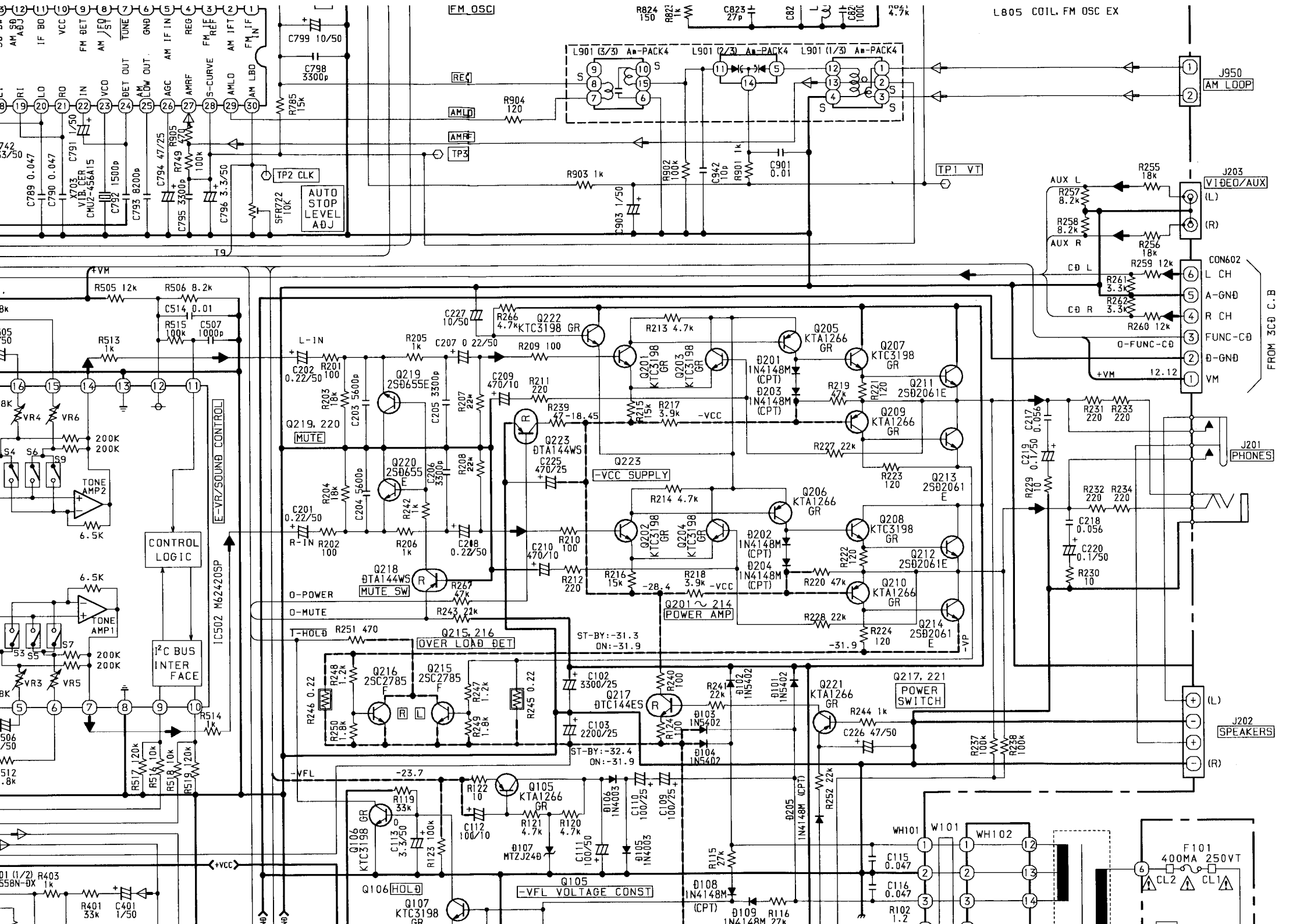
SCHEMATIC DIAGRAM – 3 (MAIN : HS)

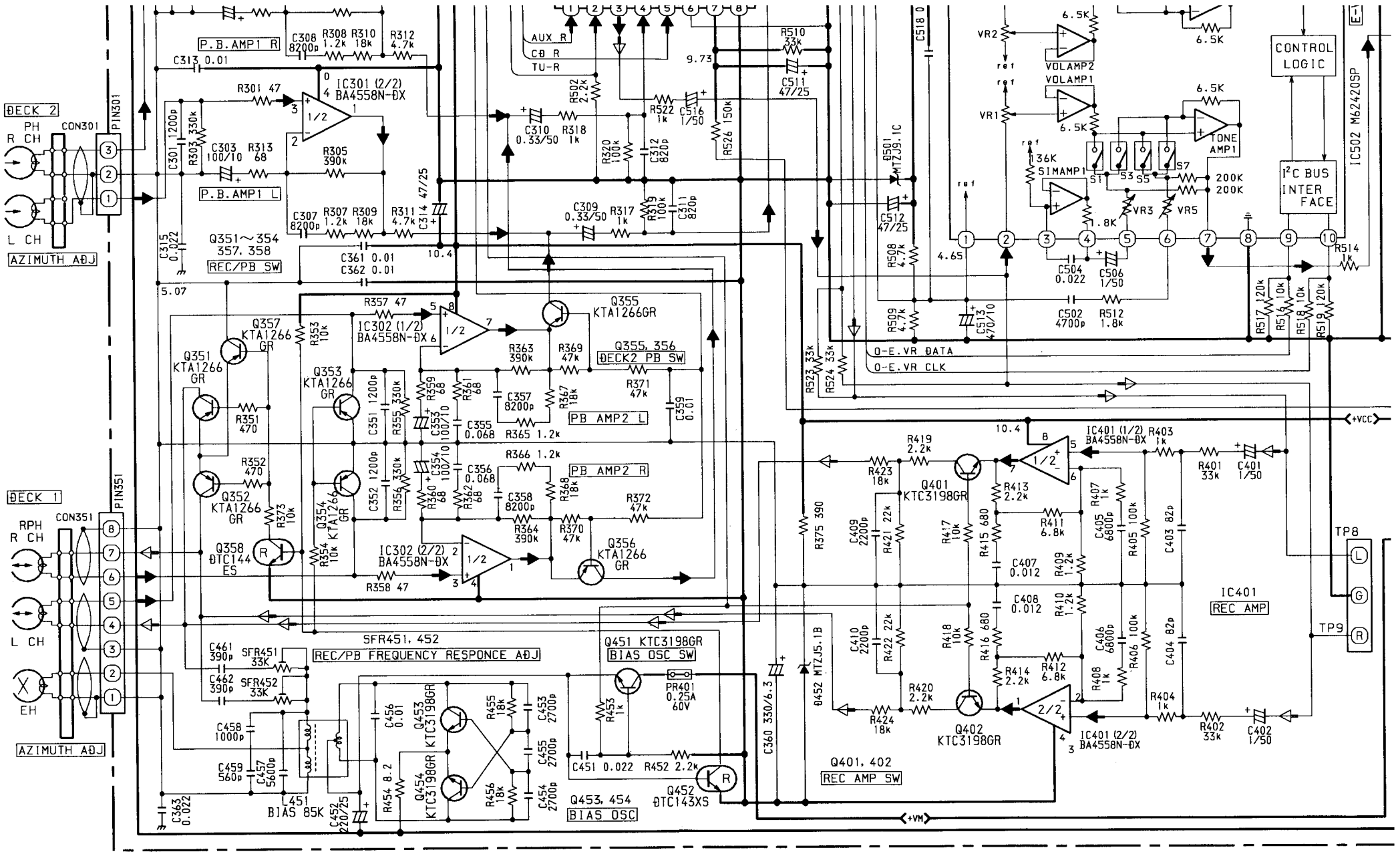


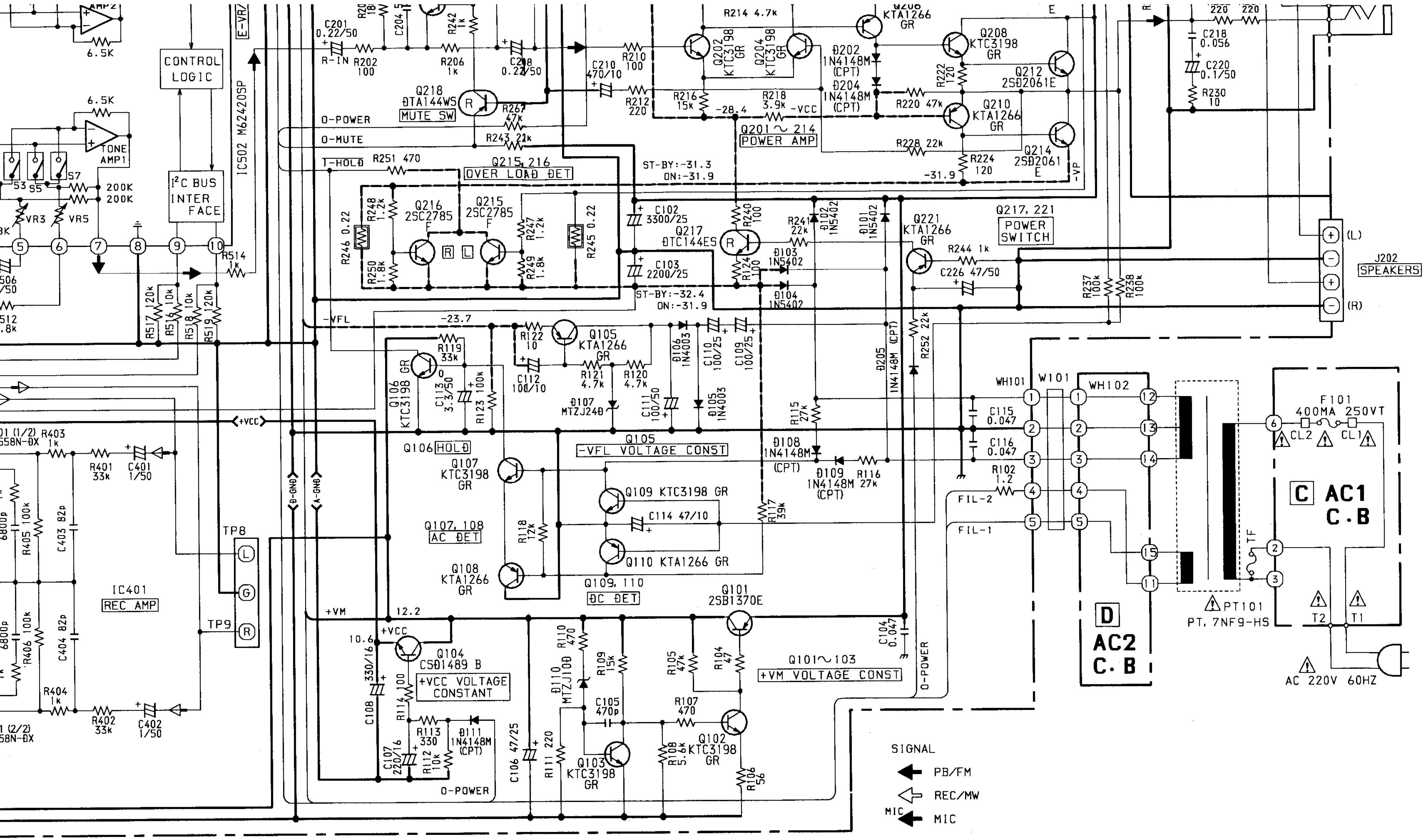

ĐC BALANCE AĐJ
L741 COIL, FM ĐET
L742 FLTR CFAZH-450
R783 100
IFT
FM MIXER
Q802 2SC535 (B/C)
FM TRACKING AĐJ
FM RF AMP
R802 33
Q801 25K439 E S
C801 6.8p
FM ANTENNA
CF801 SFE10.7 MA5A
L806 FM IFT 7-6.2
L807 2.2μH
L804 2.2μH
Đ801 SVC-251
Đ802 SVC-251
Đ803 1N4148M (CPT)
Đ804 1N4148M (CPT)
L801 COIL,FM BPF EX
L802 COIL,RF FM 3-1/2T L4
L803 COIL, RF FM 3-1/2T L4
L805 COIL, FM OSC EX
FM BAND-SW
Q804 ĐTA114 YS
Q803 FM OSC AMP
Q803 2SC1923 O
FM VT AĐJ
FM OSC
L805
L901 (3/3) AM-PACK4
L901 (2/3) AM-PACK4
L901 (1/3) AM-PACK4
J950 AM LOOP
REG
AMLD
AMRF
TP1 VT
TP2 CLK
TP3
TP4
TP7
AUTO STOP LEVEL AĐJ
SFR722 10K
X703 VIB CER CMU2-456A15
J203 VIĐEO/AUX
(L)
(R)
AUX L
AUX R
CON602
L CH
A-GNĐ
R CH
FUNC-CĐ
O-FUNC-CĐ
Đ-GNĐ
VM
12.12
FROM 3CĐ C.B
+VM
L-IN
Q222 KTC3198 GR
Q219 2SĐ655E
Q220 2SĐ655E
Q223 ĐTA144WS
Q223 -VCC SUPPLY
Q201 KTC3198 GR
Q203 KTC3198 GR
Q205 KTA1266 GR
Q207 KTC3198 GR
Q209 KTA1266 GR
Q211 2SĐ2061E
Q213 2SĐ2061
Q206
Đ201 1N4148M (CPT)
Đ203 1N4148M (CPT)
Q219, 220 MUTE
-VCC
J201 PHONES
TONE AMP2
VR4
VR6
S4
S6
S9



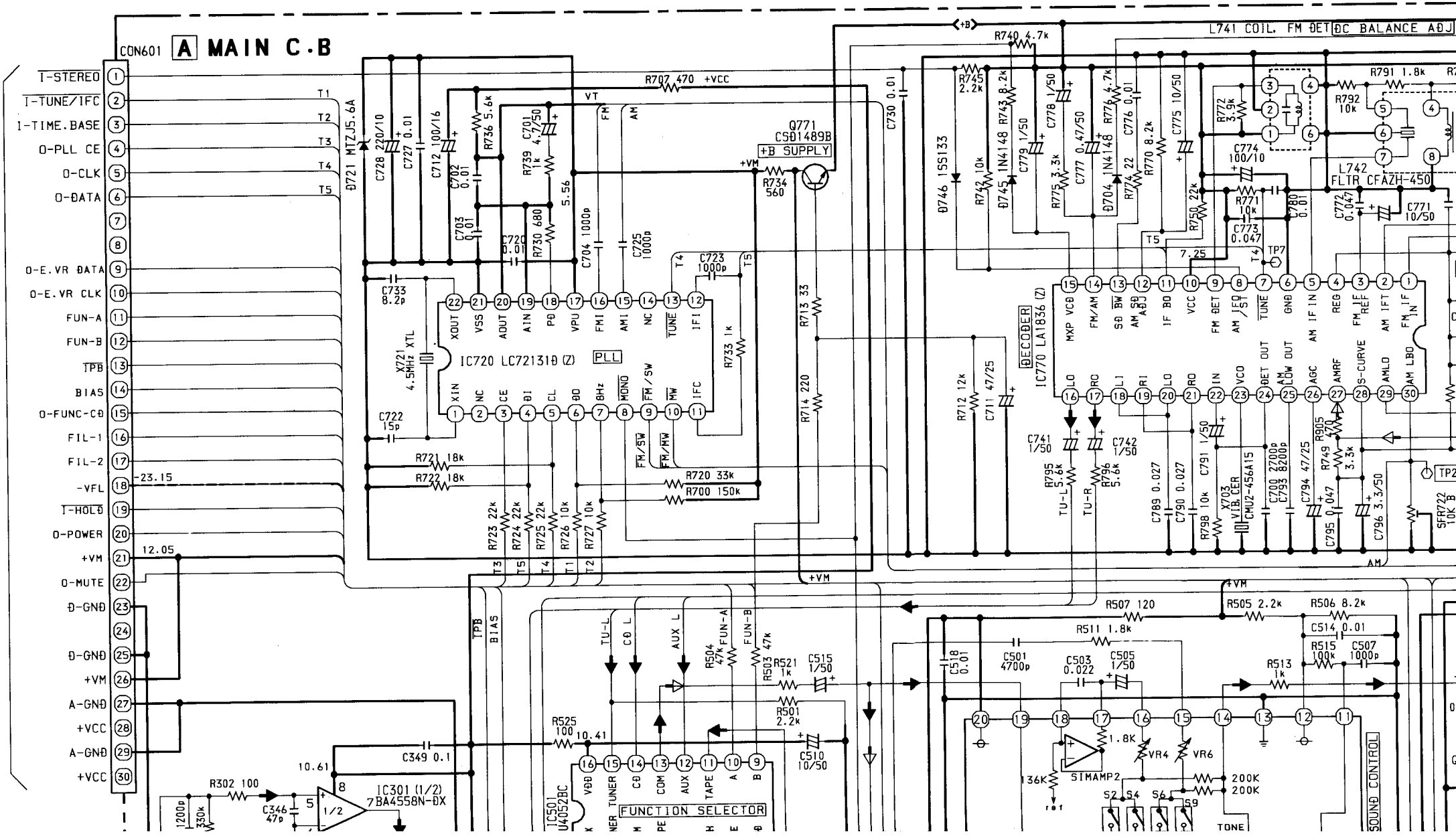
FROM B FRONT C.B CON10
FUN-A
FUN-B
IPB
BIAS
O-FUNC-CD
FIL-1
FIL-2
-VFL
I-HOLD
O-POWER
+VM
O-MUTE
D-GND
MIC
D-GND
+VM
A-GND
+VCC
A-GND
+VCC
-23.15
12.05
X721 4.5MHz XTL
IC720 LC72131D (Z)
PLL
XIN
NC
CE
DI
CL
DO
8Hz
MONO
FM/SW
MW
IFC
C722 15p
R721 18k
R722 18k
R723 22k
R724 22k
R725 22k
R726 10k
R727 10k
R720 33k
R700 150k
R733 1k
R714 220
R712 12k
C711 47/25
T3
T5
T4
T1
T2
P9
+VM
IC770 LA18
DECODE
MXP
C741 0.33/50
C742 0.33/50
R795 8.2k
R796 8.2k
TU-L
TU-R
C789 0.047
C790 0.047
C791 1/50
X703 VIB.CER CMU2-456A15
C792 1500p
C793 8200p
C794 47/25
C795 3300p
R905 470
R749 100k
C796 3.3/50
DET OUT
AM LOW OUT
AGC
AMRF
S-CURVE
AMLD
AM LBO
VCO
T9
+VM
R505 12k
R506 8.2k
C514 0.01
R515 100k
C507 1000p
R507 68
R511 1.8k
C501 4700p
C503 0.022
C505 1/50
R513 1k
C518 0.01
TU-L
CD L
AUX L
FUN-A
FUN-B
MIC
R504 47k
R503 47k
R521 1k
C515 1/50
R501 2.2k
R525 100
10.41
C510 10/50
9.25
IC501 BU4052BC
FUNCTION SELECTOR
VDD
TUNER
CD
COM
AUX
TAPE
A
B
INH
VEE
GND
AUX R
CD R
TU-R
R510 33k
C511 47/25
9.73
R502 2.2k
R522 1k
C516 1/50
R526 150k
C310 0.33/50
R318 1k
R320 100k
C312 820p
1.8K
VR4
VR6
136K
SIMAMP2
200K
S2
S4
S6
S9
TONE AMP2
6.5K
VR2
VOLAMP2
VOLAMP1
VR1
TONE AMP1
S1
S3
S5
S7
SIMAMP1
VR3
VR5
E-VR/SOUND CONTROL
CONTROL LOGIC
I²C BUS INTER FACE
IC502 M62420SP
C504 0.022
C506 1/50
C502 4700p
R512 1.8k
4.65
R514 1k
R517 120k
R516 10k
R518 10k
R519 120k
R508 4.7k
R509 4.7k
C513 470/10
D501 MTZJ9.1C
C512 47/25
O-E.VR DATA
O-E.VR CLK
R523 33k
R524 33k
+VCC
10.61
R302 47
IC301 (1/2) BA4558N-DX
C300 0.1
C302 1200p
R304 330k
C304 100/10
R314 68
R306 390k
P.B.AMP1 R
C308 8200p
R308 1.2k
R310 18k
R312 4.7k
C313 0.01
R301 47
IC301 (2/2) BA4558N-DX
DECK 2
PH
R CH
L CH
CON301
PIN301
AZIMUTH ADJ
C301 1200p
R303 330k
C303 100/10
R313 68
R305 390k
P.B.AMP1 L
C307 8200p
R307 1.2k
R309 18k
R311 4.7k
C314 47/25
C309 0.33/50
R317 1k
R319 100k
C311 820p
C315 0.022
Q351~354 357, 358
REC/PB SW
C361 0.01
C362 0.01
10.4
5.07
Q357 KTA1266 GR
Q351 KTA1266 GR
R353 10k
R357 47
IC302 (1/2) BA4558N-DX
Q355 KTA1266GR
R363 390k
R369 47k
Q355, 356
DECK2 PB SW
R371 47k
Q353 KTA1266 GR
C351 1200p
R355 330k
R359 68
C353 100/10
R361 68
C357 8200p
R367 18k
C359 0.01
C355 0.068
R365 1.2k
PB AMP2 L
R351 470
R352 470
Q352 KTA1266 GR
C352 1200p
R356 330k
C354 100/10
R360 68
C356 0.068
R362 68
C358 8200p
R366 1.2k
R368 18k
PB AMP2 R
R372 47k
DECK 1
CON351
PIN351
IC401 (1/2) BA4558N-DX
R403 1k
R401 33k
C401 1/50
R419 2.2k
R423 18k
Q401 KTC3198GR
R413 2.2k
R407 1k
R411

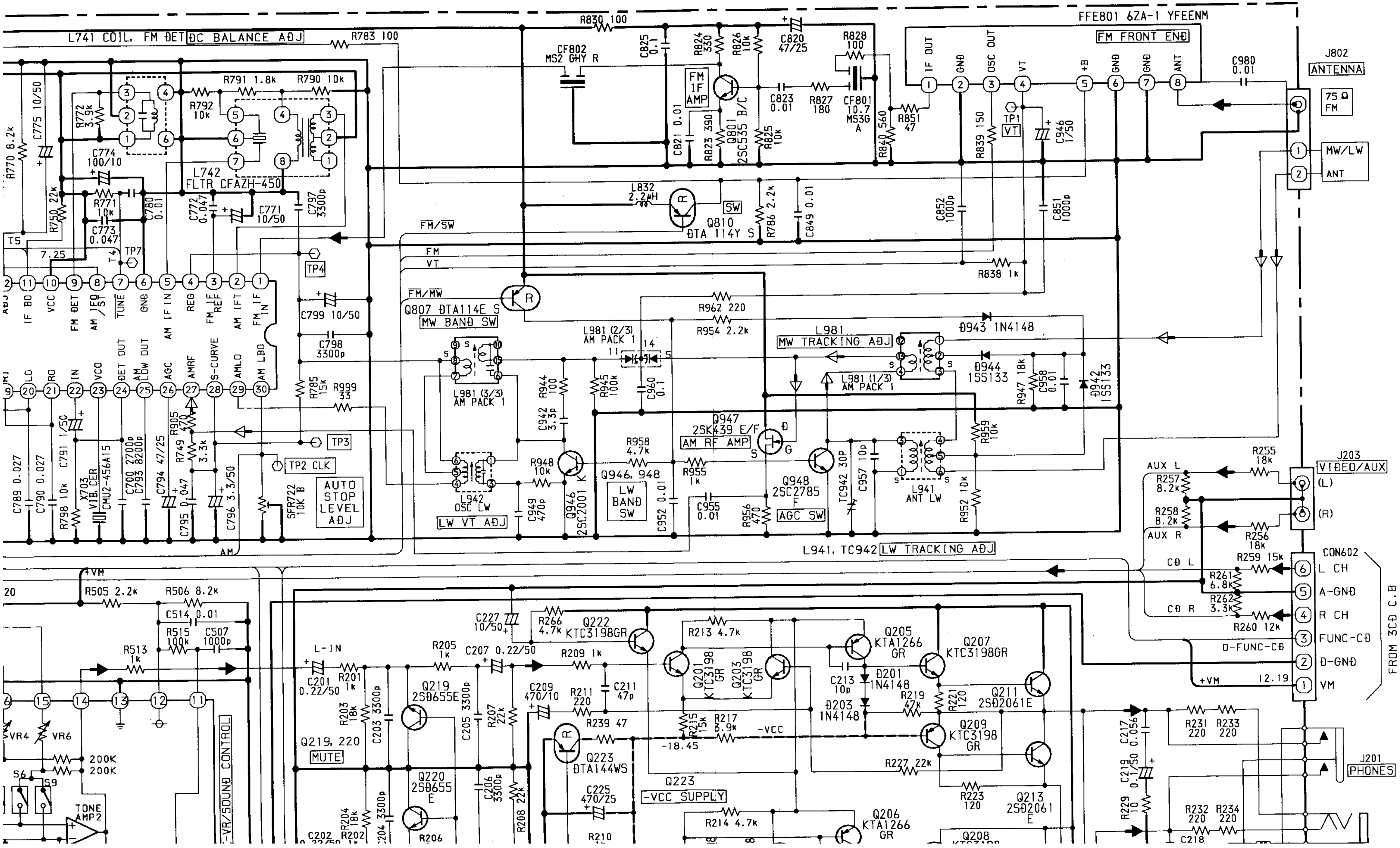

FM OSC
L805 COIL. FM OSC EX
L901 (3/3) Am-PACK4
L901 (2/3) Am-PACK4
L901 (1/3) Am-PACK4
REC
AMLD
AMRF
TP3
TP1 VT
TP2 CLK
AUTO STOP LEVEL ADJ
J950 AM LOOP
J203 VIDEO/AUX
AUX L
AUX R
CD L
CD R
CON602
L CH
A-GND
R CH
FUNC-CD
D-GND
VM
FROM 3CD C.B
J201 PHONES
J202 SPEAKERS
+VM
-VCC
-VFL
+VCC
L-IN
R-IN
Q219, 220 MUTE
Q223 -VCC SUPPLY
Q201 ~ 214 POWER AMP
Q215, 216 OVER LOAD DET
Q217, 221 POWER SWITCH
Q218 MUTE SW
Q105 -VFL VOLTAGE CONST
Q106 HOLD
E-VR/SOUND CONTROL
IC502 M62420SP
CONTROL LOGIC
I²C BUS INTER FACE
TONE AMP1
TONE AMP2
D-POWER
D-MUTE
T-HOLD
ST-BY:-31.3 ON:-31.9
ST-BY:-32.4 ON:-31.9
WH101
WH102
W101
F101 400MA 250VT


DECK 2
PH
R CH
L CH
CON301
PIN301
AZIMUTH ADJ
P.B.AMP1 R
P.B.AMP1 L
IC301 (2/2)
BA4558N-DX
REC/PB SW
Q351~354
357, 358
AUX R
CD R
TU-R
IC302 (1/2)
BA4558N-DX
IC302 (2/2)
BA4558N-DX
Q355
KTA1266GR
Q356
KTA1266GR
Q357
KTA1266
GR
Q351
KTA1266
GR
Q353
KTA1266
GR
Q354
KTA1266
GR
Q352
KTA1266
GR
Q358
DTC144
ES
DECK 2 PB SW
PB AMP2 L
PB AMP2 R
DECK 1
RPH
R CH
L CH
EH
CON351
PIN351
AZIMUTH ADJ
SFR451, 452
REC/PB FREQUENCY RESPONCE ADJ
Q453
KTC3198GR
Q454
KTC3198GR
L451
BIAS 85K
Q451 KTC3198GR
BIAS OSC SW
PR401
0.25A
60V
Q452
DTC143XS
Q453, 454
BIAS OSC
Q401
KTC3198GR
Q402
KTC3198GR
IC401 (1/2)
BA4558N-DX
IC401 (2/2)
BA4558N-DX
IC401
REC AMP
Q401, 402
REC AMP SW
D452 MTZJ5.1B
D501
MTZJ9.1C
VOLAMP2
VOLAMP1
TONE
AMP1
SIMAMP1
CONTROL
LOGIC
I²C BUS
INTER
FACE
IC502 M62420SP
O-E.VR DATA
O-E.VR CLK
+VCC
+VM
TP8
TP9

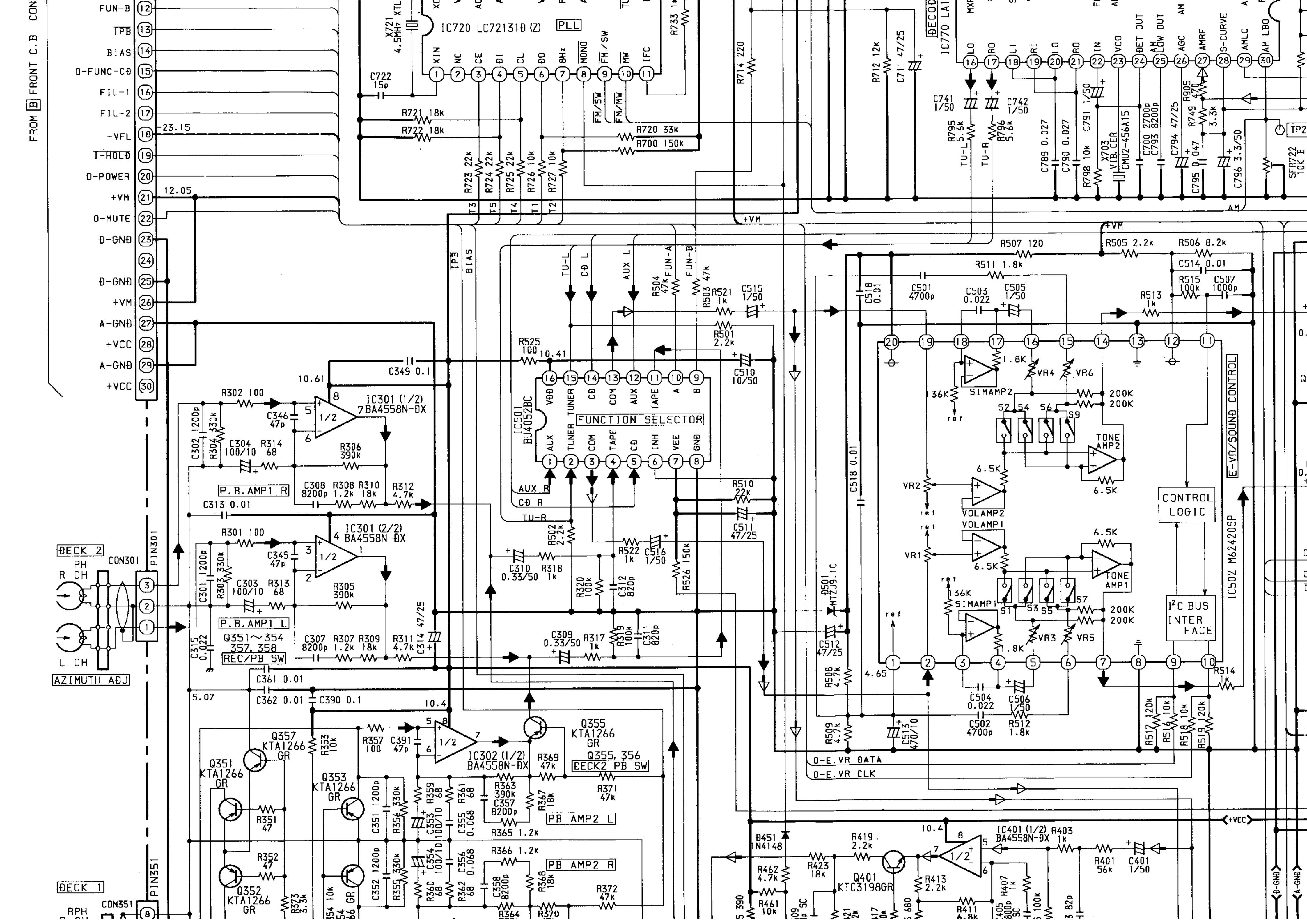

CONTROL LOGIC
I²C BUS INTER FACE
IC502 M62420SP
TONE AMP1
IC401
REC AMP
TP8
TP9
Q218
DTA144WS
MUTE SW
O-POWER
O-MUTE
T-HOLD
Q215, 216
OVER LOAD DET
Q201 ~ 214
POWER AMP
Q217, 221
POWER SWITCH
J202
SPEAKERS
Q106 HOLD
Q105
-VFL VOLTAGE CONST
Q107, 108
AC DET
Q109, 110
DC DET
Q101 ~ 103
+VM VOLTAGE CONST
Q104
CSD1489 B
+VCC VOLTAGE CONSTANT
Q101
2SB1370E
WH101
W101
WH102
F101
400MA 250VT
C AC1 C·B
D AC2 C·B
PT101
PT, 7NF9-HS
AC 220V 60HZ
FIL-1
FIL-2
SIGNAL
PB/FM
REC/MW
MIC

SCHEMATIC DIAGRAM – 4 (MAIN : 9EZ, G)

