

SAMSUNG

# COLOR TELEVISION RECEIVER

Chassis : S53A  
Model: CW28C7VH2S/XEC

# ***SERVICE Manual***

## COLOR TELEVISION RECEIVER



## CONTENTS

1. Precautions
2. Reference Information
3. Specifications
4. Alignment and Adjustments
5. Troubleshooting
6. Exploded Views and Parts List
7. Electric Parts List
8. Block Diagrams
9. Wiring Diagram
10. Schematic Diagrams

## 1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

### 1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.
2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including: nonmetallic control knobs and compartment covers.
3. Make sure that there are no cabinet openings through which people—particularly children—might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (Figure 1-1): Warning: Do not use an isolation transformer during this test. Use a leakage-current tester or a metering system that complies with American National Standards Institute (ANIS C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).
5. With the unit completely reassembled, plug the AC line cord directly into the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

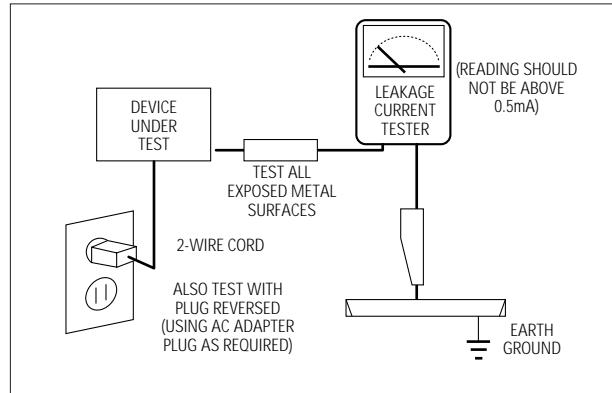


Fig. 1-1 AC Leakage Test

6. Antenna Cold Check: With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong. Connect the other lead to the coaxial connector.
7. X-ray Limits: The picture tube is especially designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original. Carefully reinstall the picture tube shields and mounting hardware; these also provide X-ray protection.
8. High Voltage Limits: High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits. Correct operation of the X-ray protection circuits must be reconfirmed whenever they are serviced. (X-ray protection circuits also may be called "horizontal disable" or "hold-down".) Heed the high voltage limits. These include the X-ray Protection Specifications Label, and the Product Safety and X-ray Warning Note on the service data schematic.

## 1-1 Safety Precautions (Continued)

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9. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.
  10. Design Alteration Warning:  
Never alter or add to the mechanical or electrical design of this unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.
  11. Hot Chassis Warning:  
Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.  
  
To confirm that the AC power plug is inserted correctly, do the following: Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.
  12. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, regardless of the AC plug polarity. These units can be safely serviced only if an isolation transformer inserted between the receiver and the power source.
  13. Some TV chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulating material that must not be defeated or altered.
  14. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards.
  15. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.
  16. Picture Tube Implosion Warning:  
The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.
  17. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.
  18. Product Safety Notice:  
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original—even if the replacement is rated for higher voltage, wattage, etc.
- Components that are critical for safety are indicated in the circuit diagram by shading, ( or ). Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

## 1-2 Servicing Precautions

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Warning1: First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.

Warning2: An electrolytic capacitor installed with the wrong polarity might explode.

1. Servicing precautions are printed on the cabinet. Follow them.
2. Always unplug the unit's AC power cord from the AC power source before attempting to:  
(a) Remove or reinstall any component or assembly,  
(b) Disconnect an electrical plug or connector,  
(c) Connect a test component in parallel with an electrolytic capacitor.
3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.
5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of the AC plug.  
  
The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
8. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

## 1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

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1. Some semiconductor (“solid state”) devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.
2. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power—this is an electric shock precaution.)
3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.
4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.
5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.
6. Use only an anti-static solder removal device. Many solder removal devices are not rated as “anti-static”; these can accumulate sufficient electrical charge to damage ESDs.
7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
9. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

## 2. Reference Information

### 2-1 Tables of Abbreviations and Acronyms

Table 2-1 Abbreviations

A	Ampere	MV	Megavolt
Ah	Ampere-hour	MW	Megawatt
Å	Angstrom	MΩ	Megohm
dB	Decibel	m	Meter
dBm	Decibel Referenced to One Milliwatt	μA	Microampere
°C	Degree Celsius	μF	Microfarad
°F	Degree Fahrenheit	μH	Microhenry
°K	degree Kelvin	μm	Micrometer
F	Farad	μs	Microsecond
G	Gauss	μW	Microwatt
GHz	Gigahertz	mA	Millampere
g	Gram	mg	Milligram
H	Henry	mH	Millihenry
Hz	Hertz	ml	Milliliter
h	Hour	mm	Millimeter
ips	Inches Per Second	ms	Millisecond
kWh	Kilowatt-hour	mV	Millivolt
kg	Kilogram	nF	Nanofarad
kHz	Kilohertz	Ω	Ohm
kΩ	Kilohm	pF	Picofarad
km	Kilometer	lb	Pound
km/h	Kilometer Per Hour	rpm	Revolutions Per Minute
kV	Kilovolt	rps	Revolutions Per Second
kVA	Kilovolt-ampere	s	Second (Time)
kW	Kilowatt	V	Volt
l	Liter	VA	Volt-ampere
MHz	Megahertz	W	Watt
		Wh	Watt-hour

Table 2-2 Table of Acronyms

ABL	Automatic Brightness Limiter	I/O	Input/output
AC	Alternating Current	L	Left
ACC	Automatic Chroma Control	L	Low
AF	Audio Frequency	LED	Light Emitting Diode
AFC	Automatic Frequency Control	LF	Low Frequency
AFT	Automatic Fine Tuning	MOSFET	Metal-Oxide-Semiconductor-Field-Effect-Transistor
AGC	Automatic Gain Control	MTS	Multi-channel Television Sound
AM	Amplitude Modulation	NAB	National Association of Broadcasters
ANSI	American National Standards Institute	NEC	National Electric Code
APC	Automatic Phase Control	NTSC	National Television Systems Committee
APC	Automatic Picture Control	OSD	On Screen Display
A/V	Audio-Video	PCB	Printed Circuit Board
AVC	Automatic Volume Control	PLL	Phase-Locked Loop
BAL	Balance	PWM	Pulse Width Modulation
BPF	Bandpass Filter	QIF	Quadrature Intermediate Frequency
B-Y	Blue-Y	R	Right
CATV	Community Antenna Television (Cable TV)	RC	Resistor & Capacitor
CB	Citizens Band	RF	Radio Frequency
CCD	Charge Coupled Device	R-Y	Red-Y
CCTV	Closed Circuit Television	SAP	Second Audio Program
Ch	Channel	SAW	Surface Acoustic Wave(Filter)
CRT	Cathode Ray Tube	SIF	Sound Intermediate Frequency
CW	Continuous Wave	SMPS	Switching Mode Power Supply
DC	Direct Current	S/N	Signal/Noise
DVM	Digital Volt Meter	SW	Switch
EIA	Electronics Industries Association	TP	Test Point
ESD	Electrostatic Discharge	TTL	Transistor Transistor Logic
ESD	Electrostatically Sensitive Device	TV	Television
FBP	Feedback Pulse	UHF	Ultra High Frequency
FBT	Flyback Transformer	UL	Underwriters Laboratories
FF	Flip-Flop	UV	Ultraviolet
FM	Frequency Modulation	VCD	Variable-Capacitance Diode
FS	Fail Safe	VCO	Voltage Controlled Oscillator
GND	Ground	VCXO	Voltage Controlled Crystal Oscillator
G-Y	Green-Y	VHF	Very High Frequency
H	High	VIF	Video Intermediate Frequency
HF	High-Frequency	VR	Variable Resistor
HI-FI	High Fidelity	VTR	Video Tape Recorder
IC	Inductance-Capacitance	VTVM	Vacuum Tube Voltmeter
IC	Integrated Circuit	TR	Transistor
IF	Intermediate Frequency		

## 2-2 IC Line Up

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Table 2 - 3 IC Line - Up

NO	BOARD	LOC. NO	SPEC.	DESCRIPTION	REMARKS
1	POWER	IC801	STR6709	SMPS	
		IC805	PC123Y	PHOTO-COUPLER	
		IC806	KA7805A	REGULATOR(STD-5V)	
		IC803	TOP210ES	STAND-BY SMPS	
		IC403	TDA8145	E-W IC	
		IC301	LA7845	VERTICAL IC	
		Q801	TIP102	TR-DARLINGTON SMPS	
		Q805	SE135N	ERROR AMP	
		Q404	BUZ73A	H-DRIVE	
		Q405	2SC5331		
2	F_BOX	D806	RBV606	BRIDGE DIODE	
		D407	IMP3FU	H-DRIVE	
		IC1	CIP3250	RGB INVERTER	
		IC2	VPC3215C	VIDEO INVERTER	
		IC3	SDA9362	DIGITAL DEFLECTION CONTROL	
		IC4	SDA9254	MEMORY(NOISE REDUCTION)	
		IC5	SDA9220	MEMORY SYNC CONTROL	
3	MAIN	IC6	SDA9280	DISPLAY-PROCESSOR	
		IC7	7705AC	POWER-ON RESET GENERATOR	
		IC101	TDA9810	MULTISTANDARD VIF-PLL WITH QSS-IF AND AM DEMODULATOR	
		IC201	TDA4780	RGB VIDEO PROCESSOR	
		IC601	TDA7265	AUDIO AMP.	
		IC701	TEA6415C	VIDEO MATRIX SWITCH	
		IC801	KA7809A	REGULATOR	
		IC802	SI3050		
		IC803			

Table 2 - 3 IC Line - Up

NO	BOARD	LOC. NO	SPEC.	DESCRIPTION	REMARKS
3	<b>MAIN</b>	IC804	KA7812	REGULATOR	
		IC805	KA7808		
		IC806	KA7809		
		IC901	SDA5457	MICOM, TTX	
		IC902	24W16	EEPROM	
		IC903	7042	DETECTOR	
		TU01	TECC2949PG29A(S)	TUNNER	
4	<b>AUDIO</b>	IC601	MSP3410D	MULTISTAND VIF-PLL WITH QSS-IF AND AM DEMODULATOR	
		IC603	TDA7050	OP AMP	
5	<b>CRT</b>	IC501	TDA6111Q	VIDEO OUTPUT AMPLIFIER R,G,B DRIVE	
		IC502			
		IC503			
		QF09	2SA1011	PUSH-PULL	
		QF10	2SC2344		
		IC504	TDA2030	OP AMP	
		IC505	SPK102T		

### 3. Specifications

MODEL		CW28C7VH2S
SYSTEM	TUNING	Frequency Synthesizer
	COLOR	PAL, SECAM, NTSC (Video Input)
	SOUND	NICAM, A2 STEREO, AM
ANTENNA INPUT		75ohms,Coaxial Cable
POWER	CONSUMPTION	170W
	REQUIREMENTS	Main Voltage : 230V Input Range : 180 ~ 260V
	FREQUENCY	50Hz/60Hz
TUBE	SIZE	28" (71.12 Cm)
	TYPE	4:3, 1.5R Invar
PROGRAMMABLE CHANNELS		100
SOUND OUTPUT		Right : 12W Left : 12W
SOCKETS	FRONT	RCA : Input/S-VHS Headphone Audio Output
	BACK (2 SCART)	AV-1 : SCART Input/Output, R,G,B Input. AV-2 : SCART Input/Output

Specifications are subject to change.

# **MEMO**

## 4. Alignment and Adjustments

### 4-1 General Alignment Instructions

1. Usually, a color TV-VCR needs only slight touch-up adjustment upon installation. Check the basic characteristics such as height, horizontal and vertical sync and focus.
2. Observe the picture for good black and white details. There should be objectionable color shading; if color shading is present, demagnetize, perform purity and convergence adjustments described below.
3. Use the specified test equipment or its equivalent.
4. Correct impedance matching is essential.
5. Avoid overload. Excessive signal from a sweep generator might overload the front-end of the TV. When inserting signal markers, do not allow the marker generator to distort test results.
6. Connect the TV only to an AC power source with voltage and frequency as specified on the backcover nameplate.
7. Do not attempt to connect or disconnect any wires while the TV is turned on. Make sure that the power cord is disconnected before replacing any parts.
8. To protect against shock hazard, use an isolation transformer.

### 4-2 Automatic Degaussing

A degaussing coil is mounted around the picture tube, so that external degaussing after moving the TV should be unnecessary. But the receiver must be properly degaussed upon installation.

The degaussing coil operates for about 1 second after the power is switched ON. If the set is moved or turned in a different direction, the power should be OFF for at least 10 minutes.

If the chassis or parts of the cabinet become magnetized, poor color purity will result. If this happens, use an external degaussing coil. Slowly move the degaussing coil around the faceplate of the picture tube and the sides and front of the receiver. Slowly withdraw the coil to a distance of about 6 feet before turning power OFF.

If color shading persists, perform the following Color purity and Convergence adjustments.

### 4-3 High voltage Check

*CAUTION: There is no high voltage adjustment on this chassis. The B+ power supply should be +135 volts (with full color-bar input and normal picture level).*

1. Connect a digital voltmeter to the second anode of the picture tube.
2. Turn on the TV. Set the Brightness and Contrast controls to minimum (zero beam current).
3. Adjust the Brightness and contrast controls to both extremes. Ensure that the high voltage does not exceed 32 KV under any conditions.

## **4-4 RF AGC Adjustment**

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1. Turn to the strongest local station.
2. Turn the AGC control fully clockwise (VR101, on the MAIN board).
3. Adjust the AGC control until noise (snow) disappears from the screen.

## **4-5 FOCUS Adjustment**

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1. Input a black and white signal.
2. Adjust the tuning control for clearest picture.
3. Adjust the FOCUS control for well defined scanning lines in the center area of the screen.

## **4-6 SCREEN Adjustment**

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1. Turn to the ACTIVE channel.
2. Adjust the VR screen for a normal picture is (no blooming or flyback line).
3. Adjust the SCREEN control for well defined scanning lines in the center area of the screen.

## **4-7 Purity Adjustment**

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1. Warm up the receiver for at least 20 minutes.
2. Plug in the CRT deflection yoke. Tighten the clamp screw.
3. Plug the convergence yoke into the CRT and set it as shown in Fig. 4-1.
4. Input a black and white signal.
5. Fully demagnetize the receiver by using an external degaussing coil.
6. Turn the CONTRAST and BRIGHTNESS controls to maximum.
7. Loosen the clamp screw holding the yoke.  
Slide the yoke backward or forward to produce a vertical green belt. (Fig.4-2)
8. Tighten the convergence yoke.
9. Slowly move the deflection yoke forward.  
Adjust for the best overall green screen.
10. Temporarily tighten the deflection yoke.
11. Produce blue and red rasters by adjusting the low-light controls. Check for good purity in each field.
12. Tighten the deflection yoke.

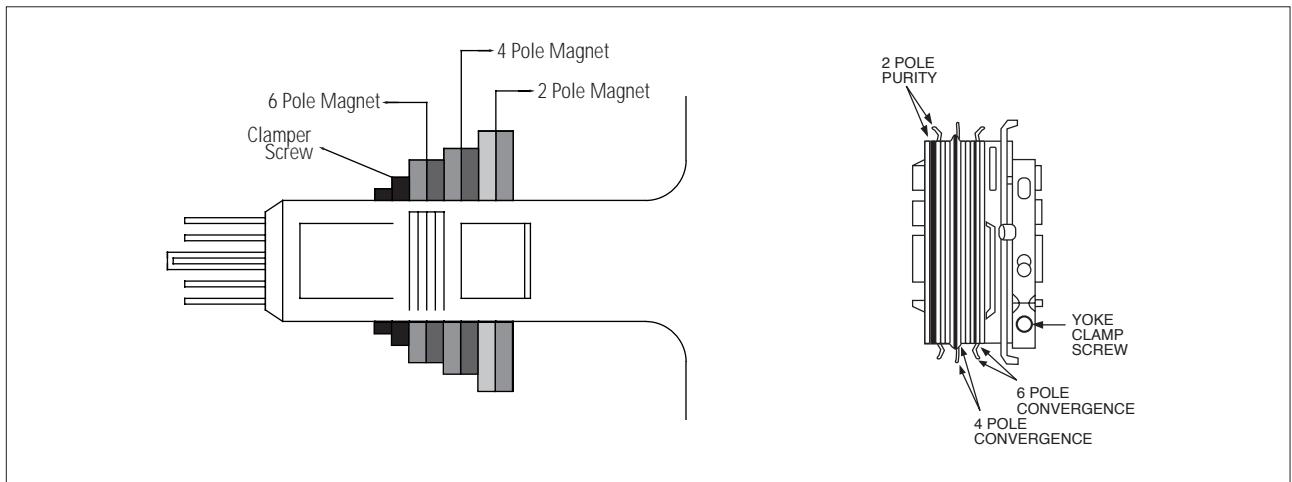


Fig. 4-1 Convergence Magnet Assembly

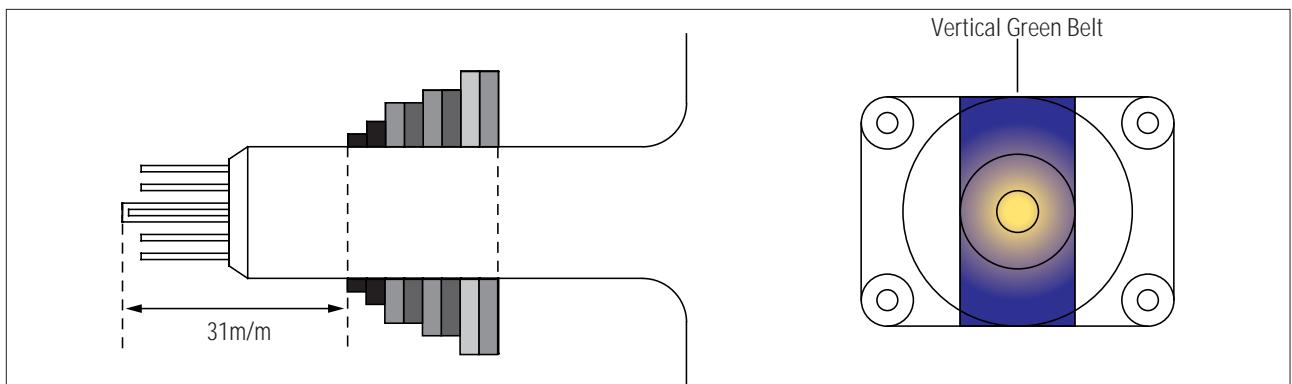


Fig. 4-2 Center Convergence Adjustment

## 4-8 Center Convergence Adjustment

1. Warm up the receiver for at least 20 minutes.
2. Adjust the BRIGHTNESS and CONTRAST controls for a well-defined picture.
3. Adjust the two tabs of the 4-pole magnets: Change the angle between them. Superimpose the red and the blue vertical lines in the center area of the screen.
4. Turn both tabs at the same time, keeping the angle constant: Superimpose the red and blue horizontal lines in the center of the screen.
5. Adjust two tabs of 6-pole magnets: Superimpose the red and blue lines with the green. Adjusting the angle affects the vertical lines, and rotating both magnets affects the horizontal lines.
6. Repeat adjustments 2~4, if necessary.
7. Since the 4-pole and 6-pole magnets interact, the dot movement is complex (Fig. 4-3).

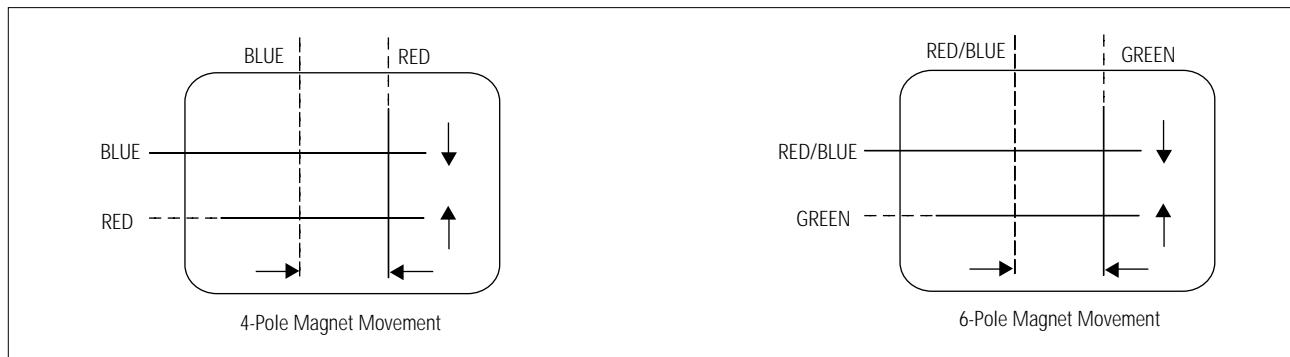


Fig 4-3 Center Convergence Adjustment

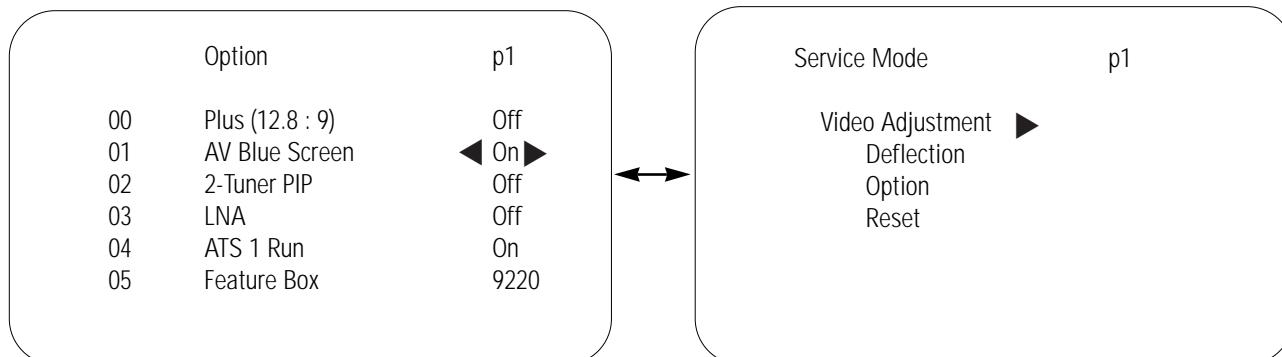
## 4-9 Service Mode

- Enter the Factory Mode. Press the remote-control keys in this sequence:



- Use the channel and volume keys (up/down) to move the cursor. Select an alignment parameter. Use the volume keys (up/down) to adjust the value. Adjustment must be done separately for PAL, SECAM, NTSC color systems. (As soon as the TV receives a signal, it switches to the correct broadcast standard.) After adjustments are completed, press the picture off key to exit the Service Mode. Press the digit keys to directly change channel number.

