

The logo for jalcor, featuring a red dot above the 'j' and the brand name in a stylized, blocky font.



HD-2000

User Manual

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SAFETY INSTRUCTION

IMPORTANT SAFETY INSTRUCTIONS

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.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. The parameter of the using power source should be accordance with which indicating on the rear panel; otherwise the machine will work improperly and even be ruined.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. To prolong the useful life of this machine, the interval of the continuous switch action must be above one minute.
13. Use only the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
14. Unplug this apparatus during lightning storms or when unused for long periods of time.
15. 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.
16. Warning: This unit should only be serviced by an authorized and properly trained technician. Opening the cover or other attempts by the user to service this unit may result in serious injury or death from electrical shock, and may increase the risk of fire.
17. The MAINS plug or an appliance coupler of the apparatus is used as the disconnect device, the disconnect device shall remain readily operable.
18. The signal cable must be earthed to the system.
19. No naked flame sources, such as lighted candles, should be placed on the apparatus.

Note: All the OSD and illustrations in this manual may be somewhat different from the actual situation. Please take the actual RECEIVER as the standard.

WARNING: To reduce the risk of fire or electric shock, do not expose this product to rain or moisture. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus. Refer to the identification/rating label located on the back panel of your product for its proper operating voltage.



This symbol indicates "dangerous voltage" inside the product that present a risk of electric shock or personal injury



This symbol indicates important instructions accompanying the product

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

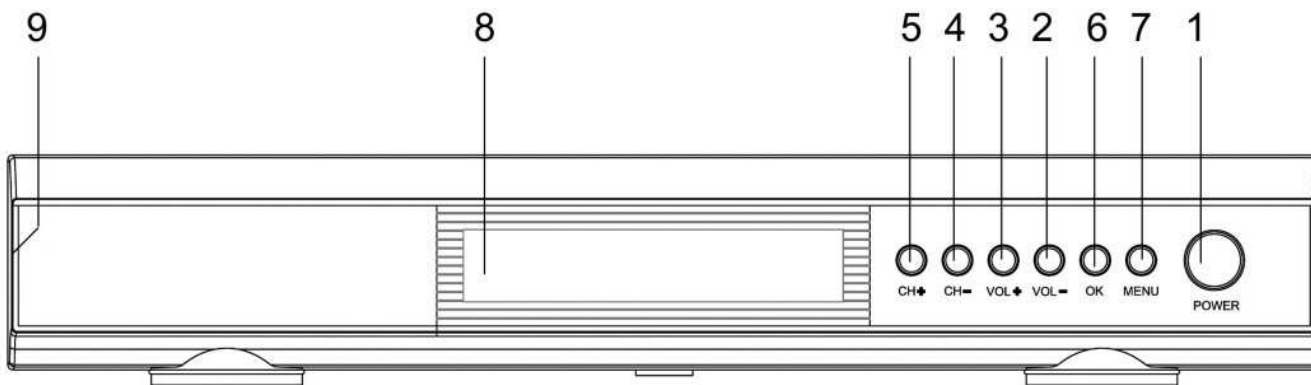
TO REDUCE THE RISK OF ELECTRIC SHOCK

DO NOT REMOVE COVER (OR BACK)

NO USER SERVICEABLE PARTS INSIDE

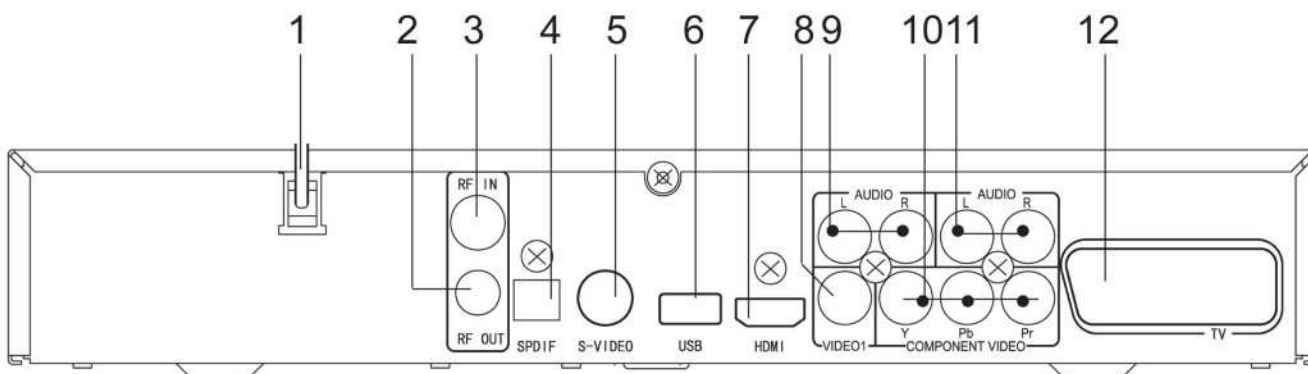
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

FRONT PANEL



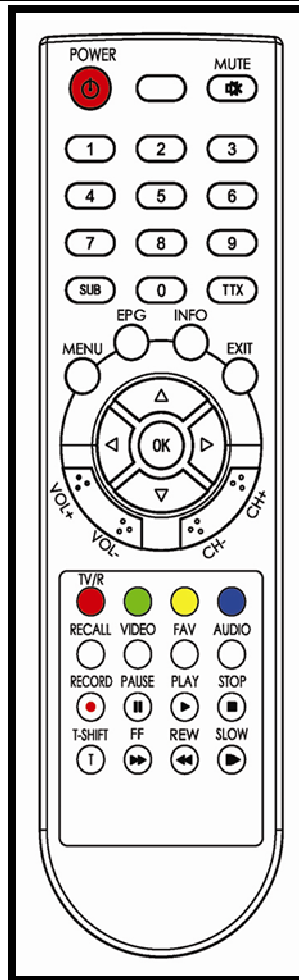
1. POWER switch
2. 3. Volume adjustment/ state alteration
4. 5. Channel up or down/ cursor movement
6. Operation confirmation
7. Menu entry
8. Remote sensor/ status indicator/ displaying board
9. The spot at where to open the lid of mini-door to insert into/ pull off a smart card

REAR PANEL



1. Plughole, power
2. Terminal, RF OUT
3. Terminal, RF IN. link with antenna
4. Interface, SPDIF. Digital optic fiber audio signal output. You can link it with either an amplifier or a TV set with a SPDIF interface as well
5. Interface, S-VIDEO. An interface owns clearer video effect than VIDEO
6. Interface, USB. Use to plug into a USB device for PVR, pic-viewing, mp3-listening or software updating.
7. Interface, HDMI. An interface owns both the audio and the video signal the same time has the clearest video effect
8. Terminal, video signal output
9. Terminal, audio signal output. Link with the corresponding terminals on a TV set
10. Terminal, audio signal output. Link with the corresponding terminals on a TV set
11. Terminals, component video, YPbPr.
12. Interface, TV scart. Video and audio signals share just one cord.

REMOTE






PRECAUTIONS ABOUT BATTERIES

Improper use of batteries may cause corrosion or fluid leakage. Please observe the following instructions for the safe use of batteries.

1. Do not mistake the polarities of batteries
2. Never leave dead batteries in the remote control
3. Remove batteries from the remote controller it is not going to be used for a certain time
4. Do not attempt to disassemble, short-circuit, heat, recharge or throw the batteries into the fire source
5. Do not use new batteries and old one together, or which is different type
6. Wipe away any electrolyte fluid inside the remote controller, and insert new batteries

- MUTE. Mutes the audio
- STANDBY. Enters Standby mode or program-watching state
- FAV. Displays Your Favorites List
- TV/RAD. Non-menu: to switch program mode between TV and radio
- LEFT/RIGHT. Menu mode: select or adjust the parameter value; non-menu, volume adjustment
- UP/DOWN. Menu mode: move the cursor upwards/ downwards; non-menu, channel turning
- EXIT. Return to the previous menu
- MENU. Displays the MAIN MENU
- 0-9. Menu: input the parameter value; non-menu: Select Channel
- SUB. Non-menu: activates Closed Captions/ subtitle
- INFO. Non-menu: displays basic information tape below the screen. Press the key to switch info bar the present and the next time-section, press the OK key to display the brief description.
- EPG. Non-menu: activates the EPG
- RECALL. Non-menu: recalls the previous channel
- AUDIO. Non-menu: displays the Audio Control
- OK. Operation confirmation/ TV CHANNEL LIST
- VOL+/- . volume adjustment
- CH+/- . Non-menu: channel turning
- TTX. Non-menu: get into teletext interface.
- **Green** key. Non-menu: get into TIMER SETTING to establish a timer function.
- VIDEO. Display video parameter options. By using directional key to adjust video effect.

