

# Operating Instructions

## Dual View HDTV Receiver THD-5150



**NextWave**  
DIGITAL

# Safety Instructions

## WARNING

**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.



This symbol indicates “dangerous voltage” inside the product that presents a risk of electric shock or personal injury



This symbol indicates important instructions accompanying product.



**Never stack other electronic equipment on top of the STB. The STB requires sufficient ventilation space to prevent overheating. Failure to provide adequate ventilation could result in poor performance of the STB.**

**Please read the following safety instructions carefully.**

- ◆ Do not overload wall outlets, extension cords or integral convenience receptacles as this can result in a risk of fire or electrical shock.
- ◆ Never allow liquids, spray or other materials to come into contact with the inside of the STB.
- ◆ Unplug the STB from the wall outlet before cleaning.
- ◆ Use a soft cloth to clean the exterior of the STB.
- ◆ Allow clear space around the STB for sufficient ventilation.
- ◆ Do not use the STB where it is exposed to direct sunlight or near a heater.
- ◆ Never stack other electronic equipment on top of the STB.
- ◆ Do not place the STB outdoors. Keep out of direct sunlight.
- ◆ Do not connect or modify cables when the STB is plugged in.
- ◆ Do not cover the STB or place it on a unit that emits heat.

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# Quick-Start Guide

If you wish to operate the NextWave HDTV STB (Set Top Box) before reading the rest of this manual, use the following steps to get started quickly.

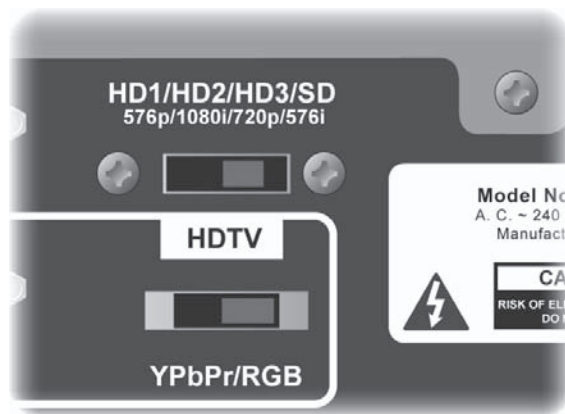
## Step 1 Connect antenna feed cable to the RF IN socket on the STB (Set Top Box)

## Step 2 Check your display documentation for the optimum settings

It is important to check your display device documentation for the recommended HDTV resolution and connection method for your display.

## Step 3 Set STB output to optimal mode for the display device

Having established the optimal display mode for your device, move the selector switch for the resolution display mode to the appropriate setting.



Switch	Setting
HD1	576p (720 x 576 progressive scan)
HD2	1080i (1920 x 1080 interlaced scan)
HD3	720p (1280 x 720 progressive scan)
SD	576i (720 x 576 interlaced scan)

Switch	Setting
YPbPr	For component video connections
RGB	for D-SUB RGB connections

**Please Note:** The STB must be turned off on the front panel and on each time you make a change to the output setting via the switch.

For information about what resolutions are broadcast in Australia, see the "Picture Resolution" section @ [www.dba.org.au](http://www.dba.org.au) (<http://www.dba.org.au/index.asp?sectionID=15>).

## Step 4 Connect video leads to display

Connect the Component video leads (supplied), RGBHV lead, S-Video lead or Composite video lead between the STB and your display.

Ensure that your display device is set correctly or automatically detects this input.

## Step 5 Connect audio leads to display and/or audio processor - MAIN Output

Connect the main L & R outputs (16 17) to the L & R inputs of your display or Hifi amplifier using the supplied audio leads.

If you use a digital surround sound processor, you can also use the optical or coaxial digital audio leads to connect to the appropriate inputs of your processor.

## Step 6 Connect AV leads to recording device or secondary display - VCR Output

Connect the Composite video (13) and L & R (11 12) audio leads (supplied) between your STB and your VCR or other recording device. This will allow you to record from the secondary (VCR) output of the STB.

