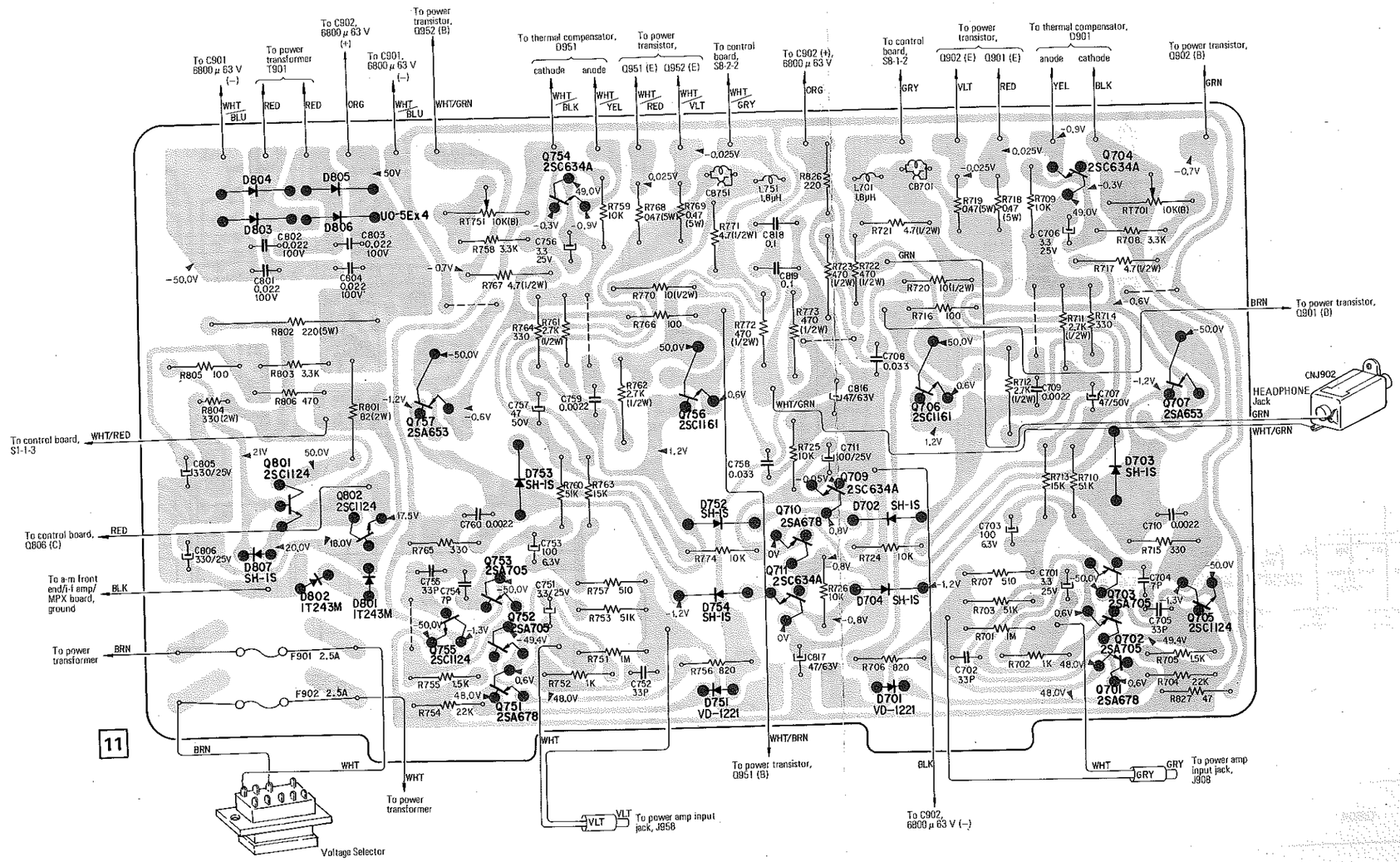
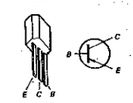
5-7. MOUNTING DIAGRAM – Power Amplifier/Power Supply Board –

– Conductor Side –

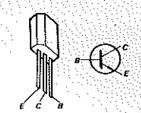


Transistor												
Location	Q801	Q802	Q757 Q755	Q753 Q752 Q751	Q754	Q756	Q710 Q711	Q709	Q706	Q704 Q703 Q702 Q701	Q707 Q705	

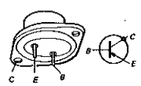
2SA678
2SA705



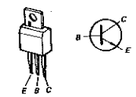
2SC634A



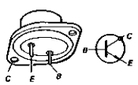
2SA653
2SA679



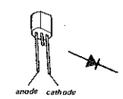
2SC1124



2SC1079
2SC1161



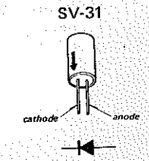
1T243M



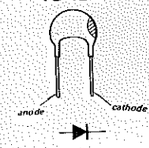
UO-5E

SH-1S

SV-31

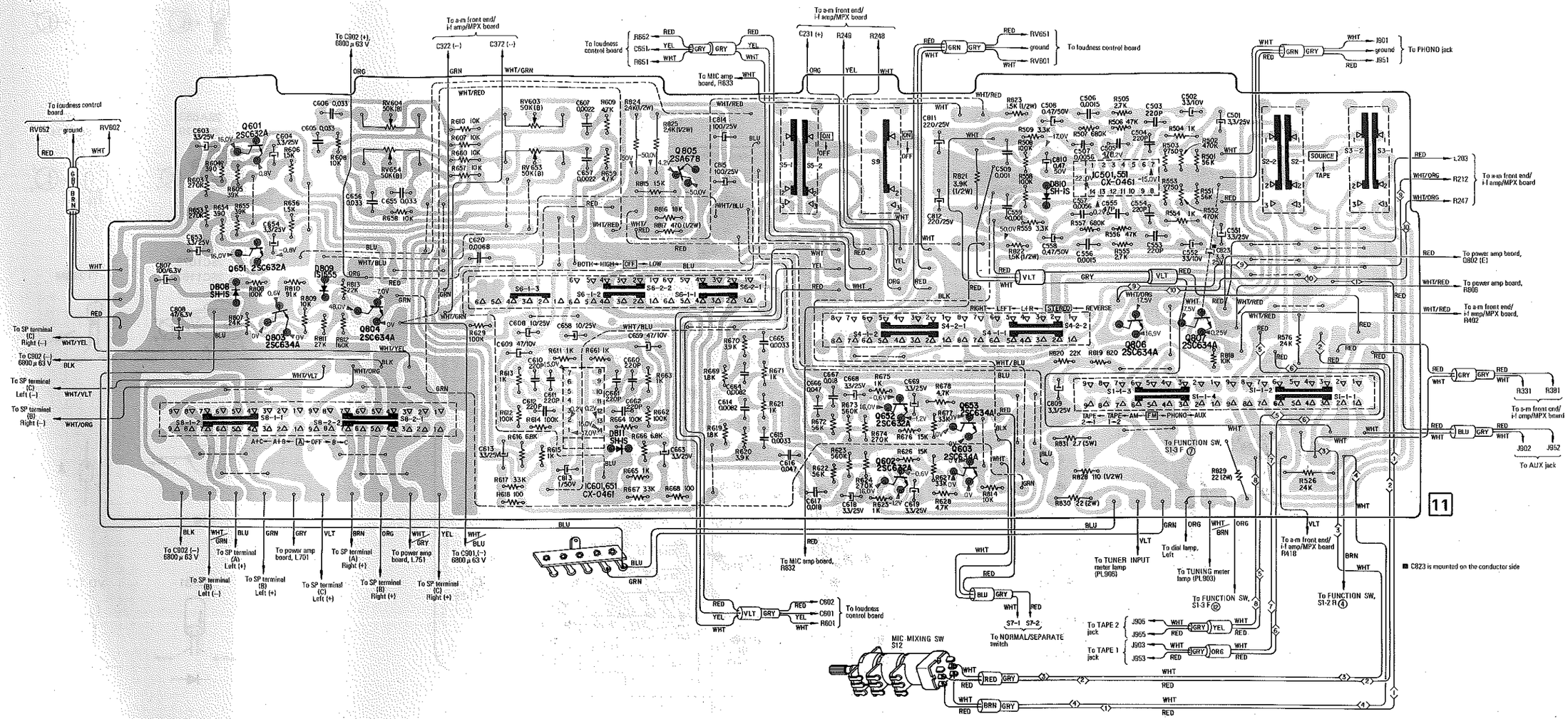


VD-1221



5-6. MOUNTING DIAGRAM — Control Board — (CCB-115)

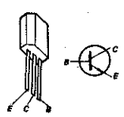
— Conductor Side —



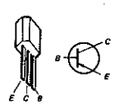
■ C823 is mounted on the conductor side

Transistor Location								
Q601 Q651 Q803	Q804	Q805	Q652 Q602	Q653 Q603	Q806	Q807		

