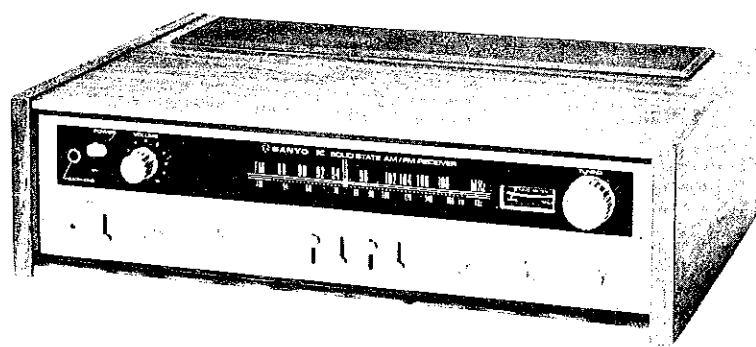




SANYO STEREO RECEIVER DCX 2300K SERVICE MANUAL

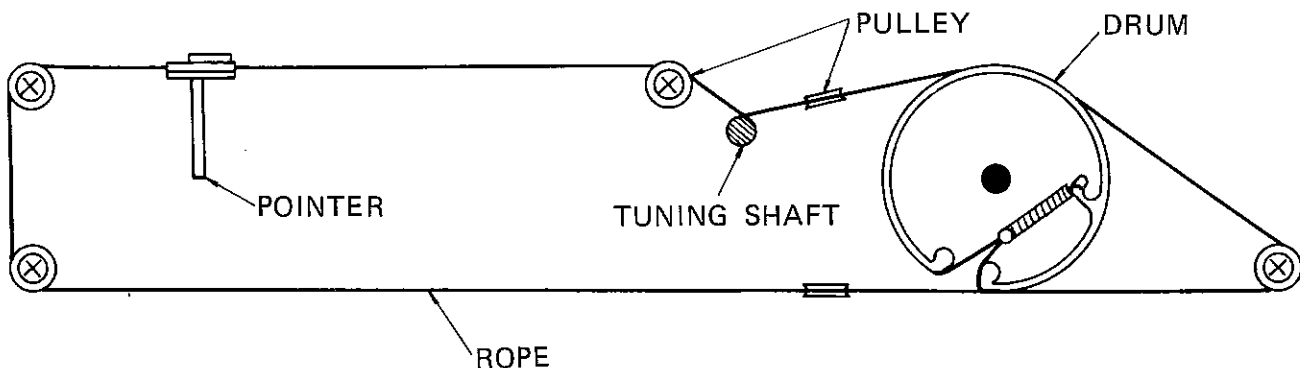


A PRODUCT OF SANYO ELECTRIC INC.

SPECIFICATIONS

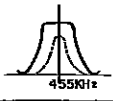
General	
IC	LA1201 x 1
FET	2SK25 x 1
Transistors	2SC668 x 2 2SC930 x 1 2SC929 x 1 2SC537 x 9 2SC693 x 7 2SC536 x 2 2SC853 x 4 2SA545 x 2 2SD91 x 4
Diodes	1S188 x 14 SV-02 x 2 SZ-9 x 1 10D1 x 2
Power source	AC 120V 60 Hz
Power consumption	65W
AC outlet	Unswitched 120W x 1
Dimensions	17-5/16"(W) x 14"(D) x 6-15/16"(H) 440 x 354 x 177 mm)
Weight	15.8 lbs. (7.2 kg)
FM Tuner section	
Tuning range	88 – 108 MHz
Intermediate frequency	10.7 MHz
Sensitivity	2.5 μ V (IHF)
Antenna	Input impedance 300 ohm, balanced
Channel separation	35 dB at 1,000 Hz
Signal-to-noise ratio	60 dB
AM tuner section	
Tuning range	535 ~ 1,605 KHz
Intermediate frequency	455 KHz
Sensitivity	150 μ V (IHF)
Audio amplifier section	
Output power	45W IHF total music power (0.8%) 15W IHF continuous power per channel (0.8%)
Frequency response	15 – 80,000 Hz \pm 3 dB
Power band width	15 – 50,000 Hz \pm 3 dB
Input terminals	AUX 100mV 30K ohm PHONO 2.5mV 50K ohm RECORDER PLAYBACK 150mV 100K ohm MIC. 10K ohm –65 dB
Output terminals	SPEAKER 4 – 16 ohm (Recommended 8 ohm) HEADPHONE 8 ohm
Tone controls	BASS \pm 12 dB at 100 Hz TREBLE \pm 12 dB at 10 KHz
Loudness control	50 Hz + 12 dB 10 KHz + 5 dB
High filter	Over 5KHz, 6 dB/OCT cut
Residual noise	1.5mV/8 ohm (at minimum volume)

DIAL CORD STRINGING



ADJUSTMENT



AM ADJUSTMENT

Step	Adjusting circuit	Connections		SG. frequency	Position of tuning dial	Adjustment	V.T.V.M. Oscilloscope
		Input	Output				
1	IF	Connect sweep generator to VC4.	Connect oscilloscope to test point TP2.	455 KHz (400Hz, 30% modulation)	Near max. capacity of VC. at position with no unrequired signal.	AM 1st 9-20940 (Yellow) 9-20950 (White) AM 2nd 9-20960 (Black)	
2	RF	Connect standard loop antenna to output terminals of SG. Place receiver 2 feet from loop antenna.	Connect V.T.V.M. to speaker terminals.	600 KHz (400Hz, 30% modulation)	600 KHz	AM ANT 9-20524 AM OSC 9-20700 (Red)	Max.
3				1400 KHz (400Hz, 30% modulation)	1400 KHz	TC4 TC5	Max.
4	Repeat adjustments.						

PREPARE

1. Variable capacitor completely closed.
2. Set the dial pointer to very left line dial scale.
3. Connect sweep generator, SG, V.T.V.M. and oscilloscope.
4. Selector switch to "AM".
5. Use a screwdriver with plastic grip for all adjustments.

FM ADJUSTMENT

Step	Adjusting circuit	Connections		SG frequency	Position of tuning dial	Adjustment	V.T.V.M. Oscilloscope
		Input	Output				
1	IF	Connect sweep generator to test point TP1 through 0.01μF.	Connect oscilloscope to test point TP3.	10.7 MHz (none modulation)	Near max. capacity of VC. at position with no unrequired signal.	FM 1st 9-20890 (Violet) 9-20900 (Orange) FM 2nd 9-20910 (Gray) 9-20920 (Brown) FM 3rd 9-20930 (Pink) 9-20920 (Blue)	
2	Ratio Det.		Connect oscilloscope to test point TP4.			FM DET 9-20850 9-20860	
3	RF	Connect FM SG. to FM ANT. terminals.	Connect V.T.V.M. to speaker terminal.	90 MHz (400Hz, 30% modulation)	90 MHz	FM ANT 9-20910 FM OSC 9-20460 FM Coil 9-20260	Max.
4				106 MHz (400Hz, 30% modulation)	106 MHz	TC1 TC2 TC3	Max.
5	Repeat adjustments.						

PREPARE

1. Variable capacitor completely closed.
2. Set the dial pointer to very left line of dial scale.
3. Connect sweep generator, FM SG, V.T.V.M. and oscilloscope. FM antenna input impedance is 300 ohm.
4. Selector switch to "FM"
5. Use a screwdriver with plastic grip for all adjustments.