## Step 7 Select channel scanning method and perform scan

Power up STB with mains power lead and press main power button to ON. The STB will boot up to a channel or to a blank screen if channels have not been scanned.

Press MENU. Select PROGRAM from the menu. Select Quick Search from the sub-menu. Select your location from the list and press ENTER on the remote control. **If your location is not included in the quick search then perform an Auto Search.**

The Set Top Box will begin searching for all available digital channels.

## Step 8 Select appropriate audio and video display settings

After scanning the channels found by the STB the scanned programs will be available for viewing. Programs may be selected by pressing the LIST button on the remote control.

Use the ASPECT button on the remote control to adjust the aspect ratio of the main display.

The AUDIO button selects the audio format of the broadcast. Depending on the broadcaster and your equipment you may choose MPEG or AC3 digital formats.

# Introduction & Front & Rear Panels




## Introduction

Congratulations on purchasing the NextWave THD-5150 High Definition Dual View digital TV receiver. The distinctive feature of this receiver is its ability to decode two digital channels simultaneously. This manual will guide users through a variety of representative installation setups and discuss the various features and functions required to make full use of the capabilities of this unit.

The “Quick-Start Guide” beginning at page 4 should guide the user through the initial setup of this unit in a simple installation. Pointers to other sections of this manual are given where more detailed information is available. Maps of buttons and outputs are followed by a more detailed installation guide with diagrams. Navigation and use of the On-Screen Menu system is covered in detail, followed by troubleshooting and other useful appendices.

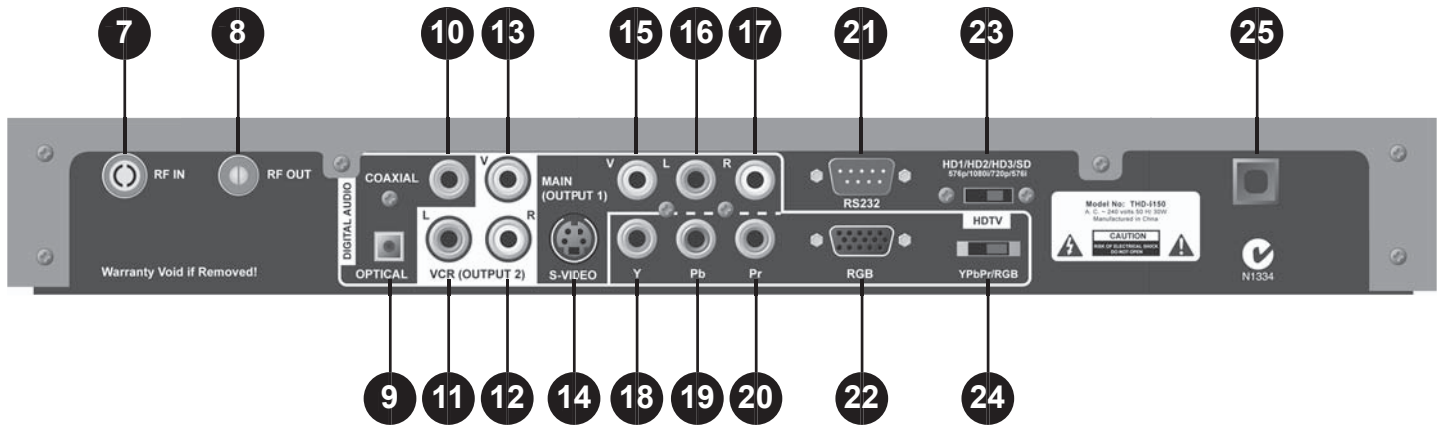
## Front Panel



1		Power Switch.
2	<b>4 Digit Display</b>	Displays channel number.
3	<b>Menu</b>	Display Main Menu.
4		1. Change volume up and down. 2. Navigate left and right through the main menu, Channel list and EPG.
5		1. Change channels up and down. 2. Navigate up and down through the main menu, Channel list and EPG.
6	<b>ENTER</b>	1. Confirm selection of a highlighted item in the menu and to go to the next step.

