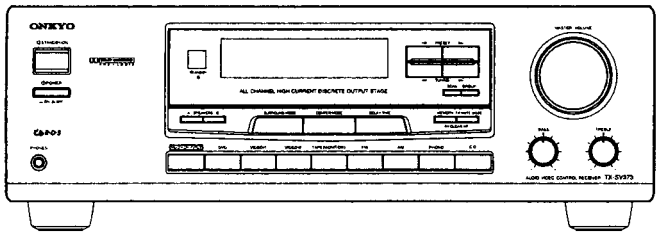
Ref. No.3616

ONKYO® SERVICE MANUAL

AUDIO VIDEO CONTROL RECEIVER

MODEL TX-SV373



Black model

BMDN	120V AC, 60Hz
BMP,BMPT	230V AC, 50Hz
BMWT,BMWR	220-230V/120V AC, 50/60Hz

Black and Golden models

BMWT,BMWR,GMWT,GMWR	220-230V/120V AC, 50/60Hz

SAFETY-RELATED COMPONENT WARNING!!

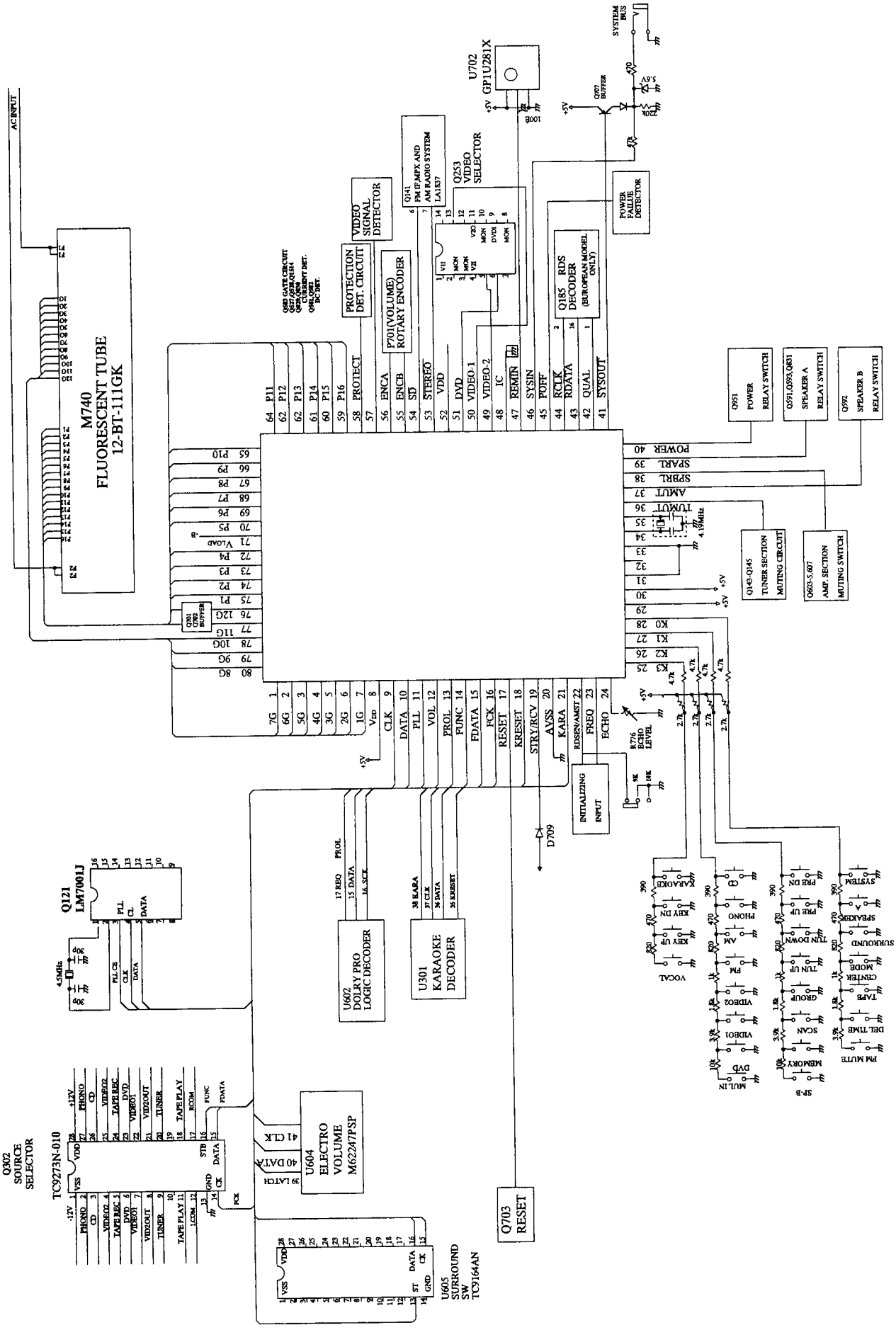
COMPONENTS IDENTIFIED BY MARK ⚠ ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