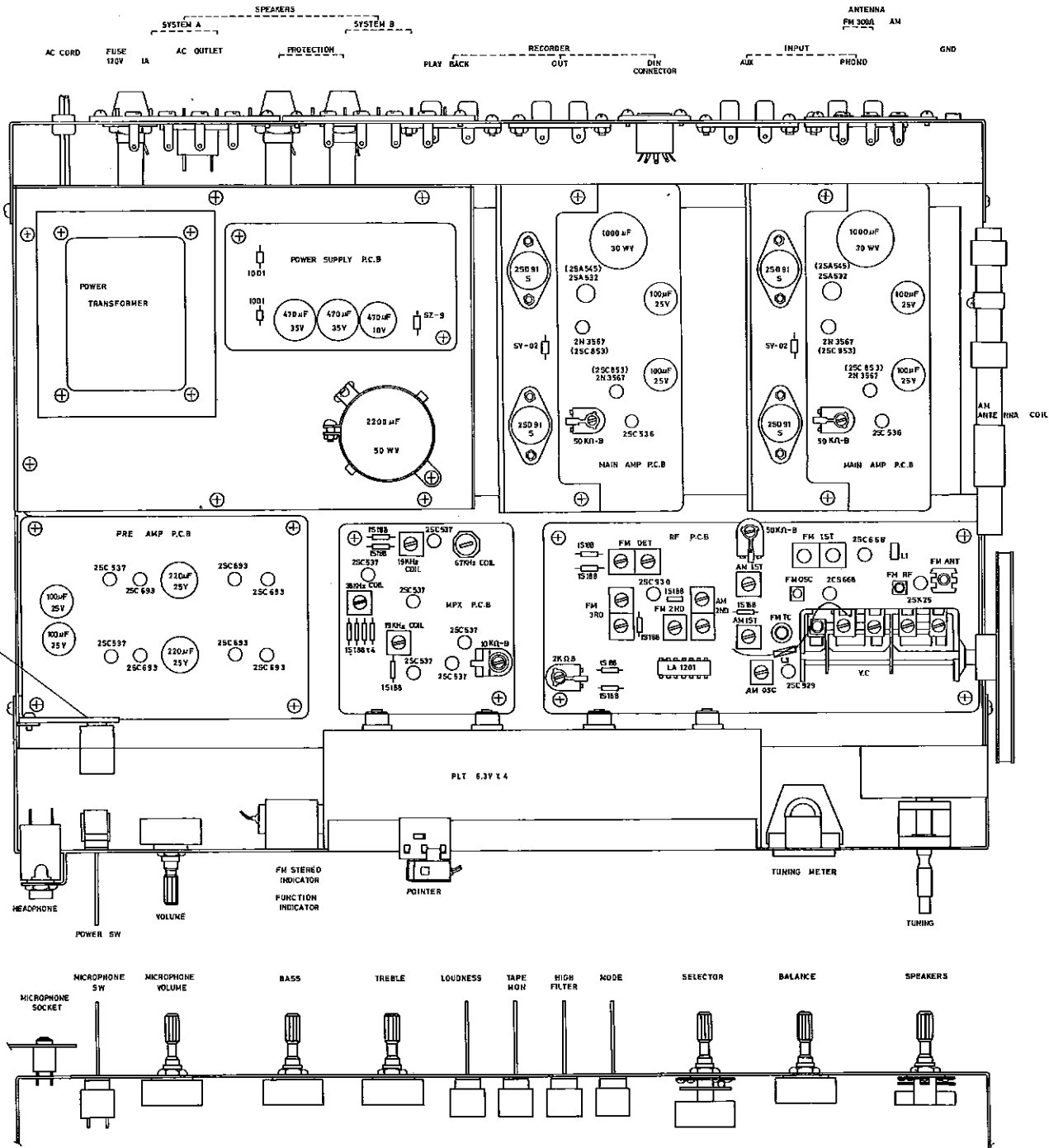
FM MPX ADJUSTMENT

Step	Adjusting circuit	Connections		Position of tuning dial	Adjustment	V.T.V.M.
		Input	Output			
1	SCA signal filter (67 KHz)	Add SCA signal to FM stereo SG. to FM ANT. terminals. FM stereo signal OFF.	Connect V.T.V.M. to emitter of TR201.	Near max. capacity of VC. at position with no unrequired signal.	67KHz 9-20140 (Red)	Min.
2	19KHz pilot signal	Connect FM stereo SG. to FM ANT terminals. 19KHz signal ON. SCA signal OFF.	Connect V.T.V.M. to test point TP8.		19KHz 9-20160 (Blue)	Max.
			Connect V.T.V.M. to test points TP7 & TP9.		19KHz 9-20150 (Green)	Max.
3	38 KHz	Connect FM stereo SG to FM ANT terminals. 19KHz signal ON. Main channel, sub channel signal ON.	Connect V.T.V.M. to test point TP8.		38KHz 9-20170 (Yellow)	Max.
4	FM stereo signal separation	Add 1000Hz signal from L Ch.	Connect V.T.V.M. to R speaker terminal.		Separation control SVR B-10K ohm	Min.
5		Connect FM stereo SG to FM ANT terminals. 19KHz signal ON. Main channel, sub channel signal ON. Add 1000Hz signal from R Ch.	Connect V.T.V.M. to L speaker terminal.	38KHz 9-20170 (Yellow)	Min.	
6	Repeat steps 4 ~ 5. Set at position with max. channel separation.					

PREPARE

1. Variable capacitor completely closed.
2. Connect FM stereo SG. and V.T.V.M.
3. Selector switch to "FM AUTO"
4. Use a screwdriver with plastic grip for all adjustments.

