

Palsonic

HDD320G



USER'S MANUAL

IMPORTANT SAFETY INSTRUCTIONS

<p>1. Be sure to read this user manual before starting your operation.</p>	<p>6. Install the unit horizontally. Unbalanced installation may cause damaged to unit.</p>
<p>2. Never open the cover. It is very dangerous to touch the inside of the unit due to possible electric shock.</p>	<p>7. When the unit is suddenly moved to a hot area from a cold area, it may cause problems. In that case, turn off the power, and turn on after 1-2 hours.</p>
<p>3. When you don't use this unit for a long time, please pull the power cord from the outlet. Also do not use a damaged power cord.</p>	<p>8. Install the unit in a place with:</p> <ul style="list-style-type: none">good ventilationsuitable temperatureno direct sunrayslow humiditylow vibration influence
<p>4. Do not touch the power with wet hand. If there is liquid flowing into the unit, pull out the power cord immediately because it may cause fire or electric shock.</p>	<p>9. Do not put heavy objects on the unit.</p>
<p>5. Place the unit in a well ventilated and no heat environment.</p>	

Instruction Markings:

This symbol indicates there is a dangerous voltage within the PVR, which may have sufficient magnitude to constitute a risk of electric shock if not handled correctly. To avoid the risk of electric shock, do not open the housing at any time.



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 product’s enclosure that may be of sufficient magnitude to constitute a risk to persons.



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



Table of Contents

IMPORTANT SAFETY INSTRUCTIONS	1
Instruction Markings:	2
GENERAL INFORMATION	5
1. Preface	5
2. Main Features	5
3. Accessories	7
4. General Operation of STB.....	7
OVERVIEW	8
1. Front Panel.....	8
2. Rear Panel	9
3. Remote Control Unit.....	10
4. Connection Diagram.....	13
OPERATION	16
1. Installation	16
1.1 Auto Search.....	17
1.2 Manual Search.....	17
1.3 Channel Edit	18
1.4 Factory Default	19
2. Program Guide	19
3. Program Manage	20
3.1 Program Edit.....	20
3.2 Favorite Edit	21
4. Program Select	23
5. PVR.....	24
5.1 Record File Edit	24
5.2 Schedule.....	25
5.3 PVR Setting	26
5.4 Recording Info	26
5.5 HDD Format	27

6. System Setting	27
6.1 Common Set.....	27
6.2 Video Set.....	28
6.3 Audio Set	28
6.4 Time Zone Adjust.....	28
6.5 System Information.....	28
7. Shortcut Key Explanations	29
7.1 Audio	29
7.2 MUTE	29
7.3 TeleText.....	29
7.4 Information.....	30
7.5 EPG and EPG Schedule.....	30
7.6 Recall the favorite channel	30
7.7 (HDD) File List	31
7.8 PVR ASSIST	31
7.9 Time shift.....	31
7.10 REC	32
7.11 File playback.....	33
7.12 Bookmark	35
SPECIFICATIONS.....	36
TROUBLE SHOOTING	38

GENERAL INFORMATION

1. Preface

Thank you for your purchasing our products.

This HDPVR is equipped with the latest technology and design; it can decode high and standard definition digital TV programs, and can also record and playback terrestrial digital broadcasts. You can view a variety of programs provided through terrestrial. Simply pressing the power button of the remote control unit, the crystal clear picture and DVD quality sound of digital broadcasting that your TV portrays through this product, allows you to watch whatever channel you wish off the digital broadcasting network.

Throughout this manual you will notice that the operation is easy to use.

In case you experience any difficulties using this product, please consult the relevant section of the manual for assistance.

2. Main Features

MPEG-2 HD/SD decoding (MP@HL/ML)

Fully DVB-T & MPEG-2 compliant

Down-mixes 5.1 AC3 to two channels encoded with Dolby Prologic Surround, also

Support PCM digital audio output (Bitstream)

5000 Editable Channels

Auto or Manual installation

Electronic Program Guide and Information Plate (EPG)

RF modulator for TV standard (PAL B/G, NTSC)

Digital Audio Output S/P DIF

Signal level & quality indicator
Composite video output
Auto PAL/ NTSC conversion
Standby with low power consumption
Clock adjustment
Excellent Performance
Fast Channel Change
Conversion between SD programs and HD programs
YPbPr Output: supporting 1080i
HDMI output: supporting 1080i
Digital Reception covers through VHF & UHF band
Wide screen 16:9 and normal 4:3 Aspect Ratio
Bandwidth of 6MHz & 7MHz & 8MHz Supported
TeleText / Bitmap subtitle, compliant with ETSI/EN300 472
S/P DIF (Digital Audio or Dolby AC3 Stream out)
RTC (Real Time Clock) Timer
65536 Color Graphic
8 Favorite Channel List
Channel Editing Capability (Move, Delete, complied Lock and etc.)
PVR Functions and Twin Tuner Function
Time shift (buffering): 1 Hours
Recording Time: up to 100 Hours (Depend on HDD)
Variable Forward Play Speed: 2, 4, 8, 16, 32, 1/2, 1/4, 1/8
Variable Reverse Play Speed: 2, 4, 8, 16, 32, 1/2, 1/4, 1/8
Fast Schedule: Support Once/Daily/Weekly mode
Region Selection for Replay
Variable Combination of Watching and Recording Simultaneously
Live Watching or Recording + Live Watching or Recording or HDD Playback
Grouping for Cascade Playing
Particular tips to help you

3. Accessories

Please check the following accessories are enclosed

1 x User Manual

1 x Remote Control Unit

2 x AAA Batteries

1x AV Cable

Note: If any of the accessories listed above are missing, please contact the dealer where this product was initially purchased.

