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Safety Notice

SAFETY PRECAUTIONS

- 1: An isolation transformer should be connected in the power line between the receiver and the AC line when a service is performed on the primary of the converter transformer of the set.
- 2: Comply with all caution and safety-related notes provided on the cabinet back, inside the cabinet, on the chassis or the picture tube.
- 3: When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as, control knobs, adjustment covers or shields, barriers, isolation resistor-capacitor networks etc.. Before returning any television to the customer, the service technician must be sure that it is completely safe to operate without danger of electrical shock.

X-RADIATION PRECAUTION

The primary source of X-RADIATION in television receiver is the picture tube. The picture tube is specially constructed to limit X-RADIATION emissions. For continued X-RADIATION protection, the replacement tube must be the same type as the original including suffix letter. Excessive high voltage may produce potentially hazardous X-RADIATION. To avoid such hazards, the high voltage must be maintained within specified limit. Refer to this service manual, high voltage adjustment for specific high voltage limit. If high voltage exceeds specified limits, take necessary corrective action. Carefully follow the instructions for +B1 volt power supply adjustment, and high voltage check to maintain the high voltage within the specified limits.

PRODUCT SAFETY NOTICE

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by mark \triangle in the parts list and the schematic diagram designate components in which safety can be of special significance. It is particularly recommended that only parts designated on the parts list in this manual be used for component replacement designated by mark \triangle . No deviations from resistance wattage or voltage ratings may be made for replacement items designated by mark \triangle .

Technical specification

Systems: a. North America: NTSC-M
b. South America and southeast Asia: NTSC-M/PAL
BG/DK/I/M/N
c. Europe: PAL SECAM

Power: 90-260VAC

Sound systems: a. AV STEREO(TONE CONTROL optional)
b. MTS STEREO(TONE CONTROL optional)

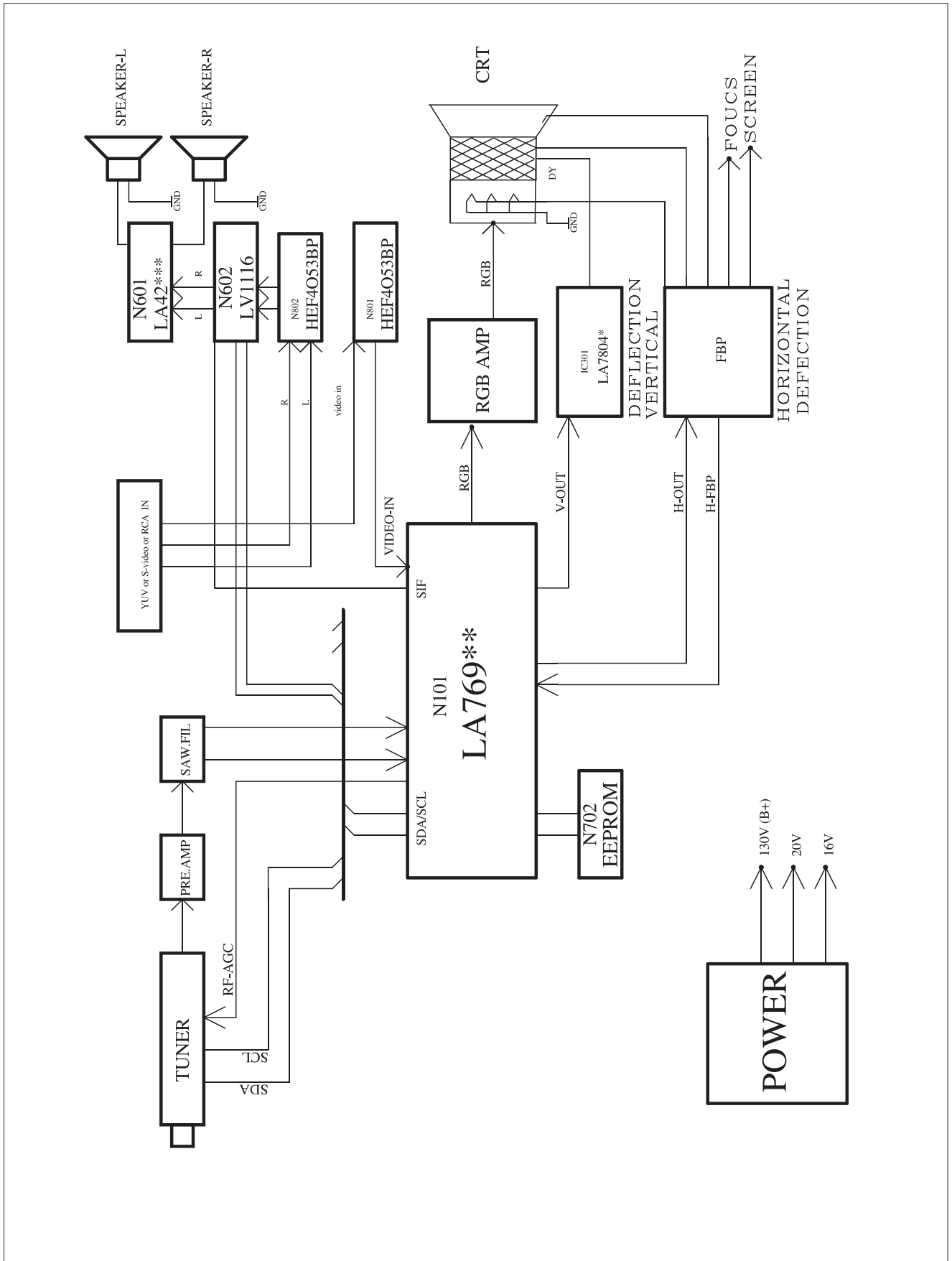
Sound power: STEREO 5W+5W OR 10W+10W (PIN TO PIN)

AV input/output:

- 1、 F.AV
- 2、 AV OUT
- 3、 AV IN optional: a. ONE FULL SCART
b. RCA&S-video
c. RCA&YUV
d. RCA&YUV&S-video

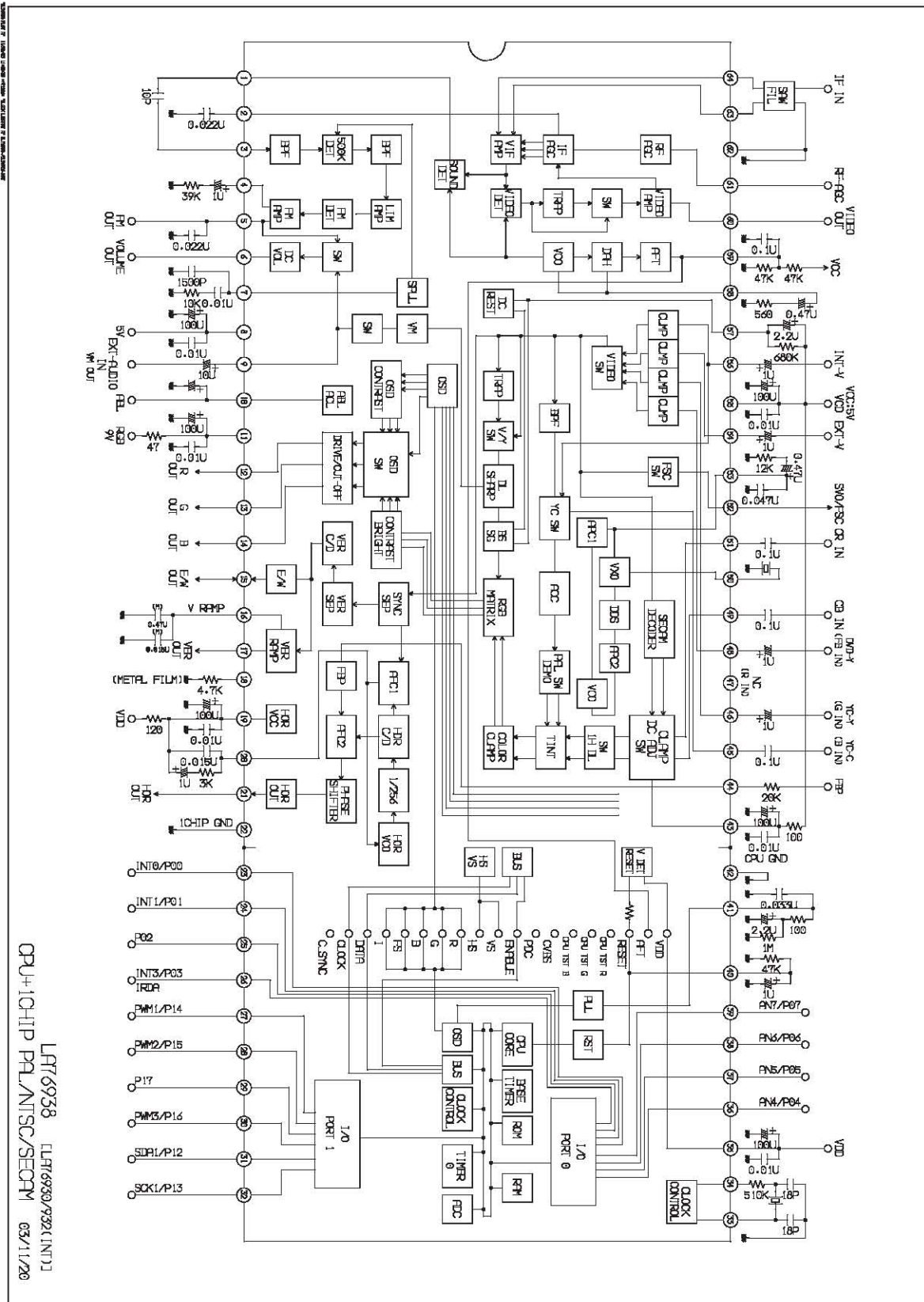
Other functions: TONE CONTROL/CCD/V-CHIP/LOGO/GAME/ calendar
/blue screen /lock/time