PARTS LOCATION



PARTS LIST

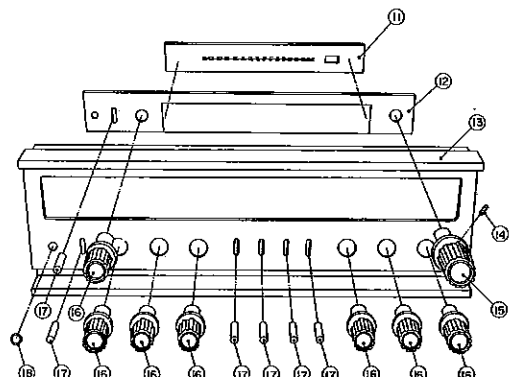
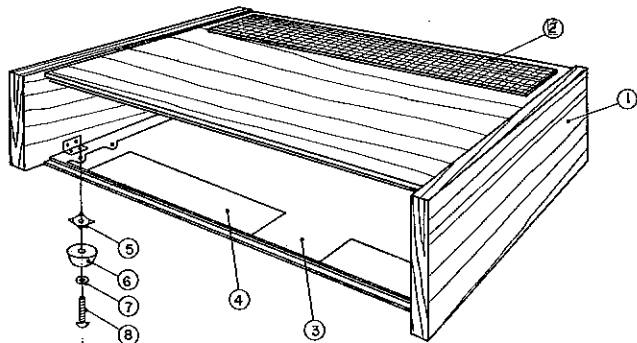
Ref. No.	Part No.	Description	Q'ty
CABINET			
1	131 2 1101 17900	Cabinet	1
2	131 2 1312 10101	Grill	1
		Pan head tapping screw 3x8	8
		Washer 3.2φx10φx1t	8
3	131 2 6101 15400	Plate, Shield	1
4	131 2 6107 11500	Plate, Sever	1
	131 2 3201 11600	Angle reinf	8
		Pan head tapping screw 3.1x8	16
		Pan head tapping screw 3.1x13	16
6	131 2 1804 10401	Leg, Rubber	4
8		Pan head screw 4x20	4
7		Washer 4.2φx12φx1t	4
5	131 2 4203 12900	Washer	4
15	131 2 1601 17700	Knob, Tuning	1
14	131 2 4201 11800	Screw	1
16	131 2 1602 11800	Knob Indicate, Select & Volume	7
17	131 0 1001 18600	Knob Assy, Lever switch	6
	131 0 1016 12104	Panel Assy, Decorate	1
		Pan head tapping screw 3x6	4
13	131 2 1203 19109	Panel, Control	1
12	131 2 6308 13300	Filter	1
	131 2 6113 10100	Shelter	1
	131 2 6113 11001	Shelter	1
CHASSIS			
	131 2 3301 16200	Chassis	1
		Pan head tapping screw 3x10	1
		Washer 3.2φx10φx1t	1
	131 0 3016 10500	Cramp assy, Wire	4
		Pan head tapping screw 3x8	4
	131 2 3608 10800	Cramp, Wire	1
	131 2 4107 10000	Pulley	1
		Washer 3.2φx10φx1t	1
	131 2 4108 10001	Spindle, Pulley	1
	131 2 3306 12902	Panel, Rear	1
		Pan head tapping screw 3x8	4
	131 2 6111 11300	Bushing	1
		Fillister head screw 4x8	1
	131 2 3617 11200	Metal mount, Trans	1
		Pan head tapping screw 3x8	6
	131 2 3603 12700	Metal mount, Antenna	1
		Pan head tapping screw 3x8	1
	131 2 3305 13502	Panel, Front	1
		Pan head tapping screw 3x8	6
	131 2 6110 15300	Shelter, Dial light	1
		Pan head tapping screw 3x8	4
	131 2 6110 14100	Shelter, Function light ind.	1
		Pan head tapping screw 3x8	1
	131 2 6110 14200	Shelter, Function light ind.	1
	131 2 5206 11400	Moldplane	1
	131 2 6111 10000	Bushing, Function ind.	3
11	131 2 1201 19600	Plate, Dial	1
		Pan head tapping screw 3x8	1
	131 2 5206 11300	Moldplane	3
	131 2 6110 12800	Shelter, Plate dial light	1
		Pan head tapping screw 3x8	2
	131 0 3020 00200	Pulley Assy	2
		Pan head tapping screw 3x8	2
	131 2 4107 10000	Pulley	3
	131 2 4108 10001	Spindle, Pulley	3
	131 0 3003 13300	Shaft assy, Dial	1
		Pan head tapping screw 3x8	2
	131 0 3002 10201	Drum Assy	1
		Pan head screw 3x8	2

Ref. No.	Part No.	Description	Q'ty
CHASSIS			
	131 2 4112 10200	Rope	1
	131 2 4214 10000	Eyelet	1
	131 2 4111 00200	Spring, Rope	1
	131 0 3011 12100	Pointer assy	1
	131 2 6308 12400	Filter	1
	131 2 3620 10500	Plate, Mount VR	1
	131 2 3101 12700	Metal mount, Tuning meter	1
	131 2 6306 10300	Reflector, Tuning meter	1
	131 2 6111 10300	Bushing, Tuning meter lamp	1
	131 2 1406 10703	Plate Color, Tuning meter	1
18	131 2 4203 14200	Washer, Headphone	1
	131 2 6111 11200	Bushing	3
	131 2 3608 00200	Cramp, ANT lead	1
		Pan head tapping screw 3x8	1
	131 2 6107 11800	Plate, Sever, Lever SW (3P)	1
	131 2 6107 11600	Plate, Sever, Lever SW (6P)	5
	131 2 6101 15700	Plate, Shield, Lever SW (3P)	1
	4 2579 20524	Antenna Coil MW	1
	4 2519 22000	Power Trans	1
	4 2239 20450	Electrolytic Capacitor 2200μF/50wV	1
	4 2229 22030	VR, B-200K ohm x 2, Volume	1
	4 2229 22010	VR, A-50K ohm x 2, Bass, Treble	2
	4 2229 22021	VR, MN-200K ohm, Balance	1
	4 2229 22090	VR, B-10K ohm, Mic volume	1
	4 2319 21751	Switch rotary, Selector	1
	4 2319 22070	Switch rotary, Speaker	1
	4 2319 21560	Switch lever, Tape Mon, High Fil. Mode, Mic, Loudness	5
	4 2319 21922	Switch lever, Power	1
	4 2359 21080	Jack, Headphone	1
	4 2359 21200	Jack, Mic	1
	131 0 4001 23700	Printed circuit assy, PL	1
	4 2359 21100	Socket, AC outlet	1
	4 2359 21040	Socket, Phono 2P, Phono, Aux, Tape PB, Rec.	4
	4 2359 20190	Socket, DIN	1
	4 2359 21110	Fuse Holder, Protector	3
	4 2379 20020	Terminal ANT 3P, AM, FM ANT	1
	4 2379 20080	Terminal 4P, Speaker	2
	4 2379 20490	Terminal Lug, 1PL	1
	4 2379 20330	Terminal Lug, 2P	1
	4 2379 20310	Terminal Lug, 4P	1
	4 5119 20200	Meter, Tuning	1
	4 6129 20100	Pilot lamp, 6.3V 0.25A, Dial sign, Tuning meter	5
	4 6129 20143	Pilot lamp, 6V 25mA, FM Stereo Ind.	1
	4 6129 20145	Pilot lamp, 6.3V 140mA, Pointer lamp, Selector ind.	3
	4 2349 20030	Fuse 2A, Protector	2
	4 2349 20260	Fuse 1A,	1
	4 2439 20390	Power Cord	1
	4 2359 20970	Socket Pilot	1
RESISTORS			
	R916	Carbon P-type 15 ohm ±10% 1/2W	1
	R914,915	Carbon P-type 330 ohm ±10% 1/2W	2
	R903	Carbon P-type 820 ohm ±10% 1/4W	1
	R901	Carbon P-type 1K ohm ±10% 1/4W	1
	R902	Carbon P-type 1.5K ohm ±10% 1/4W	1
	R908,909	Carbon P-type 2.7K ohm ±10% 1/4W	2
	R917,918	Carbon P-type 8.2K ohm ±10% 1/4W	2
	R906,907	Carbon P-type 56K ohm ±10% 1/4W	2
	R910,911	Carbon P-type 82K ohm ±10% 1/4W	2

