Haier

LED LCD TV OWNER' S MANUAL

MODEL: LE22P600 LE24P600



Please READ this manual carefully before operating your TV, and retain it for future reference

Haier

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IMPORTANT SAFETY INSTRUCTION

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- Do not block any ventilation openings, install in accordance with the instructions.
- Do not install near any heat sources such as radiations, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized plug. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protected the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- 12) Unplug this apparatus during lighting storms or when unused for long periods of time.
- 13) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 14) Mains plug is used as the disconnect device, the disconnect device shall remain readily operable.
- 15) The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloth, curtains, etc.
- 16) No naked flame sources, such as lighted candles, should be placed on the apparatus.
- 17) Attention should be drawn to the environmental aspects of battery disposal.
- 18) The use of apparatus in moderate climate.
- 19) The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.



TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK).NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The symbol indicates that dangerous voltages constituting a risk of electric shock are present within this unit.



The symbol indicates that there are important operating and maintenance instructions in the literaturaccompanying this unit.

WARNING:

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

WARNING:

The batteries shall not be exposed to excessive heat such as sunshine, fire or the like.



This symbol indicates that this product incorporates double insulation between hazardous mains voltage and user accessible parts. When servicing use only identical replacement parts.



This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.



High voltages are used in the operation of this television receiver. Do not remove the cabinet back from your set. Refer servicing to qualified service personnel.



To prevent fire or electrical shock hazard, do not expose the television receiver to rain or moisture.



Do not drop or push objects into the television cabinet slots or openings. Never spill any kind of liquid on the television receiver.



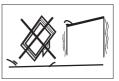
Do not block the ventilation holes in the back cover. Adequate ventilation is essential to prevent failure of electrical components.



Do not trap the power supply cord under the television receiver.



Never stand on, lean on, or suddenly push the television or its stand. You should pay special attention to children. Serious injury may result if it falls.



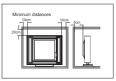
Do not place your television on an unstable cart, stand, shelf or table. Serious injury to an individual, and damage to the television, may result if it falls.



When the television receiver is not used for an extended period of time, it is advisable to disconnect the AC power cord from the AC outlet.



Avoid exposing the television receiver to direct sunlight and other sources of heat. Do not stand the television receiver directly on other products which give off heat, e.g. video cassette players and audio amplifiers. Do not place naked flame sources, such as lighted candles on the television.



If the television is to be built into a compartment or similar enclosure, the minimum distances must be maintained. Heat build-up can reduce the service life of your television, and can also be dangerous.

Main features

- (1) Used as Television, display terminal, PC display;
- (2) High luminance, wide viewing angle;
- ③ Can store 200 TV programs;
- (4) HDMI interface;
- (5) Multi-Media player (USB);

Accessories

LCD TV1	Power Cord
Bottom Stand1	User Manual1
Screw1	Warranty Card1
Remote Control1	Quick Set Up Guide1
Battery(AAA)2	E-waste Guideline Booklet1

Main parameter

Viewing Picture Size (Diagonal)	22 inch	24 inch
Resolution	1920 x 1080	
Aspect Ratio	16:9	
TV System	PAL/NTSC/SECAM	
Video Signal System	PAL/NTSC	
Receiving Channel	1-200	
Input Power Voltage	AC 100-240V 50/60Hz	
Power consumption	35W	40W
Audio Output Power(THD 27%)	2 x 3W	
Signal Input	Analog RGB(VGA)x 1 High-Definition Multimedia Interface (HDM Composite Video Input x 1 Composite Video Output x 1 Audio Input x 1 YCb (Pb)Cr (Pb) x 1 USB x 1 RF x 1	I) x 2
Horizontal definition (TV line)	Composite Video input >=350 Y Cb(Pb) Cr(Pr) >=400	

Front panel

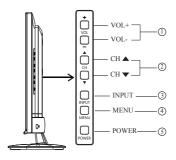


- 1: Remote control sensor.
- 2: Indicator LED: LED OFF O POWER ON.

RED STANDBY.

3: Key board

KEYBOARD



1. VOL+/ VOL-:

Adjust sound level. In Menu mode, press " VOL+" or "VOL-" to adjust the item that you selected.

2. CH▲/CH▼:

In TV mode, press "CH+" or "CH-" to change the channel up and down. In MENU mode, press "CH+" or "CH-" to select items.

In standby mode, press "CH+" or "CH- " to turn.

3. INPUT : Display the input sou

Display the input source menu.

4. MENU

Display main MENU.