Chassis Block Diagram



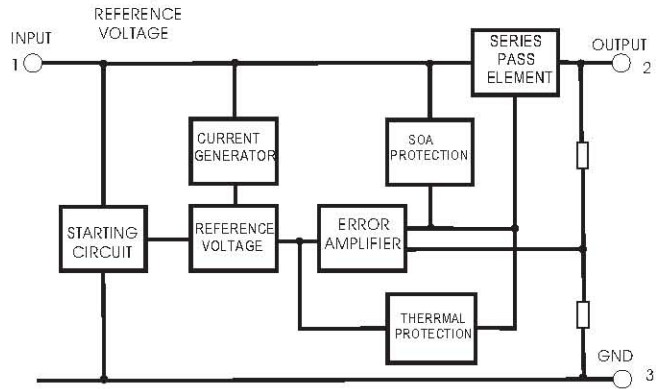
IC Block Diagram

N 101(OPTION)(PAL BG,DK,I,SECAM BG/DK ,NTSC M)LA 76938

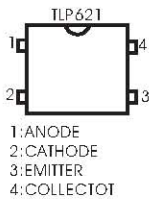


IC Block Diagram

N552,N541&N553 <REGULATORS> L7800SERIES

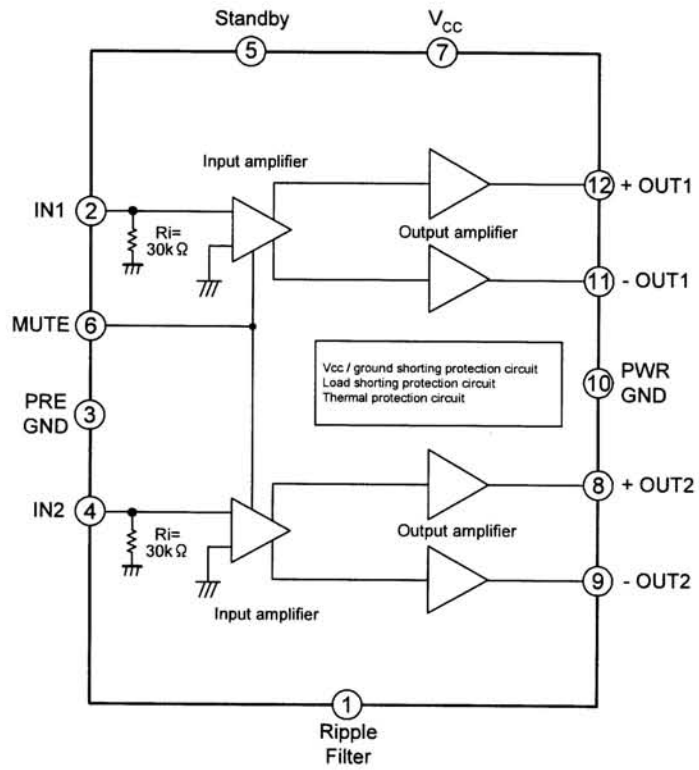


N502<PHOTO TRANSISTOR> TLP621



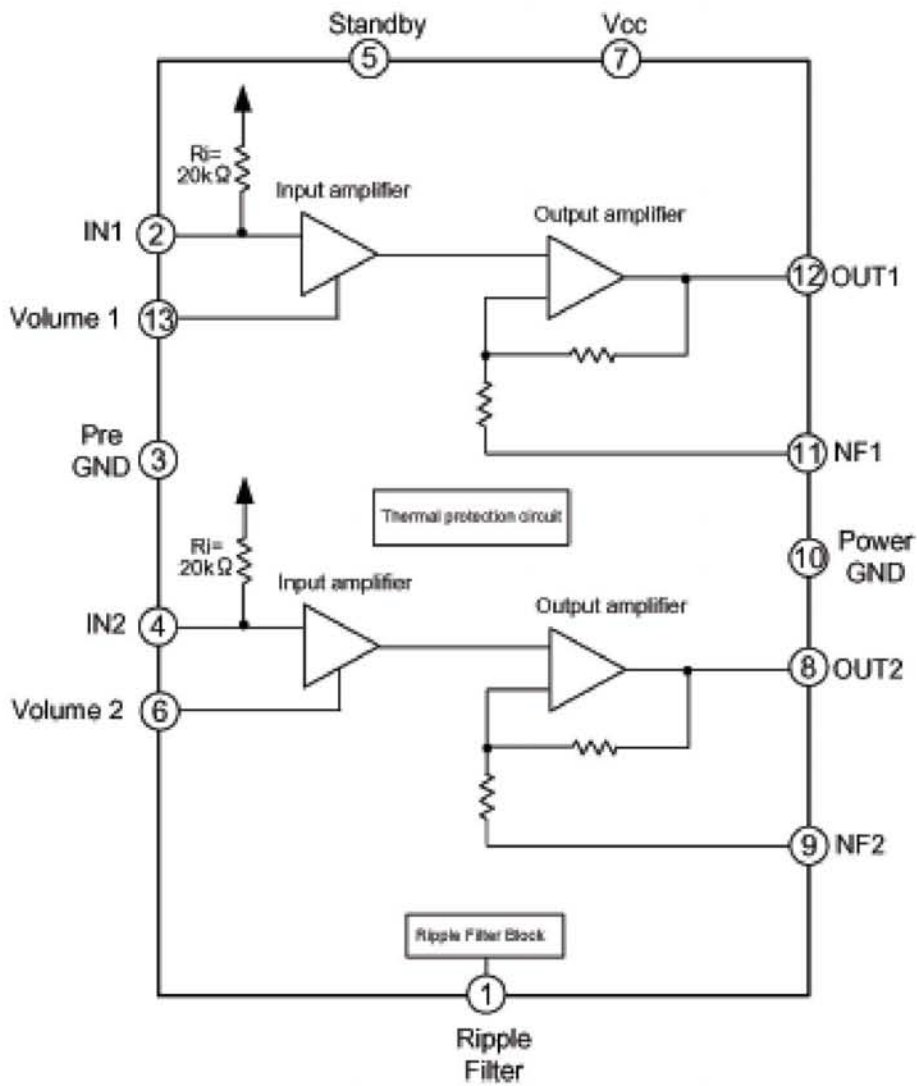
IC Block Diagram

N601 (OPTION)(10W-2-CHANNEL BTL POWER AMPLIFIER) Lα42102



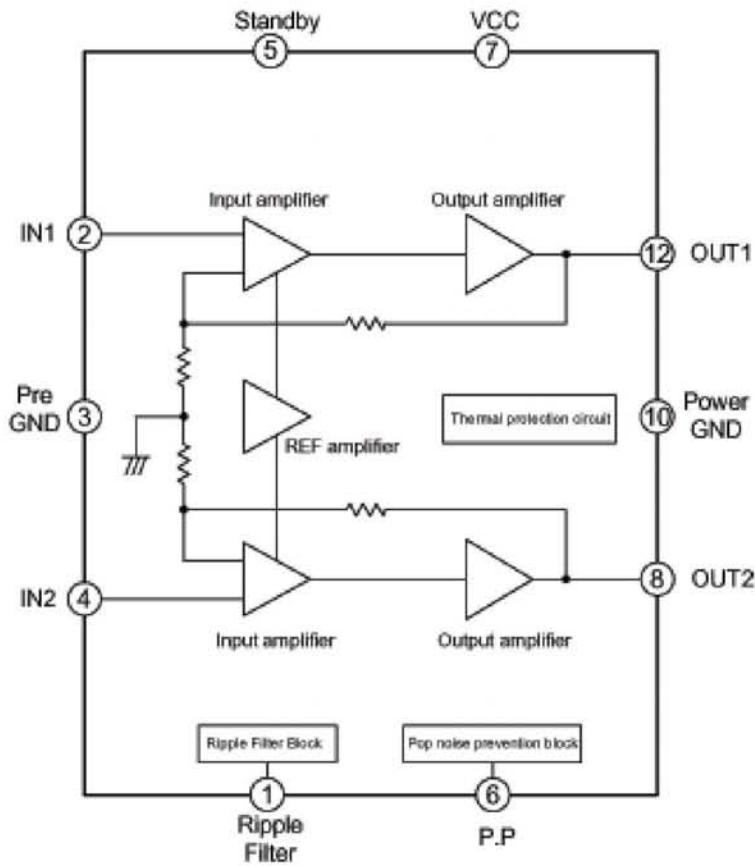
IC Block Diagram

N601 (OPTION)(5W-2-CHANNEL POWER AMPLIFIER) Ld42352

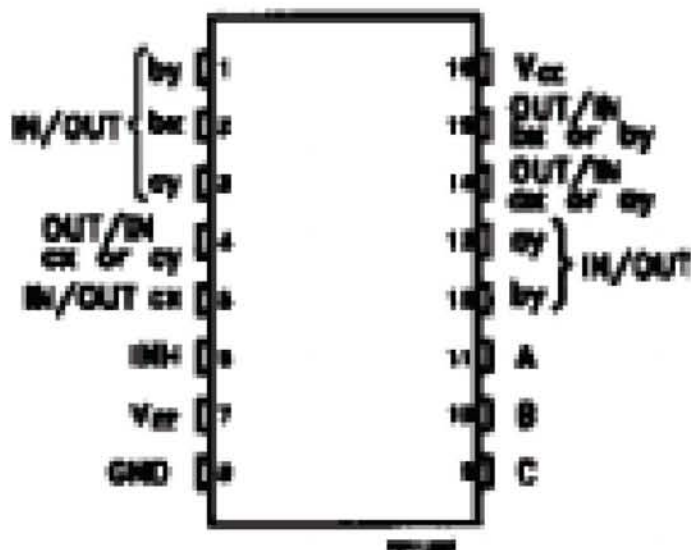


IC Block Diagram

N601 (OPTION)(5W-2-CHANNEL AF POWER AMPLIFIER) La42052

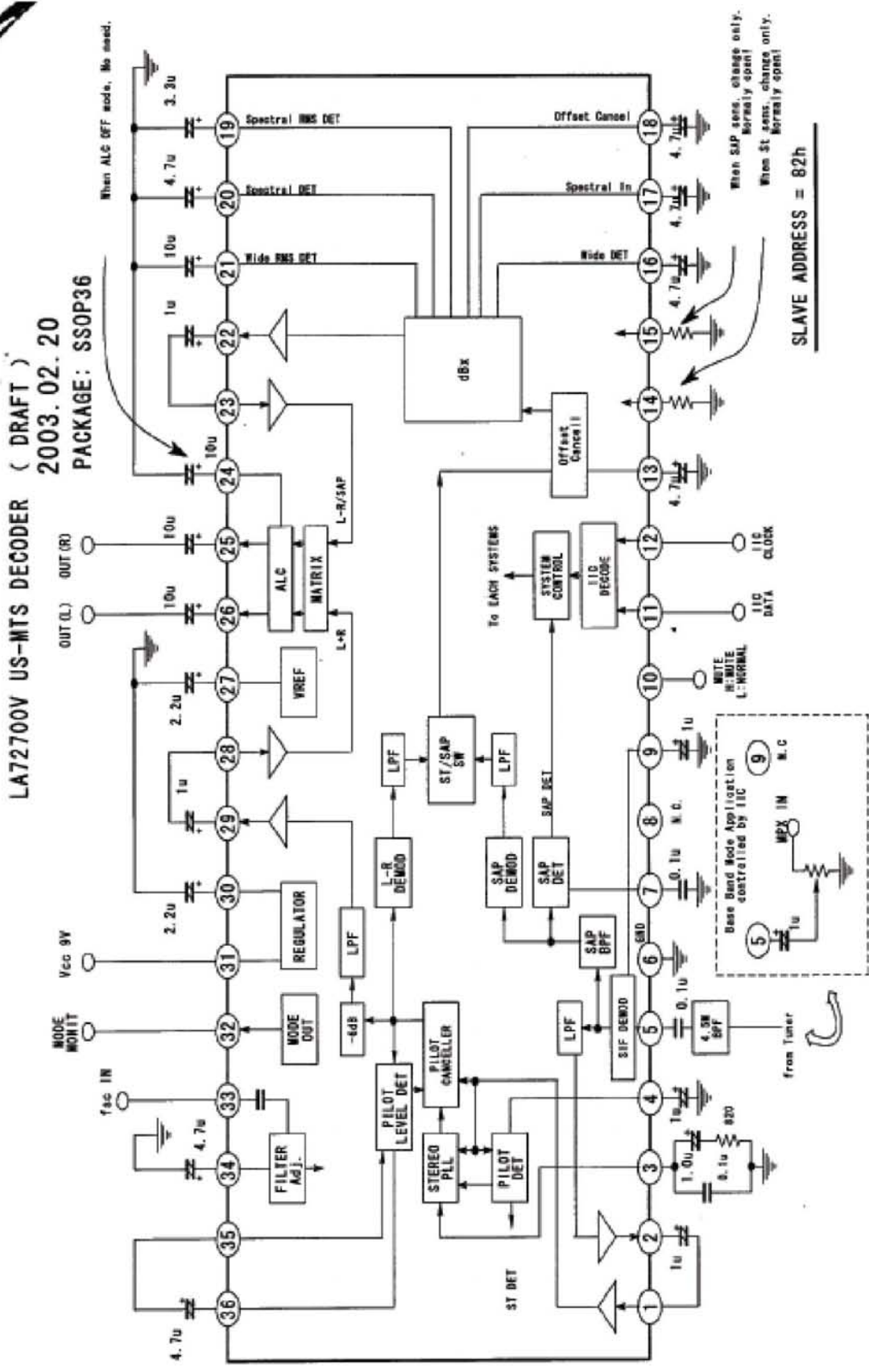


N801&N802 (ANALOG SWITCHES) H40530



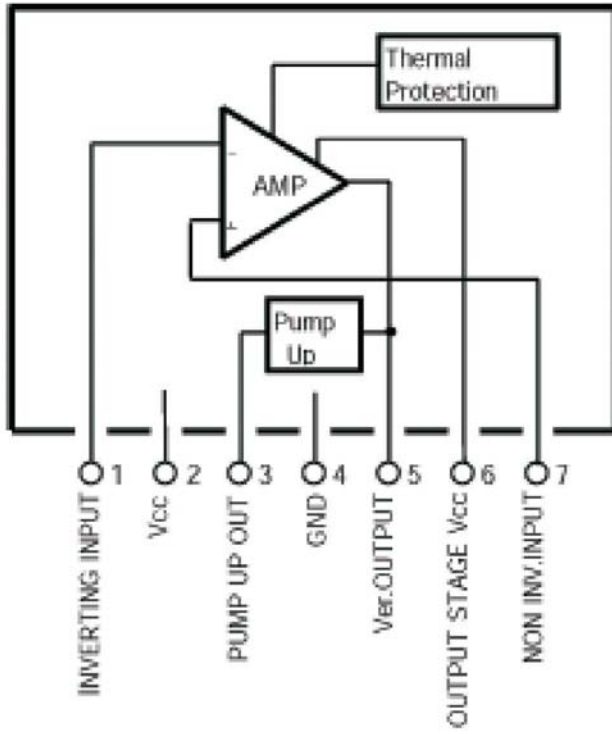
IC Block Diagram

N 01(US MTS TELEVISION SOUND DECODER) La72700V



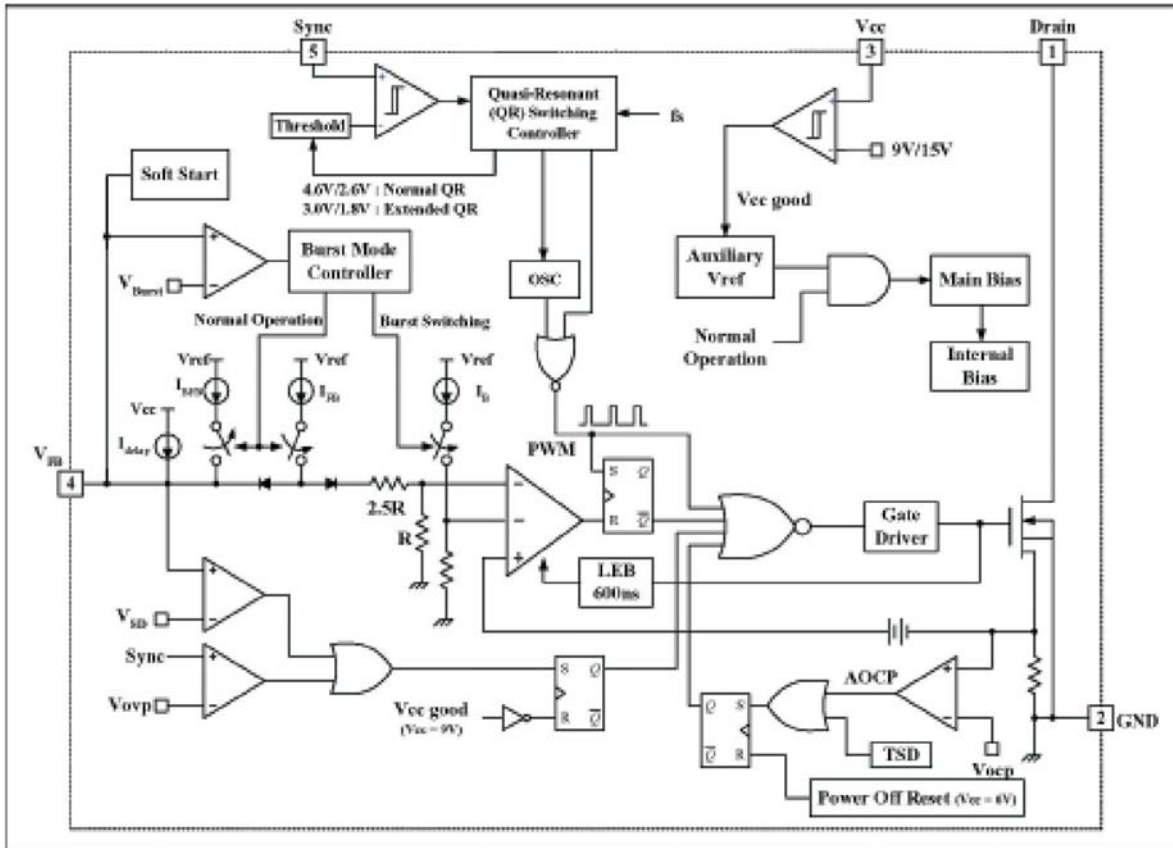
IC Block Diagram

N 451 (VERTICAL DEFLECTION OUTPUT CIRCUIT) La78041



IC Block Diagram

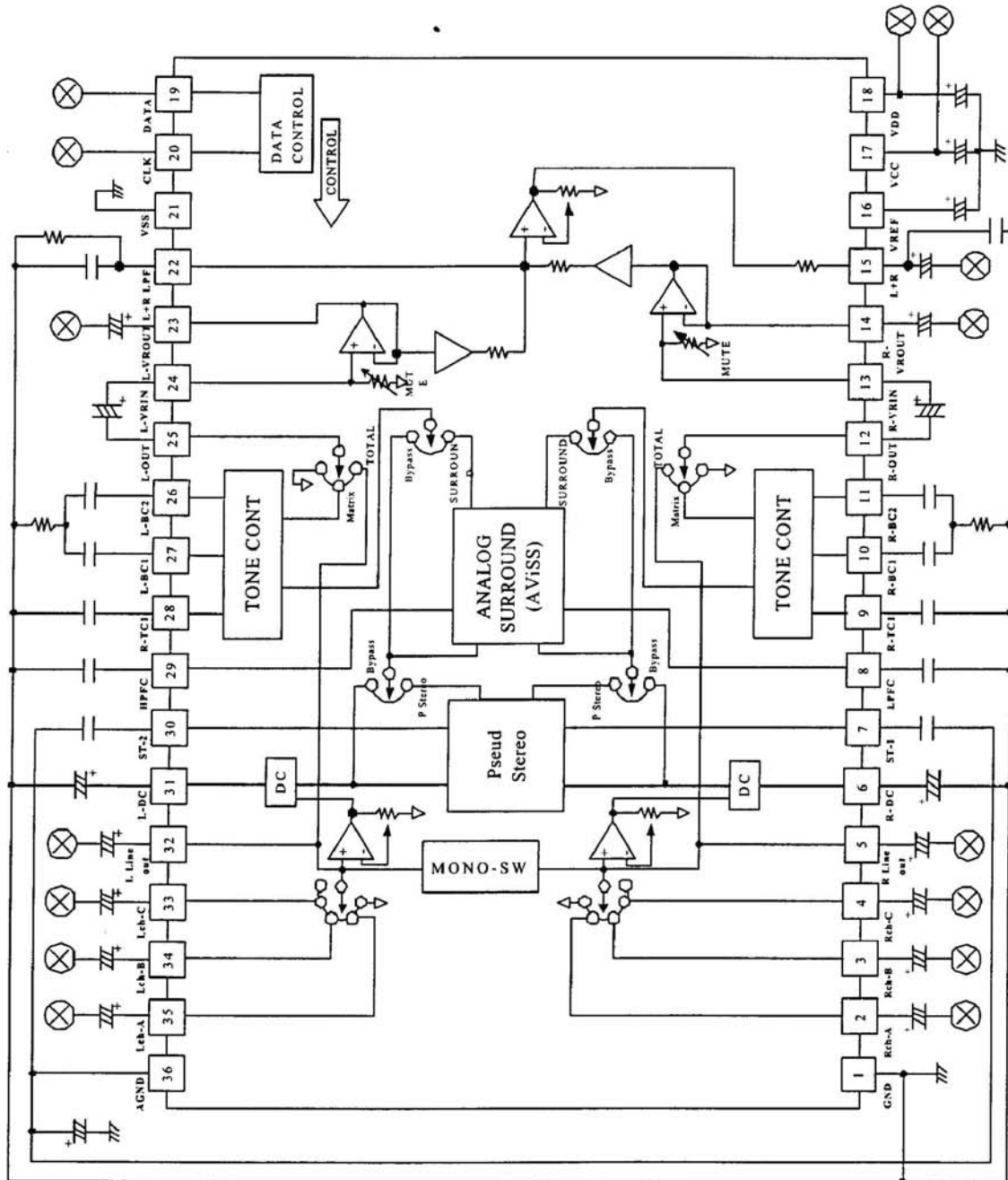
N 501 (QUASI-RESONANT SWITCHING CONVERTER) F12650



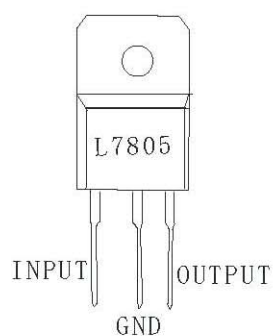
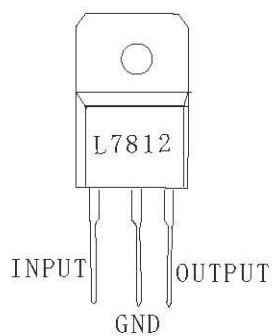
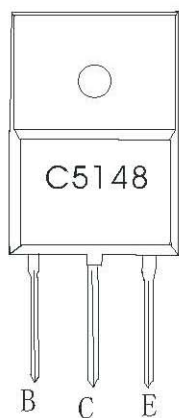
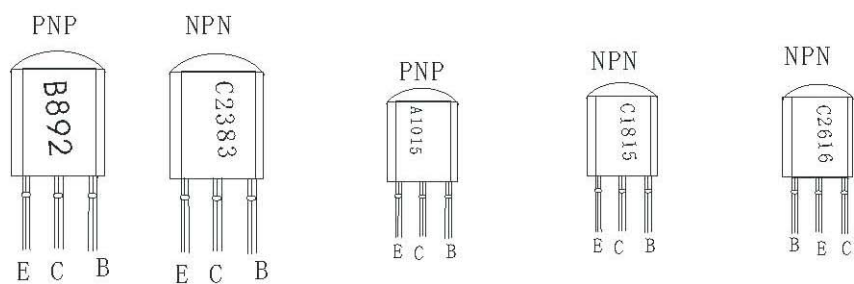
IC Block Diagram

