SERVICE MANUAL

Contents

Attention: This maintenance manual is only intended for the professional maintenance personnel to take reference with. Before repairing TV set please carefully read the following points of attention.

Safety Instruction

Before fixing and aligning this set, please read the following “Points of attention for Safety “, “Points of attention for Safety of Components” and “X-ray Radiation Protection“.

Points of attention for Safety

1. Because the city power is connected directly to the hot earth of power supply PCB, in order to avoid electric shock or damage to instruments, an isolate transformer must be applied during the fixing procedure.
2. Before moving the CRT, graphite layer conductor must be discharged.
3. Before replacing any components, the power plug must be taken out from the power supply socket.
4. Before replacing large power resistor, 10mm high must be kept between resistor and PCB.

Points of attention for the components safety

There are many electric and mechanical components on the PCB that are related with the safety features. These features are not easily visible. Replacement parts that have special safety characteristic are indicated in the Instruction Manual. Electric components with such features will be labeled with shadow or labeled with ⚠ in the detail list. When changing these components, please refer to the detail list in the manual. Components that have different specification from that in the detail list may not have the same safety features. They may cause electric shock, fire, increase of X-ray radiation or other damage.

1. Safety instruction

Before fixing or aligning this set, please read the following “ X-ray radiation protection”, “Safety measures” and “Points of attention for products”.

1.1 X-ray radiation protection

1.1.1 Too high voltage will produce radiation harmful to human health. To avoid such risk, the high voltage should be regulated within the limited value. For 25”, the normal value of beam current should be 26.5 kV at 1.3 mA, for 29”, 29kV at1.4 mA and for 29” pure flat TV set, 30kV.

Under any circumstances, the high voltage should not exceed 31kV (25”), 33 kV (29”), 35kV

(29” pure flat). When the TV set needs to be fixed, please follow the inspection procedures of high voltage in item 4.11 under this instruction ”Inspection of high voltage”. It is suggested that the value of high voltage be recorded as part of maintenance work. It is most essential at the same time to use precise and dependable high voltage meter.

1.1.2 This set is equipped with X-ray over radiation (FS) protection circuit to prevent over radiation of X-ray in the case of abnormal increase of B+ voltage in the set. Whenever fixing the set, FS circuit must be checked according to the inspection procedures as in item 4.11.5 of this instruction, ”X-ray radiation protection test” to make sure the circuit functions well.

1.1.3 The only source of TV set producing X-ray is CRT. To avoid X-ray radiation during the whole process, the exact same type of CRT designated in the detail list must be replaced, when there is a need to change CRT.

1.1.4 When deciding on the same type of 4, as some components of this TV set are related to the safety characteristic, please read the “Points of attention for products safety” before changing the components, for the sake of safety.

1.2 Safety measures

1.2.1 When the TV set is working, the high voltage will be as high as approximately 31kV. When adjusting the set after removing the cover or opening the back cabinet there will be risk of electric shock, so

a) Before detaching the anode cap, please discharge it several times by grounding the anode of CRT to earth many times to avoid electric shock.

b) Before moving the CRT, its anode must be thoroughly discharged. The CRT is a high vacuum part. Once broken, its fragments will fly out violently. Therefore it must be very careful in dismantling and loading it.

1.2.2 There are a lot of electronic and mechanical components in PCB that have safety related features. They are indicated with shadow in the circuit diagram. Please carefully read the detail list before changing these components.

1.2.3 If the fuse is blown, please change it for the one designated in the list of components.

1.2.4 When changing resistors of 1w or bigger than 1w in PCB, make sure to separate them from the PCB by10 mm.

1.2.5 Make sure that the wire stays far away from the high voltage or high temperature components.

1.2.6 Check for the AC leakage current of the metal components exposed out of the cover such as antenna terminal, screw, metal surface and control axis. Make sure that the cabinet of TV set is absolutely safe in operation, free from any risk in electric shock. Insert the power supply plug directly into the 220v AV socket (No isolate transformer will be applied during the test). Use an AC voltage meter with sensitivity of 5 kΩ or higher per volt to measure the leakage current according to the following steps:

First, connect in parallel a resistor of1.5 kΩ,10 W resistor and a 0.15 μF capacitor (AC type)

between the known good earthing connector (such as underground metal tube) and the exposed metal parts out of the cabinet. Measure AC voltage across both terminals. Then exchange the two pins of AC before re-measuring every exposed metal parts. The measured value of voltage should not exceed 0.3V effective value, which corresponds to current.0.2mA If the value exceeds this specified value, aligning must be made at once.

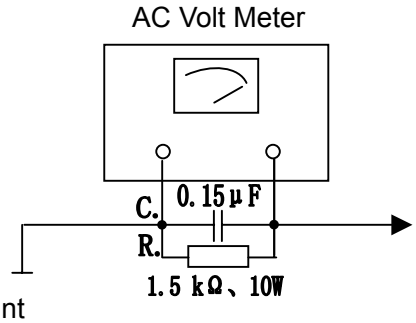


Figure 1

1.2. 7 DC voltage breakdown test

The following touchable parts must be subject to 1s anti voltage test before packing. The voltage is applied between the plug pin of the power supply and the exposed metal parts for the test and the volt value should be AC 3000V.

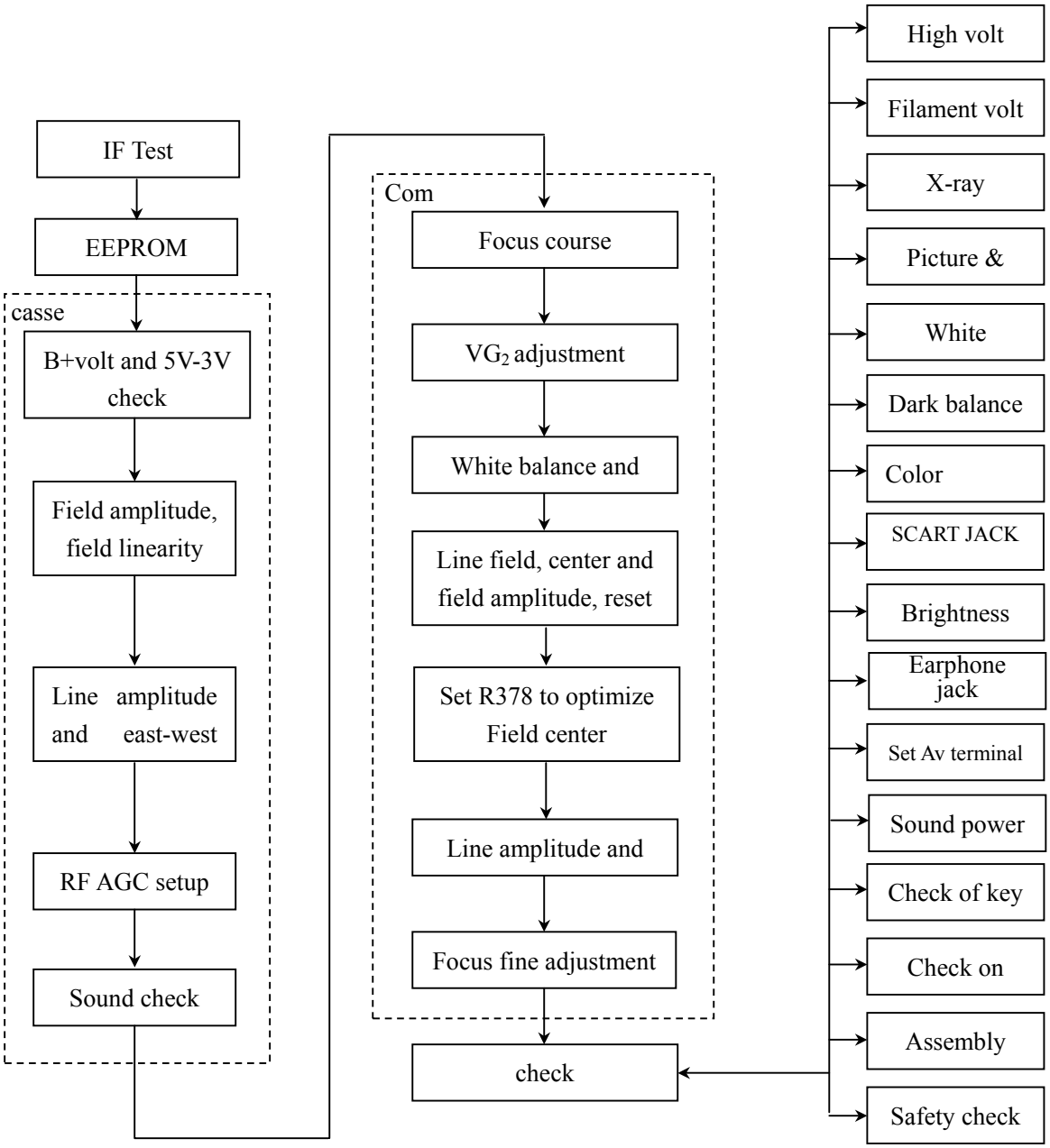
Parts designation:	Position:
Antenna terminal	Back cover
External cover screw	Back cover
AV interface	Back cover, sides

1.3 Points of attention for product safety

There are many electric and mechanical parts in this PCB that are related to safety. However, they are often neglected from visual look. For changing the high voltage and high power parts, very often it's impossible to provide them with effective "X-ray radiation" protection. All these exchange parts with safety characteristic are designated in the detail list. All the electronic parts with such characteristics are indicated with shadow in the circuit diagram.

When changing these parts, please carefully check the detail list.

2 Flow chart of Adjustment and aligning



See Fig.2

3. Alignment Equipment

3.1 DC Current Stabilizer Power Supply PAB18-1.8

3.2 Audio Frequency Voltage Meter

3.3 Oscillograph

3.4 High Voltage Meter

3.5 Digital Multi-meter

3.6 AC breakdown test meter

3.7 IFT Signal Gene

4. Alignment Instruction

4.1 Factory Alignment Methods

4.1.1 Push composed keys → --/--- → to enter factory menu.

4.1.2 There are totally three pages of factory menu. Turn the page by pushing “MENU”, Move the items by CH+/CH- key, Adjust the value by VOL+/VOL-. After adjustment, push “OK” for save.

4.1.3 The method to quit factory menu: Under the item VCT in SERVICE XOCECO-50 Hz, push EXIT: OK

4.2 IF amplifier alignment

a) Connect the positive pole of TP5. C219 to DC 5v, TP2 or TP7 to positive pole DC 8v, TP6 to earth, TP4 to multi-meter.

b) Connect 38.9M, PAL DK IF signal to TP1 through 1000p capacitor, adjust IFT L102 with zero inductance screwdriver, to make the readout of multi-meter as 2.5V±0.1 V.

c) Connect 33.9M SECAM L IF signal to TP1 through 1000P capacitor, apply voltage 5v at TP1, TP3, TP8, adjust RP101 with zero inductance screwdriver, to make the readout of multi-meter as 2.5V±0.1 V.

d) After adjustment, connect the IF line disconnect point of tuner, seal L102 with wax, point glue RP 101.

4.3 B+ confirmation

Determine the B+ voltage by DC meter, DC 200V (C503 two poles) , the value should be 135 V±0.5.

4.4 AGC adjustment

4.4.1 Receive D-8 signal 60db, determine the voltage of positive testing pole of C114 with DC voltage meter.

4.4.2 Adjust potentiometer RP107, to make the voltage readout of voltage meter to be 4.1 V± 0.1V.

4.4.3 Input 100db from antenna, and the picture should not appear as asynchronized and distorted. Input 35db-40db weak signal, and the color should not disappear, the picture should be synchronized, and the sound is normal.

4.5 Sound inspection

4.5.1 Receive 1kHz sound signal 100% modulated and connect X701 with 8Ω false resistances (load). Connect sound voltage meter and Oscillograph to two poles of the false resistances.