OF PVR COMPONENT

-  RECORD. Non-menu: get into program-recording state
-  SLOW. In playing recorded program or time-shifting. Press the key to slow down program among the speeds of [X1/2-X1/4-X1/8-X1/16-X1/32-normal play]
-  FF. In playing recorded program or time-shifting. Press the key to speed up program among the speeds of [X2-X4-X8-X16-X32-normal play]

- PAUSE. In playing recorded program, time-shifting and recording: freeze/ actuate picture.
- STOP. In playing recorded program, time-shifting and recording program: exit current mode
- PLAY. In playing recorded program or time-shifting: to play normally
- T,T-SHIFT. In watching program, press the key to start timeshift function after a freeze of screen, press the PLAY key to actuate picture.
- REW. In playing recorded program or time-shifting. Press the key to get back program among the speeds of [X2-X4-X8-X16-X32]

PREPARATION OF REMOTE CONTROL

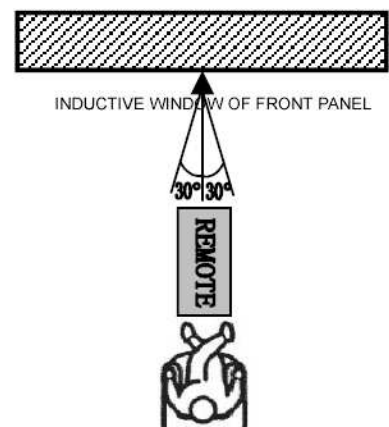
Load the batteries to the groove of the remote control and then enable you to operate the native.

1. Open the lid.
2. Load the batteries and attend whether the anode and cathode of battery are corresponding to the polarity indicated on the remote controller.
3. Close the lid.

OPERATION SCOPE OF THE REMOTE CONTROL

Make the control toward the inductive window of native and then press the keys

1. Distance: about seven meters in front of the inductive window.
2. Angle: about 30 degree right or left refer to the frontispiece of the native's front panel.



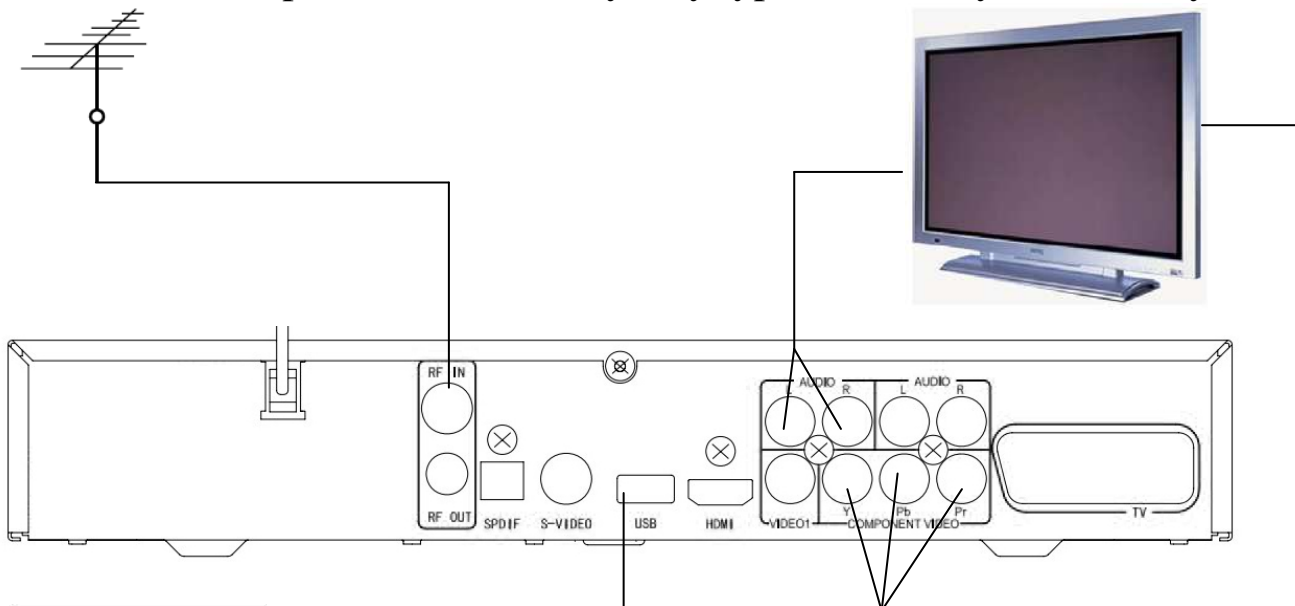
USEFUL TIPS

1. To prolong the useful life of this machine, the interval of the continuous switch action must be above one minute.
2. The parameter of the using power source should be accordance with which indicating on the rear panel; otherwise the machine will work improperly and even be ruined.
3. When the picture that the unexpected non-responsivity happening, please turn on the machine again.

SYSTEM CONNECTION

1. SET UP- YPbPr

For this Set Up use an YPbPr lead (Red, Blue and Green colored) for the video connection and either the red and white connectors of the RCA leads that came with this Set Top Box or an optical cable for the audio connection. All of video output modes are ready, any type is useful synchronically



We do recommend adopting a memory device (a high-speed U disk or a portable HDD) supports interface 2.0. Same the others connection type.

1.1 Prepare your equipment

Make sure that your monitor has YPbPr input.

Ensure that the power leads to both the TV monitor and the Set Top Box are unplugged before you commence the set up procedure.

1.2. Connecting Video and Audio

Video

Connect the YPbPr terminals colored red, blue and green from COMPONENT VIDEO on the receiver to the input on the TV monitor.

Audio

a) Connect the red and white connectors of the RCA lead to the corresponding colored audio output connectors on the rear of the Set Top

Box.

b) Connect the other end of the cable to the corresponding colored connectors on your television monitor.

c) Connect the SPDIF for a better audio environment

1.3. Connect the antenna

Connect the antenna lead to the “RF IN” connection on the rear of the Set Top Box.

1.4. Connect the power

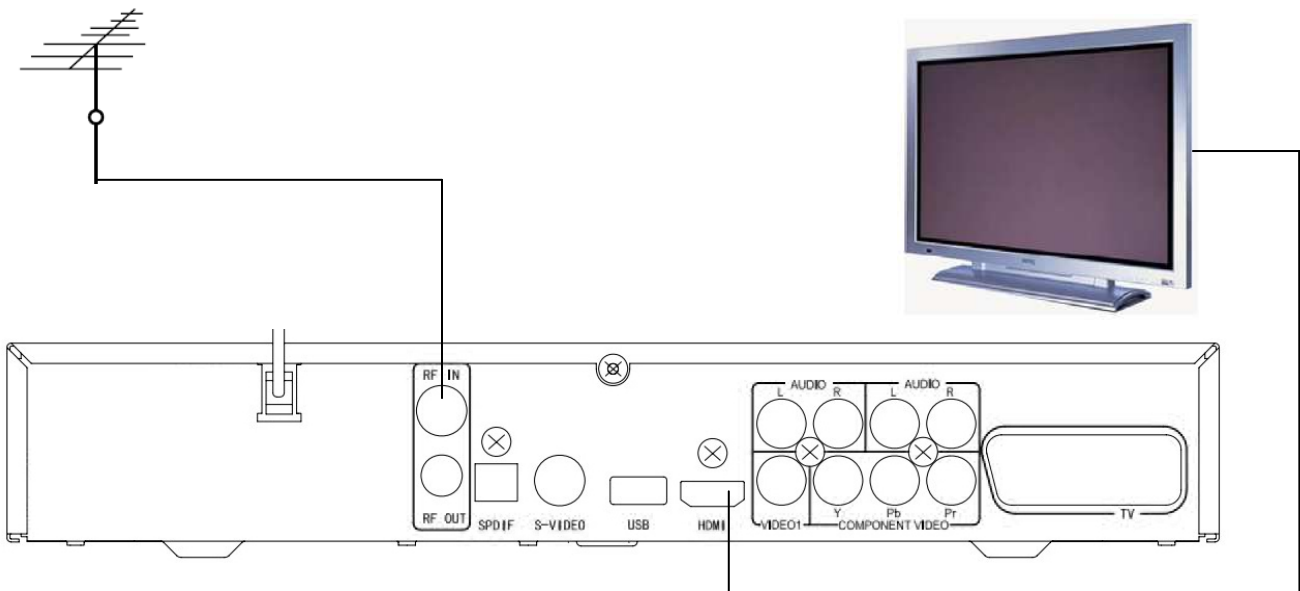
a) Connect the power to your receiver and turn it on,

b) Connect the power to your monitor and turn it on, you are now ready to get started.

