

Service
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Service Manual

43PFT6100/98

49PFT6100/98

55PFT6100/98

Product Specification Sheet

	43" FHD STV(43S91F-DVB)	49" FHD STV(49S91F-DVB)	55" FHD STV(55S91F-DVB)
Series name	43PFT6100	49PFT6100	55PFT6100
Set Product Manager			
Set Product Manager in outsourcing company			
E-mail address of main contact in outsourcing company			
Set Project Manager			
Status			
CR (yyyyww) of leading set			
Platform/Chipset	T8E3-6A628 DVB-T2	T8E3-6A628 DVB-T2	T8E3-6A628 DVB-T2
Processor type (CPU) / GPU			
Picture/Display			
RC			
Backlight Type (Panel Supplier)	DLED	DLED	DLED
Diagonal Screen Size	42.51"	48.5"	54.64"
Perfect Motion Rate	1920×1080@60Hz	1920×1080@60Hz	1920×1080@60Hz
Panel Frequency (Native)	60HZ	60HZ	60HZ
Chasis Frequency	60HZ	60HZ	60HZ
Backlight Dimming	PWM	PWM	PWM
Scanning Segments (amount)	48.25--863.25MHZ	48.25--863.25MHZ	48.25--863.25MHZ
Panel Resolution	1920*1080	1920*1080	1920*1080
Aspect ratio	16:9	16:9	16:9
Brightness (Home Vivid Mode) cd/m²	Min: 220cd/m2 , Typ:260cd/m2	Min: 280cd/m2 ,	Min:300cd/m2;
Panel contrast ratio	1200:1	1200:1	1200: 1
Viewing Angle - H (L+R)	178°	178°	176°
Viewing Angle - V	178°	178°	176°
Response Time (ms)	8ms	9ms	6ms
Analog + PWM dimming	YES	YES	YES
2D/3D Logic (2D/3D Active/3D	2D	2D	2D
Color Gamut	NTSC 66%	NTSC 65%	NTSC 68%
PQ engine	Digital Crystal Clear	Digital Crystal Clear	Digital Crystal Clear
PQ Resolution	N/A	N/A	N/A
Directional Super Resolution (on 2D & 3D)	N/A	N/A	N/A
Improved 3D Super Resolution	N/A	N/A	N/A
ISF Color Management	N/A	N/A	N/A
Digital Natural Motion (2D/3D)	N/A	N/A	N/A
Perfect Natural Motion (2D/3D)	N/A	N/A	N/A
2D to 3D Conversion	N/A	N/A	N/A
3D Depth adjustment (Auto/Offset)	N/A	N/A	N/A
Auto 3D Detection	N/A	N/A	N/A
Micro Dimming Demo	N/A	N/A	N/A
Micro Dimming mode	N/A	N/A	N/A
Dual View (2 Player Full Screen Gaming/Video) 双屏	N/A	N/A	N/A
Supported Display Resolution (Computer Inputs)	720*400@70HZ 640*480@60HZ 800*600@60HZ 1024*768@60HZ 1360*768@60HZ 1280*720@60HZ 1280*960@60HZ 1280*1024@60HZ 1600*900@60HZ 1920*1080@60HZ	720*400@70HZ 640*480@60HZ 800*600@60HZ 1024*768@60HZ 1360*768@60HZ 1280*720@60HZ 1280*960@60HZ 1280*1024@60HZ 1600*900@60HZ 1920*1080@60HZ	720*400@70HZ 640*480@60HZ 800*600@60HZ 1024*768@60HZ 1360*768@60HZ 1280*720@60HZ 1280*960@60HZ 1280*1024@60HZ 1600*900@60HZ 1920*1080@60HZ

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	43" FHD STV(43S91F-DVB)	49" FHD STV(49S91F-DVB)	55" FHD STV(55S91F-DVB)
Supported Display Resolution (Video Inputs)	480i, 480p,576i, 576p,720p,1080i,1080p(24/25/30 /50/60Hz)	480i, 480p,576i, 576p,720p,1080i,1080p(24/25 /30/50/60Hz)	480i, 480p,576i, 576p,720p,1080i,1080p(24/25 /30/50/60Hz)
Brightness (Shop Vivid mode: 10%)	YES(1% boost)	YES(1% boost)	YES(1% boost)
Pixel Plus Link (I/II/III)	N/A	N/A	N/A
Active Control	N/A	N/A	N/A
Local Contrast	N/A	N/A	N/A
"UHD Display" - logo (Industry)	N/A	N/A	N/A
"UHD Receiver" - logo (Industry) - pending std	N/A	N/A	N/A
HDMI 2.0 4:4:4 @ 60p	N/A	N/A	N/A
10-bit color support	N/A	N/A	N/A
DAPQ	N/A	N/A	N/A
Ambilight			
Ambilight Version	N/A	N/A	N/A
Pixels	N/A	N/A	N/A
Ambilight Performance (nit, no of colors, halo length)	N/A	N/A	N/A
Ambilight Features (Wall colour adaptive, Lounge Light Mode, Ambilight Motion, Gaming Mode)	N/A	N/A	N/A
Ambilight for 3D	N/A	N/A	N/A
Ambilight for all TV Events	N/A	N/A	N/A
Ambilight Open Source via JointSpaceApp	N/A	N/A	N/A
Wall Distance Adaptive (Stand vs Motion Adaptive	N/A	N/A	N/A
Built-in AL + Hue	N/A	N/A	N/A
TV as Lamp(s) in Hue ecosystem	N/A	N/A	N/A
In screen demo in mobile shop app	N/A	N/A	N/A
Ambi Wakeup (ref HTV)	N/A	N/A	N/A
Ambimusic	N/A	N/A	N/A
Sound (TV)			
Sound (Internal)			
Output Power (10% THD) RMS	16W	16W	16W
Speaker configuration	8W+8W	8W+8W	8W+8W
Speaker system	2.0	2.0	2.0
Speaker type	built-in(normal)	built-in(normal)	built-in(normal)
Auto Volume Levelier / Auto Volume Levelier +	YES	YES	YES
Sound Claim (Incredible Surround/Cinema Surround/Clear Sound/Ambiwoo/3D Movie/Incredible Surround 3D)	N/A	N/A	N/A
Bass (Bass control/DBE/Ultra Bass/Ultra Bass II)	N/A	N/A	N/A
Wireless Sound Interface	N/A	N/A	N/A
Dolby Digital Decoder Type	YES	YES	YES
DTS Studio Sound	N/A	N/A	N/A
DTS 2.0+ Digital out	N/A	N/A	N/A
Acoustic Compensation Filters 主板滤波补偿	N/A	N/A	N/A
Dynamic Treble Enhancement 动态高音增强	N/A	N/A	N/A
Programmable Bass And Treble Curve （可编程的低音和高音曲线）用户	N/A	N/A	N/A
Visible Sound	N/A	N/A	N/A
Sound (External)			
External Sound device type	N/A	N/A	N/A
Output Power (10% THD) RMS	N/A	N/A	N/A
Design Specs			
Stand type (Swivel/non Swivel)	Metal Wing	Metal Wing	Metal Wing
I/O port to be clearly indicated （列接口）	RJ45*1/HDMI*3/VGA*1/AV-IN*1/VIDEO-OUT*1/Tuner*1/USB*2/CI*1/Earphone*1/Coaxial-OUT*1	RJ45*1/HDMI*3/VGA*1/AV-IN*1/VIDEO-OUT*1/Tuner*1/USB*2/CI*1/ Earphone*1/Coaxial-OUT*1	RJ45*1/HDMI*3/VGA*1/AV-IN*1/VIDEO-OUT*1/Tuner*1/USB*2/CI*1/ Earphone*1/Coaxial-OUT*1
Local Keyboard 按键板	YES	YES	YES
Philips wordmark 商标logo	PHILIPS	PHILIPS	PHILIPS

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	43" FHD STV(43S91F-DVB)	49" FHD STV(49S91F-DVB)	55" FHD STV(55S91F-DVB)
Leading Edge 装饰件	7# Crystal	7# Crystal	7# Crystal
Vesa Wall Mount Compatible 壁挂孔	YES	YES	YES
Compatible Wall Mount 壁挂孔	200mm*300mm	200mm*300mm	200mm*300mm
规格			
POS label			
Connectivity (I/O)			
HDMI Number	*3(HDMI1.3 support MHL)	*3(HDMI1.3 support MHL)	*3(HDMI1.3 support MHL)
HDMI 1.4a	HDMI(Side-out/Under-out)	HDMI(Side-out/Under-out)	HDMI(Side-out/Under-out)
HDMI 2.0	N/A	N/A	N/A
HDMI/DVI	YES	YES	YES
HDMI ARC	HDMI-2	HDMI-2	HDMI-2
EasyLink (HDMI-CEC)	YES	YES	YES
Scart (EU) Connections	N/A	N/A	N/A
YPbPr/CVI (EU/Latam) Connections	N/A	N/A	N/A
CVBS (EU/Latam) Connections	*1	*1	*1
Audio L/R in	*1	*1	*1
CI+ slots	*1	*1	*1
Antenna	*1	*1	*1
Satellite (for K&S only)	N/A	N/A	N/A
USB	USB2.0/USB3.0	USB2.0/USB3.0	USB2.0/USB3.0
USB Harddisk Format (Power)	FAT/NTFS (500mA)	FAT/NTFS (500mA)	FAT/NTFS (500mA)
VGA	YES	YES	YES
VGA/DVI Audio Input	share AV audio input	share AV audio input	share AV audio input
Digital audio out (SPDIF)	N/A	N/A	N/A
Headphone	*1	*1	*1
Ethernet-LAN RJ-45	*1	*1	*1
Service Connector	VGA connectable	VGA connectable	VGA connectable
Wireless connections	YES	YES	YES
Wi-Fi Band Concurrent	N/A	N/A	N/A
WoWLAN	N/A	N/A	N/A
WoLAN	N/A	N/A	N/A
Bluetooth for subwoofer/RC (do not claim commercially)	N/A	N/A	N/A
Multichannel over BT	N/A	N/A	N/A
HDCP v2.2 (on HDMI 2.0 port)	N/A	N/A	N/A
MHL (HDMI+power+return channel)	YES	YES	YES
Wi-fi Miracast Certified (HDCP 2.2 supported)	N/A	N/A	N/A
GoogleCast Receiver	N/A	N/A	N/A
Tablet Screen Mirroring (Wi-Fi	N/A	N/A	N/A
TAD AppFTA channels (free app)	N/A	N/A	N/A
TAD Server, FTA channel	N/A	N/A	N/A
Indep. Watching (TV&PVR), FTA&CI+	N/A	N/A	N/A
SAT>IP Client, FTA	N/A	N/A	N/A
HEVC @ FHD 60Hz	N/A	N/A	N/A
HEVC @ UHD 60Hz	N/A	N/A	N/A
H264 @ UHD	N/A	N/A	N/A
VP9 @ UHD	N/A	N/A	N/A
UI & Interaction			
Ux (Basic: without Dashboard, Advanced: with Dashboard)	Basic	Basic	Basic
Animations 动画	N/A	N/A	N/A
Drag and drop 拖动	N/A	N/A	N/A
Remote Control Version (state if include Keyboard/Pointer)	N/A	N/A	N/A
Sensor.accelerometer & sensor gyroscope	N/A	N/A	N/A
Easy access to eDFU (Blue key) 电子说明书	N/A	N/A	N/A
Text Entry (Basic : Text Entry via HID and/or On-screen Keyboard)	Basic	Basic	Basic
Multi-view 多屏显示	N/A	N/A	N/A
Multi-task 多任务	N/A	N/A	N/A
Screen Format Adjustments 比例列表	wide screen; 4:3; movie expand16:9; subtitle zoom; unscaled	wide screen; 4:3; movie expand16:9; subtitle zoom; unscaled	wide screen; 4:3; movie expand16:9; subtitle zoom; unscaled
Dual Screen (TV and TeleText) 图	N/A	N/A	N/A
Teletext	N/A	N/A	N/A

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	43" FHD STV(43S91F-DVB)	49" FHD STV(49S91F-DVB)	55" FHD STV(55S91F-DVB)
e-Sticker	N/A	N/A	N/A
Priority Channel List	N/A	N/A	N/A
Channel Cloning via USB	N/A	N/A	N/A
Logo Editor (Channel Editor)	N/A	N/A	N/A
Channel Matrix with EPG data	N/A	N/A	N/A
Channel Scanning (Australia/NZ)	N/A	N/A	N/A
Time Zone (Australia/NZ)	N/A	N/A	N/A
PC Sorting	N/A	N/A	N/A
Intelligent Source List	N/A	N/A	N/A
On-screen Remote (via HDMI)	N/A	N/A	N/A
Cold boot to broadcast	N/A	N/A	N/A
Cold boot to online dashboard	N/A	N/A	N/A
Warm boot to broadcast	N/A	N/A	N/A
Warm boot to online dashboard	N/A	N/A	N/A
Zapping OSD with EPG data	N/A	N/A	N/A
Electronic Program Guide (IP & Broadcast)	N/A	N/A	N/A
8 Days Electronic Program Guide	YES	YES	YES
Live Setting Assistant (include PQ level) 设置助手直播	N/A	N/A	N/A
Signal Strength Indication 信号强度指示	YES	YES	YES
Pause TV/USB recording (PVR) 刻录	YES	YES	YES
Two simultaneous recordings in stdby	N/A	N/A	N/A
UI Languages	English, Malaysia, Indonesian, Thai, French, Portuguese,Chinese	English, Malaysia, Indonesian, Thai, French,	English, Malaysia, Indonesian, Thai, French,
Memory Profile (DRAM)	512M	512M	512M
Menu Layout Update 菜单更新 换UI	N/A	N/A	N/A
Wizards (Ease of Installation) 安装工具（类似螺丝刀）	N/A	N/A	N/A
Single Sign On (google a/c only)	N/A	N/A	N/A
Personalized Dashboard （定制化	N/A	N/A	N/A
Face recognition 面部识别	N/A	N/A	N/A
Shopmode 2015	N/A	N/A	N/A
CloudTV app content in search and Dashboard (on TV)	N/A	N/A	N/A
Firmware Upgradeable 软件升级	YES	YES	YES
Multimedia Applications			
Video Playback Formats	MJPEG,MPEG-1,MPEG-2,MPEG-4,H.264,XviD,FLV,AVS.	MJPEG,MPEG-1,MPEG-2,MPEG-4,H.264,XviD,FLV,AVS.	MJPEG,MPEG-1,MPEG-2,MPEG-
Subtitles Formats Support	SRT、ASS	SRT、ASS	SRT、ASS
Music Playback Formats	MP2/MP3/AAC/M4A/PCM	MP2/MP3/AAC/M4A/PCM	MP2/MP3/AAC/M4A/PCM
Picture Playback Formats	JPG/JPEG/PNG/BMP	JPG/JPEG/PNG/BMP	JPG/JPEG/PNG/BMP

Product Specification Sheet

	43" FHD STV(43S91F-DVB)	49" FHD STV(49S91F-DVB)	55" FHD STV(55S91F-DVB)
Smart TV			
Software Platform			
Android Home Page			
Android OS			
UI Resolution			
Google Voice Search			
Google Hangouts			
Remote Control			
Gesture			
Pre-installed Google Apps (Google Search, Google Hangouts, Google Play Movies, Google Play Music,			
Basic Performance Profile			
Google Play			
Memory size to install apps			
Extendable USB storage for App Download			
Smart TV Experience			
DLNA 1.5 - DMR, DMP			
DLNA 1.5 - DMS			
MultiRoom Client, FTA+Scrambled Non-Copy Protected & CI+			
MultiRoom Server, FTA+Scrambled Non-Copy Protected & CI+			
PVR Auto Recording (IP-EPG)			
API - access control			
xTV Support			
Rich User Interaction			
Smart Home			
4k photo support in Android apps			
4k photo support in Picture apps			
4k photo support in USB/DLNA			
UHD content playback from all sources (USB,DLNA,web)			
NextFlix UHD			
Youtube UHD			
Google Play UHD			
Smart TV with Broadcast PIP; single video			
SMART TV offline content (cached)			
MPEG-DASH (CENC & CFF)			
HLS			
Wake up from APP			
Preinstalled Apps			
Netflix *			
YouTube Leanback (HTML5) *			
Spotify *			
BBC iPlayer *			
Skype			
Skype Cowatch (mix audio)			
Cloud Explorer			
Cloud TV			
Smart TV Services			
Social Apps			
Game Dashboard in Google launcher			
OpenGL Games			
Playstation Now App			
OnLive App			
STA 3.0 & 4.0 Clients			
STA shared App store			
Camera & Mic API			
TV as an app (Verimatrix, etc)			
Companion Apps			
Philips TV Remote App			
Sharing in Remote App			
Ambilight TV App			
Ambilight+Hue App			
User Manual App			

