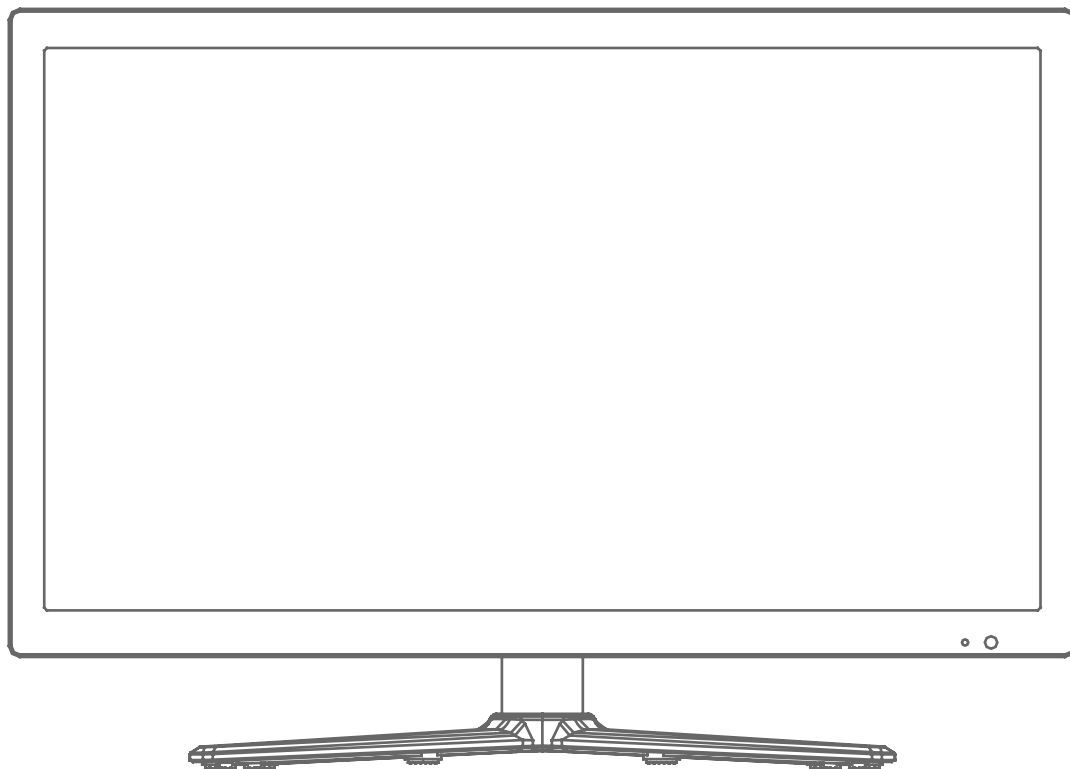


# DENVER

---

**22" full hd led tv with atv and mpeg-4 dvb-t + c.i  
& usb input + pvr function**

**Model NO.: LED-2257M**



**Instruction Manual**



# Contents

---

<b>Caution</b>	<b>1</b>
<b>Safety Information</b>	<b>2</b>
<hr/>	
<b>Accessories</b>	<b>3</b>
<b>Technical Specification</b>	<b>3</b>
<hr/>	
<b>Product Introduction</b>	<b>4</b>
Front View	4
<hr/>	
<b>Connections</b>	<b>5</b>
<hr/>	
<b>Remote Control</b>	<b>6-7</b>
<hr/>	
<b>Basic Operation</b>	<b>8</b>
<hr/>	
<b>OSD Menu</b>	<b>9-17</b>
1. Channel menu	9-10
2. Picture menu	11
3. Sound menu	12
4. Time menu	13
5. Lock menu	14-16
6. Setup menu	17
<hr/>	
<b>Multimedia Operation</b>	<b>18-21</b>
<b>Recording Operation</b>	<b>22-23</b>
<hr/>	
<b>Simple Troubleshooting</b>	<b>24</b>
<hr/>	

## Caution

---



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of un-insulated “dangerous voltage” within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to the persons.



The exclamation point within an equilateral triangle is intend to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

---



### **Correct disposal of this Product**

(Waste Electrical & Electronic Equipment (WEEE))

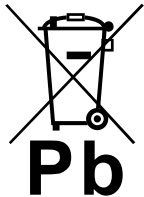
Your product is designed and manufactured with high quality materials and components which can be recycled and reused.

This symbol means that electrical and electronic equipment, at their end-of-life should be disposed of separately from your household waste.

Please dispose of this equipment at your local community waste collection/ recycling center.

In the USA there are separate collection systems for used electrical and electronic products. Please help us to conserve the environment we live in!

---



This unit complies with European safety and electrical interference directives.

---

# Safety Information

---

To ensure reliable and safe operation of this equipment, please read carefully all the instructions in this user guide, especially the safety information below.

---

## Electrical safety

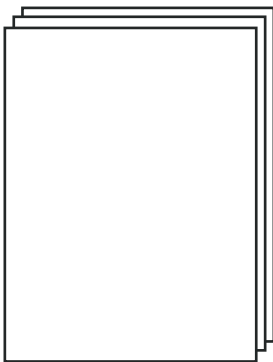
- The TV set should only be connected to a mains supply which matches that stated on the label on the mains adaptor.
  - The power cable/disconnect device shall remain easy to operate/disconnect.
  - To prevent overload, don't share the same mains supply socket with too many other items of equipment.
    - Do not place any connecting wires where they may be stepped on or tripped over.
    - Do not place heavy items on the leads, which may damage them.
    - Hold the Mains plug, not the wires, when removing from a socket.
    - During a thunderstorm or while leaving the TV for long periods, disconnect the aerial (if outdoor) and mains adaptor from the supply.
    - Do not allow water or moisture to enter the TV or mains adaptor. Do NOT use in wet or moist areas such as Bathrooms, steamy kitchens or near swimming pools.
  - Pull the plug out immediately, and seek professional help if:
    - the mains plug or cable is damaged.
    - liquid is spilt onto the set, or if it is accidentally exposed to water or moisture.
    - anything accidentally penetrates the ventilation slots.
    - the set does not work normally.
    - Do NOT remove the safety covers. There are no user serviceable parts inside. You may invalidate the warranty. Qualified personnel only are permitted to service this apparatus.
    - To avoid battery leakage, remove exhausted batteries from the remote control handset, or when not using for a long period.
    - Do NOT break open or throw exhausted batteries on a fire.
- 

## Physical safety

- Do NOT block ventilation slots in the back cover. You may place the TV in a cabinet, but ensure at least 5cm (2") clearance all around the unit.
- Do NOT tap or shake the TV screen, you may damage the internal circuitry. Take good care of the remote control, do not drop it or allow it to come into contact with liquids.
- To clean the TV use a soft dry cloth. Do NOT use solvents or petrol based fluids. For stubborn stains, you may use a damp soft cloth with diluted detergent.