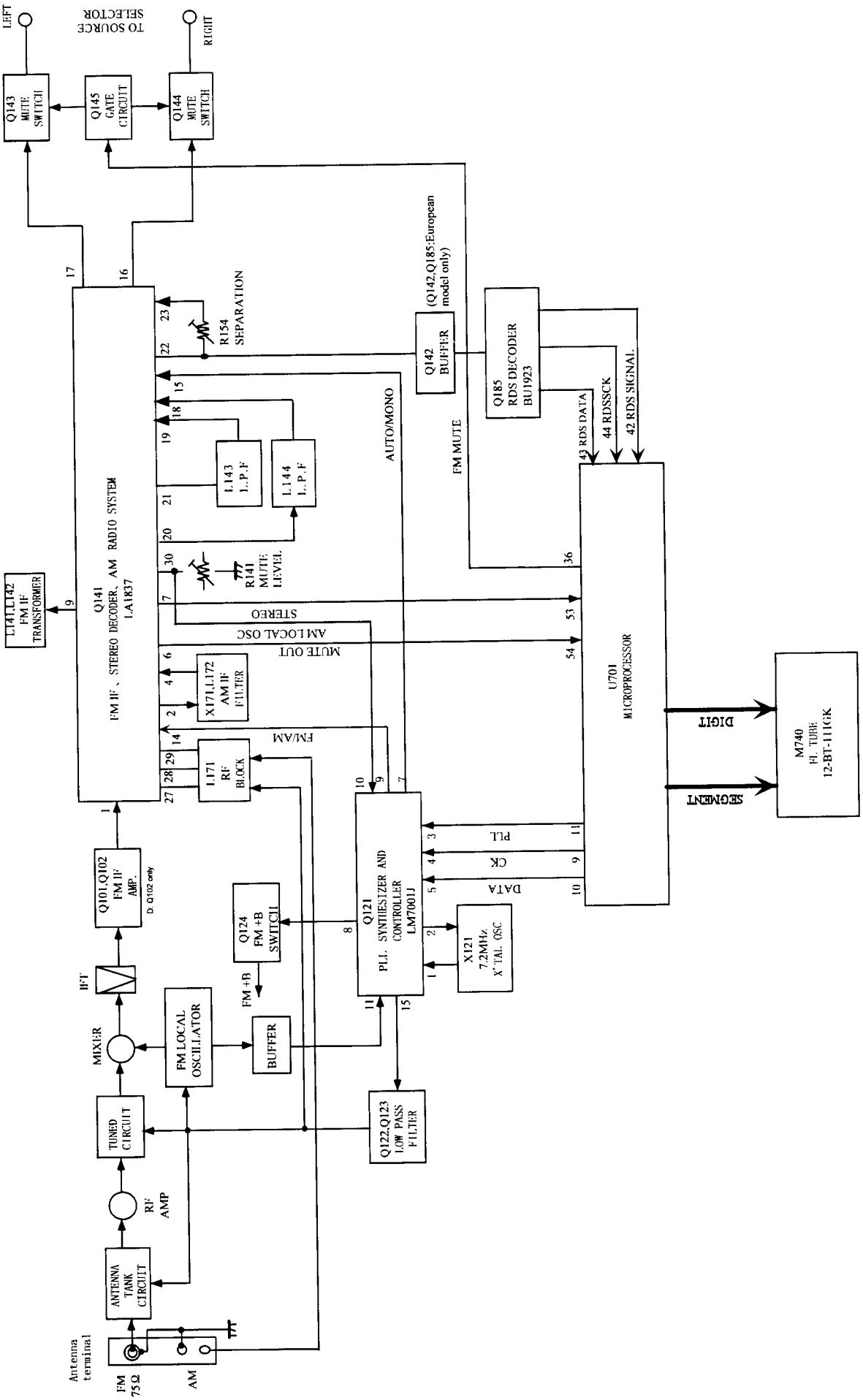
ONKYO®
AUDIO COMPONENTS

TABLE OF CONTENTS

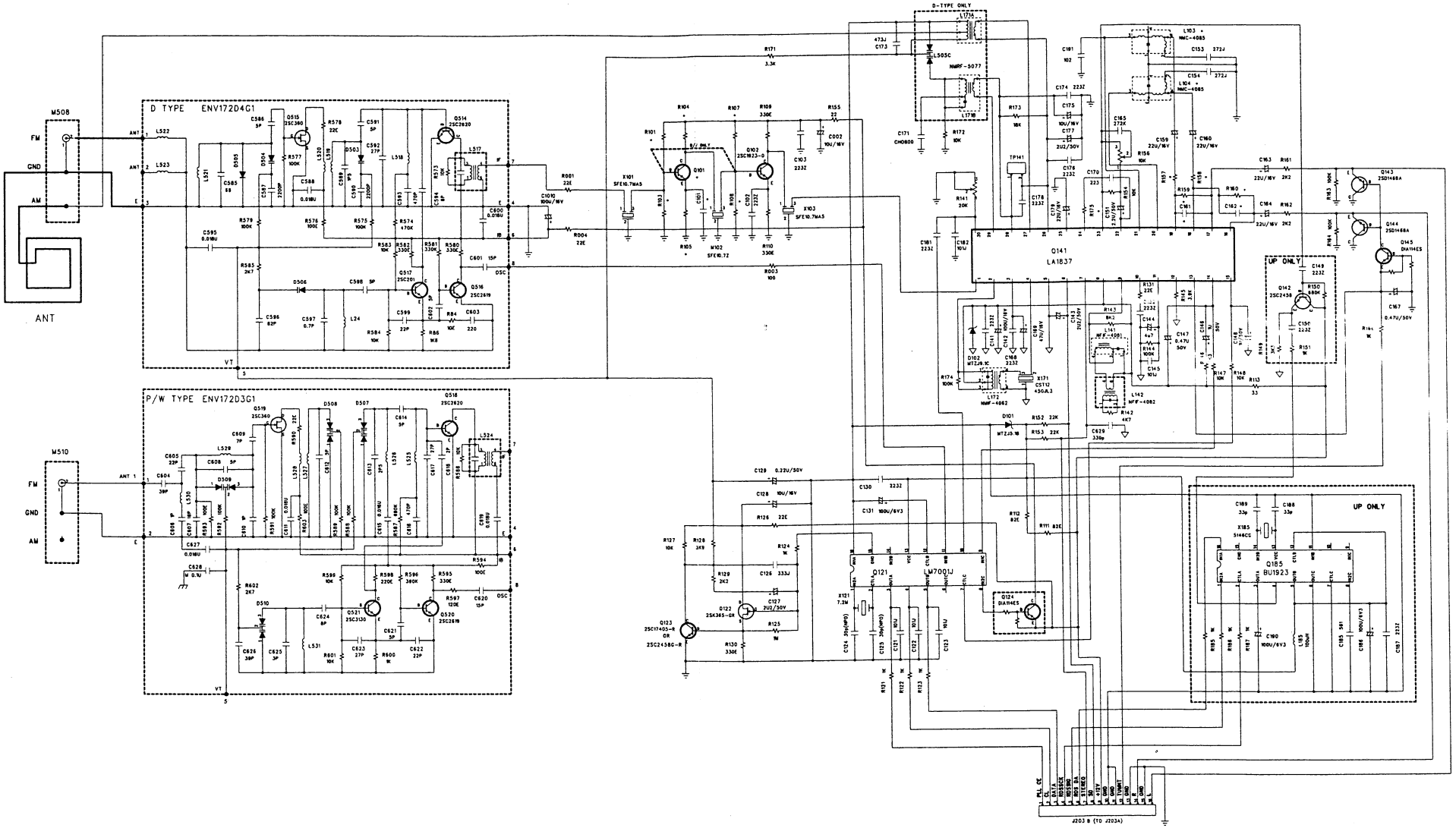
MICROPROCESSOR-CONNECTION DIAGRAM



BLOCK DIAGRAM
TUNER SECTION



SCHEMATIC DIAGRAM



	R101	R104	R107	R103	R105	R108	R175	R159	R160	C101	C161	C162	Q101	R157	R158	J157	J111
UD	3K3	–	–	1K	–	–	33K	68K	68K	–	332	332	–	3K3	3K3	NO	YES
UP	33K	330	3K3	12K	680	470	56K	330K	330K	223	152	152	2SC945A-P	2K7	2K7	YES	NO
UWT	33K	330	3K3	12K	680	470	56K	330K	330K	223	182	182	2SC945A-P	2K7	2K7	YES	NO

