

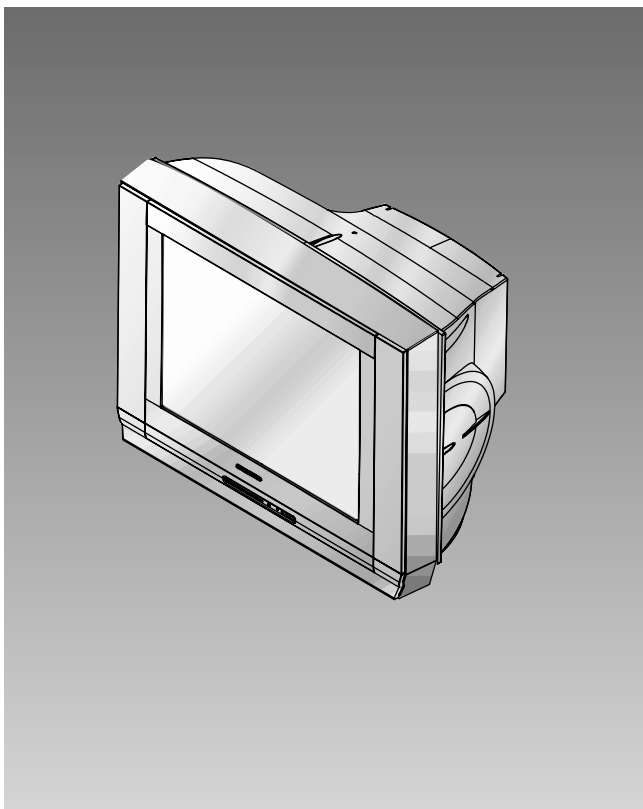
**SAMSUNG**

# COLOR TELEVISION RECEIVER

Chassis : KS3A(P)\_50Hz(REV. 5)  
Model : CS29K10MQBXXSE

# **SERVICE** *Manual*

## COLOR TELEVISION RECEIVER



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## 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.

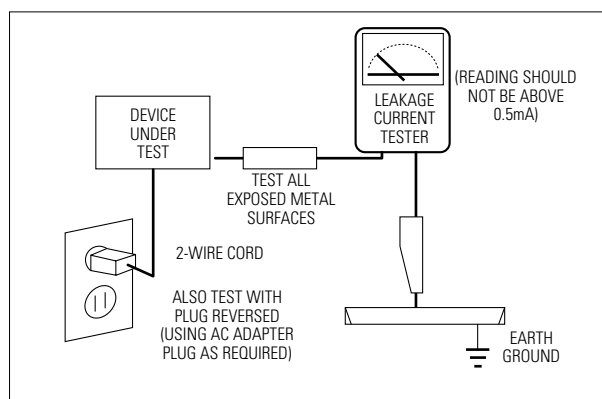




Fig. 1-1 AC Leakage Test

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	Milliampere
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-Tr
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

<b>Table 2 - 3 IC Line - Up</b>						
<b>NO</b>	<b>BOARD</b>	<b>LOC. NO</b>	<b>SPEC</b>	<b>DESCRIPTION</b>	<b>REMARK</b>	
<b>1</b>	<b>MAIN</b>	IC201S	VDP3130Y	Video Processor	Refer to Table 2-3-1	
		IC601	MSP3411G	Multistandard Sound Processor	Refer to Table 2-3-2	
		IC901	SDA555X	MICOM, TTX(MTP)		
		IC902	KS24L161	EEPROM		
		IC602	TDA7297	Audio AMP	Refer to Table 2-3-3	
		HIC201	DRGB001	RGB Drive AMP Hybrid IC		VM Option
		HIC202				
		HIC203				
		HIC204				
		IC301	LA7845	Vertical IC		
		Q402	KSC2073-H2	Horizontal Drive IC	HC401	
		Q401	KSD5703			
		D414	FMP-3FU			
		IC401	KA393	E/W Drive IC		
		Q404	IRF620			
		IC801S	3S1265RB 3S1265RD	SPS Controllor		
		D801S	RBV606	Bridge Diode		
		PC801S	PC123Y	Photo Coupler		
		IC802	KA78R05	5V Controlled Regulator		
		D805	FML-G12S	Rectifier Diode	HC801	
		D806				
		D807				
		D802	FMG-G2CS			
		IC201	KA78RM33	3.3V Regulator		
		IC804	KA7806	6V Regulator		
		IC803	KA78R08	8V Controlled Regulator		
		IC903	KA78RM33	3.3V Regulator		
		IC904	KIA7025AP	MICOM Reset IC		
		Q909	2N700	IIC Level Shifter		
		Q910				



**Table 2 - 3 IC Line - Up**

NO	BOARD	LOC. NO	SPEC	DESCRIPTION	REMARK	
		TU01S	TCL3101PD09A9(S)		Refer to Table 2-3-4	
		TU02S	TCL3101PD09A9(S)		Refer to Table 2-3-5	
2	CRT	IC501	TDA5109 TDA6101Q	Video Output AMP R.G.B Drive	FLAT	
		IC502			FLAT	
		IC503			FLAT	
		QF04	2SC2344	Push-Pull (VM)		
		QF05	2SA1011			
		QG02	KSA940	TR-Power (TILT)		
		QG03	KSD2073-H2			Option
		ICG01	KA4558	OP-AMP (TILT)		
3	DOUBLE FOCUS	ICH01	KA4558	OP-AMP		Option
		QH01	2SC4636RB	TR-Power		
4	V-S/W	ICS01	TEA6425	Video Switching IC with Adder Output		Option
5	PIP	ICP01	SDA9489X	High-end Picture-In Picture IC	Option	
			SDA9489	1-TUNER PIP	Option	
		ICP02	EZ1086CM	3.3V Regulator	Option	
6	WOOFER	ICW801	STRG9656	SMPS Controller		
		ICW601	TDA7265	Audio Amp		
		DW808	FES8GT	Rectifier Diode		

 **Table 2-3-1 VIDEO IC (IC201S)**

SPEC	FUNCTION	REMARK
VDP3108B	50Hz Basic	
VDP3112B	50Hz, 2H Comb Filter	
VDP3120B	50Hz, 2H Comb Filter, Horizontal Scaler	
VDP3130Y	50Hz, 2H Comb Filter, DVD Input	

 **Table 2-3-2 SOUND IC (IC601)**

SPEC	FUNCTION	REMARK
MSP3400D	Multistandard, A2 Stereo	
MSP3410D	Multistandard, A2 Stereo, Nicam	
MSP3411G	Multistandard, A2 Stereo, Nicam, Virtual Dolby	
MSP3400G	Multistandard, A2 Stereo, Woofer Sound Level 12dB	

 **Table 2-3-3 SOUND AMP (IC602)**

SPEC	FUNCTION	REMARK
TDA7297	15W x 2CH, 10W x 2CH	

 **Table 2-3-4 1'st TUNER (TU01S)**

SPEC	FUNCTION	REMARK
TCLS3101PD09A(S)	CS with LNA Function	Main(Old)
TCPS3000P	CS	
TCPS3001PD09E(S)	CS	India
TCPW3001PD09A(S)	CZ, CW	
TCL3101PD16A	CS	Main(New)

**Note** TCPS3001PD09A(S) is out-of-date, TCPS3001PD09D(S) which is up-to-date has the same function.

 **Table 2-3-5 2'nd TUNER (TU02S)**

SPEC	FUNCTION	REMARK
TCPS3000PC09B(S)	CS	Sub(Old())
TCPS3000PC16B	CS	Sub(New)

# MEMO

### 3. Specifications

Television System	CS	PAL/SECAM-B/G/D/K,L,I, NTSD-M		
Antena Input	-	75ohms, Coaxial Cable		
Power	Consumption	130W(Applied When 29" Flat)		
	Requirements	220V Only		
		Free Voltage		Not Present R815
Frequency	50/60Hz			
Sound	Output	15W x 2CH	29Inch	
		10W x 2CH	21Inch	
		5W x 2CH		
		30W x 2CH	29Inch Normal woofer	
		20W x 2CH	21Inch Flat woofer	
	Effect	Virtual Dolby		Option
		Trubo Sound		
		Pseudo Stereo		
Woofer Sound				
Jacks	Front(AV2)	RCA Input		
		S-VHS	Option	
	BACK	Head-Phone		
		RCA99(AV2 Input/Out)		
		2Scart Input/OUtput		AV1: Scart I/O, RGB Input, RF Out AV2: Scart I/O, Monitor Out
		DVD Input(YPbPr)		Option
		AV2 Monitro Audio Output		Option
		S-VHS		Option
Woofer Output		2CH		

#### Specifications for Model Name (Ex. CS29A6??8X/HAC)

#### Specifications for Model Name (Ex. CS29A6??8X/HAC)

	Function	NOTE
<b>N</b>	NICAM	"NICAM" means that A2 STEREO + NICAM
<b>P</b>	2 TUNER PIP	
<b>PF</b>	2 TUNER PIP, NICAM, TTX	
<b>PT</b>	2 TUNER PIP, A2 STEREO, TTX	
<b>PW</b>	2 TUNER PIP, A2 STEREO	
<b>MT</b>	2 TUNER MULTI PIP, A2 STEREO,	
<b>NT</b>	NICAM, TTX	
<b>WT</b>	A2 STEREO, TTX	
<b>GW</b>	1 TUNER PIP, A2 STEREO, TTX	

# MEMO

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## 4. Alignment and Adjustments

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### 4-1 General Alignment Instructions

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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

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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

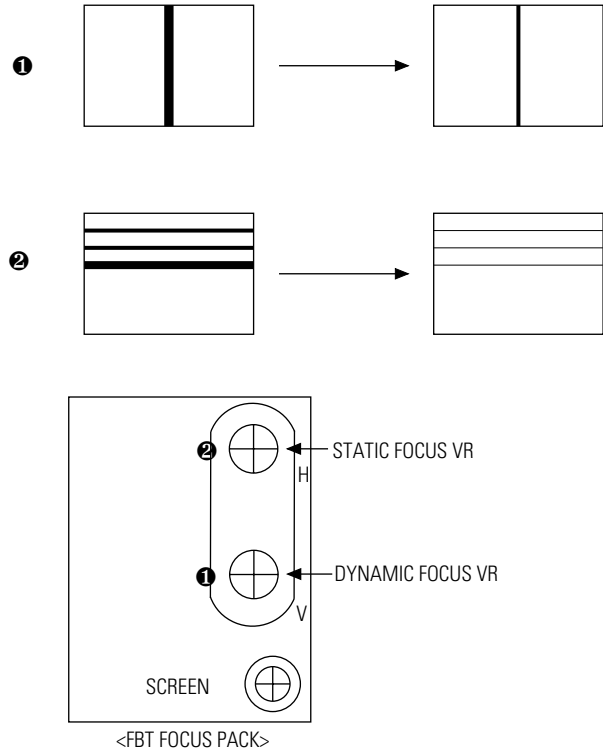
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**CAUTION :** There is no high voltage adjustment on this chassis. The B+ power supply should be +135 volts (with full color- bar input and normal picture level).

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 Dynamic Focus Adjustment

1. A dynamic focus adjustment should be done after replacing the CRT PCB, FBT or CRT.
2. Input a crosshatch pattern.
3. Enter " STANDARD " in video mode.
4. Turn the Dynamic focus VR fully clockwise (maximum).( ① )
5. Turn the Static focus VR fully counterclockwise (maximum).( ② )
6. Slowly turn the static focus VR counterclockwise. Adjust until the vertical line in the middle of the screen has maximum clarity.( ① )
7. Slowly turn the dynamic focus VR (clockwise) and adjust the 3rd horizontal line for maximum clarity.( ② )
8. Repeat 4-7, if necessary.



## 4-5 SCREEN Adjustment

1. Input Toshiba Pattern
2. Enter "Service Mode".(Refer to "Service Mode")
3. Select "G2-Adjust".
4. Set the values as example(Refer to page4-24).

ex) **IBRM = 220**  
**WDRV = 35**  
**CDL = 220**  
**COLR G B = 150 150 150**

5. Turn the SCREEN VR until "MRCR G B" and "MRWDG" are green and those value are about 100.  
(The incorrect SCREEN Voltage may result that "MRCR G B" and "MRWDG" should be red)

**Note 1. When you do not have Toshiba Pattern, follow this method.**

1. Set the TV on the condition that AV mode no signal(black)
2. Enter the "Menu" and set the mode to blue screen off.
3. Enter the "Service Mode".
4. Select " G2-Adjust".
5. Set the values as example(Refer to page4-24).

**ex) IBRM = 220**  
**WDRV = 35**  
**CDL = 220**  
**COLR G B = 150 150 150**

6. Turn the SCREEN VR until the value of " MRCR G B" is about 120. Do not mind that the "OSD" Color is red.

■ After completing G2-Adjust, follow this procedure.

- ① Enter the "Video Adjust 1".
- ② Choose any item in menu. (ex. Select "Red Cutoff")
- ③ Change the value of item you select, and recover the value.

For example, when the value of "Red Cutoff" is 127, change the value to 128 and restore the value to 127.

If you do not follow this procedure, the picture may be abnormal.  
 For example, when the TV set is on, the picture becomes brighter gradually.



## 4-6 E<sup>2</sup>PROM (IC902) Replacement

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1. When IC902 is replaced, all adjustment data revert to the initial values.  
So, all adjustment values when servicing should be readjusted.
2. After IC902 is replaced, connect the AC power supply cord.
3. Turn the power switch ON.
4. In stand-by, warm up the TV for at least 10 seconds.
5. Power on the TV.

## 4-7 White Balance Adjustment

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■ Equipment : Color-Analyzer (CA-100)

■ Input Signal : Pattern signal (Toshiba pattern)

1. Select STANDARD from the menu.
2. Input an 100% White pattern.
3. Enter the "Service Mode". (Refer to "4-8 Service Mode")
4. Warm up the TV set at least for 30 minutes.
5. Input a Toshiba pattern signal.
6. Enter the "Video Adjust1".
  - Adjust "Sub Contrast" so that Y (luminance) becomes  $40 \text{ ft} \pm 3$ .
  - Use "Red Drive" and "Blue Drive" to adjust High-Light (x : 290, y : 300)
  - Adjust "Sub Bright" so that Y (luminance) becomes  $1.3\text{ft} \pm 0.3$ .
  - Use "Red Cutoff" and "Blue Cutoff" to adjust Low-Light (x : 290, y : 300).
7. Adjust CA-100 so that the final adjustment value can be fixed.
8. Use the Channel Up/Down (▲/▼) buttons to move the cursor on the adjustment modes.
9. Use the Volume +/- buttons to change the adjustment value.

### ■ SMPS Controller differential List

1265RB		1265RD	
LOC.	SPEC	LOC.	SPEC
DZ808	MTZ8.28	DZ808	MTZ8.28
C811	47NF	C811	47NF
C828	221.50V	C828	221.50V

**Note 2.** KS3A 29" Flat 50Hz, CRT Change(Double Focus → Single Focus)

- Background : It is occurred to service confusion
- Cause : CRT Socket PCB change as CRT changing from Double Focus to Single Focus
- How to service

Code : It is different to CRT Socket Code per focus type

CRT Socket	Code No
For Double Focus	3704-001032
For Single Focus	3704-000114

Case :

1. Using CRT Socket PCB for Single Focus at CRT for Double Focus
  - (1) Change the CRT Socket in PCB(Single → Double).
  - (2) Cut the red-colored focus wire of FBT in set.
  - (3) Connect the wires at Focus terminal like picture #1 for short circuit using red-colored focus wire of FTB.
2. Using CRT Socket PCB for Double Focus at CRT for Single Focus
  - (1) Change the CRT Socket in PCB(Double → Single).
  - (2) Cut the red-colored focus wire of FBT in set like picture #2.

\* You must tape the isolation parts for safety.

## 4-8 Factory Adjustment

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### 4-8-1 Service Mode

1. To enter the "Service Mode", Press the remote-control keys in this sequence :

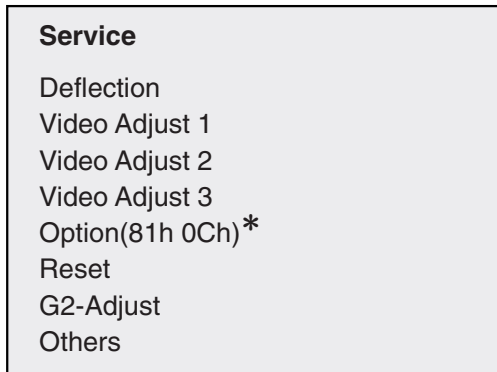
- If you do not have Factory remote-control



- If you have Factory remote-control



2. After the Service Mode is entered, the initial screen is as shown in the figure below.



\* These hexa digits are check sum value which depends on the MICOM.  
If check sum value is changed, the value of E<sup>2</sup>PROM Data newly initialed.

3. Use the Channel Up/Down buttons to move the cursor in the adjustment parameters.

**Note 3.**

- When CRT, CRT PCB, FBT, E<sup>2</sup>PROM (sometimes MICOM) is replaced, the adjustment values should be controlled.
- After the Service adjustment is completed, Do not select "Reset" in the service mode menu. (After above procedure is done, power is on initially and the "Plug and Play" will be operated.)

## 4-8-2 Memory Data

### 4-8-2(A) DEFLECTION (GEOMETRIC ADJUSTMENT VALUE)

No.	OSD	Function	Remark
1	V Amp	Adjusts Vertical picture size. Adjust 4:4 upper and below picture size in lion head pattern at factory.	Adjust
2	V Shift	Adjusts Vertical picture position	Adjust
3	V Slope	Adjusts Vertical Slope Correction	Adjust
4	V SC	Adjusts Vertical s-correction	Fix
5	H EW	Horizontal east west width. Adjust 5:5 left and right picture size in lion head pattern at factory.	Adjust
6	H Trapizium	Adjusts horizontal Trapezium.	Adjust
7	H Parabola	Adjusts Horizontal Parabola.	Adjust
8	H Symmetry	Adjusts Picture upper and below horizontal Symmetry.	Fix
9	H Corner	Adjusts Picture upper and below Horizontal Corner.After adjust the Parabola, adjust H corner vertical Line upper and below has nonlinear.	Adjust
10	H Shift	Adjusts Horizontal Position.	Adjust
11	Zoom 4:3 Para	Corrects the vertical linearity in Zoom mode of P-SIZE. The data depends on CRT (see data above)	Fix
12	4:3~16:9 Para	Corrects the vertical linearity in 16:9 mode of P-SIZE. The data differs according to CRT (see data above).	Adjust
13	Wide-4:3 Para	Corrects the vertical linearity in wide mode of P-SIZE. The data differs according to CRT (see data above).	Adjust
14	Wide-Zoom Para	Corrects the vertical linearity in wide mode of P-SIZE. The data differs according to CRT (see data above).	Adjust
15	Wide-Zoom2 Para	Corrects the vertical linearity in wide mode of P-SIZE. The data differs according to CRT (see data above).	Fix
16	Zoom1 Amp	Adjusts vertical amplitude in zoom1	Fix
17	Zoom2 Amp	Adjusts vertical amplitude in zoom2. Zoom2 mode is a manual zoom mode	Fix
18	TTX Position	Sets TTX Position.	Fix
19	D-TTX Posi	Double -TTX position.	Fix
20	RGB Shift	Adjusts RGB input signal Horizontal position	Fix
21	PIP Contrast	Adjusts PIP contrast.	Fix
22	PIP Tint	Adjusts PIP Tint. It is a function to control color phase of NTSC signal in PIP	Fix
23	PIP V.Move(VSPDEL)	PIP vertical sync pulse delay. When changing data, PIP jitters at two points. In this case, the PIP VSPDEL is set to the center between two points.	Fix
24	PIP PAL V.Pos	Adjusts Vertical position of PIP in PAL system.	Fix
25	PIP NTSC V.Pos	Adjusts Vertical position of PIP in NTSC system.	Fix
26	PIP H.Pos	Adjusts Horizontal Position of the PIP.	Fix
27	PIP BLKLG	PIP blanking level green(PIP low light white balance). It is used to control low light white balance in PIP	Fix

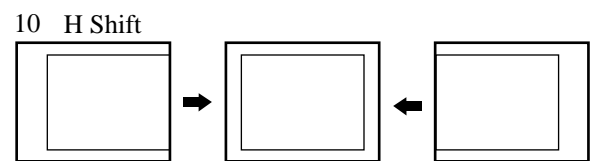
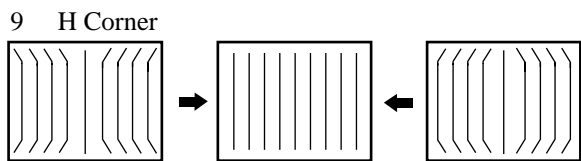
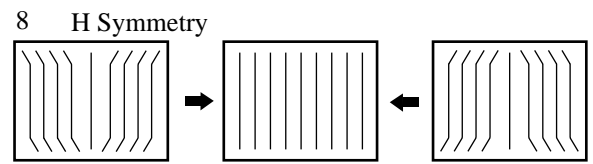
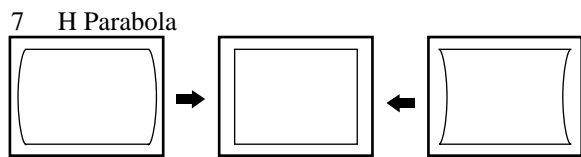
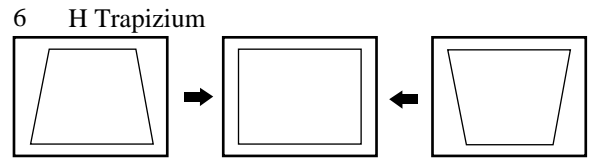
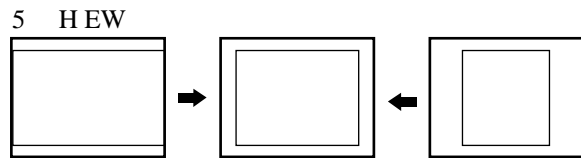
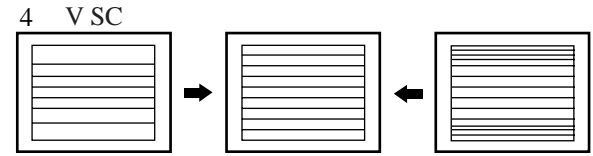
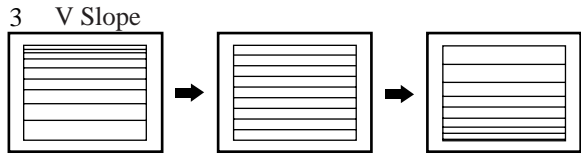
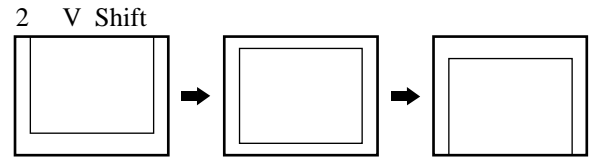
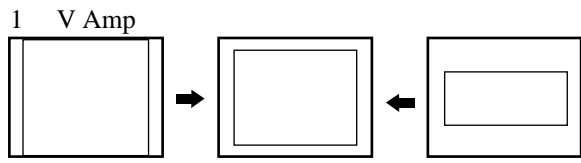
OSD	RANGE	INITIAL DATA							Remarks
		SIM-806HEW							
		32W8VH Philips Invar Flat	32W8VH Thomson Invar Flat	28C7VH Thomson Invar 2.0R	28C7H Thomson AK 2.0R	28C7H Philips Invar 2.0R	28W6 Thomson AK 2.0R	32W6V Thomson Invar 2.0R	
V Amp	0 ~ 255	80	92	85	129	129	84	80	GEOM
V Shift	0 ~ 255	104	111	108	110	110	117	116	GEOM
V Slope	0 ~ 255	125	130	130	130	130	130	115	FIX
V SC	0 ~ 255	117	225	200	200	200	200	150	FIX
H EW	0 ~ 255	125	215	205	187	187	172	232	GEOM
H Trapizium	0 ~ 255	85	113	91	114	114	108	107	GEOM
H Parabola	0 ~ 255	65	96	65	91	91	82	92	GEOM
H Corner L	0 ~ 255	45	121	118	118	118	118	73	FIX
H Corner L	0 ~ 255	88	122	136	136	136	136	92	FIX
H Shift	0 ~ 255	185	170	174	180	180	177	185	GEOM
BOW	0 ~ 255	132	130	123	123	123	121	123	GEOM
Amgle	0 ~ 255	129	140	129	129	129	132	129	GEOM
H Corner U6	0 ~ 255	176	76	140	133	133	135	159	GEOM
H Corner L6	0 ~ 255	176	78	136	129	129	126	158	GEOM
V Max	0 ~ 255	128	128	213	213	213	128	128	FIX
Zoom1 Amp	0 ~ 255	150	143	180	180	180	146	150	FIX
Zoom2 Amp	0 ~ 255	202	173	202	202	202	171	190	FIX
Zoom Trap	0 ~ 255	128	128	128	128	128	128	128	FIX
H-QEW	0 ~ 255	-	128	-	128	-	128	-	-
Zoom 4:3 Para	0 ~ 255	-	-	-	-	-	-	-	-
4:3~16:9 Para	0 ~ 255	-	-	-	-	-	-	-	-

OSD	RANGE	INITIAL DATA						Remarks
		SIM-806HEW		SIM-806HMA/806HEA/806HC				
		29A8VH SED Invar Flat	28W8VH SED Invar Flat	29A7HP SED V-Before	29A7HP SED V-After	34A7HP Toshiba V-Before	34A7HP Toshiba V-After	
V Amp	0 ~ 255	128	104	148	106	133	124	GEOM
V Shift	0 ~ 255	153	109	149	141	151	125	GEOM
V Slope	0 ~ 255	133	107	134	134	134	125	FIX
V SC	0 ~ 255	210	175	206	206	189	210	FIX
H EW	0 ~ 255	109	161	183	195	179	215	GEOM
H Trapizium	0 ~ 255	108	124	110	105	95	92	GEOM
H Parabola	0 ~ 255	112	110	94	79	81	71	GEOM
H Corner L	0 ~ 255	125	108	130	130	145	134	FIX
H Corner L	0 ~ 255	118	111	133	143	150	159	FIX
H Shift	0 ~ 255	183	188	195	195	186	189	GEOM
BOW	0 ~ 255	123	127	127	127	127	127	GEOM
Amgle	0 ~ 255	129	127	128	128	128	128	GEOM
H Corner U6	0 ~ 255	126	138	131	131	127	133	GEOM
H Corner L6	0 ~ 255	136	140	130	130	134	126	GEOM
V Max	0 ~ 255	200	127	200	200	200	200	FIX
Zoom1 Amp	0 ~ 255	195	148	187	179	198	189	FIX
Zoom2 Amp	0 ~ 255	202	178	-	-	-	-	FIX
Zoom Trap	0 ~ 255	128	128	128	128	131	131	FIX
H-QEW	0 ~ 255	128	128	128	128	128	128	-
Zoom 4:3 Para	0 ~ 255	-	-	-	-	-	-	-
4:3~16:9 Para	0 ~ 255	-	-	5	5	5	5	-