# Accessories

---



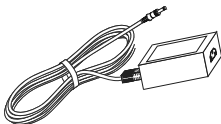
User's Manual



Remote control



Mains cable



Mains adaptor



AV Cable



Converter cable for YPbPr

\* Note: The configuration of the components may look different from the following illustration

# Technical Specification

---

- TV System	PAL BG/DK/I SECAM BG/DK L/L'
- Screen Size	22 inch(diagonal)
- Resolution	1920x1080
- Aerial input	75 Ω (unbalanced)
- Audio output power	2x3W
- Power Consumption	12V $\overline{\text{---}}$ 3.33A 40W

---

## Remote Control

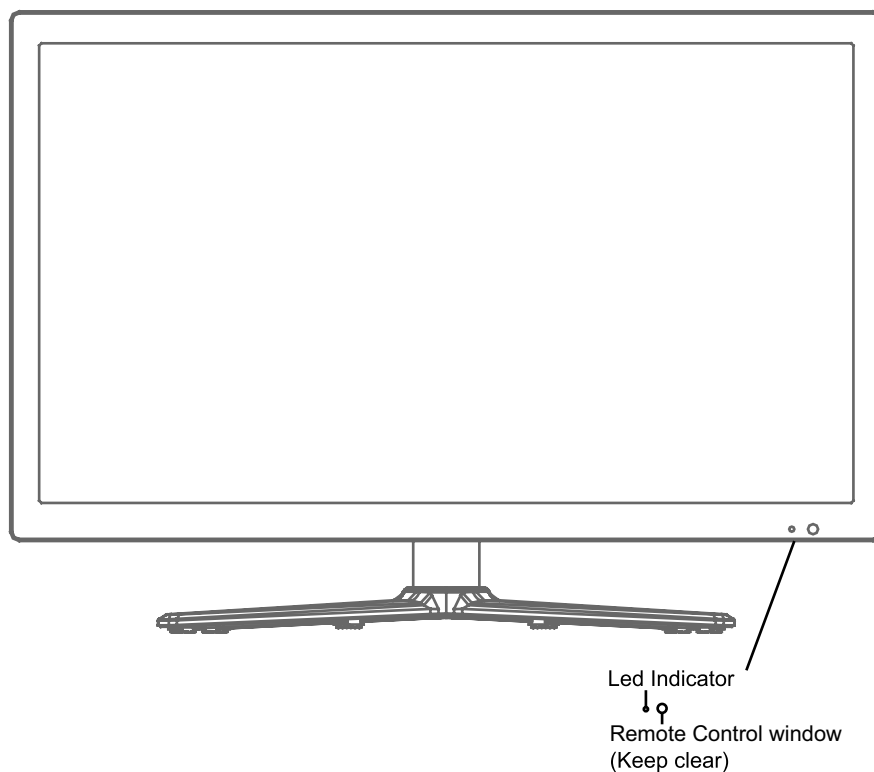
Type	infrared
Control distance	5m
Control angle	30° (horizontal)
Batteries	2 x 1.5V, size AAA

# Product Introduction

---

## Introduction

### Front View



1. (IR) Infrared Receiver: Receives IR signals from the remote control.  
(Power on/Standby)LED Indicator: Press **POWER** to turn on and off.

Indicator on(Red)  
Indicator off (Null)

Standby mode  
Power on mode

***The effective receiving range for the signal is 5-8 metres from the front of the remote control window, and 30° to the left or right side and 20° above or below the remote control window.***

2. The functions of the buttons are described as bellows:

**INPUT:** Press to display the input source menu.

**MENU:** Press to display the OSD menu, press again to exit the menu.

**CH+/-:** Press to scan through channels.

**VOL+/-:** Press to adjust the volume.

**POWER:** Turn on/standby the TV set.

# Connections

---



**Common Interface:** CI slot.

**RF:** Connect antenna or cable 75 Ohm coaxial to receive TV signal.

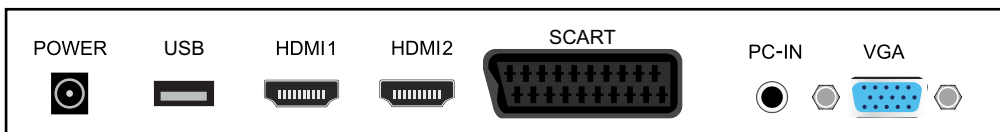
**R/L in:** Connect them to the audio output terminal of DVD.(shared with YPbPr)