4. General Operation of STB

Throughout this manual you will notice that the everyday operation of your STB is based on a series of user friendly on screen display and menus. These menus will help you get the most from your STB, guiding you through installation, channel organizing, viewing and many other functions.

All functions can be carried out using the buttons on the RCU, and some of the functions can also be carried out using the buttons on the front panel.

Should you experience any difficulties with the operation of your unit, please consult the relevant section of this manual, including the Problem Shooting, or alternatively call your dealer or a customer service adviser.

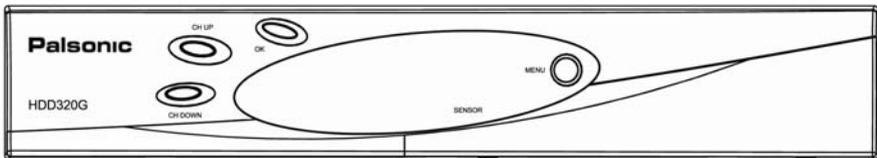
NOTE:

Please be aware that new software may change the functionality of the STB.

The photo and the function explanation involved in this specification are for reference only. If there is any mistake, please refer to the entity.

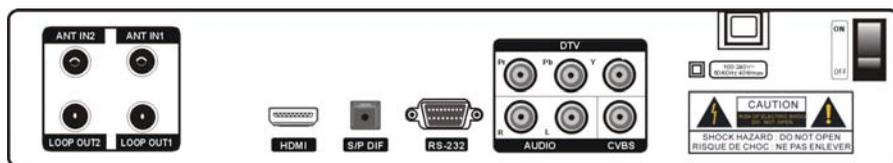
OVERVIEW

1. Front Panel



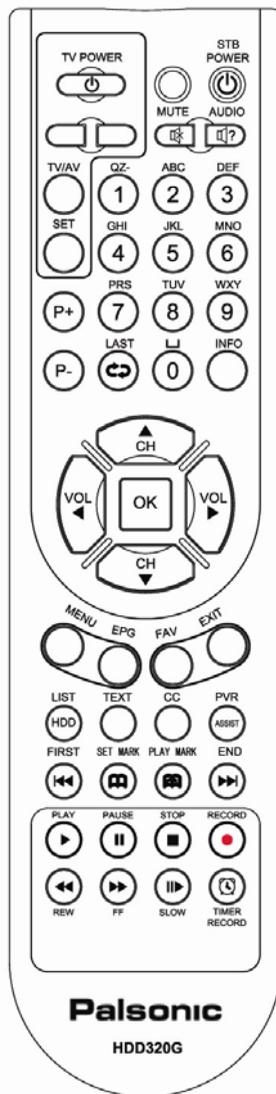
NAME	FUNCTION
MENU	Press to display the Main Menu on the screen
OK	Connect to terrestrial antenna
CH	When watching, change to the previous or next channel, or move to the next higher or lower item in the menu.

2. Rear Panel



NAME	FUNCTION
2 LOOP OUT	IF Loop through output to 2nd receiver
1 LOOP OUT	IF Loop through output to 2nd receiver
2 ANT IN	Connect to terrestrial antenna
1 ANT IN	Connect to terrestrial antenna
R-AUDIO	Right audio output
L-AUDIO	Left audio output
CVBS	Composite video output
S/P DIF	Connect to amplifier for digital audio output
RS232	Serial port used for software upgrade
HDMI	HDMI video output, supporting high definition output
YPbPr	Component video output. Supports high definition output
100-240V	Power supply
ON/OFF	Main power switch

3. Remote Control Unit



- STB POWER:** Press to switch between Operation and Standby modes
- MUTE:** Press to temporarily cut off the sound
- AUDIO:** Switch the audio channel among the Left, Right and Stereo modes
- 0-9 :** Enter required numbers in the input box or select a channel to watch
- P+/-:** Press to scroll page down or up
- LAST:** Returns to previous program.
- INFO:** Press to show information of the current channel
- ▲◀▼▶:** Move cursor up/down/left/right, Page up/down, Volume +/-
- OK:** Press to execute the selected item in the menu, or to confirm the desired value in input mode
- MENU:** Press to display the Main Menu on the screen
- EPG:** Press to display EPG (Electronic Program Guide) menu
- FAV:** Press to display the FAV list
- EXIT:** Press to return to the previous menu or escape from the item

PVR Functions:

- LIST:** Press to display the Recorded Program List.
- TEXT:** Press to enter the teletext window
- CC:** Used to turn Closed Caption subtitles on or off
- PVR/ASSIST:** Press to display the PVR Assist window.
- FIRST:** Change playback position (backward).
- SET MARK:** Set the bookmark in playback process bar.
- PLAY MARK:** Press to jump to the next bookmark in playback process bar.
- END:** Change playback position (Forward).
- PLAY:** Return to Normal Speed Playback from FF/FB/Slow/Paused mode.
- PAUSE:** Pause from live video or playback, step when playback in Paused mode.
- STOP:** Stop playback when playback or stop recording when recording.
- RECORD:** Record current service or set stop recording time when recording.
- REW:** Fast rewind
- F.F:** Fast forward
- SLOW:** Press to slow at 1/2, 1/4, speed
- TIMER RECORD:** Shortcut to schedule recording.