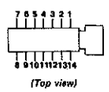
2SC632A
2SC634A



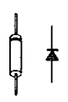
2SA678



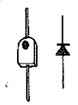
CX-0461



1S1555



SH-1S



STR-7065

USA Model

FM STEREO/FM-AM RECEIVER

SPECIFICATIONS

Fm Tuner Section

Tuning range:	87.5 MHz to 108 MHz
Usable sensitivity:	1.6 μV
Signal-to-noise ratio:	70 dB
Capture ratio:	1.0 dB
Frequency response:	20 Hz to 15 kHz ± 1 dB
Stereo separation:	Better than 38 dB at 400 Hz

A-m Tuner Section:

Tuning range:	530 kHz to 1,605 kHz
Sensitivity:	53 dB/m, built-in antenna at 1,000 kHz 30 μV, external antenna
Signal-to-noise ratio:	50 dB at 50 mV/m

Audio Amplifier Section:

Continuous RMS power output: (Less than 0.2 % THD)	Both channels driven simultaneously 60 + 60 watts (8 ohms) at 20 Hz to 20 kHz 70 + 70 watts (8 ohms) 85 + 85 watts (4 ohms) at 1 kHz One channel driven 85 + 85 watts (8 ohms), 110 + 110 watts (4 ohms)
Dynamic power output: (IHF constant power supply method)	240 watts (8 ohms) 380 watts (4 ohms)
Harmonic distortion:	Less than 0.2 % at rated output Less than 0.1 % at 1 watt output

General

Power requirements:	120 volts, 60 Hz ac
Power consumption:	180 watts
Dimensions:	471 (w) x 157 (h) x 375 (d) mm $18^{9}/_{16}$ x $6^{3}/_{16}$ x $14^{3}/_{4}$ inches
Net weight:	15.2 kg (33 lb 8 oz)

SONY®

SERVICE MANUAL

SECTION 7
ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description
		COMPLETE CIRCUIT BOARDS
	8-982-709-11	fm front-end board (FAF-022BWG)
	8-982-709-27	a-m front-end/i-f amp/MPX board
	8-982-709-12	control board (CCB-115)
	8-982-709-25	loudness control board
	8-982-709-26	MIC amp board
	8-982-709-22	power amp/power supply board
		SEMICONDUCTORS
D101		diode 1S351M
D102		diode 1T243M
D201		diode 1T22A
D202		diode 1T22A
D203		diode 1S1555
D204		diode 1T22A
D205		diode 1T22A
D206		diode 1S1555
D207		diode 1T22A
D208		diode 1T22A
D701(D751)		diode VD-1221
D702(D752)		diode SH-1S
D703(D753)		diode SH-1S
D704(D754)		diode SH-1S
D801		diode 1T243M
D802		diode 1T243M
D803		diode UO-5E
D804		diode UO-5E
D805		diode UO-5E
D806		diode UO-5E
D807		diode SH-1S
D808		diode SH-1S
D809		diode 1S1555
D810		diode SH-1S
D811		diode SH-1S
D901(D951)		diode SV-31
Q101		FET 2SK42
Q102		FET 2SK23A
Q103		transistor 2SC403C
Q104		transistor 2SC710
Q201		transistor 2SC403C
Q202		transistor 2SC403C
Q203		transistor 2SC403C
Q204		FET 2SK23A
Q205		transistor 2SC633A
Q206		transistor 2SC633A
Q207		FET 2SK23A
Q301		transistor 2SC631A
Q302		transistor 2SC631A
Q303		transistor 2SC633A
Q304		transistor 2SC633A
Q501(Q551)		transistor 2SA705
Q502(Q552)		transistor 2SC632A
Q601(Q651)		transistor 2SC632A
Q602(Q652)		transistor 2SC632A
Q603(Q653)		transistor 2SC634A
Q701(Q751)		transistor 2SA678
Q702(Q752)		transistor 2SA705
Q703(Q753)		transistor 2SA705
Q704(Q754)		transistor 2SC634A
Q705(Q755)		transistor 2SC1124
Q706(Q756)		transistor 2SC1161
Q707(Q757)		transistor 2SA653
Q708		----------
Q709		transistor 2SC634A
Q710		transistor 2SA678
Q711		transistor 2SC634A
Q801		transistor 2SC1124
Q802		transistor 2SC1124
Q803		transistor 2SC634A
Q804		transistor 2SC634A
Q805		transistor 2SA678
Q806		transistor 2SC634A
Q807		transistor 2SC634A
Q901(Q951)		transistor 2SC1079
Q902(Q952)		transistor 2SA679
IC201		IC CX-0412
IC301		IC CX-0431
IC401		IC CX-0451
IC501		IC CX-0461
IC601		IC CX-0461
		TRANSFORMERS, COILS & INDUCTORS
B1	1-417-014-21	balun
CFT401	1-403-150-00	CFT
IFT101	1-403-295-12	IFT, fm 10.7 MHz
L101	1-401-489-00	coil, fm antenna
L102	1-425-446-12	coil, fm rf 1
L103	1-425-668-00	coil, fm rf 2
L104	1-405-377-00	coil, fm osc
L105	1-407-184-00	inductor, micro 3.3 μH
L106	1-407-184-00	inductor, micro 3.3 μH
L201	1-407-418-00	coil, trap; SCA
L202	1-407-163-00	inductor, micro 33 μH
L203	1-407-169-00	inductor, micro 100 μH
L401	1-407-169-00	inductor, micro 100 μH
L402	1-407-592-00	inductor, micro 100 μH
L701(L751)	1-401-439-62	inductor, micro 1.8 μH
L901	1-401-439-62	bar antenna, a-m
MU301	1-464-009-00	MPX unit
T201	1-403-291-00	transformer, discriminator 10.7 MHz
T202	1-403-299-00	transformer, muting
T301	1-425-729-00	transformer, switching 38 kHz
T401	1-405-459-00	coil, MW osc
T402	1-403-128-00	IFT, a-m
T801	1-442-030-00	transformer, power

CAPACITORS

All capacitance values are in μF except as indicated with p, which means $\mu\mu$F.

Ref. No.	Part No.	Description
C101	1-102-880-11	15 p ±0.5 pF 50 V ceramic
C102		----------
C103	1-102-880-11	15 p ±0.5 pF 50 V ceramic
C104	1-102-064-11	0.75 p ±10 % 50 V ceramic
C105	1-102-880-11	15 p ±0.5 pF 50 V ceramic
C106	1-102-848-11	180 p ±0.5 pF 50 V ceramic
C107	1-101-923-11	0.01 +80 −20 % 25 V ceramic
C108	1-101-923-11	0.01 +80 −20 % 25 V ceramic
C109	1-101-923-11	0.01 +80 −20 % 25 V ceramic
C110	1-101-918-11	0.001 +80 −20 % 25 V ceramic
C111	1-101-924-11	0.022 +80 −20 % 25 V ceramic
C112	1-101-924-11	0.022 +80 −20 % 25 V ceramic
C113	1-101-924-11	0.022 +80 −20 % 25 V ceramic
C114	1-101-923-11	0.01 +80 −20 % 25 V ceramic
C115	1-102-875-11	7 p ±5 % 50 V ceramic
C116	1-102-875-11	7 p ±5 % 50 V ceramic
C117	1-102-986-11	10 p ±0.5 pF 50 V ceramic
C118	1-102-114-11	470 p ±10 % 50 V ceramic
C119	1-101-118-11	0.01 ±20 % 50 V ceramic
C120	1-102-986-11	10 p ±0.5 pF 50 V ceramic
C121	1-101-924-11	0.022 +80 −20 % 25 V ceramic
C122	1-105-679-12	0.033 ±10 % 50 V mylar
C123	1-121-391-11	1 50 V electrolytic
C124	1-101-924-11	0.022 +80 −20 % 25 V ceramic
C125	1-101-118-11	0.01 ±20 % 50 V ceramic
C126	1-101-118-11	0.01 ±20 % 50 V ceramic
C127	1-102-986-11	10 p ±0.5 pF 50 V ceramic
C128	1-101-924-11	0.022 +80 −20 % 25 V ceramic
C201	1-101-118-11	0.01 ±20 % 50 V ceramic
C202	1-101-923-11	0.01 +80 −20 % 25 V ceramic
C203	1-102-100-11	0.0022 ±5 % 50 V ceramic
C204	1-101-923-11	0.01 +80 −20 % 25 V ceramic
C205	1-101-118-11	0.01 ±20 % 50 V ceramic
C206	1-101-923-11	0.01 +80 −20 % 25 V ceramic
C207	1-101-923-11	0.01 +80 −20 % 25 V ceramic
C208	1-101-918-11	0.001 ±5 % 50 V ceramic
C209	1-102-977-11	200 p ±5 % 50 V ceramic
C210	1-101-924-11	0.022 +80 −20 % 25 V ceramic
C211	1-102-100-11	0.0022 ±5 % 50 V ceramic
C212	1-121-651-11	10 16 V electrolytic
C213	1-101-118-11	0.01 ±20 % 50 V ceramic
C214	1-121-651-11	10 16 V electrolytic
C215	1-105-677-12	0.022 ±10 % 50 V mylar
C216	1-105-689-12	0.22 ±10 % 50 V mylar
C217	1-123-068-11	220 16 V electrolytic
C218	1-102-977-11	200 p ±5 % 50 V ceramic
C219	1-121-413-11	100 6.3 V electrolytic
C220	1-121-651-11	10 16 V electrolytic
C221	1-107-140-11	240 p ±10 % 50 V silvered mica
C222	1-102-824-11	470 p ±5 % 50 V ceramic
C223	1-131-196-11	2.2 16 V tantalum
C224	1-102-960-11	24 p ±5 % 50 V ceramic
C225	1-101-922-11	0.0047 +80 −20 % 25 V ceramic
C226	1-101-923-11	0.01 +80 −20 % 25 V ceramic
C227	1-105-683-12	0.068 ±10 % 50 V mylar
C228	1-121-391-11	1 50 V electrolytic
C229	1-121-395-11	4.7 25 V electrolytic
C230	1-121-651-11	10 16 V electrolytic
C231	1-127-022-11	0.47 ±10 % 10 V solid, aluminum
C232	1-102-960-11	24 p ±5 % 50 V ceramic
C233	1-101-924-11	0.022 +80 −20 % 25 V ceramic
C234	1-101-924-11	0.022 +80 −20 % 25 V ceramic
C235	1-101-118-11	0.01 ±20 % 50 V ceramic
C236	1-121-413-11	100 6.3 V electrolytic
C237	1-101-923-11	0.01 +80 −20 % 25 V ceramic
C301	1-121-402-11	33 10 V electrolytic
C302	1-121-352-11	47 10 V electrolytic
C303	1-121-413-11	100 6.3 V electrolytic
C304	1-127-022-11	0.47 10 V solid, aluminum
C305	1-103-575-11	4.700 p ±5 % 50 V styrol
C306	1-105-661-12	0.001 ±10 % 50 V mylar
C307	1-123-068-11	220 16 V electrolytic
C321(C371)	1-106-013-12	0.0033 ±5 % 50 V mylar
C322(C372)	1-121-912-11	1 50 V electrolytic
C323(C373)	1-121-912-11	1 50 V electrolytic
C324(C374)	1-105-661-12	0.001 ±10 % 50 V mylar
C325(C375)	1-102-973-11	100 p ±5 % 50 V ceramic
C326(C376)	1-121-352-11	47 10 V electrolytic
C327(C377)	1-121-392-11	3.3 25 V electrolytic
C401	1-105-673-12	0.01 ±10 % 50 V mylar
C402		----------
C403	1-102-953-11	18 p ±25 % 25 V ceramic

