

# SERVICE MANUAL

**NAD**

**701  
AM/FM STEREO  
RECEIVER**

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AM/FM STEREO  
RECEIVER**

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## SERVICE SAFETY PRECAUTIONS

1. Use exact replacement parts for critical locations, marked "⚠" on parts list.
2. Return lead dress to original position, and re-install protective covers.
3. Before returning to customer, test for shock hazard; use either method A or B:
  - A. Leakage test, "cold":**
    1. Unplug AC cord.
    2. Connect one lead of High Voltage Insulation Tester to both prongs of AC plug.
    3. Touch other lead to all exposed metal parts.
    4. Impedance measurement must be 0.3 - 5.0 Megohms.
  - B. Leakage test, "live":**
    1. Plug unit directly into AC outlet; do not use isolation transformer.
    2. Connect one lead of Leakage Current Tester to earth ground.
    3. Touch other lead to all exposed metal parts.
    4. Leakage measurement must be less than 0.5 milliamps.

# SPECIFICATIONS

Specifications are measured in accordance with EIA Standard RS-490 (IHF T-202) for amplifiers and ANSI-IEEE Standard 185 (1975), i.e. IHF T-200 for tuners. Amplifier measurements referred to 8 ohms are taken with the Speaker Impedance selector set to 8 ohms (High). Measurements for 4 and 2 ohms are taken with Impedance selector at 4 ohms (Normal).

## POWER AMPLIFIER SECTION

<b>CONTINUOUS AVERAGE POWER OUTPUT</b> (Min. power per channel, 20Hz-20kHz, both channels driven with no more than rated distortion).....	8 ohms=25W(14dBW) 4 ohms=25W(14dBW)
<b>Rated distortion</b> (THD, 20Hz-20kHz) .....	0.04%
<b>Clipping power at 8 ohms, 1kHz</b> (maximum continuous power per channel).....	30W
<b>IHF dynamic headroom at 8 ohms</b> .....	+4.4dB
<b>IHF dynamic power</b> (maximum short-term power per channel) .....	8 ohms=57W 4 ohms=80W 2 ohms=85W
<b>Damping factor</b> (ref. 8 ohms, 50Hz).....	>50
<b>Signal/Noise ratio</b> (A-weighted, 220 ohms).....	(Ref. 1W), 80dB (Ref. 25W), 100dB
<b>Frequency response</b> (20Hz-20kHz) .....	±0.5dB
<b>Input sensitivity</b> (25W, 8 ohms).....	1V, ±0.05V

## PREAMPLIFIER SECTION

### PHONO INPUT

<b>Input impedance</b> .....	R=47k ohms, C=100pF
<b>Input sensitivity, 1kHz</b> .....	2.7V, ±0.3mV
<b>Maximum input level</b> .....	20Hz, >20mV 1kHz, >200mV 20kHz, >1.7V
<b>Signal/Noise ratio</b> (A-wtd, IHF cartridge source, 5mV in).....	72dB
<b>THD</b> (20Hz-20kHz).....	0.04%
<b>RIAA response accuracy</b> .....	+0.5, -0.8dB

**LINE LEVEL INPUTS** (CD, Aux, Video, Tape)

**Input impedance** ..... R=25k ohms, C=100pF  
**Input sensitivity** ..... 180mV,  $\pm 20$ mV  
**Maximum input level**..... >10V  
**Signal/Noise ratio** (A-wtd., 1k ohm, 500mV in) ..... AH=77dB  
C=80dB  
**THD** (20Hz-20kHz)..... 0.03%  
**Frequency response** (20Hz-20kHz)..... +0.8,-1.0dB

**LINE LEVEL OUTPUT**

**Output impedance**..... 600 ohms  
**Maximum output level** ..... >12V

**CONTROLS**

**Treble** (10kHz) .....  $\pm 7$ dB  
**Bass** (50Hz) .....  $\pm 1$  0dB  
**Loudness** ..... 100Hz=+7.5dB  
10kHz=+2.5dB  
**Infrasonic filter** ..... -3dB at 10Hz, fixed

**FM TUNER SECTION**

**Usable sensitivity** ..... 2.0uV  
50dB quieting Mono=2.5uV  
Stereo=30uV  
60dB quieting Mono=9uV  
Stereo=150uV  
**Capture ratio** (45dBf)..... 2.5dB  
**IF rejection**..... 7.5dB  
**Image rejection** ..... 6.5dB  
**AM suppression** ..... 5.5dB  
**Selectivity, alternate channel** ..... 4.5dB

<b>Subcarrier suppression (19kHz and 38kHz)</b> .....	60dB
<b>THD</b> .....	Mono, 1kHz=0.3% Stereo L-R, 1kHz=0.4% Stereo L+R, 1kHz=0.3%
<b>Signal/Noise ratio (65dBf, IHF wtd)</b> .....	Mono=75dB Stereo=65dB
<b>Frequency response (30Hz-15kHz)</b> .....	±0.5dB
<b>Channel separation (1kHz)</b> .....	40dB
<b>Center-tune sensitivity</b> .....	3.2 - 6.3uV
<b>Stereo indicator</b> .....	On @ 5.6 - 8.9uV Off @ 4.5 - 7.1uV
<b>Autosearch sensitivity</b> .....	6.3 - 17.8uV

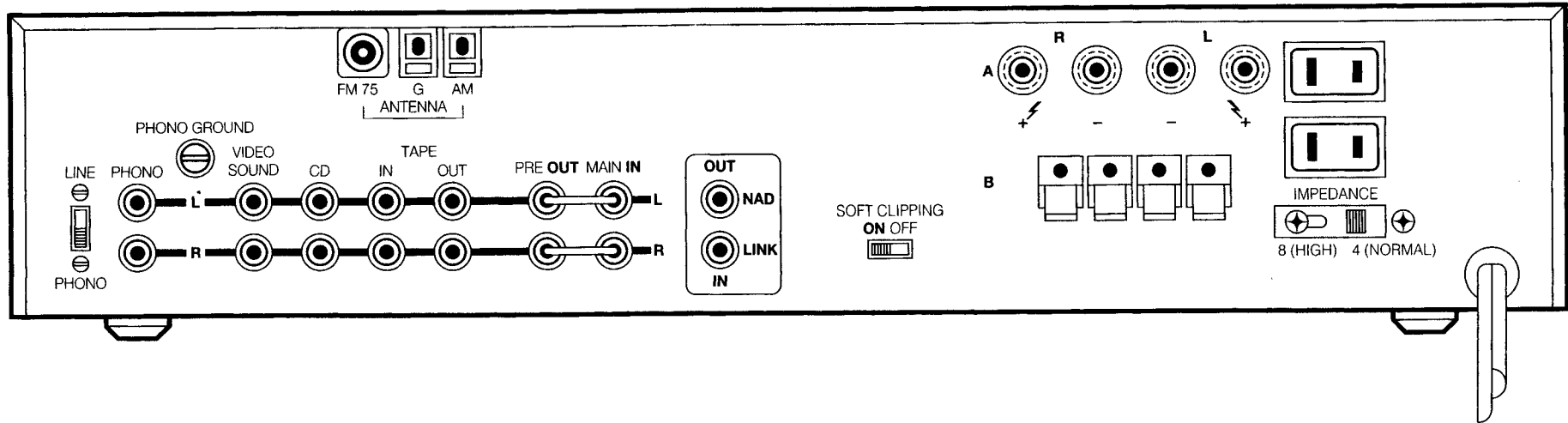
## AM TUNER SECTION

<b>Usable sensitivity</b> .....	9uV
<b>Selectivity</b> .....	25dB
<b>Image rejection</b> .....	36dB
<b>Signal/Noise ratio (1mV input)</b> .....	45dB
<b>THD (30% mod., 1mV input)</b> .....	3%
<b>Autosearch sensitivity</b> .....	28.2 - 141.2uV
<b>IF rejection</b> .....	46dB

## PHYSICAL

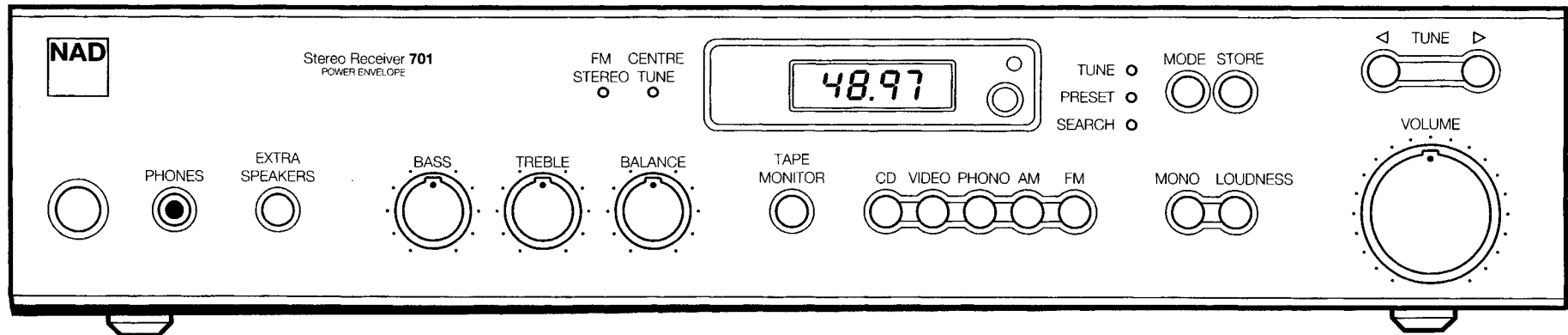
<b>Dimensions (Width x Height x Depth)</b> .....	420 x 91 x 273mm
<b>Net weight</b> .....	5.5 kgs/12lbs.
<b>Shipping weight</b> .....	6.8 kgs/15lbs.
<b>Power consumption at 120, 220 or 240VAC, 50/60Hz</b> .....	150W

# REAR PANEL



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# FRONT PANEL



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# ALIGNMENT PROCEDURES

## MAIN AMPLIFIER

### IMPORTANT NOTES:

- 1). Before adjusting, remove input signal and load, and set Speaker impedance switch to 8 ohms (reset to 4 ohms when finished).
- 2). These adjustments are always necessary after repair of main amplifier.
- 3). After repair, it is recommended to use a current limiter (30-70W lightbulb) in the mains line, for initial turn-on.

### A. CENTER VOLTAGE ADJUSTMENT

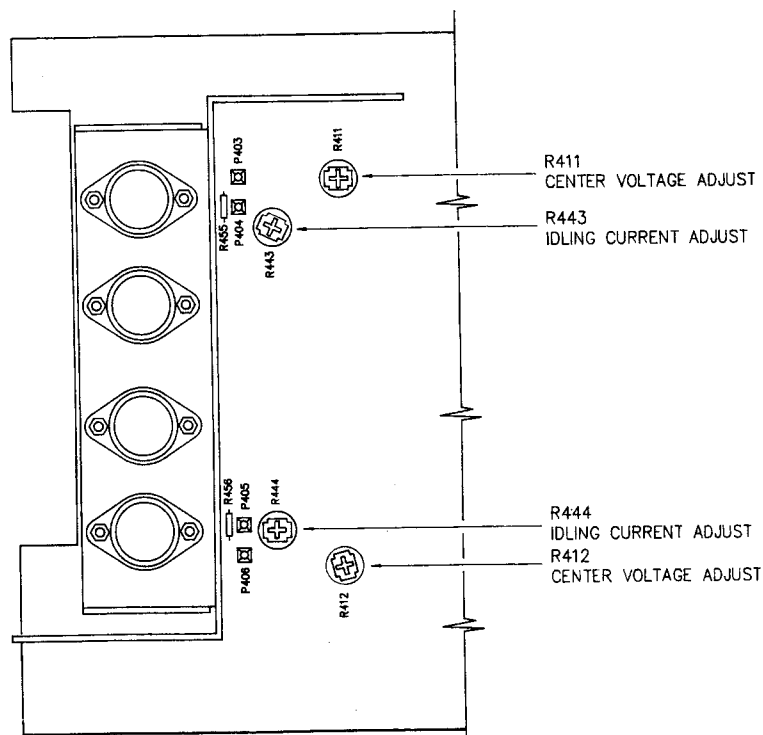
1. Connect DMM across L channel (R channel) output terminals.
2. Turn on, and adjust R411 (R412) for a reading of  $0V \pm 30mVDC$ .

### B. IDLE CURRENT ADJUSTMENT

1. Remove solder short across R455 and R456.
2. Connect DMM across P403(-) and P404(+).
3. Turn on and adjust R443 for a reading of  $28mV, \pm 2mVDC$ .
4. Repeat, using P405(+) and P406(-), adjust R444.

### C. FINAL ADJUSTMENT

1. Leave power on for a minimum of 5 minutes with no signal connected.
2. Repeat center voltage and idle current adjustments.
3. **WHEN FINISHED, REPLACE SOLDER SHORT ACROSS R455 AND R456.**



AMPLIFIER ADJUSTMENT POINTS

## FM SECTION

### A. PREPARATION

1. Set stereo modulator to mono mode with 1kHz modulating signal unless otherwise stated.
2. Set signal generator to FM mode with 75kHz deviation.
3. Store the following frequencies: 98MHz, 87.5MHz, 108MHz, 90MHz, and 106MHz.
4. Note: RF levels are open circuit voltages of signal generator with 75 ohms output impedance.

### B. OSCILLATOR TUNING VOLTAGE

1. Connect DVM between TP1 and ground.
2. Tune to 87.5MHz and check DVM for a reading of 3.0VDC  $\pm$ 0.5V.
3. Tune to 108MHz and check DVM for a reading of 20.5VDC  $\pm$ 0.5V.

If either of the above is out of tolerance, adjust L8 (oscillator coil) until both readings are within tolerance.

### C. I.F.

1. Connect DVM between TP113 (VA) and TP112 (VB).
2. Apply 10.7MHz (90dBu) via 1Kohm resistor to TP2.
3. Adjust I101 for 0VDC  $\pm$ 50mV reading on DVM.
4. Adjust I102 until minimum THD is achieved at audio output.
5. Repeat (3) and (4) until no further improvement can be made.

When adjusting I102, two nulls can be found. With the core on top, adjust until the second one is found as this has lower THD. Correct position of the core is normally just above the metal casing.

### D. SYNTHESIZER I.F. TRACKING

1. Maintain connection of DVM but disconnect 10.7MHz tap at TP2.
2. Apply 98MHz (60dBu) to FM antenna input and tune to 98MHz.
3. Adjust C917 for 0VDC  $\pm$ 20mV reading on DVM.
4. Fine adjust I102 for minimum THD.
5. Repeat (3) and (4) until no further improvement can be made.

### E. FRONT-END I.F.

1. Connect DVM between TP117 (level) and ground.
2. Turn R117 fully clockwise and R116 fully counterclockwise.
3. Apply 98MHz (12dBu) to antenna input.
4. Carefully adjust I1 to obtain minimum reading on DVM. There should only be one minimum.

### F. R.F.

1. Apply 98MHz (6dBu) to antenna input.
2. Check if THD is better than 3%. If not, proceed to (3).
3. Adjust L2, L4, and L5 by squeezing or stretching using a non-metallic tool until THD is better than 3%.
4. Check THD at 90MHz and 106MHz with 7dBu input. If THD is more than 3% for both frequencies, re-adjust until required THD is met.

### G. AUTOSEARCH LEVEL

1. Turn R116 fully clockwise and R117 fully counterclockwise.
2. Set stereo modulator to L=R mode and apply 98MHz (18dBu) to antenna input.
3. Adjust R116 counterclockwise until center tune LED lights up.
4. Increase antenna input signal to 22dBu and adjust R117 clockwise until FM stereo LED lights up.
5. Check if autosearch operation is working properly at antenna input level of 28dBu.

Center tune LED should be at least 2dBu higher than FM stereo LED.



## H. STEREO SEPARATION AND PILOT SUPPRESSION

1. Modulate L-only at 98MHz (60dBu) and adjust R127 for minimum output on right channel.
2. Modulate R-only and adjust R127 for minimum output on left channel.
3. Repeat (1) and (2) until readings are the same and within specification.
4. Turn off modulating signal but leave pilot tone.
5. Adjust Z105 and Z106 for minimum output on left and right channels, respectively.

## AM SECTION

### A. PREPARATION

1. Set signal generator to AM mode with 1kHz at 30% modulation.
2. Connect 22pF ceramic capacitor between signal generator and AM antenna input terminal. Capacitor should be as close as possible to antenna input terminal.
3. Store the following frequencies: 603/600kHz, 999/1000kHz, and 1404/1400kHz.