Preparation

1. Input

FM mono: 1kHz, 75kHz devi., 60dB/μV

FM stereo: 1kHz, 67.5kHz devi., 60dB/μV

Pilot signal 19kHz, 7.5kHz devi.

AM: 400Hz, 30% mod.

2. Outputs

Connect the non-inductive type resistor of 8 ohms to the all speaker terminals unless otherwise noted.

FM Adjustment

Item	Step	Connection of instrument	FM SG output	Stereo modulator output	Tuning frequency	Output indicator	Adjustment point	Adjust for	Remarks
FM IF/RF	1	Fig.1	99.0MHz 1kHz 75kHz devi. 65dBf(60dB)	—	99.0MHz	DC voltmeter	L141	0±20mV	FM MUTE/MODE switch:ON/STEREO Repeat the steps 1 and 3 until no further adjustment is necessary.
	2					AC voltmeter	IFT on the front end	Maximum	
	3					Distortion analyzer	L142	Minimum	
Stereo Distortion		Fig.2	99.0MHz Ext. mod. 65dBf(60dB)	Channel L or R 1kHz	99.0MHz	Distortion analyzer	IFT on the front end	Minimum	Don't turn more than ±180°
Stereo Separation	1	Fig.2	99.0MHz Ext. mod. 65dBf(60dB)	Channel L 1kHz	99.0MHz	Channel R AC voltmeter	R156	Minimum	Maximum and same separation
	2			Channel R 1kHz		Channel L AC voltmeter		Minimum	
Muting Level		Fig.3	99.0MHz 19.2dBf(14dB)	—	99.0MHz	Oscilloscope or TUNED indicator	R141	Signal output or light on	

AM adjustment

120V model

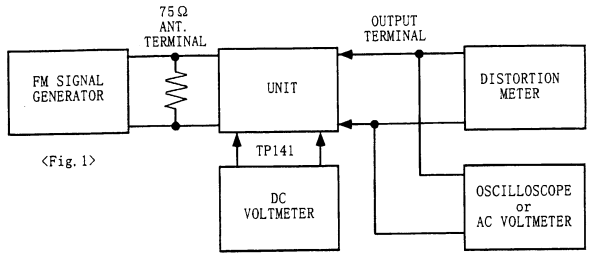
Step	AM SG output	Tuning Frequency	Output Indicator	Adjustment point	Adjust for
1		530kHz	Digital DC voltmeter	OSC coil on RF block L171	1.4±0.2V
2	600kHz 400Hz 30% mod. 60dB/m	600kHz	AC voltmeter	RF coil on RF block L171	Maximum
3	990kHz 400Hz 30% mod. 60dB/m	990kHz	AC voltmeter	L172	Maximum

Reference Specification
FM tuned voltage: 87.5MHz~108.0MHz
More than 1.3V~Less than 9.0V
AM tuned voltage: 530kHz~1710kHz
1.4±0.5V~Less than 9.0V

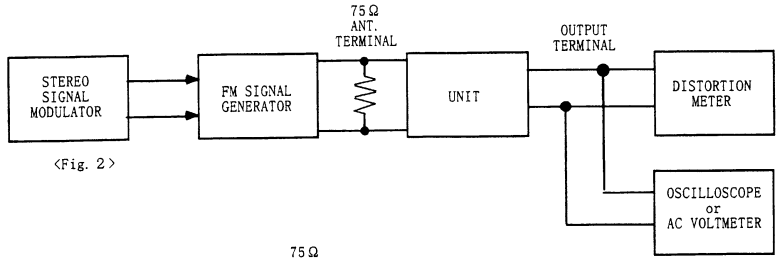
230V and worldwide models

Step	AM SG output	Tuning Frequency	Output Indicator	Adjustment point	Adjust for
1		522kHz or 531kHz	Digital DC voltmeter	OSC coil on RF block L171	1.4±0.2V
2	603kHz 400Hz 30% mod. 60dB/m	603kHz	AC voltmeter	RF coil on RF block L171	Maximum
3	999kHz 400Hz 30% mod. 60dB/m	999kHz	AC voltmeter	L172	Maximum

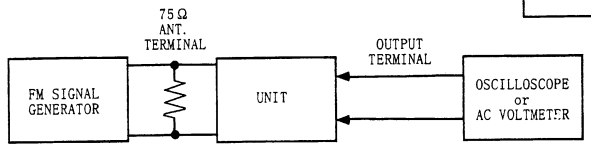
Reference Specification
FM tuned voltage: 87.5MHz~108.0MHz
more than 1.3V ~Less than 9V
AM tuned voltage: 522kHz~1611kHz
1.4±0.2V~Less than 9.0V
(230V model)
AM tuned voltage: 531kHz~1602kHz
1.4±0.2V~Less than 9.0V
(Worldwide model)