Ref. No.	Part No.	Description			
C404	1-102-976-11	180 p	±5 %	25 V	ceramic
C405	1-121-409-11	47		16 V	electrolytic
C406	1-105-677-12	0.022	±10 %	50 V	mylar
C407	1-103-815-11	390 p	±5 %	25 V	styrol
C408	1-101-923-11	0.01	$^{+80}_{-20}$ %	25 V	ceramic
C409	1-101-923-11	0.01	$^{+80}_{-20}$ %	25 V	ceramic
C410	1-105-677-12	0.022	±10 %	50 V	mylar
C411	1-105-669-12	0.0047	±10 %	50 V	mylar
C412	1-101-923-11	0.01	$^{+80}_{-20}$ %	25 V	ceramic
C413	1-105-677-12	0.022	±10 %	50 V	mylar
C414		----------			
C415	1-102-977-11	200 p	±5 %	25 V	ceramic
C416	1-102-936-11	3 p	±0.25 pF	25 V	ceramic
C417	1-121-651-11	10		16 V	electrolytic
C418	1-121-395-11	4.7		25 V	electrolytic
C419	1-121-398-11	10		25 V	electrolytic
C420	1-101-923-11	0.01	$^{+80}_{-20}$ %	25 V	ceramic
C421	1-105-672-12	0.0082	±10 %	50 V	mylar
C422	1-105-672-12	0.0082	±10 %	50 V	mylar
C423	1-105-672-12	0.0082	±10 %	50 V	mylar
C424	1-101-924-11	0.022	$^{+80}_{-20}$ %	25 V	ceramic
C425	1-121-651-11	10		16 V	electrolytic
C426	1-101-924-11	0.022	$^{+80}_{-20}$ %	25 V	ceramic
C427	1-105-682-12	0.056	±10 %	50 V	mylar
C501(C551)	1-131-206-11	3.3		25 V	tantalum
C502(C552)	1-121-926-11	33		10 V	electrolytic
C503(C553)	1-102-978-11	220 p	±5 %	50 V	ceramic
C504(C554)	1-102-978-11	220 p	±5 %	50 V	ceramic
C505(C555)	1-101-880-11	47 p	±5 %	50 V	ceramic
C506(C556)	1-106-005-12	0.0015	±5 %	50 V	mylar
C507(C557)	1-106-019-12	0.0056	±5 %	50 V	mylar
C508(C558)	1-121-911-11	0.47		50 V	electrolytic
C509(C559)	1-105-661-12	0.001	±10 %	50 V	mylar
C510(C560)	1-131-206-11	3.3		25 V	tantalum
C511(C561)	1-105-661-12	0.001	±10 %	50 V	mylar
C512(C562)	1-123-044-11	33		25 V	electrolytic
C513(C563)	1-121-913-11	3.3		25 V	electrolytic
C514(C564)	1-121-416-11	100		25 V	electrolytic
C515(C565)	1-105-685-12	0.1	±10 %	50 V	mylar
C516(C566)	1-121-398-11	10		25 V	electrolytic
C601(C651)	1-105-677-12	0.022	±10 %	50 V	mylar
C602(C652)	1-102-982-11	180 p	±10 %	50 V	ceramic
C603(C653)	1-131-206-11	3.3		25 V	tantalum
C604(C654)	1-121-392-11	3.3		25 V	electrolytic
C605(C655)	1-105-679-12	0.033	±10 %	50 V	mylar
C606(C656)	1-105-679-12	0.033	±10 %	50 V	mylar
C607(C657)	1-105-665-12	0.0022	±10 %	50 V	mylar
C608(C658)	1-121-398-11	10		25 V	electrolytic
C609(C659)	1-121-352-11	47		10 V	electrolytic
C610(C660)	1-102-978-11	220 p	±5 %	50 V	ceramic
C611(C661)	1-102-978-11	220 p	±5 %	50 V	ceramic
C612(C662)	1-102-978-11	220 p	±5 %	50 V	ceramic
C613(C663)	1-121-392-11	3.3		25 V	electrolytic
C614(C664)	1-106-023-12	0.0082	±5 %	50 V	mylar
C615(C665)	1-106-013-12	0.0033	±5 %	50 V	mylar
C616(C666)	1-106-041-12	0.047	±5 %	50 V	mylar
C617(C667)	1-106-031-12	0.018	±5 %	50 V	mylar
C618(C668)	1-121-392-11	3.3		25 V	electrolytic
C619(C669)	1-121-392-11	3.3		25 V	electrolytic
C620	1-105-671-12	0.0068	±10 %	50 V	mylar
C701(C751)	1-121-392-11	3.3		25 V	electrolytic
C702(C752)	1-102-963-11	33 p	±5 %	50 V	ceramic
C703(C753)	1-121-413-11	100		6.3 V	electrolytic
C704(C754)	1-102-944-11	7 p	±5 %	50 V	ceramic
C705(C755)	1-102-963-11	33 p	±5 %	50 V	ceramic
C706(C756)	1-121-392-11	3.3		25 V	electrolytic
C707(C757)	1-123-058-11	47		50 V	electrolytic
C708(C758)	1-105-679-12	0.033	±10 %	50 V	mylar
C709(C759)	1-105-665-12	0.0022	±10 %	50 V	mylar
C710(C760)	1-105-665-12	0.0022	±10 %	50 V	mylar
C711	1-121-935-11	100		25 V	electrolytic
C801	1-105-917-12	0.022	±10 %	200 V	mylar
C802	1-105-917-12	0.022	±10 %	200 V	mylar
C803	1-105-917-12	0.022	±10 %	200 V	mylar
C804	1-105-917-12	0.022	±10 %	200 V	mylar
C805	1-123-065-11	330		25 V	electrolytic
C806	1-123-065-11	330		25 V	electrolytic
C807	1-121-413-11	100		6.3 V	electrolytic
C808	1-123-090-11	47		63 V	electrolytic
C809	1-121-392-11	3.3		25 V	electrolytic
C810	1-121-726-11	0.47		50 V	electrolytic
C811	1-121-936-11	220		25 V	electrolytic
C812	1-121-936-11	220		25 V	electrolytic
C813	1-121-391-11	1		50 V	electrolytic
C814	1-121-935-11	100		25 V	electrolytic
C815	1-121-935-11	100		25 V	electrolytic
C816	1-123-090-11	47		63 V	electrolytic
C817	1-123-090-11	47		63 V	electrolytic
C818	1-105-725-12	0.1	±10 %	100 V	mylar
C819	1-105-725-12	0.1	±10 %	100 V	mylar
C820	1-121-410-11	47		25 V	electrolytic
C821	1-121-936-11	220		25 V	electrolytic
C822	1-105-677-12	0.022	±10 %	50 V	mylar
C823	1-121-392-11	3.3		25 V	electrolytic
C901	1-123-089-11	6800		63 V	electrolytic
C902	1-123-089-11	6800		63 V	electrolytic
CT401,402	1-141-095-11	capacitor, trimmer			
CV101,102 CV103,104 CV105, 106	1-151-232-12	capacitor, tuning			

Ref. No.	Part No.	Description

RESISTORS

All resistance values are in Ω, ±5 %, ¼ W and carbon type unless otherwise indicated.