2. SET UP-HDMI

For this Set Up just use a HDMI interface for both the video and audio connection.

All of video output modes are ready, any type is useful meanwhile.



Video and audio signal blent

2.1. Prepare your equipment

Make sure that your monitor has HDMI input.

Ensure that the power leads to both the TV monitor and the Set Top Box are unplugged before you commence the set up procedure.

2.2. Connecting Video and Audio

Video

Connect the HDMI cable from the HDMI interface output of the Set Top Box to the HDMI interface input of the TV monitor.

Audio

Do not link any. The video and audio share just one cord

2.3. Connect the antenna

Connect the antenna lead to the “RF IN” connection on the rear of the Set Top Box.

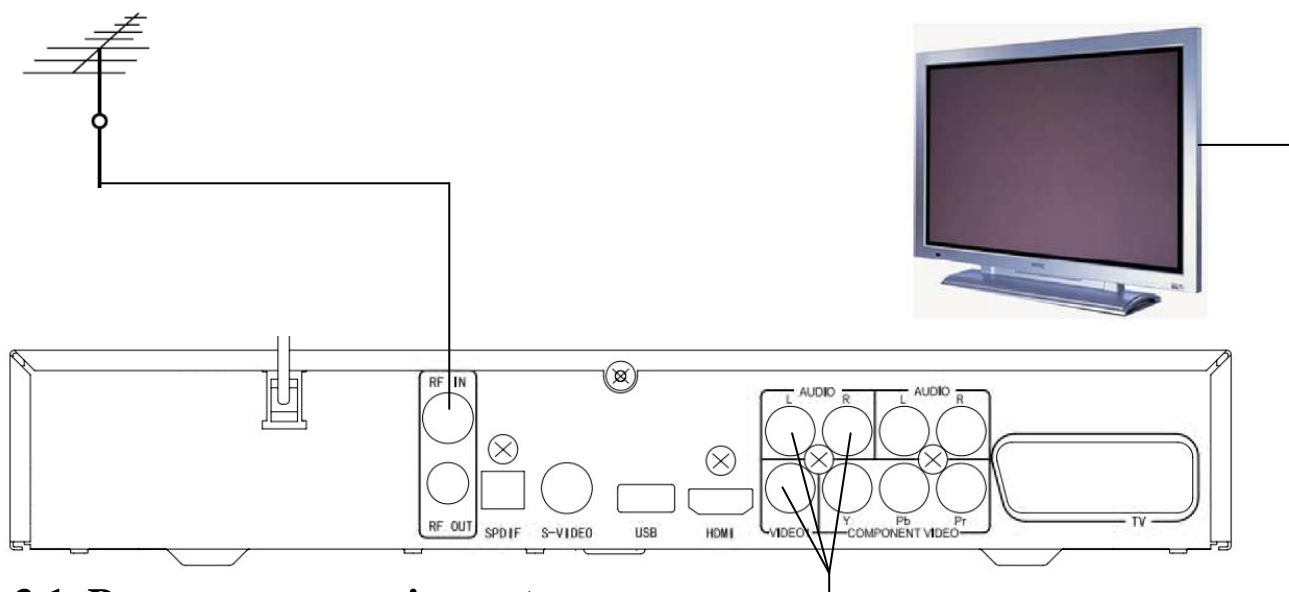
2.4. Connect the power

- Connect the power to your receiver and turn it on,
- Connect the power to your monitor and turn it on, you are now ready to get started.

3. SET UP- CVBS

For this Basic Set Up use a **yellow** CVBS lead for the video connection and either the **red** and white of RCA leads that came with this Set Top Box or an optical cable for the audio connection.

All of video output modes are ready, any type is useful simultaneously.



3.1. Prepare your equipment

Make sure that your monitor has CVBS (**VIDEO**, **AUDIO R**, **AUDIO L**)

input.

Ensure that the power leads to both the TV monitor and the Set Top Box are unplugged before you commence the set up procedure.

3.2. Connecting Video and Audio

Video

Connect the **yellow** RCA cable from the VIDEO output of the Set Top Box to the VIDEO input of the TV monitor. In addition, video part can also use S-VIDEO.

Audio

- a) Connect the **red** and white connectors of the RCA lead to the corresponding colored audio output connectors on the rear of the Set Top Box.
- b) Connect the other end of the cable to the corresponding colored connectors on your television monitor.
- c) Certainly, can use SPDIF audio connection as well as.

3.3. Connect the antenna

Connect the antenna lead to the “RF IN” connection on the rear of the Set Top Box.

3.4. Connect the power

- a) Connect the power to your receiver and turn it on,
- b) Connect the power to your monitor and turn it on, you are now ready to get started.

4. SET UP-TV SCART

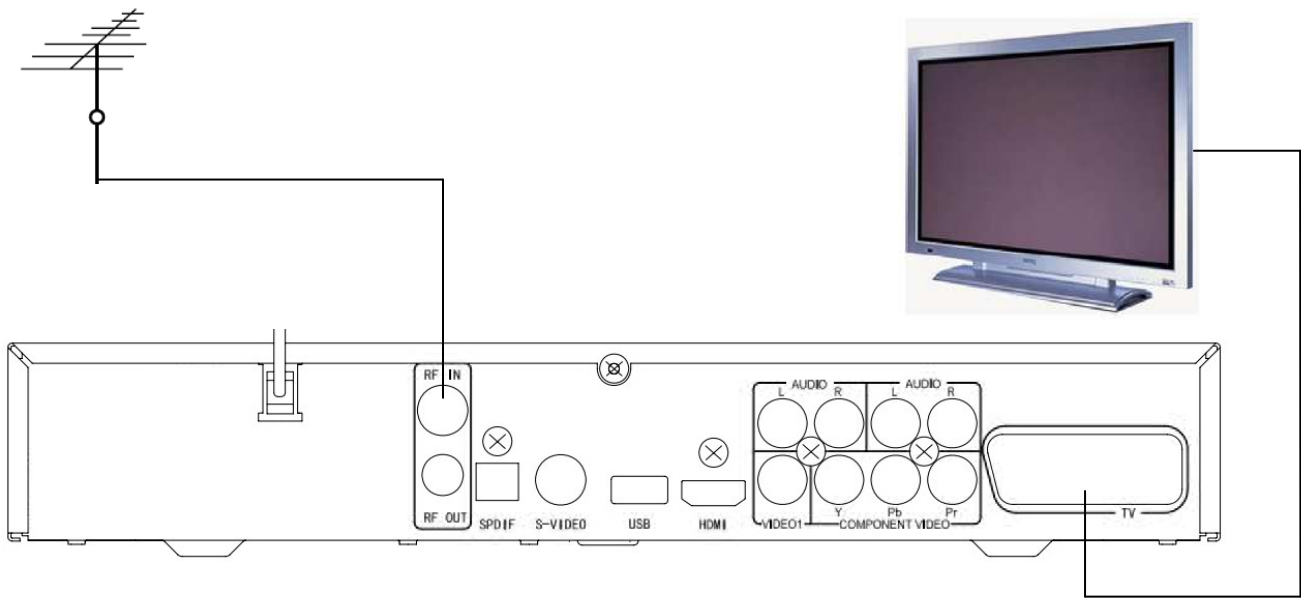
For this Set Up just use a TV SCART interface for both the video and audio connection.

All of video output modes are ready, any type is useful meanwhile.

4.1. Prepare your equipment

Make sure that your monitor has TV SCART input.

Ensure that the power leads to both the TV monitor and the Set Top Box are unplugged before you commence the set up procedure.



Video and audio share one cord

4.2. Connecting Video and Audio

Video

Connect the TV SCART cable from the TV interface output of the Set Top Box to the TV SCART interface input of the TV monitor.

Audio

Do not link any. The video and audio share just one cord

4.3. Connect the antenna

Connect the antenna lead to the “RF IN” connection on the rear of the Set Top Box.

