The Harman-Kardon Model 75+

AM/Stereo FM Multichannel Receiver

Technical Manual

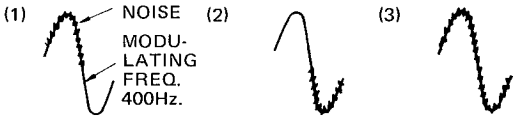
harman/kardon

ALIGNMENT PROCEDURES

FM IF & RF ALIGNMENT

INSTRUMENTS: FM S.S.G., modulator with 400Hz at 100%, V.T.V.M., Oscilloscope, and Distortion Meter.

NOTE: Set TONE control to flat response (or mechanical center of both of BASS control and TREBLE control) Set FUNCTION selector to FM.

Step	SIGNAL SOURCE	OUTPUT METER	ADJUST	ADJUST FOR
1	Check mechanical zero center of TUNING indicator, M101 at POWER switch OFF. Adjust it if necessary.			
2	None (FM ANTENNA terminals opened). Tuning control at no signal.	TUNING indicator, connect oscilloscope and V.T.V.M. to TAPE OUT.	TOP adjuster of T101 (or RAT CAN)	Zero or center indication ON TUNING indicator M101 observing noise output with output meter.
3	Same as above.	Same as above.	Bottom adjuster of T101.	Maximum noise output on V.T.V.M.
4	Same as above.	Same as above.	TOP and bottom adjusters of 'IF' in FRONT-END	Same as above.
5	Connect SSG to FM ANT terminal, with no signal (or SSG OFF). Tuning control at no signal.	Same as above.	Readjust TOP adjuster of T101.	Zero or center indication ON TUNING indicator, M101.
6	Set SSG output to 88MHz, Tune radio to 88MHz of SSG.	Same as above.	LO, LR and LA in FRONT-END.	Maximum noise output on V.T.V.M.
7	Set SSG output to 106MHz, and tune radio to 106MHz.	Same as above.	TCO, TCR and TCA in FRONT-END.	Same as above.
8	Repeat step 6 and 7 for best sensitivity.			
9	Use very weak signals of 88MHz. Tune radio to 88MHz.	Same as above.	LA and LR.	Zero or center indication of TUNING indicator M101.
10	Use very weak signals of 106MHz. Tune radio to 106MHz.	Same as above.	TCA and TOR.	Same as above.
11	Repeat step 3 through 5 for best setting under SSG connected but no signal.			
12	Use 98MHz, 1mV signals from SSG modulated with 400Hz at 100%. Tune radio to 98MHz. (Note: If another signal exists, shift to quiet point)	Connect distortion meter, V.T.V.M. and oscilloscope to SPEAKER out.	Bottom adjuster of T101.	Minimum harmonic distortion on distortion meter keeping noise output to 3V on V.T.V.M. (adjust VOLUME CONTROL VR301 through VR601, if necessary).
13	Same as above.	Same as above.	Observe output waveform with oscilloscope at S/N = 20 to 30dB. Observed waveform will be (1), (2) or (3), below:  UNACCEPTABLE UNACCEPTABLE ACCEPTABLE Wave form (1) and (2) will result from misalignment. (1) To correct, carefully adjust two adjusters of IF on the FRONT-END and bottom adjuster of T101. (2) Check TUNING meter zero center again under no signals of SSG. If necessary, adjust the zero point with TOP adjuster of T101. (3) For ANTENNA input of 1mV from SSG, distortion shall be adjusted with bottom adjuster of T101, if, necessary.	

AM ALIGNMENT PROCEDURE

INSTRUMENTS: SSG, modulated with 400Hz at 30%, V.T.V.M., AM IF Sweep Generator, and Oscilloscope.

NOTE: Set FUNCTION selector to AM.
Connect signal source to a loop placed to radiate signals into AM ANT LOOP STICK.

Step	SIGNAL SOURCE OUTPUT	CONNECT OUTPUT METER TO	DIAL SETTING	ADJUST	ADJUST FOR
1	455kHz of sweep generator	V.T.V.M. & oscilloscope to TAPE OUT	Quiet point near 1600kHz	T162 (Black)	Maximum and symmetrical pattern on SCOPE
2				T161, input side	
3				T161, output side	
4	Repeat step 1 through 3 for best sensitivity and symmetrical pattern on oscilloscope.				
5	525kHz of S.S.G.	V.T.V.M. to TAPE OUT 1 and distortion meter together with oscilloscope to speaker out	Gang fully closed	L162 (Black)	Maximum output
6	1700kHz of S.S.G.		Gang fully opened	AM oscillator trimmer	
7	Repeat step 5 and 6 for best sensitivity				
8	600kHz of S.S.G.	Same as above	600kHz	AM ANT LOOP STICK	Same as above
9	1400kHz of S.S.G.		1400kHz	AM ANT trimmer	
10	Repeat step 8 and 9 for best sensitivity.				

SIDE CHAIN ALIGNMENT FOR MUTING & STEREO THRESHOLD

Step	SIGNAL SOURCE	OUTPUT METER 11	ADJUST	ADJUST FOR
14	Repeat 1, 2 and 3 for optimum setting.			
15	Connect SSG to FM ANT terminal. Quiet point near 98MHz. SSG set on CW	D.C. Voltmeter from ground to R141.	STEREO THRESHOLD VR012.	1.50V on DC voltmeter
16			L101 and SSG output.	Maximum on DC voltmeter; keep DC voltage to 1.50V by adjusting SSG output. TUNING indicator, M101 must indicate zero center all times.
17	Same as above, but set SSG output to 26dB. (or 20 μV)		MUTING ADJUSTER, VR 101.	Finally, audio output must drop by 3dB with FM MUTING switch ON.
18	Check again zero center on TUNING INDICATOR, M101 with no signal.			

MPX ALIGNMENT PROCEDURE

INSTRUMENTS: S.S.G., Stereo Generator, V.T.V.M., Oscilloscope, Oscilloscope of low input capacitance, and Distortion Meter
L + R = 90%, PILOT = 9%, modulation

NOTE: Set TONE control to flat response (or mechanical center of both of BASS control and TREBLE control). Set FUNCTION selector to FM STEREO.

Step	SIGNAL SOURCE	OUTPUT METER	ADJUST	ADJUST FOR
1	Connect SSG modulated with MPX Generator to FM ANT terminals. Output level: 1mV Pilot level: 6%	Connect low input capacitance oscilloscope to TEST POINT TP. Connect oscilloscope to TAPE OUT of both channels.	L102	For maximum on scope connected to T.P. at minimum resistance (or extreme counter clockwise) of VR101 and maximum resistance (or extreme clockwise of VR102.
2			L103	
3			L104	
4			VR101	Adjust VR101 until STEREO INDICATION lights. The INDICATION will go out for the PILOT level of lower than 6%.
5	Same as above, but PILOT LEVEL: 9%, only RIGHT channel is modulated with main signal of 1kHz.		L102	For maximum stereo separation.
6	Change main signal modulation to LEFT channel.		L102	For maximum stereo separation.
7	Repeat step 5 and 6, and if unbalance of stereo separation between LEFT and RIGHT exists, correct it with VR102.			
8	Check PILOT level that STEREO INDICATION lights at 5.5% to 6.5% of PILOT LEVEL and that the INDICATION does not light at 1% of P.L.			
9	Return PILOT LEVEL to 9% and check stereo separation at 100Hz and 10kHz.			
10	At 32dB (40 μV) of SSG output, adjust STEREO THRESHOLD, VR012 for STEREO INDICATION ON.			
11	Remove oscilloscope from test point, TP and adjust again L104 for best stereo separation.			

POWER AMP. UNIT (Alignment of Idle current of output transistors).

INSTRUMENTS: High sensitivity D.C. voltmeter or synchroscope.

NOTE: Set VOLUME control to minimum output.
No signal.

Step	CONNECT M.S. VOLTMETER TO	ADJUST	ADJUST FOR
1	Across emitter of Q347 and collector of Q348.	VR341	5.5mV on voltmeter.
2	Across emitter of Q447 and collector of Q448.	VR441	Same as above.
3	Across emitter of Q547 and collector of Q548.	VR541	Same as above.
4	Across emitter of Q647 and collector of Q648.	VR641	Same as above.

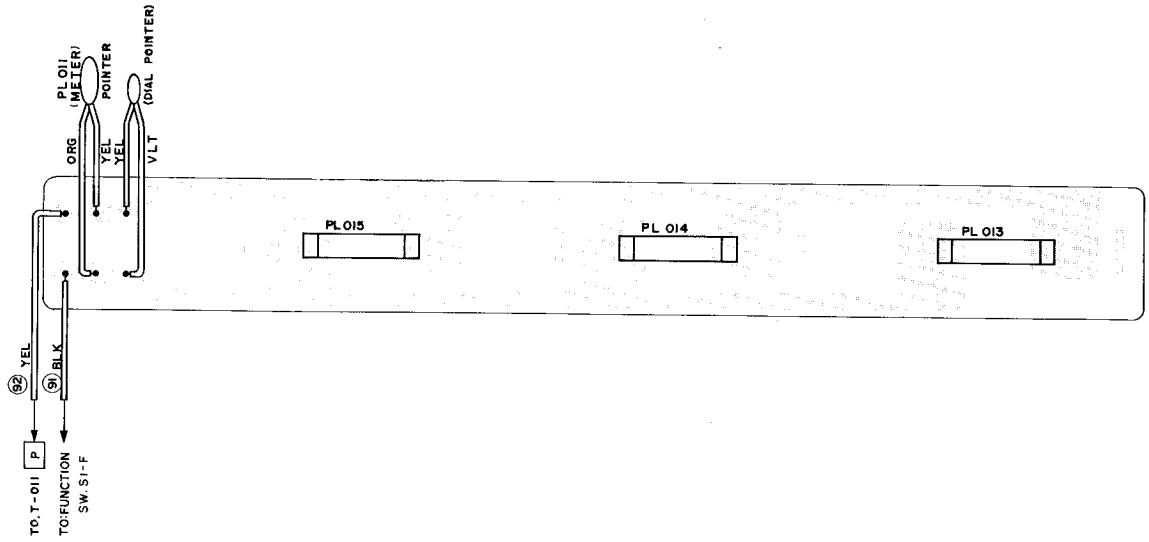
SQ UNIT

INSTRUMENTS: AF Oscillator, 2-V.T.V.M., and Oscilloscope

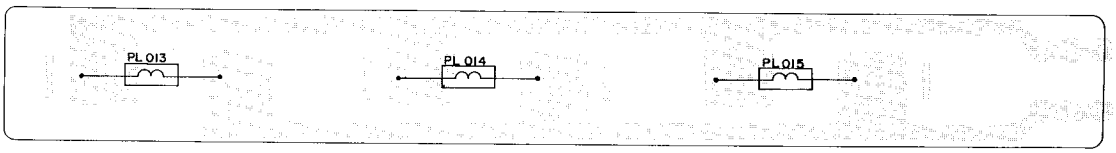
NOTE: Set MODE selector to ENHANCE STEREO.
Keep AF oscillator output to 1.0V at 1000Hz during alignment.

Step	SIGNAL SOURCE	OUTPUT METER	ADJUST	ADJUST FOR
1	Connect AFO to LT.	Connect scope and V.T.V.M. to LF	VR201	1.0V on V.T.V.M.
2	Same as above.	Connect scope and V.T.V.M. to LB	VR202	1.0V on V.T.V.M.
3	Connect AFO to RT	Connect scope and V.T.V.M. to RF	VR203	1.0V on V.T.V.M.
4	Same as above.	Connect scope and V.T.V.M. to RB	VR204	1.0V on V.T.V.M.