Product Specification Sheet

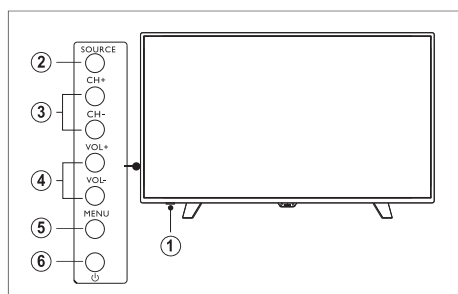
	43" FHD STV(43S91F-DVB)	49" FHD STV(49S91F-DVB)	55" FHD STV(55S91F-DVB)
Channel Editor - PC Client App			
Mobile app for in-shop (cover MRA/Demo Me/Shop RC functions)			
Proximity based shop app activation (BTLE/NFC/QR tbc)			
MyRemote App (Old TV Remote App)			
Ambilight Lounge App			
Broadcast/Certification			
DVB-T/C	YES	YES	YES
DVB-S/S2	N/A	N/A	N/A
DVB-T/T2	YES	YES	YES
DVB-C2	N/A	N/A	N/A
SBTVD-T (Brazil)	N/A	N/A	N/A
SATVD-T (Argentina)	N/A	N/A	N/A
Analog (LATAM/APMEA)	PAL SECAM NTSC	PAL SECAM NTSC	PAL SECAM NTSC
Nicam (APMEA)	N/A	N/A	N/A
Enhanced SSU	N/A	N/A	N/A
Italy HD Book 2.1.1 (GOLD)	N/A	N/A	N/A
HD-Book Italy 3.0 (HEVC@FHD)	N/A	N/A	N/A
UK D Book 7a	N/A	N/A	N/A
Freeview SD (UK)	N/A	N/A	N/A
Freeview HD (UK)	N/A	N/A	N/A
MHEG 5(只有HbbTV有)	N/A	N/A	N/A
TiVuON (IT)	N/A	N/A	N/A
TNT HD (FR)	N/A	N/A	N/A
Argentina Ginga - NCL	N/A	N/A	N/A
Brazil Ginga (A/B)	N/A	N/A	N/A
Video Playback	N/A	N/A	N/A
Dual Cam (CI+)	N/A	N/A	N/A
Dual Tuner	N/A	N/A	N/A
CI+ 1.4 Multistream CAM	N/A	N/A	N/A
CI+ 1.3 CAM	N/A	N/A	N/A
HBBTV 1.5	N/A	N/A	N/A
HBBTV 2.0	N/A	N/A	N/A
MHP	N/A	N/A	N/A
Ziggo Interactief	N/A	N/A	N/A
3D DVB Phase 1	N/A	N/A	N/A
3D signaling bits in broadcast	N/A	N/A	N/A
Background update installation	N/A	N/A	N/A
Marlin/ Play ready	N/A	N/A	N/A
Sustainability/Power			
PVC / BFR Free 无卤	N/A	N/A	N/A
Mercury Free 无汞	N/A	N/A	N/A
Cabinet Resin 面框材质	Metal	Metal	Metal
Eco-Flower Certified	N/A	N/A	N/A
ECO Mode	N/A	N/A	N/A
Mains Power	AC 100-240V 50/60Hz	AC 100-240V 50/60Hz	AC 100-240V 50/60Hz
Standby Power	<0.5W	<0.5W	<0.5W
Quick Startup	NA	NA	NA
Network Standby mode (max 6W)	NA	NA	NA
Off Mode Power	<0.5W	<0.5W	<0.5W
Auto Switch-Off Timer 休眠时间	YES	YES	YES
Green packaging (Non-EPS) 绿色包装	N/A	N/A	N/A
Light Sensor 光感应器	N/A	N/A	N/A
Picture Mute (For Radio) 单独听	N/A	N/A	N/A
EU Energy Label (A++/A+/A/B) - Requirement	NA	NA	NA
non-EU Energy Label - Standby Label (A/B/C)	NA	NA	NA
Blauer Engel (Germany)	NA	NA	NA
Accessory			
By-packed accessories			
Active Glasses (509)	N/A	N/A	N/A
Active Glasses (529)	N/A	N/A	N/A
Passive Glasses (PTA417)	N/A	N/A	N/A

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Dual Gaming Glasses	N/A	N/A	N/A
Woofer (e.g. SWB50) with	N/A	N/A	N/A
Sound Bar	N/A	N/A	N/A
Detachable speaker base 可拆卸喇	N/A	N/A	N/A
Wireless audio adaptor	N/A	N/A	N/A
Wi-Fi Adapter	N/A	N/A	N/A
Skype Camera (PTA317)	N/A	N/A	N/A
Table Stand 底座	YES	YES	YES
Accessory Bag	YES	YES	YES
Mains Cord (EU/UK/Brazil/APMEA) 电源线	YES	YES	YES
Remote Control + 2x Philips Batteries	YES	YES	YES
Printed QSG	YES	YES	YES
Printed DFU (APMEA)	YES	YES	YES
Safety Legal Leaflet (EU) - 3D Health Advise and Ukraine requirement (安 规小册子)	N/A	N/A	N/A
Philips Warranty Leaflet 保修卡	YES	YES	YES
Optional accessories			
Active Glasses (PTA509/529)	N/A	N/A	N/A
Passive Glasses (PTA419)	N/A	N/A	N/A
Dual Gaming Glasses (PTA436)	N/A	N/A	N/A
Wi-Fi Adapter	N/A	N/A	N/A
Skype Camera (PTA317)	N/A	N/A	N/A
Table Top Stand	N/A	N/A	N/A
Speaker stand	N/A	N/A	N/A
Others	N/A	N/A	N/A
Certification			
Dolby Digital/Dolby Digital Plus/Dolby Pulse			
DTS 2.0+ Digital out			
DTS Premium Sound			
DivX			
WMA			
Wi-Fi			
DLNA Certified (DMR/DMP/DMS)			
SKYPE			
HDMI			
MHL			
Dimensions (WxHxD)			
Unit with stand	970*614*219mm	1102*696*258mm	1243*776*258mm
Unit without stand	970*564*74mm	1102*639*81mm	1243*720*81mm
Carton	1085*667*150mm	1210*744*175mm	1355*824*175mm
Wall-mount	200*300 mm	200*300 mm	200×300 mm
Weight			
Product without Stand	8.3kg	9.5 kg	13.5kg
Product with Stand	8.5kg	10 kg	14kg
Product in Packaging	10.5kg	13.5 kg	17kg

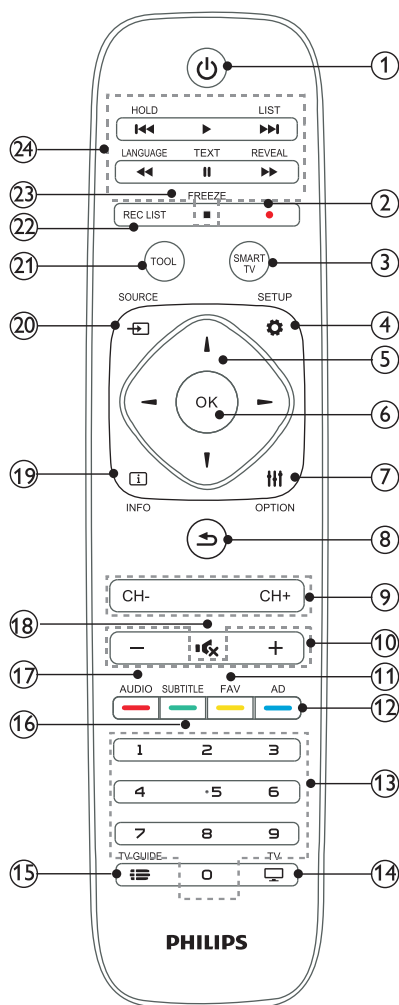
3 Your TV

Control Panel



1. Indicator/Remote Control Sensor
2. Source: display the list of signal sources.
3. CH +/-: switch to the previous/ next channel.
4. VOL +/-: increase/reduce the volume.
5. Menu: turn on/off the main menu.
6. : turn on/off the TV; to cut off power supply, please unplug the power cable.

Remote Control



① Standby/Power On

- Switch to Standby mode when the TV is powered on.
- Power on the TV when it is in standby mode.

② Recording

Before recording, get ready by following the steps below:

1. Connect a formatted USB hard drive to the TV.
 2. Make sure DTV channels are available on the TV.
- To record TV programs, press the **Red ** (recording) button on the remote control.
 - To record TV programs at a scheduled time, press the **TV Guide** button, select the TV program to be recorded, and press the Red  (recording) button on the remote control to schedule a recording time.

③ Smart TV

Enter the Smart TV homepage.

④ SETUP

Open or close the Setup menu.

⑤ Navigation Keys

- In menu mode: navigate the menus.

⑥ OK

- In menu mode: confirm input or selection.

⑦ OPTION

View options related to the current activity or selection.

⑧ Return

Return to the previous channel

⑨ CH+/-

Switch to the previous or next channel.

⑩ VOL+/-

Increase or decrease the volume.

⑪ FAV

Favorite channel list.

⑫ AD

Shortcut key for Audio Description.

⑬ Numeric Keys 0-9

Select a channel or input a channel number.

⑭ TV

Switch to TV mode.

⑮ **TV GUIDE (Electronic Program Guide)**

Instant access to EPG.

- Contact your broadcasting service provider or operator for availability of EPG.

⑯ **SUBTITLE**

When subtitle is available on the current channel, press the **Green** (Teletext) button to display the subtitle.

⑰ **AUDIO**

Shortcut key for audio language selection.

⑱ **MUTE**

Mute or unmute the sound.

⑲ **INFO**

Display the available program information.

⑳ **SOURCE**

Select an input source for the TV.

㉑ **TOOL**

Open or close the Tool menu.

㉒ **REC LIST**

View the recording list.

㉓ **FREEZE**

Freeze the image of TV program.

Press this button again to return to the TV program.

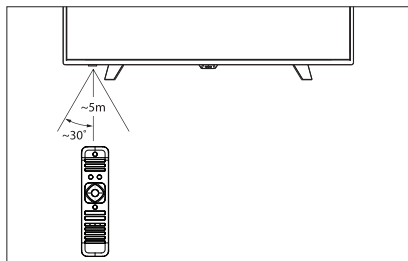
㉔ **PLAYBACK**

Shortcut keys under the USB mode:

Previous, Fast Reverse, Play, Pause, Stop, Fast Forward, Next.

Remote control usage

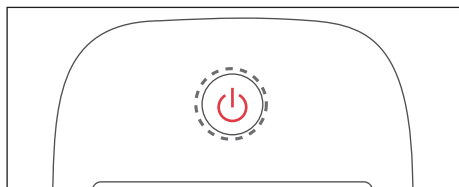
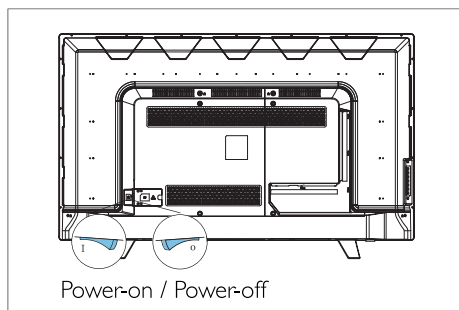
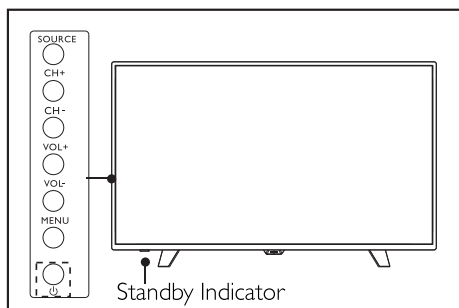
When you use the remote control, hold it close to the TV and point it at the remote control sensor. Make sure that the line-of-sight between the remote control and TV is not blocked by furniture, walls or other objects.



4 Use your TV

This chapter describes the basic TV operations.

Turn on/off the TV, or switch to Standby



Turn on the TV

- If the indicator is off, please insert the TV power cord into a power outlet. Press the power switch to turn on the TV as shown in the figure.
- When the indicator is on, press the  (Standby-On) button on the remote control or on the side of TV to turn on the TV.

Switch to Standby

- Press the  (On-Standby) button on the remote control.
 - ➔ The Standby Indicator turns on.

Turn off the TV

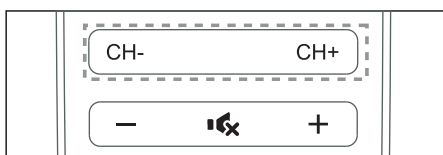
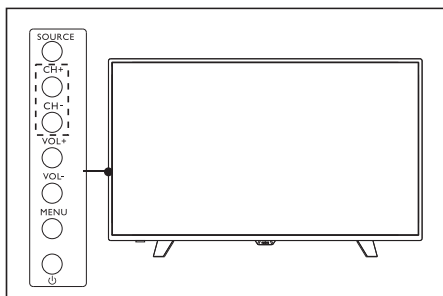
- Press the power switch to turn off the TV as shown in the figure.
 - ➔ The Standby Indicator turns off.



Tip

- The TV still consumes a little power in Standby mode. If it will be idle for long period, please disconnect the power plug from the power outlet to save power.

Switch Channels



- Press the **CH+/-** button on the remote control or on the lower right side of the TV.
- Press the numeric keys on the remote control to input the channel number.
- Press the button on the remote control to switch and return to the previous channel.

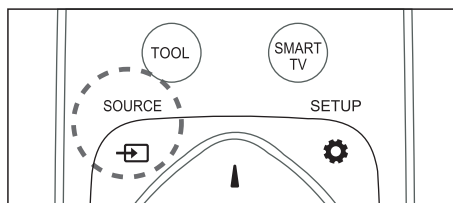
View Connected External Devices



Note

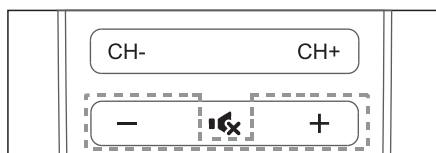
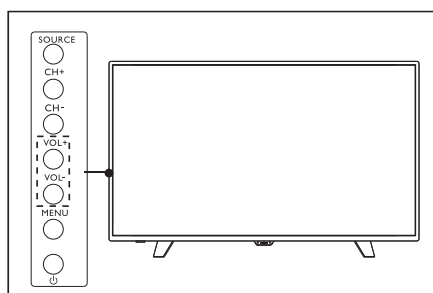
- Before selecting an external signal source, please turn on the connected external devices.

Use the SOURCE Button



1. Press the **SOURCE** button.
 - » The signal source list is displayed.
2. Press the **▼▲** buttons to select a device.
3. Press the **OK** button to confirm.
 - » The input source is switched to the selected device.

Adjust TV Volume



Increase / decrease the volume

- Press the **VOL+/-** button on the remote control or on the lower right side of the TV. Mute or unmute the sound.
- Press the (Mute) button to disable sound.
- Press the button again to unmute the sound.

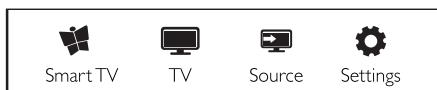
5 More TV Functions

As the product and software are subject to continuous upgrade, the actual software operations may vary from descriptions in this manual.

TV Menu

You can set up channels, picture, and sound in the TV menu and it also provides access to other functions.

1. Press the **TOOL** button.
 The menu is displayed.



2. Select an option and press the “OK” button:
 - [Smart TV]: Enter the Smart TV homepage.
 - [TV]: When the current signal source is not TV, select this option to switch to TV program.
 - [Source]: Select from connected external devices.
 - [Settings]: Set up TV, channel, network, software settings.

Language

You can set up the menu language.

Set the menu language

1. Press the  SETUP button.
2. Select [TV Settings] > [Preference] > [Menu Language], and press the  button.
3. Select the language you want and press the “OK” button.

Picture and Sound Settings

You can configure the picture and sound settings to suit your preference.

You can use the predefined settings or manually change the settings.

Intelligent Picture

Select the predefined picture settings for the Intelligent Picture.

1. Press the  SETUP button.
2. Select [TV Settings] > [Picture] > [Intelligent Picture].
3. Select an option and press the “OK” button.
 - [Standard]: This mode is suitable for most of the occasions and video formats.
 - [Natural]: Adopt natural picture quality.
 - [Vivid]: Adopt colorful and dynamic

picture settings suitable for viewing in daylight.

- [Customized]: Adopt the customized settings.

Manual Picture Settings

1. Press the  SETUP button.
2. Select [TV Settings] and press the "OK" button.
3. Select [Picture], select an option and press the  button.
 - [Intelligent Picture]: Select predefined settings.
 - [Contrast]: Adjust the contrast between the bright and dark areas (0-100).
 - [Brightness]: Adjust the brightness and fineness of the picture (0-100).
 - [Sharpness]: Adjust the definition of the picture (0-100).
 - [Saturation]: Adjust the color saturation (0-100).
 - [Color Temperature]: Set the color temperature of the picture to Cool, Standard and Warm.
 - [Display Format]: Adjust the aspect ratio of the picture.
 - [Noise Reduction]: Reduce the noises in the picture.

Aspect Ratio

1. Press the  SETUP button.
2. Select [TV Settings] > [Picture] > [Aspect Ratio] and press the  button.

About Aspect Ratio

The following settings are available.



Note

• Some picture settings may be unavailable, depending on the signal source of the picture.	
	[Wide Screen]: Adjust the screen to the Wide Screen mode.
	[4:3]: Display the screen in 4:3 format.
	[16:9]: (Not suitable for PC mode.) Adjust 4:3 format to 16:9 format.
	[Scaled-up Subtitle]: (Not suitable for HD and PC mode.) Display the screen in 4:3 format, but the top of the screen is cropped so as to display the subtitle.

Set the Intelligent Sound

Select the predefined sound settings for the Intelligent Sound.

1. Press the  SETUP button. Select [TV Settings] > [Sound] > [Intelligent Sound].
2. Select an option and press the "OK" button.
 - [Standard]: This mode is suitable for most of the occasions and audio formats.

[News]: This mode is suitable for news programs.

[Cinema]: This mode is suitable for watching movies.

[Customized]: Configure your customized sounding settings.

Manual Sound Settings

Press the  SETUP button.

Select [TV Settings] and press the "OK" button.

Select [Sound], select an option and press the  button.

[Intelligent Sound]: Select the predefined settings.

[Bass]: Adjust the bass (0-100).

[Treble]: Adjust the treble (0-100).

[Balance]: Adjust the balance between the left and right speakers (R50-L50).

[Surround]: Turn on the surround sound.

[SPDIF Output]: Select digital audio output mode: PCM or RAW.

[AD Switch]: Turn on/off audio description (only available in DTV mode).

3. Select [Auto] or [Manual], and press the  button.

4. If [Manual] is selected, press the     buttons to set the time or date, then select [OK] and press the "OK" button.

Sleep Timer

You can set a sleep timer to switch your TV to Standby mode at the preset time.



Note

- You can turn off the TV manually, or you can reset the sleep timer before the countdown ends.

- Press the  SETUP button.
- Select [TV Settings] > [Preference] > [Sleep Timer] and press the "OK" button.
- Set the timer to a value between 0 min and 240 min.
- Press the "OK" button to start the timer.
 -  When the preset time goes out, the TV switches to Standby mode.

Clock

You can set a clock that will appear on the screen in the smart mode.

Set up TV Clock

Press the  SETUP button.

Select [TV Settings] > [Preference] > [Clock] and press the "OK" button.

Other TV Settings

You can change other TV settings.

Factory Settings

- Press the  SETUP button.
- Select [TV Settings] > [Factory Settings] and press the "OK" button.

3. Select [Reset] and press the “OK” button to restore to the default factory settings, but the channel settings will not be restored.

Reset the TV

1. Press the  SETUP button.
2. Select [TV Settings] > [Reset the TV] and press the “OK” button.
3. Select [Reset] and press the “OK” button to reset all the settings and channels.

