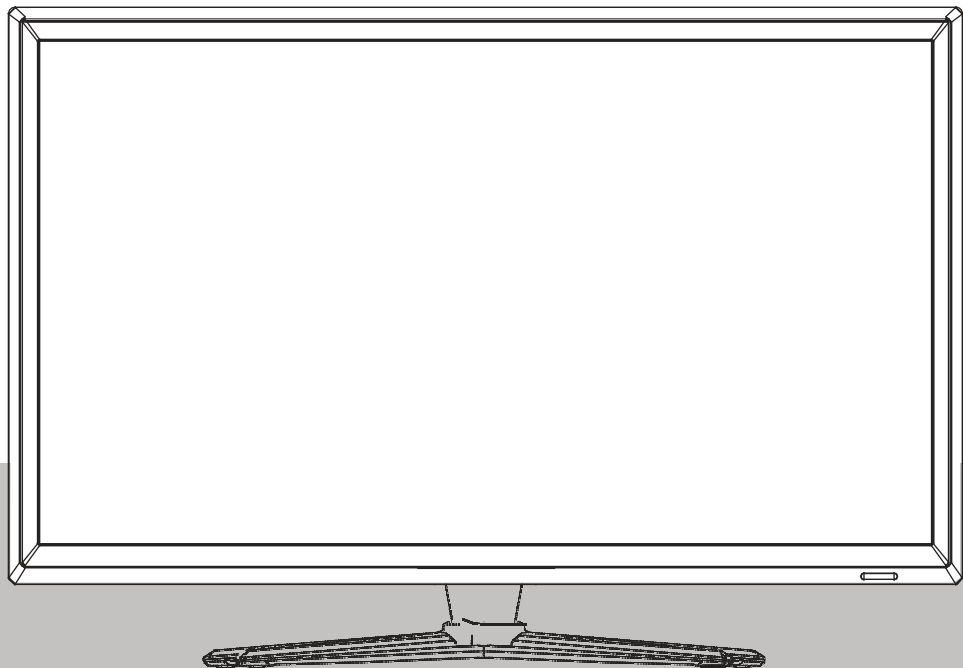


Lenco

INSTRUCTION MANUAL

61cm (24") FULL HD LED TV with DVB-T/-C/-S2 & CI+ Slot
Model No.: LED-2419 BLACK



Please read and follow these instructions before using your unit.

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.

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.

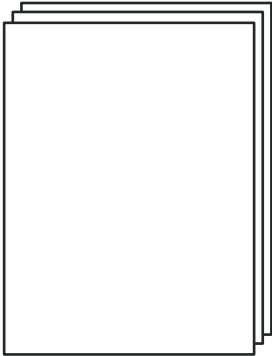
Electrical safety

- 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 the power supply.
 - Do not allow water or moisture to enter the TV . Do NOT use in wet or moist areas such as Bathrooms, steamy kitchens or near swimming pools.
- 3X00 WKH SOXJ RXW LPPHGLDWHOy, 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. 4XDOL¿HG SHUVRQQHO RQO\ DUH SHUPLWWHG WR VHUYLFH WKLV apparatus.
 - To avoid battery leakage, remove exhausted batteries from the remote control handset, or when not using for along period.
 - Do NOT EUHDN RSHQ RU WKURZ H[KDXVWHG EDWWHULHV RQ D ¿UH.

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



Batteries
for Remote
Control



Converter cable for
AV and YPbPr video



Mains adapter

* 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	23.6 inch(diagonal)
- Resolution	1920x1080
- Aerial input	75 Ω (unbalanced)
- Audio output power	2x3W
- Power Consumption	12V = 3A 36W