The Learning Key

Your PVR remote has four learning keys plus a self-coding function. The keys can be used for the STB remote to function as any of the four keys on your TV remote. The recommended keys to use are “TV POWER”, the two grey keys below “TV/AV”, and “SET”. The identification of “TV/AV” key varies with the TV type. For example, identifying AV, INPUT 123, etc.

You do not need to use your TV remote when watching the digital TV program and services once your PVR remote has been set up to turn on your TV and change to the correct AV channel.

Instructions to use the STB RCU learning keys:

1. Press “SET” key to keep for more than three seconds, indicator light will keep on;
2. The TV RCU aims to “receiving window” on the STB RCU, and press the STB RCU key to do learning. (Such as power key on the TV RCU);
3. The indicator light of the STB RCU flashes three times, and it indicates that the STB RCU has received signal from the TV RCU;
4. And press corresponding learning keys on “TV key” window of the STB RCU again (such as power key), the indicator light will plash three times, and then extinguish. It indicates that the key has learned successfully and is ready to use.
5. When pressing keys on the “TV key” window of the STB RCU, the indicator light will flash. It indicates that the STB RCU is to control the TV. It is the same as the VOL+, VOL- and TV/AV keys.

Appendix :

1. When watching TV pressing “INFO’ key on the RCU, the information of the current and next channel, such as name, starting time and ending time, will be displayed on the screen. The message will disappear automatically in several seconds. And also press “exit” to cancel.
2. The description information of the current channel will be displayed on the screen in several seconds with by pressing “INFO” again. And then press “exit” to enter the full-screen mode to watch TV program.

4. Connection Diagram

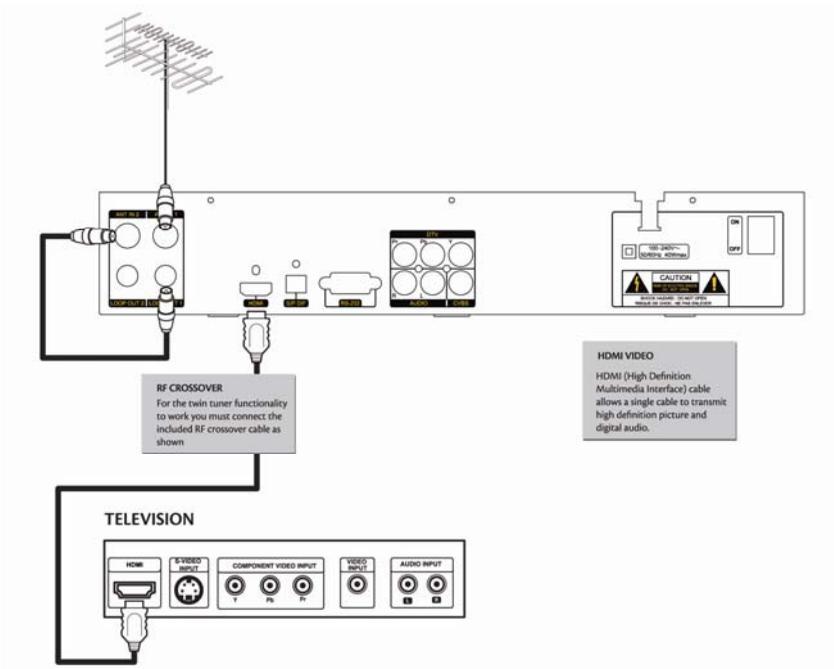
There are various ways to connect your PVR to your TV.

Important: To make use of the twin tuner functionality built-in to your PVR, you must ensure that you connect the supplied RF crossover lead from LOOP OUT 1 To ANT IN 2.

A). Using HDMI Cable

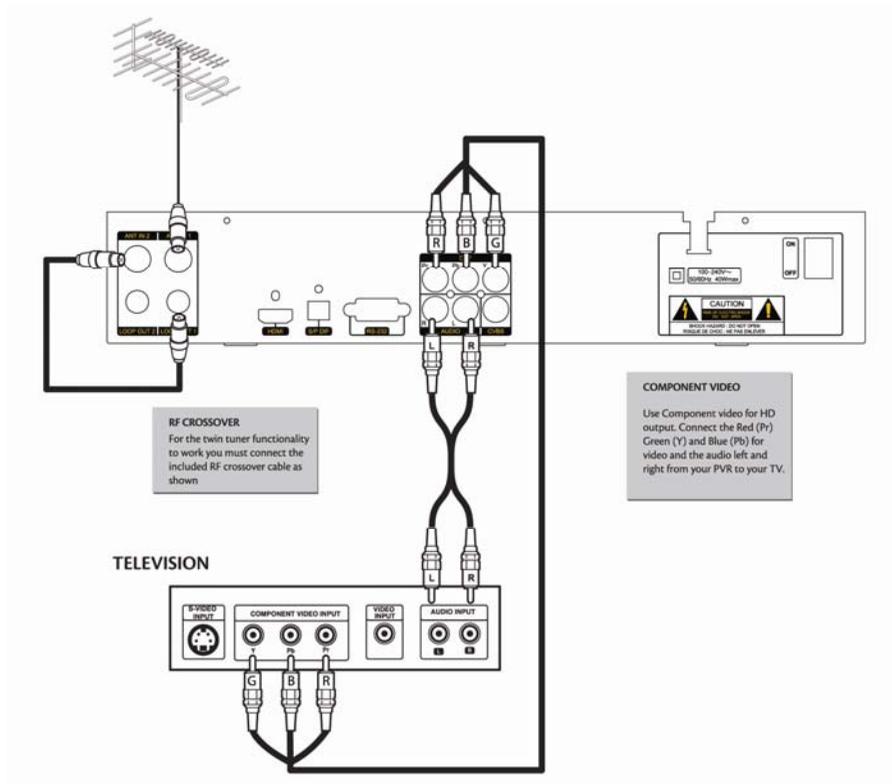
HDMI is the recommended connection for your PVR (if you have a TV with an HDMI input). An HDMI connection will allow you to transmit 1080i digital video and digital audio signals using a single lead.

