

Haier

LCD TV RECEIVER

USER'S MANUAL

Please read this manual carefully before using your television and keep this manual in a good place for future reference.

MODEL: L20AV6-A0

Content

Before operation	
Warnings and Cautions	2
Safety Precautions	3
Preparation for the Remote Control	5
Keys and Ports	6
Front panel	6
Back panel	6
Keys of remote control	7
Basic operation	
Power on/off and menu operation	8
Viewing TV Programs	9
Tuning	10
Auto search	10
Manual search	11
Fine tune	12
Skip	13
Ajusting the Picture and the Sound	14
Multiple picture modes	14
Multiple sound modes	15
Setting function	16
Setting OSD Language	16
Setting OSD postion	16
Video advance,reset and source input	17
PC mode function	18
Technic operation	
Connection	19
Connecting additional equipments	20
Others	
Troubleshooting	21
Specifications	22

Warning and Cautions



WARNING
RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. FOR ANY PROBLEM, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. THERE IS A LIGHTNING ARROW SYMBOL IN THE TRIANGLE: THIS SYMBOL INDICATES HIGH VOLTAGE IS PRESENT INSIDE. IT IS DANGEROUS TO MAKE ANY KIND OF CONTACT WITH ANY INSIDE PART OF THIS PRODUCT. THERE IS AN EXCLAMATION MARK IN THE TRIANGLE: THIS SYMBOL ALERTS YOU THAT IMPORTANT LITERATURE CONCERNING OPERATION AND MAINTENANCE HAS BEEN INCLUDED WITH THIS PRODUCT.



CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK AND FIRE, DO NOT PUT THE TV SET NEAR SOURCES OF HUMIDITY. DO NOT USE ANY ABRASIVE CLEANSERS WHICH MAY SCRATCH OR DAMAGE THE LCD SCREEN. AVOID CONTACT WITH OBJECTS THAT MAY SCRATCH THE LCD SCREEN.



NOTE: SERVICING THE UNIT YOURSELF IS UNAUTHORIZED AND COULD LEAD TO INJURY OR PRODUCT DAMAGE.

Power supply:

There is a AC-DC adapter with the set that transform AC to DC power. and the power value supplied to the adapter is marked on the label on the adapter. Only DC power can be input into the set and AC power must not be input. And the output power value of the AC-DC adapter is on the label on the back cover of the set.

Power connection:

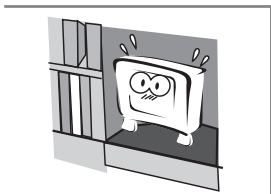
- Connect the output pin (12V) of the adapter to the DC IN port of the TV set;
- Connect the AC power cable to the **composite** port of the adapter;
- Connect the other side of the AC power cable to the AC power socket.

Cleaning:

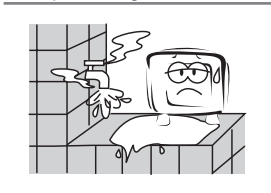
Make sure that the power cable is removed from the socket before cleaning the product. When the screen is seriously contaminated, use a clean soft cloth moistened to clean the display. **Wring** the water while clean the display and then use a dry cloth to clean it.

Never use any liquid or inhalator cleanser.

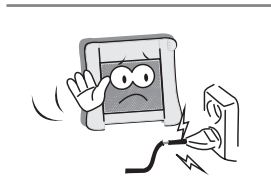
Safety Precautions



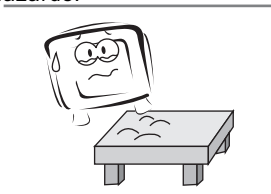
The product should be tightly fixed to avoid drop damages and even fire.



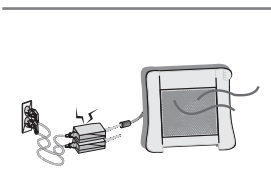
Do not locate the product close to water or oil, which may cause fire hazards.



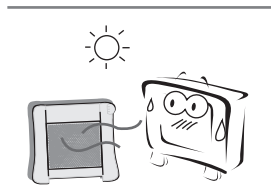
Do not use damaged or worn electric plugs, and keep electric cord away from heat sources to avoid electric shocks or fire hazards.



The product must be placed on a solid and stable surface to avoid collapse.



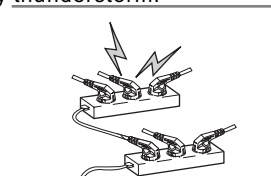
Keep the product away from a transformer or heat source to avoid fire hazards.



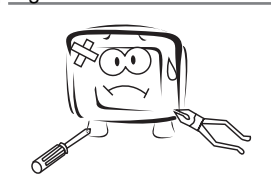
To avoid fire hazards, do not use this product under direct sunlight or closely to heat sources.



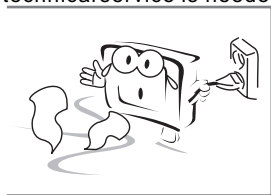
Unplug the power supply and antenna of the product when there is a rainstorm, especially thunderstorm.



Do not connect excessive sockets in parallel or share the same socket by multiple plugs to avoid fire hazards.

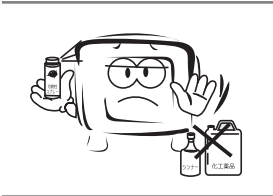


Unauthorized disassembly of the television is prohibited to avoid electric shocks or fire hazards. Contact authorized after-sales service if technical service is needed.