## Rear Panel

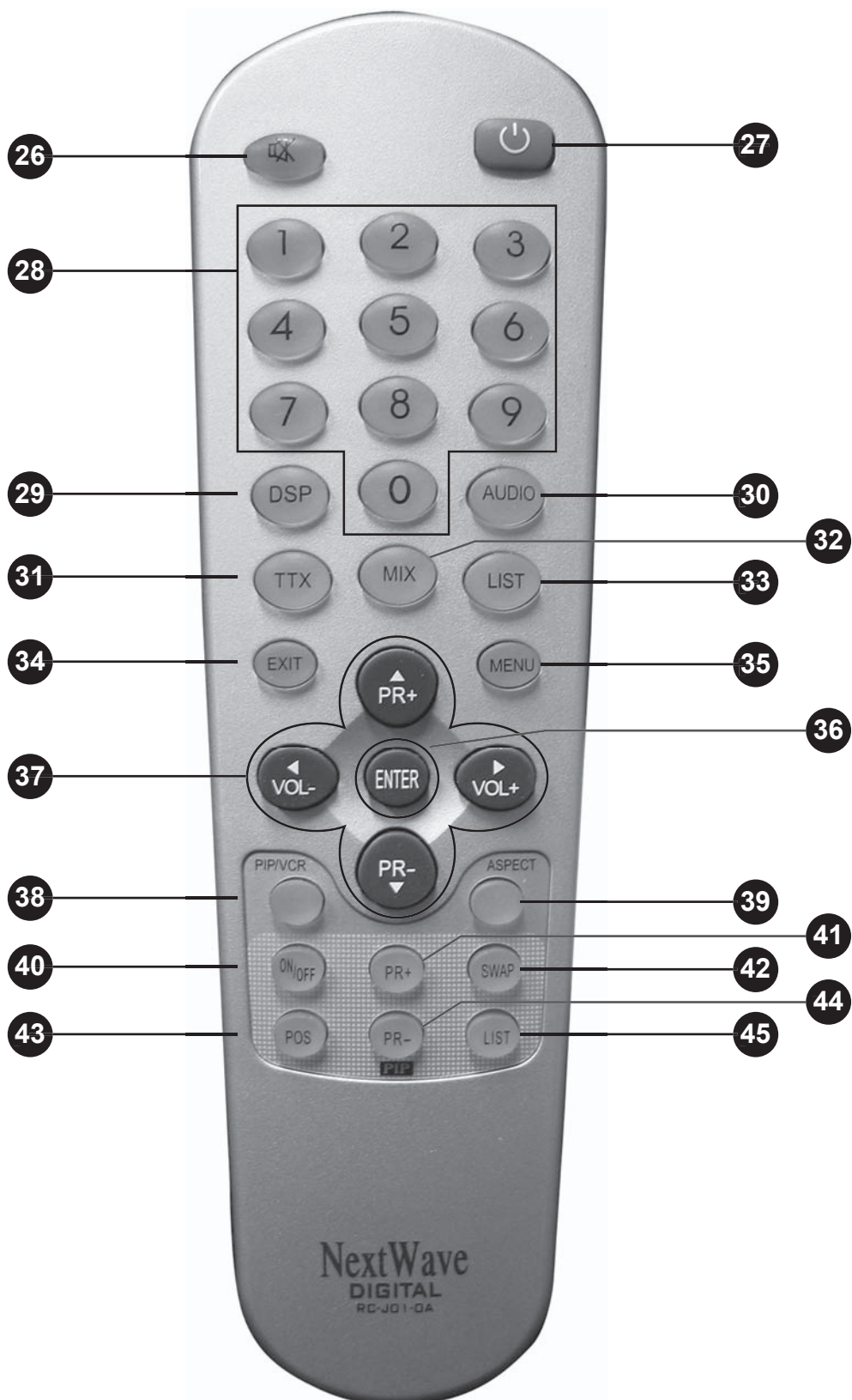
Your NextWave THD-5150 High Definition Digital TV receiver contains a wealth of connection options. The following diagram illustrates and describes the connection options on the rear panel.