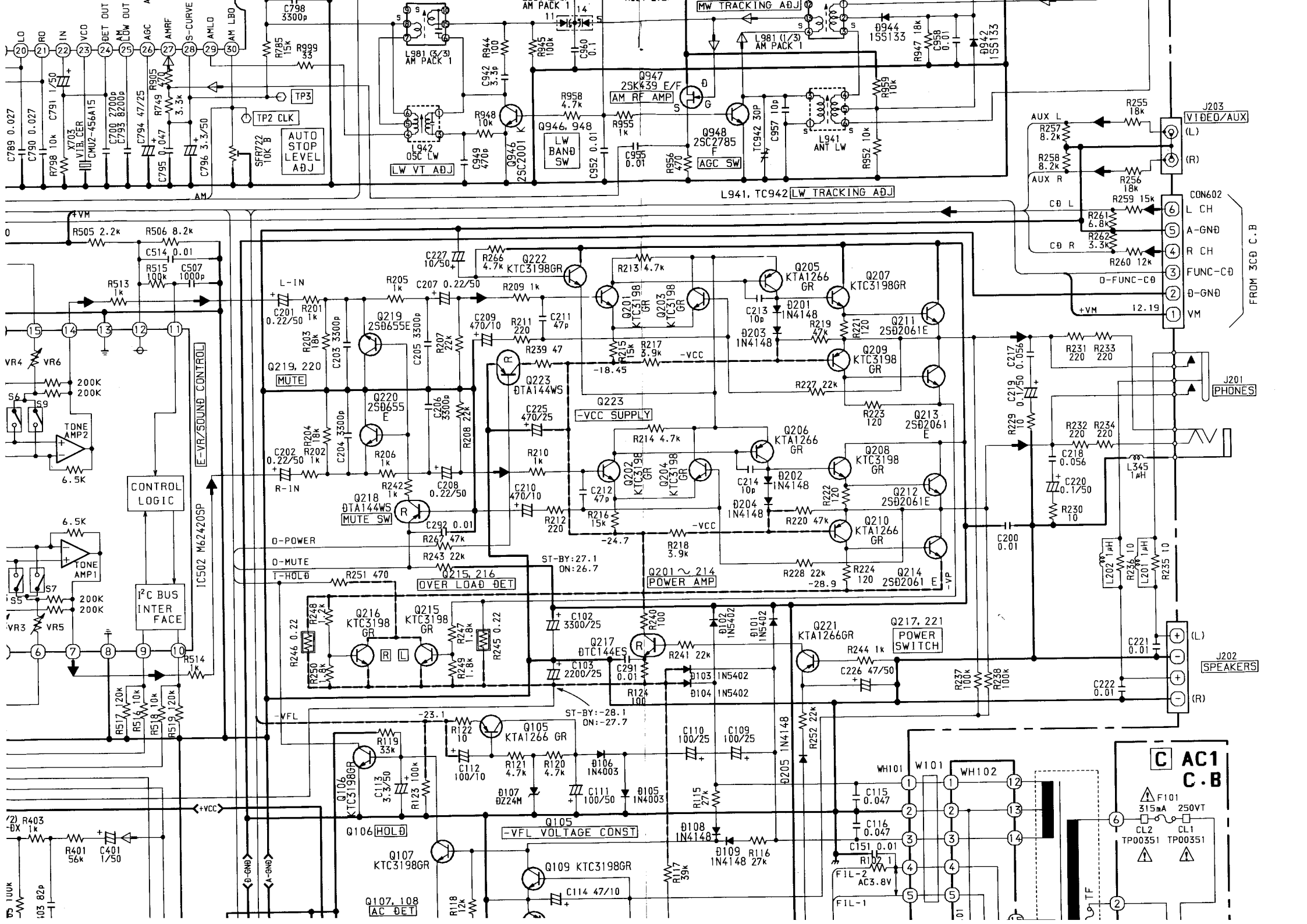


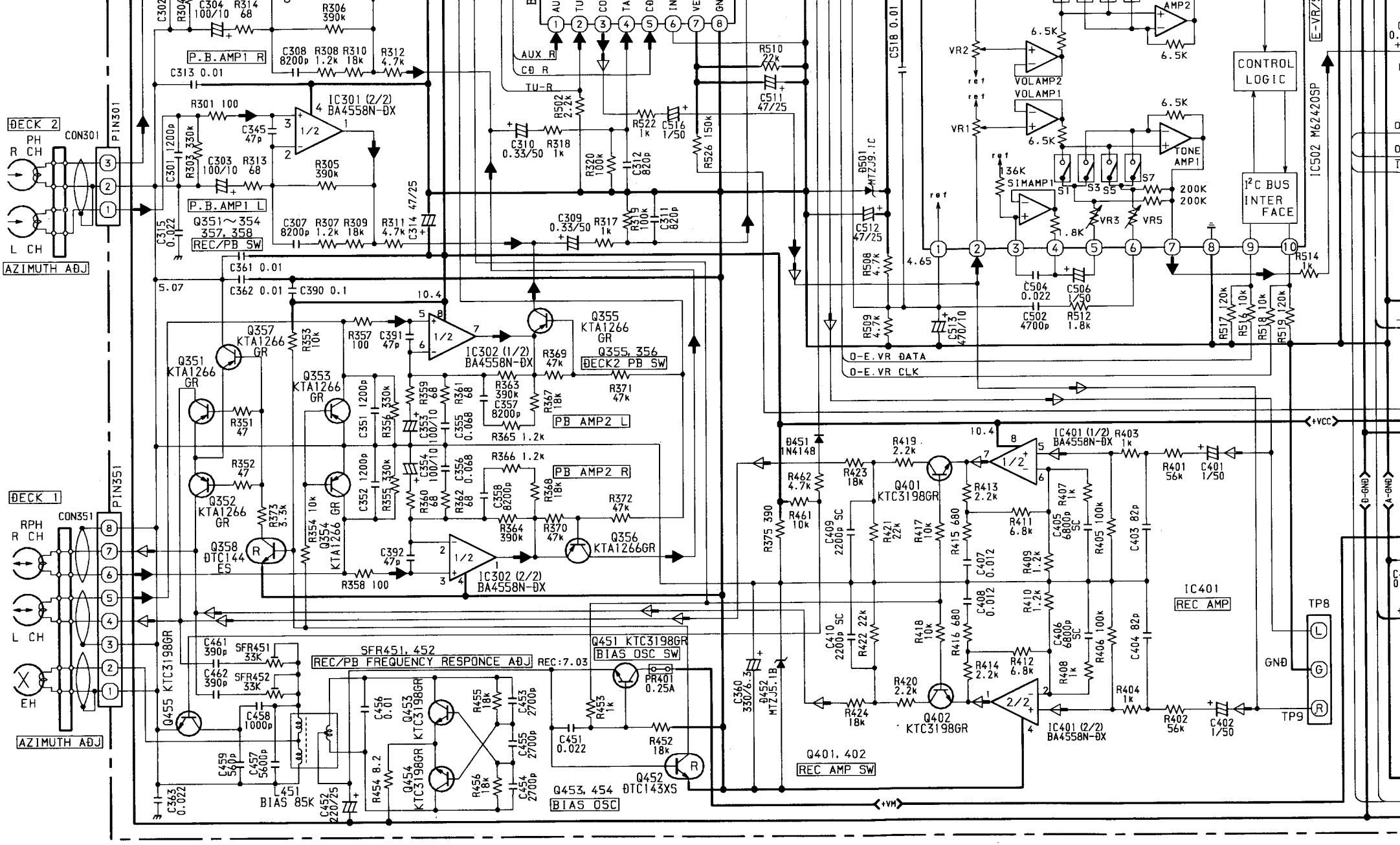


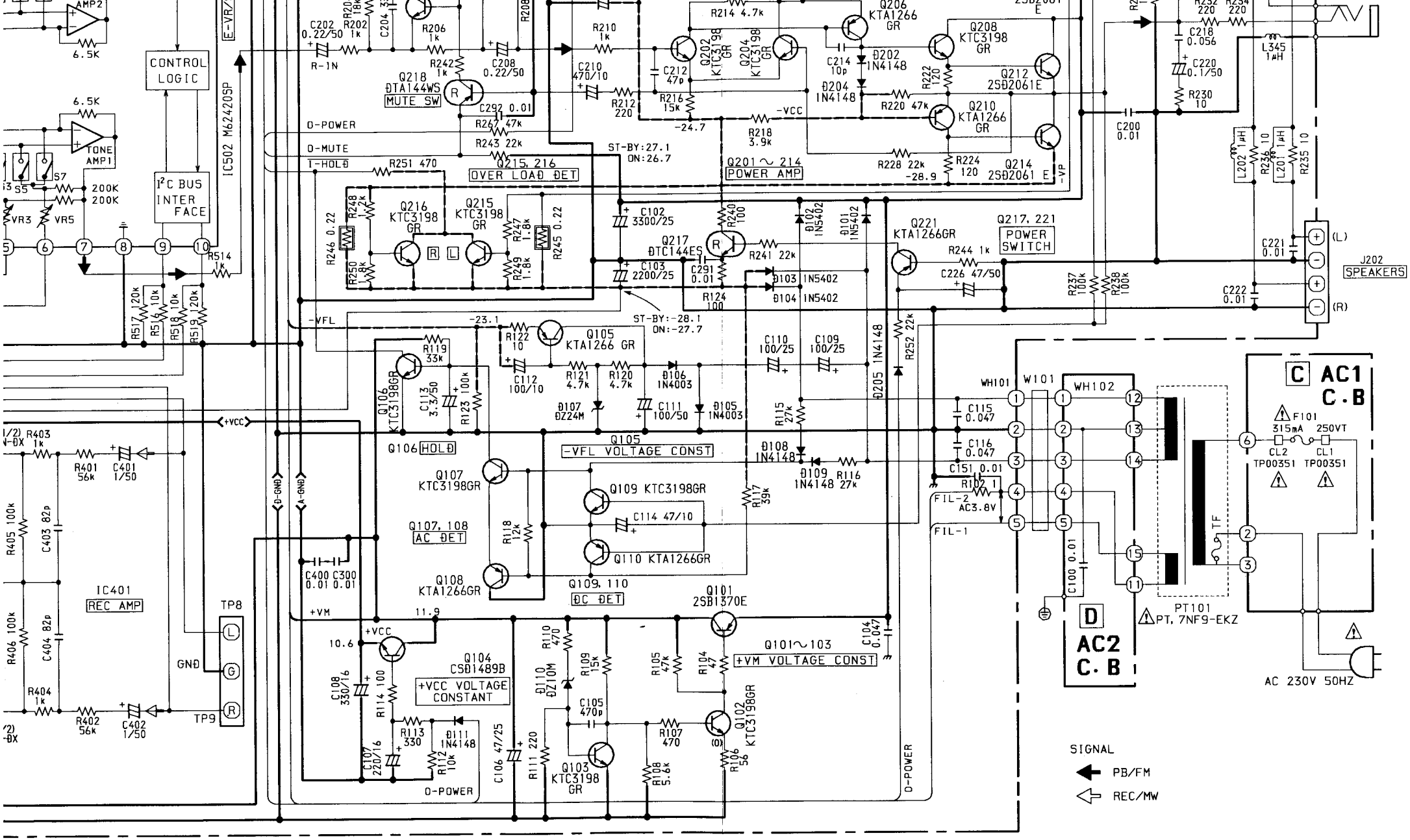
FFE801 6ZA-1 YFEENM
FM FRONT END
J802
ANTENNA
75 Ω FM
MW/LW
ANT
C980 0.01
IF OUT
GND
OSC OUT
VT
+B
ANT
L741 COIL, FM DET DC BALANCE ADJ
R783 100
R830 100
CF802 MS2 GHY R
C825 0.1
R824 330
R826 10k
C820 47/25
R828 100
FM IF AMP
Q801 2SC535 B/C
C823 0.01
R827 180
CF801 10.7 MS3G A
R851 47
R840 560
R823 390
R825 10k
C821 0.01
R839 150
TP1 VT
C946 1/50
R791 1.8k
R790 10k
R792 10k
R772 3.9k
C775 10/50
R770 8.2k
C774 100/10
R771 10k
C773 0.047
R750 22k
C780 0.01
L742 FLTR CFAZH-450
C772 0.047
C771 10/50
C797 3300p
L832 2.2μH
Q810 DTA 114Y S
SW
R786 2.2k
C849 0.01
C852 1000p
C851 1000p
FM/SW
FM
VT
R838 1k
TP7
TP4
T5
T4
7.25
IF BO
VCC
FM DET
AM JFO /ST
TUNE
GND
AM IF IN
REG
FM IF REF
AM IFT
FM IF IN
Q807 DTA114E S
MW BAND SW
FM/MW
C799 10/50
C798 3300p
R962 220
R954 2.2k
D943 1N4148
L981 (2/3) AM PACK 1
L981 MW TRACKING ADJ
L981 (1/3) AM PACK 1
L981 (3/3) AM PACK 1
D944 1SS133
R947 18k
C958 0.01
D942 1SS133
R944 100
R945 100k
C960 0.1
C942 3.3p
Q947 2SK439 E/F
AM RF AMP
R959 10k
R958 4.7k
R948 10k
Q946, 948
LW BAND SW
R955 1k
C955 0.01
C952 0.01
Q948 2SC2785 F
AGC SW
R956 470
TC942 30P
C957 10p
L941 ANT LW
R952 10k
Q946 2SC2001 K
C949 470p
L942 OSC LW
LW VT ADJ
L941, TC942 LW TRACKING ADJ
LO
RO
IN
VCO
DET OUT
AM LOW OUT
AGC
AMRF
S-CURVE
AMLO
AM LBO
R785 15k
R999 33
TP3
R905 470
R749 3.3k
TP2 CLK
AUTO STOP LEVEL ADJ
C789 0.027
C790 0.027
R798 10k
C791 1/50
X703 VIB.CER CMU2-456A15
C700 2700p
C793 8200p
C794 47/25
C795 0.047
C796 3.3/50
SFR722 10K B
AM
J203
VIDEO/AUX
AUX L
R255 18k
R257 8.2k
R258 8.2k
AUX R
R256 18k
CON602
CD L
R259 15k
L CH
R261 6.8k
A-GND
R262 3.3k
CD R
R CH
R260 12k
FUNC-CD
D-FUNC-CD
D-GND
+VM
12.19
VM
FROM 3CD C.B
+VM
R505 2.2k
R506 8.2k
C514 0.01
R515 100k
C507 1000p
R513 1k
VR4
VR6
200K
200K
S6
S9
TONE AMP2
VR/SOUND CONTROL
L-IN
C201 0.22/50
R201 1k
R205 1k
C207 0.22/50
C227 10/50
R266 4.7k
Q222 KTC3198GR
R209 1k
R213 4.7k
Q205 KTA1266 GR
Q207 KTC3198GR
C213 10p
D201 1N4148
D203 1N4148
R219 47k
R221 120
Q211 2SD2061E
Q201 KTC3198 GR
Q203 KTC3198 GR
C209 470/10
R211 220
C211 47p
R239 47
R215 15k
R217 3.9k
-VCC
-18.45
Q209 KTC3198 GR
R203 18k
C203 3300p
Q219 2SD655E
C205 3300p
R207 22k
Q219, 220
MUTE
Q223 DTA144WS
Q223
-VCC SUPPLY
R227 22k
R223 120
Q213 2SD2061 E
C217 0.056
C219 0.1/50
R231 220
R233 220
R229 10
R232 220
R234 220
C218
J201
PHONES
Q220 2SD655 E
C206 3300p
R208 22k
C225 470/25
R210
R214 4.7k
Q206 KTA1266 GR
Q208
C202 0.22/50
R204 18k
R202 1k
C204 3300p
R206

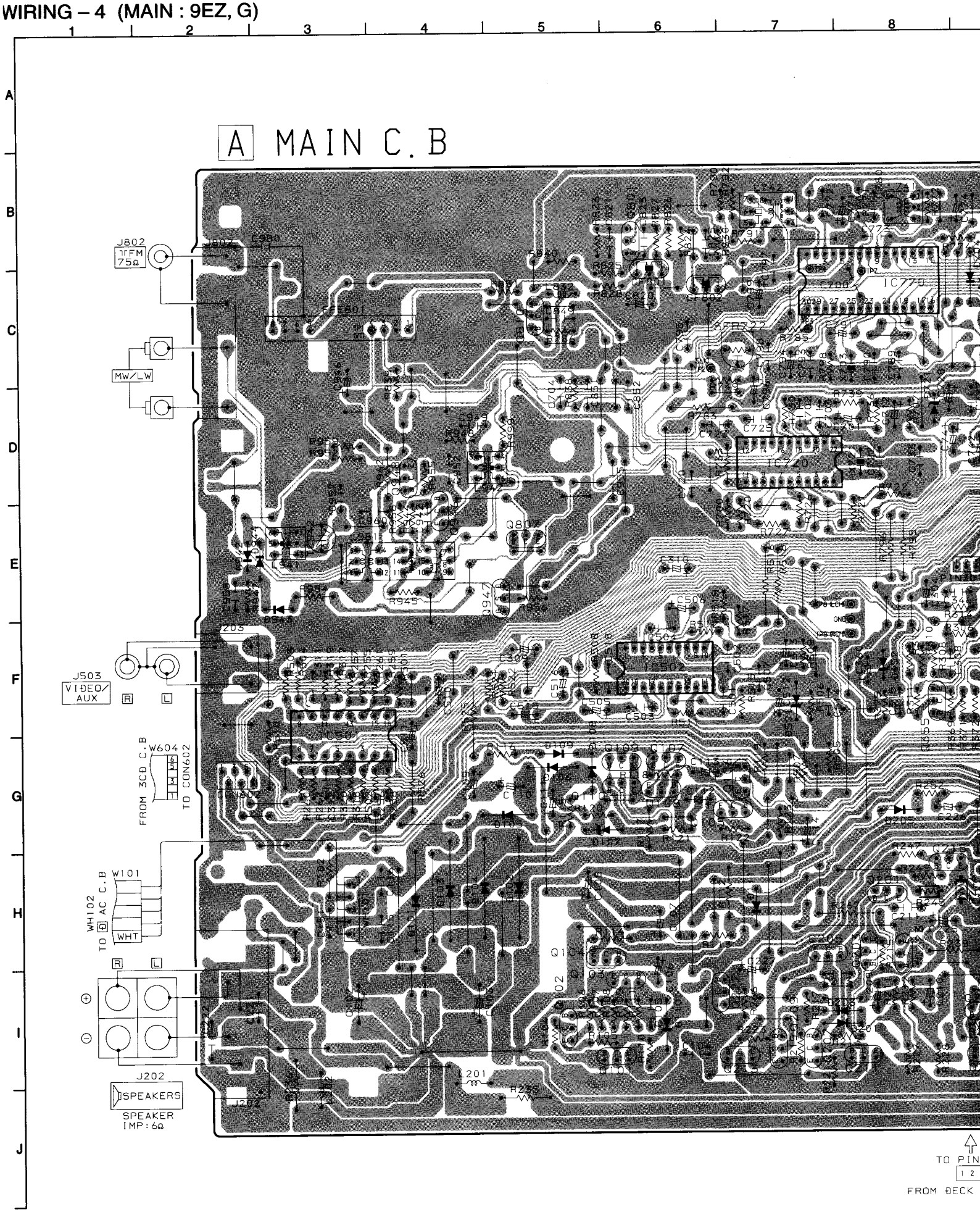


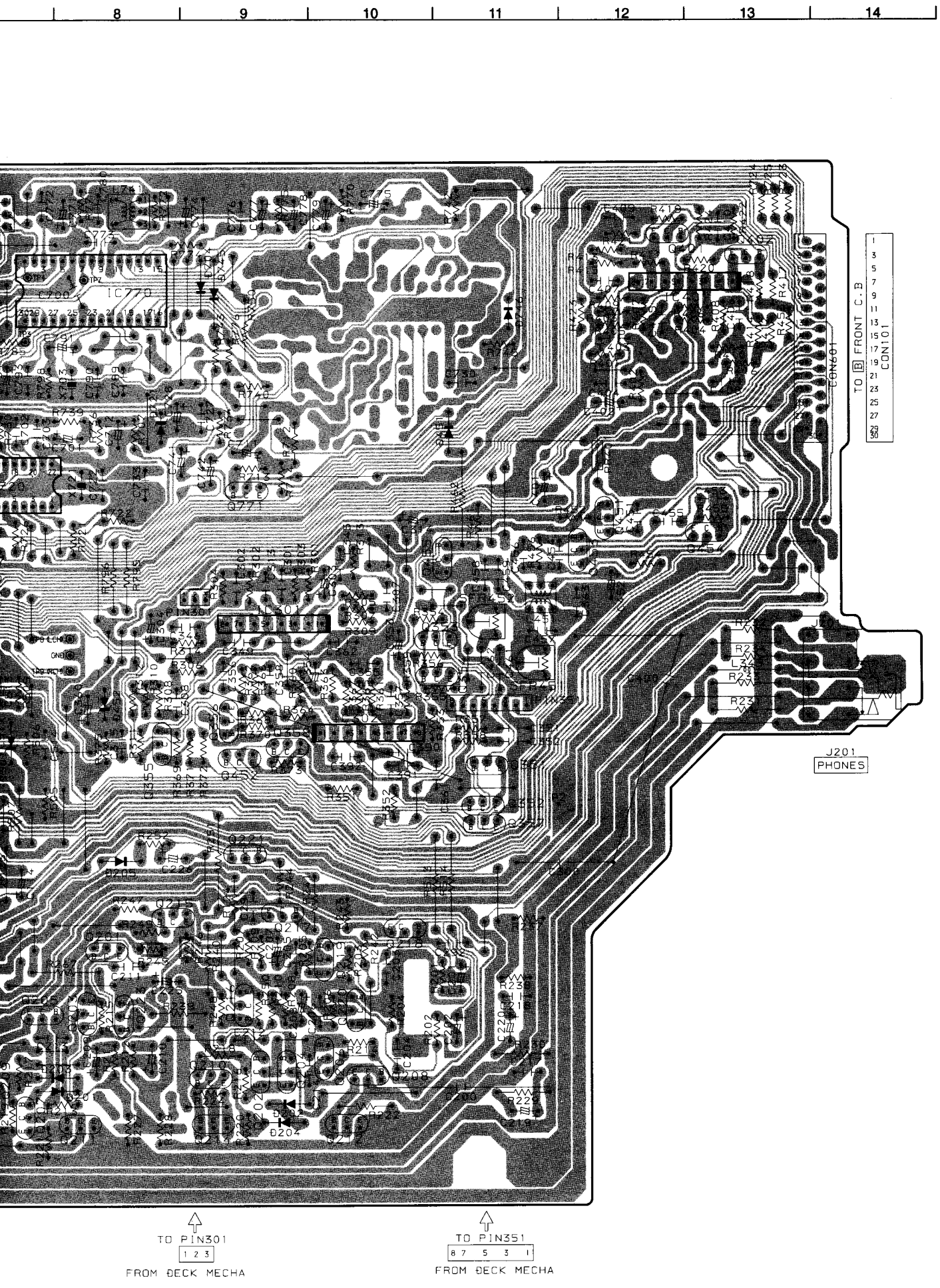
FROM B FRONT C.B CON
FUN-B
TPB
BIAS
O-FUNC-CD
FIL-1
FIL-2
-VFL
-23.15
T-HOLD
O-POWER
+VM
12.05
O-MUTE
D-GND
D-GND
+VM
A-GND
+VCC
A-GND
+VCC
IC720 LC72131D (Z)
PLL
X721 4.5MHz XTL
C722 15p
XIN
NC
CE
DI
CL
DO
8Hz
MONO
FM/SW
MW
IFC
R721 18k
R722 18k
R720 33k
R700 150k
FM/SW
FM/MW
R723 22k
R724 22k
R725 22k
R726 10k
R727 10k
R733 1k
R714 220
R712 12k
C711 47/25
DECOD
IC770 LA1
TU-L
TU-R
C741 1/50
C742 1/50
R795 5.6k
R796 5.6k
C789 0.027
C790 0.027
R798 10k
C791 1/50
X703 VIB,CER CMU2-456A15
C700 2700p
C793 8200p
C794 47/25
C795 0.047
C796 3.3/50
R905 470
R749 3.3k
SFR722 10K B
TP2
DET OUT
AM LOW OUT
AGC
AMRF
S-CURVE
AMLO
AM LBO
VCO
AM
+VM
R507 120
R505 2.2k
R506 8.2k
R511 1.8k
C514 0.01
R515 100k
C507 1000p
R513 1k
C501 4700p
C503 0.022
C505 1/50
C518 0.01
R504 47k
FUN-A
FUN-B
R503 47k
R521 1k
C515 1/50
R501 2.2k
C510 10/50
R525 100
10.41
C349 0.1
10.61
IC501 BU4052BC
FUNCTION SELECTOR
VDD
TUNER
CD
COM
AUX
TAPE
A
B
INH
VEE
GND
AUX R
CD R
TU-R
R510 22k
C511 47/25
R502 2.2k
C310 0.33/50
R318 1k
R522 1k
C516 1/50
R526 150k
R320 100k
C312 820p
C309 0.33/50
R317 1k
R319 100k
C311 820p
IC301 (1/2) BA4558N-DX
IC301 (2/2) BA4558N-DX
R302 100
R301 100
C346 47p
C345 47p
C302 1200p
C301 1200p
R304 330k
R303 330k
C304 100/10
C303 100/10
R314 68
R313 68
R306 390k
R305 390k
C308 8200p
R308 1.2k
R310 18k
R312 4.7k
C307 8200p
R307 1.2k
R309 18k
R311 4.7k
C314 47/25
P.B.AMP1 R
P.B.AMP1 L
C313 0.01
Q351~354 357, 358
REC/PB SW
DECK 2
PH R CH
L CH
CON301
PIN301
AZIMUTH ADJ
C315 0.022
C361 0.01
C362 0.01
C390 0.1
5.07
10.4
Q357 KTA1266 GR
Q351 KTA1266 GR
Q352 KTA1266 GR
Q353 KTA1266 GR
R353 10k
R357 100
C391 47p
IC302 (1/2) BA4558N-DX
Q355 KTA1266 GR
Q355, 356 DECK2 PB SW
R369 47k
R371 47k
R367 18k
R363 390k
C357 8200p
R365 1.2k
PB AMP2 L
R366 1.2k
PB AMP2 R
C358 8200p
R368 18k
R372 47k
R359 68
R361 68
C353 100/10
C355 0.068
C354 100/10
C356 0.068
R360 68
R362 68
C351 1200p
C352 1200p
R356 330k
R355 330k
R351 47
R352 47
R373 3.3k
DECK 1
PIN351
CON351
IC502 M62420SP
E-VR/SOUND CONTROL
SIMAMP2
SIMAMP1
VOLAMP2
VOLAMP1
TONE AMP2
TONE AMP1
VR1
VR2
VR3
VR4
VR5
VR6
CONTROL LOGIC
I²C BUS INTER FACE
D501 MTZJ9.1C
C512 47/25
R508 4.7k
R509 4.7k
C513 470/10
4.65
C504 0.022
C506 1/50
C502 4700p
R512 1.8k
R517 120k
R516 10k
R518 10k
R519 120k
R514 1k
O-E.VR DATA
O-E.VR CLK
+VCC
D451 1N4148
R419 2.2k
Q401 KTC3198GR
R462 4.7k
R423 18k
R461 10k
R413 2.2k
IC401 (1/2) BA4558N-DX
R403 1k
R401 56k
C401 1/50
R407 1k
R411 6.8k
D-GND
A-GND


AM
L941, TC942 LW TRACKING ADJ
MW TRACKING ADJ
L981 (1/3) AM PACK 1
L981 (3/3) AM PACK 1
AM PACK 1
Q947 2SK439 E/F AM RF AMP
Q948 2SC2785 F AGC SW
Q946, 948 LW BAND SW
Q946 2SC2001 K
L942 05C LW
LW VT ADJ
L941 ANT LW
AUTO STOP LEVEL ADJ
TP3
TP2 CLK
J203 VIDEO/AUX
AUX L
AUX R
CON602
L CH
A-GND
R CH
FUNC-CD
D-FUNC-CD
D-GND
VM
FROM 3CD C.B
J201 PHONES
J202 SPEAKERS
E-VR/SOUND CONTROL
IC502 M62420SP
CONTROL LOGIC
I²C BUS INTER FACE
TONE AMP1
TONE AMP2
Q219, 220 MUTE
Q223 -VCC SUPPLY
Q201 ~ 214 POWER AMP
Q215, 216 OVER LOAD DET
Q218 DTA144WS MUTE SW
Q105 -VFL VOLTAGE CONST
Q106 HOLD
Q107, 108 AC DET
Q217, 221 POWER SWITCH
L-IN
R-IN
D-POWER
D-MUTE
T-HOLD
-VCC
-VFL
+VCC
+VM
-VP
ST-BY:27.1 ON:26.7
ST-BY:-28.1 ON:-27.7
-18.45
-24.7
-28.9
-23.1
12.19
C AC1 C.B
F101 315mA 250VT
CL2 TP00351
CL1 TP00351
WH101
WH102
W101
FIL-2 AC3.8V
FIL-1
TF

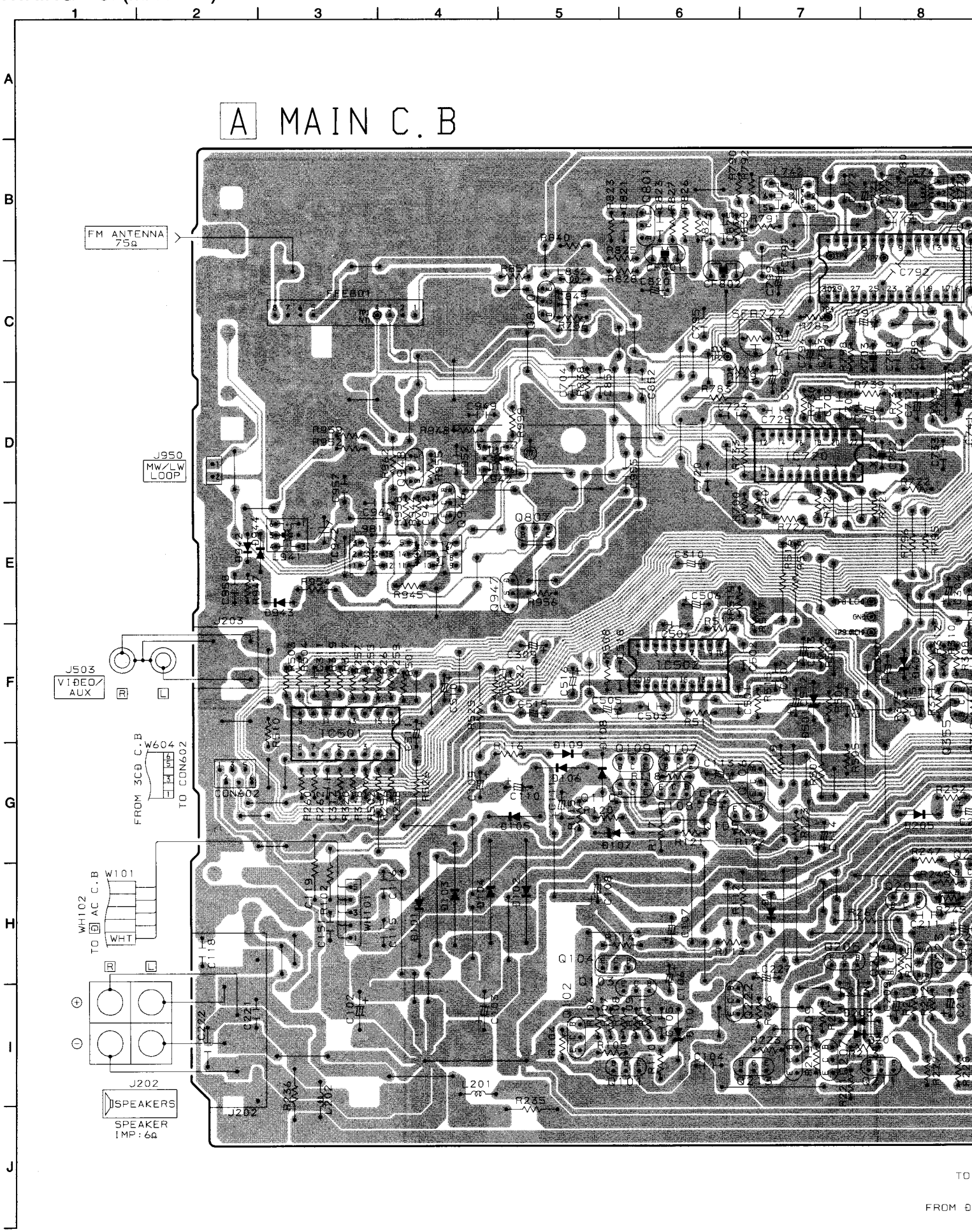

DECK 2
PH
R CH
L CH
CON301
PIN301
AZIMUTH ADJ
DECK 1
RPH
R CH
L CH
EH
CON351
PIN351
AZIMUTH ADJ
P.B.AMP1 R
P.B.AMP1 L
Q351~354
357, 358
REC/PB SW
IC301 (2/2)
4 BA4558N-DX
AUX R
CD R
TU-R
IC302 (1/2)
BA4558N-DX
IC302 (2/2)
BA4558N-DX
Q355
KTA1266
GR
Q355, 356
DECK2 PB SW
Q357
KTA1266
GR
Q351
KTA1266
GR
Q353
KTA1266
GR
Q352
KTA1266
GR
Q354
KTA1266
GR
Q358
DTC144
ES
Q356
KTA1266GR
PB AMP2 L
PB AMP2 R
O-E.VR DATA
O-E.VR CLK
+VCC
+VM
D1 1N4148
Q401
KTC3198GR
Q402
KTC3198GR
IC401 (1/2)
BA4558N-DX
IC401 (2/2)
BA4558N-DX
IC401
REC AMP
Q401, 402
REC AMP SW
SFR451, 452
REC/PB FREQUENCY RESPONCE ADJ
REC:7.03
Q451 KTC3198GR
BIAS OSC SW
PR401
0.25A
Q452
DTC143XS
Q453, 454 DTC143XS
BIAS OSC
L451
BIAS 85K
Q455 KTC3198GR
Q453
KTC3198GR
Q454
KTC3198GR
VOLAMP2
VOLAMP1
TONE
AMP1
SIMAMP1
CONTROL
LOGIC
I²C BUS
INTER
FACE
IC502 M62420SP
TP8
TP9
GND
D-GND
A-GND

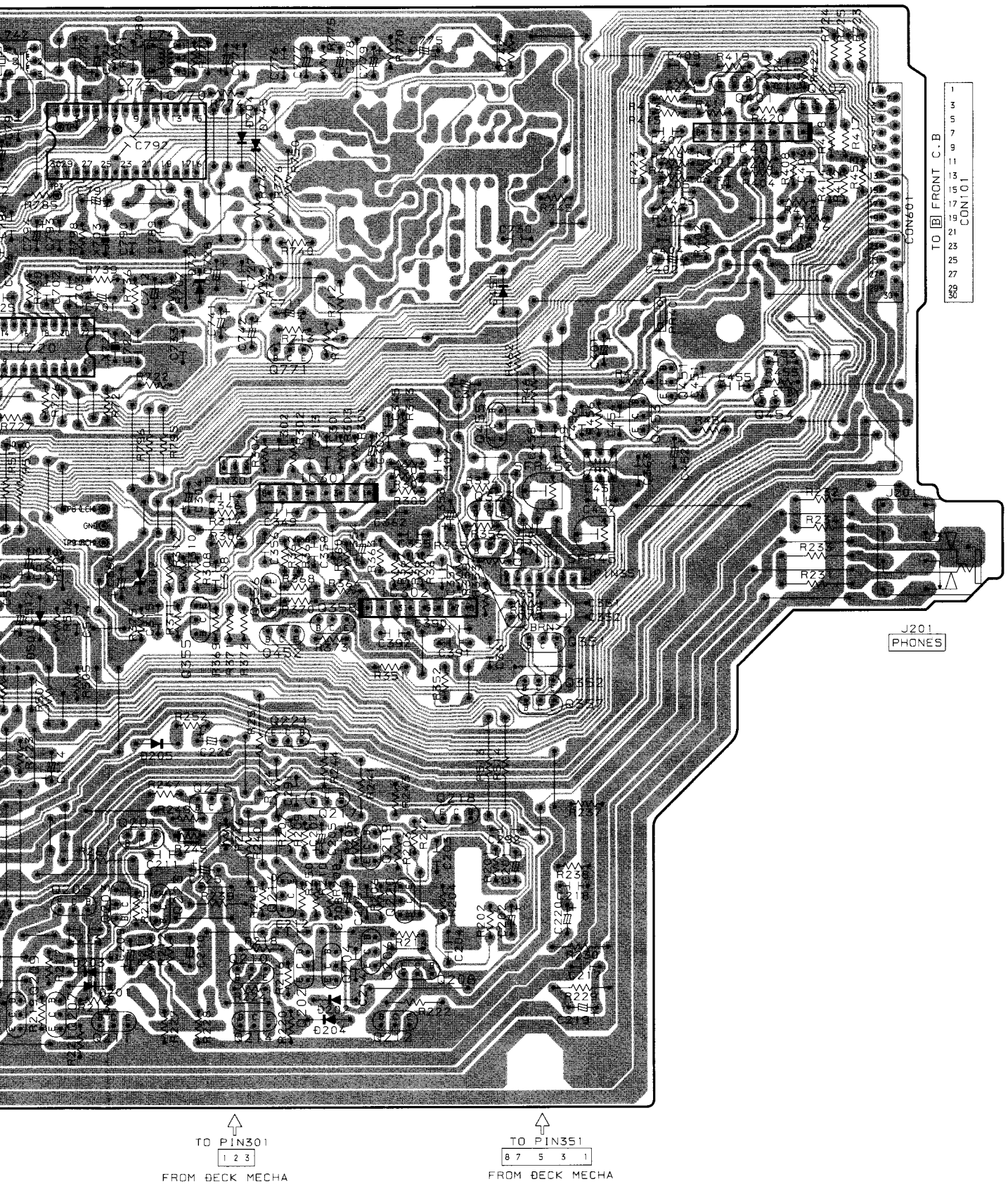

CONTROL LOGIC
IC502 M62420SP
I²C BUS INTER FACE
TONE AMP1
AMP2
IC401 REC AMP
Q218 DTA144WS MUTE SW
Q215, 216 OVER LOAD DET
Q201 ~ 214 POWER AMP
Q217 DTC144ES
Q221 KTA1266GR
Q217, 221 POWER SWITCH
Q105 KTA1266 GR
Q105 -VFL VOLTAGE CONST
Q106 HOLD
Q107, 108 AC DET
Q109, 110 DC DET
Q104 CSB1489B +VCC VOLTAGE CONSTANT
Q101~103 +VM VOLTAGE CONST
Q101 2SB1370E
Q102 KTC3198GR
Q103 KTC3198 GR
Q206 KTA1266 GR
Q208 KTC3198 GR
Q212 2SD2061E
Q210 KTA1266 GR
Q214 2SD2061 E
Q202 KTC3198 GR
Q204 KTC3198 GR
Q216 KTC3198 GR
Q215 KTC3198 GR
Q106 KTC3198GR
Q107 KTC3198GR
Q109 KTC3198GR
Q110 KTA1266GR
Q108 KTA1266GR
ST-BY:27.1 ON:26.7
ST-BY:-28.1 ON:-27.7
-24.7
-23.1
11.9
10.6
O-POWER
O-MUTE
I-HOLD
-VFL
+VM
+VCC
-VCC
D-GND
A-GND
GND
TP8
TP9
J202 SPEAKERS
(L)
(R)
WH101
WH102
W101
PT101 PT, 7NF9-EKZ
FIL-1
FIL-2 AC3.8V
F101 315mA 250VT
TP00351
TP00351
AC 230V 50HZ
C AC1 C.B
D AC2 C.B
SIGNAL
PB/FM
REC/MW