**VIDEO:** Connect it to video output terminal of DVD.

**YPbPr:** Connect them to the YPbPr video output terminal of DVD with the converter cable.

**Headphone:** Connect it to your headphone or other audio equipment.

**Coax:** Digital coaxial output.



**POWER:** Connect to the mains adaptor.

**USB:** USB jack for update, media and PVR.

**HDMI1/2:** Connect it to the HDMI of DVD or other equipment.

**SCART:** Connect them to the SCART video output terminal of DVD.(used in component source)

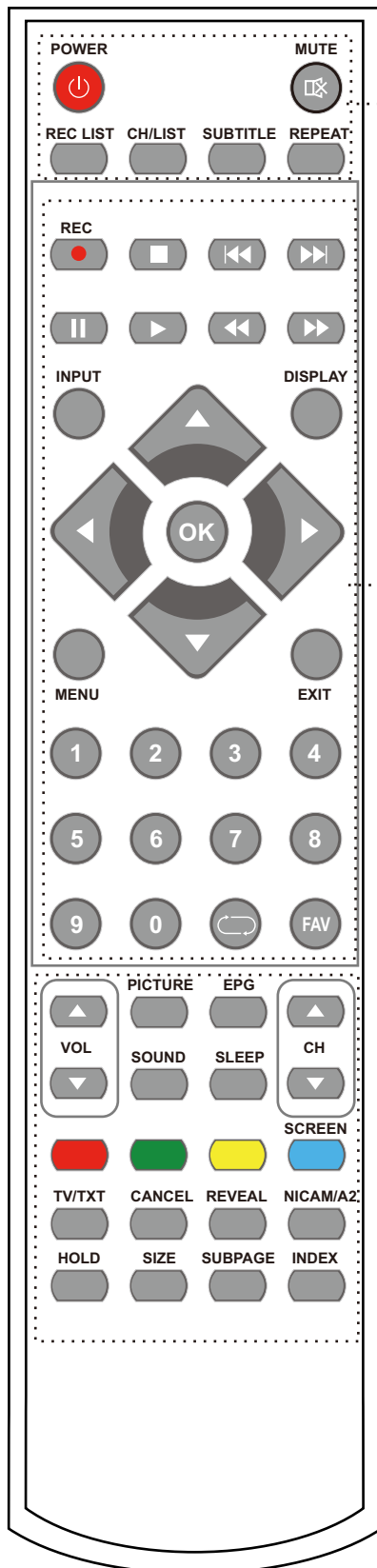
**PC-IN:** Connect it to the audio output terminal of PC.

**VGA:** For PC display.Connect it to the D-Sub 15 pins analog output connector of the PC.



# Remote Control

The remote control is using Infra-Red(IR). Point it towards the front of the LED TV. The remote control may not work correctly if it is operated out of range or out of angle.



POWER: Turn the TV on/standby.

MUTE: Press to mute the sound, press again or press VOL+ to unmute.

REC LIST: Record List.

CH/LIST: Display the programs list.

SUBTITLE: Turn on/off the subtitle display in DTV mode.

REPEAT: Repeat playing the title or chapter.

## PVR function

REC ● : Press to start record the program in DTV mode.

■ : Stop program.

◀◀ : Previous chapter.

▶▶ : Next chapter.

|| : Pause program.

▶ : Play program.

◀◀ : Fast reverse.

▶▶ : Fast forward.

INPUT : Press to display the input source menu.

DISPLAY: Press to display the current mode's information.

MENU: System setup menu.

EXIT: Exit the OSD menu.

FAV: Display the favorite program list.

## NUMBER BUTTONS

Press0-9 to select a TV channel directly when you are watching TV.

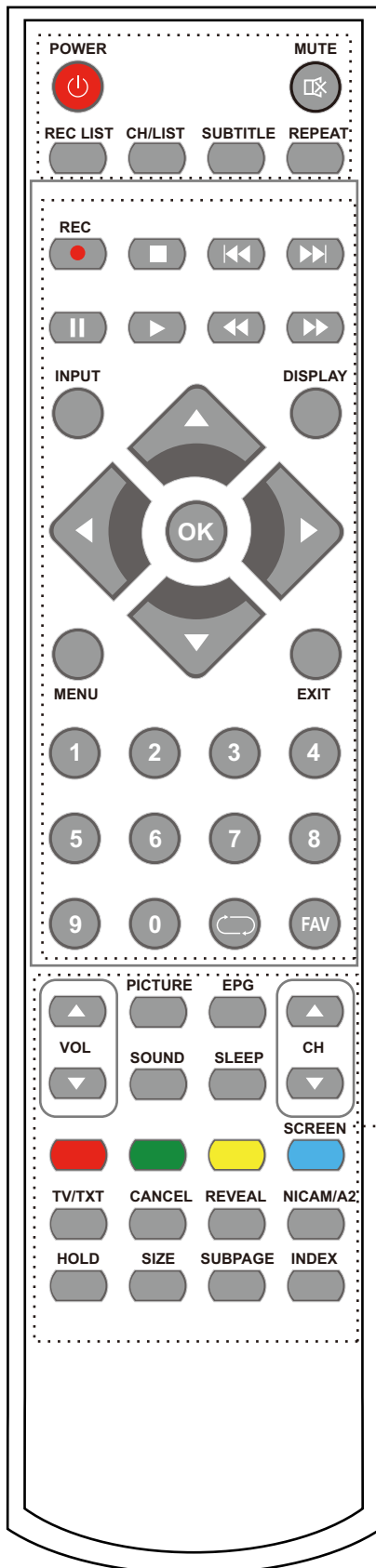


Return to the previous channel viewed.

CURSOR KEYS (▲/▼/◀/▶ / OK)

Allows you to navigate the on-screen menus and adjust the system settings to your preference.

# Remote Control



CH▲/▼: Scan through channels.

VOL▲/▼: Adjust the volume.

PICTURE: Select the picture mode.

EPG: To show the Electronic Program Guide during no-menu state only in DTV mode.

SOUND: Select the sound mode.

SLEEP: Standby timer.

SCREEN: Turn on/off the screen.

TV/TXT: Turn off/on the Teletext display.

CANCEL: Cancel the Teletext display.

REVEAL: Reveal any hidden text.

NICAM/A2: TV Nicam/A2 select.

HOLD: Hold or carry on the current subpage.

SIZE: Press to see top half of page double size,

Press again to see the bottom

half of page double size. Press again for normal size.

SUBPAGE: Press to enter subpages, press again to cancel.

INDEX: Go to index.

Colour buttons: Short cuts—follow the coloured links in the text.