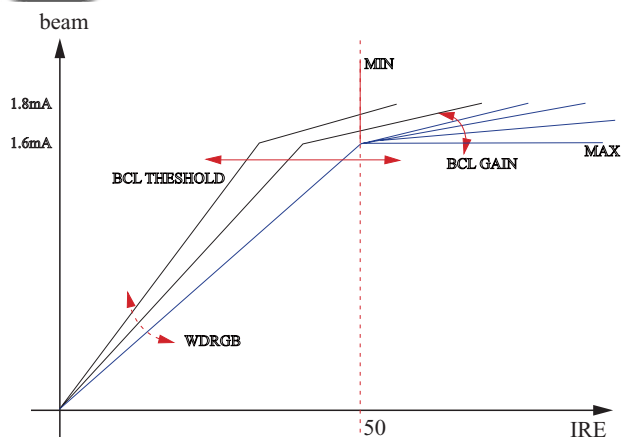
OSD	RANGE	INITIAL DATA								Remarks
		SIM-812MA3			SIM-812MAD	SIM-806MA3		SIM-812EA1	SIM-806E11	
		29" Flat/DVD	CIS 29" Flat	CIS 29" Flat SKD CKD	29" Flat	34" Flat	29" Flat	29" Flat	29" Flat	
V Amp		-30/55	-30	-30	-45	7	-55	-55	-65	GEOM
V Shift		-7	-7	-7	-2	-22	-7	-7	-7	GEOM
V Slope		-3	-3	-3	-3	-7	-3	-3	-3	GEOM
V SC		-17	-17	-17	-17	-15	-17	-17	-15	FIX
H EW		30	30	30	30	-8	30	30	30	GEOM
H Trapizium		-47	-47	-47	-34	-22	-47	-47	-47	GEOM
H Parabola		-7	-7	-7	10	-6	-7	-7	-7	GEOM
H Symmetry		10/13	13	13	10	10	10	10	10	FIX
H Corner		23	23	23	-10	-8	23	23	23	GEOM
H Shift		13	13	13	27	-13	13	13	13	GEOM
PIP Contrast		8	8	8	10	7	8	8	10	FIX
PIP Tint		0	0	0	0	0	0	0	0	FIX
PIP V.Move(VSPDEL)		0	17	0	17	8	17	17	17	FIX
PIP PAL V.Pos		26	26	26	23	26	26	26	25	FIX
PIP NTSC V.Pos		23	23	23	20	23	23	23	25	FIX
PIP H.Pos		30	30	30	27	30	30	30	30	FIX
PIP BLKLG		6	6	6	3	6	6	6	7	FIX
OSD	RANGE	SIM-806E13								Remarks
		21" Flat				29" Normal				
V Amp		-51				-23				GEOM
V Shift		-32				-23				GEOM
V Slope		-4				-8				GEOM
V SC		-2				0				FIX
H EW		0				42				GEOM
H Trapizium		0				-40				GEOM
H Parabola		0				-60				GEOM
H Symmetry		0				13				FIX
H Corner		0				70				GEOM
H Shift		24				10				GEOM
PIP Contrast		15				15				FIX
PIP Tint		0				0				FIX
PIP V.Move(VSPDEL)		11				8				FIX
PIP PAL V.Pos		25				25				FIX
PIP NTSC V.Pos		25				25				FIX
PIP H.Pos		30				47				FIX
PIP BLKLG		7				7				FIX

4-8-2(B) SCREEN CHANGE (I2C BUS GEOMETRIC ADJUSTMENT)



## 4-8-2(C) VIDEO ADJUST 1

No.	OSD	Function	Remark
1	Red Cutoff	Adjusts the gain of red output of low light	Adjusts
2	Green Cutoff	Adjusts the gain of green output of low light. Fix this gain to 127.	Fix
3	Blue Cutoff	Adjusts the gain of blue output of low light.	Adjusts
4	Red Drive	Adjusts the gain of red output of high light.	Adjusts
5	Green Drive	Adjusts the gain of green output of high light. After "G2-Adjustment" and White Balance adjustments are complete, this data is fixed to 127..	Fix
6	Blue Drive	Adjusts the gain for blue output of high light.	Adjusts
7	Sub Bright	Adjust sub brightness level to set the low light luminance in Picture Standard mode.	Adjusts
8	Sub Contrast	Adjusts sub contrast level to set the high light luminance in Picture Standard mode. Set the value of sub contrast to near 50. The user control "contrast" depends on this value. User contrast = [sub cont * 2 / 100] If sub contrast data is 10, user contrast changes into 1/5 step	Adjusts
9	Sub Color	Adjusts sub color level to set the gain for color in Picture Standard mode.	Fix
10	Sub Tint	Adjusts the sub tint level of NTSC color system.	Fix
11	BCL Threshold	Beam Current Limit threshold current if SENSE input used 0...-2048 BCL threshold current if RSW1 input used (max. ADC output ~2047)	Fix
12	BCL Gain	Beam Current Limit loop Gain	Fix
13	BCL Time	BCL time constant; 0 = off	Fix
14	BCL Time2	Teletext Contrast Level	Fix
15	BCL Bri Reduction	BCL Brightness Reduction	Fix
16	P.DK.YC Delay	PAL-D/K Y/C Delay	Fix
17	P.I.YC Delay	PAL-I Y/C Delay	Fix
18	P.L.YC Delay	PAL-L Y/C Delay	Fix
19	S.BG.YC Delay	SECAM-B/G Y/C Delay	Fix
20	S.DK.YC Delay	SECAM-D/K Y/C Delay	Fix
21	S.L.YC Delay	SECAM-L Y/C Delay	Fix
22	P.BG.YC Delay	PAL-B/G Y/C Delay	Fix
23	P.YC Delay	External PAL Y/C Delay	Fix
24	S.YC Delay	External SECAM Y/C Delay	Fix
25	N.YC Delay	External NTSC Y/C Delay	Fix
26	P.M.YC Delay	PAL-M Y/C DELAY	Fix
27	N.MYC Delay	NTSC-M YC DELAY	Fix

**Note 4. Beam Control Limit Characteristic**



OSD	RANGE	INITIAL DATA										Remarks
		SIM-806EW1(SEH)										
		21" 4:3 SED AK	21" 4:3 Tho AK	25" 4:3 SED AK	25" 4:3 SED AK	28" 4:3 Tho AK	28" 4:3 Phi/Tho Invar	29" 4:3 SED Flat	24" WIDE Phi AK	24" WIDE Phi Invar	24" WIDE Tho Invar	
Red Cutoff		116	127	117	117	118	128	127	119	127	127	W/B
Green Cutoff		127	127	127	133	127	127	127	127	127	127	Fix
Blue Cutoff		158	127	134	134	127	135	127	130	128	127	W/B
Red Drive		139	127	161	161	162	147	127	145	150	127	W/B
Green Drive		127	127	127	127	127	127	127	127	127	127	Fix
Blue Drive		89	127	83	83	110	105	127	131	127	127	W/B
Sub Bright		1.2 ftl	1.2 ftl	1.2 ftl	1.2 ftl	1.2 ftl	1.2 ftl	1.2 ftl	1.2 ftl	1.2 ftl	1.2 ftl	
		100	100	111	100	107	118	100	100	112	100	W/B
Sub Contrast		28 ftl	28 ftl	28 ftl	28 ftl	28 ftl	32 ftl	32 ftl	28 ftl	32 ftl	32 ftl	
		51	51	57	51	52	51	51	51	51	51	W/B
Sub Color		27	27	27	27	27	27	27	27	27	27	Fix
Sub Tint		80	80	80	80	80	80	80	80	80	80	Fix
BCL Threshold		30	30	27	27	35	55	40	26	85	40	Fix
BCL Gain		9	9	13	13	9	9	10	12	9	10	Fix
BCL Time		10	10	10	10	10	10	10	10	10	10	Fix
BCL Time2		90	90	90	90	90	90	90	90	90	90	Fix
BCL Bri Reduction		3	3	3	3	3	3	3	3	3	3	Fix
P.DK.YC Delay		6	6	6	6	6	6	6	6	6	6	Fix
P.I.YC Delay		6	6	6	6	6	6	6	6	6	6	Fix
P.L.YC Delay		7	7	7	7	7	7	7	7	7	7	Fix
S.BG.YC Delay		3	3	3	3	3	3	3	3	3	3	Fix
S.DK.YC Delay		5	5	5	5	5	5	5	5	5	5	Fix
S.L.YC Delay		8	8	8	8	8	8	8	8	8	8	Fix
P.BG.YC Delay		5	5	5	5	5	5	5	5	5	5	Fix
P.YC Delay		4	4	4	4	4	4	4	4	4	4	Fix
S.YC Delay		1	1	1	1	1	1	1	1	1	1	Fix
N.YC Delay		4	4	4	4	4	4	4	4	4	4	Fix
OSD	RANGE	SIM-806EW1(SEH)						SIM-806EW1(HQ)				Remarks
		28" WIDE Tho AK	28" WIDE Tho Invar	32" WIDE Tho Invar	28" WIDE SED Flat	32" WIDE Phi Flat	32" WIDE Tho Flat	29" Flat	21" Flat	25" Flat	21" LG Pin Free	
Red Cutoff	0 ~ 255	131	130	132	117	129	145	127	127	127	127	W/B
Green Cutoff	0 ~ 255	127	127	127	133	127	127	127	127	127	127	Fix
Blue Cutoff	0 ~ 255	133	131	128	134	127	107	127	127	127	122	W/B
Red Drive	0 ~ 255	147	164	157	161	168	146	127	127	127	149	W/B
Green Drive	0 ~ 255	127	127	127	127	127	127	127	127	127	127	Fix
Blue Drive	0 ~ 255	121	106	86	127	110	116	127	127	127	124	W/B
Sub Bright		1.2 ftl	1.2 ftl	1.2 ftl	1.2 ftl	1.2 ftl	1.2 ftl					
	0 ~ 200	93	105	100	100	109	117	100	100	100	149	W/B
Sub Contrast		28 ftl	32 ftl	32 ftl	32 ftl	32 ftl	32 ftl					
	0 ~ 63	55	51	51	51	52	51	45	45	45	38	W/B
Sub Color	0 ~ 27	27	27	27	27	27	27	27	27	27	27	Fix
Sub Tint	0 ~ 127	80	80	80	80	80	80	80	80	80	80	Fix
BCL Threshold	0 ~ 255	33	35	43	46	48	49	40	59	40	59	Fix
BCL Gain	0 ~ 15	9	/8	/9	12	10	13	7	8	7	8	Fix
BCL Time	0 ~ 15	10	10	10	10	10	10	10	13	10	15	Fix
BCL Time2	0 ~ 15	90	90	90	90	90	90	-	-	-	-	Fix
BCL Bri Reduction	0 ~ 255	3	3	3	3	3	3	-	-	-	-	Fix
P.DK.YC Delay	0 ~ 8	6	6	6	6	6	6	7	7	7	7	Fix
P.I.YC Delay	0 ~ 8	6	6	6	6	6	6	7	7	7	7	Fix
P.L.YC Delay	0 ~ 8	7	7	7	7	7	7	5	5	5	5	Fix
S.BG.YC Delay	0 ~ 8	3	3	3	3	3	3	3	3	3	3	Fix
S.DK.YC Delay	0 ~ 8	5	5	5	5	5	5	5	5	5	5	Fix
S.L.YC Delay	0 ~ 8	8	8	8	8	8	8	5	5	5	5	Fix
P.BG.YC Delay	0 ~ 8	5	5	5	5	5	5	3	3	3	3	Fix
P.YC Delay	0 ~ 8	4	4	4	4	4	4	4	4	4	4	Fix
S.YC Delay	0 ~ 8	1	1	1	1	1	1	1	1	1	1	Fix
N.YC Delay	0 ~ 8	4	4	4	4	4	4	4	4	4	4	Fix
S.I YC Delay	0 ~ 8	-	-	-	-	-	-	7	7	7	7	Fix
TTX Contrast	0 ~ 255	-	-	-	-	-	-	90	120	90	120	Fix

OSD	RANGE	INITIAL DATA								Remarks
		SIM-812MA3			SIM-812MAD	SIM-806MA3		SIM-812EA1	SIM-806EI1	
		29" Flat/DVD	CIS 29" Flat	CIS 29" Flat SKD CKD	29" Flat	34" Flat	29" Flat	29" Flat	29" Flat	
Red Cutoff	0 ~ 255	127	127	127	127	127	127	127	127	W/B
Green Cutoff	0 ~ 255	127	127	127	127	127	127	127	127	Fix
Blue Cutoff	0 ~ 255	127	127	127	127	127	127	127	127	W/B
Red Drive	0 ~ 255	127	127	127	127	127	127	127	127	W/B
Green Drive	0 ~ 255	127	127	127	127	127	127	127	127	Fix
Blue Drive	0 ~ 255	127	127	127	127	127	127	127	127	W/B
Sub Bright	0 ~ 200	100	100	100	100	100	100	100	100	W/B
Sub Contrast	0 ~ 63	45	45	45	45	45	45	45	45	W/B
Sub Color	0 ~ 27	27	27	27	27	27	27	27	27	Fix
Sub Tint	0 ~ 127	80	80	80	40	40	40	40	30	Fix
BCL Threshold	0 ~ 255	65	65	65	65	65	65	65	65	Fix
BCL Gain	0 ~ 15	8	8	8	8	8	8	8	8	Fix
BCL Time	0 ~ 15	9	9	9	6	6	8	8	8	Fix
TTX Contrast	0 ~ 255	90	90	90	90	90	90	90	-	Fix
P.YC Delay	0 ~ 8	4	4	4	4	4	4	4	4	Fix
S.YC Delay	0 ~ 8	1	1	1	1	1	1	1	1	Fix
N.YC Delay	0 ~ 8	4	4	4	4	4	4	4	4	Fix
P.BG YC Delay	0 ~ 8	3	3	3	3	3	3	3	3	Fix
P.DK YC Delay	0 ~ 8	6	6	6	6	6	6	6	6	Fix
P.I YC Delay	0 ~ 8	6	6	6	6	6	6	6	6	Fix
S.BG YC Delay	0 ~ 8	1	1	1	1	1	1	1	1	Fix
S.DK YC Delay	0 ~ 8	5	5	5	5	5	5	5	5	Fix
S.I YC Delay	0 ~ 8	8	8	8	8	8	8	8	8	Fix
P.M.YC Delay	0 ~ 8	7	7	7	7	7	7	7	7	Fix
N.MYC Delay	0 ~ 8	3	3	3	3	3	3	3	3	Fix
OSD	RANGE	SIM-806EI3								Remarks
		29" Normal				21" Flat				
Red Cutoff	0 ~ 255	127				127				W/B
Green Cutoff	0 ~ 255	127				127				Fix
Blue Cutoff	0 ~ 255	127				127				W/B
Red Drive	0 ~ 255	127				127				W/B
Green Drive	0 ~ 255	127				127				Fix
Blue Drive	0 ~ 255	127				127				W/B
Sub Bright	0 ~ 200	100				100				W/B
Sub Contrast	0 ~ 63	45				45				W/B
Sub Color	0 ~ 27	27				27				Fix
Sub Tint	0 ~ 127	30				30				Fix
BCL Threshold	0 ~ 255	67				62				Fix
BCL Gain	0 ~ 15	9				9				Fix
BCL Time	0 ~ 15	10				13				Fix
TTX Contrast	0 ~ 255	-				-				Fix
P.YC Delay	0 ~ 8	4				4				Fix
S.YC Delay	0 ~ 8	1				1				Fix
N.YC Delay	0 ~ 8	4				4				Fix
P.BG YC Delay	0 ~ 8	3				3				Fix
P.DK YC Delay	0 ~ 8	6				6				Fix
P.I YC Delay	0 ~ 8	6				6				Fix
S.BG YC Delay	0 ~ 8	1				1				Fix
S.DK YC Delay	0 ~ 8	5				5				Fix
S.I YC Delay	0 ~ 8	8				8				Fix
P.M.YC Delay	0 ~ 8	7				7				Fix
N.MYC Delay	0 ~ 8	3				3				Fix



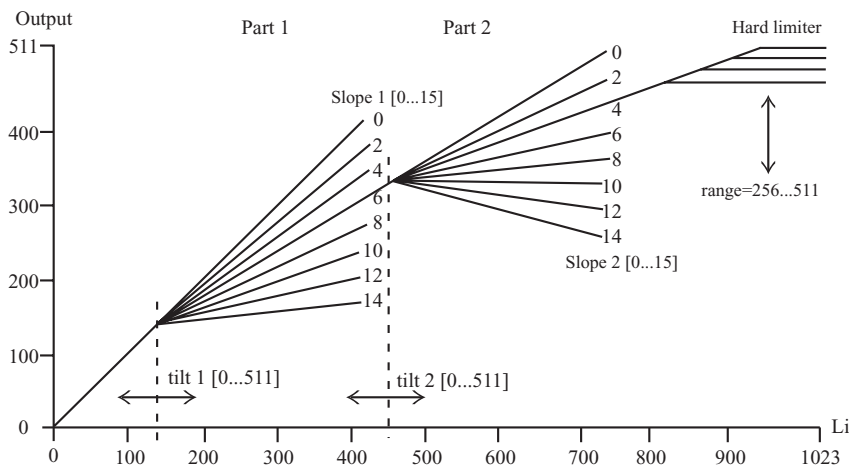
OSD	RANGE	INITIAL DATA						Remarks
		SIM-806EW1(SEH)						
		21" 4:3 SED/Tho AK	25" 4:3 SED/Tho AK	28" 4:3 Tho AK	28" 4:3 Phi/Tho Invar	29" 4:3 SED Flat	24" WIDE Phi AK	
B stretch-BTHR	0 ~ 55	0	0	0	0	0	0	Fix
B stretch-BTLT	0 ~ 15	0	0	0	0	0	0	Fix
B stretch-BAM	0 ~ 31	0	0	0	0	0	0	Fix
Coring	0 ~ 31	25	25	25	25	25	25	Fix
NR Off Value	0 ~ 10	3	3	3	3	3	3	Fix
Melody Volume	0 ~ 20	8	8	8	8	8	8	Fix
RGB Bright	0 ~ 255	45	45	45	45	45	45	Fix
RGB Contrast	0 ~ 80	0	0	0	0	0	0	Fix
EHT Time	0 ~ 255	0	0	0	0	0	0	Fix
EHT Compesation	-	90	30	30	30	90	140	Fix
VSU	96 ~ 111	110	110	110	110	110	110	Fix
OSD	RANGE	SIM-806EW1(SEH)						Remarks
		24" WIDE Phi/Tho AK	28" WIDE Phi/Tho AK	28" WIDE Phi/Tho Invar	32" WIDE Phi/Tho Invar	28" WIDE Phi/SED Flat	32" WIDE Phi/Tho Flat	
B stretch-BTHR	0 ~ 55	0	0	0	0	0	0	Fix
B stretch-BTLT	0 ~ 15	0	0	0	0	0	0	Fix
B stretch-BAM	0 ~ 31	0	0	0	0	0	0	Fix
Coring	0 ~ 31	25	25	25	25	25	25	Fix
NR Off Value	0 ~ 10	3	3	3	3	3	3	Fix
Melody Volume	0 ~ 20	8	8	8	8	8	8	Fix
RGB Bright	0 ~ 255	45	45	45	45	45	45	Fix
RGB Contrast	0 ~ 80	0	0	0	0	0	0	Fix
EHT Time	0 ~ 255	0	0	0	0	0	0	Fix
EHT Compesation	-	30	95	95	90	90	90	Fix
VSU	96 ~ 111	110	110	110	110	110	110	Fix

OSD	RANGE	INITIAL DATA						Remarks
		SIM-806EW1(HQ)				SIM-812MA3		
		29" Flat	21" Flat	25" Flat	21" LG Pin Free	29" Flat/DVD	CIS 29" Flat	
B stretch-BTHR	0 ~ 55	0	0	0	50	50	50	Fix
B stretch-BTLT	0 ~ 15	0	0	0	8	8	8	Fix
B stretch-BAM	0 ~ 31	0	0	0	4	4	4	Fix
Coring	0 ~ 31	25	25	25	31	25	20	Fix
NR Off Value	0 ~ 10	3	3	7	7	-	-	Fix
Melody Volume	0 ~ 20	8	8	8	8	-	-	Fix
RGB Bright	0 ~ 255	45	45	45	45	45	45	Fix
RGB Contrast	0 ~ 80	0	0	15	0	0	0	Fix
EHT Time	0 ~ 255	0	0	0	0	0/3	0	Fix
EHT Compesation	-	30	95	90	90	-	-	Fix
VSU	96 ~ 111	110	110	100	100	-	-	Fix
EHT Vertical	0 ~ 255	-	-	-	-	90	90	
OSD	RANGE	SIM-812MA3	812MAD	SIM-806MA3		SIM-812EA1	SIM-806EI1	Remarks
		CIS 29" Flat SKD CKD	29" Flat	34" Flat	29" Flat	29" Flat	29" Flat	
B stretch-BTHR	0 ~ 55	50	50	50	50	50	50	Fix
B stretch-BTLT	0 ~ 15	8	8	8	8	8	8	Fix
B stretch-BAM	0 ~ 31	4	4	4	4	4	4	Fix
Coring	0 ~ 31	20	25	25	25	25	25	Fix
NR Off Value	0 ~ 10	-	-	-	-	-	-	Fix
Melody Volume	0 ~ 20	-	-	-	-	-	-	Fix
RGB Bright	0 ~ 255	45	45	80	45	45	50	Fix
RGB Contrast	0 ~ 80	0	0	24	0	0	0	Fix
EHT Time	0 ~ 255	0	3	3	3	3	3	Fix
EHT Compesation	-	-	-	-	-	-	-	Fix
VSU	96 ~ 111	-	-	-	-	-	-	Fix
EHT Vertical	0 ~ 255	90	90	60	90	90	90	Fix
OSD	RANGE	SIM-806EI3				Remarks		
		29" Normal		21" Flat				
B stretch-BTHR	0 ~ 55	50		50		Fix		
B stretch-BTLT	0 ~ 15	8		8		Fix		
B stretch-BAM	0 ~ 31	4		4		Fix		
Coring	0 ~ 31	31		31		Fix		
NR Off Value	0 ~ 10	-		-		Fix		
Melody Volume	0 ~ 20	-		-		Fix		
RGB Bright	0 ~ 255	50		50		Fix		
RGB Contrast	0 ~ 80	40		40		Fix		
EHT Time	0 ~ 255	3		3		Fix		
EHT Compesation	-	-		-		Fix		
VSU	96 ~ 111	-		-		Fix		
EHT Vertical	0 ~ 255	60		90		Fix		

4-8-2(E) VIDEO 3 ADJUST

No.	OSD	Function	Remark
1	Peak Threshold	White peak level threshold	Fix
2	Soft Limit Slope B	Refer to picture below	Fix
3	Hard Limit	Refer to picture below	Fix
4	Peak Video Ref	White peak level threshold reference	Fix
5	Peak Video Gain	White peak level threshold gain	FiX
6	ACC Ref=(PAL/NTSC)	Auto color control gain(PAL/NTSC)	Fix
7	ACCR(SECAM)	Auto color control gain(SECAM)	Fix
8	Gain1(Video)	Velocity video gain	Fix
9	Delay1(Video)	Velocity video delay	Fix
10	Velocity Limit	Velocity limit	Fix
11	Velocity Delay	Velocity delay	Fix
12	Velocity Coring	Velocity frequency coring	Fix
13	RGB Shift	Adjust RGB input signal Horizontal position	Fix
14	HB START	Horizontal blanking start	Fix
15	HB STOP	Horizontal blanking stop	FiX
16	2H CombFilter	Comb filter on/off (0:Comb filter off 1:Comb filter on) VDP3108 has no function of Comb filter. In VDP3112B/VDP3130Y/VDP3120B, Set 'on'.	Fix
17	NR Off Value	Adjusts Digital NR off value	Fix
18	Color hys(SECAM)	Color killing hysteresys(SECAM)	Fix
19	Color hys(PAL)	Color killing hysteresys(PAL)	Fix

**Note 6. Soft Limit & Hard Limit**



Calculation Example for the Softlimiter Input Amplitude. (The real signal processing in the limiter is 2 bit more than described here)

Y Input 16...235(ITUR)  
 Black Level 16(constant)  
 Contrast 63  
 Dig. Brightness 20  
 BLE Off  
 Peaking Off

Limiter input signal.  
 (Yin-Black Level)-Contr/32+Brightn.  
 (235-16).63/32+20=451

OSD	RANGE	INITIAL DATA						Remarks
		SIM-806EW1(SEH)						
		21" 4:3 SED/Tho AK	25" 4:3 SED/Tho AK	28" 4:3 Tho AK	28" 4:3 Phi/Tho Invar	29" 4:3 SED Flat	24" WIDE Phi AK	
Peak Threshold	0 ~ 255	100	100	100	100	100	100	Fix
Soft Limit Slope B	0 ~ 15	8	8	8	8	8	8	Fix
Hard Limit	0 ~ 4	255	255	255	255	255	255	Fix
Peak Video Ref	0 ~ 255	1	1	1	1	1	1	Fix
Peak Video Gain	0 ~ 5	2	2	2	2	2	2	Fix
ACC Ref=(PAL/NTSC)	0 ~ 40	20	20	20	20	20	20	Fix
ACCR(SECAM)	0 ~ 39	20	20	20	20	20	20	Fix
Gain1(Video)	0 ~ 31	63	63	63	63	63	63	Fix
Delay1(Video)	0 ~ 15	1	1	1	1	1	1	Fix
Velocity Limit	0 ~ 127	63	63	63	63	63	63	Fix
Velocity Delay	0 ~ 15	7	7	7	7	7	7	Fix
Velocity Coring	0 ~ 15	2	2	2	2	2	2	Fix
OSD	RANGE	SIM-806EW1(SEH)						Remarks
		24" WIDE Phi/Tho AK	28" WIDE Phi/Tho AK	28" WIDE Phi/Tho Invar	32" WIDE Phi/Tho Invar	28" WIDE Phi/SED Flat	32" WIDE Phi/Tho Flat	
		Peak Threshold	0 ~ 255	100	100	100	100	
Soft Limit Slope B	0 ~ 15	8	8	8	8	8	8	Fix
Hard Limit	0 ~ 4	255	255	255	255	255	255	Fix
Peak Video Ref	0 ~ 255	1	1	1	1	1	1	Fix
Peak Video Gain	0 ~ 5	2	2	2	2	2	2	Fix
ACC Ref=(PAL/NTSC)	0 ~ 40	20	20	20	20	20	20	Fix
ACCR(SECAM)	0 ~ 39	20	20	20	20	20	20	Fix
Gain1(Video)	0 ~ 31	63	63	63	63	63	63	Fix
Delay1(Video)	0 ~ 15	1	1	1	1	1	1	Fix
Velocity Limit	0 ~ 127	63	63	63	63	63	63	Fix
Velocity Delay	0 ~ 15	7	7	7	7	7	7	Fix
Velocity Coring	0 ~ 15	2	2	2	2	2	2	Fix
OSD	RANGE	SIM-806EW1(HQ)				SIM-812MA3		Remarks
		29" Flat	21" Flat	25" Flat	21" LG Pin Free	29" Flat/DVD	CIS 29" Flat	
		Peak Threshold	0 ~ 255	185	255	185	255	
Soft Limit Slope B	0 ~ 15	4	4	4	4	5	5	Fix
Hard Limit	0 ~ 4	160	255	160	255	180	180	Fix
Peak Video Ref	0 ~ 255	1	0	1	0	0	0	Fix
Peak Video Gain	0 ~ 5	3	0	3	0	0	0	Fix
ACC Ref=(PAL/NTSC)	0 ~ 40	20	20	20	20	33	33	Fix
ACCR(SECAM)	0 ~ 39	20	20	20	20	39	39	Fix
Gain1(Video)	0 ~ 31	11	11	11	11	31	31	Fix
Delay1(Video)	0 ~ 15	3	3	3	3	3	3	Fix
Velocity Limit	0 ~ 127	74	74	74	74	127	127	Fix
Velocity Delay	0 ~ 15	7	7	7	7	7	7	Fix
Velocity Coring	0 ~ 15	10	10	10	10	3	3	Fix
RGB Shift	0 ~ 255	-	-	-	-	-	109	Fix
HB START	0 ~ 3	121	121	121	121	121/117	121	Fix
HB STOP	0 ~ 255	173	173	173	173	173/168	173	Fix
2H CombFilter	0 ~ 1	-	-	-	-	1	1	Fix
NR Off Value	0 ~ 10	-	-	-	-	0	0	Fix
Color hys(SECAM)	0 ~ 255	-	-	-	-	166	166	Fix
Color hys(PAL)	0 ~ 255	-	-	-	-	200	200	Fix