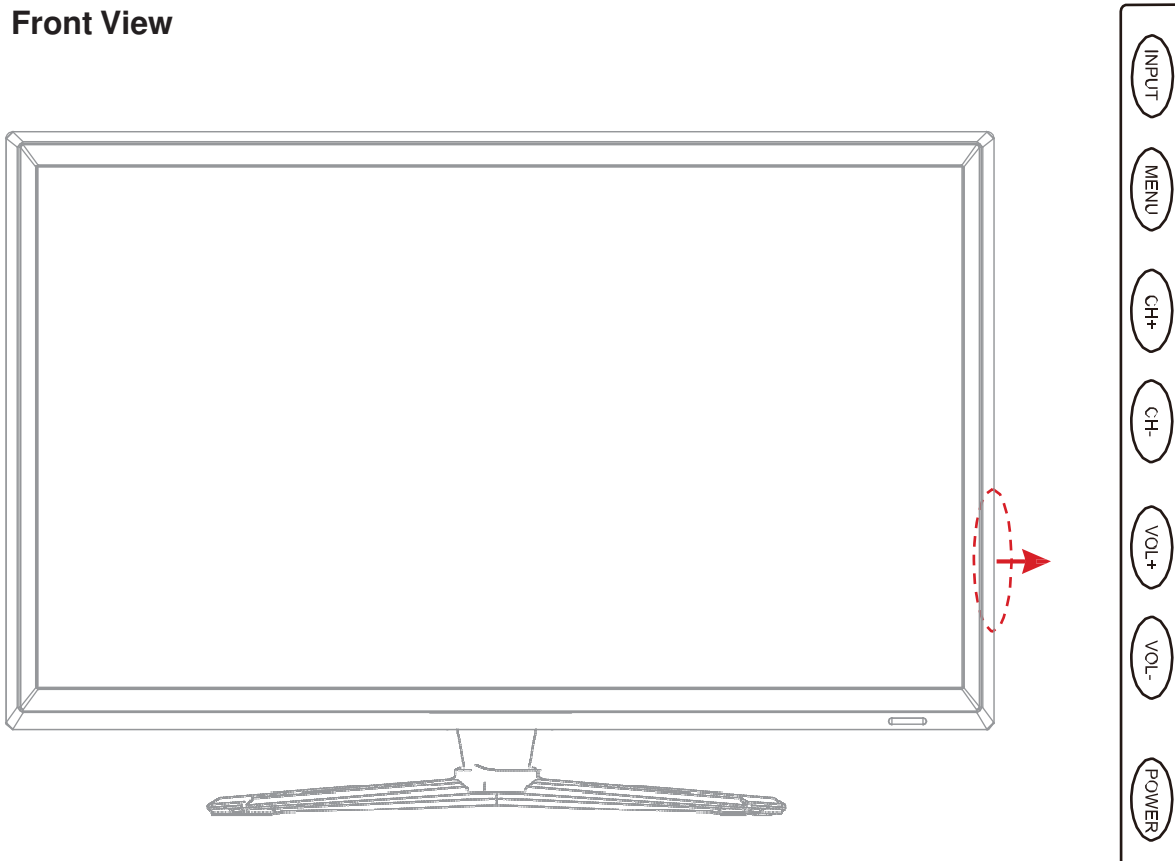
Remote Control

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(Blue)
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.

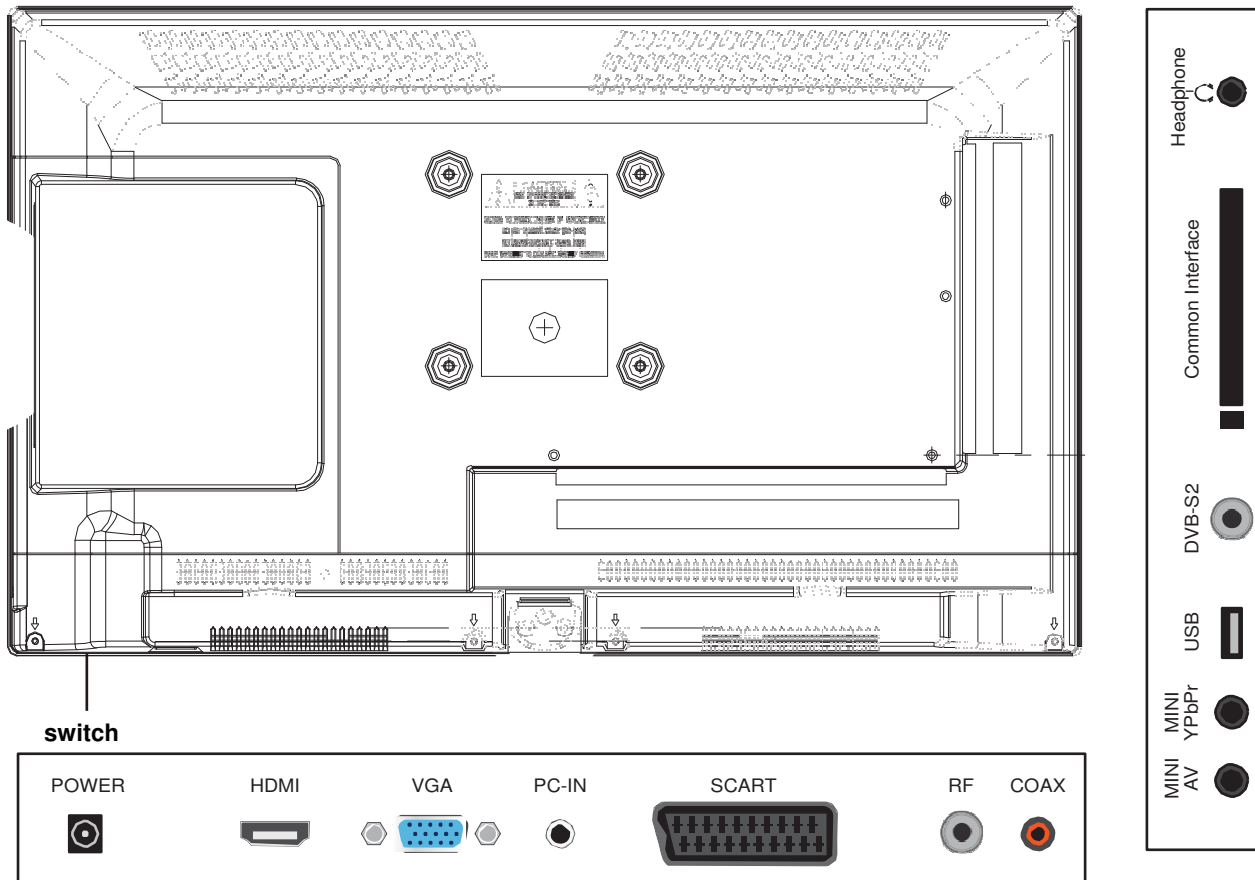
MENU: Press to display the OSD menu, press again to exit the menu.

CH+/-: Press to scan through channels.

VOL+/-: Press to adjust the volume.

POWER: Turn on/standby the TV set.

Connections



Switch: Switch on/off the power supply.

POWER: Connect to the mains adaptor.

HDMI: Connect it to the HDMI of DVD or other equipment.

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

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

SCART: Connect them to the SCART video output terminal of DVD.

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

Coax: Digital output to AV receiver.

MINI AV: Connect it to the audio & video output terminal of DVD with the Converter cable.
(Audio terminals are shared with YPbPr)

MINI YPbPr: Connect it to the YPbPr video output terminal of DVD with the Converter cable.

USB: Connect to USB device for multimedia

DVB-S2: Connect a Satellite signal.

Common Interface: CI slot.

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

Remote Control

● Functions of remote control buttons

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



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

PICTURE: Select the picture mode.

SOUND: Select the sound mode.