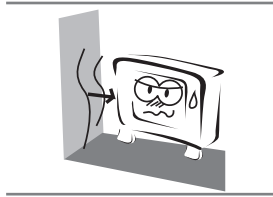


Disconnect the product from power supply and contact authorized after-sales service if abnormal sound is heard in the product.

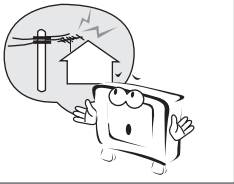
Safety Precautions (continued)



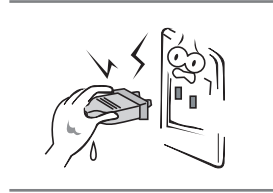
Don't use or store inflammable materials near the product to avoid explosion or fire hazards.



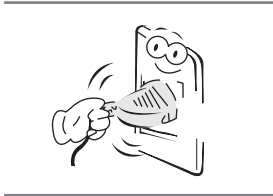
Don't place the product in a humid area to avoid fire hazards.



The antenna of the product should be away from electric cable to avoid electric shocks.



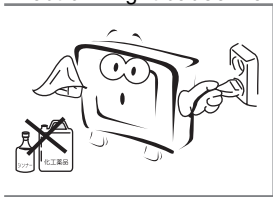
Never touch the plug when your hand is wet as this might cause electric shocks.



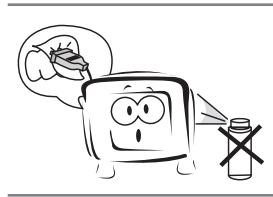
Always make sure that the television is well plugged as poor electric connection might cause fire.



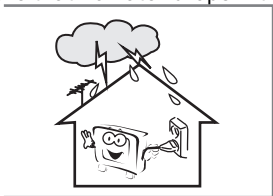
When antenna is used, measures should be taken to prevent water from flowing down along the cable into the television.



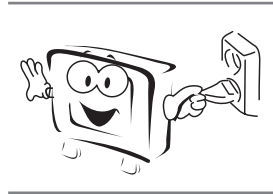
Unplug the television, use soft fabric, never chemicals, if you are going to make cleaning of the product. Make sure that no water drops in the product.



The plug and electric cable must be kept clean to avoid electric shocks or fire hazards.



Disconnect the television from power supply and antenna when there is a rainstorm or thunderstorm to avoid electric shocks or fire hazards.

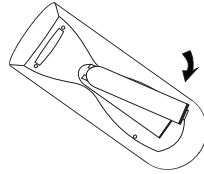
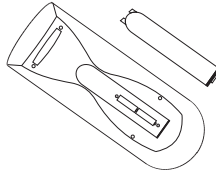
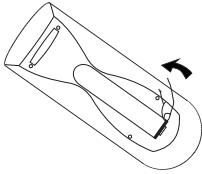


Disconnect the television from power supply to avoid electric shocks or fire hazards in a long vacation.

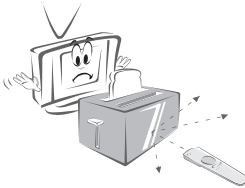
Preparation for the Remote Control

Battery loading

1. Slide open the cover of the battery compartment on the back of the remote controller.
2. Load two 5# alkaline batteries in the compartment. (plus and minus poles to respective mark)
3. Replace the cover of the battery compartment.



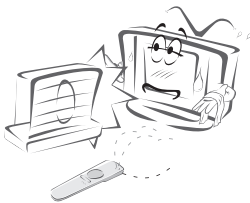
Make sure that there is no obstacle between the remote controller and television set.



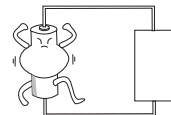
As strong light may interfere the signals, change your position to operate the remote controller if the television cannot be turned on or off as you expect.



Keep the remote controller away from heat source or humid area to ensure effective performance of the remote controller.

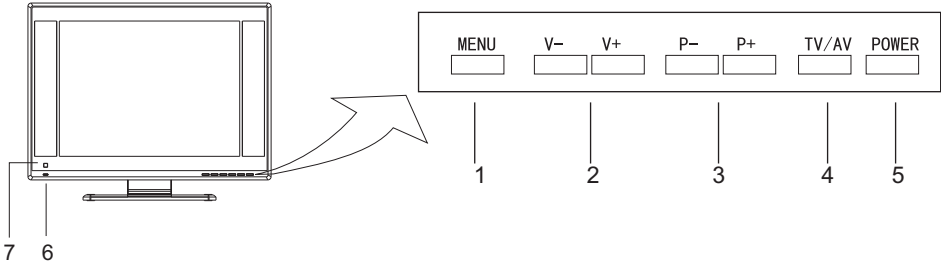


Make sure that two 5# 1.5V alkaline batteries are loaded. The batteries must be of the same type. The batteries must be located properly. The batteries are not rechargeable.