4.5.2 Turn the sound to the biggest volume. Balance the sound and set the high/low sound to the middle, MSS OFF, DBE OFF, and the sound power should be ≥7 W×2（about 7.5 Vrms）, distortion≤7% (A slight peak cutting at maximum sound sine wave is allowed.）

4.6 Alignment of focus potentiometer

4.6.1 Pre-warm the TV set for 30 minutes.

4.6.2 Receive the signal from testing card.

4.6.3 Push the key of picture mode to place analog in “dynamic”.

4.6.4 Adjust potentiometer of FOCUS on the FBT to make the picture to be best focused.

4.7 Alignment of line center

4.7.1 Receive 50 HZ signal from video head.

4.7.2 Enter the factory menu RGB HOR. POSITION item under AV status, adjust amplitude of RGB, and make the picture to be symmetry. Then save.

4.7.3 Receive 60Hz video signal and enter the factory menu RGB HOR.POSITION item under AV status. The adjusting method of POSITION is same as 4.7.1～4.7.2.

4.7.4 Adjust separately under following four modes

a）50 Hz 4: 3;

b）60 Hz 4: 3;

Of which Vert position is unnecessary for readjustment after setup at the initial value. Adjust the value of R378 to optimize it (set it up during the production in the factory).

4.8 Field amplitude, field S alignment, field center, line amplitude, E/W alignment etc.

Enter the corresponding item of factory menu and adjust the geometric distortion until accepted.

Hor Amplitude

Cushion

Trapeze

Angle

Bow

Hor Symmetry

Hor Corners

Vert position

Vert Amplitude

Vert S-Correction

Vert S-Symmetry

The adjustment result should satisfy the scan linear geometric distortion and over scan (rate of recurrence)

4.9 Adjustment of screen-grid Focus and VG2

4.9.1 Adjust FBT Focus pole potentiometer until picture is clear.

4.9.2 Enter factory menu Cathode current (G2) item, (AV should be kept empty then), push VOL+, change to bright horizontal line and adjust the potentiometer of the line pack acceleration pole in such a way that the bight horizontal line becomes slightly bright.

4.10 White Balance Adjustment

4.10.1 Enter “Cutoff ref” adjustment of factory menu. It’s enough only to fine adjust the dark balance. Under 4.5 Niete, color temperature 12000K+8MPCD（X=0.270，Y=0.283）.

4.10.2 Enter Drive ref item adjustment of factory menu. The bright balance will be automatically adjusted at a certain white coordinate place. Under 60 Niete, color temperature 2000K+8MPCD（X=0.270，Y=0.283）.

4.11 Inspection of the high voltage and filament voltage

4. 11. 1 Connect high voltmeter between the high voltage cap and the earth. Measure the filament voltage with an actual value and effective voltage meter.

4.11.2 Receive D35 signal, set the picture mode at “dynamic”, and measure the high voltage and filament voltage. The voltage for 29” “Yongxin” extra pure flat should be: high voltage- 29 kV ±0.5 kV; 29〃 pure flat, high voltage- 30 kV±0.5 kV，filament voltage- 6.3±0.3 Vrms.

4.12 Inspection of X-ray protection

4.12.1 Receive normal picture.

4.12.2 Push switch S301. The line scan should stop vibrating and shut the set off.

4.12.3 Shut off the main power supply, re-power it on in 30 seconds. It should be back to normal.

4.13 Inspection of beam current

Receive D35 signal, set the picture mode at “dynamic”, and measure the two terminals of TP9, TP10. For ultra pure flat it should be ≤1.6 V, and for 29〃 pure flat, ≤1.7 V.

4.14 Inspect ion of AV function

VIDEO IN: 1 Vp-p 75Ω, AUDIO IN: -8 dBm±3 dBm ＞47 kΩ.

As per instruction manual, connect audio and video equipment with AV terminal of the set to be tested. The inter-connection should be made to meet the following requirements:

VIDEO IN: 1 Vp-p 75Ω, AUDIO I: -8 dBm±3 dBm ＞47 kΩ.

667-TAE35-29

667-TAE35-05

667-TAE35-64

667-TAE35-02

667-TAE35-01
MAIN BOARD

667-TA2935-29

TO ROTATE COIL

TO VM COIL

TO CRT GND

SCREEN

FOCUS

TO SPEAKER

TO SPEAKER

TO DEG COIL

POWER LINE

TO DET COIL

SCREEN

FOCUS

1.2. Chip Architecture

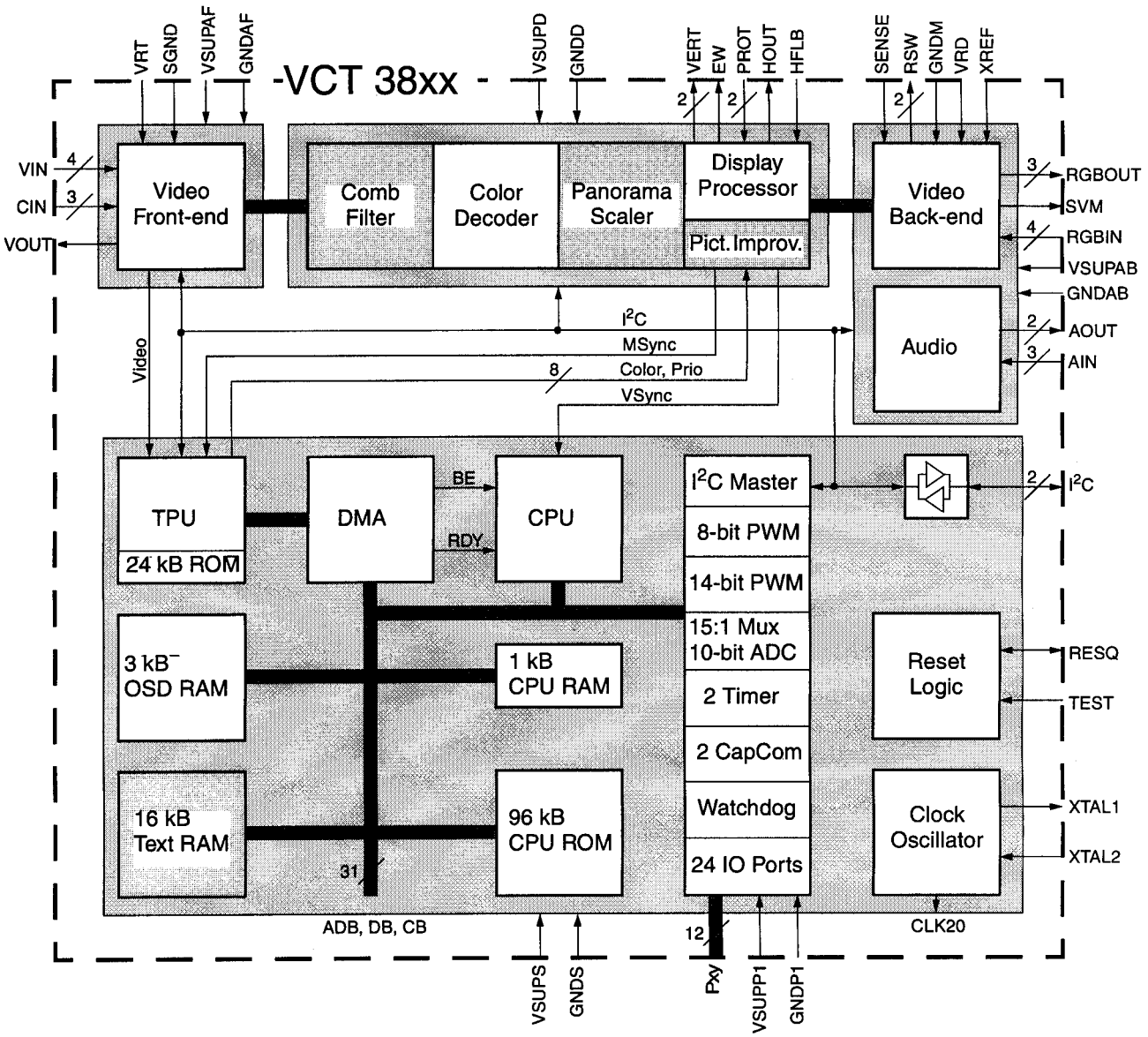


Fig. 1–2: Block diagram of the VCT 38xxA (shaded blocks are optional)

2. Functional Description

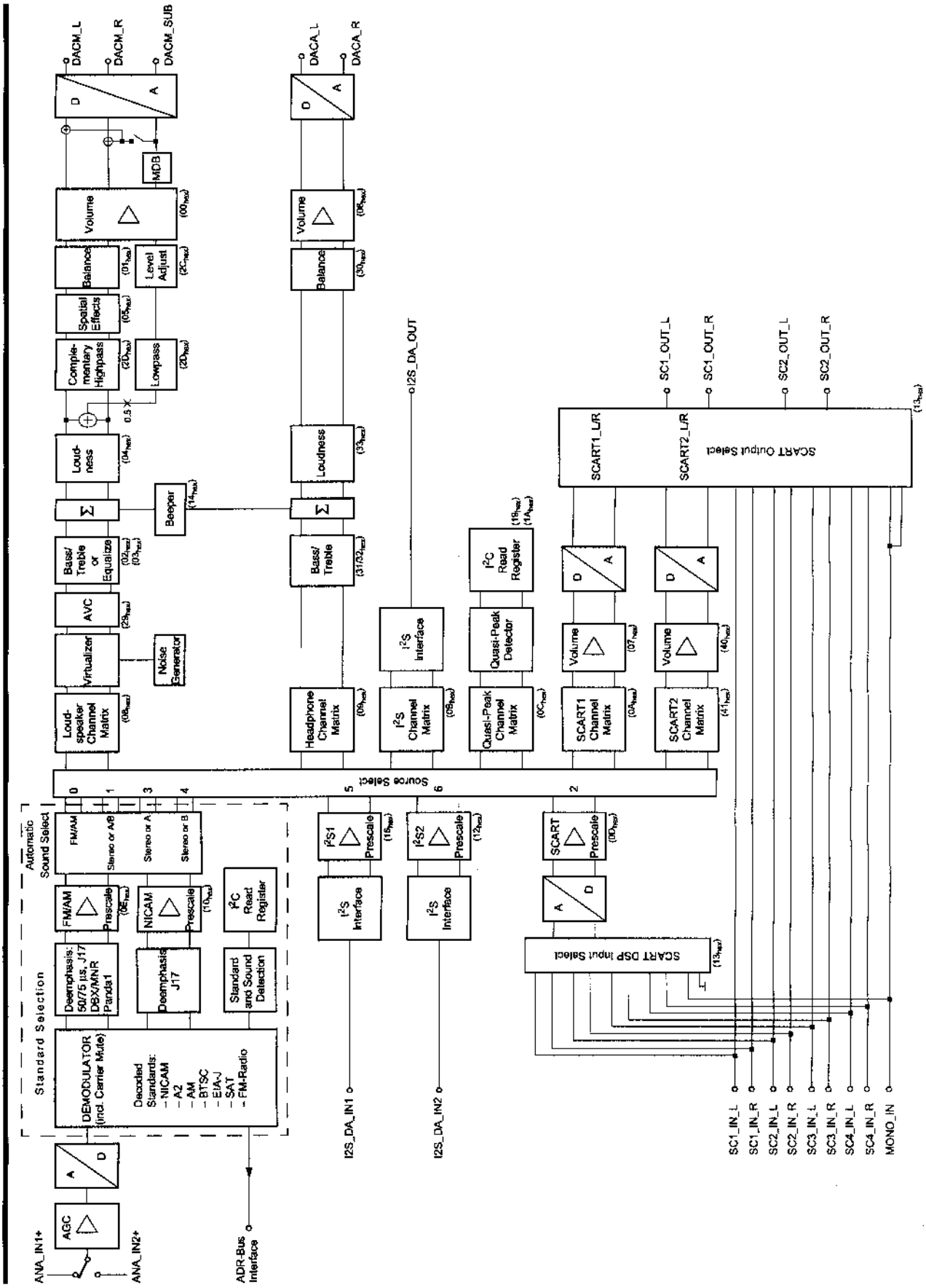
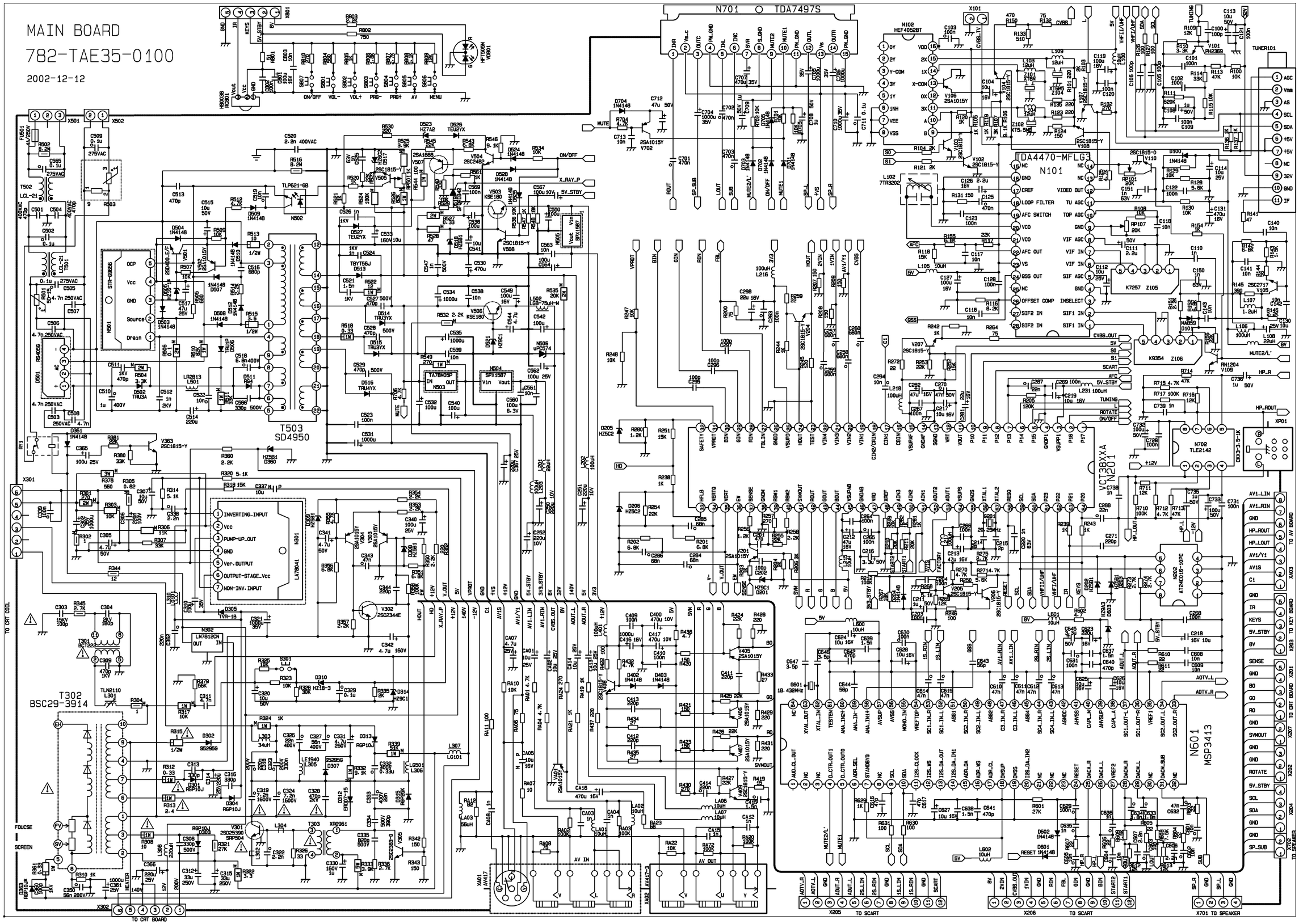