R104	1-244-665-11	470
R105	1-242-689-11	4.7 k
R106	1-242-696-11	9.1 k
R107	1-242-666-11	510
R108	1-242-673-11	1 k
R109	1-242-642-11	51
R110	1-242-697-11	10 k
R111	1-244-692-11	6.2 k
R112	1-242-666-11	510
R113	1-242-677-11	1.5 k
R114	1-242-685-11	3.3 k
R115	1-242-677-11	1.5 k
R116	1-242-721-11	100 k
R117	1-244-697-11	10 k
R118	1-244-675-11	1.2 k
R119	1-244-708-11	30 k
R201	1-244-655-11	180
R202	1-242-661-11	330
R203	1-242-671-11	820
R204	1-242-693-11	6.8 k
R205	1-242-663-11	390
R206	1-242-680-11	2 k
R207	1-244-649-11	100
R208	1-242-673-11	1 k
R209	1-242-687-11	3.9 k
R210	1-242-673-11	1 k
R211	1-242-649-11	100
R212	1-244-649-11	100
R213	1-242-691-11	5.6 k
R214	1-242-661-11	330
R215	1-242-684-11	3 k
R216	1-242-669-11	680
R217	1-242-663-11	390
R218	1-242-661-11	330
R219	1-242-669-11	680
R220	1-242-663-11	390
R221	1-244-649-11	100
R222	1-242-675-11	1.2 k
R223	1-242-697-11	10 k
R224	1-242-641-11	47
R225	1-242-641-11	47
R226	1-242-721-11	100 k
R227	1-242-745-11	1 M
R228	1-242-745-11	1 M
R229	1-242-721-11	100 k
R230	1-244-649-11	100
R231	1-242-673-11	1 k
R232	1-242-706-11	24 k
R233	1-242-655-11	180
R234	1-242-713-11	47 k
R235	1-244-673-11	1 k
R236	1-242-657-11	220
R237	1-242-705-11	22 k
R238	1-242-703-11	18 k
R239	1-242-649-11	100
R240	1-242-689-11	4.7 k
R241	1-242-632-11	20
R242	1-242-701-11	15 k
R243	1-242-699-11	12 k
R244	1-242-632-11	20
R245	1-242-701-11	15 k
R246	1-242-699-11	12 k
R247	1-242-685-11	3.3 k
R248	1-244-731-11	270 k
R249	1-242-714-11	51 k
R250	1-242-745-11	1 M
R251	1-242-735-11	390 k
R252	1-242-723-11	120 k
R253	1-242-711-11	39 k
R254	1-242-721-11	100 k
R255	1-242-745-11	1 M
R256	1-242-673-11	1 k
R257	1-242-677-11	1.5 k
R301	1-242-669-11	680
R302	1-242-701-11	15 k
R303	1-242-684-11	3 k
R304	1-242-684-11	3 k
R305	1-242-681-11	2.2 k
R306	1-202-559-11	270 ±10 % ½ W composition
R321(R371)	1-242-709-11	33 k
R322(R372)	1-242-693-11	6.8 k
R323(R373)	1-242-693-11	6.8 k
R324(R374)	1-242-713-11	47 k
R325(R375)	1-242-724-11	130 k
R326(R376)	1-242-665-11	470
R327(R377)	1-242-693-11	6.8 k
R328(R378)	1-242-681-11	2.2 k
R329(R379)	1-242-663-11	390
R330(R380)	1-242-709-11	33 k
R331(R381)	1-242-681-11	2.2 k
R401	1-242-697-11	10 k
R402	1-242-690-11	5.1 k
R403	1-244-673-11	1 k
R404	1-242-649-11	100
R405	1-242-716-11	62 k
R406	1-242-682-11	2.4 k
R407	1-242-671-11	820

Ref. No.	Part No.	Description
R408	1-242-697-11	10 k
R409	1-242-673-11	1 k
R410	1-242-656-11	200
R411	1-242-709-11	33 k
R412	1-242-687-11	3.9 k
R413	1-242-693-11	6.8 k
R414	1-242-672-11	910
R415	1-242-641-11	47
R416	1-242-672-11	910
R417	1-242-689-11	4.7 k
R418	1-242-673-11	1 k
R419	1-242-713-11	47 k
R420	1-244-643-11	56
R501(R551)	1-242-715-11	56 k
R502(R552)	1-242-737-11	470 k
R503(R553)	1-242-670-11	750
R504(R554)	1-242-673-11	1 k
R505(R555)	1-242-683-11	2.7 k
R506(R556)	1-242-713-11	47 k
R507(R557)	1-242-741-11	680 k
R508(R558)	1-242-721-11	100 k
R509(R559)	1-242-685-11	3.3 k
R510(R560)	1-242-721-11	100 k
R511(R561)	1-242-721-11	100 k
R512(R562)	1-242-673-11	1 k
R513(R563)	1-242-721-11	100 k
R514(R564)	1-242-718-11	75 k
R515(R565)	1-242-705-11	22 k
R516(R566)	1-242-713-11	47 k
R517(R567)	1-242-671-11	820
R518(R568)	1-242-697-11	10 k
R519(R569)	1-242-657-11	220
R520(R570)	1-242-709-11	33 k
R521(R571)	1-242-685-11	3.3 k
R522(R572)	1-242-673-11	1 k
R523(R573)	1-242-698-11	12 k
R524(R574)	1-242-709-11	33 k
R525(R575)	1-242-697-11	10 k
R526(R576)	1-244-699-11	24 k
R601(R651)	1-244-703-11	18 k
R602(R652)	1-244-717-11	68 k
R603(R653)	1-242-731-11	270 k
R604(R654)	1-242-663-11	390
R605(R655)	1-242-711-11	39 k
R606(R656)	1-242-677-11	1.5 k
R607(R657)	1-242-697-11	10 k
R608(R658)	1-242-697-11	10 k
R609(R659)	1-242-689-11	4.7 k
R610(R660)	1-242-697-11	10 k
R611(R661)	1-242-673-11	1 k
R612(R662)	1-242-721-11	100 k

Ref. No.	Part No.	Description
R613(R663)	1-242-673-11	1 k
R614(R664)	1-242-721-11	100 k
R615(R665)	1-242-673-11	1 k
R616(R666)	1-242-693-11	6.8 k
R617(R667)	1-242-709-11	33 k
R618(R668)	1-242-649-11	100
R619(R669)	1-242-679-11	1.8 k
R620(R670)	1-242-687-11	3.9 k
R621(R671)	1-242-673-11	1 k
R622(R672)	1-242-715-11	56 k
R623(R673)	1-242-739-11	560 k
R624(R674)	1-242-731-11	270 k
R625(R675)	1-242-673-11	1 k
R626(R676)	1-242-701-11	15 k
R627(R677)	1-242-709-11	33 k
R628(R678)	1-242-689-11	4.7 k
R629	1-242-721-11	100 k
R701(R751)	1-244-745-11	1 M
R702(R752)	1-244-673-11	1 k
R703(R753)	1-244-714-11	51 k
R704(R754)	1-244-705-11	22 k
R705(R755)	1-244-677-11	1.5 k
R706(R756)	1-244-671-11	820
R707(R757)	1-244-666-11	510
R708(R758)	1-244-685-11	3.3 k
R709(R759)	1-244-697-11	10 k
R710(R760)	1-244-714-11	51 k
R711(R761)	1-202-583-11	2.7 k ±10 % ½ W composition
R712(R762)	1-202-583-11	2.7 k ±10 % ½ W composition
R713(R763)	1-244-701-11	15 k
R714(R764)	1-244-661-11	330
R715(R765)	1-244-661-11	330
R716(R766)	1-244-649-11	100
R717(R767)	1-202-517-11	4.7 ±10 % ½ W composition
R718(R768)	1-217-158-11	0.47 ±10 % 5 W metal
R719(R769)	1-217-158-11	0.47 ±10 % 5 W metal
R720(R770)	1-202-525-11	10 ±10 % ⅓ W composition
R721(R771)	1-202-517-11	4.7 ±10 % ½ W composition
R722(R772)	1-202-565-11	470 ±10 % ½ W composition
R723(R773)	1-202-565-11	470 ±10 % ½ W composition
R724(R774)	1-244-697-11	10 k
R725	1-244-697-11	10 k
R726	1-244-697-11	10 k
R801	1-207-635-11	82 ±10 % 2 W wirewound
R802	1-207-688-11	220 ±10 % 5 W wirewound
R803	1-244-685-11	3.3 k
R804	1-207-639-11	330 ±10 % 2 W wirewound
R805	1-244-649-11	100
R806	1-244-665-11	470
R807	1-242-706-11	24 k
R808	1-242-721-11	100 k