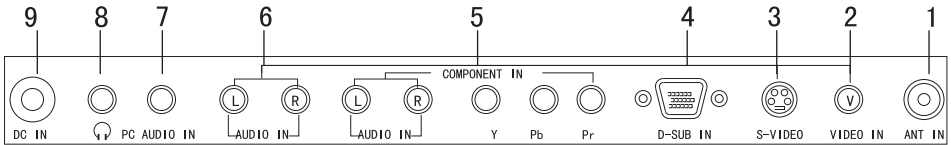
Keys and Ports

Front panel



1. MENU: menu display/enter the sub-menu/confirm the adjustment.
2. V-/V+ : volume adjustment and adjust the parameters in the menu.
3. P-/P+: program minus and plus, select the menu options
4. TV/AV: all input source select:PC-RGB/COMPONENT/AV/S-VIDEO/TV/exit the menu .
5. POWER: press to be on /standby mode.
6. Power indicator
7. Remote control signal receiver window.

Back panel

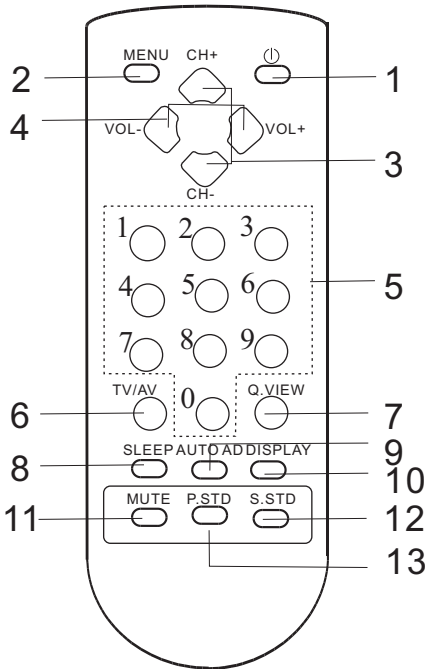


1. Connect antenna or CATV 75 Ω coaxial cable to receive TV/ CATV signal.
2. external video input
3. S-VIDEO input
4. VGA input
5. Component audio/video input
6. external audio input
7. VGA audio input
8. headphone output
9. DC power input

Note: Please do not use the S-VIDEO and AV terminals simultaneously.

Keys of remote control

Buttons and Descriptions

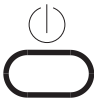


1. Press to turn on the TV from standby mode. Press again to switch off the TV to standby mode.
2. **MENU**
Press to display menu or enter the sub-menu
3. **CH+/-**
Select the option up and down in menu or select channels when there is no OSD.
4. **VOL+/-**
Left and right orientation in menu option or adjust the volume when there is no OSD.
5. Number key: Press to select the channel number
6. **TV/AV**
Select among PC-RGB/COMPONENT/AV/S-VIDEO/TV or exit the menu
7. **Q.VIEW**
Back to the last channel
8. **SLEEP**
Can be used to set time to change the TV into the standby status after a period of preset time.
9. **AUTO.AD**
Only available in PC-RGB and COMPONENT
10. **DISPLAY**
Display the current info
11. **MUTE**
Press this button to mute the sound. Press again or VOL+/- to reactivate the sound.
12. **S.STD**
Press to select the sound mode among NEWS, NATURE, THEATER and USER.
13. **P.STD**
Press to select the sound mode among MILD, NATURE, VIVID and USER.

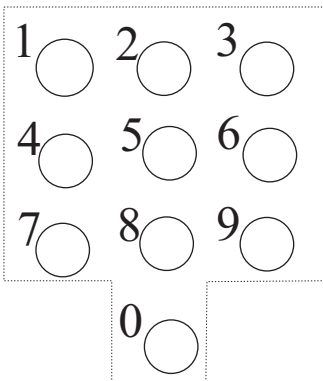
Power on/off and menu operation

- Below are methods on how to power on/off the TV set with the switches on the TV and on the remote control.

Power on/off



DC Standby Button



Direct-digit Choosing Button

Power on/off

- 1、 Connect AC-DC adaptor and power supply wire first, then plug insert the power socket on the wall, the indicator light.
- 2、 If the television is on standby mode , you could press **POWER** (⏻) button on remote control or on the TV to turn on the TV.
- 3、 If you want to switch off the TV to standby mode press **POWER** (⏻) button on TV or on remote controller .

Menu operation

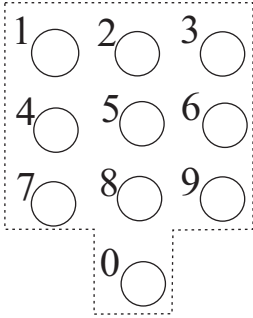
- 1.Press MENU button to display the main menu.
- 2.Press VOL+/- or CH+/- to select the option
- 3.Press MENU button to enter the sub-menu and select the system you want to adjust.
- 4.Press VOL+/- button to adjust the parameters after select the right options.
- 5.Press TV/AV to exit the menu.

Power supply auto-off function

When the BLUE SCREEN is set ON, and there is no signal , blue screen with **XX no signal**(XX is the inputs)protection works, and ,in 15 minutes later without any operation, it will change into standby status.

Viewing TV Programs

- There are 200 channels from 0 to 199.

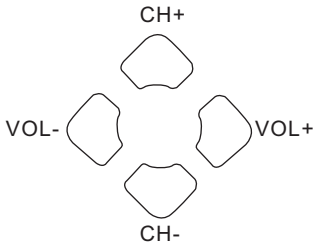


Direct-digit Choosing Button

Q.VIEW



MENU



How to select program

1、 Use the direct-digit choosing button

- Press the button from 0-9 to select a one digit channel.
- Press the button from 0-9 to select a two digits channel.
- **Press the button from 0-9 to select a three digits channel.**

Note: when you select one or two digits channel, you should await about 2 seconds to the channel.