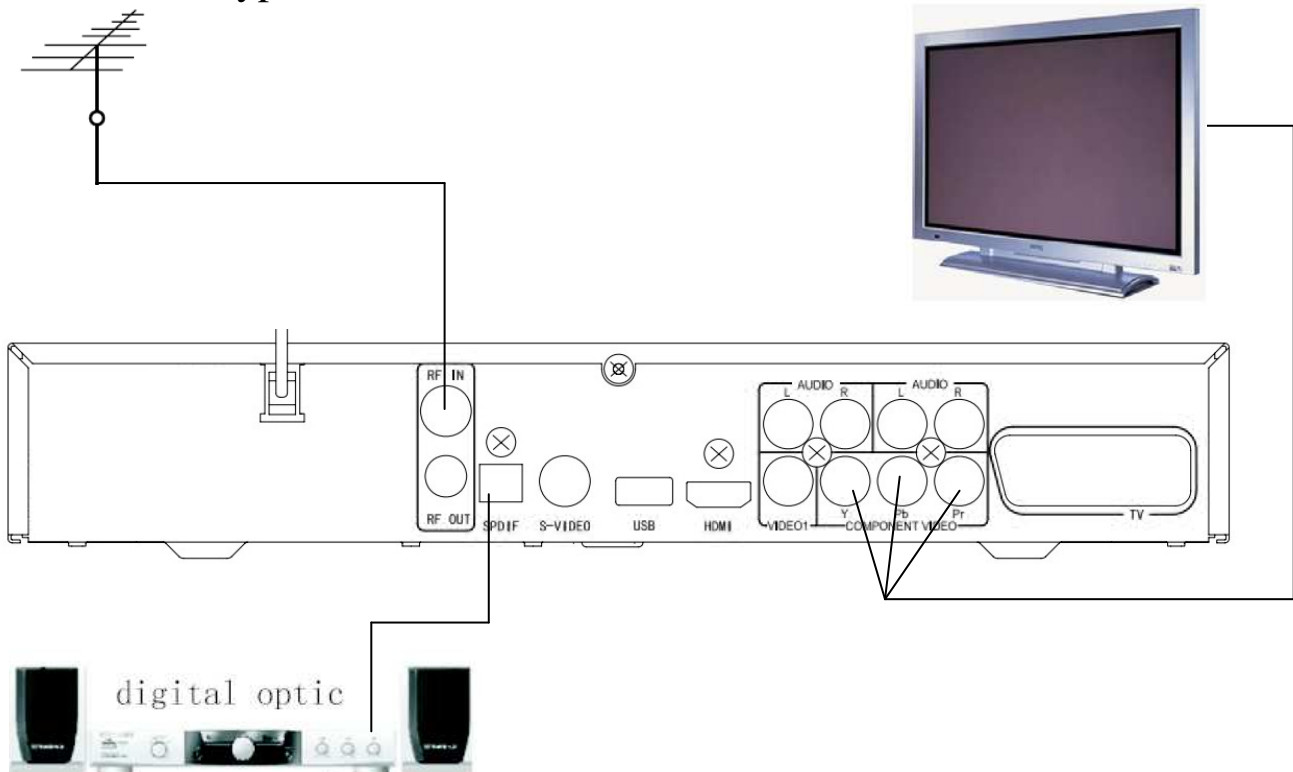
4.4. Connect the power

- a) Connect the power to your receiver and turn it on,
- b) Connect the power to your monitor and turn it on, you are now ready to get started.

5. SET UP- Amplifier, home theater

For this Set Up use your preferred video connection, the example below shows video connection via YPbPr (component), you can use other methods from the previous examples. You will also need an Optical cable for the audio set up.

All of video types are useful meanwhile.



4.1 Prepare your equipment

Make sure that your television monitor has a component input; it may be labeled “YPbPr”, COMPONENT or RGB. In any case it will be characterized by the red, green and blue connectors grouped together.

Ensure that the power leads to both the TV monitor and the Set Top Box are unplugged before you commence the set up procedure.

4.2 Connecting Video and Audio

Video

Follow the instructions for one of the previous video set up examples to suit your system. We do recommend using YPbPr.

Audio

a) Connect the optical cable to the SPDIF connector on the rear of the set top box.

b) Connect the other end of the optical cable to the Amplifier.

4.3 Connect the antenna

Connect the antenna lead to the RF IN connection on the rear of the Set Top Box.

4.4 Connect the power

a) Connect the power to your receiver and turn it on,

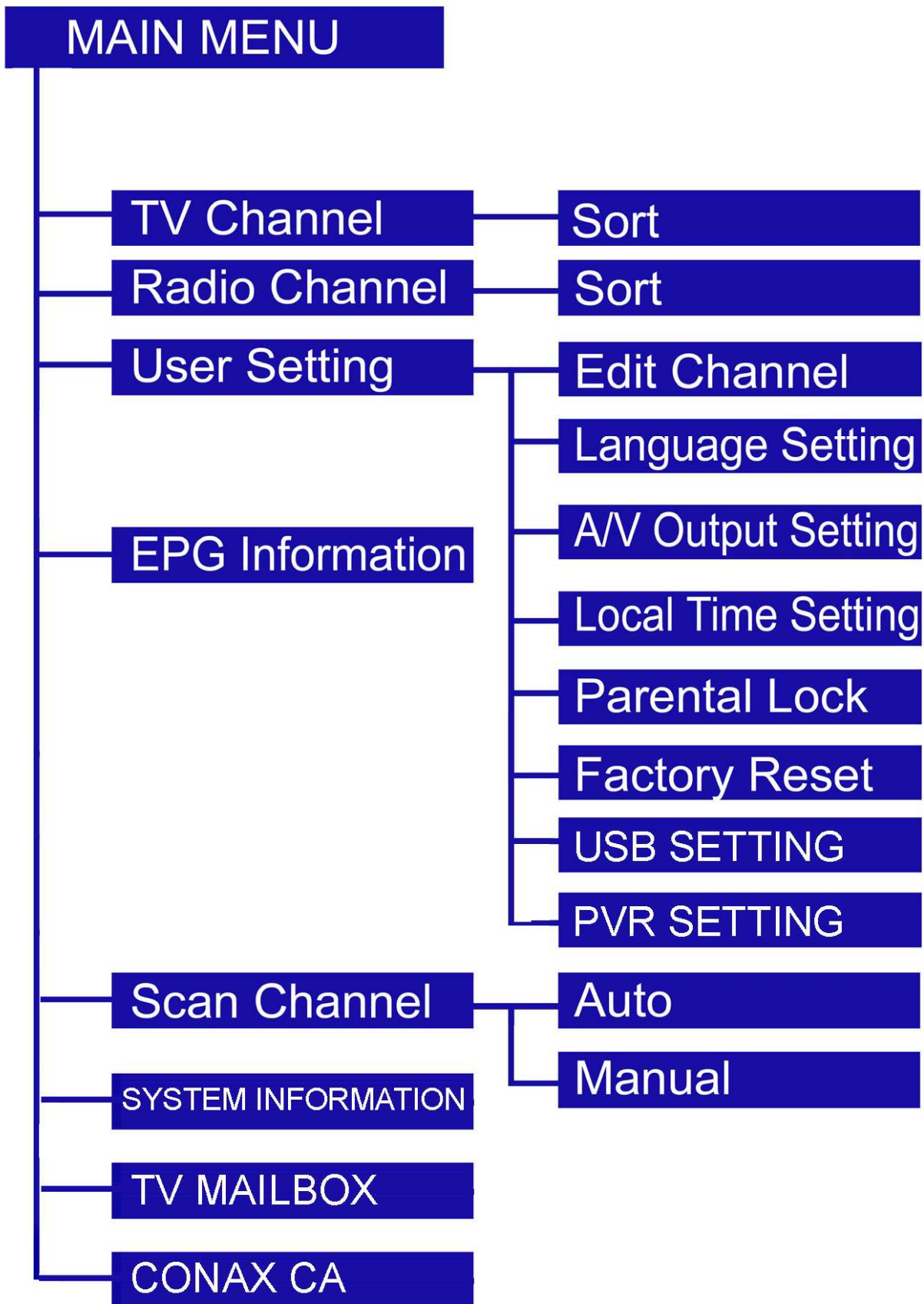
b) Connect the power to your Amplifier and turn it on,

c) Connect the power to your monitor and turn it on, you are now ready to get started.

POWER ON

1. Plug the connector of the receiver into mains.
2. Press the **STANDBY** key on the remote control to the remote receiving panel of the receiver, which enters its standby mode. Re-press the key the unit recovers to its normal.
3. On standby mode, the time when the booked program is coming, the receiver will switch itself into normal mode automatically.

MENU TREE



SCAN CHANNEL

On **MAIN MENU**, drive the cursor onto the tape of **Scan Channel**.

Press the OK key to enter its submenu.

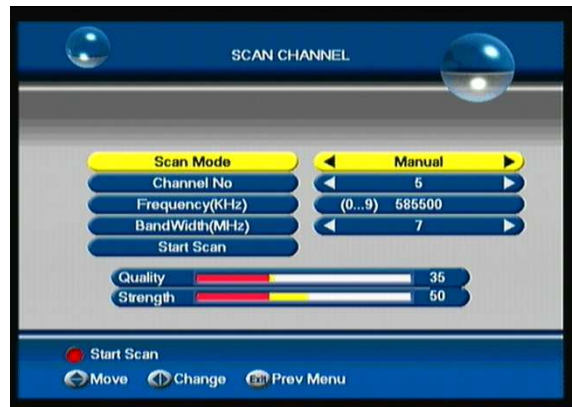
Press the LEFT/RIGHT key to alternate the scan mode between **Auto** and **Manual**.