PVR

1. Press the  SETUP button.
2. Select [TV Settings] > [PVR File System] and press the “OK” button to enter.
3. Press the “OK” button after you finish the settings.

OAD Settings

Only available in DTV mode.

1. Press the  SETUP button.
2. Select [TV Settings] > [OAD Settings] > [On] to open the menu.
3. Select to set the scanning time, OAD scanning, and update prompt on/off, then press the “OK” button to finish the settings.

Software Settings

Philips is committed to continuously improving our products. We recommend that

you should upgrade your TV software when an update is available.

App Management

1. Press the  SETUP button.
2. Select [Software Settings] > [App Management] and press the “OK” button.
 - [App Settings]: Set the installation path for apps.
 - [All Apps]: View all the apps installed in the system.
 - [Apps in USB Device]: View all the apps stored in the USB device.

Software Info

1. Press the  SETUP button.
2. Select [Software Settings] > [Software Info] and press the “OK” button.
 - View relevant information about the current software version.

Local Update

1. Press the  SETUP button.
2. Select [Software Settings] > [Local Update] and press the “OK” button.
3. Update the software following the on-screen prompts.



Note

- Before operation, please insert the USB device containing the update package.

Channel Settings

When you first turn on your TV, it will prompt you to set up menu language, auto channel scan and network.

Auto Scan

1. Press the  SETUP button.
2. Select [Channel Settings] > [Auto Scan] and press the "OK" button.
3. Select the applicable system and the country you are located.

ATV Manual Scan

Before scanning, please switch the signal source to ATV.

1. Press the  SETUP button.
2. Select [Channel Settings] > [Manual Scan] and press the "OK" button.
3. Select the applicable [Color System] and [Sound System].

Search for and Save Channels

1. Press the  SETUP button.
2. Select [Channel Settings] > [Manual Scan] > [Scan] and press the "OK" button.
 - Select [Scan] and press the  buttons to search for channels.
3. When you finish scanning, select [Save] and press the "OK" button to save the searched channel as the current channel.



Note

- In ATV mode, press the "OK" button to display the saved channels.

Fine Tuning

1. Press the  SETUP button.
2. Select [Channel Settings] > [Manual Scan] > [Fine Tuning] and press the "OK" button.
3. Press the  buttons to fine tune channels. Select [Finish] to exit the menu.

DTV Manual Scan

Before scanning, please switch the signal source to DTV.

1. Press the  SETUP button.
2. Select [Channel Settings] > [Manual Scan] and press the "OK" button to start scanning.
3. Press the  buttons to adjust channels. Select [Finish] to exit the menu.

EPG

Only available in DTV mode.

1. Press the  TV GUIDE" button.
2. Press the  buttons to select time and channel.
3. Press the colored buttons to view program list, set program notifications, etc.

Network Configuration

You can configure different network connections to access different networks.

Smart TV

1. Connect your TV to the Internet. If network connection is unavailable, some functions of Smart TV cannot work.
2. Press the "SMART TV" button on the remote control.
 - ↳ The screen auto enters the Smart TV homepage.



Interface Description

	TV: A preview of the current TV program.
	App List: Display all the apps installed in the system.
	Signal Source: Select a signal source from the connected external devices.
	Settings: Open the setting menu.

	Calendar and Network Status: A shortcut window for Calendar and network status.
--	--

Note

- Philips reserves the right to add or remove apps. Please do not alter the TV ROM without authorization, and any damages arising therefrom shall not be covered by the warranty. To improve user experience, connect an external mouse for easier operation.

Network Status

You can select the network type.

1. Press the SETUP button.
2. Select [Network Configuration] > [Network Status].
 - ↳ The screen displays the current network parameters.

Wired Network

To connect the TV to the Internet via PC, your PC must be equipped with a router. Connect the router to the network port on the TV using a network cable (Ethernet cable). Turn on the router before network configuration.

Wired Network Configuration - Auto

Settings

1. Press the  SETUP button.
2. Select [Network Configuration] > [Wired Network] and press the "OK" button.
3. Select [Auto obtain IP address/On].
 The network protocol is automatically configured.

1. Press the  SETUP button.
2. Select [Network Configuration] > [Wired Network] and press the "OK" button.
3. Select [Auto Obtain IP Address/Off].
4. Press the numeric keys to input the values of [IP Address], [Subnet Mask], [Default Gateway], [Primary DNS] and [Secondary DNS].
5. After inputting the values, select [Save] and press the "OK" button.

Wireless Network

You can set up a Wi-Fi network to connect your TV to the Internet.

Wireless Network Configuration

1. Press the  SETUP button.
2. Select [Network Configuration] > [Wireless Network] and press the "OK" button.
3. Select [Wi-Fi/On], and the following options are displayed:
 - [SSID]: View all the Wi-Fi signal sources searched by the TV. For an encrypted

network, you have to input the correct password to join the network.

- [Auto Obtain IP Address]: Enable or disable the auto obtaining of IP address. The operations are the same as those described in wired Network Configuration.

SAMBA File Sharing

1. In Smart TV mode, select [Media Player Center] > [SAMBA File Sharing] and press the "OK" button. The system auto searches for users on the network.
2. Select one network IP address and press the "OK" button. Input the correct user name and password to view and play the files shared on the SAMBA server.



Note

- The PC and TV shall be on the same LAN with their IP addresses in the same segment;
- The shared PC shall disable the firewall and set to share the folder;
- The PC must support domain name system;
- Depending on network environment and speed, the playback of HD videos may not be fluent sometimes, which is a normal phenomenon, not a fault.

PPPOE Settings

Through this function, the TV can be directly connected to ADSL via a network cable, so as to access the Internet over PPPOE.

1. Press the  SETUP button.

2. Select [Network Configuration] > [PPPOE Settings] and press the ► button.
3. Finish the following settings, then press the "OK" button to select [Dial Up] or [Hang Up].
 - [User Name]: Input the user name offered by your Internet service provider.
 - [Password]: Input the user password.
 - [Display Password]: Enable or disable the display of password.
 - [Auto Dial Up]: Enable or disable auto dial up.

Wi-Fi Access Point

Enable the TV to become an access point of the wireless network.

1. Press the  SETUP button.
2. Select [Network Configuration] > [Wi-Fi Access Point] and press the ► button.
3. Select an option:
 - [Wi-Fi Access Point]: Enable or disable the Wi-Fi access point.
(Turn off the Wi-Fi before operation)
 - [Configure Wi-Fi Access Point]: After enabling the access point, you can set up options such as SSID, security, password. After settings, select [Save] and press the "OK" button.

Parental Control

The parents can restrict the use of this TV by children on the basis of TV program ratings.

1. Press the  SETUP button.

2. Select [TV Settings] > [Parental Control] > [System Lock] and press the "OK" button. Input the initial password "0000" to enter the menu.
3. Select On or Off.
4. Select to set an option:
 - [Change Password]: To change the password, you need to input the old password, the new password and confirm the new password. Select [Confirm] and press the "OK" button.
 - [Lock Program]: Press the "Green" button to lock or unlock the programs as required.
 - [Set Rating]: Press the "OK" button to set the TV program rating.



Note

- It requires password to change the system settings.
 - When system lock is disabled, the following options cannot be selected: [Change Password]; [Lock Program]; [Set Rating].

Play Pictures, Music and Videos Stored in USB Device

Video format supported by USB device:

Supported storage device: USB device (only support FAT or FAT 32 USB storage devices)

Supported multimedia formats:

Image: JPEG

Audio: MP3

Video: MPEG1/MPEG2/H.264

(The above formats are for reference only)



Note

We shall not be held liable for any incompatible USB devices and any data damage or loss from such devices.

Play Pictures, Music and Videos via the Connected USB Device

1. Turn on the TV.
2. Connect the USB storage device to the USB port on the side of the TV.
3. Press the "SOURCE" button on the remote control to select USB and press the "OK" button; or, press the "SMART TV" button on the remote control to select "Media Player Center" from App and press the "OK" button.
4. Press the "◀" button to select from file types shown on the left of the screen: [All], [Picture], [Music], [Movie]. Press the "OK" button to select and press the "▶" button to enter [Local Disk]. Press the "OK" button to enter the folder, press the "▲▼" buttons to select the file, and press the "OK" button to play.

6 Product information

Display resolutions

Computer Formats

- Resolution - refresh rate:
 - 640 × 480 - 60Hz
 - 800 × 600 - 60Hz
 - 1024 × 768 - 60Hz
 - 1360 × 768 - 60Hz
 - 1920 × 1080 - 60Hz

Video Formats

- Resolution - refresh rate:
 - 480i - 60Hz
 - 480p - 60Hz
 - 576i - 50Hz
 - 576p - 50Hz
 - 720p - 50Hz, 60Hz
 - 1080i - 50Hz, 60Hz
 - 1080p - 50Hz, 60Hz.

Multimedia

- Supported storage device: USB (only FAT or FAT 32 USB storage devices are supported.)
 - Compatible multimedia file formats:
 - Image: JPEG
 - Audio: MP3
 - Video: MPEG 2/MPEG 4, H.264
-

Sound power

- 43": 8W×2
 - 49": 8W×2
 - 55": 8W×2
-

Inherent resolution

- 43" : 1920 × 1080
 - 49" : 1920 × 1080
 - 55" : 1920 × 1080
-

Tuner / Reception / Transmission

- Aerial input: 75ohm coaxial (IEC75)
 - Supported Systems:
 - ATV: PAL D/K, I, B/G, NTSC M,
 - SECAM D/K, B/G, L
 - DTV: DVB-T/T2/C
-

Remote Control

- Batteries: 2 × AAA

Power Supply

- Main Power Supply:
100-240V~, 50/60Hz
 - Standby Energy Consumption:
≤0.5W
 - Environment Temperature: 5-40°C
 - Power consumption:
43": 75W
49": 110W
55": 130W
-

Supported TV mounts

To mount the TV, please purchase a Philips TV mount or any TV mount compliant with the VESA standard. To prevent damage to cables and connectors, be sure to leave a clearance gap of at least 2.2 inches or 5.5cm between the back of the TV to the wall.



Warning

- Please follow all instructions provided with the TV mount. TP Vision Europe B.V. bears no responsibility for improper TV mounting those results in accident, injury or damage.

Model No.	Required Pixel Pitch (mm)	Required Mounting Screws
43"	200 × 300	4 × M6
49"	200 × 300	4 × M6
55"	200 × 300	4 × M6

Product Specification

The product design and specification are subject to change without further notice.

43"

- Without base
- Dimension (W×H×D)
970×564×74 (mm)
- Weight: 8.3 Kg

- With base
- Dimension (W×H×D)
970×614×219 (mm)
- Weight: 8.5 Kg

49"

- Without base
- Dimension (W×H×D)
1102×639×81 (mm)
- Weight: 9.5 Kg

- With base
- Dimension (W×H×D)
1102×696×258 (mm)
- Weight: 10.0 Kg

55"

- Without base
- Dimension (W×H×D)
1243×720×81 (mm)
- Weight: 13.5 Kg

- With base
- Dimension (W×H×D)
1243×776×258 (mm)
- Weight: 14.0 Kg

7 Troubleshooting

This section covers common problems and their accompanying solutions.

General issues

The TV cannot be switched on:

- Disconnect the power cable from the power outlet. Wait for one minute before reconnecting it.
- Check that the power cable is securely connected.

The remote control is not working properly:

- Check that the remote control batteries are correctly inserted according to the +/- orientation.
- Replace the remote control batteries if they are flat or weak.
- Clean the remote control and TV sensor lens.

The TV menu is in the wrong language.

- Change the TV menu to your preferred language.

When turning the TV On/Off or to Standby, you hear a creaking sound from the TV chassis:

- No action is required. The creaking sound comes from the normal expansion and contraction of the TV as it cools down and warms up. This does not impact its performance.

Channel issues

Previously installed channels do not appear in the channel list:

- Check that the correct channel list is selected.

Picture issues

The TV is on, but there is no picture:

- Check that the antenna is properly connected to the TV.
- Check that the correct device is selected as the TV source.

There is sound but no picture:

- Check that the picture settings are correctly set.

Poor TV reception from the antenna connection:

- Check that the antenna is properly connected to the TV.
- Loudspeakers, unearthed audio devices, neon lights, high buildings and other large objects can influence reception quality. If possible, try to improve the reception quality by changing the antenna direction or moving devices away from the TV.
- If the reception on one particular channel is poor, please fine tune this channel.

There is poor picture quality from connected devices:

- Check that the devices are connected properly.

- Check that the picture settings are correctly set.

The picture does not fit the screen; it is too big or too small:

- Try using a different picture format.

The picture position is incorrect:

- Picture signals from some devices may not fit the screen correctly. Please check the signal output of the device.

Sound issues

The pictures are showing but sound quality is poor:

- Check that all cables are properly connected.
- Check that the volume is not set to 0.
- Check that the sound is not muted.
- Check that the sound settings are correctly set.

The pictures are showing but sound comes from one speaker only:

- Verify that sound balance is set to the centre.

HDMI connection issues

There are problems with HDMI devices:

- Please note that HDCP (High-bandwidth Digital Content Protection) support can delay the time taken for a TV to display content from a HDMI device.
- If the TV does not recognize the HDMI

device and no pictures are displayed, please try switching the signal source to another device before switching it back again.

- If there are intermittent sound disruptions, please check that output settings from the HDMI device are correct.

Computer connection issues

The computer display on the TV is not stable:

- Check that your PC uses the supported resolution and refresh rate.
- Set the TV picture format to unscaled.

Network Connection Issues

Failure to connect to the Internet:

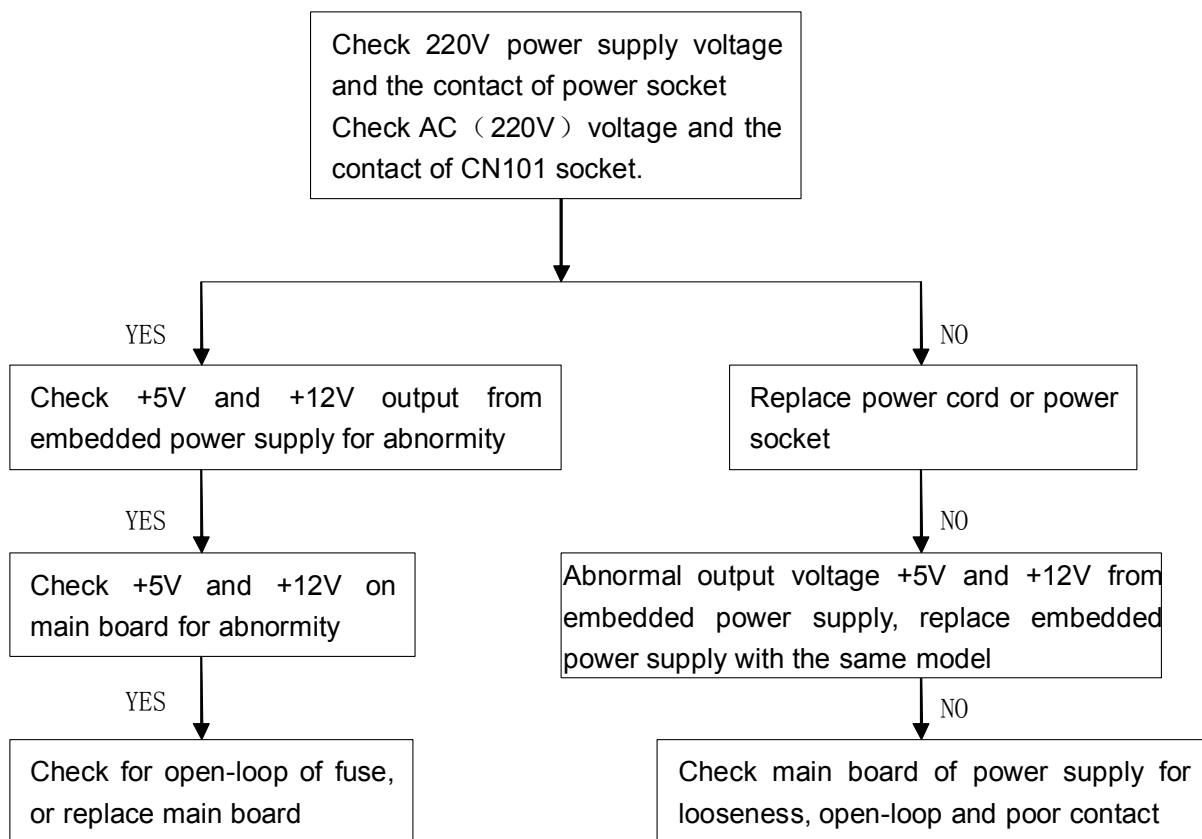
- If the TV is correctly connected to the router, please check the connection between the router and the Internet.

Network speed is slow

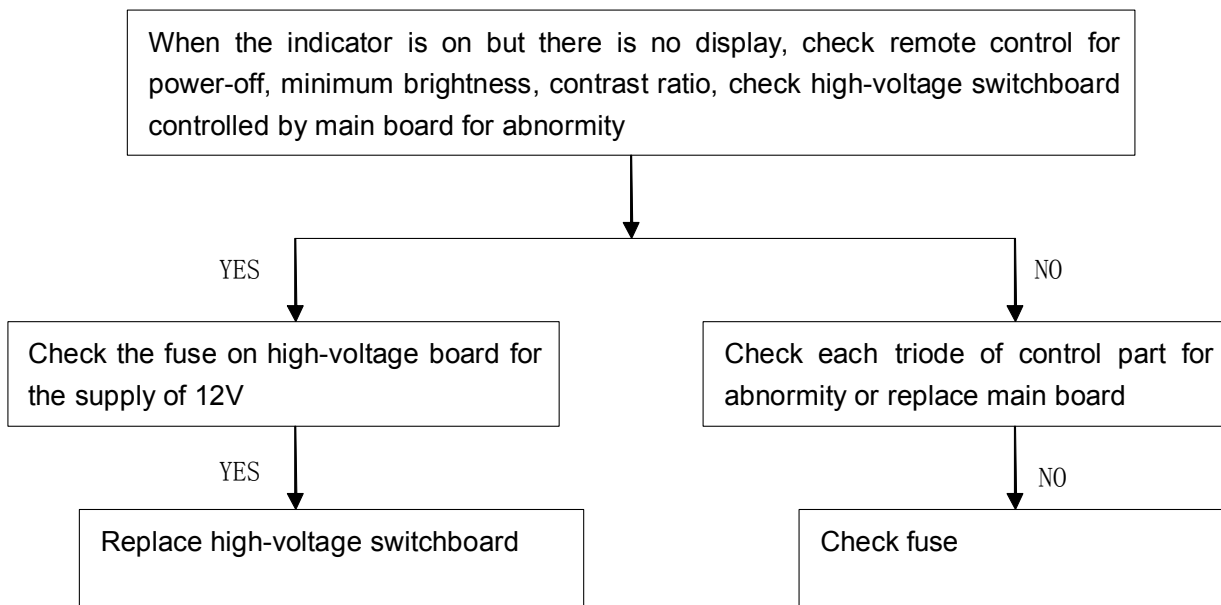
- Please refer to the instruction manual of your router to learn about the factors that may affect transfer rate and signal quality.
- You may need to upgrade your broadband speed.