2、 Use CH+/- button

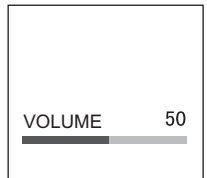
- Press CH+ to increase the channel position number.
- Press CH- to decrease the channel position number.

3、 Use Q.VIEW

- press Q.VIEW button, you can return to the channels you were watching just now in TV mode.

Choose the proper volume you like

Press VOL+/- button to adjust the volume.




Screen display

Usually, when you press the DISPLAY

button, the channel info will appear on the top left corner of the screen.

If the sound of one **channel is** abnormal

It might be because the **color** has been set improperly. Press MENU and CH+/- to select TV SETTING menu and press MENU to enter.

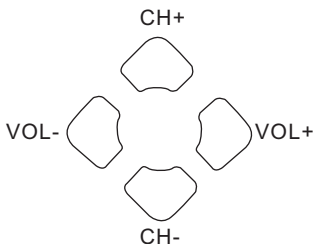
CHANNEL	4
SOUND	DK
SKIP THIS	OFF
AUTO FINE	ON
FINE TUNE	
MANUAL SEARCH	168 MHz
AUTO SEARCH	

If the sound is abnormal Select SOUND and press MENU button to enter and VOL+/- to select the proper sound.

Tuning

- There are three ways of searching: automatic search, manual search and MFT (manual fine tune).
- You may operate it either on the TV or on the remote control. Here is mainly about the remote control.

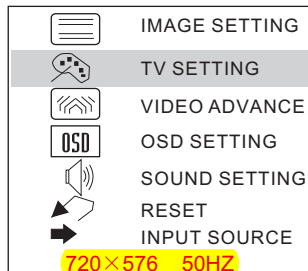
Auto search



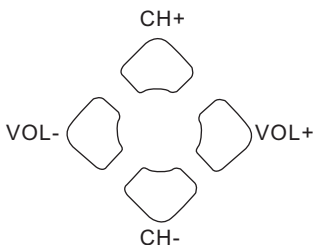
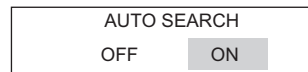
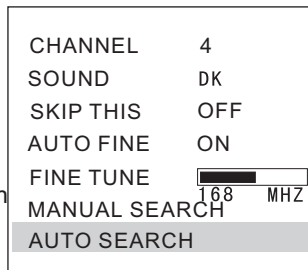
AUTO SEARCH

1. Press MENU button and CH+/- to select TV SETTING (note: TV SETTING is only available in TV)

2. Press MENU button to enter the TV SETTING and CH+/- to select AUTO SEARCH



3. Press MENU button to enter the AUTO SEARCH. Press CH+/- or VOL+/- to select ON, and MENU to confirm. The TV set will search automatically all available programs, after that, all available program will be stored in turn and the TV set will return to the first channel



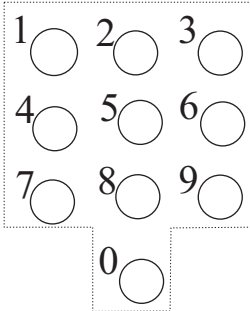
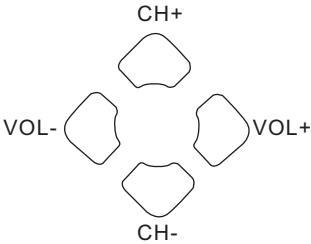
Note: The order of the automatic search is due to the frequency of the program, generally speaking, it is used only at the first time you search the program, and once the order of the program has been confirmed, you don't have to use this function, otherwise the order of the program will be changed.

After searching

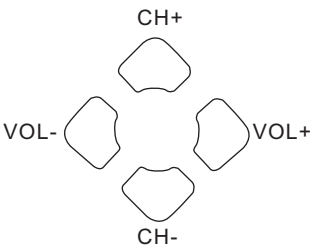
Press CH+/- button to check the channels. If the sound is abnormal in a certain channel, it may be the sound system has not been set properly, so you should adjust it to the proper system (Reference to page 9).

TUNING (Continued)

Manual search



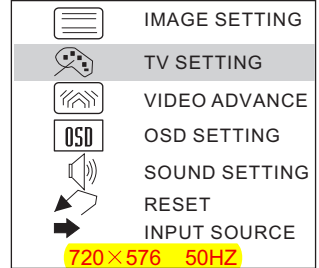
Direct-digit Choosing Button



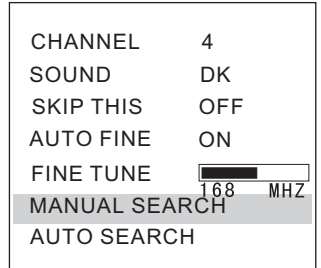
Manual search

Press CH+/- button or the Direct-digit Choosing button to select a channel directly

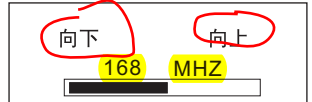
1. Press MENU button and CH+/- to select TV SETTING