➤ **AUTO**. When on the mode **Auto**, drive the cursor onto the tape **Start Scan**; press the OK key to commence the scanning, the receiver will deploy the scanning process based on its defaulted setting.

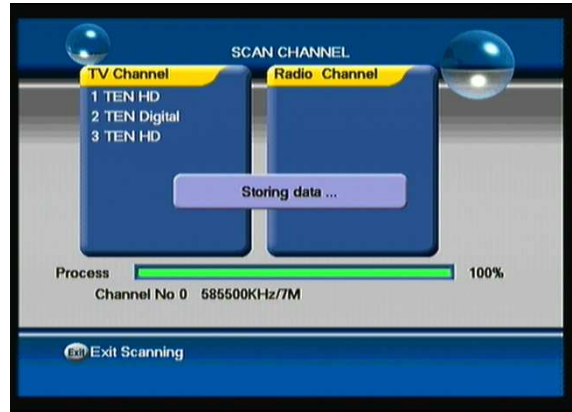
Or, press the **red** key to initiate channel-scanning as well as.

After scanning, the receiver will store its entire scanned channel and give way to channel-enjoying status.

➤ **MANUALLY**. When on the mode **Manual**, drive the cursor onto the tape of **Channel No**, press the LEFT/RIGHT key to switch the sequence of channel till both the tapes of **Quality** and **Strength** show their certain length then move the cursor onto the tape of **Start Scan**, press the OK key to begin the scanning. Alternatively, drive the cursor onto the



tape of **Frequency (KHz)**, press the digit-key to input the value, meanwhile, press the [-] key to eliminate the digit, drive the cursor onto the tape of **BandWidth (MHz)**, press the LEFT/RIGHT key to switch its status between 7 and 8, ensure that both the tapes of **Quality** and **Strength** show their certain length simultaneously, drive the cursor onto the tape of **Start Scan**, press the OK key to start the scanning; or press the **red** key to start scanning also.



As for the accurate value, refer them from the service provider. After scanning, the receiver will store its entire scanned channel and return to the channel-watching status.



USER SETTING

On **MAIN MENU**, drive the cursor onto the tape User Setting; press the OK key to enter its submenu.

➤ **Edit Channel**: enter the menu of **EDIT TV CHANNEL**; press the **red** key to move the cursor one by one to choose instruction. E.g. Entry needs code. Defaulted code is 0000.

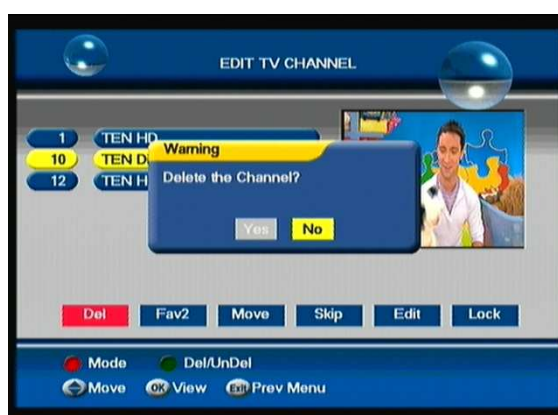


■ **FAVn**: when the cursor stays on **FAVn**, press the **green** key to switch its order, press the directional key to opt for channel, press the **yellow** key to determine and add one mark of heart behind it, and repress the **yellow** on

the marked channel to eliminate the sign. When on the program-enjoying status, press the FAV key to deploy the menu of **FAVORITE CHANNEL**, similarly, press the **red** key to move cursor, correspondingly, the channel within this type of FAV will list on, pitch on one then press the OK key to watch this channel on its non-menu mode.



■ **DEL**: to eliminate the channel you want, after selecting a channel, when the **Del** is reddened, press the **green** key to display a box [Warning], by confirming the [Yes] to delete or the [No] to do without removal.



■ **MOVE**: to move the channel's order to one location you want, after selecting a channel, when the **Move** is reddened, press the **green** key to deepen the selected channel's color, presses the UP/DOWN key to move the channel to a place, re-press the **green** key to restore the channel's color to release position.



■ **SKIP**: to skip over a channel you want on the channel-enjoying mode when switching channel. When the **Skip** is reddened, press the **green** key to add a mark X behind which. Re-press the **green** key to cancel the mark meanwhile release this function.



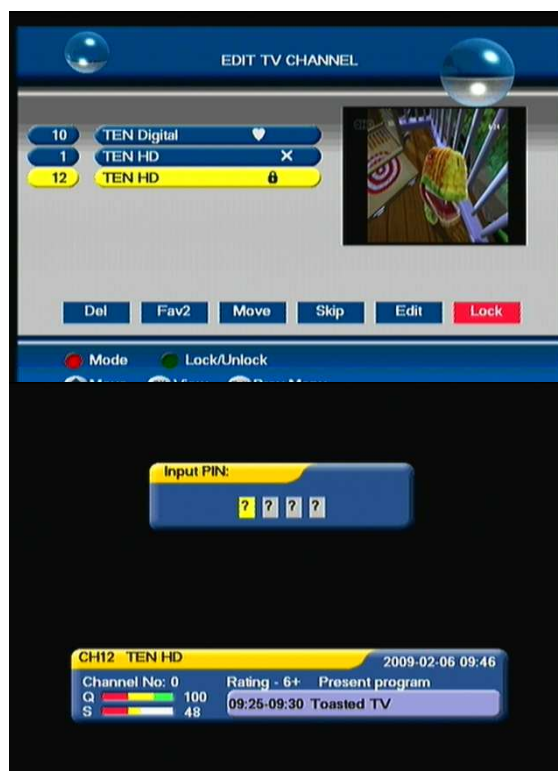
■ **EDIT:** further, to edit the channel particular. When the **red** cursor stays on the instruction **Edit**, Press the directional key to opt for channel, press the **green** key to reveal the dialog box of **Edit Program**: move the cursor onto the instruction **V.PID**, **A.PID**, **PCR.PID**, **TTXT.PID** in turn, press the [-] key and the digit-key to modify its parameter; move the cursor onto the instruction **Name**, press the OK key to reveal the soft-keyboard (usage, press the directional key to move cursor, press the OK key to input character, the function of **CAPS** is used to alter the mode of alphabet between capital and lower case, the function of [←] is used to eliminate letter, the function of **Space** is used to leave blank, the function of **Num** is used to show digit and symbol. Press the OK key on the instruction **Save** to save and instead on the instruction **Cancel** to do without modification) to rename, press the OK key on the instruction OK to save.



■ **Lock:** to lock a selecting channel. After selecting a channel, when the **Lock** is reddened, press the **green** key to add a LOCK sign behind the tape, re-press the **green** key to unlock it.



When you want to enjoy the locked channel on program-watching state, you have to input the code to access.



➤ As for the operation of Edit Radio Channel, same as above-mentioned

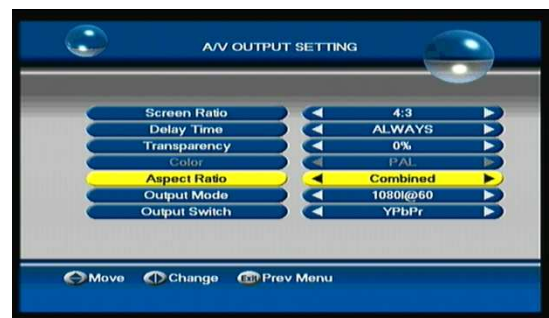
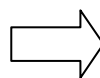
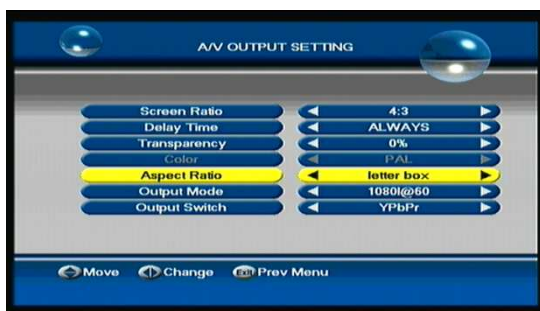
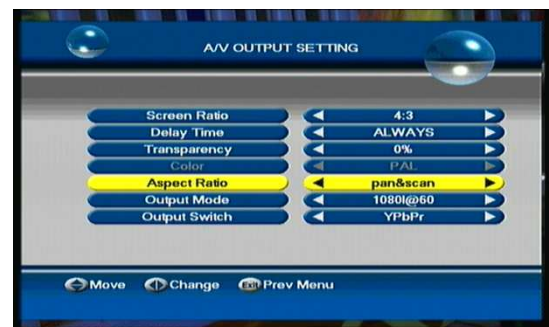
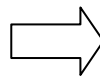
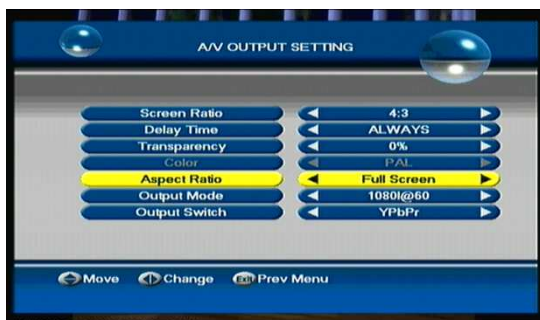
➤ **Language Setting:** after entering the **LANGUAGE SETTING**, Press the **LEFT/RIGHT** key to select menu language. Note, on the instruction **Menu Language**, which category is being opted means that it owns the strongest priority in broadcasting.