5. POWER

Press this button to turn the unit ON from STANDBY mode.

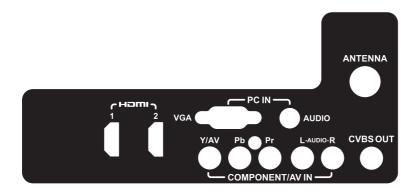
Press it again to turn the set back to STANDBY.

REAR AV Connections(SIDE)



All the terminals are (from up to down): USB, EARPHONE.

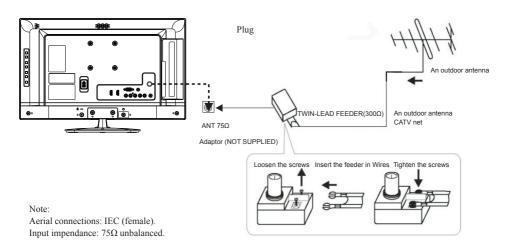
REAR AV Connections



All the terminals are (from left to right): HDMI1, HDMI2, VGA, PC AUDIO, ANTENNA, YPbPr, AV IN, CVBS OUT.

Note: VIDEO and YPbPr share one audio channel.

ANTENNA



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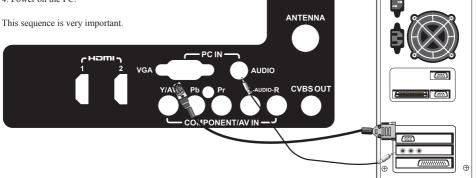
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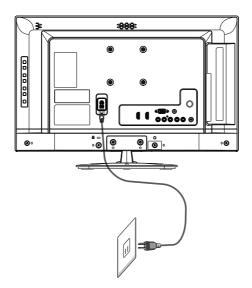
PC

STEPS:

Be sure both the TV and computer are Power off.

- 1. Connect VGA and audio cable.
- 2. Connect power cord.
- 3. Power on the TV switch to PC mode.
- 4. Power on the PC.





PC Input Signal Reference Table

Default computer mode			
Item	Resolution	Horizontal Frequency (kHz)	Vertical Frequency(Hz)
1	640×480	31.469	59.94
2	720 × 400	31.469	70.087
3	800 × 600	37.879	60.317
4	1024×768	48.363	60.004
5	1360 × 768	47.72	59.799
6	1440 × 900	55.469	59.901
7	1680 × 1050	65.29	59.954
8	1920 × 1080*	66.587	59.934

Connect a computer to your TV set and set up the computer output signal in accordance with table below.

*Recommended resolution

DVI/ PC HDMI Input Signal Reference Table

When DVI port is being used: connect the DVI port of video device to your TV set with a DVI-to-HDMI line and set up the output signal of the video device in accordance with table below.

When HDMI port is being used: connect the HDMI ports of your computer and TV set with one HDMI wire and set up the output signal of the video device in accordance with table below.

Default HDMI Mode					
Standard Resolution Horizontal Frequency (kHz) Vertical Frequency					
1	640 × 480	31.469	59.94		
2	800 × 600	37.879	60.317		
3	1024 × 768	48.363	60.004		
4	1360 × 768	47.72	59.799		
5	1920 × 1080*	66.587	59.934		

*Recommended resolution

Video Input Signal Reference Table

Connect the component signal or HDMI port of video device to your TV set and set up the output signal of the video device in accordance with table below.

If your computer display card supports signals of video format then you can set up following output signal.

Default Component or HDMI Mode				
Standard Resolution Horizontal Frequency (kHz) Vertical Frequency (Hz				
SD	640 × 480p	25.175	60	
SD	720 × 480i	15.734	60	
SD	720 × 480p	31.5	60	

SD	720 × 576i	15.625	50
SD	720 × 576p	31.25	50
HD	1280 × 720p	37.5	50
HD	1280 × 720p	45	60
HD	1920 × 1080i	28.125	50
HD	1920 × 1080i	33.75	60
FHD	1920 × 1080p	56.25	50
FHD	1920 × 1080p	67.5	60

Video Input Signal Reference Table

Video System Supported in TV and Video Modes

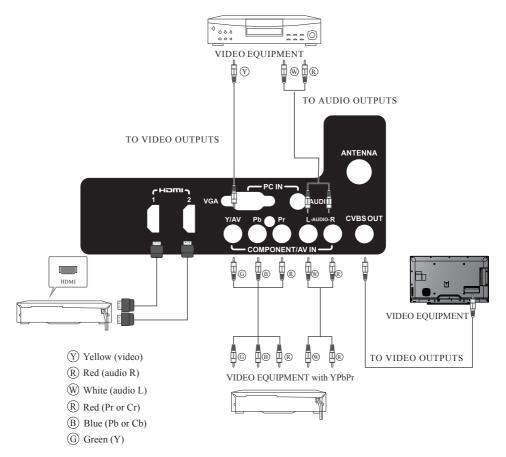
PAL D/K B/G I

Standard Definition Interface

You can also enjoy traditional program by using a DVD player or VCR Player. Connect this equipment to your TV via the Composite Input on the back of your TV.