2. Press MENU button to enter the TV SETTING and CH+/- to select MANUAL SEARCH

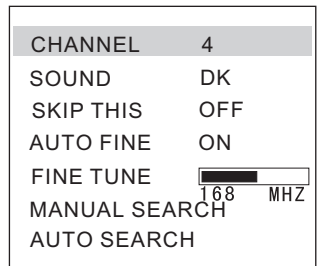


3. Press MENU button to enter the AUTO SEARCH. Press VOL+/- to select UP or DOWN, and MENU to confirm.



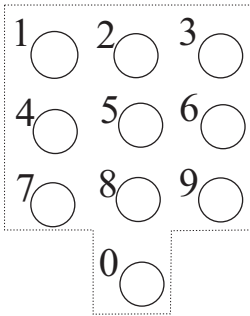
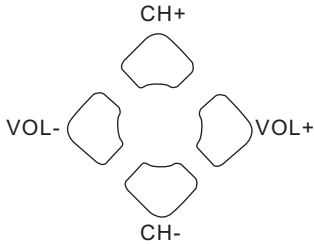
- DOWN is used to search the lower frequency channel.
- UP is used to search the higher frequency channel.

If you want to memory another channel, press CH+/- to select CHANNEL and MENU to confirm, then VOL+/- to select the channel number. Repeat the steps above.

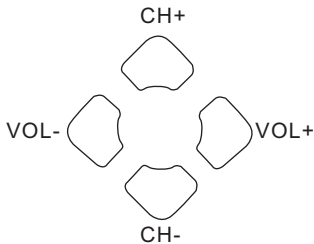


TUNING (Continued)

Fine tune



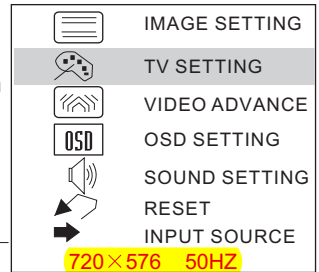
Direct-digit Choosing Button



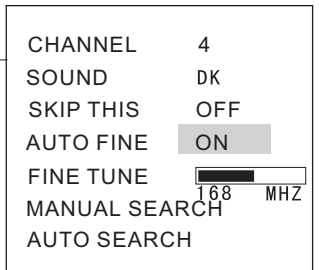
When you can't get a satisfactory picture and audio effect, you can fine tune to obtain.

Auto fine

1. Press CH+/- or digit buttons to select the channel, press MENU button and CH+/- to select TV SETTING



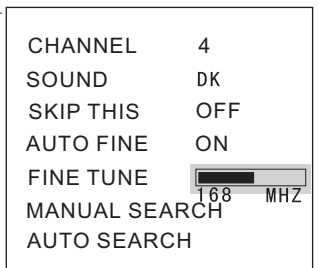
2. Press MENU button to enter the TV SETTING and CH+/- to select AUTO FINE



3. Press MENU button to enter the AUTO FINE, press VOL+/- to select ON, press TV/AV to exit the menu.

FINE TUNE

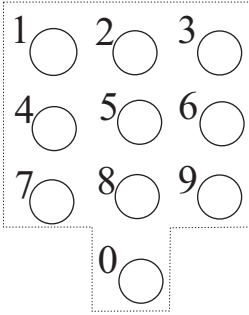
The same way to select FINE TUNE, press MENU and then VOL+/- button to start until receive the best picture and sound, then press TV/AV to exit.



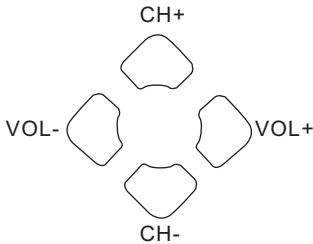
- VOL- is used to tune the lower frequency
- VOL+ is used to tune the higher frequency

TUNING (Continued)

Skip



Direct-digit Choosing Button



DISPLAY



Skip

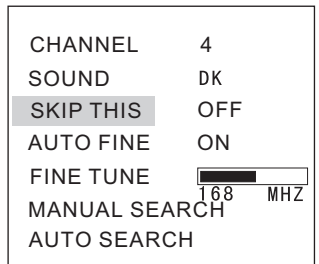
After the programs are preset, you can skip some programs so that to select your favorite channels only.

1、 Press CH+/- or digit buttons to select the channel you want to skip.

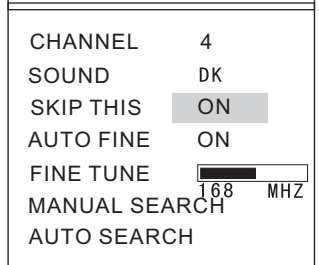
2、 Press MENU and CH+/- to select TV SETTING, then press MENU to enter the sub-menu



3、 Press CH+/- to select SKIP THIS.



4、 Press MENU to confirm and VOL+/- to set ON. Press TV/AV to exit the menu.



5、 When you select channels with CH+/- button, this channel will be skipped. However, you can also use the digit Choosing button on the remote control to select this channel directly.

If you want to recover the skipped channel

1. Use digit choosing buttons to select the number of the channel to be recovered.
2. Do the above steps again.
3. Press VOL+/- button to set SKIP OFF.

Adjusting the Picture and the Sound

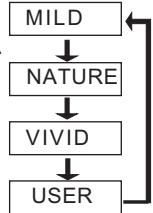
Multiple picture modes

P.STD



How to select the picture mode

You may select the mode you want from the three preset modes and one individual mode.