A MAIN C.B
J802
TFM
75Ω
MW/LW
J503
VIDEO/
AUX
R
L
FROM 3CB C.B
W604
TO CON602
W101
WH102
TO AC C.B
WHT
J202
SPEAKERS
SPEAKER
IMP : 6Ω
IC770
IC720
IC502
TO PIN
12
FROM DECK

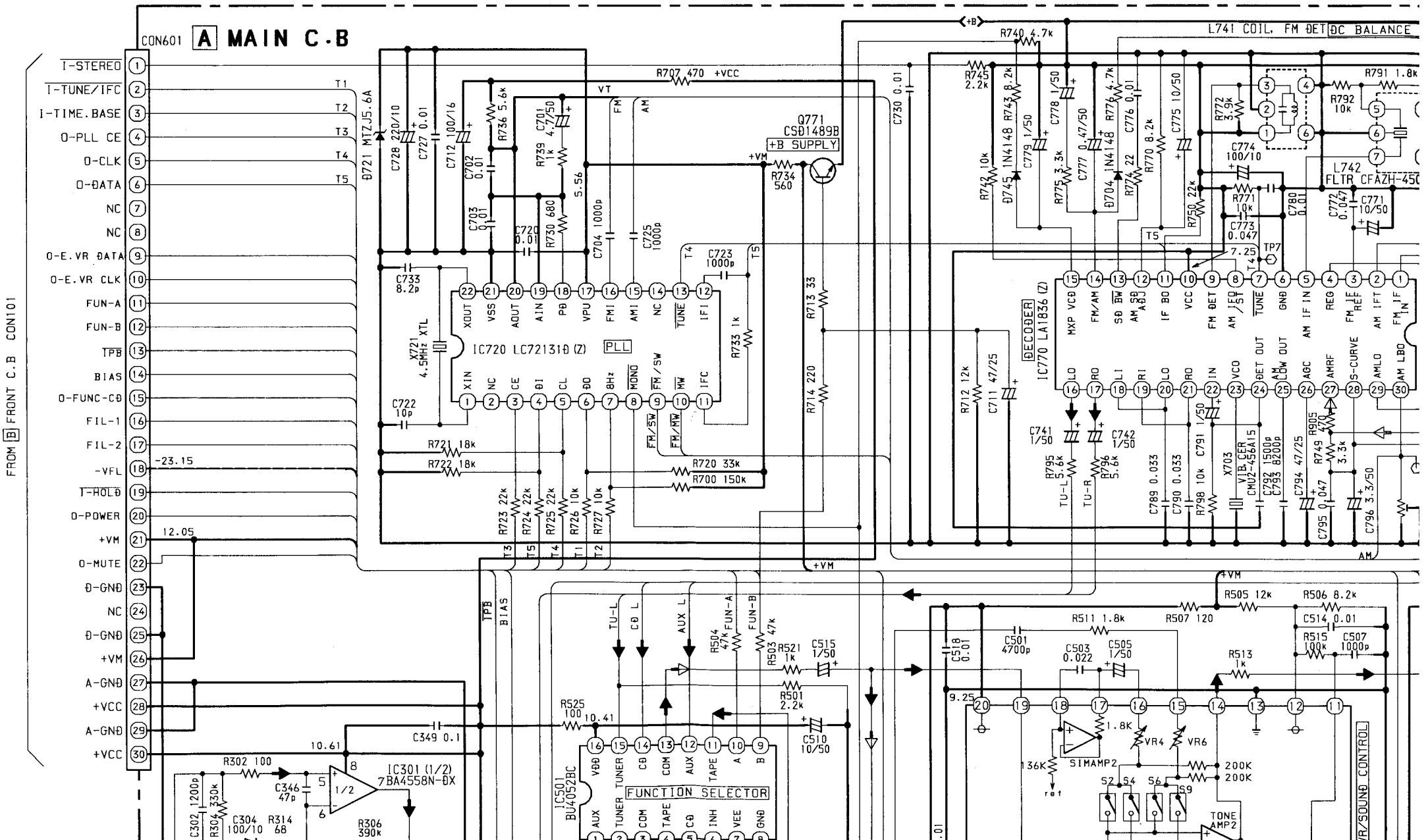

8
9
10
11
12
13
14
TO B FRONT C.B
CON101
CON601
J201
PHONES
TO PIN301
1 2 3
FROM DECK MECHA
TO PIN351
8 7 5 3 1
FROM DECK MECHA

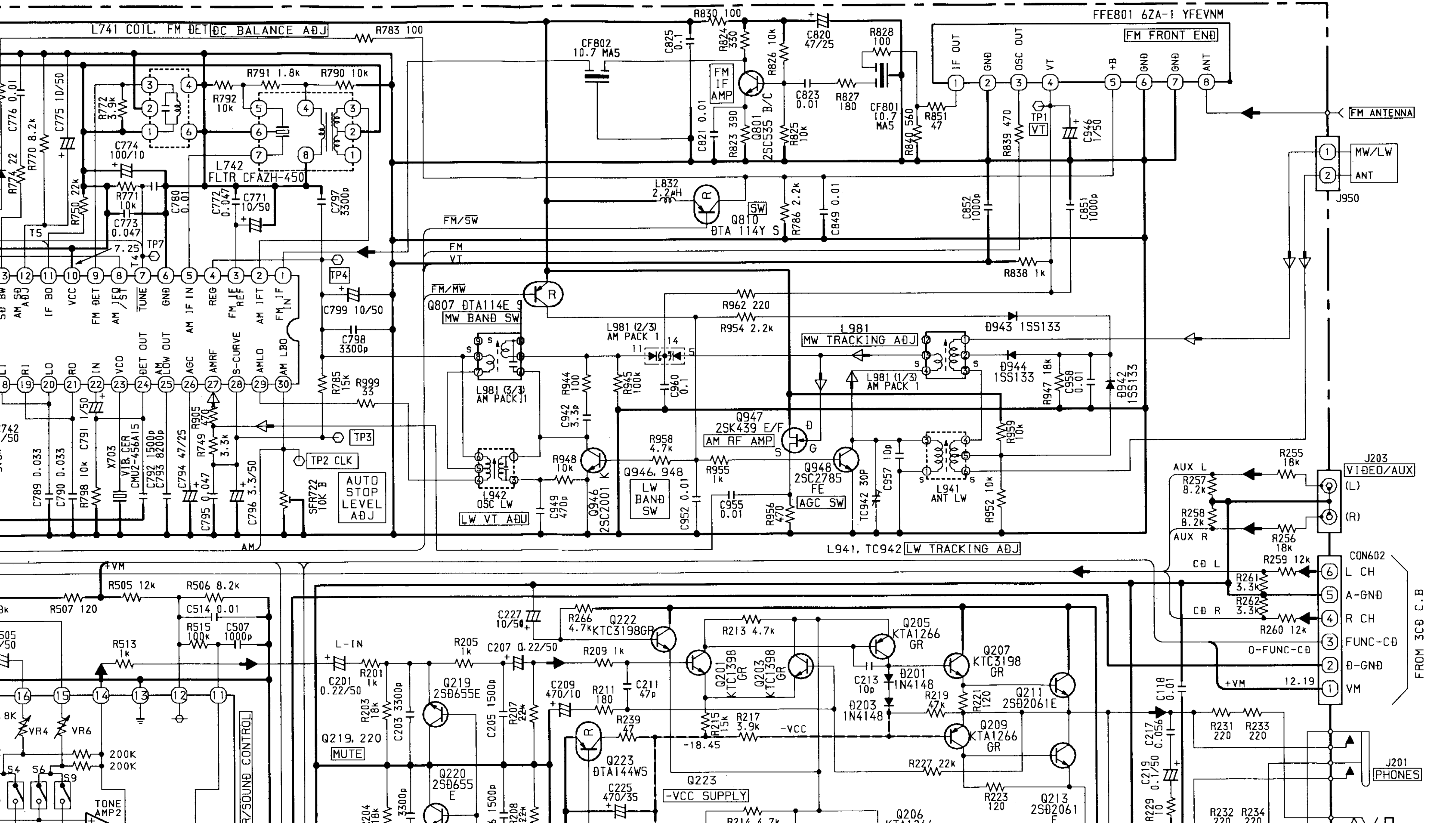
WIRING – 5 (MAIN : V)

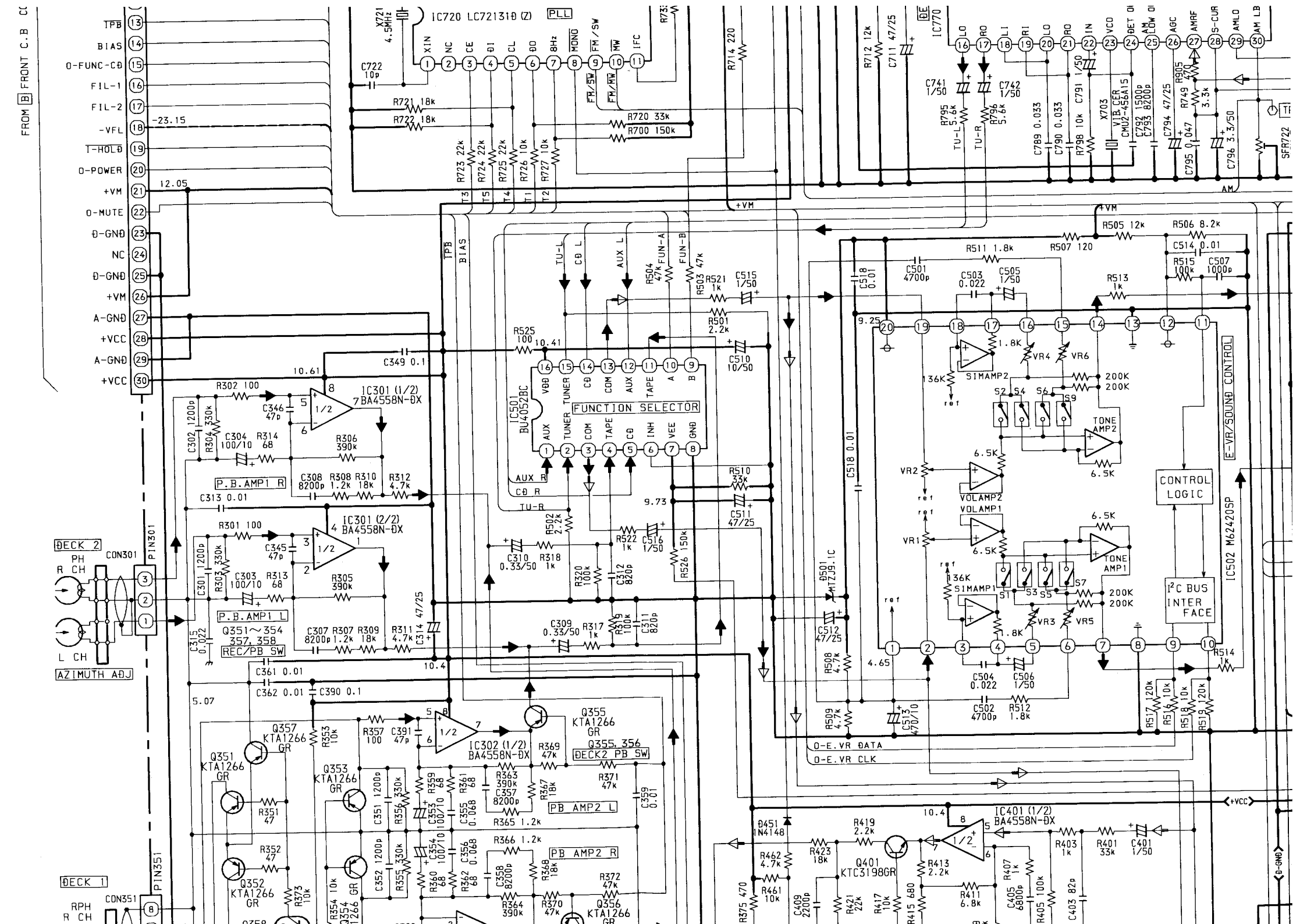


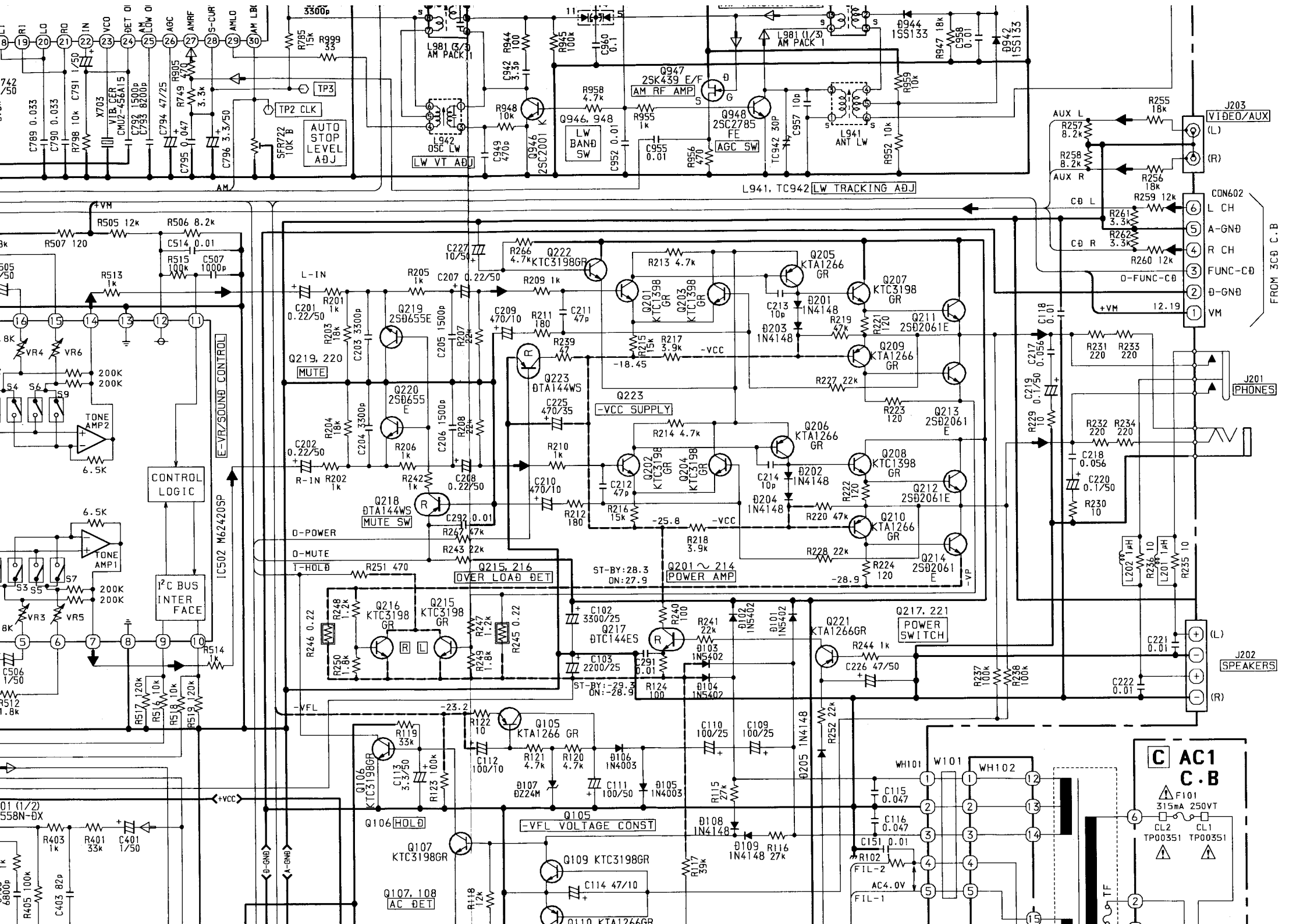

7
8
9
10
11
12
13
14
TO B FRONT C.B
CON101
CON601
J201
PHONES
TO PIN301
1 2 3
FROM DECK MECHA
TO PIN351
8 7 5 3 1
FROM DECK MECHA

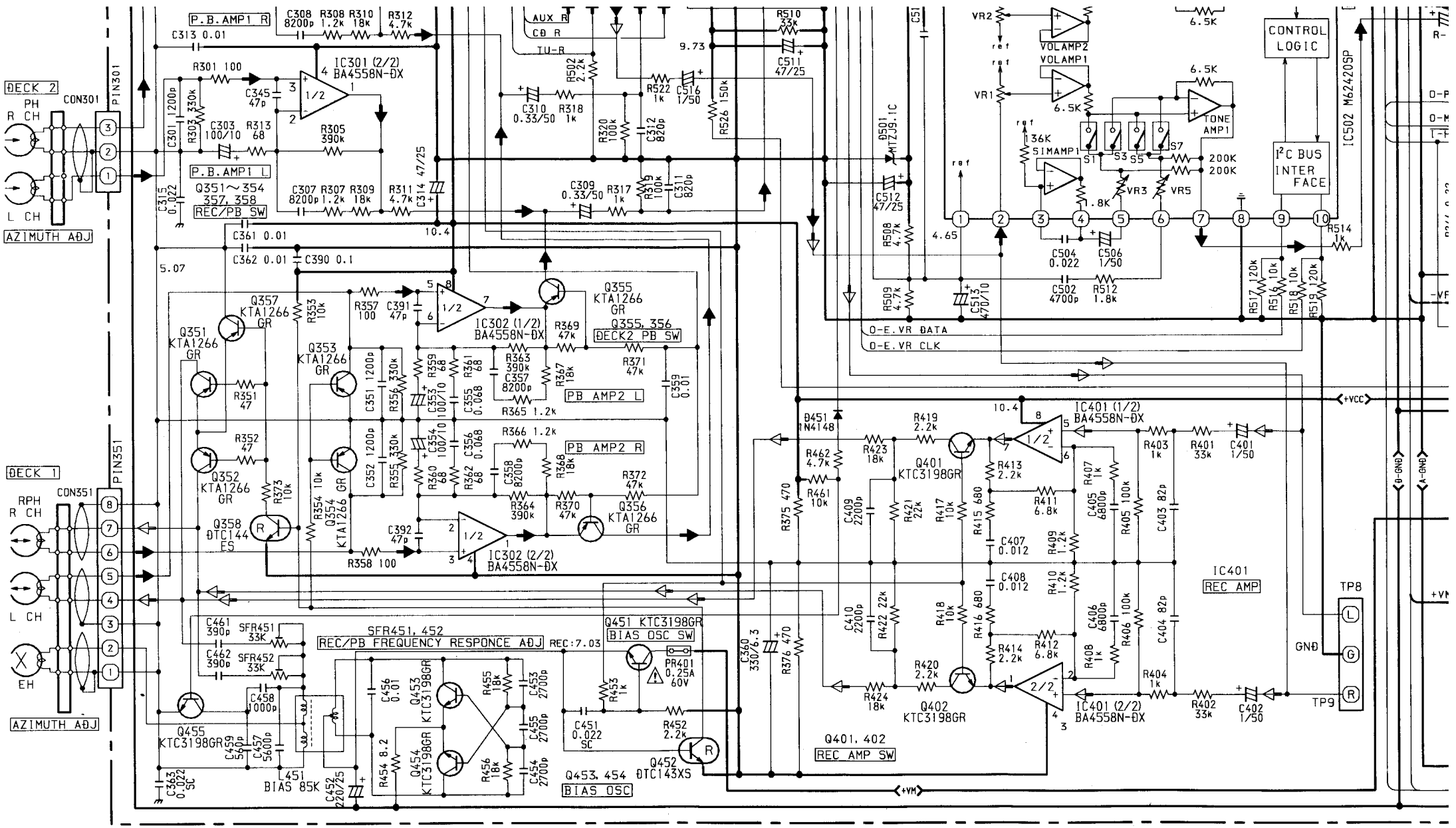
SCHEMATIC DIAGRAM – 5 (MAIN : V)

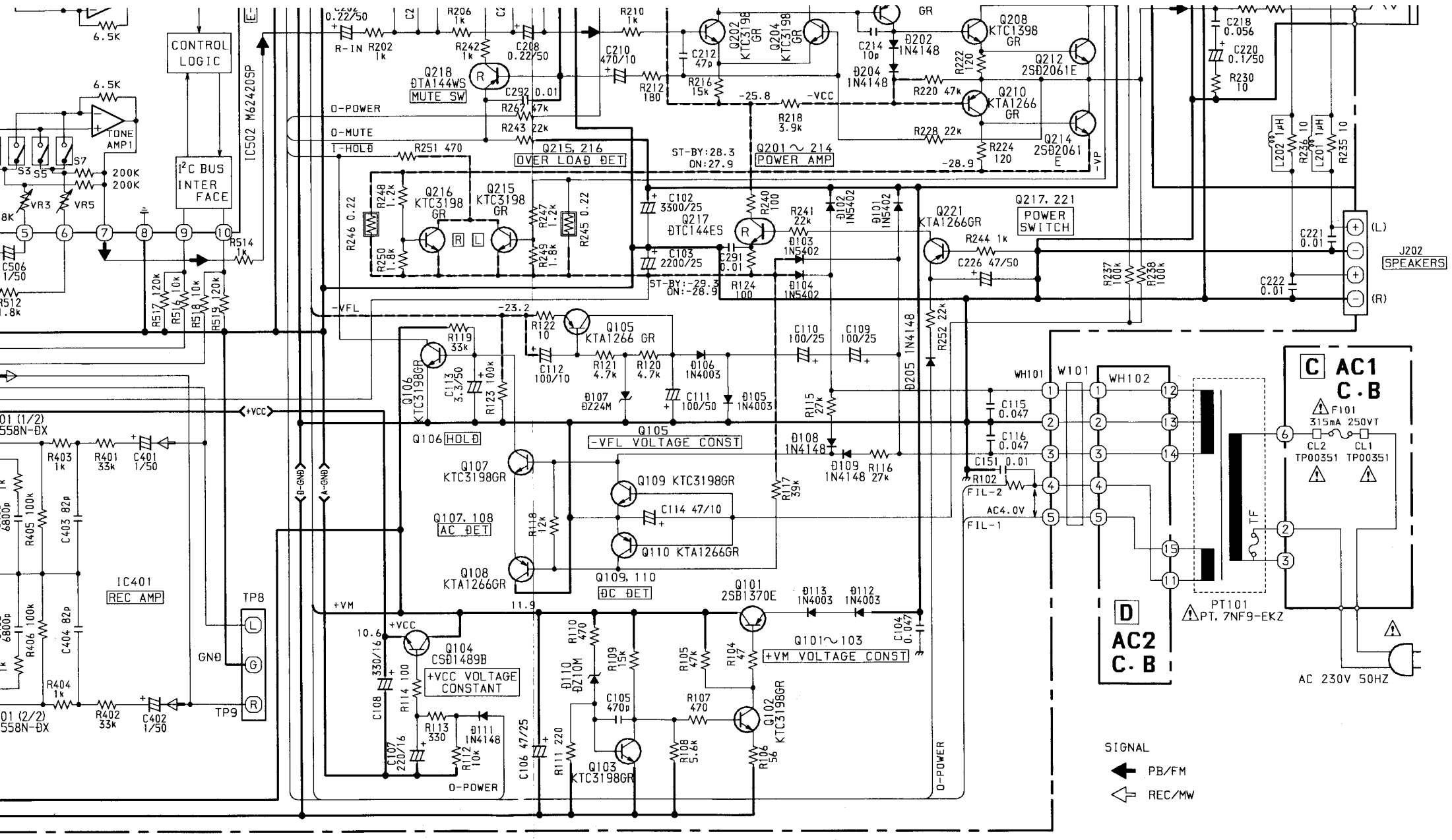



FFE801 6ZA-1 YFEVNM
FM FRONT END
IF OUT
GND
OSC OUT
VT
+B
ANT
FM ANTENNA
MW/LW
J950
L741 COIL, FM DET
DC BALANCE ADJ
R783 100
R830 100
CF802 10.7 MA5
C825 0.1
R824 330
R826 10k
C820 47/25
R828 100
FM IF AMP
Q801 2SC535 B/C
C823 0.01
R827 180
CF801 10.7 MA5
R851 47
R840 560
R825 10k
R823 390
C821 0.01
R839 470
TP1
C946 1/50
R791 1.8k
R790 10k
R792 10k
R772 3.9k
C776 0.01
C775 10/50
R770 8.2k
R774 22
C774 100/10
R771 10k
C773 0.047
R750 22k
C780 0.01
L742 FLTR CFAZH-450
C772 0.047
C771 10/50
C797 3300p
L832 2.2µH
Q810 DTA 114Y S
SW
R786 2.2k
C849 0.01
C852 1000p
C851 1000p
FM/SW
FM
VT
R838 1k
TP7
7.25
TP4
FM/MW
Q807 DTA114E S
MW BAND SW
C799 10/50
C798 3300p
R962 220
R954 2.2k
L981 (2/3) AM PACK 1
L981
MW TRACKING ADJ
D943 1SS133
D944 1SS133
R947 18k
C958 0.01
D942 1SS133
L981 (1/3) AM PACK 1
L981 (3/3) AM PACK 1
R944 100
R945 100k
C960 0.1
R785 15k
R999 33
C942 3.3p
Q947 2SK439 E/F
AM RF AMP
R959 10k
TP3
R958 4.7k
R948 10k
L942 OSC LW
LW VT ADJ
Q946, 948
LW BAND SW
R955 1k
Q948 2SC2785 FE
AGC SW
C957 10p
L941 ANT LW
R952 10k
C949 470p
Q946 2SC2001 K
C952 0.01
C955 0.01
R956 470
TC942 30P
TP2 CLK
AUTO STOP LEVEL ADJ
SFR722 10K B
C789 0.033
C790 0.033
R798 10k
X703 VIB.CER CMU2-456A15
C792 1500p
C793 8200p
C794 47/25
C795 0.047
R749 3.3k
R905 470
C796 3.3/50
C791 1/50
AM
L941, TC942 LW TRACKING ADJ
J203 VIDEO/AUX
AUX L
AUX R
R255 18k
R256 18k
R257 8.2k
R258 8.2k
CON602
CD L
CD R
R259 12k
R260 12k
R261 3.3k
R262 3.3k
L CH
A-GND
R CH
FUNC-CD
D-GND
VM
D-FUNC-CD
+VM
12.19
FROM 3CD C.B
+VM
R505 12k
R506 8.2k
R507 120
C514 0.01
R515 100k
C507 1000p
R513 1k
VR4
VR6
200K
S4
S6
S9
TONE AMP2
SOUND CONTROL
L-IN
C201 0.22/50
R201 1k
R203 18k
C203 3300p
Q219 2SD655E
Q219, 220 MUTE
Q220 2SD655 E
R205 1k
C207 0.22/50
C205 1500p
R207 22k
C227 10/50
R266 4.7k
Q222 KTC3198GR
R209 1k
C209 470/10
R211 180
C211 47p
R239 47
Q223 DTA144WS
C225 470/35
Q223 -VCC SUPPLY
R213 4.7k
Q201 KTC1398 GR
Q203 KTC1398 GR
R215 15k
R217 3.9k
-VCC
-18.45
Q205 KTA1266 GR
C213 10p
D201 1N4148
D203 1N4148
R219 47k
R221 120
Q207 KTC3198 GR
Q209 KTA1266 GR
Q211 2SD2061E
R227 22k
R223 120
Q213 2SD2061 E
R214 4.7k
Q206
C118 0.01
C217 0.056
C219 0.1/50
R229 10
R231 220
R233 220
R232 220
R234 220
J201 PHONES

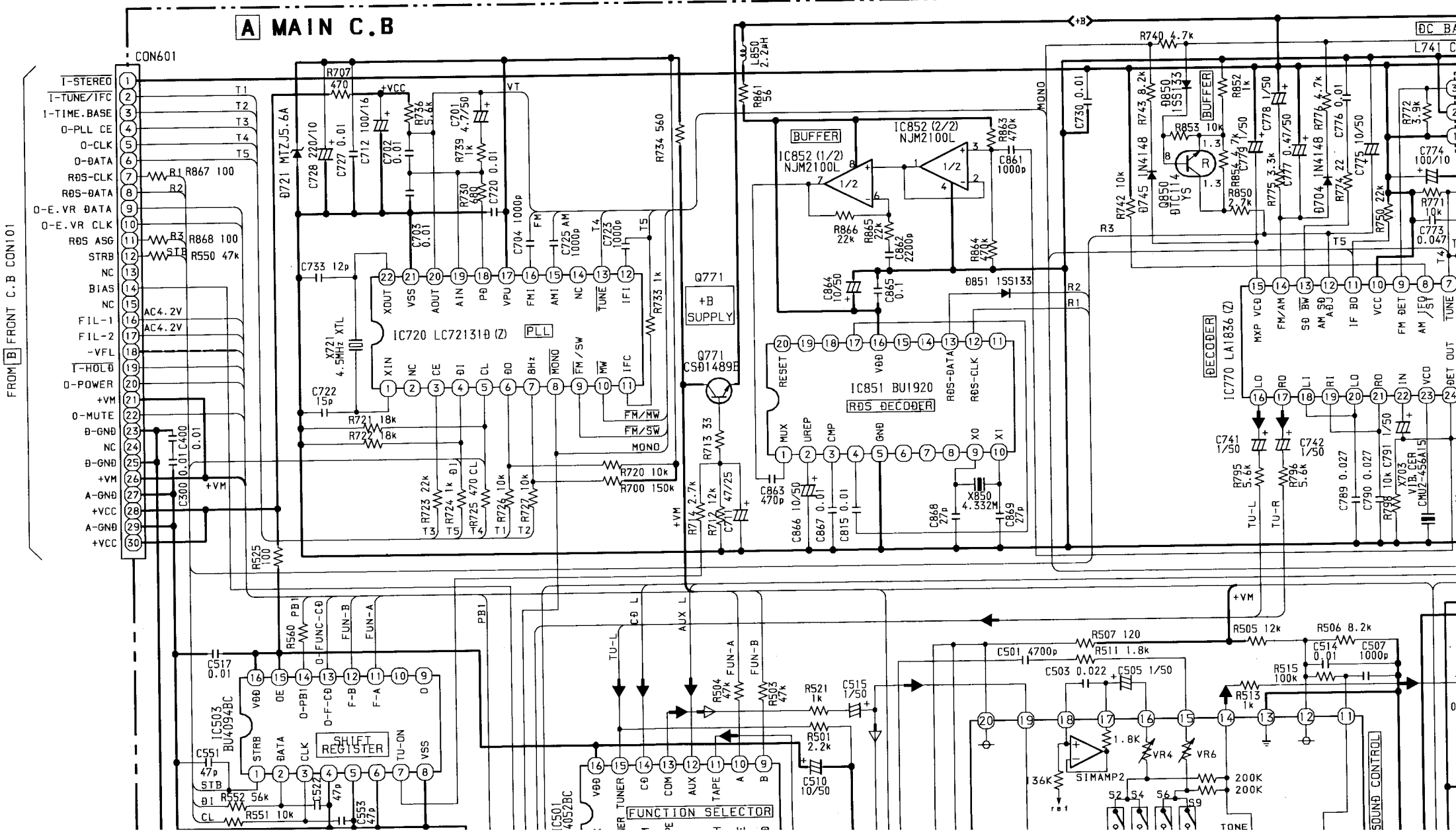

FROM B FRONT C.B
TPB
BIAS
O-FUNC-CD
FIL-1
FIL-2
-VFL
-23.15
T-HOLD
O-POWER
+VM
12.05
O-MUTE
D-GND
NC
D-GND
+VM
A-GND
+VCC
A-GND
+VCC
PLL
IC720 LC72131D (Z)
X721 4.5MHz
XIN
NC
CE
DI
CL
DO
8Hz
MONO
FM/SW
MW
IFC
C722 10p
R721 18k
R722 18k
R720 33k
R700 150k
R723 22k
R724 22k
R725 22k
R726 10k
R727 10k
R714 220
R712 12k
C711 47/25
IC770
LO
RO
LI
RI
LO
RO
IN
VCO
DET OUT
AM LOW OUT
AGC
AMRF
S-CURVE
AMLO
AM LB
C741 1/50
C742 1/50
R795 5.6k
R796 5.6k
TU-L
TU-R
C789 0.033
C790 0.033
R798 10k
C791 1/50
X703
VIB.CER CMU2-456A15
C792 1500p
C793 8200p
R749 3.3k
R905 470
C794 47/25
C795 0.047
C796 3.3/50
SFR722
AM
+VM
R505 12k
R506 8.2k
R511 1.8k
R507 120
C514 0.01
R515 100k
C507 1000p
C501 4700p
C503 0.022
C505 1/50
R513 1k
C518 0.01
9.25
E-VR/SOUND CONTROL
SIMAMP2
VR4
VR6
1.8K
36K
ref
200K
200K
S2
S4
S6
S9
TONE AMP2
6.5K
VR2
VOLAMP2
CONTROL LOGIC
VOLAMP1
VR1
TONE AMP1
SIMAMP1
S1
S3
S5
S7
VR3
VR5
I²C BUS INTER FACE
IC502 M62420SP
R514 1k
C504 0.022
C506 1/50
C502 4700p
R512 1.8k
R517 120k
R518 10k
R519 120k
4.65
R508 4.7k
R509 4.7k
C513 470/10
C512 47/25
R501 MTZJ9.1C
O-E.VR DATA
O-E.VR CLK
IC501 BU4052BC
FUNCTION SELECTOR
VDD
TUNER
TUNER
CD
COM
AUX
TAPE
A
B
AUX
TUNER
COM
TAPE
CD
INH
VEE
GND
AUX R
CD R
TU-R
TU-L
CD L
AUX L
FUN-A
FUN-B
R504 47k
R503 47k
R521 1k
C515 1/50
R501 2.2k
R525 100
10.41
C510 10/50
C349 0.1
10.61
R302 100
IC301 (1/2) 7BA4558N-DX
C346 47p
C302 1200p
R304 330k
C304 100/10
R314 68
R306 390k
P.B.AMP1 R
C308 8200p
R308 1.2k
R310 18k
R312 4.7k
C313 0.01
R301 100
IC301 (2/2) 4 BA4558N-DX
C345 47p
C301 1200p
R303 330k
C303 100/10
R313 68
R305 390k
P.B.AMP1 L
Q351~354 357, 358 REC/PB SW
C307 8200p
R307 1.2k
R309 18k
R311 4.7k
C314 47/25
C315 0.022
AZIMUTH ADJ
DECK 2
PH
R CH
L CH
CON301
PIN301
C361 0.01
C362 0.01
C390 0.1
5.07
R502 2.2k
R522 1k
C516 1/50
R526 150k
C310 0.33/50
R318 1k
R320 100k
C312 820p
C309 0.33/50
R317 1k
R319 100k
C311 820p
9.73
R510 33k
C511 47/25
10.4
IC302 (1/2) BA4558N-DX
R353 10k
R357 100
C391 47p
Q357 KTA1266 GR
Q351 KTA1266 GR
Q353 KTA1266 GR
Q355 KTA1266 GR
Q355, 356 DECK2 PB SW
R369 47k
R371 47k
R363 390k
R367 18k
C357 8200p
R365 1.2k
PB AMP2 L
C359 0.01
R351 47
R352 47
R373 10k
R354 10k
Q352 KTA1266 GR
C351 1200p
R356 330k
C353 100/10
R359 68
R361 68
C355 0.068
C352 1200p
R355 330k
C354 100/10
R360 68
R362 68
C356 0.068
R366 1.2k
C358 8200p
R368 18k
PB AMP2 R
R364 390k
R370 47k
R372 47k
Q356 KTA1266 GR
DECK 1
RPH
R CH
CON351
PIN351
D451 1N4148
R462 4.7k
R423 18k
R419 2.2k
Q401 KTC3198GR
R413 2.2k
R461 10k
R411 6.8k
R375 470
C409 2200p
R421 22k
R417 10k
R415 680
C405 6800p
R405 100k
C403 82p
R407 1k
IC401 (1/2) BA4558N-DX
R403 1k
R401 33k
C401 1/50
+VCC
D-GND