Ref. No.	Part No.	Description
R809	1-242-697-11	10 k
R810	1-242-720-11	91 k
R811	1-242-707-11	27 k
R812	1-242-726-11	160 k
R813	1-242-705-11	22 k
R814	1-242-697-11	10 k
R815	1-242-701-11	15 k
R816	1-242-703-11	18 k
R817	1-202-565-11	470 ±10 % ½ W composition
R818	1-242-697-11	10 k
R819	1-242-671-11	820
R820	1-242-705-11	22 k
R821	1-202-587-11	3.9 k ±10 % ½ W composition
R822	1-202-577-11	1.5 k ±10 % ½ W composition
R823	1-202-577-11	1.5 k ±10 % ½ W composition
R824	1-202-582-11	2.4 k ±10 % ½ W composition
R825	1-202-582-11	2.4 k ±10 % ½ W composition
R826	1-244-657-11	220
R827	1-244-641-11	47
R828	1-202-550-11	110 ±10 % ½ W composition
R829	1-207-630-11	22 ±10 % 2 W wirewound
R830	1-207-630-11	22 ±10 % 2 W wirewound
R831	1-207-929-11	2.7 ±10 % 5 W wirewound
R832	1-202-510-11	2.4 k ±10 % ½ W composition
R833	1-202-510-11	2.4 k ±10 % ½ W composition
R901(R951)	1-244-697-11	10 k
R902(R952)	1-244-697-11	10 k
R903(R953)	1-244-719-11	82 k
R904(R954)	1-244-735-11	390 k
R905	1-202-645-11	1 M ±10 % ½ W composition
RT201	1-222-845-11	100 k (B), adjustable
RT202	1-221-978-11	4.7 k (B), adjustable
RT301	1-221-978-11	4.7 k (B), adjustable
RT401	1-221-997-11	2.2 k (B), adjustable
RT701 (RT751)	1-221-967-11	10 k (B), adjustable
RV501 (RV551)	1-224-103-11	50 k (C), variable (MIC MIXING)
RV601 (RV651)	1-224-102-11	250 k (B)/250 k (M), variable (VOLUME)
RV602 (RV652)	1-224-102-11	250 k (B)/250 k (M), variable (BALANCE)
RV603 (RV653)	1-224-101-11	50 k (B), variable (TREBLE)
RV604 (RV654)	1-224-101-11	50 k (B), variable (BASS)

Ref. No.	Part No.	Description
		SWITCHES
S1	1-516-199-00	switch, rotary/slide (FUNCTION)
S2	1-516-036-00	switch, lever (MONITOR 1)
S3	1-516-036-00	switch, lever (MONITOR 2)
S4	1-516-196-00	switch, rotary/slide (MODE)
S5	1-516-036-00	switch, lever (LOUDNESS)
S6	1-516-197-00	switch, rotary/slide (FILTER)
S7	1-514-524-00	switch, slide (NORMAL/SEPARATE)
S8	1-514-198-00	switch, rotary/slide (SPEAKER)
S9	1-516-036-00	switch, lever (MUTING)
S10	1-514-448-00	switch, slide (DE-EMPHASIS)
S11	1-516-007-00	switch, seesaw (POWER)
S12-1 ~ 3		switch, MIC MIXING (built in RV501, 551)
		FILTERS
CF201,202	1-527-507-12	fm i-f, ceramic 10.70 MHz (red)
	1-527-507-22	fm i-f, ceramic 10.66 MHz (black)
	1-527-507-32	fm i-f, ceramic 10.74 MHz (white)
	1-527-507-42	fm i-f, ceramic 10.62 MHz (green)
	1-527-507-52	fm i-f, ceramic 10.78 MHz (yellow)
		MISCELLANEOUS
CB701 (CB751)	1-515-194-00	breaker, circuit
CP201	1-231-193-00	encapsulated component
CP301,302	1-231-224-00	encapsulated component
CP901	1-231-057-12	encapsulated component, 0.033 μF + 120 Ω
CNJ901	1-509-517-00	connector, REC/PB
CNJ902	1-507-265-00	jack, HEADPHONE
CNJ903,904 CNJ905	1-509-403-00	outlet, ac
CNJ906 CNJ907	1-507-394-00	jack, MIC
F901,902	1-532-269-00	fuse, 2.5 A
J901 ~ 908 (J951 ~ 958)	1-507-393-00	jack, phono; 8-p
M901	1-520-140-00	meter, TUNING
M902	1-520-141-00	meter, TUNER INPUT
PL901,902	1-518-116-00	lamp, dial 11V/0.36 A
PL903	1-518-124-00	lamp, TUNING 8 V/0.25 A
PL904	1-518-151-00	lamp, pointer
PL905	1-518-158-00	lamp, STEREO
PL906	1-518-124-00	lamp, TUNER INPUT meter 8 V/0.25 A
PL907 ~ PL912	1-518-121-00	lamp, AUX, PHONO, FM, A-M, TAPE, MIC 4.5 V/0.04 A
VS901	1-526-520-00	selector, voltage
	1-509-437-00	socket, power transistor
	1-517-057-00	holder, meter lamp; 2-p

Ref. No.	Part No.	Description
	1-533-090-00	holder, dial lamp
	1-534-526-21	cord, power
	1-535-055-00	lug terminal
	1-536-353-00	terminal post, U-shaped (single)
	1-536-354-00	terminal post (C)
	1-536-355-00	terminal post, U-shaped (double)
	1-536-395-00	terminal strip, 1L1C
	1-536-398-00	terminal strip, 2L2C
TM901 ~ TM904	1-536-415-00	screw terminal strip, 4-p (ANTENNA)
	1-582-233-00	jumper board, 8-p phono jack

SONY CORPORATION

2K0518-1

Printed in Japan

SECTION 1
TECHNICAL DESCRIPTION

1-1. SPECIFICATIONS

Fm Tuner Section

Tuning range: 87.5 MHz to 108 MHz

Antenna terminals: 300 ohms balanced
75 ohms unbalanced

Intermediate frequency: 10.7 MHz

Sensitivity: 2.0 μV (IHF), 1.6 μV (S/N = 30 dB)

Image rejection: 70 dB

I-f rejection: 100 dB

Spurious rejection: 90 dB

A-m suppression: 56 dB

Capture ratio: 1.0 dB

Selectivity: 70 dB, IHF

Signal-to-noise ratio: 70 dB

Frequency response: 20 Hz to 15 kHz ± 1 dB

Harmonic distortion: Mono 0.2 % at 400 Hz, 100 % modulation
Stereo 0.5 % at 400 Hz, 100 % modulation

Stereo separation: Better than 38 dB at 400 Hz

19 kHz, 38 kHz suppression: 40 dB

SCA suppression: 55 dB

Muting level: Less than 5 μV

A-m Tuner Section

Tuning range: 530 kHz to 1,605 kHz

Antenna: Built-in bar antenna and external antenna terminal

Intermediate frequency: 455 kHz

Sensitivity: 53 dB/m, built-in bar antenna at 1,000 kHz
30 μ V, external antenna

Image rejection: 50 dB at 1,000 kHz

I-f rejection: 40 dB at 1,000 kHz

Signal-to-noise ratio: 50 dB at 50 mV/m

Harmonic distortion: 0.8 % at 50 mV/m

Amplifier Section

Continuous RMS power output: (rated output) (Less than 0.2 % THD)
Both channels driven simultaneously
60 + 60 watts (8 ohms) at 20 Hz to 20 kHz
70 + 70 watts (8 ohms)
85 + 85 watts (4 ohms) at 1 kHz
One channel driven
85/85 watts (8 ohms)
110/110 watts (4 ohms)

Dynamic power output: (IHF constant power supply method)
240 watts (8 ohms)
380 watts (4 ohms)

Power bandwidth, IHF: 15 Hz to 35 kHz

Damping factor: 50 (8 ohms)

Harmonic distortion:
Less than 0.2 % at rated output
Less than 0.1 % at 1 watt output

IM distortion: (60 Hz : 7 kHz = 4 : 1)
Less than 0.2 % at rated output
Less than 0.1 % at 1 watt output

Frequency response:
PHONO: RIAA equalization curve ± 1 dB
MIC, AUX, TAPE, REC/PB (input): 100 Hz to 10 kHz $^{+0}_{-3}$ dB
POWER AMP: 10 Hz to 100 kHz $^{+0}_{-1}$ dB

Signal-to-noise ratio:

	S/N	Weighting network	Input level
PHONO	74 dB	A	2 mV
MIC	65 dB	B	1 mV
AUX, TAPE, REC/PB (input)	90 dB	A	150 mV
POWER AMP	110 dB		1 V

Input sensitivity and impedance:

	Maximum sensitivity	Impedance
PHONO	2 mV	47 k ohms
MIC	1 mV	47 k ohms
AUX, TAPE, REC/PB (input)	150 mV	50 k ohms
POWER AMP	1 V	50 k ohms

Note: Maximum sensitivity means the input level at which the rated output is provided into 8 ohms (with both channels driven at full volume) at 1 kHz.