OSD	RANGE	INITIAL DATA						Remarks
		SIM-812MA3	812MAD	SIM-806MA3		SIM-812EA1	SIM-806EI1	
		CIS 29" Flat SKD CKD	29" Flat	34" Flat	29" Flat	29" Flat	29" Flat	
Peak Threshold	0 ~ 255	185	185	185	185	185	185	Fix
Soft Limit Slope B	0 ~ 15	5	5	5	5	5	5	Fix
Hard Limit	0 ~ 4	180	180	180	180	180	180	Fix
Peak Video Ref	0 ~ 255	0	0	0	0	0	0	Fix
Peak Video Gain	0 ~ 5	0	0	0	0	0	0	Fix
ACC Ref=(PAL/NTSC)	0 ~ 40	33	33	39	33	33	33	Fix
ACCR(SECAM)	0 ~ 39	39	39	33	39	39	39	Fix
Gain1(Video)	0 ~ 31	31	31	31	31	31	31	Fix
Delay1(Video)	0 ~ 15	3	3	3	3	3	3	Fix
Velocity Limit	0 ~ 127	127	127	127	127	127	127	Fix
Velocity Delay	0 ~ 15	7	7	7	7	7	7	Fix
Velocity Coring	0 ~ 15	3	3	3	3	3	3	Fix
RGB Shift	0 ~ 255	-	-	-	-	-	-	Fix
HB START	0 ~ 3	121	117	115	117	117	117	Fix
HB STOP	0 ~ 255	173	168	169	168	168	168	Fix
2H CombFilter	0 ~ 1	1	1	1	1	1	1	Fix
NR Off Value	0 ~ 10	0	0	0	0	0	0	Fix
Color hys(SECAM)	0 ~ 255	166	166	166	166	-	-	Fix
Color hys(PAL)	0 ~ 255	200	-	200	200	-	-	Fix
OSD	RANGE	SIM-806EI3				Remarks		
		29" Normal		21" Flat				
Peak Threshold	0 ~ 255	255		255		Fix		
Soft Limit Slope B	0 ~ 15	4		4		Fix		
Hard Limit	0 ~ 4	255		255		Fix		
Peak Video Ref	0 ~ 255	0		0		Fix		
Peak Video Gain	0 ~ 5	0		0		Fix		
ACC Ref=(PAL/NTSC)	0 ~ 40	33		20		Fix		
ACCR(SECAM)	0 ~ 39	21		21		Fix		
Gain1(Video)	0 ~ 31	11		11		Fix		
Delay1(Video)	0 ~ 15	3		3		Fix		
Velocity Limit	0 ~ 127	74		74		Fix		
Velocity Delay	0 ~ 15	7		7		Fix		
Velocity Coring	0 ~ 15	10		10		Fix		
RGB Shift		-		-		Fix		
RGB START		117		117		Fix		
RGB STOP		168		168		Fix		
2H Comb Fiter		1		1		Fix		
NR Off Value		3		3		Fix		
Color hys(SECAM)		-		-		Fix		
Color hys(PAL)		-		-		Fix		



4-8-2(F) OPTION

No.	OSD	Function
1	System	Select the Broadcasting System - CZ : PAL/SECAM-B/G,D/K,I,L CW : It is added SECAM-L function in CZ
2	AV by CH Key	On : It can select AV Mode for CH key in case that the number of Pannel key is 5. Off : In case that it is AV key in pannel
3	Sound	Select the sound system, for example A2-Stereo/Nicam,V-dolby,Mono, L-StereoIn case of using MSP3411G and V-Dolby MSP3400D/MSP3410, select A2-Stereo/Nicam
4	CRT	Select P-Size Mode
5	AV Mode	Select EXT Jack (RCA/SCARTS-1,2,S-VIDEO,DVD)
6	Speaker	Select the Speaker . If Dome speaker, Select 'Dome Spk'. If Non Dome speaker, select 'Non Dome Spk
7	TTX TOP	Select TOP TTX On/Off
8	X-Ray	Select X-Ray On/Off (On : USA, Of f: Other )
9	Tilt Control	Select Tilt On/Off
10	Auto FM	On : In Nicam Broadcasting Channel, If it happened 'Nicam Ident check bits error'or 'Sound Noise', Set Auto FM Mode. Of f :In Nicam Broadcasting Channel, Keep Nicam Mode till Nicam Ident Check bits are perfectly Off .
11	Text Language	West Europe : English/German/Skandinavian/Italian/French/Spainsh/Czech East Europe : Polish/Czech/Rumanian/Slovenian/Croatian//French/Skandinavian/German/Italian Russian : Russian/Ukranian/Estonian/Czech/German/Lettish/English Greek-Turkey : English/Turkey/Greek/French/Skandinavian/German/Spainsh/Italian/ Arabic : English/Arabic/French Farsi : English/Farsi/French Arab-Hebrew : Arabic/Hebrew
12	AKB	AKB(Auto kined bias) On/Off
13	Language	Select OSD Language Arab : English/Arabic/French/Pakistan≤ī Libya : English/French/Libya≤īIran : English/French/Persia≤ī/Turkey CIS : English/Russian
14	PIP	Select 1T-PIP, 2T-PIP or PIP Off
15	LNA	If LNA(Low Noise Amplitude) Tuner, Set 'On'. : TCLS
16	Equalizer	Equalizer ON/OFF.
17	High Deviate	On :If it happened 'Sound click' Noise cause that the input signal from TV Station has been over modulated,Set 'ON'. Off : Normal input Signal
18	TTX On/OFF	Select TTX On/Off

**Note 6. Sound IC & System**

Sound	IC601
A2/NICAM	MSP3400D, MSP3410D, MSP3400G
V-DOLBY	MSP3411G
Mono	Not used this mode for KS3A Chassis
L-Stereo	

OSD	INITIAL DATA								
	SIM-806EW1(SEH)			SIM-806EW1(HQ)					
	4:3 WIDE MODEL	28" WIDE Flat	32" WIDE Flat	CW29A7	CZ29A6	CZ29A7	CZ29A6	CZ21A8	CW21A8
System	Option	CW	CW	CW	CZ	CZ	CZ	CZ	CZ
AV by CH Key	On	On	On	Off	Off	Off	Off	Off	On
Sound	Option	V.Dolby	V.Dolby	A2/NICAM	A2/NICAM	A2/NICAM	V.Dolby	A2/NICAM	A2/NICAM
CRT	4:3	Wide	Wide	4:3	4:3	4:3	4:3	4:3	4:3
AV Mode	2Scart	2Scart	2Scart	2Scart	2Scart	2Scart+S	2Scart	2Scart	2Scart
Speaker	Non	Non	Non	Dome spk	Dome spk	Dome spk	Dome spk	Non	Non
TTX TOP	Off	Off	Off	Off	Off	Off	Off	Off	Off
X-Ray	Off	Off	Off	Off	Off	Off	Off	Off	Off
Tilt Control	Off	On	On	On	On	On	On	Off	Off
Auto FM	On	On	On	On	On	On	On	On	On
AKB	On	On	On	On	On	On	On	On	On
Text Language	West	West	West	-	-	-	-	-	-
OSD	SIM-812MA3								
	29A5WT8X	29A6PF8X	29K3WT8X	29A6WT8X	29A6PF8X	29A6PF8X	29A6WT8X		
Language	Arab	Iran	CIS	CIS	Arab	Arab	Iran		
Sound	V.Dolby	V.Dolby	A2/Nicam	A2/Nicam	V.Dolby	V.Dolby	V.Dolby		
CRT	4:3	4:3	4:3	4:3	4:3	4:3	4:3		
AV Mode	2RCA+S	2RCA+S	2Scart+S	2Scart+S	2RCA+S	2RCA+S+D	2Scart+S		
X-Ray	Off	Off	Off	Off	Off	Off	Off		
Tilt Control	On	On	On	On	On	On	On		
Auto FM	Off	Off	Off	Off	Off	Off	Off		
PIP	Off	2-Tuner	Off	Off	2-Tuner	2-Tuner	Off		
Txt Language	Arabic	Farsi	Russian	Russian	Arabic	Arabic	Reek-Turkey		
LNA	Off	On	On	On	On	On	Off		
Equalizer	On	On	On	On	On	On	On		
High Deviate	On	On	Off	Off	On	On	On		
TTX On/Off	On	On	On	On	On	On	On		
AV by CH Key	On	Off	On	Off	Off	Off	Off		
OSD	SIM-812MA3				SIM-806MA3				
	29A5WTBX	29A6PF8X	29A5PF8C	29A6NTBX	34D2GNBX	29A6GWBX			
Language	Arab	Iran	Arab	Iran	Iran	Arab			
Sound	V.Dolby	V.Dolby	V.Dolby	V.Dolby	A2/Nicam	Virtual Dolby			
CRT	4:3	4:3	4:3	4:3	4:3	4:3			
AV Mode	2RCA+S+D	2RCA+S+D	2Scart+S	2RCA+S+D	2RCA+D	2RCA+S+D			
X-Ray	Off	Off	Off	On	On	Off			
Tilt Control	On	On	On	On	Off	On			
Auto FM	Off	Off	Off	Off	Off	Off			
PIP	Off	2-Tuner	2-Tuner	Off	1-Tuner	1-Tuner			
Txt Language	Arabic	Farsi	Arabic	East Euripe	West Europe	Arabic			
LNA	Off	On	On	Off	Off	Off			
Equalizer	On	On	On	On	On	On			
High Deviate	On	On	On	Off	On	On			
TTX On/Off	On	On	On	On	Off	On			
AV by CH Key	On	Off	On	Off	On	Off			

OSD	INITIAL DATA					
	SIM-812EA1					
	29A7NTBX	29A5WBX	29A5NTBX	29K3WTBX	29K3WBX	29A7PFBX
Language	ESASIA	ESASIA	ESASIA	ESASIA	ESASIA	ESASIA
Sound	V.Dolby	V.Dolby	V.Dolby	A2/Nicam	A2/Nicam	V.Dolby
CRT	4:3	4:3	4:3	4:3	4:3	4:3
AV Mode	2RCA+S+D	2RCA+S+D	2RCA+S+D	2RCA+S+D	2RCA+S+D	2RCA+S+D
X-Ray	Off	Off	Off	Off	Off	Off
Tilt Control	On	On	On	On	On	On
Auto FM	Off	Off	Off	Off	Off	Off
PIP	Off	Off	Off	Off	Off	2-Tuner
Txt Language	West	West	West	West	West	West
LNA	Off	Off	Off	Off	Off	On
Equalizer	On	On	On	On	On	On
High Deviate	Off	Off	Off	Off	Off	Off
TTX On/Off	On	Off	On	Off	Off	On
AV by CH Key	Off	On	On	Off	On	Off
AKB	-	-	-	-	-	-
OSD	SIM-812MAD					SIM-806E1
	29A5PFBX	29A6NTBX	29A7PNBX	29A6MT8X	29A5MT8X	29A7PFBX
Language	ESASIA	ESASIA	ESASIA	CIS	CIS	-
Sound	V.Dolby	V.Dolby	V.Dolby	A2/Nicam	A2/Nicam	V.Dolby
CRT	4:3	4:3	4:3	4:3	4:3	4:3
AV Mode	2RCA+S+D	2RCA+S+D	2RCA+S+D	2Scart+S	2Scart+S	2RCA+S+D
X-Ray	Off	Off	Off	Off	Off	Off
Tilt Control	On	On	On	On	On	On
Auto FM	Off	Off	Off	Off	Off	On
PIP	2-Tuner	Off	2-Tuner	2T-D/W	2T-D/W	2-Tuner
Txt Language	West	West	West	Russian	Russian	-
LNA	On	Off	On	On	On	On
Equalizer	On	On	On	On	On	On
High Deviate	Off	Off	Off	Off	Off	On
TTX On/Off	On	On	Off	On	On	-
AV by CH Key	On	Off	On	Off	On	Off
AKB	-	-	-	-	-	On
OSD	SIM-806E13		OSD	SIM-806E13		
	29" Normal	21" Flat		29" Normal	21" Flat	
Language	-	-	Woofers	On	On	
Sound	A2/Nicam	A2/Nicam	Pre Chanlle	On	On	
CRT	4:3	4:3	Volume Table	Large	Large	
AV Mode	2RCA	2RCA + D	Dynamic Vol	On	ON	
X-Ray	Off	Off	Woofers Table	Small	Small	
Tilt Control	Off	Off	Amp Mute	Off	Off	
Auto FM	On	On				
PIP	2-Tuner	2-Tuner				
Txt Language	-	-				
LNA	On	On				
Equalizer	On	On				
High Deviate	On	On				
TTX On/Off	-	-				
AV by CH Key	On	On				
AKB	Off	On				

## 4-8-2(G) G2-ADJUST

No.	OSD	Function	Remark
1	MRCR	Measurement Result Resisters; Cutoff/Leakage Red	Measure data
2	MRCG	Measurement Result Resisters; Cutoff/Leakage Green	Measure data
3	MRCB	Measurement Result Resisters; Cutoff/Leakage Blue	Measure data
4	MRWDG	Measurement Result Resisters; White Drive	Measure data
5	IBRM	Internal Brightness, Measurement (0 .. 511), the center value is 256, the brightness for measurement can be set to measure at higher cutoff current. The measurement brightness is independent of the drive values."	G2 Voltage of CRT
6	WDRV	White Drive Measurement Control; RGB Values for White Drive Beam Current Measurement	Fix
7	CDL	Cathode Drive Level Uses the same register as the RGB drive in Video adjust-1.	Fix
8	COL(G)	Cutoff Level Red Uses the same register as the RED cutoff in Video adjust-1.	Fix
9	COL(G)	Cutoff Level GreenUses the same register as the GREEN cutoff in Video adjust-1.	Fix
10	COL(B)	Cutoff Level BlueUses the same register as the BLUE cutoff in Video adjust-1.	Fix

After setting COL/CDL/WDRV/IBRM to each spec of models, adjust the screen VR till the color of MRCR/MRCG/MRCB/MRWDG becomes green

OSD	RANGE	INITIAL DATA										Remarks
		SIM-806EW1(SEH)										
		21" 4:3 SED AK	21" 4:3 Tho AK	25" 4:3 SED AK	25" 4:3 Tho AK	28" 4:3 Tho Ak	29" 4:3 SED Flat	24" WIDE Phi Ak	24" WIDE Tho Invar	28" WIDE Tho Ak		
MRCR	0 ~ 255	-	-	-	-	-	-	-	-	-	-	Measure data
MRCG	0 ~ 255	-	-	-	-	-	-	-	-	-	-	Measure data
MRCB	0 ~ 255	-	-	-	-	-	-	-	-	-	-	Measure data
MRWDG	0 ~ 255	-	-	-	-	-	-	-	-	-	-	Measure data
IBRM	0 ~ 255	208	198	207	208	197	208	197	204	214	G2 Vlotage of CRT	
WDRV	0 ~ 255	117	120	108	114	105	42	124	118	98	Fix	
CDL	0 ~ 255	166	140	188	160	149	230	140	150	148	Fix	
COL(R)	0 ~ 255	76	125	115	152	100	160	88	176	215	Fix	
COL(G)	0 ~ 255	76	125	115	152	100	160	88	176	215	Fix	
COL(B)	0 ~ 255	76	125	115	152	100	160	88	176	215	Fix	
OSD	RANGE	SIM-806EW1(SEH)					SIM-806EW1(HQ)					Remarks
		28" WIDE Tho Invar	32" WIDE Tho Invar	28" WIDE SED Flat	32" WIDE Pin Flat	32" WIDE Tho Flat	29" Flat	21" Flat	25" Flat	LG Pin Free Set		
		MRCR	-	-	-	-	-	-	-	-	-	
MRCG	-	-	-	-	-	-	-	-	-	-	Measure data	
MRCB	-	-	-	-	-	-	-	-	-	-	Measure data	
MRWDG	-	-	-	-	-	-	-	-	-	-	Measure data	
IBRM	0 ~ 255	211	211	205	200	230	220	220	220	240	G2 Vlotage of CRT	
WDRV	0 ~ 255	105	93	43	95	88	40	35	40	55	Fix	
CDL	0 ~ 255	200	250	197	210	233	210	165	200	255	Fix	
COL(R)	0 ~ 255	180	180	142	125	198	150	70	150	160	Fix	
COL(G)	0 ~ 255	180	180	152	125	198	150	70	150	160	Fix	
COL(B)	0 ~ 255	180	180	197	125	198	150	70	150	160	Fix	
OSD	RANGE	SIM-812MA3			SIM-812MAD	SIM-806MA3		SIM-812EA1	SIM-806E11	SIM-806E13		Remarks
		29" Flat	CIS 29" Flat	CIS 29" Flat SKD CKD	29" Flat	29" Flat	34" Flat	29" Flat	29" Flat	29" Normal	21" Flat	
		MRCR	0 ~ 255	-	-	-	-	-	-	-	-	
MRCG	0 ~ 255	-	-	-	-	-	-	-	-	-	Measure data	
MRCB	0 ~ 255	-	-	-	-	-	-	-	-	-	Measure data	
MRWDG	0 ~ 255	-	-	-	-	-	-	-	-	-	Measure data	
IBRM	0 ~ 255	220	220	220	220	200	220	220	220	220	225	G2 Vlotage of CRT
WDRV	0 ~ 255	35	35	35	35	35	3	35	35	35	45	Fix
CDL	0 ~ 255	220	220	220	220	160	220	220	220	205	150	Fix
COL(R)	0 ~ 255	150	150	150	150	200	150	150	150	120	150	Fix
COL(G)	0 ~ 255	150	150	150	150	200	150	150	150	120	150	Fix
COL(B)	0 ~ 255	150	150	150	150	200	150	150	150	120	150	Fix

After setting COL/CDL/WDRV/IBRM to each spec of models, adjust the screen VR till the color of MRCR/MRCG/MRCB/MRWDG becomes green

## 4-8-2(H) OTHERS

No.	OSD	Function
1	VSU	Vertical Setup Time. Delays the vertical sync to solve the jitter of OSD and TTX . Check OSD while varying 96 ~ 111 step by step and an 1H line moves at two points. If the value is set at the first point or second point, an OSD jitter may happen. Also, if the value is set between the first and second points, a TTX jitter may happen. So, the value of VSU should be set after giving some margins (three steps).
2	H QEW	Short for Q-CRT HORIZONTAL EAST WEST, data used only for Q-CRT MODEL. In NORMAL mode, the horizontal picture size is within 5 ~ 5.5. In Q mode, the horizontal picture size is within 6.5 ~ 7. This H QEW function sets the gap between horizontal picture size in NORMAL mode and horizontal picture size in Q mode.
3	H ZOOM PARABOLA	In ZOOM mode of P-SIZE, Adjusts vertical linearity. Each CRT has a different data. (Refer 'other' data)
4	H 16:9 PARABOLA	In 16:9 mode of P-SIZE, Adjusts vertical linearity. Each CRT has a different data. (Refer 'other' data)
5	TTX H SHIFT	Adjusts TTX horizontal position
6	MONO SOUND SYSTEM	NOT USED, KS3A chassis has no function of Mono sound system.
7	V SLICE LEVEL	Allows the sync slice level of sync separate block to be changed. This item corresponds the case where a vertical bouncing happens according to signal conditions by area. (overmodulation, especially). 0: 100% 1: 90% 2: 75% 3: 60%
8	MELODY VOLUME	Sets the level of melody volume in Picture ON. It is managed differently according to buyer or area.
9	AKB	Short for Auto Kined Bias, a function that maintains uniformity in brightness and white balance by automatically correction the variance of brightness and white balance according to temperature and characteristics of AMP in the CRT drive
10	TTX LIST PRIOR	TTX mode has two different types; List and FLOF. When switching into the TTX mode, this function determines which type has priority. On : Australia Off : others country
11	MAIN NEWLIN	Controls the picture compressing rate.
12	Main PFGHB	Controls the horizontal blanking when the picture size compressed.
13	PIP BLKLR	PIP blanking level red(PIP low light white balance). Adjust low light white balance of PIP.
14	PIP BLKLB	PIP blanking level blue(PIP low light white balance). Adjust low light white balance of PIP.
15	PIP PKLR	PIP peak white level Red. Adjusts high light white balance of PIP.
16	PIP PKLG	PIP peak white level Green. Adjusts high light white balance of PIP.
17	PIP PKLB	PIP peak white level Blue. Adjusts high light white balance of PIP.

**SIM-806EW doesn't have this function**

OSD	RANGE	INITIAL DATA						Remarks
		SIM-812MA3		SIM-812MAD	SIM-806MA3		SIM-812EA1	
		29" Flat	29" Flat DVD	CS29A6MT	34" Flat	29" Flat	Southeast Asia 29" Flat DVD	
VSU	96 ~111	100	100	100	102	100	100	Fix
H QEW	-30 ~ 30	0	0	0	0	0	0	Fix
H ZOOM Parabola	-30 ~ 30	8	13	13	13	13	13	Fix
H 16:9 Parabola	-30 ~ 30	-15	-17	-20	-17	-17	-17	Fix
TTX H Shift	-30 ~ 30	6	6	6	6	6	6	Fix
Mono sound system	BG	BG	BG	BG	BG	BG	BG	Fix
V Slice Level	0 ~ 3	2	2	2	3	2	2	Fix
Melody Volume	0 ~ 20	8	8	8	10	8	8	Fix
AKB	On/Off	On	On	On	Off	On	On	Fix
TTX List Prior	On/Off	-	-	-	-	-	On	Fix
Main Newlin	40 ~ 100	-	-	87	-	-	-	Fix
Main PFGHB	146 ~ 206	-	-	190	-	-	-	Fix
PIP BLKLR	0 ~ 15	-	-	5	-	-	-	Fix
PIP BLKLB	0 ~ 15	-	-	5	-	-	-	Fix
PIP PKLR	155 ~ 255	-	-	255	-	-	-	Fix
PIP PKLG	155 ~ 255	-	-	255	-	-	-	Fix
PIP PKLB	155 ~ 255	-	-	255	-	-	-	Fix
OSD	RANGE	SIM-812EA1		SIM-806E11	SIM-806E13		Remarks	
		Australia, Newzealand 29" Flat dvd	Thailand 29" Flat DVD	India 29" Flat DVD	29" Normal	21" Flat		
VSU	96 ~111	100	100	100	108	108	Fix	
H QEW	-30 ~ 30	0	0	0	0	0	Fix	
H ZOOM Parabola	-30 ~ 30	13	13	13	0	8	Fix	
H 16:9 Parabola	-30 ~ 30	-17	-17	-20	-10	-18	Fix	
TTX H Shift	-30 ~ 30	6	6	10	0	0	Fix	
Mono sound system	BG	BG	BG	M	BG	BG	Fix	
V Slice Level	0 ~ 3	2	3	2	2	2	Fix	
Melody Volume	0 ~ 20	8	10	8	15	15	Fix	
AKB	On/Off	On	On	-	-	-	Fix	
TTX List Prior	On/Off	Off	On	-	-	-	Fix	
Main Newlin	40 ~ 100	-	-	-	-	-	Fix	
Main PFGHB	146 ~ 206	-	-	-	-	-	Fix	
PIP BLKLR	0 ~ 15	-	-	-	-	-	Fix	
PIP BLKLB	0 ~ 15	-	-	-	-	-	Fix	
PIP PKLR	155 ~ 255	-	-	-	-	-	Fix	
PIP PKLG	155 ~ 255	-	-	-	-	-	Fix	
PIP PKLB	155 ~ 255	-	-	-	-	-	Fix	

4-8-2(I) Y-ADD

No.	OSD	Function
1	H-BOW	Horizontal bow control (Refer to bottom picture) actually no active function.
2	H-ANGLE	Horizontal angle control (Refer to bottom picture) actually no active function.
3	H-DSCC	Discharge sample counter for deflection retrace.
4	DVD TINT CONTROL	Determines whether DVD SUB TINT control is used. VDP3130Y B1 is set to '1' and B2 is set to '0'.
5	DVD SUB TINT	Adjusts the color phase in the Picture standard mode and receives a NTSC DVD signal.
6	EHT OFFSET	EHT Compensation east/west offset coefficient (Not used)
7	EHT HORIZONTAL	EHT Compensation east/west gain coefficient (Not used)
8	VDPY B2 Version	Selects the VDP3130Y IC version. B2 version is set 'ON,' but B1 version is set 'OFF.'