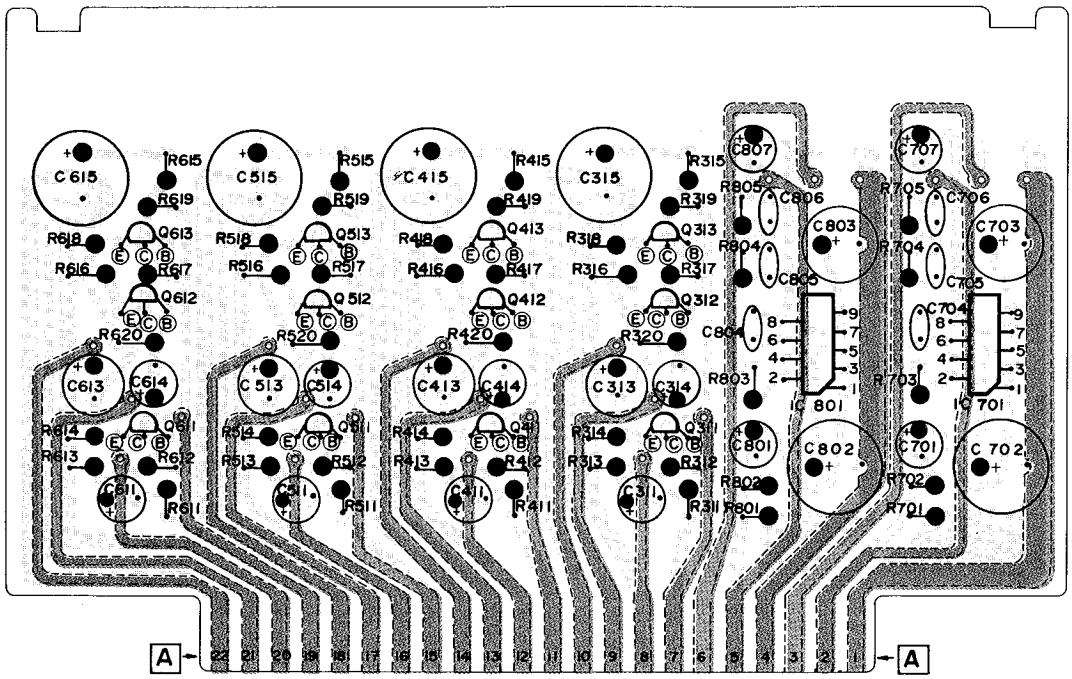
DIAL LAMP BOARD — TOP



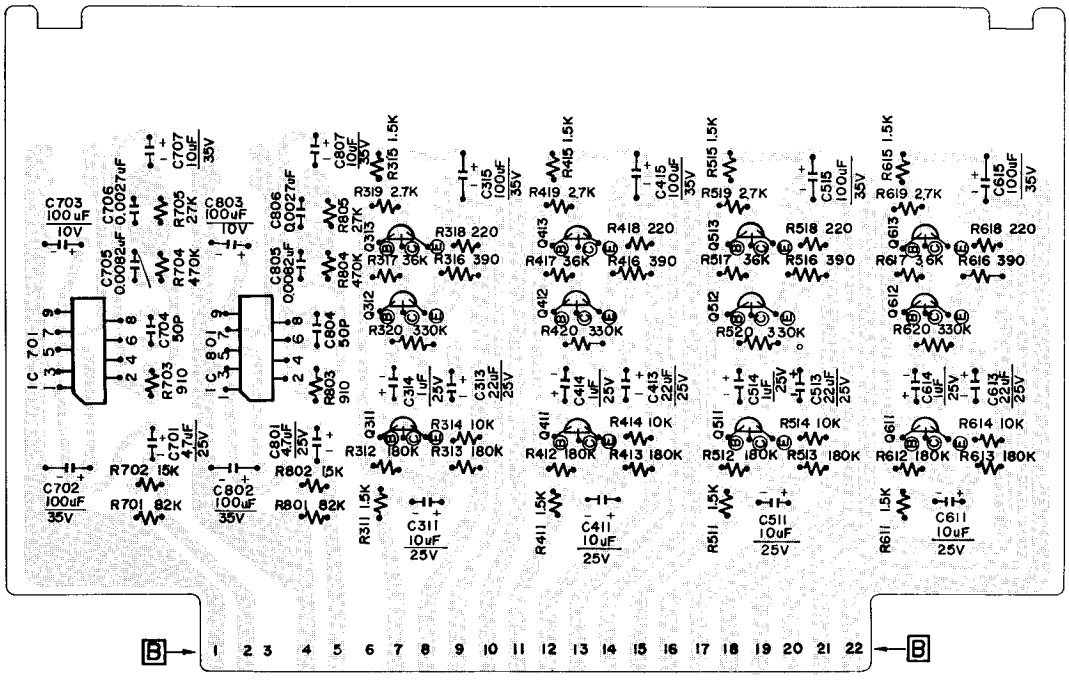
DIAL LAMP BOARD — BOTTOM



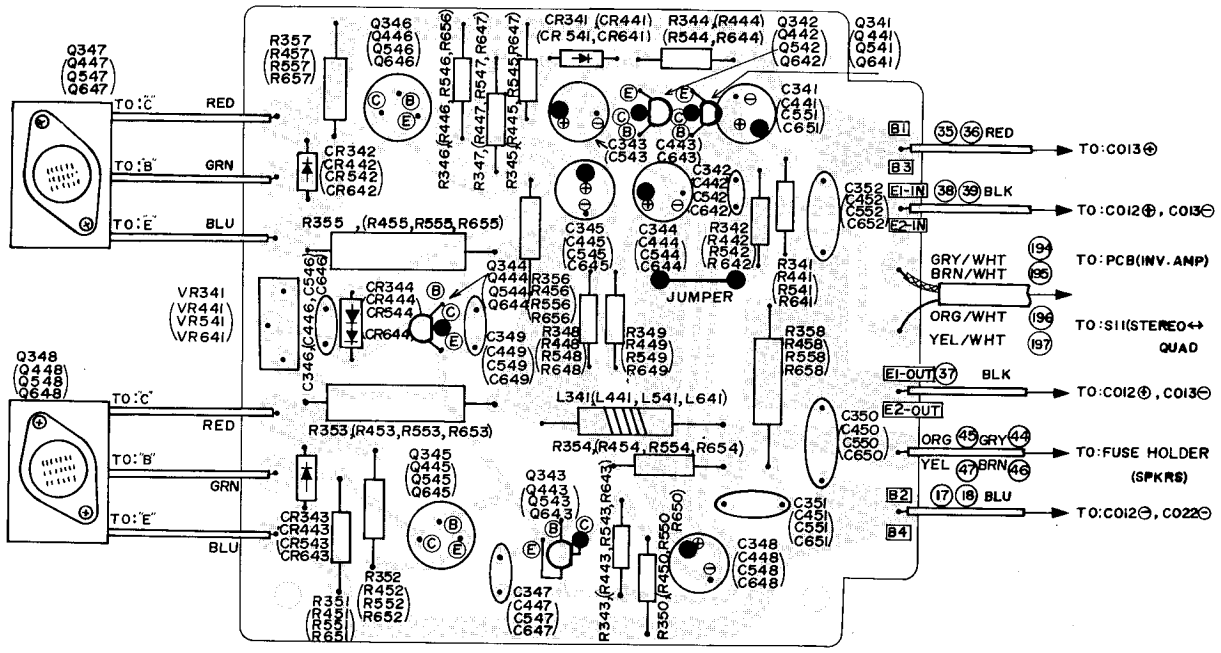
PREAMP BOARD—TOP



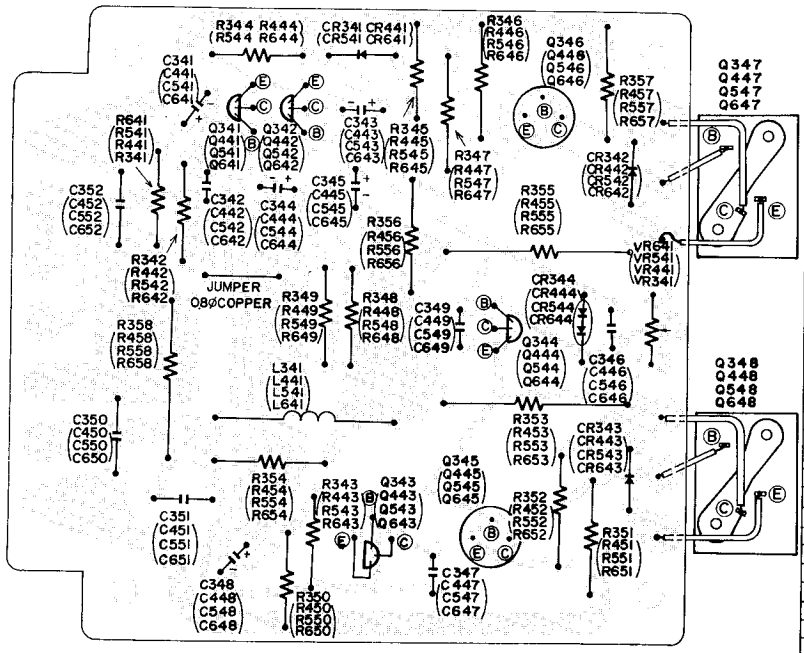
PREAMP BOARD—BOTTOM



POWER AMP BOARD — TOP



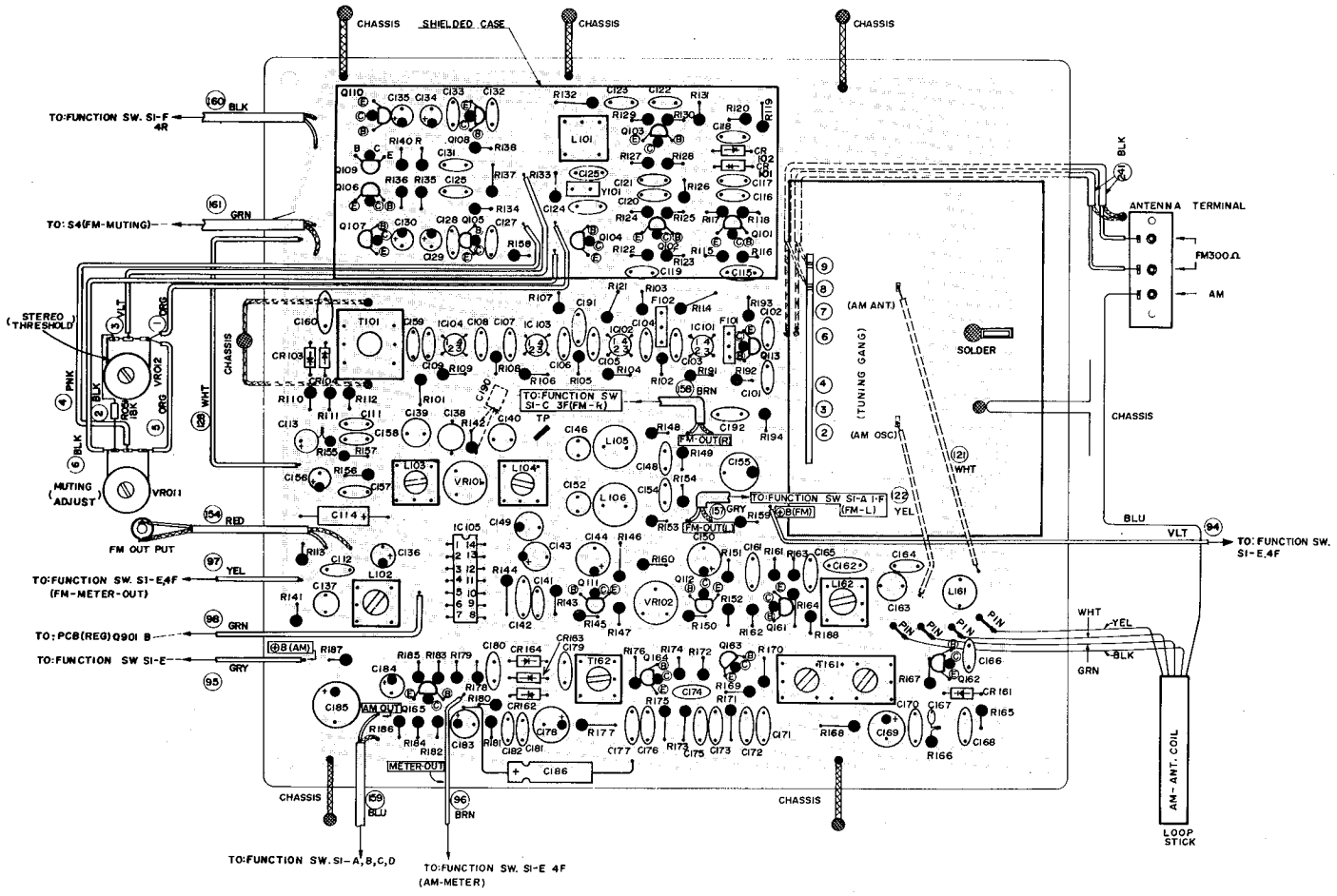
POWER AMP BOARD — BOTTOM



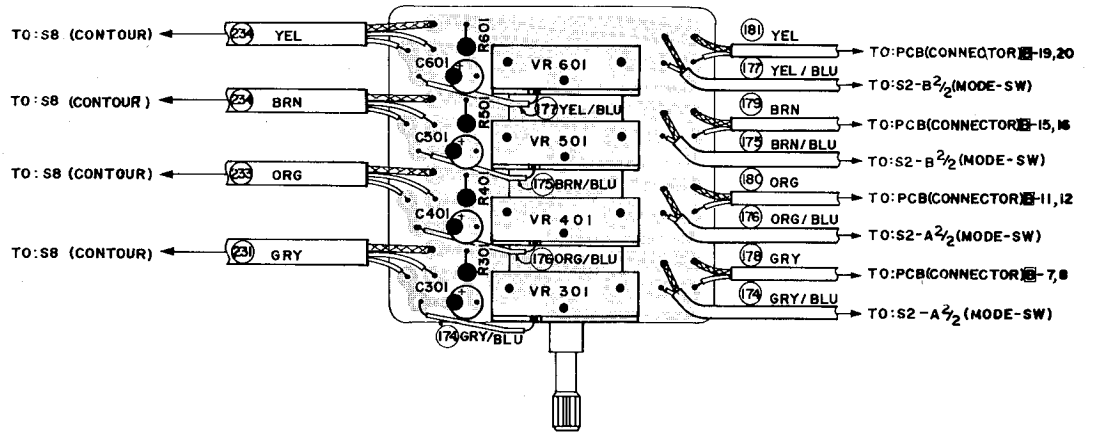
R341, R441, R541, R641	2.7K
R342, R442, R542, R642	33K
R343, R443, R543, R643	390
R344, R444, R544, R644	6.8K
R345, R445, R545, R645	180
R346, R446, R546, R646	3.9K
R347, R447, R547, R647	5.6K
R348 R448 R548 R648	33K
R349, R449, R549, R649	3.3K
R350 R450 R550 R650	180
R351, R451, R551, R651	100-1/2
R352, R452, R552, R652	10-1
R353, R453, R553, R653	0.27-3
R354, R454, R554, R654	10-1
R355, R455, R555, R655	0.27-3
R356, R456, R556, R656	100-1/2
R357, R457, R557, R657	3.3-1/2
R358, R458, R558, R658	27 /2
C341, C441, C541, C641	220μF-16V
C342, C442, C542, C642	70P
C343, C443, C543, C643	47μF-35V
C344, C444, C544, C644	220μF-16V
C345, C445, C545, C645	47μF-35V
C346, C446, C546, C646	0.01μF
C347, C447, C547, C647	150P
C348, C448, C548, C648	47μF-35V
C349, C449, C549, C649	0.001μF
C350, C450, C550, C650	0.1μF
C351, C451, C551, C651	0.1μF
C352, C452, C552, C652	0.1μF
L341, L441, L541, L641	1.6μF
VR341, VR441, VR541, VR641	4.7K