N602(SOUND PROCESSOR W/ELECTR-NOIC VOLUME CONTROLLER) Lv1 116

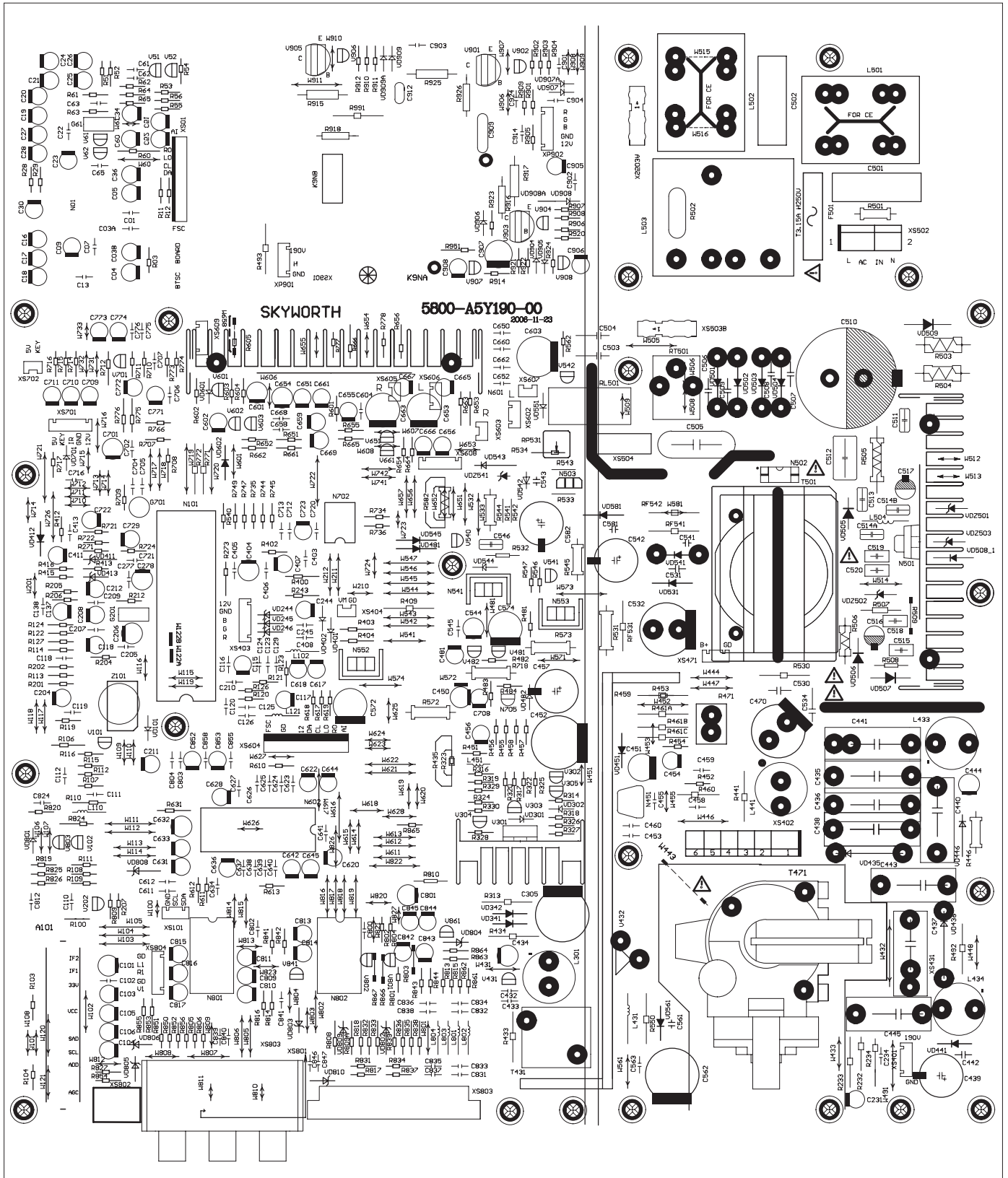
DIP-36s



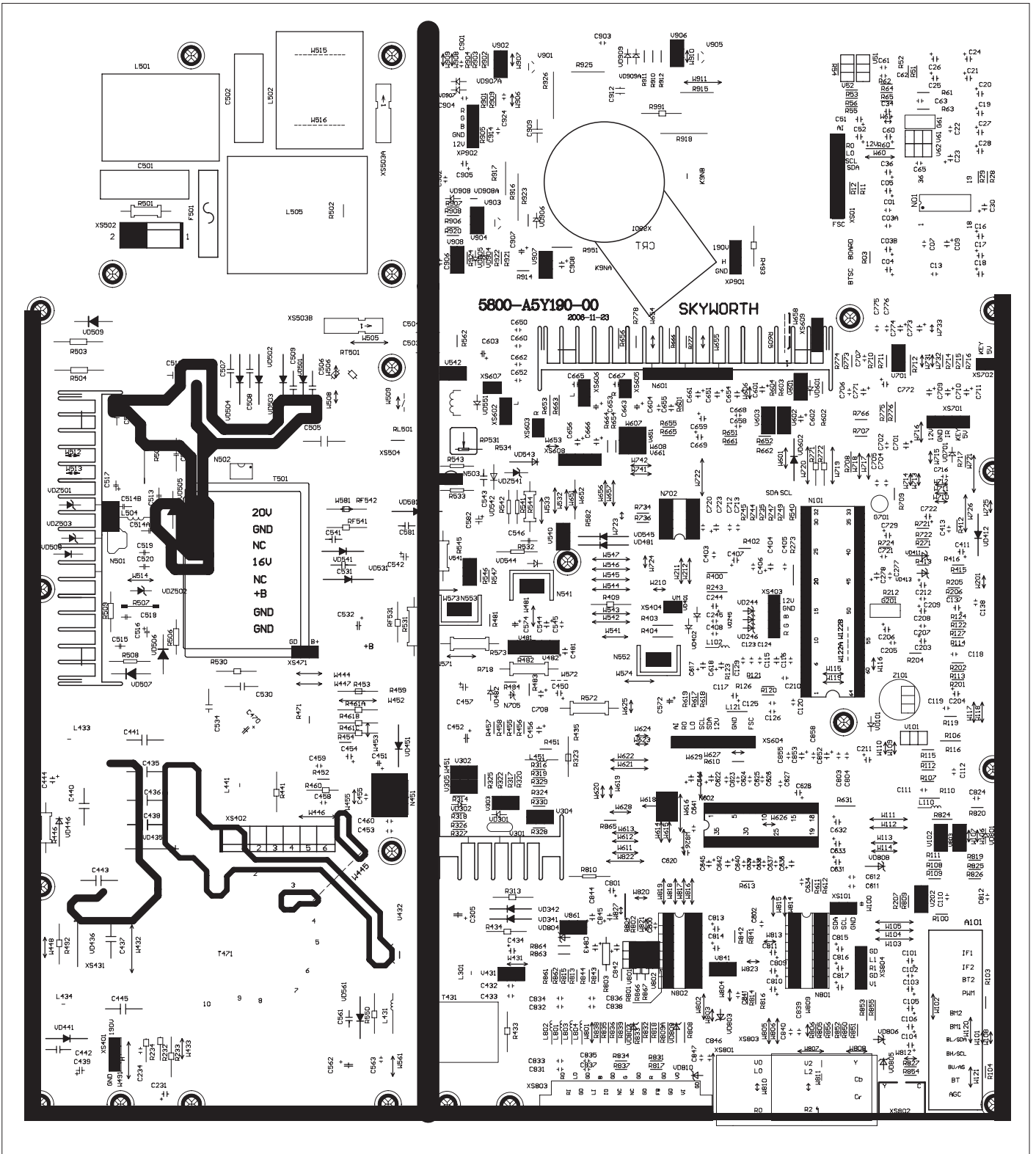
Transistor Mark



MAIN PCB Top Layer

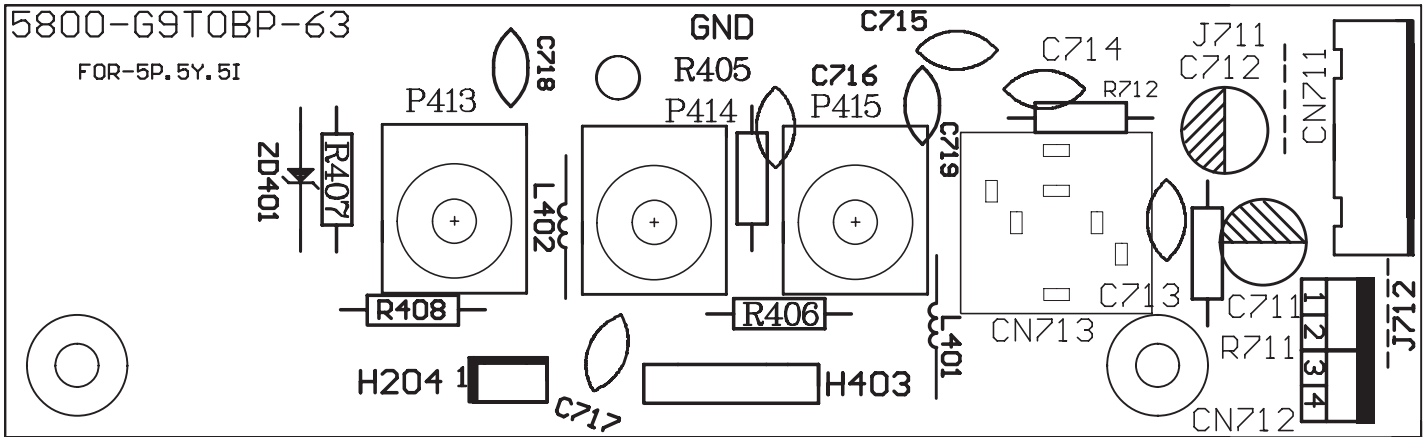


MAIN PCB Bottom Layer

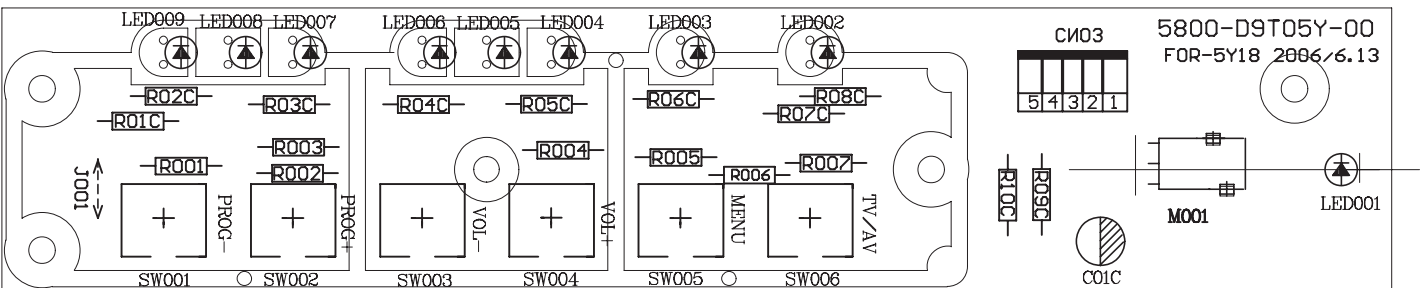


CRT & FRONT AV & CONTROL PCB Top Layer

SIDE AV TOP LAYER (alterable)



CONTROL PCB TOP LAYER (Alterable)



Service Adjustment

1、 Please notice the following before Servicing

- 1-1 The main power is 90~260V/50/60Hz. Please be careful when you debug and equip.
- 1-2、 Don't short any two soldering points, which should not be shorted and don't touch any components, which should not be touched.
- 1-3、 Please disconnect the power plug from the wall outlet before servicing.
- 1-4、 For safety reasons, all components equipped or replaced should be identical with BOM.
- 1-5、 Before alignment, ensure the TV set has been heated for at least 30 minutes and degauss the CRT thoroughly with demagnetizer.
- 1-6、 The data of EEPROM must be stored before the adjustment for main chassis.

2、 Tools and equipments for adjustment:

- 2-1、 small “-”screwdriver。
- 2-2 、 screwdriver without inductance
- 2-3、 Pattern Generator。
- 2-4、 Digital Voltmeter
- 2-5、 DC Regulated power supply。
- 2-6、 Sweep Signal Generator。
- 2-7、 20MHz 2-channel Oscilloscope.
- 2-8 、 Signal condition(factory debug signal):

Item	Logo	Picture carrier	Pattern	System	Sound mode	Remark
1	CHN-1CH	49.75	PHILIPHS Picture	PAL—I	1KHz	
2	WE-6CH	182.25MHz	Red filed	PAL—BG	L: R:400HZ	A2 STEREO /TELETEXT
3	CHN-12CH	695.25MHZ	Grey/ Half color bar	SECAM-D/K	BTSC	
4	CHN-13CH	471.25	Cross hatch	PAL—D/K	1KHZ	
5	USA-3CH	61.25	Color bar	NTSC—M	1KHZ	
6		751.25	Monoscope	PAL—I	A: BTSC B: MUSIC C: 1KHZ	I NICAM
7	WE-S20CH	294.25	Half color bar	PAL—BG	A:400HZ B:1KHZ	STEREO
8		224.25	PHILIPHS Picture	PAL—BG	A: BTSC B: MUSIC C: 1KHZ	B/G NICAM
9		85.25	Cross hatch	PAL—DK	BTSC	16:9
10		199.25	Cross hatch	NTSC—M	BTSC	MTS

Service Adjustment

11	USA-31CH	573.25	Monoscope	NTSC—M	1KHZ	
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3、Adjust for main IC

3-1、Power check

TESTING OF EACH VOLTAGE				
Item	Main voltage	Rating voltage	Power voltage	Test position (positive pole of the capacitor)
1	B+ Power supply	130V ± 1V	70V	C532
2	TFA Power supply (load)	20V ± 2V	— —	C582
3	UOC Main resistance	16V ± 1V	— —	C542
4	Memorizer power supply	5V ± 0.5V	5V ± 0.5V	W722
5	Tuner power supply	5V ± 0.5V	0V	TUNER
6	Tune voltage	33V ± 0.5V	— —	C708
7	Vertical power supply	26V ± 0.5V	0V	C452
8	RGB power supply	190V ± 10V	0V	C439

3-2、AGC adjustment

Method : Receive 60dB、751.25MHZ monoscope pattern, after pressing “PROD” key three times TV SET will go to factory mode. Then pressing the “MUTE” key three times to go to MENU3, select RF • AGE with “PROG+/-” key. Pressing “VOL+” key to change its value . Adjust W101 to 4V or just get the clearest picture. At last press “PROD” key to exit the factory mode.

4、COMPLETE MACHINE GENERAL ADJUSTMENT:

4-1 、 Set TV to factory mode before aging line.

Method: Press “PROD” key to entering factory menu, Select the item by “PROG+” and “PROG-”keys, Adjust it by “VOL+” and “VOL-“ keys, Press “PROD” key to exit factory mode!

4-2 、 Focus Adjustment.

- 4-2-1、Receive monoscope pattern.
- 4-2-2、Set TV to work in dynamic status.
- 4-2-3、Adjust the focus knob of FBT to get the clearest picture.

4-3 、 Screen Voltage Adjustment :

- 4-3-1、Set TV at “TV” / “STANDARD” mode, no signal input;
- 4-3-2、Press key “PROD” two times to enter factory mode;
- 4-3-3、Press “MUTE “button on Remote Control ;
- 4-3-4、Adjust the screen knob of FBT to set the horizontal line just be seen, then press “MUTE “button to return other factory menu .

Service Adjustment

4-4、 Horizontal Center and EW Adjustment

4-4-1、 Receive 60HZ cross hatch pattern. Set TV standard status, Adjust NT. H. PHASE to obtain picture's horizontal center at the center of CRT screen in factory MENU1. Adjust NT .E/W DC 、 NT .E/W AMP、 NT .E/W TOP、 NT .E/W BOT to obtain picture's horizontal redisplay ratio more than 90% in factory MENU4.

NT .E/W DC 60HZ Horizontal amplitude

NT .E/W AMP 60HZ EW width

NT .E/W TOP 60HZ EW upper corner parabola

NT .E/W BOT 60HZ EW lower corner parabola

NT . H . PHASE 60HZ Horizontal center adjustment

4-4-2、 Receive 50HZ cross hatch pattern . Set TV standard status . Adjust H.PHASE to obtain picture's horizontal center at the center of CRT screen in factory MENU4 . Receive cross hatch pattern . Set TV standard status .,Adjust E/W DC、 E/W TILE、 E/W AMP、 E/W TOP、 E/W BOTTOM to obtain picture's horizontal redisplay ratio more than 90% in factory MENU.

E/W DC 50HZ Horizontal amplitude

E/W AMP 50HZ EW width

E/W TOP 50HZ EW upper corner parabola

E/W BOTTOM 50HZ EW lower corner parabola

E/W TILE 50HZ EW trapezium

H . PHASE 50HZ Horizontal center adjustment

4-5 、 Vertical size and Linearity Adjustment

4-5-1、 Receive 60HZ monoscope PATTERN. Set TV standard status. Adjust NT.V.LINE and NT.V.SC to change vertical size. Adjust NT.SHIFT to obtain vertical center at the center of CRT screen in factory MENU0 .

4-5-2、 Receive 60HZ monoscope PATTERN. Set TV standard status. Adjust

Service Adjustment

NT.V.SIZE to obtain picture's vertical redisplay ratio more than 90% in factory MENU

NT.V.LINE 50HZ Vertical linearity

NT.V.SC 50HZ Vertical S-correction

NT.SHIFT 50HZ Vertical center

NT.V.SIZE 50HZ Vertical amplitude

4-5-3、Receive 50HZ monoscope PATTERN. Set TV standard status. Adjust V.LINE、V.SC and SHIFT to obtain vertical center at the center of CRT screen in factory MENU0.

4-5-4、Receive 50HZ monoscope PATTERN. Set TV standard status. Adjust V.SIZE to obtain picture's vertical redisplay ratio more than 90% in factory MENU

V.LINE 50HZ Vertical linearity

V.SC 50HZ Vertical S-correction

SHIFT 50HZ Vertical center

V.SIZE 50HZ Vertical amplitude

4-5-5、If necessary, adjust Horizontal Center and EW again.

4-6、 OSD position adjustment:

Receive 50/60HZ cross hatch pattern. Set TV standard status. Adjust OSD H. POSI. and OSD V. POSI item to obtain menu OSD at the center of CRT screen in factory MENU1;

4-7、 White Balance Adjustment

4-7-1、Set TV AV status and receive Black-White signal , connect the line to XS703,then go to auto white balance adjustment;

4-7-2、Disconnect the line when the adjustment is OK;

4-7-3、White Balance Adjustment (repairing)

4-7-4、Set TV AV status and receive Grey-White signal

4-7-5、The one sampling tube of CRT color analyzer (CA-100) covers on grey signal and the another covers on white signal;

4-7-6、Go to factory mode,. Obtain Grey signal X=281 , Y=311 by adjusting R-BIA、GBIA、 B-BIA . Obtain White signal X=281 , Y=311 by adjusting R-DRV、G-DRV、 B-DRV. Obtain both X=281 and Y=311 by adjusting the two status repeatedly .

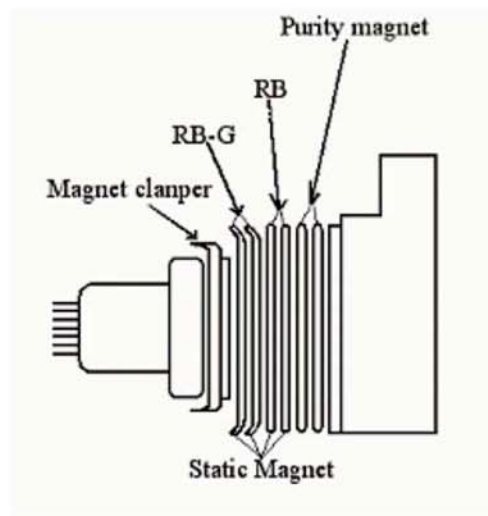
4-8、 CONVERGENCE ADJUSTMENT:

4-8-1、 Receive a dotted pattern. Set the TV receiver dynamic;

4-8-2 、 Loose the convergence magnet clumper and make red with blue dots at the

Service Adjustment

- center of the screen by rotating (R, B) static convergence magnets;
- 4-8-3、 Align Red/Blue with green dots at the center of the screen by rotating (RB-G) static convergence magnet;
 - 4-8-4、 Remove the DY wedges and slightly tilt the deflection yoke horizontally and vertically to obtain the good edge convergence. Fix them after the good overall convergence got.
 - 4-8-5、 Fix the convergence magnets in turn of Left-Low, Right-Low Right-Up , Left-Up
 - 4-8-6 、 If purity error is found , adjust color purity.



4-9、 SUB BRIGHT ADJUSTMENT:

Receive the gray scale . Get into the menu of factory mode. Then adjust the SUB.BRI option to get a scale to be seen a little brightness(Only one-two rows can be seen).

5、 E2PROM Adjustment(Department of engineering adjustment) (FOR 5Y18/5Y19)

5-1、 E2PROM Initializtion:

- 5-1-1、 When in repairing, we can replace E2PROM by other empty or unempty E2PROM, but you must initialize E2PROM to avoid unknown things.
- 5-1-2、 When in manufacturing, first you read the data from a master E2PROM 24C08, then write to other E2PROM 24C08.

5-2、 Function adjustment (Department of engineering adjustment)

Press remote control button PROD to entering factory adjust mode. Press MUTE

Service Adjustment

button to entering MENU3 , press MUTE button again after setting STEUP SELECT to 1 , set up its function according as the order form.

FACTORY MENU DESCRIPTION (5Y18E/5Y18SEA)

MENU0

Item	Name	Instruction
0	V. SIZE	Vertical amplitude (0~127)
1	V. LINE	Vertical linearity (0~31)
2	V. SHIFT	Vertical shift (0~15)
3	V. SC	Vertical SC-correction (0~31)
4	NT. V. SIZE	Vertical amplitude offset of NTSC to PAL (-31~+32)
5	NT. V. LINE	Vertical linearity offset of NTSC to PAL (-7~+8)
6	NT. V. DC	Vertical out DC level offset of NTSC to PAL (-7~+8)
7	NT. V. SHIFT	Vertical shift offset of NTSC to PAL (-7~+8)
8	NT. V. SC	Vertical SC-correction offset of NTSC to PAL (-7~+8)

MENU1

Item	Name	Instruction
0	H. PHASE	Horizontal center (0~31)
1	NT. H. PHASE	Horizontal center offset of NTSC to PAL (-7~+8)
3	H.BLK.LEFT	Horizontal Left Blanking adjust (0~7)
4	H.BLK.RIGHT	Horizontal Right Blanking adjust (0~7)
5	OSD H. POSI.	OSD horizontal position (0~63)
6	OSD V. POSI.	OSD vertical position (0~31)
7	SCR. H. POSI	SCR horizontal position (0~63)
8	OSD. CONT.	OSD contrast (0~7)

MENU2

Item	Name	Instruction
0	R-Y/B-Y G. BL	R-Y/B-Y Amplitude adjust (0~15), Default value 8
1	R-Y/B-Y ANG.	R-Y/B-Y Demodulation angle adjust(0~15), Default value8
2	B-Y DC LEVEL	White balance (0~15), Default value8;
3	R-Y DC LEVEL	White balance (0~15), Default value8;
4	PAL/M/N B-Y	SECAM White balance (0~15), Default value8;
5	PAL/M/N R-Y	SECAM White balance (0~15), Default value8;

Service Adjustment

6	YUV B-Y DC	YUV White balance (0~15), Default value8;
7	YUV R-Y DC	YUV White balance (0~15), Default value8;
8	G-Y AMP	G-Y Amplitude adjust (0~15)
9	G-Y ANGLE	G-Y Angle option0: 240, 1: 253

MENU3

Item	Name	Instruction
0	SETUP SELECT	MENU4~22 switch option (0: lost/1: ok)
1	RF. AGC	RF. AGC adjust (0~63)
2	VOLUME OUT	Volume out adjust (0~127); Make sure stereo is turn on
3	BTSC IC SEL.	BTSC IC selection (0: LA72700/1: TDA9850)
4	INPUT LEVEL	TDA9850 Amplitude of input signal (0~15) TDA9850 must be checked
5	SPECTRAL	TDA9850 Separate of high frequency (0~63) TDA9850 must be checked
6	WIDEBAND	TDA9850 Separate of low frequency (0~63) TDA9850 must be checked
7	ALC/LEVEL	ALC selection and SAP output amplitude(0: ALC OFF、LEVEL1/1: ALC ON、LEVEL1/ 2: ALC OFF、LEVEL2/3: ALC ON、LEVEL2) LA72700 must be checked
8	H.SIZE COMP	Horizontal size compensate (0~7);

MENU4

Item	Name	Instruction
0	E/W DC	E/W DC level (0~63);
1	E/W AMP	E/W amplitude (0~63);
2	E/W TILT	E/W Tilt (0~63);
3	E/W TOP	E/W top corner correction (0~15);
4	E/W BOTTOM	E/W bottom corner correction (0~15);
5	NT.E/W DC	NTSC E/W DC level (-7~+8);
6	NT.E/W AMP	NTSC E/W amplitude (-7~+8);
7	NT.E/W TOP	NTSC E/W top corner correction (-7~+8);
8	NT.E/W BOT	NTSC E/W bottom corner correction (-7~+8);
9	E/W COR.SW	Control range of corner correction 0: STRONG SIDE, 1: WEAK SIDE

MENU5

Item	Name	Instruction
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Service Adjustment

0	ZOOM V. SIZE	Vertical size of magnified screen (0~127) Make sure ZOOM OPTION is 1
1	ZOOM DC	ZOOM E/W DC level (0~63);
2	ZOOM AMP	ZOOM E/W amplitude (0~63);
3	ZOOM TOP	ZOOM E/W top corner correction (0~15);
4	ZOOM BOTTOM	ZOOM E/W bottom corner correction (0~15);
5	WIDE V. SIZE	Vertical size of wide screen(0~127); Make sure ZOOM OPTION is 1
6	WIDE DC	WIDE E/W DC level (0~63);
7	WIDE AMP	WIDE E/W amplitude (0~63);
8	WIDE TOP	WIDE E/W top corner correction (0~15);
9	WIDE BOTTOM	WIDE E/W bottom corner correction (0~15);

MENU6

Item	Name	Instruction
0	STEREO OPT.	Volume control option (0: decode inside control/1: single PWM/2: double PWM/3: LV1116 control)
1	LV1116 GAIN	LV1116 Gain control (0~7)
2	SUR. MODE	Surround mode option (0~7) (6is the same as 7)
3	WOOFER GAIN	Woofer gain control (0~7)
4	LV1116 PORT	LA1116 Input port option (0:2input/1:3input)
5	MUTE LEVEL	PMUTE Mute output level option (0: high level /1: low level)
6	VOLUME OPT.	Option of volume linearity control (0: fool control mode /1: four parts equality and linearity control mode)
7	VOLUME 25	Four parts equality and linearity control mode, Volume 25, LA7650 output (0~63)
8	VOLUME 50	Four parts equality and linearity control mode, Volume 50, LA7650 output (0~63)
9	VOLUME 75	Four parts equality and linearity control mode, Volume 75, LA7650 output (0~63)

MENU7

Item	Name	Instruction
0	S. TRAP TEST	Narrow-band sound trap wave frequency adjust (0~7); Default : 4.
1	S. TRAP. SW	Inside/outside trap wave selection (0: inside 1: outside), Default : 1
2	VOL. FILTER	Volume control and filter function (0: no 1: yes); commonly select 0.
3	A. MONI. SW	Pin 2 output Selection (0: TV audio-output 1: TV audio-output; AV audio-output)
4	4.5M OPTION	4.5M Sound system option(1: yes / 0: no)
5	5.5M OPTION	5.5M Sound system option (1: yes / 0: no)

Service Adjustment

6	6.0M OPTION	6.0M Sound system option(1: yes / 0: no)
7	6.5M OPTION	6.5M Sound system option(1: yes / 0: no)
8	THAI DUAL	Thai dual option(1: yes / 0: no)
9	TFA9843A OPT	TFA9843A option(1: yes/ 0: no)

MENU8

Item	Name	Instruction
0	AUTO OPTION	Color system AUTO option(1: yes / 0: no)
1	AUTO1/2 OPT.	Color auto identify option (0: auto identify PAL/NTSC3.58/NTSC4.43 / 1: auto identify PAL-M/PAL-N/NTSC3.58)
2	PAL OPTION	PAL Color system option(1: yes/ 0: no)
3	PAL-M OPTION	PAL-M Color system option(1: yes / 0: no)
4	PAL-N OPTION	PAL-N Color system option(1: yes/ 0: no)
5	N3.58 OPTION	NTSC3.58Color system option(1: yes / 0: no)
6	N4.43 OPTION	NTSC4.43Color system option(1: yes/ 0: no)

MENU9

Item	Name	Instruction
0	C. TRAP TEST	Color trap wave control (0~7)
1	C. BPF TEST	Color BPF control (0~3)
2	C. KILLER OPE	Color killer start setting (0~7)
3	PAL APC SW	PAL APC switch (0~1); default value 0.
4	APC OFFSET	APC OFFSET current (0~7)
5	C. VCO. ADJ.	NTSC/PAL-M/PAL-N Adjust VCO frequency (0~7)
6	C. BYPASS	Bypass color band-pass filter (0: no/1: yes) instruction: 1: throw; 0:hold.