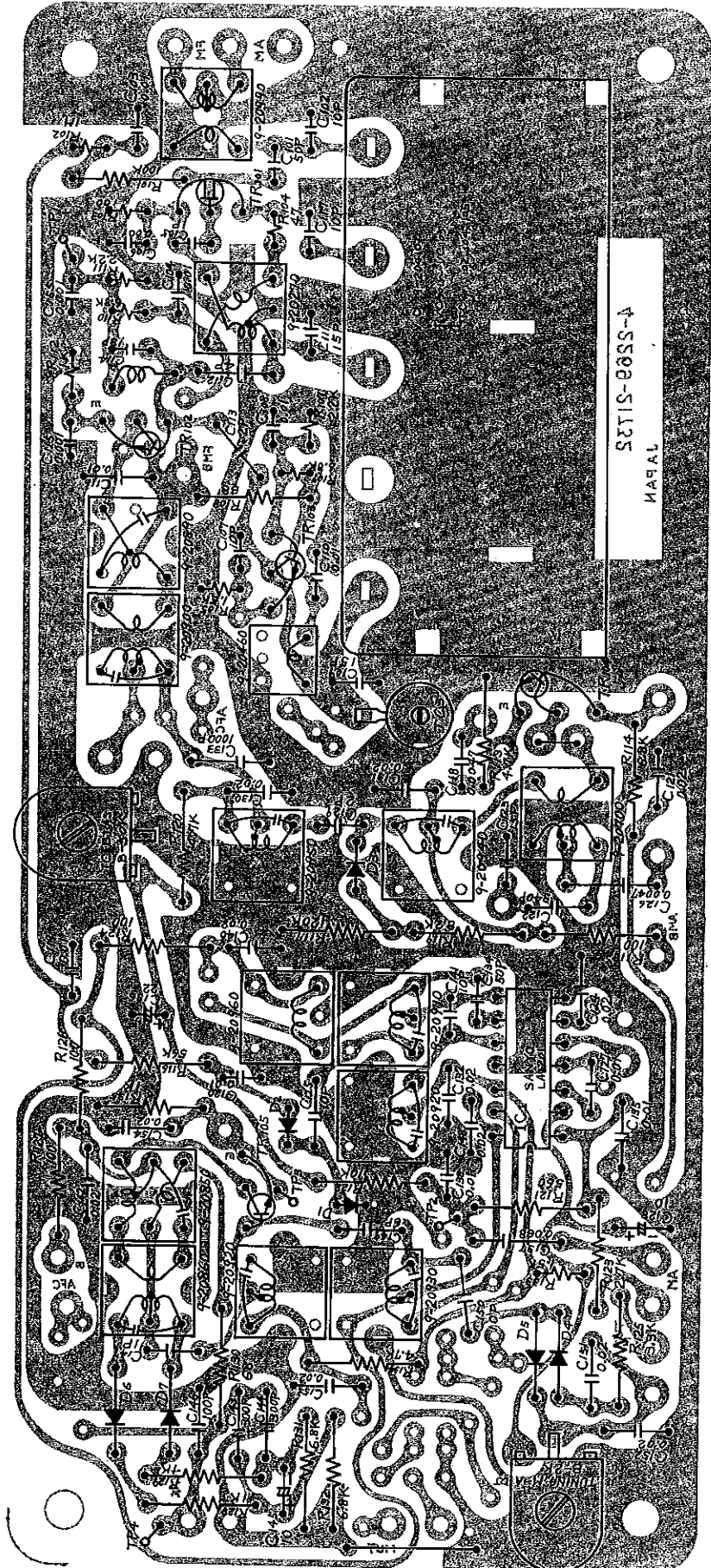
PARTS LIST

Ref. No. or Part No.	Description	Q'ty
CHASSIS		
R912,913	Carbon P-type 100K ohm $\pm 10\%$ 1/4W	2
R904,905	Carbon P-type 150K ohm $\pm 10\%$ 1/4W	2
R919	Carbon P-type 2.2M ohm $\pm 10\%$ 1/2W	1
R920	Carbon P-type 47K ohm $\pm 10\%$ 1/2W	1
CAPACITORS		
C905,906	Ceramic disk-type 250 PF $\pm 10\%$ 50WV	2
C909,910	Mylar 0.02 μ F $\pm 20\%$ 50WV	2
C907,908	Mylar 0.047 μ F $\pm 20\%$ 50WV	2
C903,904	Electrolytic 1 μ F $\pm 20\%$ 10WV	2
C901	Oil, silinder-type 0.01 μ F $\pm 20\%$ 800WV	1
RF, IF P.C.B. ASSEMBLY		
131 0 4001 21700	Printed Circuit Assy	1
4 2249 20410	Variable Capacitor	1
4 2249 20310	Trimmer Capacitor	1
4 2579 20990	Antenna Coil, FM	1
4 2589 20460	OSC Coil, FM	1
4 2599 20270	RF Coil, FM	1
4 2569 20890	IF Trans, FM 1st (violet)	1
4 2569 20900	IF Trans, FM 1st (orange)	1
4 2569 20910	IF Trans, FM 2nd (gray)	1
4 2569 20920	IF Trans, FM 2nd, 3rd (brown)	2
4 2569 20930	IF Trans, FM 3rd (green)	1
4 2569 20850	IF Trans FM, Detect (pink)	1
4 2569 20860	IF Trans FM, Detect (blue)	1
4 2539 20130	RF Filter Choke	1
4 2589 20700	OSC Coil, AM (red)	1
4 2569 20940	IF Trans, AM 1st (yellow)	1
4 2569 20950	IF Trans, AM 2nd (white)	1
4 2569 20960	IF Trans, AM 3rd (black)	1
4 2539 20020	Heater Choke	1
4 2229 21800	VR B-2K ohm, Tuning meter adj.	1
4 2229 21810	VR B-50K ohm, IC bias	1
IC1	Integrated circuit LA1201	1
TR101	FET 2SK25	1
TR102	Transistor 2SC668	1
TR103	Transistor 2SC668	1
TR104	Transistor 2SC929	1
TR105	Transistor 2SC930	1
D1,2,3,4,5,6,7	Diode 1S188 FM1	7
RESISTORS		
R104	Carbon P-type 47 ohm $\pm 10\%$ 1/4W	1
R109	Carbon P-type 68 ohm $\pm 10\%$ 1/4W	1
R108,130	Carbon P-type 68 ohm $\pm 10\%$ 1/4W	2
R118,124,126,127	Carbon P-type 100 ohm $\pm 10\%$ 1/4W	4
R103	Carbon P-type 100 ohm $\pm 10\%$ 1/4W	1
R121	Carbon P-type 560 ohm $\pm 10\%$ 1/4W	1
R112	Carbon P-type 1K ohm $\pm 10\%$ 1/4W	1