Q341→Q348, CR341→CR343, C341→C352, R341→R357, L341, VR341,	LF(LEFT FRONT)
Q441→Q448, CR441→CR443, C441→C452, R441→R457, L441, VR441,	LB(LEFT BACK)
Q541→Q548, CR541→CR543, C541→C552, R541→R557, L541, VR541,	RF(RIGHT FRONT)
Q641→Q648, CR641→CR643, C641→C652, R641→R657, L641, VR641,	RB(RIGHT BACK)

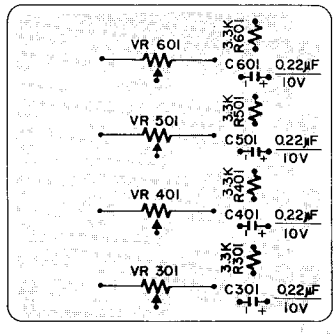
AM-FM TUNER BOARD — TOP



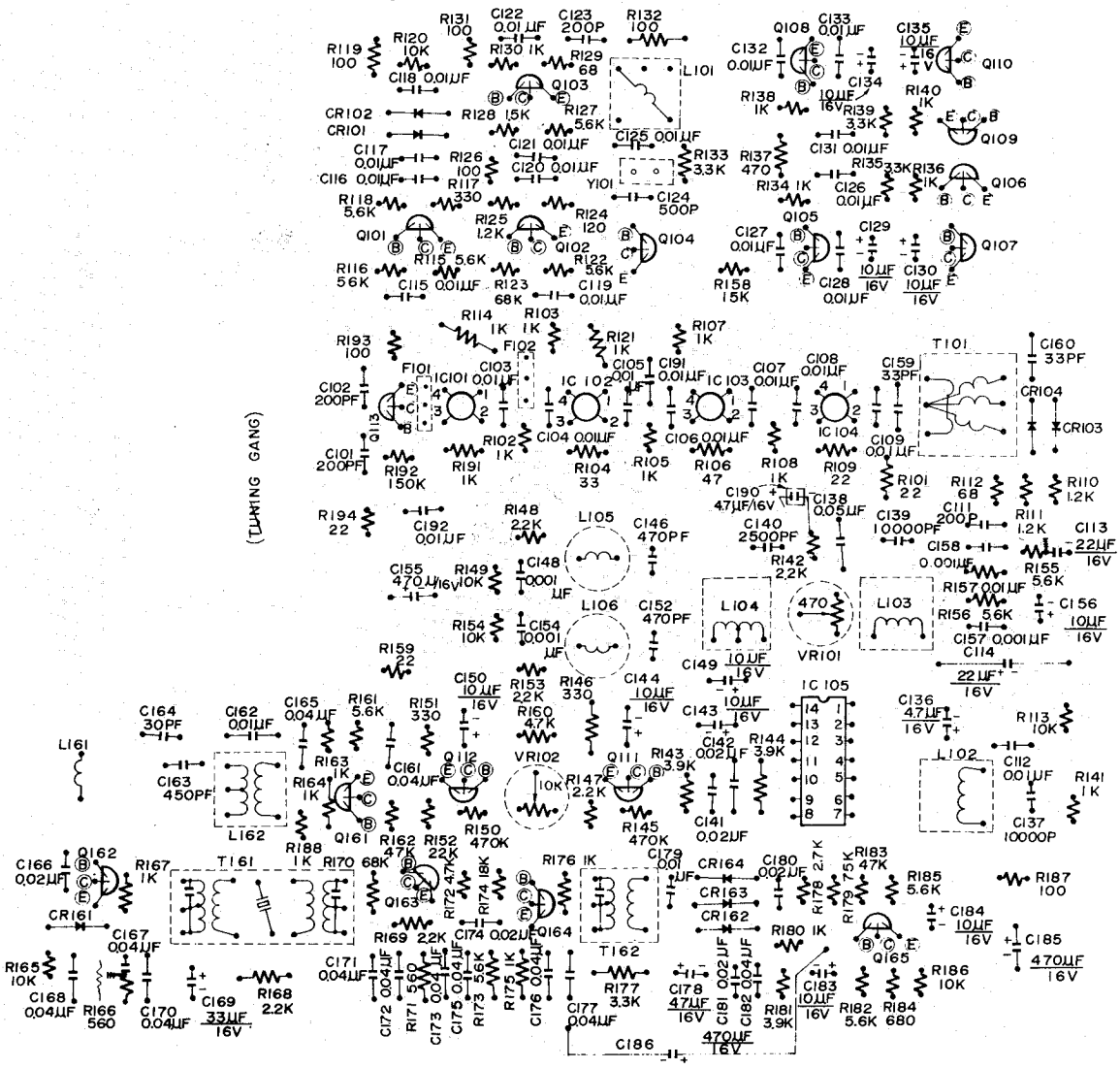
VOLUME CONTROL BOARD — TOP



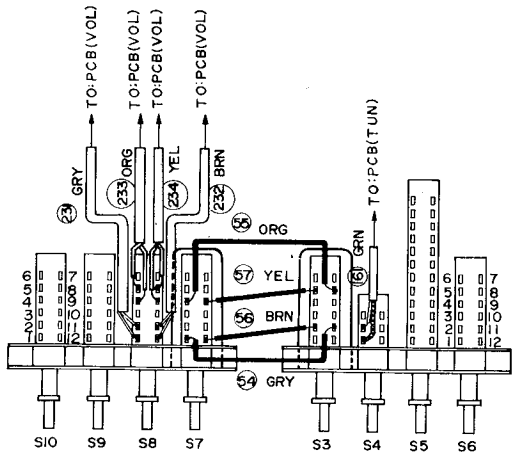
VOLUME CONTROL BOARD — BOTTOM



AM-FM TUNER BOARD — BOTTOM

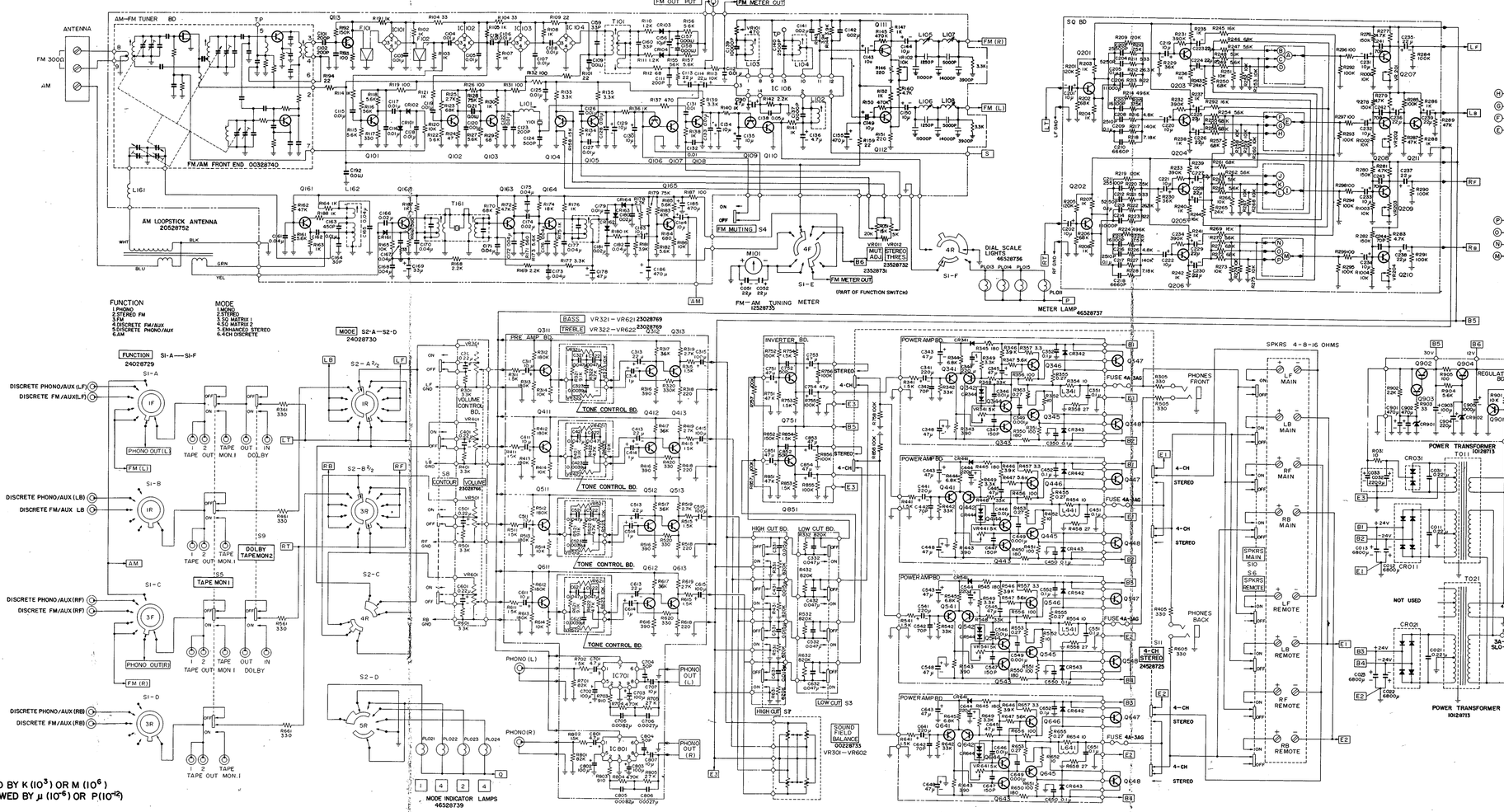


SWITCH DIAGRAM



S3	LOW CUT
S4	FM MUTING
S5	TAPE MON.1
S6	SPKRS(REMOTE)
S7	HIGH CUT
S8	CONTOUR
S9	EXT DOLBY NR(TAPE MON,2)
S10	SPKRS(MAIN)