- 1). Connect the antenna to ANT IN of the STB.
- 2). Connect one end of your HDMI lead to the PVR and the other end to the HDMI port on your TV.



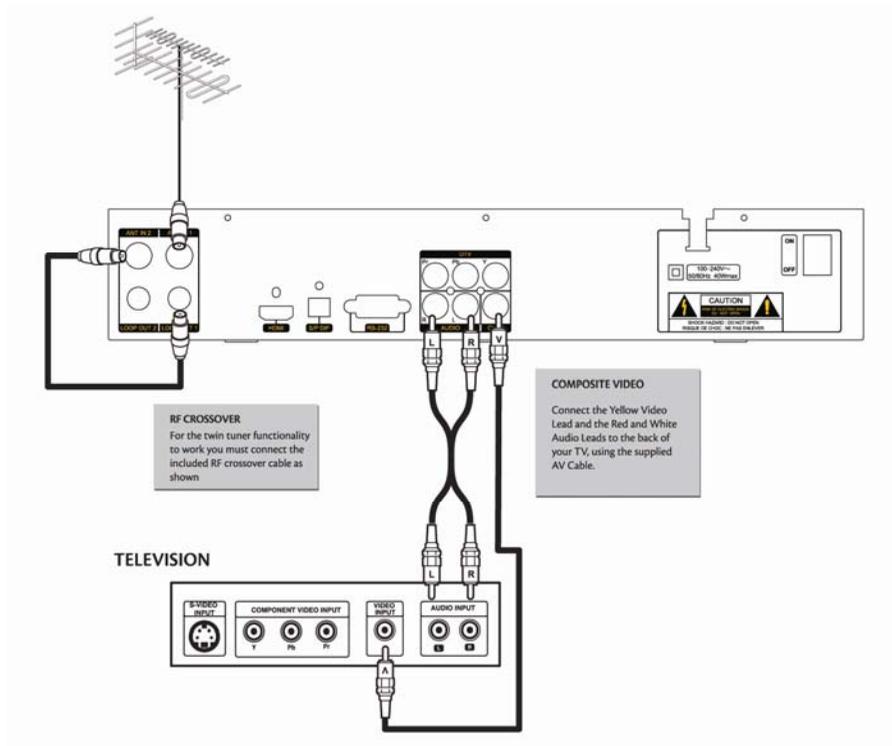
B). Connect YPbPr port

- 1). Connect the antenna to ANT IN of the STB.
- 2). Connect to TV as following figure..



C). Using RCA cable

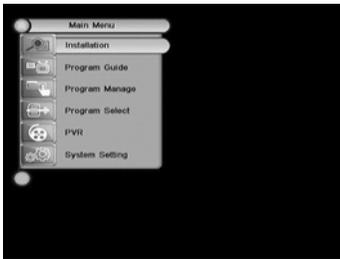
- 1). Connect the antenna to ANT IN of the STB.
- 2). Connect to TV by using the supplied AV lead as shown:



OPERATION

In normal view mode, pressing the MENU key will display the main menu. And keep pressing the Exit key will exit each sub-menu until going back to the normal view.

This menu consists of five menu items as shown below.



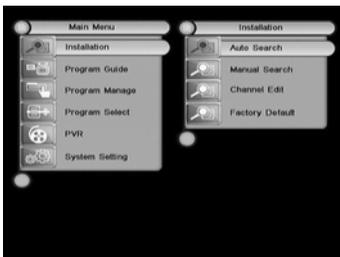
- . Installation
- . Program Guide
- . Program Manage
- . Program Select
- . PVR
- System Setting

Use the ▲▼ keys to move up or down from one item to another. Press the OK key on your remote to enter the selected sub-menu.

To escape the menu system at anytime, press EXIT on the remote

Note: When in sub-menus, pressing the EXIT key will take you back one-step through the sub-menus. To completely exit from the menu, keep pressing the EXIT key on your remote.

1. Installation



The Installation menu allows two ways to search for programs: Auto Search and Manual Search.

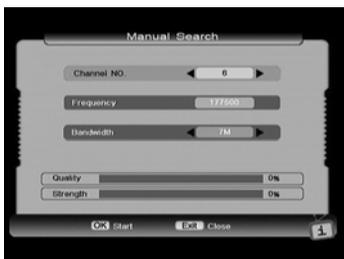
1.1 Auto Search



For beginners, the Auto Search feature is the best choice. First use ▲▼ Keys to select Auto Search from the Installation menu. Then press OK to enter into Auto Search sub-menu. The system will automatically search programs under Channel Edit. Once the search is complete, the newly found programs will be added to the TV program list and your PVR will automatically display the first found channel. During the search process you may press the EXIT key to stop or press the OK key to skip. Press EXIT key again to exit from this window.