Ref. No. or Part No.	Description	Q'ty
RF, IF, P.C.B. ASSEMBLY		
R128,129,135	Carbon P-type 1K ohm $\pm 10\%$ 1/4W	3
R105,133	Carbon P-type 1.5K ohm $\pm 10\%$ 1/4W	2
R107,111	Carbon P-type 2.2K ohm $\pm 10\%$ 1/4W	2
R125	Carbon P-type 3.3K ohm $\pm 10\%$ 1/4W	1
R123	Carbon P-type 2.2K ohm $\pm 10\%$ 1/4W	1
R120,134	Carbon P-type 4.7K ohm $\pm 10\%$ 1/4W	2
R113	Carbon P-type 4.7K ohm $\pm 10\%$ 1/4W	1
R106,110	Carbon P-type 6.8K ohm $\pm 10\%$ 1/4W	2
R114,131,132	Carbon P-type 6.8K ohm $\pm 10\%$ 1/4W	3
R119	Carbon P-type 8.2K ohm $\pm 10\%$ 1/4W	1
R122	Carbon P-type 10K ohm $\pm 10\%$ 1/4W	1
R115	Carbon P-type 47K ohm $\pm 10\%$ 1/4W	1
R116	Carbon P-type 56K ohm $\pm 10\%$ 1/4W	1
R101	Carbon P-type 100K ohm $\pm 10\%$ 1/4W	1
R117	Carbon P-type 120K ohm $\pm 10\%$ 1/4W	1
R102	Carbon P-type 1M ohm $\pm 10\%$ 1/4W	1
CAPACITORS		
C147	Ceramic 1PF ± 0.25 PF 50WV	1
C105	Ceramic 1PF ± 0.25 PF 50WV	1
C129	Ceramic 2PF ± 0.25 PF 50WV	1
C112	Ceramic 4PF ± 0.25 PF 50WV	1
C149	Ceramic 6PF ± 0.25 PF 50WV	1
C102,117,125,150	Ceramic 10PF ± 0.5 50WV	4
C107	Ceramic 10PF ± 0.5 50WV	1
C141	Ceramic 10PF ± 0.5 50WV	1
C114	Ceramic 13PF ± 0.5 50WV	1
C109	Ceramic 15PF $\pm 5\%$ 50WV	1
C111	Ceramic 15PF $\pm 5\%$ 50WV	1
C123	Ceramic 15PF $\pm 5\%$ 50WV	1
C101,134	Ceramic 100PF $\pm 10\%$ 50WV	2
C146	Ceramic 100PF $\pm 20\%$ 50WV	1
C143,144	Ceramic 300PF $\pm 20\%$ 50WV	2
C122	Styrolitic 340PF $\pm 5\%$ 50WV	1
C106,115,155	Ceramic 0.001 μ F -20%~80% 50WV	3
C133	Styrol 0.001 μ F $\pm 10\%$ 50WV	1
C118,126	Mylar 0.0047 μ F $\pm 20\%$ 50WV	2
C135,138,108	Mylar 0.01 μ F $\pm 20\%$ 50WV	3
C110	Ceramic 0.01 μ F $\pm 20\%$ 50WV	1
C103,104,116,119 120,127	Ceramic 0.01 μ F -20%~80% 50WV	6
C121,124,130,131, 132,140,142,148, 151,152,153,154	Ceramic 0.02 μ F -20%~80% 50WV	12
C137	Mylar 0.068 μ F $\pm 20\%$ 50WV	1
C128,145	Electrolytic 10 μ F -10%~150% 16WV	2
C136	Electrolytic 22 μ F -10%~150% 16WV	1
C113	Ceramic 2PF ± 0.25 PF 50WV	1



RF, IF P. C. B. ASSEMBLY

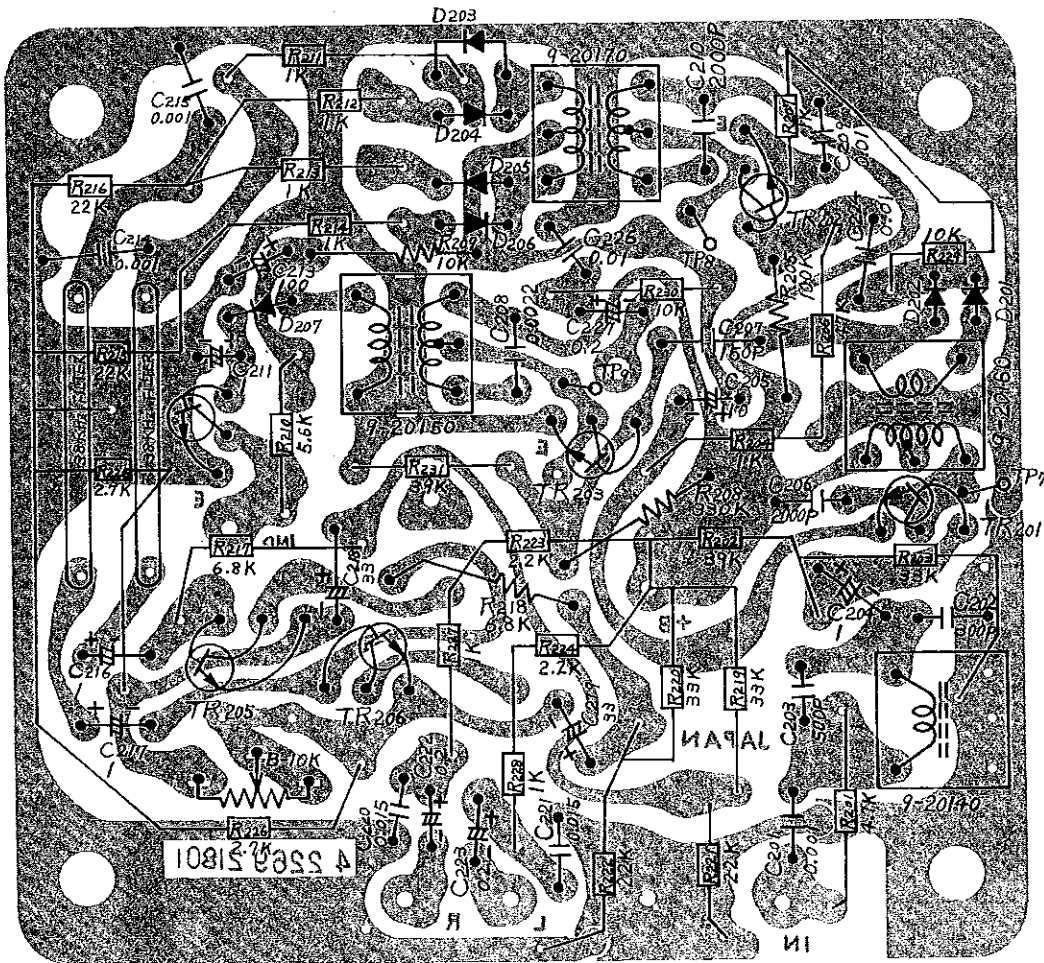


PARTS LIST

Ref. No. or Part No.	Description	Q'ty
MPX P.C.B. ASSEMBLY		
131 0 4001 18003	Printed circuit assy	1
4 2659 20140	Multiplex coil SCA (red)	1
4 2659 20150	Multiplex coil, 19K Hz (green)	1
4 2659 20160	Multiplex coil, 19K Hz (blue)	1
4 2659 20170	Multiplex coil 38K Hz (yellow)	1
4 2229 21270	VR B-10K ohm, Separation control	1
4 2279 20140	Rescap, 38K Hz Trap	2
111 2 6220 11100	Wire wrap terminal	2
TR201,202,203, 205,206	Transistor 2SC537	5
TR204	Transistor 2SC537	1
D201,202,203,204 205,206,207	Diode 1S188 FM1	7
RESISTORS		
R218	Carbon P-type 6.8K ohm $\pm 10\%$ 1/4W	1
R209	Carbon P-type 10K ohm $\pm 10\%$ 1/4W	1
R205	Carbon P-type 100K ohm $\pm 10\%$ 1/4W	1
R208	Carbon P-type 330K ohm $\pm 10\%$ 1/4W	1

Ref. No. or Part No.	Description	Q'ty
MPX P.C.B. ASSEMBLY		
CAPACITORS		
C202	Styrol 300PF $\pm 10\%$ 35WV	1
C203	Styrol 500PF $\pm 10\%$ 35WV	1
C206,210	Styrol 2000PF $\pm 10\%$ 35WV	2
C214,215,201	Mylar 0.001 μ F $\pm 20\%$ 50WV	3
C209,224,226	Mylar 0.01 μ F $\pm 20\%$ 50WV	3
C220,221	Mylar 0.015 μ F $\pm 20\%$ 50WV	2
C208	Mylar 0.0022 μ F $\pm 20\%$ 50WV	1
C207	Ceramic 150PF $\pm 10\%$ 50WV	1
C204,216,217,211	Electrolytic 1 μ F +150~-0% 10WV	4
C205	Electrolytic 10 μ F +150~-0% 10WV	1
C218,219	Electrolytic 33 μ F +150~-0% 6.3WV	2
C213	Electrolytic 100 μ F +150~-0% 10WV	1
C222,223,227	Alsicon 0.2 μ F +40~-20% 10WV	3