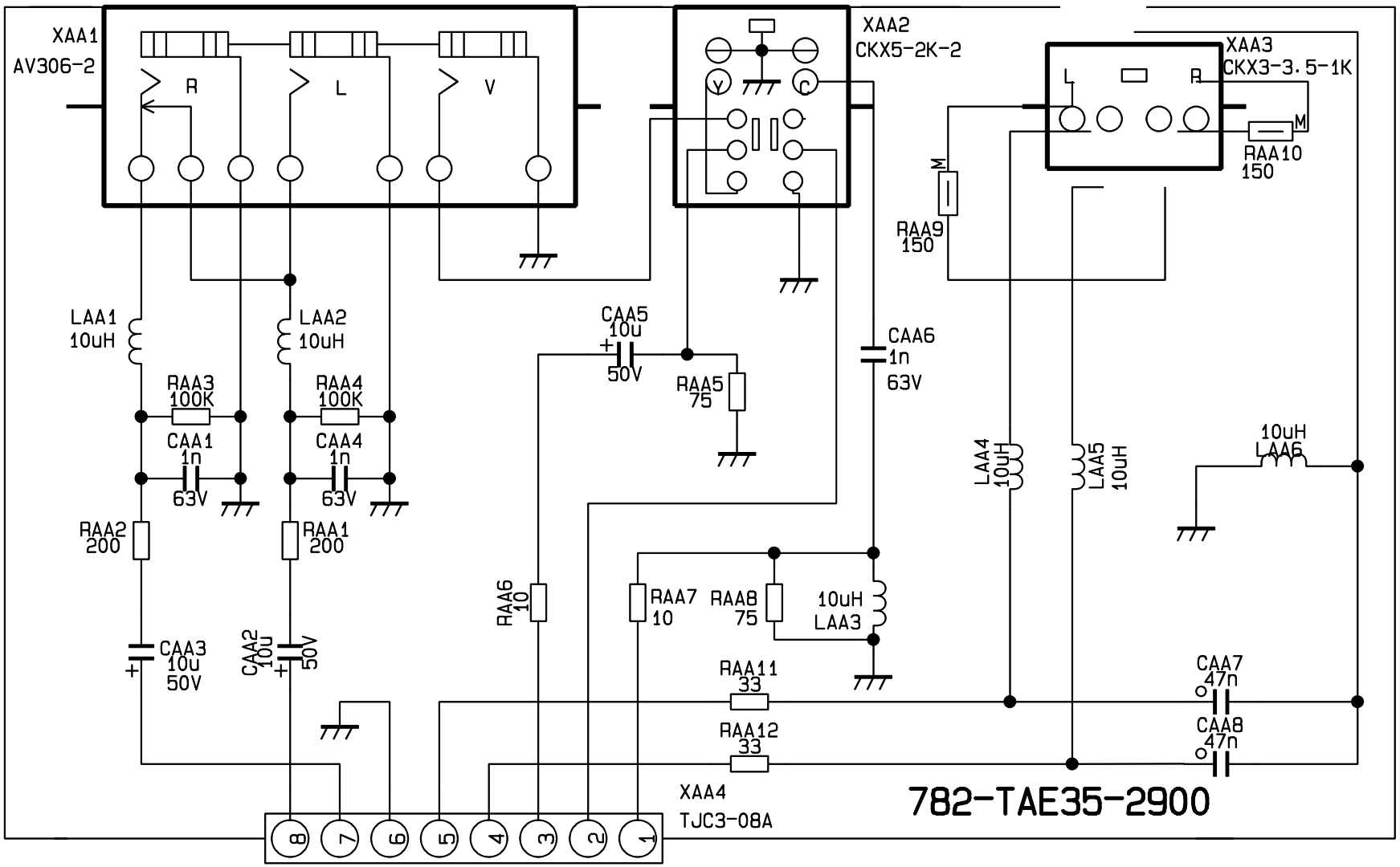
Fig. 2–1: Signal flow block diagram of the MSP 34x1G (input and output names correspond to pin names)