# Basic Operation

## Power on/off

1. Connect to the power supply with a power cord and an adaptor.
2. -To turn on the TV  
Press **POWER** button on the TV or remote control.  
-To turn off theTV  
Press **POWER** button on the TV or remote control.

## Input Source select

Press **INPUT** button on the TV set or remote control to display input source menu, and use **CH+/-** button on the TV set or **^/v** button on remote control to select the input source, press **OK** button on the remote control to enter.

**Note: Before you select the input source, make sure the connections are prepared.**

Input Source
ATV
DTV
Media
AV
PC
Component
SCART
HDMI1
HDMI2
OK

## Basic OSD Menu operation

Press **MENU** button to display the OSD menu as below:

**Main menu**

- CHANNEL
- PICTURE
- SOUND
- TIME
- LOCK
- SETUP

**Submenu**

- PICTURE menu for (example)

**Hint**---you should operate the OSD menu according to the hint.

Use **</>** button to select the main menu, and press **v** button to enter the submenu.

In the submenu, use **^/v** button to select the function item, press **</>** button to adjust/setup, or press **OK** button to enter the submenu.

\* (Press **MENU** button to return to the upper menu.)

\* (Press **EXIT** button to exit the menu display.)

**Note1: Only when you input the suitable signal, the relevant items can be activated**

**Note2: Please operating the OSD menu according to hint on the bottom of the banner.**

# OSD Menu

## 1. CHANNEL menu



### Description

#### Auto Tuning

Press **OK** button to enter the hint menu, and Press **</>** button to select the Tune Type, then press **∨** button, and use **</>** / **∨** / **∧** button to select the Country for the TV, then press **OK** button to start auto tuning.



#### ATV Manual Tuning

Press **OK** button to enter the ATV Manual Tuning menu.

**Current CH:** Select a Channel for storing the programme.

**Color System:** Select from PAL and AUTO

**Sound System:** Select from I, BG, DK

**Search:** Press **</>** button to manual search.

**Fine Tune:** Press **</>** button to fine-tune.

**AFC:** Automatic Frequency control ON/OFF.

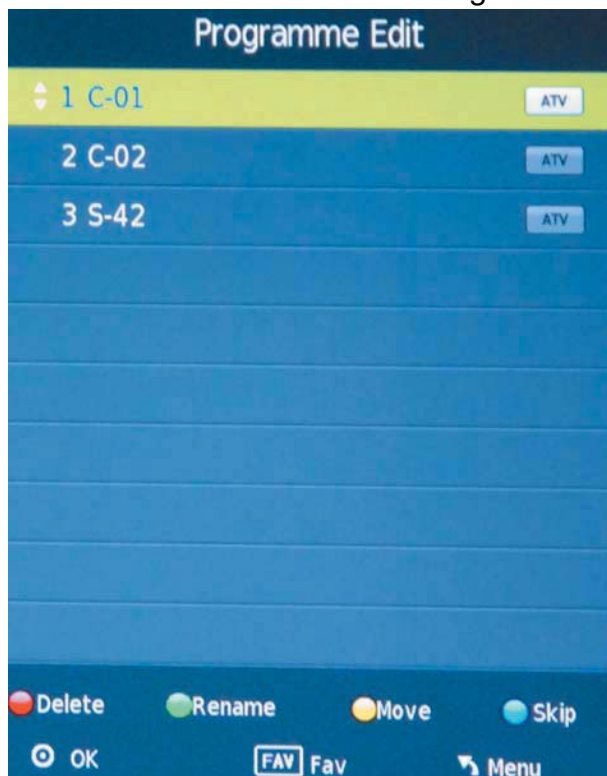


## OSD Menu

---

### Programme Edit

Press **OK** button to enter the Programme Edit menu as the following picture.



**Delete:** Select a channel and press **RED** button, then press **RED** button again, the program will be deleted.

**Rename:** Select an ATV channel and press the **GREEN** button to change the name of the channel by  $\wedge/\vee/ </>$  buttons.

**Move:** Select an ATV channel, and press **YELLOW** button, then you can use  $\wedge$  and  $\vee$  buttons to change the position of the program, press **YELLOW** again to confirm the change. Press menu to exit and it will automatically save the current set.

**Skip:** Select a channel and press the **BLUE** button to label the channel, as long as the channel has a skip label it will be skipped when searching through the channels with the CH+/- buttons.

### Signal Information

Display the digital TV-signal information (DTV mode only).

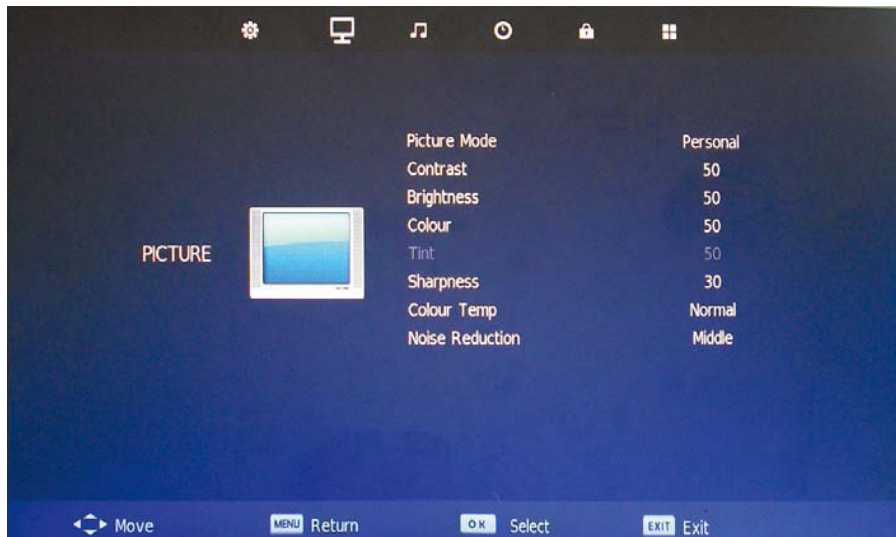
### CI Information

Please contact your “pay per view” provider who can supply a viewing card and cam unit with instructions for their use.