AV EQUIPMENT

This TV provides two group of AV, one group of YPbPr for convenient connection to VCR, DVD or other video equipment. Please refer to the owner's manual of the equipment to be connected as well. You can use the input terminals on TV set rear as follows.

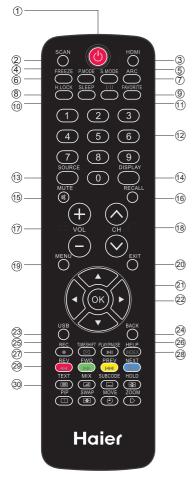


It can be connected to the following appliances: VCR, multi disc player, DVD, camcorder, video game or stereo system, etc... YPbPr can support these video fomats: 480i, 576i, 480p, 576p, 720p, 1080i. Note:

- 1. AV and YPbPr share one audio channel.
- 2. When HDMI port get DVI signal, the "PC Audio" channel is changed to receive the audio for HDMI port.
- 3. Sometimes it will not support in different device because the device supplys nonstandard signal.
- 4. When current source is TV, VIDEO OUT signal is TV; when current source is AV, VIDEO OUT signal is AV; othersources have no VIDEO OUT signal.

The remote control cannot be operated unless the batteries are properly loaded inserted. When using the remote control, aim it at the remote control sensor on the TV.

Function introduction



1. POWER

Press to turn on/off the TV. The TV is never completely powered off unless it is physically unplugged.

2. SCAN

No function

3. HDMI

Key to HDMI.

4. P.MODE

Picture mode switch.

5. S.MODE

Sound mode switch.

6. FREEZE

Static picture.

- 7. ARC
- No function.

8. H.LOCK No function.

9. FAVORITE

- No function.
- 10. SLEEP

Sleep.

- 11. I/II
 - Stereo Sound Switch.

12. 0-9 NUMBER

Press to enter TV channel number to select channel or digital number.

13. SOURCE

Press to select source.

14. DISPLAY

Display information of current signal.

15. MUTE

Switch on or off the sound.

16. RECALL

Press to display the previous channel or source or back.

17. VOL +/-

Press to adjust the volume.

18. CH ///

Press to browse through the TV channels.

19. MENU

a. Press to activate OSD menu and back to previous level of OSD.

b. Exit OSD.

20. EXIT

Press to exit OSD.

21. OK

Press to activate the setting/selection of OSD.

22. ▲/▼/◀/▶

a. Press to navigate the OSD menu;

b. The cursor RITHT key perform confirmation as well as

precede next level of OSD in Main menu;

23. USB

Switch to USB.

24. BACK

Press to display the previous channel or source or back.

25. TIMESHIFT No function

26. PLAY/PAUSE

Pause/Play photo/music/video/text file in USB.

27. REC	NEXT III :
No function.	1 .Press to go to the next music/photo/video/text in USB
28. HELP	2. Delete, delete chanels in Channel Edit menu.
No function.	3. Blue key in Teletext mode
29. REV/ FWD/ PREV/ NEXT	30. TEXT/ MIX/ SUBCODE/ HOLD/ PIP/SWAP/ MOVE/
REV E	ZOOM
1. Fast Backward USB Video/ Music/Text	TEXT:
2. Swap, swap chanels in Channel Edit menu.	Press to turn on/off TTX.
3. RED key in Teletext mode	MIX:
FWD 💮 :	Mixed mode in Teletext.
1.Fast Forward USB Video/ Music/Text	SUBCODE:
2. Press to go to previous page when scan file in USB	SUBTITLE in Teletext.
3. Insert, insert chanels in Channel Edit menu.	HOLD:Freeze the picture in Teletext.
4. Green key in Teletext mode	PIP/SWAP/ MOVE:
PREV 📻 :	Not function.
1. Press to go to the previous music/photo/video/text in	ZOOM:
USB	Zoom the picture the picture in Teletext.