Troubleshooting Procedure

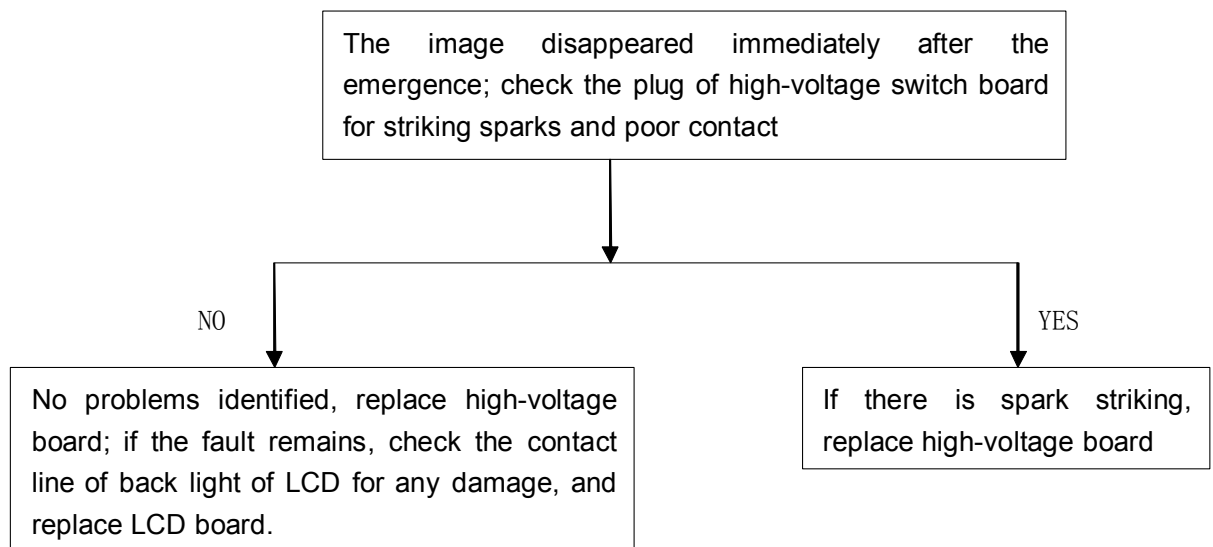
1. No power



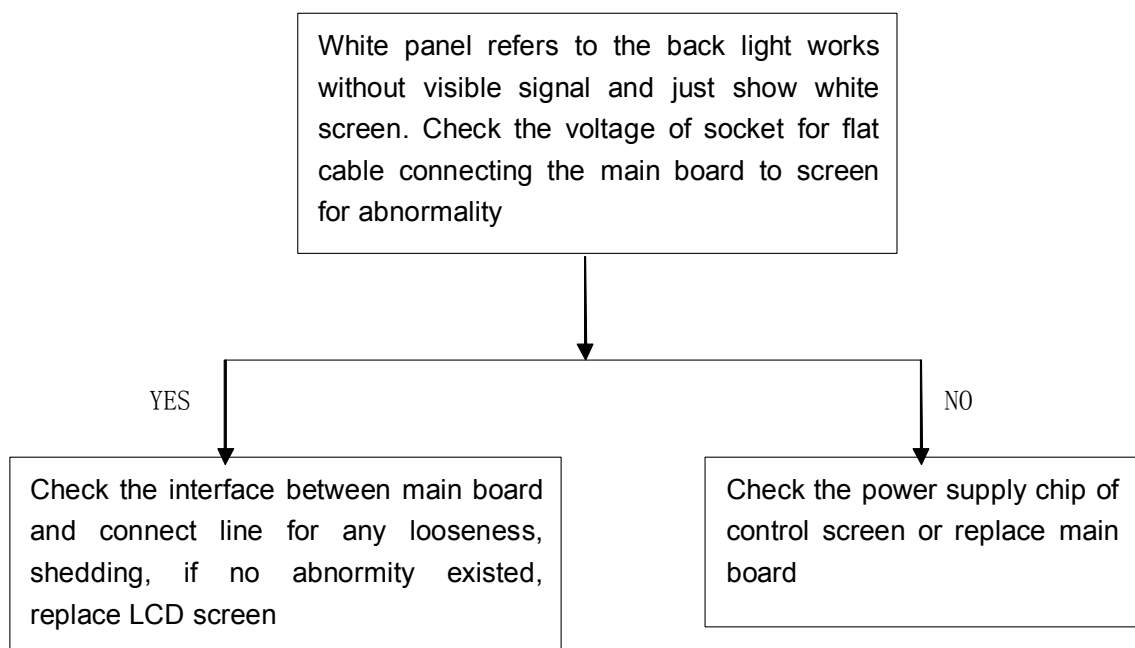
2. Without light



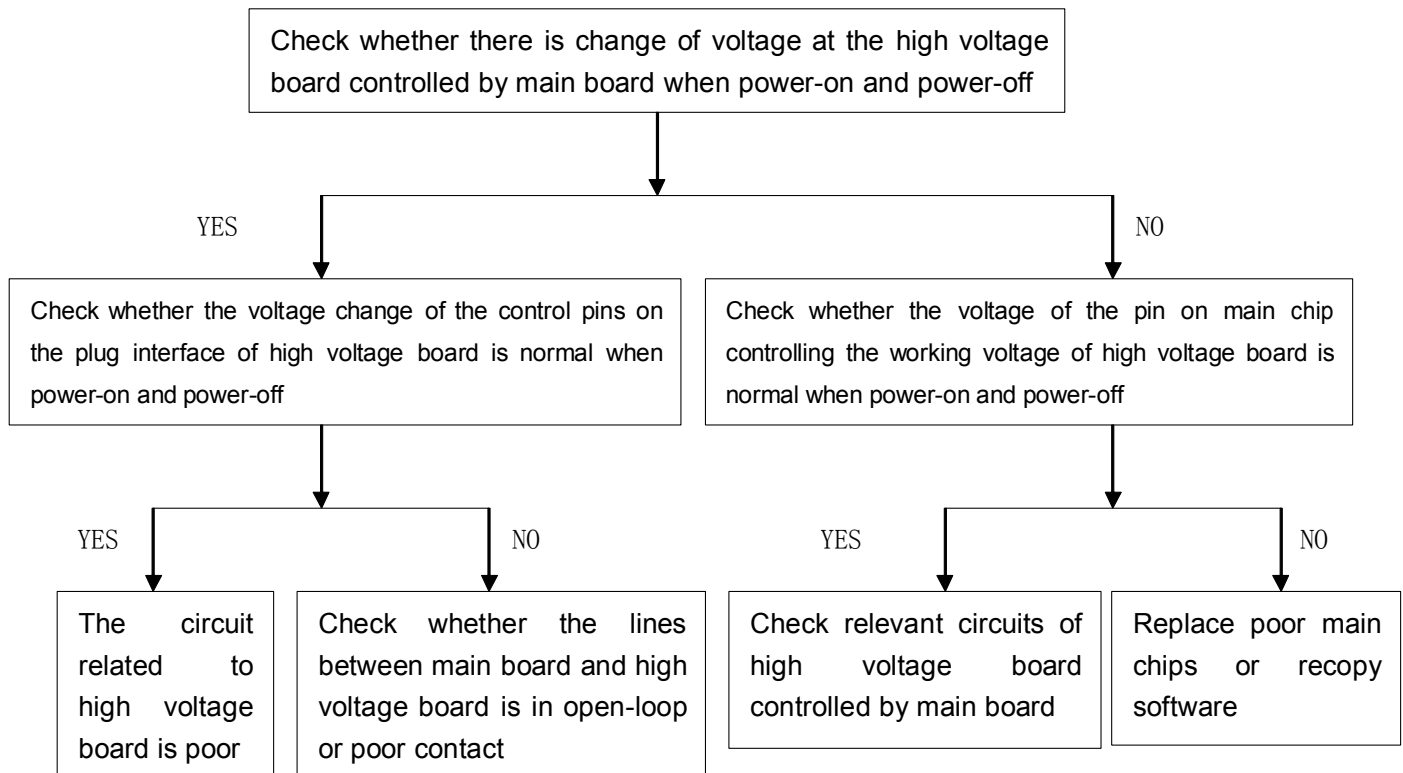
3. Protection or without light (refers to the disappearance of image several seconds after the emergence of image)



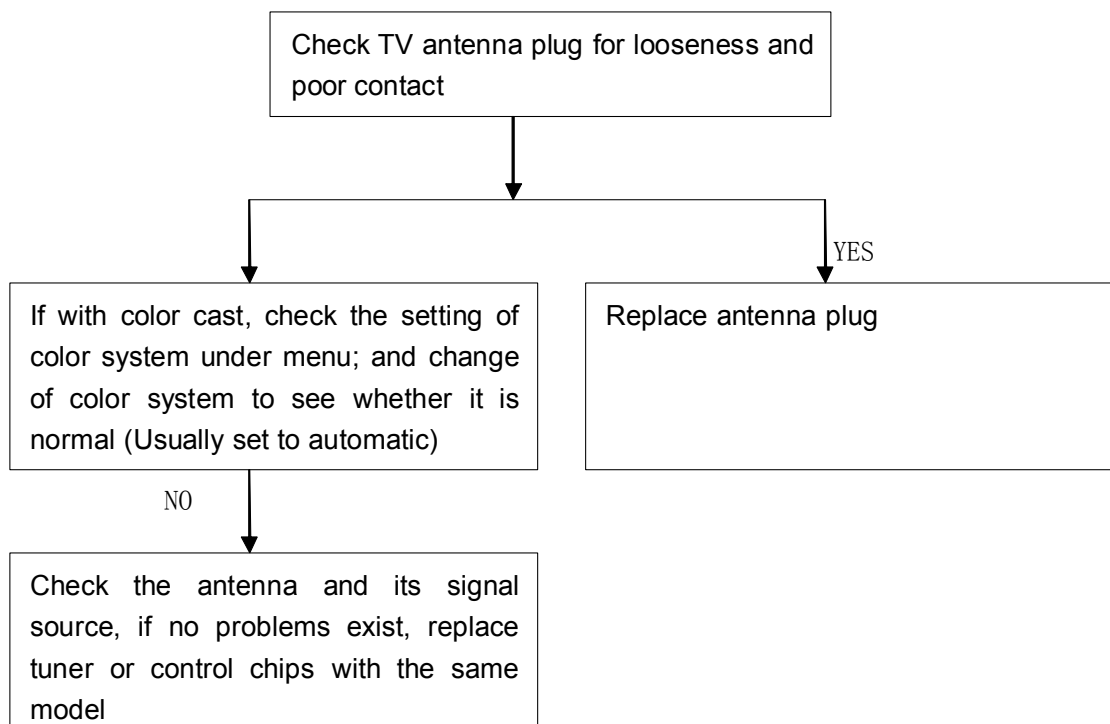
4. White panel



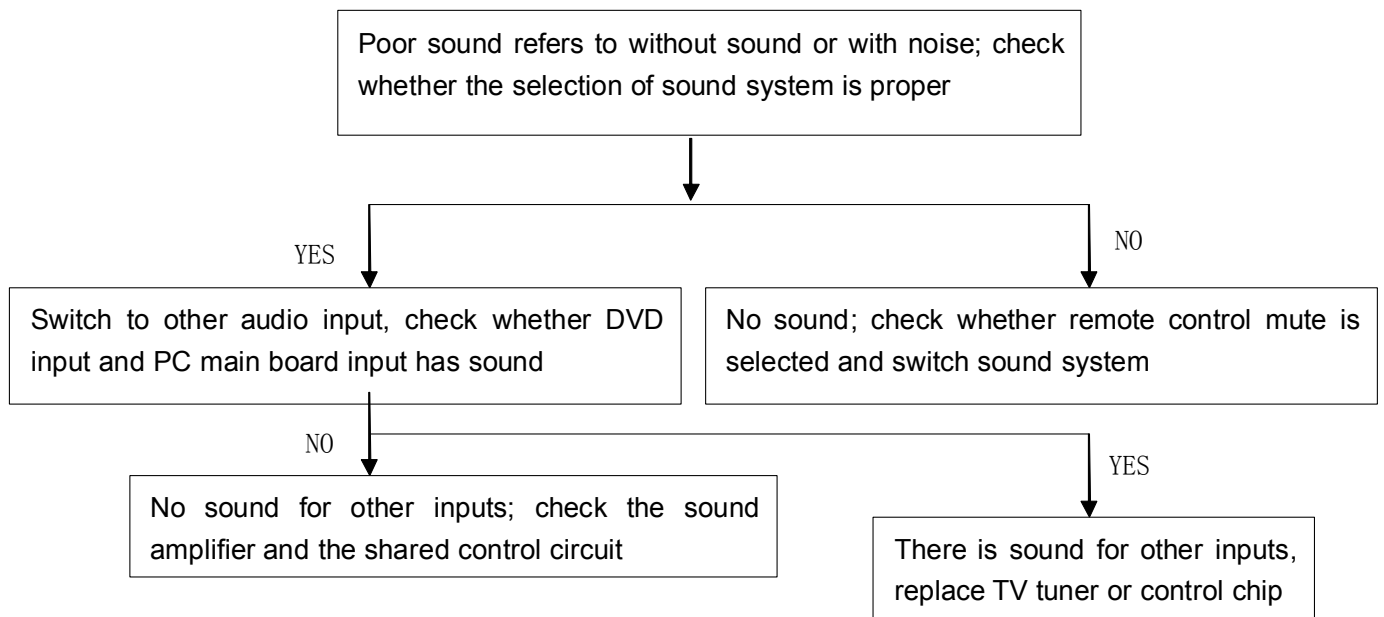
5. White screen after power-off (work normally when power on, but when power-off or no signal input, the screen shows a white screen)



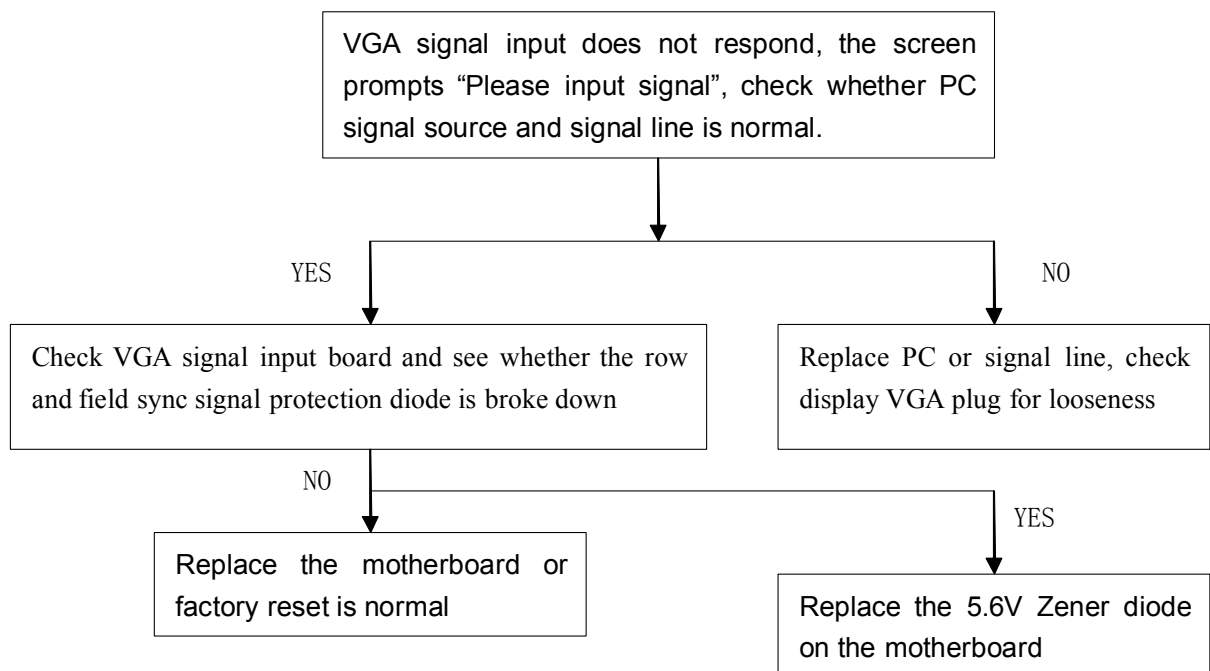
6. TV without channel or with color cast