ASPECT: Change the screen display mode.

SLEEP: Standby timer.

CH.LIST: Display the channel list.

FAV: Display the favorite program list.

TV/RADIO: Switch to TV/RADIO.

INPUT: Press to display the input source menu.

MENU: System setup menu.

EXIT: Exit the OSD menu.

CURSOR KEYS (▲/▼/◀/▶/OK)

Allows you to navigate the on-screen menus and adjust the

NUMBERBUTTONS

Press 0-9 to select a TV channel directly when you are watching TV.



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

Remote Control



VOL+/-: Adjust the volume.

CH▲/▼: Scan through channels.

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

REC . LIST: Record List.

▶|| : Play/Pause program.

■ : Stop program.

◀◀ : Fast reverse.

▶▶ : Fast forward.

◀◀ : Previous chapter.

▶▶ : Next chapter.

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

CANCEL: Cancel the Teletext display.

REVEAL: Reveal any hidden text.

NICAM/A2: TV Nicam/A2 select.

INDEX: Go to index.

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.

Colour buttons: Short cuts-follow the coloured links in the text

Basic Operation

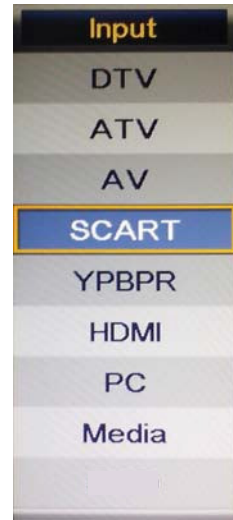
Power on/off

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

Input Source select

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



Basic OSD Menu operation

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

Use **^/∇** button to select the main menu, and press **> / OK** button to enter the submenu. In the submenu, use **^/∇** button to select the function item, press **> / OK** button to enter the setup menu, then press **</>** button to adjust, or press **^/∇** to select and press **OK / </>** button to confirm.

- * (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. Picture menu



Description

Picture Mode: Select your desired picture mode from Dynamic, Standard, Mild and User.

Brightness: Adjust image black level.

Contrast: Adjust image contrast.

Sharpness: Adjust the sharpness(Gray and invalid in VGA/PC mode).

Colour: Adjust image colour from black and white.

Tint: Control the tint (NTSC mode only).

Colour Temp.: Select an optimum color temperature mode to suit your eyes for viewing from Warm, Cool, Standard.

Aspect Ratio: Change the aspect for the screen from 4:3,16:9,Zoom1,Zoom2 or Panorama etc.... **Noise Reduction:** If the broadcast signal received is weak, you can select the Noise Reduction option to reduce the video noise level between Off, Low, Middle and High.

OSD Menu

2. Sound menu



Description

Sound Mode: Select your desired sound mode from Standard, Movie, Music, Speech and User.

Bass: Adjust the level of the lower-pitched sounds.

Treble: Adjust the level of the higherpitched sounds.

Balance: Adjust the audio output between left and right speakers.

Surround: Turn on/off the surround sound function.

Auto Volume Level (AVL): The volumes of all sources will be maintained when the function's on.

SPDIF: Select the spdif mode for the TV from off, PCM and Auto.

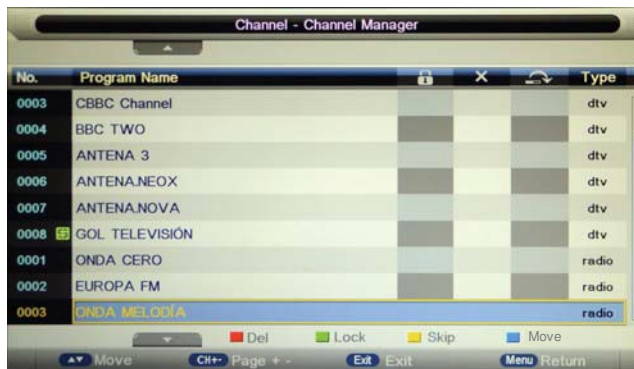
OSD Menu

3. Channel menu(In ATV/DTV mode)



Description

Channel Management: Enter the Channel management menu to edit the channels.



Delete: Press **RED** button to sign the channels you want to delete, it will hint you when you exit.

Lock:User must set the “Lock enable”(Feature-Lock- Lock enable) at ON to active this function.

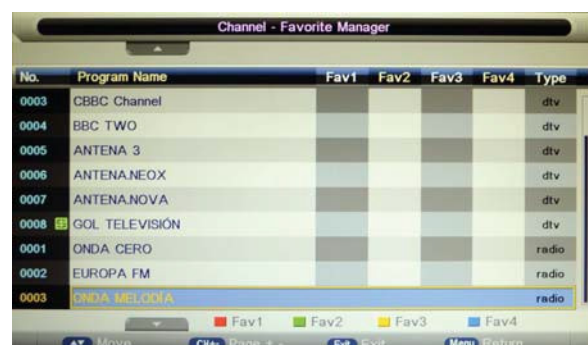
Press **GREEN** button to sign(lock) or cancel(unlock) the channel. And you have to enter the password to view the program.

Skip: Press **YELLOW** button to skip the channel or cancel the setting, and the program will not be programmed by CH+/- button.

Move: Press **BLUE** button to sign the channel, press \wedge/\vee button to move, and press OK button to move the position.

Favorite Management: Add or remove favourite channels by the colour buttons.

Up to 4 favourite lists are available, RED-Fav1, GREEN-Fav2, YELLOW-Fav3, BLUE-Fav4.