### B. OSCILLATOR TUNING VOLTAGE

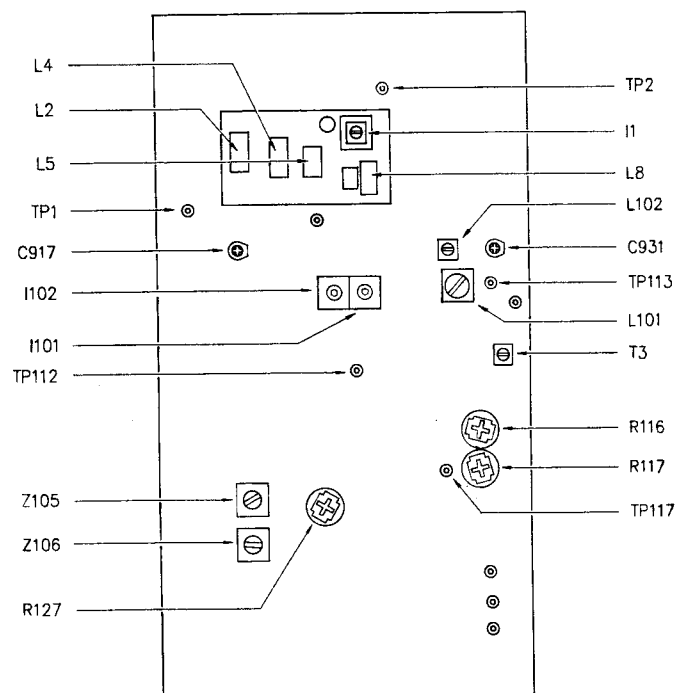
1. Connect DVM between TP1 and ground.
2. Tune to 603/600kHz and adjust L102 for 1.75VDC  $\pm$ 50mV reading on DVM.

### C. I.F.

1. Apply 999/1000kHz (45dBu) to antenna input.
2. Tune to 999/1000kHz and adjust T3 for maximum reading on audio output.

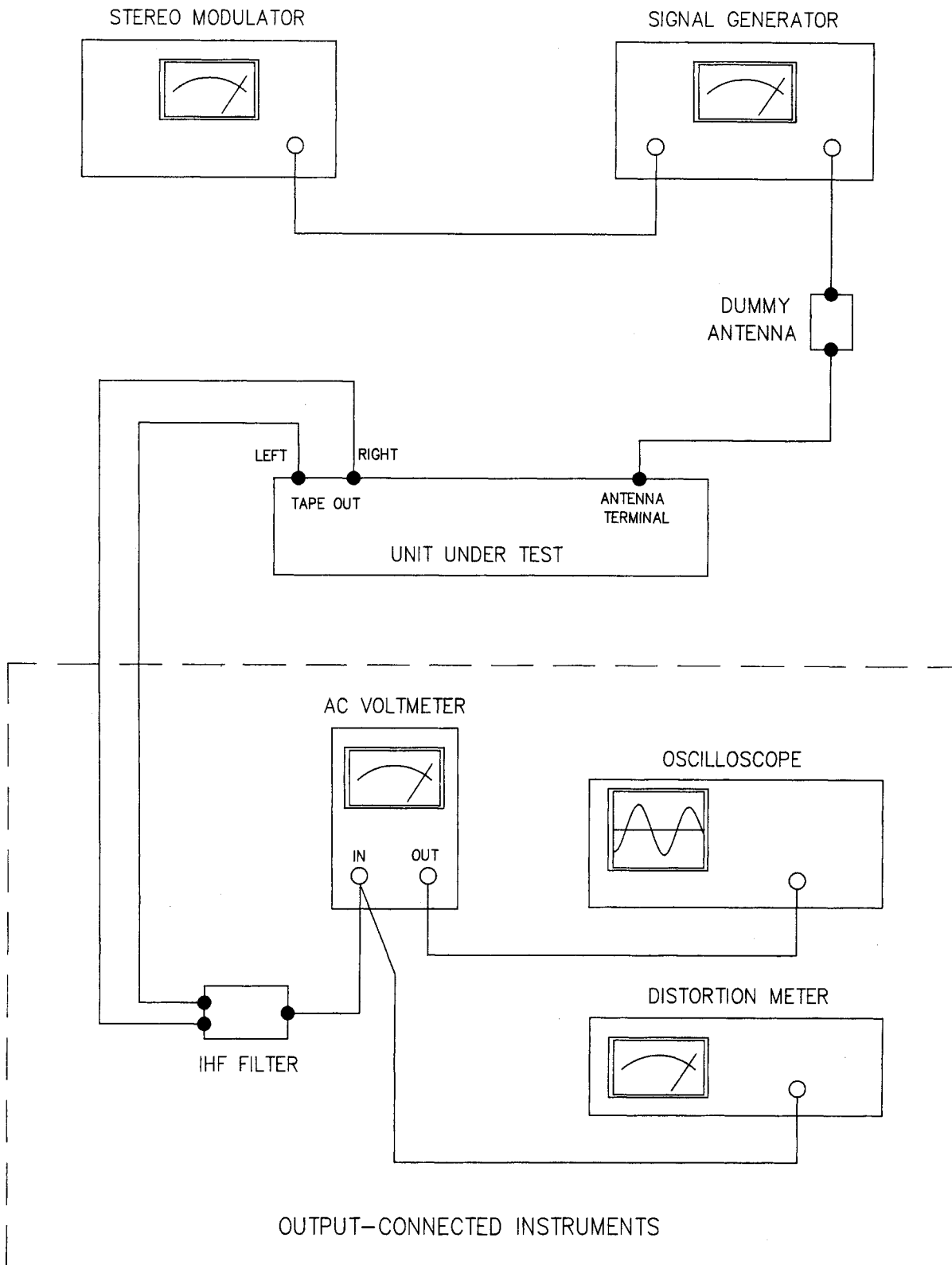
### D. R.F.

1. Apply 603/600kHz (45dBu) to antenna input.
2. Tune to 603/600kHz and adjust L101 for maximum reading on audio output.
3. Apply 1404/1400kHz (45dBu) to antenna input.
4. Tune to 1404/1400kHz adjust C931 for maximum reading on audio output.
5. Repeat (1) to (4) until no further improvement can be made.