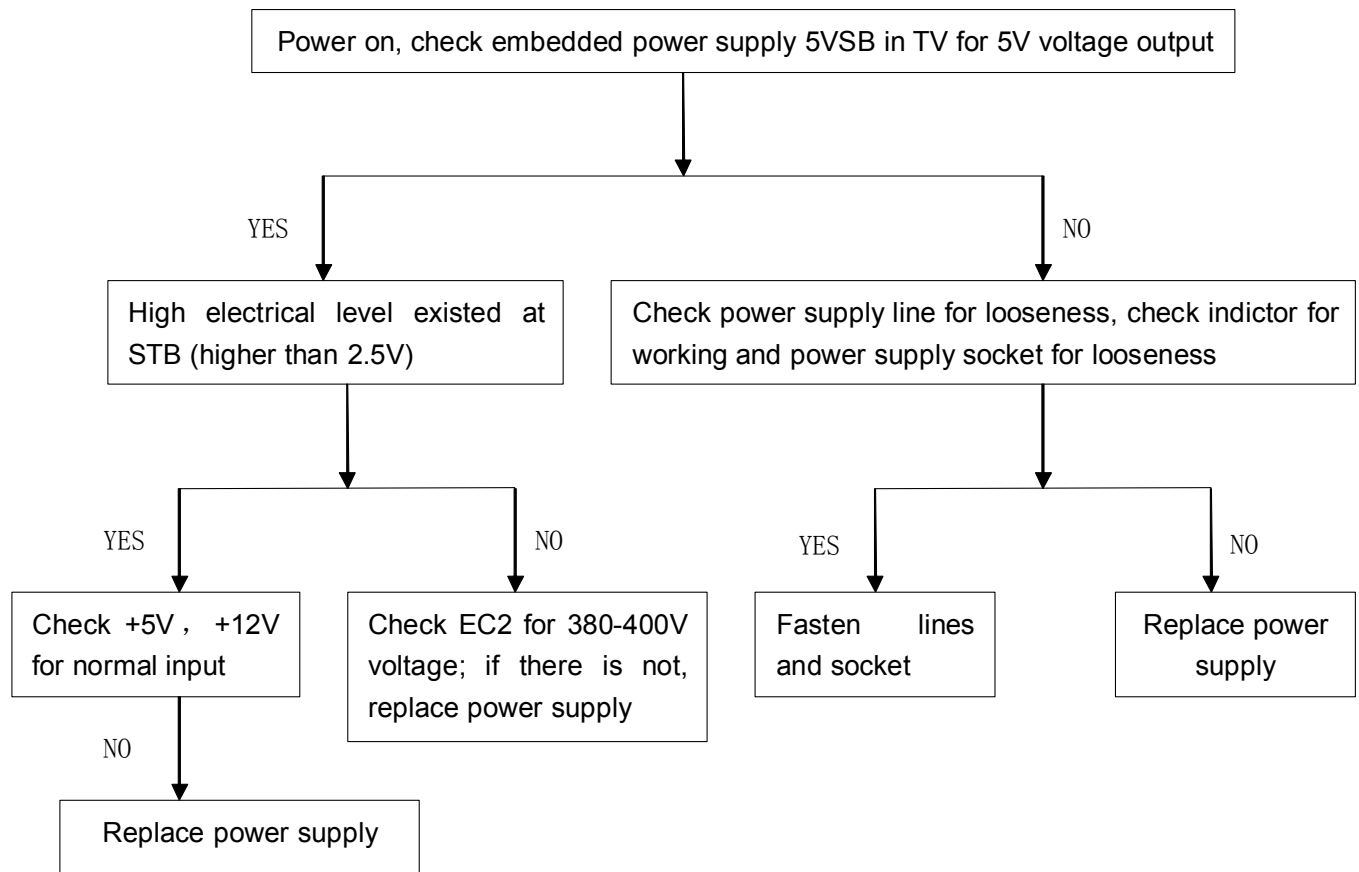
7. Poor sound



8. No VGA input signal



9. Poor embedded power supply of TV



10. Common fault of LCD screen

10.1 Bright line or bright belt (BL): constant longitudinal or transverse illuminating line or belt due to non-conformed connection between IC and glass

10.2 Dark line (DL): constant longitudinal or transverse illuminating line due to non-conformed connection between IC and glass.

10.3 White panel (WP): only light tube illuminates owing to non-conformed drive plate of the LCD, without any display signal in the display area, and the whole screen is white.

10.4 Screen breaking: (overflow of LCD): with damage or invisible damage of the liquid crystal glass, irregular black defect occurs from liquid crystal body to glass and polarizer, which can not be seen at any image. The overflow portion can not form image and does not display.

10.5 Pressing Scrape (PS): after local display area at the front of LCD is heavily pressed,

glass of the pressed portion is not damaged, the liquid crystal body can not display normally, with spot or block black defect.

10.6 Screen mess: irregular color display arising from damage of driving plate in LCD.

Level 1 menu	Level 2 menu	Level 3 menu	data, remark
factory reset			工厂复位初始化 EEPROM 设定 factory reset,initialize eeprom
ageing mode			
Channels Advanced Setup			
power-on mode	Secondary/Memory/ Direct		
Mboot upgrade	Are you sure Upgrade ? 选项: confirm/Cancel		update Mboot
Main upgrade	Are you sure Upgrade ? 选项: confirm 和 Cancel		update main program
Input MAC address			
Data debug	ADC ADJUST		ADC adjustment
		Source	VGA(RGB),分量 (SD,HD)choose
		R-GAIN	The front-end gain adjustment
		G-GAIN	
		B-GAIN	
		R-OFFSET	clamping electrical level adjustment
		G-OFFSET	
		B-OFFSET	
		Phase	Phase
		Auto Tune	
	White Balance		color temperature adjustment
		Color Temperature	
		R Gain	White level adjustment
		G Gain	
		B Gain	
		R Offset	Black level adjustment
		G Offset	
		B offset	
	Picture Mode		Picture model adjust

		Brightness	brightness
		Constrast	Constrast
		Saturation	Saturation
		Hue	Hue
		Sharpness	Sharpness
		Backlight	Backlight
	Test Pattern		
	Non_linear	OSD_0	All kinds of curve adjustment
		OSD_25	
		OSD_50	
		OSD_75	
		OSD_100	
	OverScan		repetition rate adjustment
		Source	Each signal source
		H size	WIDE adjustment
		H position	center position of Line
		V size	Field adjustment
		V position	center position of field
	PEQ		PEQ adjustment; Fo: Set to the center Frequency point of Gain spectrum
		Fo1 coarse	Range 0~16000, step is 100HZ
		Fo1 fine	Range 0~16000, step is 1HZ
		Fo2 coarse	Range 0~16000, step is 100HZ
		Fo2 fine	Range 0~16000, step is 1HZ
		Fo3 coarse	Range 0~16000, step is 100HZ
		Fo3 fine	Range 0~16000, step is 1HZ
		Fo4 coarse	
		Fo4 fine	
		Fo5 coarse	
		Fo5 fine	
	Uart Enable		(switch Uart) On/off
	Uart Debug		Debug tool can be used to read memorizer via COM port
	EfficiencyBk		
	EfficiencyBk_Max		

	AVC		
	CEC/ARC		
Others			
Panel model			
PQ			
Software version			
barcode			

Net Work TV MSD6A628 software upgrading (After service)

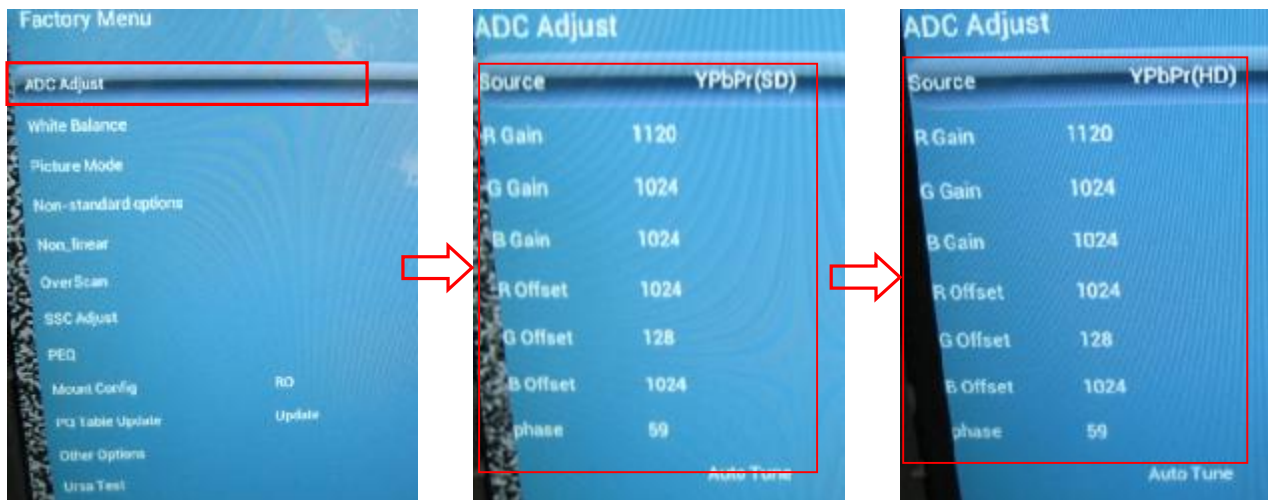
1, software upgrade tools and materials

- * PC (WINDOWS XP system, USB2.0)
- * AC100 ~ 240V power supply and power cord
- * ISP programming board and cable
- * ISP programming board driver
- * USB flash drive (version 2.0, the capacity is not more than 2G)
- * Upgrade software and boot files

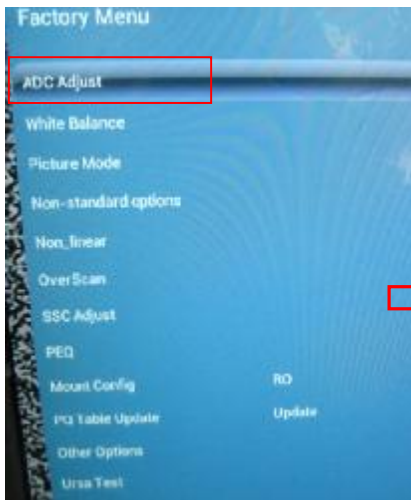
2, preparation before upgrade.

Write down all signal ADC and white balance data in factory menu before upgrading (FLASH initialization may occur after upgrade, color calibration data erased, and then revert to the written down data):

1. Under YPbPb signal source, press the MENU key to pop up the main menu, and then press 8202 by number keys to enter the factory menu, select ADC ADJUST item, press the OK button to enter the next menu, move the cursor to the MODE key, press the left / right cursor keys to select YPbPr (SD) items, recorded R-GAIN / G-GAIN / B-GAIN value and R-OFFSET / G-OFFSET / B-OFFSET value.
2. Under ADC ADJUST item and press OK to enter the next menu move the cursor to the MODE key, press the left / right keys to move the cursor to select YPbPr (HD) items, recorded R-GAIN / G-GAIN / B- GAIN value and R-OFFSET / G-OFFSET / B-OFFSET value.

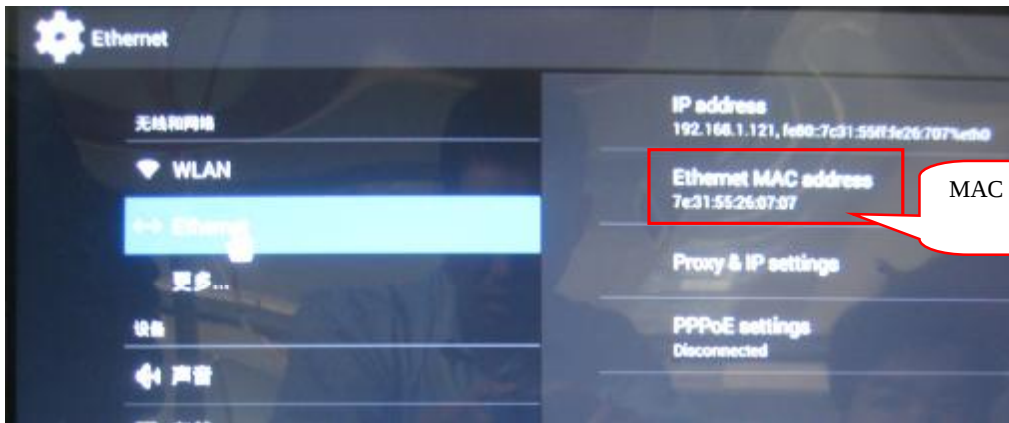


3. Under VGA signal source, press MENU in the main menu pops up, then press 8202 by number keys to enter the factory menu, select ADC ADJUST item and press OK to enter the next menu, move the cursor to the MODE key, press the left / right cursor keys to select YPbPr (SD) items, recorded R-GAIN / G-GAIN / B-GAIN value and R-OFFSET / G-OFFSET / B-OFFSET value.



Write down YPbPr(SD) and YPbPr(HD) value before upgrade and write down VGA mode R/G/B-GAIN and R/B/G-OFFSET value, change back to original value after software upgrade finished.

1. In Android system main interface, move cursor to “network” -- “Ethernet” item, click mouse left button to get into , record MAC address.



3, the software upgrade content and procedures :

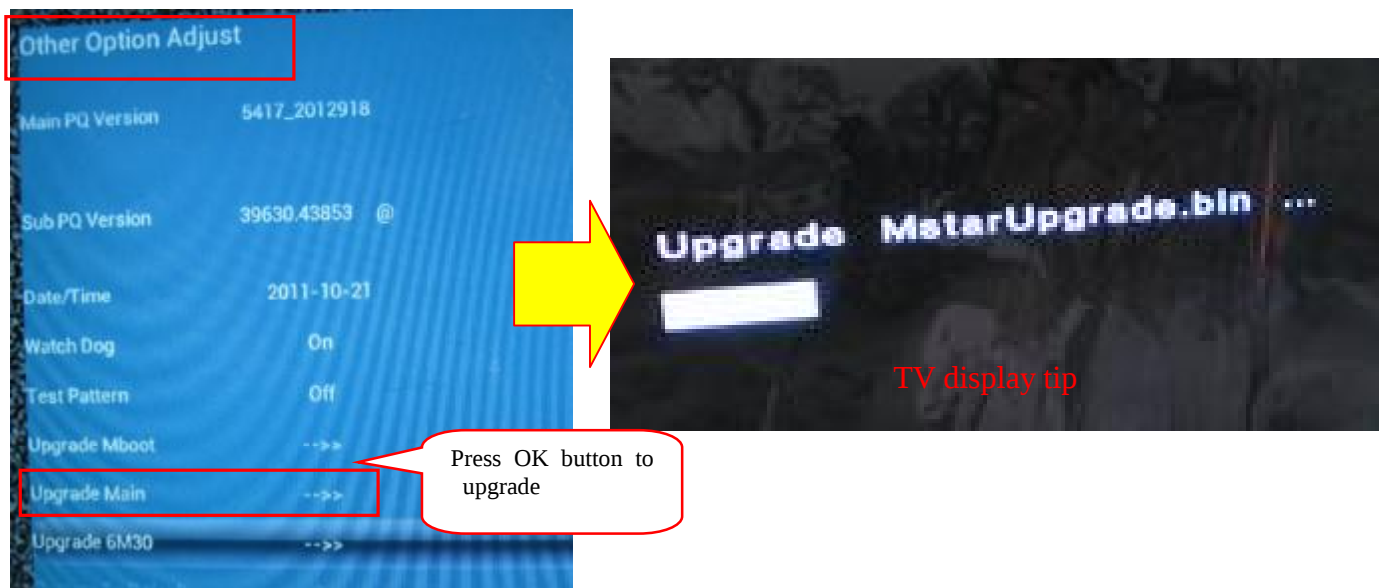
1. U disk formatted as FAT32 format , and then upgrade the software (software name and case is MstarUpgrade, suffix bin) put in the U disk .

There are two ways for software upgrade, recommended mode 1.



The bigger the file, the longer time upgrade will take, it is normally about 3~4 minutes, give enough time to make sure upgrade success

Method 1: In the case of TV normally boot, enter the factory menu upgrade: power on machine, insert disk into the TV USB interface, and then enter the factory menu, move the cursor to the Other Option Press OK to enter , and then move the cursor to Upgrade Main options , press OK to upgrade.



Method 2: Insert U disk into TV main board or programming fixture board USB interface , long press VOL + key, then power on TV (main board) , after about five seconds the TV (remote control panel) indicator fast when flashing , indicating that the TV is being upgraded , after the light is not blinking on and off (this process is time-consuming depending on the size of the main board software , the greater the file the longer the software upgrade , the upgrade takes roughly three minutes when the board software has 270M , 500M needs four minutes) , means upgrade is complete .

3. Notes:

- the file name and the case cannot be wrong , otherwise it will not be upgraded .
- When using the U disk upgrade, sometimes light will no longer flashing after a TV remote control panel lights flickering flashes ten seconds, this is upgrade failure. Normal upgrade remote panel lights flashing to be more than two minutes, in this case upgrade again by powering off main board.
- after powering off, if main board cannot upgrade normally , programming again the boot file (Mboot.bin or MbootUpgrade.bin).
- If the operator of this program is not familiar with the software, under the condition the can see factory menu recommended upgrading the operating menu to enter the factory to prevent misuse.

4, when the above third step cannot be upgraded, upgrade the boot file first; please refer to the following specific operating instructions.

MSD6A628 Network TV main board related upgrade packages with mboot.bin and MbootUpgrade.bin equipped with two boot files. Both boot files function are the same, but there are differences between upgrade methods, only one upgrade one of them. If the current TV main board can work properly, copy the boot files to the U disk after formatted FAT32, then follow the instructions below to upgrade:

Method 1 : first MbootUpgrade.bin boot files, stored in the U disk, and then insert U disk in TV main board USB port, press and hold the VOL + button on the TV control panel and hold, then power on TV (main board), approximately after five seconds the TV (remote control panel) indicator flashes rapidly , indicating that the TV is being upgraded , after the light is not blinking on and off (time-consuming of this process approximately 60 seconds) , indicating that the upgrade is complete .

Method 2 : first Mboot.bin boot files stored in the U disk, then U disk inserted in the TV main board USB interface to power on TV, and then press the MENU button on the remote control and then followed by 8202 the number keys to enter the factory menu, move cursor to Other Option press OK to enter , and then move the cursor to upgrade mboot option , press OK to upgrade (this time-consuming of this process is about 15 seconds) .

Notes:

- mboot.bin and MbootUpgrade.bin files can be put together in a U- disk, but no matter what methods to upgrade, all operating according to operation instructions, control time to upgrade, ensure that the upgrade completed before power failure, otherwise upgrade fails.
- Because the boot files related to the TV's screen resolution and other relevant parameters, so before the software

upgrade boot files of each board must be upgrade first.

3. If the above two methods cannot upgrade, using programming board online upgrade following the instructions:

5, Programming board driver installation.

Use programming board online upgrade, programming board driver program has to be installed to PC, see the following operation instructions.

1.use USB connecting wire to connect programming board and personal PC.