# OSD Menu

---

## 2. PICTURE menu



### Description

---

**Picture Mode:** Choose from Standard, Dynamic, Personal and Mild.

**Note:** *Contrast, Brightness, Colour and sharpness are only available and can be adjusted in the User mode option in the Picture Mode Settings.*

**Contrast:** Controls the difference between the brightest and darkest regions of the picture.

**Brightness:** Controls the overall brightness of the picture.

**Colour:** Control the colour.

**Sharpness:** Increase this setting to see crisp edges in the picture; decrease it for soft edges.

**Tint:** Controls the tint ( NTSC mode only).

**Colour Temperature:** Choose from Normal, Cool and Warm.

**Noise Reduction:** Choose interference noise modes form Off, Low, Middle, High and Default.

# OSD Menu

---

## 3. SOUND menu



### Description

---

**Sound Mode:** Allows you to select among: Standard, Music, Movie, Sports and Personal.

**Treble**(Can be adjusted when the sound mode is Personal) : Controls the relative intensity of higher pitched sounds.

**Bass** (Can be adjusted when the sound mode is set to Personal): Controls the relative intensity of lower pitched sounds.

**Balance:** To adjust the balance of the left and right sound track, or turn off the volume of the left and right sound track.

**Auto Volume:** Control the volume of the programme automatically when you turn on the function by selecting "On".

**SPDIF MODE:** Select the spdif mode.

**AD Switch:** Turn on/off the AD switch.

# OSD Menu

---

## 4. TIME menu



### Description

---

**Clock:** Display the time.

**Time Zone:** Allows you to select the time zone.

**Sleep Timer:** Allows you to setup the sleep timer among: 10min, 20min, 30min, 60min, 90min, 120min, 180min, 240min and off.

**Auto Standby :** According to the latest ERP regulation, this unit will switch off itself automatically if no change in status within the last 4 hours of operation.

**OSD Timer:** Allows you to select the time for OSD menu displays on the screen.



# OSD Menu

---

## 5. LOCK menu



### Description

---

**Lock System:** Turn on/off the Lock System function.

**Note:** *You should enter the code to operate the menu.(original code is 0000)*

**Set Password:** Set pin code. If the Pin code has been changed you must enter the present code.

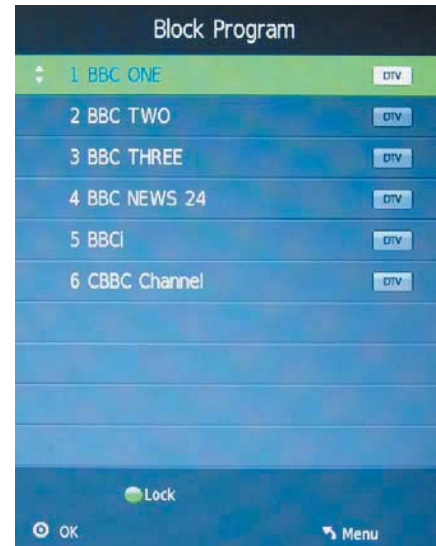
New : Enter the new password.

Confirm: Enter the new password.

## OSD Menu

---

**Block Program:** You must enter the password to view channels that have been locked. Use  $\vee$  and  $\wedge$  buttons to select the channel and press the GREEN button on the remote control to lock the channel.



**Parental Guidance:** Allows you to select the Parental Guidance mode.

**Key Lock:** Lock the buttons on the TV set when you turn on the function.

## OSD Menu

### HOTEL MODE

press ▲ ▼ to select Hotel Mode and press OK button and enter the code by the number buttons to enter HOTEL MODE menu(the original password is 0000).



Hotel Mode: Press ▲ ▼ to select Hotel Mode and press ◀▶ to select the ON or OFF.

### Source Lock:

press ▲ ▼ to select Source Lock and press ◀▶ to enter Source Lock then press ▲ ▼ to select the source and press ◀▶ to select the ON for prohibiting any external input.



Default Source: if "Hotel Mode "set to on , select the default source when turn on the TV.

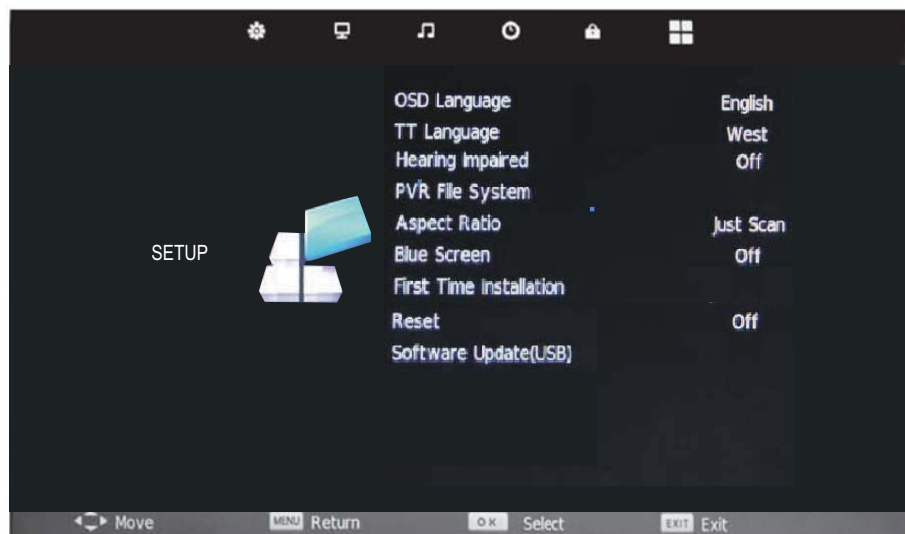
Default Prog: if "Hotel Mode " set to on and "Default Source" set to ATV , select the default programme when turn on the TV.

MAX Volume: You can choose the maximum volume limit, the user cannot set a volume level higher.