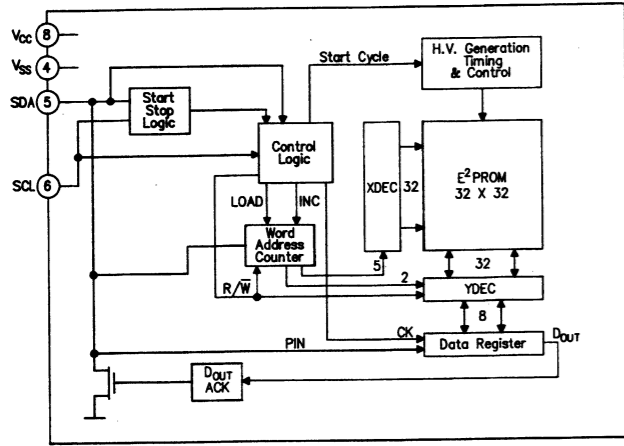
TUNER ADJUSTMENT POINTS

# INSTRUMENT SET-UP

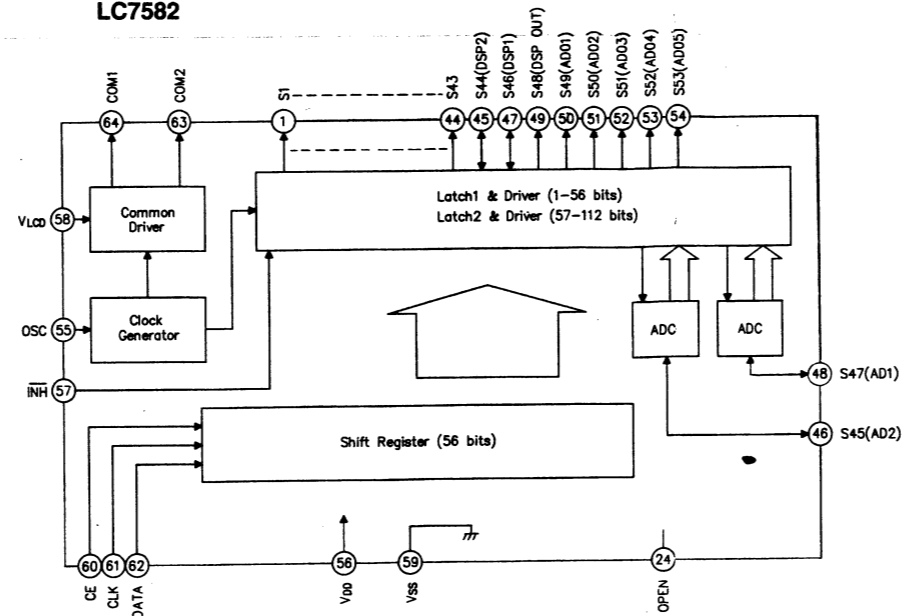


# IC BLOCK DIAGRAMS

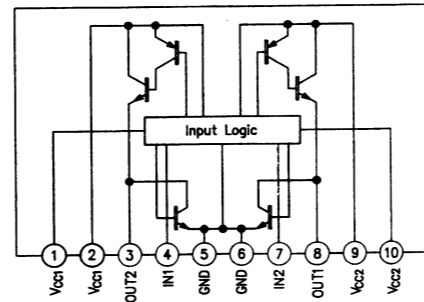
**X24C01**



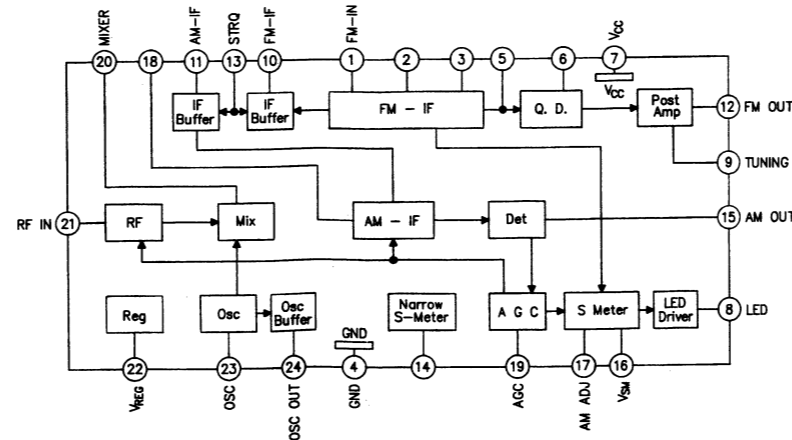
**LC7582**



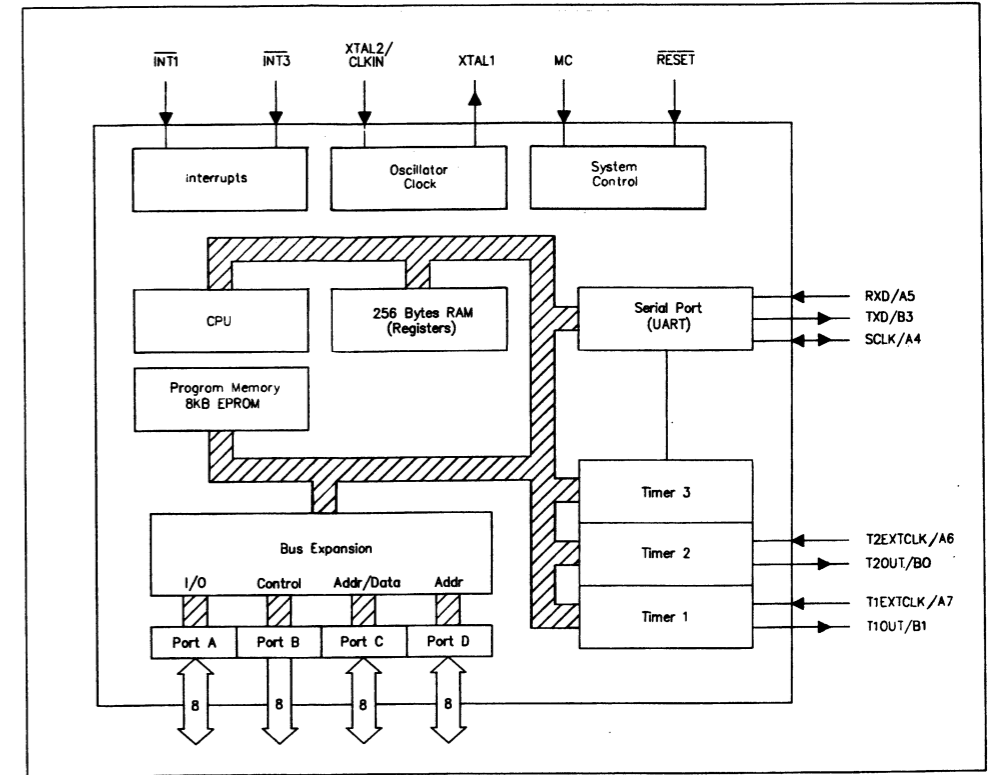
**LB1642**



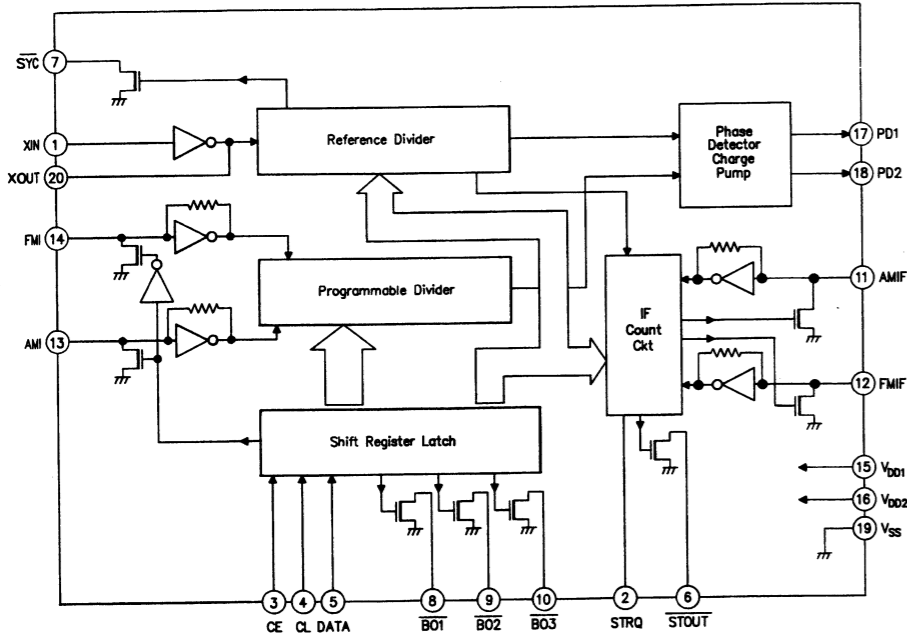
**LA1266**



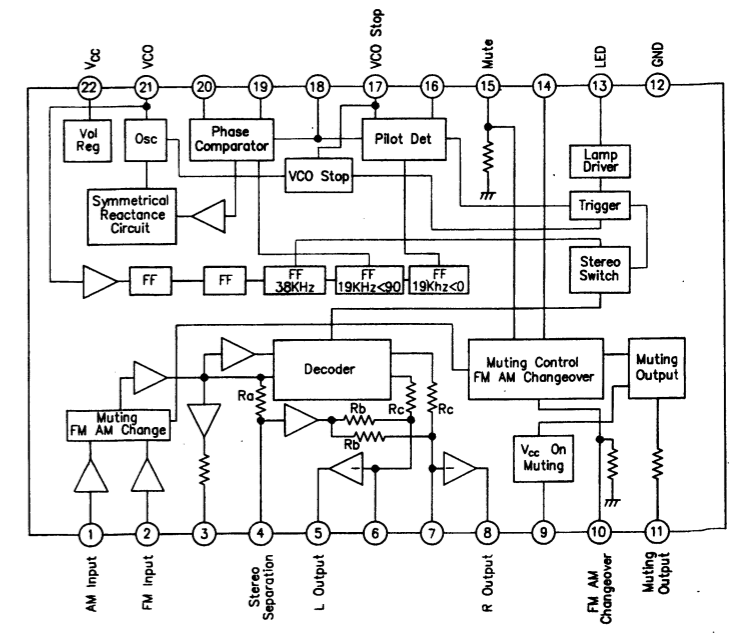
**TMS70CX0**



**LM7000**

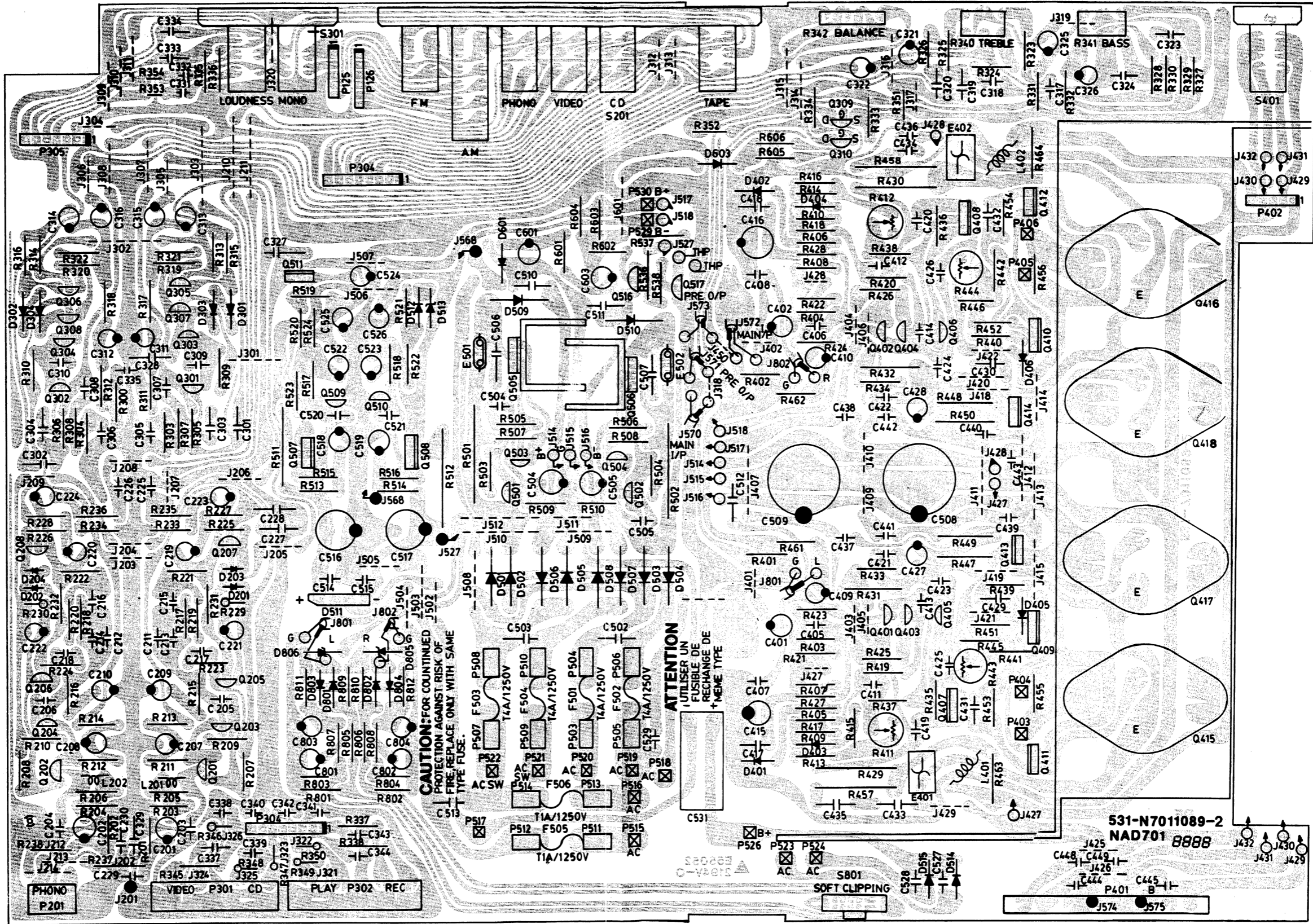


**LA3401**

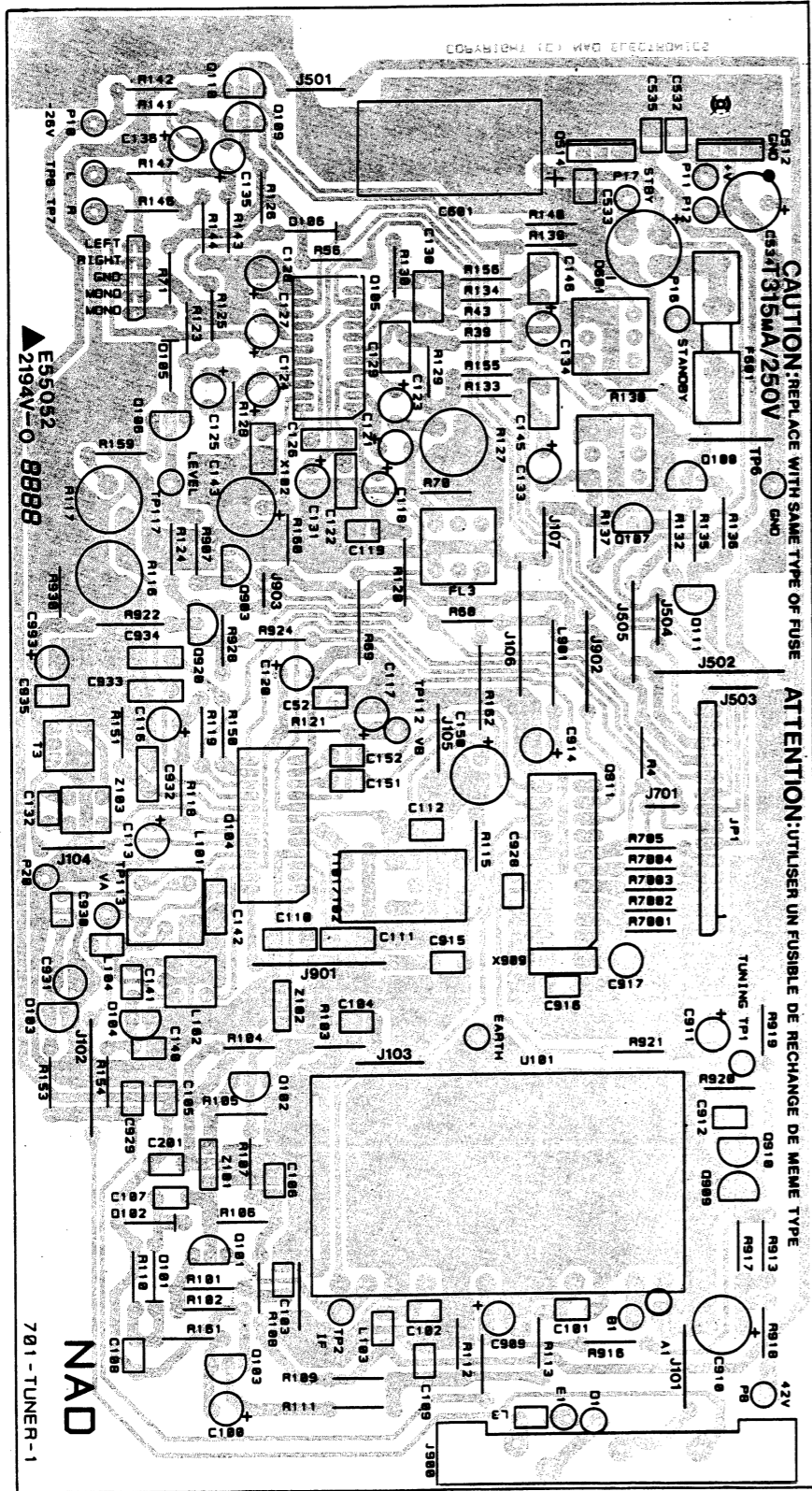


# PCB LAYOUTS

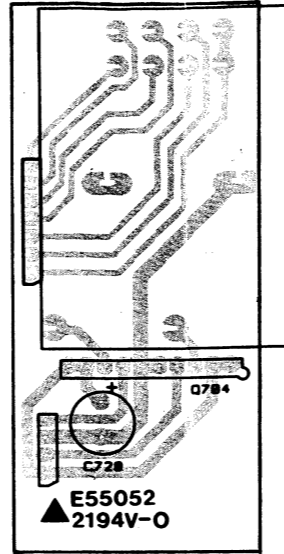
## MAIN AMP PCB



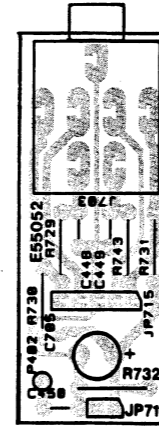
TUNER PCB



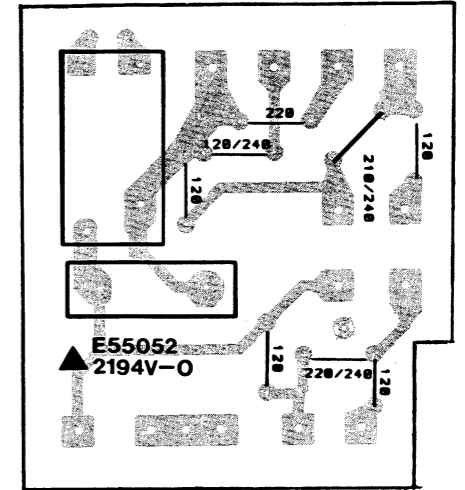
VOLUME CONTROL PCB



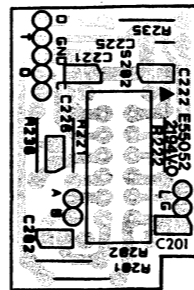
HEADPHONE PCB



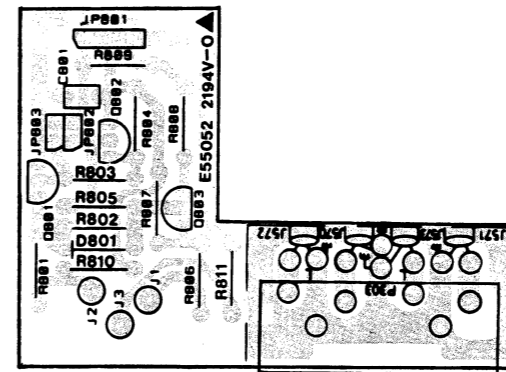
RELAY PCB



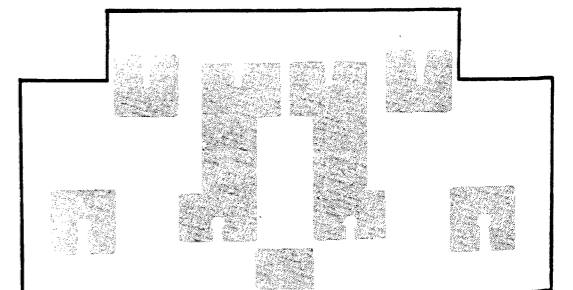
PHONO/LINE SWITCH PCB



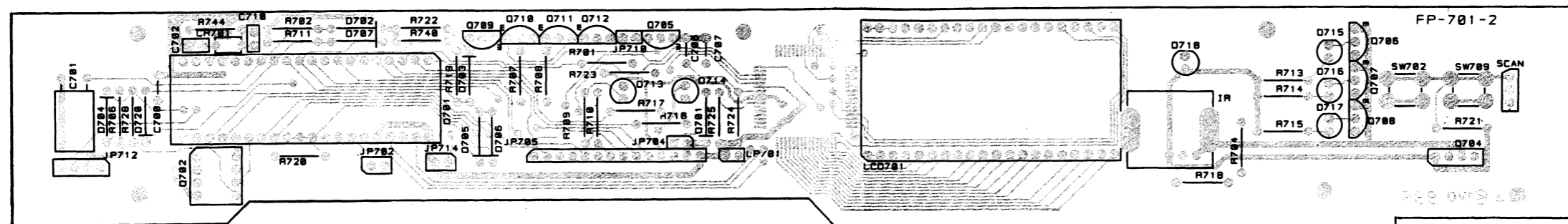
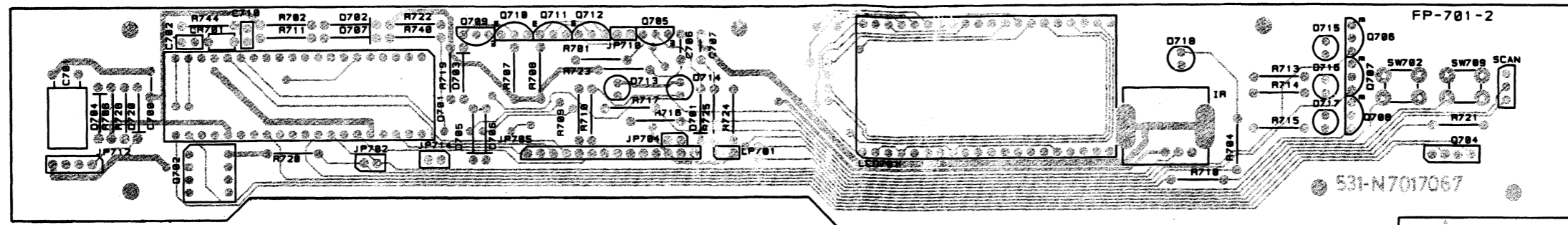
NAD LINK PCB