2. PC identify new device, choose to install from list or specified location and appoint driver file position as figure.



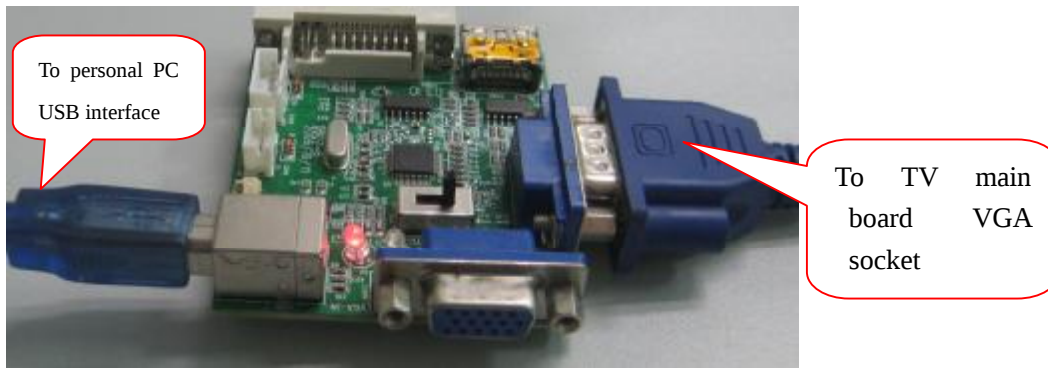


3. after PC finds driver file, below information will be prompted during installation, click on , remains can be installed, the system will install the driver process three times , namely : Mstar USB Debug Tool A; Mstar USB Debug Tool B; Mstar USB SerialPort , install the three drives in order !

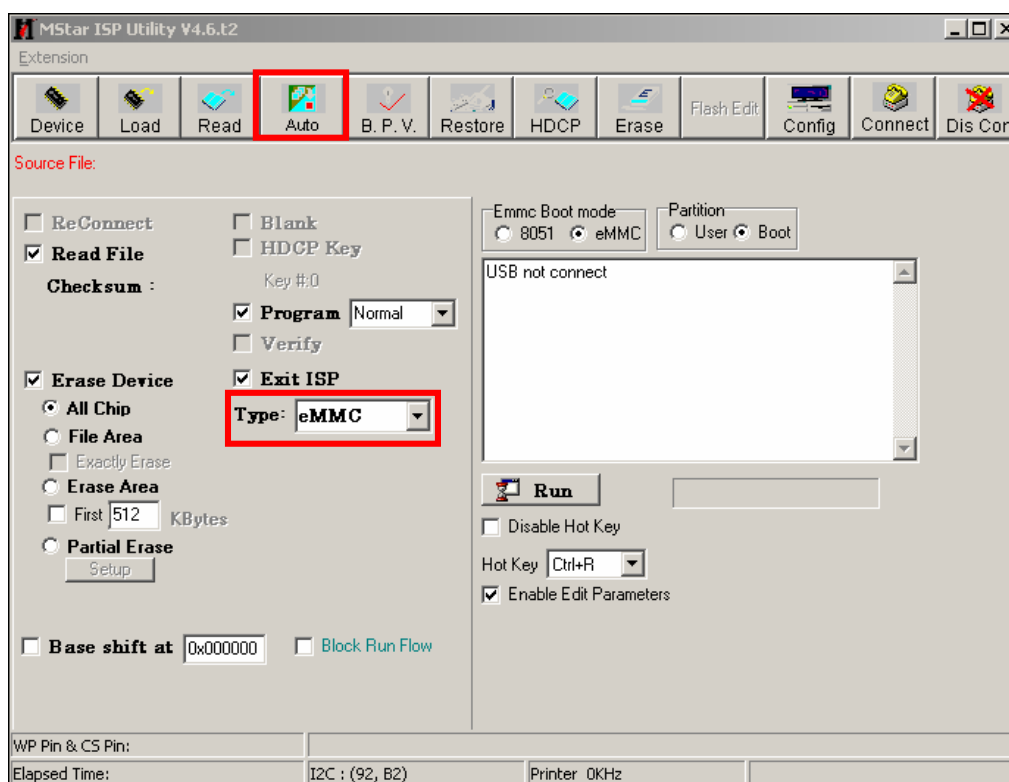


6. use programming board online upgrade boot file.

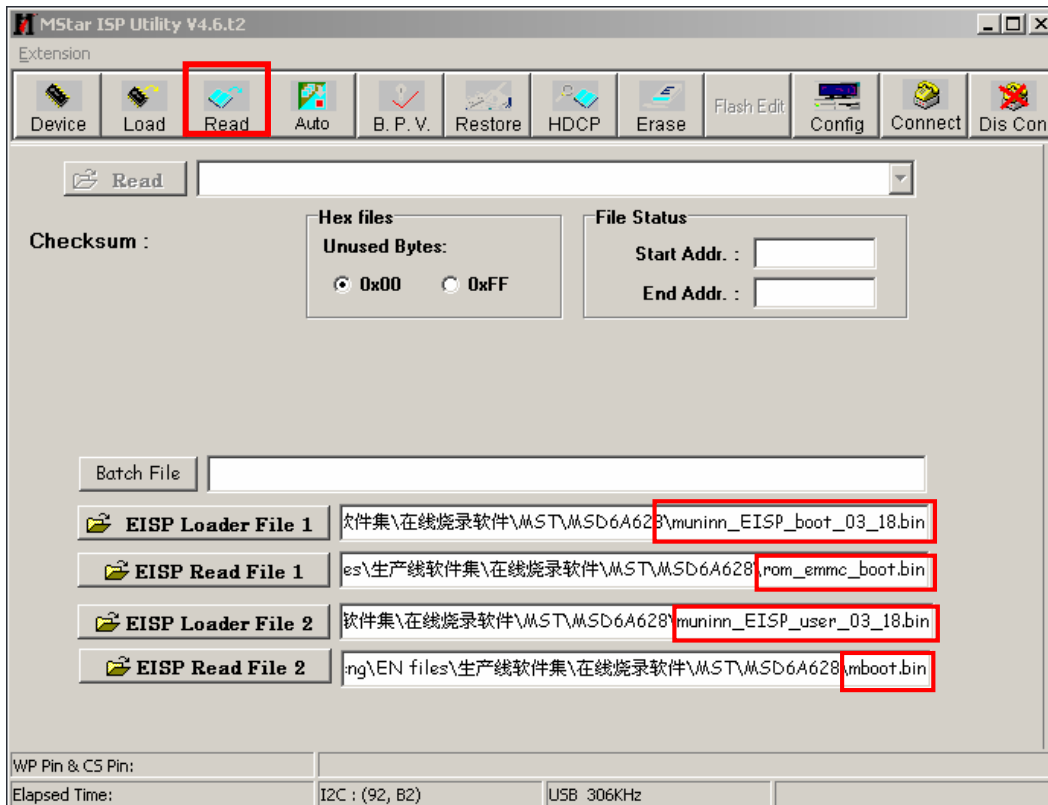
1. Use a USB cable and VGA cable to connect the programming board and TV main board , computer main bard and then powering on main board.



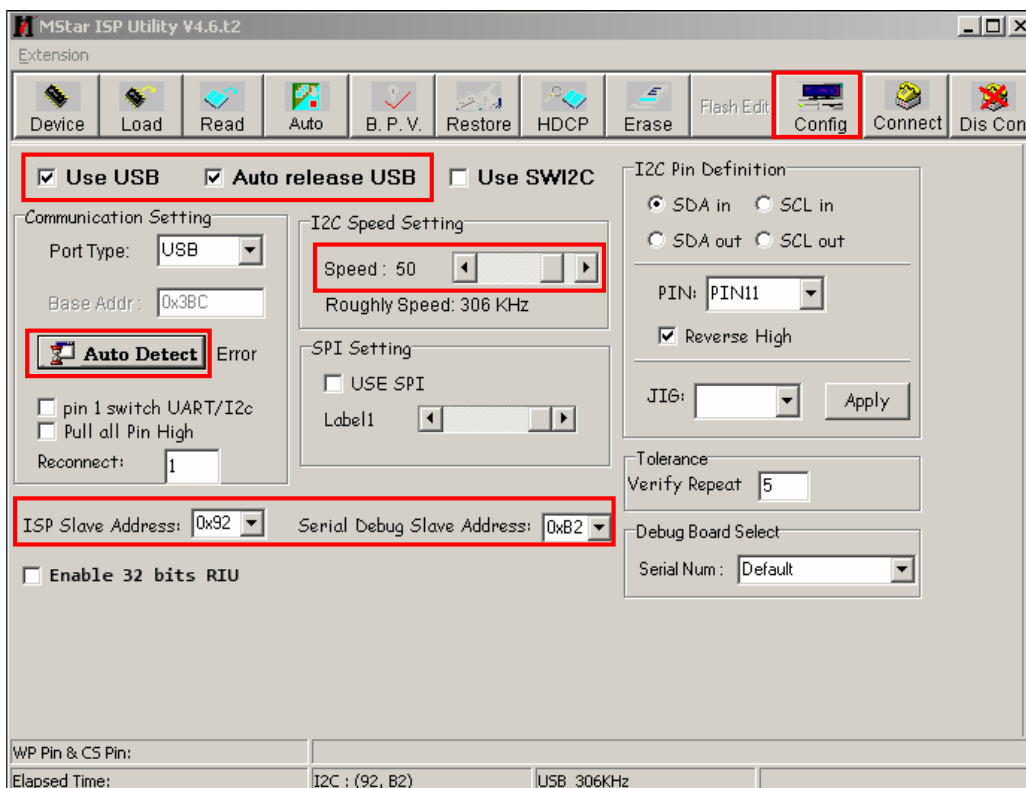
2. Double-click to run MStar ISP Utility v4.6.t2.exe, click the "Auto" icon on the main toolbar under the type selected for eMMC.



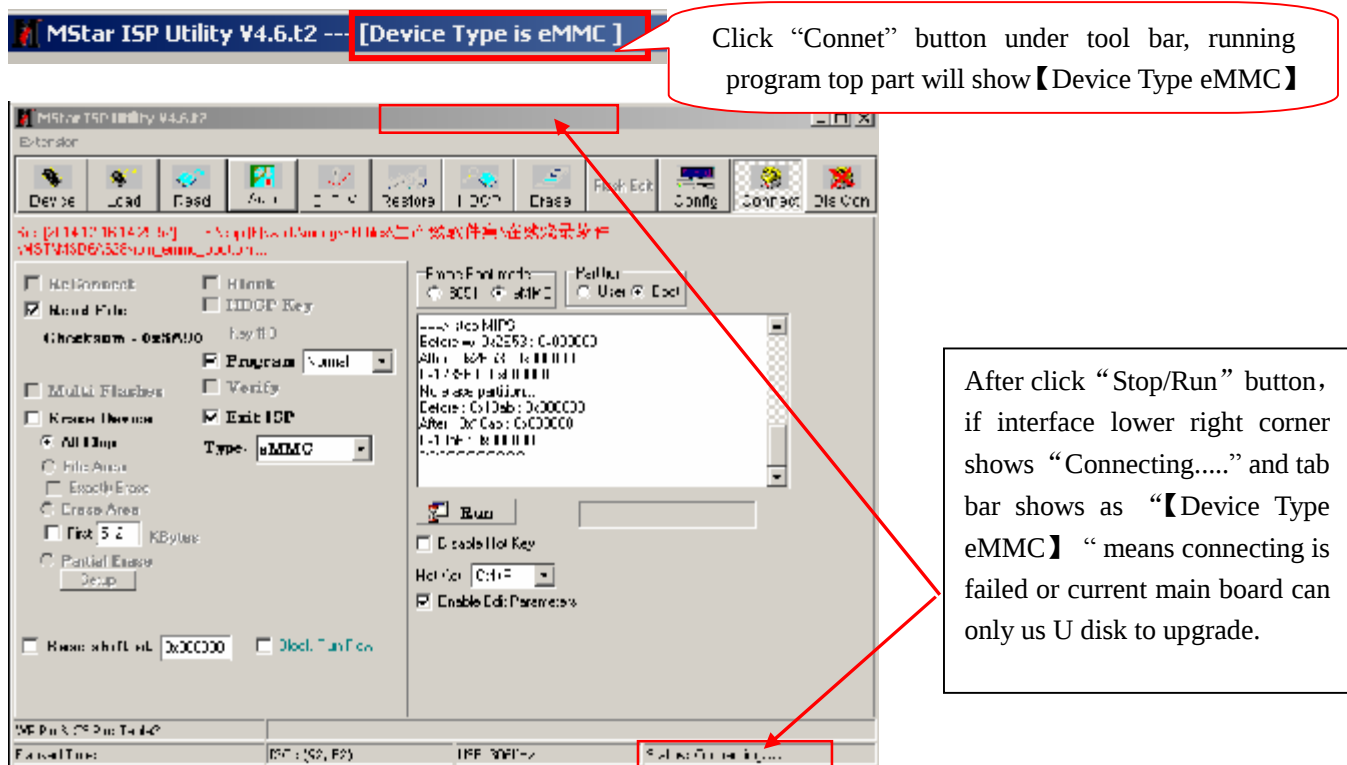
3. Click the "Read" button in the main toolbar under load in EISP Loader File1 munim_EISP_boot_**_**. Bin, in EISP Read File1 load rom_emmc_boot.bin, in EISP Loader File2 load munim_EISP_user_**_**. Bin, load mboot.bin (Figure 2) in EISP Read File2.



4. Click on the main toolbar "Config" button , the interface is set up according to the pictures of their respective settings.

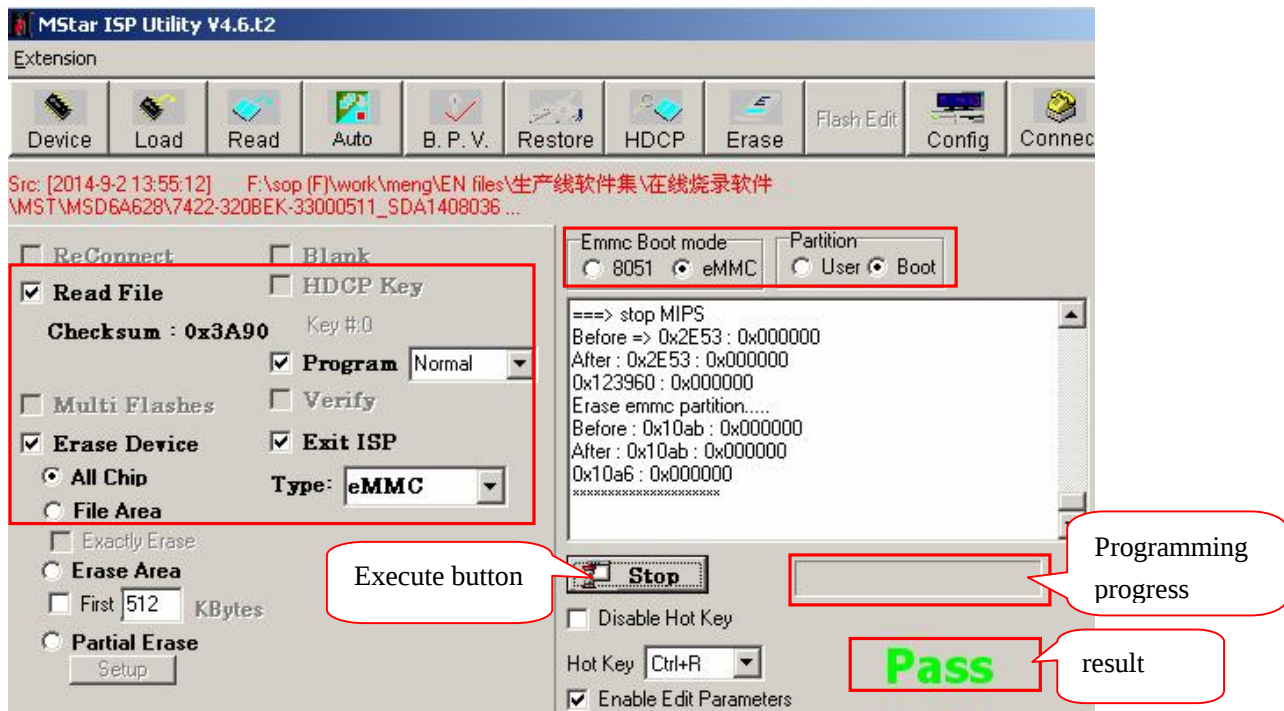


5. Click on the main toolbar "Connet" button at the top of the tab bar to run the program will display [Device Type eMMC] .



If there is no showing of [Device Type eMMC] upgrade cannot be conducted , please check the programming board is properly connected and if main board can boot (main board can boot normally not display [Device Type eMMC ,] need to upgrade the software, copying it into U disk, press and hold the button panel VOL + button first and powering on main board, wait for LED indicator on the machine flashes for about five seconds and then unplug the U disk and re- power main board to display) .

7. Check "Auto" icon in the menu settings are consistent with the figure below, and then click "Run" button to boot file to program.



Programming progress bar will scroll now, after programming is finished, it will show “Pass”.

7, Main board driver upgrade.

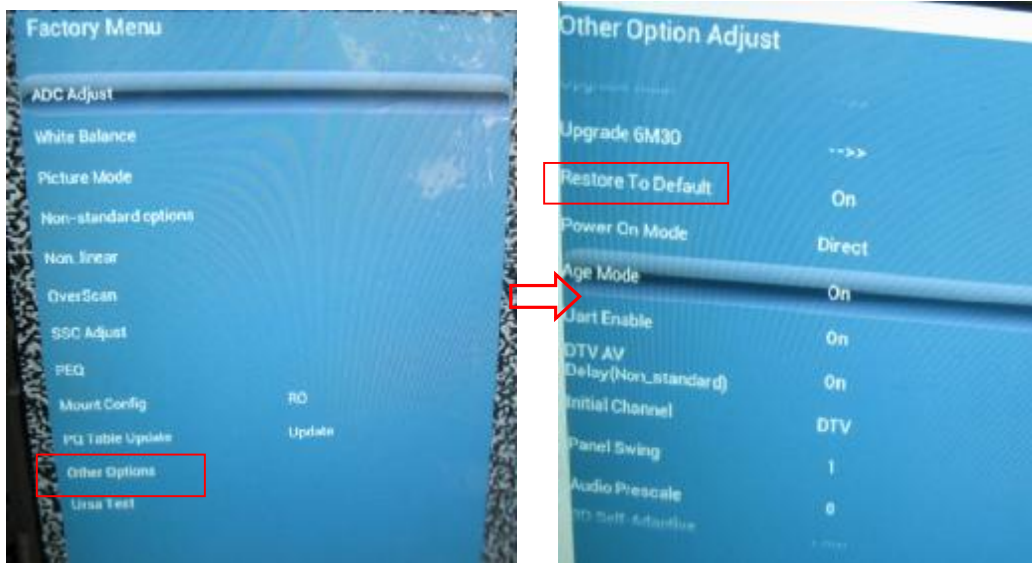
1. U disk formatted as FAT32 format, and then upgrade the software (software name is MstarUpgrade, suffix is bin) put in U disk .
2. Insert U disk into main board or programming TV fixture USB port , press VOL + key, then power on TV (main board) after about five seconds the TV (remote control panel) indicator flashes rapidly , indicating the TV is being upgraded , when the light stops blinking and goes out (this process time-consuming is depending on the size of the main board software , the greater the file the longer the software upgrade time , when the board is 270M, upgrade software takes roughly three minutes ,when 500M , it is about four minutes) , indicating that the upgrade is complete .