- 2. Press to go to next page when scan file in USB
- 3. Yellow key in Teletext mode

E/

Picture Setup

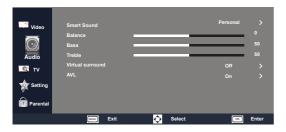


Items	Description	Description		
	Personal	User can set their favorite setting.		
	Vivid	For Enhances picture contrast and sharpness.		
Smart Picture	Standard	For standard picture settings. Recommended for home entertainment.		
	ECO	ECO Decrease backlight level to save the power		
	Movie	For viewing film-based content. Most suitable for viewing in a theater-like environment.		
Brightness	To brighten	To brighten the dark parts of the picture.		
Contrast	To sharpen	To sharpen the picture quality.		
Color	To add or re	To add or reduce Color.		
Sharpness	To improve	To improve details.Not available in PC mode.		
	Normal	Natural whitish color		
Color Temp.	Cool	Bluish white color		
	Warm	Reddish white color		

	Noise Reduction	To filter out and reduces the image noise and improve picture quality.
	Backlight	Control the brightness of the backlight.
Advanced control	DCR	Dynamic contrast ratio: Setup the contrast of the TV set to vary in accordance with the brightness and darkness of the TV set when it is set to on.
	IDCC	Dynamic Color Control: Using DCC image on the LCD display become more vivid and superior color saturation. (Not supported in PC source mode).

Note:Certain screen setups may be unavailable or have different options in accordance with the input sources.

Audio Setup



Items	Description	Description		
	Standard	Suitable for spoken dialog.		
	Music	Ehance treble and bass		
Smart Sound	Speech	Ehance treble and keep the bass at medium level		
	Personal	Adjust sound mode as per personal requirement.		
	Sound Mod	Sound Mode can also be accessed by pressing the S.MODE button on the remote control.		
Balance	Adjust the b	Adjust the balance between left and right speakers to adapt to your listening position.		
Bass	Adjust the b	Adjust the bass effect.(Increases or decreases lower-pitched sounds)		
Treble	Adjust the t	Adjust the treble effect.(Increases or decreases high-pitched sounds)		
Virtual surround	TV provides surround sound effect with rich bass and clear dialog when DSS effect is On.			
AVL	Automatica	Automatically reduces sudden volume changes, for example, when switching between the channels.		

Features Setup



Items	Description
Menu Language	Select an OSD menu language can be displayed. Default English is selected as menu language.
Select a Teletext language in TTX mode. West: Western Europe TTX Language East: Eastern Europe Russian: Russian Arabic: Arabic	
Picture Format	Resize the aspect ratio of the picture for optimum viewing. Available formats : 16:9, 4:3, Zoom1 and Zoom2.
Menu Timeout	Set up the period of time that the OSD menu screen is to be displayed.
Menu Transparency Select an OSD menu transparency as Off, Low, Middle, High, by default OSD transpa is set to Low.	
Power On Status	Select desired TV turn on condition, when AC power switch is turned on. Standby: TV will be in stand by condition and can be turned on by press Power key on remote control. Power On: TV will turn on as soon as AC power switch is turned on. Keep Last Memory: TV will turn on as per the last power on settings.
Freeze	When the Freeze Switch is On, picture is frozen while changing the channel.
Blue Screen	To select the transition type required while changing from one channel to another. Select Off : No blue screen function Select On : Blue screen will appear while changing the channel.
Color System	To Support Auto, PAL, PAL_60, NTSC, NTSC4.43, SECAM. (This feature is only available in AV mode.)

Time Setup	Time	Date : Enter TV date in year, month and date format YYYY/MM/DD. Default date is 2000/01/01. Time : Enter desire TV time in hour, minute and second format HH:MM:SS. Default time start from 00:00:00. Power On Timer : Turn on TV from standby mode with pre-defined channel/source at specified time automatically. On : TV will turn on daily at specified time with specified channel / source. Once : TV will turn on only once at specified time and channel/source and resets to Off. Timer: Set turn on/off time Power Off Timer : Turn off the TV at the specified time. On : TV will turn off daily at specified time. On: TV will turn off only once and resets to Off. Note: Date and time will be reseted to default if AC power is turned off. Power On Timer will work only when TV is in standby mode.
	Sleep Timer	Set a time period after which the TV will be turned off and enter stand by mode. Sleep timer can be set to Off,10,20,30,40,50,60,90 & 120 minutes.
	Auto Sleep	Auto Sleep can be set to Off, 1 Hour, 2 Hours or 5 Hours
System Reset		You can restore the factory default picture and sound settings of your TV. The channel installation settings and Child lock remains the same.