MENU10

Item	Name	Instruction
0	SEARCH TYPE	South America tune mode (1: yes /0: no)
1	TUNER OPTION	Tuner mode option (0: voltage/1: frequency)
2	VL/VH FREQ.	Tuner VL/VH frequency selection : (VL highest frequency +VH lowest frequency)/2-100.25MHz
3	VH/UHF FREQ.	Tuner VL/UHF frequency selection:(VL highest frequency +UHF lowest frequency)/2-100.25MHz
4	BAND OPTION	Tuner UHF carry mode selection (0: 00000100B /1: 00001000B)
5	CATV BAND	South America tune mode CABLE(0: STD / 1: STD, IRC and HRC)
6	SEARCH SPEED	Search speed option (0: low mode/1: fast mode)
7	SEARCH CHECK	Auto search check when cold power on (1: yes/0: no)

Service Adjustment

MENU11

Item	Name	Instruction
0	AV OPTION	AV input option(0~3)
1	S-VIDEO OPT.	S-Video input function option (0: no 1: yes)
2	YUV OPTION	YCbCr input function option(1: yes /0: no)
3	DVD OPTION	DVD option (1: yes /0: no)
	DVD CHANNEL	<p>DVD channel option (0~3) please notice the following</p> <p>(1) AV OPTION=1 and DVD OPTION=1 0: DVD(VIDEO)→S-VIDEO→YUV 1: no 2: VIDEO→DVD(S-VIDEO)→YUV 3: VIDEO→S-VIDEO→DVD(YUV)</p> <p>(2) AV OPTION=2 and DVD OPTION=1 0: DVD(VIDEO)→VIDEO→S-VIDEO→YUV 1: VIDEO→DVD(VIDEO)→S-VIDEO→YUV 2: VIDEO1→VIDEO2→DVD(S-VIDEO)→YUV 3: VIDEO1→VIDEO2→S-VIDEO→DVD(YUV)</p> <p>(3) AV OPTION=3 and DVD OPTION=1 0: DVD(VIDEO)→VIDEO1→VIDEO2→S-VIDEO→YUV 1: VIDEO1→VIDEO2→DVD(VIDEO)→S-VIDEO→YUV 2: VIDEO1→VIDEO2→VIDEO3→DVD(S-VIDEO)→YUV 3: VIDEO1→VIDEO2→VIDEO3→S-VIDEO→DVD(YUV)</p>

MENU12

Item	Name	Instruction
0	POWER OPTION	Power original state option(0: off / 1.: remember / 2、3: on)
1	POWER LOGO	Power logo option (1/0);make sure its value is "1" after factory setting
2	SCREEN OPT.	Screen option of power on/off (0: no/1: on/2: off/3: both)
3	SCREEN TYPE	Screen type option (0: normal/1: fade in fade out)
4	SCREEN TIME	Screen waiting time selection (0~7seconds)
5	V. MUTE P.OFF	Disconnect audio output to CRT before POWER OFF(1: yes/0: no)
6	DISCHARGE	DC power off discharge control (0: no/1: yes)
7	UHF/DEGAUSS	LA76933 pin 39 th function option (0: UHF control/1: DEGAUSS control)

MENU13

Item	Name	Instruction
0	LINE MODE	B/W BALANCE, Picture mode of line and full screen changing(1: yes/0: no)

Service Adjustment

1	GRAY MODE	Inside test signal output level setting (0: white 70%/ 1: ash 15%) , Default0
2	EVERY DAY	Time menu availability option(1: every time /0: one time)
3	HOTEL MODE	Hotel mode (1: yes/0: no)
4	HOTEL VOLUME	Hotel mode largest volume control (0~100)
5	ON POSITION	Hotel mode program option (0~255)
6	ON TV/AV	Hotel mode TV/AV option (0: TV/1: AV)
7	ZOOM OPTION	Zoom option(1: yes /0: no)
8	CHILD LOCK	Child lock function option (1: yes /0: no)

MENU14

Item	Name	Instruction
0	GAME-MONEY	Game-money function option(1: yes/ no)
1	GAME-CRAB	Game-crab function option(1: yes/ 0: no)
2	GAME-TETRIS	Game-tetris function option(1: yes/ 0: no)
3	GAME-888	Game-888 function option (1: yes/ 0: no)
4	LOTTERY	Game-lottery function option(1: yes/ 0: no)
5	CALENDAR	Calendar function option (1: yes/ 0: no)
6	BIO-CLOCK	Bio-clock function option(1: yes/ no)
7	PHONE BOOK	Phone book function option(1: yes/ 0: no)

MENU15

Item	Name	Instruction
0	ENGLISH OSD	English OSD (1: yes /no)
1	CHINESE OSD	Chinese OSD (1: yes /0: no)
2	INDONESIA	Indonesia OSD(1: yes /0: no)
3	SPANISH OSD	Spanish OSD(1: yes /0: no)
4	PORTUGAL OSD	Portugal OSD (1: yes /0: no)
5	ITALIAN OSD	Italian OSD(1: yes /0: no)
6	VIETNAMESE OSD	Vietnamese OSD (1: yes /0: no)
7	FRANCE OSD	France OSD(1: yes /0: no)
8	THAI OSD	Thai OSD (1: yes /0: no)

MENU16

Item	Name	Instruction
0	BLK PROCESS	Black option in process of channel changing(1: yes /0: no)

Service Adjustment

1	BACK COLOR	Back color option in mute condition(0: blue / 1: black)
2	POSITION L/R	OSD position L/R (0: left / 1: right)
3	SCREEN SAVER	Screen saver option (0: LOGO only; 1: the 1th row character; 2: the 2th row character; 3: both rows)
4	SAVER TOP	Screen saver top (0~255)
5	SAVER BOTTOM	Screen saver bottom (0~255)
6	SAVER LEFT	Screen saver left (0~255)
7	SAVER RIGHT	Screen saver right (0~255)

MENU17

Item	Name	Instruction
0	HALF TONE	Half tone adjust (0~3)
1	MENU BACK	Menu background (1: yes /0: no)
2	M. BACK COLOR	Menu back color (BLK: back/BLU: blue/GRN: green/CYN: cyan/RED: red/MAG: purple/YEL: yellow/ WHI: white)
3	MENU H. TONE	Menu half tone option (0: no/1: half)
3	MENU ICON	Menu icon option (0: yes/1: no)
5	ICON BACK	Menu icon back (1: yes /0: no)
6	ICON H. TONE	Menu icon half tone option (0: no /1: half)
7	PROMPT TYPE	Menu prompt type option(0: single / 1: double)

MENU18

Item	Name	Instruction
0	V. COMP	Vertical compensate adjust (0~3)
1	V. SEPUP	Vertical synchronization separate sensitive enhance setting (0: normal mode/ 1: father mode), Default : 1
2	SYNC. SEP. SEN	Vertical synchronization separate sensitive gate level setting (0~7) , Default : 3
3	V RESET TIMING	Vertical reset timing (0: normal 1:0.25H phase shift), Default : 0
4	C. D. MODE	Vertical count mode(0~7), Default0
5	V. TRANS	Vertical athwart data transfer, 0: normal, 1: data transfer mode;
6	V BLK SW	Vertical blanking switch (0: normal mode 1: wide mode), Default : 0
7	FBPBLK. SW	Horizontal blanking switch (0: come from inside logic 1: come from inside logic/FBP), Default : 1

MENU19

Item	Name	Instruction
0	SUB. CONT.	Sub-contrast (0~31)
1	SUB. COLOR	Sub-color adjust (0~15)
2	SUB. SHARP	Sub-shape adjust (0~31)
3	SUB. TINT	Sub-tint adjust (0~63)

Service Adjustment

4	BRT. ABL. DEF	Auto-bright control (0: on / 1: off)
5	MID. STP. DEF	Auto-bright center control (0: on / 1: off)
6	BRT. ABL. TH	Auto-bright gate control (0~7)
7	OVER. MOD. SW	Over modulate function switch (0: off 1: on)
8	OV. MOD. LEVEL	Over modulate level (0~15)

MENU20

Item	Name	Instruction
0	CORING W/DEF	Coring noise control (0: off 1: least Plus 3: most plus)
1	PRE SHOOT	Bright signal pre-edge shoot adjust (0~3)
2	OVER SHOOT	Bright signal back edge shoot adjust (0~3)
3	Y GAMMA STA.	Y GAMMA correction start setting (0: None 1: High 3: Low)
4	DC. REST	DC reset option (0: 100% 1: 107% 2: 113% 3: 129%)
5	WPL OPE.	WPL Operation point option (0~3) 0: Default , 1: High, 3:Low
6	SH ADJUST	Shape attribute adjust (0, normal; 1, self-adapt)
7	BLK. STR. OPT.	Black level stretch screen display option (1: yes/0: no)
8	BLK. STR. STA.	Black level stretch start setting (0: high 2: low 3: none)
9	BLK. STR. GAIN	Black level stretch plus adjust (0~3)

MENU21

Item	Name	Instruction
0	AFC GAIN	AFC gain (0: AUTO / 1: HIGH) , Default : 0
1	VIF. SYS. SW	Picture mid-frequency setting (0:38.0M 1:38.9M 2:39.5M 3:45.75M)
2	VIDEO. LEVEL	Video demodulation output level (0~7); Default : 4.
3	V. LEV. OFFSET	Video demodulation output offset level (0~3)
4	RGB TEMP SW.	RGB output temperature compensate switch (0: off 1: on)
5	VCO FREQ.	Picture mid-frequency VCO frequency adjust (0~255)
6	VCO ADJUST	VCO Correction (0~15)
7	SVO OR FSC	Pin 52 output signal (0: Video output 1: Color Sub-carrier wave output) Default : 0
8	BLANK DEF	RGB Output H/V BLK {0: on (normal mode) 1: off }

MENU22

Item	Name	Instruction
0	Y TH	Signal's delicacy of Blue level extend (0~3) Default : 0
1	Y GAIN	Blue level stretch gain adjust (0~3) Default : 0
2	R WIDTH	Blue level stretch gain adjust (0~3) Default : 0
3	R OFFSET	Blue level stretch gain adjust (0~3) Default : 0

Service Adjustment

4	B WIDTH	Blue level stretch gain adjust (0~3) Default : 0
5	B OFFSET	Blue level stretch gain adjust (0~3) Default : 0
6	VM/AUDIO SW	VM Output/AUDIO outside output switch , 0: AUDIO outside output, 1: VM output
7	VM DELAY ADJ	VM Delay time (0~3)
8	VM GAIN	VM Gain option (0~7), 0: Default

Form2:Factory setting

Item	SHIP1	SHIP2
Channel	1	1
Volume	0	0
Picture mode	PERSONAL	PERSONAL
Sound mode	MUSIC	MUSIC
Tint	0	0
Balance	0	0
Color system	AUTO	AUTO
Sound system	I	BG
Language	ENGLISH	ENGLISH

Service Adjustment

FACTORY MENU DESCRIPTION (5Y18N)

1) (MENU0)

Item	Name	Instruction
0	H. PHASE	Horizontal center (0~31)
1	V. SIZE	Vertical amplitude (0~127)
2	V. LINE	Vertical linearity (0~31)
3	V. DC	Vertical center (0~63)
4	V. SHIFT	Vertical shift (0~15)
5	V. SC	Vertical SC-correction (0~31)

2) (MENU1)

Item	name	Instruction
0	RF. AGC	RF. AGC adjust (0~63)
1	H. BLK. LEFT	Horizontal Left Blanking adjust (0~7)
2	H. BLK. RIGHT	Horizontal Right Blanking adjust (0~7)
3	OSD H. POSI.	OSD horizontal position (0~63)
4	OSD V. POSI.	OSD vertical position (0~31)
5	SCR. H. POSI	SCR horizontal position (0~63)
6	OSD. CONT	OSD contrast (0~7)

3) (MENU2)

Item	Name	Instruction
0	R-Y/B-Y ANG.	R-Y/B-Y Demodulation angle adjust(0~15), Default value8
1	B-Y DC LEVEL	White balance (0~15), Default value8; ;
2	R-Y DC LEVEL	White balance (0~15), Default value8; ;
3	YUV B-Y DC	YUV White balance (0~15), Default value8;
4	YUV R-Y DC	YUV White balance (0~15), Default value8;

4) (MENU3)

Item	Name	Instruction
0	VOLUME OUT	Volume out adjust (0~127); Make sure stereo is turn on
1	BTSC IC SEL.	BTSC IC selection (0: LA72700/1: TDA9850)
2	INPUT LEVEL	TDA9850 Amplitude of input signal (0~15) TDA9850 must be checked
3	SPECTRAL	TDA9850 Separate of high frequency (0~63) TDA9850 must be checked
4	WIDEBAND	TDA9850 Separate of low frequency (0~63) TDA9850 must be checked
5	ALC/LEVEL	ALC selection and SAP output amplitude(0: ALC OFF、LEVEL1/1: ALC ON、LEVEL1/ 2: ALC OFF、LEVEL2/3: ALC ON、LEVEL2) LA72700 must be checked

Service Adjustment

5) (MENU4)

Item	Name	Instruction
0	E/W DC	E/W DC level (0~63);
1	E/W AMP	E/W amplitude (0~63);
2	E/W TILT	E/W Tilt (0~63);
3	E/W TOP	E/W top corner correction (0~15);
4	E/W BOTTOM	E/W bottom corner correction (0~15);
5	E/W H. SIZE	E/W Horizontal width compensate adjust (0~7)
6	E/W COR. SW	E/W corner mode (0: pattern 1/1: pattern 2)
7	VM. DELAY ADJ	VM delay adjust (0~3)
8	VM GAIN	VM gain adjust (0~7)

6) (MENU5)

Item	Name	Instruction
0	ZOOM V. SIZE	89
1	ZOOM DC	63
2	ZOOM AMP	63
3	ZOOM TOP	15
4	ZOOM BUTTOM	15
5	WIDE V. SIZE	58
6	WIDE DC	63
7	WIDE AMP	63
8	WIDE TOP	15
9	WIDE BUTTOM	15

7) (MENU6)

Item	Name	Instruction
0	STEREO OPT.	Volume control option (0: decode inside control/1: single PWM/2: double PWM/3: LV1116 control) /4: LV1116 volume root no balance/5: LV1116 volume root balance)
1	LV1116 VOL.	LV1116 input volume simulation setting (0~63), It is in effect when STEREO OPT. is set to 4 or 5.
2	LV1116 GAIN	LV1116 gain control (0~7)
3	SUR. MODE	Surround mode option (0~7) (6is the same as 7)
4	WOOFER GAIN	Woofer gain control (0~7)
5	LV1116 PORT	LA1116 Input port option (0:2input/1:3input)
6	VOLUME OPT.	Option of volume linearity control (0: fool control mode /1: four parts
7	VOLUME 25	Four parts equality and linearity control mode, Volume 25, LA7650 output
8	VOLUME 50	Four parts equality and linearity control mode, Volume 50, LA7650 output
9	VOLUME 75	Four parts equality and linearity control mode, Volume 75, LA7650 output

Service Adjustment

8) (MENU7)

Item	Name	Instruction
0	S. TRAP TEST	Narrow-band sound trap wave frequency adjust (0~7); Default : 4.
1	S. TRAP. SW	Inside/outside trap wave selection (0: inside 1: outside), Default : 1
2	VOL. FILTER	Volume control and filter function (0: no 1: yes); commonly select 0.
3	C. TRAP TEST	chroma trap wave control (0~7)
4	C. BPF TEST	Color BPF control (0~3)
5	C.KILLER OPE	Color killer start setting (0~7)
6	C.BYPASS	Bypass color band-pass filter (0: no/1: yes) instruction: 1: throw; 0:hold.
7	TFA9843A OPT	TFA9843A option(1: yes/ 0: no)
8	MUTE LEVEL	PMUTE output voltage select (0: high /1: low)

9) (MENU8)

Item	Name	Instruction
0	VL/VH FREQ.	VL/VH diapart frequency point selection:(VL tiptop FREQ.+ VH the lowest FREQ.)/2-100.25MHz
1	VH/UHF FREQ.	VH/UHF diapart frequency point selection: (VH tiptop FREQ. +UHF the lowest FREQ.)/2-300.25MHz
2	BAND OPTION	UHF wave band carry format selection: (0, 1: 00000100B/2, 3: 00001000B)
3	CATV BAND	South America tune mode CABLE(0: STD / 1: STD、IRC and HRC)
4	SEARCH SPEED	SEARCH SPEED selection (0: slow/1: celerity)
5	SEARCH CHECK	Auto search check when cold power on (1: yes/0: no)

10) (MENU9)

Item	Name	Instruction
0	AV OPTION	AV input option(0~3)
1	S-VIDEO OPT.	S-Video input function option (0: no 1: yes)
2	YUV OPTION	YCbCr input function option(1: yes /0: no)
3	DVD OPTION	DVD option (1: yes /0: no)

Service Adjustment

4	DVD CHANNEL	<p>DVD channel option (0~3) please notice the following</p> <p>(1) AV OPTION=1 and DVD OPTION=1 0: DVD(VIDEO)→S-VIDEO→YUV 1: no 2: VIDEO→DVD(S-VIDEO)→YUV 3: VIDEO→S-VIDEO→DVD(YUV)</p> <p>(2) AV OPTION=2 and DVD OPTION=1 0: DVD(VIDEO)→VIDEO→S-VIDEO→YUV 1: VIDEO→DVD(VIDEO)→S-VIDEO→YUV 2: VIDEO1→VIDEO2→DVD(S-VIDEO)→YUV 3: VIDEO1→VIDEO2→S-VIDEO→DVD(YUV)</p> <p>(3) AV OPTION=3 and DVD OPTION=1 0: DVD(VIDEO)→VIDEO1→VIDEO2→S-VIDEO→YUV 1: VIDEO1→VIDEO2→DVD(VIDEO)→S-VIDEO→YUV 2: VIDEO1→VIDEO2→VIDEO3→DVD(S-VIDEO)→YUV 3: VIDEO1→VIDEO2→VIDEO3→S-VIDEO→DVD(YUV)</p>
5	AVSW IC OPT.	AV switch IC selection (0:common , yes 4053 / 1:no 4053)