Output level and impedance:

	Level	Impedance
REC OUT	250 mV	10 k ohms
REC/PB (output)	30 mV	82 k ohms
PREAMP OUTPUT	1 V	4.7 k ohms

HEADPHONE: Accepts all low and high impedance headphones.

SPEAKER: Accepts 4 ~ 16 ohm speakers.

Tone controls: BASS ± 10 dB at 100 Hz
TREBLE ± 10 dB at 10 kHz

High filter: 12 dB/oct. above 9 kHz

Low filter: 12 dB/oct. below 50 Hz

Loudness control: + 10 dB at 50 Hz, + 4 dB at 10 kHz (Attenuation : 30 dB)

General:

System: Superheterodyne fm/a-m, switching MPX Complementary symmetry circuit (SEPP OTL), Direct output coupling

Power requirements: 120 volts, 60 Hz ac

Power consumption: 180 watts

AC outlets: 2 switched, 200 watts, total
1 unswitched, 200 watts

Dimensions: 471 (w) x 157 (h) x 375 (d) mm
$18^{9}/_{16}$ x $6^{3}/_{16}$ x $14^{3}/_{4}$ inches

Net weight: 15.2 kg (33 lb 8 oz)

Shipping weight: 18.9 kg (41 lb 11 oz)

1-2. CIRCUIT DESCRIPTION DIGEST

1. Noise Elimination Circuit for Tuner Section

This circuit is used to eliminate noises due to B+ voltage fluctuation of tuner when changing the FUNCTION switch S1 to FM or AM from other position. Referring to Fig. 1-1, when S1 is changed

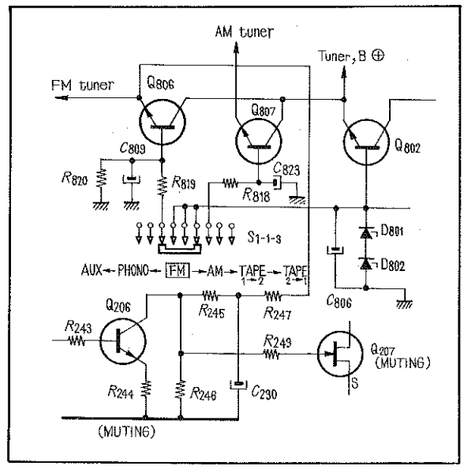


Fig. 1-1. Noise elimination circuit for tuner section

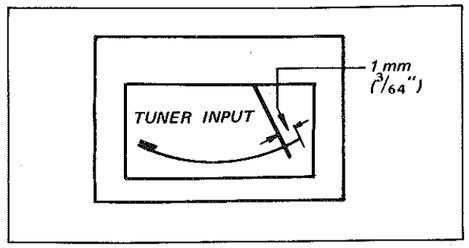


Fig. 3-9. TUNER INPUT meter calibration

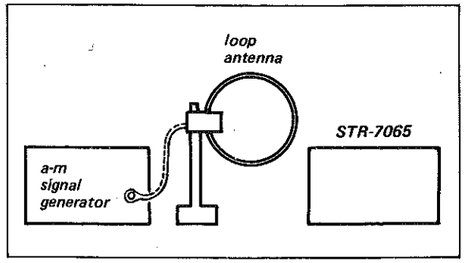
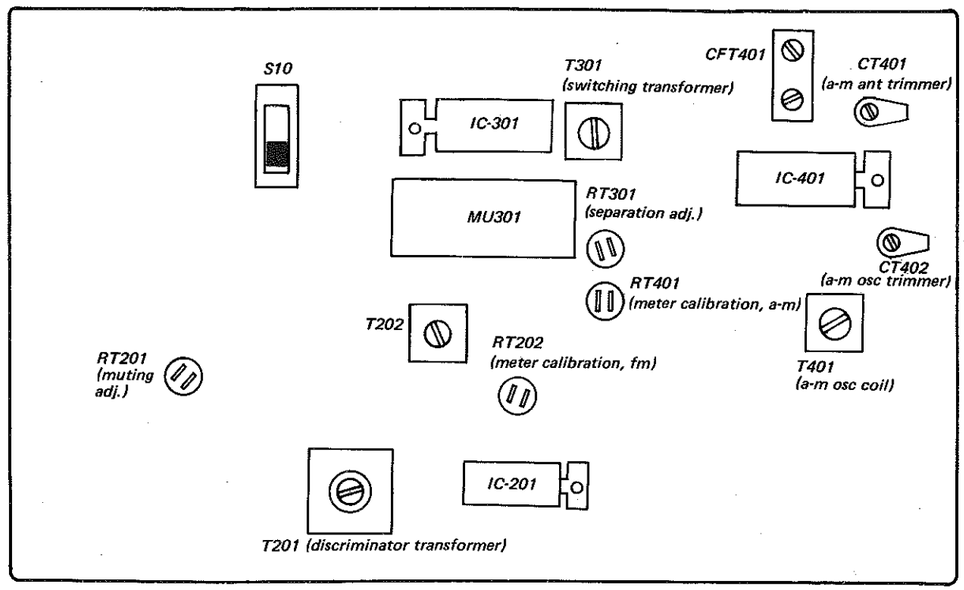


Fig. 3-10. Tuner input meter calibration test setup (A-m)

Adjustment Parts Location

rear panel side

A-m Front End/I-f Amplifier/MPX Board
– Component Side –



front panel side

Fig. 3-11. Adjustment parts location

3-9. POWER-AMPLIFIER ADJUSTMENT

Dc-Bias Adjustment

Serious deficiencies in performance, such as thermal runaway of power transistors, will result if this adjustment is improperly set.

CAUTION

To avoid accidental power transistor damage, increase the ac line voltage gradually, using a variable transformer.

Test Equipment Required

1. Dc millivoltmeter
2. Variable transformer
3. Screwdriver, 3 mm ($^1/_8$") blade

Preparation

1. Remove the wooden case.
2. Connect the dc millivoltmeter across the test points as shown in Fig. 3-12.
3. Turn the adjustable resistors RT701 and RT751 on the power amp/power supply board fully counterclockwise as shown in Fig. 3-12.
4. Set the variable transformer for minimum output.

Procedure

1. Turn on POWER switch, and increase the line voltage up to the rated value (120 V).
2. Adjust RT701 (RT751) for 50 mV reading on the meter.