Parental Setup



Press the original password of 0000 to enter parental menu.

Items	Description
Channel Lock or unlock the selected chanels.	
Input Block	Lock or unlock the selected input source.
Keypad Locked	Lock or unlock the key pad.
Change Password	Change parental password.
Clean All	Clear the lock status of channels, source, key pad.

Channel Setup

This setup is available in TV mode only.



Items	Description		
	TV automatically searches for the channel in the available frequency band and stores		
	sequentially.		
Auto Search	Select TV menu.		
	Select Auto search and press OK key or ► arrow key to tune channels automatically and store.		
	During auto searching Press Menu key to stop search.		
Update Scan	Updates your channel list by adding new/missed channels to the end of the list without disturbing		
Opuale Scall	previously stored channels.Consequently, it takes more time than Auto channel scan.		
	Search for the channels manually and store it to the desired channel number.		
Manual Search	It can also be used for editing of channels searched by auto search if required.		
	Please refer to Manual Search description in next page for details.		
Channel Edit	Edit the selected channel, including channel swap, insert, delete, skip, channel name.		
Clean Channel List	Clear the channel list.		

Note: Make sure you have connected RF signal cable before performing channel search.

Manual search description

- 1. Select TV menu and select Channels.
- 2. Select Manual Search and press OK key or ▶arrow key to get Manual search sub-menu.
- 3. Select Start Frequency to input frequency you want to start
- 4. Select End Frequency to input frequency you want to end
- 5. Select Start Search and OK key or ► key to search



Computer Setup

This setup function is available in computer mode.



Items	Decsription
Auto Adjust	Press > arrow Button to adjust the screen automatically to the optimal position of the picture.
H.position	Adjusts the horizontal position of the picture.
V.position	Adjusts the vertical position of the picture.
Phase	Eliminate the horizontal interfering lines.
Clock	Eliminate the vertical interfering lines.

Note:

If the PC is connected to the TV and no signal has been input from the PC for more than 30 seconds, the TV enters the standby mode automatically.

USB Media Center



TV USB port can be used to view JPEG photos, play mp3 music and Video files, and read text present in USB devices.

Entering to USB Media

Press USB key on remote to get USB Media menu as shown above Or Press the **Source** key and ▲/▼keys on remote and select USB source to get USB Media menu as shown above.

Select the **Media type (Photo/ Music/ Movie/ Text)** to be viewed and press **OK** key to enter into USB Media and When USB drive is detected by the TV, USB drive is displayed as a folder on the screen as shown below. Press OK key to view subfolder or files in the USB drive.

Note: * Files of selected Media type can only be viewed through USB. Media type can be any one amoung Photo / Music / Movie / Text.

After entering the multimedia file selection interface, press the **Menu** button allows you to execute the following control functions:

- 1. [Sort]: Sort the multimedia files according to Date or Name.
- 2. [Media Type]: Select the multimedia file type to playback.
- 3. [Thumbnail Size]: Select the size of the multimedia file thumbnail.
- 4. [Copy]: Select the multimedia files to copy.
- 5. [Paste]: Paste the copied multimedia file.
- 6. [Delete]: Delete the selected multimedia file.

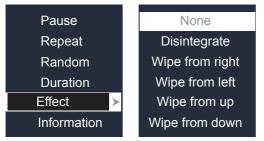
Viewing Photos



1. Thumbnail of the available images will be displayed on the screen. If no images are displayed then select the folder containing the Photos.

- 2. Select particular image and press OK key to display it in full screen.
- Slide show starts automatically when image is viewed in full screen.
- 3. Press key to play/ pause slideshow. Press key to view previous or next image.

USB menu settings for Photo Slide show



Press Menu key to get following Menu setup shown above.

- 1. [Play/Pause]: Play/Pause photo play.
- 2. [Repeat]: Select the repeat mode as None, Repeat One, Repeat All.
- 3. [Random]: Select Shuffle mode as Shuffle Off, Shuffle On.
- 4. [Duration]: Select play time as Short, Medium,Long.
- 5. [Effect]: Select effect of transition
- 6. [Information]: Display the information of the file.

Playing Music files

- 1. Thumbnail of the available music files will be displayed on the screen. If no files are displayed then select the folder containing the music files.
- 2. To play particular music file select the required file and press OK key.
- 3. Press key to play/pause music. Press key to play previous or next track.

USB menu settings for Music play



Press Menu key to get following Menu setup shown above.