VIDEO ADJUSTMENT		p1	DEFLECTION		p1
00	RED DRIVE	◀ 36 ▶	NO	CONTROL	PAL NTSC SECAM
01	BLUE DRIVE	39	00	V-SIZE	-41 -58
02	GREEN DRIVE	32	01	V-SHIFT	3 -10
03	RED CUTOFF	31	02	V-LIN	-5 -4
04	BLUE CUTOFF	28	03	S-COLLECTION	-31 -30
05	GREEN CUTOFF	32	04	EW-WIDTH	65 59
06	SUB BRIGHTNESS	4	05	EW-PARABOLA	12 14
07	SUB CONTRAST	15	06	H-SHIFT	-2 -7
08	SUB COLOR	12	07	EW-TRAPIZIUM	-9 -25
09	PEAK DRIVE LIMIT	63	08	EW-UPPER CORNER	53 39
10	YC DELAY	2 (NTSC) 8 (PAL,SECAM)	09	EW-LOWER CORNER	28 4
11	SUB TINT	13	10	HOR-EHT	-10 -10
12	GAMMA CORRECTION	0	11	VER-EHT	-10 -10
			12	BOW	-1 -15
			13	ANGLE	-2 -3



## 4-10 MICOM

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### 4-10-1 Pin Layout

L/L'	1	I/	I/O	52	NC
H/P-IDENT	2	I/O	COR	51	→ HALF-TONE
S-RESET	3	I/O	BO	50	→ TTX/OSD-F/B
S-MUTE	4	I/O	B	49	→ TTX/OSD-B
W/PROTECTION	5	I/O	G	48	→ TTX/OSD-G
SCL2	6	I/O	R	47	→ TTX/OSD-R
SDA2	7	I/O	VS	46	← V-SYNC 100Hz
SDA1	8	0I/O	HS	45	← SAND CASTLE 100Hz
SCL1	9	I/O	S	I/O 44	← /V-SYNC 100Hz'
VSS	10		D	I/O 43	→ MODE-SWITCH
VDD	11		A	I/O 42	→ NTSC-M SWITCH
XTAL1	12		5	I/O 41	← KEY3
XTAL2	13		4	I/O 40	← KEY2
FACTORY	14	I/O	4	I/O 39	NC
RESET	15		5	I/O 38	NC
SCART2-IDENT	16	I/O	7	37	VDD
SCART1-IDENT	17	I/O		I/O 36	← IR
TILT	18	PWM		35	VSSD
LED	19	I/O		A/D 34	← KEY1
D-COIL	20	I/O		A/D 33	← PIP-AFT
ON/OFF	21	I/O		A/D 32	← MAIN-AFT
RF-IDENT	22	I/O		A/D 31	← MAIN-AGC
FS-IDENT	23	I/O		CVBS1 30	← TTXCVBS
VSSA	24			Iref 29	Iref
LOOP FILTER	25			28	VDDA
VSSA	26			CVBS2 27	VSSA

## 4-10-2 Pin Assignment Specification

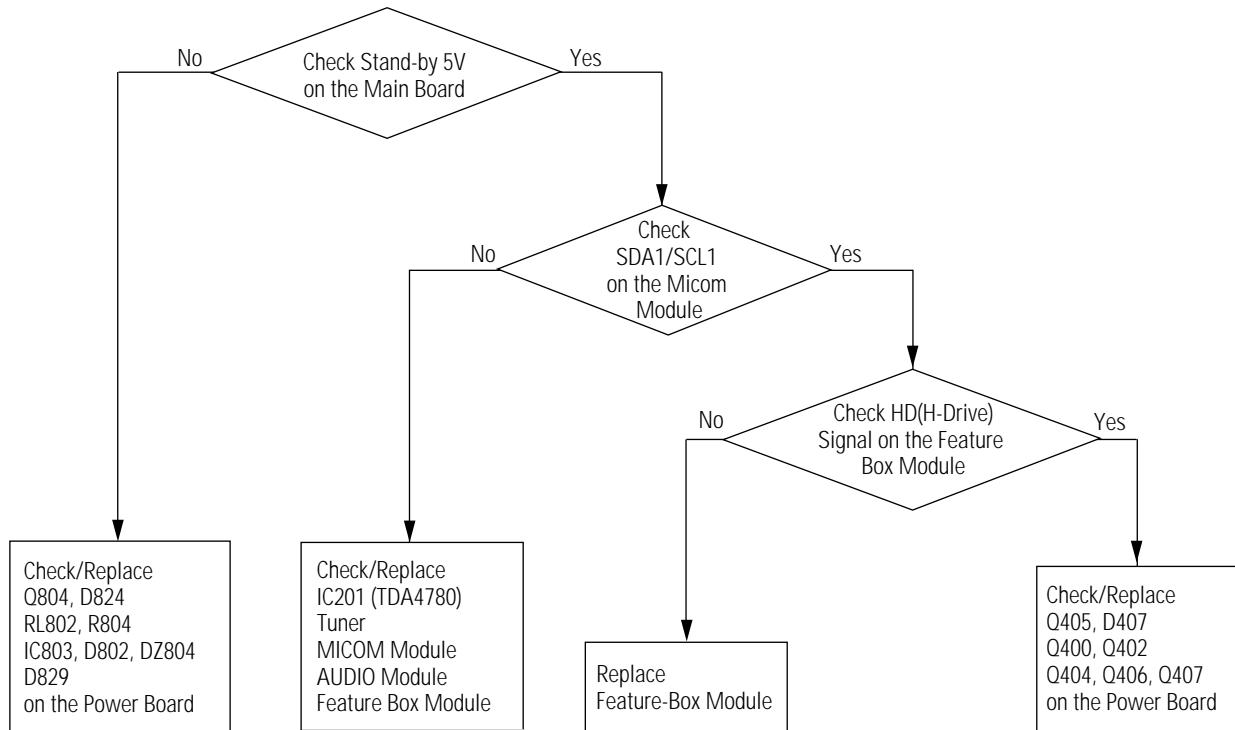
PIN NO	FUNCTION	ASSIGN	IN/OUT	ACTIVE H/L	DESCRIPTION
1	I/O	L/L'	I		L: HIGH, L': LOW
2	I/O	H/P ID	I		H/P IDENT
3	I/O	SOUND RESET	0		SOUND RESET
4	I/O	SOUND MUTE	0		SOUND MUTE
5	I/O	W/PROTECTION	0		EEPROM WRITE PROTECTION
6	SCL	SCL			SCL2, SDA2
7	SDA	SDA			
8	SDA	SDA			SCL1, SDA1
9	SCL	SCL			
10	Vss	GNDD			DIGITAL GND
11	Vdd	VDD			DIGITAL B+
12	XTAL1	XTAL1		6MHz	X-TAL OSC INPUT
13	XTAL2	XTAL2			X-TAL OSC OUTPUT
14	I/O	FACTORY	I	H	FACTORY
15	RESET	RESET			MICOM HARDWARE RESET
16	I/O	SCART2-ID	I	H	SCART2 IDENT
17	I/O	SCART1-ID	I	H	SCART1 IDENT
18	I/O	TILT	0	PWM	TILT CONTROL
19	I/O	LED	0		PICTURE ON/OFF LED CONTROL
20	I/O	D-COIL	0	H	DEGAUSSING COIL CONTROL
21	I/O	ON/OFF	0	ON: L	PICTURE ON/OFF CONTROL
22	I/O	RF-ID	I	H	NO SIGNAL SOUND MUTE FOR ITALY SCART OUT
23	I/O	FS-ID	I	L	FRONT S-VHS IDENT
24	Vssa	VSSA			ANALOG GND
25	FIL3	LOOP FILTER			FILTER3
26	Vssa	VSSA			ANALOG GND

**4-10-2 Pin Assignment Specification (Continued)**

PIN NO	FUNCTION	ASSIGN	IN/OUT	ACTIVE H/L	DESCRIPTION
27	CVBS2	VSSA			ANALOG GND
28	Vdda	VDDA			ANALOG B+
29	Iref	IREF			I REFERENCE
30	CVBS1	TTX-CVBS	I		TTX CVBS INPUT
31	A/D	M-AGC	I		CHECK(2-TUNER PIP) FOR LNA ON/OFF GAIN - MORE THAN 2.5V
32	A/D	M-AFT	I		MAIN AFT CONTROL
33	A/D	P-AFT	I		PIP AFT CONTROL(2-TUNER PIP)
34	A/D	KEY1	I		PANNEL MENU, CH.UP/DOWN, VOL.UP/DOWN CONTROL
35	Vss	VSSD			DIGITAL GND
36	I/O	IR	O		IR INPUT
37	Vdd	VDD			DIGITAL B+
38	NC				NOT USED
39	NC				NOT USED
40	I/O	KEY2	I	L	PANNEL MUTE KEY CONTROL
41	I/O	KEY3	I	L	PANNEL TV/VIDEO KEY CONTROL
42	I/O	NTSC-M	O	H	VIDEO SAW FILTER CONTROL
43	I/O	MOD-S/W	O	L	POSITIVE MODULATION, AGC
44	/VS2	/VS2	I		INVERTER VS2
45	HS	SC100	I		SAND CASTLE SYNC INPUT 32KHz
46	VS	VS2	I		VERTICAL SYNC INPUT 100Hz
47	R-OUT	R	O		
48	G-OUT	G	O		
49	B-OUT	B	O		
50	BLANK OUT	F/B	O		
51	I/O	HALF-TONE	O		HALF TONE CONTROL
52	NC				NOT USED

## 5. Troubleshooting

### 5-1 No Power



Note 1. : When Picture OFF, SDA = 5V SCL = 2V

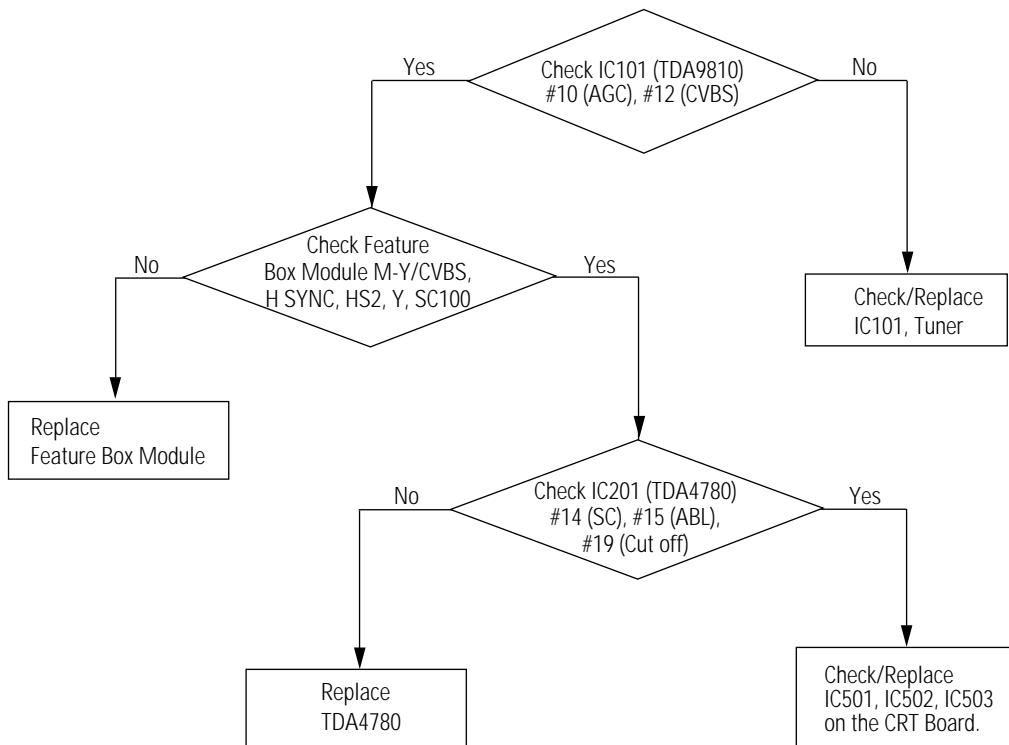
When Picture ON, SDA = 5V SCL = 5V

Note 2. : If the TV set is damaged by lightning, the following parts are probably destroyed :

IC803(Stand-by IC), R851(2W, 27Ω), D802(1N4148)

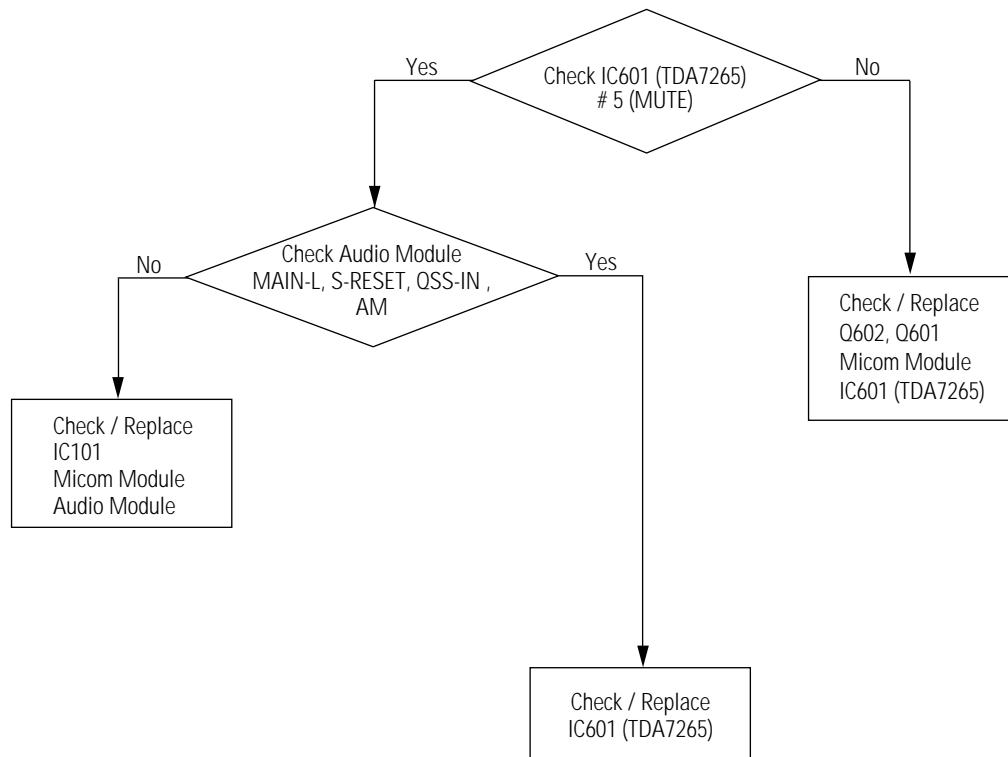
## 5-2 No Picture

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### 5-3 No Sound

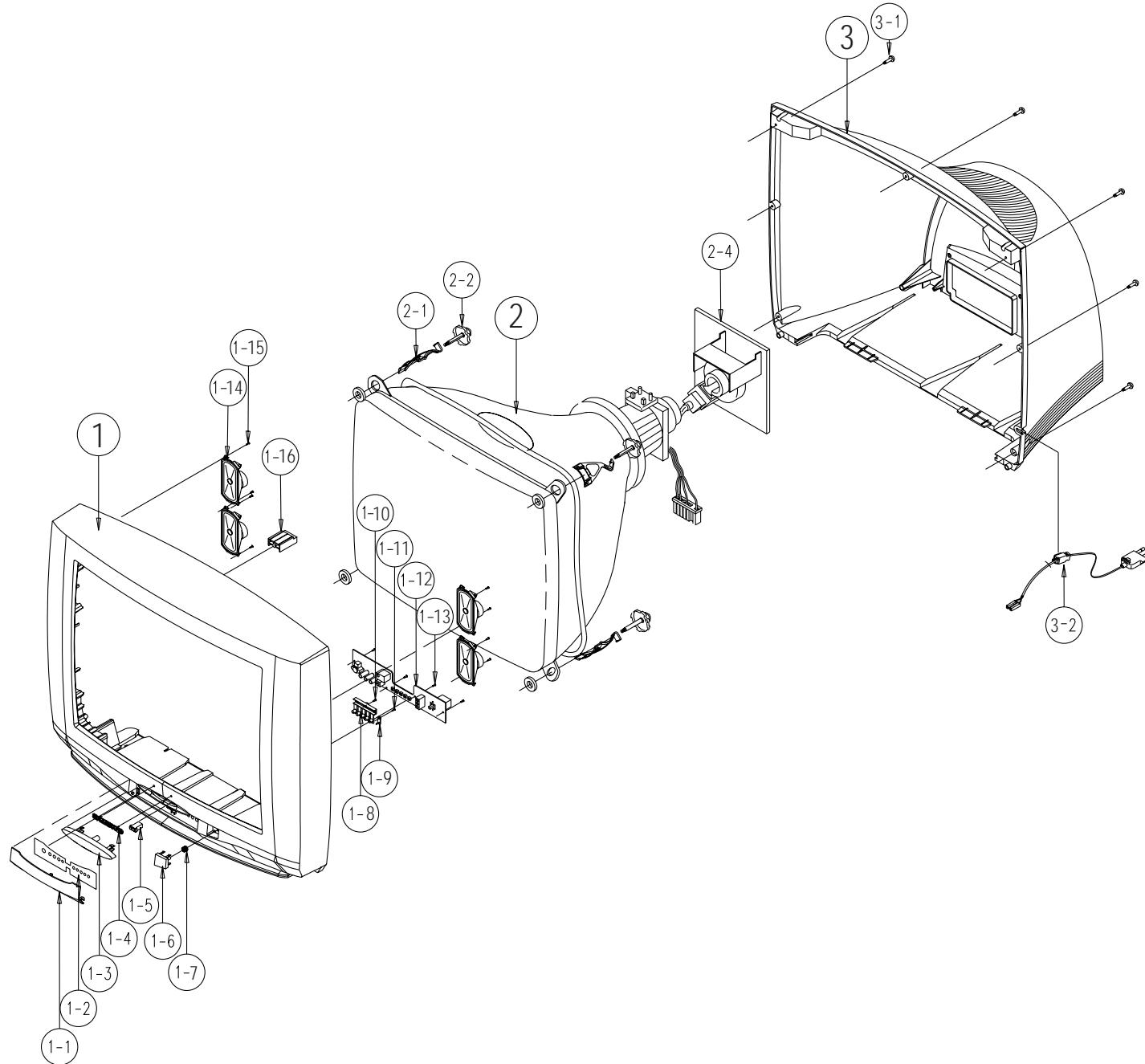
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# **MEMO**

## 6. Exploded View & Parts List

### 6-1 CW28C7VH2S/XEC



No	Description	Code No	Specification	Q'ty	Remark
1	CABINET-FRONT	AA64-31363A	HIPS,HB,BLK	1	
1-1	DOOR-CONTROL	AA64-50258A	ABS,HB,BLK	1	
1-2	INLAY-CONTROL	AA64-00189A	28C7,S53A,PS,T0.3,BLK,-,-	1	
1-3	WINDOW-REMOCON	AA64-00190A	28C7,-,PC,-,VIOLET,-	1	
1-4	BADGE-BRAND	AA64-70117B	AL,SS,SILVER,L65,R2000,-,-	1	
1-5	LATCH-DOOR	AA61-30001A	KIFUCO LA701,-	1	
1-6	KNOB-POWER	AA64-10808A	ABS,HB,G3676	1	
1-7	SPRING-CS	AA61-60003J	SUS304,0.5,OD6,H12,N7,-,-	1	
1-8	KNOB-CONTROL	AA64-10809C	28C7,S53A,ABS,HB,G3676	1	
1-9	INDICATOR-LED	AA64-00191A	28C7,-,ACRYL,-,CLR,-	1	
1-10	SCREW-TAPITITE	6003-001026	RH,+,B,M4,L15,ZPC(BLK),SWR	1	CF+KC
1-11	SCREW-TAPITITE	6003-001026	RH,+,B,M4,L15,ZPC(BLK),SWR	1	CF+IL
1-12	ASSY-PCB,CONTROL	AA95-00174A	DP,S53A,28C7,HUNGARY	1	
1-13	SCREW-TAPITITE	6003-001023	RWH,+,B,M3,L10,ZPC(YEL),SW	4	CF+PWB
1-14	SPEAKER	3001-001038	6W,160HM,92DB,140HZ	4	
1-15	SCREW-TAPITITE	6003-001026	RH,+,B,M4,L15,ZPC(BLK),SWR	8	CF+SPK
1-16	BOSS-WING	AA61-40010A	HIPS,HB,NTR,-,-	1	
2	CRT-COLOR	AA03-10035E	A66EAK552X54,+380mG,28,110d	1	
2-1	CLAMP-D,COIL	AA65-30017A	NYLON-66,V0,NTR,DADH300,25	9	
2-2	SCREW-ASSY	AA60-10051D	WC,HH,+,M5,30,SWRCH18A	4	CRT+CF
2-3	ASSY-PCB,CRT	AA95-00114A	S53A,28,EUROPE,CW28C7VH	1	
3	CABINET-BACK	AA64-31364A	HIPS,V2,G3566	1	
3-1	SCREW-TAPITITE	6003-001025	RH,+,B,M4,L20,ZPC(BLK),SWR	7	CB+CF
3-2	CLAMP/C	AA65-30008A	CLAMP-CORD;PE,HB,BLK,-,-	1	