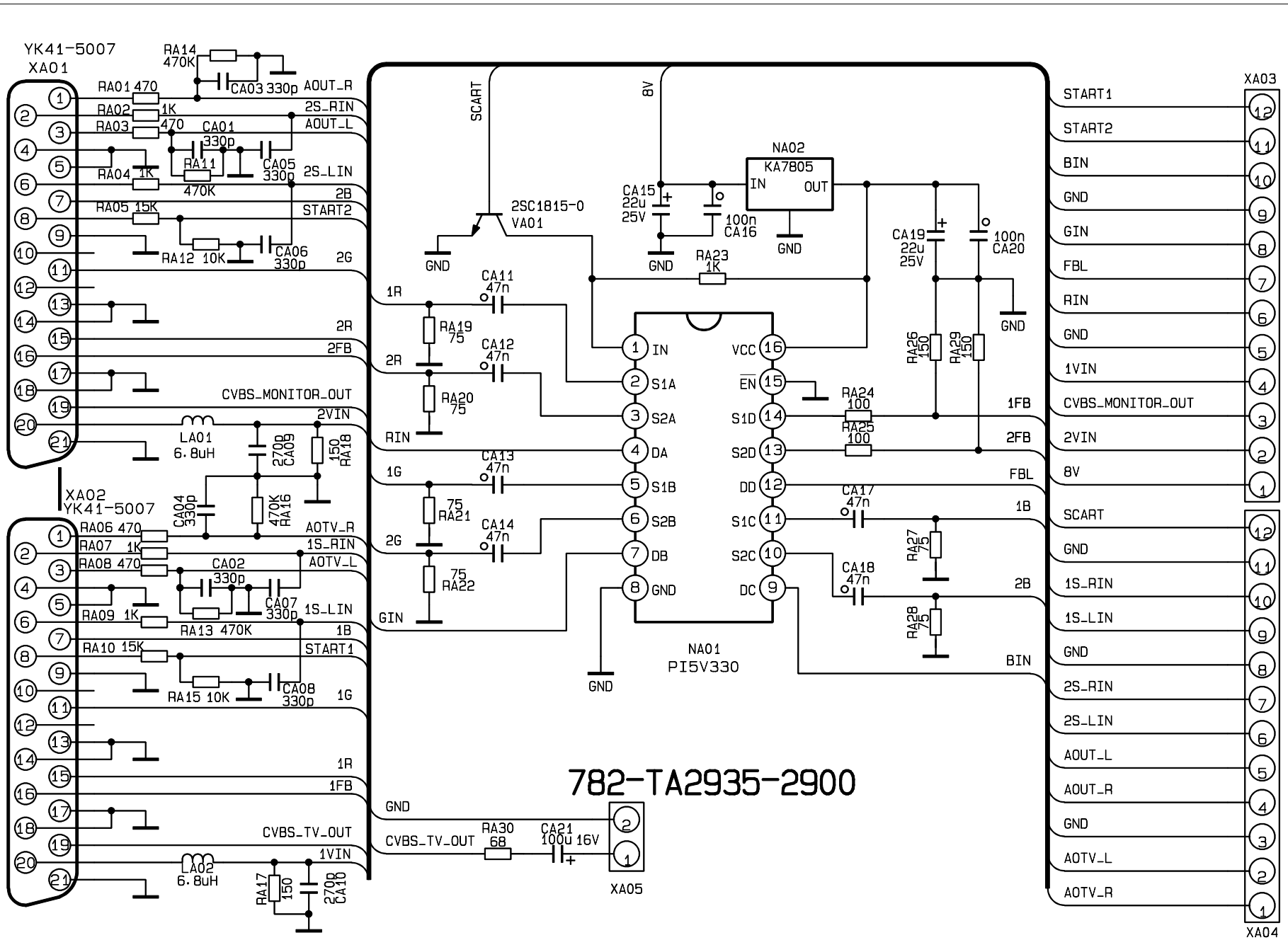
MAIN BOARD

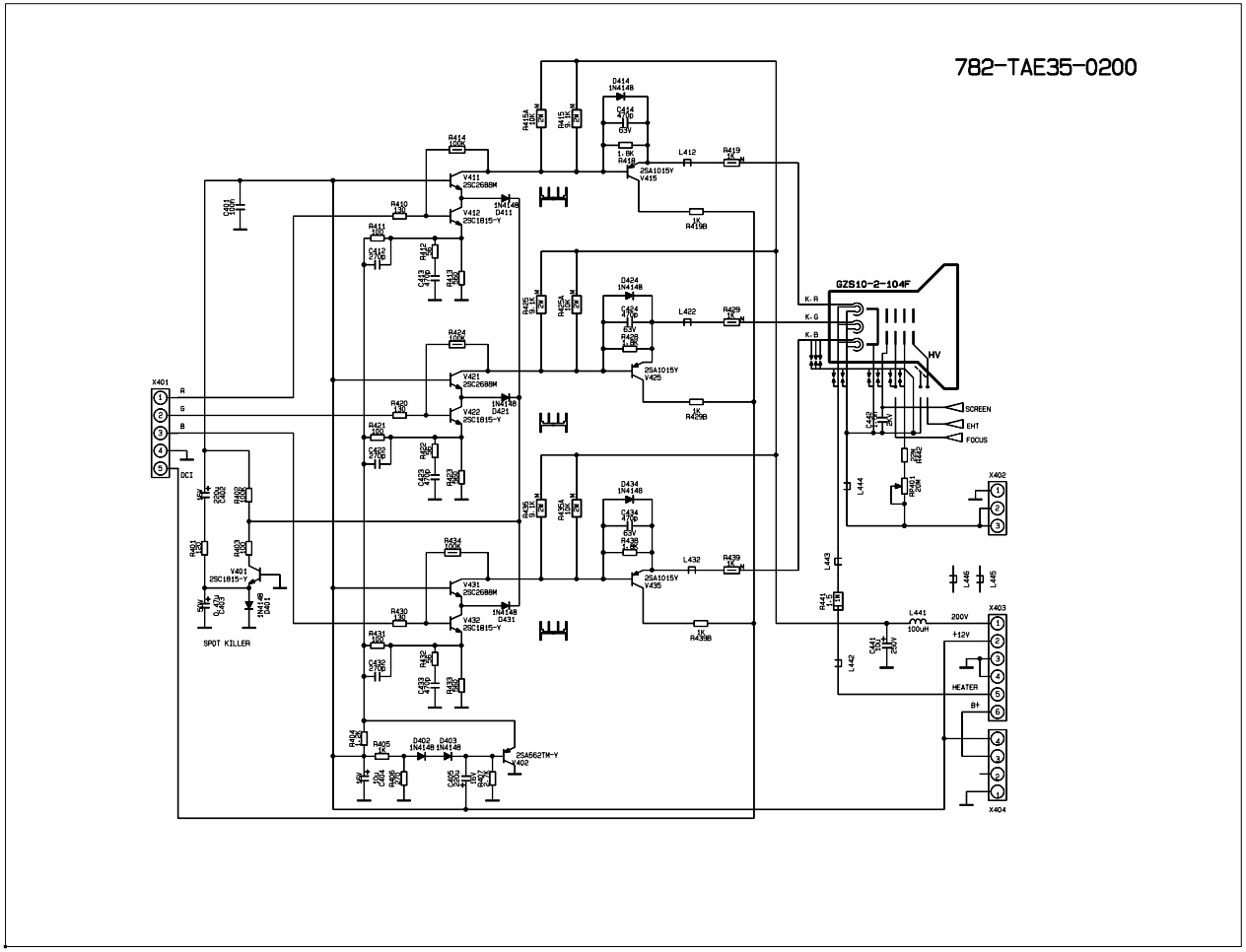
782-TAE35-0100

2002-12-12




XAA1
AV306-2
R
L
V
XAA2
CKX5-2K-2
XAA3
CKX3-3.5-1K
L
R
M
RAA10
150
RAA9
150
LAA1
10uH
LAA2
10uH
CAA5
10u
50V
RAA5
75
CAA6
1n
63V
RAA3
100K
RAA4
100K
CAA1
1n
63V
CAA4
1n
63V
LAA4
10uH
LAA5
10uH
10uH
LAA6
RAA2
200
RAA1
200
RAA6
10
RAA7
10
RAA8
75
10uH
LAA3
CAA3
10u
50V
CAA2
10u
50V
RAA11
33
CAA7
47n
RAA12
33
CAA8
47n
XAA4
TJC3-08A
8
7
6
5
4
3
2
1
782-TAE35-2900


YK41-5007
XA01
RA14 470K
CA03 330p
AOUT_R
RA01 470
RA02 1K
2S_RIN
AOUT_L
RA03 470
CA01 330p
RA11 470K
CA05 330p
RA04 1K
2S_LIN
2B
RA05 15K
START2
RA12 10K
CA06 330p
2G
2R
2FB
CVBS_MONITOR_OUT
2VIN
LA01 6.8uH
270p CA09
150 RA18
CA04 330p
470K RA16
XA02
YK41-5007
AOTV_R
RA06 470
RA07 1K
1S_RIN
AOTV_L
RA08 470
CA02 330p
CA07 330p
RA09 1K
1S_LIN
RA13 470K
1B
RA10 15K
START1
RA15 10K
CA08 330p
1G
1R
1FB
CVBS_TV_OUT
1VIN
LA02 6.8uH
RA17 150
270p CA10
SCART
8V
2SC1815-O
VA01
GND
NA02
KA7805
IN
OUT
CA15 22u 25V
100n CA16
RA23 1K
CA19 22u 25V
100n CA20
RA26 150
RA29 150
CA11 47n
RA19 75
CA12 47n
RA20 75
CA13 47n
RA21 75
CA14 47n
RA22 75
1R
2R
RIN
1G
2G
GIN
1 IN
2 S1A
3 S2A
4 DA
5 S1B
6 S2B
7 DB
8 GND
VCC 16
EN 15
S1D 14
S2D 13
DD 12
S1C 11
S2C 10
DC 9
RA24 100
RA25 100
CA17 47n
CA18 47n
RA27 75
RA28 75
1FB
2FB
FBL
1B
2B
BIN
NA01
PI5V330
782-TA2935-2900
RA30 68
CA21 100u 16V
XA05
XA03
START1
START2
BIN
GND
GIN
FBL
RIN
GND
1VIN
CVBS_MONITOR_OUT
2VIN
8V
SCART
GND
1S_RIN
1S_LIN
GND
2S_RIN
2S_LIN
AOUT_L
AOUT_R
GND
AOTV_L
AOTV_R
XA04


782-TAE35-0200
GZS10-2-104F
K-R
K-G
K-B
HV
SCREEN
EHT
FOCUS
X401
R
G
B
DCI
SPOT KILLER
X402
X403
X404
200V
+12V
HEATER
B+
V411 2SC2688M
V412 2SC1815-Y
V421 2SC2688M
V422 2SC1815-Y
V431 2SC2688M
V432 2SC1815-Y
V401 2SC1815-Y
2SA1015Y V415
2SA1015Y V425
2SA1015Y V435
2SA562TM-Y V402
D411 1N4148
D421 1N4148
D431 1N4148
D414 1N4148
D424 1N4148
D434 1N4148
D402 1N4148
D403 1N4148
L412
L422
L432
L441 100uH
L442
L443
L444
L445
L446
R419 1K
R429 1K
R439 1K
R4196 1K
R4296 1K
R4396 1K
R4401 20K

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE “X-RAY RADIATION PERCAUTION”, “SAFETY PRECAUTION” AND “RPODUCT SAFETY NOTICE” ON PAGE 1&2 OF THIS MANUAL.

CAUTION: 1. The shaded areas makes in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with type identical to those in the original circuit or specified in the parts list. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on page 2.

2. Do not degrade the safety of the receiver through improper servicing.

ELECTRICAL PARTS LIST

MAIN BOARD

SYMBOL	PART NO.	DESCRIPTION
	782-TAE35-010A	MAIN PCB
CRYSTAL		
G601	329-61801-00	HC49US 18.432MHZ
G201	329-62001-00	CAST5 20.25MHZ
RECTIFIER		
D506	340-80010-00	RUIP
D501	340-80019-00	T3SB60
DIODE		
D705	340-00001-00	1N4148
D527	340-00288-003	TFR155
D304	340-00014-00	RGP10J
D315	340-00060-00	RGP25K
D101	340-00170-00	MA859
D513	340-00256-00	BYT56M
D514	340-00283-00	TRU3YX
D515	340-00283-00	TRU3YX
D516	340-00284-00	TRU4YX
D526	340-00291-00	TEU2YX
D502	340-00292-00	TRU3A
D312	340-00297-00	ERD07-15
D511	340-00309-00	RG4
D204	340-00001-003	1N4148
D601	340-00001-003	1N4148
D701	340-00001-003	1N4148
D602	340-00001-003	1N4148
D702	340-00001-003	1N4148
D525	340-00001-003	1N4148
D508	340-00001-003	1N4148

SYMBOL	PART NO.	DESCRIPTION
D512	340-00001-003	1N4148
D503	340-00001-003	1N4148
D504	340-00001-003	1N4148
D509	340-00001-003	1N4148
D510	340-00001-003	1N4148
D507	340-00001-003	1N4148
D704	340-00001-003	1N4148
D524	340-00001-003	1N4148
D402	340-00001-003	1N4148
D403	340-00001-003	1N4148
D528	340-00001-003	1N4148
D361	340-00001-003	1N4148
D100	340-00001-003	1N4148
D307	340-00010-003	S5295G
D302	340-00010-003	S5295G
D313	340-00014-003	RGP10J
D303	340-00014-003	RGP10J
D301	340-00014-003	RGP10J
D363	340-00014-003	RGP10J
D305	340-00086-003	TVR-1B
REGULATED DIODE		
D310	340-51850-00	HZ18-3
D202	340-50560-00	HZ6B1
D203	340-50560-00	HZ6B1
D360	340-50470-003	HZ5B1
D308	340-50470-003	HZ5B1
D309	340-50470-003	HZ5B1
D205	340-50510-003	HZ5C2
D206	340-50510-003	HZ5C2
D518	340-50560-003	HZ6B1
D517	340-50610-003	HZ6C2
D523	340-50650-003	HZ7A2
D603	340-50810-003	HZ9A2
D314	340-50910-003	HZ9C1
D201	340-50910-003	HZ9C1
D521	340-50910-003	HZ9C1
D505	340-51560-003	HZ16-1
TRANSISTOR		
V106	343-10150-10	2SA1015Y
V503	343-01800-00	KSE180 TO-126
V506	343-01800-00	KSE180 TO-126
V109	343-12040-00	RN1204
V507	343-16680-00	2SA1668
V504	343-24820-00	2SC2482
V301	343-25390-00	2SD2539

SYMBOL	PART NO.	DESCRIPTION
V302	343-38520-00	2SC3852
V101	343-23690-004	PH2369
D519	343-00420-404	SFORIB42
V501	343-04000-304	2SD400 E/F
V304	343-10150-104	2SA1015Y Pr2.5
V303	343-10150-104	2SA1015Y Pr2.5
V201	343-10150-104	2SA1015Y Pr2.5
V502	343-10150-104	2SA1015Y Pr2.5
V702	343-10150-104	2SA1015Y Pr2.5
VA01	343-10150-104	2SA1015Y Pr2.5
V405	343-10150-104	2SA1015Y Pr2.5
V406	343-10150-104	2SA1015Y Pr2.5
V407	343-10150-104	2SA1015Y Pr2.5
V204	343-18150-114	2SC1815-Y
V205	343-18150-114	2SC1815-Y
V206	343-18150-114	2SC1815-Y
V508	343-18150-114	2SC1815-Y
V102	343-18150-114	2SC1815-Y
V103	343-18150-114	2SC1815-Y
V107	343-18150-114	2SC1815-Y
V408	343-18150-114	2SC1815-Y
V409	343-18150-114	2SC1815-Y
V108	343-18150-114	2SC1815-Y
V505	343-18150-114	2SC1815-Y
V363	343-18150-114	2SC1815-Y
V104	343-18150-114	2SC1815-Y
V207	343-18150-114	2SC1815-Y
V110	343-18150-114	2SC1815-Y
V305	343-23830-604	2SC2383-0
V105	343-27170-004	2SC2717
CERAMIC CAPACITOR		
C526	459-6210K-00	DE0705B102K1K
C204	459-2410R-00	DD308-63F104Z50
C616	459-2051H-10	CC1-08-CH-63V-51pF-J
C617	459-2051H-10	CC1-08-CH-63V-51pF-J
C220	459-2410R-00	DD308-63F104Z50
C203	459-2410R-00	DD308-63F104Z50
C100	459-2112H-102	CC45-CH1H121JYR
C215	459-2002C-102	CC45-CH1H020CYR
C214	459-2002C-102	CC45-CH1H020CYR
C647	459-2020H-102	CC45-CH1H200JYR
C646	459-2020H-102	CC45-CH1H200JYR
C644	459-2056H-102	CC1-08-CH-63V-56pF-J
C643	459-2056H-102	CC1-08-CH-63V-56pF-J
C202	459-2110H-102	CC45-CH1H101JYR