① H- BOW



② H- ANGLE



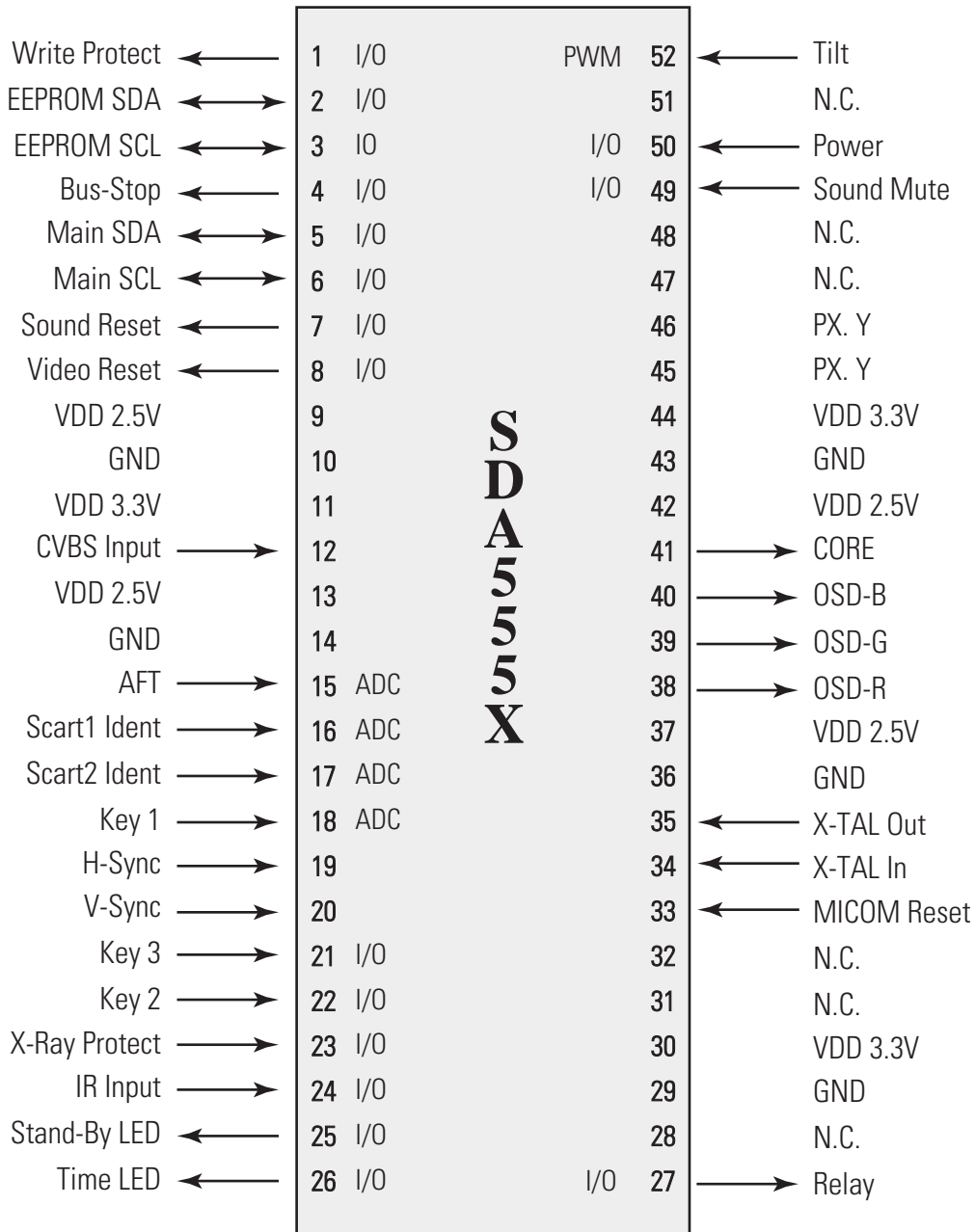
**SIM-806EW doesn't have this function**

OSD	INITIAL DATA										Remarks	
	SIM-812MA3		SIM-812MAD		SIM-806MA3		SIM-812EA1		SIM-806E11	SIM-806E13		
	29" Flat	29" Flat DVD	CS29A6MT	34" Flat	29" Flat	29" Flat DVD (VDP3130Y B1)	29" Flat DVD (VDP3130Y B2)	India 29" Flat DVD	29" Normal	21" Flat		
H-BOW	0	0	0	0	0	0	0	0	0	0	0	Fix
H-ANGLE	0	0	0	0	0	0	0	0	0	0	0	Fix
H-DSCC	3	3	3	3	3	3	3	3	3	3	2	Fix
DVD TINT CONTROL	1	1	1	1	1	1	0	0	0	0	0	Fix
DVD SUB TINT	25	25	25	25	25	25	25	25	25	60	60	Fix
EHT OFFSET	0	0	0	0	0	0	0	0	0	0	0	Fix
EHT HORIZONTAL	0	0	0	0	0	0	0	0	0	0	0	Fix
VDPY 32 Version	Off	On	Off	Off	Off	Off	On	On	On	On	On	Fix



## 4-9 MICOM

### 4-9-1 Pin Layout



### 4-9-2 Pin Assignment Specification

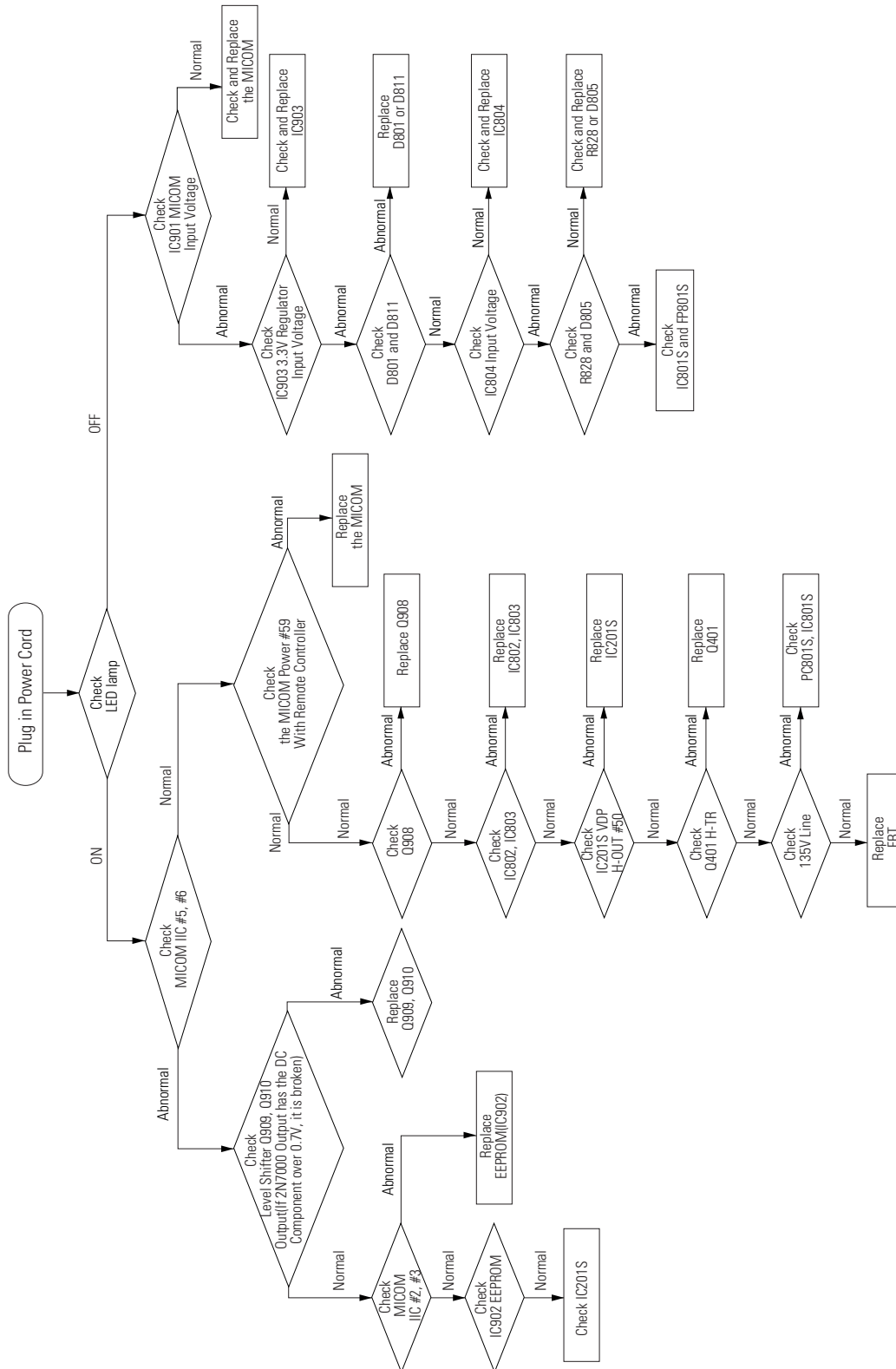
PIN NO	FUNCTION	ASSIGN	IN/OUT	ACTIVE H/L	DESCRIPTION
1	I/O	Write Protect	Out	Low	EEPROM Write Protection
2	I/O	ROM SDA	I/O		EEPROM Serial Data Line
3	I/O	ROM SCL	I/O		EEPROM Serial Clock Line
4	I/O	Bus Stop	In	Low	Disable Micom IIC
5	I/O	Main SDA	I/O		Peripheral IC Serial Data Line
6	I/O	Main SCL	I/O	Low	Peripheral IC Serial Clock Line
7	I/O	Sound Reset	Out	Low	MSP IC Initial Control
8	I/O	Video Reset	Out		VDP IC Initial Control
9	Vdd	VDD 2.5V			
10	GND				
11	Vdd	VDD 3.3V			
12	CVBS	CVBS Input	In		TTX CVBS Input
13	Vdd	VDD 2.5V			Analog B+
14	GND				Analog Ground
15	ADC	AFT	In		Auto Fine Tuning Control
16	ADC	SC1-ID	In		Scart1 Ident
17	ADC	SC2-ID	In		Scart2 Ident
18	ADC	Key1	In		Key1 Input
19	HS	H-Sync	In		Horizontal Sync Input
20	VS	V-Sync	In		Vertical Sync Input
21	I/O	Key3	In		Key3 Input
22	I/O	Key2	In		Key2 Input
23	I/O	X-Ray	In		X-Ray Protection
24	I/O	IR-In	In		Remocon Signal Input
25	I/O	STD-LED	Out		LED Drive Output(Red)
26	I/O	TIM-LED	Out		LED Drive Output(Green)

**4-9-2 Pin Assignment Specification (Continued)**

<b>PIN NO</b>	<b>FUNCTION</b>	<b>ASSIGN</b>	<b>IN/OUT</b>	<b>ACTIVE H/L</b>	<b>DESCRIPTION</b>
27	I/O	Relay	Out	Low	Activate Degaussing Coil
28	N.C.				Not Used (Programmed Gound Level)
29	GND				Analog Ground
30	Vdd	VDD 3.3V			Not Used (Programmed Gound Level)
31	N.C.				Not Used (Programmed Gound Level)
32	N.C.				Micom Hardware Reset
33	Reset	Reset	In	Low	Crystal Oscillation Input
34	X-In	X-TAL In	In	6MHz	Crystal Oscillation Output
35	X-Out	X-TAL Out	Out	6MHz	Analog Ground
36	GND				Analog B+
37	Vdd	VDD 2.5V			OSD/TTX Output (Red)
38	R	OSD-R	Out		OSD/TTX Output (Green)
39	G	OSD-G	Out		OSD/TTX Output (Blue)
40	B	OSD-B	Out		Fast Blank/Half Contrast Output
41	COR	CORE	Out		
42	Vdd	VDD 2.5V			
43	GND				
44	Vdd	VDD 3.3V			
45	I/O	PX.Y	In		When The Caption Function Adopted, Used.
46	I/O	PX.Y	Out		
47	N.C.				Not Used (Programmed Gound Level)
48	N.C.				
49	I/O	S-Mute	Out	High	Sound Amp Mute
50	I/O	Power	Out	Low	Picture On/Off Control
51	N.C.				Not Used (Programmed Gound Level)
52	I/O	Tilt	Out	PWM	Tilt Control Output

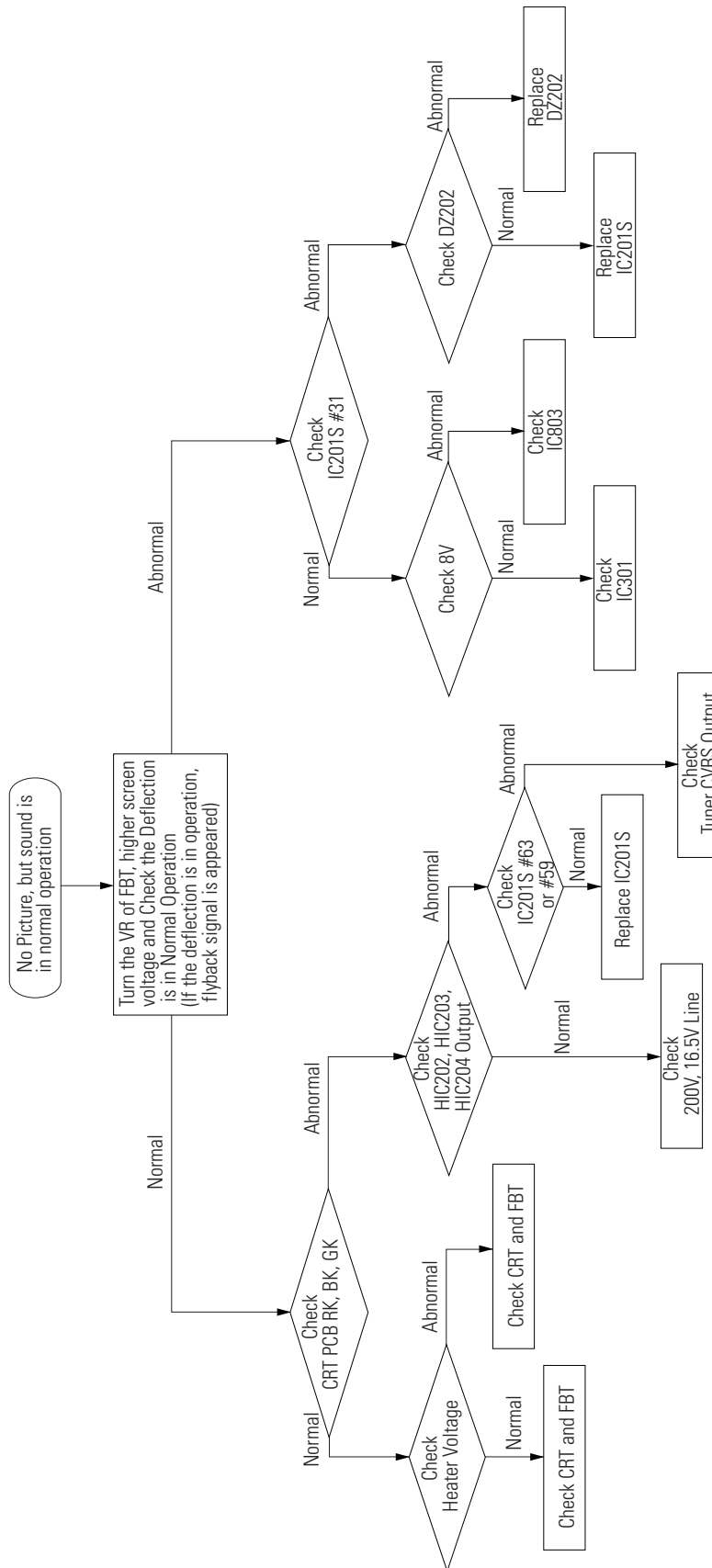
# 5. Troubleshooting

## 5-1 No Power

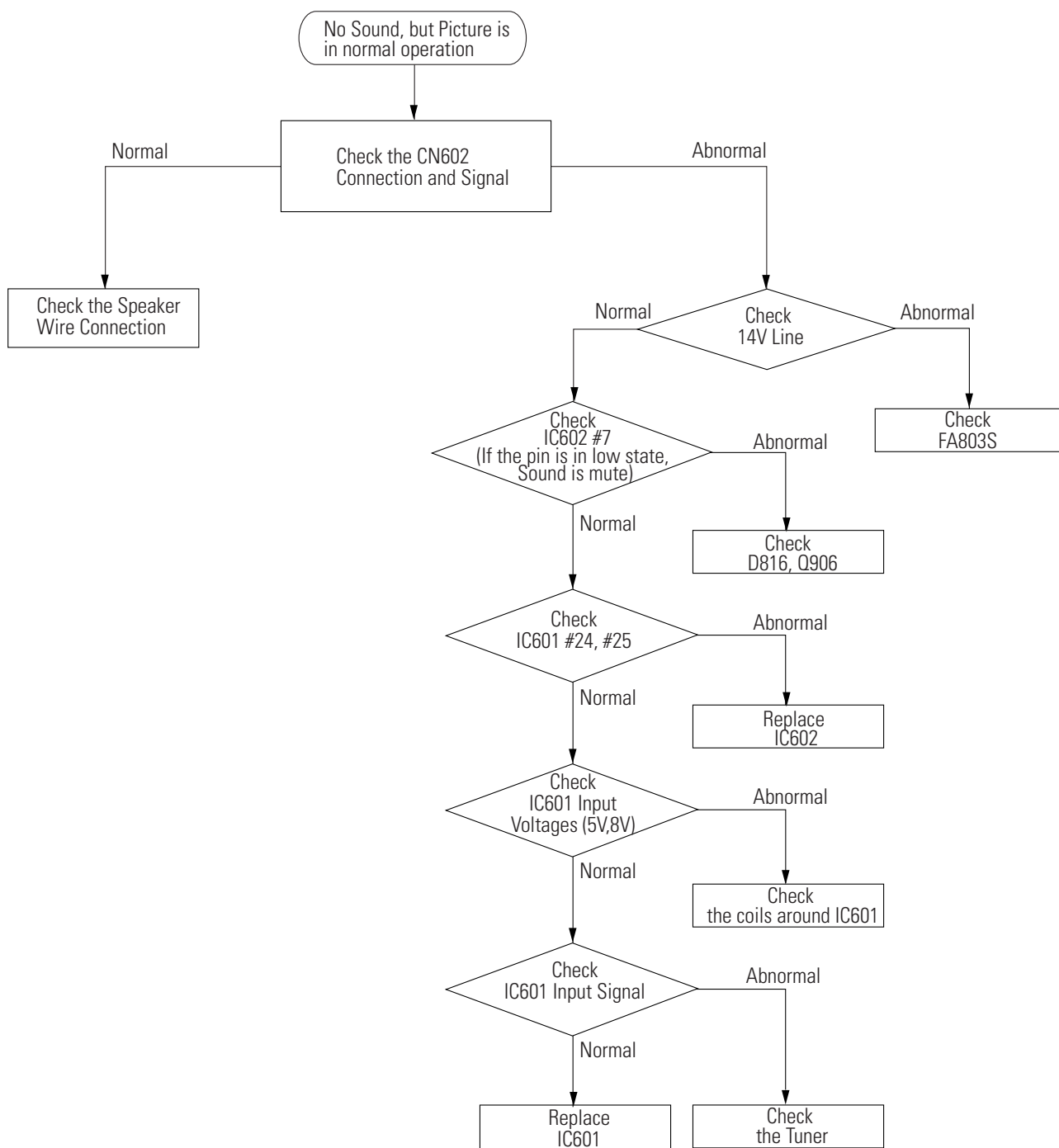


**Note :** When you check whether any component is normal, you must let the output pin be open in order not to be affected by the side of output.

## 5-2 No Picture



### 5-3 No Sound

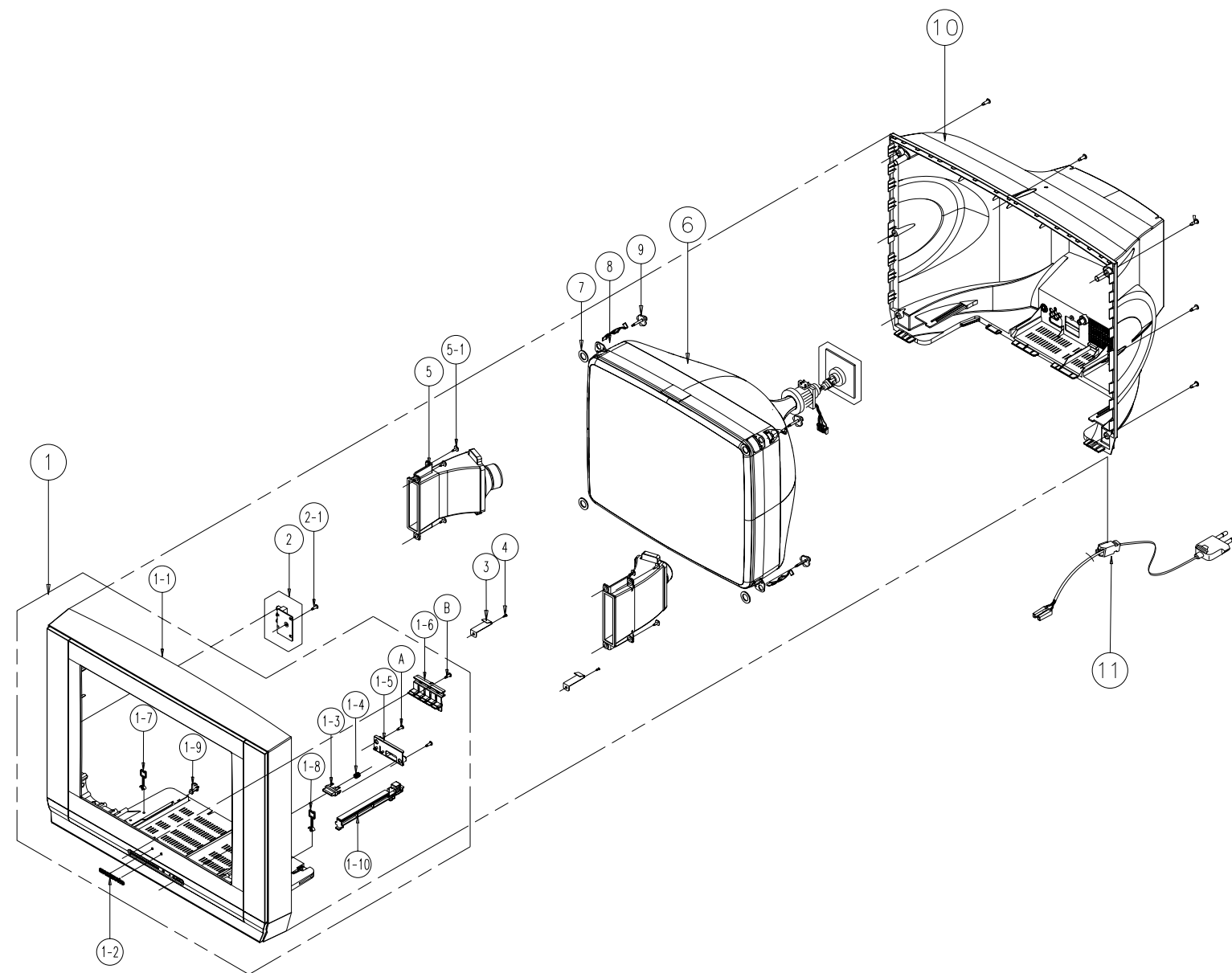


# MEMO

## 6. Exploded View & Parts List

### 6-1 CS29K10MQBXXSE

You can search for the updated part code through ITSELF web site.  
URL : <http://itself.sec.samsung.co.kr>



No	Code No	Description;Specification	Q'ty	Remark	S.N.A
1	AA96-01552E	ASSY COVER P-FRONT;29K10,HIPS HB,G4309,S	1	M0001	
1-1	AA64-03480E	CABINET FRONT;29K10,HIPS,HB,G4309,SV012P	1	CIS3	S.N.A
1-2	AA64-70117B	BADGE-BRAND;,AL,T1.5,10.6,L65,BLK,SILVER	1	T0057	S.N.A
1-3	AA64-03428A	KNOB POWER;21,25,29K10,ABS,HB,G3676,SVM3	1	T0023	S.N.A
1-4	AA61-60003J	SPRING ETC-CS;-;SUS304,-,-,OD6,N7,OD6,-,	1	CIS7	S.N.A
1-5	AA64-03427A	WINDOW-RMC,LED;21K10(SDMA),PC,ACRYL,CLR	1	T0299	S.N.A
A	6002-000522	SCREW-TAPPING;TH,+,2,M4,L15,ZPC(BLK),SWR	2	T0081	
1-6	AA64-03429A	KNOB CONTROL;21,25,29K10,ABS,HB,G3676,SV	1	T0022	S.N.A
B	6003-001019	SCREW-TAPTITE;RH,+,B,M4,L12,ZPC(BLK),SWR	2	T0081	
1-7	AA65-00011C	CLAMPER CORE-WIRE;ALL MODEL,NYLON 66,V2,	1		S.N.A
1-8	AA65-30105A	CLAMPER CORE-WIRE;ALL MODEL,NYLON 66,V2,	1		S.N.A
1-9	AA61-40113A	STOPPER-PCB;501H,HIPS,-,-,HB,NTR,-	1		S.N.A
1-10	AA61-00711D	HOLDER-PCB;29U1,U2,HIPS VO,BK502(HB-PROP	1	T0245	S.N.A
2	AA95-01787X	ASSY SUB-PCB,A/V SIDE;29K1,KS3APAL,AA95-	1	T0091	
2-1	6003-001023	SCREW-TAPTITE;RWH,+,B,M3,L10,ZPC(YEL),SW	1	T0081	S.N.A
3	AA61-10054A	BRACKET-CRATER;6277,STS304,T0.5,-,-,-,-	2		S.N.A
4	6003-001026	SCREW-TAPTITE;RH,+,B,M4,L15,ZPC(BLK),SWR	2	T0081	S.N.A
5	AA91-00507A	ASSY HOLDER SPK;-,-,80HM/15W,-,ASSY HOLD	1	T0010	
5-1	6006-001095	SCREW-ASS'Y TAPT;WP,BH,+,M4,L12,ZPC(YEL)	8	SPK+CF	S.N.A
6	AA91-02173M	ASSY CPT;A68QCP891X100,29,-300MGAA03-00	1		S.N.A
7	AA63-60004G	SPACER-GUM,CRT;-;NTR RUBBER,-,-,-,GRY,T3	4		S.N.A
8	AA65-30113A	CLAMPER CORE-D,COIL;-;NYLON 66,V2,-,BLK,	4		S.N.A
9	AA60-10050V	SCREW-ASSY;-;SWRCH18A,M6,L30,HH,+,WC,-,Z	4	SC016	
10	AA64-03498C	CABINET BACK;29K10,HIPS,HB,G4309	1	T0015	
11	AA96-20109A	ASSY POWER CORD;-;CP2/NO(4.0),H/C400,KKP	1	T0066	S.N.A



You can search for the updated part code through ITSELF web site.  
 URL : http://itself.sec.samsung.co.kr