## 7. Electric Parts List

### 7-1. CW28C7VH2S/XEC

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
<b>ASSY-PCB,MAIN(OPT)</b>							
* AA94-00599AASSY-PCB,MAIN(OPT);CW28C7VH,S53A,EUROPE,							
C101	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m		C615	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5	
C103	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m		C616	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5	
C104	2401-000660	C-AL:2.2uF,20%,50V,GP,TP,5x11,5		C701	2202-000216	C-CERAMIC,MLC-AXIAL:27pF,5%,50V,SL,TP,3.	
C105	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m		C702	2202-000216	C-CERAMIC,MLC-AXIAL:27pF,5%,50V,SL,TP,3.	
C106	2201-000292	C-CERAMIC,DISC:1nF,10%,50V,Y5P,TP,5x3,5		C703	2202-000216	C-CERAMIC,MLC-AXIAL:27pF,5%,50V,SL,TP,3.	
C107	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm		C704	2202-000216	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
C108	2401-000667	C-AL:2.2uF,20%,50V,WTF,TP,5x11,5		C705	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
C109	2401-002300	C-AL:47uF,20%,50V,GP,TP,6.3x11,5		C706	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
C110	2201-000179	C-CERAMIC,DISC:10nF,10%,50V,Y5V,TP,6.5x3		C707	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
C111	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm		C708	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
C112	2401-000947	C-AL:22uF,20%,35V,GP,TP,5x11,5		C709	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C113	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m		C710	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5	
C114	2201-000982	C-CERAMIC,DISC:10nF,+80-20%,50V,Y5V,TP,6		C711	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
C115	2201-000982	C-CERAMIC,DISC:10nF,+80-20%,50V,Y5V,TP,6		C712	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
C116	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		C713	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
C117	2201-000982	C-CERAMIC,DISC:10nF,+80-20%,50V,Y5V,TP,6		C714	2201-000376	C-CERAMIC,DISC:220pF,5%,50V,SL,TP,4x4,5	
C119	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5		C715	2201-000376	C-CERAMIC,DISC:220pF,5%,50V,SL,TP,4x4,5	
C120	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5		C716	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11,5	
C121	2401-001571	C-AL:47uF,+20%-0%,50V,GP,TP,8x11,5,5		C717	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11,5	
C122	2201-000292	C-CERAMIC,DISC:1nF,10%,50V,Y5P,TP,5x3,5		C718	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C123	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m		C719	2305-000289	C-FILM,MPEF;220nF,5%,63V,TP,-,5mm	
C124	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5		C724	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP	
C125	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5		C725	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP	
C201	2201-000558	C-CERAMIC,DISC:470pF,10%,50V,Y5P,TP,5x3,		C726	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP	
C202	2201-000144	C-CERAMIC,DISC:100pF,5%,50V,CH,TP,8x3,5		C727	2202-000231	C-CERAMIC,MLC-AXIAL:330pF,10%,50V,Y5P,TP	
C203	2305-000196	C-FILM,MPEF;150nF,5%,63V,TP,-,5mm		C831	2401-002286	C-AL:470uF,20%,16V,WTF,TP,10x12.5,5	
C204	2305-000196	C-FILM,MPEF;150nF,5%,63V,TP,-,5mm		C832	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C205	2201-000464	C-CERAMIC,DISC:30pF,5%,50V,SL,TP,4x3,5,5		C833	2401-003034	C-AL:220uF,20%,16V,WTF,TP,8x11,5,5	
C206	2305-000196	C-FILM,MPEF;150nF,5%,63V,TP,-,5mm		C834	2401-000832	C-AL:220uF,20%,25V,GP,TP,8x11,5,5	
C207	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		C835	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C208	2305-000355	C-FILM,MPEF;330nF,5%,63V,TP,-,5mm		C836	2401-002286	C-AL:470uF,20%,16V,WTF,TP,10x12.5,5	
C209	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5		C837	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C210	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm		C838	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C211	2305-000355	C-FILM,MPEF;330nF,5%,63V,TP,-,5mm		C839	2401-003034	C-AL:220uF,20%,16V,WTF,TP,8x11,5,5	
C212	2401-000962	C-AL:22uF,20%,50V,GP,TP,5x11,5		C840	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
C213	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm		C841	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C214	2201-000144	C-CERAMIC,DISC:100pF,5%,50%CH,TP,8x3,5		C851	2401-002286	C-AL:470uF,20%,16V,WTF,TP,10x12.5,5	
C218	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m		C852	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C219	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m		C862	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C220	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m		C863	2401-001397	C-AL:470uF,20%,25V,GP,TP,10x16,5	
C221	2201-000144	C-CERAMIC,DISC:100pF,5%,50%CH,TP,8x3,5		C864	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C222	2201-000653	C-CERAMIC,DISC:68pF,5%,50V,SL,TP,4x3,5		C866	2401-000832	C-AL:220uF,20%,25V,GP,TP,8x11,5,5	
C223	2201-000265	C-CERAMIC,DISC:180pF,5%,50V,RH,TP,8x3,5		C870	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C224	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m		C901	2301-000247	C-FILM,PEF:33nF,5%,50V,TP,8.1x4.5x13mm,5	
C225	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5		C902	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C226	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm		C903	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11,5	
C227	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm		C904	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5	
C228	2301-000383	C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm		C905	2201-000487	C-CERAMIC,DISC:33pF,5%,50V,SL,TP,5x3,5m	
C229	2401-000404	C-AL:10uF,20%,16V,BP,TP,5x11,5		C906	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C230	2201-000375	C-CERAMIC,DISC:220pF,5%,50%RH,TP,9.5x3		C907	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C231	2201-000144	C-CERAMIC,DISC:100pF,5%,50%CH,TP,8x3,5		C908	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
C232	2201-000375	C-CERAMIC,DISC:220pF,5%,50%RH,TP,9.5x3		C909	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m	
C601	2401-000192	C-AL:1000uF,20%,50V,GP,TP,16x25,7,5		C910	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C602	2401-000192	C-AL:1000uF,20%,50V,GP,TP,16x25,7,5		C911	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
C603	2401-000192	C-AL:1000uF,20%,50V,GP,TP,16x25,7,5		C912	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	
C605	2401-000832	C-AL:220uF,20%,25V,GP,TP,8x11,5,5		C913	2401-000934	C-AL:22uF,20%,25V,BP,TP,8x11,5,5	
C606	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5		C914	2305-000355	C-FILM,MPEF:330nF,5%,63V,TP,-,5mm	
C607	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5		C915	2201-000234	C-CERAMIC,DISC:150pF,5%,50%CH,TP,9.5x3	
C608	2401-002300	C-AL:47uF,20%,50V,GP,TP,6.3x11,5		C916	2301-000192	C-FILM,PEF:1nF,5%,50V,TP,5.3x10mm,5mm	
C609	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m		C917	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m	
C610	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m		C918	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m	
C611	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m		C919	2305-000665	C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0m	
C612	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m		C920	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5	
Samsung Electronics				C921	2301-000356	C-FILM,PEF:47nF,5%,50V,TP,7.5x4.0x6.5,5m	
				C922	2305-000355	C-FILM,MPEF:330nF,5%,63V,TP,-,5mm	
				C923	2201-000292	C-CERAMIC,DISC:1nF,10%,50V,Y5P,TP,5x3,5	
				C925	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m	

## Electric Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
C926	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11.5		L202	2701-000208	INDUCTOR-AXIAL:6.8uH,10%,2.5x3.4mm	
C927	2201-000558	C-CERAMIC,DISC:470pF,10%,50V,Y5P,TP,5x3,		L203	2701-000208	INDUCTOR-AXIAL:6.8uH,10%,2.5x3.4mm	
C932	2201-000573	C-CERAMIC,DISC:47pF,5%,50V,CH,TP,6.3x3.0		L204	2701-000149	INDUCTOR-AXIAL:2.7uH,10%,2.5x3.4MM	
C934	2201-000472	C-CERAMIC,DISC:330pF,5%,50V,SL,TP,8x3.5,		L205	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
CN501A	3711-003641	CONNECTOR-HEADER-BOX,12P,1R,2.5mm,STRAIGH		L206	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
CN601A	3711-002643	CONNECTOR-HEADER-BOX,4P,1R,2.5MM,STRAIGH		L208	2701-001043	INDUCTOR-AXIAL:10uH,10%,14x4.5mA	
CN701	3722-000195	JACK-SCART:42P,-,SN,BLK,NO		L601	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
CN702A	3711-003641	CONNECTOR-HEADER-BOX,12P,1R,2.5mm,STRAIG		L602	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
CN803A	3711-000654	CONNECTOR-HEADER-BOX,12P,1R,2.5mm,STRAIG		L603	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
CN804A	3711-000654	CONNECTOR-HEADER-BOX,12P,1R,2.5mm,STRAIG		L604	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
CN901A	3711-002643	CONNECTOR-HEADER-BOX,4P,1R,2.5MM,STRAIGH		L701	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
CN902A	3711-002644	CONNECTOR-HEADER-BOX,7P,1R,2.5mm,STRAIGH		L702	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
CN903A	3711-002644	CONNECTOR-HEADER-BOX,5P,1R,2.5mm,STRAIGH		L703	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
D103	0401-001024	DIODE-SWITCHING:BAW75,25V,300MA,DO-35,TP		L704	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
D104	0401-001024	DIODE-SWITCHING:BAW75,25V,300MA,DO-35,TP		L705	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
D202	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T		L706	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
D203	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T		L707	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
D601	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T		L708	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
D602	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T		L709	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
D901	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T		L901	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
D902	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T		L902	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
D903	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T		L903	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
D904	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T		L904	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
D905	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T		L905	2701-000158	INDUCTOR-AXIAL:22uH,10%,2.5x3.4mm	
D906	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T		Q101	0504-000137	TR-DIGITAL:KSR1202,PNP,300mW,10K-1K,TO-	
D907	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T		Q102	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,T	
D908	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T		Q104	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,T	
D909	0401-001024	DIODE-SWITCHING:BAW75,25V,300MA,DO-35,TP		Q105	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
DL201	AA29-9003G	FILTER-LC,-,D5121,LP,12MHz,TP		Q107	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,T	
DZ102	1203-000451	IC-VOLTAGE REGULATOR:UZ5.1BSB,5.1V,4.97-5.18V,500		Q108	0504-000150	TR-DIGITAL:KSR2010,PNP,300mW,10K,TO-92,T	
DZ201	0403-000355	DIODE-ZENER:UZ5.1BSB,5.1V,4.97-5.18V,500		Q201	0501-000283	TR-SMALL SIGNAL:KSA539,NPN,400mW,TO-92,T	
DZ202	0403-000654	DIODE-ZENER:MTZ12B,12V,11.44-12.03V,500m		Q202	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
DZ203	0403-000660	DIODE-ZENER:MTZ22A,22V,20.15-21.2V,500mW		Q203	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
DZ204	0403-000660	DIODE-ZENER:MTZ22A,22V,20.15-21.2V,500mW		Q204	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
DZ206	0403-000562	DIODE-ZENER:MTZ7.5B,7.5V,7.07-7.45V,500m		Q601	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,T	
DZ701	0403-000654	DIODE-ZENER:MTZ12B,12V,11.44-12.03V,500m		Q602	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,T	
DZ702	0403-000654	DIODE-ZENER:MTZ12B,12V,11.44-12.03V,500m		Q701	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
DZ703	0403-000654	DIODE-ZENER:MTZ12B,12V,11.44-12.03V,500m		Q702	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
DZ704	0403-000654	DIODE-ZENER:MTZ12B,12V,11.44-12.03V,500m		Q703	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
DZ705	0403-000654	DIODE-ZENER:MTZ12B,12V,11.44-12.03V,500m		Q704	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
DZ706	0403-000654	DIODE-ZENER:MTZ12B,12V,11.44-12.03V,500m		Q705	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
DZ901	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500m		Q706	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
DZ902	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500m		Q707	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
DZ903	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500m		Q708	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
FI101	2904-000302	FILTER-SAW AV:38.90MHz,-,ST,13.9dB,PAL-B		Q709	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
FI102	2904-000301	FILTER-SAW AV:38.90MHz,SIP5K,ST,14.5dB,P		Q901	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
FI103	2903-000181	FILTER-CERAMIC:TR,5.5MHz,-,-,TP,TPS5.5		Q902	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
FI104	2903-000129	FILTER-CERAMIC:TR,4.5MHz/4.72MHz,-,-,TP		Q903	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
IC101	1204-001276	IC-SOUND PROCESSOR:TDA9810T,DIP,24P,400M		Q904	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
IC201	1204-001108	IC-VIDEO PROCESS:TDA74780/V4,DIP,28P,,PL		Q905	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
IC601	1201-001026	IC-POWER AMP:7265,ZIP,11P,19.6mIL,DUAL,1	H/SINK	Q906	0501-000283	TR-SMALL SIGNAL:KSA539,NPN,400mW,TO-92,T	
IC701	1001-001073	IC-VIDEO SWITCH:TEA6415C,VIDEO SWITCH,DI	H/SINK	Q907	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,T	
IC801	1203-000298	IC-POSI.FIXED REG.:7809,TO-220,3P,,PLAS	H/SINK	Q908	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
IC802	1203-000203	IC-POSI.ADJUST REG.:3050,TO-220,3P,,PLA	H/SINK	Q909	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
IC803	1203-000203	IC-POSI.ADJUST REG.:3050,TO-220,3P,,PLA	H/SINK	Q910	0501-000283	TR-SMALL SIGNAL:KSA539,NPN,400mW,TO-92,T	
IC804	1203-000243	IC-POSI.FIXED REG.:7812A,TO-220,3P,,PLA	H/SINK	Q911	0501-000369	TR-SMALL SIGNAL:KSC2331-Y,NPN,1W,TO-92L	
IC805	1203-000006	IC-POSI.FIXED REG.:7808,TO-220,3P,,PLAS	H/SINK	R101	2001-000522	R-CARBON:22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
IC901	AA13-00010AIC-MCU,-,SDA5457-OTP,B8T,DIP,CS309AH			R102	2001-000522	R-CARBON:22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
IC902	1103-001043	IC-EEPROM:24C16,2Kx8BIT,DIP,8P,300MIL,10		R105	2001-00290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-	
IC903	1203-000515	IC-VOL. DETECTOR:T042,TO-92,3P,177MIL,PL		R106	2001-000313	R-CARBON:11Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
J224	2001-000302	R-CARBON:10ohm,5%,1/8W,AA,TP,1.8x3.2mm		R107	2001-000331	R-CARBON:12KOHM,5%,1/8W,AA,TP,-	
J225	2001-000302	R-CARBON:10ohm,5%,1/8W,AA,TP,1.8x3.2mm		R109	2001-000490	R-CARBON:2000HM,5%,1/8W,AA,TP,-	
J259	2001-000007	R-CARBON:3Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R110	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	
J260	2001-000007	R-CARBON:3Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R111	2001-000515	R-CARBON:220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
J266	2001-000003	R-CARBON:330ohm,5%,1/8W,AA,TP,1.8x3.2mm		R113	2001-000780	R-CARBON:4700HM,5%,1/8W,AA,TP,-	
L101	AA26-10006G	TRANS-IF:-,7mG,VIF,-,7mm,8pF,77.8MHz,ST		R116	2001-000969	R-CARBON:75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
L102	2701-000299	INDUCTOR-AXIAL:13uH,10%,2.5x3.4mm		R119	2001-000515	R-CARBON:220ohm,5%,1/8W,AA,TP,1.8x3.2mm	
L103	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R121	2001-000522	R-CARBON:22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
L104	2701-000101	INDUCTOR-AXIAL:1.2uH,10%,2.5x3.4mm		R122	2001-000857	R-CARBON:560ohm,5%,1/8W,AA,TP,1.8x3.2mm	
L105	2701-000120	INDUCTOR-AXIAL:12uH,10%,2.5X3.4MM		R123	2001-000241	R-CARBON:1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
L106	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R124	2001-000241	R-CARBON:1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
L107	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R125	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,-	
L108	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R126	2001-000362	R-CARBON:150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
L109	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		R128	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
L110	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		R201	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
L113	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R202	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
L201	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R203	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm	

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
R204	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm		R735	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,-	
R206	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm		R736	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R207	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm		R737	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R208	2001-000009	R-CARBON:20KOHM,5%,1/8W,AA,TP,-		R738	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R209	2001-000645	R-CARBON:330Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R739	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R210	2001-000857	R-CARBON:560ohm,5%,1/8W,AA,TP,1.8x3.2mm		R740	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R211	2001-000660	R-CARBON:33Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R741	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R212	2001-000864	R-CARBON:56Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R742	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R213	2001-000008	R-CARBON:15Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R743	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R214	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,-		R745	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R215	2001-000004	R-CARBON:200KOHM,5%,1/8W,AA,TP,-		R746	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R216	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-		R747	2001-000969	R-CARBON:75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R217	2001-000660	R-CARBON:33Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R748	2001-000969	R-CARBON:75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R222	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,-		R749	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-	
R223	2001-000869	R-CARBON:56ohm,5%,1/8W,AA,TP,1.8x3.2mm		R750	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-	
R224	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,-		R801	2006-000295	R-CEMENT:11ohm,5%,5W,CB,TP,9x13x25mm	
R225	2001-000405	R-CARBON:180ohm,5%,1/8W,AA,TP,1.8x3.2mm		R901	2001-000302	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R226	2001-000674	R-CARBON:360ohm,5%,1/8W,AA,TP,1.8x3.2mm		R902	2001-000302	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R227	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,-		R903	2001-000591	R-CARBON:3.3KOHM,5%,1/8W,AA,TP,-	
R228	2001-000325	R-CARBON:120ohm,5%,1/8W,AA,TP,1.8x3.2mm		R904	2001-000302	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R229	2001-000325	R-CARBON:120ohm,5%,1/8W,AA,TP,1.8x3.2mm		R905	2001-000302	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R230	2001-000325	R-CARBON:120ohm,5%,1/8W,AA,TP,1.8x3.2mm		R906	2001-001111	R-CARBON(S):240ohm,5%,1/2W,AA,TP,2.4x6.4	
R231	2001-000362	R-CARBON:150ohm,5%,1/8W,AA,TP,1.8x3.2mm		R907	2001-000786	R-CARBON:47Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R232	2001-000958	R-CARBON:750ohm,5%,1/8W,AA,TP,1.8x3.2mm		R908	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	
R233	2001-000958	R-CARBON:750ohm,5%,1/8W,AA,TP,1.8x3.2mm		R909	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-	
R234	2001-000958	R-CARBON:750ohm,5%,1/8W,AA,TP,1.8x3.2mm		R910	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-	
R235	2001-000362	R-CARBON:150ohm,5%,1/8W,AA,TP,1.8x3.2mm		R911	2001-000472	R-CARBON:2.7KOHM,5%,1/8W,AA,TP,-	
R236	2001-000577	R-CARBON:2Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R912	2001-000449	R-CARBON:2.2Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R237	2001-000331	R-CARBON:12KOHM,5%,1/8W,AA,TP,-		R913	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	
R238	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,-		R914	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	
R251	2001-000812	R-CARBON:5.6Kohm,5%,1/8W,AA,TP,1.8x3.2m		R915	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	
R601	2001-001182	R-CARBON(S):7.5Kohm,5%,1/2W,AA,TP,2.4x6.		R916	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	
R602	2001-001182	R-CARBON(S):7.5Kohm,5%,1/2W,AA,TP,2.4x6.		R917	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	
R603	2001-000146	R-CARBON(S):4.7ohm,5%,1/2W,AA,TP,2.4x6.4		R918	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	
R604	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-		R919	2001-000281	R-CARBON:10KOHM,5%,1/8W,AA,TP,1.8x3.2mm	
R605	2001-001182	R-CARBON(S):7.5Kohm,5%,1/2W,AA,TP,2.4x6.		R920	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-	
R606	2001-001182	R-CARBON(S):7.5Kohm,5%,1/2W,AA,TP,2.4x6.		R921	2001-000449	R-CARBON:2.2Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R607	2001-001146	R-CARBON(S):4.7ohm,5%,1/2W,AA,TP,2.4x6.4		R922	2001-000449	R-CARBON:2.2Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R608	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-		R923	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	
R609	2001-000628	R-CARBON:300ohm,5%,1/8W,AA,TP,1.8x3.2mm		R924	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	
R610	2001-000628	R-CARBON:300ohm,5%,1/8W,AA,TP,1.8x3.2mm		R925	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	
R611	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-		R926	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	
R612	2001-000522	R-CARBON:22Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R927	2001-000522	R-CARBON:22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R613	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,-		R928	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	
R614	2001-000109	R-CARBON(S):470ohm,5%,1/2W,AA,TP,2.4x6.4		R929	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	
R701	2001-000969	R-CARBON:75ohm,5%,1/8W,AA,TP,1.8x3.2mm		R930	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R702	2001-000969	R-CARBON:75ohm,5%,1/8W,AA,TP,1.8x3.2mm		R931	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R703	2001-000969	R-CARBON:75ohm,5%,1/8W,AA,TP,1.8x3.2mm		R932	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R704	2001-000723	R-CARBON:4.3Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R933	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-	
R705	2001-000522	R-CARBON:22Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R934	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-	
R706	2001-000969	R-CARBON:75ohm,5%,1/8W,AA,TP,1.8x3.2mm		R935	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-	
R707	2001-000723	R-CARBON:4.3Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R936	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R708	2001-000522	R-CARBON:22Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R937	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R709	2001-000554	R-CARBON:270ohm,5%,1/8W,AA,TP,1.8x3.2mm		R938	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R710	2001-000699	R-CARBON:75ohm,5%,1/8W,AA,TP,1.8x3.2mm		R939	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R711	2001-000554	R-CARBON:270ohm,5%,1/8W,AA,TP,1.8x3.2mm		R940	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R712	2001-000969	R-CARBON:75ohm,5%,1/8W,AA,TP,1.8x3.2mm		R941	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R713	2001-000969	R-CARBON:75ohm,5%,1/8W,AA,TP,1.8x3.2mm		R942	2001-000008	R-CARBON:15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R714	2001-000969	R-CARBON:75ohm,5%,1/8W,AA,TP,1.8x3.2mm		R943	2001-000591	R-CARBON:3.3KOHM,5%,1/8W,AA,TP,-	
R715	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm		R944	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-	
R716	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm		R945	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-	
R717	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm		R946	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-	
R718	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm		R947	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-	
R719	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-		R948	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R720	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm		R949	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R721	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-		R950	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,-	
R722	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm		R951	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-	
R723	2001-000405	R-CARBON:180ohm,5%,1/8W,AA,TP,1.8x3.2mm		R952	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R724	2001-000515	R-CARBON:220ohm,5%,1/8W,AA,TP,1.8x3.2mm		R954	2001-000281	R-CARBON:100hm,5%,1/8W,AA,TP,1.8x3.2mm	
R725	2001-000699	R-CARBON:75ohm,5%,1/8W,AA,TP,1.8x3.2mm		R956	2001-000435	R-CARBON:1Mohm,5%,1/8W,AA,TP,1.8x3.2mm	
R727	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,-		R958	2001-000969	R-CARBON:75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R728	2001-000010	R-CARBON:68Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R959	2001-000969	R-CARBON:75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R729	2001-000660	R-CARBON:33Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R960	2001-000563	R-CARBON:27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R730	2001-000010	R-CARBON:68Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R961	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-	
R732	2001-000660	R-CARBON:33Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R962	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	
R733	2001-000258	R-CARBON:1.8KOHM,5%,1/8W,AA,TP,-		R963	2001-000786	R-CARBON:4.7Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R734	2001-000273	R-CARBON:100KOHM,5%,1/8W,AA,TP,-		R964	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,-	