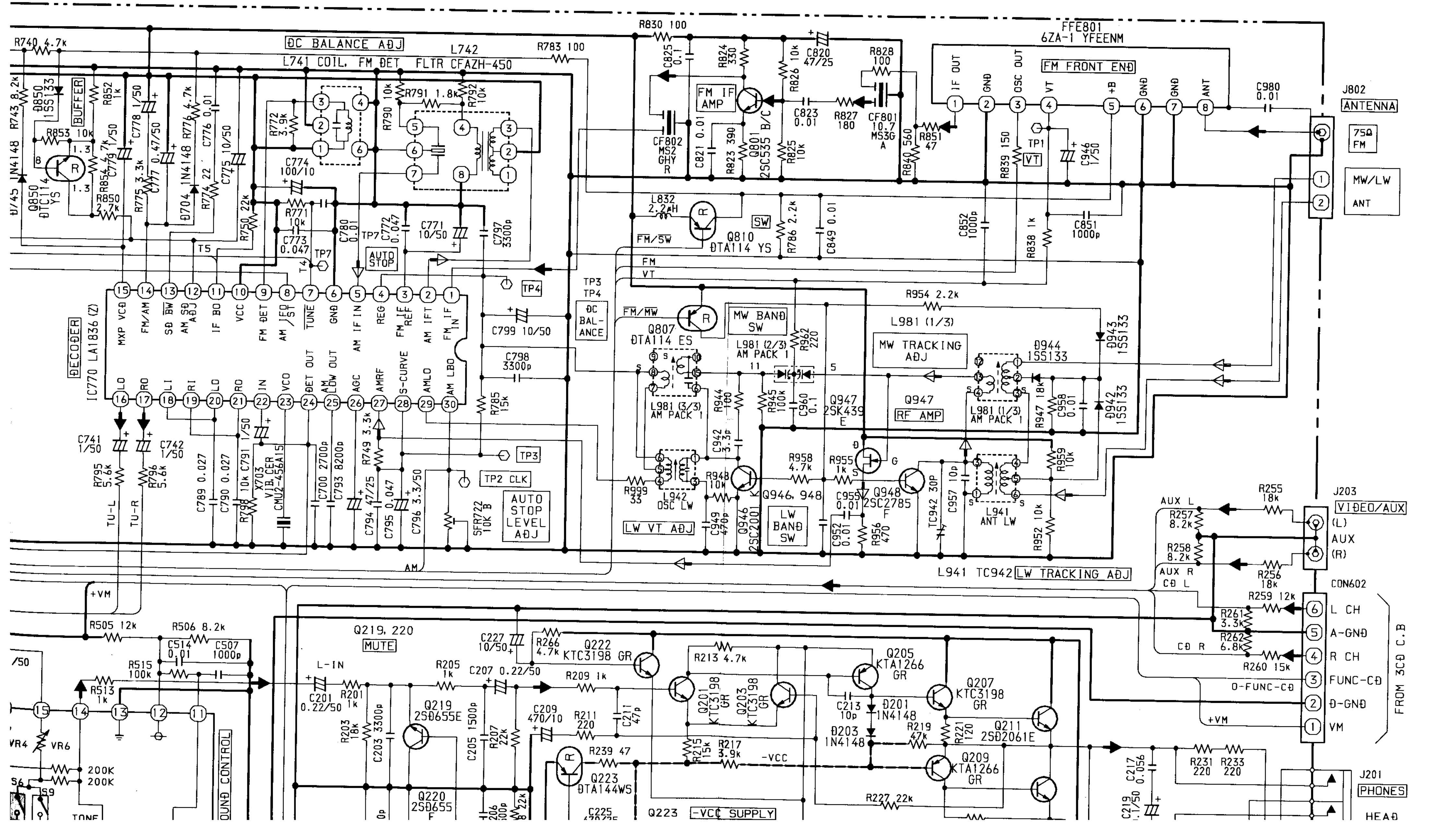

AUTO STOP LEVEL ADJ
TP3
TP2 CLK
L981 (3/3) AM PACK 1
L942 OSC LW
LW VT ADJ
Q946, 948 LW BAND SW
Q947 2SK439 E/F AM RF AMP
Q948 2SC2785 FE AGC SW
L941 ANT LW
L941, TC942 LW TRACKING ADJ
L981 (1/3) AM PACK 1
J203 VIDEO/AUX
AUX L
AUX R
CD L
CD R
CON602
L CH
A-GND
R CH
FUNC-CD
D-GND
VM
FROM 3CD C.B
J201 PHONES
J202 SPEAKERS
E-VR/SOUND CONTROL
IC502 M62420SP
CONTROL LOGIC
I²C BUS INTER FACE
TONE AMP1
TONE AMP2
Q219, 220 MUTE
Q223 -VCC SUPPLY
Q218 DTA144WS MUTE SW
Q215, 216 OVER LOAD DET
Q201 ~ 214 POWER AMP
ST-BY:28.3 ON:27.9
ST-BY:-29.3 ON:-28.9
Q217 DTC144ES
Q221 KTA1266GR
Q217, 221 POWER SWITCH
Q105 -VFL VOLTAGE CONST
Q106 HOLD
Q107, 108 AC DET
D-POWER
D-MUTE
I-HOLD
-VFL
+VCC
-VCC
+VM
-VP
C AC1 C.B
F101 315mA 250VT
CL2 TP00351
CL1 TP00351
WH101
WH102
W101
FIL-2
FIL-1
AC4.0V
TF

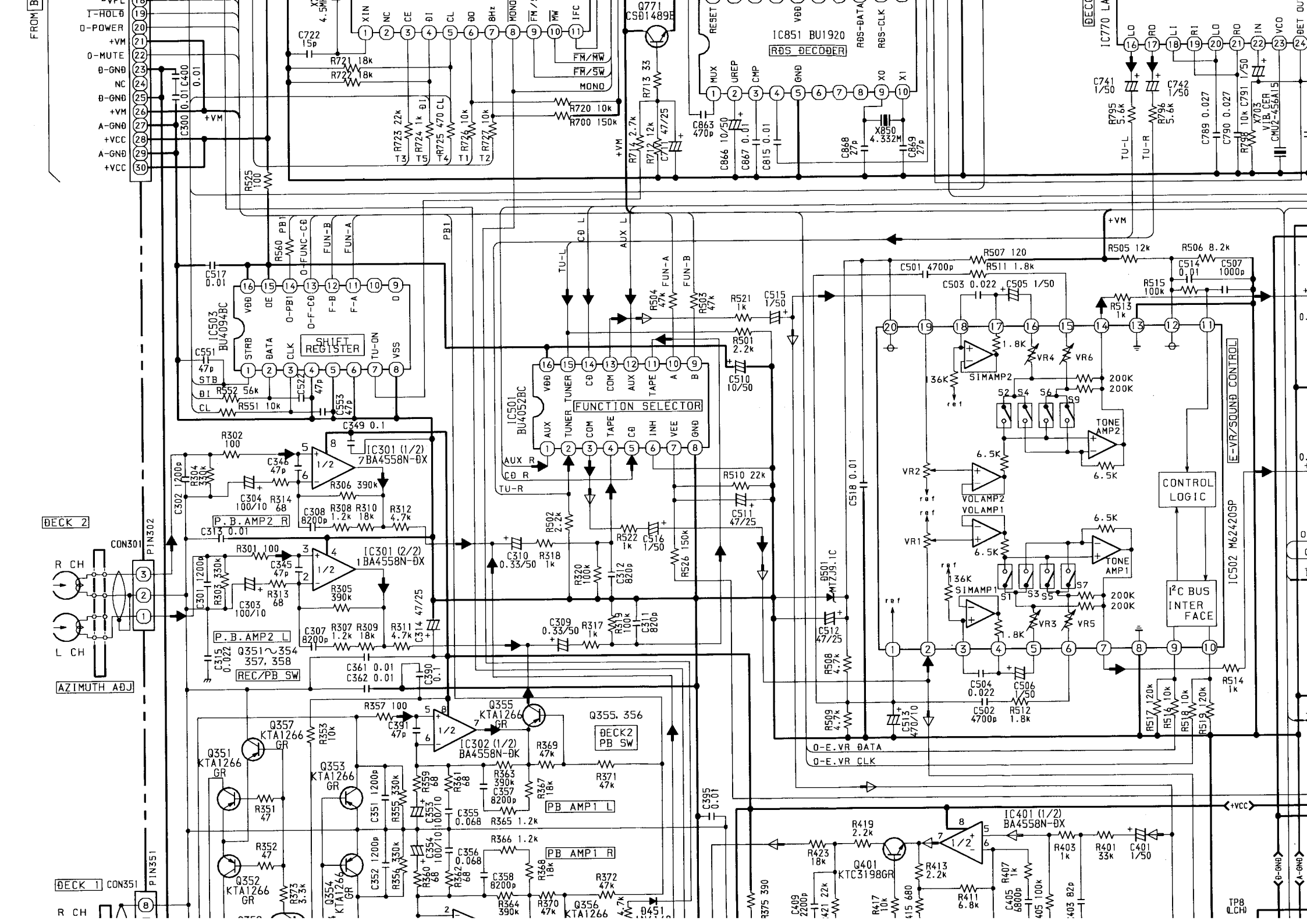

DECK 2
PH
R CH
L CH
AZIMUTH ADJ
CON301
PIN301
P.B.AMP1 R
P.B.AMP1 L
REC/PB SW
IC301 (2/2)
4 BA4558N-DX
Q351~354
357, 358
C308 8200p
R308 1.2k
R310 18k
R312 4.7k
C313 0.01
R301 100
C345 47p
R305 390k
C303 100/10
R303 330k
C301 1200p
C315 0.022
C307 8200p
R307 1.2k
R309 18k
R311 4.7k
C314 47/25
C361 0.01
C362 0.01
C390 0.1
AUX R
CD R
TU-R
R502 2.2k
C310 0.33/50
R318 1k
R320 100k
C312 820p
R522 1k
C516 1/50
R526 150k
C309 0.33/50
R317 1k
R319 100k
C311 820p
R510 33k
C511 47/25
C512 47/25
D501 MTZJ9.1C
R508 4.7k
R509 4.7k
C513 470/10
VR2
VOLAMP2
VOLAMP1
VR1
6.5K
TONE AMP1
SIMAMP1
36K
S1
S3
S5
S7
200K
200K
VR3
VR5
1.8K
CONTROL LOGIC
I²C BUS INTER FACE
IC502 M62420SP
C504 0.022
C506 1/50
C502 4700p
R512 1.8k
R514 1k
R517 120k
R516 10k
R518 10k
R519 120k
O-E.VR DATA
O-E.VR CLK
Q355
KTA1266
GR
Q355, 356
DECK2 PB SW
Q357
KTA1266
GR
Q351
KTA1266
GR
Q353
KTA1266
GR
IC302 (1/2)
BA4558N-DX
R357 100
C391 47p
R353 10k
R369 47k
R371 47k
R359 68
R361 68
R363 390k
C357 8200p
R365 1.2k
C355 0.068
C353 100/10
R351 47
PB AMP2 L
C359 0.01
R366 1.2k
PB AMP2 R
R352 47
Q352
KTA1266
GR
Q354
KTA1266
GR
Q358
DTC144
ES
R373 10k
R354 10k
R360 68
R362 68
C358 8200p
R368 18k
R372 47k
R364 390k
R370 47k
Q356
KTA1266
GR
C392 47p
R358 100
IC302 (2/2)
BA4558N-DX
DECK 1
RPH
R CH
L CH
EH
CON351
PIN351
AZIMUTH ADJ
C461 390p
C462 390p
SFR451 33K
SFR452 33K
SFR451, 452
REC/PB FREQUENCY RESPONCE ADJ
REC:7.03
C458 1000p
C459 560p
C457 5600p
Q455
KTC3198GR
L451
BIAS 85K
C456 0.01
C452 220/25
R454 8.2
Q453
KTC3198GR
Q454
KTC3198GR
R455 18k
R456 18k
C453 2700p
C455 2700p
C454 2700p
Q453, 454
BIAS OSC
Q451 KTC3198GR
BIAS OSC SW
PR401
0.25A
60V
R453 1k
C451 0.022
SC
R452 2.2k
Q452
DTC143XS
C360 330/6.3
R376 470
D451
1N4148
R419 2.2k
R462 4.7k
R423 18k
R461 10k
R375 470
C409 2200p
Q401
KTC3198GR
R421 22k
R417 10k
R415 680
R411 6.8k
C407 0.012
R409 1.2k
C405 6800p
R405 100k
C403 82p
C410 2200p
R422 22k
R418 10k
R416 680
C408 0.012
R410 1.2k
C406 6800p
R406 100k
C404 82p
R420 2.2k
R424 18k
Q402
KTC3198GR
R414 2.2k
R412 6.8k
R408 1k
R404 1k
R402 33k
C402 1/50
IC401 (2/2)
BA4558N-DX
Q401, 402
REC AMP SW
IC401 (1/2)
BA4558N-DX
R403 1k
R401 33k
C401 1/50
IC401
REC AMP
TP8
TP9
GND
+VCC
+VM
D-GND
A-GND

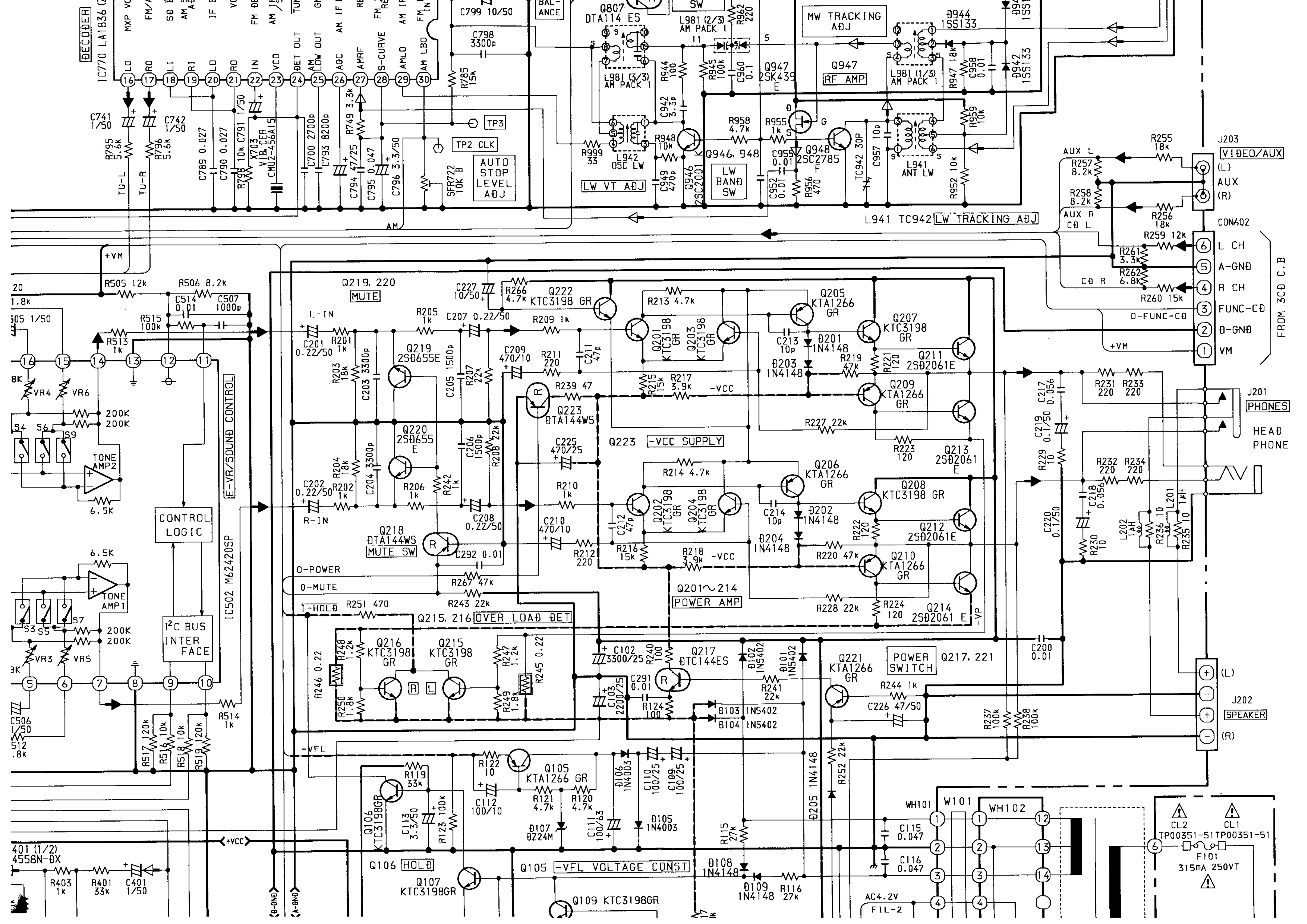

CONTROL LOGIC
IC502 M62420SP
I²C BUS INTER FACE
TONE AMP1
6.5K
200K
200K
VR3
VR5
S3
S5
S7
R514 1k
C506 1/50
R512 1.8k
R517 120k
R516 10k
R518 10k
R519 120k
R-IN R202 1k
C208 0.22/50
R206 1k
R242 1k
C292 0.01
R267 47k
R243 22k
Q218 ĐTA144WS MUTE SW
O-POWER
O-MUTE
I-HOLĐ
R251 470
Q215, 216 OVER LOAĐ ĐET
R210 1k
C210 470/10
R212 180
C212 47p
Q202 KTC3198 GR
Q204 KTC3198 GR
R216 15k
-25.8
-VCC
R218 3.9k
ST-BY:28.3 ON:27.9
Q201 ~ 214 POWER AMP
Đ202 1N4148
Đ204 1N4148
C214 10p
Q208 KTC1398 GR
R222 120
Q212 2SĐ2061E
R220 47k
Q210 KTA1266 GR
R228 22k
R224 120
Q214 2SĐ2061 E
-28.9
-VP
C218 0.056
C220 0.1/50
R230 10
L202 1μH
L201 1μH
R236 10
R235 10
R246 0.22
R248 1.2k
Q216 KTC3198 GR
Q215 KTC3198 GR
R247 1.2k
R245 0.22
R250 1.8k
R249 1.8k
C102 3300/25
Q217 ĐTC144ES
R240 100
R241 22k
Đ102 1N5402
Đ101 1N5402
C103 2200/25
C291 0.01
ST-BY:-29.3 ON:-28.9
R124 100
Đ103 1N5402
Đ104 1N5402
Q221 KTA1266GR
Q217, 221 POWER SWITCH
R244 1k
C226 47/50
R237 100k
R238 100k
C221 0.01
C222 0.01
J202 SPEAKERS
(L)
(R)
-VFL
-23.2
R122 10
Q105 KTA1266 GR
C112 100/10
R121 4.7k
R120 4.7k
Đ106 1N4003
C110 100/25
C109 100/25
Đ205 1N4148
R252 22k
R119 33k
Q106 KTC3198GR
C113 3.3/50
R123 100k
Đ107 ĐZ24M
C111 100/50
Đ105 1N4003
R115 27k
Đ108 1N4148
Đ109 1N4148
R116 27k
R117 39k
Q106 HOLĐ
Q105 -VFL VOLTAGE CONST
Q107 KTC3198GR
Q109 KTC3198GR
C114 47/10
Q107, 108 AC ĐET
R118 12k
Q110 KTA1266GR
Q108 KTA1266GR
Q109, 110 ĐC ĐET
+VCC
+VM
11.9
10.6
Q101 2SB1370E
Đ113 1N4003
Đ112 1N4003
C104 0.047
Q101~103 +VM VOLTAGE CONST
Q104 CSĐ1489B
+VCC VOLTAGE CONSTANT
C108 330/16
R114 100
R113 330
Đ111 1N4148
C107 220/16
R112 10k
Đ110 ĐZ10M
R110 470
R109 15k
R105 47k
R104 47
C105 470p
R107 470
Q102 KTC3198GR
C106 47/25
R111 220
Q103 KTC3198GR
R108 5.6k
R106 56
D-GND
A-GND
WH101
W101
WH102
C115 0.047
C116 0.047
C151 0.01
R102
FIL-2
AC4.0V
FIL-1
TF
C AC1 C.B
F101 315mA 250VT
CL2 TP00351
CL1 TP00351
PT101 PT. 7NF9-EKZ
D AC2 C.B
AC 230V 50HZ
IC401 REC AMP
TP8
TP9
GNĐ
R403 1k
R401 33k
C401 1/50
R405 100k
C403 82p
R406 100k
C404 82p
R404 1k
R402 33k
C402 1/50
6800p
SIGNAL
PB/FM
REC/MW

SCHEMATIC DIAGRAM – 6 (MAIN : 10EZ)

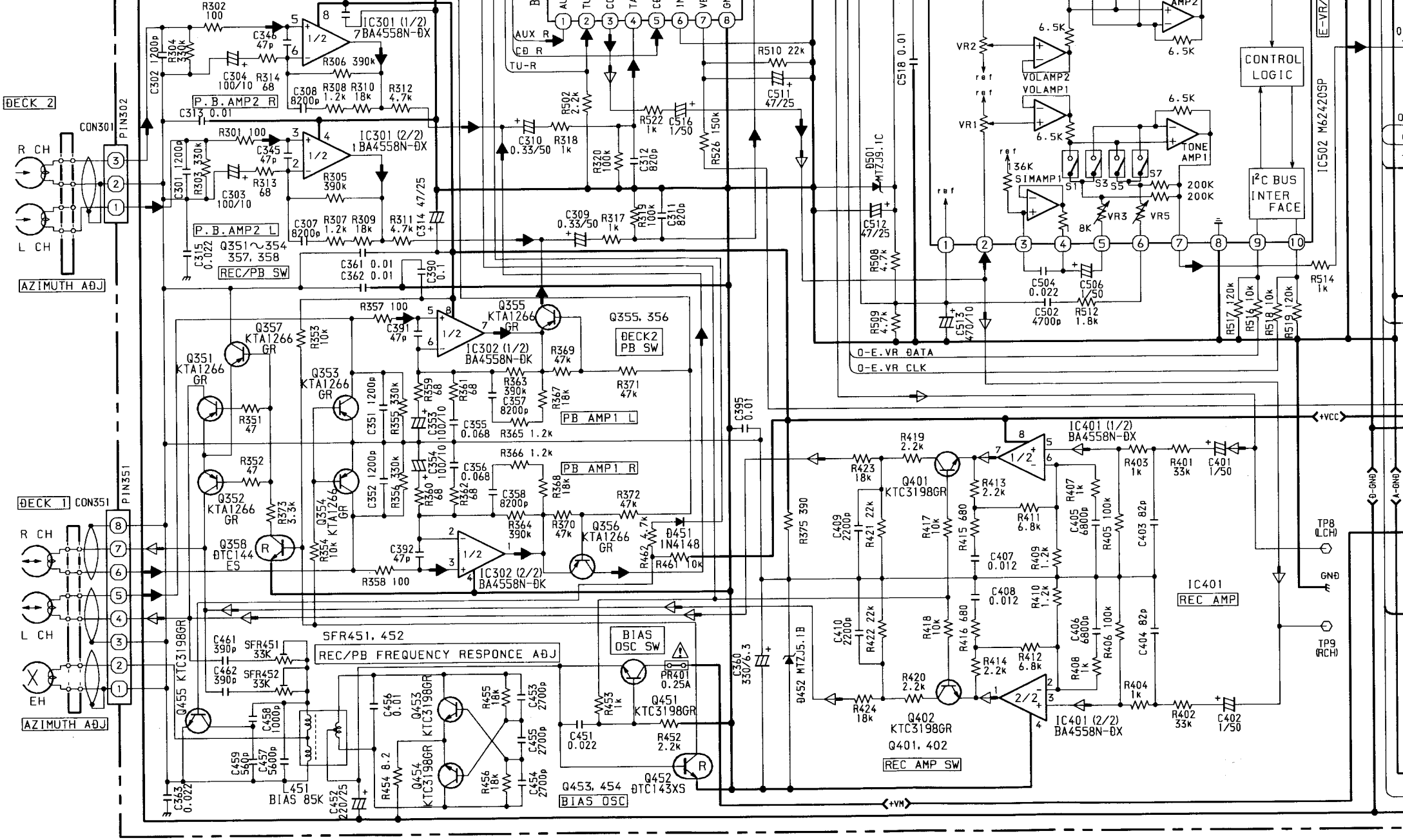


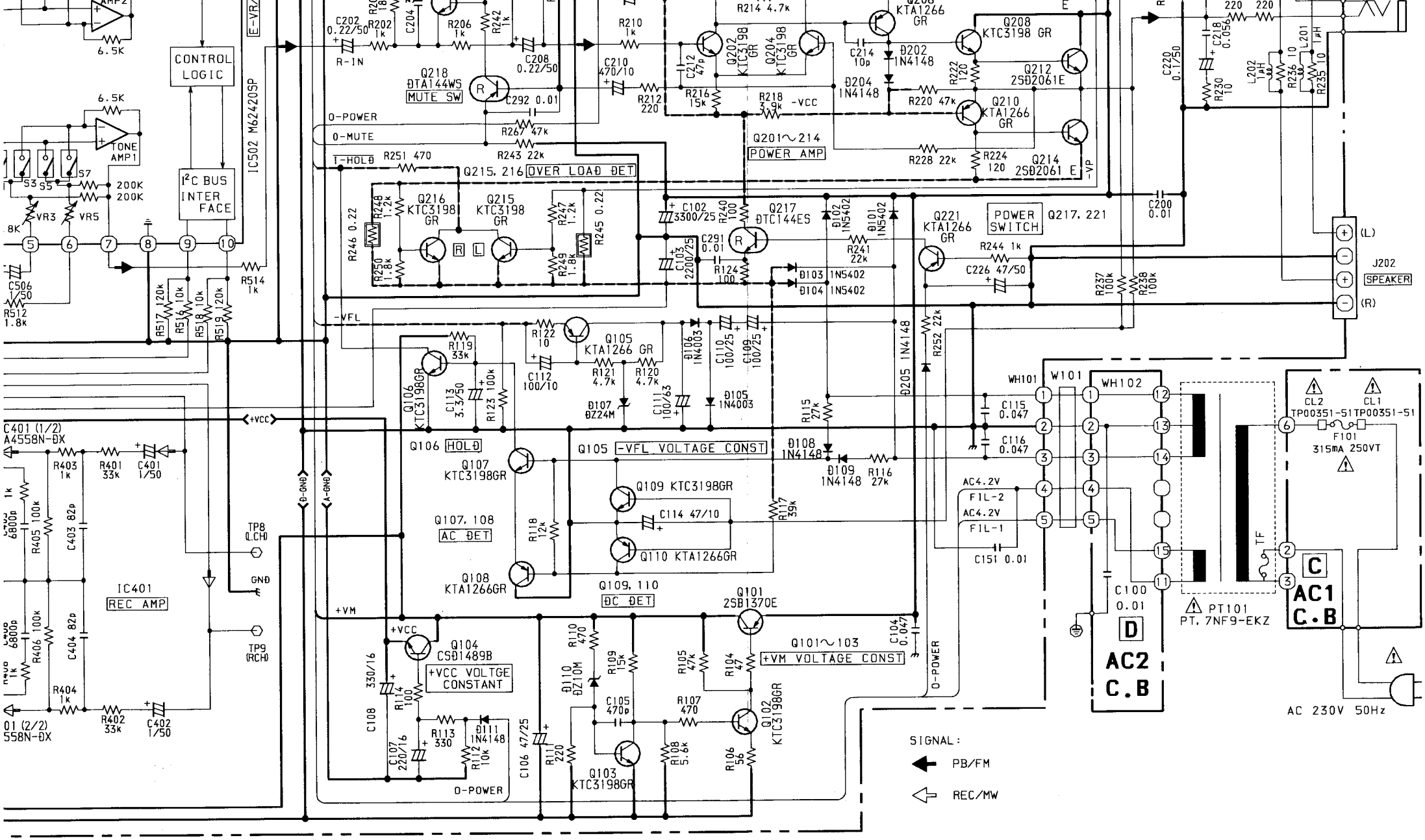

DC BALANCE ADJ
L741 COIL, FM DET
L742
FLTR CFAZH-450
FM IF AMP
FM FRONT END
FFE801
6ZA-1 YFEENM
ANTENNA
75Ω FM
MW/LW
ANT
BUFFER
DECODER
IC770 LA1836 (Z)
AUTO STOP
AUTO STOP LEVEL ADJ
DC BAL-ANCE
TP2 CLK
TP3
TP4
TP7
MW BAND SW
MW TRACKING ADJ
RF AMP
LW VT ADJ
LW BAND SW
LW TRACKING ADJ
L981 (1/3)
L981 (2/3) AM PACK 1
L981 (3/3) AM PACK 1
L942 OSC LW
L941 ANT LW
VIDEO/AUX
AUX
CON602
L CH
A-GND
R CH
FUNC-CD
D-GND
VM
FROM 3CD C.B
MUTE
L-IN
-VCC SUPPLY
PHONES
J201
J203
J802


FROM B
I-HOLD
O-POWER
+VM
O-MUTE
D-GND
NC
D-GND
+VM
A-GND
+VCC
A-GND
+VCC
IC851 BU1920
RDS DECODER
RESET
MUX
VREP
CMP
GND
VDD
RDS-DATA
RDS-CLK
X0
X1
IC770 LA
LO
RO
LI
RI
IN
VCO
DET
TU-L
TU-R
IC503 BU4094BC
SHIFT REGISTER
STRB
DATA
CLK
TU-ON
VSS
STB
DI
CL
IC501 BU4052BC
FUNCTION SELECTOR
AUX
TUNER
COM
TAPE
CD
INH
VEE
GND
AUX R
CD R
TU-R
IC301 (1/2) 7BA4558N-DX
IC301 (2/2) 1BA4558N-DX
P.B.AMP2 R
P.B.AMP2 L
REC/PB SW
DECK 2
CON301
PIN302
R CH
L CH
AZIMUTH ADJ
Q351~354 357, 358
IC302 (1/2) BA4558N-DK
Q355 KTA1266 GR
Q355. 356
DECK2 PB SW
Q357 KTA1266 GR
Q351 KTA1266 GR
Q353 KTA1266 GR
PB AMP1 L
PB AMP1 R
DECK 1
CON351
PIN351
Q352 KTA1266 GR
Q354 KTA1266 GR
Q356 KTA1266 GR
D451
IC401 (1/2) BA4558N-DX
Q401 KTC3198GR
TP8 (LCH)
IC502 M62420SP
E-VR/SOUND CONTROL
CONTROL LOGIC
I²C BUS INTER FACE
SIMAMP2
SIMAMP1
VOLAMP2
VOLAMP1
TONE AMP2
TONE AMP1
VR1
VR2
VR3
VR4
VR5
VR6
O-E.VR DATA
O-E.VR CLK
FM/MW
FM/SW
MONO
+VM
+VCC
D-GND
A-GND

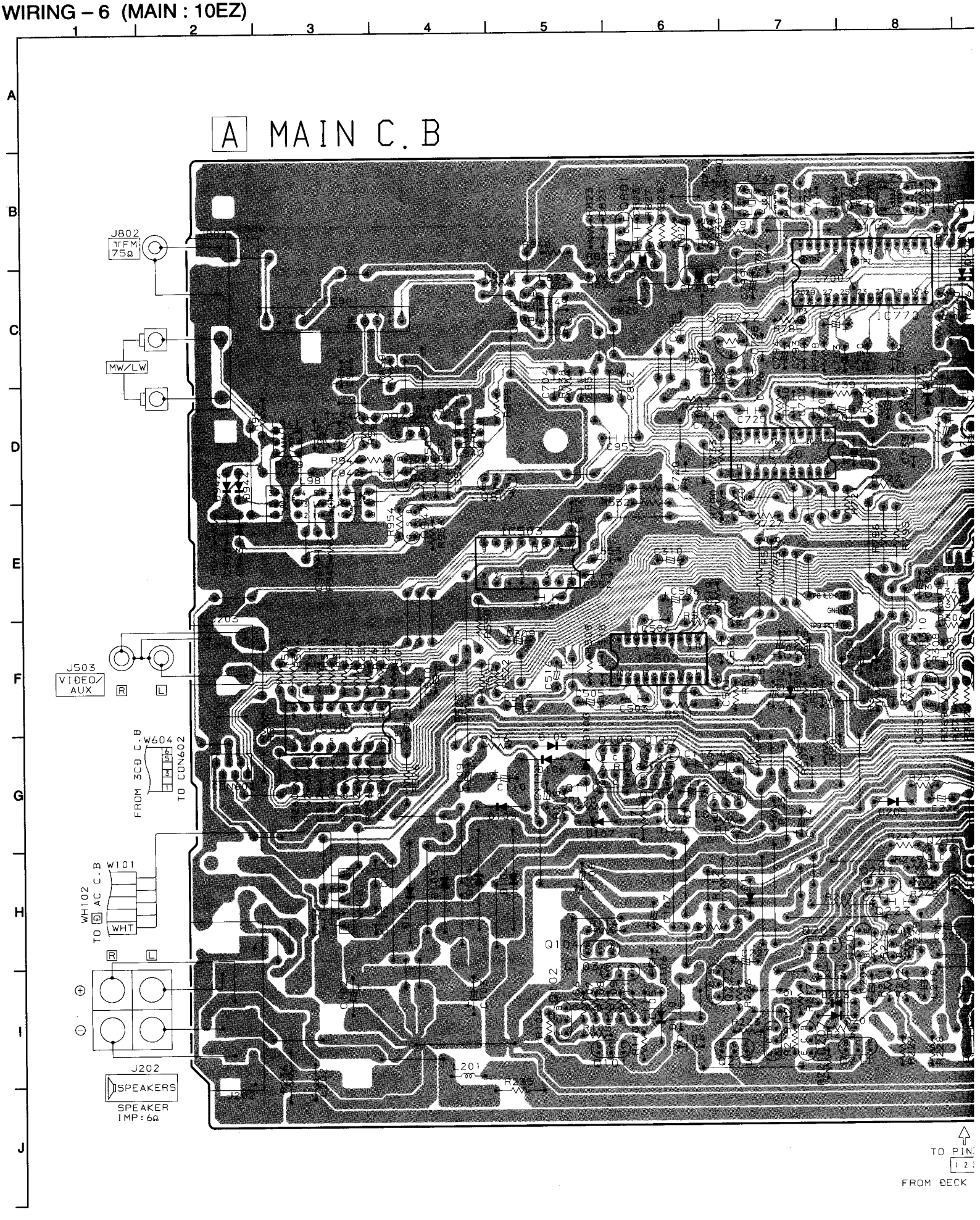


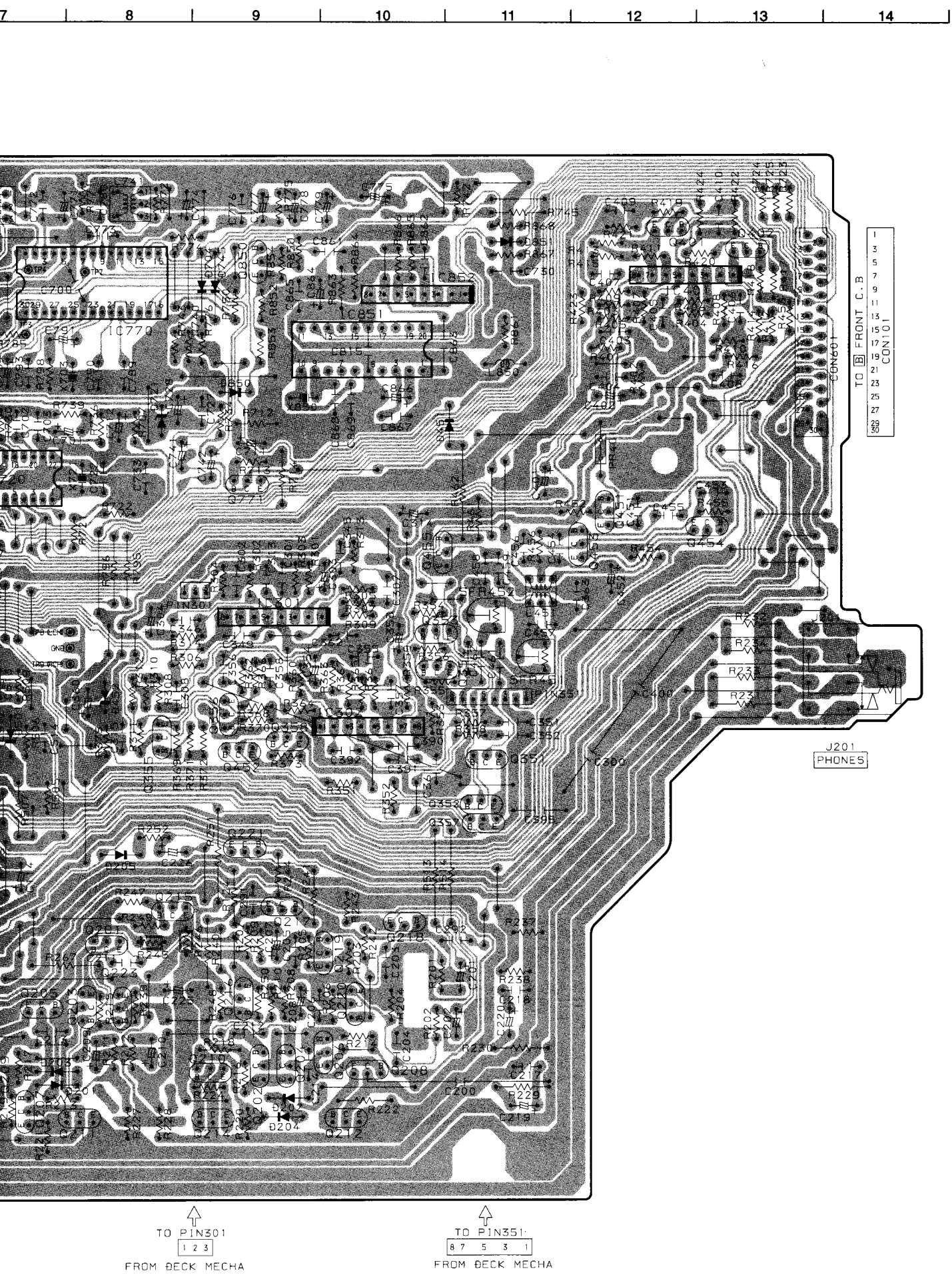
DECODER
IC770 LA1836
MW TRACKING ADJ
Q947 RF AMP
Q807 DTA114 ES
L981 (3/3) AM PACK 1
L981 (2/3) AM PACK 1
L981 (1/3) AM PACK 1
Q946, 948
L942 OSC LW
LW VT ADJ
LW BAND SW
L941 ANT LW
L941 TC942 LW TRACKING ADJ
AUTO STOP LEVEL ADJ
TP2 CLK
TP3
J203 VIDEO/AUX
AUX L
AUX R
CON602
L CH
A-GND
R CH
FUNC-CD
D-GND
VM
FROM 3CD C.B
Q219, 220 MUTE
L-IN
R-IN
Q223 -VCC SUPPLY
Q201~214 POWER AMP
Q215, 216 OVER LOAD DET
Q218 DTA144WS MUTE SW
J201 PHONES
HEAD PHONE
J202 SPEAKER
POWER SWITCH Q217, 221
E-VR/SOUND CONTROL
IC502 M62420SP
CONTROL LOGIC
I²C BUS INTER FACE
TONE AMP2
TONE AMP1
O-POWER
O-MUTE
I-HOLD
-VFL
Q106 HOLD
Q105 -VFL VOLTAGE CONST
Q107 KTC3198GR
Q109 KTC3198GR
WH101
W101
WH102
CL2 TP00351-51
CL1 TP00351-51
F101 315mA 250VT
AC4.2V
FIL-2