## 7. Electrical Parts List

### 7-1 CS29K10MQBXXSE

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
<b>ASSY COVER FRONT</b>									
1	M0001	AA90-04647E	ASSY COVER FRONT;CS29K10MQBXXSE	S.N.A	△	...3	PC801S	0604-001038 PHOTO-COUPLER;TR,130-260%,200mW,DIP-4,ST	
..2	T0081	6002-000522	SCREW-TAPPING;TH,+,2,M4,L15,ZPC(BLK),SWR		...3	IC112	1103-001171 IC-EEPROM;L51D3,16KBit,DIP8P;300MIL,10m		
..2	T0081	6003-001023	SCREW-TAPTITE;RWH,+,B,M3,L10,ZPC(YEL),SW	S.N.A	△	...3	IC401	1202-000103 IC-VOLTAGE COMP;393,DIP8P;300MIL,DUAL	
..2	T0081	6003-001026	SCREW-TAPTITE;RH,+,B,M4,L15,ZPC(BLK),SWR	S.N.A	...3	T0123	1203-001697 IC-VOLTAGE REGULATOR;78R08,TO-220,4P,-P		
..2	T0081	6003-001268	SCREW-TAPTITE;TH,+,B,M4,L12,ZPC(YEL),SWR		...3	IC118	1204-0001812 IC-VIDEO PROCESS;VDP3130Y-B2,DIP;64P;760		
..2	SPK+CF	6006-001095	SCREW-ASS'Y TAPT;WPBH,+,M4,L12,ZPC(YEL)	S.N.A	...3	P803T	1404-000002 THERMISTOR-PTC;9ohm,20%,-,TR,RECT,-		
..2	T0081	AA60-10050T	SCREW-TAPPING,-,SWRCH18A,M4,L20,RH,+,2S,	S.N.A	△	...3	NT801S	1404-001019 THERMISTOR-NTC;40ohm,20%,3450K,17mW/K,BK	
..2	SC016	AA60-10050V	SCREW-ASSY,-,SWRCH18A,M6,L30,HH,+,WC,-Z		...3	C598	2201-002002 C-CERAMIC,DISC;4.7NF,20%,400V,Y5U,BK,16X		
..2	T0245	AA61-00552B	HOLDER-PCB;29K3,HIPS,-,-,BLK,VO	S.N.A	...3	C407	2301-001338 C-FILM,LEAD-OTHER;0.68NF,5%,1.6KV,BK,28X		
..2		AA61-10054A	BRACKET-CRATER;6277,STS304,TO.5,-,-,-	S.N.A	...3	C426	2306-000205 C-FILM,LEAD-PPF;430nF,5%,400V,BK,26x21.5		
..2		AA63-60004G	SPACER-GUM,CRT,-,NTR RUBBER,-,-,-,GRY,T3	S.N.A	...3	C423	2306-000272 C-FILM,LEAD-PPF;820NF,5%,400V,BK,29X25.5		
..2		AA65-30017A	CLAMPER CORE-D,COIL,-,NYLON-66,VO,-,NTR,	S.N.A	△	...3	CX801S	2306-000318 C-FILM,LEAD-PPF;220NF,20%,250V,BK,-,22.5	
..2	T0102	AA73-00005B	RUBBER-CAP;FLAT,PRJ,SILICONE RUBBER,WHIT		...3	C406	2306-000330 C-FILM,LEAD-PPF;7.7NF,3%,1.6KV,BK,28.5X1		
..2	T0010	AA91-00507A	ASSY HOLDER SPK,-,80HM/15W,-,ASSY HOLD		...3	C405	2306-000330 C-FILM,LEAD-PPF;7.7NF,3%,1.6KV,BK,28.5X1		
..2	M0001	AA96-01552E	ASSY COVER P-FRONT;29K10,HIPS HB,G4309,S		...3	C701	2401-003031 C-AL;470uF,20%,450V,GPBK,35x45mm,1		
...3	T0081	6003-001019	SCREW-TAPTITE;RH,+,B,M4,L12,ZPC(BLK),SWR		...3	C701	2401-003076 C-AL;3300UF,20%,50V,WT,BK,18X35.5MM,7.5		
...3	T0081	6003-001019	SCREW-TAPTITE;RH,+,B,M4,L12,ZPC(BLK),SWR		...3	C701	2401-003633 C-AL;220UF,20%,160V,GPST,22X25MM,10		
...3	T0069	AA60-00091J	SPACER-FELT,-,FELT,330X10,-,-,BLK,TO.5,-	S.N.A	...3	X201	2801-004019 CRYSTAL-UNIT;20.25MHz,30ppm,28-AAM,13pf		
...3		AA61-40113A	STOPPER-PCB;501H,HIPS,-,-,HB,NTR,-	S.N.A	△	X601	2801-004020 CRYSTAL-UNIT;18.432MHz,30ppm,28-AAM,12pf		
...3	CIS7	AA61-60003J	SPRING ETC-CS,-,SUS304,-,-,OD6,N7,OD6,-	S.N.A	△	SW801S	3403-001134 SWITCH-PUSH;250V,5A,DPST,ON-OFF,-		
...3		AA64-01506D	INLAY-AV;29K3,PVC-SHEET,TO.3,-,-,P/GRAY,	S.N.A	△	RL801S	3501-001040 RELAY-POWER;12VDC,500MW,10000MA,1FORMA,1		
...3	T0299	AA64-03427A	WINDOW-RMC,LED;21K10(SDMA),PC,ACRYL,CLR	S.N.A	△	FP801S	3601-000297 FUSE-CARTRIDGE;250V,5A,TIME-LAG,GLASS,5.		
...3	T0023	AA64-03428A	KNOB POWER;21,25,29K10,ABS,HB,G3676,SVM3	S.N.A	...3	CN906	3711-002641 CONNECTOR-HEADER;BOX,10P;1R,2.5MM,STRAIG		
...3	T0022	AA64-03429A	KNOB CONTROL;21,25,29K10,ABS,HB,G3676,SV	S.N.A	...3	JA701	3722-001333 JACK-PIN;9P;3.2mm,NI,BLK,-		
...3	CIS3	AA64-03480E	CABINET FRONT;29K10,HIPS HB,G4309,SV012P	S.N.A	...3	JA702	3722-001596 JACK-PIN;3P/9P;3.5mm,NI,BLK(GRN/BLU/RED)		
...3	T0057	AA64-70117B	BADGE-BRAND,-,AL,T1.5,10.6,L65,BLK,SILVER	S.N.A	△	T801S	AA26-00046A TRANS SWITCHING,-,-,-,AC90-260V,DC135/16		
...3		AA65-00011C	CLAMPER CORE-WIRE;ALL MODEL,NYLON 66,V2,	S.N.A	△	T444S	AA26-00105A TRANS FBTF;FUH-29C001(S);CT29A5P;4.3MH,13		
...3		AA65-30105A	CLAMPER CORE-WIRE;ALL MODEL,NYLON 66,V2,	S.N.A	△	T401	AA26-50001L TRANS-HORIZ.DRIVE,-,-,-,29mH,-,-,133uH,-		
...3	T0245	AA61-00711D	HOLDER-PCB;29U1,U2,HIPS VO,BK502(HB-PROP	S.N.A	...3	L405	AA27-00057A COIL HORIZ. WIDTH,-,10mH,YL-9N 15x27.5 C		
..2		AA61-01373A	HOLDER-D COIL;29K5,NYLON 66	S.N.A	...3	L402	AA27-00067A COIL HORIZ. WIDTH,-,240uH,YL9N 12x20 C;6		
					...3	L808	AA27-00098A COIL CHOKE,-,-,24uH,10%,-,0.1,3.0A,DR10X		
					...3	T0296	AA27-00099A COIL LINEARITY;23.5uH,23.5uH,DR14x15C;5.		
					...3	L408	AA27-00103A COIL CHOKE;600UH,-,600UH,-,10%,600UH,0.5		
					△	LX801S	AA29-00012A FILTER LINE NOISE;CS29A6PF8X/HAC,-,0.1MA		
					...3	RM901	AA32-00015A MODULE REMOCON;FRP-3521H31,38KHZ,940MM,M		
					△	TU01S	AA40-00082A TUNER;TCPS3001PD16D(S),PAL-M(NTSC),181CH		
					...3		AA61-00707B HOLDER-COVER;ALL MODEL,NYLON-66 T1.0 V2,	S.N.A	
					...3	T0115	AA95-01757G ASSY SUB-PCB CRT;29K3,KS3A,AA95-01120A		
1	M0002	AA90-04648D	ASSY COVER REAR;CS29K10MQBXXSE,RCA9P+DVD	S.N.A	...4	0202-000187	SOLDER-WIRE FLUX;-RS60S,D1.2,63Sn/37Pb	S.N.A	
..2	T0069	AA60-00091J	SPACER-FELT,-,FELT,330X10,-,-,BLK,TO.5,-	S.N.A	...4	DZ016	0403-001211 DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D		
..2		AA64-00892F	INLAY-BACK;D2,D3,PS SHEET,TO.3,-,-,BLK,R	S.N.A	...4	T0156	0501-000283 TR-SMALL SIGNAL;KSA539,PNP,400mW,TO-92,T		
..2	T0015	AA64-03498C	CABINET BACK;29K10,HIPS,HB,G4309	S.N.A	...4	DU410	1201-000191 IC-OP AMP;4558,DIP8P;300MIL,DUAL,20V/mV		
..2		AA65-30008A	CLAMPER CORE-CORD,-,PE,HB,-,BLK,-	S.N.A	...4	R523	2008-000267 R-FUSIBLE(S);2.4ohm,5%,2W,AA,TP3;9x10mm		
					...4	VA999	3704-000114 SOCKET-CRT;14P;29.1,35.5,SN,ISH09S/BK		
					...4	CN906	3711-002641 CONNECTOR-HEADER;BOX,10P;1R,2.5MM,STRAIG		
					...4	JA501	3722-001503 JACK-PIN;1P;1PI,NI,RED,SCR-JACK		
					...4	SG502	AA27-00084A COIL;S-23,-,-,-,-,-,S-23,5000Mohm MIN,		
					...4	T0245	AA39-00225A LEAD CONNECTOR-ASSY;10P;600MM,67096-010		
					...4	T0245	AA39-20010B LEAD CONNECTOR-ASSY;1P;500,YFH800-01,S,		
					...4	T0245	AA39-20010B LEAD CONNECTOR-ASSY;1P;500,YFH800-01,S,		
					...4	T0245	AA39-20029K LEAD CONNECTOR-ASSY;7P;400,67096-007,S,		
..2		AA91-021396A	ASSY CPT;CS29K3NTBX/XSE	S.N.A	...4	AA63-10002A	BAND-TIE;NYLON66 V2,L10,NTR	S.N.A	
△	...3	T0063	AA03-00275A CRT COLOR;A68QCP891X100,29,-300MGAA03-00	S.N.A	...4	QF04	AA96-00111A ASSY H/S,-,-,AA62-30013L,2SC2344,-	S.N.A	
..2		AA98-70011A	ASSY TBC WIRE(P);-,29INCH,NTSC,PAL,2P-WH	S.N.A	...5	T0090	0502-000153 TR-POWER;2SC2344-D,NPN,1.2W,TO-220,-60		
..2	T0089	AA27-20002Q	COIL DEGAUSSING;-29,14ohm,70T,L3300,E		...5	T0081	6003-000333 SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YEL),SW	S.N.A	
					...5	AA62-30013L	HEAT SINK-ES,-,-,-,44/22,-,WHT,-,-,-	S.N.A	
					...4	QF05	AA96-00111B ASSY H/S,-,-,AA62-30013L,2SA1011,-	S.N.A	
					...5	T0090	0502-000131 TR-POWER;2SA1011-D,PNP,1.2W,TO-220,-60		
					...5	T0081	6003-000333 SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YEL),SW	S.N.A	
1	M0017	AA91-06177U	ASSY CHASSIS;-KS3A	S.N.A	...5	AA62-30013L	HEAT SINK-ES,-,-,-,44/22,-,WHT,-,-,-	S.N.A	
..2	T0073	AA94-12569Y	ASSY PCB MAIN;-KS3A		...4	IC501	AA96-50151A ASSY H/S,-,TR,AA61-10060A,TD61010,-	S.N.A	
...3		0202-000187	SOLDER-WIRE FLUX;-RS60S,D1.2,63Sn/37Pb	S.N.A	...4	IC502	AA96-50151A ASSY H/S,-,TR,AA61-10060A,TD61010,-	S.N.A	
...3	DZ016	0403-000508	DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500		...4	IC503	AA96-50151A ASSY H/S,-,TR,AA61-10060A,TD61010,-	S.N.A	
					...5	T0074	1201-000539 IC-VIDEO AMP;6101,ZIP9P,-,SINGLE,-,PLAS		
					...5	CCM	6001-000057 SCREW-MACHINE;RH,+,M3,L6,ZPC(BLK),SWRCHT	S.N.A	

Electrical Parts List

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
.....5		6021-000222	NUT-HEXAGON:2C.M3,ZPC(YEL),SM20C,-	S.N.A	.....5	R518	2003-002171	R-METAL OXIDE(S):150ohm,5%,2W,AG,TP,3.9x	
.....5	AA61-10060A		BRACKET-TR:W3220,CUS-1 1/2H,TO.5,-,-,-,-	S.N.A	.....5	RF20	2003-002214	R-METAL OXIDE(S):680ohm,5%,2W,AG,TP,3.9x	
.....4	AA97-05408A		ASSY AUTO-SUB:29FALT,KS3A,PAL	S.N.A	.....5	RF21	2003-002214	R-METAL OXIDE(S):680ohm,5%,2W,AG,TP,3.9x	
.....5	DF01	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		.....5	RF22	2003-002214	R-METAL OXIDE(S):680ohm,5%,2W,AG,TP,3.9x	
.....5	DF04	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		.....5	R527	2004-000433	R-METAL:1Kohm,1%,1/8W,AA,TP,1.8x3.2mm	
.....5	DG01	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,		.....5	R526	2004-000500	R-METAL:2.7Kohm,1%,1/8W,AA,TP,1.8x3.2m	
.....5	T0083	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		.....5	R024	2004-001397	R-METAL(S):4.7Kohm,1%,1/2W,AA,TP,2.4x6.4	
.....5	T0083	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,		.....5	R024	2004-001987	R-METAL(S):4.3Kohm,1%,1/2W,AA,TP,2.4x6.4	
.....5	T0083	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,		.....5	R024	2004-002022	R-METAL(S):51Kohm,1%,1/2W,AA,TP,2.4x6.4m	
.....5	T0083	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,		.....5	R024	2004-002022	R-METAL(S):51Kohm,1%,1/2W,AA,TP,2.4x6.4m	
.....5	T0083	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,		.....5	C598	2201-000180	C-CERAMIC,DISC:10NF,10%,50V,Y5V,TP,7X3MM	
.....5	T0083	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,		.....5	C598	2201-000247	C-CERAMIC,DISC:0.015NF,5%,50V,COG,TP,5X3	
.....5	T0083	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,		.....5	C598	2201-000247	C-CERAMIC,DISC:0.015NF,5%,50V,COG,TP,5X3	
.....5	T0083	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,		.....5	C598	2201-000376	C-CERAMIC,DISC:0.22NF,5%,50V,SL,TP,6.3X3	
.....5	T0083	0402-001105	DIODE-RECTIFIER:ERB43-04SV1,400V,1.0A,-,		.....5	C598	2201-000516	C-CERAMIC,DISC:4.7NF,+100-0%,500V,Y5U,TP	
.....5	DZ016	0403-001039	DIODE-ZENER:MA2560,56V,52-60V,1W,DO-41,T		.....5	C598	2201-000604	C-CERAMIC,DISC:0.056NF,+100-0%,500V,SL,T	
.....5	DZ016	0403-001039	DIODE-ZENER:MA2560,56V,52-60V,1W,DO-41,T		.....5	C598	2201-000653	C-CERAMIC,DISC:0.068NF,5%,50V,SL,TP,5X3M	
.....5	DZ016	0403-001211	DIODE-ZENER:MTZJ12B,11.44-12.03V,500mW,D		.....5	C598	2201-000723	C-CERAMIC,DISC:4.7NF,20%,3KV,Y5U,TP,16X5	
.....5	DZ016	0403-001325	DIODE-ZENER:MTZJ15C,14.35-15.09V,500mW,D		.....5	C598	2201-002108	C-CERAMIC,DISC:1.5NF,10%,500V,Y5P,TP,8.5	
.....5	DZ016	0403-001325	DIODE-ZENER:MTZJ15C,14.35-15.09V,500mW,D		.....5	C598	2201-002108	C-CERAMIC,DISC:1.5NF,10%,500V,Y5P,TP,8.5	
.....5	DZ016	0403-001328	DIODE-ZENER:MTZJ22A,20.15-21.20V,500mW,D		.....5	C598	2201-002108	C-CERAMIC,DISC:1.5NF,10%,500V,Y5P,TP,8.5	
.....5	T0156	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,TO-92,T		.....5	C2560	2301-000192	C-FILM,LEAD-PEF:1nF,5%,50V,TP,5.3x10mm,5	
.....5	T0156	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,TO-92,T		.....5	C2560	2301-000192	C-FILM,LEAD-PEF:1nF,5%,50V,TP,5.3x10mm,5	
.....5	T0156	0501-000283	TR-SMALL SIGNAL:KSA539,PNP,400mW,TO-92,T		.....5	C2560	2301-000224	C-FILM,LEAD-PEF:22nF,5%,50V,TP,7.4x3.9x1	
.....5	T0156	0501-000369	TR-SMALL SIGNAL:KSC2331,Y,NPN,1000mW,TO-		.....5	C2560	2301-000224	C-FILM,LEAD-PEF:22nF,5%,50V,TP,7.4x3.9x1	
.....5	T0156	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		.....5	C2560	2301-000224	C-FILM,LEAD-PEF:22nF,5%,50V,TP,7.4x3.9x1	
.....5	T0156	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		.....5	C2560	2301-000224	C-FILM,LEAD-PEF:22nF,5%,50V,TP,7.4x3.9x1	
.....5	T0090	0502-000244	TR-POWER:KSA940,PNP,1.5W,TO-220,-,40-14		.....5	C2560	2301-000224	C-FILM,LEAD-PEF:22nF,5%,50V,TP,7.4x3.9x1	
.....5	T0090	0502-001007	TR-POWER:KSC2073,H2,NPN,25W,TO-220,ST,6		.....5	C2560	2301-000224	C-FILM,LEAD-PEF:22nF,5%,50V,TP,7.4x3.9x1	
.....5	R503	2001-000085	R-CARBON(S):100KOHM,5%,1/2W,AA,TP,2.4X6.4		.....5	C2560	2301-000261	C-FILM,LEAD-PEF:4.7nF,5%,100V,TP,10.5x12	
.....5	R508	2001-000085	R-CARBON(S):100KOHM,5%,1/2W,AA,TP,2.4X6.4		.....5	C2560	2305-000149	C-FILM,LEAD-PEF:100nF,5%,100V,TP,12x12.5	
.....5	R513	2001-000085	R-CARBON(S):100KOHM,5%,1/2W,AA,TP,2.4X6.4		.....5	C2560	2305-000704	C-FILM,LEAD-PEF:100nF,5%,250V,TP,16.5x10	
.....5	R125	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C2560	2305-000704	C-FILM,LEAD-PEF:100nF,5%,250V,TP,16.5x10	
.....5	R125	2001-000221	R-CARBON:1.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C2560	2305-000704	C-FILM,LEAD-PEF:100nF,5%,250V,TP,16.5x10	
.....5	R125	2001-000241	R-CARBON:1.5KOHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C2560	2305-000704	C-FILM,LEAD-PEF:100nF,5%,250V,TP,16.5x10	
.....5	R125	2001-000241	R-CARBON:1.5KOHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C701	2401-000430	C-AL:10uF,20%,250V,GPT,10x16mm,5m	
.....5	R125	2001-000313	R-CARBON:1.1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C701	2401-000493	C-AL:10uF,20%,50V,VLZ,TP,5x11mm,5mm	
.....5	R125	2001-000362	R-CARBON:150OHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C701	2401-000832	C-AL:220uF,20%,25V,GPT,8x11.5,5	
.....5	R125	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C701	2401-000832	C-AL:220uF,20%,25V,GPT,8x11.5,5	
.....5	R125	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C701	2401-000832	C-AL:220uF,20%,25V,GPT,8x11.5,5	
.....5	R125	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C701	2401-000913	C-AL:22uF,20%,16V,GPT,5x11.5	
.....5	R125	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C701	2401-000913	C-AL:22uF,20%,16V,GPT,5x11.5	
.....5	R125	2001-000449	R-CARBON:2.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C701	2401-000913	C-AL:22uF,20%,16V,GPT,5x11.5	
.....5	R125	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C701	2401-000927	C-AL:22uF,20%,250V,GPT,13x20.5	
.....5	R125	2001-000515	R-CARBON:220OHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C701	2401-001232	C-AL:4.7uF,20%,250V,GPT,10x12.5,5	
.....5	R125	2001-000522	R-CARBON:22KOHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C701	2401-001563	C-AL:47uF,20%,400V,GPT,16x25,7.5	
.....5	R125	2001-000522	R-CARBON:22KOHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C701	2401-000025	C-AL:100uF,20%,16V,GPT,6.3x11.5	
.....5	R125	2001-000904	R-CARBON:620OHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	C701	2401-000025	C-AL:100uF,20%,16V,GPT,6.3x11.5	
.....5	R125	2001-000989	R-CARBON:820KOHM,5%,1/8W,AA,TP,1.8X3.2MM		.....5	LF02	2701-000112	INDUCTOR-AXIAL:100uH,10%,3070	
.....5	R517	2001-001062	R-CARBON(S):10MOHM,5%,1/2W,AA,TP,2.4X6.4		.....5	L501	2701-000178	INDUCTOR-AXIAL:33uH,10%,3070	
.....5	RF14	2001-001071	R-CARBON(S):12KOHM,5%,1/2W,AA,TP,2.4X6.4		.....5	L507	2701-000215	INDUCTOR-AXIAL:8.2uH,10%,2534	
.....5	R501	2001-001088	R-CARBON(S):1KOHM,5%,1/2W,AA,TP,2.4X6.4M		.....5	F101	2901-000297	FILTER-EMI ON BOARD:--3A,-,-,3.5x5,TP-	
.....5	R506	2001-001088	R-CARBON(S):1KOHM,5%,1/2W,AA,TP,2.4X6.4M		.....5	F101	2901-000297	FILTER-EMI ON BOARD:--3A,-,-,3.5x5,TP-	
.....5	R511	2001-001088	R-CARBON(S):1KOHM,5%,1/2W,AA,TP,2.4X6.4M		.....5	F101	2901-000297	FILTER-EMI ON BOARD:--3A,-,-,3.5x5,TP-	
.....5	R502	2001-001093	R-CARBON(S):2.2KOHM,5%,1/2W,AA,TP,2.4X6.4		.....5	L505	3301-000287	BEAD-AXIAL:3.5x1.0x6.0mm,1500,2400G	
.....5	R507	2001-001093	R-CARBON(S):2.2KOHM,5%,1/2W,AA,TP,2.4X6.4		.....5	L506	3301-000287	BEAD-AXIAL:3.5x1.0x6.0mm,1500,2400G	
.....5	R512	2001-001093	R-CARBON(S):2.2KOHM,5%,1/2W,AA,TP,2.4X6.4		.....5	LF01	3301-000287	BEAD-AXIAL:3.5x1.0x6.0mm,1500,2400G	
.....5	RF15	2001-001100	R-CARBON(S):2.7OHM,5%,1/2W,AA,TP,2.4X6.4		.....5	CN906	3711-002642	CONNECTOR-HEADER:BOX,3P,1R,2.5mm,STRAIGH	
.....5	RF17	2001-001100	R-CARBON(S):2.7OHM,5%,1/2W,AA,TP,2.4X6.4		.....5	CN906	3711-002643	CONNECTOR-HEADER:BOX,4P,1R,2.5mm,STRAIGH	
.....5	RG06	2001-001100	R-CARBON(S):2.7OHM,5%,1/2W,AA,TP,2.4X6.4		.....5	CN906	3711-002646	CONNECTOR-HEADER:BOX,7P,1R,2.5mm,STRAIGH	
.....5	RG07	2001-001100	R-CARBON(S):2.7OHM,5%,1/2W,AA,TP,2.4X6.4		.....5	SG501	AA27-00084A	COIL:S-23,-,-,-,-,-,S-23,5000Mohm MIN,	
.....5	RG05	2001-001163	R-CARBON(S):560OHM,5%,1/2W,AA,TP,2.4X6.4		.....5	SG503	AA27-00084A	COIL:S-23,-,-,-,-,-,S-23,5000Mohm MIN,	
.....5	RG08	2001-001163	R-CARBON(S):560OHM,5%,1/2W,AA,TP,2.4X6.4		.....5	SG504	AA27-00084A	COIL:S-23,-,-,-,-,-,S-23,5000Mohm MIN,	
.....5	RF13	2001-001179	R-CARBON(S):68KOHM,5%,1/2W,AA,TP,2.4X6.4		.....5	SG505	AA27-00084A	COIL:S-23,-,-,-,-,-,S-23,5000Mohm MIN,	
.....5	RF16	2001-001179	R-CARBON(S):68KOHM,5%,1/2W,AA,TP,2.4X6.4		.....5	EY501	6042-000002	EYELET:ID1.5,OD2,L2.8,Ni+SN,BSP3-1/2H	S.N.A
.....5	R519	2002-001009	R-COMPOSITION:2.7Kohm,10%,1/2W,AA,TP,3.7x9		.....5	EL81	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
.....5	R505	2002-001017	R-COMPOSITION:1Kohm,10%,1/2W,AA,TP,3.7x9		.....5	EL82	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
.....5	R510	2002-001017	R-COMPOSITION:1Kohm,10%,1/2W,AA,TP,3.7x9		.....5	EL83	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
.....5	R515	2002-001017	R-COMPOSITION:1Kohm,10%,1/2W,AA,TP,3.7x9		.....5	EL84	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
.....5	RF18	2003-000458	R-METAL OXIDE(S):100ohm,5%,2W,AF,TP,4x12m		.....5	EL85	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
.....5	RF23	2003-000746	R-METAL OXIDE(S):56ohm,5%,2W,AF,TP,4x12m		.....5	EL86	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
.....5	RF24	2003-000746	R-METAL OXIDE(S):56ohm,5%,2W,AF,TP,4x12m		.....5	EL87	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
.....5	RF19	2003-001023	R-METAL OXIDE(S):120ohm,5%,2W,AF,TP,3.9x		.....5	EL88	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
.....5	RF25	2003-002009	R-METAL OXIDE(S):390ohm,5%,2W,AF,TP,3.9x		.....5	EL89	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
.....5					.....5	EL90	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
....5	EL91	6042-000001	EYELET:ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H	S.N.A	...3	M0018	AA97-13625B	ASSY MICOM; K3SA,SDA555X,SIM812EA3,02111	
....5	EL92	6042-000001	EYELET:ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H	S.N.A	...4	T0119	AA09-00041A	IC MICOM; SDA555X-OTP,3.3V,-,128K,SDIP,-	S.N.A
....5	EL93	6042-000001	EYELET:ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H	S.N.A	...3		AA97-13970A	ASSY AUTO-MAIN:CS29K10M0QBSX5,K51A,INDON	S.N.A
....5	EL94	6042-000001	EYELET:ID2.2,OD2.7,L3.1,NI+SN,BSP3-1/2H	S.N.A	...4	D211	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....5	GT504	AA60-40014A	PIN-GT,ASSY:AUTO	S.N.A	...4	D602	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....5	GT505	AA60-40014A	PIN-GT,ASSY:AUTO	S.N.A	...4	D604	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....5	GT507	AA60-40014A	PIN-GT,ASSY:AUTO	S.N.A	△...4	D804	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....5	GT508	AA60-40014A	PIN-GT,ASSY:AUTO	S.N.A	...4	D906	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....5	PCB	AA41-00210D	PCB-CRT:CS29A6,FR-1,1L,D,1.6T,330x245,KS	S.N.A	...4	DZ402	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
...3	T0016	AA95-01854C	ASSY SUB-PCB,VIDEO S/W:29A6,K33APAL,AA95		...4	D201	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
...4		0202-000187	SOLDER-WIRE FLUX:-,RS60S,D1,2.63Sn/37Pb	S.N.A	...4	D202	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
...4	IC106	1001-001114	IC-VIDEO SWITCH:TEA6425,VIDEO SWITCH,DI		...4	D207	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
...4	CN906	3711-002704	CONNECTOR-HEADER:NOWALL,6P,1R,2.5mm,ANGL		...4	D210	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
...4	CN906	3711-002706	CONNECTOR-HEADER:NOWALL,8P,1R,2.5mm,ANGL		...4	D209	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
...4		AA97-05147A	ASSY AUTO-VIDEO S/W:TXM3292,K3SA,AA41-00	S.N.A	...4	D208	0401-000005	DIODE-SWITCHING:1N4148,100V,200mA,DO-35,	
....5	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		...4	T0083	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
....5	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500		...4	T0083	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
....5	T0156	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		...4	T0083	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
....5	T0156	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		...4	T0083	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
....5	T0156	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T		...4	T0083	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
....5	R125	2001-000281	R-CARBON:100OHM,5%,1/8W,AA,TP,1.8X3.2MM		...4	T0083	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
....5	R125	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4	T0083	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP	
....5	R125	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4	T0083	0402-000493	DIODE-RECTIFIER:1R5GU41,400V,1.5A,DO-15L	
....5	R125	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4	T0083	0402-000493	DIODE-RECTIFIER:1R5GU41,400V,1.5A,DO-15L	
....5	R125	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4	T0083	0402-000534	DIODE-RECTIFIER:RG10V,400V,1.2A,DO-201,T	
....5	R125	2001-000429	R-CARBON:1KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4	T0083	0402-000537	DIODE-RECTIFIER:RHTA,600V,0.6A,DO-204AC	
....5	R125	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4	T0083	0402-000540	DIODE-RECTIFIER:RU20A,600V,1.5A,-,TP	
....5	R125	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4	T0083	0402-000540	DIODE-RECTIFIER:RU20A,600V,1.5A,-,TP	
....5	R125	2001-000734	R-CARBON:4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM		...4	T0083	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,T	
....5	C2560	2305-000412	C-FILM,LEAD-PEF:470nF,5%,63V,TP,-,5mm		...4	T0083	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,T	
....5	C2560	2305-000412	C-FILM,LEAD-PEF:470nF,5%,63V,TP,-,5mm		...4	T0083	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,T	
....5	C2560	2305-000412	C-FILM,LEAD-PEF:470nF,5%,63V,TP,-,5mm		...4	T0083	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,T	
....5	C2560	2305-000412	C-FILM,LEAD-PEF:470nF,5%,63V,TP,-,5mm		...4	T0083	0402-001111	DIODE-RECTIFIER:1N5397GP,600V,1.5A,DO-20	
....5	C2560	2305-000412	C-FILM,LEAD-PEF:470nF,5%,63V,TP,-,5mm		...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....5	C2560	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x		...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....5	C701	2401-002009	C-AL:100uF,20%,16V,GP,TP,6.3x7.5		...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....5	LS01	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534		...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....5	CN906	3711-002642	CONNECTOR-HEADER:BOX,3P,1R,2.5mm,STRAIGH		...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
....5	0	AA41-00153E	PCB-VIDEO SWITCH:CS29A6,FR-1,1LE,1.6T,2	S.N.A	...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
...3	IC804	AA96-00243C	ASSY H/S:-,REGULATOR,AA62-00045A,KA7806,	S.N.A	...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
...4		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A	...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
...4	T0087	1203-000284	IC-POSI.FIXED REG.:7806,TO-220,3P,-,PLAS		...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
...4	T0081	6003-000335	SCREW-TAPTITE:RH,+2S,M3,L8,ZPC(YEL),SWR	S.N.A	...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
...4		AA62-00045A	HEAT SINK-PS:-,T1.0,-,DREAM,-,-,-,-,-	S.N.A	...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
...4	HC401	AA96-00275A	ASSY H/S:-,COMPLEX,AA62-00051A,KSD5703,	S.N.A	...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
...4		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A	...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
...4	T0083	0402-001296	DIODE-RECTIFIER:FMP-3FU,1.5KV,5A,TO-3PF,		...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
...4	T0090	0502-001136	TR-POWER:KSD5703,NPN,70W,TO-3PF,ST-8-		...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
...4	T0081	6003-000333	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SW	S.N.A	...4	DZ016	0403-000508	DIODE-ZENER:MTZJ5.6B,5.6V,5.45-5.73V,500	
...4		AA60-30001A	WASHER-PLATE:M3,ID3.5,15X8.5,T1.0,SBHG	S.N.A	...4	DZ016	0403-000700	DIODE-ZENER:TZP33A,33V,31-35V,1W,DO-41,T	
...4		AA62-00051A	HEAT SINK-PS:-,SILVER,HOLE 31mm,ALL,	S.N.A	...4	DZ016	0403-000700	DIODE-ZENER:TZP33A,33V,31-35V,1W,DO-41,T	
△...3	D801S	AA96-00276C	ASSY H/S:-,BRIDGE,AA62-00052A,GSIB660,K	S.N.A	...4	DZ016	0403-000720	DIODE-ZENER:MTZJ9.1B,9.1V,8.57-9.01V,500	
...4		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A	...4	DZ016	0403-001167	DIODE-ZENER:MTZJ30D,30V,29.02-30.51V,500	
...4	T0083	0402-001399	DIODE-BRIDGE:GSIB660,600V,6A,SIP-4,BK		...4	DZ016	0403-001221	DIODE-ZENER:UZ39BSB,35.36-37.19V,500mW,D	
...4	T0081	6003-000335	SCREW-TAPTITE:RH,+2S,M3,L8,ZPC(YEL),SWR	S.N.A	...4	DZ016	0403-001321	DIODE-ZENER:MTZJ6.8C,6.66-7.01V,500mW,DO	
...4		AA60-30003A	WASHER:T1.5,SBHG-1	S.N.A	...4	DZ016	0403-001322	DIODE-ZENER:MTZJ8.2B,7.78-8.19V,500mW,DO	
...4		AA62-00052A	HEAT SINK-PS:-,SILVER,HOLE 18.5mm, 2	S.N.A	...4	DZ016	0403-001322	DIODE-ZENER:MTZJ8.2B,7.78-8.19V,500mW,DO	
...3	LD901	AA96-00461A	ASSY LED GUIDE:-,SL-255D,RED/GRN	S.N.A	...4	DZ016	0403-001325	DIODE-ZENER:MTZJ15C,14.35-15.09V,500mW,D	
...3	HC801	AA96-00475A	ASSY H/S:-,REGULATOR,AA62-00066B,FML-G12	S.N.A	...4	DZ016	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,D	
...4		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A	...4	DZ016	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,D	
...4	T0083	0402-000233	DIODE-RECTIFIER:FML-G12S,200V,5A,-,-		...4	DZ016	0403-001329	DIODE-ZENER:MTZJ24B,22.61-23.77V,500mW,D	
...4	T0083	0402-001230	DIODE-RECTIFIER:FMG-G2CS,1000V,3A,TO-220		...4	C1Z	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
...4	T0123	1203-001006	IC-VOLTAGE REGULATOR:78R05,TO-220F,4P,-		...4	C1Z	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
...4	T0081	6003-000334	SCREW-TAPTITE:RH,+2S,M3,L6,ZPC(YEL),SWR		...4	C1Z	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
...4		AA62-00066B	HEAT SINK:D2,D3,AL,T1.0,89,70,-,AA62-00	S.N.A	...4	C1Z	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
...3	IC602	AA96-50369B	ASSY H/S:-,AA62-30181F,TDA7297,-	S.N.A	...4	C1Z	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
...4		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A	...4	C1Z	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
...4	T0124	1201-001064	IC-POWER AMP:7297,ZIP:15P,-,DUAL,32dB,PL		...4	C1Z	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
...4	T0081	6003-000333	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SW	S.N.A	...4	C1Z	0404-000156	DIODE-SCHOTTKY:RB441Q,10V,100mA,DO-34,TP	
...4		AA62-30181F	HEAT SINK-ES:-,AL6063 EXTR.,2,WHT,50MM,-	S.N.A	...4	T0156	0501-000369	TR-SMALL SIGNAL:KSC2331-Y,NPN,1000mW,TO-	
△...3	IC801S	AA96-50371F	ASSY H/S:-,PWM,AA62-30181H,KA3S1265RB,IC	S.N.A	...4	T0156	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
...4		0205-000129	GREASE-SILICON:SC102,JAPAN	S.N.A	...4	T0156	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
...4	T0081	6003-000333	SCREW-TAPTITE:RH,+2S,M3,L10,ZPC(YEL),SW	S.N.A	...4	T0156	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
...4	IC063	AA13-00101A	IC HYBRID:KA3S1265RD,CN5039,SPIN,-,50T012		...4	T0156	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
...4		AA61-10386A	BRACKET-IC:100,SECC,T1.0,KA250680	S.N.A	...4	T0156	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	
...4		AA62-30181H	HEAT SINK-ES:-,AL6063 EXTR.,2,WHT,50MM,-	S.N.A	...4	T0156	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,T	