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
R966	2001-000708	R-CARBON:390HM,5%,1/8W,AA,TP,-		1P	AA39-20010F	LEAD-CONNECTOR,ASSY:-,YFH800-01,S,1P,700	
R967	2001-000362	R-CARBON:150ohm,5%,1/8W,AA,TP,1.8x3.2mm		3(2)P	AA39-20176A	LEAD CONNECTOR-ASSY:-,YFH800-03,S,3(2)P,	
R971	2001-000241	R-CARBON:1.5Kohm,5%,1/8W,AA,TP,1.8x3.2mm		BRACKE	AA61-11005A	BRACKET-PCB,-,764A,SECC-1,T1.0,-,PFC BOA	
R972	2001-000633	R-CARBON:30Kohm,5%,1/8W,AA,TP,1.8x3.2mm		D801	1405-000187	VARISTOR:750V,1250A,12.5x7mm,TP	
R973	2001-000007	R-CARBON:3Kohm,5%,1/8W,AA,TP,1.8x3.2mm		F801	3601-001007	FUSE-FERRULE:250V,6.3A,TL,GLASS,5.2x20mm	
R974	2001-000281	R-CARBON:100ohm,5%,1/8W,AA,TP,1.8x3.2mm		FA801	3602-000114	FUSE-HOLDER:-,-,30mohm	
R975	2001-000568	R-CARBON:27ohm,5%,1/8W,AA,TP,1.8x3.2mm		FA802	3602-000114	FUSE-HOLDER:-,-,30mohm	
R976	2001-000568	R-CARBON:27ohm,5%,1/8W,AA,TP,1.8x3.2mm		H01	AA47-20001A	SPARK-GAP:-,ICE60,6.1mm	
R980	2001-000005	R-CARBON:3900HM,5%,1/8W,AA,TP,-		R801	2002-001011	R-COMPOSITION:3.3Mohm,10%,1/2W,AA,TP,3.7	
TU01	AA40-10006MTUNER/F-S;TECC2949PG29A(S),PAL/B,TR,18			SCREW	6001-000677	SCREW-MACHINE;RH,+M3,L6,ZPC(YEL),SM20C,	
VR101	2103-000672	VR-SEMI:20Kohm,25%,1/5W,TOP					
VR102	2103-000676	VR-SEMI:50Kohm,25%,1/5W,TOP					
X901	2801-000724	CRYSTAL-UNIT:6MHz,50ppm,28-AAM,20pF,40oh					

## ASSY-CABINET

\* AA90-00077BASSY-CABINET:28C7,S53A

BACK	AA63-60001X	SPACER-FELT;FELT,T0.5,BLK,330X15,-,-
BADGE	AA64-70117B	BADGE-BRAND:AL,SS,SILVER,L65,R2000,-,-
BOSS	AA61-40010A	BOSS-WING:-,HIPS,HB,NTR,-,SW
BR+HC	6003-001023	SCREW-TAPITIE:RWH,+,B,M3,L10,ZPC(YEL),SW
CB+CF	6003-001025	SCREW-TAPITIE:RH,+,B,M4,L20,ZPC(BLK),SWR
CB+TER	6003-001025	SCREW-TAPITIE:RH,+,B,M4,L20,ZPC(BLK),SWR
CF+IL	6003-001026	SCREW-TAPITIE:RH,+,B,M4,L15,ZPC(BLK),SWR
CF+KC	6003-001026	SCREW-TAPITIE:RH,+,B,M4,L15,ZPC(BLK),SWR
CF+PWB	6003-001023	SCREW-TAPITIE:RWH,+,B,M3,L10,ZPC(YEL),SW
CF+SPK	6003-001026	SCREW-TAPITIE:RH,+,B,M4,L15,ZPC(BLK),SWR
CLAMP/C	AA65-30008A	CLAMP-CORD:PE,HB,BLK,-,-
CRT+CF	AA60-10051D	SCREW-ASSY:WC,HH,+,M5,30,SWRCH18A,ZPC,-
DOOR/L	AA61-30001A	LATCH-DOOR:,-,-,KIFUCO LA701,-
HOLDER/C	AA61-20207A	HOLDER-CHASSIS:,-,2955,ABS,V0,GRY,-
HOLDER/W	AA61-20069A	HOLDER-WIRE:,-,-,NYLON-66,V0,NTR,PAWH-5NA
INLAY/C	AA64-00189A	INLAY-CONTROL:28C7,S53A,PS,T0,3,BLK,-,-
KNOB/C	AA64-10809C	KNOB-CONTROL:,-,28C7,S53A,ABS,HG,G3676
LED	AA64-00191A	INDICATOR-LED:,-,28C7,-,ACRYL,-,CLR,-
PAD	AA69-00020A	PAD-TYPE:CB,DW-2,YEL,616,336,-,-,28C7,-
RMC/W	AA64-00190A	WINDOW-REMOCON:,-,28C7,-,PC,-,VIOLET,-
SPACER	AA63-60004R	SPACER-GUM,CRT:NTR RUBBER,T3.0,BLK,-,-
SPRING	AA61-60003J	SPRING-CS:,-,SUS304,0.5,OD6,H12,N7,-,-
TER+HB	6003-001023	SCREW-TAPITIE:RWH,+,B,M3,L10,ZPC(YEL),SW
TER+JA	6003-001025	SCREW-TAPITIE:RH,+,B,M4,L20,ZPC(BLK),SWR

## ASSY-TERMINAL,BOARD

\* AA91-80056JASSY-TERMINAL,BOARD:DP,-,-,AA64-60395B

B/ANT	AA63-40254A	TERMINAL-BOARD,ANT,-,HIPS,BLK SCT55A,
INLAY/B	AA64-60395B	INLAY-BACK:622A,PV2,SCART,PS,T0,5,BLK,-,-
T/BOARD	AA91-80054G	ASSY-TERMINAL,BOARD:,-,-,PV2,SCART,CS

## ASSY-CRT

\* AA94-00744AASSY-CRT:A66EAK5552X54,+,380MG,28,ITC,C

CLAMP-CRT	AA65-30017A	CLAMP-D,COIL:NYLON-66,V0,NTR,DADH300,25
D-COIL	AA03-10035E	CRT-COLOR:,-,A66EAK552X54,+,380mg,28,110d
DY	AA27-20004K	COIL-DEGAUSSING:,-,29,19.0ohm,45T,3000mm
VM	AA39-20519A	LEAD CONNECTOR-ASSY:,-,YFH806-06,-,(6)P,

## ASSY-ACCESSORY

\* AA94-00753AASSY-ACCESSORY:CW28C7VH2S/XEC,S53A,EUROPE

## ASSY-PCB,SUB POWER

\* AA95-00096AASSY-PCB,SUB POWER:,-,28C7,S53A,PAL,-,-

Loc. No.	Code No.	Description ; Specification	Remark
1P	AA39-20010F	LEAD-CONNECTOR,ASSY:,-,YFH800-01,S,1P,700	
3(2)P	AA39-20176A	LEAD CONNECTOR-ASSY:,-,YFH800-03,S,3(2)P,	
BRACKE	AA61-11005A	BRACKET-PCB,-,764A,SECC-1,T1.0,-,PFC BOA	
D801	1405-000187	VARISTOR:750V,1250A,12.5x7mm,TP	
F801	3601-001007	FUSE-FERRULE:250V,6.3A,TL,GLASS,5.2x20mm	
FA801	3602-000114	FUSE-HOLDER:,-,-,30mohm	
FA802	3602-000114	FUSE-HOLDER:,-,-,30mohm	
H01	AA47-20001A	SPARK-GAP:,-,ICE60,6.1mm	
R801	2002-001011	R-COMPOSITION:3.3Mohm,10%,1/2W,AA,TP,3.7	
SCREW	6001-000677	SCREW-MACHINE;RH,+M3,L6,ZPC(YEL),SM20C,	

## ASSY-PCB,CRT

\* AA95-00114AASSY-PCB,CRT:,-,S53A,28,EUROPE,CW28C7VH

C501	2201-002031	C-CERAMIC,DISC:5pF,0.25pF,50V,NPO,TP,5x3
C502	2201-000436	C-CERAMIC,DISC:2pF,0.3pF,50V,SL,TP,5x3
C504	2301-000016	C-FILM,PEF:22nF,5%,100V,TP,7.2x4.5x9.0mm
C505	2301-000016	C-FILM,PEF:22nF,5%,100V,TP,7.2x4.5x9.0mm
C506	2301-000016	C-FILM,PEF:22nF,5%,100V,TP,7.2x4.5x9.0mm
C507	2301-000016	C-FILM,PEF:22nF,5%,100V,TP,7.2x4.5x9.0mm
C509	2301-000016	C-FILM,PEF:22nF,5%,100V,TP,7.2x4.5x9.0mm
C510	2305-000308	C-FILM,MPEF:22nF,5%,250V,-,14.5x6.0x9.5m
C511	2305-000308	C-FILM,MPEF:22nF,5%,250V,-,14.5x6.0x9.5m
C512	2305-000308	C-FILM,MPEF:22nF,5%,250V,-,14.5x6.0x9.5m
C513	2201-00599	C-CERAMIC,DISC:560pF,10%,500V,Y5P,TP,7x4
C514	2201-000599	C-CERAMIC,DISC:560pF,10%,500V,Y5P,TP,7x4
C515	2201-000599	C-CERAMIC,DISC:560pF,10%,500V,Y5P,TP,7x4
C520	2401-000689	C-AL:2200uF,20%,16V,GP,TP,13x25,5
C522	2201-000969	C-CERAMIC,DISC:10nF,+80-20%,3KV,Y5V,TP,-
C531	2401-000636	C-AL:2.2uF,20%,315V,GP,TP,8x12mm,5mm
C532	2401-001527	C-AL:47uF,20%,250V,HR,TP,13x25mm,5mm
C535	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11,5
C540	2201-000930	C-CERAMIC,DISC:220pF,10%,500V,Y5P,TP,6x4
CF01	2201-000234	C-CERAMIC,DISC:150pF,5%,50V,CH,TP,9.5x3,
CF02	2201-000376	C-CERAMIC,DISC:220pF,5%,50V,SL,TP,4x4.5
CF03	2201-000653	C-CERAMIC,DISC:68pF,5%,50V,SL,TP,4.0x3.5
CF04	2201-000516	C-CERAMIC,DISC:4.7nF,100-0%,500V,Y5U,TP
CF05	2301-000261	C-FILM,PEF:4.7nF,5%,100V,TP,10.5x12.5x6
CF06	2305-000704	C-FILM,MPEF:100nF,5%,250V,TP,16.5x10.3x5
CF08	2201-000982	C-CERAMIC,DISC:10nF,+80-20%,50V,Y5V,TP,
CF71	2201-000292	C-CERAMIC,DISC:1nF,10%,50V,Y5P,TP,5x3.5
CF73	2201-000292	C-CERAMIC,DISC:1nF,10%,50V,Y5P,TP,5x3.5
CF74	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm
CF76	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm
CF77	2201-000292	C-CERAMIC,DISC:1nF,10%,50V,Y5P,TP,5x3.5
CF78	2401-001157	C-AL:33uF,20%,160V,GP,TP,12.5x20.5
CF79	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5
CF80	2401-000832	C-AL:220uF,20%,25V,GP,TP,8x11.5,5
CF81	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11,5
CN501	AA39-20032G	LEAD CONNECTOR-ASSY:,-,67096-012,5,12P,50
CN501B	3711-003641	CONNECTOR-HEADER-BOX,12P,1R,2.5mm,STRAIG
CN502	AA39-20025E	LEAD-CONNECTOR,ASSY:,-,67096-010,8,10P,40
CN502B	3711-002641	CONNECTOR-HEADER-BOX,10P,1R,2.54mm,STRAI
D501	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T
D502	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP
D504	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP
D509	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-
D510	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-
D511	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-
D512	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-
D513	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-
D514	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-
DF01	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T
DF02	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T
DF05	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T
DF06	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T
DF07	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-
DF08	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-
DZ501	0403-000654	DIODE-ZENER:MTZ12B,12V,11.44-12.03V,500m
DZ502	0403-000654	DIODE-ZENER:MTZ12B,12V,11.44-12.03V,500m
DZ503	0403-000654	DIODE-ZENER:MTZ12B,12V,11.44-12.03V,500m
DZ504	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T
DZ505	0403-000664	DIODE-ZENER:MTZ3.6A,3.6V,3.455-3.695V,50
DZ506	0403-000655	DIODE-ZENER:MTZ13A,13V,12.11-12.75V,500m

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
FV1	3711-002642	CONNECTOR-HEADER:BOX,3P,1R,2.5MM,STRAIGH					
GT06+0	AA39-20010D	LEAD-CONNECTOR,ASSY,-,YFH800-01,S,1P,400					
GT503+	AA39-20010B	LEAD-CONNECTOR,ASSY,-,YFH800-01,S,1P,500					
GT505+	AA39-20010B	LEAD-CONNECTOR,ASSY,-,YFH800-01,S,1P,500					
△ IC501	1201-001131	IC-VIDEO AMP;6111,SIP,9P,-,SINGLE,-,PLAS	H/SINK	B1	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP,-	
△ IC502	1201-001131	IC-VIDEO AMP;6111,SIP,9P,-,SINGLE,-,PLAS	H/SINK	B2	2901-000297	FILTER-EMI ON BOARD:-,3A,-,-,3.5x5,TP,-	
△ IC503	1201-001131	IC-VIDEO AMP;6111,SIP,9P,-,SINGLE,-,PLAS	H/SINK	C1	2203-000683	C-CERAMIC,CHIP:27pf,5%,50V,NPO,TP,2012,-	
△ IC505	AA13-20004U	JC-HYBRID:-,SPK102T,SIP,6P,SPOT KILLER,T		C10	2401-000493	C-AL:10uf,20%,50V,LZ,TP,5x11mm,5mm	
L502	2701-000178	INDUCTOR-AXIAL:33uH,10%,2.8x7mm		C100	2203-000293	C-CERAMIC,CHIP:100pf,5%,50V,NPO,TP,2012,	
LF02	2702-000160	INDUCTOR-RADIAL:4.7uH,10%,6x6.4mm		C101	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
LF03	2701-000112	INDUCTOR-AXIAL:100uH,10%,2.8x7mm		C102	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
LF04	3301-000287	CORE-FERRITE BEAD:AA,3.5x1x6mm,1500,2400		C103	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
QF02	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		C104	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
QF03	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		C105	2401-000092	C-AL:4.7uf,20%,50V,GP,TP5x11,5	
QF04	0501-000283	TR-SMALL SIGNAL:KSA539,NPN,400mW,TO-92,T		C106	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
QF06	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		C109	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
QF07	0501-000369	TR-SMALL SIGNAL:KSC2331-Y,NPN,1W,TO-92L,		C11	2401-002009	C-AL:100uf,20%,16V,GP,TP6.3x7.5	
QF08	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		C110	2203-000239	C-CERAMIC,CHIP:100pf,5%,50V,NPO,TP,2012,	
△ QF09	0502-000131	TR-POWER:2SA1011-D,PNP,1.2W,TO-220,-,60	H/SINK	C111	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
△ QF10	0502-000153	TR-POWER:2SC2344-D,NPN,1.2W,TO-220,-,60	H/SINK	C112	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
R501	2001-000258	R-CARBON:1.8KOHM,5%,1/8W,AA,TP,-		C113	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
R502	2001-000258	R-CARBON:1.8KOHM,5%,1/8W,AA,TP,-		C119	2203-000784	C-CERAMIC,CHIP:330f,5%,50V,NPO,TP,2012,	
R503	2001-000258	R-CARBON:1.8KOHM,5%,1/8W,AA,TP,-		C12	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
R504	2001-001097	R-CARBON(S):2.4Kohm,5%,1/2W,AA,TP,2.4x6.		C120	2203-000239	C-CERAMIC,CHIP:100pf,5%,50V,NPO,TP,2012,	
R505	2001-001097	R-CARBON(S):2.4Kohm,5%,1/2W,AA,TP,2.4x6.		C121	2203-000239	C-CERAMIC,CHIP:100pf,5%,50V,NPO,TP,2012,	
R506	2001-001097	R-CARBON(S):2.4Kohm,5%,1/2W,AA,TP,2.4x6.		C122	2203-000239	C-CERAMIC,CHIP:100pf,5%,50V,NPO,TP,2012,	
R507	2001-001159	R-CARBON(S):510ohm,5%,1/2W,AA,TP,2.4x6.4		C123	2203-000239	C-CERAMIC,CHIP:100pf,5%,50V,NPO,TP,2012,	
R510	2001-001194	R-CARBON(S):82Kohm,5%,1/2W,AA,TP,2.4x6.4		C124	2203-000938	C-CERAMIC,CHIP:470pf,5%,50V,NPO,TP,2012,	
R511	2001-001194	R-CARBON(S):82Kohm,5%,1/2W,AA,TP,2.4x6.4		C125	2203-000142	C-CERAMIC,CHIP:1.5nf,10%,50V,X7R,TP,2012	
R512	2001-001194	R-CARBON(S):82Kohm,5%,1/2W,AA,TP,2.4x6.4		C126	2203-000938	C-CERAMIC,CHIP:470pf,5%,50V,NPO,TP,2012,	
R513	2002-001017	R-COMPOSITION:1K,10%,1/2W,AA,TP,3.7x9.0m		C13	2401-002009	C-AL:100uf,20%,16V,GP,TP6.3x7.5	
R514	2002-001017	R-COMPOSITION:1K,10%,1/2W,AA,TP,3.7x9.0m		C14	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
R515	2002-001017	R-COMPOSITION:1K,10%,1/2W,AA,TP,3.7x9.0m		C15	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
R518	2001-001095	R-CARBON(S):2.2Mohm,5%,1/2W,AA,TP,2.4x6.		C16	2401-000242	C-AL:100uf,20%,10V,GP,TP5x11,5	
R525	2002-001006	R-COMPOSITION:4.7KOHM,10%,1/2W,AA,TP,3.7x9.0m		C18	2203-000661	C-CERAMIC,CHIP:270pf,5%,50V,NPO,TP,2012,	
R528	2008-000292	R-FUSIBLE(S):3.3ohm,5%,2W,AF,TP,3.9x10mm		C19	2203-000595	C-CERAMIC,CHIP:220pf,5%,50V,NPO,TP,2012,	
R530	2001-000356	R-CARBON:150Kohm,5%,1/8W,AA,TP,1.8x3.2m		C2	2203-000683	C-CERAMIC,CHIP:27pf,5%,50V,NPO,TP,2012,-	
R531	2001-001086	R-CARBON(S):18Kohm,5%,1/2W,AA,TP,2.4x6.4		C20	2203-000938	C-CERAMIC,CHIP:470pf,5%,50V,NPO,TP,2012,	
R556	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,-		C21	2401-000027	C-AL:4.7uf,20%,50V,GP,TP5x11,5	
R557	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,-		C22	2203-000753	C-CERAMIC,CHIP:330nf,+80-20%,50V,Y5V,TP,	
R558	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,-		C23	2203-000444	C-CERAMIC,CHIP:1nf,10%,50V,X7R,TP,2012,-	
RF01	2001-000347	R-CARBON:13Kohm,5%,1/8W,AA,TP,1.8x3.2mm		C24	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
RF02	2001-000006	R-CARBON:2.4Kohm,5%,1/8W,AA,TP,1.8x3.2mm		C25	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
RF03	2001-000534	R-CARBON:240ohm,5%,1/8W,AA,TP,1.8x3.2mm		C26	2401-001496	C-AL:47uf,20%,16V,GP,TP,5x7,5	
RF05	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,-		C27	2401-000493	C-AL:10uf,20%,50V,LZ,TP,5x11mm,5mm	
RF06	2001-000405	R-CARBON:180ohm,5%,1/8W,AA,TP,1.8x3.2mm		C28	2203-000979	C-CERAMIC,CHIP:100nf,+80-20%,50V,X7R,TP,2012,	
RF07	2001-000290	R-CARBON:10KOHM,5%,1/8W,AA,TP,-		C29	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
RF08	2001-000449	R-CARBON:2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m		C3	2203-000683	C-CERAMIC,CHIP:27pf,5%,50V,NPO,TP,2012,-	
RF09	2001-000490	R-CARBON:2000HM,5%,1/8W,AA,TP,-		C30	2203-001172	C-CERAMIC,CHIP:6pf,0.25pf,50V,NPO,TP,201	
RF10	2001-000674	R-CARBON:360hm,5%,1/8W,AA,TP,1.8x3.2mm		C31	2203-001172	C-CERAMIC,CHIP:6pf,0.25pf,50V,NPO,TP,201	
RF11	2001-000362	R-CARBON:150ohm,5%,1/8W,AA,TP,1.8x3.2mm		C32	2203-000938	C-CERAMIC,CHIP:470pf,5%,50V,NPO,TP,2012,	
RF12	2001-000362	R-CARBON:150ohm,5%,1/8W,AA,TP,1.8x3.2mm		C34	2203-000595	C-CERAMIC,CHIP:220pf,5%,50V,NPO,TP,2012,	
RF13	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,-		C35	2203-000661	C-CERAMIC,CHIP:270pf,5%,50V,NPO,TP,2012,	
RF20	2001-000313	R-CARBON:11Kohm,5%,1/8W,AA,TP,1.8x3.2mm		C36	2203-000938	C-CERAMIC,CHIP:470pf,5%,50V,NPO,TP,2012,	
RF21	2001-000449	R-CARBON:2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m		C4	2203-000683	C-CERAMIC,CHIP:27pf,5%,50V,NPO,TP,2012,-	
RF22	2004-001989	R-METAL:620hm,5%,1/8W,AA,TP,1.8x3.2mm		C40	2401-002009	C-AL:100uf,20%,16V,GP,TP6.3x7.5	
RF23	2001-000362	R-CARBON:150ohm,5%,1/8W,AA,TP,1.8x3.2mm		C41	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
RF24	2003-001023	R-METAL OXIDE(S):120ohm,0.052W,AF,TP3.		C42	2401-002009	C-AL:100uf,20%,16V,GP,TP6.3x7.5	
RF25	2001-000241	R-CARBON:1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m		C43	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
RF26	2001-001179	R-CARBON(S):68Kohm,5%,1/2W,AA,TP,2.4x6.4		C44	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
RF27	2001-001179	R-CARBON(S):68Kohm,5%,1/2W,AA,TP,2.4x6.4		C47	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
RF28	2001-000241	R-CARBON:1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m		C48	2401-002009	C-AL:100uf,20%,16V,GP,TP6.3x7.5	
RF29	2001-001071	R-CARBON(S):12KOHM,5%,1/2W,AA,TP,-		C49	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
RF30	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,-		C5	2203-002392	C-CERAMIC,CHIP:220nf,+80-20%,50V,Y5V,TP,	
RF31	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,-		C50	2203-000142	C-CERAMIC,CHIP:1.5nf,10%,50V,X7R,TP,2012	
RF32	2003-000746	R-METAL OXIDE(S):56ohm,5%,2W,AF,TP,4x12m		C51	2203-000192	C-CERAMIC,CHIP:100nf,5%,50V,NPO,TP,2012,	
RF33	2001-001100	R-CARBON(S):2.7ohm,5%,1/2W,AA,TP,2.4x6.4		C52	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
RF34	2001-001100	R-CARBON(S):2.7ohm,5%,1/2W,AA,TP,2.4x6.4		C53	2203-000683	C-CERAMIC,CHIP:27pf,5%,50V,NPO,TP,2012,-	
RF35	2003-000746	R-METAL OXIDE(S):56ohm,5%,2W,AF,TP,4x12m		C54	2203-000683	C-CERAMIC,CHIP:27pf,5%,50V,NPO,TP,2012,-	
RF36	2003-002009	R-METAL OXIDE(S):390ohm,5%,2W,AF,TP,3.9x		C56	2203-000938	C-CERAMIC,CHIP:470pf,5%,50V,NPO,TP,2012,	
RF37	2001-000969	R-CARBON:75ohm,5%,1/8W,AA,TP,1.8x3.2mm		C57	2203-000444	C-CERAMIC,CHIP:1nf,10%,50V,X7R,TP,2012,-	
RF38	2001-000989	R-CARBON:820Kohm,5%,1/8W,AA,TP,1.8x3.2mm		C59	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,	
RF39	2001-000522	R-CARBON:22Kohm,5%,1/8W,AA,TP,1.8x3.2mm		C6	2203-002392	C-CERAMIC,CHIP:220nf,+80-20%,50V,Y5V,TP,	
VA999	3704-000112	SOCKET-CRT:14P,29.1,35.5,SN,DHE-A90-700S		C60	2203-000444	C-CERAMIC,CHIP:1nf,10%,50V,X7R,TP,2012,-	
				C61	2203-000444	C-CERAMIC,CHIP:1nf,10%,50V,X7R,TP,2012,-	