DECK 2
CON301
PIN302
R CH
L CH
AZIMUTH ADJ
P.B.AMP2 R
P.B.AMP2 L
IC301 (1/2) 7BA4558N-DX
IC301 (2/2) 1BA4558N-DX
REC/PB SW
Q351~354 357, 358
DECK 1
CON351
PIN351
EH
AUX R
CD R
TU-R
IC302 (1/2) BA4558N-DK
IC302 (2/2) BA4558N-DK
Q355, 356
DECK2 PB SW
PB AMP1 L
PB AMP1 R
SFR451, 452
REC/PB FREQUENCY RESPONCE ADJ
BIAS 85K
BIAS OSC SW
BIAS OSC
Q453, 454 DTC143XS
Q451 KTC3198GR
Q452
Q401, 402
REC AMP SW
IC401 (1/2) BA4558N-DX
IC401 (2/2) BA4558N-DX
IC401 REC AMP
CONTROL LOGIC
I²C BUS INTER FACE
IC502 M62420SP
VOLAMP1
VOLAMP2
TONE AMP1
SIMAMP1
O-E.VR DATA
O-E.VR CLK
+VCC
+VM
D-GND
A-GND
GND
TP8 (LCH)
TP9 (RCH)

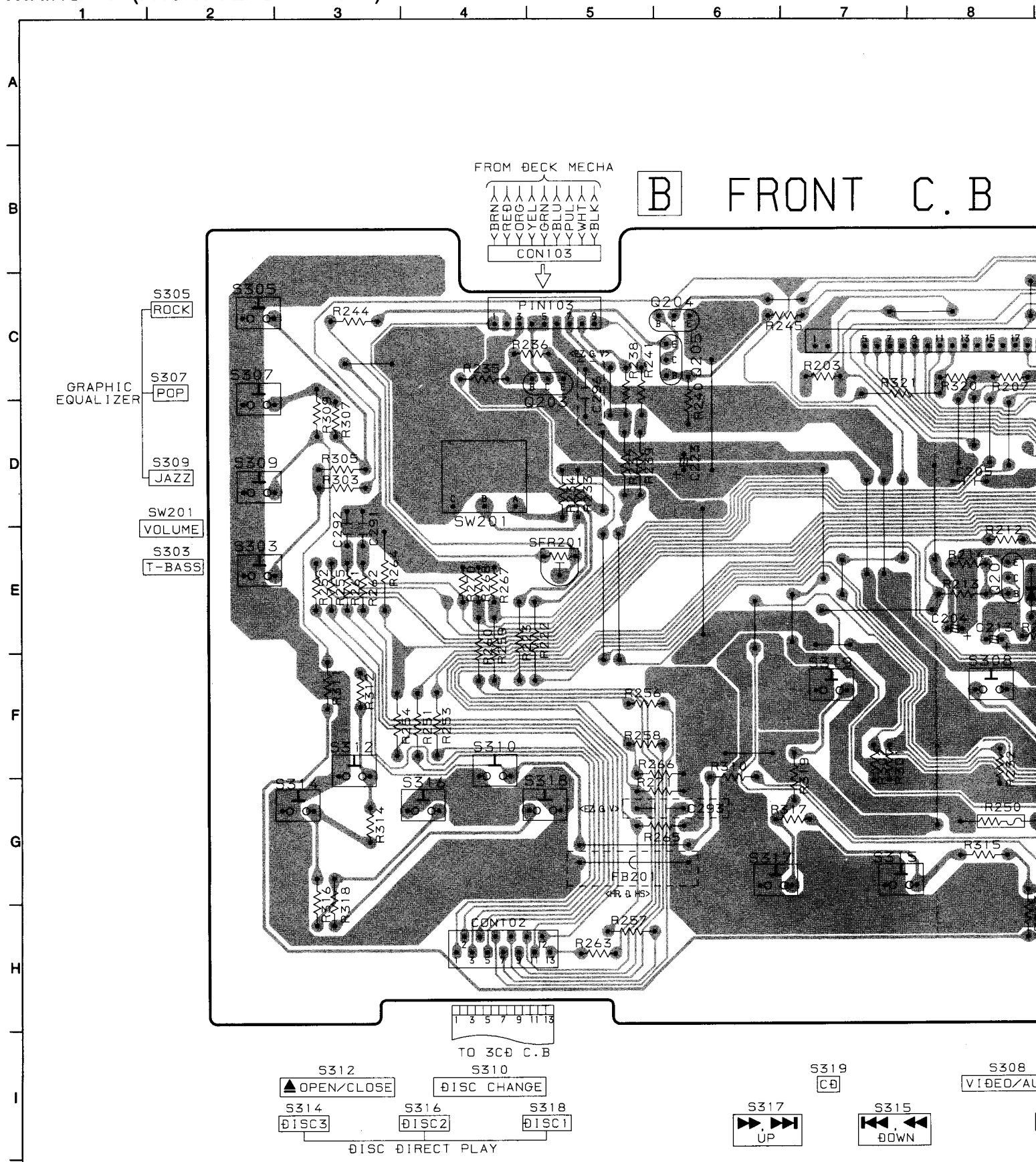

CONTROL LOGIC
IC502 M62420SP
I²C BUS INTER FACE
TONE AMP1
AMP2
E-VR
R-IN
O-POWER
O-MUTE
T-HOLD
Q218 DTA144WS MUTE SW
Q215, 216 OVER LOAD DET
Q201~214 POWER AMP
Q217 DTC144ES
POWER SWITCH
Q217, 221
Q221 KTA1266 GR
J202 SPEAKER
(L)
(R)
-VFL
+VCC
+VM
Q105 -VFL VOLTAGE CONST
Q106 HOLD
Q107, 108 AC DET
Q109, 110 DC DET
Q101~103 +VM VOLTAGE CONST
Q104 CSD1489B +VCC VOLTGE CONSTANT
IC401 REC AMP
TP8 (LCH)
TP9 (RCH)
GND
WH101
W101
WH102
PT101 PT. 7NF9-EKZ
F101 315mA 250VT
AC4.2V FIL-2
AC4.2V FIL-1
AC 230V 50Hz
SIGNAL:
PB/FM
REC/MW

WIRING – 6 (MAIN : 10EZ)

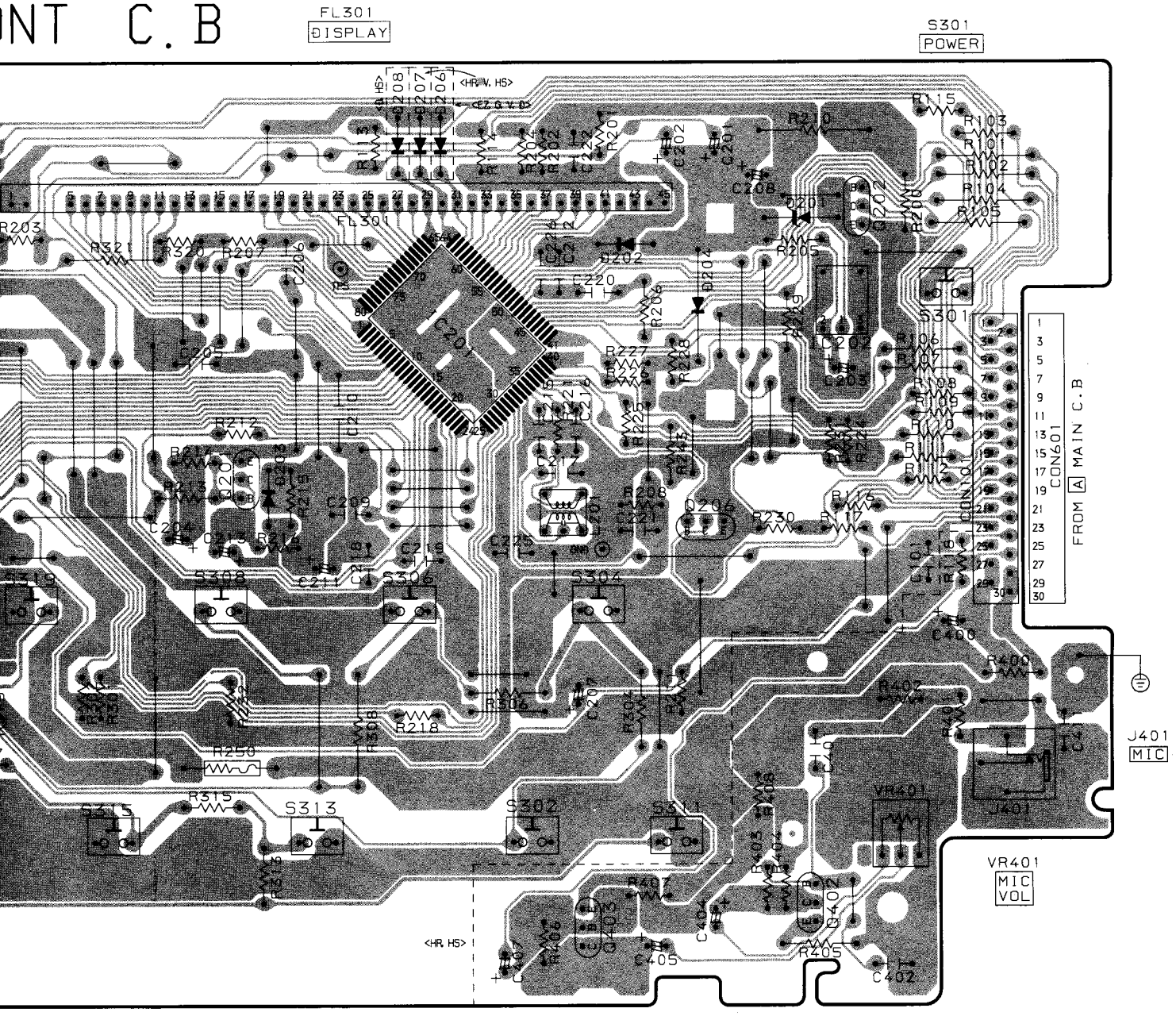



7
8
9
10
11
12
13
14
TO B FRONT C.B
CON101
CON601
J201
PHONES
TO PIN301
1 2 3
FROM DECK MECHA
TO PIN351
8 7 5 3 1
FROM DECK MECHA

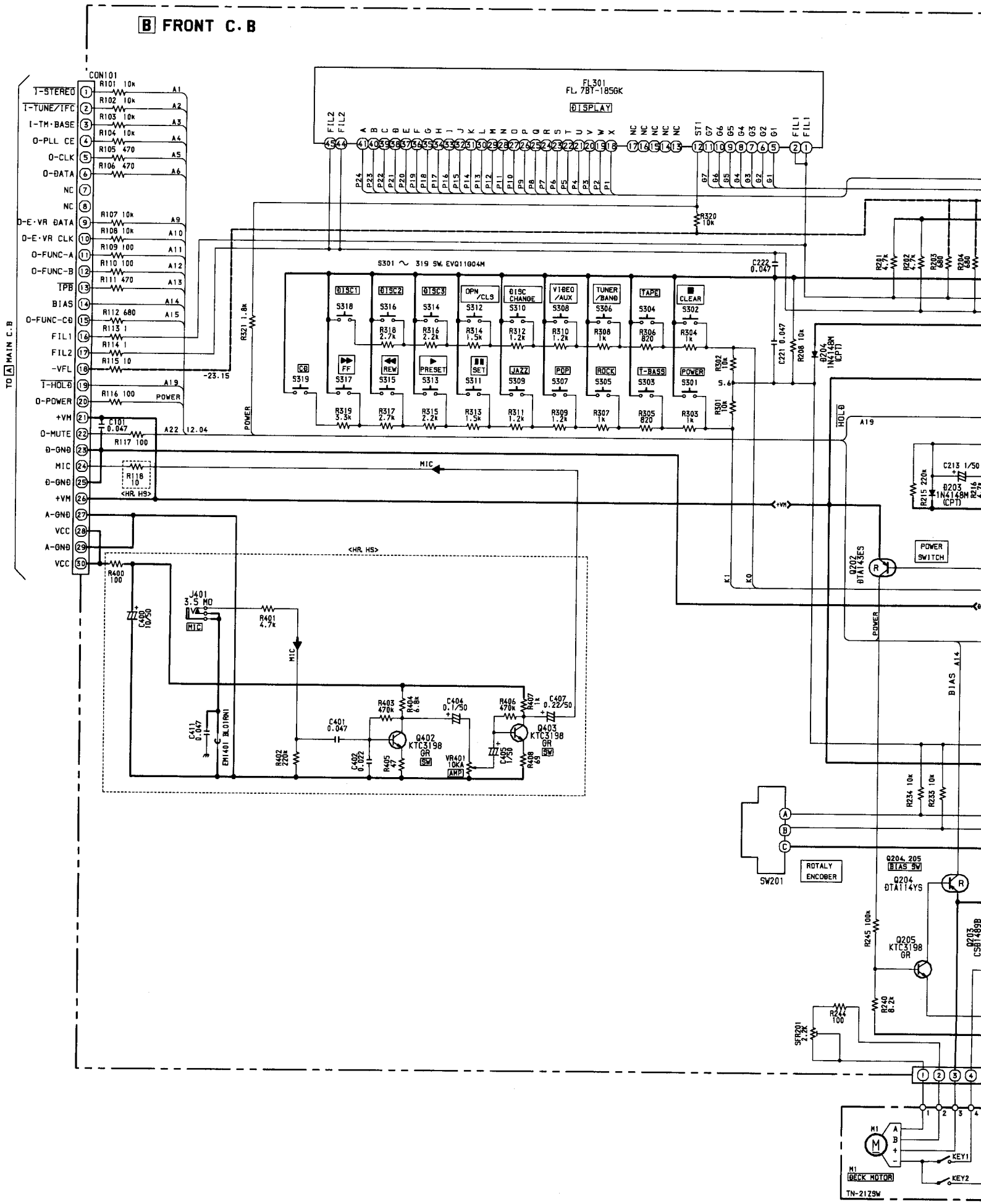
WIRING – 7 (FRONT : EXCEPT 10EZ)

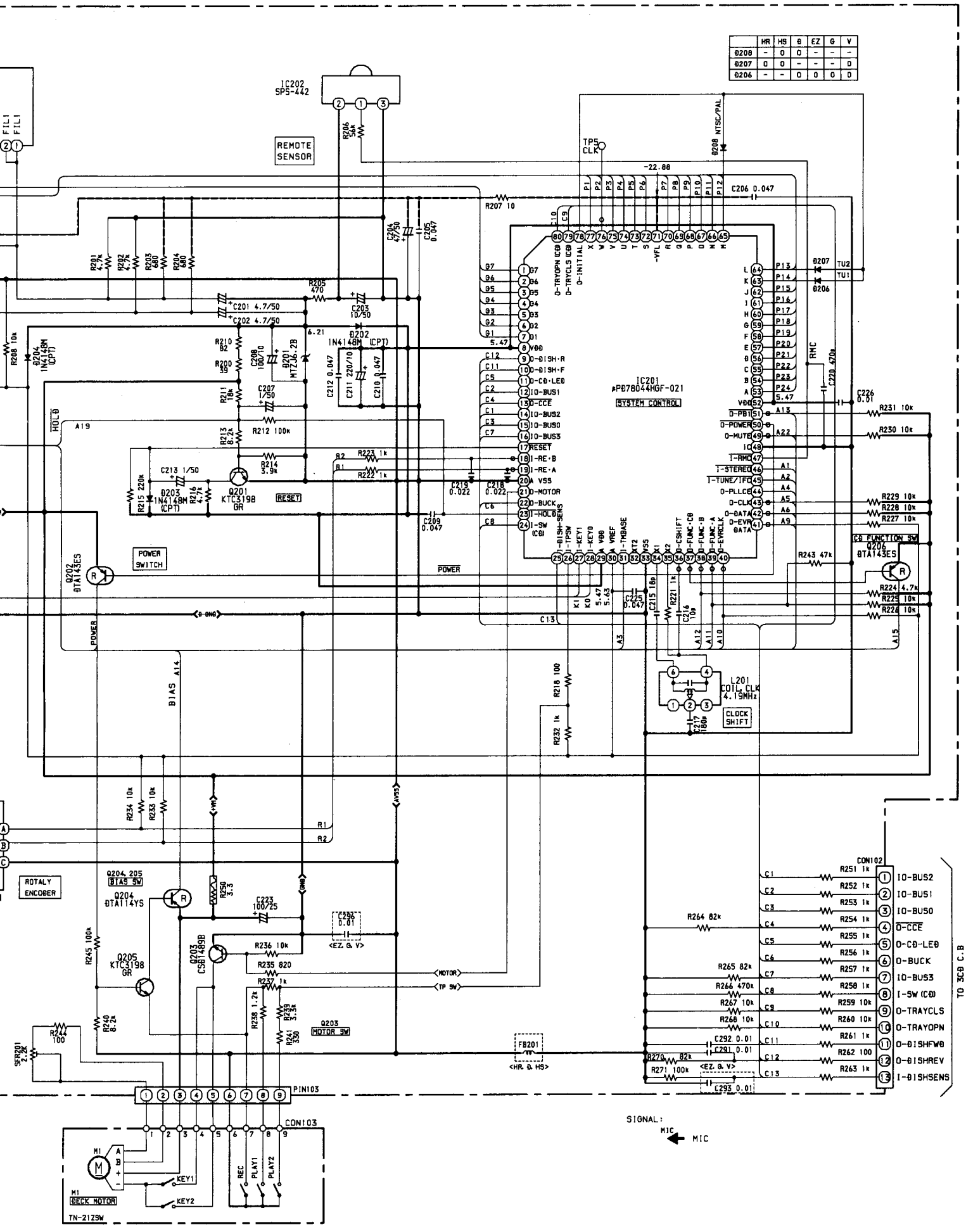


ONT C.B


FL301
DISPLAY
S301
POWER
J401
MIC
VR401
MIC
VOL
FROM A MAIN C.B
CON601
S319
CD
S308
VIDEO/AUX
S306
TUNER/BAND
S304
TAPE
S315
DOWN
S313
PRESET
S302
CLEAR
S311
SET

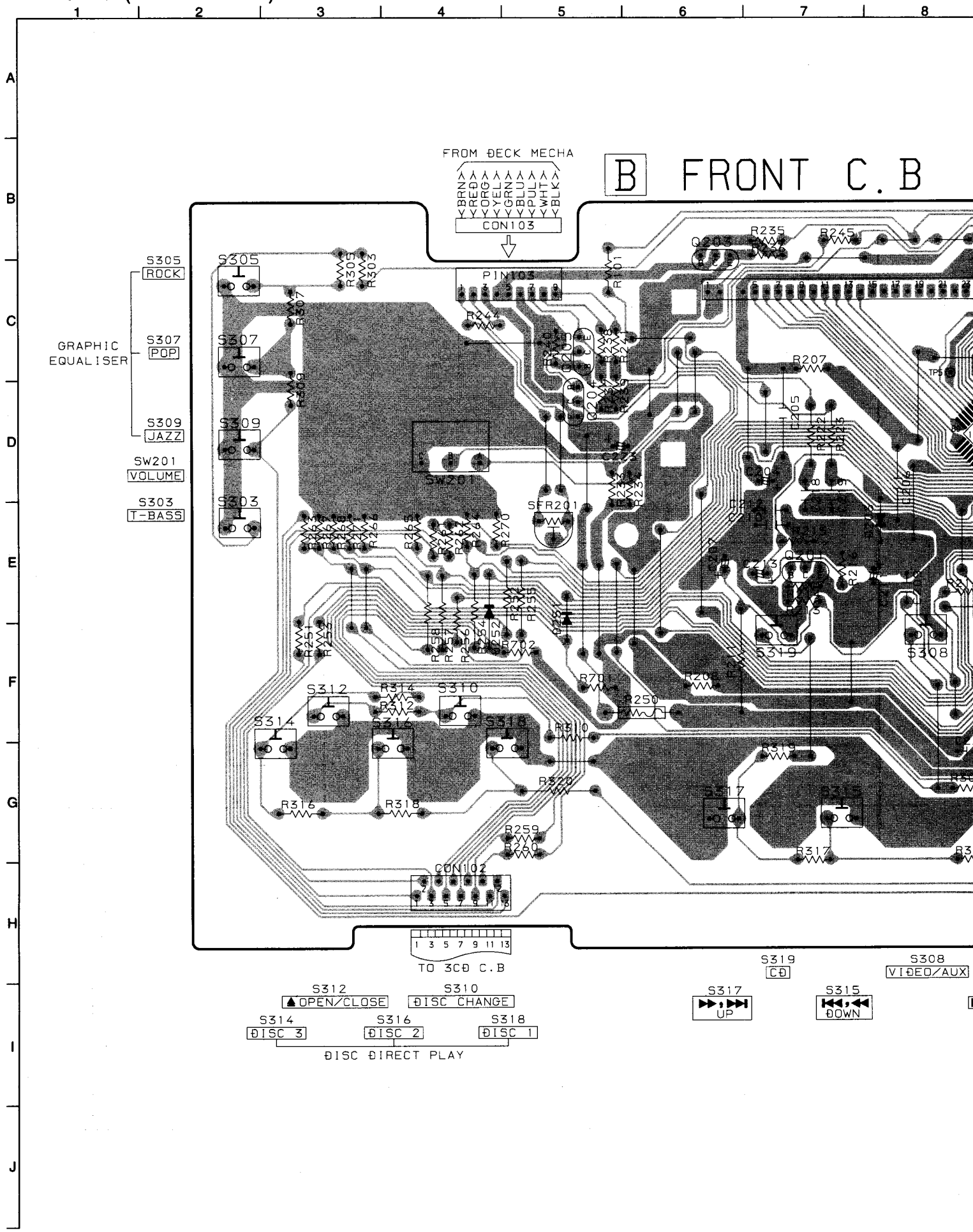
SCHEMATIC DIAGRAM – 7 (FRONT : EXCEPT 10EZ)



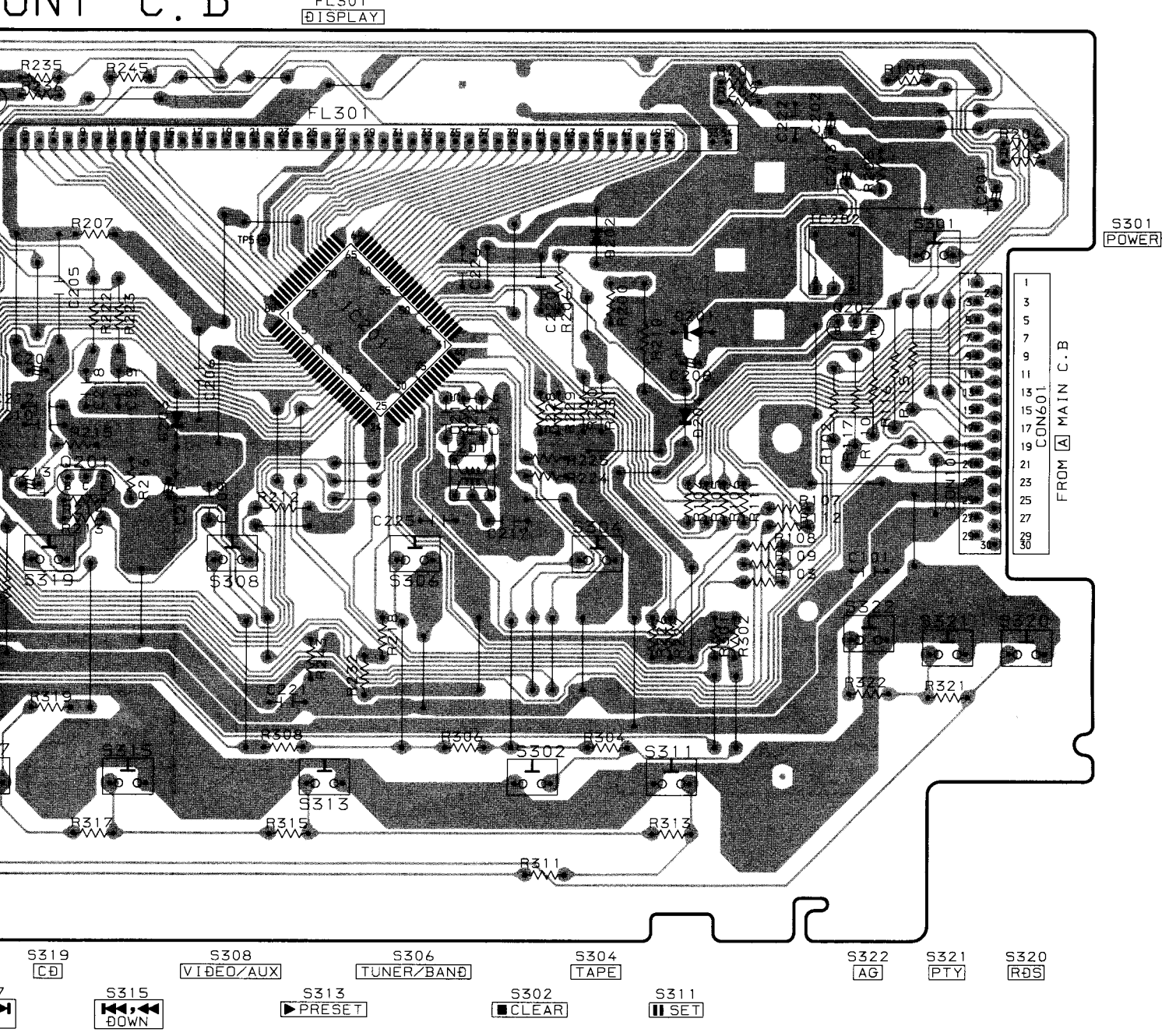


	HR	HS	0	EZ	G	V
0208	-	0	0	-	-	-
0207	0	0	-	-	-	0
0206	-	-	0	0	0	0

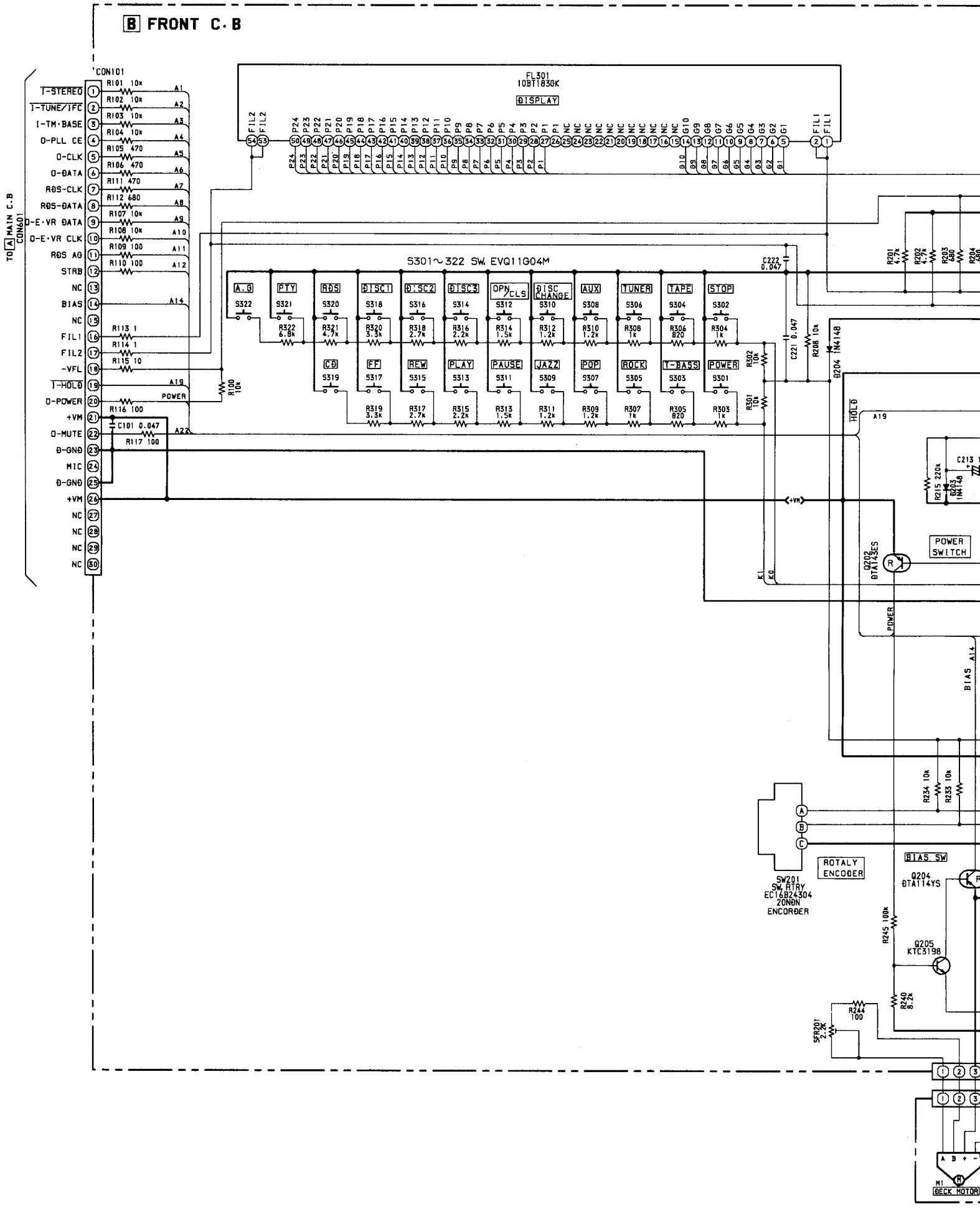
WIRING – 8 (FRONT : 10EZ)