# OSD Menu

---

## 6. SETUP menu



### Description

---

**OSD Language:** Allows you to select menu language.

**TT Language:** Allows you to select teletext language.

**Hearing Impaired:** Turn on/off the Hearing Impaired function.

**PVR File System:** Setup the PVR file system.

Note: The options PVR File System are described on pages.

**Aspect Ratio:** Choose from 4:3, 16:9, Zoom1, Zoom2.

**Blue Screen:** Turn on/off the blue screen function when there's no signal.

**First Time Installation:** Display the First Time Installation menu.

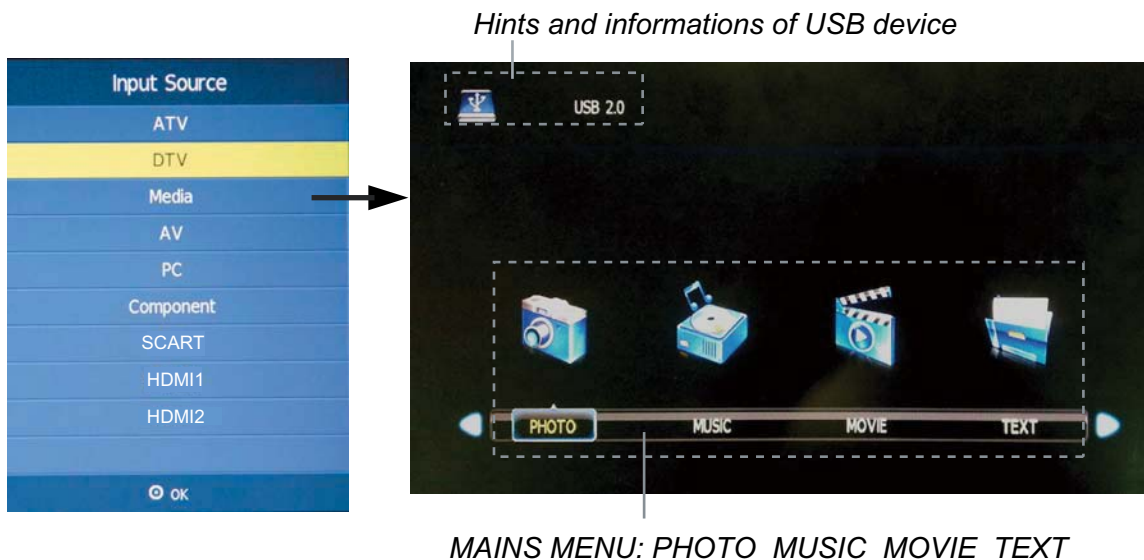
**Reset:** Press **OK** button to restore factory default.

**Software update(USB):** Allows you to update the software from the USB.

# Multimedia Operation

## Basic Operation

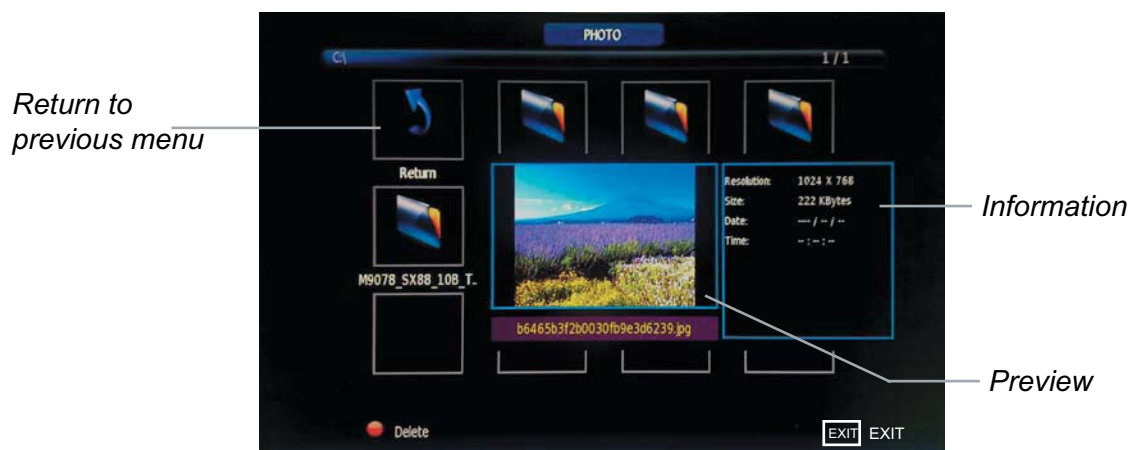
1). Press the INPUT button on the remote control to display the input source menu, select Media source by the </> buttons, and press OK button to enter the Multimedia menu seen below.



2). Select the file type (mains menu) you want to view, and insert USB device, you will find the name of the device display on the screen.



3). Press </> button to select the the USB device, and press OK button to enter.



Press </> / ^ / v buttons to select and the OK button to activate the file or open folder. Press **OK** button to play the files in full screen mode. When in full screen mode press the **OK** button to show the option menu on the bottom of the screen or press **■** stop button to return to files. Note: You can press **RED** button on the file to delete the file.

# Multimedia Operation

---

## 1. Photo

Photo viewing



Press < / > button to select the option on the menu, and press **OK** button to change.

**Pause:** Play/pause the photo view.

**Prev./Next:** View the previous/next photo.

**Stop:** Stop the photo view.

**Repeat:** Select the repeat mode from Repeat All, Repeat 1, Repeat None.

**Music:** Play/Pause the music.

**Playlist:** Display the playlist on the screen and play the file by ^ / v button and OK button, you can press ► button to select “CANCEL”, and press OK button to cancel the list displaying.

**Info:** Display the information of the file.

**Rotate:** Rotate the photo clockwise/counterclockwise.

**Zoom Out/In:** Zoom out/in the photo.

**Move View:** Move the photo in Zoom in mode.

---

## 2. Music

Play the music



Press < / > button to select the option on the menu, and press **OK** button to change.