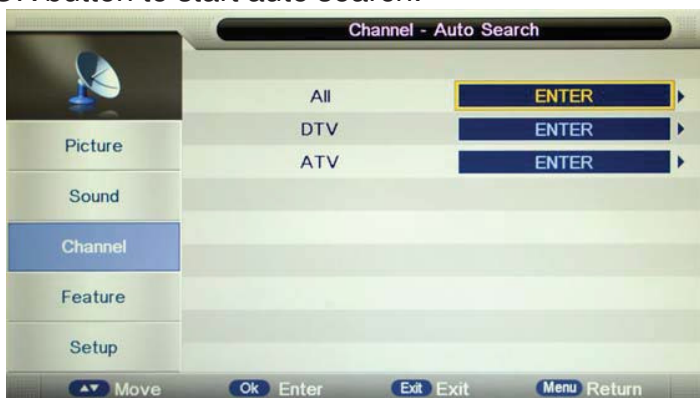
OSD Menu

Country : Select the country.

TV Connection : Select DTV type, you can choose Air(DVB-T), Cable(DVB-C), Satellite(DVB-S2), as you like.

When the Child Lock is on, please enter the Password (Lock Password in Feature menu) to start Auto and Manual Search.

Auto Search : Press OK button to enter the Auto Search menu, select search mode, and press OK button to start auto search.



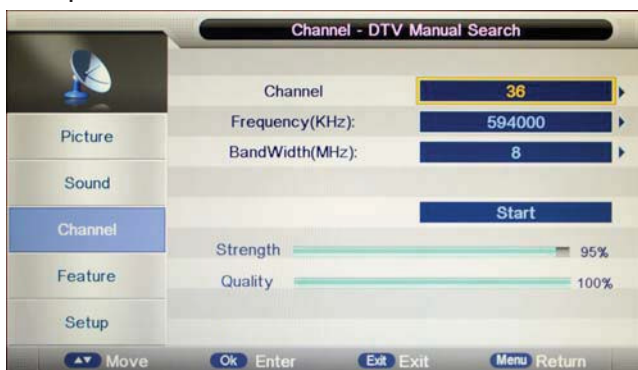
Note:

1. ALL: Auto search channels for DTV, ATV and Radio.
DTV: Auto search channels for DTV and radio.
ATV: Auto search channels for ATV.

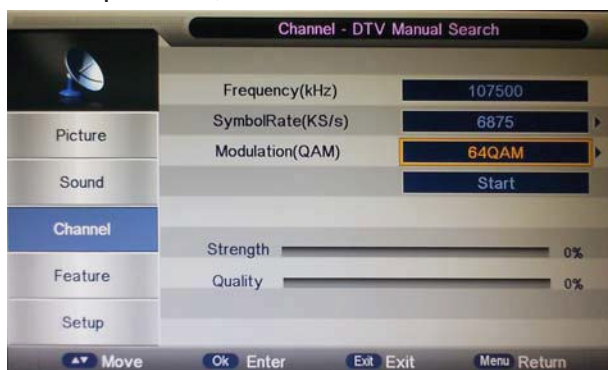
2. When the TV is auto tuning, you could press MENU button to stop auto tuning and return to preview menu.

DTV Manual Search : Enter the DTV Manual Search menu.

Press \wedge / \vee button to select the "Channel" item, and press \lt / \gt button to select the channel, then press \wedge / \vee button to select the "Start" item, and press \lt / \gt button to manual search.

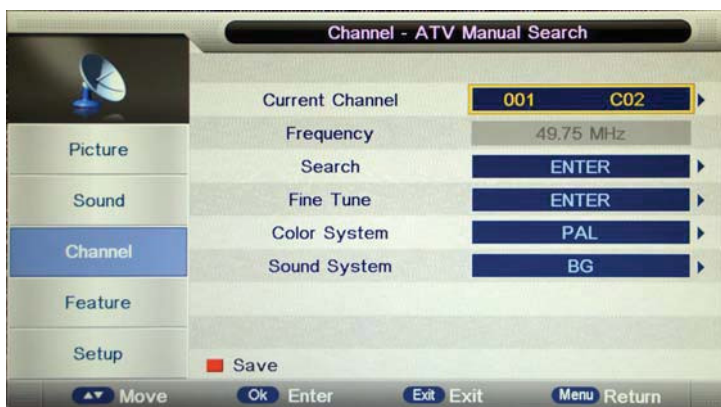


DVB-T



DVB-C

ATV Manual Search : Enter the ATV Manual Search menu.



Current Channel : Select the current channel for manual searching.

Search : Press OK button to enter the search menu, and manual search the frequency by \lt / \gt button.

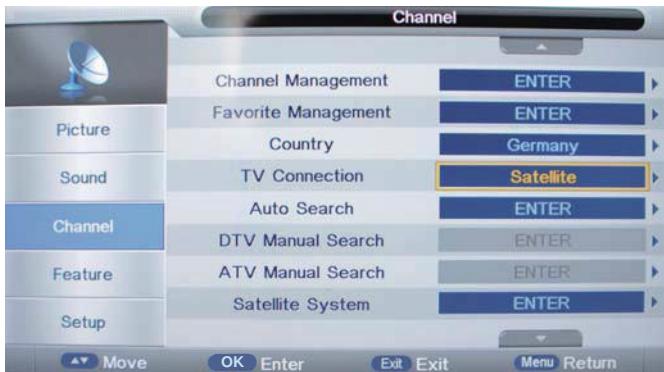
Fine Tune : Press OK button to enter the Fine tune menu, and fine tune the frequency by \lt / \gt button.

Color/Sound System : Select the Color/Sound system for the program.

OSD Menu

Satellite System

Press \wedge / \vee button to select the “TV Connection”, and set it on “Satellite”.



Select “Auto Search” as follow:



Operations in satellite Auto Search menu are shown in the following table

Option	Value
Mode	Default, Network Search, Full Search
Satellite	65 satellite for searching (3 user edit satellite)
Service Type	All Services, Free Service
Channel Type	All, TV Only

OSD Menu

Satellite System

Press \wedge / \vee button to select the “TV Connection”, and set it on “Satellite”.