**ASSY-PCB,F-BOX**

\* AA95-00154AASSY-PCB,F-BOX:;,CW28C7VH,S53A,-,-,EUROPE

## Electric Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
C63	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		L9	2701-000146	INDUCTOR-AXIAL:2.2uH,10%,2.5x3.4mm	
C64	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		NR02	2007-000029	R-CHIP;00HM,5%,1/10W,DA,TP,2012	
C65	2401-002009	C-AL:100uF,20%,16V,GP,TP,6.3x7,5		NR3	2007-000029	R-CHIP;00HM,5%,1/10W,DA,TP,2012	
C66	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		O1	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,T0-92,T	
C67	2401-002009	C-AL:100uF,20%,16V,GP,TP,6.3x7,5		△ O4	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,T0-92,T	
C68	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R111	2007-000401	R-CHIP:1500HM,5%,1/10W,DA,TP,2012	
C69	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R112	2007-000401	R-CHIP:1500HM,5%,1/10W,DA,TP,2012	
C7	2203-002392	C-CERAMIC,CHIP:220nF,+80-20%,50V,Y5V,TP,		R113	2007-000401	R-CHIP:1500HM,5%,1/10W,DA,TP,2012	
C70	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R114	2007-000401	R-CHIP:1500HM,5%,1/10W,DA,TP,2012	
C71	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R115	2007-000267	R-CHIP:1.8KOHM,5%,1/10W,DA,TP,2012	
C72	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R116	2007-000380	R-CHIP:13KOHM,5%,1/10W,DA,TP,2012	
C73	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R117	2007-000300	R-CHIP:10KOHM,5%,1/10W,DA,TP,2012	
C74	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R119	2007-000468	R-CHIP:1KOHM,5%,1/10W,DA,TP,2012	
C75	2203-000142	C-CERAMIC,CHIP:1.5nF,10%,50V,X7R,TP,2012		R120	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
C76	2203-000239	C-CERAMIC,CHIP:100pF,5%,50V,NPO,TP,2012,		R121	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
C77	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R122	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
C78	2401-002009	C-AL:100uF,20%,16V,GP,TP,6.3x7,5		R123	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
C79	2203-000429	C-CERAMIC,CHIP:18pF,5%,50V,NPO,TP,2012,-		R124	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
C8	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R13	2007-001133	R-CHIP:680HM,5%,1/10W,DA,TP,2012	
C80	2203-000429	C-CERAMIC,CHIP:18pF,5%,50V,NPO,TP,2012,-		R131	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
C81	2401-002009	C-AL:100uF,20%,16V,GP,TP,6.3x7,5		R132	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
C82	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R14	2007-001133	R-CHIP:680HM,5%,1/10W,DA,TP,2012	
C83	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R15	2007-001133	R-CHIP:680HM,5%,1/10W,DA,TP,2012	
C84	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R16	2007-001133	R-CHIP:680HM,5%,1/10W,DA,TP,2012	
C85	2401-002009	C-AL:100uF,20%,16V,GP,TP,6.3x7,5		R17	2007-001133	R-CHIP:680HM,5%,1/10W,DA,TP,2012	
C86	2203-000555	C-CERAMIC,CHIP:20pF,5%,50V,NPO,TP,2012,-		R18	2007-001133	R-CHIP:680HM,5%,1/10W,DA,TP,2012	
C87	2203-000555	C-CERAMIC,CHIP:20pF,5%,50V,NPO,TP,2012,-		R19	2007-001133	R-CHIP:680HM,5%,1/10W,DA,TP,2012	
C88	2203-000555	C-CERAMIC,CHIP:20pF,5%,50V,NPO,TP,2012,-		R20	2007-001133	R-CHIP:680HM,5%,1/10W,DA,TP,2012	
C89	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R21	2007-001133	R-CHIP:680HM,5%,1/10W,DA,TP,2012	
C9	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R22	2007-001133	R-CHIP:680HM,5%,1/10W,DA,TP,2012	
C90	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R23	2007-001133	R-CHIP:680HM,5%,1/10W,DA,TP,2012	
C91	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R24	2007-001133	R-CHIP:680HM,5%,1/10W,DA,TP,2012	
C92	2401-002009	C-AL:100uF,20%,16V,GP,TP,6.3x7,5		R25	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
C93	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R26	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
C94	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R43	2007-000947	R-CHIP:470HM,5%,1/10W,DA,TP,2012	
C95	2401-002009	C-AL:100uF,20%,16V,GP,TP,6.3x7,5		R45	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
C96	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R46	2007-000781	R-CHIP:330HM,5%,1/10W,DA,TP,2012	
C97	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R47	2007-000409	R-CHIP:15KOHM,5%,1/10W,DA,TP,2012	
C98	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R48	2007-000586	R-CHIP:22KOHM,5%,1/10W,DA,TP,2012	
C99	2203-000142	C-CERAMIC,CHIP:1.5nF,10%,50V,X7R,TP,2012		R49	2007-000468	R-CHIP:1KOHM,5%,1/10W,DA,TP,2012	
CN203A	3711-002709	CONNECTOR-HEADER:NOWALL,12P,1.25MM,ANG		R50	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
CN205A	3711-003543	CONNECTOR-HEADER:NOWALL,16P,1.254MM,AN		R51	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
CN206A	3711-002708	CONNECTOR-HEADER:NOWALL,10P,1R,2.5mm,ANG		R52	2007-000781	R-CHIP:330HM,5%,1/10W,DA,TP,2012	
D1	0403-000666	DIODE-ZENER:MTZ5.1A,5.1V,4.81-5.07V,500m		R53	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
D2	0401-000005	DIODE-SWITCHING:1N4148,75V,200MA,DO-35,T		R55	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
D3	0403-000666	DIODE-ZENER:MTZ5.1A,5.1V,4.81-5.07V,500m		R60	2007-000572	R-CHIP:2200HM,5%,1/10W,DA,TP,2012	
D4	0403-000689	DIODE-ZENER:DTZ5.1A,5.1V,4.84-5.04V,200m		R61	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
D5	0403-000689	DIODE-ZENER:DTZ5.1A,5.1V,4.84-5.04V,200m		R62	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
D6	0401-000133	DIODE-SWITCHING:RLS4148,100V,200mA,SOD-8		R63	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	
D7	0403-000666	DIODE-ZENER:MTZ5.1A,5.1V,4.81-5.07V,500m		R65	2001-000016	R-CARBON(S):1ohm,5%,1/2W,AA,TP,2.4x6.4mm	
IC1	1205-00172	IC-INTERFACE:CIP3250A,PLCC,68P,24.2ML,P		R66	2007-000267	R-CHIP:1.8KOHM,5%,1/10W,DA,TP,2012	
IC2	1204-001362	IC-VIDEO PROCESS:VPC3215C,PLCC,43P,,PLA		R67	2007-000518	R-CHIP:2.7KOHM,5%,1/10W,DA,TP,2012	
IC3	1204-001189	IC-HOR./VER.PROCESSO:SDA9362,OP44P,,P		R68	2007-000872	R-CHIP:4.7KOHM,5%,1/10W,DA,TP,2012	
IC4	1204-001315	IC-NOISE CANCELLER:SDA9254,OP,64P,,C-M		R69	2007-000941	R-CHIP:47KOHM,5%,1/10W,DA,TP,2012	
IC5	1205-001308	IC-CONTROLLER:SDA9220-5,PLCC,44P,,PLAST		R70	2007-000468	R-CHIP:1KOHM,5%,1/10W,DA,TP,2012	
IC6	1002-001045	IC-D/A CONVERTER:9280,8BIT,PLCC,68P,-,		R71	2007-000001	R-CHIP:68KOHM,5%,1/10W,DA,TP,2012	
IC7	1203-000346	IC-VOL. SUPERVISORY:7705,SOP,8P,150MIL,P		R72	2007-000355	R-CHIP:12KOHM,5%,1/10W,DA,TP,2012	
L1	2701-000142	INDUCTOR-AXIAL:1uH,10%,2.5x3.4mm		R73	2007-000300	R-CHIP:10KOHM,5%,1/10W,DA,TP,2012	
L10	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R74	2007-000981	R-CHIP:5.6KOHM,5%,1/10W,DA,TP,2012	
L12	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R75	2007-000300	R-CHIP:10KOHM,5%,1/10W,DA,TP,2012	
L13	2701-000146	INDUCTOR-AXIAL:2.2uH,10%,2.5x3.4mm		R76	2007-000468	R-CHIP:1KOHM,5%,1/10W,DA,TP,2012	
L15	2701-000146	INDUCTOR-AXIAL:2.2uH,10%,2.5x3.4mm		R77	2007-000947	R-CHIP:470HM,5%,1/10W,DA,TP,2012	
L16	2701-000146	INDUCTOR-AXIAL:2.2uH,10%,2.5x3.4mm		R78	2007-000947	R-CHIP:470HM,5%,1/10W,DA,TP,2012	
L17	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R79	2007-000468	R-CHIP:1KOHM,5%,1/10W,DA,TP,2012	
L18	2701-000141	INDUCTOR-AXIAL:1mH,5%,2.8x7mm		R80	2007-000822	R-CHIP:3900HM,5%,1/10W,DA,TP,2012	
L19	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R81	2007-000872	R-CHIP:4.7KOHM,5%,1/10W,DA,TP,2012	
L2	2701-000142	INDUCTOR-AXIAL:1uH,10%,2.5x3.4mm		R82	2007-000267	R-CHIP:1.8KOHM,5%,1/10W,DA,TP,2012	
L23	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R83	2007-000401	R-CHIP:1500HM,5%,1/10W,DA,TP,2012	
L25	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R84	2007-001133	R-CHIP:680HM,5%,1/10W,DA,TP,2012	
L26	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R85	2007-000781	R-CHIP:330HM,5%,1/10W,DA,TP,2012	
L27	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R86	2007-000781	R-CHIP:330HM,5%,1/10W,DA,TP,2012	
L3	2701-000142	INDUCTOR-AXIAL:1uH,10%,2.5x3.4mm		R87	2007-000781	R-CHIP:330HM,5%,1/10W,DA,TP,2012	
L4	2701-000142	INDUCTOR-AXIAL:1uH,10%,2.5x3.4mm		R88	2007-000781	R-CHIP:330HM,5%,1/10W,DA,TP,2012	
L5	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R89	2007-001133	R-CHIP:680HM,5%,1/10W,DA,TP,2012	
L6	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R90	2007-000781	R-CHIP:330HM,5%,1/10W,DA,TP,2012	
L7	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R91	2007-000781	R-CHIP:330HM,5%,1/10W,DA,TP,2012	
L8	2701-000146	INDUCTOR-AXIAL:2.2uH,10%,2.5x3.4mm		R92	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012	

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
R93	2007-000290	R-CHIP;1000HM,5%,1/10W,DA,TP,2012		C836	2201-000551	C-CERAMIC,DISC:470pF,10%,1KV,Y5P,TP,8x5,	
R94	2007-000290	R-CHIP;1000HM,5%,1/10W,DA,TP,2012		C838	2401-001363	C-AL:470uF,20%,16V,GP,TP,10x12.5,	
X1	2801-003432	CRYSTAL-UNIT;20.25MHz,30ppm,28-AAA,13pF,		C839	2201-000551	C-CERAMIC,DISC:470pF,10%,1KV,Y5P,TP,8x5,	
X2	2801-003433	CRYSTAL-UNIT;12MHz,30ppm,28-AAA,30pF,30o		C840	2401-001513	C-AL:47uF,20%,16V,WT,TP,5x11.5	
X3	2801-003572	CRYSTAL-UNIT;6.75MHz,30ppm,28-AAA,20pF,1		C842	2401-002211	C-AL:1000uF,20%,35V,LZ,TP,13x25mm,5	
<b>ASSY-PCB,POWER</b>							
* AA95-00155AASSY-PCB,POWER:CW28C7VH,S53A,28,-,EUROPE							
C301	2301-000160	C-FILM,PEF;12nF,5%,50V,TP,11.0x6.0x9.0mm		C843	2401-002289	C-AL:470uF,20%,35V,WT,TP,10x20.5	
C302	2201-000132	C-CERAMIC,DISC:100pF,10%,500V,Y5P,TP,6x4		C844	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11.5	
C304	2401-000365	C-AL:100uF,20%,50V,WT,TP,10x12.5mm,5		C845	2201-000539	C-CERAMIC,DISC:4.7nF,20%,250V,Y5V,BK,16x	
C305	2401-000360	C-AL:100uF,20%,50V,GP,TP,8x11.5.5		C846	2201-000539	C-CERAMIC,DISC:4.7nF,20%,250V,Y5V,BK,16x	
C306	2305-000285	C-FILM,MPEF;220nF,5%,100V,TP,10.5X5.5X15		CLAMP-	AA65-30109A	CLAMP-FBT-NYLON-66,V2,BLK,-,-	
C310	2305-000149	C-FILM,MPEF;100nF,5%,100V,TP,12x12.5x6.5		CN801	3711-002641	CONNECTOR-HEADER BOX,10P,1R,2.54mm,STRAI	
C401	2301-000247	C-FILM,PEF;33nF,5%,50V,TP,8.1x4.5x13mm,5		CN803	3710-001141	CONNECTOR-SOCKET;12P,1R,2.5mm,STRAIGHT,S	
C402	2301-000213	C-FILM,PEF;220nF,5%,250V,TP,21.5x11.7.5		CN804	3710-001141	CONNECTOR-SOCKET;12P,1R,2.5mm,STRAIGHT,S	
C407	2303-000186	C-FILM,PPF;22nF,5%,400V,BK,19.5x13.5x8.1		D301	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.0A,DO-41,T	
C408	2306-000353	C-FILM,MPPF;6.3nF,5%,1.6KV,BK,26.5x8.5x1		D401	0401-000005	DIODE-SWITCHING;1N4148,75V,200MA,DO-35,T	
C409	2306-000195	C-FILM,MPPF;360nF,5%,400V,TP,26x19x11.5,		D402	0401-000005	DIODE-SWITCHING;1N4148,75V,200MA,DO-35,T	
C410	2301-000188	C-FILM,PEF;1nf,5%,100V,TP,10.5x12.5x6.5,		D403	0401-001024	DIODE-SWITCHING;BAW75,25V,300MA,DO-35,TP	
C411	2301-001065	C-FILM,MPPF;47nF,5%,630V,TP,19x15.5x7.7.		D404	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1.5A,DO-15L	
C412	2306-001017	C-FILM,MPPF;680nF,5%,400V,TP,26X14.5X24M		D405	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1.5A,DO-15L	
C413	2306-000324	C-FILM,MPPF;3.3nf,5%,1.6KV,TP,28.5x13.5x		D407	0402-001012	DIODE-RECTIFIER;FMP-3FU,1500V,5A,TO-3PF	H/SINK
C414	2401-003114	C-AL:4.7uF,20%,250V,WT,TP,10x16.5		D410	0402-000537	DIODE-RECTIFIER;RH1A,600V,0.6A,DO-204AC	
C416	2401-001527	C-AL:47uF,20%,250V,HR,TP,13x25mm,5m		D411	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.0A,DO-41,T	
C417	2401-001527	C-AL:47uF,20%,250V,HR,TP,13x25mm,5m		D414	0402-000540	DIODE-RECTIFIER;RU20A,600V,1.5A,-,TP	
C418	2201-000132	C-CERAMIC,DISC:100pF,10%,500V,Y5P,TP,6x4		D415	0402-000534	DIODE-RECTIFIER;RG10V,400V,1.2A,DO-201,T	
C419	2306-000273	C-FILM,MPPF;82nF,5%,400V,BK,19x15.5x17.5		D801	0402-000532	DIODE-RECTIFIER;ERC13-08,800V,1.2A,DO-20	
C420	2201-000556	C-CERAMIC,DISC:470pF,10%,500V,Y5P,TP,7x4		D802	0401-000005	DIODE-SWITCHING;1N4148,75V,200MA,DO-35,T	
C421	2201-000556	C-CERAMIC,DISC:470pF,10%,500V,Y5P,TP,7x4		D803	0406-001007	DIODE-TVS;P6KE180A,171/180/189V,600V,CAS	
C422	2401-001655	C-AL:M80uF,20%,25V,GP,TP,26X14.5X24M		D804	0402-000243	DIODE-RECTIFIER;RC2-V1,2000V,0.2A,DO-201	
C423	2401-002597	C-AL:220uF,20%,35V,GP,TP,10x12.5		D805	0402-000532	DIODE-RECTIFIER;ERC13-08,800V,1.2A,DO-20	
C424	2305-000470	C-FILM,MPEF;68nF,5%,100V,TP,-,5mm		D806	0402-000549	DIODE-BRIDGE;RBV606,600V,6A,-,BK	H/SINK
C425	2306-000326	C-FILM,MPPF;4.7nF,5%,1.6KV,TP,28.5x16x9m		D807	0402-000213	DIODE-RECTIFIER;ERB12-06,600V,1.0A,DO-41	
C427	2401-000360	C-AL:100uF,20%,50V,GP,TP,8x11.5,5		D808	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1.5A,DO-15L	
C455	2301-000445	C-FILM,PEF;4.7nF,5%,100V,TP,7.5x4.0x5.0m		D810	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.0A,DO-41,T	
C456	2305-000665	C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m		D811	0403-000704	DIODE-ZENER;TZP7.5B,7.5V,7.5-8.4V,1W,DO-	
C457	2301-00175	C-FILM,PEF;15nF,5%,50V,TP,7.1x3.5x13mm,5		D812	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.0A,DO-41,T	
C458	2401-001655	C-AL:680uF,20%,25V,GP,TP,10x20.5		D813	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.0A,DO-41,T	
C459	2202-000127	C-CERAMIC,MLC-AXIAL;10nF,+80-20%,25V,Y5V		D814A	1405-001036	VARISTOR;430V,2500A,14x8.5mm,TP	
C460	2201-000558	C-CERAMIC,DISC:470pF,10%,500V,Y5P,TP,5x3,		D814B	1405-001036	VARISTOR;430V,2500A,14x8.5mm,TP	
C461	2201-000558	C-CERAMIC,DISC:470pF,10%,500V,Y5P,TP,5x3,		D816	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.0A,DO-41,T	
C801	2306-000318	C-FILM,MPPF;220nF,20%,275V,TP,-,22.5mm		D817	0402-000231	DIODE-RECTIFIER;FMG-G26S,600V,4A,TO-220F	H/SINK
C802	2306-000318	C-FILM,MPPF;220nF,20%,275V,TP,-,22.5mm		D818	0402-000233	DIODE-RECTIFIER;FML-G12S,200V,5A,-	H/SINK
C803	2201-000315	C-CERAMIC,DISC:2.2nF,+80-20%,250VAC,Y5U,		D819	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1.5A,DO-15L	
C804	2401-002289	C-AL:470uF,20%,35V,WT,TP,10x20.5		D821	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.0A,DO-41,T	
C805	2201-000292	C-CERAMIC,DISC:1nf,10%,50V,Y5P,TP,5x3,5		D823	0402-000233	DIODE-RECTIFIER;FML-G12S,200V,5A,-	H/SINK
C806	2306-000323	C-FILM,MPPF;2.2nF,5%,1.6KV,TP,28.5x15.5x		D824	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41,TP	
C807	2306-000112	C-FILM,MPPF;100nF,20%,275V,BK,-,15mm		D825	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41,TP	
C809	2401-002292	C-AL:47uF,20%,25V,WT,TP,8X11.5		D826	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.0A,DO-41,T	
C810	2401-000611	C-AL:1uF,20%,50V,WT,TP,5x11.5		D828	0402-000532	DIODE-RECTIFIER;ERC13-08,800V,1.2A,DO-20	
C811	2201-000315	C-CERAMIC,DISC:2.2nF,+80-20%,250VAC,Y5U,		D829	0402-000546	DIODE-RECTIFIER;TVR10G,400V,1.0A,DO-41,T	
C812	2201-000332	C-CERAMIC,DISC:2.2nF,20%,250VAC,Y5U,TP,1		D830	0402-000493	DIODE-RECTIFIER;1R5GU41,400V,1.5A,DO-15L	
C813	2401-003066	C-AL:10uF,20%,450V,GP,TP,13x20mm,5m		D832	0402-000534	DIODE-RECTIFIER;RG10V,400V,1.2A,DO-201,T	
C814	2401-003190	C-AL:470uF,20%,450V,GP,BK,35x45.22.		DZ301	0403-000545	DIODE-ZENER;MTZ24B,24V,22.61-23.77V,500m	
C816	2401-002262	C-AL:10uF,20%,160V,WT,TP,10x20.5		DZ302	0403-000545	DIODE-ZENER;MTZ24B,24V,22.61-23.77V,500m	
C817	2401-002459	C-AL:220uF,20%,25V,LZ,TP,10x16.5		DZ303	0403-000494	DIODE-ZENER;MTZ39.39V,35.36-37.2V,500mW,	
C818	2201-000551	C-CERAMIC,DISC:470pF,10%,1KV,Y5P,TP,8x5,		DZ304	0403-000700	DIODE-ZENER;TZP33A,33V,31-35V,1W,DO-41,T	
C819	2401-002287	C-AL:470uF,20%,200V,WT,BK,25x40.10		DZ305	0403-000656	DIODE-ZENER;MTZ15C,15V,14.35-15.09V,500m	
C820	2401-003024	C-AL:220uF,20%,200V,WT,TP,22x35.10		DZ306	0403-000666	DIODE-ZENER;MTZ5.1A,5.1V,4.81-5.07V,500m	
C821	2201-000551	C-CERAMIC,DISC:470pF,10%,1KV,Y5P,TP,8x5,		DZ401	0403-000300	DIODE-ZENER;MTZ2.8B,8.2V,7.78-8.19V,500m	
C822	2401-000737	C-AL:220uF,20%,50V,GP,TP,18x35.5.7.5		DZ801	0403-000662	DIODE-ZENER;MTZ3.0B,3.0V,3.01-3.22V,500m	
C823	2201-000551	C-CERAMIC,DISC:470pF,10%,1KV,Y5P,TP,8x5,		DZ802	0403-000656	DIODE-ZENER;MTZ15C,15V,14.35-15.09V,500m	
C824	2201-000556	C-CERAMIC,DISC:470pF,10%,500V,Y5P,TP,7x4		DZ804	0403-000734	DIODE-ZENER;TZP15B,15V,14.7-16.5V,1W,DO-	
C825	2401-000722	C-AL:2200uF,20%,25V,WT,TP,16x25.7.5		DZ822	0403-000699	DIODE-ZENER;TZP27B,27V,27-30.8V,1W,DO-41	
C826	2401-000722	C-AL:2200uF,20%,25V,WT,TP,16x25.7.5		F805	3601-000281	FUSE-FERRULE;250V,4A,TL,GLASS,5.2x20mm	
C827	2401-002262	C-AL:10uF,20%,160V,WT,TP,10x20.5		F805A	3602-000114	FUSE-HOLDER;-,30mohm	
C828	2401-000722	C-AL:2200uF,20%,25V,WT,TP,16x25.7.5		F805B	3602-000114	FUSE-HOLDER;-,30mohm	
C829	2401-001397	C-AL:470uF,20%,25V,GP,TP,10x16.5		F806	3601-001064	FUSE-FERRULE;125V,4A,FA,GLASS,2.4x7.5mm	
C830	2401-000832	C-AL:220uF,20%,25V,GP,TP,8x11.5,5		F807	3601-000120	FUSE-FERRULE;125V,2.5A,FA,GLASS,2.4x7.5m	
C833	2305-000412	C-FILM,MPEF;470nF,5%,63V,TP,-,5mm		△ IC301	1204-000517	IC-VERTIVAL DEF:LA7845,SIP,7P,-,PLASTIC	
C835	2201-000556	C-CERAMIC,DISC:470pF,10%,500V,Y5P,TP,7x4		△ IC403	1204-001178	IC-VIDEO SYSTEM;TDA8145,DIP,8P,300MIL,PL	
				△ IC801	AA13-20002K	IC-HYBRID;-,STR-S6709 LF953,SIP,9P,SMPS	
				△ IC803	1203-000640	IC-PWM CONTROLLER;210,DIP8P,245MIL,PLAS	
				△ IC805	0604-001038	PHOTO-COUPLER;TR,130-260%,200mW,DIP-4,ST	
				△ IC806	1203-000274	IC-POS,FIXED REG.;7805,TO-220,3P,-,PLAS	
				L302	3301-000287	CORE-FERRITE BEAD;AA,3.5x1x6mm,1500,2400	
				L303	3301-000287	CORE-FERRITE BEAD;AA,3.5x1x6mm,1500,2400	
				L401	AA27-10002V COIL-CHOKE;-,6.3MH,K,-,500MA,-,NY632K(50		
				L402	2701-001034	INDUCTOR-AXIAL;22uH,10%,5x14mm	