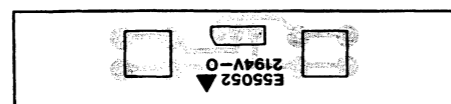
SPEAKER PCB



DISPLAY PCB



TUNE PCB



LAMP PCB



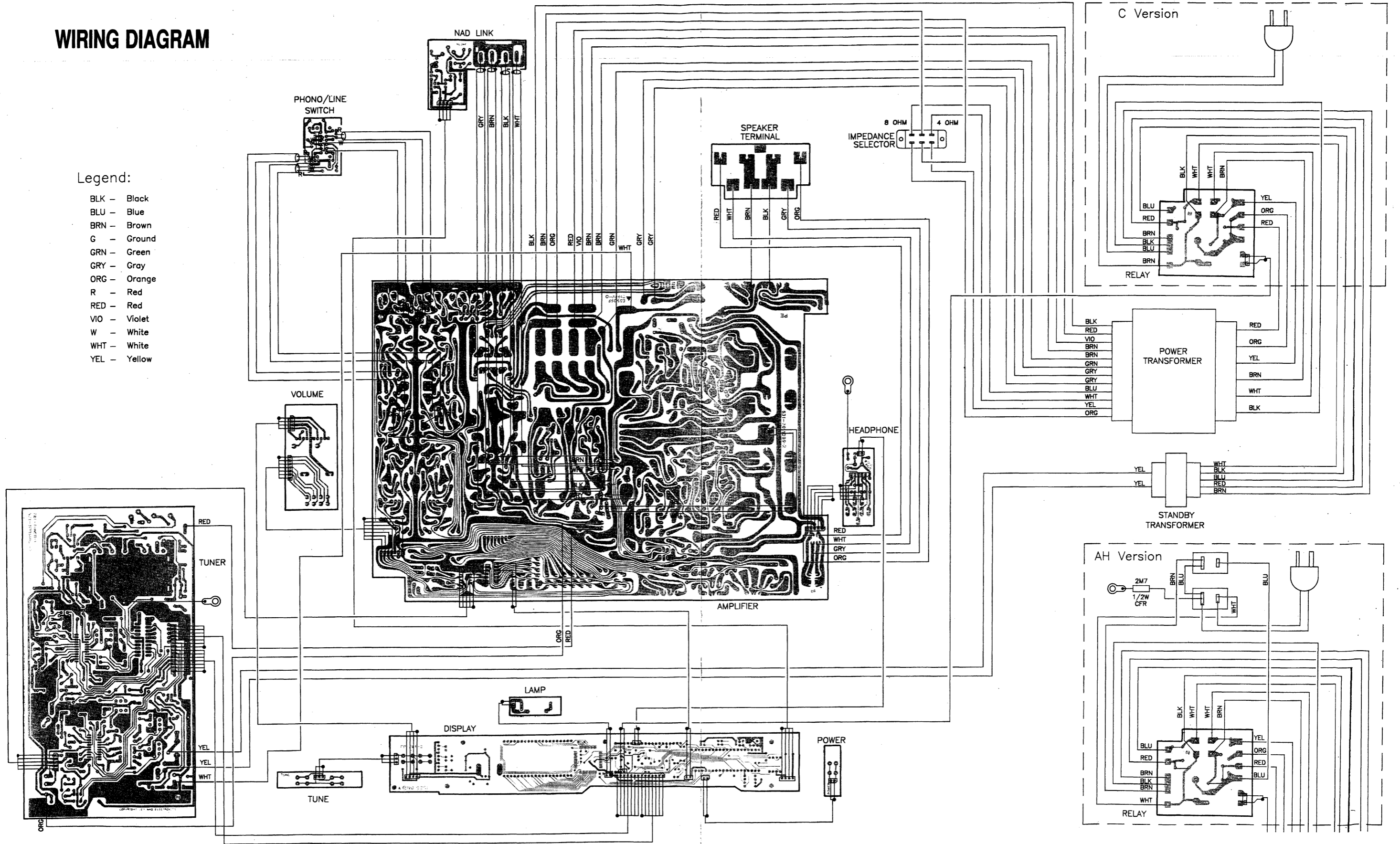
POWER PCB



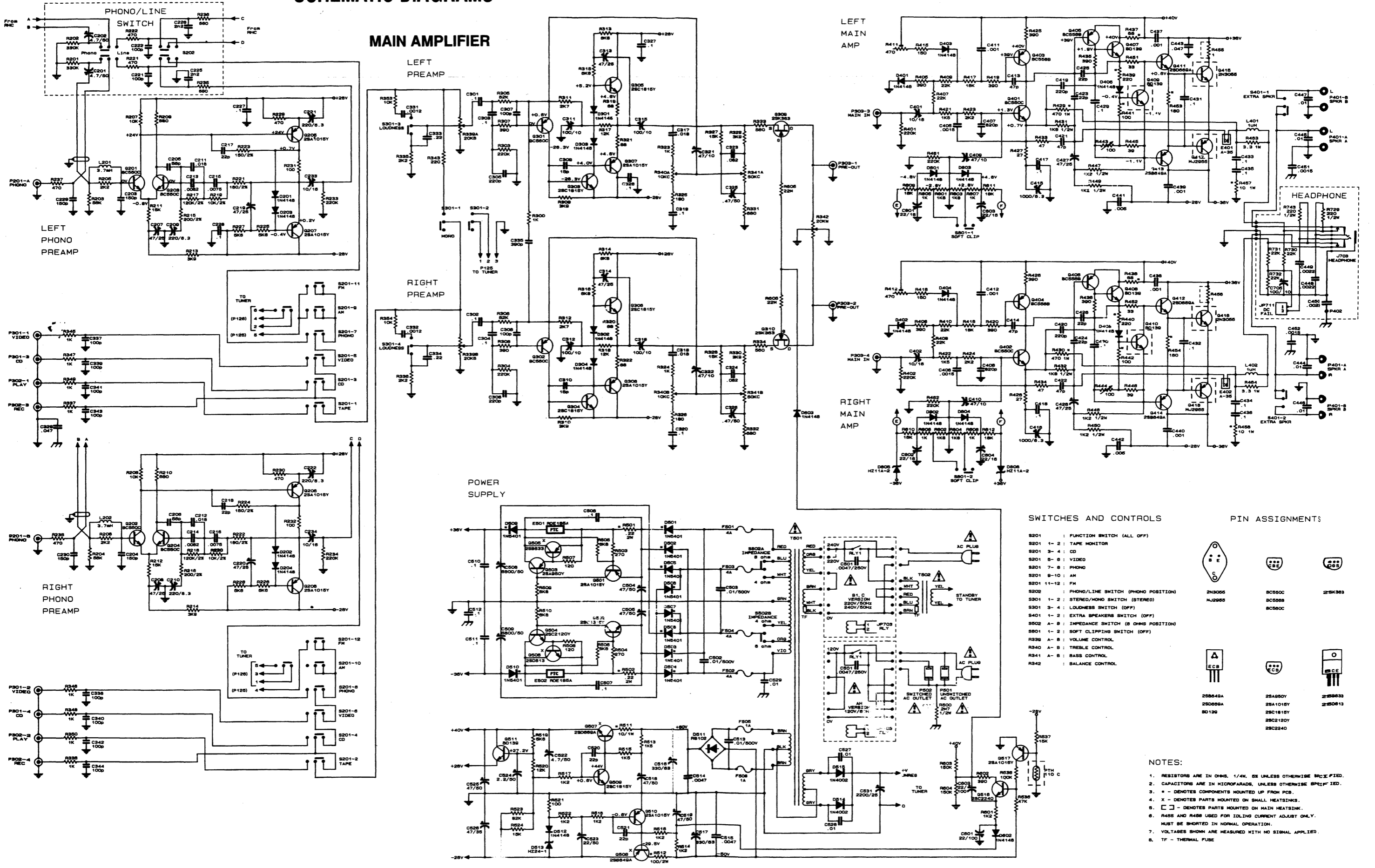
# WIRING DIAGRAM

## Legend:

- BLK - Black
- BLU - Blue
- BRN - Brown
- G - Ground
- GRN - Green
- GRY - Gray
- ORG - Orange
- R - Red
- RED - Red
- VIO - Violet
- W - White
- WHT - White
- YEL - Yellow



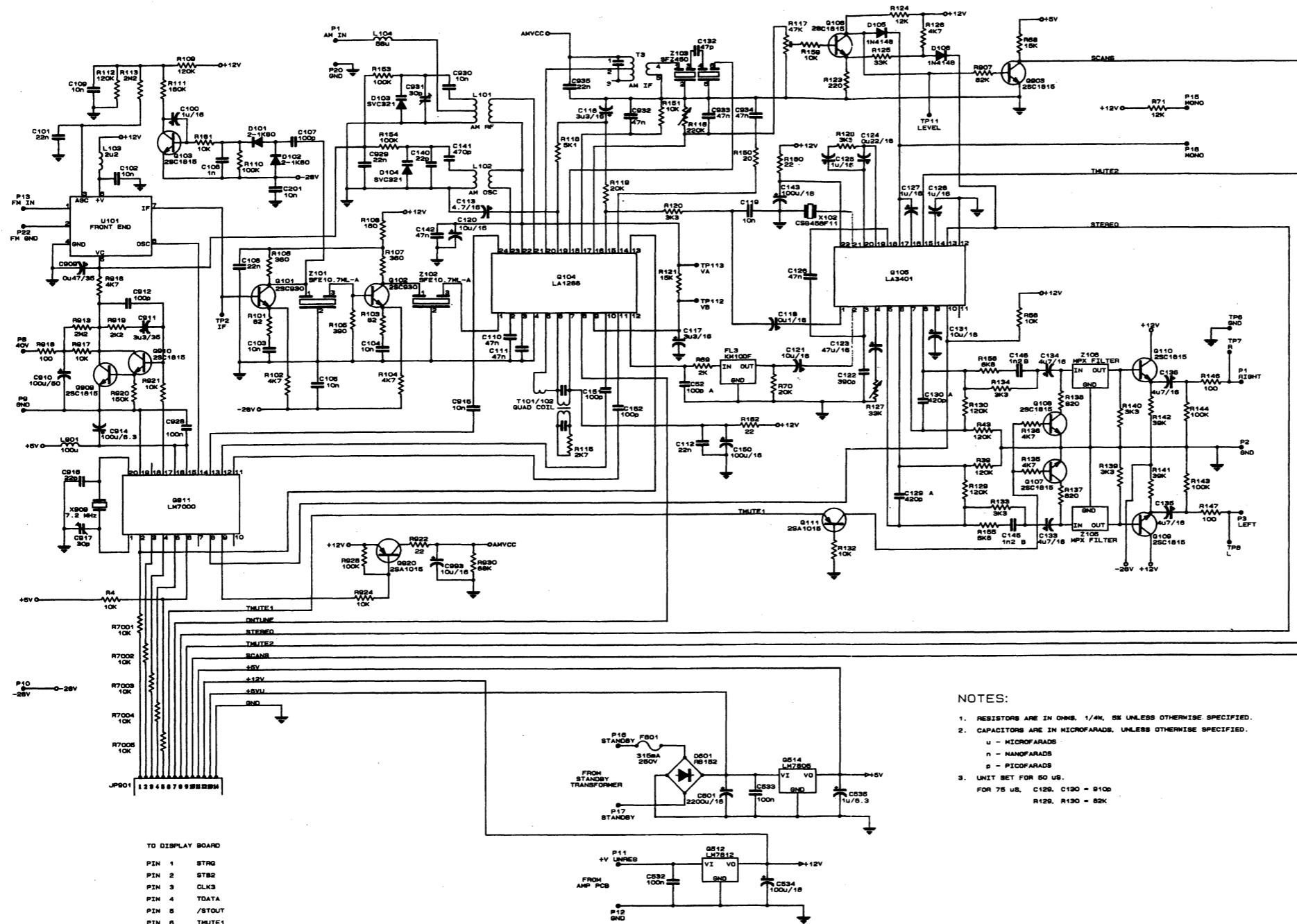
# SCHEMATIC DIAGRAMS



- NOTES:**
1. RESISTORS ARE IN OHMS, 1/4W, 5% UNLESS OTHERWISE SPECIFIED.
  2. CAPACITORS ARE IN MICROFARADS, UNLESS OTHERWISE SPECIFIED.
  3. \* - DENOTES COMPONENTS MOUNTED UP FROM PCB.
  4. X - DENOTES PARTS MOUNTED ON HEAT SINKS.
  5. □ - DENOTES PARTS MOUNTED ON MAIN HEAT SINK.
  6. R455 AND R456 USED FOR IDLING CURRENT ADJUST ONLY. MUST BE SHORTED IN NORMAL OPERATION.
  7. VOLTAGES SHOWN ARE MEASURED WITH NO SIGNAL APPLIED.
  8. TF - THERMAL FUSE

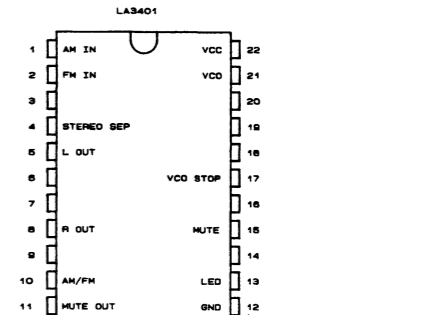
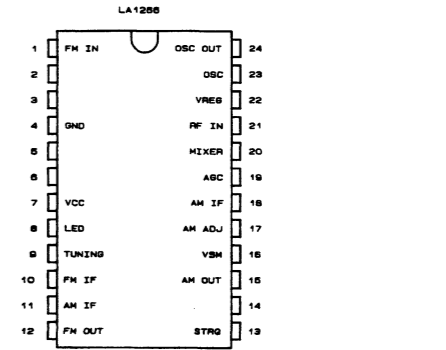
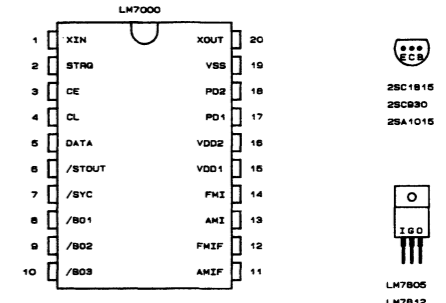


# TUNER



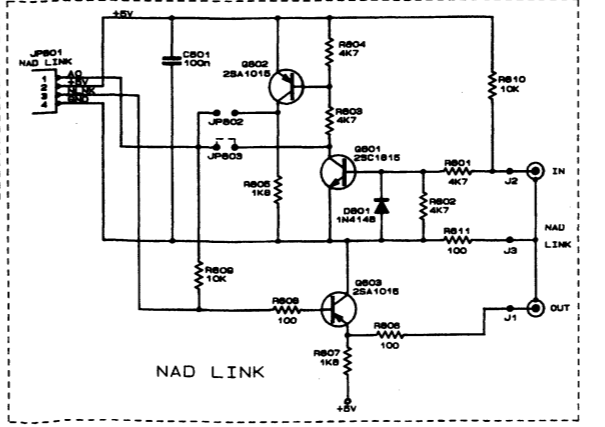
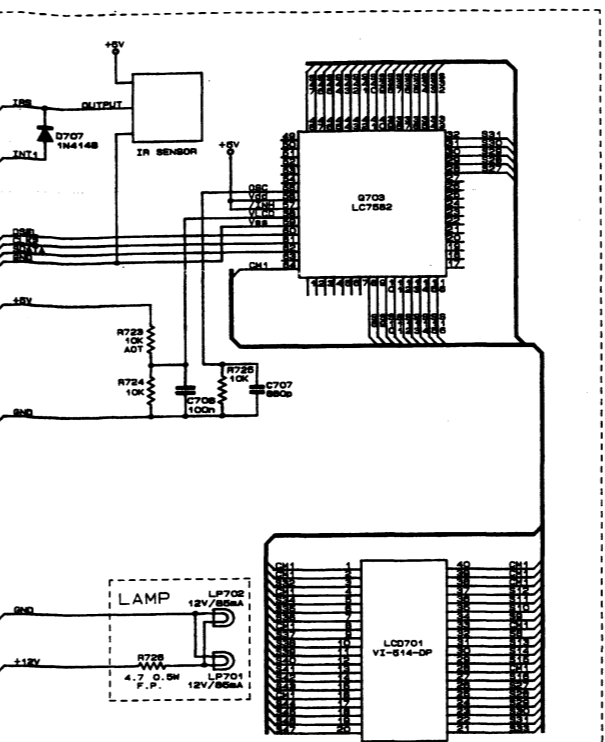
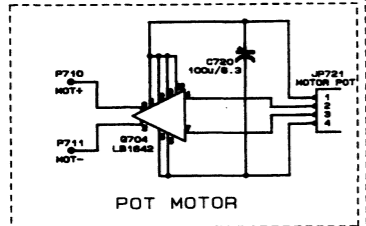
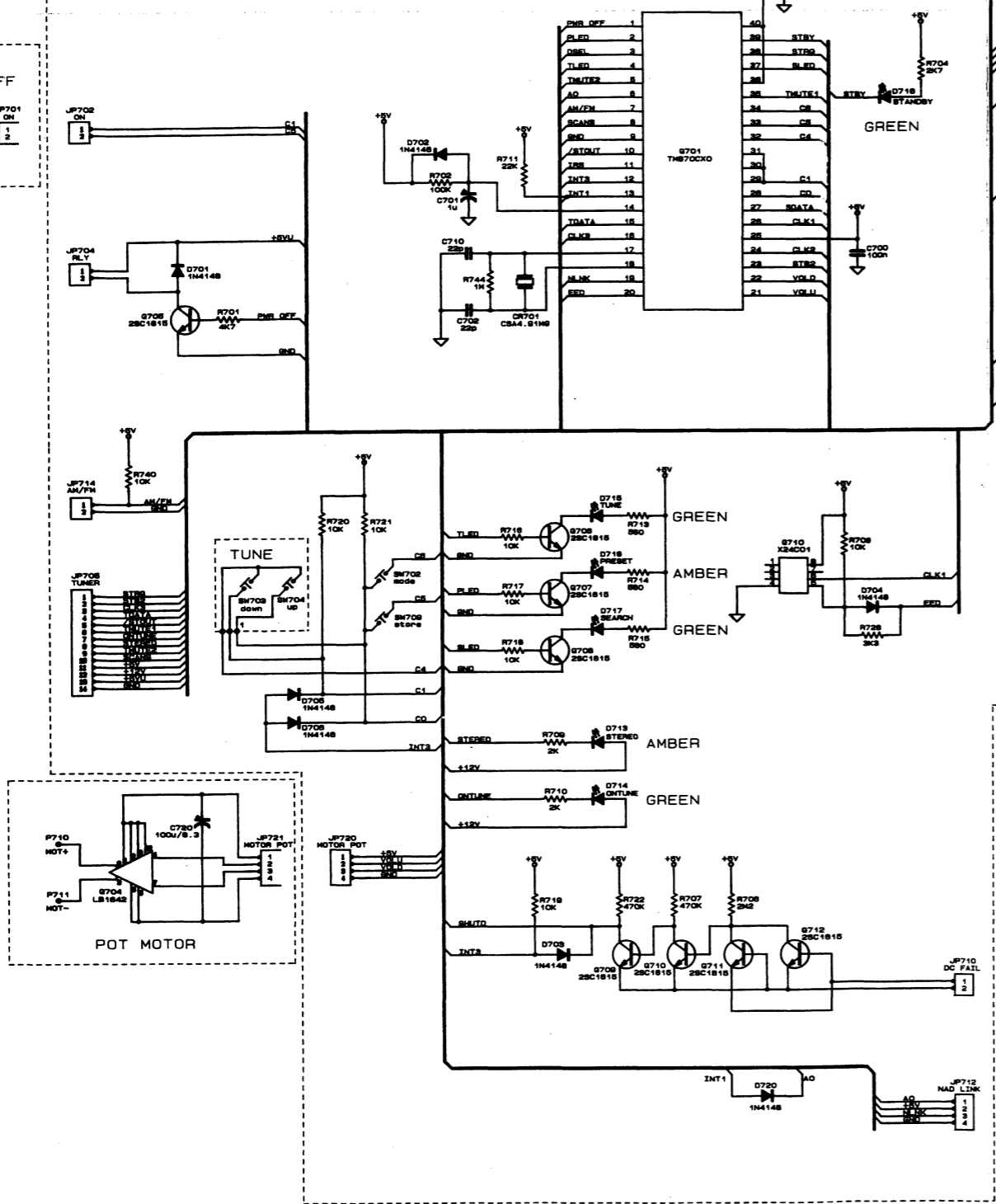
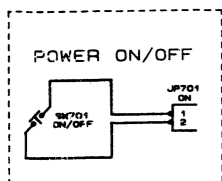
- TO DISPLAY BOARD
- PIN 1 STRG
  - PIN 2 STB2
  - PIN 3 CLK3
  - PIN 4 TDATA
  - PIN 5 /STOUT
  - PIN 6 TMUTE1
  - PIN 7 ONTUNE
  - PIN 8 STEREO
  - PIN 9 TMUTE2
  - PIN 10 SCANS
  - PIN 11 +5V
  - PIN 12 +12V
  - PIN 13 +5VU
  - PIN 14 GND