3. Notes:

- a. the file name and case cannot be wrong , otherwise it will not be upgraded .
- b. When using U disk to upgrade, sometimes after light does not flat after a TV remote control panel lights flickering flashes ten seconds, this is upgrade failure. Normal upgrade remote panel lights flashing more than two minutes , place the board in case of power failure in this case re- board software upgrade.
- c. main board cannot be upgraded after powering on , please programming boot file again (Mboot.bin or MbootUpgrade.bin).

8, after the upgrade is complete, install machine cover, before delivery, factory adjustment must be carried out :

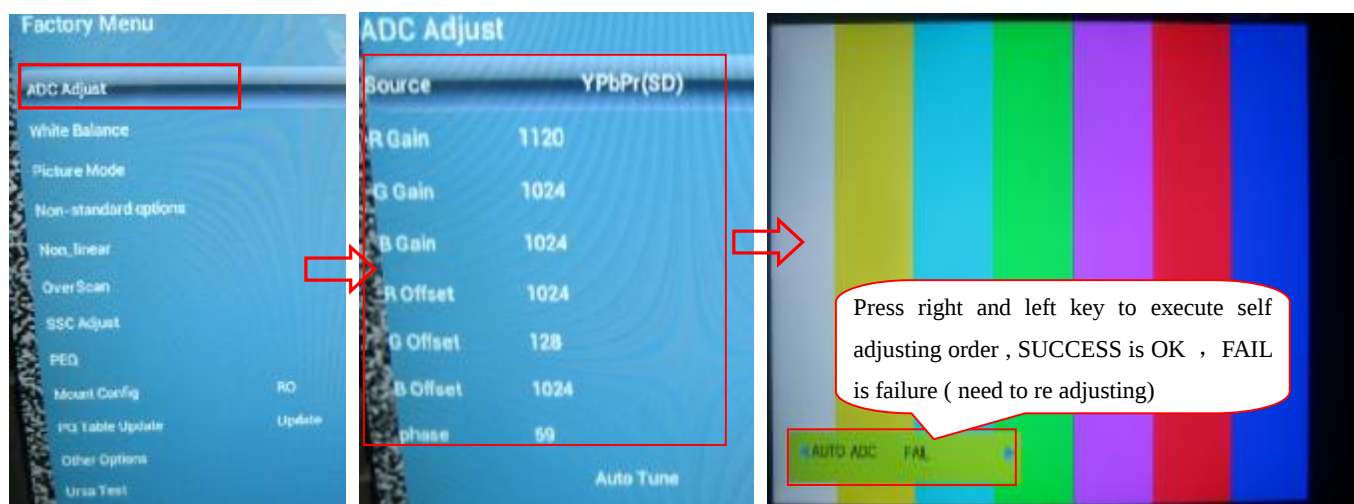
1. powering on machine, press the MENU button on the remote control to the main menu pops up, then press 8202 followed by the number key to enter the factory menu , press the up / down keys to move the cursor to the "Other Options" option Press the Up / Down keys move the cursor to the "Restore To Default" option by right the reset command , a black screen for about 8 seconds and the machine automatically re- power on reset operation is completed .



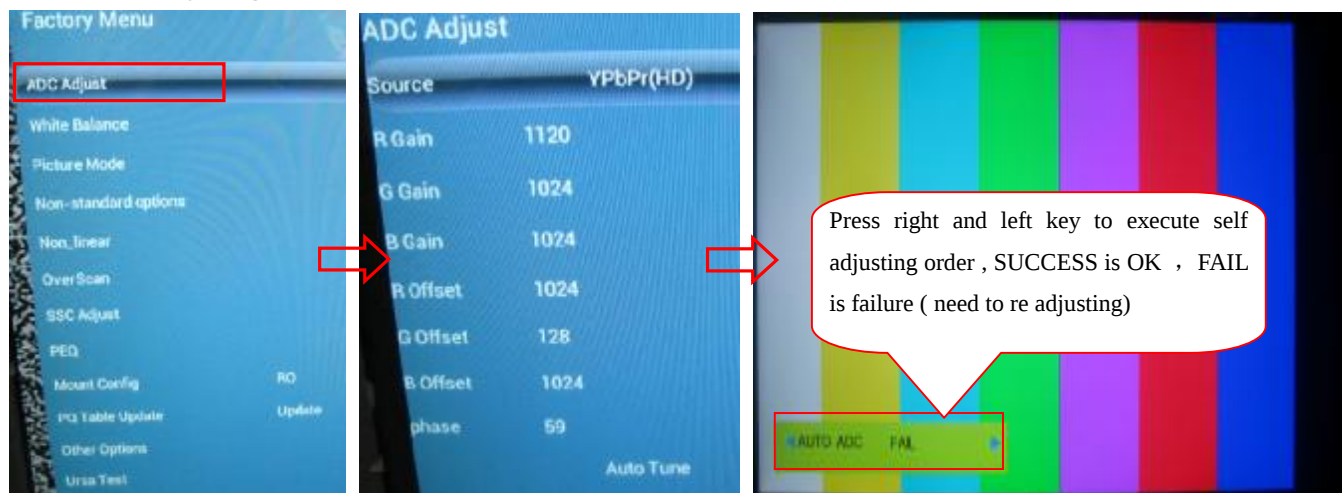
2. Completed initialization within three minutes after inserting VGA signal wire and powering on machine (automatically initializes started after factory menu reset is) switch to VGA signal source . Press the MENU key to pop up the main menu, and then followed by 8202 the number keys to enter the factory menu, press the Shift key to "ADC ADJUST" and press the OK button to enter the next menu, press the left / right keys to move the cursor to select VGA item, then press shift keys to move the cursor to the AUTO TUNE key and press the OK button to execute the self-adjusting command. There is a corresponding entry in the AUTO TUNE Tip: SUCCESS, means self-adjusting qualified, FAILS, means self-tuning failure, need to self adjusting again.



3. under YPbPb source ,input 480i 100% color bar signal to machine . after press NEMU popping-up main menu , then followed by 8202 the number keys to enter the factory menu , select ADC ADJUST item , press the OK button to enter the next menu , press the left / right keys to move the cursor to select YPbPr (SD) item , press down keys to move the cursor to the AUTO TUNE key and press the OK button to execute the self-adjusting color commands. There is a corresponding entry in the AUTO TUNE Tip : SUCCESS , means self-adjusting qualified , FAIL , means self-adjusting is filed, needed to adjust again.



4. Under YPbPr signal source , input 720P 100% color bar signal to machine. After pressing NEMU pop-up main menu, then followed by 8202 the number keys to enter the factory menu , select ADC ADJUST item , press the OK button to enter the next menu , press the left / right keys to move the cursor to select YPbPr (HD) key, then press down keys to move the cursor to the AUTO TUNE key and press the OK button to execute the self-adjusting color commands. There is a corresponding entry in the AUTO TUNE Tip : SUCCESS , means self-adjusting qualified , FAIL , means self adjusting is failed, need to adjust again.



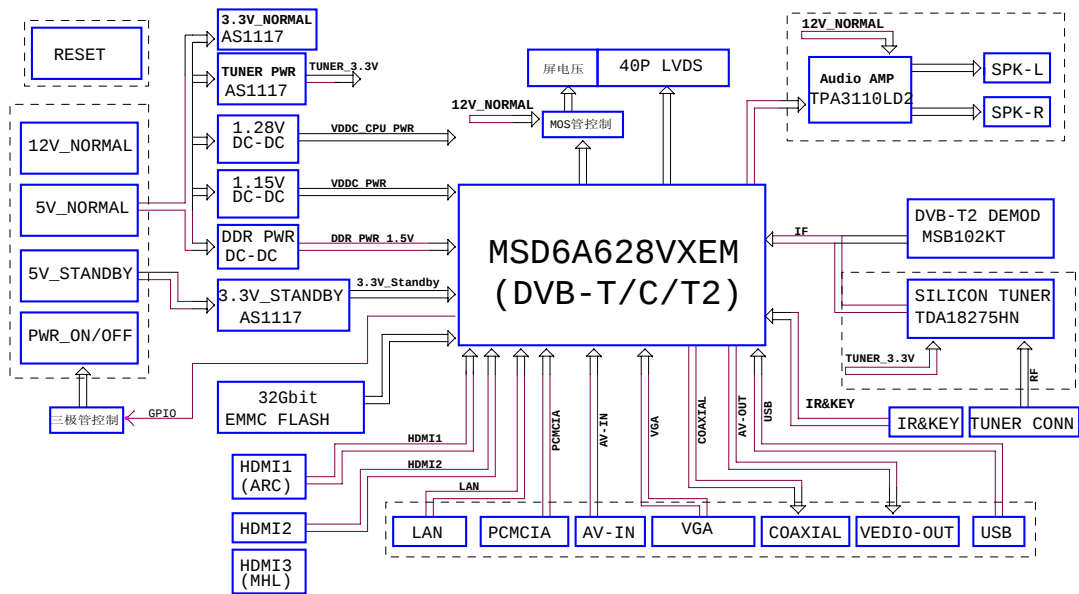
5. about white balance adjustment:

* need to input standard graphics to TV during auto white balance self adjusting, recommended instrument is CHROMA222293.

* In case not plugging signal line, in the factory menu of ADC Adjust, change the source value of VGA, YPBPR (HD), R-GAIN YPBPR (SD) for each mode / G-GAIN / B -GAIN value and R-OFFSET / G-OFFSET / B-OFFSET to the original value before upgrade.

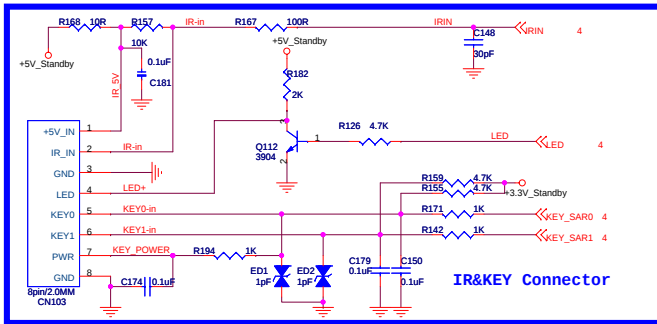
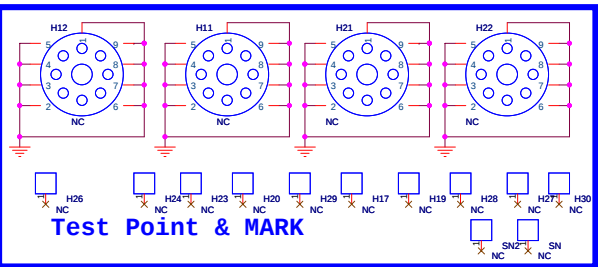
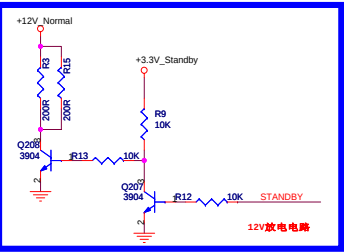
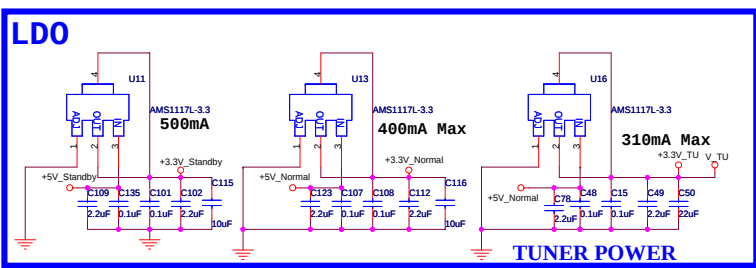
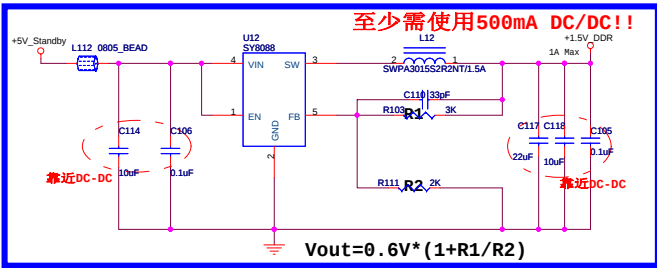
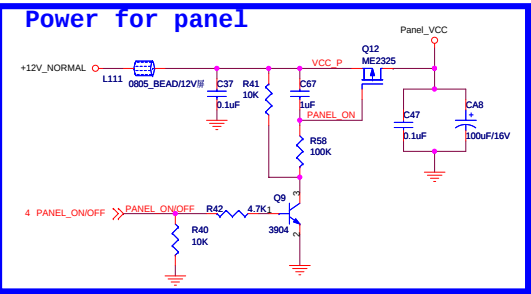
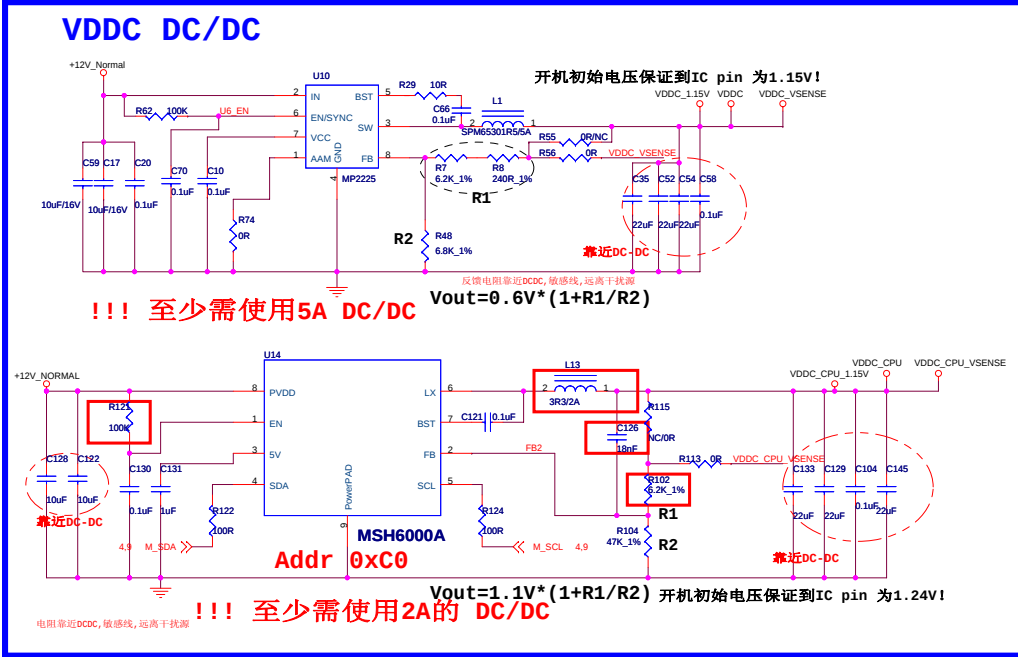
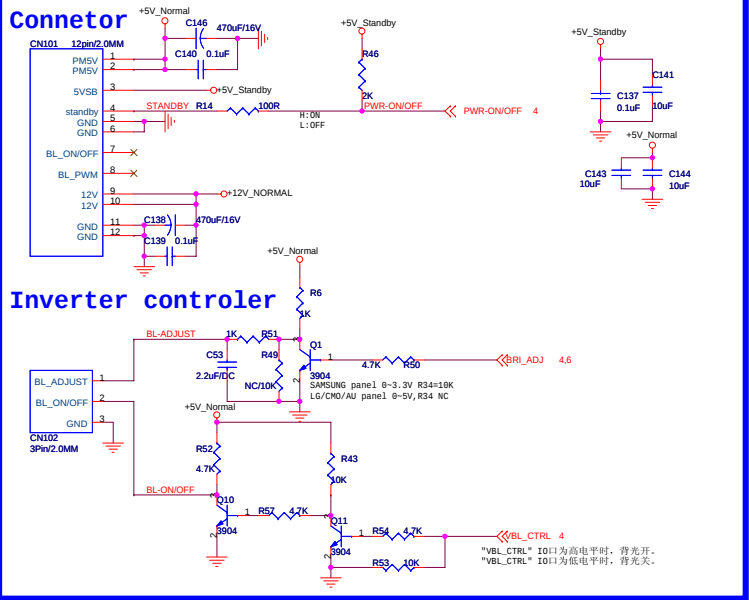
9 , MAC address programming refers to "MSD6A628 Msd6a608 MSD6A818 smart network TV MAC address code programming Guide" , in general, just use U disk to upgrade (do not use programming board burn boot files MAC in machine, will not erased , if using programming board to re- burn the boot files , MAC address programming is needed) .

10, after ADC ADJUST debugging finished, press the MENU button several times to exit the factory menu to save the data , turn the machine off and then restore the original packaging.