## Electric Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
L404	AA27-00021A	COIL-LINEARITY:-,5UH,OWA14X15,-,BK,20%		R805	2003-000462	R-METAL OXIDE(S);10Kohm,5%,2W,AA,TP,4x12	
L405	AA27-40001S	COIL-HORIZ.WIDTH:-,110UH,SB-5S8202.6,P10		R806	2003-000462	R-METAL OXIDE(S);10Kohm,5%,2W,AA,TP,4x12	
L407	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP,-		R807	2003-000462	R-METAL OXIDE(S);10Kohm,5%,2W,AA,TP,4x12	
L408	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP,-		R808	2001-001129	R-CARBON(S);330Kohm,5%,1/2W,AA,TP,2.4x6.	
L409	3301-000287	CORE-FERRITE BEAD:AA,3.5x16mm,1500,2400		R809	2001-001129	R-CARBON(S);330Kohm,5%,1/2W,AA,TP,2.4x6.	
L411	AA27-10004F	COIL-CHOKE:-,56uH,K,-,2.5A,BK,-,DR12x15,		R810	2009-001001	R-METAL PLATE:0.120HM,10%,5W,CL,TP,5X14X	
L801	AA29-30002F	FILTER-LINE NOISE:-,6mH,2.45A,-		R811	2001-001117	R-CARBON(S);2Kohm,5%,1/2W,AA,TP,2.4x6.4m	
L802	AA29-30002F	FILTER-LINE NOISE:-,6mH,2.45A,-		R812	2001-001045	R-CARBON(S);1.2Kohm,5%,1/2W,AA,TP,2.4x6.	
L803	3301-001223	CORE-FERRITE BEAD:AB,-,3.5X5X0.8MM,-,TP,		R813	2001-000109	R-CARBON(S);470ohm,5%,1/2W,AA,TP,2.4x6.4	
L805	3301-000287	CORE-FERRITE BEAD:AA,3.5x16mm,1500,2400		R814	2006-001008	R-CEMENT:8.20HM,5%,5W,CJ,TP,10.5X14X27M	
L806	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP,-		R815	2001-001117	R-CARBON(S);2Kohm,5%,1/2W,AA,TP,2.4x6.4m	
L810	AA27-10002L	COIL-CHOKE:-,24UH,K,-,2A,-,24UH-K,10X10M		R816	2001-001117	R-CARBON(S);2Kohm,5%,1/2W,AA,TP,2.4x6.4m	
L811	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP,-		R817	2003-001090	R-METAL OXIDE(S);10Kohm,5%,2W,AF,TP,4x12	
L812	AA27-10002L	COIL-CHOKE:-,24UH,K,-,2A,-,24UH-K,10X10M		R820	2003-001093	R-METAL OXIDE(S);12Kohm,5%,2W,AF,TP,3.9x	
L813	3301-001223	CORE-FERRITE BEAD:AB,-,3.5X5X0.8MM,-,TP,		R821	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,-	
L816	2901-000297	FILTER-EMI ON BOARD:-,3A,-,3.5x5,TP,-		R822	2008-001002	R-FUSIBLE(S);0.18ohm,5%,2W,AA,TP,3.9x10m	
L818	AA27-10002L	COIL-CHOKE:-,24UH,K,-,2A,-,24UH-K,10X10M		R830	2001-001087	R-CARBON(S);18ohm,5%,1/2W,AA,TP,2.4x6.4m	
L820	3301-000287	CORE-FERRITE BEAD:AA,3.5x16mm,1500,2400		R831	2001-001165	R-CARBON(S);56ohm,5%,1/2W,AA,TP,2.4x6.4m	
L821	AA27-10002L	COIL-CHOKE:-,24UH,K,-,2A,-,24UH-K,10X10M		R832	2001-001122	R-CARBON(S);3.9Kohm,5%,1/2W,AA,TP,2.4x6.	
△Q400	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		R833	2001-001078	R-CARBON(S);15Kohm,5%,1/2W,AA,TP,2.4x6.4	
△Q402	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		R834	2001-000028	R-CARBON(S);1000HM,5%,1/2W,AA,TP,-	
△Q404	0505-001116	FET-SILICON:BUZ73A,N,200V,22A,0.6ohm,40W		R840	2001-001097	R-CARBON(S);2.4Kohm,5%,1/2W,AA,TP,2.4x6.	
△Q405	0502-001062	TR-POWER:2SC5331,NPN,180W,TO-3PS,10-3		R841	2001-001088	R-CARBON(S);1Kohm,5%,1/2W,AA,TP,2.4x6.4m	
△Q406	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,T		R842	2001-001106	R-CARBON(S);220Kohm,5%,1/2W,AA,TP,2.4x6.	
△Q407	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		R844	2001-000085	R-CARBON(S);100Kohm,5%,1/2W,AA,TP,2.4x6.	
△Q801	0503-000153	TR-DARLINGTON:TOP102,NPN,2W,TO-220,TP,10		R845	2001-001112	R-CARBON(S);24Kohm,5%,1/2W,AA,TP,2.4x6.4	
△Q803	0501-000369	TR-SMALL SIGNAL:KSC2331,Y-NPN,W,1W,TO-92L,		R846	2002-001012	R-COMPOSITION:8.2Mhm,10%,1/2W,AA,TP,3.7	
△Q804	0501-000369	TR-SMALL SIGNAL:KSC2331-Y-NPN,W,1W,TO-92L,		R848	2008-001058	R-FUSIBLE:0.18ohm,5%,1W,AF,TP,3.9x10mm	
△Q805	AA13-20004HIC-HYBRID:-,SE135N-LF12,TO220-LF12,3,ERR			R849	2001-001143	R-CARBON(S);4.3Kohm,5%,1/2W,AA,TP,2.4x6.	
R301	2001-000052	R-CARBON(S);3.3Kohm,5%,1/2W,AA,TP,2.4x6.		R851	2008-001080	R-FUSIBLE:270HM,5%,2W,AF,TP,3.9X10MM	
R302	2001-000052	R-CARBON(S);3.3Kohm,5%,1/2W,AA,TP,2.4x6.		R852	2003-000458	R-METAL OXIDE(S);100hm,5%,2W,AF,TP,4x12	
R305	2001-001048	R-CARBON(S);1.2ohm,5%,1/2W,AA,TP,2.4x6.4		RL801	3501-001040	RELAY-POWER:12VDC,500mW,10A,1FormA,15Ms,5	
R306	2001-001163	R-CARBON(S);560ohm,5%,1/2W,AA,TP,2.4x6.4		RL802	3501-001053	RELAY-POWER:5VDC,530MW,10A,1FORMA,15MS,5	
R310	2003-000744	R-METAL OXIDE(S);560hm,5%,2W,AA,TP,4x12m		△T403	AA26-50001S	TRANS-HORIZ DRIVE:-,6.0mh,44uh,1.5uh,EI2	
R311	2003-000744	R-METAL OXIDE(S);560hm,5%,2W,AA,TP,4x12m		△T444	AA26-00007A	TRANS-FLYBACK:-,FCZ-29A014(S),29INCH,130	
R312	2004-004366	R-METAL(S);1.3Kohm,1%,1/2W,AA,TP,2.5x6.5		T801	AA26-20006X	TRANS-SWITCHING:-,160-260V,130/30/24/8/1	
R313	2001-001048	R-CARBON(S);1.2ohm,5%,1/2W,AA,TP,2.4x6.4		T802	AA26-20004M	TRANS-SWITCHING:-,90-260V,K5,EE2118,7.92	
R314	2004-004366	R-METAL(S);1.3Kohm,1%,1/2W,AA,TP,2.5x6.5					
R315	2001-000016	R-CARBON(S);1ohm,5%,1/2W,AA,TP,2.4x6.4mm					
R325	2001-001144	R-CARBON(S);4.7Kohm,5%,1/2W,AA,TP,2.4x6.					
R401	2006-000323	R-CEMENT:560hm,5%,5W,CB,TP,9.5x13.5x26.					
R402	2001-001168	R-CARBON(S);6.8Kohm,5%,1/2W,AA,TP,2.4x6.4					
R403	2001-001108	R-CARBON(S);22Kohm,5%,1/2W,AA,TP,2.4x6.4					
R404	2001-001045	R-CARBON(S);1.2Kohm,5%,1/2W,AA,TP,2.4x6.					
R405	2003-000578	R-METAL OXIDE(S);220hm,5%,2W,AA,TP,4x12					
R406	2001-001122	R-CARBON(S);3.9Kohm,5%,1/2W,AA,TP,2.4x6.					
R407	2003-000578	R-METAL OXIDE(S);220hm,5%,2W,AA,TP,4x12					
R408	2006-000325	R-CEMENT:560hm,5%,5W,CB,9.5x27x9.5mm					
R409	2003-000538	R-METAL OXIDE(S);1Kohm,5%,2W,AA,TP,4x12m					
R410	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,-					
R411	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,-					
R412	2004-001399	R-METAL(S);5.1Kohm,1%,1/2W,AA,TP,2.4x6.4					
R413	2001-001159	R-CARBON(S);510ohm,5%,1/2W,AA,TP,2.4x6.4					
R414	2001-001142	R-CARBON(S);3Kohm,5%,1/2W,AA,TP,2.4x6.4m					
R415	2004-001390	R-METAL(S);1Kohm,2%,1/2W,AA,TP,2.4x6.4mm					
R416	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,-					
R417	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm					
R418	2001-000539	R-CARBON;24Kohm,5%,1/8W,AA,TP,1.8x3.2mm					
R419	2008-001019	R-FUSIBLE:0.20HM,10%,1/2W,AA,TP,2.5X6.5M					
R420	2001-001155	R-CARBON(S);5.6Kohm,5%,1/2W,AA,TP,2.4x6.					
R421	2001-001106	R-CARBON(S);220Kohm,5%,1/2W,AA,TP,2.4x6.					
R422	2001-001108	R-CARBON(S);22Kohm,5%,1/2W,AA,TP,2.4x6.4					
R423	2008-002053	R-FUSIBLE(S);0.47ohm,5%,1W,AF,TP,3.9x10m					
R424	2008-000221	R-FUSIBLE:0.47ohm,10%,1/2W,AA,TP,4.7x11m					
R425	2008-000221	R-FUSIBLE:0.47ohm,10%,1/2W,AA,TP,4.7x11m					
R426	2003-000540	R-METAL OXIDE(S);1Kohm,5%,2W,AF,TP,4x12m					
R427	2003-000462	R-METAL OXIDE(S);10Kohm,5%,2W,AA,TP,4x12					
R429	2004-000698	R-METAL;3.3Kohm,1%,1/4W,AA,TP,2.4x6.4m					
R430	2004-002016	R-METAL(S);15Kohm,1%,1/2W,AA,TP,2.5x6.5m					
R431	2004-002016	R-METAL(S);15Kohm,1%,1/2W,AA,TP,2.5x6.5m					
R434	2004-001376	R-METAL(S);11Kohm,1%,1/2W,AA,TP,2.4x6.4m					
R435	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,-					
R436	2001-000008	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm					
R457	2003-000592	R-METAL OXIDE(S);220hm,5%,2W,AF,TP,4x12m					
R801	1404-000178	THERMISTOR-PTC:7ohm,20%,290V,25A,-,BK					
R803	1404-001045	THERMISTOR-NTC:4.70HM,15%,2900K,35.0MW,T					
P904	2001-001116	P-CAPRON/S;270hm,5%,1/2W,AA,TP,2.4x6.4m					
R805	2003-000462	R-METAL OXIDE(S);10Kohm,5%,2W,AA,TP,4x12					
R806	2003-000462	R-METAL OXIDE(S);10Kohm,5%,2W,AA,TP,4x12					
R807	2003-000462	R-METAL OXIDE(S);10Kohm,5%,2W,AA,TP,4x12					
R808	2001-001129	R-CARBON(S);330Kohm,5%,1/2W,AA,TP,2.4x6.					
R809	2001-001129	R-CARBON(S);330Kohm,5%,1/2W,AA,TP,2.4x6.					
R810	2009-001001	R-METAL PLATE:0.120HM,10%,5W,CL,TP,5X14X					
R811	2001-001117	R-CARBON(S);2Kohm,5%,1/2W,AA,TP,2.4x6.4m					
R812	2001-001045	R-CARBON(S);1.2Kohm,5%,1/2W,AA,TP,2.4x6.					
R813	2001-000109	R-CARBON(S);470ohm,5%,1/2W,AA,TP,2.4x6.4					
R814	2006-001008	R-CEMENT:8.20HM,5%,5W,CJ,TP,10.5X14X27M					
R815	2001-001117	R-CARBON(S);2Kohm,5%,1/2W,AA,TP,2.4x6.4m					
R816	2001-001117	R-CARBON(S);2Kohm,5%,1/2W,AA,TP,2.4x6.4m					
R817	2003-001090	R-METAL OXIDE(S);10Kohm,5%,2W,AF,TP,4x12					
R820	2003-001093	R-METAL OXIDE(S);12Kohm,5%,2W,AF,TP,3.9x					
R821	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,-					
R822	2008-001002	R-FUSIBLE(S);0.18ohm,5%,2W,AA,TP,3.9x10m					
R830	2001-001087	R-CARBON(S);18ohm,5%,1/2W,AA,TP,2.4x6.4m					
R831	2001-001165	R-CARBON(S);56ohm,5%,1/2W,AA,TP,2.4x6.4m					
R832	2001-001122	R-CARBON(S);3.9Kohm,5%,1/2W,AA,TP,2.4x6.					
R833	2001-001078	R-CARBON(S);15Kohm,5%,1/2W,AA,TP,2.4x6.4					
R834	2001-000028	R-CARBON(S);1000HM,5%,1/2W,AA,TP,-					
R840	2001-001097	R-CARBON(S);2.4Kohm,5%,1/2W,AA,TP,2.4x6.					
R841	2001-001088	R-CARBON(S);1Kohm,5%,1/2W,AA,TP,2.4x6.4m					
R842	2001-001106	R-CARBON(S);220Kohm,5%,1/2W,AA,TP,2.4x6.					
R844	2001-000085	R-CARBON(S);100Kohm,5%,1/2W,AA,TP,2.4x6.					
R845	2001-001112	R-CARBON(S);24Kohm,5%,1/2W,AA,TP,2.4x6.4m					
R846	2002-001012	R-COMPOSITION:8.2Mhm,10%,1/2W,AA,TP,3.7					
R848	2008-001058	R-FUSIBLE:0.18ohm,5%,1W,AF,TP,3.9x10mm					
R849	2001-001143	R-CARBON(S);4.3Kohm,5%,1/2W,AA,TP,2.4x6.					
R851	2008-001080	R-FUSIBLE:270HM,5%,2W,AF,TP,3.9X10MM					
R852	2003-000458	R-METAL OXIDE(S);100hm,5%,2W,AF,TP,4x12					
RL801	3501-001040	RELAY-POWER:12VDC,500mW,10A,1FormA,15Ms,5					
RL802	3501-001040	RELAY-POWER:5VDC,530MW,10A,1FORMA,15MS,5					
△T403	AA26-50001S	TRANS-HORIZ DRIVE:-,6.0mh,44uh,1.5uh,EI2					
△T444	AA26-00007A	TRANS-FLYBACK:-,FCZ-29A014(S),29INCH,130					
T801	AA26-20006X	TRANS-SWITCHING:-,160-260V,130/30/24/8/1					
T802	AA26-20004M	TRANS-SWITCHING:-,90-260V,K5,EE2118,7.92					
	△T444	TRANS-SWITCHING:-,90-260V,K5,EE2118,7.92					
	AA26-50001S	TRANS-HORIZ DRIVE:-,6.0mh,44uh,1.5uh,EI2					
	AA26-00007A	TRANS-FLYBACK:-,FCZ-29A014(S),29INCH,130					
	AA26-20006X	TRANS-SWITCHING:-,160-260V,130/30/24/8/1					
	AA26-20004M	TRANS-SWITCHING:-,90-260V,K5,EE2118,7.92					
	△T444	TRANS-SWITCHING:-,90-260V,K5,EE2118,7.92					
	AA26-50001S	TRANS-HORIZ DRIVE:-,6.0mh,44uh,1.5uh,EI2					
	AA26-00007A	TRANS-FLYBACK:-,FCZ-29A014(S),29INCH,130					
	AA26-20006X	TRANS-SWITCHING:-,160-260V,130/30/24/8/1					
	AA26-20004M	TRANS-SWITCHING:-,90-260V,K5,EE2118,7.92					
	△T444	TRANS-SWITCHING:-,90-260V,K5,EE2118,7.92					
	AA26-50001S	TRANS-HORIZ DRIVE:-,6.0mh,44uh,1.5uh,EI2					
	AA26-00007A	TRANS-FLYBACK:-,FCZ-29A014(S),29INCH,130					
	AA26-20006X	TRANS-SWITCHING:-,160-260V,130/30/24/8/1					
	AA26-20004M	TRANS-SWITCHING:-,90-260V,K5,EE2118,7.92					
	△T444	TRANS-SWITCHING:-,90-260V,K5,EE2118,7.92					
	AA26-50001S	TRANS-HORIZ DRIVE:-,6.0mh,44uh,1.5uh,EI2					
	AA26-00007A	TRANS-FLYBACK:-,FCZ-29A					