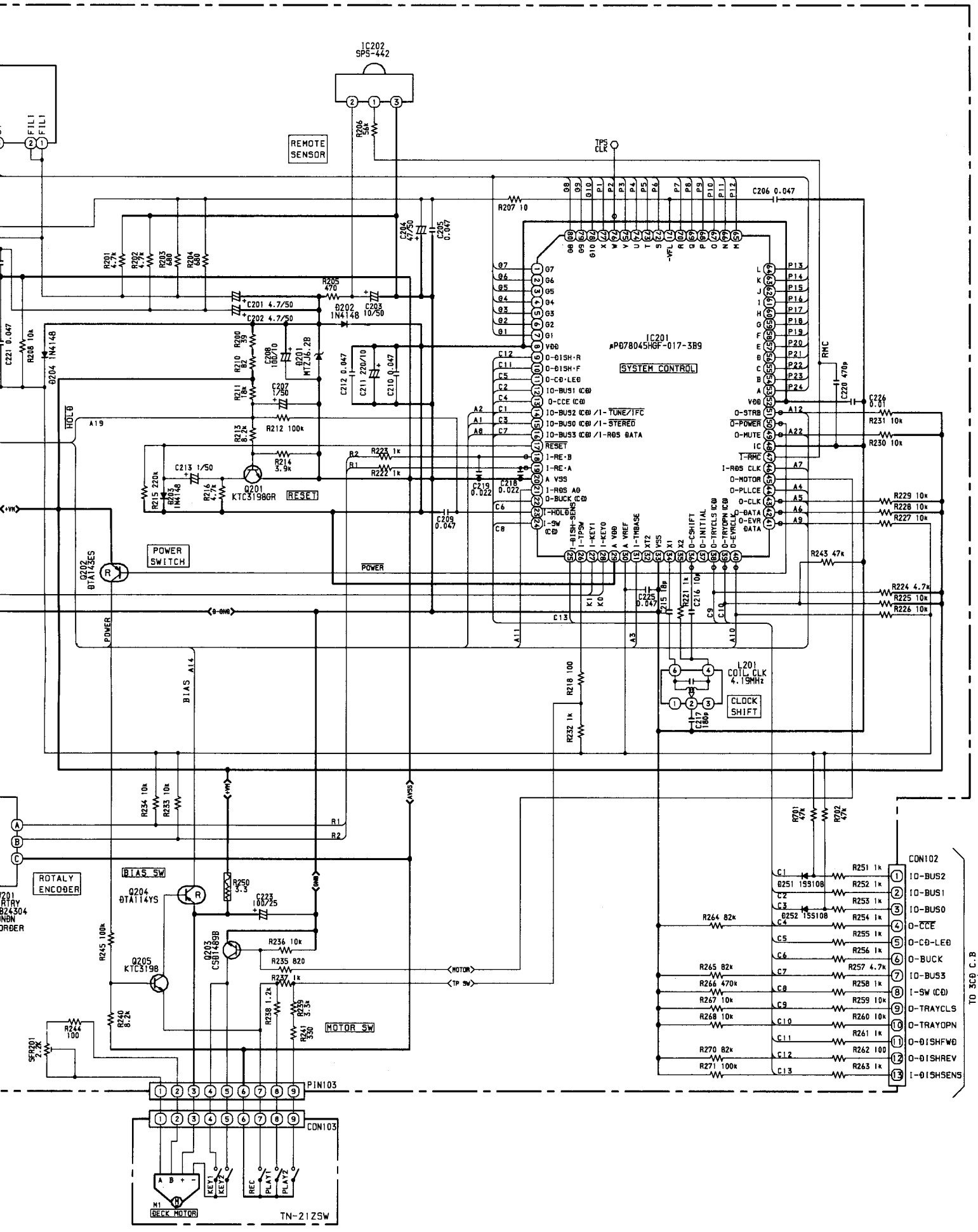


ONT C.B

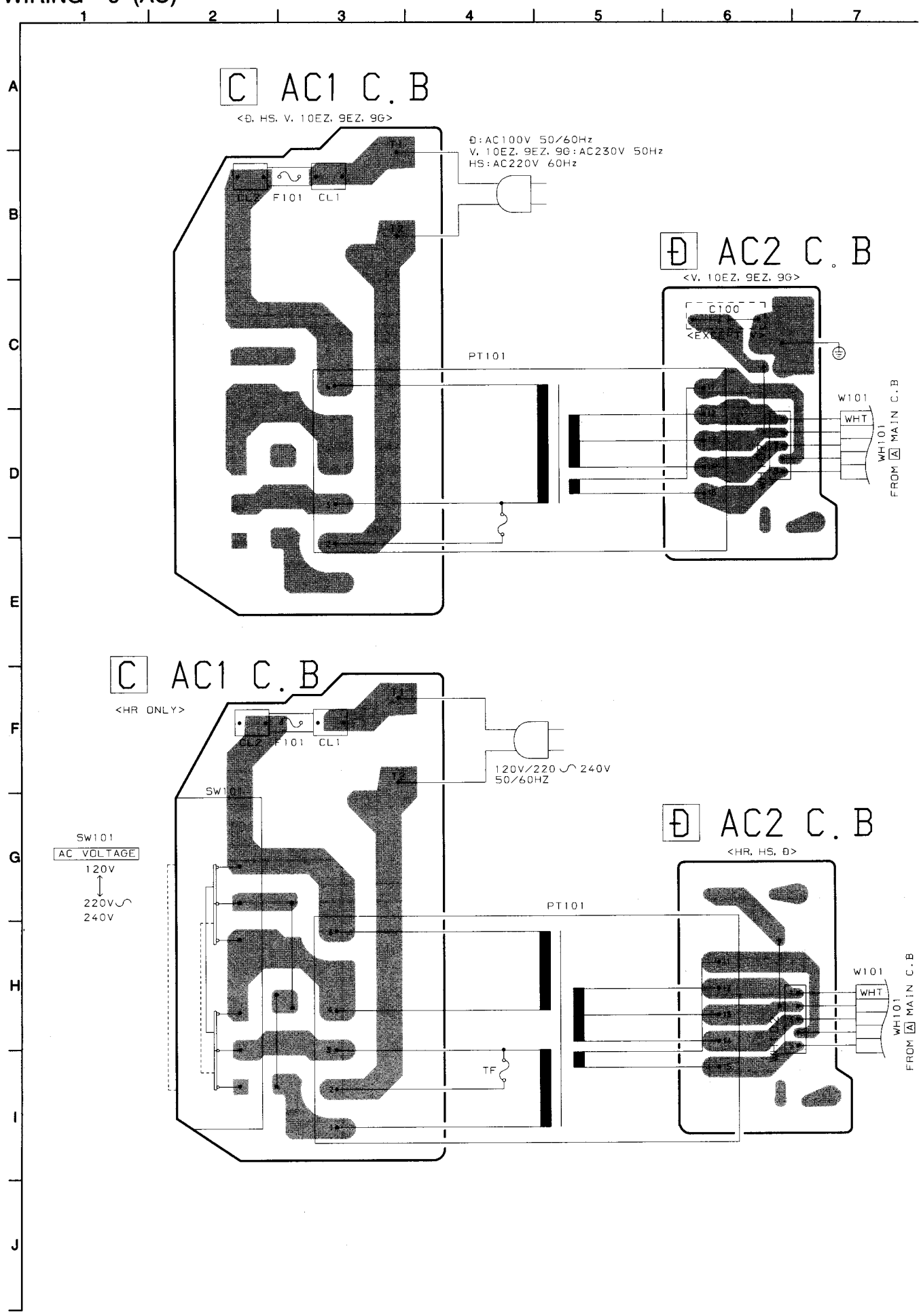

FL301
ĐISPLAY
FL301
S301
POWER
FROM A MAIN C.B
CON601
S319
CĐ
S308
VIĐEO/AUX
S306
TUNER/BANĐ
S304
TAPE
S322
AG
S321
PTY
S320
RĐS
S315
ĐOWN
S313
PRESET
S302
CLEAR
S311
SET

SCHEMATIC DIAGRAM – 8 (FRONT : 10EZ)

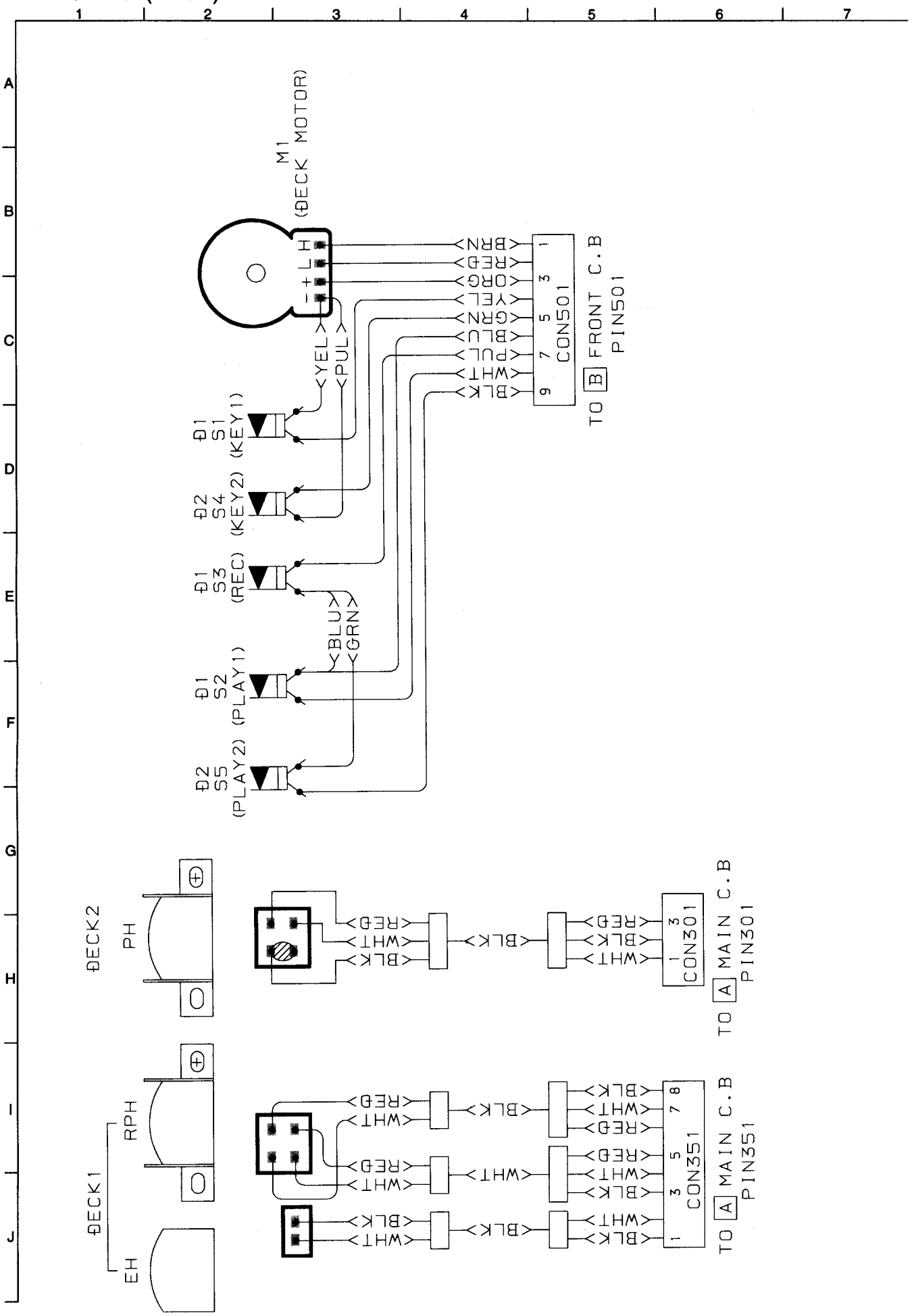



IC202
SP5-442
REMOTE SENSOR
IC201
μPD78045HGF-017-3B9
SYSTEM CONTROL
Q201
KTC3198GR
RESET
POWER SWITCH
Q202
DTA143ES
L201
COIL CLK
4.19MHz
CLOCK SHIFT
ROTALY ENCODER
BIAS SW
Q204
DTA114YS
Q205
KTC3198
Q203
CSB1489B
MOTOR SW
PIN103
CON103
M1
DECK MOTOR
TN-21ZSW
CON102
TO 3C0 C.B

WIRING – 9 (AC)

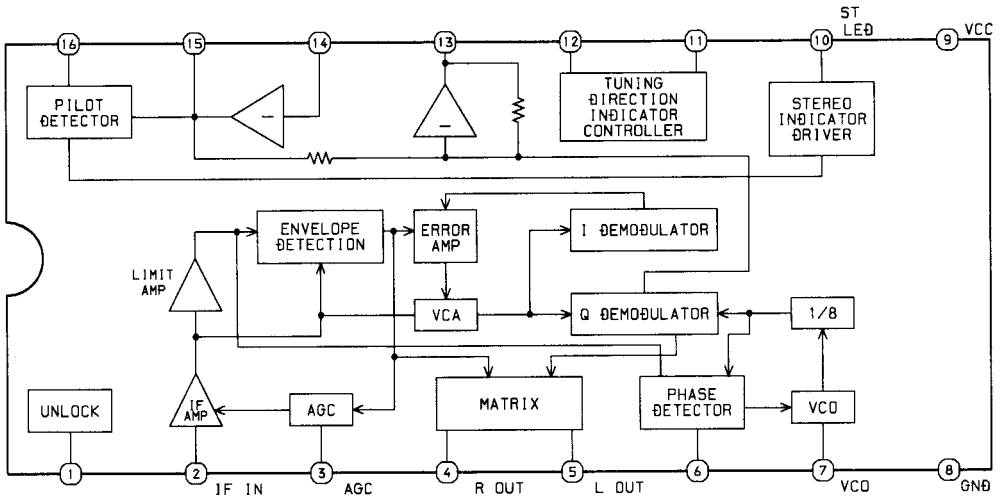

1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
C AC1 C.B
<Đ, HS, V, 10EZ, 9EZ, 9G>
Đ:AC100V 50/60Hz
V, 10EZ, 9EZ, 9G:AC230V 50Hz
HS:AC220V 60Hz
CL2
F101
CL1
Đ AC2 C.B
<V, 10EZ, 9EZ, 9G>
C100
PT101
W101
WHT
WH101
FROM A MAIN C.B
C AC1 C.B
<HR ONLY>
120V/220 ∽ 240V
50/60HZ
SW101
SW101
AC VOLTAGE
120V
220V∽
240V
Đ AC2 C.B
<HR, HS, Đ>
PT101
TF
W101
WHT
WH101
FROM A MAIN C.B

WIRING – 10 (DECK)

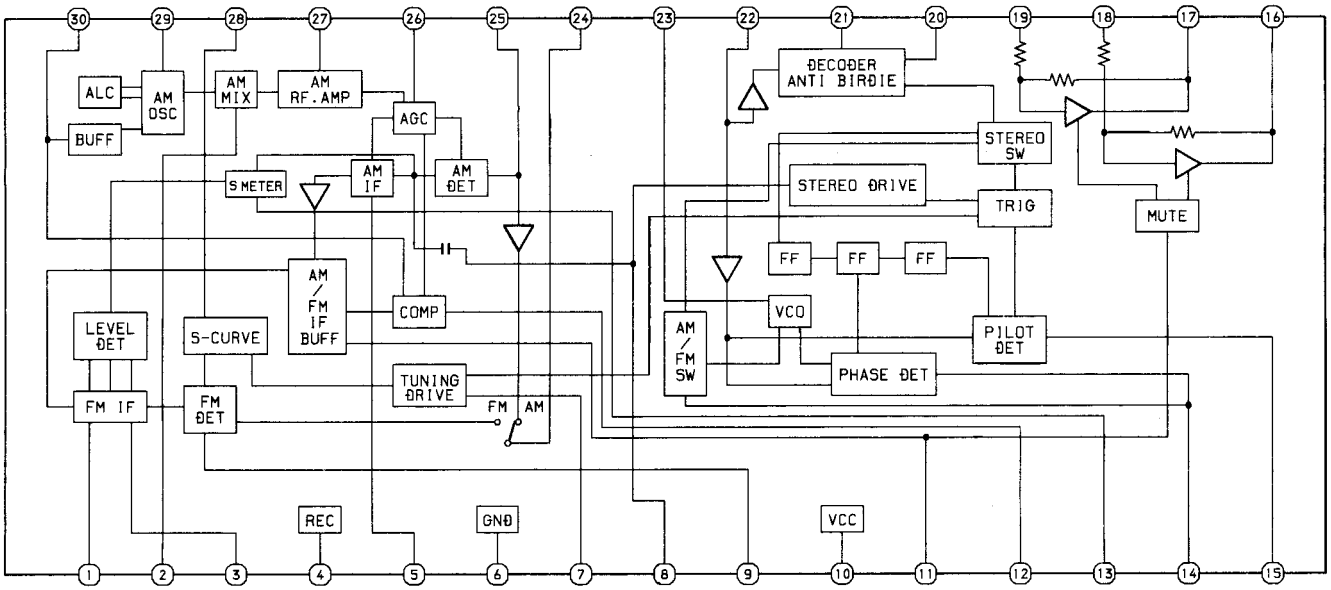


IC BLOCK DIAGRAM – 2

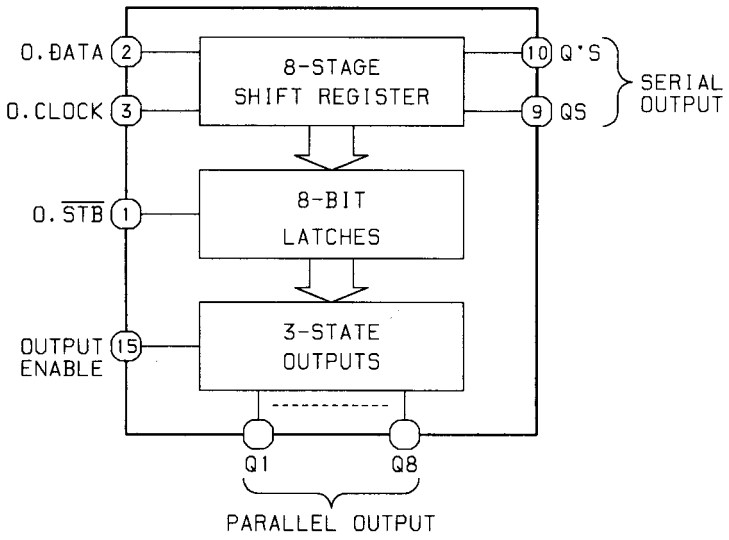
IC, TA8124P



IC, LA1836



IC, BU4094



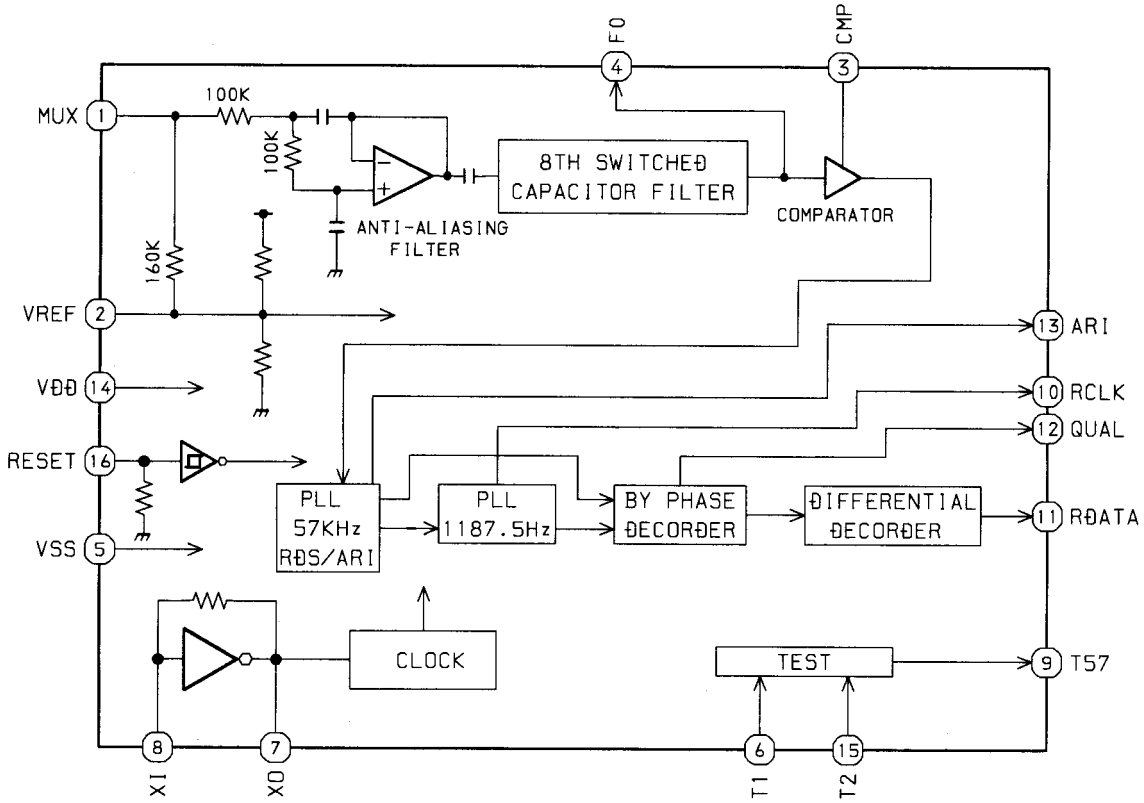
Q1:O.ĐOLBY ON
Q2:O.ĐOLBY C
Q3:O.EXT.REC
Q4:O.INT.REC
Q5:O.PLAY
Q6:O.PB2
Q7:O.LEĐ
Q8:O.$\overline{RMT}$

TRUTH TABLE

CLOCK	OUTPUT ENABLE	STROBE	ĐATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	QS	Q'S
↓	L	x	x	Z	Z	Q7	NO CHG.
↑	L	x	x	Z	Z	NO CHG.	QS
↓	H	L	x	NO CHG.	NO CHG.	Q7	NO CHG.
↓	H	H	L	L	Qn-1	Q7	NO CHG.
↓	H	H	H	H	Qn-1	Q7	NO CHG.
↑	H	x	x	NO CHG.	NO CHG.	NO CHG.	QS

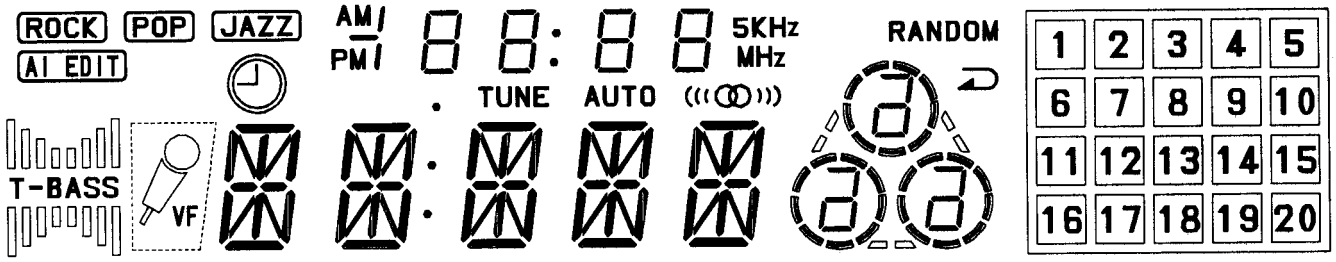
Z = HIGH IMPEĐANCE
x = ĐON'T CARE

IC, LA1836

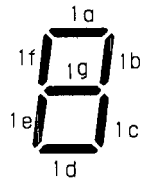


FL GRID ASSIGNMENT & ANODE CONNECTION (EXECPT 10EZ)

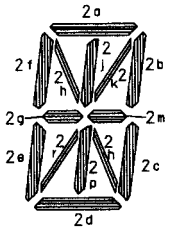
GRID ASSISNMENT



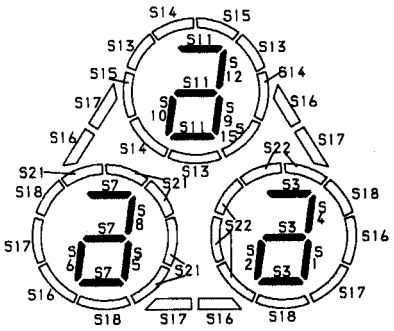
SEGMENT DESIGNATION



(6G ~ 3G)



(7G ~ 3G)



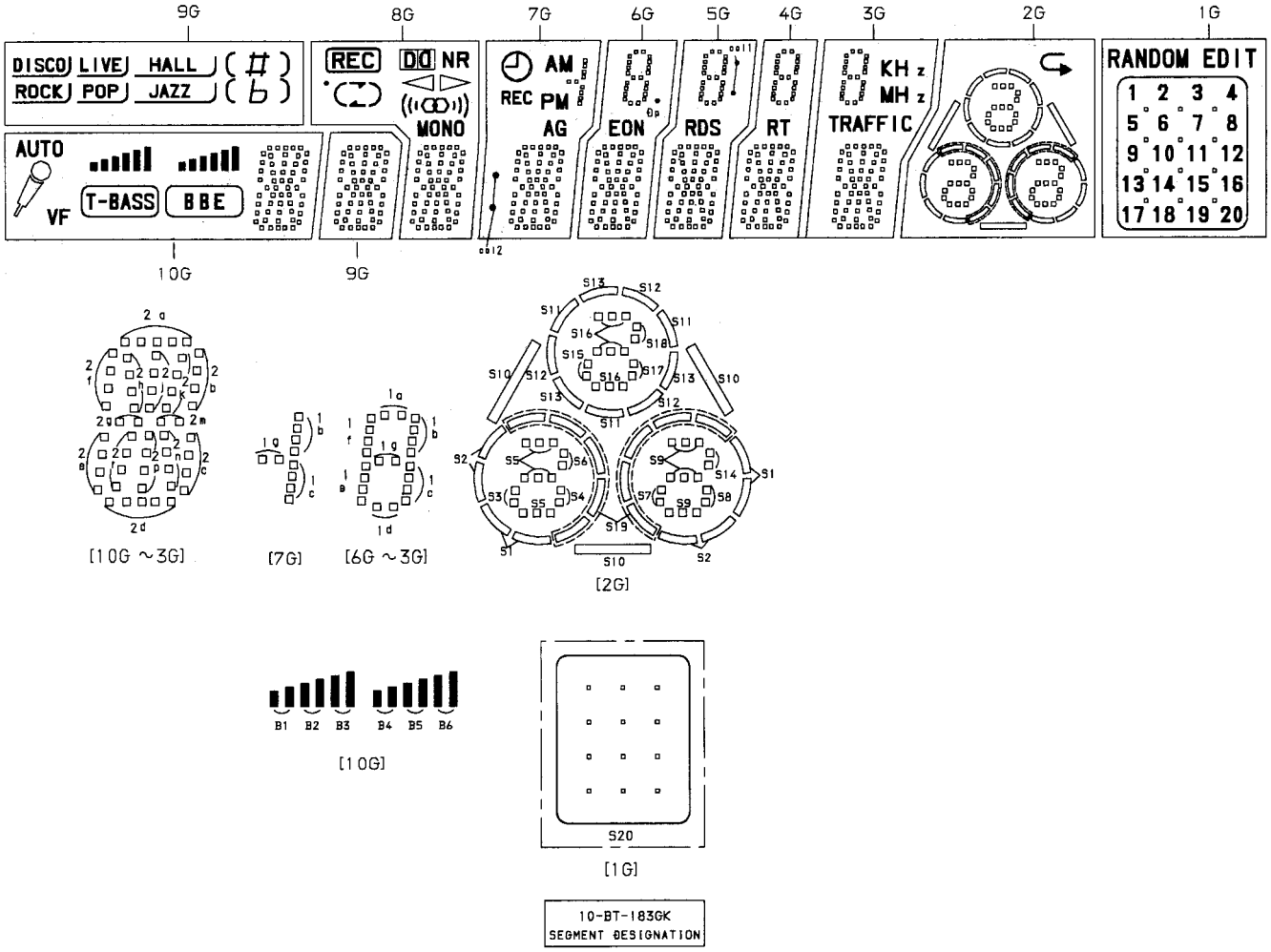
(2G)

ANODE CONNECTION

	7G	6G	5G	4G	3G	2G	1G
P1	2d	2d	2d	2d	2d	S1	20
P2	2j, 2p	2j, 2p	2j, 2p	2j, 2p	2j, 2p	S2	19
P3	2n	2n	2n	2n	2n	S3	18
P4	2r	2r	2r	2r	2r	S4	17
P5	2c	2c	2c	2c	2c	S5	16
P6	2e	2e	2e	2e	2e	S6	15
P7	2m	2m	2m	2m	2m	S7	14
P8	2g	2g	2g	2g	2g	S8	13
P9	2f	2f	2f	2f	2f	S9	12
P10	2b	2b	2b	2b	2b	S10	11
P11	2k	2k	2k	2k	2k	S11	10
P12	2h	2h	2h	2h	2h	S12	9
P13	2a	2a	2a	2a	2a	S13	8
P14	VF	:	TUNE	AUTO	((◎))	S14	7
P15	T-BASS	○	○ (下)	—	MHz	S15	6
P16	AI EDIT	—	○ (上)	—	KHz	S16	5
P17	🕘	—	—	—	5	S17	4
P18	PM	1d	1d	1d	1d	S18	3
P19	—	1e	1e	1e	1e	—	2
P20	/	1c	1c	1c	1c	—	1
P21	AM	1g	1g	1g	1g	S21	—
P22	(JAZZ)	1f	1f	1f	1f	S22	—
P23	(POP)	1b	1b	1b	1b	↩	—
P24	(ROCK)	1a	1a	1a	1a	RANDOM	—
P25	—	—	—	—	—	—	▦

FL GRID ASSIGNMENT & ANODE CONNECTION (10EZ)

GRID ASSISNMENT



ANODE CONNECTION

	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	2d	2d	2d	2d	2d	2d	2d	2d	S1	**20**
P2	2n	2n	2n	2n	2n	2n	2n	2n	S2	**19**
P3	2p	2p	2p	2p	2p	2p	2p	2p	S3	**18**
P4	2r	2r	2r	2r	2r	2r	2r	2r	S4	**17**
P5	2e	2e	2e	2e	2e	2e	2e	2e	S5	**16**
P6	2c	2c	2c	2c	2c	2c	2c	2c	S6	**15**
P7	2g	2g	2g	2g	2g	2g	2g	2g	S7	**14**
P8	2m	2m	2m	2m	2m	2m	2m	2m	S8	**13**
P9	2f	2f	2f	2f	2f	2f	2f	2f	S9	**12**
P10	2b	2b	2b	2b	2b	2b	2b	2b	S10	**11**
P11	2k	2k	2k	2k	2k	2k	2k	2k	S11	**10**
P12	2j	2j	2j	2j	2j	2j	2j	2j	S12	**9**
P13	2h	2h	2h	2h	2h	2h	2h	2h	S13	**8**
P14	2a	2a	2a	2a	2a	2a	2a	2a	S14	**7**
P15	**BBE**	(DISCO)	**MONO**	**AG**	**EON**	**RDS**	**RT**	**TRAFFIC**	S15	**6**
P16	**T-BASS**	(LIVE)	(( ))	col	—	col (LOWER)	—	**MHz**	S16	**5**
P17	$\mathcal{P}_{VF}$	(HALL)	◁	**REC**	Dp	col (UPPER)	—	**KHz**	S17	**4**
P18	**AUTO**	(ROCK)	▷	⏲	1d	1d	1d	1d	S18	**3**
P19	B1	(POP)	○	**PM**	1e	1e	1e	1e	S19	**2**
P20	B2	(JAZZ)	☾	**AM**	1c	1c	1c	1c	↻	**1**
P21	B3	([#])	♪	1g	1g	1g	1g	1g	—	**RANDOM**
P22	B4	([b])	♪	1b, 1c	1f	1f	1f	1f	—	**EDIT**
P23	B5	DISCO LIVE HALL	**REC**	—	1b	1b	1b	1b	—	S20
P24	B6	ROCK POP JAZZ	**DD NR**	—	1a	1a	1a	1a	—	—
P25	—	# b	—	—	—	—	—	—	—	—

IC DESCRIPTION (D)

IC, μPD78044HGF-021-3B9

端子番号	端子名称	I/O	機能説明
1~7	G7~G1	O	FL グリッド出力
8	VDD	-	電源端子
9	O-DISH·R	O	CD ターンテーブル逆回転出力
10	O-DISH·F	O	CD ターンテーブル正回転出力
11	O-CD·LED	O	CD フラッシュウインドウ LED ON/OFF 出力
12	O-CDCE(CD)	O	CDCE 出力
13	I-WRQ(CD)	I	WRQ 入力
14	O-CLK(CD)	O	CLK 出力
15	O-DATA(CD)	O	データ出力
16	I-SUBQ(CD)	I	SUB-Q 入力
17	RESET	I	リセット入力
18	I-RE·B	I	ロータリーエンコーダー A 入力
19	I-RE·A	I	ロータリーエンコーダー B 入力
20	A VSS	-	GND
21	O-MOTOR	O	デッキモータ 入力
22	NC	-	未使用
23	I-HOLD	I	電源不良検出 入力 "L" クロック停止、メモリー保持
24	I-CDSW	I	CD ターンテーブルフォトセンサー A/D コンバーター入力
25	I-DISH	I	CD メカスイッチ A/D コンバーター入力
26	I-TPSW	I	デッキメカスイッチ A/D コンバーター入力
27,28	I-KEY0,1	I	キー入力（AD）
29	A VDD	-	電源端子
30	A VREF	-	リファレンス電圧（+5V）
31	I-TMBASE	I	タイマー時計用リファレンスクロック入力
32	NC	-	未使用
33	VSS	-	GND
34,35	X1,X2	I/O	511.47Hz 発振子回路
36	O-CSHIFT	O	マイコンクロックシフト出力
37	O-FUNC·CD	O	CD 用電源、ON/OFF 出力
38	O-FUNC·B	O	ファンクションスイッチ出力
39	O-FUNC·A		
40	O-EVRCLK	O	音量クロック出力
41	O-EVRDATA	O	音量データ出力
42	O-DATA	O	PLL IC データ出力
43	O-CLK	O	PLL IC クロック出力
44	O-PLLCE	O	PLL IC チップイネーブル
45	I-TUNE/IFC	I	チューナー SD 検知入力、IF カウントシリアルデータ入力
46	I-STEREO	I	チューナーステレオ検知入力
47	I-RMC	I	システムリモコン信号入力

	AUX	TUNER	CD	TAPE
O-FUNCA	0	0	1	1
O-FUNCB	0	1	0	1

端子番号	端子名称	I/O	機能説明
48	IC	-	GNDに接続
49	O-MUTE	O	システムミュート出力
50	$\overline{\text{O-POWER}}$	O	システム電源供給 $\overline{\text{ON}}$/OFF出力
51	$\overline{\text{O-PB1}}$	O	再生デッキ1,2スイッチ出力"L"はデッキ1
52	VDD	-	電源供給入力
53~70	O-SEG·A~O-SWG·R	O	FLセグメント出力P24～P7
71	-VFL	-	FLディスプレイ用電源
72~77	O-SEG·S~O-SEG·X	O	FLセグメント出力P6～P1
78	O-INITIAL	O	出力イニシャルダイオード入力
79	O-TRYCLS	O	CDトレイクローズデータ出力
80	O-TRYOPN	O	CDトレイオープンデータ出力

IC, LC72131

端子番号	端子名称	I/O	機能説明
1	XIN	I/O	水晶発振子（4.5MHz）に接続
22	XOUT		
2	NC	–	未使用
3	CE	I	IC起動、"H"でアクティブ
4	DI	I	適切キー作動時、CPU(μPD78044HGF-201-3B9)からデジタルデータ入力
5	CLK	I	データDIでクロックする
6	DO	O	CPU(μPD78044HGF-201-3B9)へディジタルデータ出力
7	TM-BASE	O	時計用リファレンスクロック信号（8Hz）を出力
8	$\overline{\text{MONO}}$ / BEAT	O	MONO/BEATスイッチ時"H"でを出力
9	$\overline{\text{FM}}$ / AM	O	以下のように"L"または"H"を出力 2 BAND: AM H, FM L 3 BAND: LW H, MW H, FM L 3 BAND: MW H, SW L, FM L
10	$\overline{\text{MW}}$	O	以下のように"L"または"H"を出力 2 BAND: AM L, FM L 3 BAND: LW H, MW L, FM L 3 BAND: MW L, SW H, FM L
11	IF-MUTE	O	インターナルカウンターをコントロール
12	IFIN	I	ゼネラルパポーズカウンター入力
13	$\overline{\text{TUNE}}$	I	選局時、"L"を受信
14	NC	–	未使用
15	A MIN	I	AMローカル発振周波数信号を受信
16	F MIN	I	FMローカル発振周波数信号を受信
17	VDD	–	IC(+5V)へ電源供給
18	PD	O	PLLチャージポンプ出力
19	AIN	I	PLLアクティブ低域フィルター用MOSトランジスター
20	AOUT	O	
21	VSS	–	GND

IC DESCRIPTION (EXCEPT D)

IC, μPD78044HGF-201-3B9 <EXCEPT 10EZ>

Pin No.	Pin Name	I/O	Description
1~7	G7~G1	O	FL grid output.
8	VDD	-	Power supply input.
9	O-DISH·R	O	CD turntable reverse rotation output.
10	O-DISH·F	O	CD turntable forword rotation output.
11	O-CD·LED	O	CD flash window LED ON/$\overline{\text{OFF}}$ output.
12	IO-BUS1	I/O	μprocessor interface,data input/output.
13	$\overline{\text{O-CCE}}$	O	μprocessor interface,chip enable signal. When "L" : BUS 3~0 are active.
14	IO-BUS2	I/O	μprocessor interface,data input/output.
15	IO-BUS0	I/O	μprocessor interface,data input/output.
16	IO-BUS3	I/O	μprocessor interface,data input/output.
17	$\overline{\text{RESET}}$	I	Reset input.
18	I-RE·B	I	Rotary encoder A input.
19	I-RE·A	I	Rotary encoder B input.
20	A VSS	-	GND.
21	O-MOTOR	O	Deck motor output.
22	O-BUCK	O	μprocessor interface,clock output.
23	$\overline{\text{I-HOLD}}$	I	Power failure detected input "L" to stop clock and maintain memory.
24	I-SW(CD)	I	CD mechanical switch A/D converter input.
25	I-DISH-SENS	I	CD turntable photo sensor A/D converter input.
26	I-TPSW	I	Deck mechanical switch A/D converter input.
27,28	I-KEY1,0	I	Key input. (A/D)
29	A VDD	-	Power supply input.
30	A VREF	-	Reference voltage. (+5V)
31	I-TMBASE	I	Reference clock input for timer watch.
32	XT2(NC)	-	Not used.
33	VSS	-	GND.
34,35	X1,X2	I/O	4.19MHz oscillator circuit.
36	O-CSHIFT	O	Micon clock shift output. (active high)
37	O-FUNC·CD	O	Power supply for CD. Output $\overline{\text{ON}}$/OFF.
38	O-FUNC·B	O	Function switch output.
39	O-FUNC·A		
40	O-EVRCLK	O	Electrical volume clock output.
41	O-EVRDATA	O	Electrical volume data output.
42	O-DATA	O	PLL IC data output.
43	O-CLK	O	PLL IC clock output.
44	O-PLLCE	O	PLL IC chip enable.
45	$\overline{\text{I-TUNE/IFC}}$	I	Tuner SD detected input. IF count serial data input.
46	$\overline{\text{I-STEREO}}$	I	Tuner stereo detected input.
47	$\overline{\text{I-RMC}}$	I	System remote control signal input.