- 1. [Play/Pause]: Play/Pause music play.
- 2. [Repeat]: Select the repeat mode as None, Repeat One, Repeat All.
- 3. [Random]: Select Shuffle mode as Shuffle Off, Shuffle On.
- 4. [Infomation]: Display the information of the file.
- 5. [Show Spectrum/Hide Spectrum]: Select show or hide Spectrum.
- 6. [Smart Sound]: Select the sound mode as Standard, Personal, Music, Speech.

- 7. [Lyric Option]: Select on or off to turn on or off lyric display.
- 8. [Audio Only]: Select it to turn off dispaly and to get only sound from TV.

Playing Video files

- 1. Thumbnail of the available video files will be displayed on the screen. If no files are displayed then select the folder containing the video files.
- 2. To play particular video file select the required file and press OK key.
- 3. Press key to play/pause video. Press Rev to play previous or next video.

USB menu settings for Video play



Press Menu key to get following Menu setup shown above.

- 1. [Play/Pause]: Play/Pause movie play.
- 2. [Repeat]: Select the repeat mode as None, Repeat One, Repeat All.
- 3. [Information]: Display the information of the file.
- 4. [Smart Picture]: Select the picture mode as Vivid, Standard, Movie, Personal, Eco.
- 5. [Screen Mode]: Select the screen mode as 4:3, Zoom1, Zoom2, 16:9.
- 6. [Subtitle Display]: Select the subtitle mode of the movie.
- 7. [Track]: Select the track mode of the audio.

Reading Text files

- 1. Thumbnail of the available text files will be displayed on the screen. If no files are displayed, then select the folder containing the text files.
- 2. To read particular text file select the required file and press OK key.
- 3. Press $\blacktriangle / \checkmark$ keys to browse the text.

USB menu settings for text read



Press Menu key to get following Menu setup shown below.

- 1. [Play/Pause]: Play/Pause text read.
- 2. [Repeat]: Select the repeat mode as None, Repeat One, Repeat All.
- 3. [Random]: Select the shuffle mode as Shuffle Off, Shuffle On.
- 4. [Infomation]: Display the information of the file.

Formats supported to multimedia mode: Photo, Music, Movie and Text..

	Format	Resolution	Туре	Note
			Base-line	
Picture		Progressive:1024 x 768	Progressive	
	bmp	9600 x 6400		
	png	9600 x 6400		

Audio	Format	Sample Rate	Date Rate	Channel
Audio	MP3	32KHz-48KHz	32Kbps-320Kbps	Mono/Stereo

	Format	File Extension	Codec	Data Rate
	Real media	.RM/.RMVB	RealVideo 8/9	20Mbit/sec
Movie	MPEG1/2	.DAT/.MPG	MPEG-1/2 Video	20Mbit/sec
	MPEG4	.AVI /.MP4	H.264	20Mbit/sec

Text	Format		Note
lext	txt		

Remarks:

- The voltage supplied to USB interface is 5V, and the most electrical current is 500mA. When some interface criteria of USB devices are different from standard USB protocol, digital multimedia player may be unable to recognize USB devices correctly, which is normal status.
- 4. USB could be used as an interface to update software.
- 5. If some files source could not play because of the parameter decoding-limitation, the problem is not performance failure.
- 6. The system only applies to memory medium with FAT32 and NTFS format.
- 7. Does not support connecting of removable devices to the USB hub.
- 8. Does not support displaying of subtitles of video files with subtitles.
- 9. Does not support thumbnail display of png and Bmp format images.
- 10. The USB device does not support copying and pasting for NTFS system.

^{1.} USB interface of digital multimedia player is not all-purpose. So when some USB devices could not be recognized, the problem is usually not the performance failure but due to device driver.

Because USB devices and memory capability are different, the time needs for multimedia player to read information are also different. So the information reading speed of the player temporarily getting slow are not the performance failure.

	Trouble ph	Inspection		
Picture				Audio
	Snow		Noise	antenna position, direction or connection
	Ghost		Normal audio	antenna position, direction or connection
	Interfere		Noise	electronic equipment,car/ motorcycle,fluorescent light
	Normal Picture	(X	Mute	Volume(inspect wether the mute function on the remote control are started , or audio system are correct or not)
?	No picture	d X	Mute	Power cord is not inserted Power switch is not opened Contrast and brightness/volume setup Press standby key on the remote control for inspecting
	No color		Normal audio	color control
	Scramble		Normal audio or weak	retune channel
	No color		Noise	Audio system





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