SYMBOL	PART NO.	DESCRIPTION
C415	459-2110H-102	CC45-CH1H101JYR
C271	459-2122H-102	CC45-CH1H221JYR
C344	459-2122H-102	CC45-CH1H221JYR
C411	459-2122H-102	CC45-CH1H221JYR
C412	459-2122H-102	CC45-CH1H221JYR
C413	459-2122H-102	CC45-CH1H221JYR
C201	459-2122H-102	CC45-CH1H221JYR
C313	459-2133K-902	RBU07SL331K-H46CA
C316	459-2133K-902	RBU07SL331K-H46CA
C642	459-2147H-902	CC1-12-SL-63V-471J
C640	459-2147H-902	CC1-12-SL-63V-471J
C641	459-2147H-902	CC1-12-SL-63V-471J
C516	459-2168K-002	CK45-B1H681KYR
C525	459-2210K-002	CK45-B1H102KYR
C110	459-2210K-002	CK45-B1H102KYR
C151	459-2210K-002	CK45-B1H102KYR
C738	459-2210K-002	CK45-B1H102KYR
C739	459-2210K-002	CK45-B1H102KYR
C637	459-2215K-002	CT1-06-2B4-63V-152K
C639	459-2215K-002	CT1-06-2B4-63V-152K
C638	459-2215K-002	CT1-06-2B4-63V-152K
C606	459-2233K-002	CT1-08-2B4-63V-332K
C607	459-2233K-002	CT1-08-2B4-63V-332K
C311	459-2247R-002	CT1-08-2E4-63V-472Z
CA12	459-2247R-002	CT1-08-2E4-63V-472Z
CA15	459-2247R-002	CT1-08-2E4-63V-472Z
C538	459-2310R-002	CK45-F1H103ZYR
C539	459-2310R-002	CK45-F1H103ZYR
C561	459-2310R-002	CK45-F1H103ZYR
C563	459-2310R-002	CK45-F1H103ZYR
C140	459-2310R-002	CK45-F1H103ZYR
C141	459-2310R-002	CK45-F1H103ZYR
C142	459-2310R-002	CK45-F1H103ZYR
C143	459-2310R-002	CK45-F1H103ZYR
C608	459-2310R-002	CK45-F1H103ZYR
C609	459-2310R-002	CK45-F1H103ZYR
C713	459-2310R-002	CK45-F1H103ZYR
C118	459-2310R-002	CK45-F1H103ZYR
C116	459-2310R-002	CK45-F1H103ZYR
C117	459-2310R-002	CK45-F1H103ZYR
C128	459-2410R-002	DD308-63F104Z50
C569	459-2410R-002	DD308-63F104Z50
C122	459-2410R-002	DD308-63F104Z50
C267	459-2410R-002	DD308-63F104Z50
C269	459-2410R-002	DD308-63F104Z50

SYMBOL	PART NO.	DESCRIPTION
C731	459-2410R-002	DD308-63F104Z50
C266	459-2410R-002	DD308-63F104Z50
C264	459-2410R-002	DD308-63F104Z50
C268	459-2410R-002	DD308-63F104Z50
C409	459-2410R-002	DD308-63F104Z50
C410	459-2410R-002	DD308-63F104Z50
C121	459-2410R-002	DD308-63F104Z50
C120	459-2410R-002	DD308-63F104Z50
C123	459-2410R-002	DD308-63F104Z50
C308	459-5133K-002	RQC05B331K-H46CA
C566	459-5133K-002	RQC05B331K-H46CA
C334	459-5139K-002	CK45-B2H391KYR
C529	459-5147K-002	RQC05B471K-H46CA
C528	459-5147K-002	RQC05B471K-H46CA
C527	459-5147K-002	RQC05B471K-H46CA
C335	459-5182K-002	DD06-999B812K500
C547	459-5210K-002	CK45-B2H102KYR
C501	459-B147M-20	ECK-DNS471MBX
C504	459-B147M-20	ECK-DNS471MBX
C520	459-B222M-20	ECK-DNS222MEX
C507	459-B247R-00	DE0807F472ZAC250V
C503	459-B247R-00	DE0807F472ZAC250V
C508	459-B247R-00	DE0807F472ZAC250V
C506	459-B247R-00	DE0807F472ZAC250V
C523	459-2410R-00	DD308-63F104Z50
C360	459-6110H-00	CT81-06C-Bn-1KV-101J
C511	459-6147K-00	DE0705B471K1k
C524	459-6210K-00	DE0705B102K1K
C521	459-6215K-00	DE0905B152K1K
C328	459-8147K-00	DE0707B471K2K
C512	459-8210K-00	DE0907B102K2K
THIN-FILM CAPACITOR		
C513	462-00215-H0	CL11-100V-1500PF-J
C295	462-00356-H02	CL11-100V-0.056uF-J
C296	462-00356-H02	CL11-100V-0.056uF-J
C297	462-00356-H02	CL11-100V-0.056uF-J
C519	462-B0310-H02	CL21X-50V-0.01uF-J
C288	462-B0322-H02	CL21X-50V-0.022uF-J
C287	462-B0322-H02	CL21X-50V-0.022uF-J
C270	462-B0347-H02	CL21X-50V-0.047uF-J
C343	462-B0347-H02	CL21X-50V-0.047uF-J
C610	462-B0347-H02	CL21X-50V-0.047uF-J
C611	462-B0347-H02	CL21X-50V-0.047uF-J
C612	462-B0347-H02	CL21X-50V-0.047uF-J
C613	462-B0347-H02	CL21X-50V-0.047uF-J

SYMBOL	PART NO.	DESCRIPTION
C614	462-B0347-H02	CL21X-50V-0.047uF-J
C615	462-B0347-H02	CL21X-50V-0.047uF-J
C285	462-B0368-H02	CL21X-50V-0.068uF-J
C286	462-B0368-H02	CL21X-50V-0.068uF-J
C284	462-B0368-H02	CL21X-50V-0.068uF-J
C265	462-B0410-H02	CL21X-50V-0.1uF-J
C630	462-B0410-H02	CL21X-50V-0.1uF-J
C629	462-B0410-H02	CL21X-50V-0.1uF-J
C103	462-B0410-H02	CL21X-50V-0.1uF-J
C631	462-B0410-H02	CL21X-50V-0.1uF-J
C263	462-B0410-H02	CL21X-50V-0.1uF-J
C711	462-B0410-H02	CL21X-50V-0.1uF-J
C701	462-B0447-H02	CL21X-50V-0.47uF-J
C702	462-B0447-H02	CL21X-50V-0.47uF-J
C125	462-B0447-H02	CL21X-50V-0.47uF-J
C260	462-B0468-H02	CL21X-50V-0.68uF-J
C257	462-B0468-H02	CL21X-50V-0.68uF-J
C259	462-B0468-H02	CL21X-50V-0.68uF-J
C258	462-B0468-H02	CL21X-50V-0.68uF-J
C636	462-00210-H02	CL11-100V-1000PF-J
C634	462-00218-H02	CL11-100V-1800PF-J
C633	462-00218-H02	CL11-100V-1800PF-J
C338	462-00222-H02	CL11-100V-2200PF-J
C322	462-00222-H02	CL11-100V-2200PF-J
C602	462-00310-K02	CL11-100V-0.01uF-K
C603	462-00310-K02	CL11-100V-0.01uF-K
C604	462-00310-K02	CL11-100V-0.01uF-K
C605	462-00310-K02	CL11-100V-0.01uF-K
C329	462-90410-H02	63V-0.1uF-J
C101	462-B0422-H02	CL21X-50V-0.22uF-J
C102	462-B0422-H02	CL21X-50V-0.22uF-J
C109	462-B0422-H02	CL21X-50V-0.22uF-J
C414	462-B0422-H0	CL21X-50V-0.22uF-J
C510	462-D5510-H0	CBB21A-400V-1uF-J
C635	462-00210-H0	CL11-100V-1000PF-J
C294	462-00310-H0	CL11-100V-0.01uF-J
C339	462-00410-H0	CL11-100V-0.1uF-J
C325	462-05322-H0	CL11-400V-0.022uF-J
C502	462-2B410-M0V	250VAC-0.1uF-M
C505	462-2B410-M0V	250VAC-0.1uF-M
C509	462-2B410-M0V	250VAC-0.1uF-M
C565	462-2B410-M0V	250VAC-0.1uF-M
C522	462-26310-K0	CL21-630V-0.01uF-K
C323	462-85433-H0	CBB21-400V-0.33uF-J
C350	462-53356-K0	CBB12-200V-0.056uF-K

SYMBOL	PART NO.	DESCRIPTION
C333	462-55333-H0	CBB12-400V-0.033uF-J
C327	462-55356-H0	CBB12-400V-0.056uF-J
C518	462-56268-H0	CBB13-630V-6800PF-J
C332	462-85433-H0	CBB21-400V-0.33uF-J
C318	462-D5410-H0	CBB21A-400V-0.1uF-J
C319	462-8E310-H4F	CBB81A-2K-0.01uF-J
C324	462-88272-H0	CBB81-1600V-7200PF-J
ELECTROLYTIC CAPACITOR		
C342	464-V1610-T0	CD111HR-100V-10uF-T
C530	464-04747-M0R	200USP470MA35
C514	464-08715-M0H	450V-150uF-M
C560	464-6B710-M0	CD110-6.3V-100uF-M
C540	464-6C710-M0	CD110-10V-100uF-M
C624	464-6D610-M0	CD110-16V-10uF-M
C628	464-6D610-M0	CD110-16V-10uF-M
C627	464-6D610-M0	CD110-16V-10uF-M
C625	464-6D610-M0	CD110-16V-10uF-M
C282	464-6D647-M0	CD110-16V-47uF-M
C212	464-6D647-M0	CD110-16V-47uF-M
C623	464-6D722-M0	CD110-16V-220uF-M
C131	464-6D747-M0	CD110-16V-470uF-M
C535	464-6D810-M0	CD110-16V-1000uF-M
C534	464-6D810-M0	CD110-16V-1000uF-M
C416	464-6D810-M0	CD110-16V-1000uF-M
C562	464-6E710-M0	CD110-25V-100uF-M
C361	464-6E810-M0	CD110-25V-1000uF-M
C707	464-6F747-M0	CD110-35V-470uF-M
C302	464-6F810-M0	CD110-35V-1000uF-M
C706	464-6F810-M0	CD110-35V-1000uF-M
C705	464-6F810-M0	CD110-35V-1000uF-M
C710	464-6F810-M0	CD110-35V-1000uF-M
C531	464-6F810-M0	CD110-35V-1000uF-M
C645	464-60533-M0	CD110-50V-3.3uF-M
C533	464-64610-M0	CD288-200V-10uF-M
C331	464-65547-M0	CD288-250V-4.7uF-M
C315	464-65633-M0	CD288-250V-33uF-M
C312	464-65633-M0	CD288-250V-33uF-M
C337	464-3D610-M02	CD11W-16V-10uF-M
C567	464-6C710-M02	CD110-10V-100uF-M
C250	464-6C722-M02	CD110-10V-220uF-M
C251	464-6C722-M02	CD110-10V-220uF-M
C252	464-6C722-M02	CD110-10V-220uF-M
C417	464-6C747-M02	CD110-10V-470uF-M
C400	464-6C747-M02	CD110-10V-470uF-M
C544	464-6D547-M02	CD110-16V-4.7uF-M