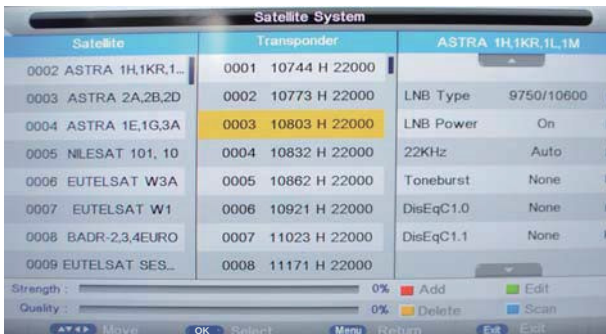
Press \wedge / \vee button to select the “Satellite System”, show as follow:

Operations in Satellite List Menu are shown in the following table:



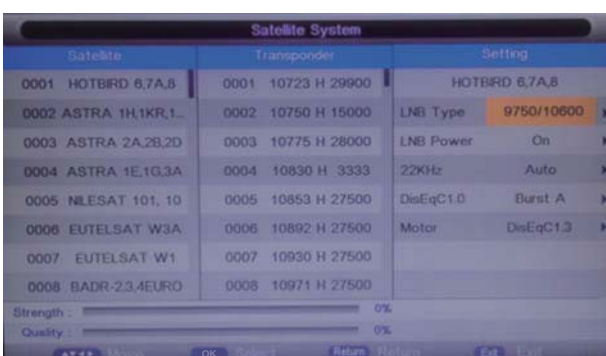
Key Stroke	Action
KEY_UP	use cursor to up
KEY_DOWN	use cursor to down
KEY_LEFT	switch operation to satellite system parameters setting list
KEY_RIGHT	switch operation to Transponder list
KEY_MENU	Back to Main Menu.
KEY_EXIT	Exit Main Menu.
KEY_GREEN	Enter satellite edit menu

Operations in Transponder List Menu are shown in the following table:



Key Stroke	Action
KEY_UP	use cursor to up
KEY_DOWN	use cursor to down
KEY_LEFT	switch operation to Satellite list
KEY_RIGHT	switch operation to satellite system parameters setting list
KEY_ENTER	Select/unselect cursor item Transponder.
KEY_MENU	Back to Satellite list.
KEY_EXIT	Exit Main Menu.
KEY_RED	Enter Transponder Add menu
KEY_GREEN	Enter Transponder Edit menu
KEY_YELLOW	Enter Transponder Delete confirm menu
KEY_BLUE	Enter Transponder scan menu

Operations in Setting Menu are shown in the following table:

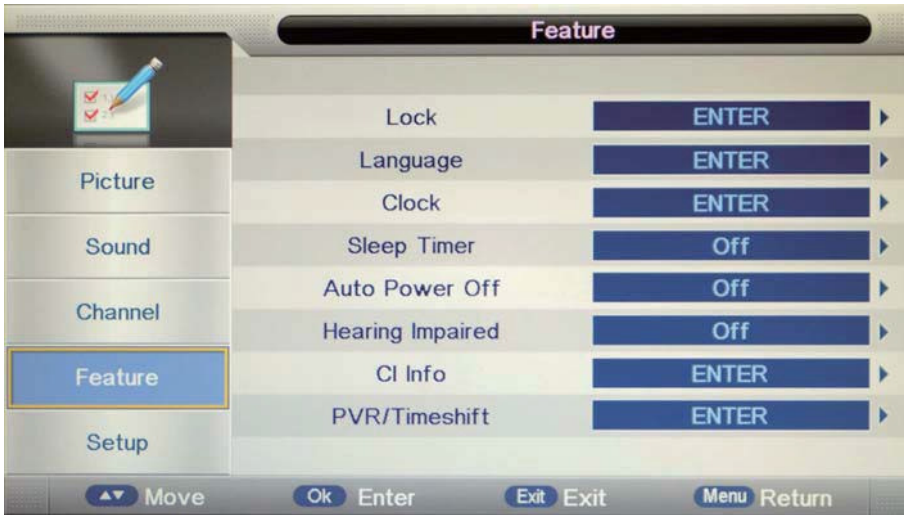


Key Stroke	Action
KEY_UP	use cursor to up
KEY_DOWN	use cursor to down
KEY_MENU	Back to Transponder list.
KEY_EXIT	Exit Main Menu.

Option	Value
LNB Type	9750/10600,9750/10750,05150,05750,09750,10600,10750,11300,11475,User Single,User Dual
LNB Power	On,Off
22KHz	Auto,off,on
DisEqC Mode	Off,LNB1,LNB2,LNB3,LNB4,Burst A,Burst B
Motor	None,DisEqC1.2,DisEqC1.3

OSD Menu

4. Feature menu



Description

Lock: This menu allows you to lock certain features of the television so that they can not be used or viewed. For example if you don't want certain channels viewed by children or if the television is to be used in a hotel and you want certain channels be locked.

When you enter the system lock menu you will be asked for a password. As default it is 0000.



Lock Enable - Turn on/off the Lock functions.