MPX P. C. B. ASSEMBLY

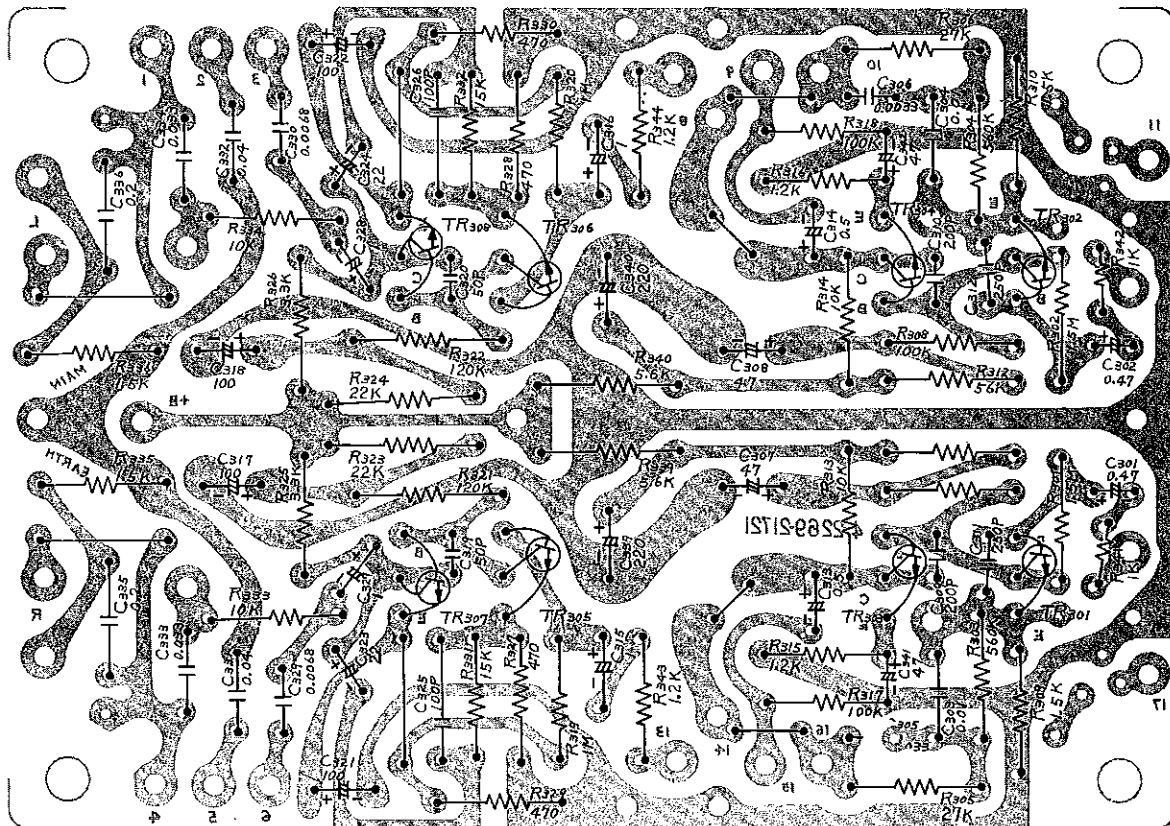


PARTS LIST

Ref. No. or Part No.	Description	Q'ty
PRE. AMP. P.C.B. ASSEMBLY		
131 0 4001 17103	Printed circuit assy	1
TR303,304	Transistor 2SC 693	2
TR307,308	Transistor 2SC 537	2
TR301,302, 305,306	Transistor 2SC 693	4
RESISTORS		
R330,329,327,328	Carbon P-type 470 ohm ±10% 1/4W	4
R315,316,343,344	Carbon P-type 1.2K ohm ±10% 1/4W	4
R331,332	Carbon P-type 15K ohm ±10% 1/4W	2
R325,326	Carbon P-type 3.3K ohm ±10% 1/4W	2
R335,336	Carbon P-type 1.5K ohm ±10% 1/4W	2
R339,340	Carbon P-type 5.6K ohm ±10% 1/4W	2
R333,334	Carbon P-type 10K ohm ±10% 1/4W	2
R313,314	Carbon P-type 10K ohm ±10% 1/4W	2
R323,324	Carbon P-type 22K ohm ±10% 1/4W	2
R305,306	Carbon P-type 27K ohm ±10% 1/4W	2
R311,312	Carbon P-type 56K ohm ±10% 1/4W	2
R307,308,317,318	Carbon P-type 100K ohm ±10% 1/4W	4
R321,322	Carbon P-type 120K ohm ±10% 1/4W	2
R303,304	Carbon P-type 560K ohm ±10% 1/4W	2
R301,302,319,320	Carbon P-type 1.5M ohm ±10% 1/4W	4
R309,310	Carbon P-type 1.5K ohm ±10% 1/4W	2
R341,342	Carbon P-type 1K ohm ±10% 1/4W	2

Ref. No.	Description	Q'ty
PRE AMP. P.C.B. ASSEMBLY		
CAPACITORS		
C305,306	Mylar 0.0033μF ±20% 50WV	2
C329,330	Mylar 0.0068μF ±20% 50WV	2
C303,304	Mylar 0.01μF ±20% 50WV	2
C331,332	Mylar 0.04μF ±20% 50WV	2
C333,334	Mylar 0.033μF ±20% 50WV	2
C335,336	Mylar 0.2μF ±10% 50WV	2
C319,320	Ceramic 50pF ±10% 50WV	2
C325,326	Ceramic 100pF ±10% 50WV	2
C311,312	Ceramic 250pF ±10% 50WV	2
C309,310	Ceramic 200pF ±10% 50WV	2
C313,314	Alsicon 0.5μF ±20% 15WV	2
C315,316	Alsicon 1μF ±20% 10WV	2
C323,324	Electrolytic 22μF +150%~-10% 16WV	2
C307,308	Electrolytic 47μF +150%~-10% 16WV	2
C321,322	Electrolytic 100μF +150%~-10% 10WV	2
C317,318	Electrolytic 100μF +150%~-10% 25WV	2
C339,340	Electrolytic 220μF +150%~-10% 25WV	2
C301,302	Electrolytic 0.47μF +150%~-10% 10WV	2
C327,328	Electrolytic 1μF +150%~-10% 16WV	2
C341,342	Electrolytic 47μF +150%~-10% 3WV	2