1.2 Manual Search

You can set parameters in Manual Search window if you are familiar with relevant parameters. In this mode, only one channel, whose necessary parameters are set in Manual Search window by hand, can be searched.



Channel No. : Press ◀▶ key to select proper option among the Channel List that you can edit in Channel Edit window.

Frequency: The value varies with what you have selected in Channel No.

Bandwidth: Press ◀▶ keys to choice 6M, 7M or 8M.

At the bottom of this window, there are two dynamic color bars reflecting the signal's quality and strength. You can check whether you have set the antenna well by these two bars.

After modifying, press OK key to start searching. Searching well, system will turn to view first searched program automatically.

1.3 Channel Edit



Select Channel Edit item in the Installation menu and press OK key. Then Channel Edit window will be displayed on the screen. From here, new channel can be added and the existing ones can be edited or deleted.

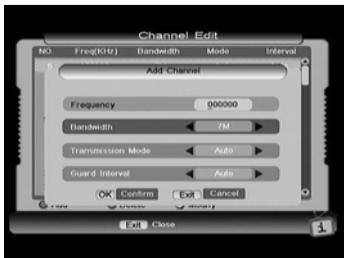
You can use the color keys on the REMOTE to execute the corresponding command shown at the bottom of this window.

Add (Red key)

Delete (Green key)

Modify (Yellow key)

◇ Add



After pressing red key on the REMOTE, the Add Channel window, where you can set necessary parameters of the new channel, will be displayed on the screen.

Frequency: You can input values referring to above by using the number keys on the REMOTE.

Bandwidth: Press ◀▶ keys to choice 6M, 7M or 8M.

Have all above parameters set well, press OK key to confirm and exit from the Add Channel window. In Channel Edit window, you can find that the new channel has been added to end of the list.

◇ Delete

This command allows you to delete one or more unwanted channels. Select the channel you want to delete and press green key on the REMOTE, you will find the channel have been deleted from the channel list.

Note: After you choose to delete the channel (press the green key), the system won't ask you to confirm your deletion. So please make sure before you delete the channel.

◇ . **Modify**

Select the channel you want to edit first and then press yellow key to display Modify Channel window. The operations are the same as “Add”.

1.4 Factory Default



In Installation menu, move cursor to Factory Default item and press OK key, a warning message box will be displayed on the screen, press OK key to ensure the default.

NOTE: After restoring default, all programs you have searched will be erased and all parameters will return to the factory default. Please use this operation with care.

2. Program Guide



NOTE: Press EPG key on the REMOTE, will also enter into Program Guide window directly.

In Program Guide window, the up-right small Picture in Graphics (PIG) and down-right program guide list vary with what you have selected in left TV program list. Use ◀▶ keys to move cursor between TV program List and downright list, and ▲▼ keys to move up or down in each list.

The selected TV program's EPG is displayed in the down-right list.

Recall key is used to switch among EPG of several future days.

Press FAV key to change the group.

Press Green color key to enter into the program schedule window.

Press EXIT key to return to main menu.

3. Program Manage

3.1 Program Edit

Through this window, you can edit programs according to your requirements. The three color keys on the REMOTE have their corresponding functions.

Delete (Red key)

Move (Green key)

Rename (Blue key)

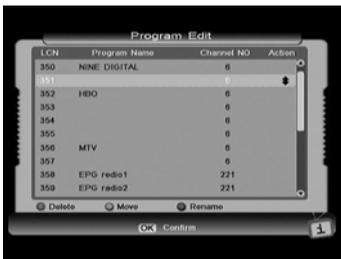
✧ Delete



This deletion command allows you to delete one or more unwanted programs permanently. First select the program you want to delete and press red key on the REMOTE.

You can continue to select other unnecessary programs and mark them with the crossings. And finally press OK key to delete all of them from the list.

✧ Move



Only one program item can be moved up or down each time. Press keys to select program you want to move and press green key on the REMOTE. An Up-Down-Pointed arrow will be displayed right to the selected program. You can press keys to move this program to where you want to locate. Press green key again to confirm new location.

✧ . Rename

Use ▲▼ key to select the program you want to rename, press blue key on the REMOTE, and will pop up a keypad window where you can rename the program name.

In this keypad window, select your required character by using direction keys on the REMOTE and press OK key.



Then the selected character will be shown in the title bar at the top of this keypad window. To switch between capitalization and lowercase, please select Caps On command and press OK key on the REMOTE. Back command allows you to erase the unwanted character in the title bar. Move cursor to OK command and press OK key. The keypad will disappear and the new name will be shown in the program name column. You can define several program names in the same way.

3.2 Favorite Edit

This window includes the three columns of FAV, Selected and Programs. While there are no prepared favorite groups in FAV column, you can define and modify favorite groups' name by using corresponding color keys on the REMOTE. And more, you can add programs to any favorite group.

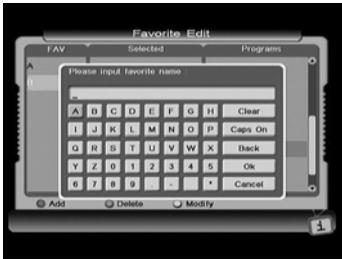
◀▶ keys are used to switch among three columns, and Up/Right keys are used to select item in each column. Notice that what will be shown in the Selected and Programs column varies with the favorite group that you have selected in the FAV column.