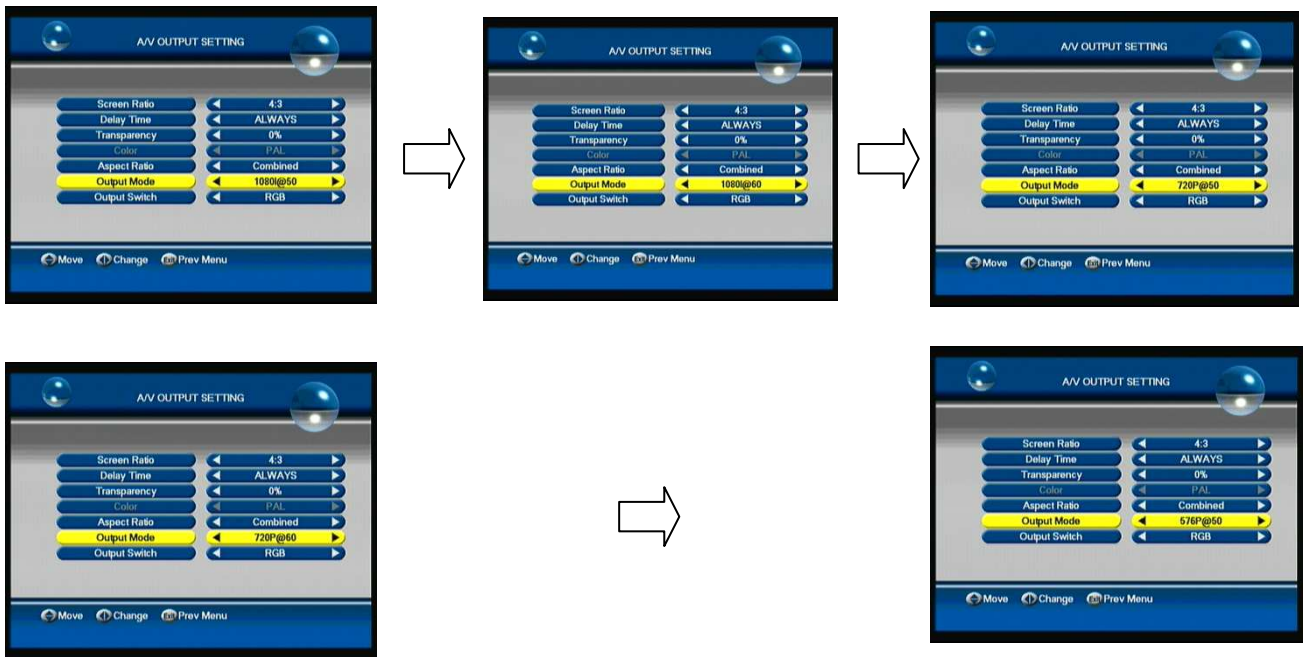
➤ **A/V Output Setting:** after entering the **A/V OUTPUT SETTING**, press the directional key to adjust.



- **Screen Ratio.** Set as 4:3 or 16:9 according to the style of the actual TV.
- **Delay Time.** Set the time length an information tape or a temporary dialog box appears on the screen when turning over channel. **Always** indicates the tape won't disappear until press the **EXIT** key.
- **Transparency.** Set the transparent degree of the menu interface (OSD), 0% indicates the opaque menu.
- **Aspect Ratio.** Set a screen ratio option, to fit your visual effect. Full screen, pan&scan, letter box or combined.



- Output Mode. Press the LEFT/RIGHT key to select HD video mode. 1080I@50, 1080I@60, 720P@50, 720P@60 or 576P@50.



Those above just work on the HD video output. On this receiver embody as HDMI and COMPONENT VIDEO outputs.

- Output Switch. YPbPr and RGB. Use to switch the video output work on COMPONENT VIDEO and TV scart.

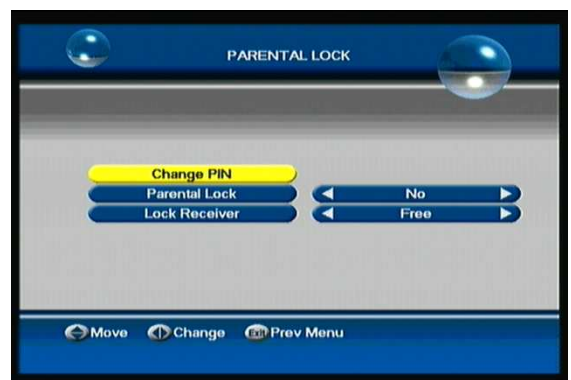
➤ Local Time Setting: after entering the **LOCAL TIME SETTING**, press the LEFT/RIGHT key to switch.

- AUTO. Display time based on the data in the signal.

- ON. Support to adjust manually

➤ Parental Lock: used to limit the operation of this machine. Entry needs code.

To change the code by press the OK key on Change PIN (personal identification number), after entering the current code



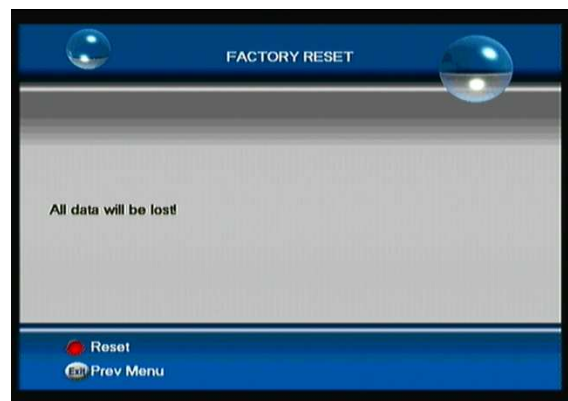
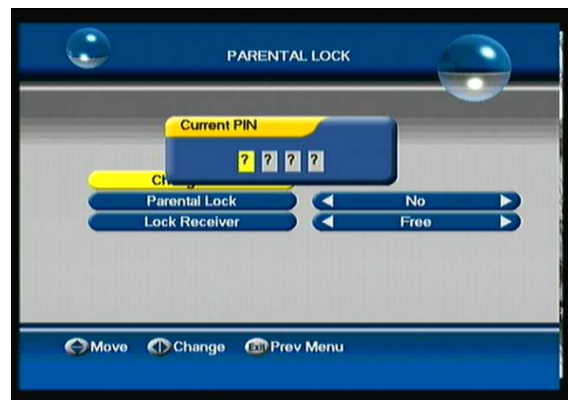
then, input the new one and then, input which to verify, when phrase “PIN changed” appears show that the modification has made. When instruction **Lock Menu** is locked, to reveal menu needs code input

■ Parental Lock. Set limitation class based on age. No, unlimited; ALL, block all.

➤ Factory Reset: use to default the machine. Entry needs code. Use it with caution. For the user’s data will be lost!

➤ USB SETTING. Be sure the USB device has connected with the receiver well.

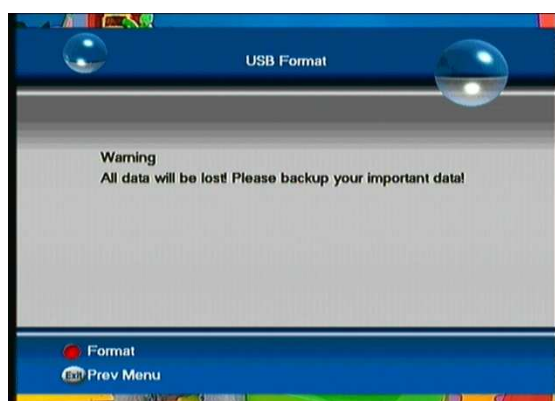
■ Electron Album. Get into this command, press the directional key to opt for image, press the [OK] key to view. In looking image, press the LEFT/RIGHT key to thumb, the UP/DOWN key to zoom, press the [EXIT] key to quite. So far, support formats of GIF, JPEG and BMP.