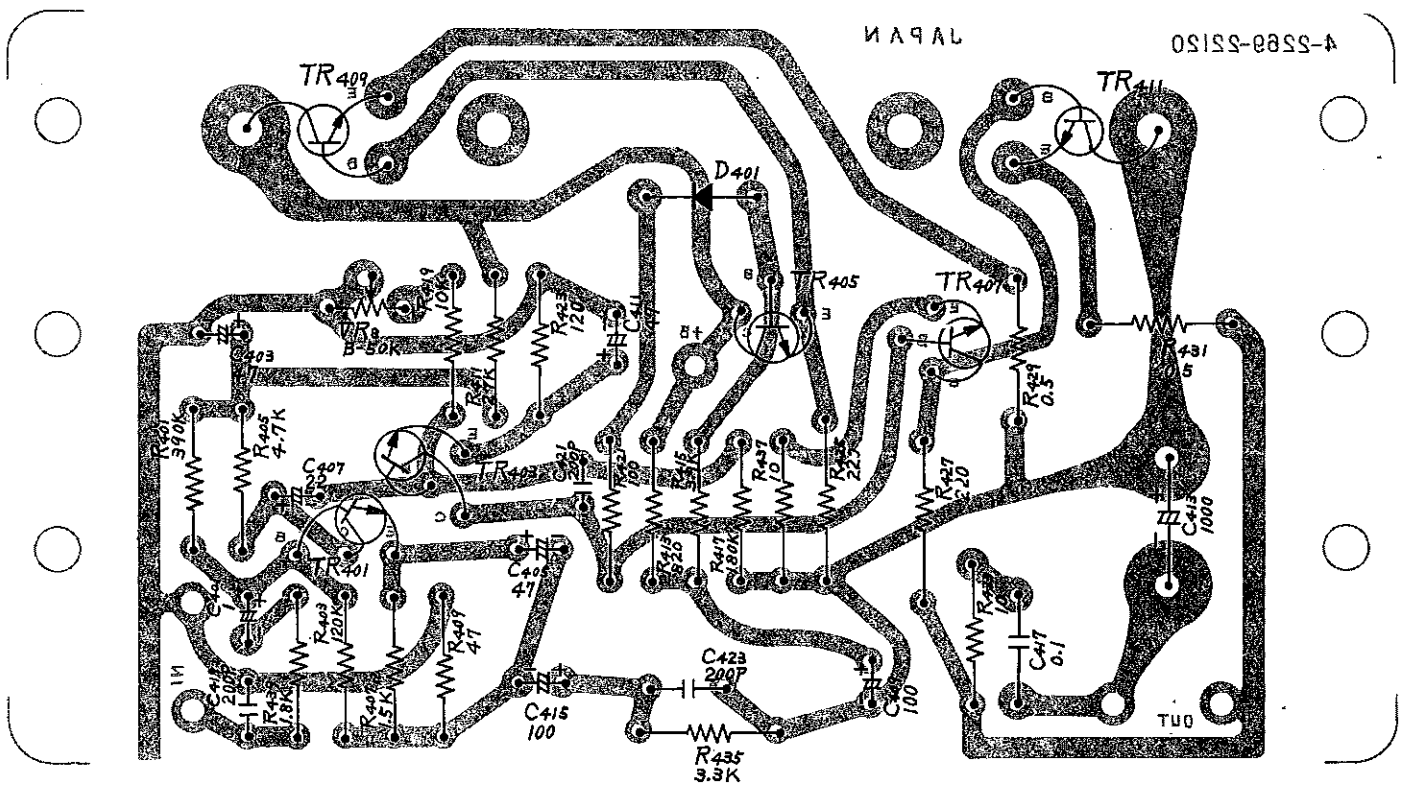
PRE AMP P. C. B. ASSEMBLY



PARTS LIST

Ref. No. or Part No.	Description	Q'ty	Ref. No. or Part No.	Description	Q'ty
MAIN AMP. P.C.B. ASSEMBLY			MAIN AMP. P.C.B. ASSEMBLY		
131 0 4001 19800	Printed circuit assy	2	R421,422	Carbon P-type 100 ohm $\pm 10\%$ 1/4W	2
4 2229 21810	VR B-50K ohm, Bias control	2	R407,408	Carbon P-type 1.5K ohm $\pm 10\%$ 1/4W	2
131 2 6201 16700	Plate heat sink	2	R439,440	Carbon P-type 1.8K ohm $\pm 10\%$ 1/4W	2
TR401,402	Transistor 2SC536	2	R435,436	Carbon P-type 3.3K ohm $\pm 10\%$ 1/4W	2
TR403,404,405	Transistor 2SC853	4	R403,404	Carbon P-type 120K ohm $\pm 10\%$ 1/4W	2
406			R419,420	Carbon P-type 10K ohm $\pm 10\%$ 1/4W	2
TR407,408	Transistor 2SA545	2	CAPACITORS		
TR409,410,411	Transistor 2SD91	4	R417,418	Mylar 0.1 μ F $\pm 20\%$ 50WV	2
412			C419,420,423,424	Ceramic 200pF $\pm 10\%$ 50WV	4
D401,402	Diode SV-02	2	C421,422	Ceramic 200pF $\pm 10\%$ 50WV	2
RESISTORS			C401,402	Alsicon 1 μ F $\pm 20\%$ 16WV	2
R429,430,431,432	Cement 0.5 ohm $\pm 10\%$ 2W	4	C407,408	Electrolytic 22 μ F +150%~-10% 10WV	2
R425,426,427,428	Solid P-type 220 ohm $\pm 10\%$ 1/2W	4	C405,406,411,412	Electrolytic 47 μ F +150%~-10% 10WV	4
R417,418	Carbon P-type 180K ohm $\pm 10\%$ 1/4W	2	C403,404	Electrolytic 47 μ F +150%~-10% 16WV	2
R411,412	Carbon P-type 27K ohm $\pm 10\%$ 1/4W	2	C415,416,409,410	Electrolytic 100 μ F +150%~-10% 25WV	4
R423,424	Carbon P-type 120 ohm $\pm 10\%$ 1/4W	2	C413,414	Electrolytic 1000 μ F +150%~-10% 30WV	2
R401,402	Carbon P-type 390K ohm $\pm 10\%$ 1/4W	2			
R405,406	Carbon P-type 4.7K ohm $\pm 10\%$ 1/4W	2			
R433,434,437,438	Carbon P-type 10 ohm $\pm 10\%$ 1/4W	4			
R413,414	Carbon P-type 820 ohm $\pm 10\%$ 1/4W	2			
R415,416	Carbon P-type 3.9K ohm $\pm 10\%$ 1/4W	2			
R409,410	Carbon P-type 47 ohm $\pm 10\%$ 1/4W	2			

MAIN AMP P. C. B. ASSEMBLY



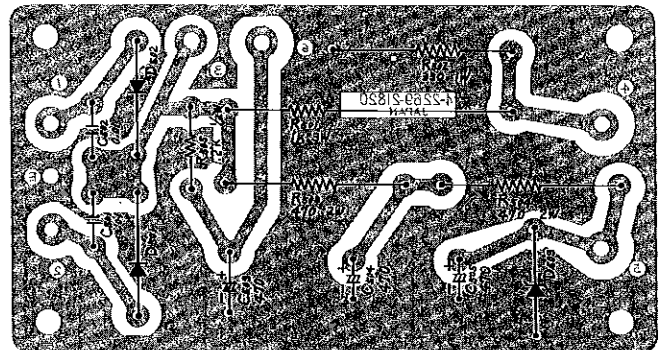
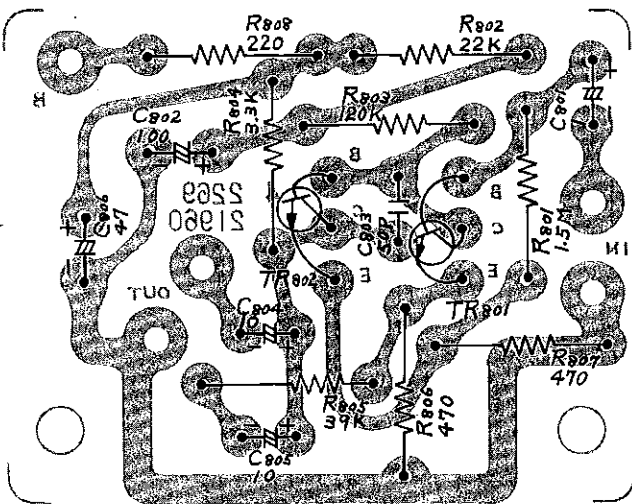
PARTS LIST