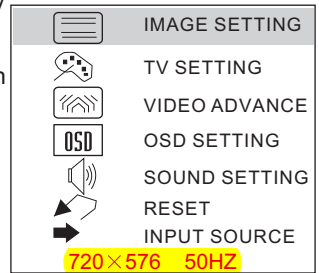


Press the P. STD button to select a mode you like. MILD, NATURE, VIVID and USER totally four picture modes can be selected alternately.

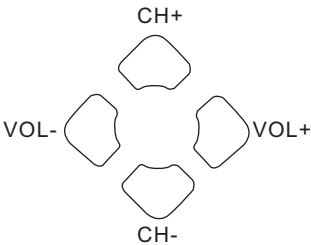
MODE	PICTURE QUALITY
MILD	LOW COLOR AND BRIGHTNESS
NATURE	MEDIUM COLOR AND BRIGHTNESS
VIVID	BRIGHT COLOR
USER	SET BY YOURSELF

Set the parameter of USER

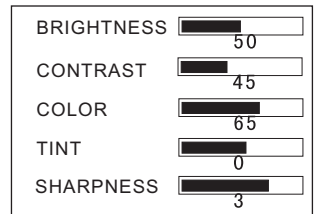
1、 Press MENU button to display the main menu, and CH+/- to select IMAGE SETTING and then press MENU to enter



2、 Press CH+/- to select the option you want to adjust and MENU button to confirm. Then press VOL+/- to adjust.



OPTION	VOL-	VOL+
BRIGHTNESS	DARK	BRIGHT
CONTRAST	WEAK	STRONG
COLOR	LIGHT	THICK
TINT	GREEN	RED
SHARPNESS	SOFT	SHARP



Note: The item of TINT appears when the N system signal is received, and you can adjust it by VOL-/+ button.

Adjusting the Picture and the Sound

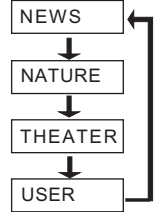
Multiple sound modes

S.STD



How to select the sound mode

You can quickly select your most favored sound mode from the following four kinds of modes.



Press the S.STD button to select the sound quality that you want. NEWS/ NATURE/ THEATER/ USER can be selected in turn (their parameter may be adjusted due to your need).

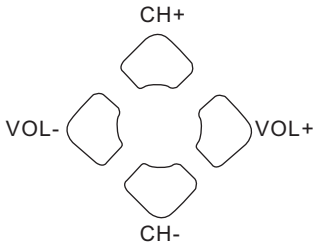
Setting the sound

This function can let you regulate the volume to the preconcerted parameter quickly

1、 Press MENU and CH+/- to select SOUND SETTING, and press MENU to enter

	IMAGE SETTING
	TV SETTING
	VIDEO ADVANCE
	OSD SETTING
	SOUND SETTING
	RESET
	INPUT SOURCE
720×576 50HZ	

2、 Press CH+/- to select the system you want to adjust and press MENU to confirm, then press VOL+/- to adjust. The parameter will store in USER mode.



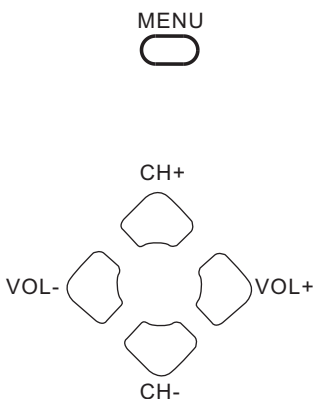
OPTION	VOL-	VOL+
BASS	WEAK	STRONG
TREBLE	WEAK	STRONG
BALANCE	WEAKEN RIGHT CHANNEL	WEAKEN LEFT CHANNEL
VOLUME	WEAK	STRONG

TREBLE		0
BASS		0
BALANCE		0
MUTE		OFF
VOLUME		50

Setting function

Setting function

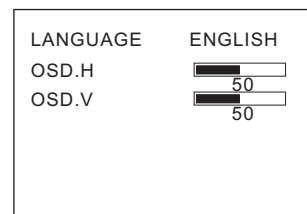
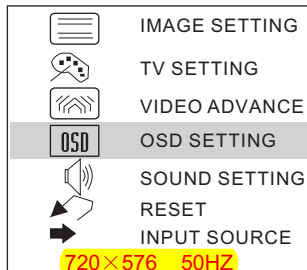
Setting OSD Language



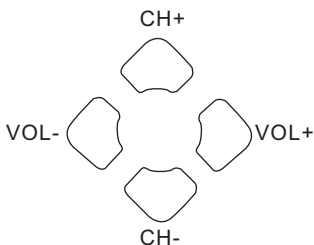
1、 Press MENU button and CH+/- to select OSD SETTING, then press MENU button to enter

2、 Press CH+/- to select LANGUAGE.

3、 Press MENU button to confirm and VOL+/- button to select the language.



Setting OSD position



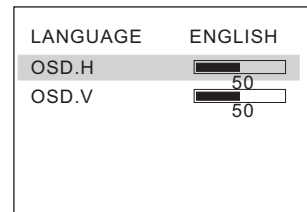
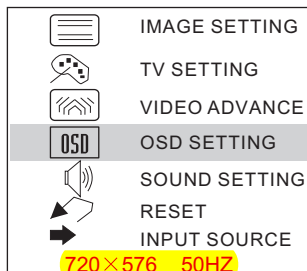
1、 Press MENU button and CH+/- to select OSD SETTING, then press MENU button to enter.