## SEMICONDUCTOR PIN DESCRIPTIONS

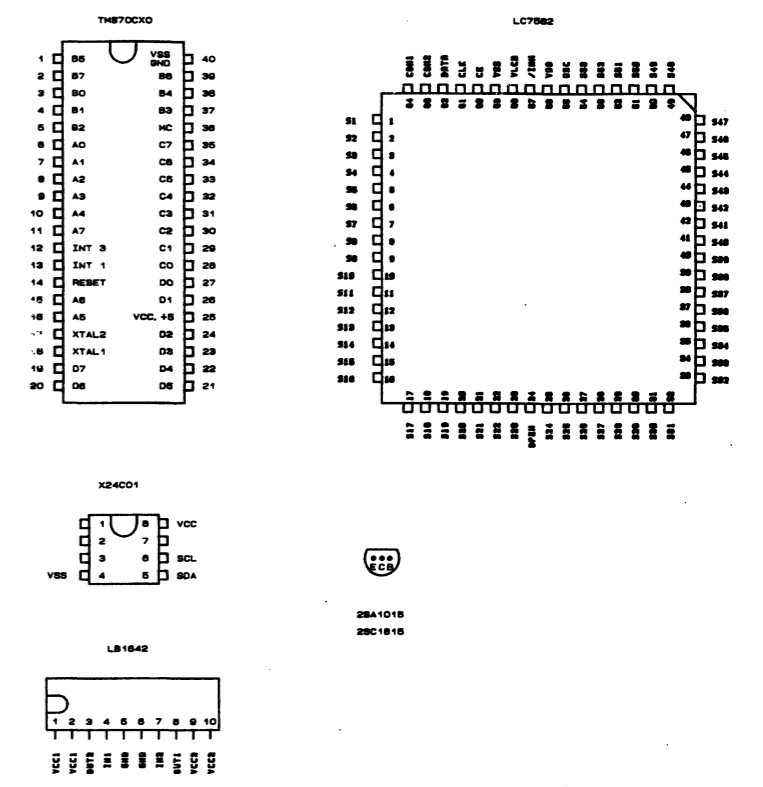


- NOTES:
- RESISTORS ARE IN OHMS, 1/4W, 5% UNLESS OTHERWISE SPECIFIED.
  - CAPACITORS ARE IN MICROFARADS, UNLESS OTHERWISE SPECIFIED.  
 u = MICROFARADS  
 n = NANOFARADS  
 p = PICOFARADS
  - UNIT SET FOR 50 US.  
 FOR 75 US, C129, C130 = 0100  
 R129, R130 = 82K

# DISPLAY/NAD LINK



## SEMICONDUCTOR PIN DESCRIPTIONS



- NOTES:
1. RESISTORS ARE IN OHMS, 1/K, 10K, 100K, 1M, 10M, 100M, 1G, UNLESS OTHERWISE SPECIFIED.
  2. CAPACITORS ARE IN MICROFARADS, UNLESS OTHERWISE SPECIFIED.
- u - MICROFARADS  
n - NANOFARADS  
p - PICOFARADS

# ELECTRICAL PARTS LIST



SYMBOL NO.	PART NUMBER	DESCRIPTION				REMARKS
<b>MAIN AMPLIFIER</b>						
C203, C204	N150F151J-5-GG	Capacitor	Ceramic	150pF	±5%	50V
C205, C206	N150F560J-5-IF	Capacitor	Ceramic	56pF	±5%	50V
C207, C208	N157E476M-5-IU	Capacitor	Electrolytic	47uF	±20%	25V
C209, C210	N157C227M-5-KW	Capacitor	Electrolytic	220uF	±20%	10V
C211, C212	N153H183J-5-JQ	Capacitor	Mylar	0.018uF	±5%	100V
C213, C214	N153H822J-5-WQ	Capacitor	Mylar	0.0082uF	±5%	100V
C215, C216	N153H752J-5-IQ	Capacitor	Mylar	0.0075uF	±5%	100V
C217, C218	N150F220J-5-IF	Capacitor	Ceramic	22pF	±5%	50V
C219, C220	N157E476M-5-IU	Capacitor	Electrolytic	47uF	±20%	25V
C221, C222	N157C227M-5-KW	Capacitor	Electrolytic	220uF	±20%	10V
C223, C224	N157D106M-5-IU	Capacitor	Electrolytic	10uF	±20%	16V
C227, C228	N150F104Z-5-IU	Capacitor	Ceramic	0.1uF	+80-20%	50V
C229, C230	N150F151J-5-GG	Capacitor	Ceramic	150pF	±5%	50V
C301, C302	N153H104J-5-QW	Capacitor	Mylar	0.1uF	±5%	100V
C303, C304	N153H104J-5-QW	Capacitor	Mylar	0.1uF	±5%	100V
C305, C306	N150F221J-5-OF	Capacitor	Ceramic	220pF	±5%	50V
C307, C308	N150F101J-5-IF	Capacitor	Ceramic	100pF	±5%	50V
C309, C310	N150F150J-5-IF	Capacitor	Ceramic	15pF	±5%	50V
C311, C312	N157C107M-5-IU	Capacitor	Electrolytic	100uF	±20%	10V
C313, C314	N157E476M-5-IU	Capacitor	Electrolytic	47uF	±20%	25V
C315, C316	N157C107M-5-IU	Capacitor	Electrolytic	100uF	±20%	10V
C317, C318	N153H183J-5-JQ	Capacitor	Mylar	0.018uF	±5%	100V
C319, C320	N153H104J-5-QW	Capacitor	Mylar	0.1uF	±5%	100V
C321, C322	N157C476M-5-IU	Capacitor	Electrolytic	47uF	±20%	10V
C323, C324	N153H823J-5-SM	Capacitor	Mylar	0.082uF	±5%	100V
C325, C326	N157F474M-5-IU	Capacitor	Electrolytic	0.47uF	±20%	50V
C327, C328	N150F104Z-5-IU	Capacitor	Ceramic	0.1uF	+80-20%	50V
C331, C332	N153H122K-5-IQ	Capacitor	Mylar	0.0012uF	±10%	50V
C333, C334	N153H224J-5-OQM	Capacitor	Mylar	0.22uF	±5%	100V
C335	N150F391K-5-RF	Capacitor	Ceramic	390pF	±10%	50V
C337, C338	N150F101J-5-IF	Capacitor	Ceramic	100pF	±5%	50V
C339, C340	N150F101J-5-IF	Capacitor	Ceramic	100pF	±5%	50V
C341, C342	N150F101J-5-IF	Capacitor	Ceramic	100pF	±5%	50V
C343, C344	N150F101J-5-IF	Capacitor	Ceramic	100pF	±5%	50V
C401, C402	N157D106M-5-IU	Capacitor	Electrolytic	10uF	±20%	16V
C405, C406	N153H152J-5-IQ	Capacitor	Mylar	0.0015uF	±5%	100V
C407, C408	N150F821K-5-IF	Capacitor	Ceramic	820pF	±10%	50V
C409, C410	N157C476M-5-IU	Capacitor	Electrolytic	47uF	±20%	10V
C411, C412	N153H102J-5-IQ	Capacitor	Mylar	0.001uF	±5%	100V
C413, C414	N150F470J-5-IF	Capacitor	Ceramic	47pF	±5%	50V
C415, C416	N157C108M-5-S5	Capacitor	Electrolytic	1000uF	±20%	10V
C417, C418	N153H104J-5-QW	Capacitor	Mylar	0.1uF	±5%	100V
C419, C420	N150F221J-5-OF	Capacitor	Ceramic	220pF	±5%	50V
C421, C422	N150F470J-5-IF	Capacitor	Ceramic	47pF	±5%	50V
C423, C424	N150F220J-5-IF	Capacitor	Ceramic	22pF	±5%	50V
C425, C426	N150F220J-5-IF	Capacitor	Ceramic	22pF	±5%	50V
C427, C428	N157E476M-5-IU	Capacitor	Electrolytic	47uF	±20%	25V
C429, C430	N153H104J-5-QW	Capacitor	Mylar	0.1uF	±5%	100V
C431, C432	N153H104J-5-QW	Capacitor	Mylar	0.1uF	±5%	100V
C433, C434	N150F104Z-5-IU	Capacitor	Ceramic	0.1uF	+80-20%	50V
C435, C436	N150F104Z-5-IU	Capacitor	Ceramic	0.1uF	+80-20%	50V
C437, C438	N150F102K-5-II	Capacitor	Ceramic	0.001uF	±10%	50V
C439, C440	N150F102K-5-II	Capacitor	Ceramic	0.001uF	±10%	50V
C441, C442	N150F502K-5-OG	Capacitor	Ceramic	0.005uF	±10%	50V
C443	N150F473Z-5-SG	Capacitor	Ceramic	0.047uF	±20%	50V
C502, C503	N153L103M-5-6S	Capacitor	Mylar	0.01uF	±20%	500V
C504, C505	N157F476M-5-PV	Capacitor	Electrolytic	47uF	±20%	50V
C506, C507	N150F104Z-5-IU	Capacitor	Ceramic	0.1uF	+80-20%	50V

SYMBOL NO.	PART NUMBER	DESCRIPTION				REMARKS	
C508, C509	N89100029-0	Capacitor	Electrolytic	6800uF	±20%	50V	
C510, C511	N150H104Z-5-MM	Capacitor	Ceramic	0.1uF	+80-20%	100V	
C512	N150F104Z-5-IU	Capacitor	Ceramic	0.1uF	+80-20%	50V	
C513	N153L103M-5-6S	Capacitor	Mylar	0.01uF	±20%	500V	
C514, C515	N150F473Z-5-SG	Capacitor	Ceramic	0.047uF	±20%	50V	
C516, C517	N157I337M-5-Y9	Capacitor	Electrolytic	330uF	±20%	63V	
C518, C519	N157F476M-5-PV	Capacitor	Electrolytic	47uF	±20%	50V	
C520, C521	N150F220J-5-IF	Capacitor	Ceramic	22pF	±5%	50V	
C522	N157F475M-5-IU	Capacitor	Electrolytic	4.7uF	±20%	50V	
C523	N157F226M-5-LU	Capacitor	Electrolytic	22uF	±20%	50V	
C524	N157F225M-5-GM	Capacitor	Electrolytic	2.2uF	±20%	50V	
C525	N157F476M-5-PV	Capacitor	Electrolytic	47uF	±20%	50V	
C526	N157Q476M-5-LU	Capacitor	Electrolytic	47uF	±20%	35V	
C527, C528	N150F103K-5-UU	Capacitor	Ceramic	0.01uF	±10%	50V	
C529	N150F103K-5-UU	Capacitor	Ceramic	0.01uF	±10%	50V	
C531	N157E228Z-5-6@	Capacitor	Electrolytic	2200uF	+80-20%	25V	
C601	N157H226M-5-PV	Capacitor	Electrolytic	22uF	±20%	100V	
C603	N157H226M-5-PV	Capacitor	Electrolytic	22uF	±20%	100V	
C801, C802	N157D226M-5-IU	Capacitor	Electrolytic	22uF	±20%	16V	
C803, C804	N157D226M-5-IU	Capacitor	Electrolytic	22uF	±20%	16V	
D201, D202	N48041480-2	Diode		1N4148			
D203, D204	N48041480-2	Diode		1N4148			
D301, D302	N48041480-2	Diode		1N4148			
D303, D304	N48041480-2	Diode		1N4148			
D401, D402	N48041480-2	Diode		1N4148			
D403, D404	N48041480-2	Diode		1N4148			
D405, D406	N48041480-2	Diode		1N4148			
D501, D502	N48054010-1	Diode		1N5401, 100V, 3A			
D503, D504	N48054010-1	Diode		1N5401, 100V, 3A			
D505, D506	N48054010-1	Diode		1N5401, 100V, 3A			
D507, D508	N48054010-1	Diode		1N5401, 100V, 3A			
D509, D510	N48054010-1	Diode		1N5401, 100V, 3A			
D511	N48400470-0	Rectifier	Bridge	RS102, 100V, 1A			
D512	N48041480-2	Diode		1N4148			
D513	N483724B4-1	Diode	Zener	(23.81-24.81)		0.5W	
D514, D515	N48040020-2	Diode		1N4002			
D601	N48041480-2	Diode		1N4148			
D603	N48041480-2	Diode		1N4148			
D801, D802	N48041480-2	Diode		1N4148			
D803, D804	N48041480-2	Diode		1N4148			
D805, D806	N48378C20-1	Diode	Zener	11V		0.5W	
E401, E402	N89100030-0	Circuit Breaker		3.5A		250 VAC	
E501, E502	N89100035-0	PTC Polyswitch		RDE185			
F501, F502	N51004020-1A	Fuse	UL/CSA 5x20mm		4A	125 V	AH ▲
F501, F502	N51004020-1B	Fuse	SEMKO HBC 5x20mm		4A	250 V	C ▲
F503, F504	N51004020-1A	Fuse	UL/CSA 5x20mm		4A	125 V	AH ▲
F503, F504	N51004020-1B	Fuse	SEMKO HBC 5x20mm		4A	250 V	C ▲
F505, F506	N51001020-1A	Fuse	UL/CSA 5x20mm		1A	125 V	AH ▲
F505, F506	N51001020-1B	Fuse	SEMKO 5x20mm		1A	250 V	C ▲
L201, L202	N18030013-0	Inductor	Toroid	3.7mH		±20%	
L401, L402	N18040470-0	Coil	Spring	0.7/8/13.5			
P201	N21035102-0	Jack		RCA 2 Pos. Gold Plated, Phono			
P301, P302	N21035204-0	Jack		RCA 4 Pos. PCB Type, Video, CD, Tape In, Tape Out			
Q201, Q202	N485C550C-5	Transistor		BC550C			
Q203, Q204	N485C550C-5	Transistor		BC550C			
Q205, Q206	N4851015Y-5	Transistor		2SA1015-Y			
Q207, Q208	N4851015Y-5	Transistor		2SA1015-Y			
Q301, Q302	N485C560C-5	Transistor		BC560C			
Q303, Q304	N4851815Y-5	Transistor		2SC1815-Y			