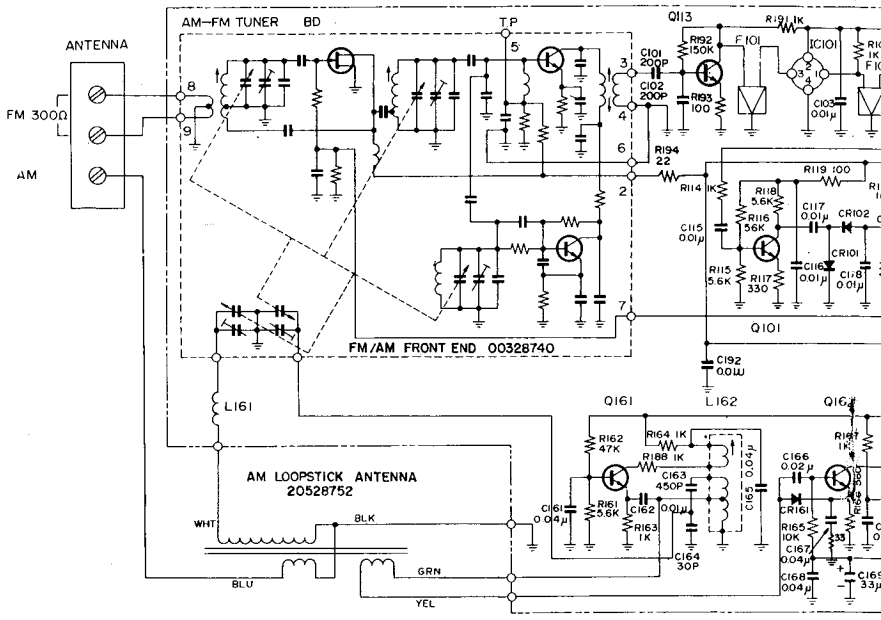
SCHEMATIC DIAGRAM — MODEL 75 +



NOTES

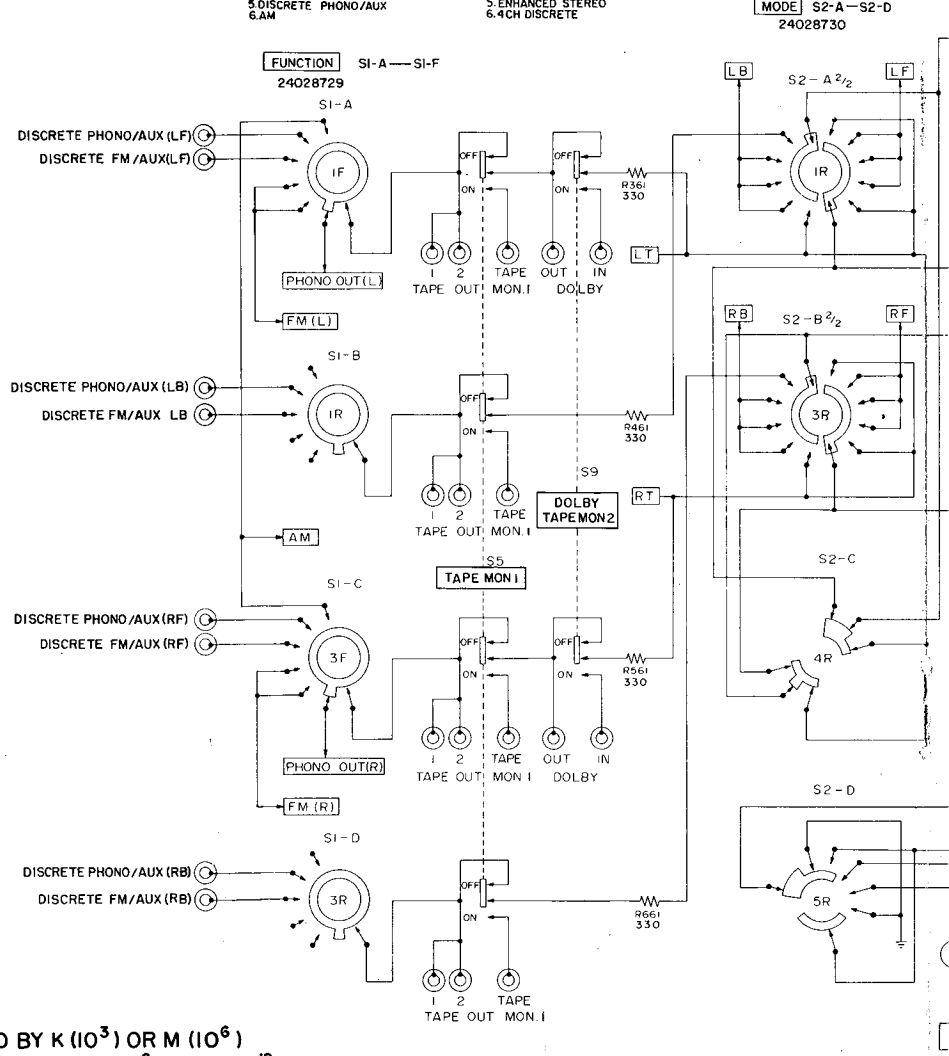
1. ALL RESISTORS IN OHMS UNLESS FOLLOWED BY K (10^3) OR M (10^6)
2. ALL CAPACITORS IN FARADS UNLESS FOLLOWED BY μ (10^{-6}) OR P(10^{-12})
3. ALL VOLTAGES TAKEN WITH "0" SIGNAL

SCHEMATIC DIAGRAM — MODEL 75 +



FUNCTION
1. PHONO
2. STEREO FM
3. FM
4. DISCRETE FM/AUX
5. DISCRETE PHONO/AUX
6. AM

MODE
1. MONO
2. STEREO
3. SQ MATRIX 1
4. SQ MATRIX 2
5. ENHANCED STEREO
6. 4CH DISCRETE



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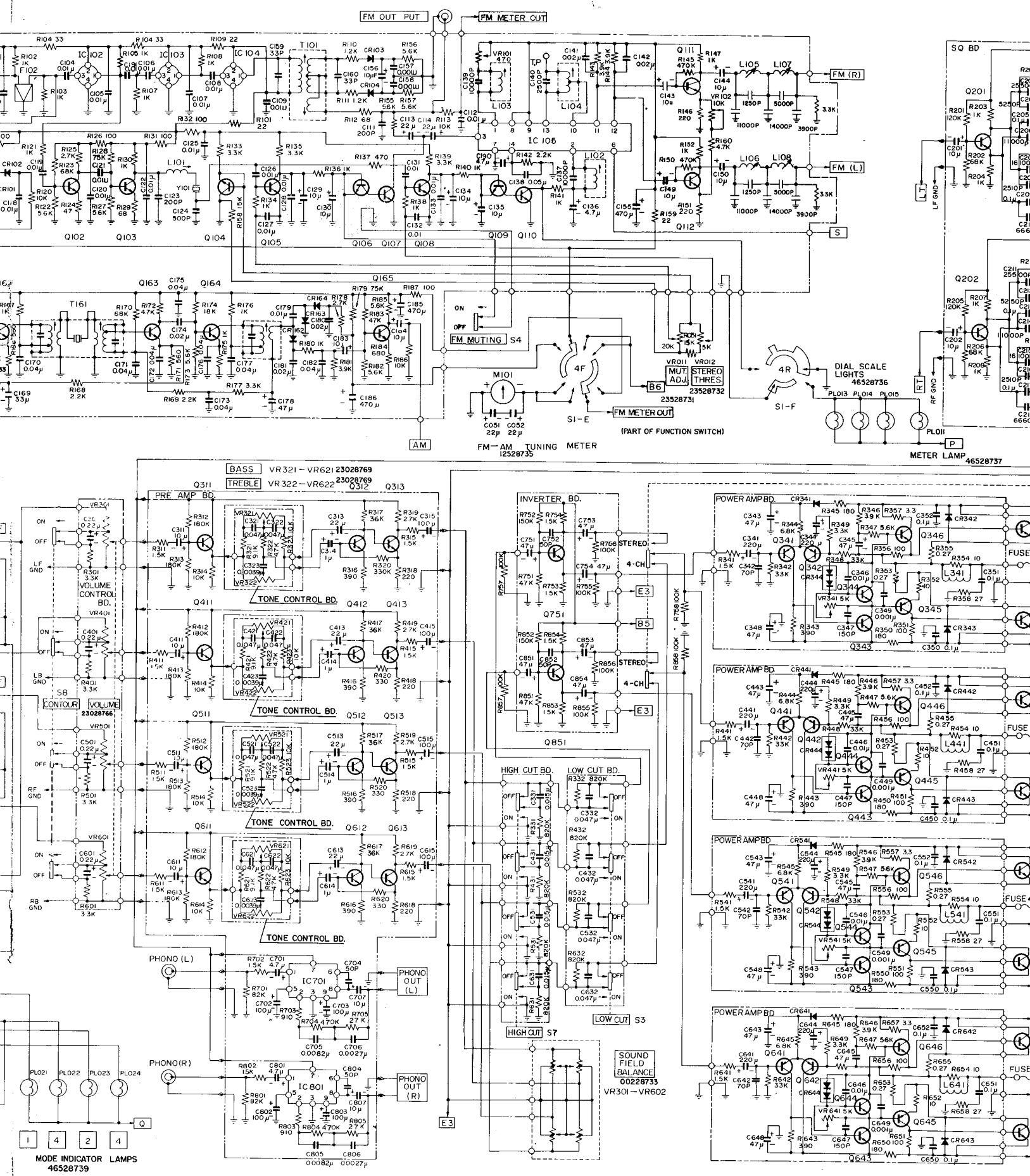
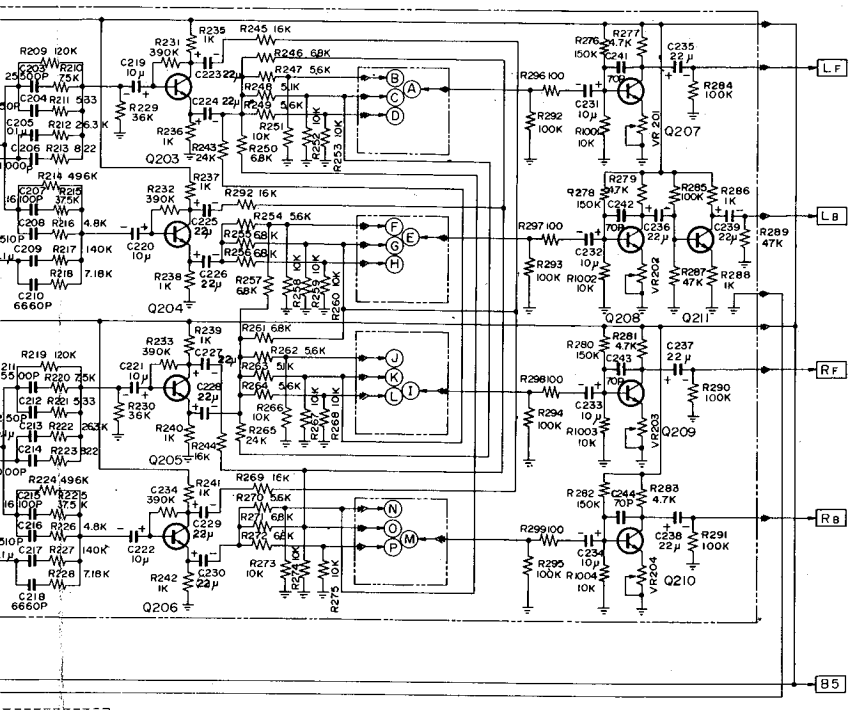
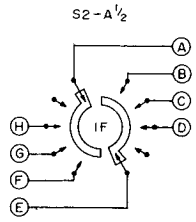
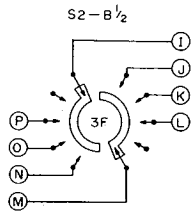
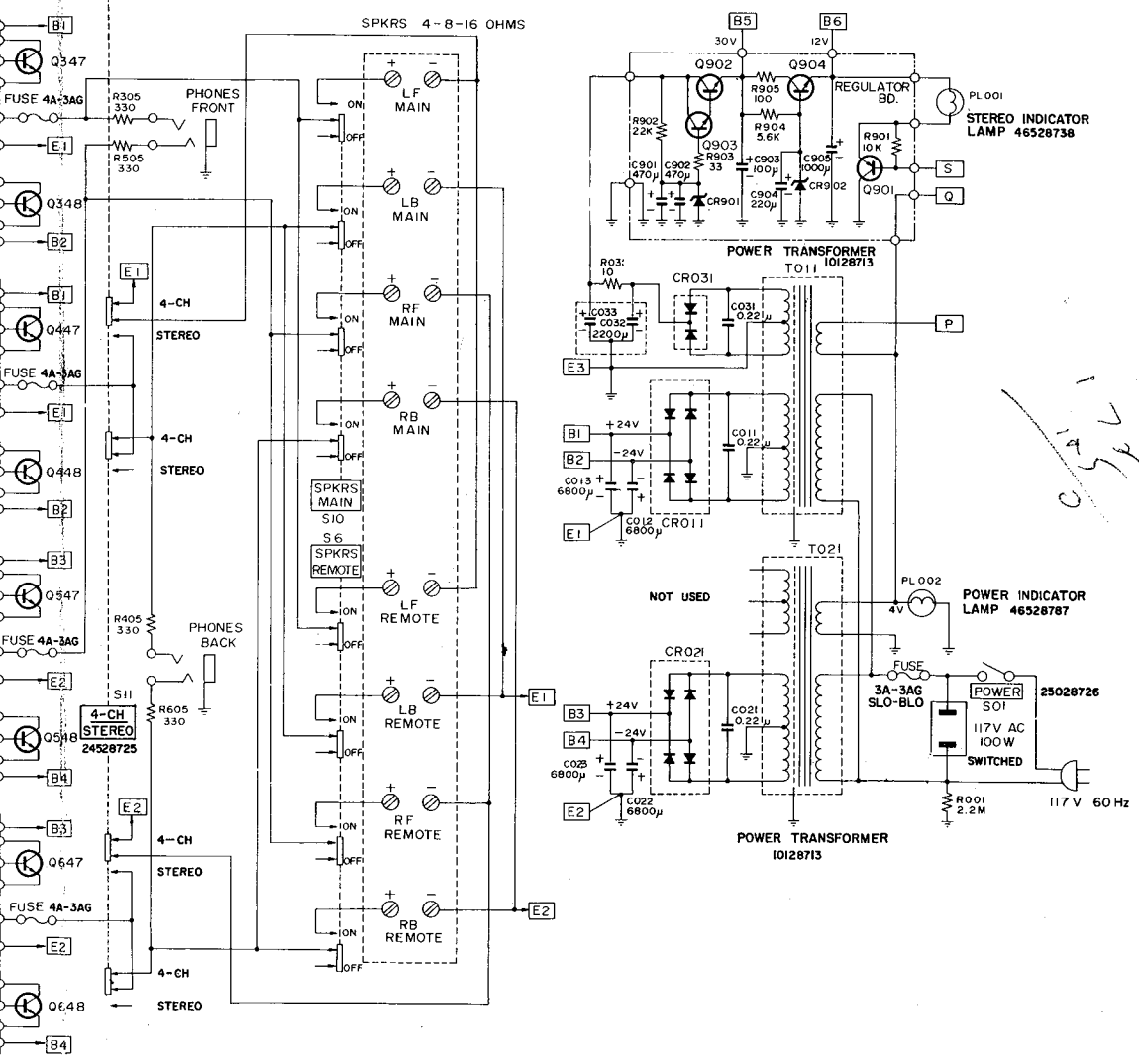

FM OUT PUT
FM METER CUT
FM (R)
FM (L)
S
AM
SQ BD
FM MUTING S4
ON
OFF
MUT. ADJ.
STEREO THRES
23528732
23528731
DIAL SCALE LIGHTS
46528736
FM METER OUT
(PART OF FUNCTION SWITCH)
FM—AM TUNING METER
12528735
METER LAMP
46528737
BASS VR321—VR621 23028769
TREBLE VR322—VR622 23028769
PRE AMP BD.
TONE CONTROL BD.
VOLUME CONTROL BD.
CONTOUR
VOLUME
23028766
INVERTER BD.
STEREO
4-CH
HIGH CUT BD.
LOW CUT BD.
HIGH CUT S7
LOW CUT S3
SOUND FIELD BALANCE
00228733
VR301—VR602
POWER AMP BD.
PHONO (L)
PHONO (R)
PHONO OUT (L)
PHONO OUT (R)
MODE INDICATOR LAMPS
46528739