11) (MENU10)

Item	Name	Instruction
0	POWER OPTION	Power original state option(0: off / 1.: remember / 2、3: on)
1	POWER LOGO	Power logo option (1/0);make sure its value is "1" after factory setting
2	POWER DELAY	POWER DELAY setting (0: no/1: 2 seconds delay)
3	SCREEN OPT.	Screen option of power on/off (0: no / 1: on / 2: off / 3: both)
4	SCREEN TYPE	Screen type option (0: normal/1: fade in fade out)
5	SCREEN TIME	Screen waiting time selection (0~7seconds)
6	V.MUTE P.OFF	Disconnect audio output to CRT before POWER OFF(1: yes/0: no)
7	DISCHARGE	DC power off discharge control (0: no/1: yes)

12) (MENU11)

Item	Name	Instruction
0	LINE MODE	B/W BALANCE, Picture mode of line and full screen changing(1: yes/0:
1	GARY MODE	0
2	EVERY DAY	Time menu availability option(1: every time /0: one time)
3	HOTEL MODE	Hotel mode (1: yes/0: no)
4	HOTEL VOLUME	Hotel mode largest volume control (0~100)
5	ON POSITION	Hotel mode program option (0~255)
6	ON TV/AV	Hotel mode TV/AV option (0: TV/1: AV)
7	ZOOM OPTION	0

Service Adjustment

8	CHILD LOCK	0
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13) (MENU12)

Item	Name	Instruction
0	GAME-MONEY	Game-money function option(1: yes/ no)
1	GAME-CRAB	Game-crab function option(1: yes/ 0: no)
2	GAME-TETRIS	Game-tetris function option(1: yes/ 0: no)
3	LOTTERY	Game-lottery function option(1: yes/ 0: no)
4	CALENDAR	Calendar function option (1: yes/ 0: no)
5	BIO-CLOCK	Bio-clock function option(1: yes/ no)
6	CCD OPTION	CCD function option (1: yes 0: no)
7	V-CHIP DSP.	V-CHIP MENU OSD display selection (0: the same as former/1: new)
8	V-PASSWORD	V-CHIP password selection (1: yes/ 0: no)

14) (MENU13)

Item	Name	Instruction
0	ENGLISH OSD	English OSD selection(1: yes /0: no)
1	CHINESE OSD	Chinese OSD selection(1: yes/0: no)
2	FRANCE OSD	France OSD selection(1: yes /0: no)
3	SPAINSH OSD	Spanish OSD selection(1: yes /0: no)
4	PORTUGAL OSD	Portugal OSD selection(1: yes /0: no)

15) (MENU14)

Item	Name	Instruction
0	BLK PROCESS	1
1	BACK COLOR	Back color option in mute condition(0: blue / 1: black)
2	POSITION L/R	Choose program number OSD display on the left or right corner of the screen (0: left / 1: right)
3	SCREEN SAVER	selection of screen protection when no signals (0 : display LOGO only .don't move; 1: character in the first line; 2: the second row character; 3: both rows)
4	SAVER TOP	Screen protection top (0~255)
5	SAVER BOTTOM	Screen protection bottom (: 0~255)
6	SAVER LEFT	Screen protection left (0~255)
7	SAVER RIGHT	Screen protection right (0~255)

16) (MENU15)

Item	Name	Instruction
0	HALF TONE	Half tone adjust (0~3)
1	MENU BACK	Menu background (1: yes /0: no)
2	M. BACK COLOR	Menu back color (BLK: back/BLU: blue/GRN: green/CYN: cyan/RED: red/MAG:

Service Adjustment

3	MENU H. TONE	Menu half tone option (0: no/1: half)
4	MENU ICON	Menu icon option (0: yes/1: no)
5	ICON BACK	Menu icon back (1: yes /0: no)
6	ICON H. TONE	0
7	PROMPT TYPE	0
8	PICTURE BAR	PICTURE menu simulation quantity adjust method (0: menu simulation quantity adjust display /1: simulation quantities display separately)

17) (MENU16)

Item	Name	Instruction
0	V. COMP	Vertical compensate adjust (0~7)
1	V. SEPUP	Vertical synchronization separate sensitive enhance setting (0: normal mode/ 1: father
2	SYNC SEP SEN	(0~7)
3	C. D. MODE	Vertical count mode(0~7), Default0
4	V BLK SW	Vertical athwart data transfer, 0: normal, 1: data transfer mode;
5	FBPBLK. SW	Vertical blanking switch (0: normal mode 1: wide mode), Default : 0

18) (MENU17)

Item	Name	Instruction
0	SUB. CONT.	Sub-contrast (0~31)
1	SUB. COLOR	Sub-color adjust (0~15)
2	SUB. SHARP	Sub-shape adjust (0~31)
3	SUB. TINT	Sub-tint adjust (0~63)
4	BRT. ABL. DEF.	Auto-bright control (0: on / 1: off)
5	MID. STP. DEF	Auto-bright center control (0: on / 1: off)
6	BRT. ABL. TH	Auto-bright gate control (0~7)

19) (MENU18)

Item	Name	Instruction
0	CORING W/DEF	Coring noise control (0: off 1: least Plus 3: most plus)
1	PRE SHOOT	Bright signal pre-edge shoot adjust (0~3)
2	OVER SHOOT	Bright signal back edge shoot adjust (0~3)
3	WPL OPE.	WPL Operation point option (0~3) 0: Default , 1: High, 3:Low
4	DC. REST	DC reset option (0: 100% 1: 107% 2: 113% 3: 129%)
5	BLK. STR. OPT.	Black level stretch screen display option (1: yes/0: no)
6	BLK. STR. STA.	Black level stretch start setting (0: high 2: low 3: none)

Service Adjustment

7	BLK. STR. GAIN	Black level stretch plus adjust (0~3)
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20) (MENU19)

Item	Name	Instruction
0	AFC GAIN	AFC gain (0: AUTO / 1: HIGH) , Default 0
1	VIF. SYS. SW	Picture intermediate frequency setting (0:38.0M 1:38.9M 2:39.5M 3:45.75M)
2	VIDEO. LEVEL	Video demodulate output range setting (0~7); Default 4.
3		
4	VCO FREQ.	Picture mid-frequency VCO frequency adjust (0~63) operate in the engineering sample LA76950 only
5	SVO OR FSC	Pin 52 output signal (0: Video output 1: Color Sub-carrier wave output) Default : 0
6	RGB TEMP SW.	1
7	OVER. MOD. SW.	Over modulate function switch (0: off 1: on)
8	OV. MOD. LEVEL	Over modulate level (0~15)

Service Adjustment

FACTORY MENU DESCRIPTION (5Y18S)

MENU0

Item	Name	Instruction
0	V. SIZE	Vertical amplitude (0~127)
1	V. LINE	Vertical linearity (0~31)
2	V. SHIFT	Vertical shift (0~15)
3	V. SC	Vertical SC-correction (0~31)
4	NT. V. SIZE	Vertical amplitude offset of NTSC to PAL (-31~+32)
5	NT. V. LINE	Vertical linearity offset of NTSC to PAL (-7~+8)
6	NT. V. DC	Vertical out DC level offset of NTSC to PAL (-7~+8)
7	NT. V. SHIFT	Vertical shift offset of NTSC to PAL (-7~+8)
8	NT. V. SC	Vertical SC-correction offset of NTSC to PAL (-7~+8)

MENU1

Item	Name	Instruction
0	H. PHASE	Horizontal center (0~31)
1	NT. H. PHASE	Horizontal center offset of NTSC to PAL (-7~+8)
3	H.BLK.LEFT	Horizontal Left Blanking adjust (0~7)
4	H.BLK.RIGHT	Horizontal Right Blanking adjust (0~7)
5	OSD H. POSI.	OSD horizontal position (0~63)
6	OSD V. POSI.	OSD vertical position (0~31)
7	SCR. H. POSI	SCR horizontal position (0~63)
8	OSD. CONT.	OSD contrast (0~7)

MENU2

Item	Name	Instruction
0	R-Y/B-Y G. BL	R-Y/B-Y Amplitude adjust (0~15), Default value 8
1	R-Y/B-Y ANG.	R-Y/B-Y Demodulation angle adjust(0~15), Default value8
2	B-Y DC LEVEL	White balance (0~15), Default value8;
3	R-Y DC LEVEL	White balance (0~15), Default value8;
4	PAL/M/N B-Y	SECAM White balance (0~15), Default value8;
5	PAL/M/N R-Y	SECAM White balance (0~15), Default value8;

Service Adjustment

6	YUV B-Y DC	YUV White balance (0~15), Default value8;
7	YUV R-Y DC	YUV White balance (0~15), Default value8;
8	G-Y AMP	G-Y Amplitude adjust (0~15)
9	G-Y ANGLE	G-Y Angle option0: 240, 1: 253

MENU3

Item	Name	Instruction
0	SETUP SELECT	MENU4~22 switch option (0: lost/1: ok)
1	RF.AGC	RF.AGC adjust (0~63)
2	VOLUME OUT	Volume out adjust (0~127); Make sure stereo is turn on
3	BTSC IC SEL.	BTSC IC selection (0: LA72700/1: TDA9850)
4	INPUT LEVEL	TDA9850 Amplitude of input signal (0~15) TDA9850 must be checked
5	SPECTRAL	TDA9850 Separate of high frequency (0~63) TDA9850 must be checked
6	WIDEBAND	TDA9850 Separate of low frequency (0~63) TDA9850 must be checked
7	ALC/LEVEL	ALC selection and SAP output amplitude(0: ALC OFF、LEVEL1/1: ALC ON、LEVEL1/ 2: ALC OFF、LEVEL2/3: ALC ON、LEVEL2) LA72700 must be checked
8	H.SIZE COMP	Horizontal size compensate (0~7);

MENU4

Item	Name	Instruction
0	E/W DC	E/W DC level (0~63);
1	E/W AMP	E/W amplitude (0~63);
2	E/W TILT	E/W Tilt (0~63);
3	E/W TOP	E/W top corner correction (0~15);
4	E/W BOTTOM	E/W bottom corner correction (0~15);
5	NT.E/W DC	NTSC E/W DC level (-7~+8);
6	NT.E/W AMP	NTSC E/W amplitude (-7~+8);
7	NT.E/W TOP	NTSC E/W top corner correction (-7~+8);
8	NT.E/W BOT	NTSC E/W bottom corner correction (-7~+8);
9	E/W COR.SW	Control range of corner correction 0: STRONG SIDE, 1: WEAK SIDE

Service Adjustment

MENU5

Item	Name	Instruction
0	STEREO OPT.	Volume control option (0: decode inside control/1: single PWM/2: double PWM/3: LV1116 control)
1	LV1116 GAIN	LV1116 Gain control (0~7)
2	SUR. MODE	Surround mode option (0~7) (6is the same as 7)
3	WOOFER GAIN	Woofer gain control (0~7)
4	LV1116 PORT	LA1116 Input port option (0:2input/1:3input)
5	MUTE LEVEL	PMUTE Mute output level option (0: high level /1: low level)
6	VOLUME OPT.	Option of volume linearity control (0: fool control mode /1: four parts equality and linearity control mode)
7	VOLUME 25	Four parts equality and linearity control mode, Volume 25, LA7650 output (0~63)
8	VOLUME 50	Four parts equality and linearity control mode, Volume 50, LA7650 output (0~63)
9	VOLUME 75	Four parts equality and linearity control mode, Volume 75, LA7650 output (0~63)

MENU6

Item	Name	Instruction
0	S. TRAP TEST	Narrow-band sound trap wave frequency adjust (0~7); Default : 4.
1	S. TRAP. SW	Inside/outside trap wave selection (0: inside 1: outside), Default : 1
2	VOL. FILTER	Volume control and filter function (0: no 1: yes); commonly select 0.
3	A. MONI. SW	Pin 2 output Selection (0: TV audio-output 1: TV audio-output; AV audio-output)
4	4.5M OPTION	4.5M Sound system option(1: yes / 0: no)
5	5.5M OPTION	5.5M Sound system option (1: yes / 0: no)
6	6.0M OPTION	6.0M Sound system option(1: yes / 0: no)
7	6.5M OPTION	6.5M Sound system option(1: yes / 0: no)
8	BALANCE OPT.	' sound balance system selection(1:yes/0:no)
9	CH, SET. OPT	' channel mode option switch(1:Europe/0:America) define:0.

Service Adjustment

MENU 7

Item	Name	Instruction
0	AUTO OPTION	Color system AUTO option(1: yes / 0: no)
1	AUTO1/2 OPT.	Color auto identify option (0: auto identify PAL/NTSC3.58/NTSC4.43 / 1: auto identify PAL-M/PAL-N/NTSC3.58)
2	PAL OPTION	PAL Color system option(1: yes/ 0: no)
3	PAL-M OPTION	PAL-M Color system option(1: yes / 0: no)
4	PAL-N OPTION	PAL-N Color system option(1: yes/ 0: no)
5	N3.58 OPTION	NTSC3.58Color system option(1: yes / 0: no)
6	N4.43 OPTION	NTSC4.43Color system option(1: yes/ 0: no)

MENU8

Item	Name	Instruction
0	C. TRAP TEST	Color trap wave control (0~7)
1	C. BPF TEST	Color BPF control (0~3)
2	C.KILLER OPE	Color killer start setting (0~7)
3	PAL APC SW	PAL APC switch (0~1); default value 0.
4	C. VCO. ADJ.	NTSC/PAL-M/PAL-N Adjust VCO frequency (0~7)
5	C. BYPASS	Bypass color band-pass filter (0: no/1: yes) instruction: 1: throw; 0:hold.
6	FM GAIN	(1:yes/0:no) define 0

MENU 9

Item	Name	Instruction
0	SEARCH TYPE	South America tune mode (1: yes /0: no)
1	TUNER OPTION	Tuner mode option (0: voltage/1: frequency)
2	VL/VH FREQ.	Tuner VL/VH frequency selection :(VL highest frequency +VH lowest frequency)/2-100.25MHz
3	VH/UHF FREQ.	Tuner VL/UHF frequency selection:(VL highest frequency +UHF lowest
4	BAND OPTION	Tuner UHF carry mode selection (0: 00000100B /1: 00001000B)
5	CATV BAND	South America tune mode CABLE(0: STD / 1: STD、IRC and HRC)
6	SEARCH SPEED	Search speed option (0: low mode/1: fast mode)
7	SEARCH CHECK	Auto search check when cold power on (1: yes/0: no)

Service Adjustment

MENU10

Item	Name	Instruction
0	AV OPTION	AV input option(0~3)
1	S-VIDEO OPT.	S-Video input function option (0: no 1: yes)
2	YUV OPTION	YCbCr input function option(1: yes /0: no)
3	DVD OPTION	DVD option (1: yes /0: no)
	DVD CHANNEL	<p>DVD channel option (0~3) please notice the following</p> <p>(1) AV OPTION=1 and DVD OPTION=1 0: DVD(VIDEO)→S-VIDEO→YUV 1: no 2: VIDEO→DVD(S-VIDEO)→YUV 3: VIDEO→S-VIDEO→DVD(YUV)</p> <p>(2) AV OPTION=2 and DVD OPTION=1 0: DVD(VIDEO)→VIDEO→S-VIDEO→YUV 1: VIDEO→DVD(VIDEO)→S-VIDEO→YUV 2: VIDEO1→VIDEO2→DVD(S-VIDEO)→YUV 3: VIDEO1→VIDEO2→S-VIDEO→DVD(YUV)</p> <p>(3) AV OPTION=3 and DVD OPTION=1 0: DVD(VIDEO)→VIDEO1→VIDEO2→S-VIDEO→YUV 1: VIDEO1→VIDEO2→DVD(VIDEO)→S-VIDEO→YUV 2: VIDEO1→VIDEO2→VIDEO3→DVD(S-VIDEO)→YUV 3: VIDEO1→VIDEO2→VIDEO3→S-VIDEO→DVD(YUV)</p>

12) (MENU11)

Item	Name	Instruction
0	POWER OPTION	Power original state option(0: off / 1.: remember / 2、3: on)
1	POWER LOGO	Power logo option (1/0);make sure its value is "1" after factory setting
2	SCREEN OPT.	Screen option of power on/off (0: no /1: on /2: off /3: both)
3	SCREEN TYPE	Screen type option (0: normal/1: fade in fade out)
4	SCREEN TIME	Screen waiting time selection (0~7seconds)
5	V. MUTE P. OFF	Disconnect audio output to CRT before POWER OFF(1: yes/0: no)
6	DISCHARGE	DC power off discharge control (0: no/1: yes)
7	UHF/DEGAUSS	LA76933 pin 39 th function option (0: UHF control/1: DEGAUSS control)
8	X-RAY OPT.	X RAY protection awitvh(1:yes/0:no)
9	X-RAY VOLT.	X-RAY protection voltage option

Service Adjustment

MENU12

Item	Name	Instruction
0	LINE MODE	B/W BALANCE, Picture mode of line and full screen changing(1: yes/0: no)
1	GRAY MODE	Inside test signal output level setting (0: white 70%/ 1: ash 15%), Default0
2	EVERY DAY	Time menu availability option(1: every time /0: one time)
3	HOTEL MODE	Hotel mode (1: yes/0: no)
4	HOTEL VOLUME	Hotel mode largest volume control (0~100)
5	ON POSITION	Hotel mode program option (0~255)
6	ON TV/AV	Hotel mode TV/AV option (0: TV/1: AV)
7	ZOOM OPTION	Zoom option(1: yes /0: no)
8	CHILD LOCK	Child lock function option (1: yes /0: no)

MENU13

Item	Name	Instruction
0	GAME-MONEY	Game-money function option(1: yes/ no)
1	CALENDAR	Calendar function option (1:yes/0:no)
2	CCD OPTION	CCD function option (1:yes/0:no)
3	V-CHIP OPT.	V-CHIP function option (1:yes/0:no)
4	V. PASSWORD	V-CHIP password option (1:yes/0:no)
5	CANADA V- CHIP	Canada V-CHIP option (1:yes/0:no)

MENU14

Item	Name	Instruction
0	ENGLISH OSD	English OSD (1: yes /no)
1	INDONESIA	Indonesia OSD(1: yes /0: no)
2	SPANISH OSD	Spanish OSD(1: yes /0: no)
3	PORTUGAL OSD	Portugal OSD (1: yes /0: no)
4	VIETNAMESE OSD	Vietnamese OSD (1: yes /0: no)
5	FRANCE OSD	France OSD(1: yes /0: no)
6	THAI OSD	Thai OSD (1: yes /0: no)

Service Adjustment

MENU15

Item	Name	Instruction
0	BLK PROCESS	Black option in process of channel changing(1: yes /0: no)
1	BACK COLOR	Back color option in mute condition(0: blue / 1: black)
2	POSITION L/R	OSD position L/R (0: left/ 1: right)
3	SCREEN SAVER	Screen saver option (0: LOGO only; 1: the 1th row character; 2: the 2th row character; 3: both rows)
4	SAVER TOP	Screen saver top (0~255)
5	SAVER BOTTOM	Screen saver bottom (0~255)
6	SAVER LEFT	Screen saver left (0~255)
7	SAVER RIGHT	Screen saver right (0~255)

MENU16

Item	Name	Instruction
0	HALF TONE	Half tone adjust (0~3)
1	MENU BACK	Menu background (1: yes /0: no)
2	M. BACK COLOR	Menu back color (BLK: back/BLU: blue/GRN: green/CYN: cyan/RED: red/MAG: purple/YEL: yellow/ WHI: white)
3	MENU H. TONE	Menu half tone option (0: no/1: half)
3	MENU ICON	Menu icon option (0: yes/1: no)
5	ICON BACK	Menu icon back (1: yes /0: no)
6	ICON H. TONE	Menu icon half tone option (0: no /1: half)

MENU17

Item	Name	Instruction
0	V. COMP	Vertical compensate adjust (0~3)
1	V. SEPUP	Vertical synchronization separate sensitive enhance setting (0: normal mode/ 1: father mode), Default : 1
2	SYNC. SEP. SEN	Vertical synchronization separate sensitive gate level setting (0~7) , Default : 3
3	V RESET TIMING	Vertical reset timing (0: normal 1:0.25H phase shift), Default : 0
4	C. D. MODE	Vertical count mode(0~7), Default0
5	V. TRANS	Vertical athwart data transfer, 0: normal, 1: data transfer mode;
6	V BLK SW	Vertical blanking switch (0: normal mode 1: wide mode), Default : 0
7	FBPBLK. SW	Horizontal blanking switch (0: come from inside logic 1: come from inside logic/FBP), Default : 1