7	<b>RF IN</b>	Terrestrial (conventional) TV aerial input.
8	<b>RF OUT</b>	TV Aerial output for feeding to other devices (eg: TV/VCR).
9	<b>S/PDIF Optical (TOSLINK)</b>	Optical Audio Output. Connect to AV Processor or Audio Amplifier.
10	<b>S/PDIF Coaxial (RCA)</b>	Coaxial Audio Output. Connect to AV Processor or Audio Amplifier.
11 12	<b>Audio Left/Right (2nd)</b>	Stereo Output for connection to a Hi-Fi system or TV set.
13	<b>VIDEO OUT (2nd)</b>	CVBS (Composite) video output. Connect to TV/VCR.
14	<b>S-Video</b>	Connect to TV/VCR through S-Video cable.
15	<b>VIDEO OUT</b>	CVBS (Composite) video output. Connect to TV/VCR.
16 17	<b>Audio Left/Right</b>	Stereo Output for connection to a Hi-Fi system or TV set.
18 19 20	<b>Component Video</b>	Connect to High Definition capable display.
21	<b>RS232 Data Port</b>	For Software Upgrades.
22	<b>RGB (D-SUB)</b>	RGBHV connector for High Definition capable and other VGA displays.
23	<b>Display mode switch</b>	Selects the HDTV display mode and resolution (576p, 1080i, 720p, 576i).
24	<b>HDTV connector switch</b>	Select the connector type (YPbPr, RGB).
25	<b>Power Lead</b>	Connect to 240VAC mains supply.

# Remote Control

You can operate every function of the NextWave digital decoder using the buttons on the remote control handset. Please read this section to help your understanding of each function.