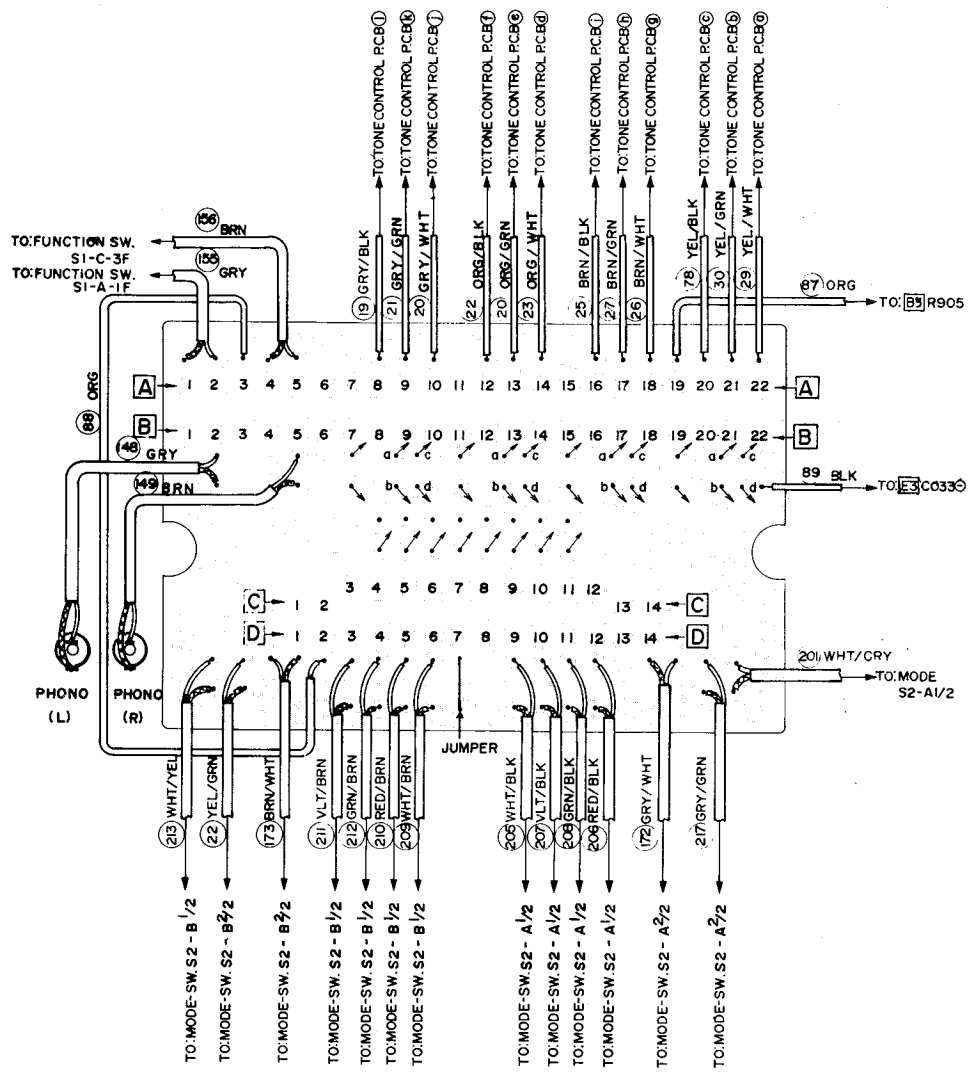


(PART OF MODE SWITCH)





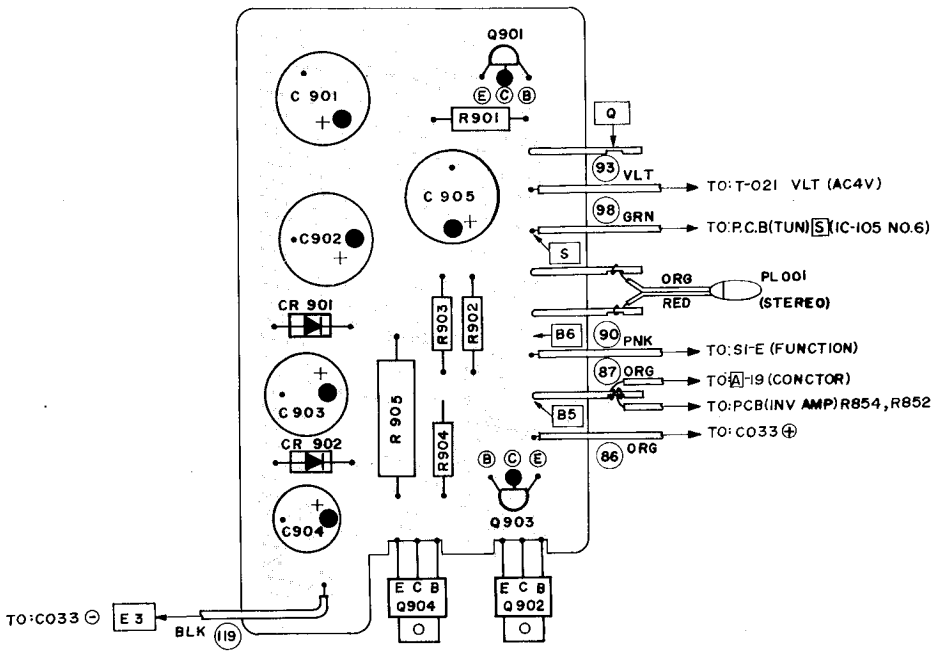
CONNECTOR BOARD



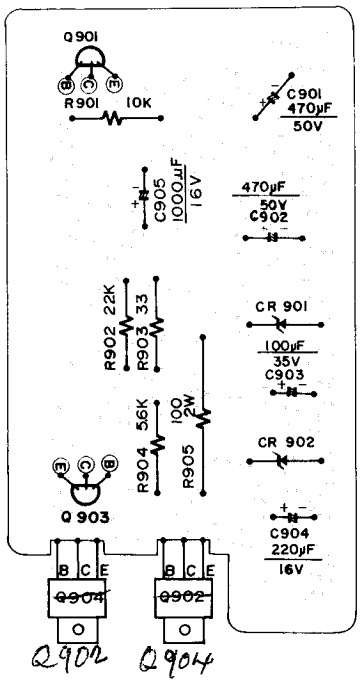
FROM		WIRE COLOR	TO
CONNECTOR-P.C.B	C 4 / GND	(215) VLT / YEL	S2-B 1/2 (MODE-SW)
" - "	C 5 / GND	(216) GRN / YEL	S2-B 1/2 (" - ")
" - "	C 6 / GND	(214) RED / YEL	S2-B 1/2 (" - ")
" - "	C 7 / GND	(213) BRN / GRN	S2-B 2/2 (" - ")
" - "	C 8 / GND	(219) ORG / GRN	S2-B 2/2 (" - ")
" - "	C 9 / GND	(208) VLT / GRY	S2-B 1/2 (" - ")
" - "	C 10 / GND	(207) GRN / GRY	S2-B 1/2 (" - ")
" - "	C 11 / GND	(205) RED / GRY	S2-B 2/2 (" - ")
" - "	B 7/8 GND	(178) GRY	PCB(VOLUME)
" - "	B 9a /10 b	(182) GRY / VLT	SOUND FILD BALANCE
" - "	B 9c /10 d	(186) GRY / BLK	S7(HIGH CUT)
" - "	B 11/12 GND	(180) ORG	PCB(VOLUME)
" - "	B 13a /14 b	(184) ORG / VLT	SOUND FILD BALANCE
" - "	B 13c /14 d	(188) ORG / BLK	S7(HIGH CUT)
" - "	B 15/16 GND	(179) BRN	PCB(VOLUME)
" - "	B 17a /18 b	(183) BRN / VLT	SOUND FILD BALANCE
" - "	B 17c /18 d	(187) BRN / BLK	S7(HIGH CUT)
" - "	B 19/20 GND	(181) YEL	PCB(VOLUME)
" - "	B 21a /22 b	(185) YEL / VLT	SOUND FILD BALANCE
" - "	B 21c /22 d	(189) YEL / BLK	S7(HIGH CUT)

FROM	TO
C 14 / D 14 (GND)	SQ-P.C.B - C, D - 14 (GND)
C 1 / D 1 (GND)	" - C, D - 1 (GND)
C 13 / GND	" - C - 13 (GND)
C 8 / GND	" - C - 8 (GND)
C 7 / GND	" - C - 7 (GND)
C 2 / GND	" - C - 2 (GND)