Ref. No. or Part No.	Description	Q'ty
MIC. P.C.B. ASSEMBLY		
131 0 4001 19301	Printed circuit assy	1
TR801	Transistor 2SC693	1
TR802	Transistor 2SC537	1
RESISTORS		
R806,807	Carbon P-type 470 ohm $\pm 10\%$ 1/4W	2
R804	Carbon P-type 3.3K ohm $\pm 10\%$ 1/4W	1
R805	Carbon P-type 18K ohm $\pm 10\%$ 1/4W	1
R802	Carbon P-type 22K ohm $\pm 10\%$ 1/4W	1
R803	Carbon P-type 120K ohm $\pm 10\%$ 1/4W	1
R801	Carbon P-type 1.5M ohm $\pm 10\%$ 1/4W	1
R808	Carbon P-type 220 ohm $\pm 10\%$ 1/4W	1
CAPACITORS		
C803	Ceramic 50pF 10% 50WV	1
C801	Alsicon 1 μ F 20% 10WV	1
C804,806	Electrolytic 10 μ F +150%~-0% 10WV	2
C802	Electrolytic 100 μ F +150%~-0% 25WV	1
C806	Electrolytic 47 μ F +150%~-0% 25WV	1

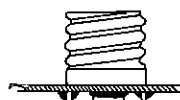
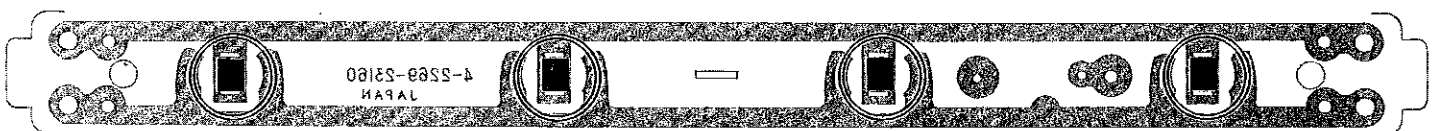
Ref. No. or Part No.	Description	Q'ty
POWER SUPPLY P.C.B. ASSEMBLY		
131 0 4001 18403	Printed circuitt assy	1
D501,502	Diode 10D1	2
D503	Diode SZ-9	1
RESISTORS		
R503,504	Metal film 470 ohm $\pm 10\%$ 2W	2
R501	Metal film 1K ohm $\pm 10\%$ 3W	1
R502	Metal film 330 ohm $\pm 10\%$ 1W	1
R505	Solid 1.2K ohm $\pm 10\%$ 1/2W	1
CAPACITORS		
C505	Electrolytic 470 μ F +150%~-10% 10WV	1
C503,504	Electrolytic 470 μ F +150%~-10% 35WV	2
C501,502	Ceramic 0.01 μ F +80%~-20% 400WV	2
PILOT P.C.B. ASSEMBLY		
131 0 4001 23700	Printed circuit assy	1
4 2359 21290	Socket pilot	4
4 2379 20950	Terminal	4

MIC P. C. B. ASSEMBLY

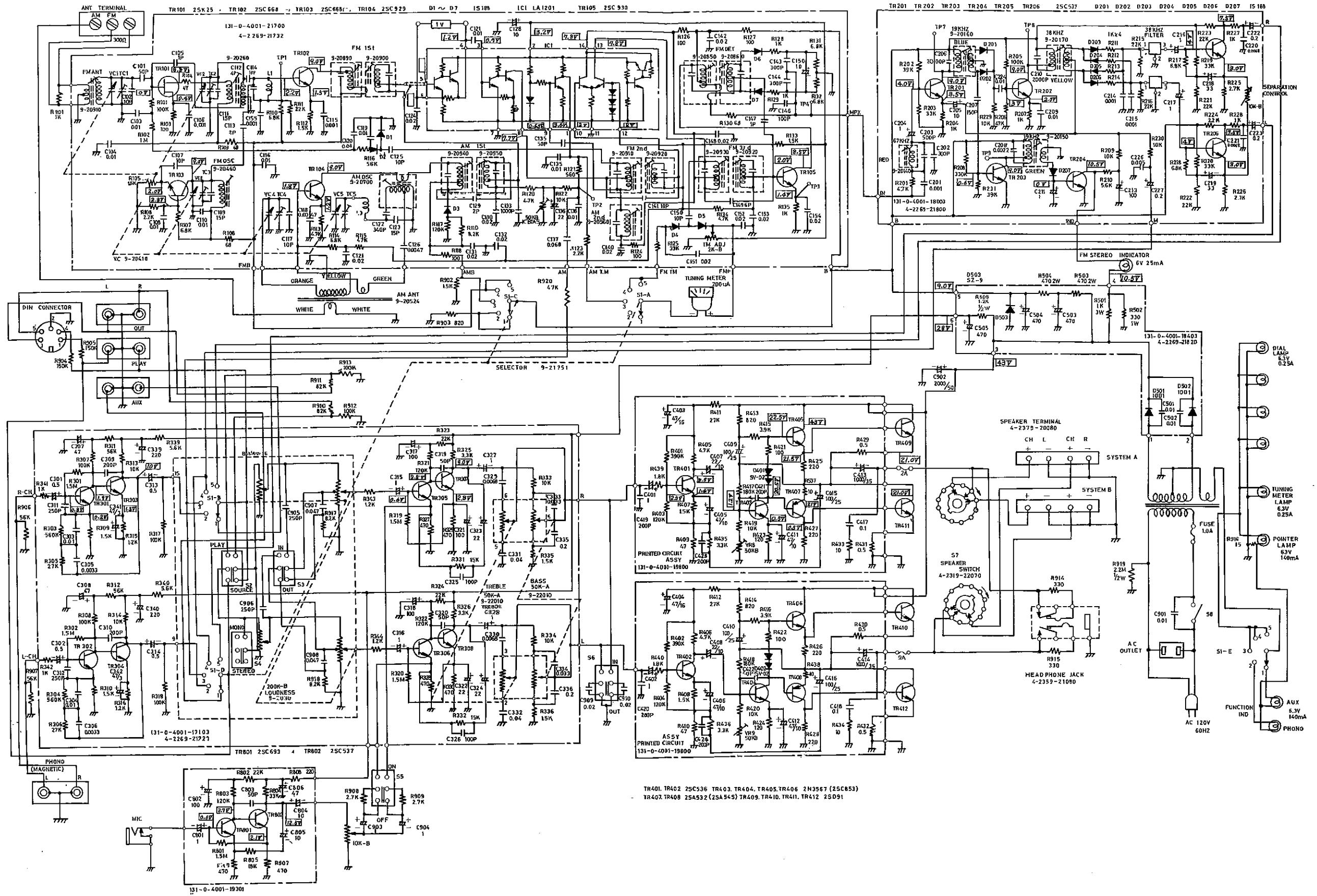
POWER SUPPLY P. C. B. ASSEMBLY



PILOT P. C. B. ASSEMBLY



SCHEMATIC DIAGRAM



TR401, TR402 25C536 TR403, TR404, TR405, TR406 2N3567 (25C853)
 TR407, TR408 25A532 (25A545) TR409, TR410, TR411, TR412 25D91