\* AA95-00174AASSY-PCB, CONTROL; DP, S53A, 28C7, HUNGARY

AA39-20179A LEAD-CONNECTOR,ASSY,-, YFH150-03,S,3(2)P,

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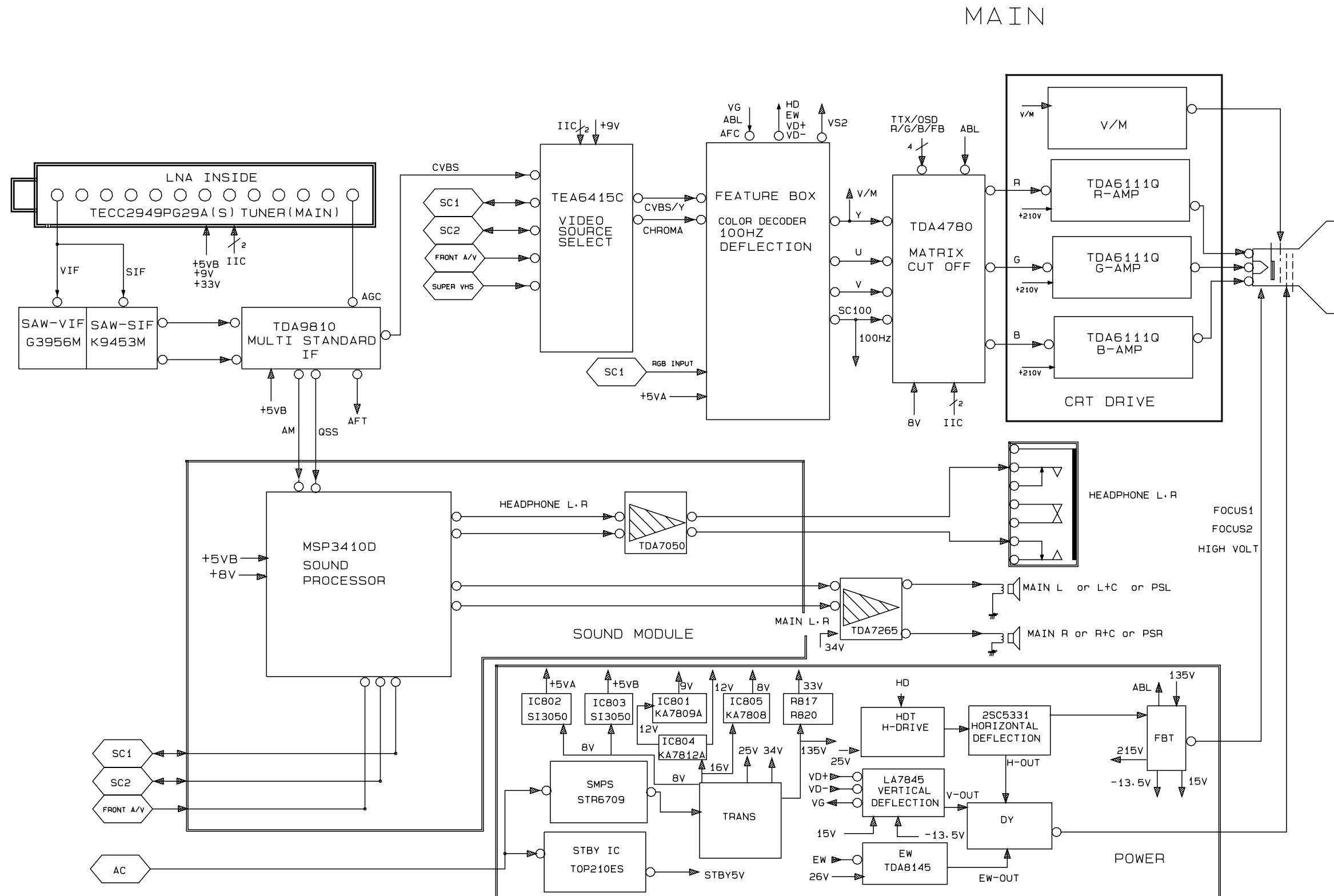
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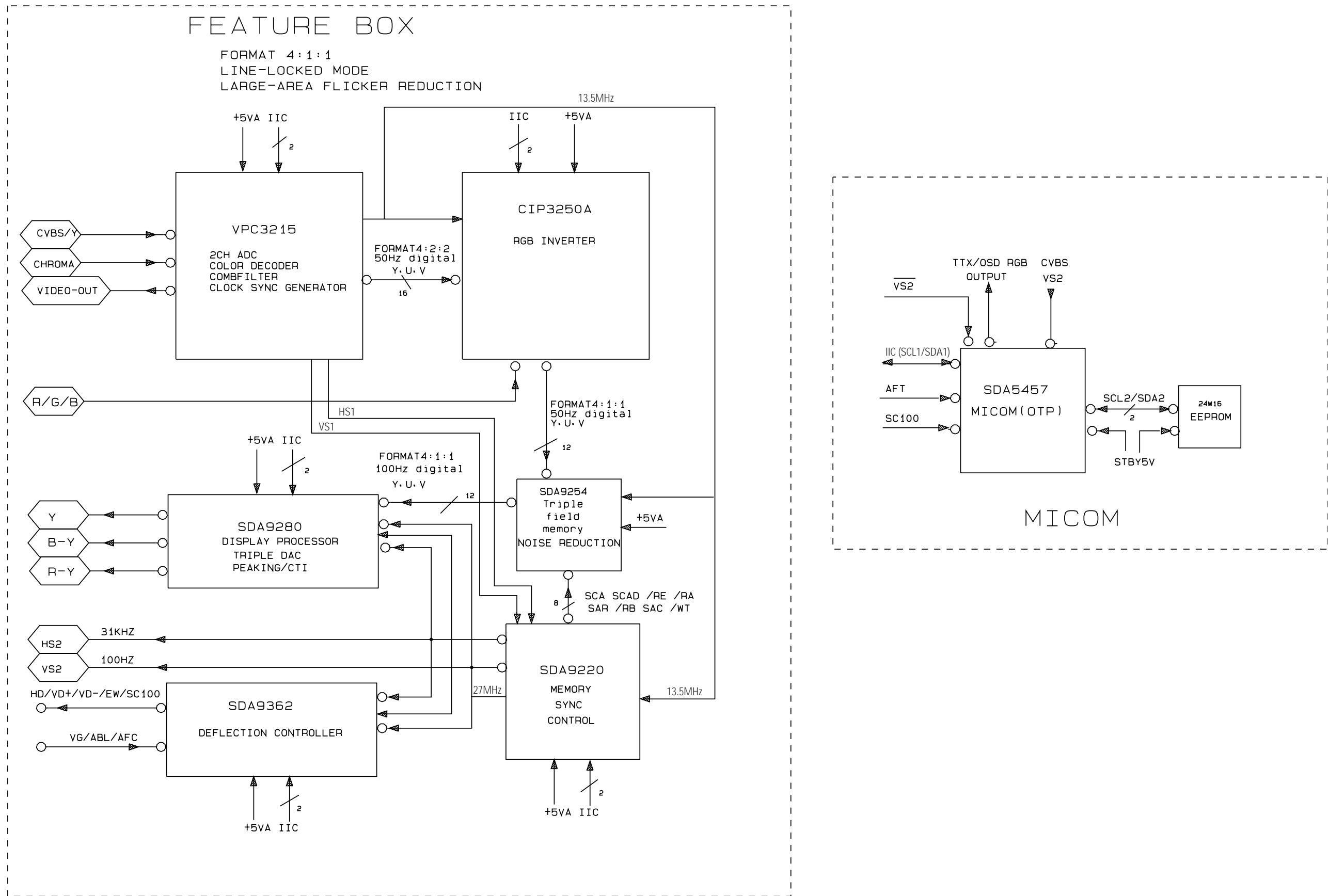
Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark				
SCREW	6001-000677	SCREW-MACHINE:RH+,M3,L6,ZPC(YEL),SM20C,		D602	0401-000133	DIODE-SWITCHING:RLS4148,100V,200mA,SOD-8					
SWC01	3404-000176	SWITCH-TACT;12V,50mA,90-150gf,6x6mm,SPST		DZ601	0403-000546	DIODE-ZENER:MTZ3.6B,3.6V,3.6-3.845V,500m					
SWC02	3404-000176	SWITCH-TACT;12V,50mA,90-150gf,6x6mm,SPST		▲ IC601	1204-001163	IC-SOUND PROCESSOR:MSP3410D,PLCC,68P,24.					
SWC03	3404-000176	SWITCH-TACT;12V,50mA,90-150gf,6x6mm,SPST		▲ IC603	1201-000407	IC-POWER AMP:7050,DIP8P,-,SINGLE,-,PLAS					
SWC04	3404-000176	SWITCH-TACT;12V,50mA,90-150gf,6x6mm,SPST		L601	2701-000170	INDUCTOR-AXIAL:3.9uH,10%,2.8x7mm					
SWC05	3404-000176	SWITCH-TACT;12V,50mA,90-150gf,6x6mm,SPST		L602	2701-000170	INDUCTOR-AXIAL:3.9uH,10%,2.8x7mm					
SWP01	3403-000179	SWITCH-PUSH:250V,5A,DPST,-,JPW-2104B		L603	2701-000112	INDUCTOR-AXIAL:100uH,10%,2.8x7mm					
<b>ASSY-SOUND</b>											
*AA95-40011NASSY-SOUND:-,29,SCT53B,-,-,-											
C601	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R604	2007-000586	R-CHIP:22KOHM,5%,1/10W,DA,TP,2012					
C602	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R605	2007-000586	R-CHIP:22KOHM,5%,1/10W,DA,TP,2012					
C603	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11.5		R606	2007-000881	R-CHIP:4.7ohm,5%,1/10W,DA,TP,2012					
C604	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11.5		R607	2001-000028	R-CARBON(S):100OHM,5%,1/2W,AA,TP-					
C605	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11.5		R608	2007-000300	R-CHIP:10KOHM,5%,1/10W,DA,TP,2012					
C606	2203-000979	C-CERAMIC,CHIP:47nF,10%,50V,X7R,TP,2012,		R609	2007-000300	R-CHIP:10KOHM,5%,1/10W,DA,TP,2012					
C610	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11.5		R610	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012					
C611	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11.5		R611	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012					
C612	2203-000716	C-CERAMIC,CHIP:3.3nF,10%,50V,X7R,TP,2012		R612	2007-000686	R-CHIP:3.3KOHM,5%,1/10W,DA,TP,2012					
C613	2203-000716	C-CERAMIC,CHIP:3.3nF,10%,50V,X7R,TP,2012		R613	2007-000686	R-CHIP:3.3KOHM,5%,1/10W,DA,TP,2012					
C614	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		R614	2007-000468	R-CHIP:1KOHM,5%,1/10W,DA,TP,2012					
C615	2203-000595	C-CERAMIC,CHIP:220pF,5%,50V,NPO,TP,2012,		R617	2007-000931	R-CHIP:4700HM,5%,1/10W,DA,TP,2012					
C616	2203-000938	C-CERAMIC,CHIP:470pF,5%,50V,NPO,TP,2012,		R618	2007-000931	R-CHIP:4700HM,5%,1/10W,DA,TP,2012					
C617	2203-000142	C-CERAMIC,CHIP:1.5nF,10%,50V,X7R,TP,2012		R619	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012					
C618	2203-000444	C-CERAMIC,CHIP:1nF,10%,50V,X7R,TP,2012,-		R620	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012					
C619	2203-000444	C-CERAMIC,CHIP:1nF,10%,50V,X7R,TP,2012,-		R621	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012					
C622	2203-000701	C-CERAMIC,CHIP:2pF,0.25pF,50V,NPO,TP,201		R622	2007-000290	R-CHIP:1000HM,5%,1/10W,DA,TP,2012					
C623	2203-000701	C-CERAMIC,CHIP:2pF,0.25pF,50V,NPO,TP,201		R623	2007-000468	R-CHIP:1KOHM,5%,1/10W,DA,TP,2012					
C624	2203-001077	C-CERAMIC,CHIP:56pF,5%,50V,NPO,TP,2012,-		R632	2007-000931	R-CHIP:4700HM,5%,1/10W,DA,TP,2012					
C625	2203-001077	C-CERAMIC,CHIP:56pF,5%,50V,NPO,TP,2012,-		R633	2007-000931	R-CHIP:4700HM,5%,1/10W,DA,TP,2012					
C626	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		R634	2007-000931	R-CHIP:4700HM,5%,1/10W,DA,TP,2012					
C627	2203-000938	C-CERAMIC,CHIP:470pF,5%,50V,NPO,TP,2012,		R635	2007-000931	R-CHIP:4700HM,5%,1/10W,DA,TP,2012					
C628	2203-000142	C-CERAMIC,CHIP:1.5nF,10%,50V,X7R,TP,2012		R636	2007-000931	R-CHIP:4700HM,5%,1/10W,DA,TP,2012					
C629	2203-001077	C-CERAMIC,CHIP:56pF,5%,50V,NPO,TP,2012,-		R660	2007-000872	R-CHIP:4.7KOHM,5%,1/10W,DA,TP,2012					
C630	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		R661	2007-000872	R-CHIP:4.7KOHM,5%,1/10W,DA,TP,2012					
C631	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		R666	2007-000872	R-CHIP:4.7KOHM,5%,1/10W,DA,TP,2012					
C632	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP,		R671	2007-000872	R-CHIP:4.7KOHM,5%,1/10W,DA,TP,2012					
C633	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP,		X601	2801-000186	CRYSTAL-UNIT:18.432MHZ,25PPM,28-AAM,8PF,					
C634	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP,2012,		<b>ASSY-SPEAKER</b>							
C635	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP,2012,		*AA96-00092AASSY-SPEAKER:-,16Ω,0.6W,3001-001038,AA39-							
C636	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,		SPEAKER WIRE	3001-001038	SPEAKER:6W,16ΩHM,92DB,140Hz					
C637	2401-001026	C-AL:3.3uF,20%,50V,GP,TP,5X11.5			AA39-00005B	LEAD CONNECTOR-ASSY:-,YSH250-04,REC,REC,					
C638	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm									
C639	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		<b>ASSY-POWER CORD</b>							
C640	2203-000938	C-CERAMIC,CHIP:470pF,5%,50V,NPO,TP,2012,		POWER/C HOLDER/C	AA39-10003B POWER-CORD:-,KJP-140,KLCE-2F,2.4m,HOUS,S						
C641	2203-000142	C-CERAMIC,CHIP:1.5nF,10%,50V,X7R,TP,2012			AA61-20050A HOLDER-CORD:-,-,PP,V0,BLK,DO						
C642	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm									
C643	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11.5		<b>REMOCON</b>							
C644	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11.5			* AA59-00025AREMOCON:-,DPTM57,AA59-00023A,-,-,-,-						
C645	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11.5									
C646	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11.5									
C647	2203-000979	C-CERAMIC,CHIP:47nF,10%,50V,X7R,TP,2012,									
C648	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP,2012,									
C649	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP,									
C650	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP,									
C651	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP,2012,									
C652	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP,2012,									
C653	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP,									
C654	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP,									
C655	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP,2012,									
C656	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP,									
C657	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP,									
C658	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP,2012,									
C659	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP,2012,									
C660	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP,2012,									
C661	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP,2012,									
C662	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP,									
C663	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP,									
C664	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP,2012,									
C665	2203-000634	C-CERAMIC,CHIP:22pF,5%,50V,NPO,TP,2012,-									
C666	2203-000716	C-CERAMIC,CHIP:3.3nF,10%,50V,X7R,TP,2012									
C667	2401-000493	C-AL:10uF,20%,50V,LZ,TP,5x11mm,5mm									
C668	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11.5									
C669	2401-002212	C-AL:10uF,20%,25V,WT,TP,5x11.5mm									
C670	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP,									
C671	2203-000716	C-CERAMIC,CHIP:3.3nF,10%,50V,X7R,TP,2012									
C672	2203-000716	C-CERAMIC,CHIP:3.3nF,10%,50V,X7R,TP,2012									
CN601A	3711-002710	CONNECTOR-HEADER:NOWALL,15P,1R,2.5mm,ANG									
CN602A	3711-002710	CONNECTOR-HEADER:NOWALL,15P,1R,2.5mm,ANG									
D601	0401-000133	DIODE-SWITCHING:RLS4148,100V,200mA,SOD-8									