SYMBOL	PART NO.	DESCRIPTION
C217	464-6D610-M02	CD110-16V-10uF-M
C218	464-6D610-M02	CD110-16V-10uF-M
C626	464-6D610-M02	CD110-16V-10uF-M
C219	464-6D610-M02	CD110-16V-10uF-M
C281	464-6D622-M02	CD110-16V-22uF-M
C298	464-6D622-M02	CD110-16V-22uF-M
C213	464-6D647-M02	CD110-16V-47uF-M
C549	464-6D710-M02	CD110-16V-100uF-M
C127	464-6D710-M02	CD110-16V-100uF-M
C550	464-6D710-M02	CD110-16V-100uF-M
C564	464-6D710-M02	CD110-16V-100uF-M
C119	464-6D710-M02	CD110-16V-100uF-M
CA16	464-6D747-M02	CD110-16V-470uF-M
C130	464-6E610-M02	CD110-25V-10uF-M
CA13	464-6E610-M02	CD110-25V-10uF-M
CA14	464-6E610-M02	CD110-25V-10uF-M
C112	464-6E610-M02	CD110-25V-10uF-M
C114	464-6E610-M02	CD110-25V-10uF-M
C517	464-6E647-M02	CD110-25V-47uF-M
C340	464-6E710-M02	CD110-25V-100uF-M
C365	464-6E710-M02	CD110-25V-100uF-M
C366	464-6E722-M02	CD110-25V-220uF-M
C367	464-6E722-M02	CD110-25V-220uF-M
C314	464-6E722-M02	CD110-25V-220uF-M
C532	464-6F710-M02	CD110-35V-100uF-M
C536	464-6F710-M02	CD110-35V-100uF-M
C310	464-6F710-M02	CD110-35V-100uF-M
C211	464-60510-M02	CD110-50V-1uF-M
C708	464-60510-M02	CD110-50V-1uF-M
C709	464-60510-M02	CD110-50V-1uF-M
C735	464-60510-M02	CD110-50V-1uF-M
C736	464-60510-M02	CD110-50V-1uF-M
C111	464-60522-M02	CD110-50V-2.2uF-M
C126	464-60522-M02	CD110-50V-2.2uF-M
C216	464-60533-M02	CD110-50V-3.3uF-M
C104	464-60610-M02	CD110-50V-10uF-M
C341	464-60547-M02	CD110-50V-4.7uF-M
C305	464-60547-M02	CD110-50V-4.7uF-M
C320	464-60610-M02	CD110-50V-10uF-M
C515	464-60610-M02	CD110-50V-10uF-M
C541	464-60610-M02	CD110-50V-10uF-M
C113	464-60610-M02	CD110-50V-10uF-M
C712	464-60647-M02	CD110-50V-47uF-M
C542	464-60710-M02	CD110-50V-100uF-M
C306	464-61422-M02	CD110-100V-0.22uF-M

SYMBOL	PART NO.	DESCRIPTION
C330	464-62510-M02	CD288-160V-1uF-M
C307	464-60647-M02	CD110-50V-47uF-M
C321	464-6F810-M0	CD110-35V-1000uF-M
C733	464-6D810-M0	CD110-16V-1000uF-M
CARBON RESISTOR		
R119	467-1D110-H0	RT14-1/4W-100Ω-J
R259	467-1C022-H03	1/6W-22Ω-J
R610	467-1C022-H03	1/6W-22Ω-J
R611	467-1C022-H03	1/6W-22Ω-J
R604	467-1C022-H03	1/6W-22Ω-J
R605	467-1C022-H03	1/6W-22Ω-J
R606	467-1C022-H03	1/6W-22Ω-J
R607	467-1C022-H03	1/6W-22Ω-J
R433	467-1C027-H03	1/6W-27Ω-J
R434	467-1C027-H03	1/6W-27Ω-J
R435	467-1C027-H03	1/6W-27Ω-J
R419	467-1C030-H03	1/6W-30Ω-J
R141	467-1C047-H03	1/6W-47Ω-J
R144	467-1C056-H03	1/6W-56Ω-J
RA23	467-1C068-H03	1/6W-68Ω-J
R132	467-1C075-H03	1/6W-75Ω-J
R264	467-1C075-H03	1/6W-75Ω-J
R246	467-1C110-H03	1/6W-100Ω-J
R631	467-1C110-H03	1/6W-100Ω-J
R630	467-1C110-H03	1/6W-100Ω-J
R529	467-1C110-H03	1/6W-100Ω-J
R422	467-1C110-H03	1/6W-100Ω-J
R245	467-1C112-H03	1/6W-120Ω-J
R131	467-1C115-H03	1/6W-150Ω-J
R207	467-1C115-H03	1/6W-150Ω-J
R208	467-1C115-H03	1/6W-150Ω-J
R124	467-1C115-H03	1/6W-150Ω-J
R343	467-1C115-H03	1/6W-150Ω-J
R342	467-1C115-H03	1/6W-150Ω-J
R420	467-1C115-H03	1/6W-150Ω-J
R421	467-1C115-H03	1/6W-150Ω-J
R423	467-1C115-H03	1/6W-150Ω-J
R200	467-1C115-H03	1/6W-150Ω-J
R536	467-1C120-H03	1/6W-200Ω-J
R437	467-1C122-H03	1/6W-220Ω-J
R352	467-1C122-H03	1/6W-220Ω-J
R530	467-1C122-H03	1/6W-220Ω-J
RA24	467-1C127-H03	1/6W-270Ω-J
R430	467-1C127-H03	1/6W-270Ω-J
R257	467-1C127-H03	1/6W-270Ω-J

SYMBOL	PART NO.	DESCRIPTION
R102	467-1C127-H03	1/6W-270Ω-J
R428	467-1C130-H03	1/6W-300Ω-J
R429	467-1C130-H03	1/6W-300Ω-J
R431	467-1C130-H03	1/6W-300Ω-J
R101	467-1C130-H03	1/6W-300Ω-J
R123	467-1C130-H03	1/6W-300Ω-J
R135	467-1C130-H03	1/6W-300Ω-J
R145	467-1C139-H03	1/6W-390Ω-J
R150	467-1C147-H03	1/6W-470Ω-J
R133	467-1C151-H03	1/6W-510Ω-J
R203	467-1C151-H03	1/6W-510Ω-J
R353	467-1C156-H03	1/6W-560Ω-J
R505	467-1C168-H03	1/6W-680Ω-J
R154	467-1C210-H03	1/6W-1K-J
R238	467-1C210-H03	1/6W-1K-J
R239	467-1C210-H03	1/6W-1K-J
R281	467-1C210-H03	1/6W-1K-J
R242	467-1C210-H03	1/6W-1K-J
R244	467-1C210-H03	1/6W-1K-J
R243	467-1C210-H03	1/6W-1K-J
R282	467-1C210-H03	1/6W-1K-J
R629	467-1C210-H03	1/6W-1K-J
R310	467-1C210-H03	1/6W-1K-J
R120	467-1C210-H03	1/6W-1K-J
R105	467-1C210-H03	1/6W-1K-J
R547	467-1C210-H03	1/6W-1K-J
R521	467-1C210-H03	1/6W-1K-J
R520	467-1C210-H03	1/6W-1K-J
R534	467-1C210-H03	1/6W-1K-J
R256	467-1C212-H03	1/6W-1.2K-J
R280	467-1C212-H03	1/6W-1.2K-J
R354	467-1C212-H03	1/6W-1.2K-J
R143	467-1C215-H03	1/6W-1.5K-J
R335	467-1C220-H03	1/6W-2K-J
R204	467-1C220-H03	1/6W-2K-J
R121	467-1C220-H03	1/6W-2K-J
R103	467-1C220-H03	1/6W-2K-J
R104	467-1C220-H03	1/6W-2K-J
R360	467-1C222-H03	1/6W-2.2K-J
R258	467-1C222-H03	1/6W-2.2K-J
R146	467-1C222-H03	1/6W-2.2K-J
R350	467-1C222-H03	1/6W-2.2K-J
R514	467-1C222-H03	1/6W-2.2K-J
R151	467-1C222-H03	1/6W-2.2K-J
R320	467-1C224-H03	1/6W-2.4K-J

SYMBOL	PART NO.	DESCRIPTION
R273	467-1C227-H03	1/6W-2.7K-J
R274	467-1C227-H03	1/6W-2.7K-J
R275	467-1C227-H03	1/6W-2.7K-J
R107	467-1C230-H03	1/6W-3K-J
R206	467-1C230-H03	1/6W-3K-J
R110	467-1C327-H03	1/6W-27K-J
R270	467-1C247-H03	1/6W-4.7K-J
R271	467-1C247-H03	1/6W-4.7K-J
R712	467-1C247-H03	1/6W-4.7K-J
R715	467-1C247-H03	1/6W-4.7K-J
R355	467-1C247-H03	1/6W-4.7K-J
R512	467-1C247-H03	1/6W-4.7K-J
R704	467-1C247-H03	1/6W-4.7K-J
R432	467-1C247-H03	1/6W-4.7K-J
R314	467-1C251-H03	1/6W-5.1K-J
R268	467-1C251-H03	1/6W-5.1K-J
R267	467-1C251-H03	1/6W-5.1K-J
R250	467-1C256-H03	1/6W-5.6K-J
R142	467-1C268-H03	1/6W-6.8K-J
R201	467-1C268-H03	1/6W-6.8K-J
R202	467-1C268-H03	1/6W-6.8K-J
R351	467-1C268-H03	1/6W-6.8K-J
R356	467-1C268-H03	1/6W-6.8K-J
R543	467-1C268-H03	1/6W-6.8K-J
R155	467-1C268-H03	1/6W-6.8K-J
R152	467-1C268-H03	1/6W-6.8K-J
R608	467-1C275-H03	1/6W-7.5K-J
R609	467-1C275-H03	1/6W-7.5K-J
R116	467-1C282-H03	1/6W-8.2K-J
R546	467-1C291-H03	1/6W-9.1K-J
R106	467-1C291-H03	1/6W-9.1K-J
RA22	467-1C310-H03	1/6W-10K-J
R357	467-1C310-H03	1/6W-10K-J
R115	467-1C310-H03	1/6W-10K-J
R129	467-1C310-H03	1/6W-10K-J
R249	467-1C310-H03	1/6W-10K-J
R247	467-1C310-H03	1/6W-10K-J
R248	467-1C310-H03	1/6W-10K-J
R702	467-1C310-H03	1/6W-10K-J
R507	467-1C310-H03	1/6W-10K-J
R509	467-1C310-H03	1/6W-10K-J
R701	467-1C310-H03	1/6W-10K-J
R269	467-1C312-H03	1/6W-12K-J
R716	467-1C312-H03	1/6W-12K-J
R711	467-1C312-H03	1/6W-12K-J

SYMBOL	PART NO.	DESCRIPTION
R318	467-1C315-H03	1/6W-15K-J
R252	467-1C315-H03	1/6W-15K-J
R251	467-1C315-H03	1/6W-15K-J
R118	467-1C315-H03	1/6W-15K-J
R548	467-1C318-H03	1/6W-18K-J
R210	467-1C320-H03	1/6W-20K-J
R211	467-1C320-H03	1/6W-20K-J
R424	467-1C322-H03	1/6W-22K-J
R425	467-1C322-H03	1/6W-22K-J
R426	467-1C322-H03	1/6W-22K-J
R427	467-1C322-H03	1/6W-22K-J
R381	467-1C322-H03	1/6W-22K-J
R117	467-1C322-H03	1/6W-22K-J
R156	467-1C322-H03	1/6W-22K-J
R254	467-1C322-H03	1/6W-22K-J
R255	467-1C322-H03	1/6W-22K-J
R253	467-1C322-H03	1/6W-22K-J
R601	467-1C327-H03	1/6W-27K-J
R380	467-1C333-H03	1/6W-33K-J
R307	467-1C333-H03	1/6W-33K-J
R113	467-1C310-H03	1/6W-10K-J
R714	467-1C347-H03	1/6W-47K-J
R713	467-1C347-H03	1/6W-47K-J
R379	467-1C356-H03	1/6W-56K-J
R705	467-1C356-H03	1/6W-56K-J
R128	467-1C410-H03	1/6W-100K-J
RA72	467-1C410-H03	1/6W-100K-J
RA20	467-1C410-H03	1/6W-100K-J
R710	467-1C410-H03	1/6W-100K-J
R717	467-1C410-H03	1/6W-100K-J
R212	467-1C410-H03	1/6W-100K-J
R205	467-1C412-H03	1/6W-120K-J
R358	467-1C418-H03	1/6W-180K-J
R272	467-1C022-H03	1/6W-22Ω-J
R436	467-1DA47-H03	RT14-1/4W-4.7Ω-J
R602	467-1DA47-H03	RT14-1/4W-4.7Ω-J
RA19	467-1C310-H03	1/6W-10K-J
RA21	467-1C310-H03	1/6W-10K-J
R326	467-1D033-H03	RT14-1/4W-33Ω-J
R336	467-1D227-H03	RT14-1/4W-2.7K-J
R706	467-1D247-H03	RT14-1/4W-4.7K-J
R323	467-1D275-H03	RT14-1/4W-7.5K-J
R545	467-1D322-H03	RT14-1/4W-22K-J
R523	467-1D322-H03	RT14-1/4W-22K-J
R328	467-1D330-H03	RT14-1/4W-30K-J