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KTC ISO9001.ISO14001体系文件			
文件名称: MSD6A628方案T8E3(DVB-T/T2/C)数模一体智能电视原理图			
文件编号:	T4270	版本: 3.0	页数: 2 " 9
设计:	张志清	审核:	批准:
发行部门:	研发处	生效日期:	Friday, February 06, 2015

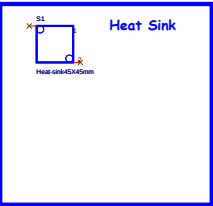
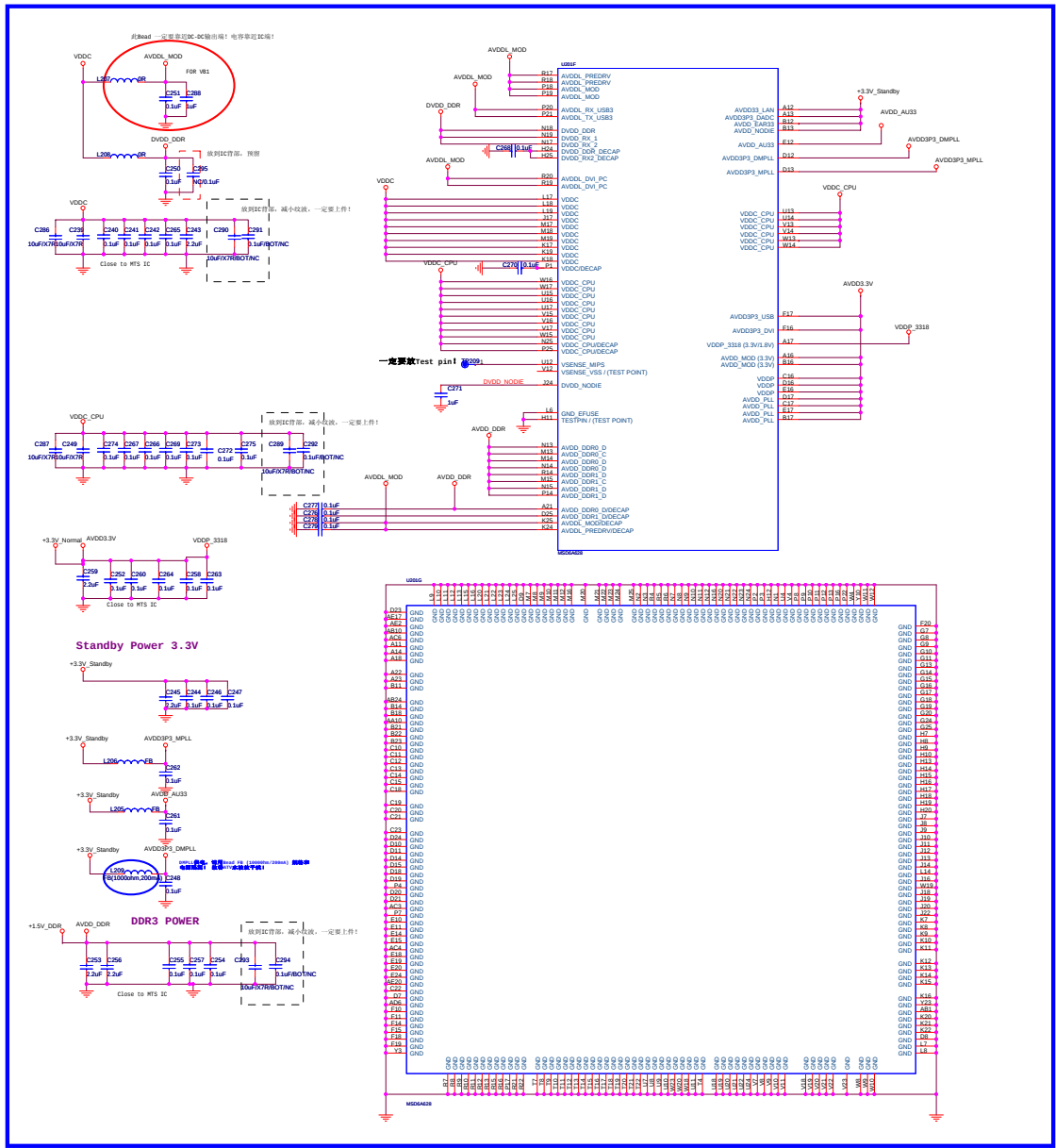


所用IO口	SAR0			SAR1		
按键功能	CH+	CH-	SOURCE	POWER	VBL-	VBL+
电阻值	0K	2K	6.8K	1K	0K	2K
电压值	0V	0.98V	1.95V	0.58V	0V	0.98V

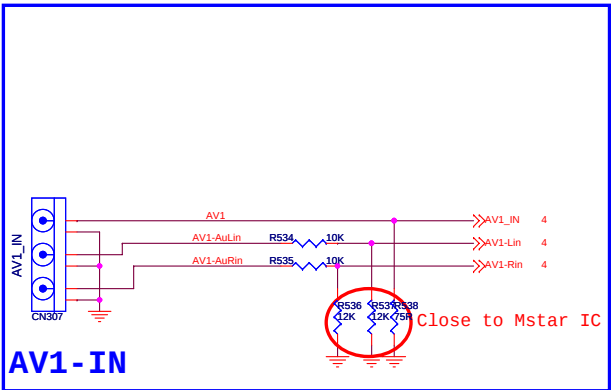
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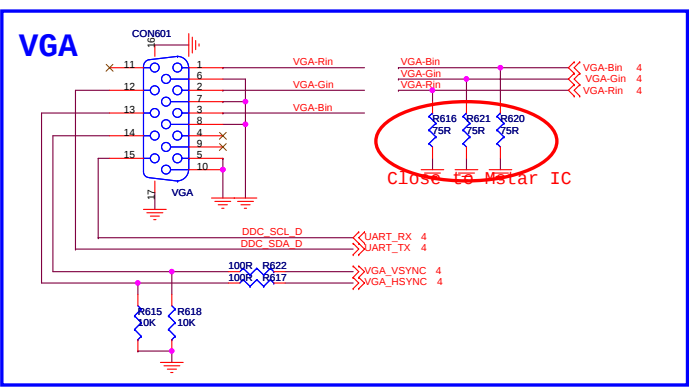
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文件编号:	T4270	版本: 3.0	页数: 3 of 9
设计:	张志清	审核:	批准:
发行部门:	研发处	生效日期:	Friday, February 06, 2015



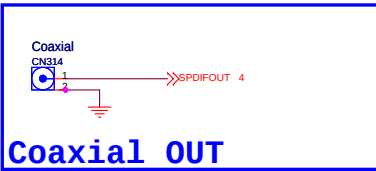
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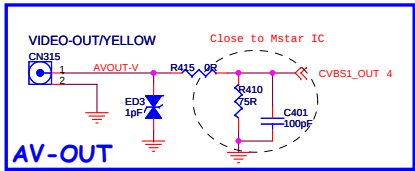
AV1-IN



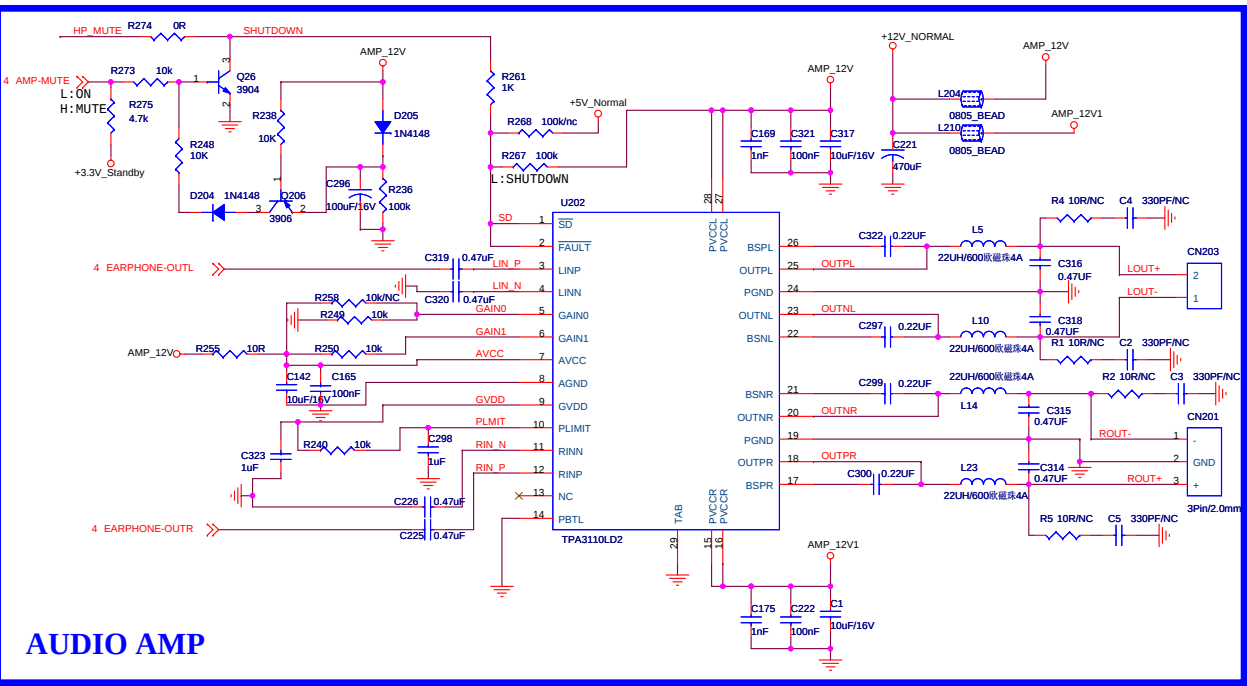
VGA



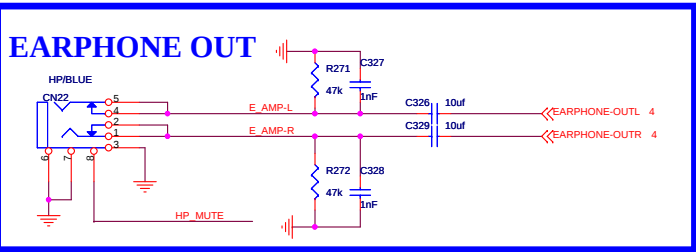
Coaxial OUT



AV-OUT



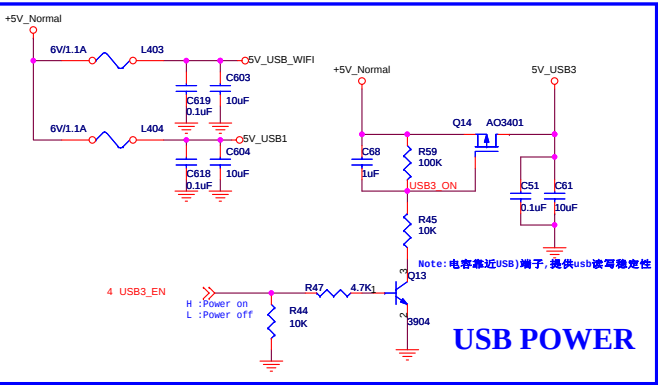
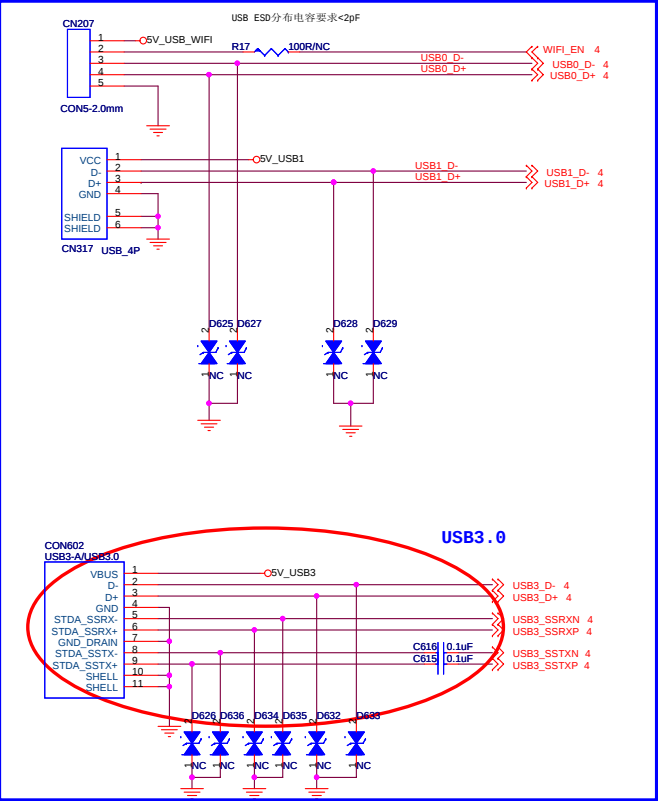
AUDIO AMP



EARPHONE OUT

功放放大倍数调节		
GAIN1(PIN6)	GAIN0(PIN5)	AMP GAIN(db)
0	0	20
0	1	26
1	0	32
1	1	36

USB INTERFACE



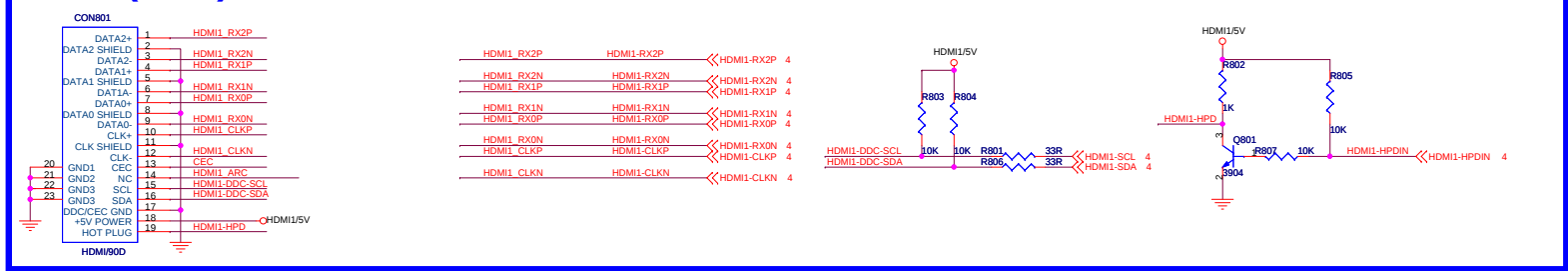
USB POWER

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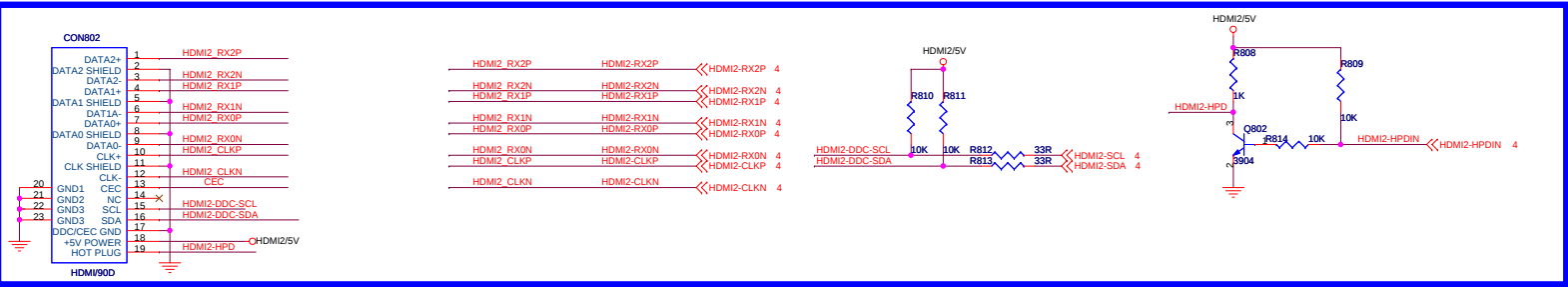
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设计:	张志清	审核:	批准:
发行部门:	研发处	生效日期:	Friday, February 06, 2015

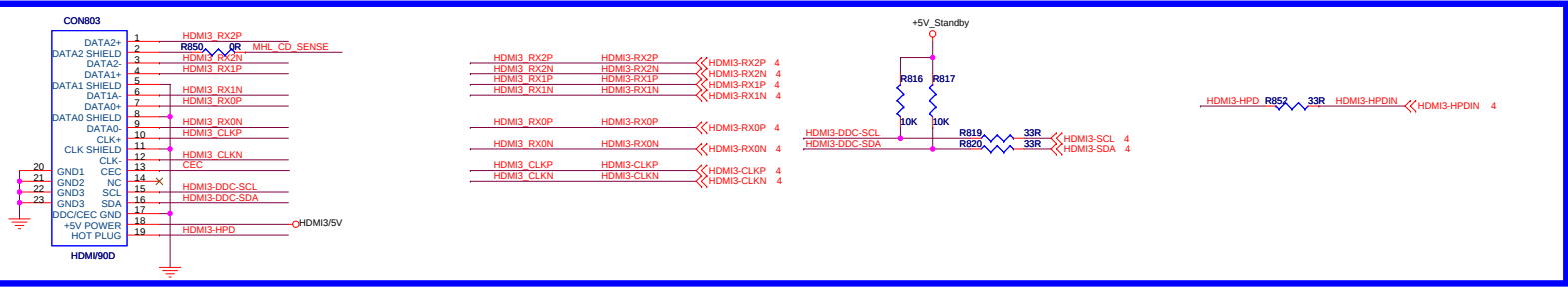
HDMI1 (ARC)



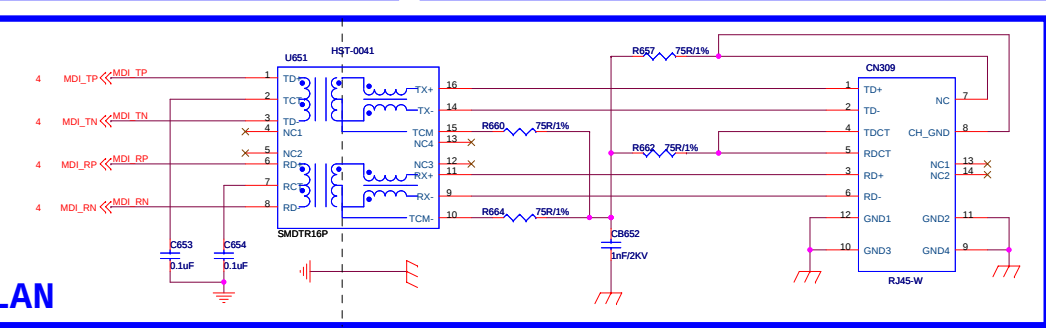
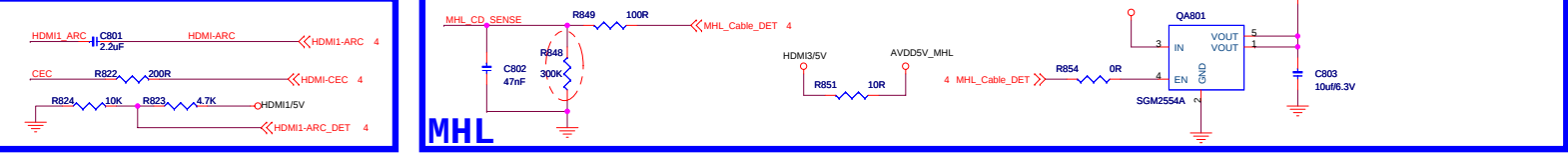
HDMI2



HDMI3 (MHL)



CEC & ARC



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