How to define a favorite group

Press **Red** key on the REMOTE, and will pop up a keypad window where you can define a favorite group name.

In this keypad window, select your required character by using direction keys on the

REMOTE and press OK key.



Then the selected character will be shown in the title bar at the top of this keypad window. To switch between capitalization and lowercase, please select Caps On command and press OK key on the REMOTE. Back command allows you to erase the unwanted character in the title bar. Move cursor to OK command and press OK key. The keypad will disappear and the new name will be shown in the FAV column. You can define several favorite groups in the same way.

How to modify a favorite group

In the FAV column, use ▲ ▼ keys to select one that you want to modify and press yellow key. Then a keypad window will pop up for further operation, please refer to the above specification.

How to delete a favorite group

In the FAV column, the selected favorite group will be deleted from the list after green color key on the REMOTE is pressed.

Note: After you choose to delete the group (press the green key), the system won't ask you to confirm your deletion. So please make sure before you delete the group.

How to add programs into a favorite group



Select one favorite group (for example Sports favorite group that you have just defined) in FAV column, and then move cursor to Programs column. In Programs column, select programs that have a relation with Sports and press OK key, and then those programs will be added into Sports favorite group and shown in the selected column.

If you want to deselect one program in Sport favorite group, move cursor to program that you want to delete from selected column and press OK key, and then this designated program will disappear in selected column.

4. Program Select

In the Main Menu, use ▲▼ keys to select Program List item, and press OK key to enter into Program List window. From here, the default mode is “TV” mode.

In program list, ◀▶ keys are used to select desired program and press OK key to view in full screen.

To watch only selected favorite channels (see section Favorite Edit), say you had setup 2 favorite Groups.

1. All HD channels.
2. All SD channels.



You can use the left and right arrow buttons to select how the program list is displayed. You can choose between show ALL, or only HD or SD groups (which you created earlier). Say you choose HD favorite group, you will see the Channels you added into this favorite group. If you highlight one of these channels and pressed OK, the Receiver will go back to normal viewing mode, but each time you change channel, you will only cycle through channels within your HD favorite group. To get back to all channels, simply press OK button and get the program list back up, and use the Left and Right arrow keys to change the Program list choice back to ALL.

5. PVR

5.1 Record File Edit

You can edit recorded channels in the menu.



Delete: Select a recorded file you want to delete, and press Red key.



Rename: Press Yellow key to display the keypad dialog. Using the arrow keys on the REMOTE, you can edit the file name.



Lock: Press Blue key on the selected file name.

GroupMgr: Press Green key, there will show the list of Recorded Group except "All". Then you can press OK key to add a recorded file to the group, Red key to cancel exist group, Green Key to create a new one, or Yellow Key to modify its name.

5.2 Schedule

To add a new Scheduled task, press the Green key on your remote.

To delete existing scheduled tasks: press the Red key to delete an individual task, or press the Blue key to delete all the existing tasks. You will have to confirm your decision once you press OK.



Press the EXIT or MENU keys to exit.

In Add Schedule, there are parameters below to be set.

Schedule Type: Rec or Play



Schedule Start Time: Input wanted time by numeric keys, or press OK to enter the sub-menu to set the date and time (FAV key is used to switch between date and time)

Schedule End Time(hh:mm): Input wanted time by numeric keys.

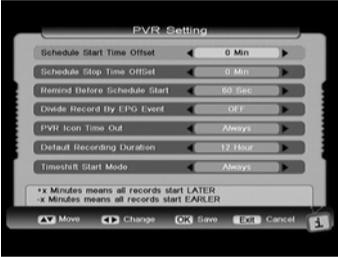


Schedule mode: Once / Daily / Weekly. When you choose the mode of weekly, press the Ok key you can see the weekday Group, select the days you want and press OK key to back.

Channel Name:Select the desired channel.

Note: If record mode is weekly, you can choose days from Sunday to Saturday. The Schedule will start to record or play when time is up these days every week.

5.3 PVR Setting



Schedule start time offset: Schedule record or play to start earlier or later.

Schedule stop time offset: Schedule record or play to stop earlier or later.

Remind before schedule start: Remind you before schedule is going to start

Divide Record By EPG Event: Select on or off.

PVR Icon Time Out: Select the time that the PVR icon is displayed on the screen by using ◀▶ keys.

Default Recording Duration: the default duration of manual record.

Time shift Start Mode: The available options are: Never, Always and Pause key. New setting can work after playing a new service.

5.4 Recording Info

When you are recording, you can see the light down left on the front panel winking. And you can enter the Recording info, otherwise there will be a message of “there is no record going!”

Recording Info will tell you the recording information as follows:

Index: R1 or R2

Mode: Quick or Schedule

Channel Name

File Name: you can change the name by pressing OK key.

Valid Record Time: the real recording time

Past Time: Display the past time.

Duration: the recording will stop until the duration is reached.

5.5 HDD Format

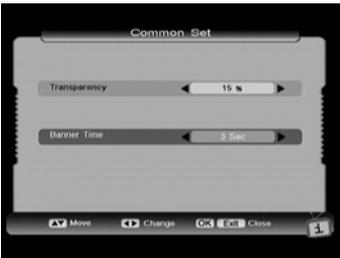


Please be extra careful when using this feature as it will completely erase your hard drive and you will lose any previously recorded content. For security purposes you will be asked to enter the password to confirm your decision. (Default password is :0000).