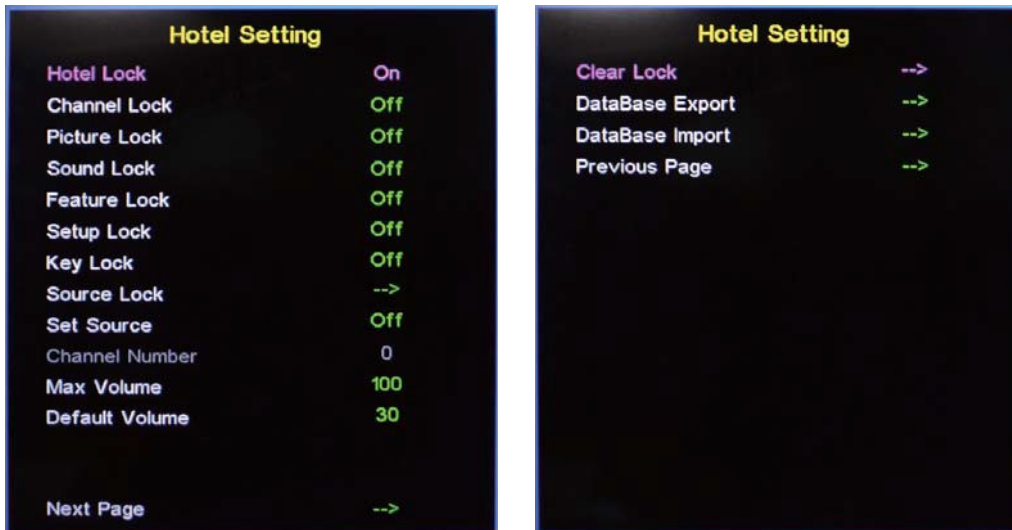
Note: When it is be turned on, the functions of Parental Guidance and Change Pin code below will be locked, and the functions Lock(in Channel Management), Auto Search, DTV Manual Search, ATV manual Search in Channel menu will also be locked.

Parental Guidance - Select the Parental Guidance mode, or turn off the function.

Change Pin Code – Press OK button to enter, first enter the current code, then enter your new code and confirm your new code.

OSD Menu

Hotel Mode - Enter the Hotel Setting menu.



Hotel Lock: Turn on/off the Hotel Lock function.

Channel Lock: Disable the Channel menu in OSD.

Picture Lock: Disable the Picture menu in OSD.

Sound Lock: Disable the Sound menu in OSD.

Feature Lock: Disable the Feature menu in OSD.

Setup Lock: Disable the Setup menu in OSD.

Key Lock: Disable the buttons on the TV set.

Source Lock: Disable the input source you desired.

Set Source: Select the default source when you turn on the TV.

Channel Number: Select the default channel number when you turn on the TV.

Max Volume: Set the Max volume for the TV.

Default Volume: Set the default volume when the program is on.

Clear Lock: Clear all the locks above, it means set all the locks to OFF and max volume to 100.

Database Export: Export all Hotel Settings to the USB device.

Database Import: Import all Hotel Settings from the USB device.

Previous Page: Select Previous Page items, press the ok button to return to the previous page.

Language: Lets you adjust the different language options available.

Clock: Allows you to set the clock (as default the information is taken automatically from the digital signal).

Sleep Timer: Lets you set the sleep timer so the television automatically switches off after a certain amount of time.

Auto Power Off: The TV will switch off itself automatically if no change in status within the time you select. You can choose 1H, 2H, 4H or off.

Hearing Impaired: You can switch on the hearing impaired feature, this provides additional information and subtitles

CI Info: Pay per view services require a "smartcard" to be inserted into the TV.

If you subscribe to a pay per view service the provider will issue you with a 'CAM' and a "smartcard". The CAM can then be inserted into the COMMON INTERFACE PORT (CI Card In).

PVR/Timeshift: Setup menu for recording, please see the Recording Operation section.

OSD Menu

5. SETUP menu



Description

OSD Timer: Lets you adjust the amount of time the On Screen Menu stays on the screen before disappearing.

Auto SCART: The TV will be changed to SCART source automatically when you connect the TV to the SCART device.

PC Setup: Change the PC Settings in PC mode.



Auto Adjust: Setup the parameter of the screen automatically.

H/V-Position: Adjust the transverse/vertical position of the screen.

Phase: Adjust the phase of the ADC sampling clock relative to the sync signal, until a stable image is obtained.

Clock: Adjust the pixel clock frequency, until the image size is maximized for the screen.

Blue Screen: Changes the background when there is no input between clear and a blue background (Only available in some sources).

Home Mode: Press to select from the following home modes: Home, Dynamic.

Reset TV Setting: This clears all the TV settings for the television.

Software Upgrade: From time to time we may release new firmware to improve the running of the television (available to download). This menu lets you upgrade that software onto the television. Further details of how to do this will be issued with the firmware. Contact the helpline or refer to the 'product support' section of the website.

Load Default Database: Import the default satellites and channel, so that the user can watch programs directly.

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 as shown below.

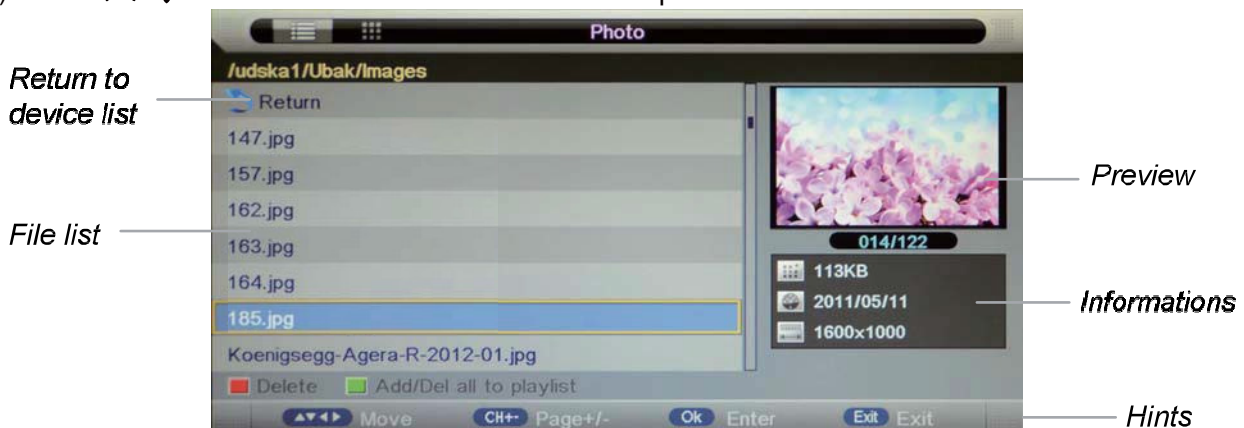


2). Insert USB device, and select the Media mode form Photo, Music, Movie and eBook, then you will find the name of the device display on the screen as shown below.