## 8. Block Diagrams

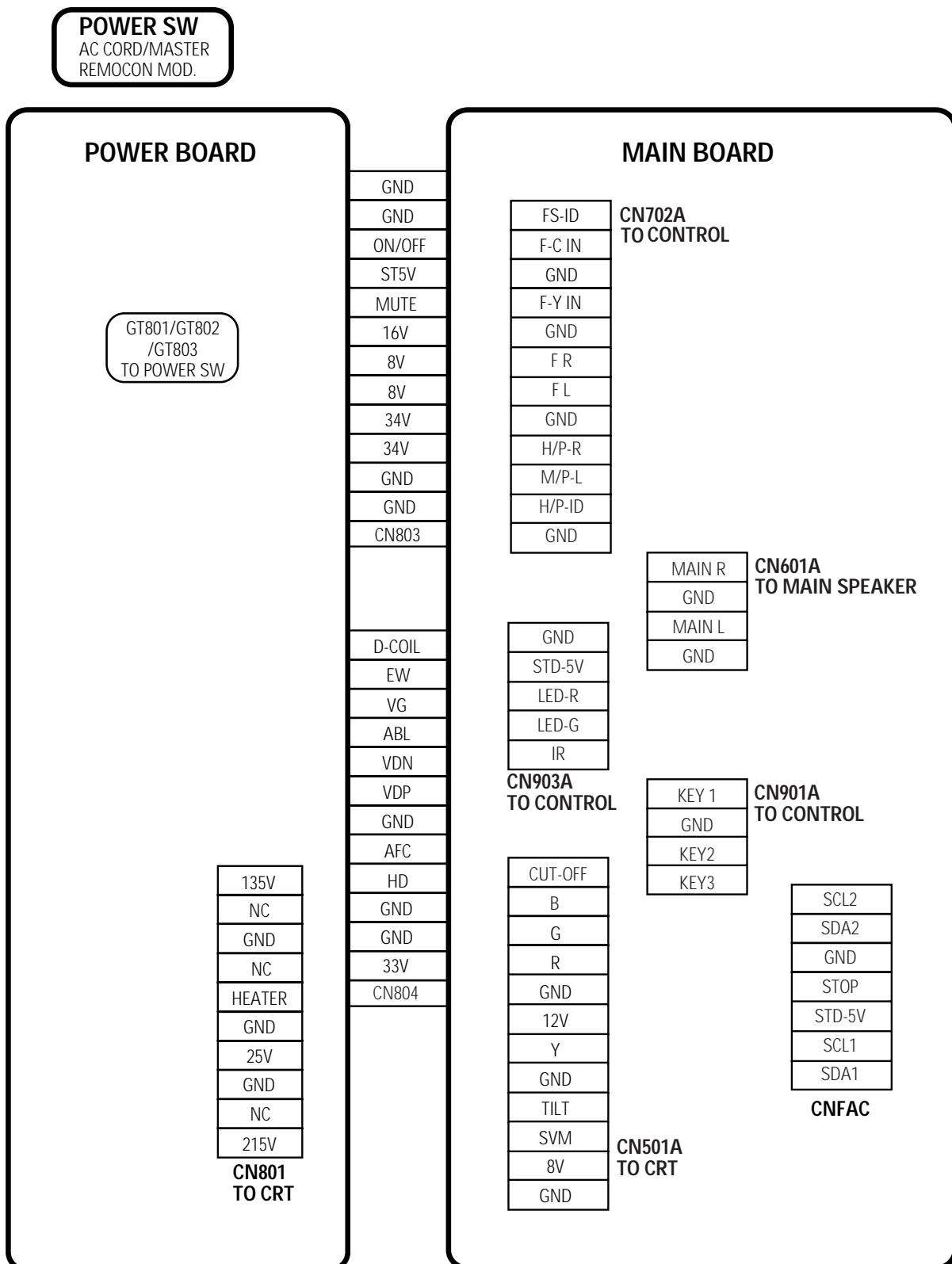
### 8-1 MAIN



## 8-2 FEATURE BOX, MICOM MODULE



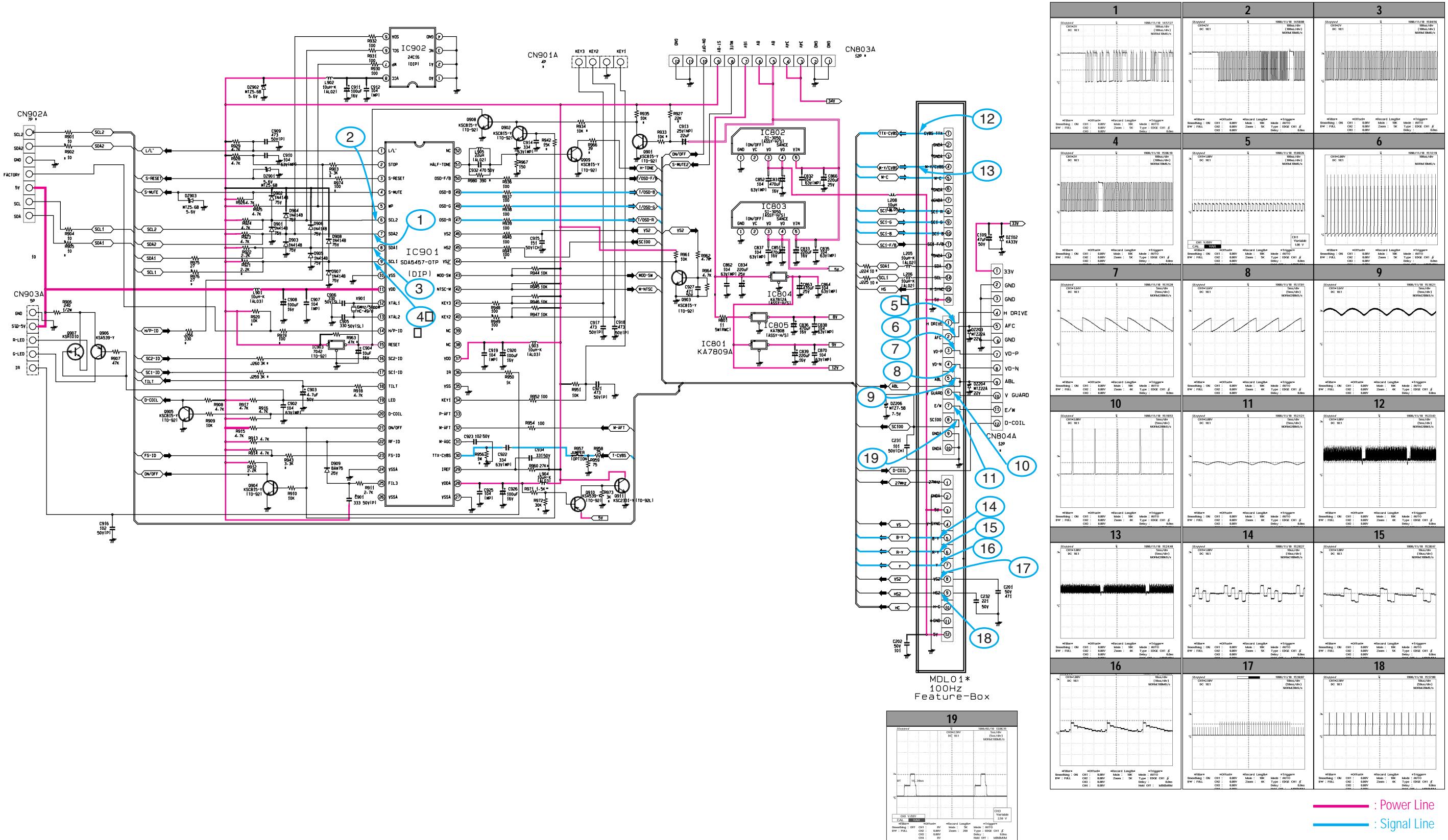
## 9. Wiring Diagram



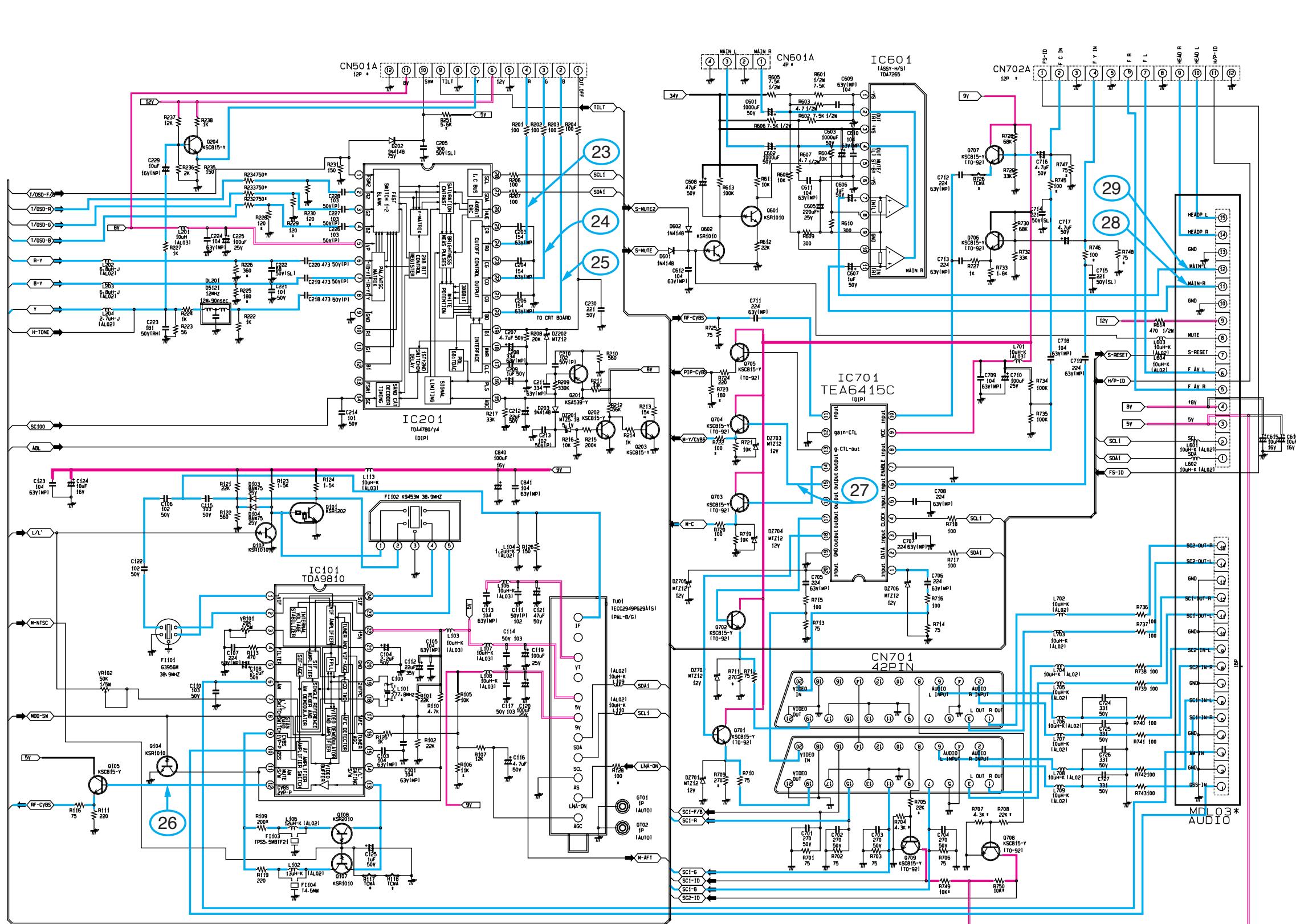
# **MEMO**

## 10. Schematic Diagrams

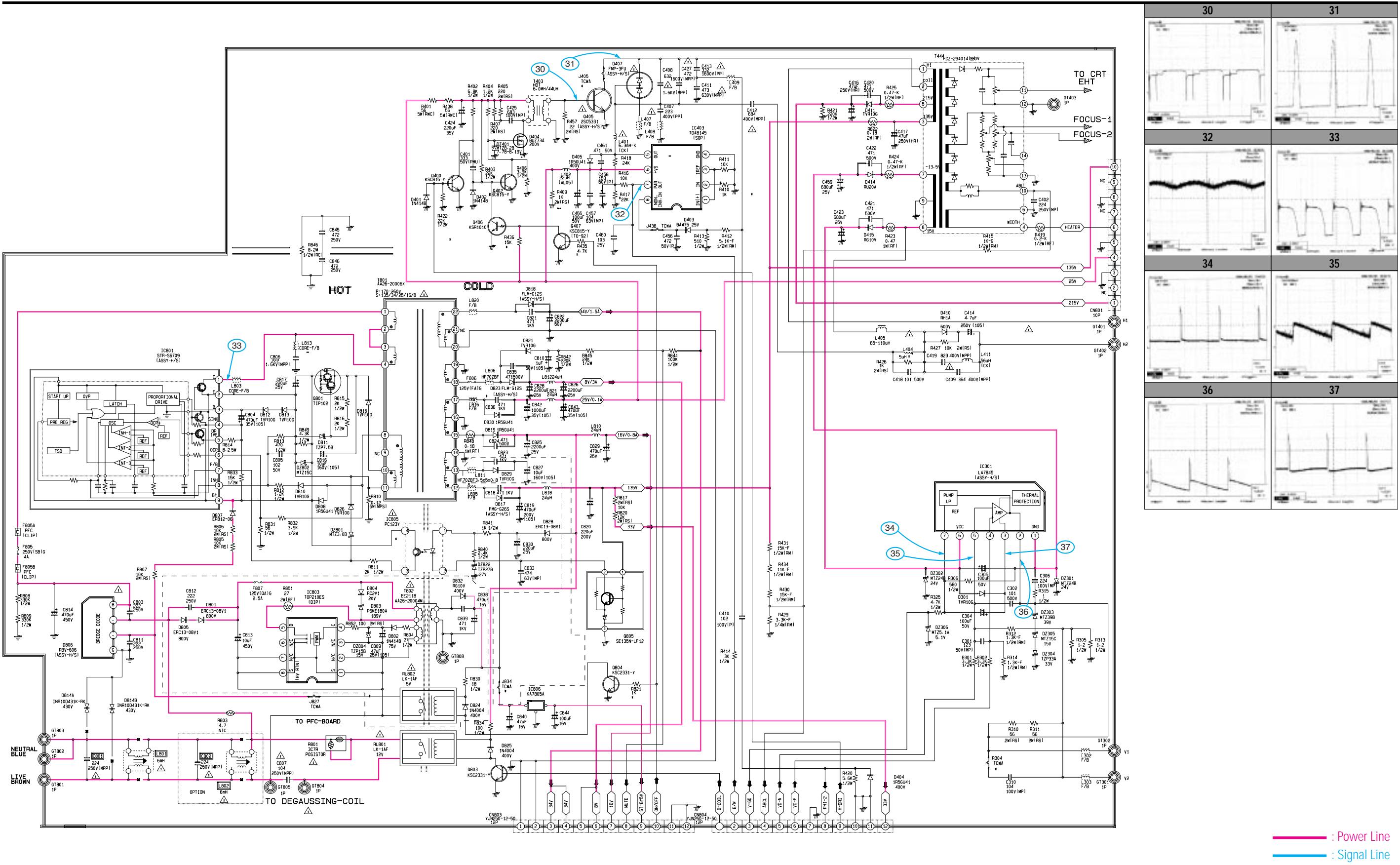
### 10-1 MAIN A



## 10-2 MAIN B

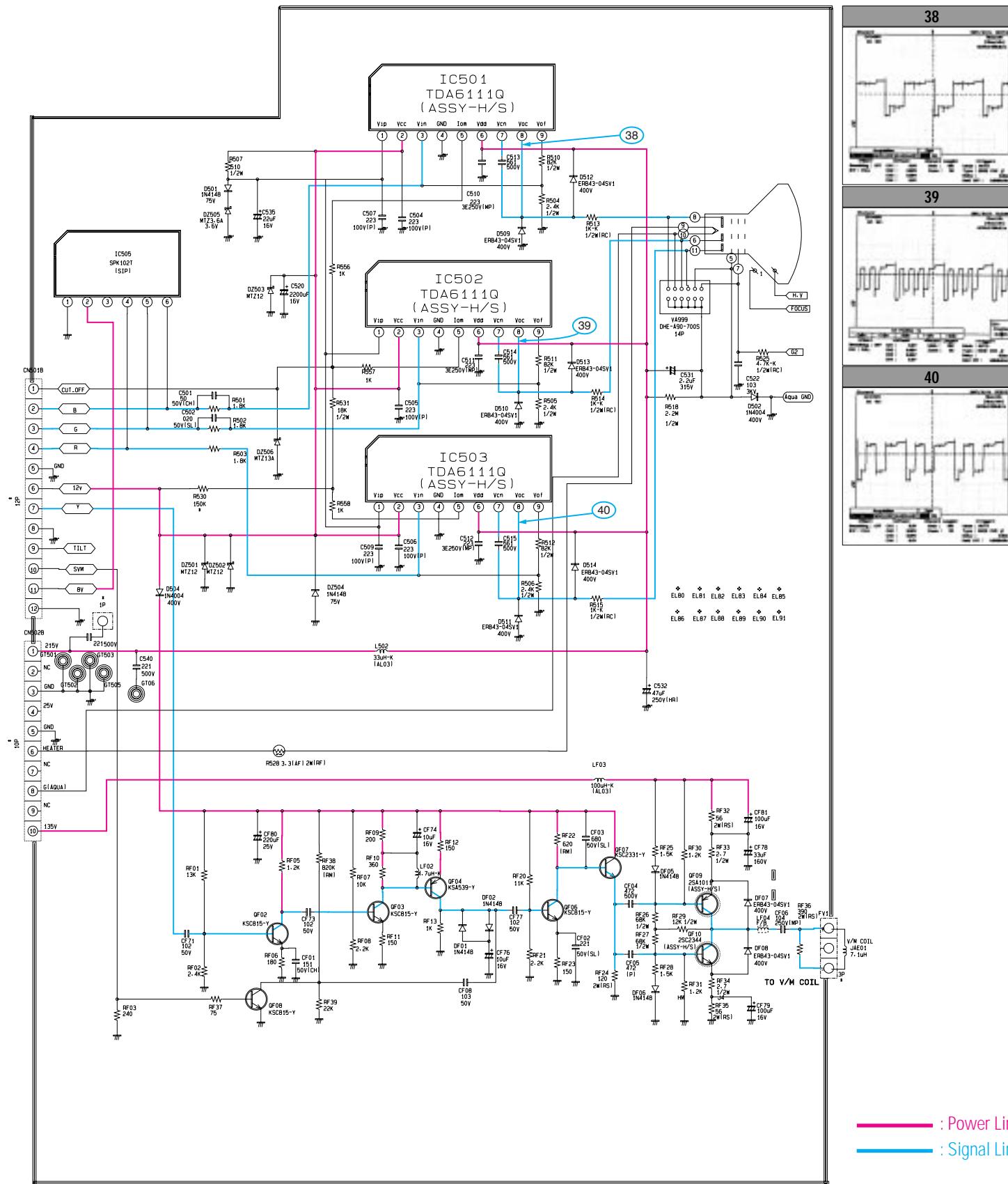


## 10-3 POWER &amp; DEFLECTION

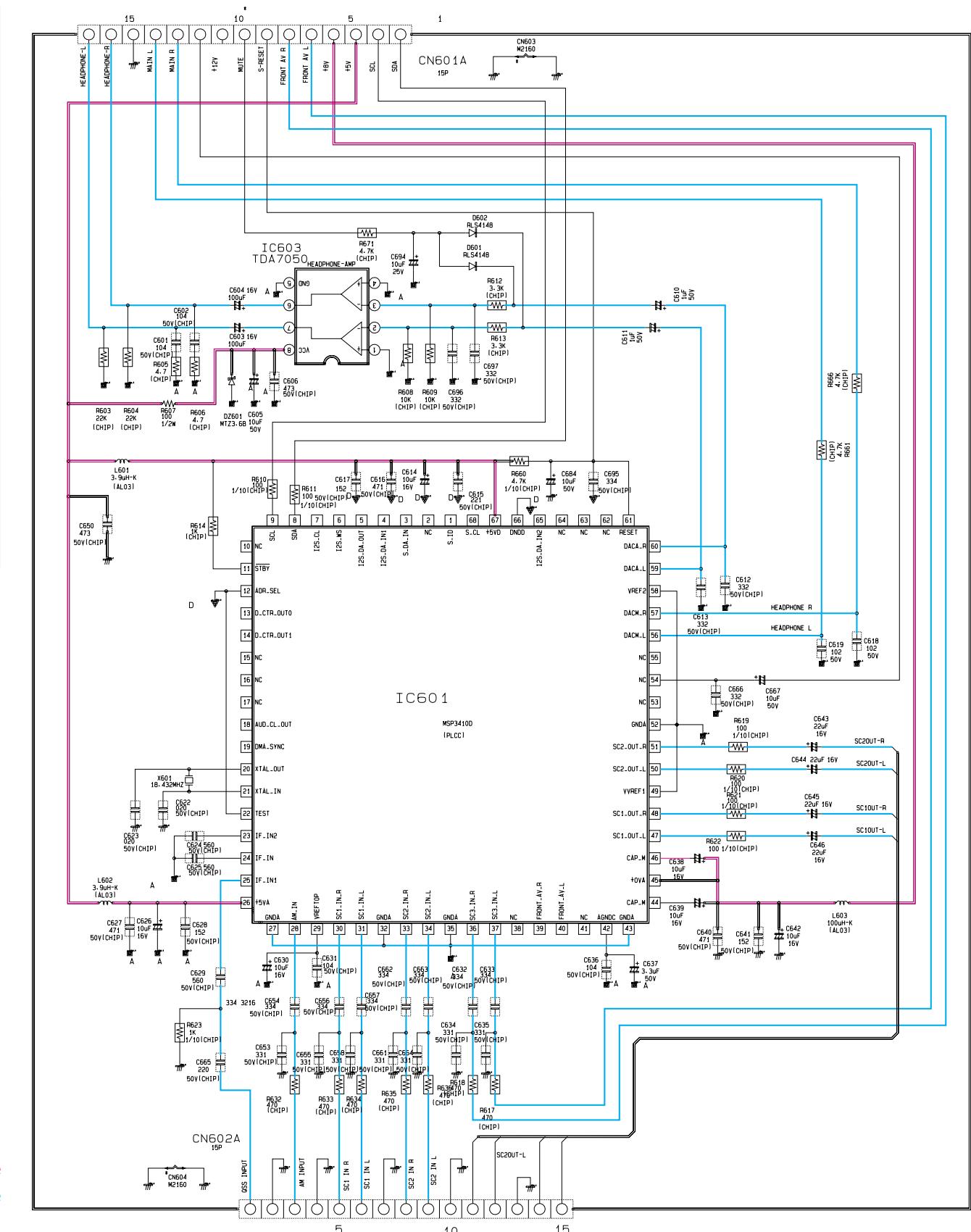


## 10-4 CRT-DRIVE, AUDIO

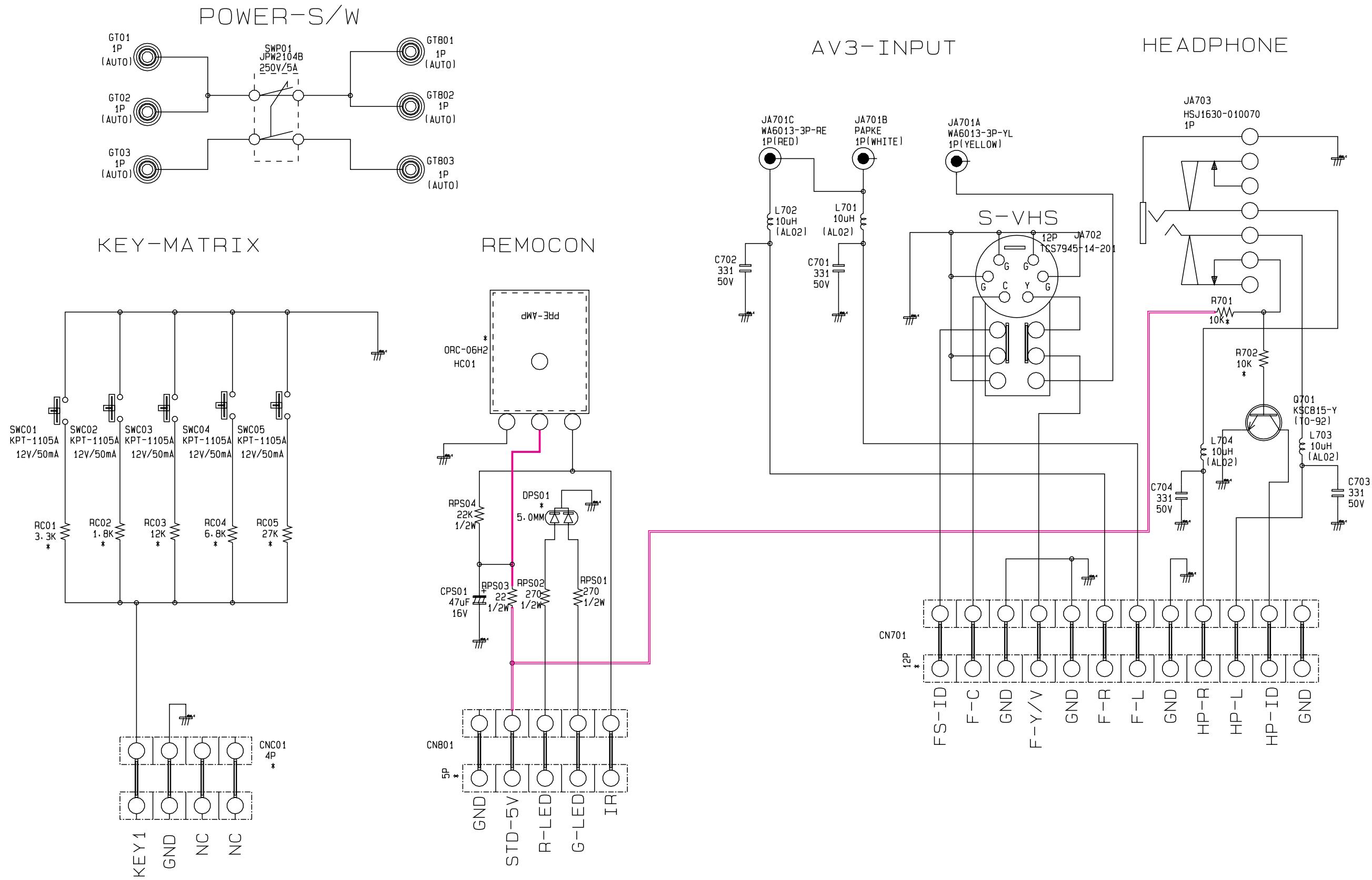
## CRT-DRIVE



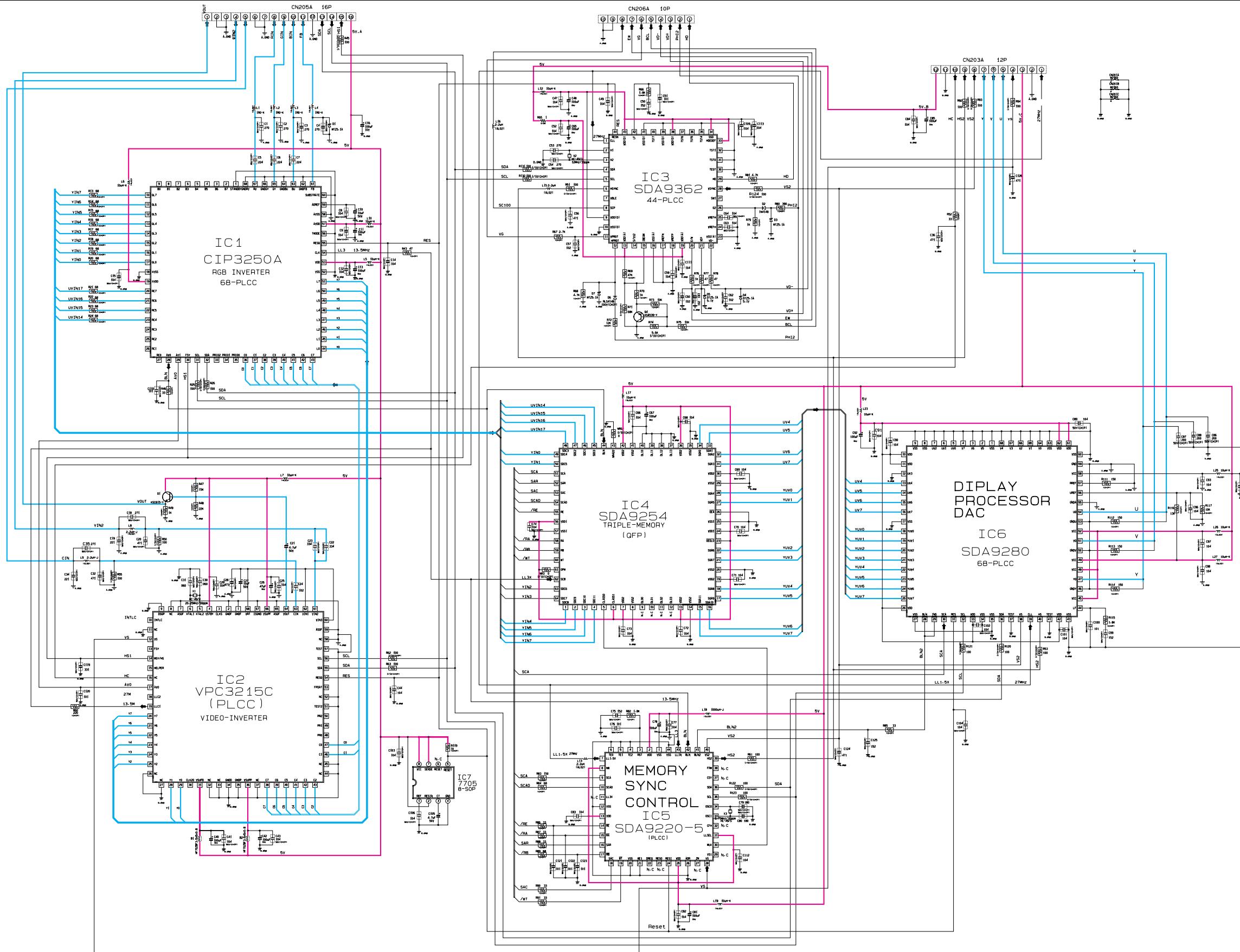
## AUDIO



## 10-5 CONTROL



## 10-6 FEATURE BOX



- : Power Line
- : Signal Line



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