6. System Setting

In the Main Menu, use ▲▼ keys to select System Setting item, and press OK key to enter into System Setting menu. This menu consists of five items. You can access its sub-menu by highlighting this item and pressing OK key.

6.1 Common Set



Transparency: The value is from 0 to 30%. The transparency of the closed caption that you have seen varies with your selection.

Banner Time: Whenever a new channel is selected, an Info bar appears momentarily at the bottom edge of the screen. Therefore this setting is provided to set the display duration of the Info bar.

After setting well, press OK or EXIT key to save and exit.

6.2 Video Set



Screen Type: 4:3 or 16:9

Aspect Ratio: Full Screen / Letterbox / Pan_Scan

Resolve: AUTO / 1080I / 576P / 720P

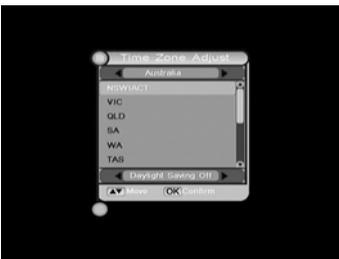
6.3 Audio Set



Audio Channel Mode: Stereo / left / right

Decoder: MPEG or AC3

6.4 Time Zone Adjust



In this menu, user can change time zones for different countries. Press the ▲▼ keys to change.

Use ◀▶ keys to select between “Daylight Saving On” and “Daylight Saving Off” for daylight saving.

Press OK or EXIT key to save and exit.

6.5 System Information

From here, you can get not only the information about the hardware and software, but also product type and release date, etc.

7. Shortcut Key Explanations

You can realize some functions in an easy and fast way by pressing some special keys on the REMOTE. These keys will be explained as follows:

7.1 Audio



Press Audio key to display the Audio Selection window.

Press ◀▶ key to switch among Left, Right, Stereo and mix. Select the best audio channel output for the current program.

NOTE: That the available selections in audio language window depend on the TV broadcasting service. If the service provides several audio languages, use keys to select appropriate language and press OK key to confirm.

7.2 MUTE

By pressing MUTE key on the REMOTE, the volume will disappear temporarily and MUTE mark will be displayed on the up-right corner. The volume will be restored by pressing MUTE key again.

7.3 TeleText

You can press **CC** key on the REMOTE to enter the TeleText or Closed Caption windows. Only when the broadcaster has provided this service, you can open TeleText or Closed Caption windows. Except normal view mode, you can exit TeleText windows by pressing the EXIT key and exit Closed Caption windows by CC key.

7.4 Information

When watching a channel, press INFO key, a simple EPG banner that includes current and next program information will appear. Duration of banner's display can be modified referring to Common Setup Banner Time. Further more, SD or HD mark will display at top-right corner of this banner according to current TV Program transmitted header.



By pressing INFO key again at this bar, system will pop up a bigger textbox showing more details about current program. By pressing INFO key again on the REMOTE to continue reading the next program information. Press INFO key once again to return to the normal view mode.

During the whole operation, press EXIT key to exit from this banner at anytime.

7.5 EPG and EPG Schedule

This is the same as Program Guide.

When the right list is on focus, press OK key you can enter EPG Schedule window, then you can reserve program, change type (Rec or Play) and mode(once/daily/weekly), press OK to complete it and Exit to back without saved. When is success, you can see an icon like clock on the right of the item.

7.6 Recall the favorite channel

Press the FAV key to recall a stored favorite channel.

Favorite channels are programmed and stored in the Program list menu.

7.7 (HDD) File List

You can see the record file list as shown in the screen by pressing the HDD key. You can see the used percent of hard disk on the left-down corner.



Pressing ◀▶ key to change view between the group and file lists.

When File list is on focus, its program name, start time and duration will display, and you can operate as follows:

Press INFO key to see the information of this file, when there is no information, it will display “this file has no description”.

Press INFO Key again, the info will disappear.

Press OK key to playback this file.

7.8 PVR ASSIST



PVR Assist is a quite convenient function, it will display all the PVR operation according to the current situation, and press OK key to start it.

7.9 Time shift

7.9.1 Start Time shift

When Time shift Start Mode is Always, you can press the Red, Blue Key or Pause Key to start it.

When the mode is Pause, you can only start it by pressing Pause Key.

You can't start time shift when the mode is never.

Of course you can change this mode in PVR Setting view.

7.9.2 Change time shift speed

After pressing the REW, FF, Slow or Pause keys to change time shift speed, a speed icon will be displayed on upper left of the screen.

7.9.3 Change time shift playing position

Press the Red or Blue keys to display time shift process bar. You can change the time shift playing position.

7.9.4 Stop time shift

Method 1: Press the Stop key to stop time shift and return to play live service.

Method 2: Start play new service, time shift of old service will be stopped automatically.

7.10 REC

7.10.1 Start record

Press the RECORD key to start recording. A record icon is displayed on the upper left of the screen and the light down left on the front panel is winking..

The record icon displays recording number, duration and recording name. Recording name is in the form of Channel Name-Event Name.

7.10.2 Change recording information

This is the same as 5.4 Recording Info.

7.10.3 EPG record and Common scheduled record

If scheduled EPG or scheduled REC is reached, a new record can also be started. For more information, refer to **Scheduled list**.

7.10.4 Recording file information

If current recording service has EPG information, recorded file is partitioned automatically according EPG items. Recorded file name is program name, file duration is program duration and file description is program description. If current recording service has no EPG information, recorded file name is channel name and it will not be partitioned.