2、 Press CH+/- to select OSD.H and MENU button to confirm, then press VOL+/- to adjust.

3、 Then you can adjust the parameter of OSD.V with the same method above.

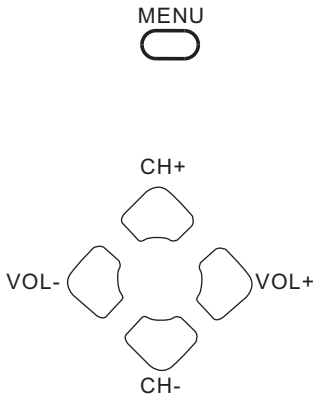
Note: OSD.H is used to adjust the horizontal position of the

OSD and OSD.V is used to adjust the vertical position of the OSD.



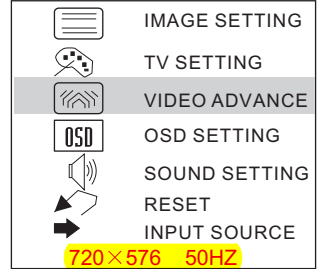
Setting function(continued)

Video advance,reset and source input



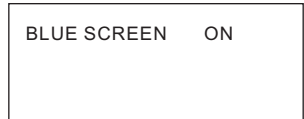
Blue screen

1、 Press MENU button and then CH+/- to select VIDEO ADVANCE, then press MENU button to enter



2、 Press CH+/- to select BLUE SCREEN.

3、 Press MENU button to confirm, then press VOL+/- to select ON/OFF.



When BLUE SCREEN is ON, and there is no signal, the screen will display blue; when BLUE SCREEN is OFF and there is no signal, the screen will display black.

Reset

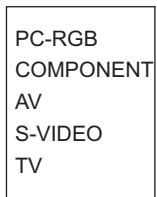
1、 Press MENU button and then CH+/- to select RESET.



2、 Press MENU to confirm, then the picture and sound will restore the factory default.

Source input

You can select INPUT SOURCE by the same way above, then press MENU button, the inputs will switch among these modes.(You can also press TV/AV button)



PC Mode Function

PC mode function

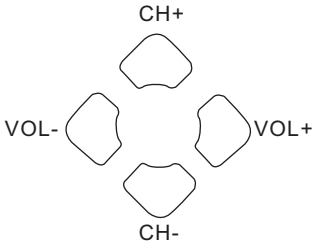


Image adjustment

You can adjust the contrast, brightness and the position of the image.

1. Press TV/AV to select PC-RGB.
2. Press MENU and CH+/- to select the option you want to adjust.
3. Press MENU to confirm and VOL+/- to adjust.

Main menu:

CONTRAST: To adjust the contrast of the picture.

BRIGHTNESS: To adjust the brightness of the picture.

Sub-menu:

AUTO CONFIG: Adjust the position and size of the picture automatically.

PHASE: Improve the quality of the picture.

CLOCK: Adjust the picture size on horizontal.

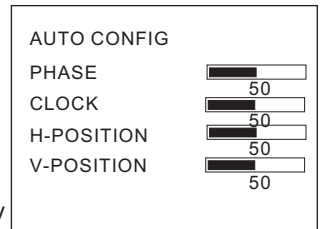
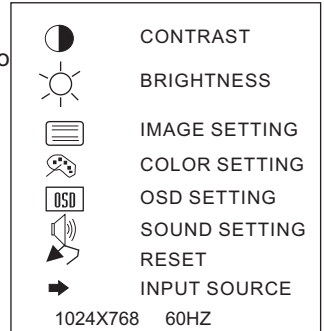
H-POSITION: Adjust the horizontal position of the picture.

V-POSITION: Adjust the vertical position of the picture.

COLOR SETTING menu:

You can select the color you like. Press CH+/- to select them.

Note: If some picture can not be set automatically, you should set it manually.