Electrical Parts List

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
...	R402	2003-000586	R-METAL OXIDE(S):22Kohm,5%,2W,AF,TP,4x12		...	C689	2202-000121	C-CERAMIC,MLC-AXIAL-100pf,10%,50V,Y5P,TP	
...	R233	2003-000592	R-METAL OXIDE(S):22ohm,5%,2W,AF,TP,4x12mm		...	C689	2202-000121	C-CERAMIC,MLC-AXIAL-100pf,10%,50V,Y5P,TP	
...	R434	2003-000664	R-METAL OXIDE(S):33ohm,5%,2W,AF,TP,4x12mm		...	C689	2202-000121	C-CERAMIC,MLC-AXIAL-100pf,10%,50V,Y5P,TP	
...	R802	2003-001025	R-METAL OXIDE(S):15Kohm,5%,2W,AF,TP,3.9x		...	C689	2202-000121	C-CERAMIC,MLC-AXIAL-100pf,10%,50V,Y5P,TP	
...	R803	2003-001025	R-METAL OXIDE(S):15Kohm,5%,2W,AF,TP,3.9x		...	C689	2202-000121	C-CERAMIC,MLC-AXIAL-100pf,10%,50V,Y5P,TP	
...	R804	2003-001025	R-METAL OXIDE(S):15Kohm,5%,2W,AF,TP,3.9x		...	C689	2202-000127	C-CERAMIC,MLC-AXIAL-10nf,+80-20%,25V,Y5V	
...	R433	2003-001042	R-METAL OXIDE(S):5.6Kohm,5%,2W,AF,TP,3.9		...	C689	2202-000183	C-CERAMIC,MLC-AXIAL-2.2NF,20%,16V,Y5R,TP	
...	R403	2003-001091	R-METAL OXIDE(S):10ohm,5%,2W,AF,TP,4x12mm		...	C689	2202-000210	C-CERAMIC,MLC-AXIAL-270pf,10%,50V,Y5P,TP	
...	R436	2003-002008	R-METAL OXIDE(S):18Kohm,5%,2W,AF,TP,3.9x		...	C689	2202-000210	C-CERAMIC,MLC-AXIAL-270pf,10%,50V,Y5P,TP	
...	R410	2003-002009	R-METAL OXIDE(S):390ohm,5%,2W,AF,TP,3.9x		...	C689	2202-000231	C-CERAMIC,MLC-AXIAL-0.33NF,10%,50V,Y5P,T	
...	R409	2003-002009	R-METAL OXIDE(S):390ohm,5%,2W,AF,TP,3.9x		...	C689	2202-000231	C-CERAMIC,MLC-AXIAL-0.33NF,10%,50V,Y5P,T	
...	R305	2003-002157	R-METAL OXIDE:220OHM,5%,2W,AG,TP,6X16MM		...	C689	2202-000231	C-CERAMIC,MLC-AXIAL-0.33NF,10%,50V,Y5P,T	
...	R306	2003-002157	R-METAL OXIDE:220OHM,5%,2W,AG,TP,6X16MM		...	C689	2202-000231	C-CERAMIC,MLC-AXIAL-0.33NF,10%,50V,Y5P,T	
...	R836	2003-002181	R-METAL OXIDE(S):68Kohm,5%,2W,AG,TP,3.9x		...	C689	2202-000231	C-CERAMIC,MLC-AXIAL-0.33NF,10%,50V,Y5P,T	
...	R835	2003-002181	R-METAL OXIDE(S):68Kohm,5%,2W,AG,TP,3.9x		...	C689	2202-000231	C-CERAMIC,MLC-AXIAL-0.33NF,10%,50V,Y5P,T	
...	R620	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-000231	C-CERAMIC,MLC-AXIAL-0.33NF,10%,50V,Y5P,T	
...	R609	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-000231	C-CERAMIC,MLC-AXIAL-0.33NF,10%,50V,Y5P,T	
...	R606	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-000231	C-CERAMIC,MLC-AXIAL-0.33NF,10%,50V,Y5P,T	
...	R310	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-000243	C-CERAMIC,MLC-AXIAL-33pf,5%,50V,SL,TP,3.	
...	R629	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-000243	C-CERAMIC,MLC-AXIAL-33pf,5%,50V,SL,TP,3.	
...	R715	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-000243	C-CERAMIC,MLC-AXIAL-33pf,5%,50V,SL,TP,3.	
...	R716	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-000263	C-CERAMIC,MLC-AXIAL-470pf,10%,50V,Y5P,TP	
...	R935	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-000286	C-CERAMIC,MLC-AXIAL-56pf,5%,50V,SL,TP,1.	
...	R952	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-000796	C-CERAMIC,MLC-AXIAL-1NF,10%,50V,Y5P,TP,3	
...	R202	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-000796	C-CERAMIC,MLC-AXIAL-1NF,10%,50V,Y5P,TP,3	
...	R205	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-000796	C-CERAMIC,MLC-AXIAL-1NF,10%,50V,Y5P,TP,3	
...	R206	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-000796	C-CERAMIC,MLC-AXIAL-1NF,10%,50V,Y5P,TP,3	
...	R211	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-000806	C-CERAMIC,MLC-AXIAL-220pf,10%,50V,Y5P,TP	
...	R212	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-000849	C-CERAMIC,MLC-AXIAL-0.018NF,5%,50V,COG,T	
...	R309	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-000863	C-CERAMIC,MLC-AXIAL-560pf,10%,50V,Y5P,TP	
...	R246	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-002037	C-CERAMIC,MLC-AXIAL-100nf,80-20%,50V,Y5V	
...	R245	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-002037	C-CERAMIC,MLC-AXIAL-100nf,80-20%,50V,Y5V	
...	R243	2004-000218	R-METAL:10Kohm,1%,1/8W,AA,TP,1.8x3.2mm		...	C689	2202-002037	C-CERAMIC,MLC-AXIAL-100nf,80-20%,50V,Y5V	
...	R313	2004-001137	R-METAL:6.8Kohm,1%,1/8W,AA,TP,1.8x3.2m		...	C689	2202-002037	C-CERAMIC,MLC-AXIAL-100nf,80-20%,50V,Y5V	
...	R024	2004-001382	R-METAL(S):13Kohm,1%,1/2W,AA,TP,2.4x6.4m		...	C689	2202-002037	C-CERAMIC,MLC-AXIAL-100nf,80-20%,50V,Y5V	
...	R024	2004-001397	R-METAL(S):4.7Kohm,1%,1/2W,AA,TP,2.4x6.4		...	C689	2202-002037	C-CERAMIC,MLC-AXIAL-100nf,80-20%,50V,Y5V	
...	R024	2004-001402	R-METAL(S):6.8Kohm,1%,1/2W,AA,TP,2.4x6.4		...	C689	2202-002037	C-CERAMIC,MLC-AXIAL-100nf,80-20%,50V,Y5V	
...	R024	2004-001408	R-METAL(S):91Kohm,1%,1/2W,AA,TP,2.4x6.4m		...	C689	2202-002037	C-CERAMIC,MLC-AXIAL-100nf,80-20%,50V,Y5V	
...	R024	2004-001891	R-METAL(S):133Kohm,1%,1/2W,AA,TP,2.5x6.5		...	C689	2202-002037	C-CERAMIC,MLC-AXIAL-100nf,80-20%,50V,Y5V	
...	R024	2004-001983	R-METAL(S):2.49Kohm,1%,1/2W,AA,TP,2.4x6.		...	C689	2202-002037	C-CERAMIC,MLC-AXIAL-100nf,80-20%,50V,Y5V	
...	R024	2004-001984	R-METAL(S):26.7Kohm,1%,1/2W,AA,TP,2.4x6.		...	C689	2202-002037	C-CERAMIC,MLC-AXIAL-100nf,80-20%,50V,Y5V	
...	R024	2004-001986	R-METAL(S):35.7Kohm,1%,1/2W,AA,TP,2.4x6.		...	C2560	2301-000108	C-FILM,LEAD-PEF:1.5nf,5%,50V,TP,6.5x3.0x	
...	R024	2004-004048	R-METAL(S):3.9Kohm,1%,1/2W,AA,TP,2.5x6.5		...	C2560	2301-000192	C-FILM,LEAD-PEF:1nf,5%,50V,TP,5.3x10mm,5	
...	R024	2004-004048	R-METAL(S):3.9Kohm,1%,1/2W,AA,TP,2.5x6.5		...	C2560	2301-000192	C-FILM,LEAD-PEF:1nf,5%,50V,TP,5.3x10mm,5	
...	R024	2004-004970	R-METAL(S):62Kohm,1%,1/8W,AA,TP,1.8x3.2m		...	C2560	2301-000213	C-FILM,LEAD-PEF:220nf,5%,250V,TP,21.5x11	
...	R807	2006-001083	R-CEMENT:120ohm,5%,5W,CJ,TP,14x10x27mm		...	C2560	2301-000224	C-FILM,LEAD-PEF:22nf,5%,50V,TP,7.4x3.9x1	
...	R405	2008-000253	R-FUSIBLE(S):0.47ohm,5%,1W,AF,TP,3.9x10m		...	C2560	2301-000224	C-FILM,LEAD-PEF:22nf,5%,50V,TP,7.4x3.9x1	
...	R414	2008-000253	R-FUSIBLE(S):0.47ohm,5%,1W,AF,TP,3.9x10m		...	C2560	2301-000232	C-FILM,LEAD-PEF:3.3nf,5%,50V,TP,8.1x4.5x	
...	R304	2008-000254	R-FUSIBLE(S):0.68ohm,5%,2W,AF,TP,3.9x10m		...	C2560	2301-000310	C-FILM,LEAD-PEF:68nf,5%,50V,TP,8.0x8.5x4	
...	R828	2008-000266	R-FUSIBLE(S):1ohm,5%,2W,AF,TP,3.9x10mm		...	C2560	2301-000313	C-FILM,LEAD-PEF:8.2nf,5%,100V,TP,7x3.2x7	
...	R829	2008-000266	R-FUSIBLE(S):1ohm,5%,2W,AF,TP,3.9x10mm		...	C2560	2301-000342	C-FILM,LEAD-PEF:2.2nf,5%,50V,TP,7.4x3.9x	
...	R827	2008-000284	R-FUSIBLE(S):0.1OHM,10%,2W,AF,TP,3.9X10M		...	C2560	2301-000356	C-FILM,LEAD-PEF:47nf,5%,50V,TP,7.5x4.0x6	
...	R425	2008-001018	R-FUSIBLE(S):0.47ohm,10%,2W,AF,TP,3.9x10		...	C2560	2301-000356	C-FILM,LEAD-PEF:47nf,5%,50V,TP,7.5x4.0x6	
...	R424	2008-001018	R-FUSIBLE(S):0.47ohm,10%,2W,AF,TP,3.9x10		...	C2560	2301-000356	C-FILM,LEAD-PEF:47nf,5%,50V,TP,7.5x4.0x6	
...	R413	2008-001018	R-FUSIBLE(S):0.47ohm,10%,2W,AF,TP,3.9x10		...	C2560	2301-000356	C-FILM,LEAD-PEF:47nf,5%,50V,TP,7.5x4.0x6	
...	C598	2201-000132	C-CERAMIC,DISC:0.1NF,10%,500V,Y5P,TP,6.5		...	C2560	2301-000356	C-FILM,LEAD-PEF:47nf,5%,50V,TP,7.5x4.0x6	
...	C598	2201-000304	C-CERAMIC,DISC:0.001NF,0.25PF,50V,COG,TP		...	C2560	2301-000383	C-FILM,LEAD-PEF:10nf,5%,50V,TP,6x7x3.2mm	
...	C598	2201-000304	C-CERAMIC,DISC:0.001NF,0.25PF,50V,COG,TP		...	C2560	2301-000383	C-FILM,LEAD-PEF:10nf,5%,50V,TP,6x7x3.2mm	
...	C598	2201-000332	C-CERAMIC,DISC:2.2NF,20%,250V,Y5U,TP,9X4		...	C2560	2301-000383	C-FILM,LEAD-PEF:10nf,5%,50V,TP,6x7x3.2mm	
...	C598	2201-000332	C-CERAMIC,DISC:2.2NF,20%,250V,Y5U,TP,9X4		...	C2560	2301-000445	C-FILM,LEAD-PEF:4.7nf,5%,50V,TP,5.5x7x3m	
...	C598	2201-000374	C-CERAMIC,DISC:0.22NF,5%,50V,COG,TP,10.5		...	C2560	2301-000445	C-FILM,LEAD-PEF:4.7nf,5%,50V,TP,5.5x7x3m	
...	C598	2201-000406	C-CERAMIC,DISC:0.27NF,10%,2KV,Y5P,TP,6.3		...	C2560	2301-000445	C-FILM,LEAD-PEF:4.7nf,5%,50V,TP,5.5x7x3m	
...	C598	2201-000556	C-CERAMIC,DISC:0.47NF,10%,500V,Y5P,TP,5.		...	C420	2301-001065	C-FILM,LEAD-PPF:47nf,5%,630V,TP,19x15.5x	
...	C598	2201-000556	C-CERAMIC,DISC:0.47NF,10%,500V,Y5P,TP,5.		...	C425	2301-001259	C-FILM,LEAD-PPF:100nf,5%,400V,TP,19x8x16	
...	C598	2201-000556	C-CERAMIC,DISC:0.47NF,10%,500V,Y5P,TP,5.		...	C409	2301-001268	C-FILM,LEAD-PPF:33nf,5%,630V,TP,20x11x17	
...	C598	2201-000558	C-CERAMIC,DISC:0.47NF,10%,50V,Y5P,TP,5X3		...	C807	2301-001397	C-FILM,LEAD-PPF:2.2nf,5%,1.2KV,TP,15x8.5	
...	C598	2201-000599	C-CERAMIC,DISC:0.56NF,10%,500V,Y5P,TP,5.		...	C2560	2305-000149	C-FILM,LEAD-PEF:100nf,5%,100V,TP,12x12.5	
...	C598	2201-000599	C-CERAMIC,DISC:0.56NF,10%,500V,Y5P,TP,5.		...	C2560	2305-000285	C-FILM,LEAD-PEF:220NF,5%,100V,TP,10.5X5.	
...	C598	2201-000599	C-CERAMIC,DISC:0.56NF,10%,500V,Y5P,TP,5.		...	C2560	2305-000382	C-FILM,LEAD-PEF:4.7nf,5%,400V,TP,.5mm	
...	C598	2201-000599	C-CERAMIC,DISC:0.56NF,10%,500V,Y5P,TP,5.		...	C2560	2305-000411	C-FILM,LEAD-PEF:470nf,5%,50V,TP,7.3x4.8x	
...	C598	2201-000611	C-CERAMIC,DISC:0.056NF,5%,50V,COG,TP,7X3		...	C2560	2305-000411	C-FILM,LEAD-PEF:470nf,5%,50V,TP,7.3x4.8x	
...	C598	2201-000980	C-CERAMIC,DISC:0.03NF,5%,50V,COG,TP,5X3M		...	C2560	2305-000411	C-FILM,LEAD-PEF:470nf,5%,50V,TP,7.3x4.8x	
...	C598	2201-000980	C-CERAMIC,DISC:0.03NF,5%,50V,COG,TP,5X3M		...	C2560	2305-000411	C-FILM,LEAD-PEF:470nf,5%,50V,TP,7.3x4.8x	
...	C598	2201-002031	C-CERAMIC,DISC:0.005NF,0.5PF,50V,COG,TP,		...	C2560	2305-000411	C-FILM,LEAD-PEF:470nf,5%,50V,TP,7.3x4.8x	
...	C598	2201-002031	C-CERAMIC,DISC:0.005NF,0.5PF,50V,COG,TP,		...	C2560	2305-000411	C-FILM,LEAD-PEF:470nf,5%,50V,TP,7.3x4.8x	
...	C598	2201-002103	C-CERAMIC,DISC:0.015NF,5%,500V,COG,TP,6.		...	C2560	2305-000665	C-FILM,LEAD-PEF:100nf,5%,63V,TP,7.5x4.0x	



Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark	
...	4	C2560	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x		...	CW901	2503-000156	C-NETWORK:100pF,4.20%,50V	
...	4	C2560	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x		...	L907	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534	
...	4	C2560	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x		...	L406	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534	
...	4	C2560	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x		...	L301	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534	
...	4	C2560	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x		...	L202	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534	
...	4	C2560	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x		...	J401	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534	
...	4	C2560	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x		...	L108	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534	
...	4	C2560	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x		...	L109	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534	
...	4	C2560	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x		...	L103	2701-000115	INDUCTOR-AXIAL:10uH,10%,3070	
...	4	C2560	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x		...	L714	2701-000142	INDUCTOR-AXIAL:1uH,10%,2534	
...	4	C2560	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x		...	L713	2701-000142	INDUCTOR-AXIAL:1uH,10%,2534	
...	4	C2560	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x		...	L712	2701-000142	INDUCTOR-AXIAL:1uH,10%,2534	
...	4	C2560	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x		...	L710	2701-000142	INDUCTOR-AXIAL:1uH,10%,2534	
...	4	C2560	2305-000665	C-FILM,LEAD-PEF:100nF,5%,63V,TP,7.5x4.0x		...	L709	2701-000142	INDUCTOR-AXIAL:1uH,10%,2534	
...	4	C701	2401-000025	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		...	L208	2701-000146	INDUCTOR-AXIAL:2.2uH,10%,2534	
...	4	C701	2401-000025	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		...	L212	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2534	
...	4	C701	2401-000025	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		...	L210	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2534	
...	4	C701	2401-000025	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		...	L209	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2534	
...	4	C701	2401-000025	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		...	L604	2701-000169	INDUCTOR-AXIAL:3.9uH,10%,2534	
...	4	C701	2401-000025	C-AL:100uF,20%,16V,GP,TP,6.3x11,5		...	L608	2701-000177	INDUCTOR-AXIAL:33uH,10%,2534	
...	4	C701	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5		...	L705	2701-000177	INDUCTOR-AXIAL:33uH,10%,2534	
...	4	C701	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5		...	L706	2701-000177	INDUCTOR-AXIAL:33uH,10%,2534	
...	4	C701	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5		...	L607	2701-000177	INDUCTOR-AXIAL:33uH,10%,2534	
...	4	C701	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5		...	J920	2701-000177	INDUCTOR-AXIAL:33uH,10%,2534	
...	4	C701	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5		...	L605	2701-000177	INDUCTOR-AXIAL:33uH,10%,2534	
...	4	C701	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5		...	L606	2701-000177	INDUCTOR-AXIAL:33uH,10%,2534	
...	4	C701	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5		...	J919	2701-000183	INDUCTOR-AXIAL:39uH,5%,2534	
...	4	C701	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5		...	L902	2701-000184	INDUCTOR-AXIAL:4.7uH,10%,2534	
...	4	C701	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5		...	L204	2701-000184	INDUCTOR-AXIAL:4.7uH,10%,2534	
...	4	C701	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5		...	L908	2701-000191	INDUCTOR-AXIAL:47uH,10%,2534	
...	4	C701	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5		...	L909	2701-000191	INDUCTOR-AXIAL:47uH,10%,2534	
...	4	C701	2401-000050	C-AL:10uF,20%,16V,GP,TP,5x11,2,5		...	L904	2702-001094	INDUCTOR-RADIAL:10uH,10%,4x6mm	
...	4	C701	2401-000262	C-AL:100uF,20%,160V,HR,TP,16x25,7,5		...	L903	2702-001094	INDUCTOR-RADIAL:10uH,10%,4x6mm	
...	4	C701	2401-000287	C-AL:100uF,20%,16V,WT,TP,6.3x11,5		...	L901	2702-001094	INDUCTOR-RADIAL:10uH,10%,4x6mm	
...	4	C701	2401-000287	C-AL:100uF,20%,16V,WT,TP,6.3x11,5		...	L609	2702-001094	INDUCTOR-RADIAL:10uH,10%,4x6mm	
...	4	C701	2401-000360	C-AL:100uF,20%,50V,GP,TP,8x11,5,5		...	L203	2702-001094	INDUCTOR-RADIAL:10uH,10%,4x6mm	
...	4	C701	2401-000360	C-AL:100uF,20%,50V,GP,TP,8x11,5,5		...	L216	2702-001094	INDUCTOR-RADIAL:10uH,10%,4x6mm	
...	4	C701	2401-000450	C-AL:10uF,20%,25V,WT,TP,5x11,5		...	L601	2702-001094	INDUCTOR-RADIAL:10uH,10%,4x6mm	
...	4	C701	2401-000450	C-AL:10uF,20%,25V,WT,TP,5x11,5		...	X901	2801-003728	CRYSTAL-UNIT:6MHz,30ppm,28-AAM,20pF,40oh	
...	4	C701	2401-000493	C-AL:10uF,20%,50V,LZ,TP,5x11mm,5mm		...	F101	2901-000297	FILTER-EMI ON BOARD:3A,3.5x5,TP-	
...	4	C701	2401-000493	C-AL:10uF,20%,50V,LZ,TP,5x11mm,5mm		...	F101	2901-000297	FILTER-EMI ON BOARD:3A,3.5x5,TP-	
...	4	C701	2401-000493	C-AL:10uF,20%,50V,LZ,TP,5x11mm,5mm		...	F101	2901-000297	FILTER-EMI ON BOARD:3A,3.5x5,TP-	
...	4	C701	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,2		...	F101	2901-000297	FILTER-EMI ON BOARD:3A,3.5x5,TP-	
...	4	C701	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,2		...	L802	3301-000287	BEAD-AXIAL:3.5x1.0x6.0mm,1500,2400G	
...	4	C701	2401-000611	C-AL:1uF,20%,50V,WT,TP,5x11,5		...	L803	3301-000287	BEAD-AXIAL:3.5x1.0x6.0mm,1500,2400G	
...	4	C701	2401-000611	C-AL:1uF,20%,50V,WT,TP,5x11,5		...	L804	3301-000287	BEAD-AXIAL:3.5x1.0x6.0mm,1500,2400G	
...	4	C701	2401-000722	C-AL:2200uF,20%,25V,WT,TP,16x25,7,5		...	L809	3301-000287	BEAD-AXIAL:3.5x1.0x6.0mm,1500,2400G	
...	4	C701	2401-000913	C-AL:22uF,20%,16V,GP,TP,5x11,5		...	L410	3301-000287	BEAD-AXIAL:3.5x1.0x6.0mm,1500,2400G	
...	4	C701	2401-001026	C-AL:3.3uF,20%,50V,GP,TP,5x11,5		...	J901	3301-000287	BEAD-AXIAL:3.5x1.0x6.0mm,1500,2400G	
...	4	C701	2401-001026	C-AL:3.3uF,20%,50V,GP,TP,5x11,5		...	L207	3301-000287	BEAD-AXIAL:3.5x1.0x6.0mm,1500,2400G	
...	4	C701	2401-001026	C-AL:3.3uF,20%,50V,GP,TP,5x11,5		...	L302	3301-000287	BEAD-AXIAL:3.5x1.0x6.0mm,1500,2400G	
...	4	C701	2401-001397	C-AL:470uF,20%,25V,GP,TP,10x16,5		...	L303	3301-000287	BEAD-AXIAL:3.5x1.0x6.0mm,1500,2400G	
...	4	C701	2401-001397	C-AL:470uF,20%,25V,GP,TP,10x16,5		...	L806	3301-001223	BEAD-AXIAL-AA:62ohm,3.5x0.8x5mm,-,TPHF3	
...	4	C701	2401-001527	C-AL:47uF,20%,250V,HR,TP,13x25mm,5mm		...	L801	3301-001223	BEAD-AXIAL-AA:62ohm,3.5x0.8x5mm,-,TPHF3	
...	4	C701	2401-001914	C-AL:1uF,20%,50V,BP,TP,5x11,5		...	FA802S	3601-001086	FUSE-AXIAL LEAD:125V,5A,FAST-ACTING,GLAS	
...	4	C701	2401-001914	C-AL:1uF,20%,50V,BP,TP,5x11,5		...	FA803S	3601-001228	FUSE-AXIAL LEAD:125V,10A,FAST-ACTING,EPO	
...	4	C701	2401-001914	C-AL:1uF,20%,50V,BP,TP,5x11,5		...	F801B	3602-000114	FUSE-HOLDER:30mohm	
...	4	C701	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11,5		...	F801A	3602-000114	FUSE-HOLDER:30mohm	
...	4	C701	2401-001989	C-AL:4.7uF,20%,50V,BP,TP,5x11,5		...	CN906	3711-002644	CONNECTOR-HEADER:BOX,5P,1R,2.5mm,STRAIGH	
...	4	C701	2401-002075	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		...	CN906	3711-002646	CONNECTOR-HEADER:BOX,7P,1R,2.5mm,STRAIGH	
...	4	C701	2401-002075	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		...	CN906	3711-002646	CONNECTOR-HEADER:BOX,7P,1R,2.5mm,STRAIGH	
...	4	C701	2401-002075	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		...	CN906	3711-002646	CONNECTOR-HEADER:BOX,8P,1R,2.5mm,STRAIGH	
...	4	C701	2401-002075	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		...	EL807	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
...	4	C701	2401-002075	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		...	EL806	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
...	4	C701	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5		...	EL805	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
...	4	C701	2401-002267	C-AL:2.2uF,20%,250V,GP,TP,8x11,5,5		...	EL803	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
...	4	C701	2401-002289	C-AL:470uF,20%,35V,WT,TP,10x20,5		...	EL808	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
...	4	C701	2401-002458	C-AL:1000uF,20%,35V,GP,TP,16x25,7,5		...	EL809	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
...	4	C701	2401-002597	C-AL:220uF,20%,35V,GP,TP,10x12,5,5		...	EL810	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
...	4	C701	2401-002597	C-AL:220uF,20%,35V,GP,TP,10x12,5,5		...	EL811	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
...	4	C701	2401-002619	C-AL:47uF,20%,25V,GP,TP,5x11,5		...	EL401	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
...	4	C701	2401-002619	C-AL:47uF,20%,25V,GP,TP,5x11,5		...	EL402	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
...	4	C701	2401-003046	C-AL:47uF,20%,50V,WT,TP,6.3x11,2,5		...	EL404	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
...	4	C701	2401-003046	C-AL:47uF,20%,50V,WT,TP,6.3x11,2,5		...	EL405	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
...	4	C701	2401-003046	C-AL:47uF,20%,50V,WT,TP,6.3x11,2,5		...	EL802	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A
...	4	C701	2401-003578	C-AL:1000uF,20%,10V,GP,TP,8x20mm,5		...	EL408	6042-000001	EYELET:ID2.2,OD2.7,L3.1,Ni+SN,BSP3-1/2H	S.N.A



Electrical Parts List

Level	Loc. No.	Code No.	Description ; Specification	Remark	Level	Loc. No.	Code No.	Description ; Specification	Remark
...3	C2560	2305-001037	C-FILM,LEAD-PEF:330nF,5%,63V,TP,7.5x5.5x		..2		6902-000061	BAG AIR:LDPE,TO.2,L1000,W500,TRP,..	S.N.A
...3	BOT	0401-000005	DIODE-SWITCHING;1N4148,100V,200mA,DO-35,		..2		6902-000001	BAG AIR:LDPE,TO.2,L1800,W1000,TRP,..,LDPE	S.N.A
..2	T0091	AA95-01787X	ASSY SUB-PCB,A/V SIDE:29K1,KS3APAL,AA95-						
...3		0202-000187	SOLDER-WIRE FLUX;-RS60S,D1,2.63Sn/37Pb	S.N.A					
...3	JH701	3722-000143	JACK-PHONE:1P[VER],3.4PI,AG,BLK,NO						
...3	JA701	3722-001031	JACK-PIN:3P,3.6mm,#18,AU						
...3	JS701	3722-001163	JACK-VHS:4P,12mm,AU,BLK,N						
...3	T0245	AA39-00070A	LEAD CONNECTOR-ASSY;4P,200MM,YBNH250-04						
...3	T0245	AA39-20009E	LEAD CONNECTOR-ASSY;1P,600,YFH800-01,16						
...3	T0245	AA39-20068G	LEAD CONNECTOR-ASSY;8P,700MM,YBNH025-08						
...3	T0245	AA39-20069A	LEAD CONNECTOR-ASSY;5P,500,YBNH025-05,6						
...3	T0245	AA39-20070J	LEAD CONNECTOR-ASSY;7P,700MM,YBNH250-07						
...3		AA63-10002A	BAND-TIE:NYLON66 V2,L100,NTR	S.N.A					
...3		AA97-07084A	ASSY AUTO-A/V SIDE:29K1,KS3A,PAL,AA95-00	S.N.A					
...4	R701	2001-000028	R-CARBON(S);100OHM,5%,1/2W,AA,TP,2.4X6.4						
...4	R702	2001-000028	R-CARBON(S);100OHM,5%,1/2W,AA,TP,2.4X6.4						
...4	R125	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM						
...4	R125	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM						
...4	C689	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP						
...4	C689	2202-000121	C-CERAMIC,MLC-AXIAL:100pF,10%,50V,Y5P,TP						
...4	C689	2202-000231	C-CERAMIC,MLC-AXIAL:0.33NF,10%,50V,Y5P,T						
...4	C689	2202-000231	C-CERAMIC,MLC-AXIAL:0.33NF,10%,50V,Y5P,T						
...4	C689	2202-000231	C-CERAMIC,MLC-AXIAL:0.33NF,10%,50V,Y5P,T						
...4	C689	2202-000231	C-CERAMIC,MLC-AXIAL:0.33NF,10%,50V,Y5P,T						
...4	L701	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534						
...4	L702	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534						
...4	L703	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534						
...4	L704	2701-000114	INDUCTOR-AXIAL:10uH,10%,2534						
...4	L705	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2534						
...4	L706	2701-000168	INDUCTOR-AXIAL:3.3uH,5%,2534						
...4	L707	3301-000287	BEAD-AXIAL:3.5x1.0x6.0mm,1500,2400G						
...4	L708	3301-000287	BEAD-AXIAL:3.5x1.0x6.0mm,1500,2400G						
...4	PCB	AA41-00345A	PCB-SIDE A/V;CS29K1,FR-1,1LA,1.6T,245x2	S.N.A					
...4	C701	2401-003036	C-AL:100uF,20%,16V,GPT,5X11mm,5mm						
...4	C701	2401-003036	C-AL:100uF,20%,16V,GPT,5X11mm,5mm						

**ASSY FIXING**

1		AA91-06322G	ASSY FIXING;KS3A	S.N.A
..2	C-BLOC	AA26-00069A	TRANS FBT-C BLOCK:FUJ-29C002C(S),DREAM3,	
..2	T0245	AA39-20010B	LEAD CONNECTOR-ASSY;1P,500,YFH800-01,S,	
..2	CLAMP	AA65-30018A	CLAMPER CORE-WIRE:DONG-A,NYLON-66,-,-,-,	S.N.A
..2	C/W	AA65-30018A	CLAMPER CORE-WIRE:DONG-A,NYLON-66,-,-,-,	S.N.A
..2	CLAMP	AA65-30104C	CLAMPER CORE-WIRE:ALL MODEL,NYLON 66,V2,	S.N.A
..2		AA65-30105A	CLAMPER CORE-WIRE:ALL MODEL,NYLON 66,V2,	S.N.A
..2	CLAMP	AA65-30105C	CLAMPER CORE-WIRE:ALL MODEL,NYLON 66,V2,	S.N.A
..2		AA65-30110A	CLAMPER CORE-WIRE:ALL MODEL,NYLON 66,V2,	S.N.A
..2	CLAMP	AA65-30110A	CLAMPER CORE-WIRE:ALL MODEL,NYLON 66,V2,	S.N.A
⚠	T0066	AA96-20109A	ASSY POWER CORD;-CP2/NO(4.0),H/C400,KKP	S.N.A
...3		3811-000401	WIRE-PVC CU:BCWA,300V,ROLL,17/0.16mm,#22	S.N.A
...3	T0077	AA39-10006X	CBF POWER CORD;-KKP419C,KLCE-2F,2.286MT	
...3		AA61-20284A	HOLDER-P-CORD,PP,-,-,-,BLK,VO,KE-002	S.N.A
..2		AA65-30009A	CLAMPER CORE-FBT;-ABS,VO,-,BLK,-	S.N.A

**ASSY ACCESSORY**

1	M0017	AA92-03245D	ASSY ACCESSORY;CS29K3NTBX/XSE	S.N.A
..2		AA68-00145A	CARD-WARRANTY:ALL,W/P 220(G),636X939,BLA	S.N.A
..2		6902-000009	BAG PE:HDPE,TO.03,L400,W240,TRP,8,2,PE M	S.N.A
..2	T0074	AA59-00104K	REMOCON;-TM59,DREAM,29,L/GRAY,PAL-TTX,E	
..2	T0563	AA68-01142C	MANUAL USERS;INDONESIAN,W/P100G,ALL1,B5	

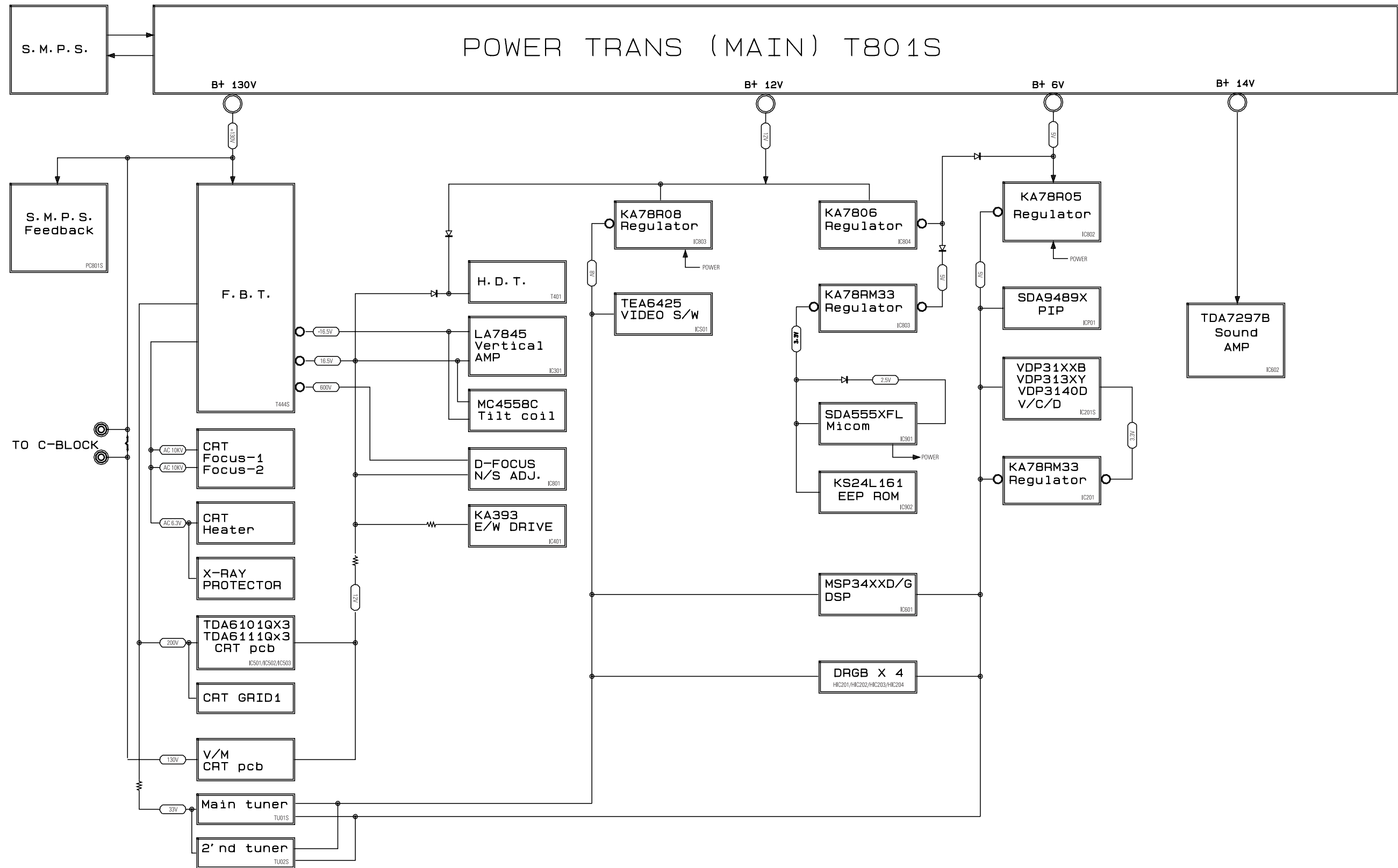
**ASSY P/MATERIAL**

1		AA92-07843A	ASSY P/MATERIAL:29K10	S.N.A
..2		AA63-10007C	BAND-PP:W18,CLEA,1G	S.N.A
..2		6902-000007	BAG PE:HDPE/NITRON/HDPE,TO.015/TO.5/TO.0	S.N.A
..2		AA60-40006A	PIN-STAPLE:AUTO,33X17.8X2.4,H18,33X17.8X	S.N.A

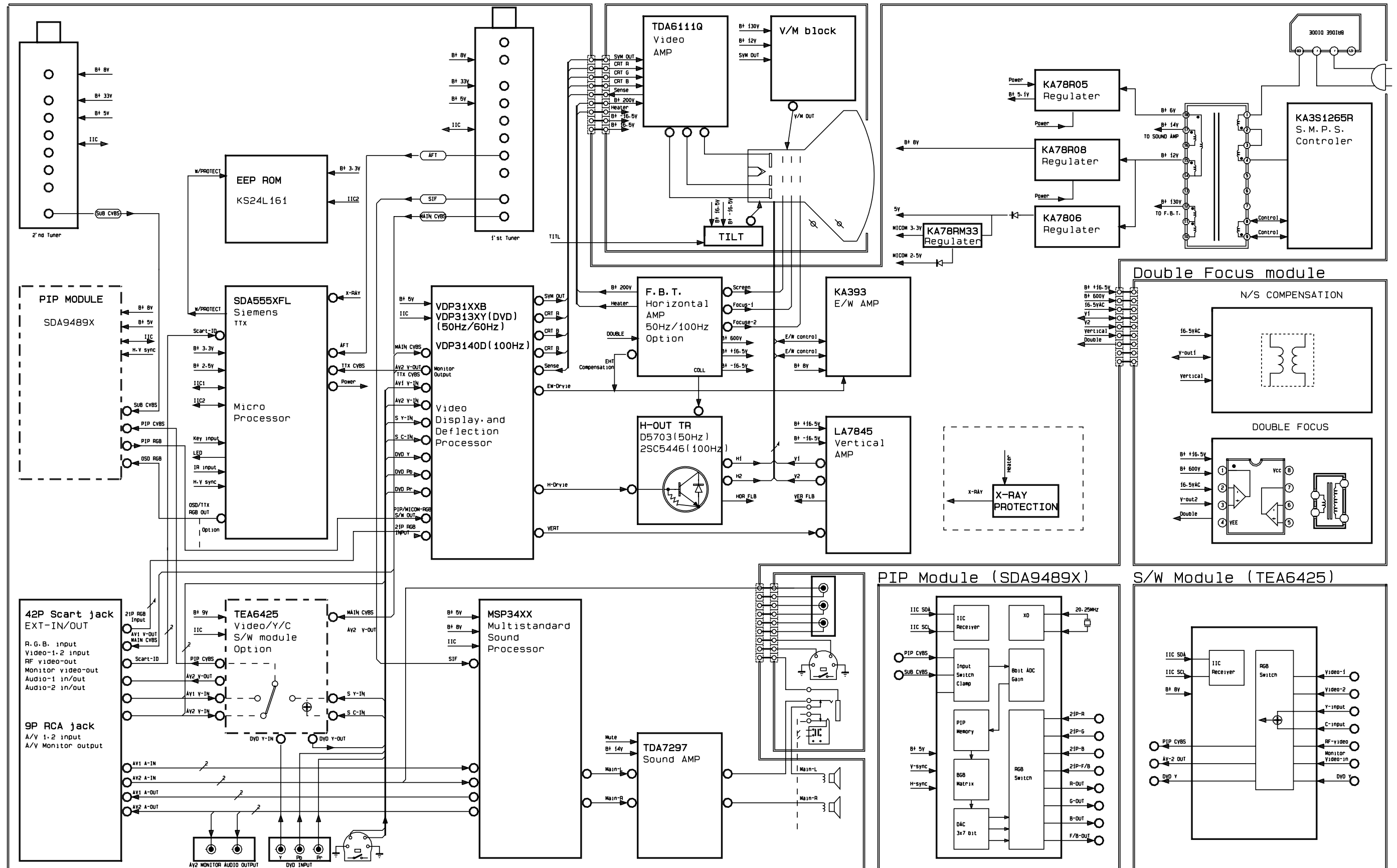


## 8. Block Diagrams

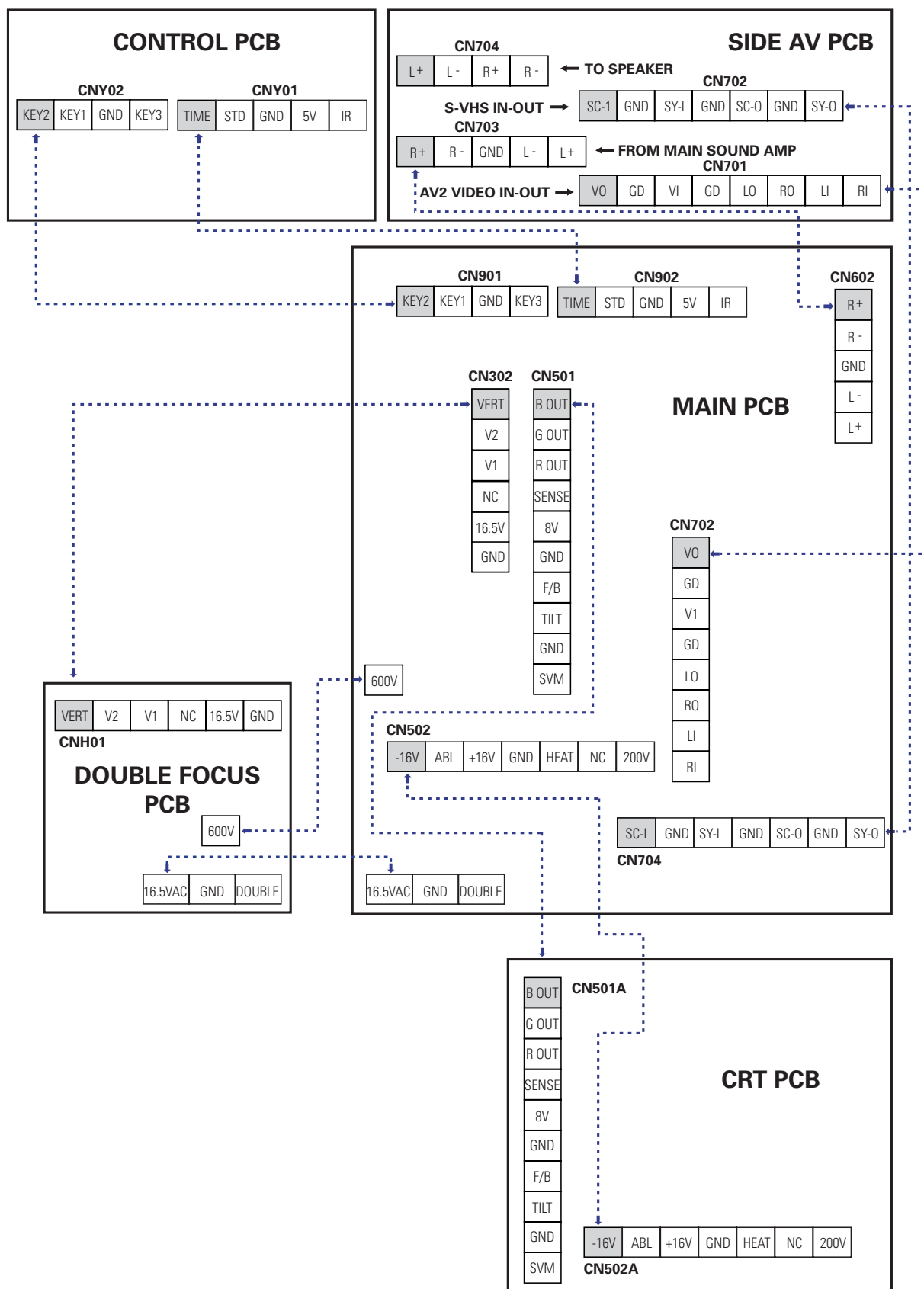
### 8-1 Power Diagram



8-2 Block Diagram



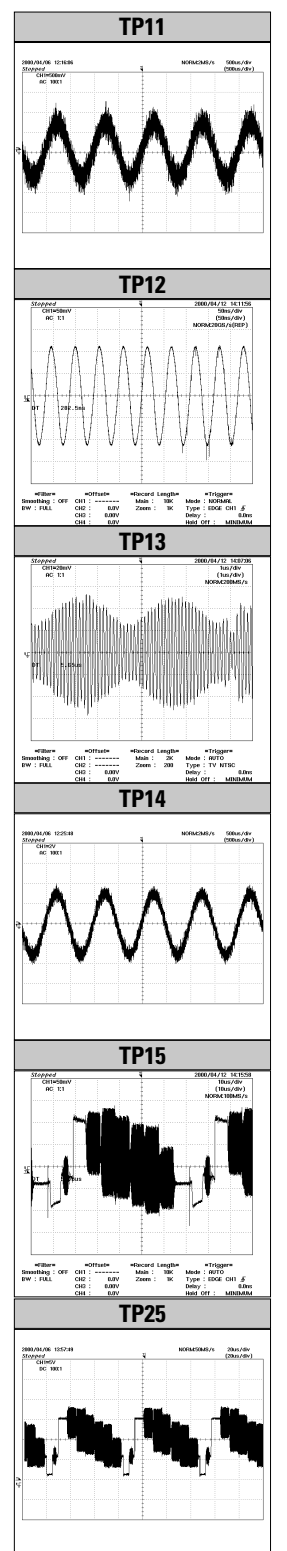
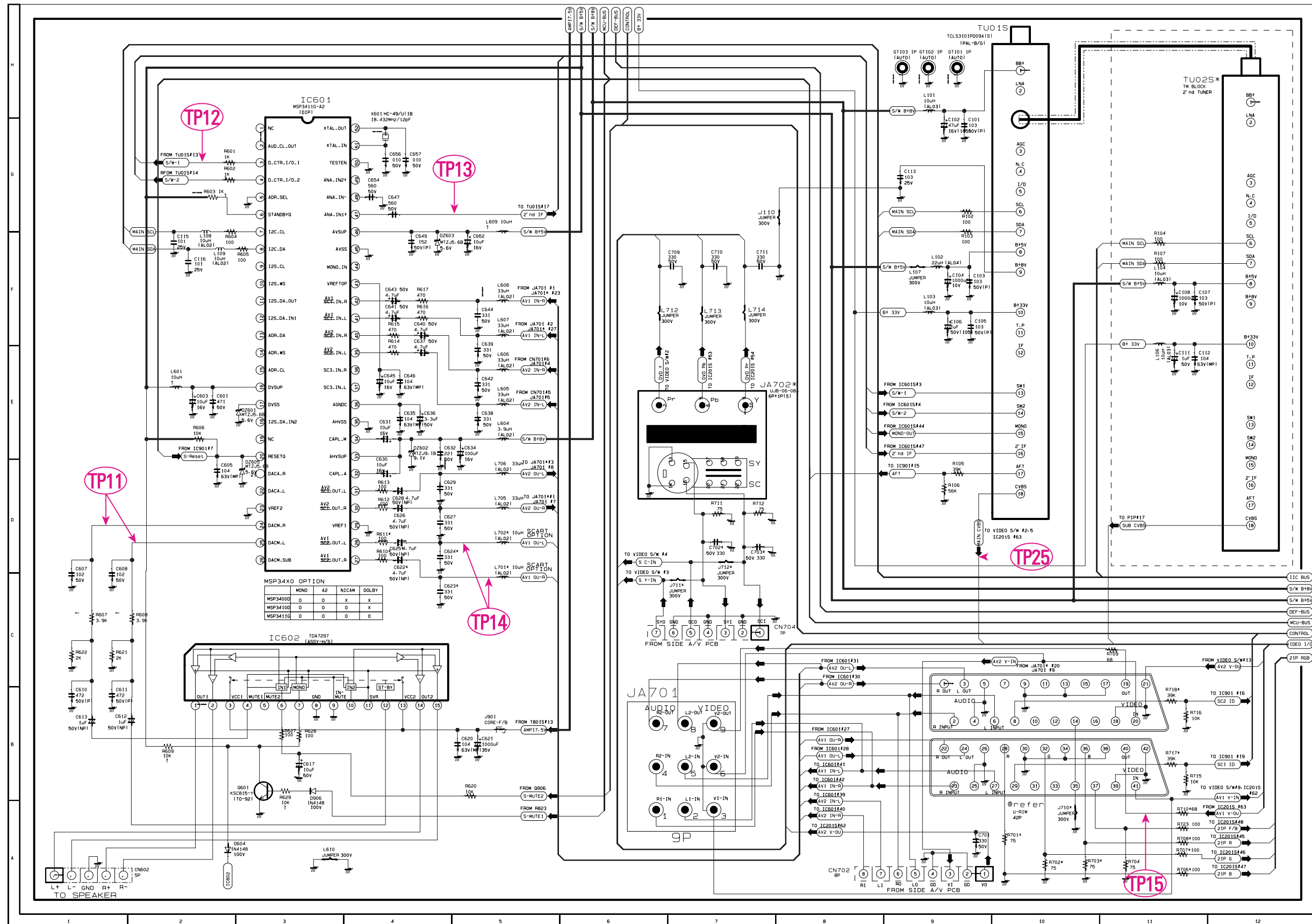
## 9. Wiring Diagram