SYMBOL NO.	PART NUMBER	DESCRIPTION			REMARKS
Q305, Q306	N4851815Y-5	Transistor		2SC1815-Y	
Q307, Q308	N4851015Y-5	Transistor		2SA1015-Y	
Q309, Q310	N485363BL-5	Transistor	N-JFET	2SK363-BL	
Q401, Q402	N485C550C-5	Transistor		BC550C	
Q403, Q404	N485C556B-5	Transistor		BC556B	
Q405, Q406	N485C556B-5	Transistor		BC556B	
Q407, Q408	N485D1390-5	Transistor	Philips	BD139-10	
Q409, Q410	N485D1390-5	Transistor	Philips	BD139-10	
Q411, Q412	N485669AC-5	Transistor		2SD669A-C	
Q413, Q414	N485649AC-5	Transistor		2SB649A-C	
Q415, Q416	N48530550-5	Transistor	Motorola	2N3055	
Q417, Q418	N48529550-5	Transistor	Motorola	MJ2955	
Q501	N4851015Y-5	Transistor		2SA1015-Y	
Q502	N4851815Y-5	Transistor		2SC1815-Y	
Q503	N485A950Y-5	Transistor		2SA950-Y	
Q504	N4852120Y-5	Transistor		2SC2120-Y	
Q505	N485B633D-5	Transistor		2SB633D	
Q506	N485D613D-5	Transistor		2SD613D	
Q507	N485669AC-5	Transistor		2SD669A-C	
Q508	N485649AC-5	Transistor		2SB649A-C	
Q509	N4851815Y-5	Transistor		2SC1815-Y	
Q510	N4851015Y-5	Transistor		2SA1015-Y	
Q511	N485D1390-5	Transistor	Philips	BD139-10	
Q516	N485240GR-5	Transistor		2SC2240GR	
Q517	N4851015Y-5	Transistor		2SA1015-Y	
R203, R204	N4705563J-2	Resistor	Carbon Film	56K 1/4W ±5%	
R205, R206	N4705222J-2	Resistor	Carbon Film	2.2K 1/4W ±5%	
R207, R208	N4705103J-2	Resistor	Carbon Film	10K 1/4W ±5%	
R209, R210	N4705681J-2	Resistor	Carbon Film	680 1/4W ±5%	
R211, R212	N4705153J-2	Resistor	Carbon Film	15K 1/4W ±5%	
R213, R214	N4705392J-2	Resistor	Carbon Film	3.9K 1/4W ±5%	
R215, R216	N4705201C-2	Resistor	Carbon Film	200 1/4W ±2%	
R217, R218	N4705124C-2	Resistor	Carbon Film	120K 1/4W ±2%	
R219, R220	N4705103C-2	Resistor	Carbon Film	10K 1/4W ±2%	
R221, R222	N4705181C-2	Resistor	Carbon Film	180 1/4W ±2%	
R223, R224	N4705151J-2	Resistor	Carbon Film	150 1/4W ±5%	
R225, R226	N4705562J-2	Resistor	Carbon Film	5.6K 1/4W ±5%	
R227, R228	N4705562J-2	Resistor	Carbon Film	5.6K 1/4W ±5%	
R229, R230	N4705471J-2	Resistor	Carbon Film	470 1/4W ±5%	
R231, R232	N4705101J-2	Resistor	Carbon Film	100 1/4W ±5%	
R233, R234	N4705224J-2	Resistor	Carbon Film	220K 1/4W ±5%	
R237, R238	N4705471J-2	Resistor	Carbon Film	470 1/4W ±5%	
R300	N4705102J-2	Resistor	Carbon Film	1K 1/4W ±5%	
R303, R304	N4705224J-2	Resistor	Carbon Film	220K 1/4W ±5%	
R305, R306	N4705823J-2	Resistor	Carbon Film	82K 1/4W ±5%	
R307, R308	N4705391J-2	Resistor	Carbon Film	390 1/4W ±5%	
R309, R310	N4705392J-2	Resistor	Carbon Film	3.9K 1/4W ±5%	
R311, R312	N4705272J-2	Resistor	Carbon Film	2.7K 1/4W ±5%	
R313, R314	N4705682J-2	Resistor	Carbon Film	6.8K 1/4W ±5%	
R315, R316	N4705682J-2	Resistor	Carbon Film	6.8K 1/4W ±5%	
R317, R318	N4705123J-2	Resistor	Carbon Film	12K 1/4W ±5%	
R319, R320	N4705680J-2	Resistor	Carbon Film	68 1/4W ±5%	
R321, R322	N4705680J-2	Resistor	Carbon Film	68 1/4W ±5%	
R323, R324	N4705102J-2	Resistor	Carbon Film	1K 1/4W ±5%	
R325, R326	N4705181J-2	Resistor	Carbon Film	180 1/4W ±5%	
R327, R328	N4705153J-2	Resistor	Carbon Film	15K 1/4W ±5%	
R329, R330	N4705392J-2	Resistor	Carbon Film	3.9K 1/4W ±5%	
R331, R332	N4705681J-2	Resistor	Carbon Film	680 1/4W ±5%	
R333, R334	N4705561J-2	Resistor	Carbon Film	560 1/4W ±5%	

SYMBOL NO.	PART NUMBER	DESCRIPTION					REMARKS
R335, R336	N4705222J-2	Resistor	Carbon Film	2.2K	1/4W	±5%	
R337, R338	N4705102J-2	Resistor	Carbon Film	1K	1/4W	±5%	
R340	N47503486-0	Resistor	Variable - Treble	10KCx2			
R341	N47503506-2	Resistor	Variable - Bass	50KCx2			
R342	N47503496-0	Resistor	Variable - Balance	20KW			
R345, R346	N4705102J-2	Resistor	Carbon Film	1K	1/4W	±5%	
R347, R348	N4705102J-2	Resistor	Carbon Film	1K	1/4W	±5%	
R349, R350	N4705102J-2	Resistor	Carbon Film	1K	1/4W	±5%	
R353, R354	N4705103J-2	Resistor	Carbon Film	10K	1/4W	±5%	
R401, R402	N4705224J-2	Resistor	Carbon Film	220K	1/4W	±5%	
R405, R406	N4705391J-2	Resistor	Carbon Film	390	1/4W	±5%	
R407, R408	N4705223J-2	Resistor	Carbon Film	22K	1/4W	±5%	
R409, R410	N4705223J-2	Resistor	Carbon Film	22K	1/4W	±5%	
R411, R412	N47564715-3-09	Resistor	Semi-fixed, Horizontal, 5mm		470		
R415, R416	N4705151J-2	Resistor	Carbon Film	150	1/4W	±5%	
R417, R418	N4705183J-2	Resistor	Carbon Film	18K	1/4W	±5%	
R419, R420	N4705391J-2	Resistor	Carbon Film	390	1/4W	±5%	
R421, R422	N4705152J-2	Resistor	Carbon Film	1.5K	1/4W	±5%	
R423, R424	N4705222J-2	Resistor	Carbon Film	2.2K	1/4W	±5%	
R425, R426	N4705391J-2	Resistor	Carbon Film	390	1/4W	±5%	
R427, R428	N4705270J-2	Resistor	Carbon Film	27	1/4W	±5%	
R429, R430	N4718471J-1	Resistor	Metal Oxide	470	1W	±5%	
R431, R432	N4707182J-1	Resistor	Carbon Film	1.8K	1/2W	±5%	
R433, R434	N4705470J-2	Resistor	Carbon Film	47	1/4W	±5%	
R435, R436	N4705391J-2	Resistor	Carbon Film	390	1/4W	±5%	
R437, R438	N4717680J-1	Resistor	Metal Oxide	68	1/2W	±5%	
R439, R440	N4717221J-1	Resistor	Metal Oxide	220	1/2W	±5%	
R441, R442	N4717101J-1	Resistor	Metal Oxide	100	1/2W	±5%	
R443, R444	N47561015-3-09	Resistor	Semi-fixed, Horizontal, 5mm		100		
R445, R446	N4705390J-2	Resistor	Carbon Film	39	1/4W	±5%	
R447, R448	N4707122J-1	Resistor	Carbon Film	1.2K	1/2W	±5%	
R449, R450	N4707122J-1	Resistor	Carbon Film	1.2K	1/2W	±5%	
R451, R452	N4705330J-2	Resistor	Carbon Film	33	1/4W	±5%	
R453, R454	N4717181J-1	Resistor	Metal Oxide	180	1/2W	±5%	
R455, R456	N47051R0J-2	Resistor	Carbon Film	1	1/4W	±5%	
R457, R458	N4718100J-1	Resistor	Metal Oxide	10	1W	±5%	
R461, R462	N4705224J-2	Resistor	Carbon Film	220K	1/4W	±5%	
R463, R464	N47083R3J-1	Resistor	Carbon Film	3.3	1W	±5%	
R501, R502	N4719R22J-1	Resistor	Metal Oxide	0.22	2W	±5%	
R503, R504	N4705271J-2	Resistor	Carbon Film	270	1/4W	±5%	
R505, R506	N4705682J-2	Resistor	Carbon Film	6.8K	1/4W	±5%	
R507, R508	N4705121J-2	Resistor	Carbon Film	120	1/4W	±5%	
R509, R510	N4705682J-2	Resistor	Carbon Film	6.8K	1/4W	±5%	
R511	N4718100J-1	Resistor	Metal Oxide	10	1W	±5%	
R512	N4719101J-1-K	Resistor	Metal Oxide	100	2W	±5%	
R513	N4705152J-2	Resistor	Carbon Film	1.5K	1/4W	±5%	
R514	N4705122J-2	Resistor	Carbon Film	1.2K	1/4W	±5%	
R515	N4705152J-2	Resistor	Carbon Film	1.5K	1/4W	±5%	
R516	N4705122J-2	Resistor	Carbon Film	1.2K	1/4W	±5%	
R517, R518	N4705122J-2	Resistor	Carbon Film	1.2K	1/4W	±5%	
R519	N4705562J-2	Resistor	Carbon Film	5.6K	1/4W	±5%	
R520	N4705123J-2	Resistor	Carbon Film	12K	1/4W	±5%	
R521	N4705101J-2	Resistor	Carbon Film	100	1/4W	±5%	
R522	N4705122J-2	Resistor	Carbon Film	1.2K	1/4W	±5%	
R523	N4705823J-2	Resistor	Carbon Film	82K	1/4W	±5%	
R524	N4705153J-2	Resistor	Carbon Film	15K	1/4W	±5%	
R536	N4705473J-2	Resistor	Carbon Film	47K	1/4W	±5%	
R537	N4705153J-2	Resistor	Carbon Film	15K	1/4W	±5%	
R538	N4705104J-2	Resistor	Carbon Film	100K	1/4W	±5%	

SYMBOL NO.	PART NUMBER	DESCRIPTION	REMARKS
R601	N4705122J-2	Resistor Carbon Film 1.2K 1/4W ±5%	
R602	N4705391J-2	Resistor Carbon Film 390 1/4W ±5%	
R603, R604	N4705154J-2	Resistor Carbon Film 150K 1/4W ±5%	
R605, R606	N4705226J-2	Resistor Carbon Film 22M 1/4W ±5%	
R801, R802	N4705182J-2	Resistor Carbon Film 1.8K 1/4W ±5%	
R803, R804	N4705182J-2	Resistor Carbon Film 1.8K 1/4W ±5%	
R805, R806	N4705102J-2	Resistor Carbon Film 1K 1/4W ±5%	
R807, R808	N4705102J-2	Resistor Carbon Film 1K 1/4W ±5%	
R809, R810	N4705183J-2	Resistor Carbon Film 18K 1/4W ±5%	
R811, R812	N4705183J-2	Resistor Carbon Film 18K 1/4W ±5%	
S201	N52002071-0-01	Switch Push, 12.5mmx12.5mm 6 Keys, Input Selector	
S301	N52002041-0-01	Switch Push, 2S2S (SPUF21) 2 Keys Alps, Mono/Loudness	
S401	N52002081-0-01	Switch Push, 2P2J 1 Key Alps, Extra Speakers	
S801	N52002091-0-01	Switch Slide, 2P2T 3.5T22K10G10, Soft Clipping	
	N89100031-0	T.S-110 PTH9M04BC471TS2F333	
T501	N18062095-0	Transformer EI67	⚠
T502	N18062096-0	Transformer EI35 115/230VAC 160mA	⚠
<b>TUNER</b>			
C52	N158D121J-5-IQ	Capacitor Polystyrene 120pF ±5% 16V	
C100	N157F105M-5-IU	Capacitor Electrolytic 1uF ±20% 50V	
C101	N150F203Z-5-OL	Capacitor Ceramic 0.02uF +80-20% 50V	
C102, C103	N150F103Z-5-II	Capacitor Ceramic 0.01uF +80-20% 50V	
C104, C105	N150F103Z-5-II	Capacitor Ceramic 0.01uF +80-20% 50V	
C106	N150F203Z-5-OL	Capacitor Ceramic 0.02uF +80-20% 50V	
C107	N150F101J-5-IF	Capacitor Ceramic 100pF ±5% 50V	
C108	N150F102Z-5-II	Capacitor Ceramic 0.001uF +80-20% 50V	
C109	N150F103Z-5-II	Capacitor Ceramic 0.01uF +80-20% 50V	
C110, C111	N150F473Z-5-SG	Capacitor Ceramic 0.047uF ±20% 50V	
C112	N150F203Z-5-OL	Capacitor Ceramic 0.02uF +80-20% 50V	
C113	N157F475M-5-IU	Capacitor Electrolytic 4.7uF ±20% 50V	
C116, C117	N157F335M-5-IU	Capacitor Electrolytic 3.3uF ±20% 50V	
C118	N157F104M-5-IU	Capacitor Electrolytic 0.1uF ±20% 50V	
C119	N150F103Z-5-II	Capacitor Ceramic 0.01uF +80-20% 50V	
C120, C121	N157D106M-5-IU	Capacitor Electrolytic 10uF ±20% 16V	
C122	N150F391K-5-RF	Capacitor Ceramic 390pF ±10% 50V	
C123	N157D476M-5-IU	Capacitor Electrolytic 47uF ±20% 16V	
C124	N157F224M-5-IU	Capacitor Electrolytic 0.22uF ±20% 50V	
C125	N157F105M-5-IU	Capacitor Electrolytic 1uF ±20% 50V	
C126	N150F473Z-5-SG	Capacitor Ceramic 0.047uF ±20% 50V	
C127, C128	N157F105M-5-IU	Capacitor Electrolytic 1uF ±20% 50V	
C129, C130	N158E421J-5-IQ	Capacitor Polystyrene 420pF ±5% 25V	C
C129, C130	N158E911J-5-IQ	Capacitor Polystyrene 910pF ±5% 25V	AH
C131	N157D106M-5-IU	Capacitor Electrolytic 10uF ±20% 16V	
C132	N15CH470J-5-KG	Capacitor Ceramic 47pF NPO ±5%	
C133, C134	N157F475M-5-IU	Capacitor Electrolytic 4.7uF ±20% 50V	
C135, C136	N157F475M-5-IU	Capacitor Electrolytic 4.7uF ±20% 50V	
C140	N15CH220J-5-GG	Capacitor Ceramic 22pF NPO ±5% 50V	
C141	N158E471J-5-IQ	Capacitor Polystyrene 470pF ±5% 25V	
C142	N150F473Z-5-SG	Capacitor Ceramic 0.047uF ±20% 50V	
C143	N157D107Z-5-KW	Capacitor Electrolytic 100uF +80-20% 16V	
C145, C146	N153H122K-5-IQ	Capacitor Mylar 0.0012uF ±10% 50V	
C150	N157D107Z-5-KW	Capacitor Electrolytic 100uF +80-20% 16V	
C151, C152	N150F101J-5-IF	Capacitor Ceramic 100pF ±5% 50V	
C201	N150F103Z-5-II	Capacitor Ceramic 0.01uF +80-20% 50V	
C532, C533	N150F104Z-5-IU	Capacitor Ceramic 0.1uF +80-20% 50V	
C534	N157D107Z-5-KW	Capacitor Electrolytic 100uF +80-20% 16V	
C535	N157F105Z-5-IU	Capacitor Electrolytic 1uF +80-20% 50V	
C601	N157D228Z-5-W9	Capacitor Electrolytic 2200uF +80-20% 16V	