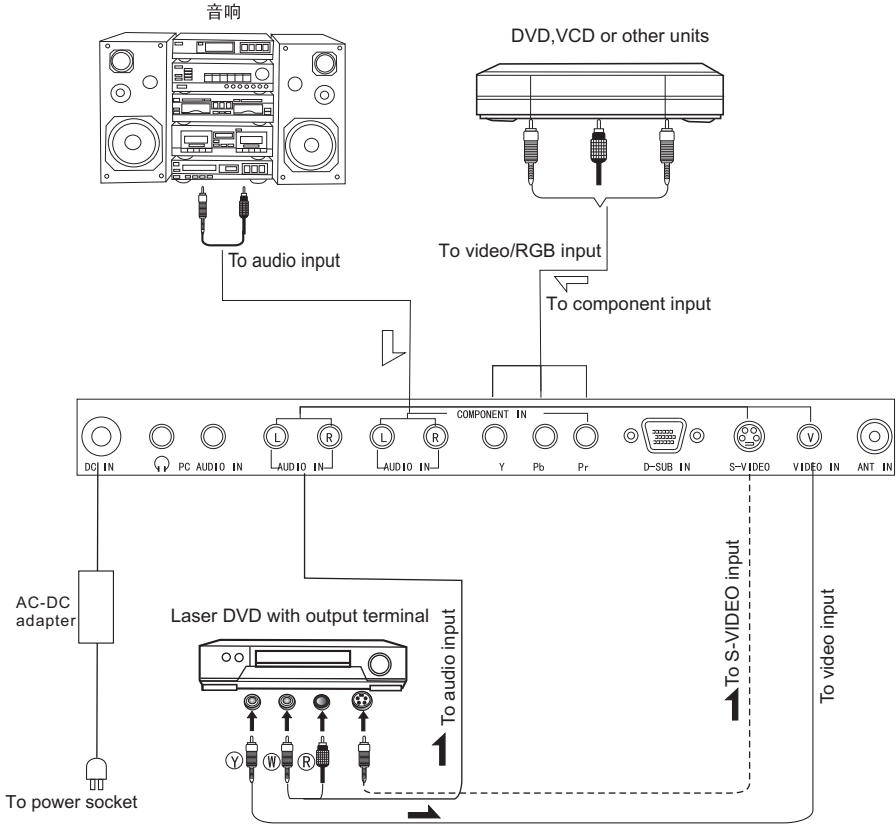


Connection

Connecting additional equipments

You can connect the DVD,VCR to the set to enjoy a higher quality of picture .

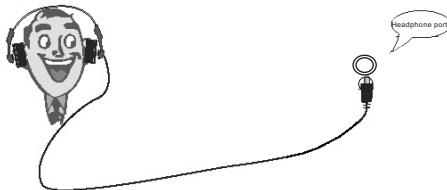
⇒ Signal flow



Note: Please do not use the S-VIDEO and AV terminals simultaneously.

Headphone port

Plug the headphone in the television headphone port, then the television program sound will be heard from the headphone, not by the television speaker. Press VOL+/- buttons to increase or decrease the sound volume. No sound will be heard if MUTE button is pressed.

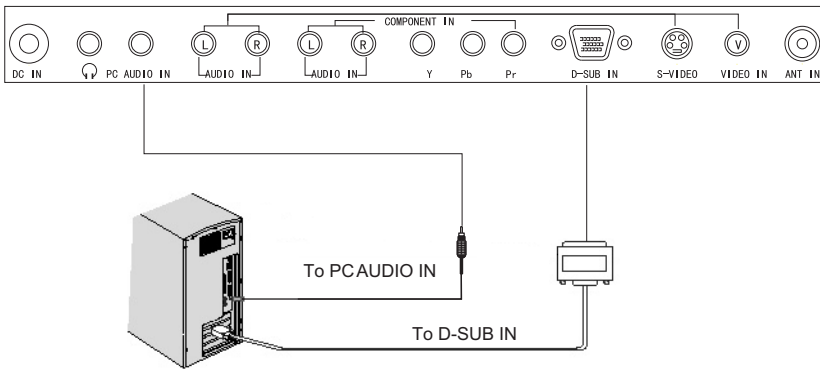


Connection(continued)

Connecting additional equipments

VGA input

1. Link VGA output port of a PC to the D-SUB IN port of the television.
 2. Link audio cable of a PC to PC AUDIO IN port of television.
 3. Press TV/AV button to select PC-RGB mode.
 4. Turn on the PC and its screen picture will be displayed on the television screen.
- In this way, the television can be used as a PC monitor.



Mode	Resolution	Line frequency (Khz)	Frame frequency (Hz)
VGA	640*480	31.5KHz	60Hz
SVGA	800*600	37.9KHz	60Hz
XGA	1024*768	48.4KHz	60Hz
SXGA	1280*1024	63.9KHz	60Hz

Note: All above listed are subject to VESA Criteria.

Troubleshooting

Before arranging for service, firstly know the status and then check simply as follows:

Used as TV

No picture, no sound	Verify if the television is properly plugged. Verify if the television is properly supplied power. Verify if electricity is available.
Blank screen	Verify if correct signals are input. Press TV/AV button to change signal input to TV input. Restart the television if power supply is interrupted.
No sound	Press MUTE button and verify if mute mode is set. Switch to other channel and verify if the same problem happens. Press VOL+ button to see if the problem can be solved.
Poor sound	Verify if sound system is correct. Refer to some chapter for adjust.
No picture in some channel	Verify if correct channel is selected. Adjust the antenna. Make adjustments by Fine Tune and Manual Search.
No color for some channel program (black and white)	Verify if the same problem exists in other channels. Check out of picture and sound systems. Refer to relative instructions in the Manual for color adjust.
Spots with some or all pictures	Verify if the antenna is correctly connected. Verify if the antenna is in good condition. Make fine adjustment of channel.
Television out of control	Disconnect the television from power supply and, 10 seconds later, connect the television to the power supply. If the problem still exists, contact authorized after-sales service for technical assistance.

Specifications

Following are some reference specifications, which may vary from that of the television that you have just purchased due to technical innovations.

Model	L20AV6-A0	
Size/Weight	W: 550mm	D: 165mm
	H: 450mm	NG: 7.4Kg
Power	Connected to the AC-DC adapter	
Color/Sound system	PAL DK/I/BG	
Power consumption	60W	
Antenna input	75 Ω	
Audio output	$\geq 1.5W+1.5W$	
External input	AV input, PC input, S-video input, COMPONENT input, PC audio input, 12V DC input, Antenna input	
AC-DC adapter	Input : ~100V-240V, 50/60Hz, Output : 12V, 5A	
Temperature	Working: 5°C ~ 35°C Storage: -15°C ~ 45°C	
Accessories	AC-DC adapter Remote control	Power cable Owner's Manual

Haier