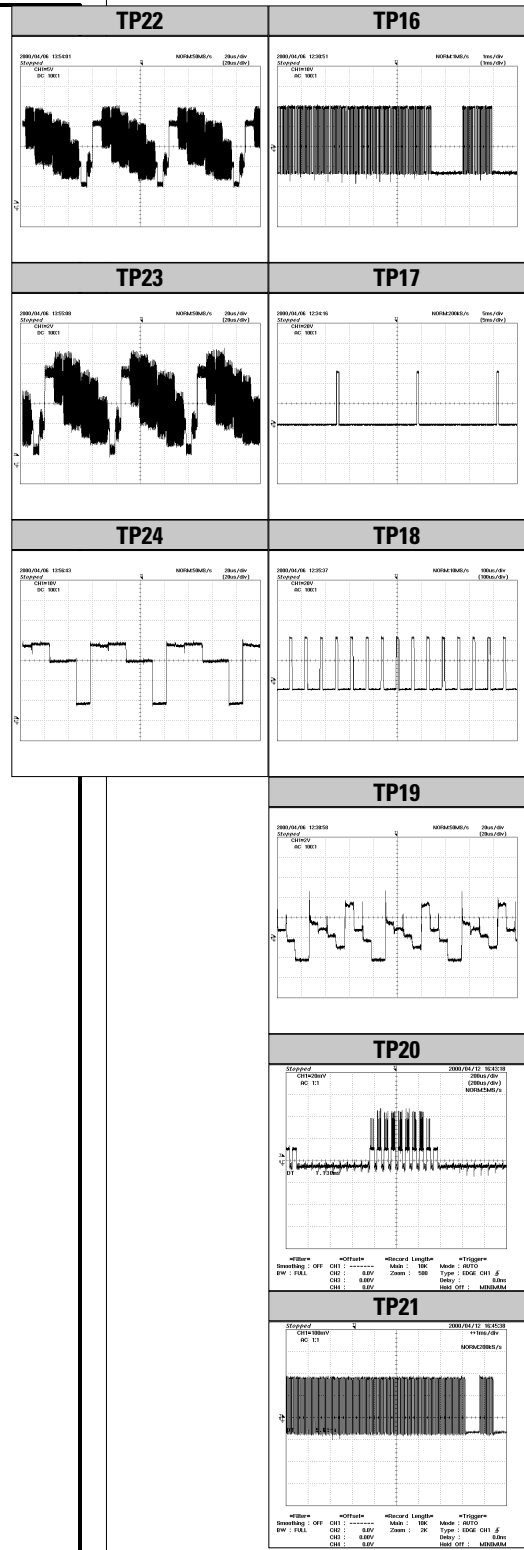
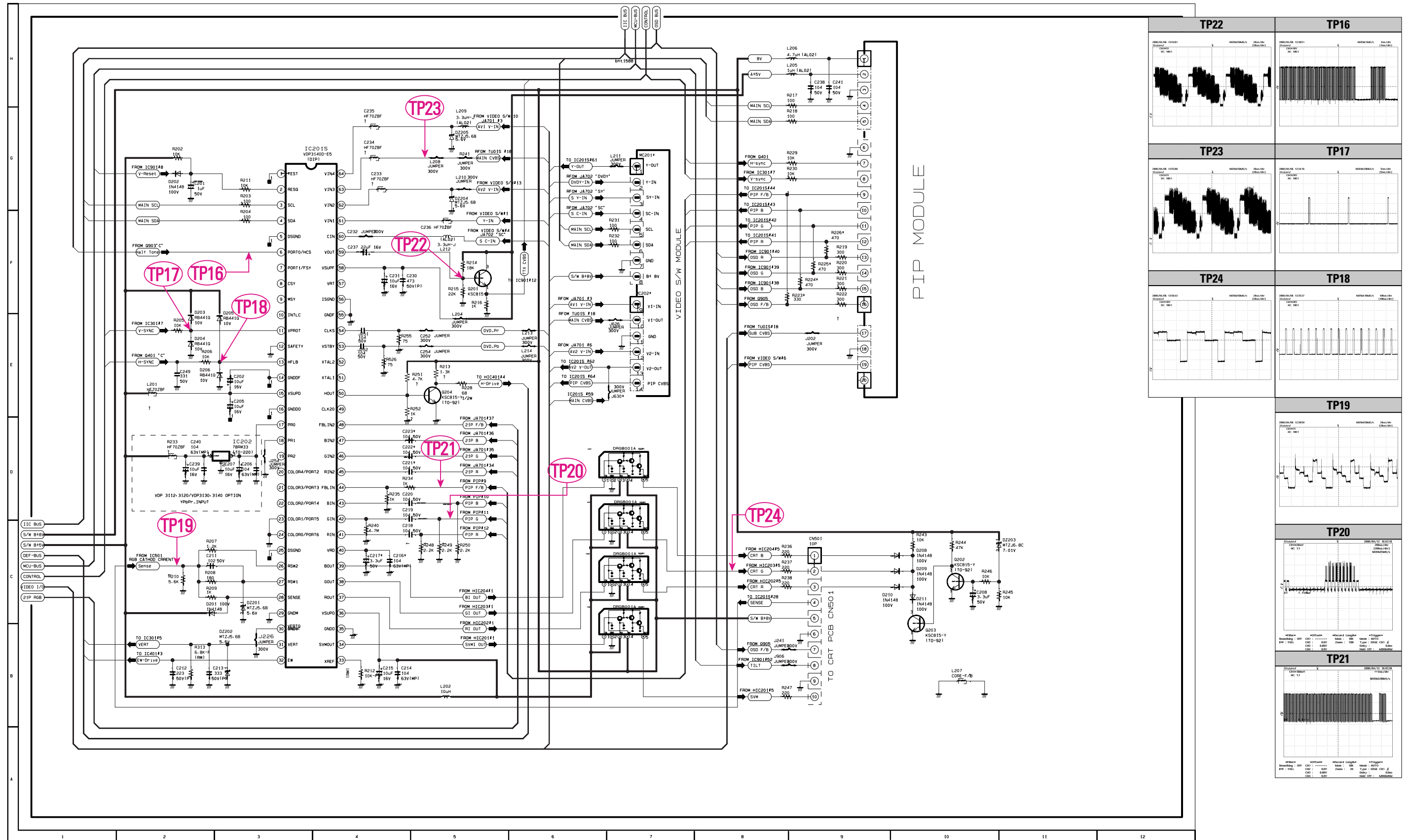
# MEMO



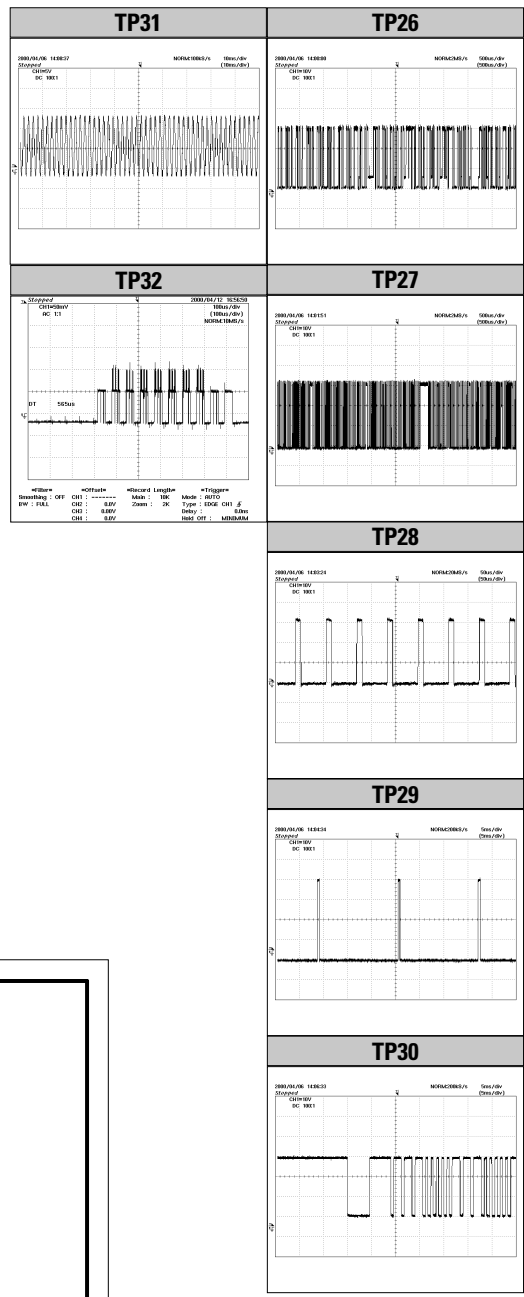
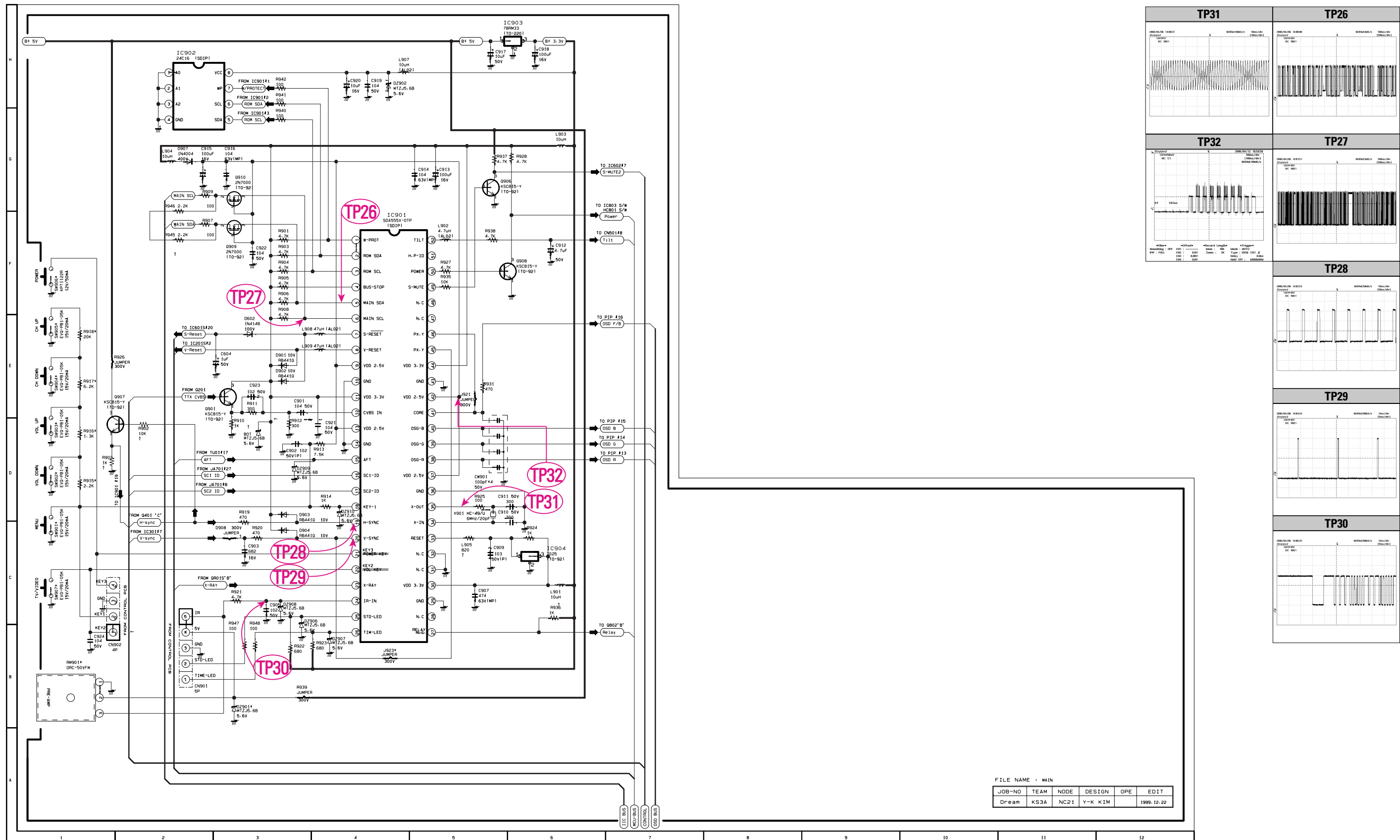
10-2 MAIN 2



10-3 MAIN3



# 10-4 MAIN 4



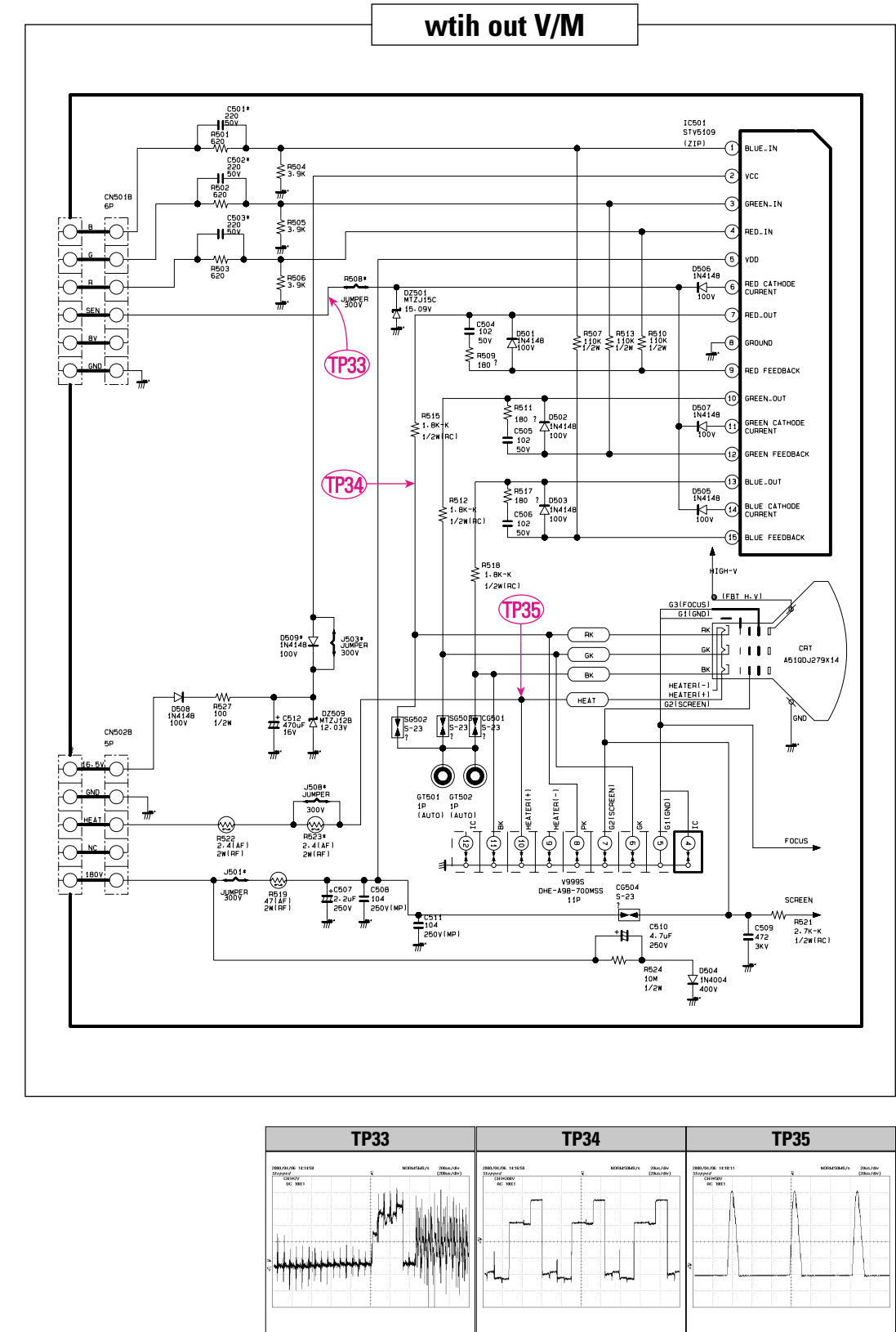
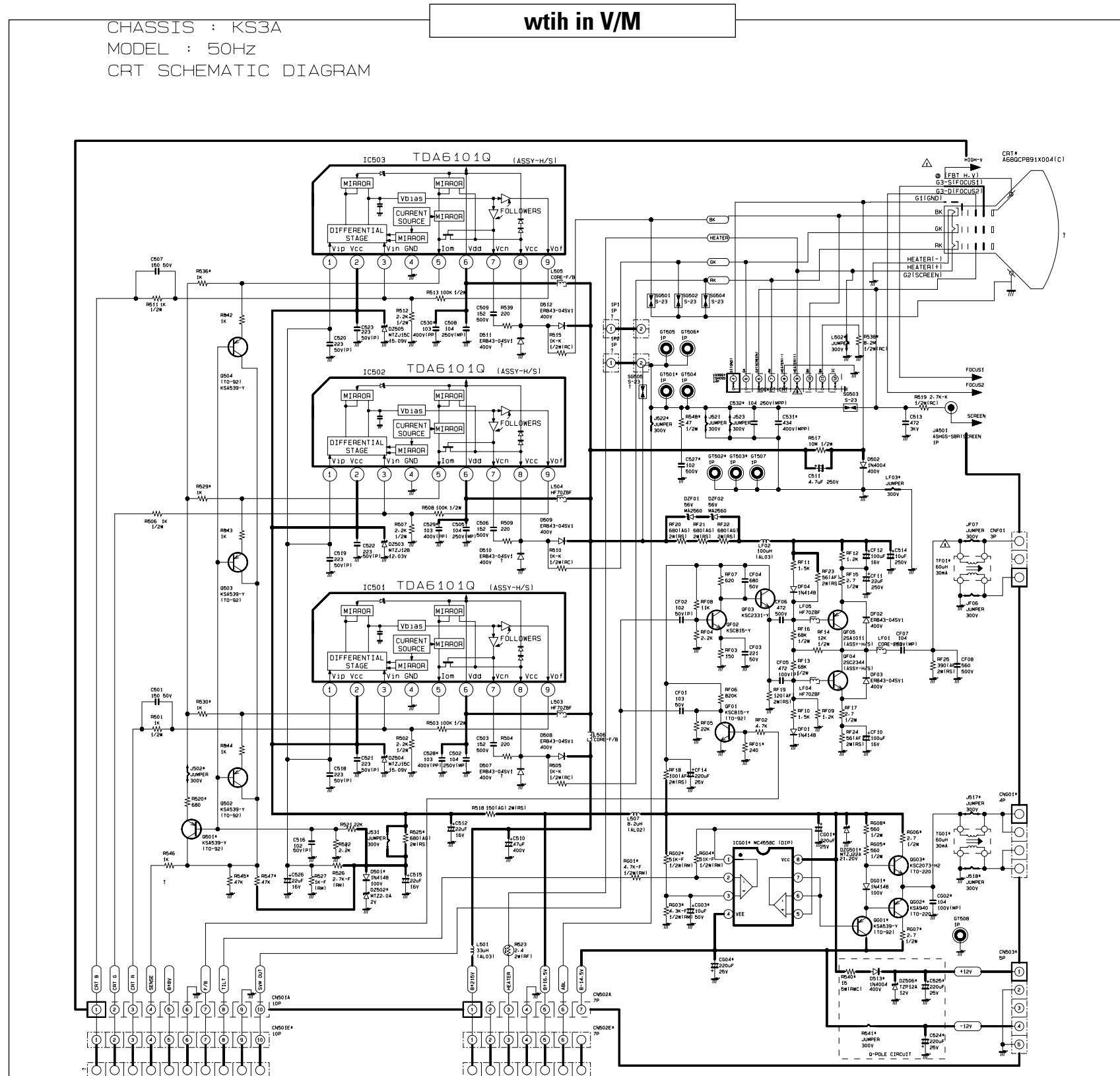
FILE NAME : MAIN

JOB-NO	TEAM	NODE	DESIGN	OPE	EDIT
Dream	K33A	NC21	Y-K KIM		1999.12.22



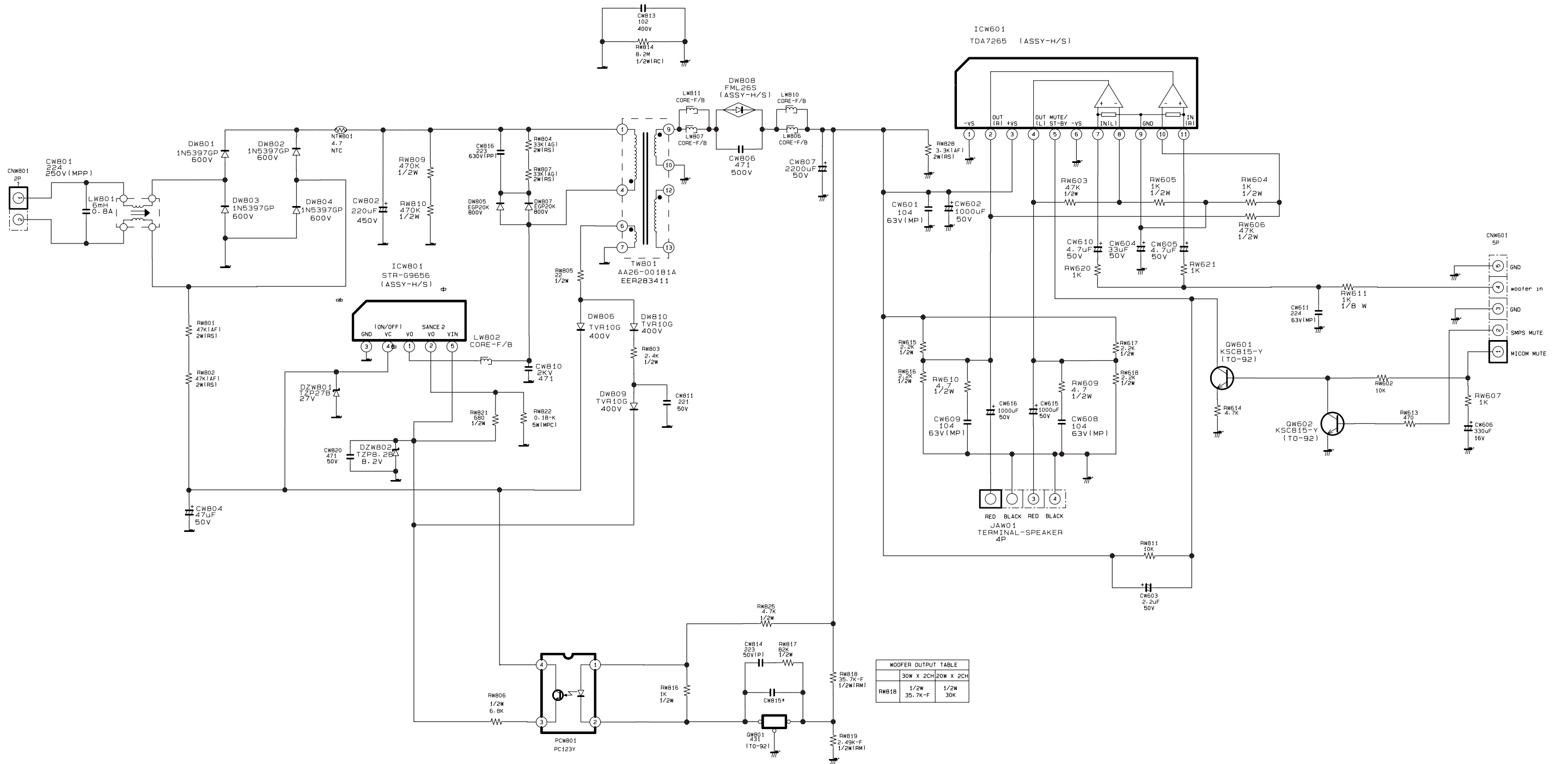


10-6 CRT





# 10-8 WOOFER





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Printed in Korea  
**AA82-00869A**