SYMBOL NO.	PART NUMBER	DESCRIPTION	REMARKS
C909	N157F474Z-5-IU	Capacitor Electrolytic 0.47uF +80-20% 50V	
C910	N157F107Z-5-OW	Capacitor Electrolytic 100uF +80-20% 50V	
C911	N157F335M-5-IU	Capacitor Electrolytic 3.3uF ±20% 50V	
C912	N150F104Z-5-IU	Capacitor Ceramic 0.1uF +80-20% 50V	
C914	N157D476Z-5-IU	Capacitor Electrolytic 47uF +80-20% 16V	
C915	N150F103Z-5-II	Capacitor Ceramic 0.01uF +80-20% 50V	
C916	N15CH220J-5-GG	Capacitor Ceramic 22pF NPO ±5% 50V	
C917	N15510210-M	Capacitor Trimmer 6mm TZ03R300FR 30pF	
C928	N150F104Z-5-IU	Capacitor Ceramic 0.1uF +80-20% 50V	
C929	N150F203Z-5-OL	Capacitor Ceramic 0.02uF +80-20% 50V	
C930	N150F103Z-5-II	Capacitor Ceramic 0.01uF +80-20% 50V	
C931	N15510210-M	Capacitor Trimmer 6mm TZ03R300FR 30pF	
C932	N150F473Z-5-SG	Capacitor Ceramic 0.047uF ±20% 50V	
C933, C934	N150F473Z-5-SG	Capacitor Ceramic 0.047uF ±20% 50V	
C935	N150F203Z-5-OL	Capacitor Ceramic 0.02uF +80-20% 50V	
C993	N157D106M-5-IU	Capacitor Electrolytic 10uF ±20% 16V	
D101, D102	N4801N60P-1	Diode Germanium 2-1K60	
D103, D104	N484C321D-5	Diode AFC SVC321SPA	
D105, D106	N48041480-2	Diode 1N4148	
D601	N48400490-0	Rectifier Bridge RB152, 100V, 1.5A	
F601	N51003120-1A	Fuse UL/CSA 5x20mm 315mA 250V	AH 
F601	N51003120-1B	Fuse SEMKO 5x20mm 315mA 250V	C 
FL3	N56002296-S	Coil FTZ 10DFE01	
JP901	N21024114-0-901	Socket 14-Pin, Right Angle	
L101	N56002276-S	Coil AM RF 5564102600	
L102	N56002286-S	Coil AM Osc 5564312800	
L103	N18012R2M-M	Coil Choke 2.2uH ±20%	
L104	N1801560M-M	Coil Choke 56uH ±20%	
L901	N1801101K-M	Coil Choke 100uH ±10%	
Q101, Q102	N485C930E-5	Transistor 2SC930E	
Q103	N4851815Y-5	Transistor 2SC1815-Y	
Q104	N31303390-0	IC Sanyo FM/AM Tuner LA1266	
Q105	N31303400-0	IC PLL Multiplex LA3401	
Q106	N4851815Y-5	Transistor 2SC1815-Y	
Q107, Q108	N4851815Y-5	Transistor 2SC1815-Y	
Q109, Q110	N4851815Y-5	Transistor 2SC1815-Y	
Q111	N4851015Y-5	Transistor 2SA1015-Y	
Q512	N31302520-1	IC Regulator, 12V 7812	
Q514	N31302020-1	IC Regulator, 5V 7805	
Q903	N4851815Y-5	Transistor 2SC1815-Y	
Q909, Q910	N4851815Y-5	Transistor 2SC1815-Y	
Q911	N31303430-0	IC Sanyo DTS LM7000	
Q920	N4851015Y-5	Transistor 2SA1015-Y	
R4	N4705103J-2	Resistor Carbon Film 10K 1/4W ±5%	
R39	N4705124J-2	Resistor Carbon Film 120K 1/4W ±5%	
R43	N4705124J-2	Resistor Carbon Film 120K 1/4W ±5%	
R56	N4705103J-2	Resistor Carbon Film 10K 1/4W ±5%	
R68	N4705153J-2	Resistor Carbon Film 15K 1/4W ±5%	
R69	N4705202J-2	Resistor Carbon Film 2K 1/4W ±5%	
R70	N4705203J-2	Resistor Carbon Film 20K 1/4W ±5%	
R71	N4705123J-2	Resistor Carbon Film 12K 1/4W ±5%	
R101	N4705820J-2	Resistor Carbon Film 82 1/4W ±5%	
R102	N4705472J-2	Resistor Carbon Film 4.7K 1/4W ±5%	
R103	N4705820J-2	Resistor Carbon Film 82 1/4W ±5%	
R104	N4705472J-2	Resistor Carbon Film 4.7K 1/4W ±5%	
R105	N4705391J-2	Resistor Carbon Film 390 1/4W ±5%	
R106, R107	N4705361J-2	Resistor Carbon Film 360 1/4W ±5%	
R108	N4705181J-2	Resistor Carbon Film 180 1/4W ±5%	
R109	N4705124J-2	Resistor Carbon Film 120K 1/4W ±5%	

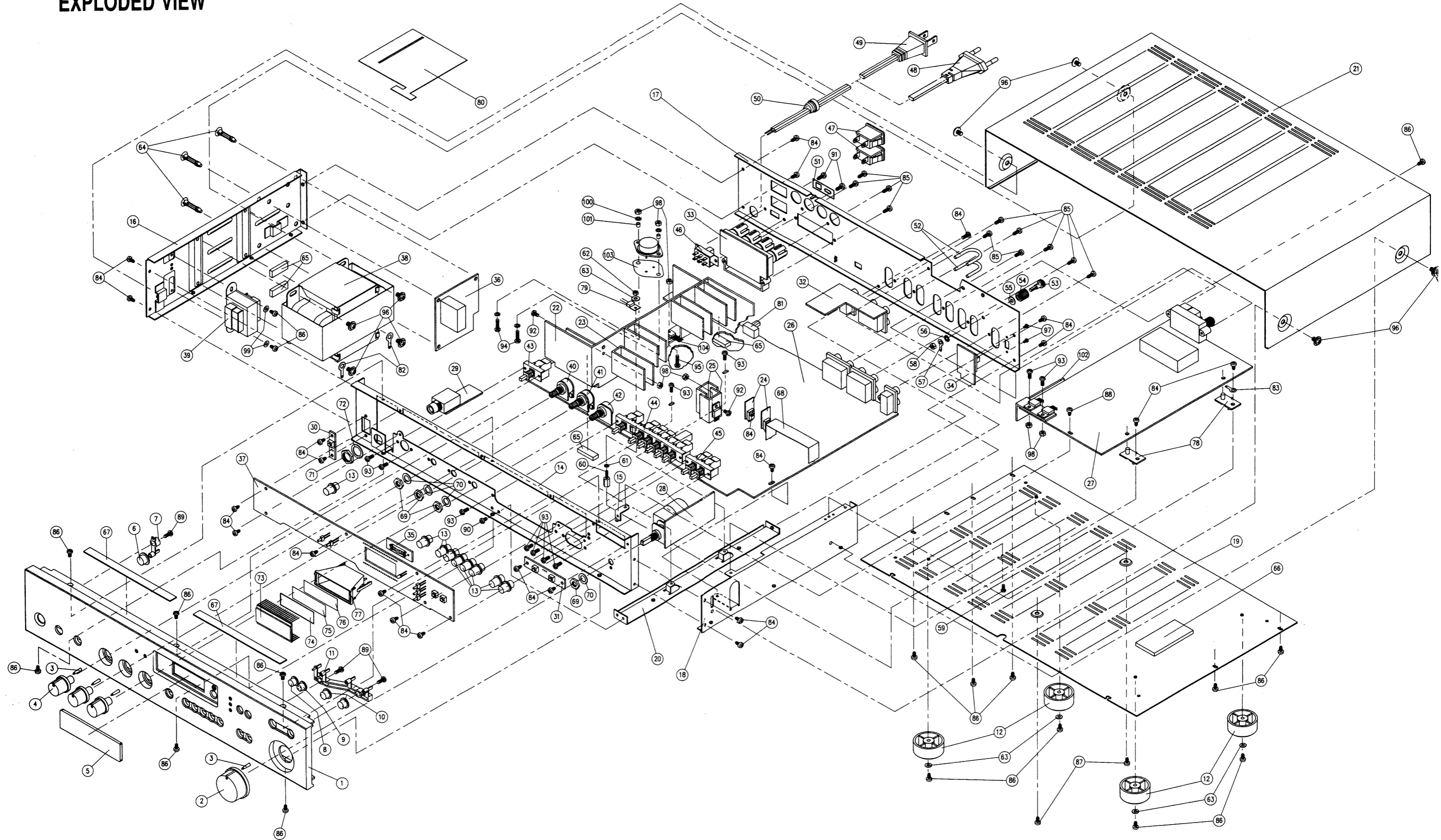


SYMBOL NO.	PART NUMBER	DESCRIPTION				REMARKS
<b>VOLUME CONTROL</b>						
C720	N157C107Z-5-LI	Capacitor	Electrolytic	100uF	+80-20%	10V
Q704	N31303410-0	IC	Sanyo Motor Driver	LB1642		
R339	N47503516-0	Resistor	Variable, Volume, Motor Drive	20K B (D)		
<b>HEADPHONE</b>						
C448, C449	N150F222K-5-LF	Capacitor	Ceramic	0.0022uF	±10%	50V
C450	N150F222K-5-LF	Capacitor	Ceramic	0.0022uF	±10%	50V
C705	N157C107Z-5-IU	Capacitor	Electrolytic	100uF	+80-20%	10V
J703	N21035401-0	Jack	Headphone, 6.5mm			
R729	N4707221J-1	Resistor	Carbon Film	220	1/2W	±5%
R730, R731	N4705223J-2	Resistor	Carbon Film	22K	1/4W	±5%
R732	N4705223J-2	Resistor	Carbon Film	22K	1/4W	±5%
R743	N4707221J-1	Resistor	Carbon Film	220	1/2W	±5%
<b>POWER</b>						
SW701	N52003011-0-01	Switch	Tact, 4-Pin	Power		
<b>TUNE</b>						
SW703, SW704	N52003011-0-01	Switch	Tact, 4-Pin	down, up		
<b>NAD LINK</b>						
C801	N150F104Z-5-IU	Capacitor	Ceramic	0.1uF	+80-20%	50V
D801	N48041480-2	Diode		1N4148		
	N21035602-0	Jack	RCA 2 Pos. Yellow PCB Type, NAD Link			
P303	N21035204-0	Jack	RCA 4 Pos. PCB Type, Pre Out, Main In			
Q801	N4851815Y-5	Transistor		2SC1815-Y		
Q802, Q803	N4851015Y-5	Transistor		2SA1015-Y		
R801, R802	N4705472J-2	Resistor	Carbon Film	4.7K	1/4W	±5%
R803, R804	N4705472J-2	Resistor	Carbon Film	4.7K	1/4W	±5%
R805, R806	N4705101J-2	Resistor	Carbon Film	100	1/4W	±5%
R807	N4705182J-2	Resistor	Carbon Film	1.8K	1/4W	±5%
R808	N4705101J-2	Resistor	Carbon Film	100	1/4W	±5%
R809, R810	N4705103J-2	Resistor	Carbon Film	10K	1/4W	±5%
R811	N4705101J-1	Resistor	Carbon Film	100	1/4W	±5%
<b>SPEAKER</b>						
C444, C445	N150F103K-5-QU	Capacitor	Ceramic	0.01uF	±10%	50V
C446, C447	N150F103K-5-QU	Capacitor	Ceramic	0.01uF	±10%	50V
C451, C452	N150F152K-5-IF	Capacitor	Ceramic	0.0015uF	±10%	50V
P401-A	N21036004-0	Speaker Terminal,	screw type, without Plug			AH
P401-A	N21036604-0	Speaker Terminal,	screw type, with Plug			C
P401-B	N21035504-0	Speaker Terminal,	clip type			
<b>PHONO/LINE SWITCH</b>						
C201, C202	N157F475M-5-GM	Capacitor	Electrolytic	4.7uF	±20%	50V
C221, C222	N150F101J-5-IF	Capacitor	Ceramic	100pF	±5%	50V
C225, C226	N153H222J-5-NL	Capacitor	Mylar	0.0022uF	±5%	100V
R201, R202	N4705334J-2	Resistor	Carbon Film	330K	1/4W	±5%
R221, R222	N4705471J-2	Resistor	Carbon Film	470	1/4W	±5%
R235, R236	N4705681J-2	Resistor	Carbon Film	680	1/4W	±5%
S202	N52003021-0-01	Switch	Slide, 4P2T	Phono/Line Switch		
<b>LAMP</b>						
LP701, LP702	N24500636-0	Lamp	Festoon	12V, 85mA		
R726	N47174R7J-1	Resistor	Metal Oxide	4.7	1/2W	±5%
<b>RELAY</b>						
C501	N89100032-0	Capacitor	Safety, DL	0.0047uF	±20%	400 V
RLY1	N45000110-0	Relay	12V DC, Taiko	DGX1-12M		

SYMBOL NO.	PART NUMBER	DESCRIPTION					REMARKS
R110	N4705104J-2	Resistor	Carbon Film	100K	1/4W	±5%	
R111	N4705184J-2	Resistor	Carbon Film	180K	1/4W	±5%	
R112	N4705124J-2	Resistor	Carbon Film	120K	1/4W	±5%	
R113	N4705225J-2	Resistor	Carbon Film	2.2M	1/4W	±5%	
R115	N4705272J-2	Resistor	Carbon Film	2.7K	1/4W	±5%	
R116	N47562245-3-09	Resistor	Semi-fixed, Horizontal, 5mm		220K		
R117	N47564735-3-09	Resistor	Semi-fixed, Horizontal, 5mm		47K		
R118	N4705512J-1	Resistor	Carbon Film	5.1K	1/4W	±5%	
R119	N4705203J-2	Resistor	Carbon Film	20K	1/4W	±5%	
R120	N4705332J-2	Resistor	Carbon Film	3.3K	1/4W	±5%	
R121	N4705153J-2	Resistor	Carbon Film	15K	1/4W	±5%	
R123	N4705221J-2	Resistor	Carbon Film	220	1/4W	±5%	
R124	N4705123J-2	Resistor	Carbon Film	12K	1/4W	±5%	
R125	N4705333J-2	Resistor	Carbon Film	33K	1/4W	±5%	
R126	N4705472J-2	Resistor	Carbon Film	4.7K	1/4W	±5%	
R127	N47563335-3-09	Resistor	Semi-fixed, Horizontal, 5mm		33K		
R128	N4705332J-2	Resistor	Carbon Film	3.3K	1/4W	±5%	
R129, R130	N4705124J-2	Resistor	Carbon Film	120K	1/4W	±5%	C
R129, R130	N4705823J-2	Resistor	Carbon Film	82K	1/4W	±5%	AH
R132	N4705153J-2	Resistor	Carbon Film	15K	1/4W	±5%	
R133, R134	N4705332J-2	Resistor	Carbon Film	3.3K	1/4W	±5%	
R135, R136	N4705472J-2	Resistor	Carbon Film	4.7K	1/4W	±5%	
R137, R138	N4705821J-2	Resistor	Carbon Film	820	1/4W	±5%	
R139, R140	N4705332J-2	Resistor	Carbon Film	3.3K	1/4W	±5%	
R141, R142	N4705333J-2	Resistor	Carbon Film	39K	1/4W	±5%	
R143, R144	N4705104J-2	Resistor	Carbon Film	100K	1/4W	±5%	
R146, R147	N4705101J-2	Resistor	Carbon Film	100	1/4W	±5%	
R150	N4705220J-2	Resistor	Carbon Film	22	1/4W	±5%	
R151	N4705103J-2	Resistor	Carbon Film	10K	1/4W	±5%	
R153, R154	N4705104J-2	Resistor	Carbon Film	100K	1/4W	±5%	
R155, R156	N4705682J-2	Resistor	Carbon Film	6.8K	1/4W	±5%	
R159	N4705103J-2	Resistor	Carbon Film	10K	1/4W	±5%	
R160	N4705220J-2	Resistor	Carbon Film	22	1/4W	±5%	
R161	N4705103J-2	Resistor	Carbon Film	10K	1/4W	±5%	
R162	N4705220J-2	Resistor	Carbon Film	22	1/4W	±5%	
R907	N4705823J-2	Resistor	Carbon Film	82K	1/4W	±5%	
R913	N4705225J-2	Resistor	Carbon Film	2.2M	1/4W	±5%	
R916	N4705472J-2	Resistor	Carbon Film	4.7K	1/4W	±5%	
R917	N4705103J-2	Resistor	Carbon Film	10K	1/4W	±5%	
R918	N4705101J-2	Resistor	Carbon Film	100	1/4W	±5%	
R919	N4705222J-2	Resistor	Carbon Film	2.2K	1/4W	±5%	
R920	N4705154J-2	Resistor	Carbon Film	150K	1/4W	±5%	
R921	N4705103J-2	Resistor	Carbon Film	10K	1/4W	±5%	
R922	N4705220J-2	Resistor	Carbon Film	22	1/4W	±5%	
R924	N4705103J-2	Resistor	Carbon Film	10K	1/4W	±5%	
R928	N4705104J-2	Resistor	Carbon Film	100K	1/4W	±5%	
R930	N4705683J-2	Resistor	Carbon Film	68K	1/4W	±5%	
R7001, R7002	N4705103J-2	Resistor	Carbon Film	10K	1/4W	±5%	
R7003, R7004	N4705103J-2	Resistor	Carbon Film	10K	1/4W	±5%	
R7005	N4705103J-2	Resistor	Carbon Film	10K	1/4W	±5%	
T3	N56002246-S	Coil	AM IF	5565105200			
T101	N56002256-S	Coil	FM, Primary	5565204300			
T102	N56002266-S	Coil	FM, Secondary	5565204400			
U101	N89100034-0	Tuner Module	Mitsumi	FE407-A16			
X102	N27030020-0	Ceramic Resonator		CSB456F11			
X909	N23000440-0	Crystal		7.2MHz 20ppm			
Z101, Z102	N27010546-1-0	Ceramic Filter		SFE10.7ML-A			
Z103	N27010066-0	Ceramic Filter		SFZ450G			
Z105, Z106	N56002236-S	Filter Coil	19kHz	10DF01			