**Pause:** Play/pause the music.

**FB/FF:** Fast backward/fast forward.

**Prev./Next:** Play the previous/next file.

**Stop:** Stop the music.

**Repeat:** Select the repeat mode from Repeat All, Repeat 1, Repeat None.

**Mute:** Mute the sound.

**Playlist:** Display the playlist on the screen and play the file by ^ / v button and OK button, you can press ► button to select “CANCEL”, and press OK button to cancel the list displaying or press the “list” button.

**Info:** Press “INFO” button to display the information of the file.

**Goto Time:** Play the music from the time you set.

# Multimedia Operation

---

## 3. Movie

Play the movie



Press **< / >** button to select the option on the menu, and press **OK** button to change.

**Pause:** Play/pause the music.

**FB/FF:** Fast backward/fast forward.

**Prev./Next:** Play the previous/next file.

**Stop:** Stop the music.

**Repeat:** Select the repeat mode from Repeat All, Repeat 1, Repeat None.

**Set A-B:** Select and play the preferable part of the file by setting A and B at the beginning and end.

Press **OK** button to cancel.

**Playlist:** Display the playlist on the screen.

**Info:** Display the information of the movie.

**Slow Forward:** Play the movies at slow speed, press **▶** button to cancel.

**Step Forward:** Step quickly through the movie by using this option

**Goto Time:** Program the movie form the time you set.

**Zoom out/in:** Zoom out/in the movie screen.

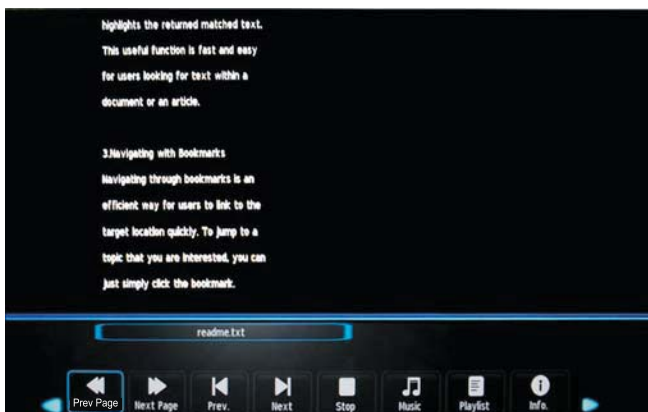
**Aspect Ratio:** Select the aspect ratio of the screen display.

**Move View:** Move the photo in Zoom in mode.

---

## 4. Text

View the text



Press **< / >** button to select the option on the menu, and press **OK** button to change.

**Previous/Next page:** Turn to previous/next page of the text.

**Prev./Next:** Turn to previous/next file.

**Stop:** Stop auto turning pages.

**Music:** Play/pause the music programme.

**Playlist:** Display the playlist on the screen.

**Info:** Display the information of the text.



# Multimedia Operation

## USB MULTIMEDIA PLAYBACK FORMAT

Media	File	Codec		Remark
	Ext.	Video	Audio	
Movie	.mpg	MPEG-1, MPEG-2	MP3, WMA, AAC, AC3	<b>Max Solution:</b> 1920×1080 <b>Max Data Rate:</b> 40 Mbps
	.avi	DivX, Xvid, MJPEG, MPEG-4 SP/ASP, H.264		<b>Max Solution:</b> 1920×1080 <b>Max Data Rate:</b> 20 Mbps
	.ts	MPEG-2, H.264		
	.mov	MPEG-4 SP/ASP, H.264		
	.dat	MPEG-1		
	.mp4	MPEG-4 SP/ASP, H.264		
		MPEG-1, MPEG-2		
	.vob	MPEG-2		<b>Max Solution:</b> 720×576 <b>Max Data Rate:</b> 40 Mbps
Music	.mp3	--	MP3	<b>Sample Rate:</b> 8K~48KHz <b>Bit Rate:</b> 32K~320Kbps <b>Channel:</b> Mono/Stereo
	.wma	--	WMA	<b>Sample Rate:</b> 16K~48KHz <b>Bit Rate:</b> 32K~442Kbps <b>Channel:</b> Mono/Stereo
	.m4a/ .aac	--	AAC	
Photo	.jpg/	Progressive JPEG		<b>Max Resolution:</b> 1024×768
	.jpeg	Baseline JPEG		<b>Max Resolution:</b> 8192×8192
	.bmp	BMP		<b>Max Resolution:</b> 6500×6500 <b>Pixel Depth:</b> 1/4/8/16/24/32 bpp
	.png	Non-Interlaced		<b>Max Resolution:</b> 3000×3000
		Interlaced		<b>Max Resolution:</b> 1500×1500

**File system:** Hi Speed FS, FAT32, FAT16, NTFS(NTFS compressed file is not supported)

**Note:** Licenses are required for DivX, MPEG, H.264, AC3, MP3, WMA and AAC.

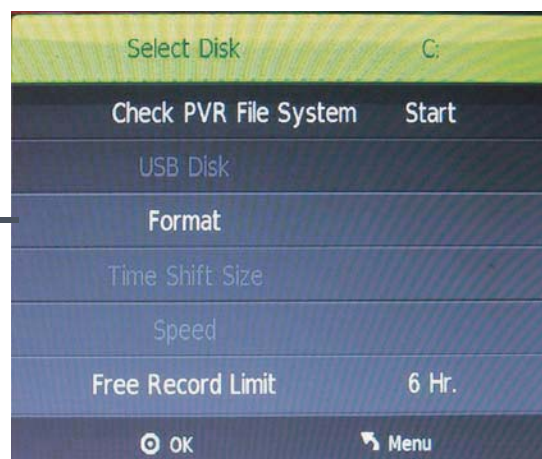
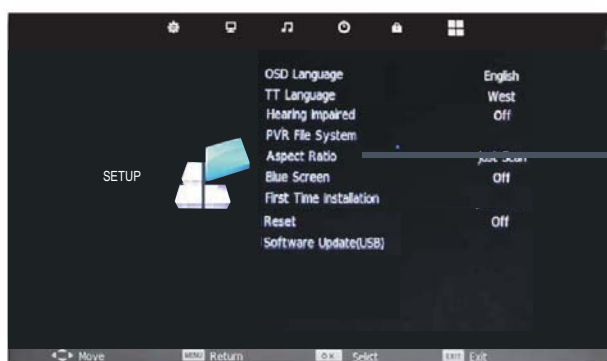


# Recording Operation

## PVR settings

### 1. PVR File System

Press the MENU button, select SETUP menu, and select “PVR File System”, then press OK button to enter the setting menu.