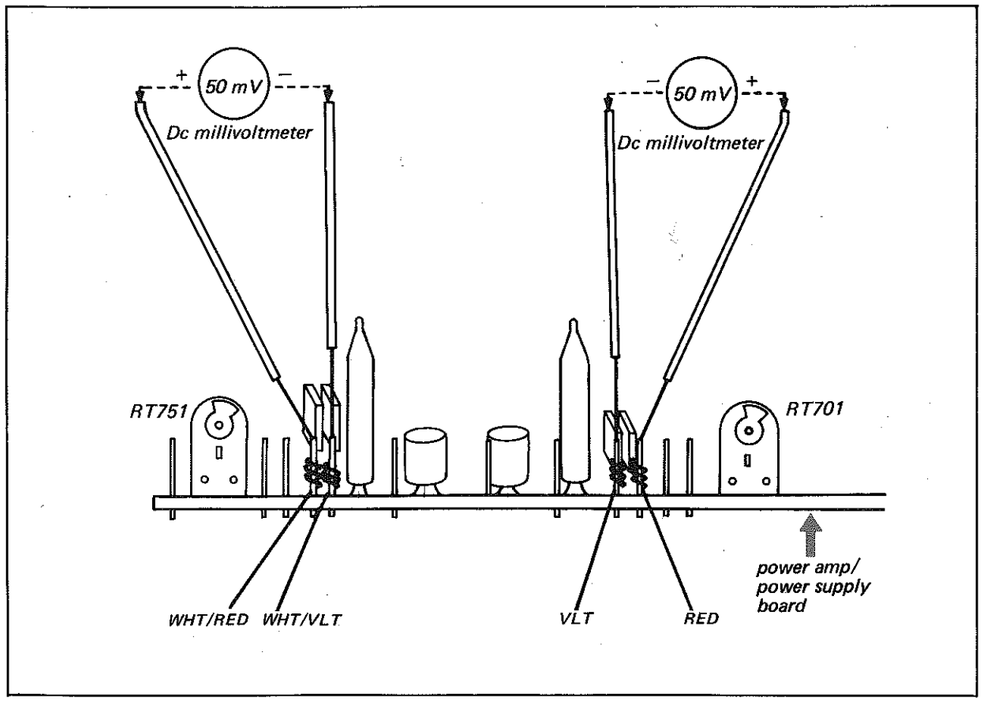
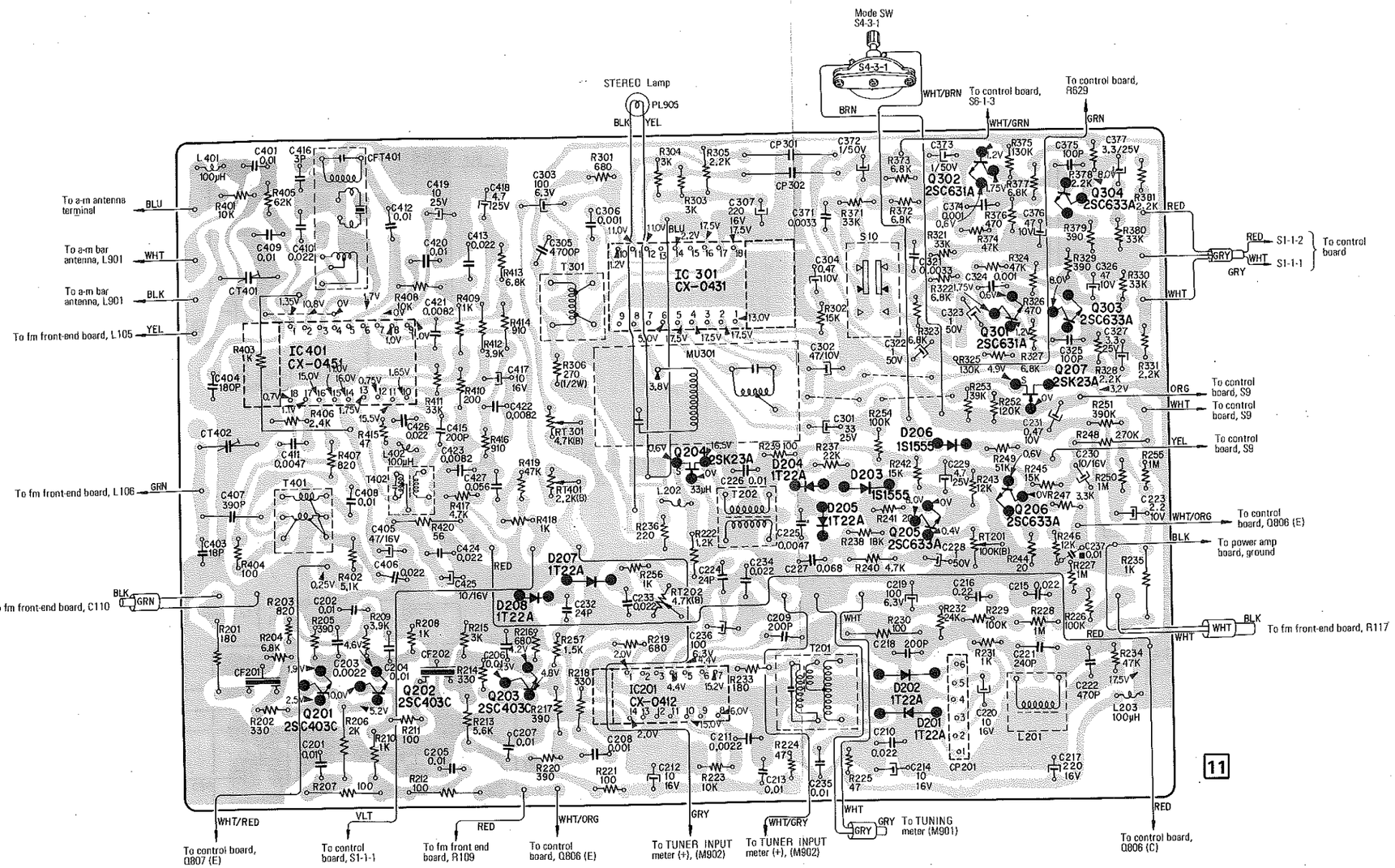


Fig. 3-12. Power-amplifier adjustment test setup

5-5. MOUNTING DIAGRAM – A-m Front End/I-f Amplifier/MPX Board

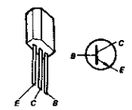
– Conductor Side –



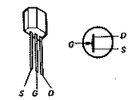
■ C237 is mounted on the conductor side

Transistor Location									
Q201	Q202	Q203	Q204	Q205	Q302 Q301 Q207 Q206	Q304 Q303
---	---	---	---	---	---	---

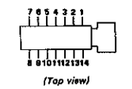
2SC403C
2SC631A
2SC633A



2SK23A

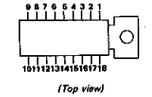


CX-0412



(Top view)

CX-0431
CX-0451

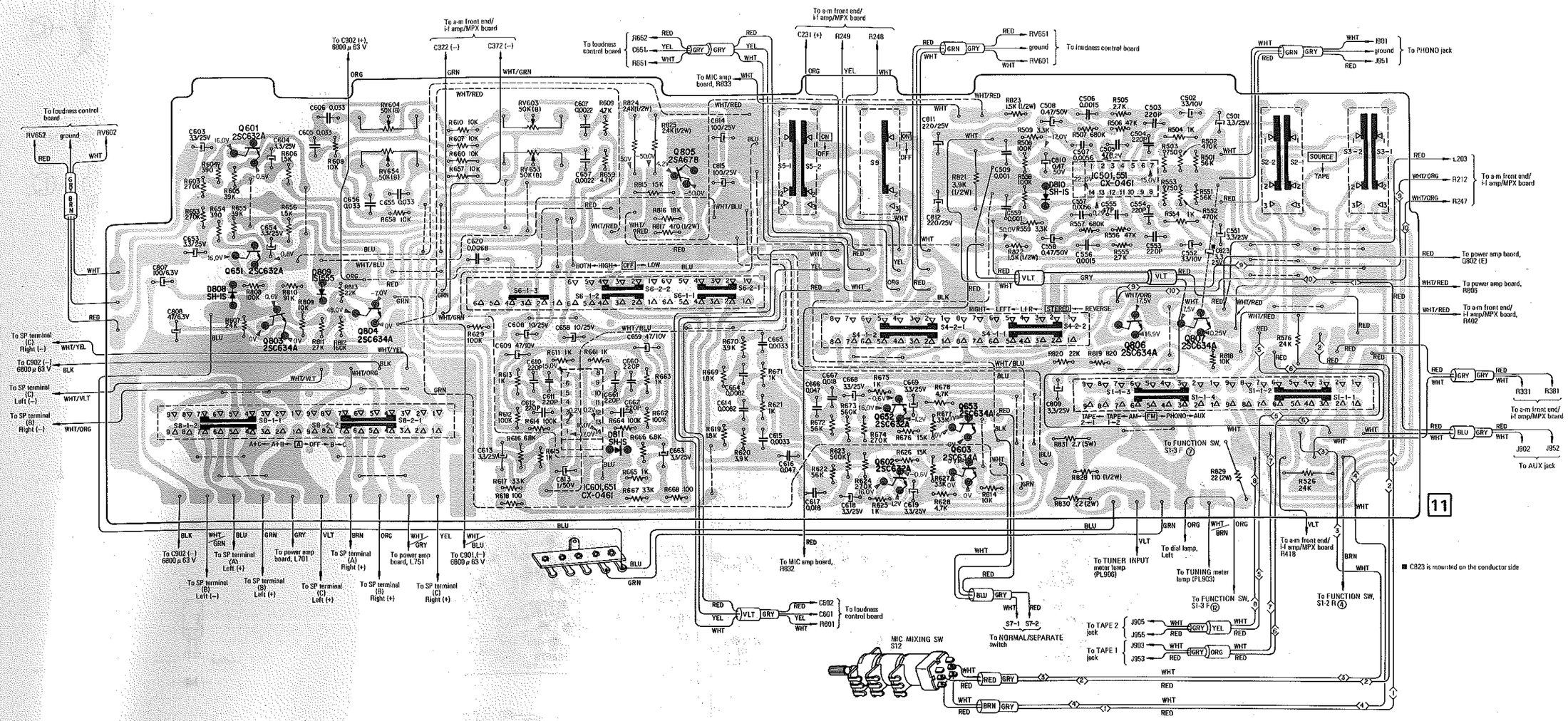


(Top view)

1T22A
1S1555

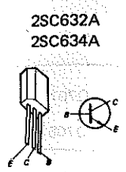
5-6. MOUNTING DIAGRAM – Control Board – (CCB-115)

– Conductor Side –

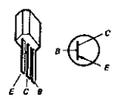


Transistor Location								
Q601 Q651 Q803	Q804	Q805	Q652 Q602	Q653 Q603	Q806	Q807		