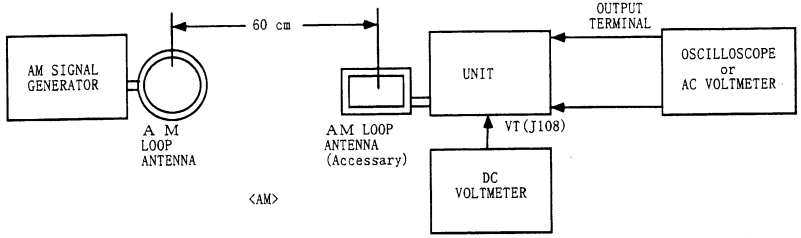
<Fig. 1>



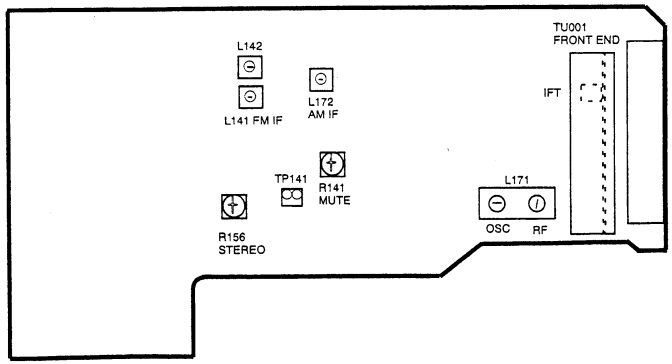
<Fig. 2>



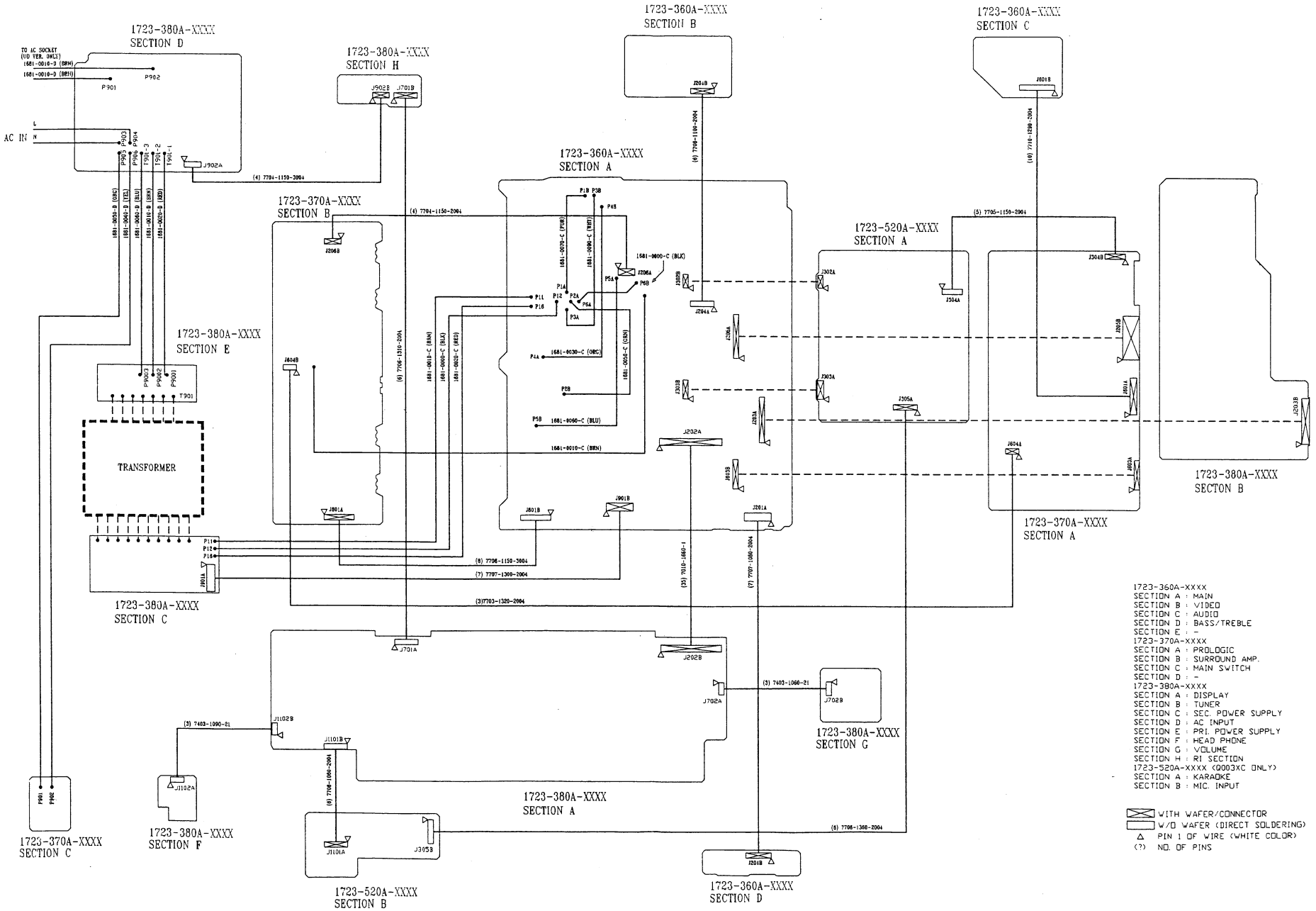
<Fig. 3>



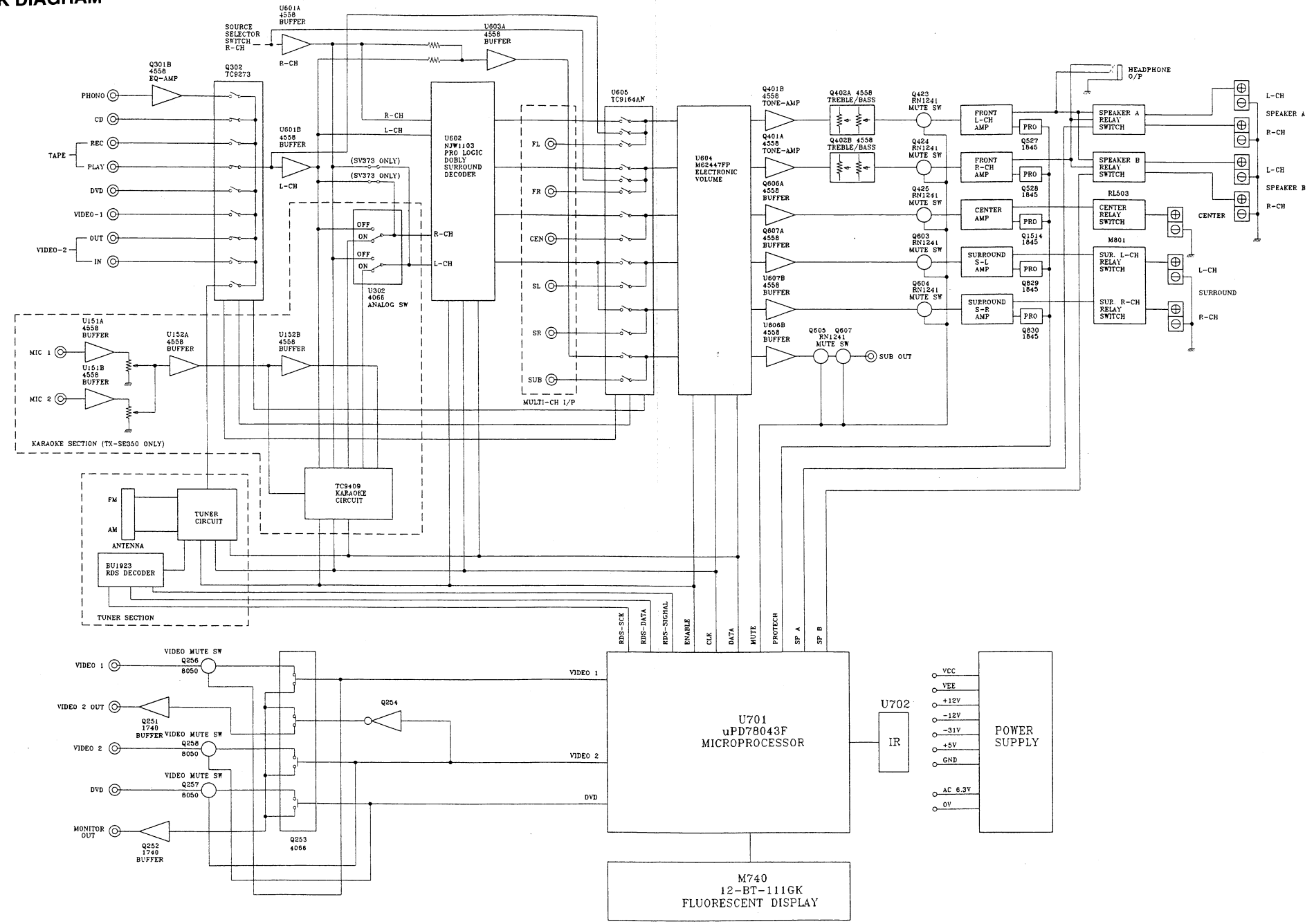
<AM>



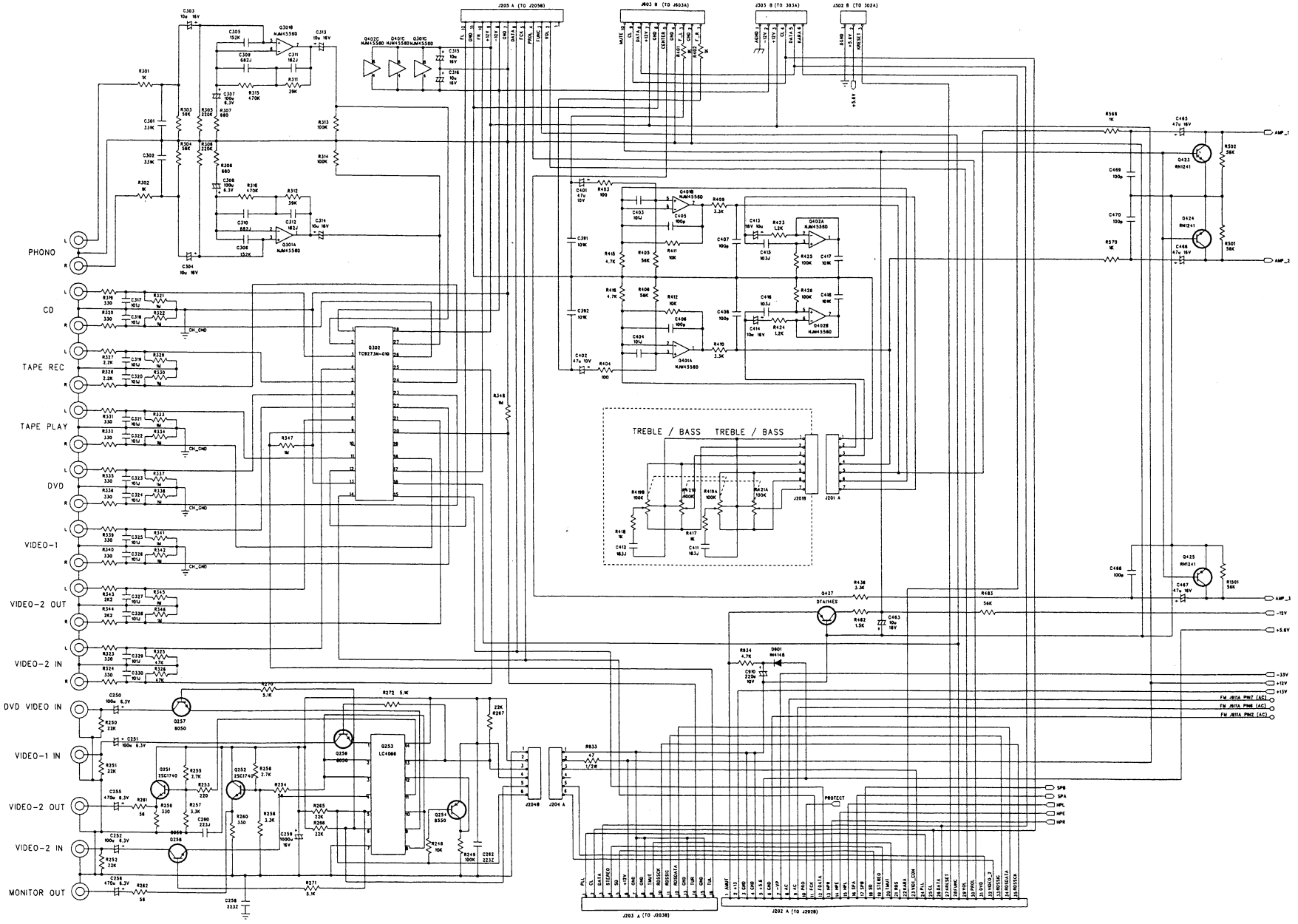
WIRING WIEW


1723-380A-XXXX
SECTION D
1723-380A-XXXX
SECTION H
1723-360A-XXXX
SECTION B
1723-360A-XXXX
SECTION C
1723-360A-XXXX
SECTION A
1723-370A-XXXX
SECTION B
1723-520A-XXXX
SECTION A
1723-380A-XXXX
SECTION E
1723-380A-XXXX
SECTON B
1723-370A-XXXX
SECTION A
TRANSFORMER
1723-380A-XXXX
SECTION C
1723-380A-XXXX
SECTION G
1723-380A-XXXX
SECTION A
1723-370A-XXXX
SECTION C
1723-380A-XXXX
SECTION F
1723-520A-XXXX
SECTION B
1723-360A-XXXX
SECTION D
AC IN
1723-360A-XXXX
SECTION A : MAIN
SECTION B : VIDEO
SECTION C : AUDIO
SECTION D : BASS/TREBLE
SECTION E : -
1723-370A-XXXX
SECTION A : PROLOGIC
SECTION B : SURROUND AMP.
SECTION C : MAIN SWITCH
SECTION D : -
1723-380A-XXXX
SECTION A : DISPLAY
SECTION B : TUNER
SECTION C : SEC. POWER SUPPLY
SECTION D : AC INPUT
SECTION E : PRI. POWER SUPPLY
SECTION F : HEAD PHONE
SECTION G : VOLUME
SECTION H : RI SECTION
1723-520A-XXXX (Q003XC ONLY)
SECTION A : KARAOKE
SECTION B : MIC. INPUT
WITH WAFER/CONNECTOR
W/O WAFER (DIRECT SOLDERING)
PIN 1 OF WIRE (WHITE COLOR)
(?) NO. OF PINS