Hints for operation

3). Press ^ / v button to select the USB device and press OK button to enter the file list as shown below.



Return to device list

File list

Preview

Informations

Hints

Press ^ / v buttons to move (press OK button to select the file or unfold the folder);

Press **RED** button to delete the file; Press **GREEN** button to sign or cancel all the files to playlist;

Press **OK** button to sign or cancel the selected file to playlist.

Press < button to previous menu, Press EXIT button to select the file view type list (<) or thurnbnail (>).

Press Exit again to return to the root MENU.

Then press ► button to program the files (be signed) you select or the files in the fold you select.

Press ■ button to stop and exit the full screen program, please notes the hints on the bottom.

Multimedia Operation

1. Photo

Play the photo



Press ◀/▶ button to select the option on the table, and press **OK** button to change.

Note: You could press OK button to display the option table when it disappears.

▶/|| Play/Pause the photo playing.

■ Stop and exit the full screen program.

◀▶ Play the previous or next file directly.

↻ Rotate the picture(0, 90, 180, 270).

🔍 Zoom in/out the picture, you could move the picture by Cursor left/right/up/down button in Zoom mode.

ⓘ Display the information of the current file.

⚙ Display the photo setup menu, and select the Repeat mode, Background Music, Music Source, Slide Time, Effect.

☰ Display the playing list.

2. Music

Play the music



Press ◀/▶ button to select the option on the table, and press **OK** button to change.

▶/|| Play/Pause the music playing.

■ Stop and exit the music playing.

◀◀▶▶ Play fast backward or forward.

◀▶ Play the previous or next file directly.

⏮ Select the repeat mode for playing music.

📄 Switch the window between "Information" and "Playlist".

☒ Switch off the screen displaying (BLUE button as quick button), and it will be turned on by exepet power button).

Multimedia Operation

3. Movie

Play the movie

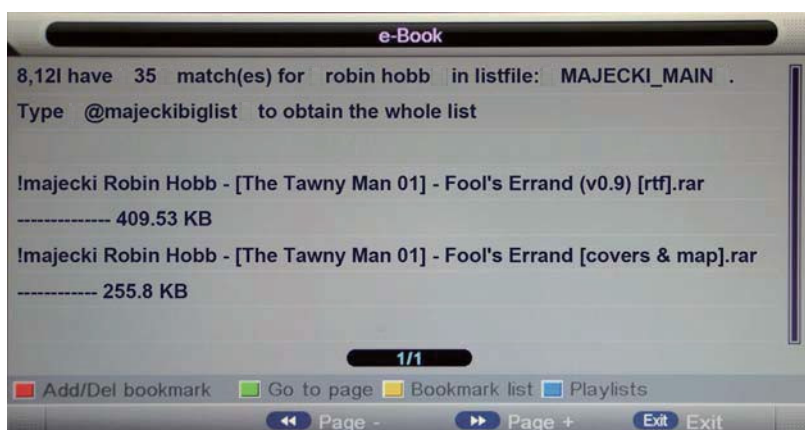


Press ◀/▶ button to select the option on the table, and press **OK** button to change.
Note: You could press OK button to display the option table when it disappears.

- ▶/|| Play/Pause the movie playing.
- Stop and exit the full screen program.
- ◀◀▶▶ Play fast backward or forward.
- ▶ Play the movie in slow mode.
- ▶| Play the movie in step mode.
- ↻ Set the A-B repeat playing mode.
- ◀▶ Play the previous or next file directly.
- ☰ Display the playing list.
- ⓘ Display the information of the current file.
- ⚙ Display the movie setup menu, and setup the Program, Subtitle, Audio, Repeat mode.
- 🕒 Goto mode, Input the time and start playing directly.

4. eBook

Play the text

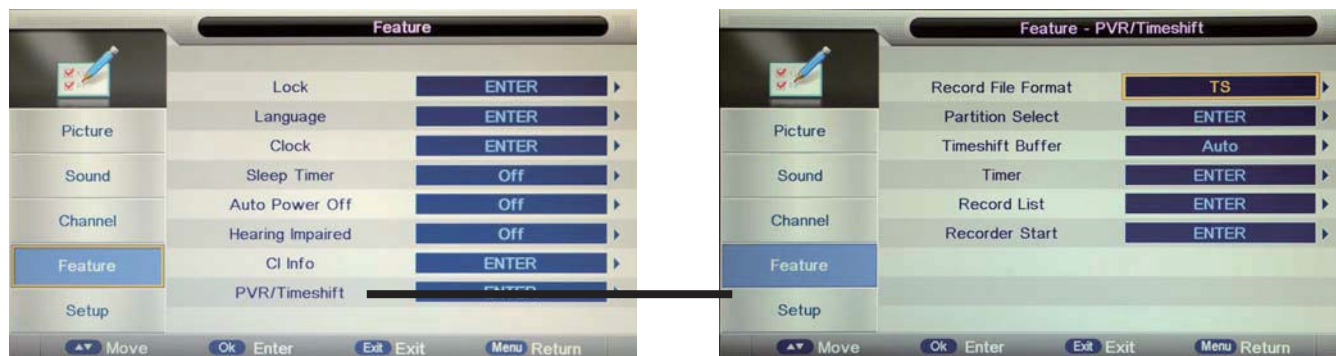


- ◀◀▶▶ Turn to previous/next page of the text.
- RED button:** Add or delete the bookmark.
- GREEN button:** Goto the appoint page.
- YELLOW button:** Display the bookmark list.
- BLUE button:** Display the playlist.