	AUX	TUNER	CD	TAPE
O-FUNCA	0	0	1	1
O-FUNCB	0	1	0	1

Pin No.	Pin Name	I/O	Description
48	IC	-	Connected to GND.
49	O-MUTE	O	System mute output.
50	$\overline{\text{O-POWER}}$	O	System power supply $\overline{\text{ON}}$/OFF output.
51	$\overline{\text{O-PB1}}$	O	Playback Deck 1 and 2 switch output. "L" = Deck 1.
52	VDD	-	Power supply input.
53~70	A ~ R	O	FL segment output P24~P7.
71	-VFL	-	Power for FL display.
72~77	S ~ X	O	FL segment output P6~P1.
78	O-INITIAL	O	Output initial diode input.
79	O-TRYCLS(CD)	O	CD tray close data ouput.
80	O-TRYOPN(CD)	O	CD tray open data output.

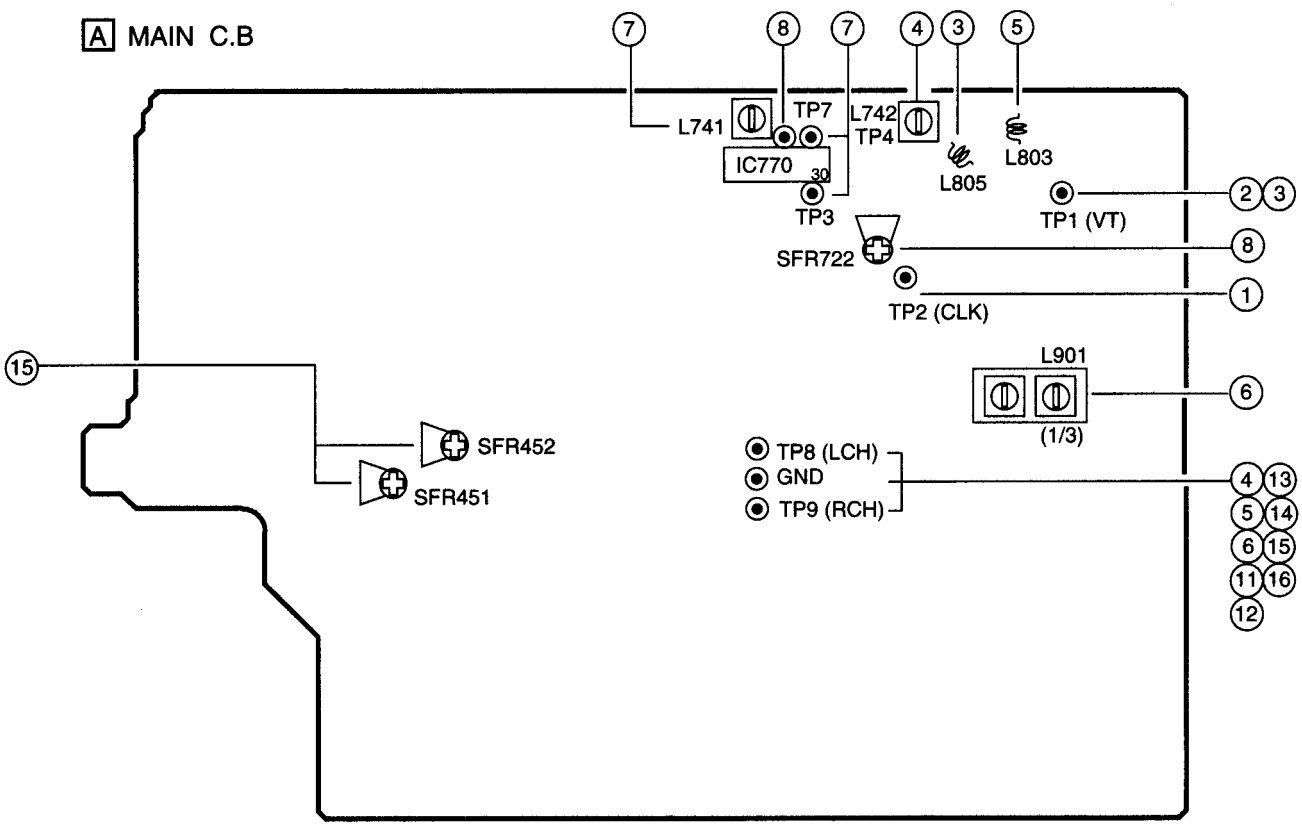
IC, μPD78045HGF-017-3B9 <10EZ>

Pin No.	Pin Name	I/O	Description
1~7	G7~G1	O	FL grid output.
8	VDD	-	Power supply input.
9	O-DISH·R	O	CD turntable reverse ratation output.
10	O-DISH·F	O	CD turntable forword ratation output.
11	O-CD·LED	O	CD flash window LED ON/$\overline{\text{OFF}}$ output.
12	IO-BUS1(CD)	I/O	BUS1(CD) output.
13	O-CCE(CD)	O	CCE(CD) output.
14	IO-BUS2(CD)/ $\overline{\text{I-TUNE/IFC}}$	I/O	BUS2(CD) output / IFC input.
15	IO-BUS0(CD)/ $\overline{\text{I-STEREO}}$	I/O	BUS0(CD) output / FM ST indicator.
16	IO-BUS3(CD)/ I-RDS DATA	I/O	BUS3(CD) input / RDS data input.
17	RESET	-	Reset input.
18	I-RE·B	I	Rotary encoder A input.
19	I-RE·A	I	Rotary encoder B input.
20	A VSS	-	GND.
21	I-RDS AG	I	RDS signal input.
22	O-BUCK(CD)	O	Buck(CD) output.
23	$\overline{\text{I-HOLD}}$	I	Power failure detected input "L" to stop clock and maintain memory.
24	I-CDSW	I	CD mechanicl switch A/D converter input.
25	I-DISH	I	CD turntable photo sensor A/D converter input.
26	I-TPSW	I	Deck mechanical switch A/D converter input.
27,28	I-KEY0,1	I	Key input. (A/D)
29	A VDD	-	Power supply input.
30	A VREF	-	Reference voltage. (+5V)

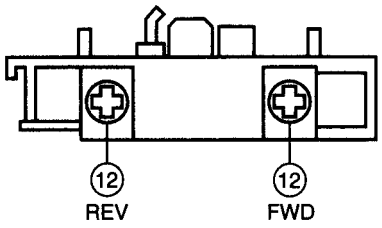
Pin No.	Pin Name	I/O	Description
31	I-TMBASE	I	Reference clock input for timer watch.
32	NC	-	Not used.
33	VSS	-	GND.
34,35	X1,X2	I/O	511.47Hz oscillator circuit.
36	O-CSHIFT	O	Micon clock shift output. (active high).
37	O-INITIAL	-	Not used.
38	O-TRY CLS(CD)	O	CD tray close / open output.
39	O-TRY OPN(CD)		
40	O-EVRCLK	O	Electrical volume clock output.
41	O-EVRDATA	O	Electrical volume data output.
42	O-DATA	O	PLL IC data output.
43	O-CLK	O	PLL IC clock output.
44	O-PLLCE	O	PLL IC chip enable.
45	O-MOTOR	O	Deck motor output.
46	I-RDS CLK	I	RDS input.
47	I-RMC	I	System remote control signal input.
48	IC	-	Connected to GND.
49	O-MUTE	O	System mute output.
50	O-POWER	O	System power supply ON/OFF output.
51	O-STRB	O	Shift register (STRB).
52	VDD	-	Power supply input.
53~70	O-SEG·A~O-SWG·R	O	FL segment output P24~P7.
71	-VFL	-	Power for FL display.
72~77	O-SEG·S~O-SEG·X	O	FL segment output P6~P1.
78~80	G10~G8	O	FL grid output.

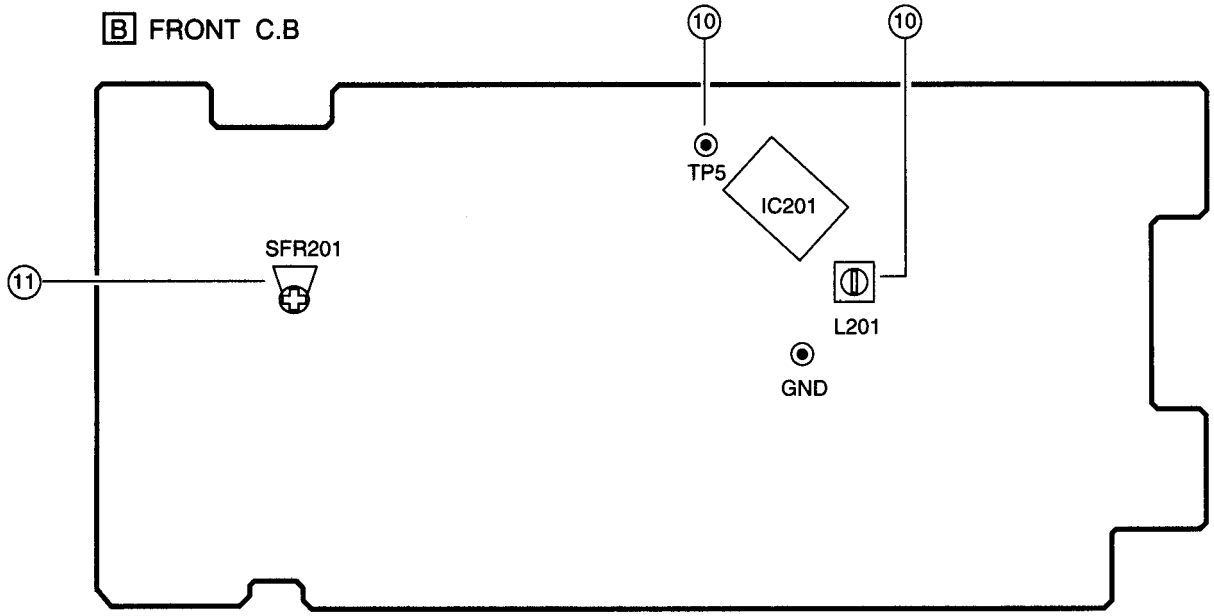
IC, LC72131

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>1</td><td>XIN</td><td rowspan="2">I/O</td><td rowspan="2">A crystal oscillator (4.5MHz) is connected between these pins.</td></tr>
<tr><td>22</td><td>XOUT</td></tr>
<tr><td>2</td><td>NC</td><td>-</td><td>Not used.</td></tr>
<tr><td>3</td><td>CE</td><td>I</td><td>To enable the IC. Active "H".</td></tr>
<tr><td>4</td><td>DI</td><td>I</td><td>Digital data input from CPU (µPD78044HGF).</td></tr>
<tr><td>5</td><td>CLK</td><td>I</td><td>To clock in the data DI.</td></tr>
<tr><td>6</td><td>DO</td><td>O</td><td>Digital data output to CPU (µPD78044HGF).</td></tr>
<tr><td>7</td><td>8Hz</td><td>O</td><td>Outputs a reference clock signal (8Hz) for the clock.</td></tr>
<tr><td>8</td><td>$\overline{\text{MONO}}$</td><td>O</td><td>Outputs "H" when MONO is switched.</td></tr>
<tr><td>9</td><td>$\overline{\text{FM}}$ / AM</td><td>O</td><td>Output "L" or "H" as follows:
<table>
<tr><th colspan="2">2 BAND</th><th colspan="3">3 BAND</th><th colspan="3">3 BAND</th></tr>
<tr><th>AM</th><th>FM</th><th>LW</th><th>MW</th><th>FM</th><th>MW</th><th>SW</th><th>FM</th></tr>
<tr><td>H</td><td>L</td><td>H</td><td>H</td><td>L</td><td>H</td><td>L</td><td>L</td></tr>
</table></td></tr>
<tr><td>10</td><td>$\overline{\text{MW}}$</td><td>O</td><td>Outputs "L" or "H" as follows:
<table>
<tr><th colspan="2">2 BAND</th><th colspan="3">3 BAND</th><th colspan="3">3 BAND</th></tr>
<tr><th>AM</th><th>FM</th><th>LW</th><th>MW</th><th>FM</th><th>MW</th><th>SW</th><th>FM</th></tr>
<tr><td>L</td><td>L</td><td>H</td><td>L</td><td>L</td><td>L</td><td>H</td><td>L</td></tr>
</table></td></tr>
<tr><td>11</td><td>IFC</td><td>O</td><td>To control internal counter.</td></tr>
<tr><td>12</td><td>IFI</td><td>I</td><td>General purpose counter input.</td></tr>
<tr><td>13</td><td>$\overline{\text{TUNE}}$</td><td>I</td><td>Receives "L" when station is tuned.</td></tr>
<tr><td>14</td><td>NC</td><td>-</td><td>Not used.</td></tr>
<tr><td>15</td><td>AMI</td><td>I</td><td>Receives the AM local oscillator frequency signal.</td></tr>
<tr><td>16</td><td>FMI</td><td>I</td><td>Receives the FM local oscillator frequency signal.</td></tr>
<tr><td>17</td><td>VPU</td><td>-</td><td>Supply power to IC (+5V).</td></tr>
<tr><td>18</td><td>PD</td><td>O</td><td>PLL charge pump output.</td></tr>
<tr><td>19</td><td>AIN</td><td>I</td><td rowspan="2">The MOS transistor for PLL active low pass filter.</td></tr>
<tr><td>20</td><td>AOUT</td><td>O</td></tr>
<tr><td>21</td><td>VSS</td><td>-</td><td>Ground.</td></tr>
</table>

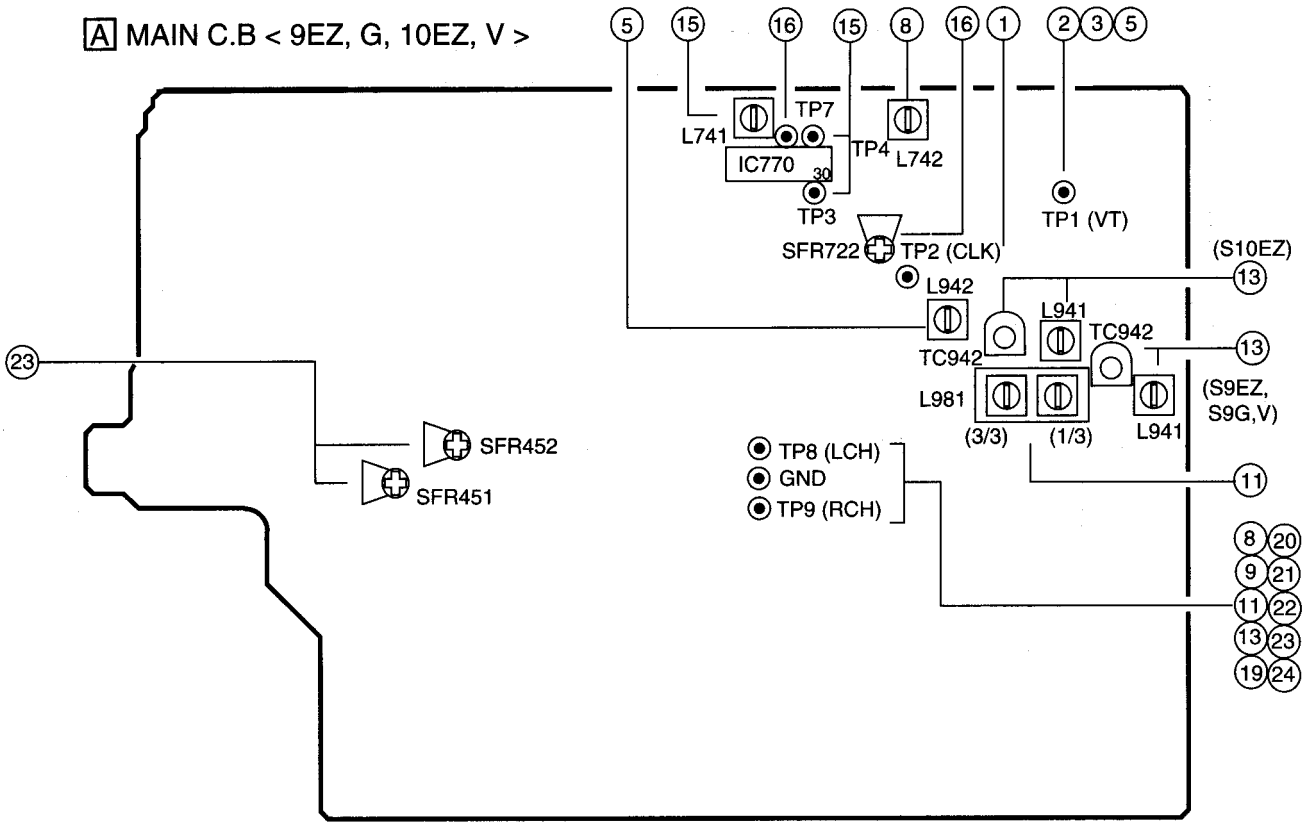


DECK–1 P, DECK–2 R / P / E HEAD

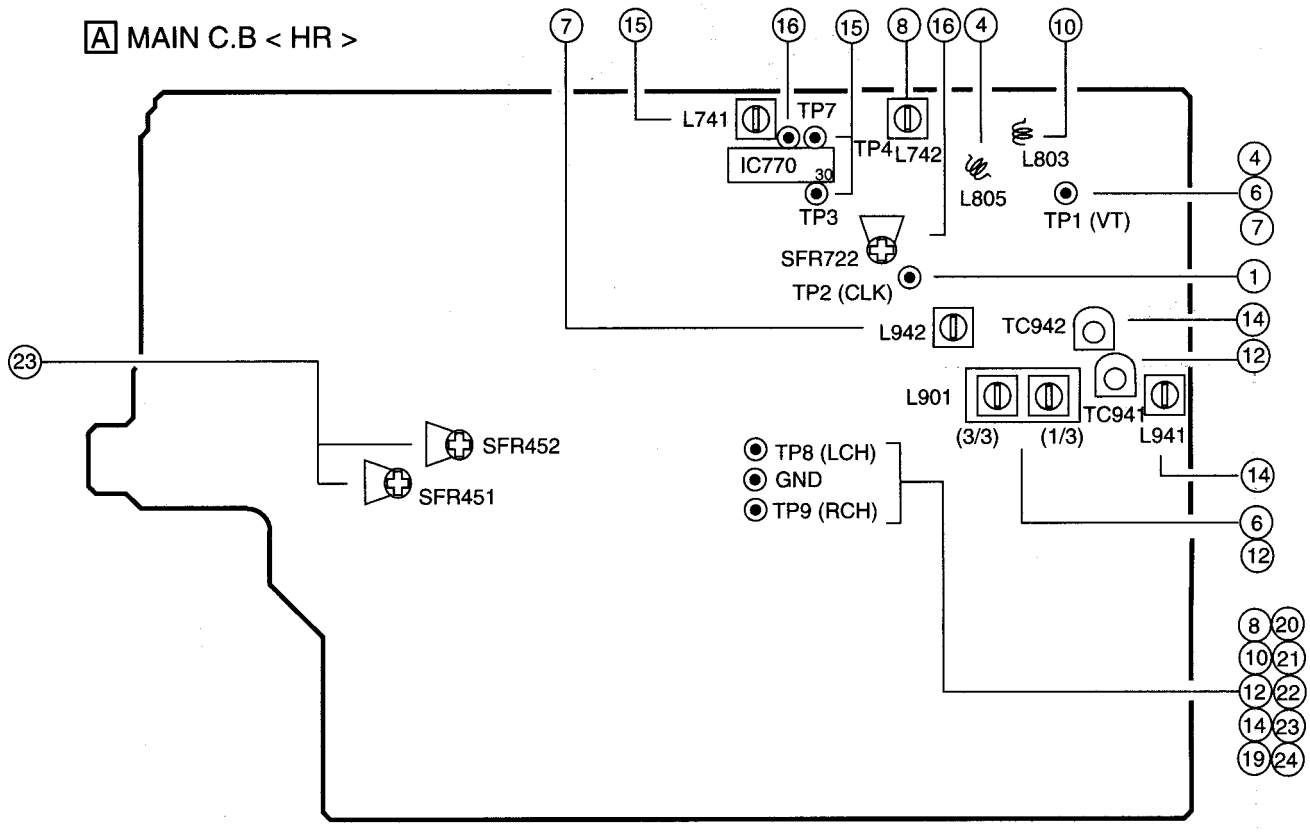


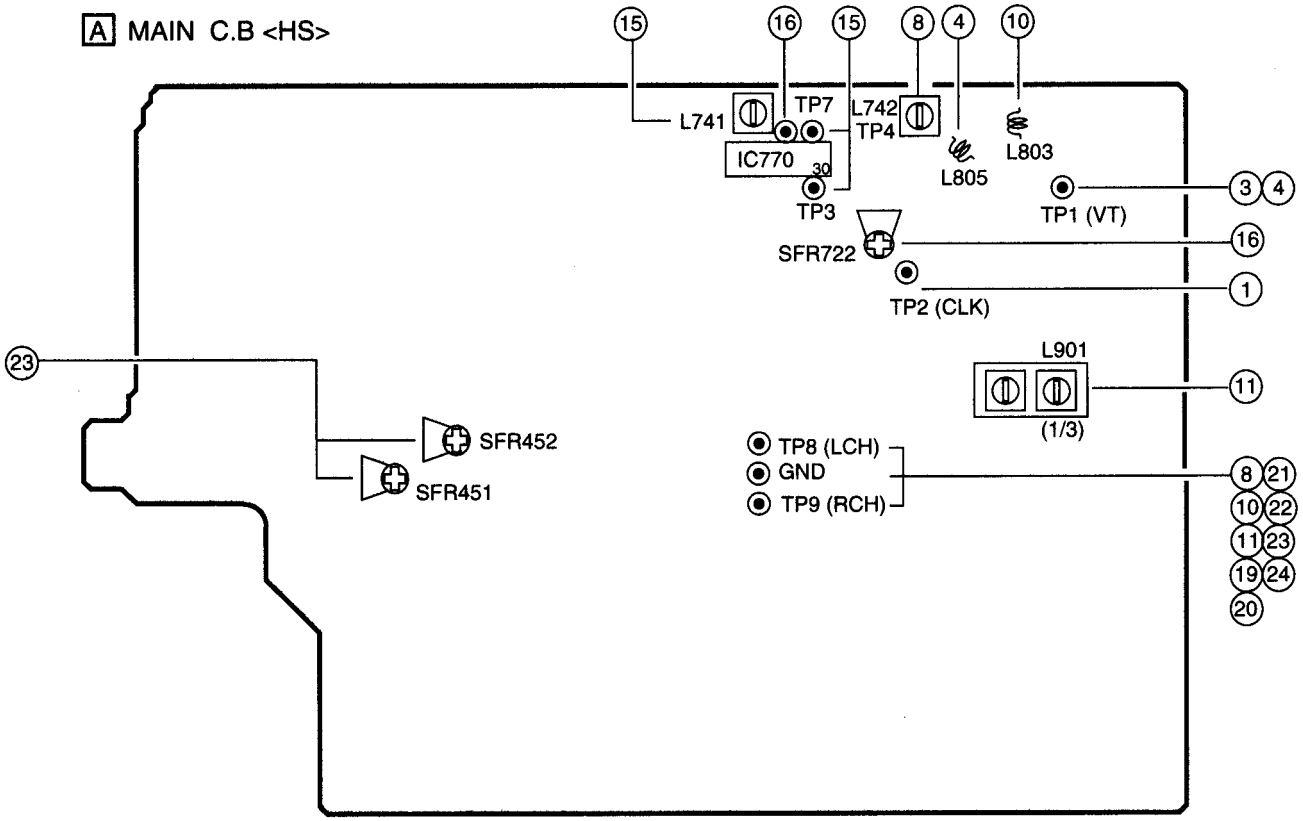


A MAIN C.B < 9EZ, G, 10EZ, V >

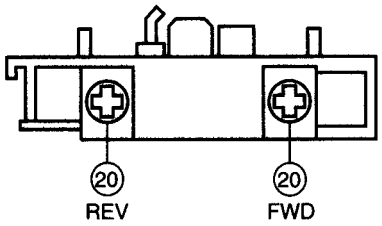


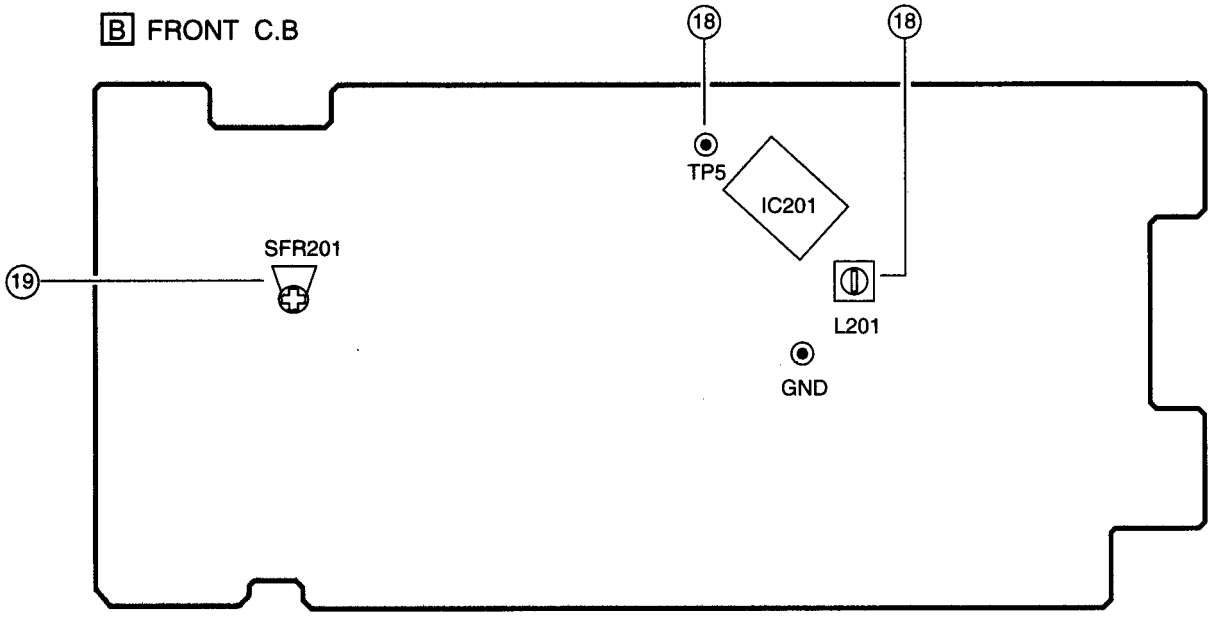
A MAIN C.B < HR >





DECK–1 P, DECK–2 R / P / E HEAD





< TUNER SECTION >

1. Clock Frequency Check
   Settings : • Test point : TP2
   Method : Set to AM(MW) 1602kHz and check that the test point is 2052kHz ± 0.08kHz.

2. FM VT Check (9EZ,G,10EZ)
   Settings : • Test point : TP1 (VT)
   Method : Set to FM 87.5MHz,108.0MHz and check that the test point more than 1.5V(87.5MHz), less than 8.2V (108.0MHz).

2. FM VT Check (V)
   Settings : • Test point : TP1 (VT)
   Method : Set to FM 65.0MHz,108.0MHz and check that the test point more than 1.0V(65.0MHz), less than 9.5V (108.0MHz).

3. MW VT Check (9EZ,G,10EZ,V,HS)
   Settings : • Test point : TP1 (VT)
   Method : Set to MW 1602kHz and check that the test point is 5.6V ± 1.0V.

4. FM VT Adjustment (HR,HS)
   Settings : • Test point : TP1 (VT)
   • Adjustment location : L805
   Method : Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 1.0V(87.5MHz) and adjust L805 so that the test point becomes 7.0V ± 0.05V (108.0MHz).

5. LW VT Adjustment (9EZ,G,10EZ,V)
   Settings : • Test point : TP1 (VT)
   • Adjustment location : L942
   Method : Set to LW 144kHz and adjust L942 so that the test point becomes 1.3V ± 0.05V.

6. MW VT Adjustment (HR)
   Settings : • Test point : TP1 (VT)
   • Adjustment location : L901(3/3)
   Method : Set to MW 1710kHz and adjust L901(3/3) so that the test point becomes 8.5V ± 0.05V.

7. SW VT Adjustment (HR)
   Settings : • Test point : TP1 (VT)
   • Adjustment location : L942
   Method : Set to SW 17.9MHz and adjust L942 so that the test point becomes 7.0V ± 0.05V.

8. AM(MW) IF Adjustment
   Settings : • Test point : TP8,TP9
   • Input level : adjustable
   • Adjustment location : L742
   Method : Set to AM(MW) 999kHz and adjust L742 so that the test point becomes maximum.

9. FM Tracking Check (9EZ,G,10EZ)
   Settings : • Test point : TP7, TP8
   Method : Set to FM 98.0MHz and check that the test point is 10dB ± 6dB.

9. FM Tracking Check (V)
   Settings : • Test point : TP7, TP8
   Method : Set to FM 70.0MHz, 98.0MHz and check that the test point is 6dB ± 6dB(70.0MHz), 5dB ±6dB (98.0MHz) .

10. FM Tracking Adjustment (HR,HS)
    Settings : • Test point : TP8, TP9
    • Input level : adjustable
    • Adjustment location : L803
    Method : The level at 87.5MHz is adjusted to maximum by L803 then check that the usable sensitivity is 0dB±6dB(87.5MHz), 4dB ± 6dB(108.0MHz).

11. AM Tracking Adjustment (HS)
    Settings : • Test point : TP8, TP9
    • Adjustment location : L901(1/3) 999kHz
    Method : Set to AM(MW) 999kHz and adjust L901(1/3) so that the test point become maximum.

11. MW Tracking Adjustment (9EZ,G,10EZ,V)
    Settings : • Test point : TP8, TP9
    • Adjustment location : L981(1/3) 999kHz
    Method : Set to AM(MW) 999kHz and adjust L981(1/3) so that the test point become maximum.

12. MW Tracking Adjustment (HR)
    Settings : • Test point : TP8, TP9
    • Adjustment location : L901(1/3) 603kHz
    TC941 ..... 1404kHz
    Method : Set up TC941 to center before adjustment, the level at 603kHz is adjusted to maximum by L901(1/3). Then the level at 1404kHz is adjusted to maximum by TC941.

13. LW Tracking Adjustment (9EZ,G,10EZ,V)
    Settings : • Test point : TP8, TP9
    • Adjustment location : L941 ..... 144kHz
    TC942 ..... 290kHz
    Method : Set up TC941 to center before adjustment, the level at 144kHz is adjusted to maximum by L941. Then the level at 290kHz is adjusted to maximum by TC942.

14. SW Tracking Adjustment (HR)
    Settings : • Test point : TP8, TP9
    • Input level : adjustable
    • Adjustment location : L941 ..... 5.9MHz
    TC942 ..... 17.9MHz
    Method : Set up TC941 to center before adjustment, the level at 5.9MHz is adjusted to maximum by L941. Then the level at 17.9MHz is adjusted to maximum by TC942.

15. DC Balance / Mono Distortion Adjustment
    Settings : • Test point : TP3, TP4
    • Adjustment location : L741
    • Input level : 54dB
    Method : Set to FM 98.0MHz and adjust L741 so that the voltage between TP3 and TP4 becomes 0V ± 0.04V. Next, check that the distortion is less than 1.3% .

16. Auto Stop Level Adjustment
    Settings : • Test point : TP7
    • Adjustment location : SFR722
    • Input level : 54dB
    Method : Set to FM 98.0 MHz and adjust voltage low (about 0.1V) by SFR722. After that voltage high (about 7.0V) by 2dB down.

17. Auto Stop Level Check

    AM(MW)
    Method : Check auto stop at AM(MW) 999kHz and the level is 43 ~ 68 dB.

FM

Method : Check auto stop at FM 98.0MHz and the level is 20 dB ± 10 dB.

SW (HR)

Method : Check auto stop at SW 12.0MHz and the level is 45 dB ± 10 dB.

18. μ-con Clock Adjustment

Settings : • Test point : TP5
• Adjustment location : L201

Method : Connect frequency counter across TP5 and GND then adjust L201 so that the test point becomes 511.47 ± 0.4Hz [9EZ, G,HR,HS,V], 371.92 ± 0.4Hz [10EZ].

< DECK SECTION >

19. Tape Speed Adjustment

Settings : • Test tape : TTA–410
• Test point : TP8, TP9
• Adjustment location : SFR201

Method : Play back the test tape and adjust SFR201 so that the frequency counter reads 3000Hz ± 5Hz.

20. Head Azimuth Adjustment

Settings : • Test tape : TTA–410
• Test point : TP8, TP9
• Adjustment location : Head azimuth adjustment screw

Method : Play back the 10kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on each FWD and REV PLAYmode.

21. PB Frequency Response Check (DECK 1, DECK 2)

Settings : • Test tape : TTA–320
• Test point : TP8, TP9

Method : Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is ± 5dB.

22. PB Sensitivity Check (DECK 1, DECK 2)

Settings : • Test tape : TTA–210
• Test point : TP8, TP9

Method : Play back the test tape and check that the output level of the test point is 150mV ± 3.0dB .

23. REC/PB Frequency Response Adjustment

Settings : • Test tape : TTA–602
• Test point : TP8, TP9
• Input signal : 800Hz / 8kHz (LINE IN)
• Adjustment location : SFR451 (Lch)
SFR452 (Rch)

Method : Apply a 800Hz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes 11mV. Record and play back the 800Hz and 8kHz signals and adjust SFRs so that the output of the 8kHz signals becomes 12mV (+1.0dB) ± 0.5dB with respect to that of the 800Hz signal.