MENU18

Item	Name	Instruction
0	SUB. CONT.	Sub-contrast (0~31)
1	SUB. COLOR	Sub-color adjust (0~15)
2	SUB. SHARP	Sub-shape adjust (0~31)
3	SUB. TINT	Sub-tint adjust (0~63)

Service Adjustment

4	BRT. ABL. DEF	Auto-bright control (0: on / 1: off)
5	MID. STP. DEF	Auto-bright center control (0: on / 1: off)
6	BRT. ABL. TH	Auto-bright gate control (0~7)
7	OVER. MOD. SW	Over modulate function switch (0: off 1: on)
8	OV. MOD. LEVEL	Over modulate level (0~15)

MENU 19

Item	Name	Instruction
0	CORING W/DEF	Coring noise control (0: off 1: least Plus 3: most plus)
1	PRE SHOOT	Bright signal pre-edge shoot adjust (0~3)
2	OVER SHOOT	Bright signal back edge shoot adjust (0~3)
3	Y GAMMA STA.	Y GAMMA correction start setting (0: None 1: High 3: Low)
4	DC. REST	DC reset option (0: 100% 1: 107% 2: 113% 3: 129%)
5	WPL OPE.	WPL Operation point option (0~3) 0: Default , 1: High, 3:Low
6	SH ADJUST	Shape attribute adjust (0, normal; 1, self-adapt)
7	BLK. STR. OPT.	Black level stretch screen display option (1: yes/0: no)
8	BLK. STR. STA.	Black level stretch start setting (0: high 2: low 3: none)
9	BLK. STR. GAIN	Black level stretch plus adjust (0~3)

MENU 20

Item	Name	Instruction
0	AFC GAIN	AFC gain (0: AUTO / 1: HIGH) , Default : 0
1	VIF. SYS. SW	Picture mid-frequency setting (0:38.0M 1:38.9M 2:39.5M 3:45.75M)
2	VIDEO. LEVEL	Video demodulation output level (0~7); Default : 4.
3	V. LEV. OFFSET	Video demodulation output offset level (0~3)
4	RGB TEMP SW.	RGB output temperature compensate switch (0: off 1: on)
5	VCO FREQ.	Picture mid-frequency VCO frequency adjust (0~255)
6	VCO ADJUST	VCO Correction (0~15)
7	SVO OR FSC	Pin 52 output signal (0: Video output 1: Color Sub-carrier wave output) Default : 0
8	BLANK DEF	RGB Output H/V BLK {0: on (normal mode) 1: off }
9	CORING OPT .	coring option (0:no/1:yes)

MENU 21

Item	Name	Instruction
0	Y TH	Signal's delicacy of Blue level extend (0~3) Default : 0
1	Y GAIN	Blue level stretch gain adjust (0~3) Default : 0
2	R WIDTH	Blue level stretch gain adjust (0~3) Default : 0
3	R OFFSET	Blue level stretch gain adjust (0~3) Default : 0

Service Adjustment

4	B WIDTH	Blue level stretch gain adjust (0~3) Default : 0
5	B OFFSET	Blue level stretch gain adjust (0~3) Default : 0
6	VM/AUDIO SW	VM Output/AUDIO outside output switch , 0: AUDIO outside output, 1: VM output
7	VM DELAY ADJ	VM Delay time (0~3)
8	VM GAIN	VM Gain option (0~7), 0: Default

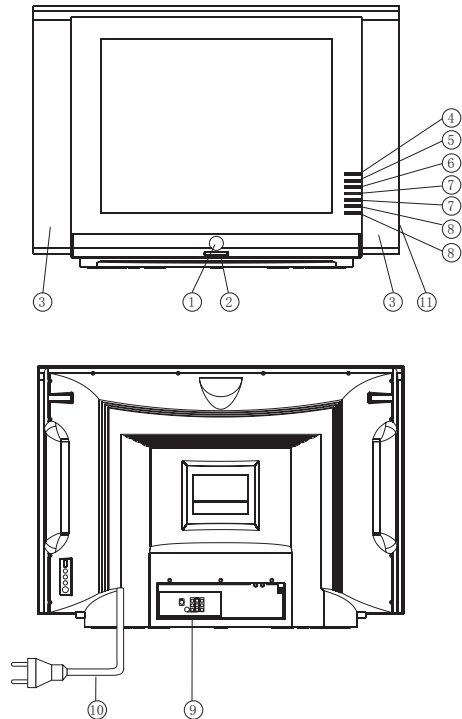
Form2:Factory setting

Item	SHIP1	SHIP2
Channel	1	1
Volume	0	0
Picture mode	PERSONAL	PERSONAL
Sound mode	MUSIC	MUSIC
Tint	0	0
Balance	0	0
Color system	AUTO	AUTO
Sound system	I	BG
Language	ENGLISH	ENGLISH

Control Location

CONTROL PANEL BUTTONS

1. Power Button
2. Power Indicator & Remote Sensor
3. Speakers
4. Standby Button
5. AV/TV Button
6. Menu Button
7. Volume Down/Up Button
8. Channel Down /Up Button
9. Video In2(Optional)
AV Out(Optional)
YUV(Y,Cb,Cr)In (Option)
S-Video In (Option)
Antenna Input Socket (75 ohm)
10. AC Power Cord
11. Side Video In(Optional)



Power Connection

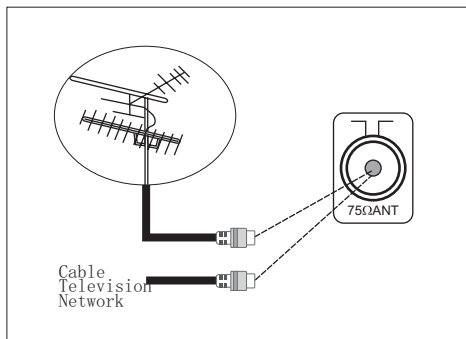
Only use the adaptor supplied with this product, connect the AC plug to the socket at the back of the TV. This TV must be operated only from the type of power source indicated on the marking label (AC 90-260V 50/60 Hz).

Rear View of the TV Set

Video And Audio Input/ Output Terminals

Control Location

Connecting the Aerial(or Cable Television Network)

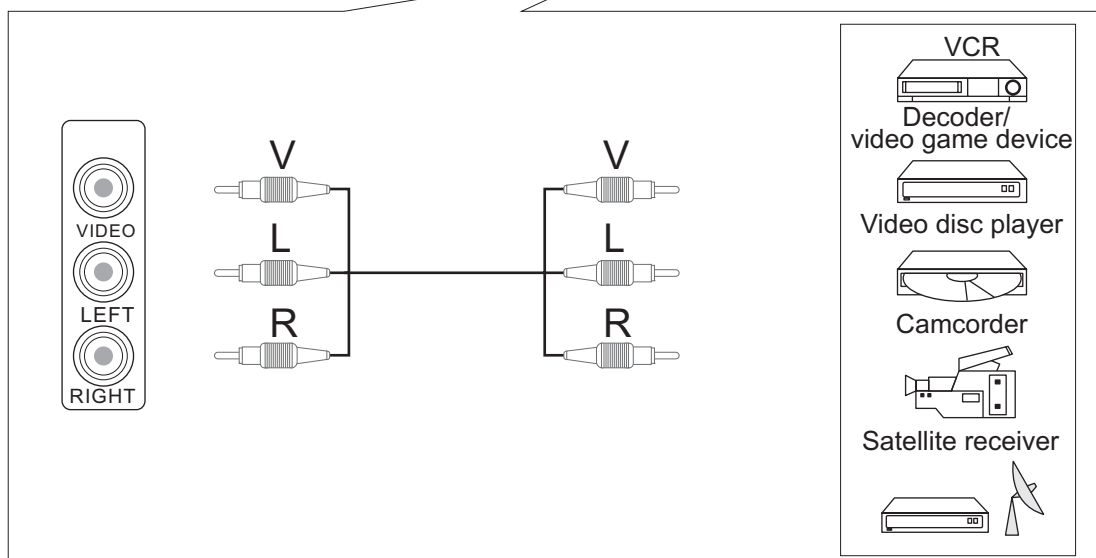
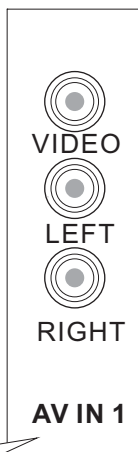


To view television channels correctly, a signal must be received by the set from one of the following sources:

- *An outdoor aerial
- *A cable television network

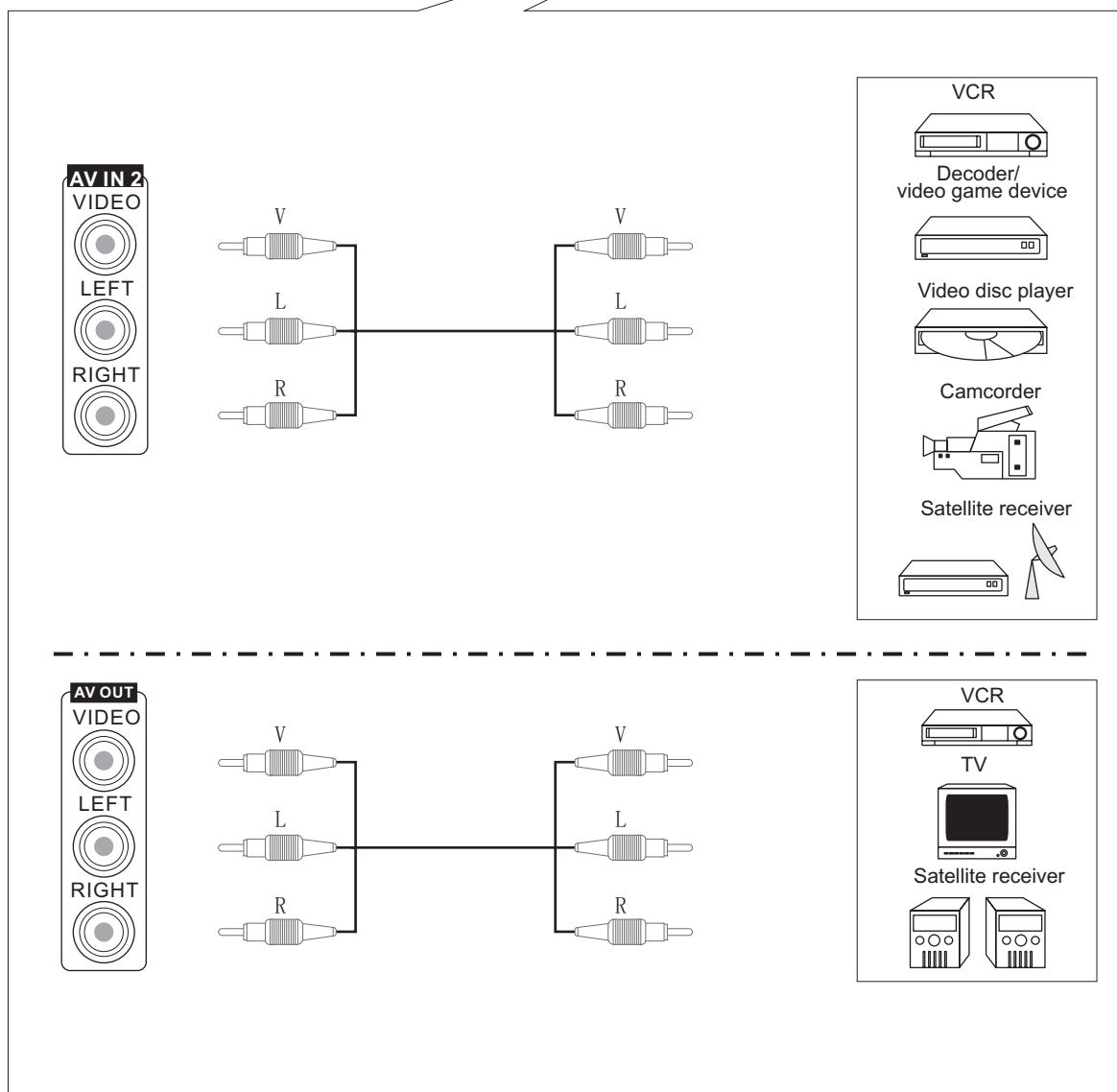
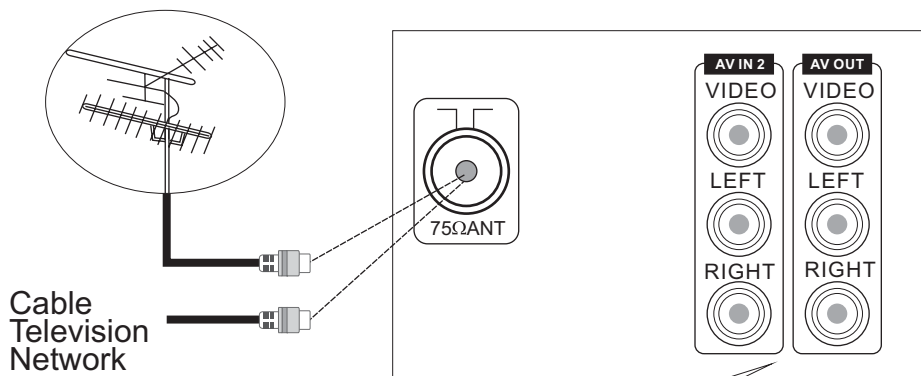
Plug the aerial or cable network input cable to the 75Ω coaxial socket on the rear of the television.

Front(or side) Audio/Video Input



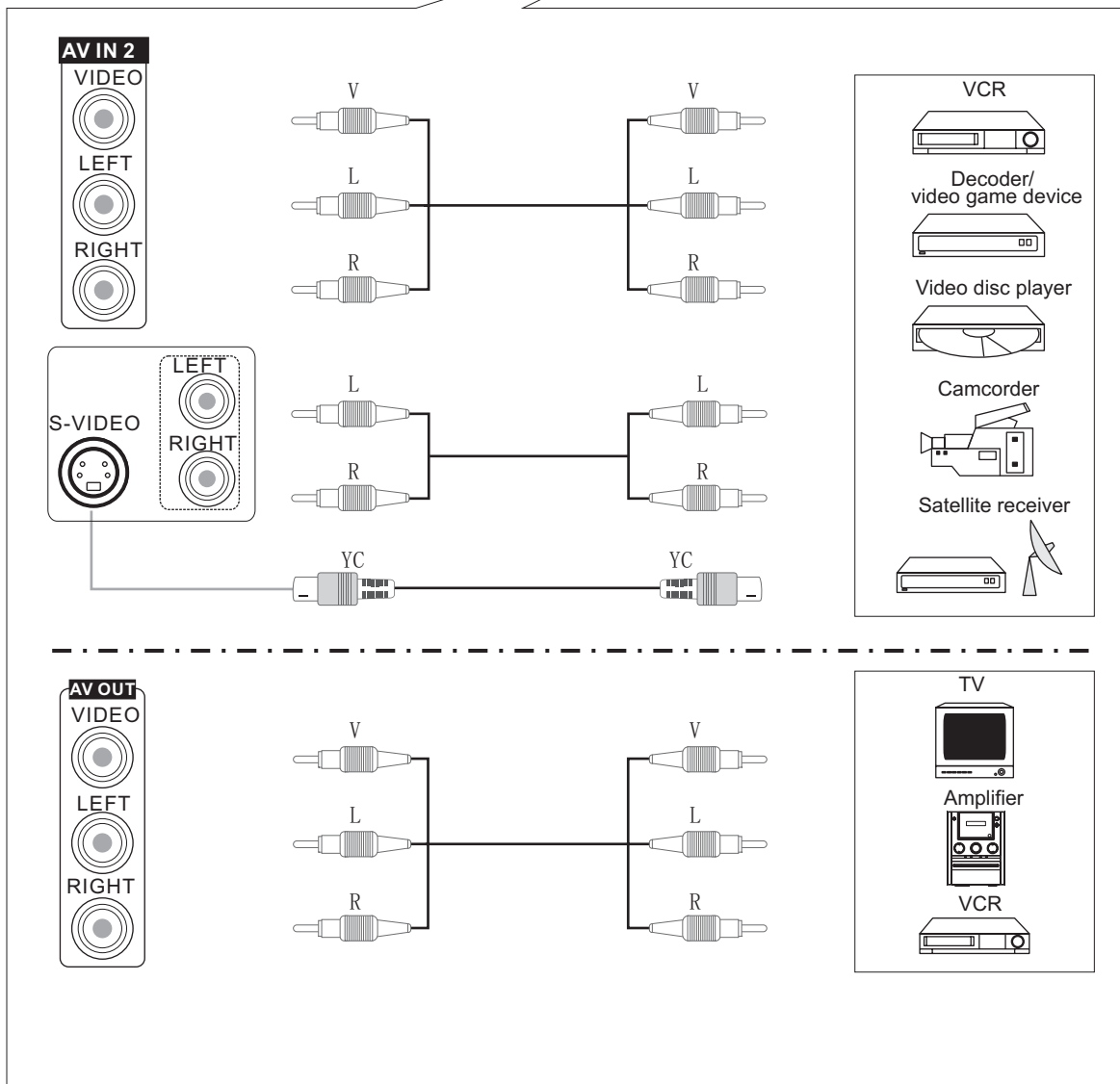
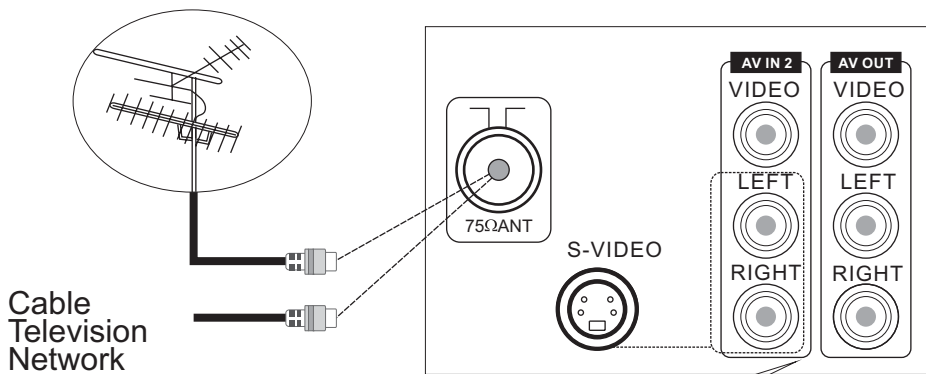
Input and Output Terminals