■ MP3. After entering, press the directional key to opt item, press the [OK]/ to play, press **yellow** key to pause/play, press the **green** key to change playing order among random, circular and order, press the **red** key to display its properties, press the [EXIT] key to quite.



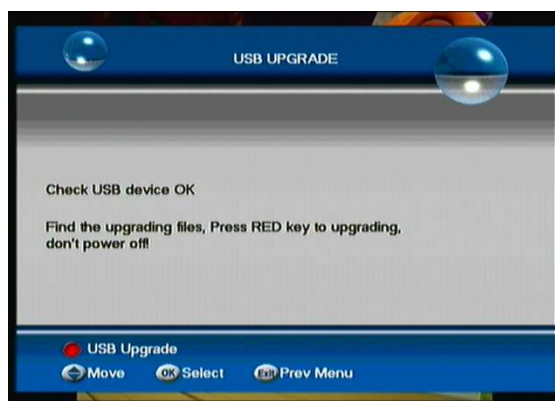
■ USB Format. Use to format the USB device. Do it with caution. Press the **red** key to format.



■ USB Uninstall. Use to uninstall (disconnect) the USB device outside.

■ USB upgrade. Use to upgrade software version of the receiver by USB manner.

Firstly, ensure the USB device is mounted on the receiver well. Get into the menu, if the receiver detects the USB device is ok, and detects the update software is exist in. the interface will show as right side.



At the moment, press the **red** key to initiate update.

Note; excludes power off in the duration of update.

➤ PVR setting

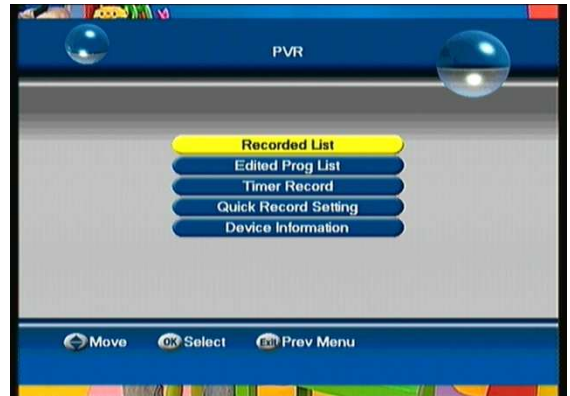
■ User need to a USB device external. It can be initialized at the threshold of program-watching.

■ Given an USB device has been inserted into the receiver, the menu will display [USB Disk has connected!]. The image shows as right side, this

means the USB device has been connected fully. Disconnect the device by using the instruction [USB Uninstall] in **USB SETTING**.



■ Press the [MENU] key to get into [Main Menu], opt for [User setting] instruction and enter, pitch on [PVR Setting] and get into. Image shows as right side.



■ Program-recording. On the state of program-watching, press the key [RECORD] to get under way recording program.



■ During the process of recording, press the key [PAUSE] to still or restore recording, press the key [STOP] to stop with saving. Image shows as right side.

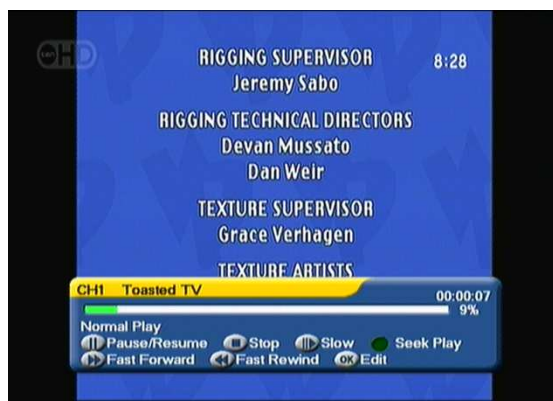
■ Operations about [PVR] instruction. On [Main Menu], select [USER SETTING] then [PVR Setting]; press the [OK] key to get into.

◇ Recorded list. Select the instruction [Recorded List]; press the [OK] key to get into. Image shows as right side.

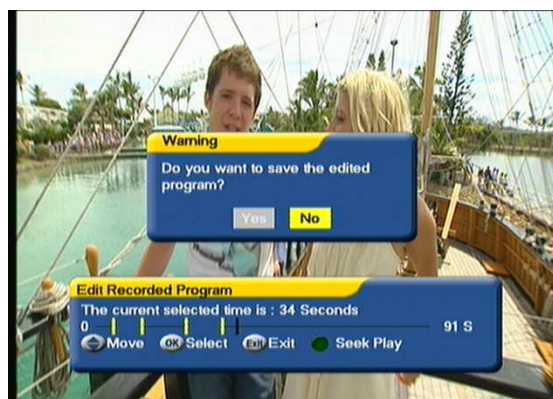


Press the **red** key to delete recorded item, a [warning] dialog box appears, confirm the [Yes] instruction to remove, the [No] to do without change. Press the [OK] key to watch it.

✧ In playing the recorded program, press the [PAUSE] key to still or restore playing, press the [STOP] key to exit, press the [INFO] key to display present relative information, press the [SLOW] key repeatedly to slow down performance at the speed of X1/2, X1/4, X1/8, X1/16, X1/32, press the key [PLAY] to perform normally, press the key [FF] repeatedly to speed up performance at the speed of X2, X4, X8, X16, X32, press the key [PLAY] to perform normally.



✧ In playing recorded program, press the LEFT/RIGHT key to opt for time point, press the [OK] key to confirm point, the section between two points will be skipped over without playing. For example, three points A, B and C, the section between A and B will be skipped over; four points A, B, C and D, the sections between A and B, C and D will be skipped over. Press the [EXIT] key to quit, this moment, a dialog box will display to query whether to save the edited program, after saving the edited; it'll be saved to [Edited Program List].

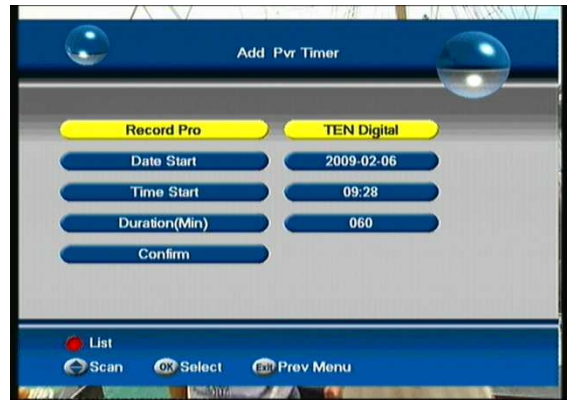


✧ Timer Record. Select [Timer Record]; press the [OK] key to get into.

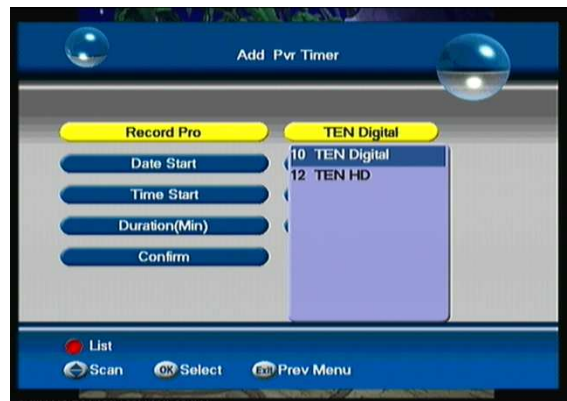
Press the UP/DOWN key to select one the prerecord item.



✚ Press the **green** key to enter [Add Pvr Timer] to add an item to be prerecorded.



Record Pro: move the cursor onto this instruction, press the **red** key to list program list, and press the digit-key and directional key to set **Date Start** and **Time Start** and time length (minute) to be recorded (**Duration**), press the [OK] key on [Confirm] to confirm.



✚ Press the **red** key and the **yellow** key to remove the prerecorded item.

✚ Press the **blue** key get into [Timer Record] interface to edit set.