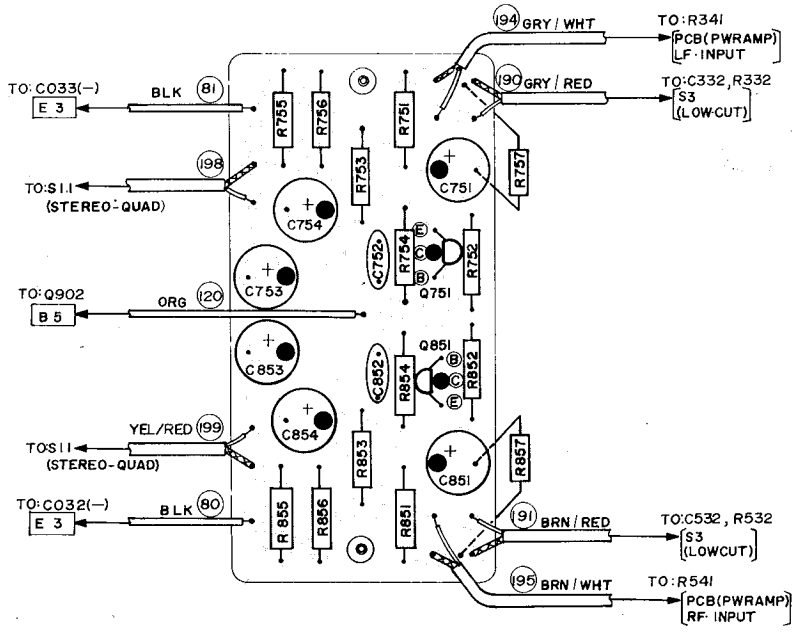
REGULATOR BOARD — TOP



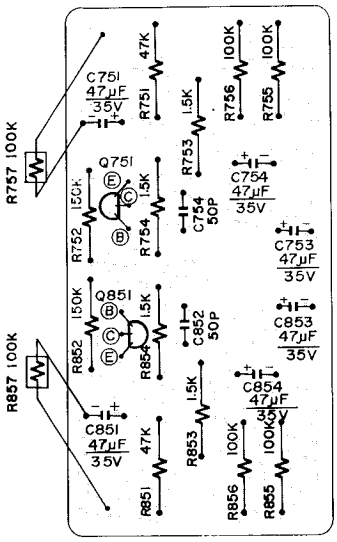
REGULATOR BOARD — BOTTOM



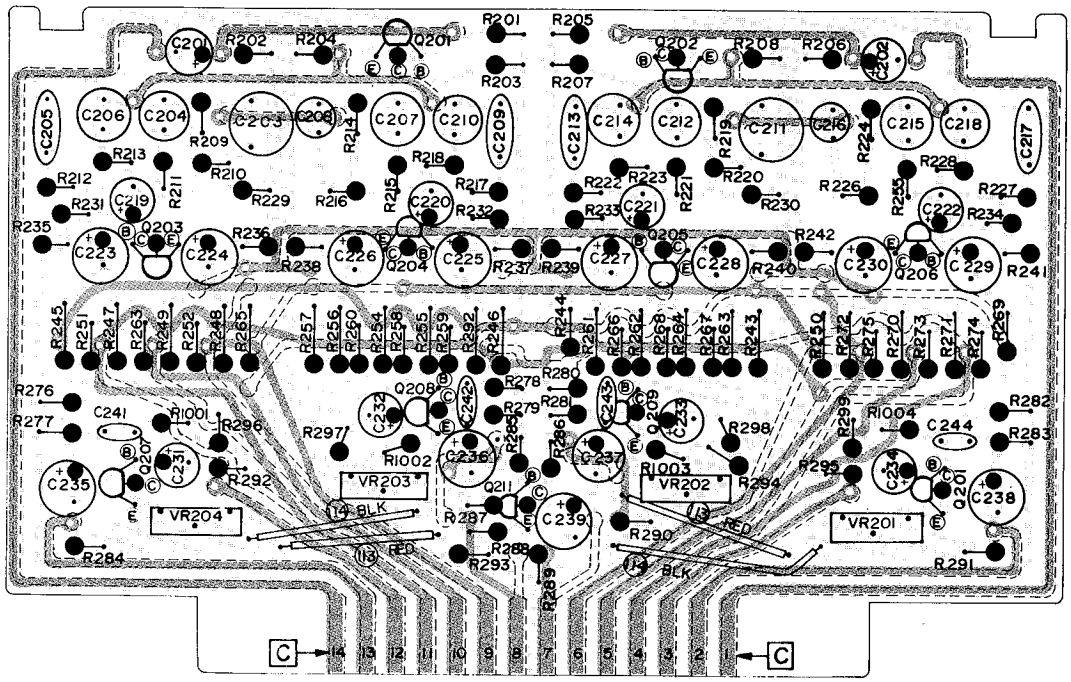
INVERTER BOARD — TOP



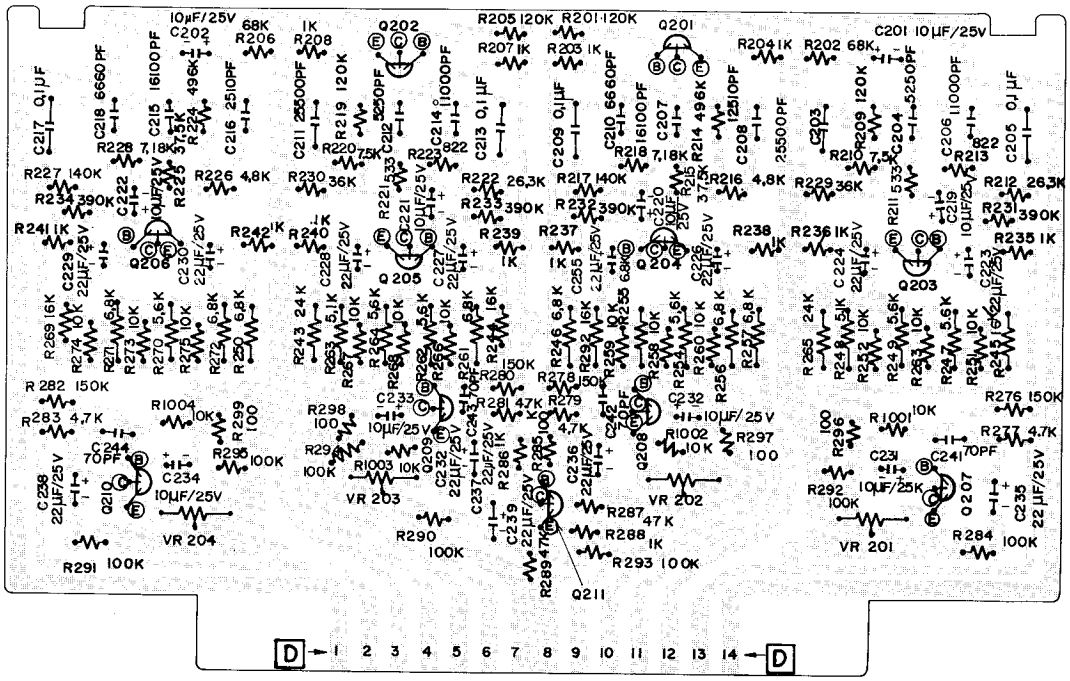
INVERTER BOARD — BOTTOM



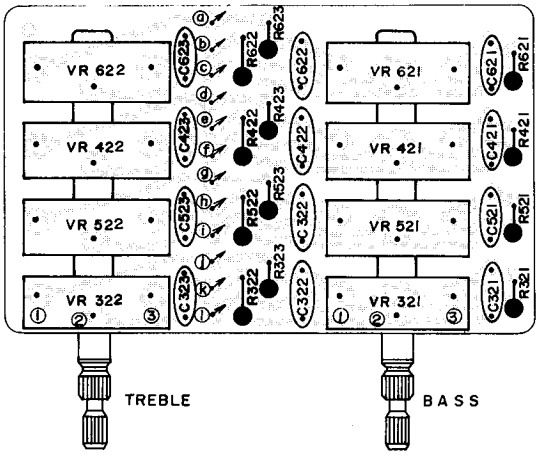
SQ BOARD — TOP



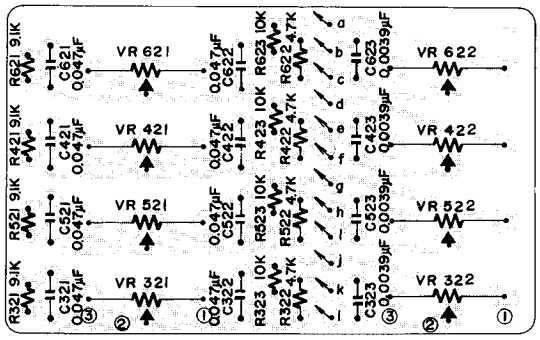
SQ BOARD — BOTTOM



TONE CONTROL BOARD — TOP

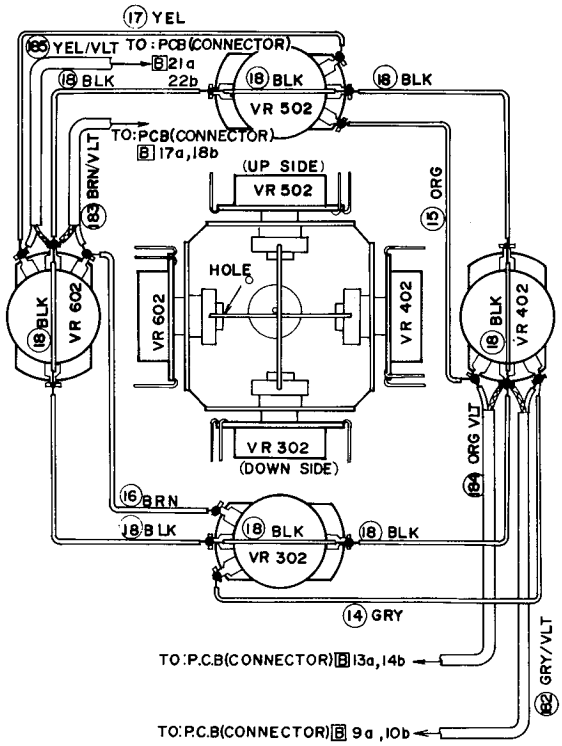


TONE CONTROL BOARD — BOTTOM

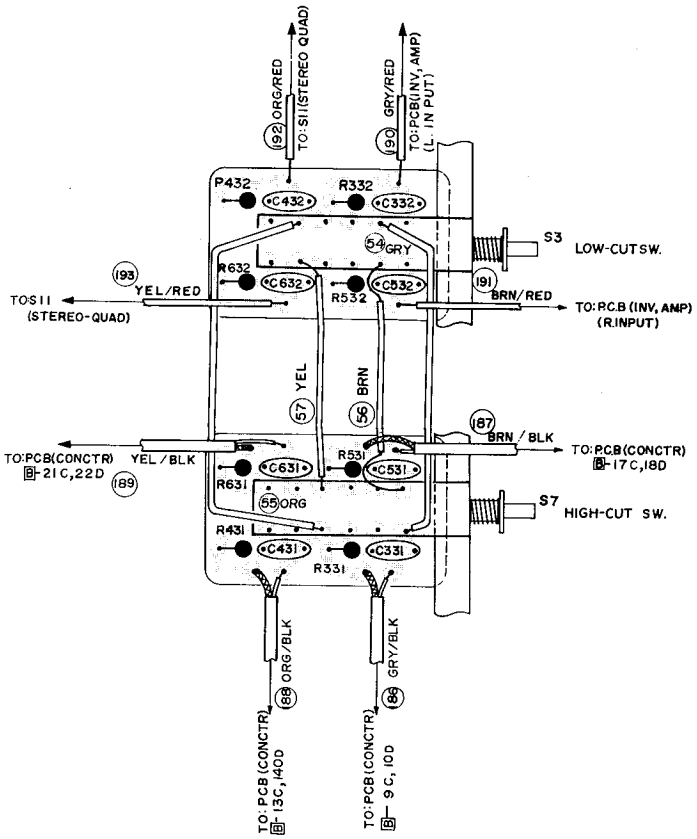


FROM	WIRE NO, COLOR	TO	
TONE CONTROL PCB ⓐ	29 YEL/WHT →	PCB(CONCTR)	A-22
ⓑ	30 YEL/GRN →		A-21
ⓒ	28 YEL/BLK →		A-20
ⓓ	23 ORG/WHT →		A-14
ⓔ	24 ORG/GRN →		A-13
ⓕ	22 ORG/BLK →		A-12
ⓖ	26 BRN/WHT →		A-18
ⓗ	27 BRN/GRN →		A-17
ⓘ	25 BRN/BLK →		A-16
ⓙ	29 GRY/WHT →		A-10
ⓚ	21 GRY/GRN →		A-9
ⓛ	19 GRY/BLK →		A-8