Recording Operation

PVR settings

Press the MENU button select Feature-PVR/Timeshift menu, press OK button to enter the menu as below.



1). Record File Format

Select Record File Format mode from TS and PS for storing in the USB device.

2). Partition Select



USB device informations

Format: Press **RED** button to format the selected USB device.

Set Default Partition: Press **GREEN** button to set the focus partition as the default partition. The recorders are stored in the default partition. It need to be reset if the default partition is full in recording progress.

3). Timeshift Buffer

Set Timeshift Buffer mode: auto, 30Mins, 1hr, 2hr.

4). Timer

Enter the Timer menu to setup the timer recording settings.



Press yellow button to add.



Recorder: Turn on/off the recorder function.

Type: Select the type of the program you want to recording.

Channel: Select the channel you want to recording.

Start Time: Setup the start time for recording the program.

Duration: Setup the duration time for recording.

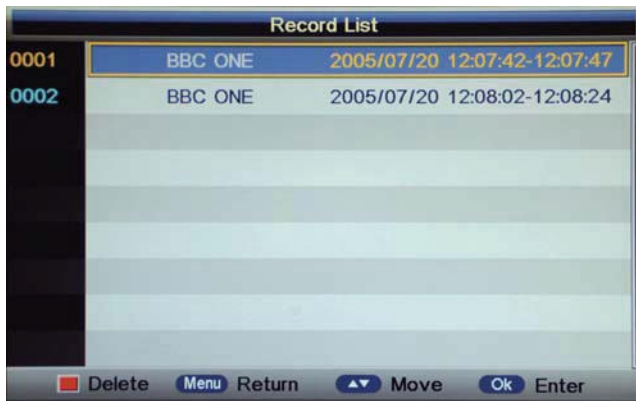
Date: Select the date for recording.

Mode: Select the mode for recording.

Recording Operation

5). Record List

Display the Record list menu.



Delete: Press RED button to delete the selected record plan.

6). Recorder Start

Press **OK** button to start recording, as the function of the **REC** button on the remote control.

Recording Operation

Recording

Press **REC** button on the remote control to start recording in DTV mode, and the TV will give you a hint. Select "OK" item, and press OK to start recording, there will be a sign on the screen.



Note:

- a. Please make sure the USB device is on the TV.
- b. Please make sure the speed and free space of the USB is enough.
- c. Press STOP button to exit the recording mode.
- d. Press Recording list button to display the Recorder list, and you can play the program you selected.
- e. You could also play the Recorded program in Multimedia mode.

Timeshift

Press **▶||** button on the remote control to start timeshift in DTV mode, and the TV will give you a hint. Select "OK" item, and press OK to start timeshift, there will be a sign on the screen, and the screen will be frozen.



Note:

- a. Please make sure the USB device is on the TV.
- b. Please make sure the speed and free space of the USB is enough.
- c. Press STOP button to exit the timeshift mode.
- d. Press PLAY button to play the program you are recording from the beginning, and the timeshift will be going on.
- e. Timeshift time menu on the right top corner shows the fallen time between the current picture and the living broadcasting picture;
- f. During the recording progress, if the signal is missing, the recording process will take a pause until the signal is stable again.



LENCO

LED-2419 BLACK



ENERGIA · ЕНЕРГИЯ
ΕΝΕΡΓΕΙΑ · ENERGIJA
ENERGY · ENERGIE
ENERGI



24
Watt

36
kWh/annum

61
cm



24
inch

2010/1062 - 2011

Service and support

For information: www.lenco.com

For support: <http://lencosupport.zendesk.com>

Lenco helpdesk:

Germany	0900-1520530	(Local charges)
The Netherlands	0900-23553626	(Local charges + 1 ct p/min)
Belgium	02-6200115	(Local charges)
France	03-81484280	

The helpdesk is accessible from Monday till Friday from 9 AM till 6 PM. When contacting Lenco, you will always be asked for the model and serial number of your product. The serial number can be found on the back of the device. Please write down the serial number below:

Model: LED-2419 BLACK

Serial number: _____

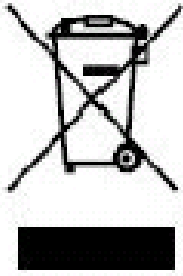
Lenco offers service and warranty in accordance to European law, which means that in case of repairs (both during and after the warranty period) you should contact your local dealer.

Important note: It is not possible to send products that need repairs to Lenco directly.

Important note:

If this unit is opened or accessed by a non-official service center in any way, the warranty expires.

This device is not suitable for professional use. In case of professional use, all warranty obligations of the manufacturer will be voided.



This symbol indicates that the relevant electrical product or battery should not be disposed of as general household waste in Europe. To ensure the correct waste treatment of the product and battery, please dispose them in accordance to any applicable local laws of requirement for disposal of electrical equipment or batteries. In so doing, you will help to conserve natural resources and improve standards of environmental protection in treatment and disposal of electrical waste (Waste Electrical and Electronic Equipment Directive).



Products with the CE marking comply with the EMC Directive (2004/108/EC) and the Low Voltage Directive (2006/95/EC) issued by the Commission of the European Community.

The declaration of conformity may be consulted at
<http://www.lenco.eu/supportfiles/CE/pjkohgtrd415643dff.pdf>

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