SYMBOL NO.	PART NUMBER	DESCRIPTION	REMARKS
<b>DISPLAY</b>			
C700	N150F104Z-5-IU	Capacitor Ceramic 0.1uF +80-20% 50V	
C701	N157C105Z-5-GM	Capacitor Electrolytic 1uF +80-20% 10V	
C702	N15CH220J-5-GG	Capacitor Ceramic 22pF NPO ±5% 50V	
C706	N150F104Z-5-IU	Capacitor Ceramic 0.1uF +80-20% 50V	
C707	N150F681K-5-GG	Capacitor Ceramic 680pF ±10% 50V	
C710	N15CH220J-5-GG	Capacitor Ceramic 22pF NPO ±5% 50V	
CR701	N27030120-0	Ceramic Resonator CSA4.91MG	
D701, D702	N48041480-1	Diode 1N4148	
D703, D704	N48041480-1	Diode 1N4148	
D705, D706	N48041480-1	Diode 1N4148	
D707	N48041480-1	Diode 1N4148	
D713	N37004509-Y	LED 2mm Yellow, FM Stereo	
D714, D715	N37004510-G	LED 2mm Green, Centre Tune, Tune	
D716	N37004509-Y	LED 2mm Yellow, Preset	
D717	N37004510-G	LED 2mm Green, Search	
D718	N37002489-G	LED 3mm Green, Standby	
D720	N48041480-1	Diode 1N4148	
I/R701	N89100033-0	Infrared Receiver, Kodenshi HC-341F	
LCD701	N24600900-0	LCD Varitronix Display	
Q701	N31303440-0	IC TI Controller NAD701-01	
Q702	N31303450-0	IC Xicor EEPROM X24C01	
Q703	N31303420-0	IC Sanyo LCD Driver LC7582A	
Q705, Q706	N4851815Y-5	Transistor 2SC1815-Y	
Q707, Q708	N4851815Y-5	Transistor 2SC1815-Y	
Q709, Q710	N4851815Y-5	Transistor 2SC1815-Y	
Q711, Q712	N4851815Y-5	Transistor 2SC1815-Y	
R701	N4705472J-1	Resistor Carbon Film 4.7K 1/4W ±5%	
R702	N4705104J-1	Resistor Carbon Film 100K 1/4W ±5%	
R704	N4705272J-1	Resistor Carbon Film 2.7K 1/4W ±5%	
R706	N4705103J-1	Resistor Carbon Film 10K 1/4W ±5%	
R707	N4705474J-1	Resistor Carbon Film 470K 1/4W ±5%	
R708	N4705225J-1	Resistor Carbon Film 2.2M 1/4W ±5%	
R709, R710	N4705202J-1	Resistor Carbon Film 2K 1/4W ±5%	
R711	N4705223J-1	Resistor Carbon Film 22K 1/4W ±5%	
R713, R714	N4705561J-1	Resistor Carbon Film 560 1/4W ±5%	
R715	N4705561J-1	Resistor Carbon Film 560 1/4W ±5%	
R716, R717	N4705103J-1	Resistor Carbon Film 10K 1/4W ±5%	
R718, R719	N4705103J-1	Resistor Carbon Film 10K 1/4W ±5%	
R720, R721	N4705103J-1	Resistor Carbon Film 10K 1/4W ±5%	
R722	N4705474J-1	Resistor Carbon Film 470K 1/4W ±5%	
R723, R724	N4705103J-1	Resistor Carbon Film 10K 1/4W ±5%	
R725	N4705103J-1	Resistor Carbon Film 10K 1/4W ±5%	
R728	N4705332J-1	Resistor Carbon Film 3.3K 1/4W ±5%	
R740	N4705103J-1	Resistor Carbon Film 10K 1/4W ±5%	
R744	N4705105J-1	Resistor Carbon Film 1M 1/4W ±5%	
SW702	N52003011-0-01	Switch Tact, 4-Pin mode	
SW709	N52003011-0-01	Switch Tact, 4-Pin store	
<b>CHASSIS</b>			
P501, P502	N21035802-0	AC Outlet 125V 15A UL SMK	AH ▲
R500	N4707275J-1	Resistor Carbon Film 2.7M 1/2W ±5%	AH
S502	N52003031-0 -01	Switch Slide 5.2T22S28G10(TH), Impedance	

# EXPLODED VIEW



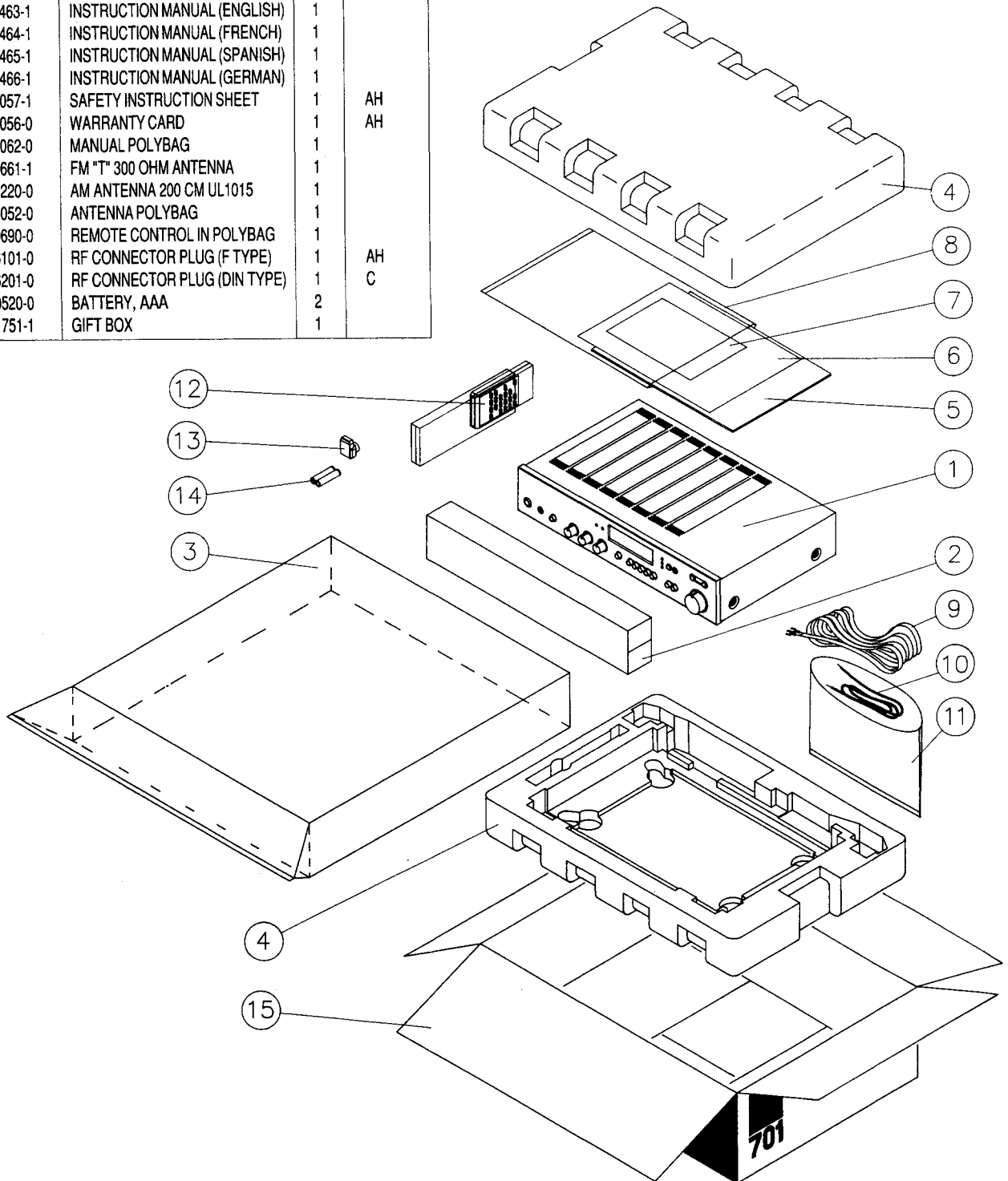
# EXPLODED VIEW PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	N14616511-0	Front Panel	1
2	N24360901-0	Knob, 35 Dia., VOLUME	1
3	N24361101-0	Series Indicator	4
4	N24361001-0	Knob, 18.5 Dia., BASS, TREBLE, BALANCE	3
5	N3714091B-0	Molded Window	1
6	N2436140B-0	Button, 9.5 Dia., Gloss, POWER	1
7	N24361801-0	Spring, Power Button	1
8	N24361601-0	Button, 7.0 Dia., Textured, Black, MODE	1
9	N2436170B-0	Button, 7.0 Dia., Textured, Red, STORE	1
10	N24361503-0	Button, 8.0 Dia., Textured, TUNE	2
11	N24361901-0	Spring, Button	1
12	N41519371-1	Rubber Foot	4
13	N24361301-0	Button, 8 Dia., Long	9
14	N14022060-0	Plate, Front	1
15	N41321031-0	Bracket, Tuner PCB 1mm	1
16	N14022070-0	Plate, Left	1
17	N14022080-1	Plate, Back, C	1
	N14022090-1	Plate, Back, AH	1
18	N14022050-0	Plate, Right	1
19	N14022030-1	Cover, Bottom	1
20	N14022040-0	Bracket, Middle	1
21	N14022020-0	Cover, Top	1
22	N54000651-0	Heatsink, Main	1
23	N54000661-0	Heatsink, Fin	4
24	N54000641-0	Heatsink, Pre-amp Regulator	2
25	N54000671-0	Heatsink, Power Envelope	2
26	N17110361-1	PCB, Main amp	1
27	N17110351-1	PCB, Tuner	1
28		PCB, Volume control (Part of Item 27)	1
29		PCB, Headphone (Part of Item 27)	1
30		PCB, Power switch (Part of Item 27)	1
31		PCB, Tune (Part of Item 27)	1
32		PCB, NAD link (Part of Item 27)	1
33		PCB, Speaker terminal (Part of Item 27)	1
34		PCB, Phono/line switch (Part of Item 27)	1
35		PCB, Lamp (Part of Item 27)	1
36		PCB, Relay (Part of Item 27)	1
37	N17110371-1	PCB, Display	1
38	N18062095-0	Transformer, EI67	1
39	N18062096-0	Transformer, EI35	1
40	N47503506-2	VR-BASS 50K-CX2	1
41	N47503486-0	VR-TREBLE 10K-CX2	1
42	N47503496-0	VR-BALANCE 20K-W	1
43	N52002081-0-01	Push Button Sw. 2P2J Alps 1 Key, EXTRA SPEAKERS	1
44	N52002071-0-01	Push Sw. 12.5mmX12.5mm 6 Keys, INPUT SELECTOR	1
45	N52002041-0-01	Push Sw. 2S2S(SPUF21)Alps 2 Keys, MONO/LOUDNESS	1
46	N52003031-0-01	Slide Switch, 5.2T22S28G10(TH), IMPEDANCE	1
47	N21035802-0	AC Outlet, AH	2
48	N70093110-0	AC Cord (SEMKO), C	1
49	N70093100-0	AC Cord 18AWGX2 Polarized UL/CSA, AH	1
50	N41519461-0	Strain Relief Bushing	1
51	N41519431-0	Plate, Switch, 0.5PVC Clear	1
52	N41321021-0	Bar, Shorting	2
53		Stud (Part of Thumbscrew Assy N41321181-0)	1
54		Bushing (Part of Thumbscrew Assy)	1
55		Washer (Part of Thumbscrew Assy)	1
56		External Tooth Washer (Part of Thumbscrew Assy)	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
57		Soldering Tag (Part of Thumbscrew Assy)	1
58		M3.5X0.5P, Hex Nut (Part of Thumbscrew Assy)	1
59		M2.6X0.45X5, Black (Part of Item 60)	1
60	N41321041-0	Post-PCB Assy, Brass M2.6X0.45P	1
61		Split Washer (Part of Item 60)	1
62		M2.6 Hex Nut (Part of Item 60)	1
63	N28422865-0	Washer, D2.8X6.5X0.5	5
64	N41519391-0	Support, Circuit Board	3
65	N41519361-0	Cushion, Transformer	4
66	N41519381-0	Foam Sheet	1
67	N41519411-0	Cushion, 130X10X1mm	2
68	N14541451-0	Plate Shield, 0.4mm	1
69		Hex Nut, VR	4
70		Washer, VR	4
71	N28361210-0	M12X1.0P, Hex Cap	1
72	N28421218-0	Metal Washer, ID=12.0, OD=18.0	1
73	N24600900-0	LCD, Varitronix Display	1
74	N37141006-0	Diffuser Lens, 1mm PC Sheet	1
75	N3714110B-0	Lee Filter, NO217, Blue Diffuser	1
76	N3714120B-0	Lee Filter, NO224, Blue Frost	1
77	N21502171-1	Lightbox (White Reflector)	1
78	N41519441-0	Hinge	2
79	N89100031-0	T.S-110 PTH9M04BC471TS2F333	1
80	N41519451-0	Power Terminal Cover Plate	1
81	N52002091-0-01	Soft Clipping Switch	1
82	N41321171-0	Soldering Tag	2
83	N41317701-0	Soldering Tag	1
84	N29243006-3000	T3X6mm, Self Tapping	24
85	N29243008-3000	T3X8mm, Self Tapping	11
86	N29443006-3000	Self Tapping Screw, 3X6mm	18
87	N29043008-3000	M3X0.5PX8mm, Black	2
88	N29003006-4010	M3X0.5PX6mm with Flat Washer	1
89	N29443006-4000	Self Tapping Screw, T3X6mm, Nickel	3
90	N29043004-4000	M3X0.5PX4mm, Nickel	1
91	N29043006-3000	Machine Screw, M3.0X6mm	2
92	N29043006-4000	M3x0.5PX6mm, Nickel	6
93	N29043008-4000	Machine Screw, M3X0.5PX8, Nickel	11
94	N29043012-4020	Machine Screw, M3X0.5Px12 with Spring Washer	8
95	N29043012-4000	Machine Screw, M3X0.5PX12	2
96	N29004006-3010	M4X0.7PX6mm with Flat Washer	8
97	N29042004-3000	Machine Screw, M2X0.4PX4, Black	2
98	N28363005-0	M3.0X0.5P Hex Nut	18
99	N28423210-0	Washer, ID=3.2, OD=10	2
100	N28450321-0	M3 Teeth Washer, External Type	8
101	N41519421-0	Tube Insulation	8
102	N54000681-0	Regulator Heatsink	1
103	N31003011-0	Mica Sheet (MJ2955)	4
104	N31003041-0	Mica Sheet TO-126	2

# PACKING DIAGRAM

ITEM	PART NUMBER	NAME	QTY.	REMARKS
1		COMPONENT	1	
2	N14971082-0	EPE BAG	1	
3	N14971072-0	UNIT POLYBAG	1	
4	N14901483-0	POLYFOAM	2	
5	N43013450-1	INSTRUCTION MANUAL COVER	1	
	N43013463-1	INSTRUCTION MANUAL (ENGLISH)	1	
	N43013464-1	INSTRUCTION MANUAL (FRENCH)	1	
	N43013465-1	INSTRUCTION MANUAL (SPANISH)	1	
	N43013466-1	INSTRUCTION MANUAL (GERMAN)	1	
6	N30301057-1	SAFETY INSTRUCTION SHEET	1	AH
7	N30301056-0	WARRANTY CARD	1	AH
8	N14971062-0	MANUAL POLYBAG	1	
9	N21070661-1	FM "T" 300 OHM ANTENNA	1	
10	N70093220-0	AM ANTENNA 200 CM UL1015	1	
11	N14970052-0	ANTENNA POLYBAG	1	
12	N89000690-0	REMOTE CONTROL IN POLYBAG	1	
13	N21036101-0	RF CONNECTOR PLUG (F TYPE)	1	AH
	N21036201-0	RF CONNECTOR PLUG (DIN TYPE)	1	C
14	N40600520-0	BATTERY, AAA	2	
15	N14501751-1	GIFT BOX	1	



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# SERVICE MANUAL

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**701**  
**AM/FM STEREO**  
**RECEIVER**

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