SYMBOL	PART NO.	DESCRIPTION
R344	467-1E012-H03	1/2W-12Ω-J
R321	467-1E327-H03	1/2W-27K-J
R130	467-1C382-H03	1/6W-82K-J
R125	467-1C182-H03	1/6W-820Ω-J
J188	467-1C247-H03	1/6W-4.7K-J
R325	467-1C210-H03	1/6W-1K-J
R612	467-1C318-H03	1/6W-18K-J
R613	467-1C318-H03	1/6W-18K-J
R109	467-1C333-H03	1/6W-33K-J
R100	467-1C322-H03	1/6W-22K-J
R114	467-1C310-H03	1/6W-10K-J
R136	467-1C210-H03	1/6W-1K-J
R137	467-1C210-H03	1/6W-1K-J
R108	467-1C151-H03	1/6W-510Ω-J
INDUCTANCE WITH COLOUR CODES		
L107	471-2A12K-003	SPT0305-1R2K-5
L215	471-2010K-003	SPT0305-100K-5
L602	471-2010K-003	SPT0305-100K-5
L100	471-2010K-003	SPT0305-100K-5
LA06	471-2010K-003	SPT0305-100K-5
LA07	471-2010K-003	SPT0305-100K-5
L105	471-2010K-003	SPT0305-100K-5
L108	471-2022K-003	SPT0305-220K-5
L201	471-2022K-003	SPT0305-220K-5
L216	471-2022K-003	SPT0305-220K-5
L401	471-2110K-003	SPT0305-101K-5
L218	471-2110K-003	SPT0305-101K-5
L308	471-2122K-003	SPT0305-221K-5
J107	471-2122K-003	SPT0305-221K-5
L601	471-1010K-00	EL0606SKI-100K
L600	471-1010K-00	EL0606SKI-100K
L217	471-1110H-00	EL0606SKI-101J
L203	471-1110H-00	EL0606SKI-101J
L231	471-1110H-00	EL0606SKI-101J
L109	471-2012K-A0	SP0203-12uH-K
L103	471-2012K-A0	SP0203-12uH-K
L104	471-2012K-A0	SP0203-12uH-K
L202	471-1010K-00	EL0606SKI-100K
L106	471-2110K-00	SPT0305-101K-5
IC		
N302	352-78120-50	LM7812CN
N506	352-05740-00	uPC574
N502	352-06210-60	TLP621-GB
N702	352-21420-00	TLE2142 CP
N202	352-24160-50	M24C16BN6

SYMBOL	PART NO.	DESCRIPTION
N505	352-28300-30	AS2830AU-3.3
N504	352-28300-30	AS2830AU-3.3
N601	352-34630-60	MSP3463G
N201	352-38330-70	VCT3833F
N102	353-40520-80	HEF4052BT
N101	352-44700-10	TDA4470MFL
N701	352-74950-10	TDA7495S
N301	352-78041-00	LA78041
N503	352-78050-40	TA78M05P
N501	352-96560-00	STR-G9656
AV SOCKET		
XA02	364-92213-00	AV417-3
RELAY		
RY1	457-12003-9G	JQX-14FF-012-1HS
SAW FILTER		
Z106	458-05027-00	K9656M
Z105	458-05028-00	K3953
WIRE-ROUND RESISTOR		
R333	467-B0239-H0	RX25-5W-3.9K-J
METAL RESISTOR		
R322	467-2GA33-H0	2W-3.3Ω-JL
R305	467-2EB82-H0	1/2W-0.82Ω-JL
R532	467-2E222-H0	1/2W-2.2kΩ-JL
R522	467-2F012-H0	1W-12Ω-JL
R549	467-2F139-H0	1W-390Ω-JL
R324	467-2F210-H0	1W-1KΩ-JL
R317	467-2F310-H0	1W-10kΩ-JL
R511	467-2F333-H0	1W-33kΩ-JL
R339	467-2F351-H0	1W-51kΩ-JL
R510	467-2F382-H0	1W-82kΩ-JL
R526	467-2F382-H0	1W-82kΩ-JL
R506	467-2GA01-H2	RY21-2W-0.1Ω-JL
R527	467-2GB33-H0	2W-0.33Ω-JL
R528	467-2G047-H0	2W-47Ω-JL
R544	467-2G068-H0	2W-68Ω-JL
R301	467-2G127-H0	2W-270Ω-JL
R504	467-2G233-H0	2W-3.3K-JL
R332	467-2G291-H0	2W-9.1kΩ-JL
R535	467-2G320-H0	2W-20K-JL
R525	467-2D239-G03	1/4W-3.9K-G
R303	467-2D310-F03	1/4W-10K-F
R306	467-2D311-F03	1/4W-11K-F
R524	467-2D418-H03	1/4W-180K-J
MELTABLE RESISTOR		
R515	467-4EA36-H0	1/2W-3.6Ω-JL

SYMBOL	PART NO.	DESCRIPTION
R315	467-4E001-H0	1/2W-1Ω-JL
R513	467-4E010-H0	1/2W-10Ω-JL
R313	467-4FA24-H0	1W-2.4Ω-JL
R361	467-4FB33-H0	1W-0.33Ω-JL
R518	467-4FB33-H0	1W-0.33Ω-JL
R312	467-4FB33-H0	1W-0.33Ω-JL
R302	467-4FB68-H0	1W-0.68Ω-JL
R308	467-4F010-H0	1W-10Ω-JL
CARBON RESISTOR		
R502	467-8E582-H0A	1/2W-8.2MΩ-J
R516	467-8E582-H0A	1/2W-8.2MΩ-J
POTENTIOMETER		
RP101	468-33207-00	EVND8A-20K
RP501	468-32107-00	EVND8A-A03-B13
RP107	468-32207-00	EVND8A-A03-B23
THERMISTOR		
R503	469-10007-00	PTH451C262BG200N270
R501	469-40004-00	5D2-14LC
SWITCH TRANSFORMER		
T503	470-00314-00	SD4920
H-DRIVE TRANSFORMER		
T303	472-10001-00	XR0961
CERAMIC TRAP FILTER		
Z102	475-25551-00	XT5.5MB
Z101	475-25601-00	XT6.0MB
Z104	475-25651-00	XT6.5MB
H-LINEARITY COIL		
L303	477-00047-00	AC-41
POWER FILTER		
T501	477-20031-00	LCL-21
T502	477-20031-00	LCL-21
FIXED INDUCTANCE		
L502	477-40031-00	LG750
L307	477-40057-00	LG101
L310	477-40057-00	LG101
L306	477-40073-00	TLN3197D
L305	477-40128-00	LE1940
L501	477-40195-00	LR2813
IFT		
L102	477-60091-00	7TR4301
FBT		
T302	472-27145-00	BSC29-01N4022M!
OTHER		
TUNER101	590-30539-00	TDQ-3B9R/124
FUSE(FU501)	569-14141-80	50T 4AL 250V

SYMBOL	PART NO.	DESCRIPTION
DEGAUSSING COIL	477-12801-00	BD-205-3
POWER SWITCH	360-30028-00	KDC-A04-S
CRT	335-2912L-00	73SX707Y22-DC01
POWER CORD	485-10125-02	BS

BUTTON BOARD

SYMBOL	PART NO.	DESCRIPTION
	782-TAE35-0500	BUTTON PCB
LIGHT-EMITTING DIODE		
VD802	340-10039-20	HFR205 (RED）
VD801	340-10021-50	2EF565 (GREEN)
IC		
RC801	352-27000-00	HRM138AA2700
CERAMIC CAPACITOR		
C802	459-2410R-00	DD308-63F104Z50
C803	459-2310R-00	CT1-08-2F4-63V-103Z
ELECTROLYTIC CAPACITOR		
C801	464-6D710-M0	CD110-16V-100uF-M
CARBON RESISTOR		
R801	467-1C051-H0	1/6W-51Ω-J
R802	467-1C175-H0	1/6W-750Ω-J
R803	467-1C222-H0	1/6W-2.2K-J
R805	467-1C156-H0	1/6W-560Ω-J
R804	467-1C210-H0	1/6W-1K-J
R807	467-1C218-H0	1/6W-1.8K-J
R806	467-1C227-H0	1/6W-2.7K-J
R808	467-1C251-H0	1/6W-5.1K-J
R809	467-1C312-H0	1/6W-12K-J

SIDE AV BOARD

SYMBOL	PART NO.	DESCRIPTION
	782-TAE35-290	SIDE AV PCB
S TERMINAL		
XAA2	364-91202-00	CKX5-2K-2
AV SOCKET		
XAA1	364-93202-00	AV306-2
CERAMIC CAPACITOR		
CAA1	459-2210K-00	CT1-06-2B4-63V-102K
CAA6	459-2210K-00	CT1-06-2B4-63V-102K

SYMBOL	PART NO.	DESCRIPTION
CAA4	459-2210K-00	CT1-06-2B4-63V-102K
THIN-FILM CAPACITOR		
CAA7	462-B0347-H0	CL21X-50V-0.047uF-J
CAA8	462-B0347-H0	CL21X-50V-0.047uF-J
ELECTROLYTIC CAPACITOR		
CAA5	464-60610-M0	CD110-50V-10uF-M
CAA2	464-60610-M0	CD110-50V-10uF-M
CAA3	464-60610-M0	CD110-50V-10uF-M
CARBON RESISTOR		
RAA11	467-1C033-H0	1/6W-33Ω-J
RAA12	467-1C033-H0	1/6W-33Ω-J
RAA5	467-1C075-H0	1/6W-75Ω-J
RAA8	467-1C075-H0	1/6W-75Ω-J
RAA2	467-1C120-H0	1/6W-200Ω-J
RAA1	467-1C120-H0	1/6W-200Ω-J
RAA3	467-1C410-H0	1/6W-100K-J
RAA4	467-1C410-H0	1/6W-100K-J
METAL RESISTOR		
RAA10	467-2E047-H0	1/2W-47Ω-JL
RAA9	467-2E047-H0	1/2W-47Ω-JL
INDUCTANCE WITH COLOUR CODES		
RAA6	471-2A12K-00	SPT0305-1R2K-5
RAA7	471-2010K-A0	SP0203-10uH-K
LAA1	471-2010K-A0	SP0203-10uH-K
LAA2	471-2010K-A0	SP0203-10uH-K
LAA3	471-2010K-A0	SP0203-10uH-K
LAA4	471-2010K-A0	SP0203-10uH-K
LAA5	471-2010K-A0	SP0203-10uH-K
LAA6	471-2010K-A0	SP0203-10uH-K

CRT BOARD

SYMBOL	PART NO.	DESCRIPTION
	782-TAE35-020	CRT PCB
DIODE		
D401	340-00001-00	1N4148
D402	340-00001-00	1N4148
D403	340-00001-00	1N4148
D411	340-00001-00	1N4148
D414	340-00001-00	1N4148
D421	340-00001-00	1N4148
D424	340-00001-00	1N4148