24. REC/PB Sensitivity Check

Settings : • Test tape : TTA–602
• Test point : TP8, TP9
• Input signal : 800Hz (LINE IN)

Method : Apply a 800Hz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes 11mV. Record and play back the 800Hz signals and check that the output is 10mV (-1.0dB) ± 2.5dB.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity :	V :
	10dB ± 4dB [at 65.0 MHz]
	6dB ± 4dB [at 70.0 /74.0 MHz]
	5dB ± 4dB [at 87.5 / 98.0 / 108.0MHz]
(THD 3%)	D :
	1dB ± 6dB [at 76.0MHz]
	4dB ± 6dB [at 83.0MHz]
	-2dB ~ 16dB [at 108.0MHz]
	9EZ,G,10EZ :
	11dB ± 6dB [at 87.5 / 98.0MHz]
	1dB ~ 19dB [at 108.0MHz]
	HR,HS :
	1dB ± 6dB [at 87.5MHz]
	4dB ± 6dB [at 98.00MHz]
	-2dB ~ 16dB [at 108.0MHz]
Quieting sensitivity :	STEREO
	V :
	Less than 36dB
	[at 65.0 / 70.0 / 74.0MHz]
	[at 87.5 / 98.0 / 108.0MHz]
(at S/N 50dB)	D,HR,HS :
	Less than 35dB
	[at 76.0 / 83.0 / 108.0MHz(D)]
	[at 87.5 / 98.0 / 108.0MHz(HR,HS)]
(at S/N 46dB)	9EZ,G,10EZ :
	Less than 36dB
	[at 87.5 / 98.0 / 108.0MHz]
Signal to noise ratio :	STEREO
	D,HR,HS :
	More than 60dB
	[at 83.0MHz(D)]
	[at 98.0MHz(HR,HS)]
	V :
	More than 55dB
	[at 70.0 / 98.0MHz]
	MONO
	D,HR,HS :
	More than 70dB
	[at 83.0MHz(D)]
	[98.0MHz(HR,HS)]
	9EZ,G,10EZ :
	More than 67dB
	[at 98.0MHz]
	V :
	More than 65dB
	[at 70.0 / 98.0MHz]
Distortion :	STEREO
	D,HR,HS,9EZ,G,10EZ :
	Less than 2.0%
	[at 83.0MHz(D)]
	[at 98.0MHz(HR,HS,9EZ,G,10EZ)]
	V :
	Less than 2.3%
	[at 70.0MHz]
	MONO
	D,HR,HS,9EZ,G,10EZ :
	Less than 1.3%
	[at 83.0MHz(D)]
	[at 98.0MHz(HR,HS,9EZ,G,10EZ)]
	V :
	Less than 1.5%
	[at 70.0MHz]
Auto stop level :	10 ~ 30dB
	[at 70.0MHz(V)]
	[at 83.0MHz(D)]
	[at 98.0MHz(HR,HS,9EZ,G,10EZ)]
Stereo separation :	D,HR,HS :
	More than 28dB
	[at 83.0MHz(D)]
	[at 98.0MHz(HR,HS)]
	9EZ,G,10EZ,V :
	More than 20dB
	[at 98.0MHz(9EZ,G,10EZ)]
	[at 70.0 / 98.0MHz(V)]
Intermediate frequency :	10.7MHz

<AM(MW) SECTION>

Sensitivity :	Less than 66dB
(S/N 20dB)	[at 603kHz]
	Less than 60dB
	[at 999kHz/1404kHz]
Signal to noise ratio :	More than 30dB
	[at 999kHz]
Distortion :	Less than 3.0%
	[at 999kHz]
Auto stop level :	43dB ~ 68dB
	[at 999kHz]
Stereo separation :	D :
	More than 12dB
	[at 999kHz]
Intermediate frequency :	450kHz

<LW SECTION> (9EZ,G,10EZ,V only)

Sensitivity :	Less than 72dB
(S/N 20dB)	[at 144 / 198 / 290kHz]
Signal to noise ratio :	More than 30dB
	[at 198kHz]
Distortion :	Less than 1.5%
	[at 198kHz]
Intermediate frequency :	450kHz

<SW SECTION> (HR only)

Sensitivity :	Less than 47dB [at 5.9MHz]
(S/N 20dB)	Less than 41dB [at 12.0 / 17.9MHz]
Signal to noise ratio :	More than 35dB
	[at 12.0MHz]
Distortion :	Less than 1.5%
	[at 12.0MHz]
Intermediate frequency :	450kHz

<DECK SECTION>

Tape speed :	3000Hz ± 45Hz
Wow & flutter :	Less than 0.35%
	(RMS)
Take-up torque :	30 ~ 60g-cm
	(FWD, REV)
F.F & REW torque :	55 ~ 140g-cm
Back tension :	2 ~ 5g-cm
	(FWD, REV)
PB output level :	2.8V ± 3dB
	(SP OUT 2V)
REC/PB output level :	2.0V ± 3.5dB
	(SP OUT 2V,NORM)
Distortion (REC/PB) :	Less than 2.0% (NORM)
Noise level (PB) :	Less than 20mV

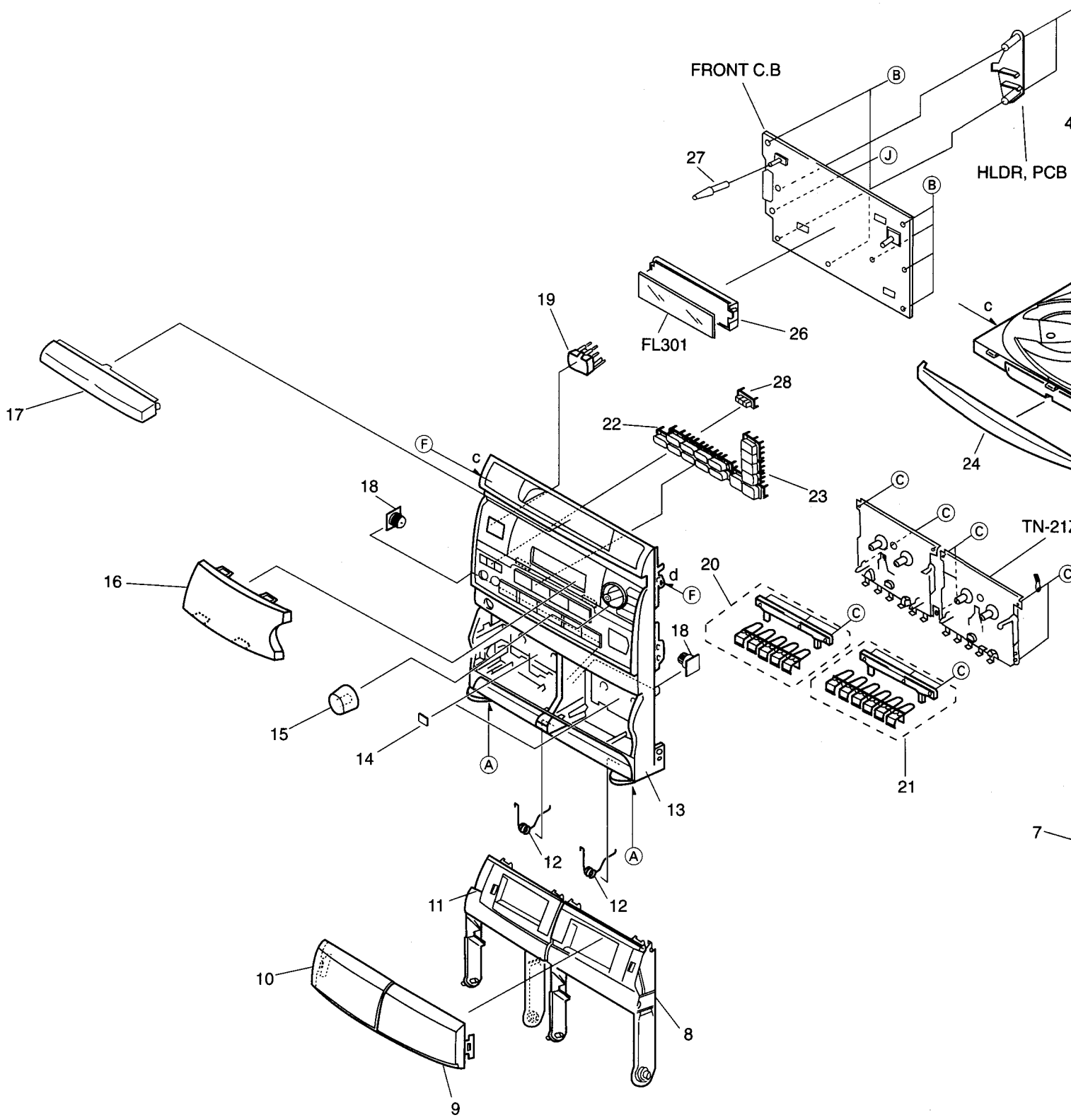
	(NORM,SP OUT 2V,DOLBY OFF)
Noise level (REC/PB) :	Less than 35mV
	(NORM,SP OUT 2V,DOLBY OFF)
Crosstalk :	More than 55dB
	(SP OUT 2V,1kHz)
Channel seperation :	More than 35 dB
	(SP OUT 2V,1kHz)
Erasing ratio :	More than 55dB
	(at 400Hz, 10VU,NORM)
Test tape :	NORM : TTA-602

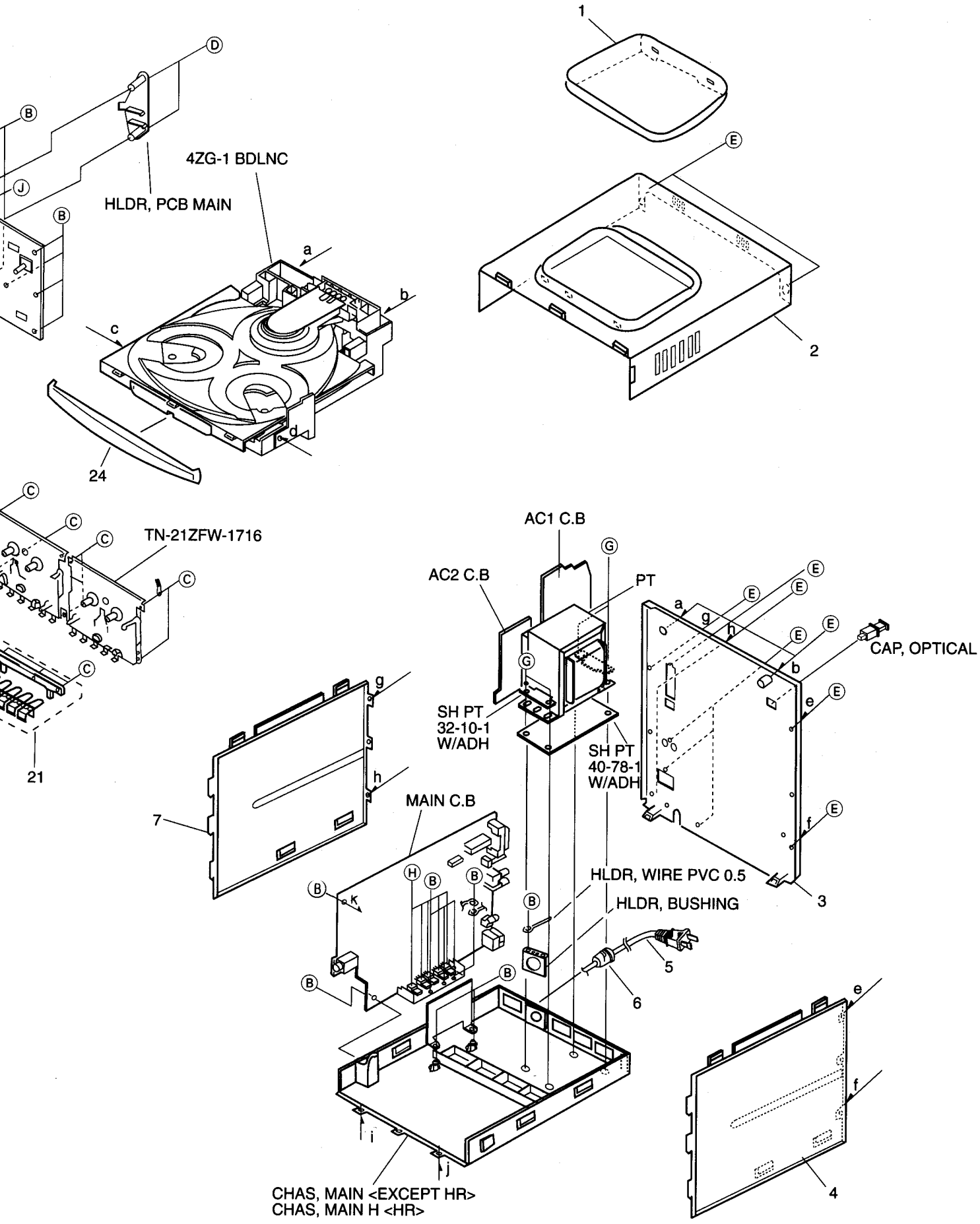
ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-NF9-909-019		IB,E(ECA)-C<HR>
1	87-NF9-910-019		IB,E(EGFSI)-C<10EZ>
1	87-NF9-911-019		IB,V-C<V>
1	87-NF9-912-019		IB,E(EGFSI)-C-9<9EZ>
1	87-NF9-913-010	--	IB,D(J)-I<D>
1	87-NF9-922-019		IB,HS(K)-C<HS>
1	87-NF9-920-010		IB,G(E)-C<G>
2	87-A90-030-010		ANT,LOOP AM-NC C<10EZ,9EZ,G>
3	87-A90-054-010	--	ANT,LOOP AM-CON C<HR,HS,V,D>
4	87-A90-118-010		ANT,WIRE FM(Z)<10EZ,9EZ,G>
5	87-043-115-010		ANT,FEEDER FM<HR>
6	87-A90-119-010		ANT,WIRE SW (5M)<HR>
7	86-NFZ-638-110		RC UNIT,RC-6AS14
⚠ 8	87-A90-312-016		PLUG,CONVERSION WTN-1157R1<HR>

MECHANICAL EXPLODED VIEW 1 / 1



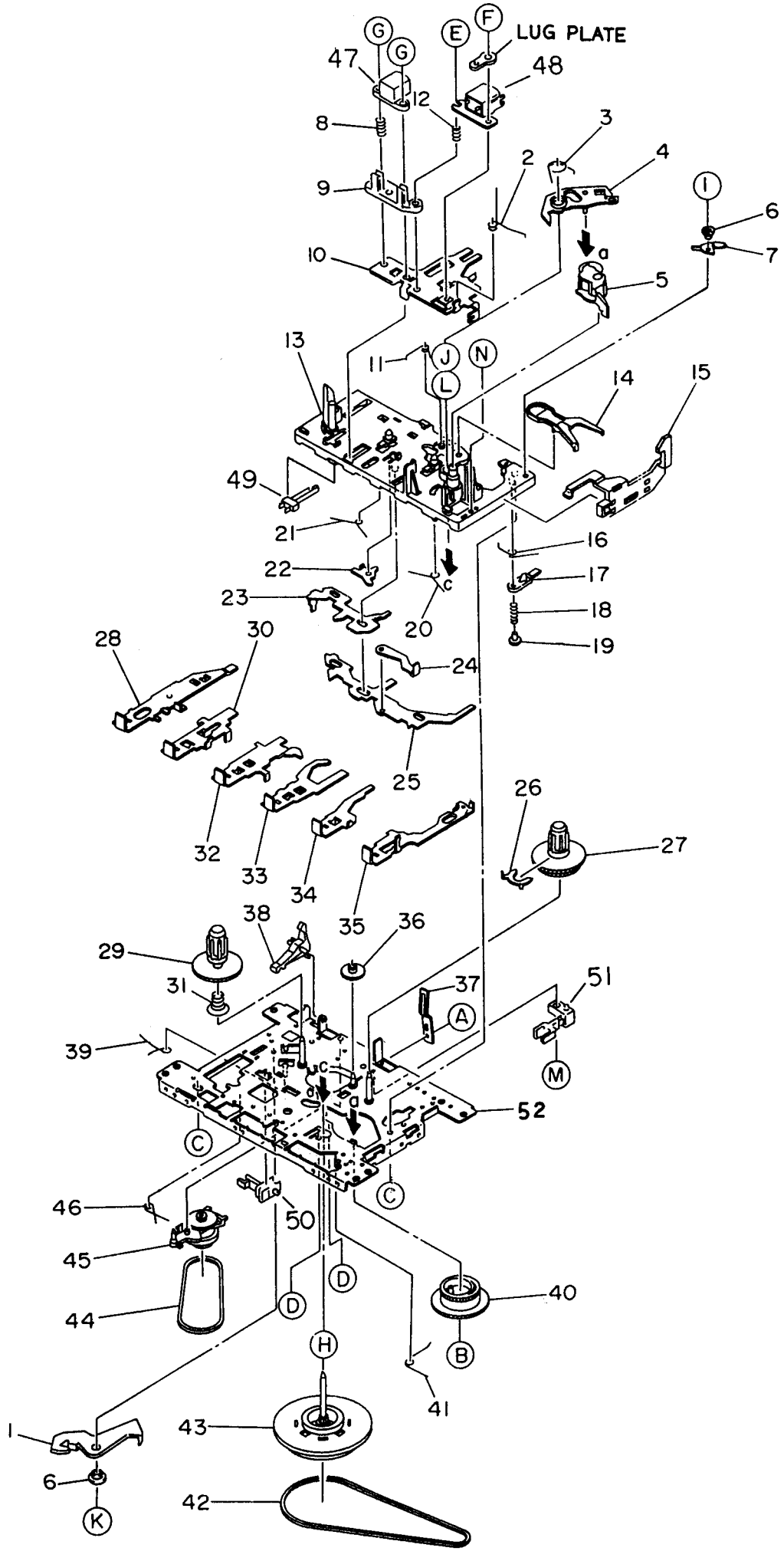

1
2
4ZG-1 BDLNC
HLDR, PCB MAIN
24
TN-21ZFW-1716
21
AC1 C.B
AC2 C.B
PT
SH PT
32-10-1
W/ADH
SH PT
40-78-1
W/ADH
CAP, OPTICAL
MAIN C.B
7
HLDR, WIRE PVC 0.5
HLDR, BUSHING
3
5
6
4
CHAS, MAIN <EXCEPT HR>
CHAS, MAIN H <HR>

MECHANICAL PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-NFZ-001-010	--	WINDOW,TOP
2	87-NF9-055-010	--	PANEL,TOP
3	87-NF9-022-010		CABI,REAR EZSTNC(RDS)<10EZ>
3	87-NF9-015-010		CABI,REAR VJSTNM<V>
3	87-NF9-027-010		CABI,REAR HSSTNC<HS>
3	87-NF9-028-010	--	CABI,REAR STNC<D>
3	87-NF9-025-010		CABI,REAR GSTNC<G>
3	87-NF9-023-010		CABI,REAR E1STNC<9EZ>
3	87-NF9-013-010		CABI,REAR HRJSTNM<HR>
4	87-NF9-057-010	--	PANEL,RIGHT
⚠ 5	87-050-079-010		AC CORD ASSY,BLK<HR,10EZ,9EZ,V>
⚠ 5	87-050-081-110		AC CORD ASSY,G<G>
⚠ 5	87-A80-006-010		AC CORD ASSY,HS<HS>
⚠ 5	87-050-098-010	1B	AC CORD ASSY,D BLK<D>
6	87-085-184-010	0E	BUSHING, AC CORD (D) CM-22A<D>
6	87-085-185-010		BUSHING, CORD (E)CM-22B<EXP D>
7	87-NF9-056-010	--	PANEL,LEFT
8	87-NF9-031-010		BOX,CASS R<HR,HS>
8	87-NF9-033-010		BOX,CASS UR<10EZ,9EZ,V,G>
8	87-NF9-053-010	--	BOX,CASS BR<D>
9	87-NF9-037-010	--	WINDOW,CASS R
10	87-NF9-036-010	--	WINDOW,CASS L
11	87-NF9-030-010		BOX,CASS L<HR,HS>
11	87-NF9-032-010		BOX,CASS UL<10EZ,9EZ,V,G>
11	87-NF9-052-010	--	BOX,CASS BL<D>
12	82-NF7-218-010	--	SPR-T,CASS
13	87-NF9-002-010		CABI,FR HE<HR,HS>
13	87-NF9-004-010		CABI,FR E RDS<10EZ>
13	87-NF9-005-010	--	CABI,FR B<D>
13	87-NF9-006-010		CABI,FR E1<9EZ,G>
13	87-NF9-007-010		CABI,FR V<V>
14	81-532-080-010	1A	LBL,CASS-COMPT
15	87-NF9-048-010	--	KNOB,RTRY VOL
16	87-NF9-034-010		WINDOW,DISP E(RDS)<10EZ>
16	87-NF9-039-010		WINDOW,DISP<HR,HS>
16	87-NF9-040-010	--	WINDOW,DISP U<9EZ,G,V,D>
17	87-NF9-038-010	--	WINDOW,CD
18	87-063-164-010	--	OIL-DMPR,
19	87-NF9-044-110		KEY,POWER<EXP D>
19	87-NF9-058-010	--	KEY,POWER<D>
20	87-NF9-041-010	--	KEY,CASS L
21	87-NF9-042-010	--	KEY,CASS R
22	87-NF9-046-010	--	KEY,ASSY 1
23	87-NF9-047-010		KEY,ASSY 2<EXP D>
23	87-NF9-054-010	--	KEY,ASSY 2B<D>
24	87-NF9-050-010		PANEL,TRAY U<EXP D>
24	87-NF9-051-010	--	PANEL,TRAY B<D>
25	82-NE6-067-010	--	BADGE,AIWA 30N
26	82-NF7-210-110	--	GUIDE,FL
27	87-NF9-049-010		KNOB RTRY MIC<HR,HS>
A	87-067-581-010	--	BVT2+3-15 W/O SLOT
B	87-067-703-010	0E	BVT2+3-10 W/O SLOT
C	87-067-758-010	0E	BVT2+3-12 W/O SLOT
D	87-067-698-010	--	BVT2+3-18 W/O SLOT
E	87-067-761-010	0E	BVT2+3-10 BLK
F	87-721-097-410	0E	QT2+3-12 GLD
G	87-741-172-410	--	UT2+4-12 W/O SLOT
H	87-067-579-010	0E	BVT2+3-8 W/O SLOT
J	87-661-096-410	--	VFT1+3-10

TAPE MECHANISM EXPLODED VIEW 1 / 2

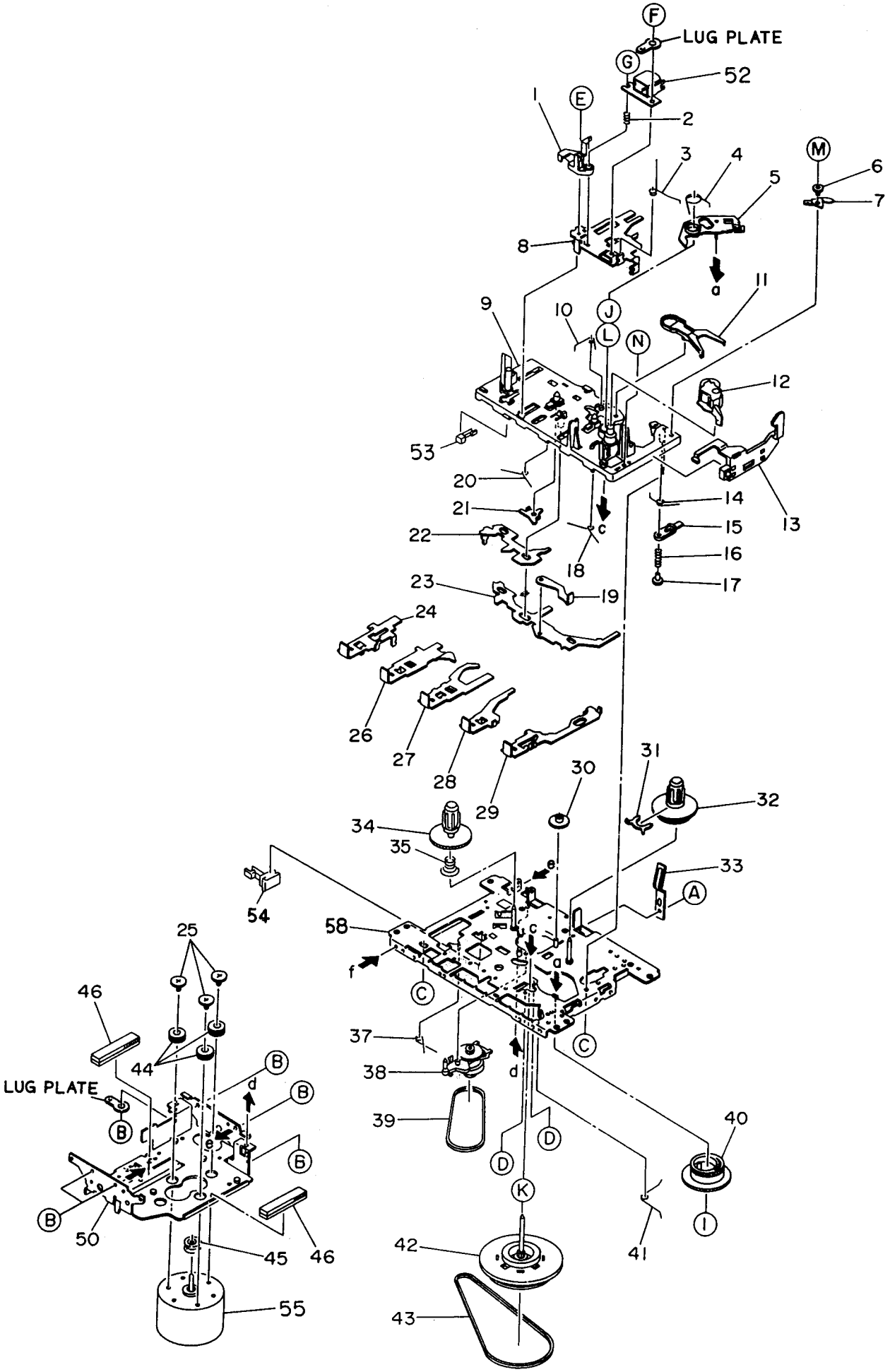


TAPE MECHANISM PARTS LIST 1/2

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	S1-921-020-010	0E	REC ARM
2	S1-921-030-090	0E	PANEL P SPRING
3	S1-921-260-050	0E	GEAR PLATE SPRING
4	S1-921-265-020	0E	GEAR PLATE ASSY
5	S1-921-043-100	1C	PINCH ROLLER ARM ASSY
6	S1-921-140-370	0E	P ARM COLLER
7	S1-921-140-340	0E	P ARM
8	S1-821-030-080	0E	EH SPRING
9	S1-921-030-060	0E	HEAD BASE
10	S1-921-030-140	0E	HEAD PANEL
11	S1-921-141-8A0	0E	M CONTROL SPRING
12	S1-821-030-070	0E	AZIMUTH SPRING
13	S1-921-143-180	1C	BASE ASSY
14	S1-921-260-4A0	0E	SENSING LEVER
15	S1-921-130-020	0E	EJECT SLIDE LEVER
16	S1-921-141-3A0	1C	P CONTROL SPRING
17	S1-921-140-550	2B	PAUSE LEVER(E)
18	S1-921-140-120	0E	PAUSE LEVER SPRING
19	S1-921-140-110	1H	PAUSE STOPPER
20	S1-921-140-150	0E	BUTTON LEVER SPRING(B)
21	S1-921-140-140	1F	BUTTON LEVER SPRING(A)
22	S1-921-140-200	0E	PR STOPPER
23	S1-921-140-090	0E	SWITCH ACTUATOR
24	S1-921-140-640	0E	E KICK LEVER
25	S1-921-140-080	1E	PUSH BUTTON ACTUATOR
26	S1-921-050-060	0E	SENSER
27	S1-921-053-030	1F	TAKE UP REEL ASSY
28	S1-921-140-220	0E	REC BUTTON LEVER
29	S1-921-053-040	1E	SUPPLY REEL ASSY
30	S1-921-140-230	1D	PLAY BUTTON LEVER
31	S1-821-100-990	0E	BACK TENSION SPRING
32	S1-921-140-240	0E	REW BUTTON LEVER
33	S1-921-140-250	0E	FF BUTTON LEVER
34	S1-921-140-660	1A	STOP BUTTON LEVER
35	S1-921-140-610	1F	PAUSE BUTTON LEVER
36	S1-821-100-700	0E	FF GEAR
37	S1-829-100-010	0E	PACK SPRING
38	S1-821-100-690	1C	RECORD SAFETY LEVER
39	S1-921-140-210	1A	REC BUTTON LEVER SPRING
40	S1-921-260-020	1B	CAM GEAR
41	S1-921-140-160	0E	E ACTUATOR SPRING
42	S1-921-090-240	1C	MAIN BELT
43	S1-921-093-030	0E	FLYWHEEL ASSY
44	S1-821-070-110	0E	RF BELT
45	S1-921-073-080	??	RF CLUTCH ASSY
46	S1-921-140-170	1H	P.S.LEVER SPRING
47	S6-202-140-190	1E	E HEAD
48	S6-201-010-750	0E	R.P.HEAD RP-7442BS
49	S6-401-011-490	1B	LEAF SW MSW-1541T
50	S6-401-011-610	1B	LEAF SW MSW-17820MVEI
51	S6-401-010-380	1B	LEAF SW MSW-1275
52	S1-921-015-010	??	CHASSIS ASSY
A	S9-179-000-000	0E	C TAP SCREW M2-3
B	S9-422-000-000	0E	P WASHER CUT 12-3.8-0.3
C	S9-679-000-000	0E	P TAP SCREW M2-5
D	S9-999-180-090	0E	TAP SCREW M2-4.5
E	S9-922-000-000	0E	AZIMUTH SCREW M2-8
F	S9-115-000-000	0E	+ BIND SCREW M2-3
G	S9-821-000-000	0E	+-CAP SCREW M2-8
H	S9-882-000-000	0E	P WASHER 2-3.5-0.4
I	S9-999-200-410	1B	P TAP SCREW M2-3
J	S9-999-030-130	0E	P WASHER CUT 1.45-3.8-0.
K	S9-180-000-000	0E	C TAP SCREW M2-4
L	S9-999-000-030	0E	P WASHER2.1-4-0.13
M	S9-181-000-000	1F	C TAP SCREW M2-5
N	S9-P05-200-610	0E	S TAPPING SCREW M2-6

TAPE MECHANISM EXPLODED VIEW 2 / 2



TAPE MECHANISM PARTS LIST 2 / 2

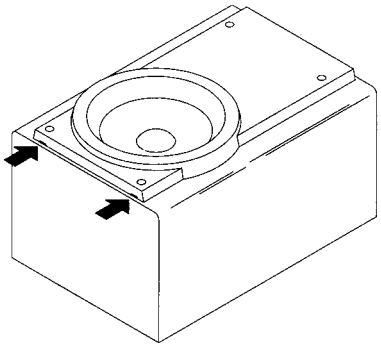
If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	S1-921-030-4A0	0E	HEAD BASE
2	S1-821-030-070	0E	AZIMUTH SPRING
3	S1-921-030-090	0E	PANEL P SPRING
4	S1-921-260-050	0E	GEAR PLATE SPRING
5	S1-921-265-020	0E	GEAR PLATE ASSY
6	S1-921-140-370	0E	P ARM COLLER
7	S1-921-140-340	0E	P ARM
8	S1-921-030-110	1A	HEAD PANEL
9	S1-921-143-170	0E	BASE ASSY
10	S1-921-141-8A0	0E	M CONTROL SPRING
11	S1-921-260-4A0	0E	SENSING LEVER
12	S1-921-043-100	1C	PINCH ROLLER ARM ASSY
13	S1-921-130-020	0E	EJECT SLIDE LEVER
14	S1-921-141-3A0	1C	P CONTROL SPRING
15	S1-921-140-550	2B	PAUSE LEVER(E)
16	S1-921-140-120	0E	PAUSE LEVER SPRING
17	S1-921-140-110	1H	PAUSE STOPPER
18	S1-921-140-150	0E	BUTTON LEVER SPRING(B)
19	S1-821-011-590	0E	E KICK LEVER
20	S1-921-140-140	1F	BUTTON LEVER SPRING(A)
21	S1-921-140-200	0E	PR STOPPER
22	S1-921-140-090	0E	SWITCH ACTUATOR
23	S1-921-140-080	1E	PUSH BUTTON ACTUATOR
24	S1-921-140-230	1D	PLAY BUTTON LEVER
25	S1-821-120-020	0E	MOTOR COLLER SCREW
26	S1-921-140-240	0E	REW BUTTON LEVER
27	S1-921-140-250	0E	FF BUTTON LEVER
28	S1-921-140-260	0E	STOP BUTTON LEVER
29	S1-921-140-610	1F	PAUSE BUTTON LEVER
30	S1-821-100-700	0E	FF GEAR
31	S1-921-050-060	0E	SENSER
32	S1-921-053-030	1F	TAKE UP REEL ASSY
33	S1-829-100-010	0E	PACK SPRING
34	S1-921-053-040	1E	SUPPLY REEL ASSY
35	S1-821-100-990	0E	BACK TENSION SPRING
37	S1-921-140-170	1H	P.S.LEVER SPRING
38	S1-921-073-080	??	RF CLUTCH ASSY
39	S1-821-070-110	0E	RF BELT
40	S1-921-260-020	1B	CAM GEAR
41	S1-921-140-160	0E	E ACTUATOR SPRING
42	S1-921-093-040	1F	FLYWHEEL ASSY
43	S1-921-090-240	1C	MAIN BELT
44	S1-820-130-060	0E	MOTOR RUBBER
45	S1-921-120-130	0E	MOTOR PULLEY
46	S1-921-120-120	1B	ANTI VIBR FELT MAT
50	S1-921-120-110	1B	MOTOR BRACKET
52	S6-201-010-750	0E	R.P.HEAD RP-7442BS
53	S6-401-011-490	1B	LEAF SW MSW-1541T
54	S6-401-011-610	1B	LEAF SW MSW-17820MVE1
55	S6-002-030-290	2M	MOTOR EG530YD-2BH
58	S1-921-015-010	??	CHASSIS ASSY
A	S9-179-000-000	0E	C TAP SCREW M2-3
B	S9-180-000-000	0E	C TAP SCREW M2-4
C	S9-679-000-000	0E	P TAP SCREW M2-5
D	S9-999-180-090	0E	TAP SCREW M2-4.5
E	S9-004-000-000	0E	SCREW M2-6
F	S9-115-000-000	0E	+ BIND SCREW M2-3
G	S9-922-000-000	0E	AZIMUTH SCREW M2-8
I	S9-422-000-000	0E	P WASHER CUT 12-3.8-0.3
J	S9-999-030-130	0E	P WASHER CUT 1.45-3.8
K	S9-882-000-000	0E	P WASHER 2-3.5-0.4
L	S9-999-000-030	0E	P WASHER2.1-4-0.13
M	S9-999-200-410	1B	P TAP SCREW M2-3
N	S9-P05-200-610	0E	S TAPPING SCREW M2-6

SPEAKER DISASSEMBLY INSTRUCTIONS

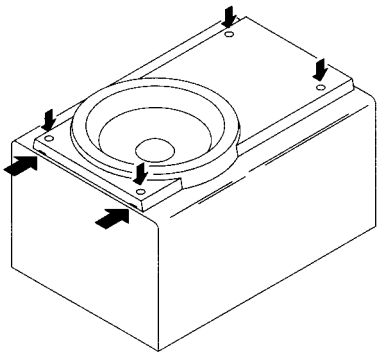
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. remove the screws of each speaker unit and then remove the speaker units.



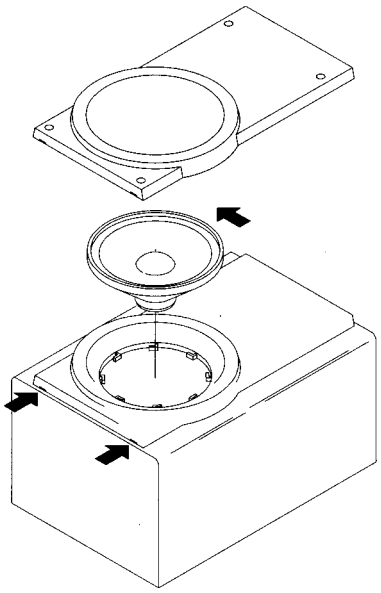
Type.2

Remove the grill frame and four pieces fo rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



SX-NA10 / NS10 (YU,YJ,YS,YL,ST)
SPEAKER PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-NSK-601-019		SPKR,120
2	86-NSZ-602-019		SPKR,CERA 14
3	87-NSK-001-019		PANEL,FR ST
4	86-NSZ-003-019		NET
5	87-NS7-611-019		CORD,SPKR

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
TRIMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
サージサプレッサ	SERGE SUPPRESSOR
セラコン	CAP, CERA SERGESUPPRESSOR CAP,CERA

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
ジグアーム	ARM, SHAFT
ジグガイド	GUIDE, SHAFT
ストラップ	STRAP
トクナベ	S-SCREW
ヒンジ	HINGE
ヒンジビス	S-SCREW
ビスセレート	SCREW, SERRART

サービス技術ニュース	
番号	連絡内容
G一　一	
G一　一	
G一　一	

9620450, 750038

AIWA CO.,LTD.

Tokyo Japan