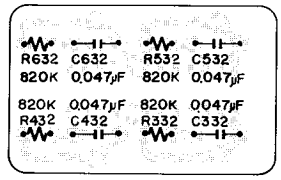
SOUND FIELD BALANCE

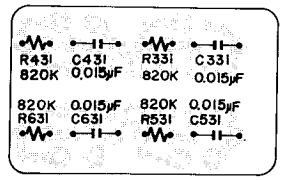


LOW CUT BOARD/HIGH CUT BOARD—TOP



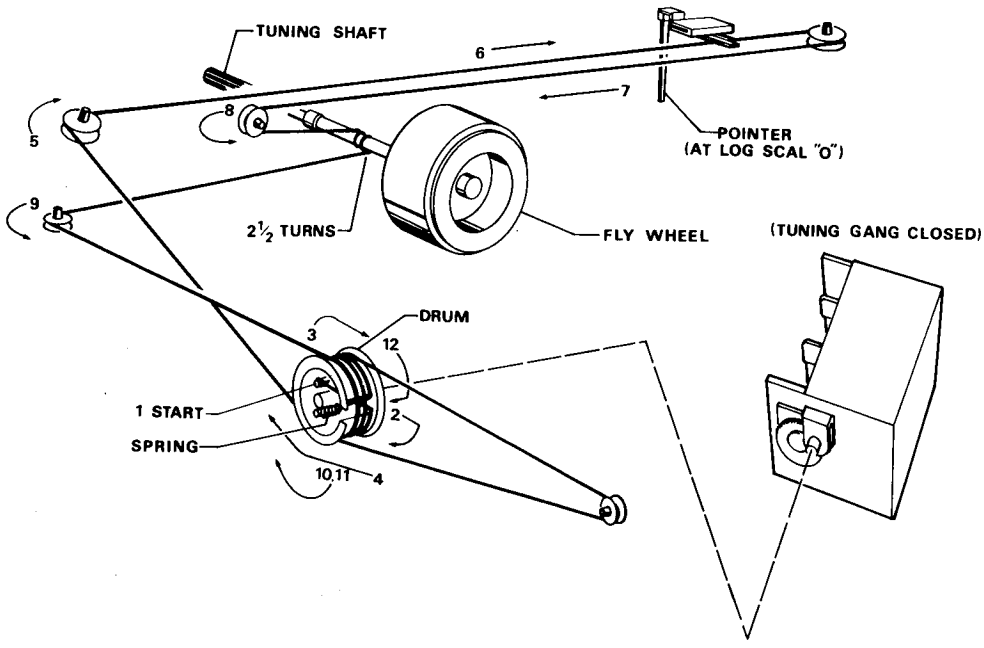
LOW CUT BOARD — BOTTOM



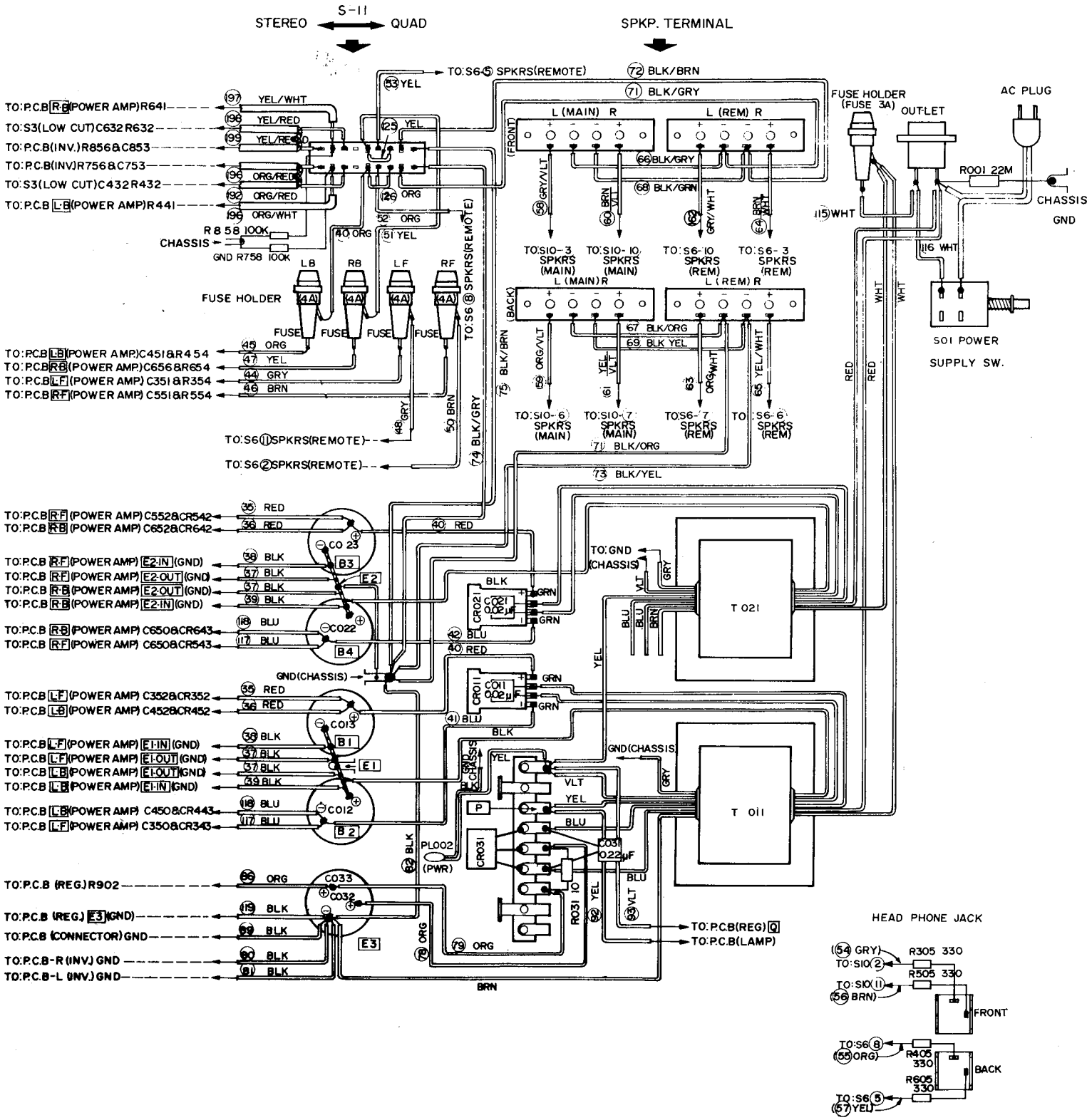


HIGH CUT BOARD — BOTTOM

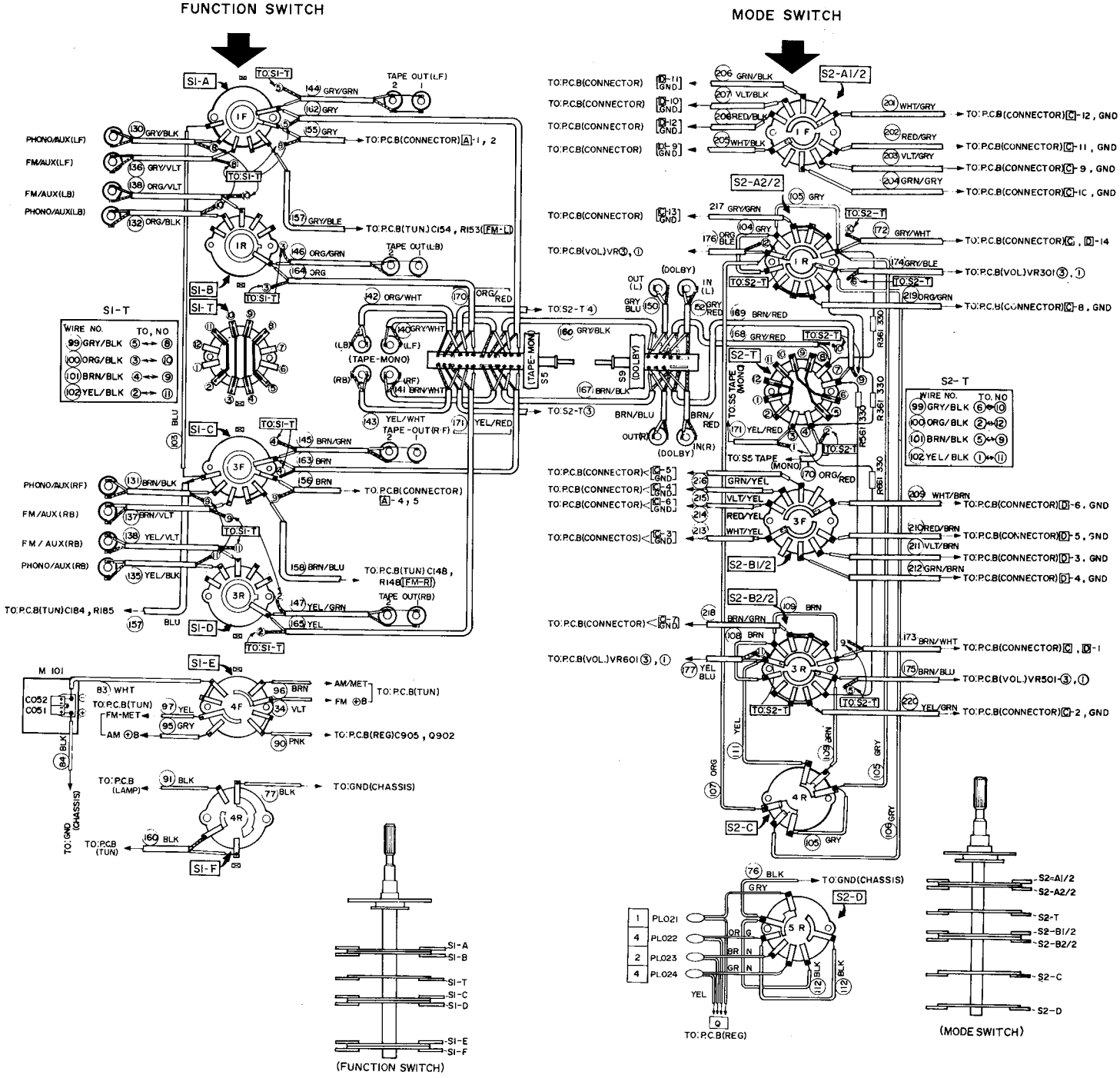
STRINGING DIAGRAM



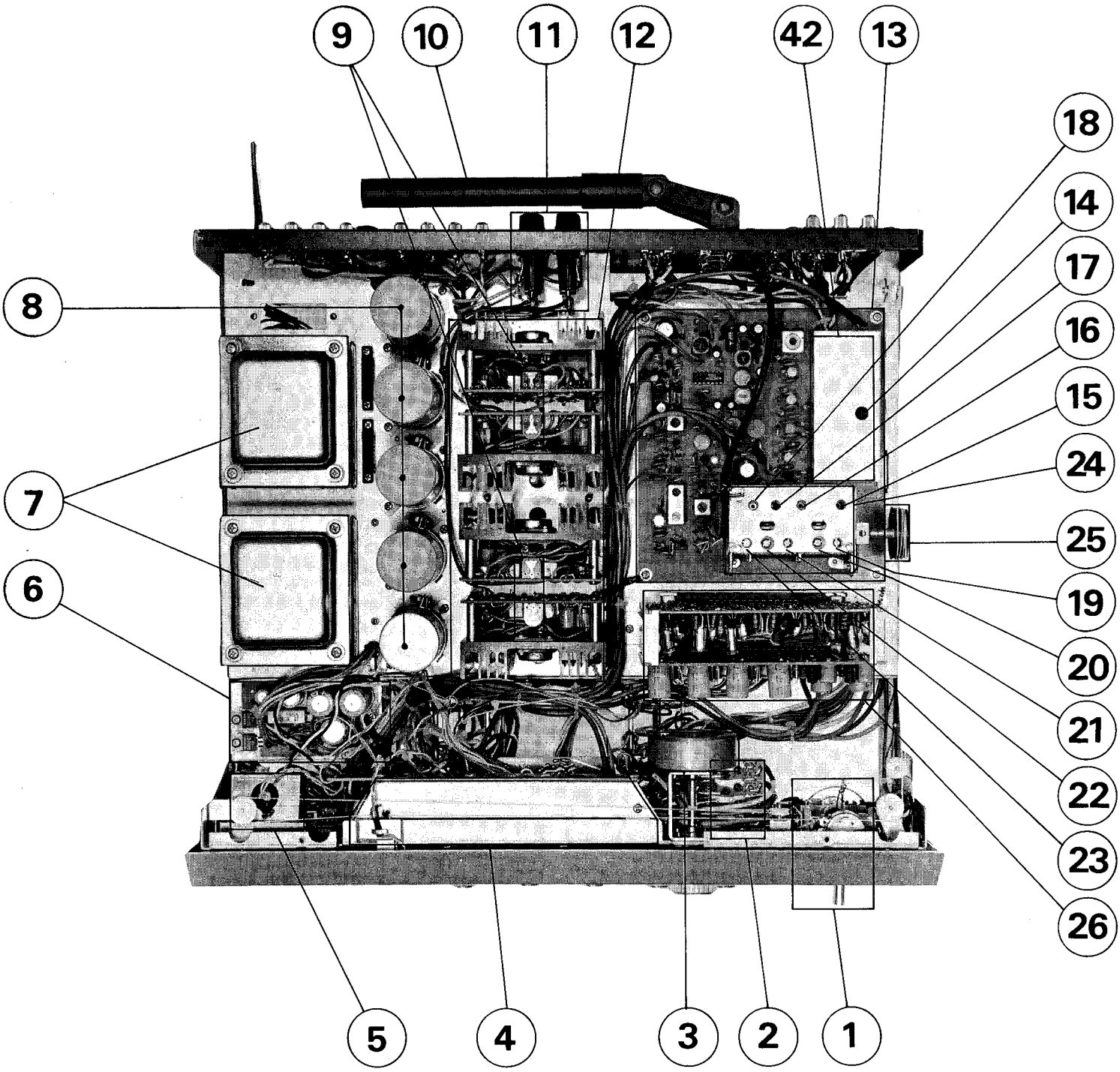
WIRING DIAGRAM (A)



WIRING DIAGRAM (B)

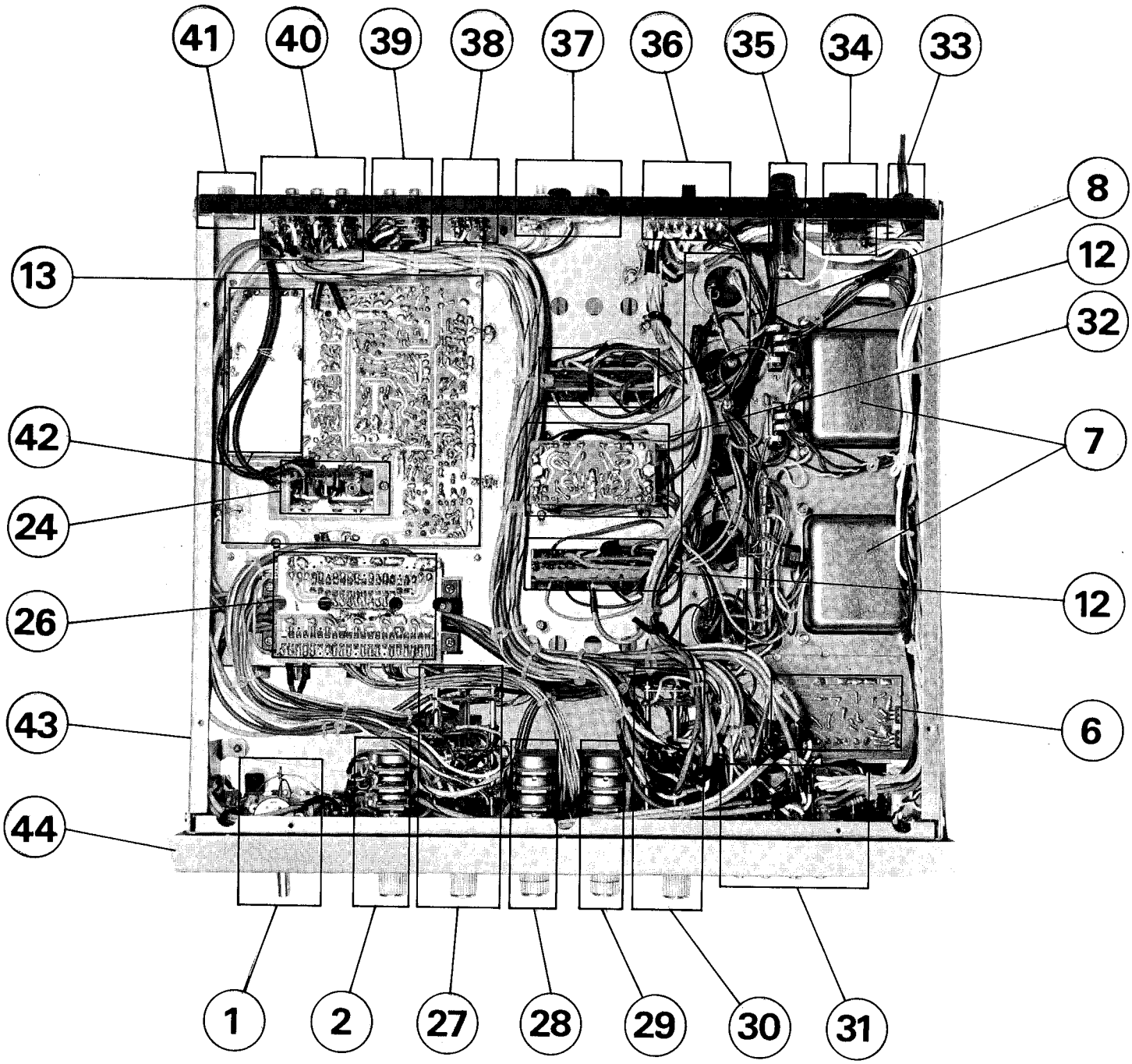


TOP VIEW



① JOY STICK (SOUND FIELD BALANCE)
② VOLUME CONTROL BD.
③ FLY WHEEL
④ DIAL LAMP HOUSE
⑤ METER LAMP
⑥ REGULATOR BD.
⑦ POWER TRANSFORMER
⑧ RIPPLE FILTER
⑨ IDLING ADJ. (POWER AMP.)
⑩ AM LOOP STICK ANTENNA
⑪ FUSE HOLDER (SPEAKER)
⑫ POWER AMP. UNIT
⑬ TUNER BD.
⑭ MUTING COIL ADJ.
⑮ LA FM ANTENNA COIL
⑯ LR FM RF COIL
⑰ FM IFT
⑱ LO FM OSC.
⑲ TCA FM ANT. TRIMMER
⑳ AM ANT. TRIM.
㉑ TCR FM RF TRIM.
㉒ AM OSC. TRIM.
㉓ TCO FM OSC.
㉔ AM–FM FRONT END
㉕ DIAL DRUM
㉖ SQ AND EQ./TONE UNIT