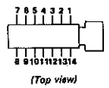
2SC632A
2SC634A



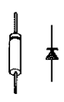
2SA678



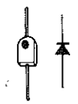
CX-0461



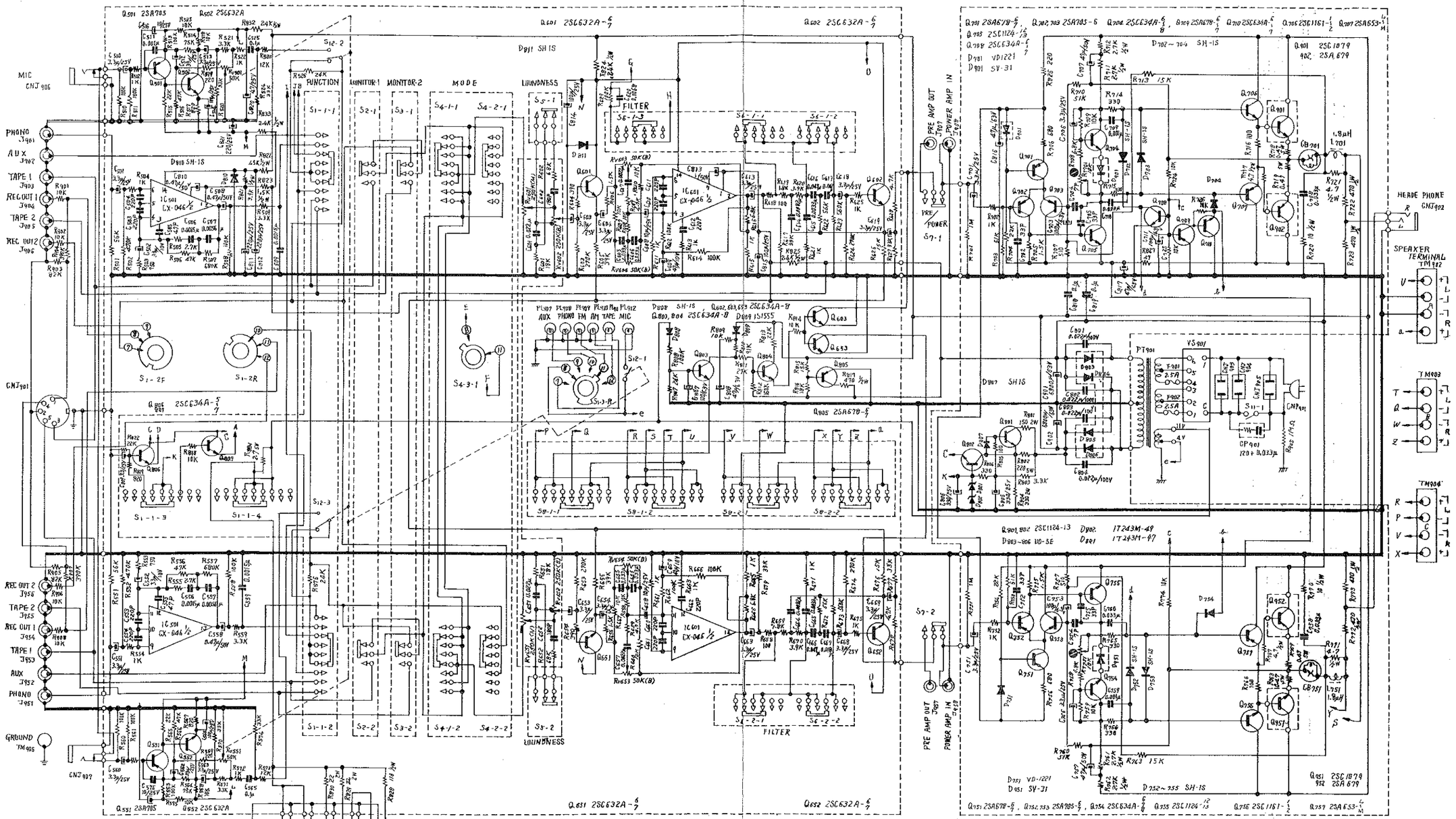
1S1555



SH-1S



SONY STR-7065 CIRCUIT DIAGRAM/DIAGRAMME DE CIRCUIT/SCHALTBILD

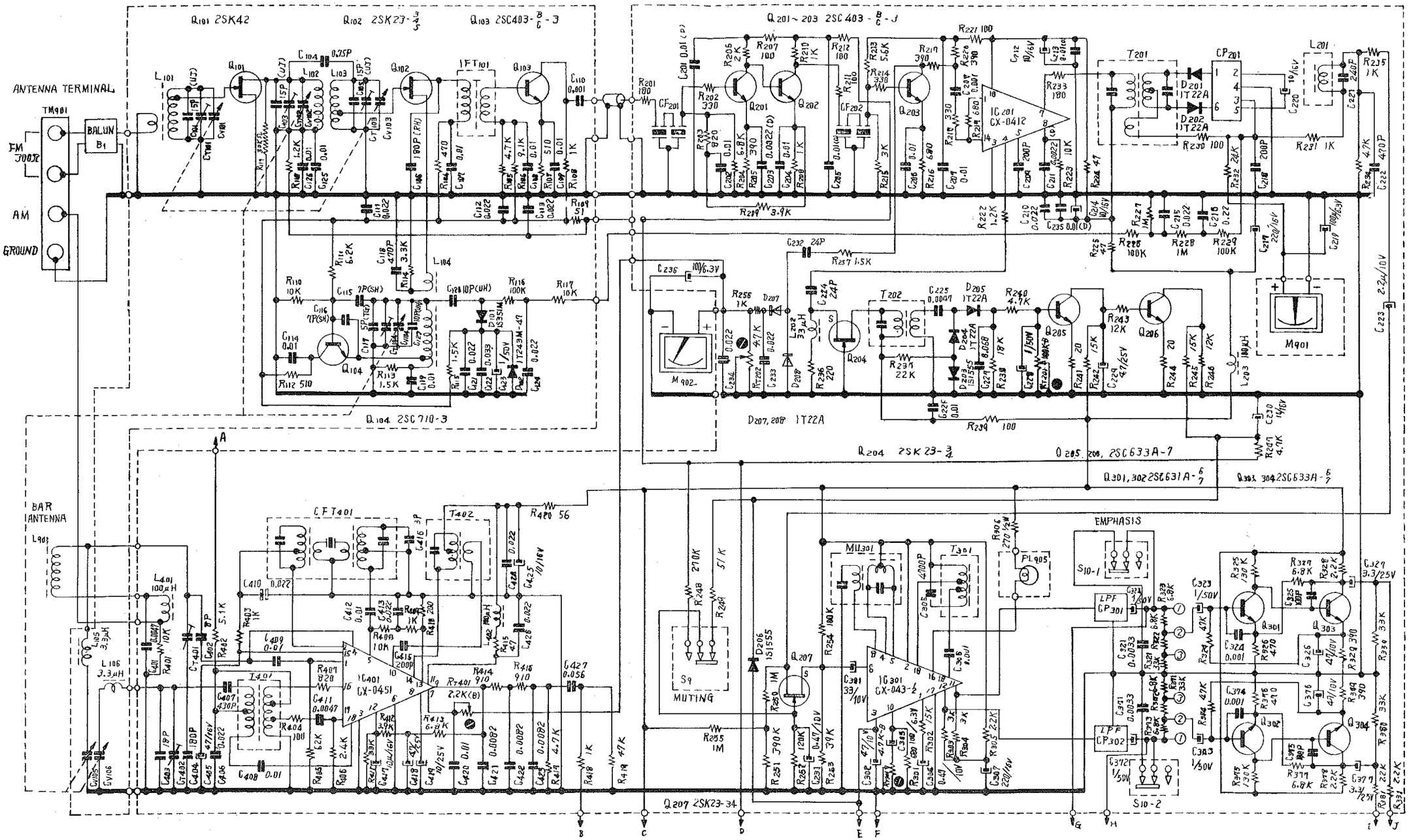


S1 ; FUNCTION SW ; FM STEREO POSITION
S2 ; MONITOR-1 SW : SOURCE POSITION
S3 ; MONITOR-2 SW : 〃 〃
S4 ; MODE SW : STEREO 〃
S5 ; LOUDNESS SW : ON 〃
S6 ; FILTER SW : OFF 〃
S7 ; PRE/MAIN AMP SW : NORMAL 〃

PL901,902 ; DIAL LAMP
PL903,906 ; METER LAMP
PL904 ; DIAL INDICATOR LAMP
PL907~912 ; FUNCTION
AUX - PHONO - FM - AM - TAPE - MIC

RV601,651 ; VOLUME CONTROL
RV602,652 ; BALANCE

SONY CORPORATION
3-793-562-11 (1)
Printed in Japan



R_{T201} : MUTING LEVEL ADJ.
R_{T202} : FM INPUT METER ADJ.
R_{T301} : STEREO SEPARATION ADJ.

R_{T401} : AM INPUT METER ADJ.

PL905 : STEREO INDICATOR LAMP

S9 : MUTING SW ON POSITION

S10 : EMPHASIS SW 75μsec. POSITION