SYMBOL	PART NO.	DESCRIPTION
D431	340-00001-00	1N4148
D434	340-00001-00	1N4148
TRANSISTOR		
V415	343-04210-00	BF421
V425	343-04210-00	BF421
V435	343-04210-00	BF421
V402	343-05620-10	2SA562TM-Y
V401	343-18150-11	2SC1815-Y
V412	343-18150-11	2SC1815-Y
V422	343-18150-11	2SC1815-Y
V432	343-18150-11	2SC1815-Y
V411	343-26880-50	2SC2688M
V412	343-26880-50	2SC2688M
V413	343-26880-50	2SC2688M
CRT SOCKET		
	364-58213-00	GZS10-2-104F
CERAMIC CAPACITOR		
C412	459-2127H-90	CC1-08-SL-63V-271J
C432	459-2127H-90	CC1-08-SL-63V-271J
C413	459-2147H-90	CC1-12-SL-63V-471J
C414	459-2147H-90	CC1-12-SL-63V-471J
C423	459-2147H-90	CC1-12-SL-63V-471J
C424	459-2147H-90	CC1-12-SL-63V-471J
C433	459-2147H-90	CC1-12-SL-63V-471J
C434	459-2147H-90	CC1-12-SL-63V-471J
C422	459-2168K-00	CT1-06-63V-2B4-681K
C401	459-2410R-00	DD308-63F104Z50
C442	459-8215K-00	DE1007B152K2K
ELECTROLYTIC CAPACITOR		
C404	464-6D810-M0	CD110-16V-1000uF-M
C402	464-6D722-M0	CD110-16V-220uF-M
C405	464-6D722-M0	CD110-16V-220uF-M
C403	464-60447-M0	CD110-50V-0.47uF-M
C441	464-65610-M0	CD288-250V-10uF-M
CARBON RESISTOR		
R412	467-1C056-H0	1/6W-56Ω-J
R422	467-1C056-H0	1/6W-56Ω-J
R432	467-1C056-H0	1/6W-56Ω-J
R411	467-1C110-H0	1/6W-100Ω-J
R421	467-1C110-H0	1/6W-100Ω-J
R431	467-1C110-H0	1/6W-100Ω-J
R403	467-1C110-H0	1/6W-100Ω-J
R401	467-1C112-H0	1/6W-120Ω-J
R406	467-1C127-H0	1/6W-270Ω-J
R413	467-1C156-H0	1/6W-560Ω-J

SYMBOL	PART NO.	DESCRIPTION
R423	467-1C156-H0	1/6W-560Ω-J
R433	467-1C156-H0	1/6W-560Ω-J
R405	467-1C168-H0	1/6W-680Ω-J
R410	467-1C182-H0	1/6W-820Ω-J
R420	467-1C182-H0	1/6W-820Ω-J
R430	467-1C182-H0	1/6W-820Ω-J
R419B	467-1C210-H0	1/6W-1K-J
R429B	467-1C210-H0	1/6W-1K-J
R439B	467-1C210-H0	1/6W-1K-J
R404	467-1C212-H0	1/6W-1.2K-J
R407	467-1C227-H0	1/6W-2.7K-J
R402	467-1C410-H0	1/6W-100K-J
R414	467-1E410-H0	1/2W-100K-J
R424	467-1E410-H0	1/2W-100K-J
R434	467-1E410-H0	1/2W-100K-J
METAL RESISTOR		
R419	467-2E233-H0	1/2W-3.3KΩ-JL
R429	467-2E233-H0	1/2W-3.3KΩ-JL
R439	467-2E233-H0	1/2W-3.3KΩ-JL
R415	467-2G291-H0	2W-9.1kΩ-JL
R425	467-2G291-H0	2W-9.1kΩ-JL
R435	467-2G291-H0	2W-9.1kΩ-JL
MELTABLE RESISTOR		
R441	467-4FA22-H0	1W-2.2Ω-JL
INDUCTANCE WITH COLOUR CODES		
L441	471-2110K-00	SPT0305-101K-5

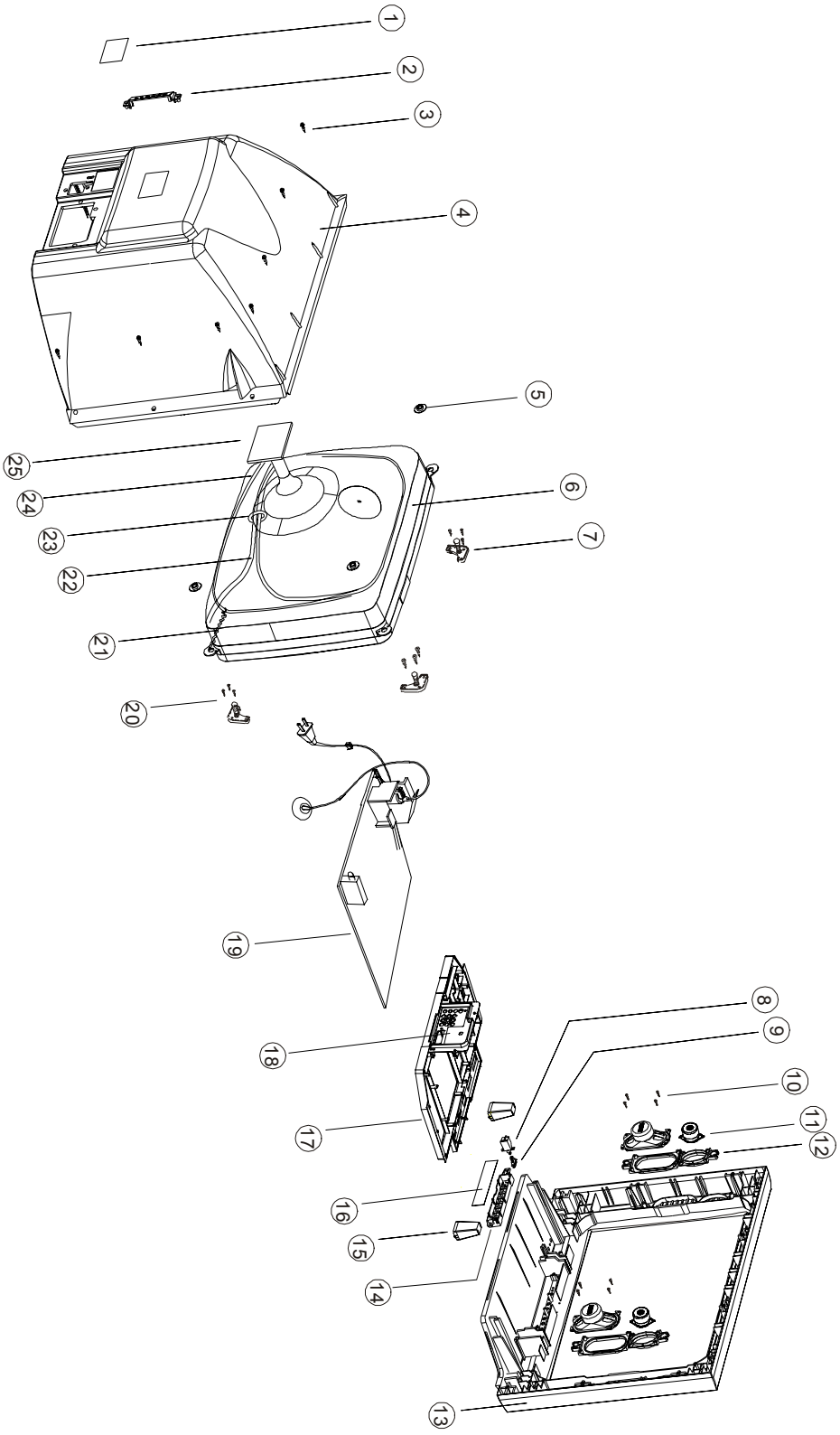
VM BOARD

SYMBOL	PART NO.	DESCRIPTION
	782-S34L0-6400	VM PCB
DIODE		
VD605	340-00001-00	1N4148
VD604	340-00001-00	1N4148
VD621	340-00001-00	1N4148
VD620	340-00001-00	1N4148
VD606	340-00079-00	FR103
VD607	340-00079-00	FR103
TRANSISTOR		
V607	343-07520-10	2SC752GTM-Y
V610	343-10150-11	2SA1015Y
V609	343-18150-11	2SC1815-Y

SYMBOL	PART NO.	DESCRIPTION
V619	343-18150-11	2SC1815-Y
V620	343-18150-11	2SC1815-Y
V611	343-19640-30	2SA1964E
V612	343-52480-30	2SC5248E
CERAMIC CAPACITOR		
C623	459-2082H-10	CC1-08-63V-82pF-J
C622	459-2082H-10	CC1-08-63V-82pF-J
C614	459-2110H-10D	CC1-08-CH-63V-101J
C616	459-2110H-10D	CC1-08-CH-63V-101J
C626	459-2210K-00	CT1-06-2B4-63V-102K
C601	459-2210K-00	CT1-06-2B4-63V-102K
C619	459-5056H-90	CC45SL2H560JYJ
C615	459-5247K-00	RQC12B472K-H46CA
C617	459-5247K-00	RQC12B472K-H46CA
ELECTROLYTIC CAPACITOR		
C607	464-6D722-M0	CD110-16V-220uF-M
C612	464-6D722-M0	CD110-16V-220uF-M
C620	464-62610-M0	CD288-160V-10uF-M
C613	464-62610-M0	CD288-160V-10uF-M
C618	464-62647-M0	CD288-160V-47uF-M
C621	464-62647-M0	CD288-160V-47uF-M
CARBON RESISTOR		
R632	467-1C082-H0	1/6W-82Ω-J
R634	467-1C082-H0	1/6W-82Ω-J
R624	467-1C122-H0	1/6W-220Ω-J
R625	467-1C191-H0	1/6W-910Ω-J
R620	467-1C210-H0	1/6W-1K-J
R644	467-1C212-H0	1/6W-1.2K-J
R645	467-1C212-H0	1/6W-1.2K-J
R637	467-1C215-H0	1/6W-1.5K-J
R639	467-1C215-H0	1/6W-1.5K-J
R646	467-1C222-H0	1/6W-2.2K-J
R619	467-1C239-H0	1/6W-3.9K-J
R602	467-1C251-H0	1/6W-5.1K-J
R638	467-1C312-H0	1/6W-12K-J
R601	467-1C318-H0	1/6W-18K-J
R613	467-1C339-H0	1/6W-39K-J
R609	467-1C356-H0	1/6W-56K-J
R633	467-1C368-H0	1/6W-68K-J
R635	467-1C368-H0	1/6W-68K-J
METAL RESISTOR		
R641	467-2EA27-G0	1/2W-2.7Ω-GL
R642	467-2EA27-G0	1/2W-2.7Ω-GL
R630	467-2E010-H0	1/2W-10Ω-JL
R636	467-2E047-H0	1/2W-47Ω-JL

SYMBOL	PART NO.	DESCRIPTION
R640	467-2E047-H0	1/2W-47Ω-JL
R614	467-2E068-H0	1/2W-68Ω-JL
R631	467-2E133-H0	1/2W-330Ω-JL
R643	467-2F122-H0	1W-220Ω-JL

Assembly drawing of complete set



DETAIL LIST OF ASSEBLY DRAWINGS

No.	Name	No.	Name
1	BACK NAMEPLATE	14	PRESS KEY
2	SIDE AV BRACKET SET SIDEWAYS	15	SUPPORTING BLOCK FOR CRT
3	SCREW	16	PUSH BUTTON PLATE
4	BACK CABINET	17	MAIN BOARD FRAME
5	COMPOSITE BOLT	18	BACK PLATE
6	CRT	19	MAIN BOARD
7	CRT FIXED PLATE ASSY'	20	SCREW
8	POWER SWITCH	21	DRAWING SPRING WITH FIBER LINE
9	POWER PUSH BUTTON	22	DEGAUSSING COIL
10	SCREW	23	LINE BUCKLE
11	SPEAKER	24	FIBER LINE
12	LOUD SPEAKER BRACKET	25	CRT BOARD
13	FRONT CABINET		