BLOCK DIAGRAM



SCHEMATIC DIAGRAM



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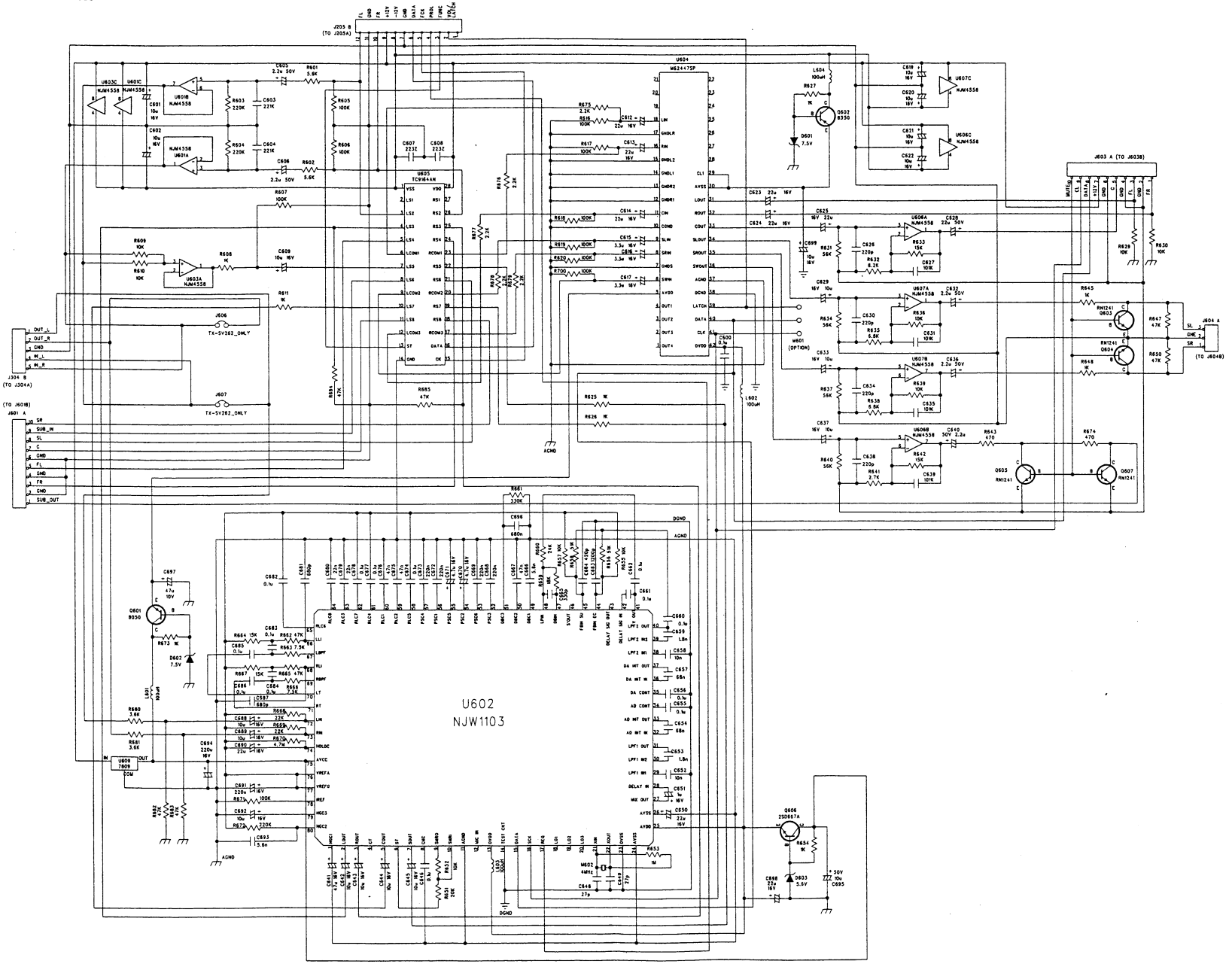
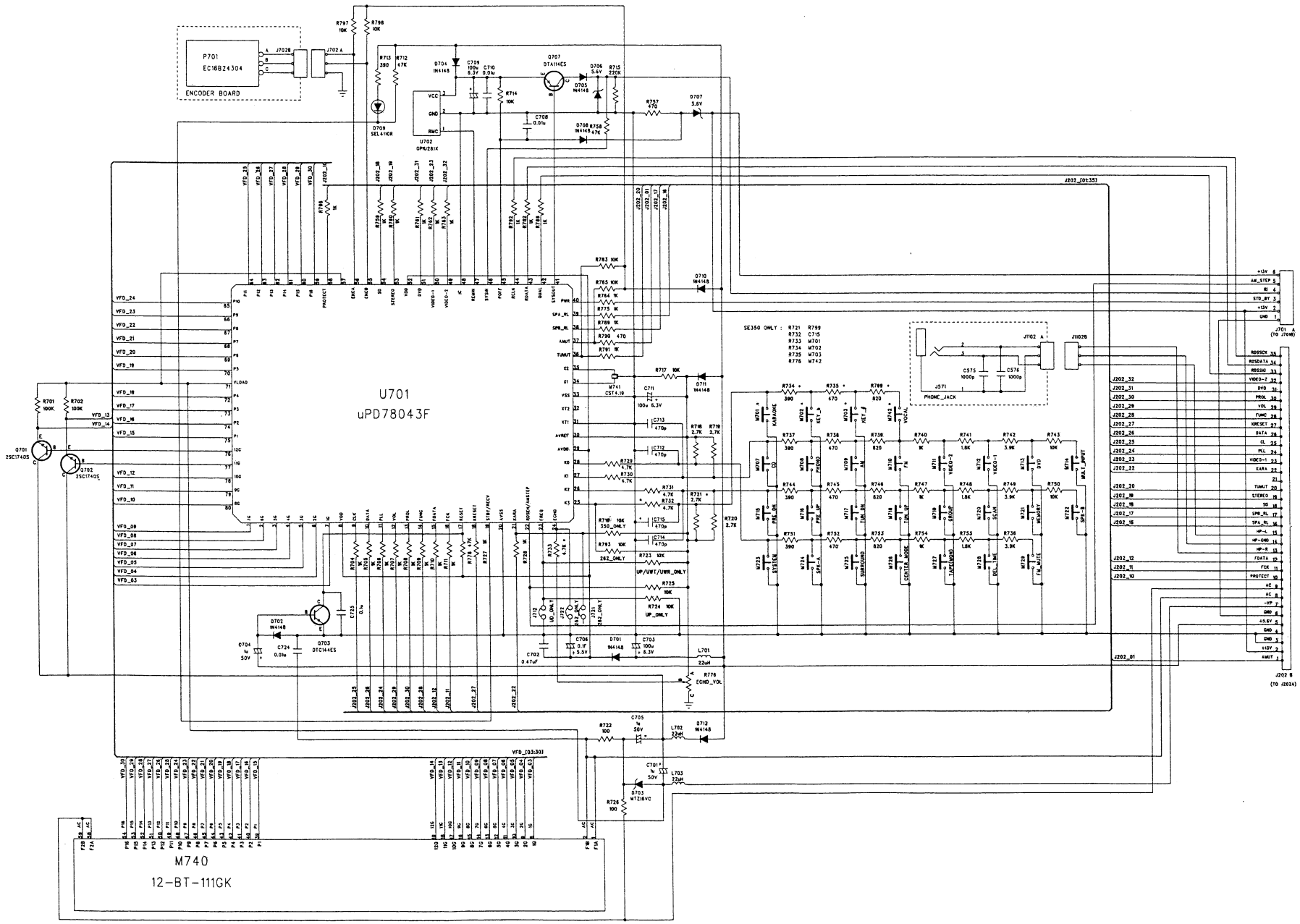
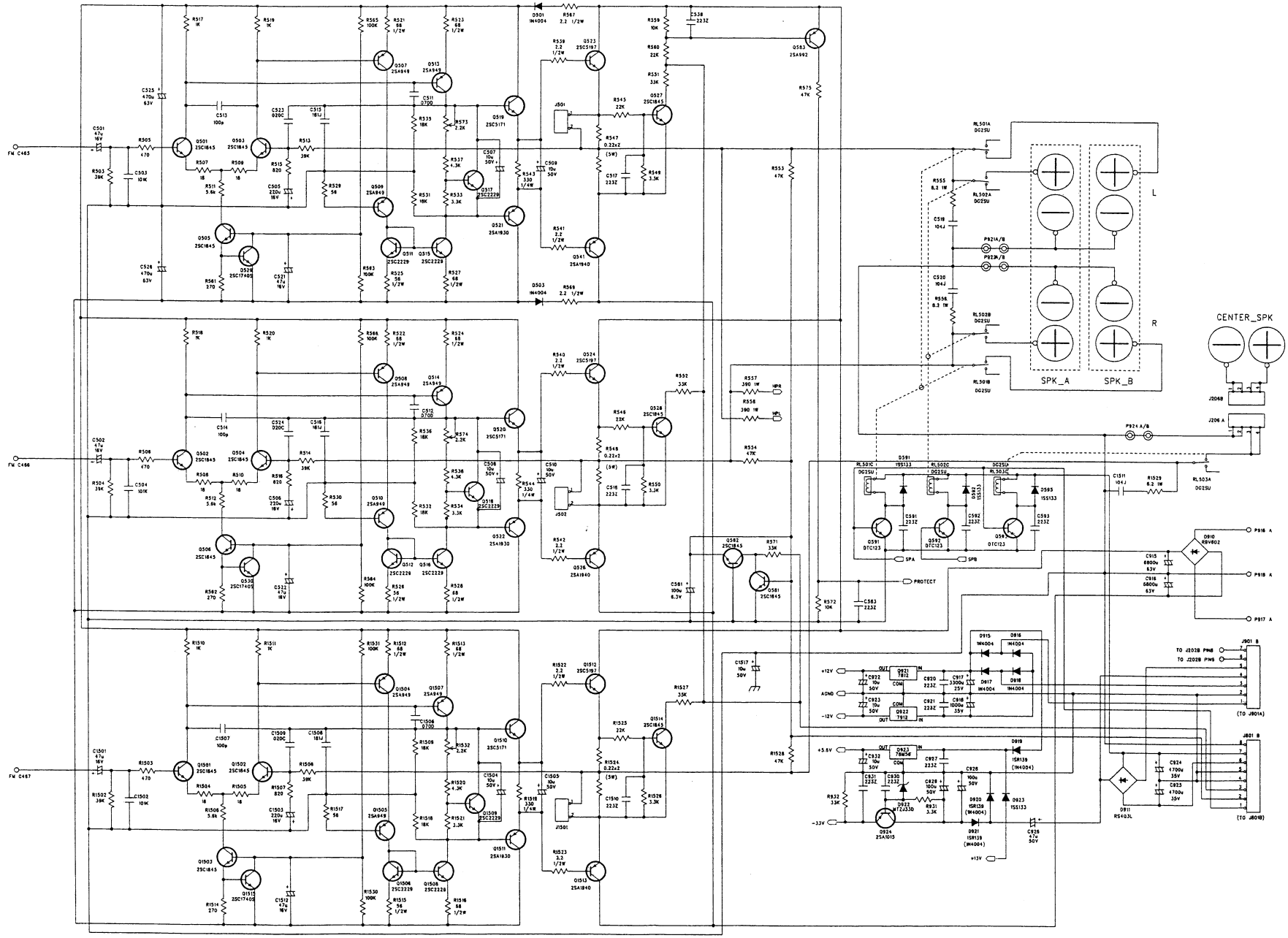


SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM



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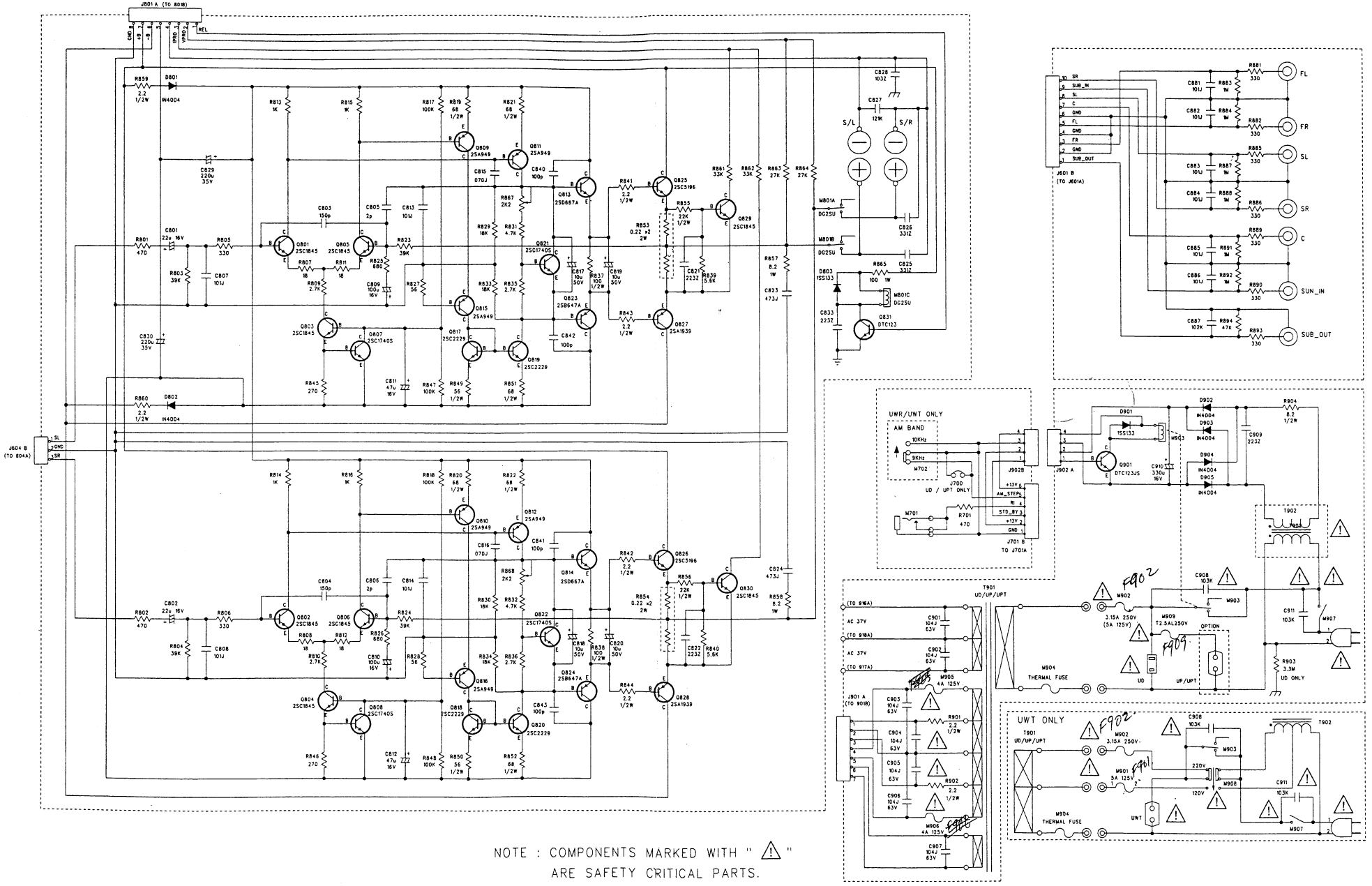

NOTE : COMPONENTS MARKED WITH " ⚠ "
ARE SAFETY CRITICAL PARTS.

ONKYO USA CORPORATION

12/08/2000

Model: TX-SV373

Correction: Error in Print and adjustment Procedure on page 16 .

Before Correction

ADJUSTMENT PROCEDURES

Fig1

Idling current adjustment

Before Idling adjustment, turn the trimming resistors R573, R574, R867, R868 and R1532 to counter clockwise.
Connect the DC voltmeter to sockets J501, J502, TP801, TP802 and J1501.
After turn POWER to ON, adjust the trimming resistors R573, R574, R867, R868 and R1532 so that the reading of voltmeter becomes 0.5±0.2mV.
After adjustment, attach the top cover.
Confirm the voltage of above points after five minutes.
Readjust the above resistors so that the voltage becomes 0.5±0.2mV.
Note: No load and No signal

After Correction

ADJUSTMENT PROCEDURES

Fig2

Idling current adjustment

Before Idling adjustment, turn the trimming resistors R573, R574, R867, R868 and R1532 to counter clockwise.
Connect the DC voltmeter to sockets J501, J502, TP801, TP802 and J1501.
After turn POWER to ON, adjust the trimming resistors R573, R574, R867, R868 and R1532 so that the reading of voltmeter becomes 5mV ± 2mV
After adjustment, attach the top cover.
Confirm the voltage of above points after five minutes.
Readjust the above resistors so that the voltage becomes 5mV ± 2mV
Note: No load and No signal