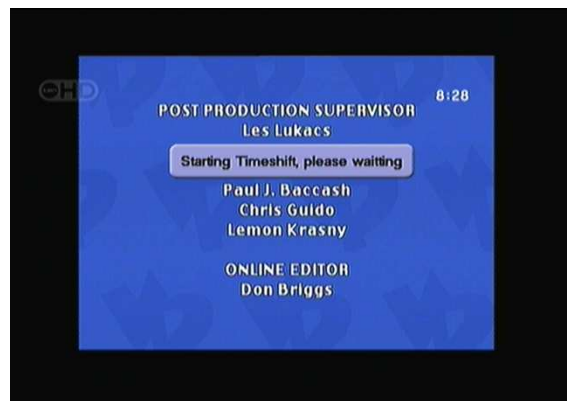
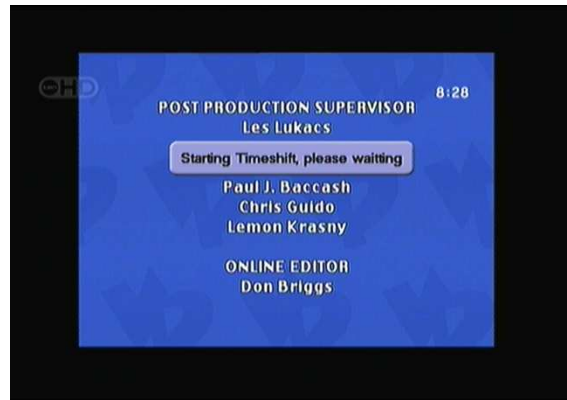
✧ Quick Record Settings: Use for selecting recording time length, the defaulted length is 3 hours. The length indicates the duration of quick recording. Once the [No Limit] is opted for, it means no limited time set, the recording length rest with the storage space.



✧ Edited Prog List. Select [Edited Prog List]; press the [OK] key to get into. Press the **red** key to delete item and [OK] key to play the edited.



■ On the state of program-watching, press the key [T-SHIFT/T] to start time-shifting function, the screen displays helping information bar meanwhile, the live picture come to still. During this process, press the key [PAUSE] repeatedly to pause or restore time-shifting function; press the key [STOP] to terminate shift, press the key [INFO] to display present shifting information, press the [SLOW] key to slow down program under the speed of X1/2 ,X1/4 ,X1/8, X1/16, X1/32, press the key [PLAY] to get into normal speed, press the key [FF] to speed up under the speed of X2, X4, X8, X16, X32, press the key [PLAY] to get into normal, press the [REW] key to get back program under the speed of X2, X4, X8, X16, X32, press the key [PLAY] to get into normal.



■ Device Information. Display relative information of the storage device, Space, for example.

TV CHANNEL

On MAIN MENU, after entering the menu of TV CHANNEL, press the directional key to choose channel, press the OK key to watch it. On the non-menu mode, or, on this menu, press the red key to reveal the dialog box with the sorting types, then, press the UP/DOWN key to opt for a kind to classify.



RADIO CHANNEL

Same operation as TV CHANNEL's

EPG INFORMATION

On MAIN MENU, after highlighting [EPG Information], press the OK key to enter.

As well as, by pressing the EPG key on the program-watching state can get into EPG interface.

On channel column, press the directional key to select one of, press the **red** key to watch it on the small window, press the **yellow** key to deploy brief depiction.

Press the OK key to switch cursor from channel column to program column, press the LEFT/RIGHT key to alternate week, press the UP/DOWN key to opt for one program, press the **yellow** key to deploy brief description. Press the **red** key to display a selection box to reserve the selecting program, press the blue key to get into Timer interface.

- EPG Order. Use to book the program without pre-recording; the receiver will jump to the booked program when the time is up.



- PVR Order. Use to book to a program to be pre-recorded. The receiver will jump to the booked program to record it when the time is up.
- EPG&Standby. Use to book a program without pre-recording; even if the receiver stays its standby mode, it'll be awaked up and turn to the booked program.
- PVR&Standby. Use to book a program with pre-recording; even if the receiver stays its standby mode, it'll be awaked up and turn to the booked program to record it.

SOMETHING ELSE

➤ Audio CTL

■ **AUDIO TRACK**, on program-watching state, press the key [AUDIO] to display a dialog box [Audio CTL], press the UP/DOWN key to pitch on [TRACK], i.e. audio channel, press the key [OK] to enter its submenu, press the UP/DOWN key to select an option among [left, right, stereo, mono], press the key [OK] to confirm, meanwhile, a symbol # will be added before the option.



■ **MULTI-AUDIO**, on program-watching state, press the key [AUDIO] to display a dialog box [Audio CTL], press the key to pitch on [MULAUDIO], press the key [OK] to enter its submenu, press the key to select an option between [type 1 (AC3), type2 (AC3)], press the key [OK] to confirm, meanwhile, a symbol # will be added before the option.



■ **AUDIO FORMAT.** On program-watching state, press the key [AUDIO] to display a dialog box [Audio CTL], press the key to pitch on [AUDIO FORMAT], press the key [OK] to enter its submenu, press the key to select an option between [PCM, COMPRESSED], press the key [OK] to confirm, meanwhile, a symbol # will be added before the option.



➤ **Timer.** On program-watching state, press the green key to get into TIMER SETTING interface.



■ **Timer Index.** Select a timer sequence.

■ **Timer Type.** Indicates the property of the timer. Normal Timer for example.

■ **Timer Repeat.** Select the manner of repetition. Daily for example.

■ **Channel Name.** Use to set the channel to be booked. Press the LEFT/RIGHT key to opt for a channel, or, press the OK key to list the channel to select.



■ **Date Start.** Press the digit-key to input the start date of a timer. YYYY-DD-MM

■ **Time Start.** Press the digit-key to input the start time of a timer. HH:MM

➤ **TELETEXT**

On the program-watching state, punch the TTX key to deploy the interface of graphics context.

The defaulted background is set on



transparent; re-press the TTX key to render the background on opaque. Press the ▲ key to turn page forwards and press the ▼ key to turn page backwards. The information of date and time are presented on the top right corner.



Press the EXIT key to withdraw the mode of graphics context.

➤ INFO BAR

On program-watching state, press the key [INFO] to display an information bar showing present program. Date, time and some of its parameters is being shown as well.

Press the OK key to display its details, press EXIT to quit.



Press the INFO key once more to display its information of the following program.

Press the OK key to display its particular, press EXIT to quit.



- Explication of pre-recording startup when standby
 - The prerequisite of pre-recording startup when standby is that the receiver has detected the time data from the signal it received. I.e. the systemic time is the available time. Given an unavailable time, nor did the pre-recording startup when standby.
 - Given the receiver is being stayed on its opening state: if the receiver gets a standby instruction in five minutes before its pre-recording coming time of pre-recording program, the receiver will give a dialog box to reminder that there has a starting of pre-recording program, by using the instruction [Yes/No] to confirm whether to discard that pre-recording instruction or not. If the instruction [Yes] is being opted for, the prerecording instruction will be discarded and the receiver will be instructed into its standby mode; if the [No] is being selected, the pre-recording instruction will be confirmed and the receive will be kept on its opening mode. If the receiver gets a standby instruction five minutes out of the starting time of pre-recording program, it'll get into its standby mode directly.
 - Given the receiver is being stayed on its standby mode: the receiver will come into its opening mode five minutes precede the coming time of pre-recording program. The time lag of five minutes serves for receiver to detect portable disk and systemic time, as soon as the pre-recording time is coming, the record will be launched.
 - During the process of recording: Provided that the receiver sensed the operative action of keys (whatever the native button or the remote key), the receiver will recognize the receiver as being used, it won't come into its standby mode after recording; if the receiver does not sense the action, it'll go into its standby mode as soon as the recording is over. After recording, the receiver won't get into standby mode if it detects other prerecording instructions; it'll not until the rest instructions are over.

SPECIFICATION

Tuner

Input Frequency	146 MHz - 862 MHz VHF High Band: 149.5 to 426MHz UHF Band: 434 to 858MHz
Input Signal Level	-87dBm to -20dBm
Input impedance	75 ohm
Loop Through Output Impedance	75 ohm
RF Input connector	IEC type Female
RF Output connector	IEC type Male
Modulations Modes	QPSK, 16QAM, 64QAM
Output Format	MPEG-2 Transport Stream

Channel Decode

Demodulation	COFDM
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Video

Profile Level	H.264(MPEG-4 part10) MPEG-2 MP@HL
Output System	NTSC / PAL
Output Terminal	TV Scart; RCA, S-VIDEO, YPbPr, HDMI
Output Level	1Vp-p (75)

Audio

Audio Decoding	MPEG-1layerI/II,MPEG-2 layerII, MPEG-4
Sampling Rate	ACC,AC-3 32/44.1/ 48KHz
Freq response	20Hz ~ 20kHz
Output Level	Adjustable (600 unbalance)
Output Terminal	RCA(L+R) / SPDIF

Working condition

Power supply voltage	AC: 200-250V 50 Hz
Power consumption	About 12W
Temperature	0 -40 °C
Humidity	10% -90%
Mass	Approx. 2.2 Kg

PAKING LIST

ITEM	QUANTITY	REMARK
DIGITAL RECEIVER	1	
REMOTE	1	
MANUAL	1	
BATTERY	2	
AV LINE	1	