Connecting to the Audio/Video Input/Outputs



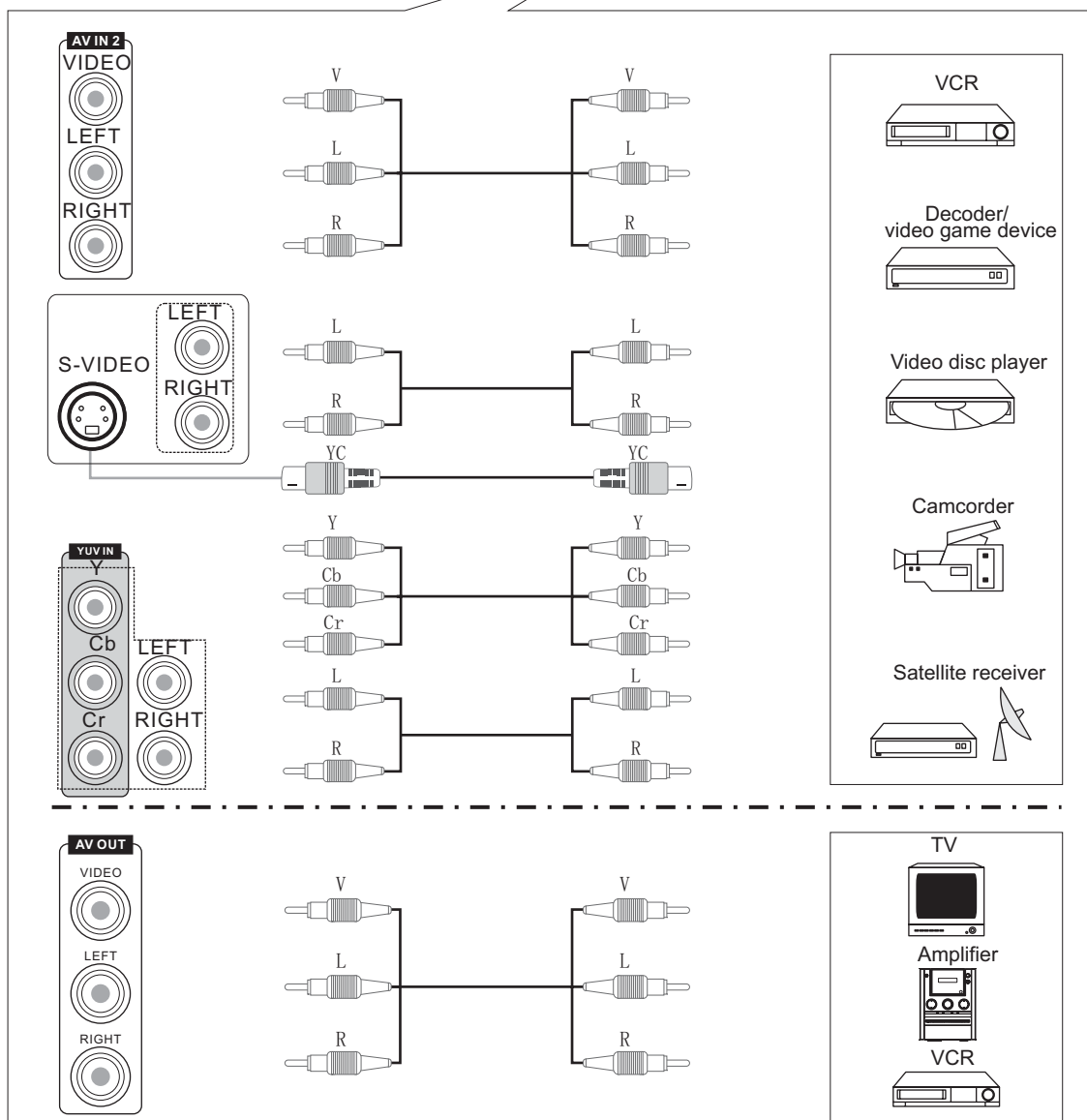
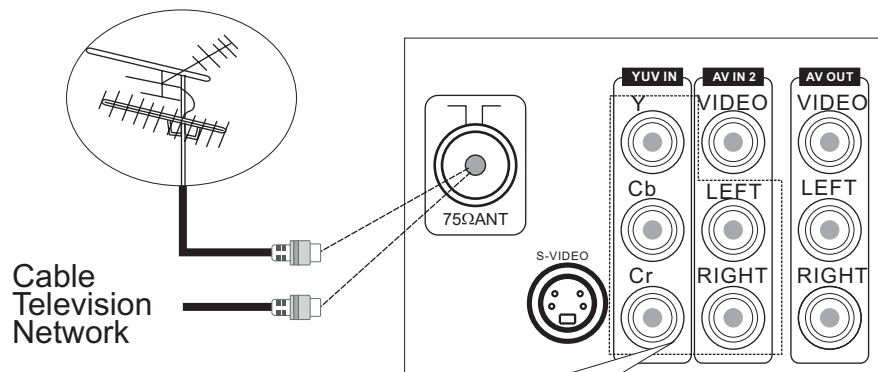
Input and Output Terminals

Connecting to the Audio/Video Input/Outputs



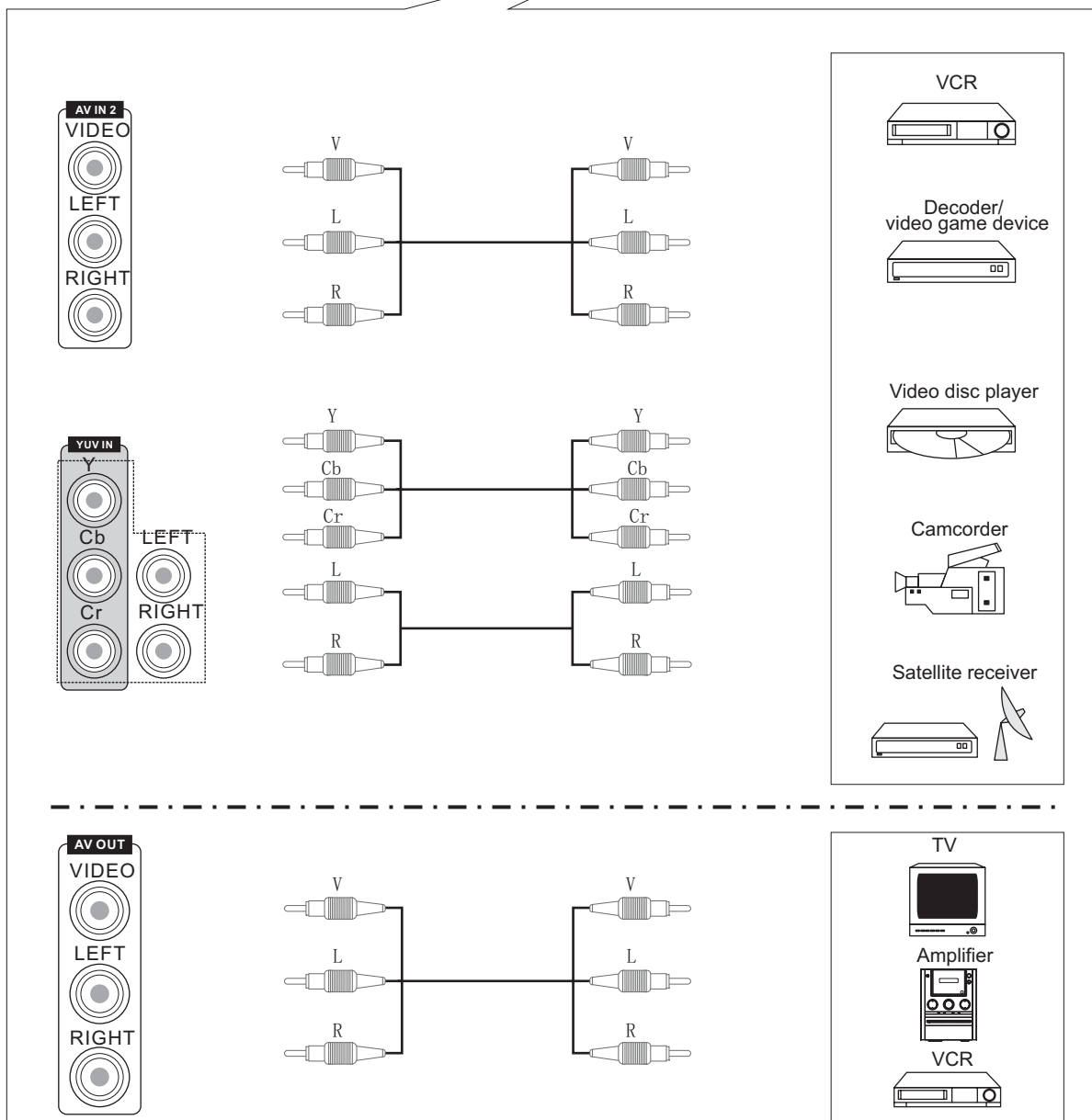
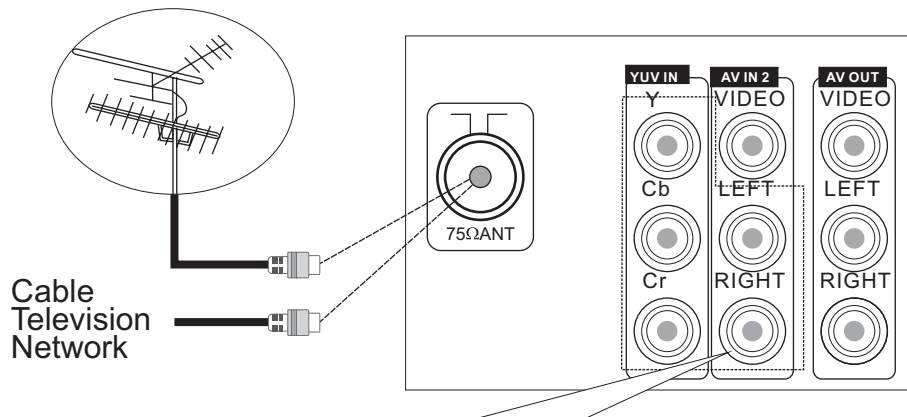
Input and Output Terminals

Connecting to the Audio/Video Input/Outputs



Input and Output Terminals

Connecting to the Audio/Video Input/Outputs



Input and Output Terminals

PERIPHERAL EQUIPMENT CONNECTIONS

There is a wide range of audio and video equipment that can be connected to your TV. Connection diagrams at the end of this section show you where the different equipment should be connected at the backside of the TV.

Aerial socket

1. Connect the RF out socket of the VCR to the aerial socket on the back of the set.
2. Connect the aerial cable to the RF aerial in socket of the VCR.
3. Select the program number where the VCR channel is stored.
4. Press the PLAY button on the VCR.

Audio/ Video in sockets

1. Connect the audio/video out sockets of the VCR to audio/video in sockets of the set.
2. Press the AV/TV button to select AV.
3. Press the PLAY button on the VCR.

The VCR playback picture appears on the screen.

Precautions when connecting to other equipments

When using external equipment with this TV, please read the instruction manual of the external equipment.

Switch off all power supplies to the equipment and TV before connection.

Always ensure that the input and output terminals are correctly connected..

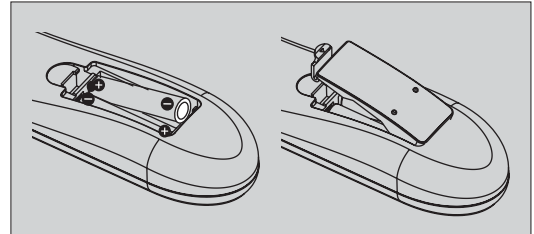
Operation Instructions

USING THE REMOTE CONTROL

Batteries

Please follow the below instructions to install the supplied batteries into the remote control to make it operate.

1. Remove the battery cover.
2. Insert two 1.5V (AAA size) batteries making sure The polarity (+ or -) of the batteries matches the polarity marks inside the unit.
3. Replace the battery cover.



Precautions when using batteries

Do not use old and new batteries together.

Do not use different types of batteries (for example, Manganese and Alkaline batteries)

- together.

Note that there are chargeable and non-chargeable batteries. Do not attempt to charge

non-chargeable batteries.

- If the remote control unit is not used for a long period of time, remove the batteries

Precautions when using the remote control unit

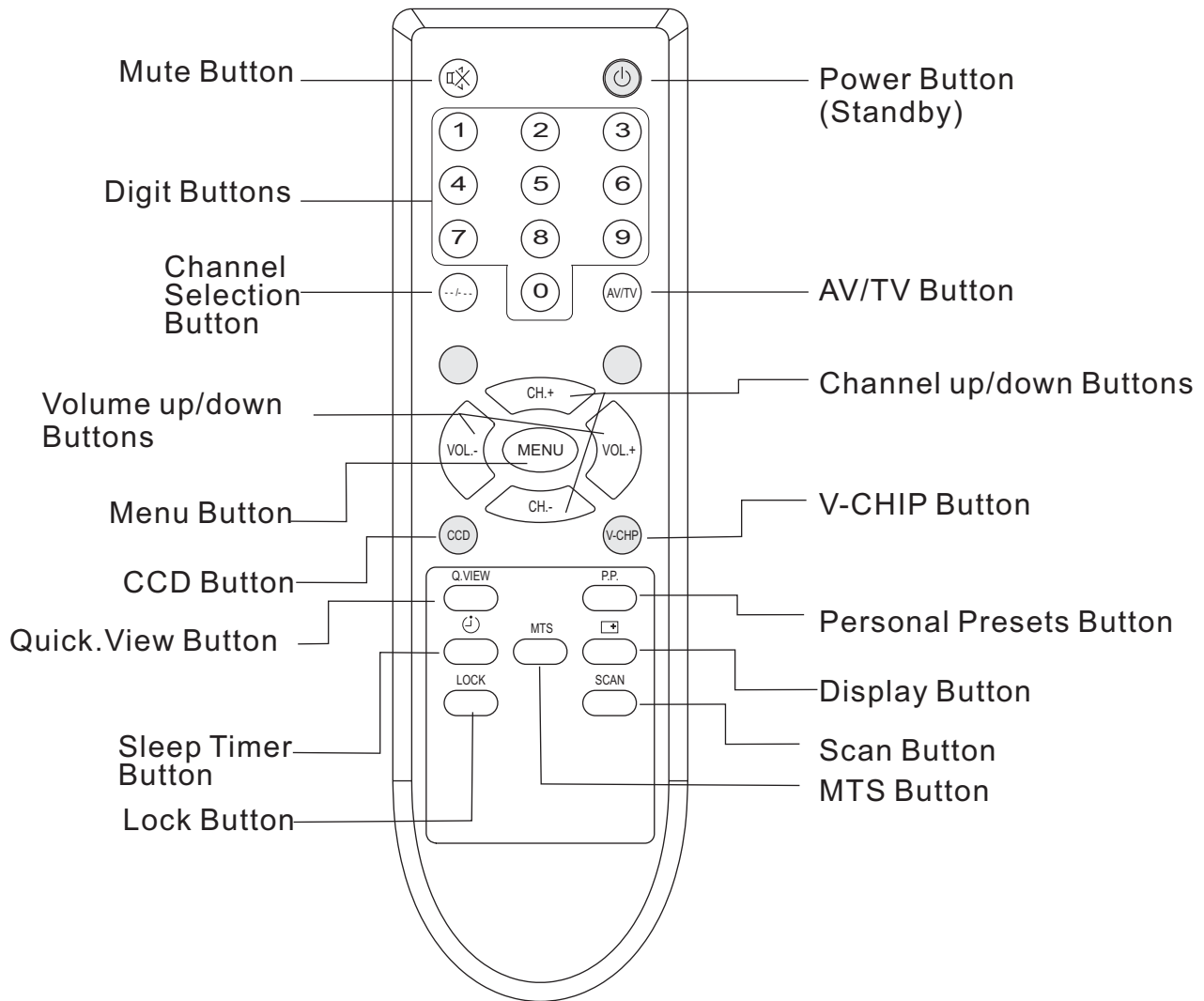
- Do not drop the remote control unit.
- Do not subject the remote control unit to physical shocks.
- Keep the remote control unit dry. Wetting it may cause the unit to malfunction.

Replace the batteries with new ones when operation of the unit deteriorates.

NOTE: If there is an object between the remote control and the signal remote

Operation Instructions

REMOTE CONTROL BUTTONS



Operation Instructions

Remote Control Buttons

1. POWER (STANDBY) BUTTON (⏻)

Press this button to turn the TV on/off. Press any Number Button or Program Up/Down Button will also switch on the TV from standby mode.

2. MUTE BUTTON (🔇)

Press this button to temporarily cut off the sound output, press it again to restore the sound level.

3. DIGIT BUTTONS (0-9)

If you want to select 0~99 program channel ,please press the digits buttons to enter the program channel directly.

If your want to select 100-125 program channel, please press "--/---" button until display "1--" on the top right screen, then enter the two latter program channel number.

AIR Channel: 2-69

CATV Channel: 1-125

4. AV/TV BUTTON (AV/ TV)

Inputs can be set for TV or AV mode. Press this button to display external video signal such as DVD, VCR or VCD video player. AV will be displayed on the screen. Press this button again to switch back to TV signal from AV.

5. CHANNEL UP/DOWN BUTTONS (CH. +/-)

Press the Channel Up Button to select the channel forwards.

Press the Channel Down Button to select the chqnnel backwards.

6. VOLUME UP/DOWN BUTTONS (VOL. +/-)

Press Volume +/- Buttons to adjust sound level.

7. MENU BUTTON (MENU)

Press "MENU" button to display the OSD (On-Screen Display) menu for adjusting the image, sound and functions. Pressing this button again to out from the OSD.

Please refer to page 16- 21 for the details.

Operation Instructions

8. PERSONAL PRESETS BUTTON (P.P.)

You can select USER, STANDARD, SOFT or RICH mode by pressing this button.

9. QUICK VIEW BUTTON (Q.VIEW)

Press this button to return to the previously viewed channel.

10. DISPLAY BUTTON (□+)

Press this button sequentially to display the current channel number, color system and sound system on the screen.

11. SLEEP TIMER BUTTON (⌚)

Press the "Sleep Timer" button on your remote control to start setting the automatic sleep timer. Press the button to adjust the time in increments of 30 minutes, from 0 to 180 minutes. When the preset time runs to 0, TV set will go into standby mode. To switch off this function, press this key step by step until " OFF" is displayed on the screen.

- If you do not set the time, " --:--" will display on the screen

12. LOCK BUTTON

The TV set can provide the locked key for control or prevent your children from watching the channel.

SETTING UP THE CHILD LOCK FUNCTION:

Press the "LOCK" button on remote control unit. The key locked symbol(🔒) will be displayed on the screen for five seconds and entered into the child locked mode. While in Lock mode, any keys on the TV set will be disabled. Except the key on the Remote control

RELEASE CHILD LOCK:

Press again the "LOCK" button on the remote control unit to cancel this function.

13. SCAN BUTTON

Press the SCAN button to automatically browse every channel which you have stored.

14. V-CHIP BUTTON

When V-Chip function turned "ON" in the Features Menu you can press the V-Chip button to go to the V-Chip menu. When V-CHIP in "OFF" mode, the V-Chip button on the remote control will be disabled.

For the V-CHIP MENU function, please refer to page 17 for the details.

Operation Instructions

15. CLOSE CAPTION DISPLAY BUTTON (CCD)

Closed-Captions aim to describe all significant audio content, as well as "non-speech information," such as the identity of speakers and their manner of speaking. Press this button to select the Closed-Caption Display Mode:

C1 → C2 → C3 → C4 → TEXT1 → TEXT2 → TEXT3 → TEXT4 → OFF.
↑

16. MTS (Multichannel Television Stereo) (OPTION)

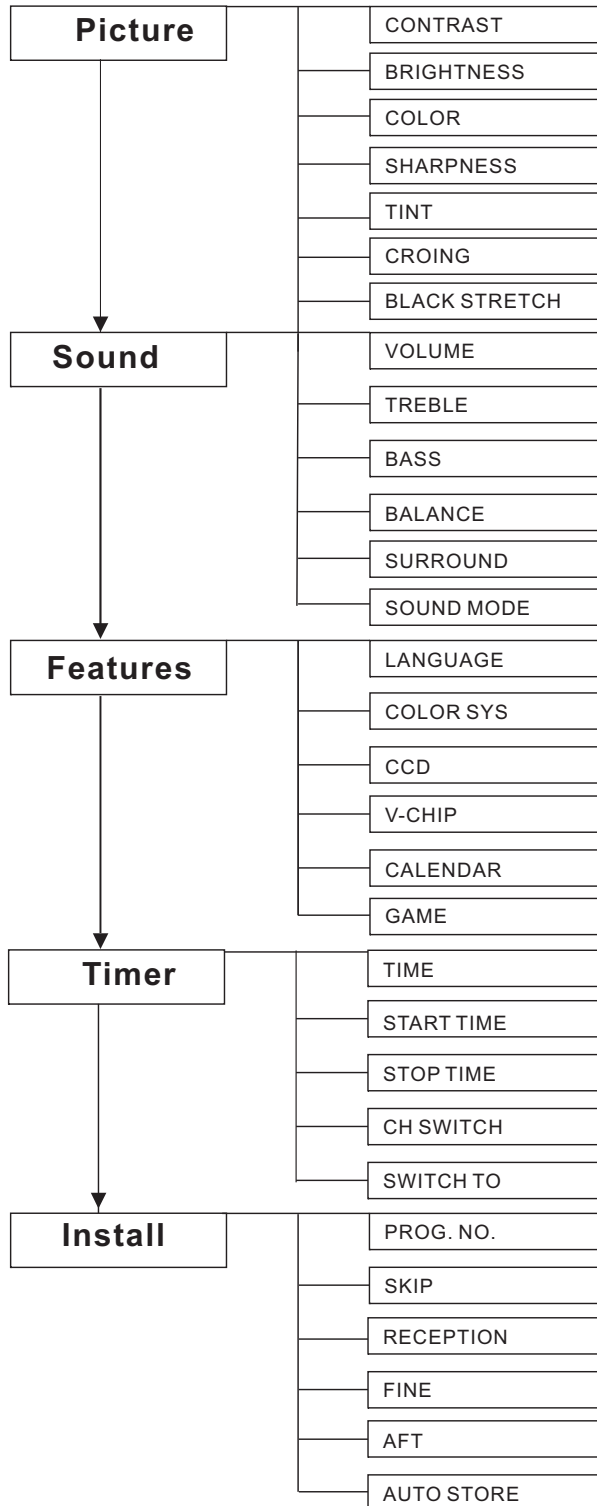
You can select the required sound effect by pressing this MTS button to choose between Mono, Stereo, or separate Audio Program (SAP broadcast).