**Select Disk:** Select the device for the Record files.

**Check PVR File System:** Check the system.

**USB Disk:** Display the USB state.

**Format:** Format the USB device for PVR operating.

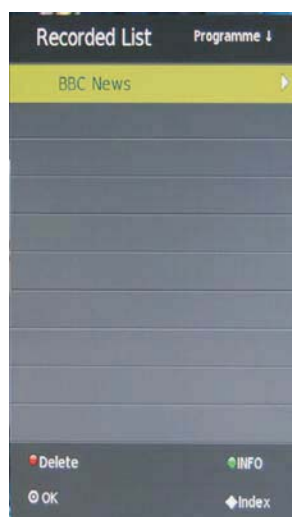
**Time Shift Size:** Display the size of the USB device (The device has been formatted).

**Speed:** Display the speed of the USB device (The device has been formatted).

**Free Record Limit:** Display the Free Record Limit state.

### 2. Recorder

Press **INDEX** button on the remote control to display the recorder menu in DTV mode as below.



Note: You select a recorded programme, and press OK button to program.

Note: You can delete a recorded programme by pressing the **RED** button on the list.

Note: You can display the information of the recorded programme by pressing the **GREEN** button on the list.

# Recording Operation

---

## Recording

### Record and Time shift function buttons

**REC:** Press to start recording.

**|| PAUSE:** Press to enter the timeshift mode.

**■ Stop:** Press to stop recording or timeshift.

**REC:** To display the recorder menu.

### 1) Recording menu

When you press **REC** button in DTV mode, the screen will display the recording menu as below:



- Note:
- a. display and exit the navigation menu by pressing the **REC**.
  - b. Press STOP button to exit the recording mode.
  - c. Press PLAY button to play the programme you are recording from the beginning.

### 2) Timeshift menu

Press **|| PAUSE** button to enter the Timeshift mode in DTV mode, and the picture will be paused, the recording will begin.



- Note:
- a. Press **■ STOP** button to exit the Timeshift mode.
  - b. Press **▶ PLAY** button to play the programme you are recording from the beginning.

## Simple Troubleshooting

---

If the display fails or performance dramatically deteriorates check the Display in accordance with the following instructions. Remember to check the peripherals to pinpoint the source of the failure.

If the display still fails to perform as expected, connect your helpline for assistance.

### **No power**

- Check all connections to the TV.
- Press either the power button or the Standby button on the Remote control.

### **No picture or sound**

- Ensure that the TV is plugged in and the power is on.
- Ensure that the aerial is connected.
- Try a different programme.

### **Poor picture quality**

- Check the aerial connections.
- Check that the channel is tuned in properly.
- Adjust the picture settings: brightness, colour, sharpness, contrast, hue.
- Make sure that the TV is not located close to electrical appliances that may emit radio frequency interference.

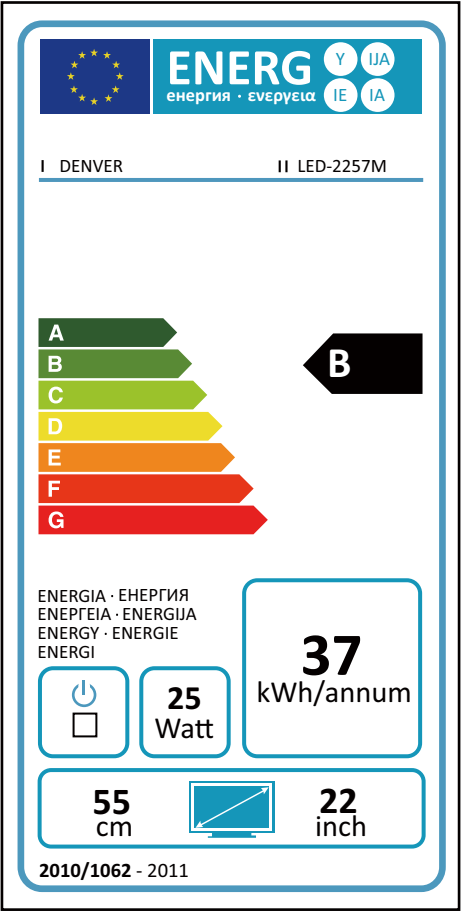
### **No colour**

- Adjust the colour setting.
- Check that the programme is broadcast in colour.
- Check that the channel is tuned properly.

### **TV does not respond to remote control**

- Check that there are no obstructions between the remote control and the unit.
- Check that the remote control is within range of the unit.
- Check that the batteries in the remote control are not weak or exhausted.

This TV is for household use and registered as harmless on electromagnetic waves. Therefore, you can use it in every location as well as residential areas.



Electric and electronic equipment and included batteries contains materials, components and substances that can be hazardous to your health and the environment, if the waste material (discarded electric and electronic equipment and batteries) is not handled correctly.

Electric and electronic equipment and batteries is marked with the crossed out trash can symbol, seen below. This symbol signifies that electric and electronic equipment and batteries should not be disposed of with other household waste, but should be disposed of separately.

As the end user it is important that you submit your used batteries to the appropriate and designated facility. In this manner you make sure that the batteries are recycled in accordance with legislature and will not harm the environment.

All cities have established collection points, where electric and electronic equipment and batteries can either be submitted free of charge at recycling stations and other collection sites, or be collected from the households. Additional information is available at the technical department of your city.



ALL RIGHTS RESERVED

COPY RIGHT DENVER ELECTRONICS A/S



[www.denver-electronics.com](http://www.denver-electronics.com)

Inter Sales A/S  
Stavneragervej 22  
8250 Egaa  
Denmark