7.10.5 Stop record

Press the **STOP** key to stop recording. You will be asked to confirm.

7.11 File playback

7.11.1 Change file playback speed

Press the REW, FF, SLOW keys to change file playback speed, a speed icon is displayed in the upper left of screen.

7.11.2 Change file playback position

Press the Play, Red or Blue keys to display playback process bar. You can press the Red or Blue keys to change file playing position.

7.11.3 Display playing file information

Press the INFO key to pop up a bar to show current playing file information.

7.11.4 Jump file playback time

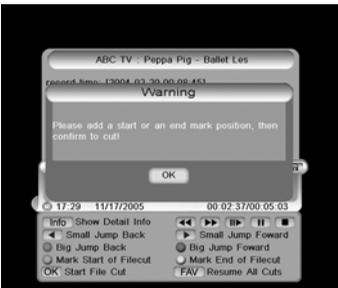
In the playback process bar, you can press number keys to input a time, then press the OK key or wait for a while, file will play from the time selected if the time is valid.

7.11.5 Cut out and Save Selected Region

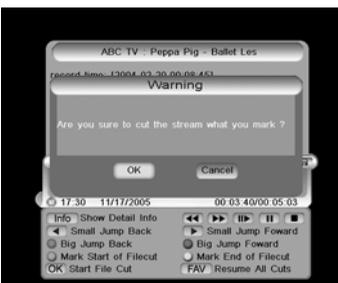
1. Start playback a recorded service.



2. Press Play, Red or Blue button to display Playback progress bar, Press OK key twice then there will be a notice named "Please add a start or an end mark position, then confirm to cut!".



3. To specify one start point with green key and end point of region with yellow key, press ok key.

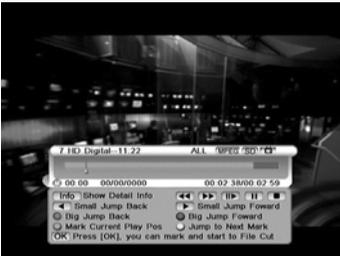


4. You can press ok key to cut and cancel to cancel the operation..

7.12 Bookmark

You can jump to a position directly by bookmark function in file playback. To search positions very quickly and easily, use bookmarks.

7.12.1 Add a bookmark



To add a bookmark, press the GREEN key at the position you want to add it into playback process bar. You can make the bookmark at maximum 20 positions for one file.

7.12.2 Go to a bookmark

Press the YELLOW key to jump to the next bookmark in the playback process bar. Then the file plays from the bookmarked position.

7.12.3 Delete a bookmark

To remove a bookmark, you should jump to the bookmarked position by pressing the YELLOW key and then press the GREEN key to delete the book mark.

SPECIFICATIONS

Tuner	
Input Frequency	474~858MHz
Loop Out Frequency	474~858 MHz
Input Level	-90 ~ -20 dBm
Bandwidth	6M, 7M, 8M
Input Impedance	75 Ohms
Channel Decoding	
Standard	DVB-T EN300 744
FEC Code Rate	1/2,2/3,3/4,5/6,7/8
Demodulation	(QPSK,16 and 64 QAM)
Video decoding	
Standard	MPEG2/4 H.264 MP@HL,MP@ML
Aspect Ratio	4:3, 16:9
Video Resolution	1920*1080i MAX
Audio Decoding	
Standard	ISO/IEC 13818-3 and TR101154
Decoding	MPEG-1 layer I and II ,AC3
Audio Mode	Left/Right/Stereo
Audio sampling frequency	32, 44.1, 48KHz
High Definition Output	
Output Format	1080i, 720p, 576p
Output Connector	HDMI / YPbPr / VGA
Memory	
Flash Memory	8MB
DDR	128MB

Front Panel	
IR Receiver:	38KHz
7 Keys	Standby, Menu, Select, Channel , VOL
Rear Panel	
Connector	ANT IN, LOOP OUT
	HDMI
	YPbPr /CVBS, Audio L/R
	Video
	S/P DIF
	RS232
Remote Control	
Type	Infra-red (Carrier Freq: 38 KHZ)
Battery	2×1.5V AAA Type
Power/Ambient	
Input Voltage	AC 100~240V, 50/60Hz
Power Consumption	40Wmax
Operation Temperature	0~40°C

TROUBLE SHOOTING

The table below covers some of the more common reasons for abnormal PVR function.

Problem	Likely Causes	Remedy
Front LED's do not light	AC power cord disconnected	Connect power cord properly to the power socket
No picture or sound	Connection of Video or Audio to input terminals is incorrect.	Check your choice of AV or RF is right. Check each AV lead at each end.
	Antenna cables incorrectly connected	Check the RF path from antenna through both tuners to modulator and RF OUT
	Antenna not delivering clear signal	Check cable connections, or adjust the antenna
	No signal or weak signal	Call an antenna specialist from local paper or similar.
	Wrong Channel Information in menu	Type values again carefully
Black and white screen or V-Hold	Your TV or PVR picture mode does not match broadcast	Check that screen shape best matches your screen and PAL B/G is selected.
The Remote Control Unit is not working	Battery exhausted	Fit fresh batteries
	Fluorescent light interfering with remote control signals	Switch light Off
	Remote control is incorrectly aimed	Point front of RCU carefully towards PVR.

Distorted Menu Screen	Brightness or Contrast level of TV set too high	Adjust Brightness and Contrast to lower levels
Not working	Processor stopped	Remove the power cord or switch AC OFF and ON