Operation Instructions

MENU SYSTEM

This TV allows you to adjust the settings from the menu screens.

** In the AV mode, menus appear the same as in TV mode except the install menu.*



Operation Instructions

Press the "MENU" button to enter the menu screens for the following settings.

PICTURE Menu -> SOUND Menu (option) -> FEATURES Menu -> TIMER Menu -> INSTALL Menu -> EXIT

-Select the desired item using the CH. + / - Buttons.
-Use the VOL. +/- buttons to adjust the item settings.

The item selected will be highlighted in red

* The menu screen will time out automatically after few seconds if it is left idle on the screen.

Picture Menu

PICTURE	
CONTRAST	55
BRIGHTNESS	55
COLOR	55
SHARPNESS	50
TINT	00
CORING	ON
BLACK STRETCH	ON

You can select CONTRAST, BRIGHTNESS, COLOR, SHARPNESS, and TINT items by pressing CH. +/- Buttons, and pressing the VOL. +/- Buttons to adjust the item of which you selected.

1.CONTRAST

Press the VOL. + / - buttons to enhance or reduce the contrast between objects and the background from "00" to "100".

2.BRIGHTNESS

Using the VOL. + / - buttons to adjust the lightness and darkness of the picture from "00" to "100".

3.COLOR

Press the VOL. + / - buttons to increase or decrease the color saturation from "00" to "100".

4.SHARPNESS

Adjust the outline of objects to either sharpen or more dull from "00" to "100".

5. TINT (NTSC Only)

Adjust the color of objects from "50" to "+50", making them more red or green for a more natural look.

6. CORING(Optional)

You can select to turn ON or OFF the CORING.

7. BLACK STRETCH(Optional)

You can select to turn ON or OFF the BLACK STRETCH.

Operation Instructions

Sound Menu

SOUND	
VOLUME	51
TREBLE	00
BASS	00
BALANCE	00
SURROUND	OFF
SOUND MODE	STANDARD

1.VOLUME

Press VOL +/- buttons to adjust the Volume between "00" and "100".

2.TREBLE

Press VOL +/- buttons to adjust desired Treble volume of sound Between "00" and "100".

3.BASS

Press VOL +/- buttons to adjust desired Bass volume of sound between "00" and "100".

5.SURROUND

You can select to turn ON or OFF the Surround.

4.BALANCE

Press VOL +/- buttons to adjust the Balance between "-50" and "+50".

6.SOUND MODE

Press VOL +/- buttons to select the Sound Mode to STANDARD, MUSIC, THEATER, USER.

Features Menu

FEATURES	
LANGUAGE	ENGLISH
COLOR SYS	AUTO
CCD	OFF
V-CHIP	ON
CALENDAR	
GAME	

1.LANGUAGE

You can change menu language in this item. Press VOL. +/- Buttons to select your desired language. All the on screen displays will appear in the selected language.

2.COLOR SYS

Press VOL +/- buttons to change the color system to AUTO, PAL-M, PAL-N NTSC.

3.CCD (Close Caption Display)

Closed captioning allows persons with hearing disabilities to have access to television programming by displaying the audio portion of a television program as text on the television screen. Set the closed-caption OFF or display C1, C2, C3, C4, TEXT1, TEXT2, TEXT3 and TEXT4. You can also set up this function by using the remote control unit.

4.V-CHIP

The V-chip is a technology that allow viewer to block television programming that they do not want children to watch. Most television programs now include a rating, as established by the broadcasting industry. This rating is encoded into the programs, and the V-chip technology reads the encoded information and blocks shows accordingly. Using the remote control, parents can program

Operation Instructions

the V-chip to block certain programs based on their ratings. If you lose your remote or need help programming the V-chip, contact the manufacturer of your television for a replacement or operating instructions.

Ratings appear in the corner of your television screen during the first 15 seconds of each television program. There are six ratings that a program can receive:

- TV-Y** (All Children): found only in children's shows, means that the show is appropriate for all children;
- TV-7** (Directed to Older Children): found only in children's shows, means that the show is most appropriate for children age 7 and up;
- TV-G** (General Audience): means that the show is suitable for all ages but is not necessarily a children's show;
- TV-PG** (Parental Guidance Suggested): means that parental guidance is suggested and that the show may be unsuitable for younger children (this rating may also include a V for violence, S for sexual situations, L for language, or D for suggestive dialog);
- TV-14** (Parents Strongly Cautioned): means that the show may be unsuitable for children under 14 (V, S, L, or D may accompany a rating of TV-14); and
- TV-MA** (Mature Audience Only): means that the show is for mature audiences only and may be unsuitable for children under 17 (V, S, L may accompany a rating of TV-MA).

Press VOL +/- buttons on the remote control unit to enter the password to activate the V-CHIP function. When V-CHIP turned on, you can press the V-CHIP button directly on the remote control unit to enter into the menu of V-CHIP. If V-CHIP in OFF mode, the V-CHIP button on the remote control unit will not function.

Setting up new password:

In the TV Menu, press the CH. +/- to select the V-CHIP function under the Features Menu. Press VOL +/- buttons to turn on the V-CHIP function, "*****" will be displayed in the left bottom corner of the screen. Enter a new four-digit password, it will be used to turn on/ off the V-CHIP function in the future.

Operation Instructions

Change the password:

Follow the same steps as the setting up new password. It must be in " OFF" mode of the V-CHIP function.

Master Password:

If you turn on the V-Chip function but failed to remember the password, you can enter the Master Password " 1980" to enter into the V-Chip menu.

MPAA Rating

The MPAA film rating system is a system used in the United States and territories and instituted by the Motion Picture Association of America to rate a movie based on its content, being used to decide which movies may be appropriate for children and/or adolescents.

The current MPAA movie ratings consist of:

Rated G General Audiences

a. Rated PG Parental guidance suggested

b. Rated PG-13 Parents strongly cautioned

c. Rated R Restricted. Under 17 requires accompanying parent or legal guardian.

d. Rated NC-17 & X No 17 and under admitted. Also called Youth Restricted Viewing.

-Press the V-Chip button to go to the MPAA Rating menu. Press " CH. +/-" and " Menu" buttons to select.

-Press the V-Chip button again to return.

CAN. ENG-RATING (Option)

For Canadian English language Rating System, the following seven Ratings are available.

E	: Exempt
C	: Children
C8	: Children eight years and older
G	: General programming, suitable for all audiences
PG	: Parental Guidance
14	: Viewers 14 years and older
18	: Adult Programming

Select each item by the PROG. +/--buttons, confirm each item the MENU Buttons.

CAN. FRN-RATING (Option)

E	: Exemptes
G	: General , ,
8A	: General - Deconseille aux jeunes enfants
13A	: Cette emission peut ne pas convenir aux enfants de moins de 13 ans
16A	: Cette emission ne convient pas aux moins de 16 ans
18A	: Cette emission est reservee aux adultes

Operation Instructions

1. Calendar (Option)

- Press VOL +/- button to enter into Calendar menu.
- Press CH. +/- buttons to select Year, Month and Date. Press VOL +/- button to adjust the value.
- Press " MENU" button again to return.

2. Game Catching Coin (Option)

Game Rules: Six kinds of bag will drop down, include moneybag, coin, snowflake, umbrella, heart and bomb. If you catch the moneybag and coin, ten points and five points will be received respectively. After entering the game, press "VOL.+" and "VOL. -" to shift the figure from left to right and vice versa. If you want to pause the game, please press "Q.VIEW" button, and if you want to quit the game, please press the "DISPLAY(☐)" button.

- If you catch a bomb, the figure will turn to red and the game will over.
 - If you catch a heart, the figure will change to purple, which last for five seconds, and at this time, even you catch a bomb, the game will go on.
- The game goes up a level in every three minutes. If the level is higher, the drop speed of bags would become more quicker.

Timer Menu

TIMER	
TIME	--:--
START TIME	--:--
STOP TIME	--:--
CH SWITCH	--:--
SWITCH TO	--

1. TIME

To adjust the current time by this item. Press the " VOL. -" button to set hour, and the " VOL. +" button to set minute.

2. START-TIME

To set the time when the TV set to turn on automatically.

3. STOP-TIME

To set the time when the TV set to turn off automatically.

4. CH SWITCH

To preset the time that the TV will switch to the selected channel (Position) automatically.

5. SWITCH TO

To set the program that will switch automatically at the CH SWITCH.

Operation Instructions

NOTE: All the timer functions will only be effective if the power of the TV set is switched off using the remote control unit. If the power is switched off by the power button on the TV set or a power failure occurs, the timer will be reset.

Install Menu

INSTALL	
PROG NO	02
SKIP	ADD
RECEPTION	CATV-HRC
FINE	00
AFT	OFF
AUTO STORE	

1.PROG. NO.

When selecting the CATV-STD, CATV-IRC and CATV-HRC signals, there are 01-125 channels available. There are 02 - 69 channels in the AIR signal.

2.SKIP

You can skip unnecessary program channels of your choice not to be displayed during viewing and scanning when pressing the " CH. -/+ " buttons. Select "Skip Del" by pressing " VOL. + / - " Buttons to select the channel that would like to skip from the channel scan operation.

3.RECEPTION

You can switch signals: AIR, CATV-STD, CATV-IRC and CATV-HRC.

4. FINE

You can use this FINE tuning process for fine adjustment by pressing VOL.+/- Buttons between 50 and +50. Normally fine tuning is only necessary if reception is poor.

5.AFT (Auto Fine Tuning)

Select "AFT ON" by pressing " VOL. + / - " buttons to Auto Fine Tuning. The " FINE " tuning function will be disabled once this AFT is " ON "

6.AUTO STORE

Press VOL.+/- Buttons, the TV set will automatically search from V-L band to U band. The channels are stored in the order in which they appear in the frequency bands.

Operation Instructions

TROUBLESHOOTING

The following problems do not always indicate a hardware failure. Therefore, please use the troubleshooting guide below before calling for repair service. If, after following the guide none of the remedies work, unplug the TV and call for service.

Problem	Checks and Adjustments
TV will not turn on	<ul style="list-style-type: none">■ Make sure the power cord is plugged in, then press POWER button.■ Check battery in the remote control. (Maybe batteries are dead.)
No picture, no sound	<ul style="list-style-type: none">■ Ensure the TV power is ON (Indicated by the green power indicator on the front of the unit).■ Check antenna/ cable connections.■ Try different channel.
No sound, picture OK	<ul style="list-style-type: none">■ Maybe sound is muted. Try pressing■ VOL+ button is not set to minimum.■ Try another channel. Check the AV cables for disconnection.
Spots on the screen (Snow)	<ul style="list-style-type: none">■ Maybe the TV is being affected by interference from automobiles, trains, high-voltage transmission lines, neon signs or another sources of interference.■ Try redirecting or relocating your antenna to reduce the affects of the interference.■ Change channels to confirm if the■ symptom is still present.
Poor reception of broadcast channels	<ul style="list-style-type: none">■ Try another channel.■ Check antenna connections.■ If using VCR, check TV/VCR button.■ Adjust fine tuning control.
VCR	<ul style="list-style-type: none">■ Probably local interference, such as an appliance.
Cannot select a certain channel	<ul style="list-style-type: none">■ When the VCR test signal (TSG) is received, the lower side of the test pattern is distorted as shown in the figure. This is not a malfunction and the playback picture is not influenced by it.■ That channel may be locked out with SKIP CHANNEL function.

Operation Instructions

Remote Control does not operate

- Check for any obstacle between the remote control and the remote control sensor window.
- Maybe batteries are dead. Try replacing batteries with new ones.
- Check for incorrect battery orientation.

The picture is doubled or tripled (GHOST)

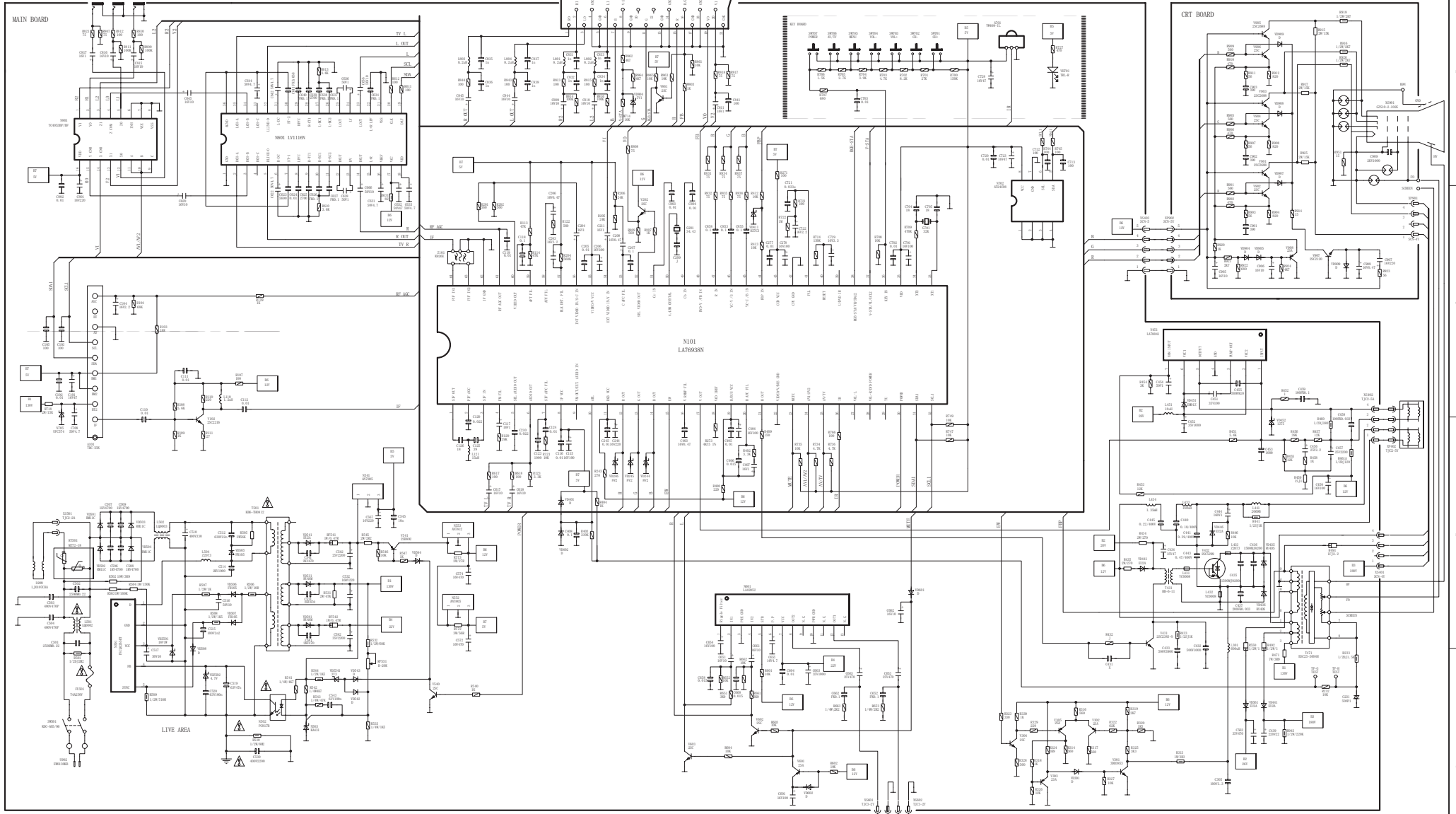
- Please change the direction, height or position of the antenna. Reflections from building or mountains might cause this phenomenon. A highly directional antenna may improve the reception.

Degraded colours or tints

- Check whether all the picture adjustments have been properly performed.
- Enter into the (Picture mode) inside the menu to select a different picture set-up.

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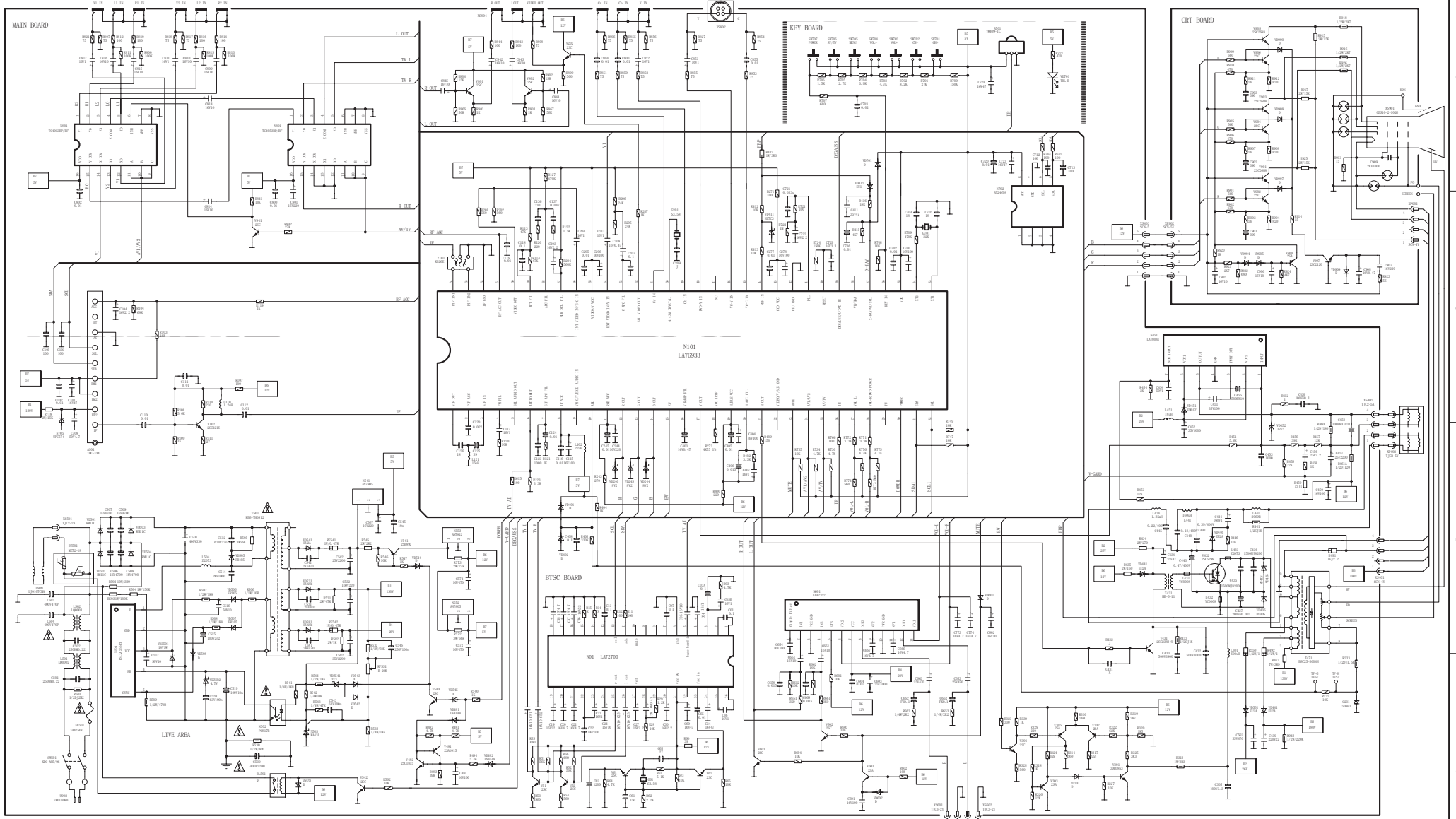
彩色电视机电路原理图



NO.	NAME	VALUE
1	RESISTOR	10K
2	CAPACITOR	100UF
3	TRANSISTOR	2N3055
4	DIODE	1N4007
5	INDUCTOR	10UH
6	RELAY	12VDC
7	OTHER	

5Y19S

USOC CHASSIS COLOR TV



NO.	DESCRIPTION	QTY.
1
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