BOTTOM VIEW



27	MODE SWITCH	36	STEREO——4-CH. SWITCH
28	TONE CONTROL (TREBLE)	37	STEREO THRESHOLD / MUTING } ADJ.
29	〃 (BASS)	38	JACK (DOLBY AND FM OUTPUT)
30	FUNCTION SWITCH	39	〃 (TAPE OUTPUT)
31	PUSH SWITCH	40	〃 (INPUT)
32	INVERTER AMP.	41	GROUND TERMINAL
33	POWER CORD	42	SHIELD CASE (MUTING)
34	AC OUTLET	43	CHASSIS
35	FUSE HOLDER (AC LINE)	44	ESCUTCHEON

REPLACEMENT PARTS LIST

H-K PART NO.	REF. NO.	DESCRIPTION
TRANSFORMERS & COILS		
10128713	T011,021	Power Transformer
12028753	L162	Coil, MW Osc.
12028754	T161	IFT, 455
12028755	T162	IFT
12028756	T101	IFT, 10.7
12028757	L102,103	Coil, MPX, 19
12028758	L104	Coil, MPX, 38
12028759	L105,106,107,108	Inductor
12028760	F101,102	Ceramic Filter, 10.7
12028761	Y101	Ceramic Filter
12028762	L161	Coil, VHF
12028763	L101	Inductor
12028764	L341,441,541,641	Inductor
DIODES		
41028714	CR011,021	Rectifier
41028715	CR031	Diode DS131A(5B2)
41628749	CR161,162	Diode IS188AM
41628750	CR101,102	Diode IS188FM
41628751	CR103,104	Diode TD73
41628778	CR341,342,343,441, 442,443,541,542, 543,641,642,643	Diode 10D1
42028785	CR902	Zener Diode RD13A M
42028786	CR901	Zener Diode RD35A L
CONTROLS		
23528731	VR011	Muting Adj.
23528732	VR012	Stereo Thres.
00228733	VR302-602	Joystick Control Assy.
23028766	VR301,401,501,601	Volume Control
23028769	VR321,421,521,621	Bass Control
23028769	VR322,422,522,622	Treble Control
TRANSISTORS & IC'S		
43128741	IC 101-104	IC LA1221
43126551	IC 105	IC MC1307
43128767	IC 701,801	IC LD3130
43025972	Q 113	2SC839H
43025972	Q101-103	2SC930D
43025972	Q104	2SC537F
43025972	Q105-112,165	2SC537G
43025972	Q161	2SC929C
43025972	Q162-164	2SC929D
43025972	Q201-206	2SC945P
43025972	Q207-211	2SC945Q
43025972	Q411-413,511-513, 611-613,751,851	2SC693G
43025972	Q344,444,544,644	2SC815L
43025972	Q343,443,543,643	2SC853M
43025972	Q903	2SC536F

Above Transistors indicated by HK Part No. 43025972 can be replaced by 2N3417

TRANSISTORS & IC'S		
43027722	Q341,342,441,442, 541,542,641,642	2SC640L
43027722	Q901	2SA545L

Above Transistors indicated by HK Part No. 43027722 can be replaced by 2N5807

43027213	Q902	2SD330C
43027213	Q904	2SD325C
43024216	Q347,348,447,448, 547,548,647,648	2SD322M
43026284	Q346,446,546,646	2SC959M
43026285	Q345,445,545,645	2SA606M

H-K PART NO.	REF. NO.	DESCRIPTION
MISCELLANEOUS		
63028686		Escutcheon
63628687		Top Cover
60128688		Bottom Plate
61028689		Dial Scale (Plexiglas)
61628690		Indicator (Stereo)
61628691		Indicator (Mode)
61628692		Clear Plate
63028693		Escutcheon Insert
63028694		Joystick Insert
62028695		Plastic Feet
61628696		Bushing for Mode Indicator Lamp
60128697		Reflector for Stereo Lamp
63228698		Knob (Volume)
63228699		Knob (Tuning)
63228700		Pushbutton
63228701		Knob (Tone) Front
63228702		Knob (Tone) Back
00228703		Pushbutton Ass'y
63228704		Knob (Joystick)
63028705		Dress Ring for Joystick
61628706		Holder for Stereo Indicator
60128707		Lamp Housing Cover (Dial)
00228708		Dial Pointer Ass'y
00228709		Tuning Shaft Ass'y
85028710		Felt for Knob
85028711		Felt for Knob
00228712		Antenna Holder Ass'y
65428716		Fuse Holder
45028717		Fuse 3AG-4A
45028718		Fuse 3AG-3A Slo-Blow
65428719		AC Outlet
53028720		Power Cord
65428721		3P Terminal Board (ANT Terminal)
65428722		4P Terminal Board (Speaker Terminal)
65428723		27P Pin Jack
65428724		Ground Terminal
24528725	S11	Slide Switch (Stereo 4-CH Sw.)
25028726	S01	Pushbutton Switch (On/Off Power)
25028727	S3,4,5,6	Pushbutton Switch (Remote, Tape Mon1, FM Muting, Lowcut
25028728	S7,8,9,10	Pushbutton Switch (Main, Ext Dolby NR.) Contour, High Cut)
24028729	S1	Rotary Switch (Function)
24028730	S2	Rotary Switch (Mode)
65428734		Headphone Jack
12528735	M101	Meter
46528736	PL013,014,015	Pilot Lamp (Dial)
46528737	PL011	Lamp (Meter)
46528738	PL001	Lamp (Stereo)
46528739	PL021,PL022,PL023, PL024	Lamp (Mode Indicator)
46528787	PL002	Lamp (Power)
00328740		Front End
20528752		AM Loopstick Antenna
38128776	SV02	Varistor
66028777		Socket for Transistor
90728788		Schematic
90728186		Owner Manual
90728187		Tech Manual

NOTE: To speed handling of your order be sure to include both the model and serial numbers which appear at the back of the chassis, in addition to the quantity, part number and part description of the items ordered. Orders from independent dealers, independent servicemen, and retail customers will be shipped on a cash in advance basis. Harman-Kardon reserves the right to substitute equivalent parts for those originally installed in this chassis. All parts should be ordered from Harman-Kardon, 55 Ames Court, Plainview, L.I., N.Y. 11803, Att: Parts Department.

Schede e recensioni

Karman Kardon 75

Sintoampli quadrifonico

Di cosa si tratta	**Sintoampli**	 L'importanza di iscrivervi alla newsletter
Produttore	**Harman Kardon**	
Caratteristiche	**Quadrifonico**	
Costo	**-**	

Caratteristiche

Illuminated pushbutton power switch
Stereo/quad headphone receptacles
Speaker selector switches for main and remote stereo or quad systems
External Dolby NR/Tape monitor (stereo only)
Stereo/quad tape monitor
Contour
FM muting
High cut filter
Low cut filter
Function selector: Phono, Stereo FM, FM, Discrete FM/Aux, Discrete phono/Aux, AM
Separate front and back bass and treble tone controls

TUNER SECTION

FM Sensitivity:2.0 microvolts, IHF.
Ultimate Signal to Noise Ratio:70db.
Capture Ratio:2.5dB.
Image Rejection:-50dB.
Spurious Response Rejection:-78dB.
Multiplex Separation:35dB.
Total Harmonic Distortion:0.6% mono. 0.7% stereo.
AM Rejection: -50dB.
SCA Suppression:Totally inaudible.
AM Sensitivity: 200 microvolts/meter.
Image Frequency Rejection: Better than 55dB.

Mode selector: Mono, Stereo, SQ Matrix, SQ Matrix Blend, Stereo-to-Quad, Discrete Quad
Ganged Tour channel volume control
Joystick Sound field balance control
Station tuning knob
Illuminated mode indicator lights
Stereo FM indicator light
AM/ FM tuning meter
lluminated dial pointer
REAR PANEL CONTROLS AND FEATURES
Swivel AM loopstick antenna
Thumbscrew connectors for external AM and FM antennas
Dolby NR/Tape Monitor inputs (stereo)
Stereo magnetic phono input receptacles
Four Discrete phono/Aux input receptacles
Four Tape Monitor input receptacles
Four Discrete FM/Aux input receptacles
Two Dolby NR/Tape Monitor outputs
Two sets of tape outputs with 8 receptacles (can record simultaneously with two recorders in stereo or quad)
Special Quad FM tuner output (single receptacle)
Main and remote speaker outputs for stereo or quad
AC convenience receptacle
Stereo/quad slide switch for double power stereo operation
AC line cord
AC line fuse
Four DC speaker output fuses
Phono grounding terminal

IF Rejection: Better than 55dB.
Selectivity: Better than 34dB.
Dimensions: 16%" W x 15" D x 5" H (less knobs)
Weight: 28 pounds.

Descrizione

sintoamplificatore harman-kardon costruzione americana quadrifonico con pilotaggio a leva come da foto,alimentazione 110v e fornito di trasformatore esterno,collegabili 4 coppie di diffusori,alti e bassi regolabili singolarmente per ogni canale,potenza notevole

Dal web:

Square wave tilt at 20 Hertz is less than 3%.
Exceptionally fast high frequency rise time achieved through use of Citation audio circuitry. Better than 2 microseconds rise time at 20kHz.
Remote and main speaker selector switching in stereo or quad. Provides flexibility for connecting speakers in stereo, or quad in various parts of the home in numerous permutations.
External Dolby noise reduction/tape monitor switch permits user to connect external Dolby NR to system for use with Dolby FM broadcasts, Switch also serves as stereo tape monitor if Dolby NR not employed.
Quadriphonic tape monitor switch provides monitoring for either a quad or stereo recorder.
Contour switch restores low frequencies normally lost at low volume levels.
High and Low out Filters remove annoying hiss and rumble.
Illuminated indicator numerals provide positive identification of the mode of operation. Numeral 1 for mono, 2 for stereo, 4-2-4 for SO matrix quad, 4-2-4 for SO matrix blend, 2-4 for stereo synthesis and and 4-4 for discrete quad.
360° joystick sound field balance control enables user to set stereo or quad sound source anywhere within the listening area. Unquestionably the most versatile control ever designed for a home music system.
Synthesizes all stereo program material (FM, tapes, phono) to pseudoquad through use of Harman/Kardon designed phase-shifting network. Network designed to give spacious, totally transparent sound closely approximating the depth and dimension of the concert hall.
Harman/Kardon ultra-wideband SO matrix delivers superb four channel sound from SO program sources. Model 754- employs two SO positions for maximum flexibility. First position retains exact balance and perspective of the concert hall while second position introduces slight amount of blend in the front channels. This is especially useful for the playback of hard rock and contemporary music or where a soloist is predominant.

Extremely sensitive, low-noise tuner pulls in distant stations with amaz
ing clarity and freedom from noise. Automatic stereo circuit switches
FM section to stereo the moment a stereo FM broadcast is received.
Provision for discrete quad reel-to-reel, or 8-track cartridge deck. Will
also accommodate the new RCA discrete disc system with the addition
of Harman / Kardon's special external discrete phono adapter.
Provision to play back discrete FM broadcasts (when approved for
transmission).

Power Output: 45/45 watts, RMS, both channels driven simultaneously into 8 ohms, 20-20kHz at less than 0.5% THD at 120 volts, 50/60 Hertz AC. (in special double power stereo mode)

4x 18 watts, RMS into 8 ohms, 20-20kHz at less than 0.5% THD at 120 volts, 50/60 Hertz AC. ALL FOUR CHANNELS DRIVEN SIMULTANEOUSLY.
(Power measurements made by the most stringent and conservative standards. If measured by competitive standards, power would be 55/55 in stereo and 4x 23 in quad)
Power Bandwidth: From less than 10 to beyond 40kHz into 8 ohms, all channels driven in stereo or quad mode at less than 0.5% THD.
Total Harmonic Distortion: Less than 0.5% at any power rating from 0.1 watt to full rated power. (Typically runs below 0.2% from 20-20kHz at fulloutput)
Intermodulation Distortion: Less than 0.15% at rated output.
Hum and Noise:Better than 85dB below rated output (unweighted) in stereo or quad mode.
Damping Factor:40:1 at 4 and 8 ohms.
Frequency Response: From below 4 Hertz to beyond 70kHz, ±0.5dB at normal power levels.
From below 1 Hertz to beyond 100kHz ±1.0dB at normal power levels.
Square Wave Tilt:Less than 10% at 20 Hertz. (Typically reads 5%)
Square Wave Rise Time:Better than 2 microseconds.
Stability:Absolutely stable with any type load.
Phono Overload:Greater than 75 millivolts.
Bass and Treble Tone±12db bass boost and cut at 50 Hertz.
Control Action:±12db treble boost and cut at 10kHz.

Scheda fotografica

Vediamo dietro

manuale

http://manuals.harman.com/hk/Service%20Manual/75+%20sm.pdf

Come suona