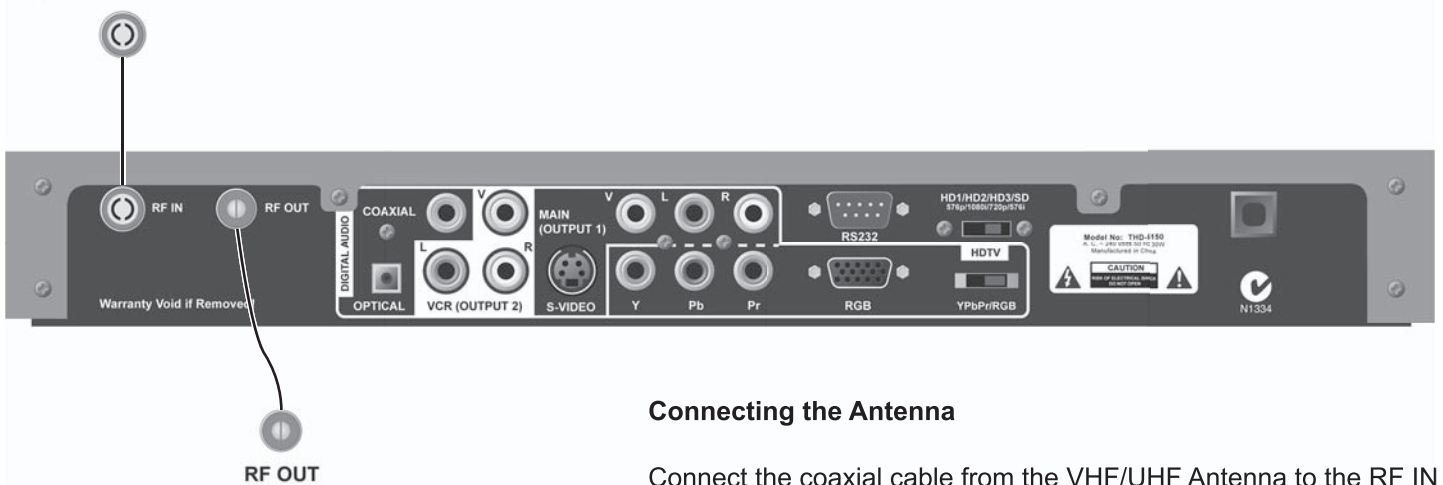
26		Turn the sound on / off (mute).
27		Standby. Puts the STB in or out of standby mode.
28	0 ~ 9	Change channels.
29	DSP	Displays program information banner. Pressing the button twice brings up the Electronic Program Guide (EPG).
30	AUDIO	Allows selection of MPEG or AC3 audio.
31	TTX	Access on-screen teletext and subtitles.
32	MIX	Press to overlay subtitles on picture.
33	LIST	Displays main channel list.
34	EXIT	Exit from menu.
35	MENU	Displays the main menu.
36	ENTER	Confirm selection of a highlighted item in the menu and to go to the next step.
37	▲PR+ ▼PR-	1. Change channels up and down. 2. Navigate up and down the main menu, Channel list and EPG.
	▶VOL+ ◀VOL-	1. increase or decrease the volume. 2. Navigate left and right the main menu, Channel list and EPG.
38	PiP/VCR	1. Sends PiP signal to another device via the secondary RCA outputs. 2. Switches PiP signal inset into main display.
39	ASPECT	Adjust aspect ratio for widescreen (16:9) display or 'Letterbox' for a 4:3 TV.
40	ON/OFF	Turns PiP on and off.
41	PR+	Change the Picture in Picture channel up.
42	SWAP	1. Swap the Picture in Picture and Main display when in PiP mode. 2. Swap the secondary (VCR) output and Main display when in VCR mode.
43	POS	Position the Picture in Picture window within the Main display.
44	PR-	Change the Picture in Picture channel down.
45	LIST	Displays PiP channel list.

# Connection Options

The Set Top Box (STB) only outputs one High Definition signal at a time. If you are choosing to use the High Definition (18 19 20 22) outputs, your Standard Definition outputs (14 15) are disabled.

The main Standard Definition output (14 15) is only available when the TV Format switch (23) is set to SD. The secondary Standard Definition output (11 12 13) is available at all times provided the signal has been switched via the remote control using the PIP/VCR button (38).

## Connecting the Antenna



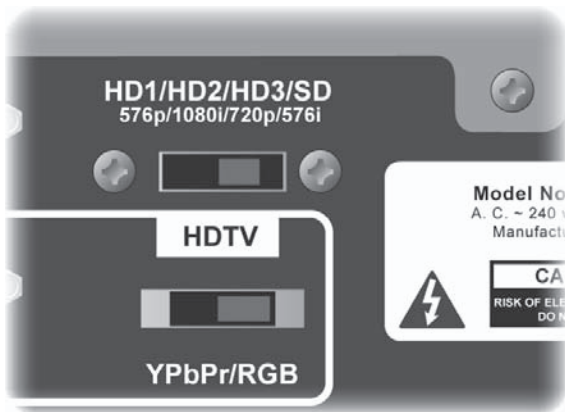
### Connecting the Antenna

Connect the coaxial cable from the VHF/UHF Antenna to the RF IN (7) socket on the rear panel of the STB.

**Please Note:** If you would like to receive either community television channels or original analogue programming, you may use the RF output signal to connect your VCR or TV receiver to it. (This signal carries the same signal that is received by the antenna and is not processed by the STB).

## TV Format switch

The STB outputs four different formats of TV signals and the TV Format Switch selects which format is sent to your display. The table below shows the resolutions for each setting.



Having established the optimal display mode for your device, move the selector switch (23) to the appropriate resolution display mode.

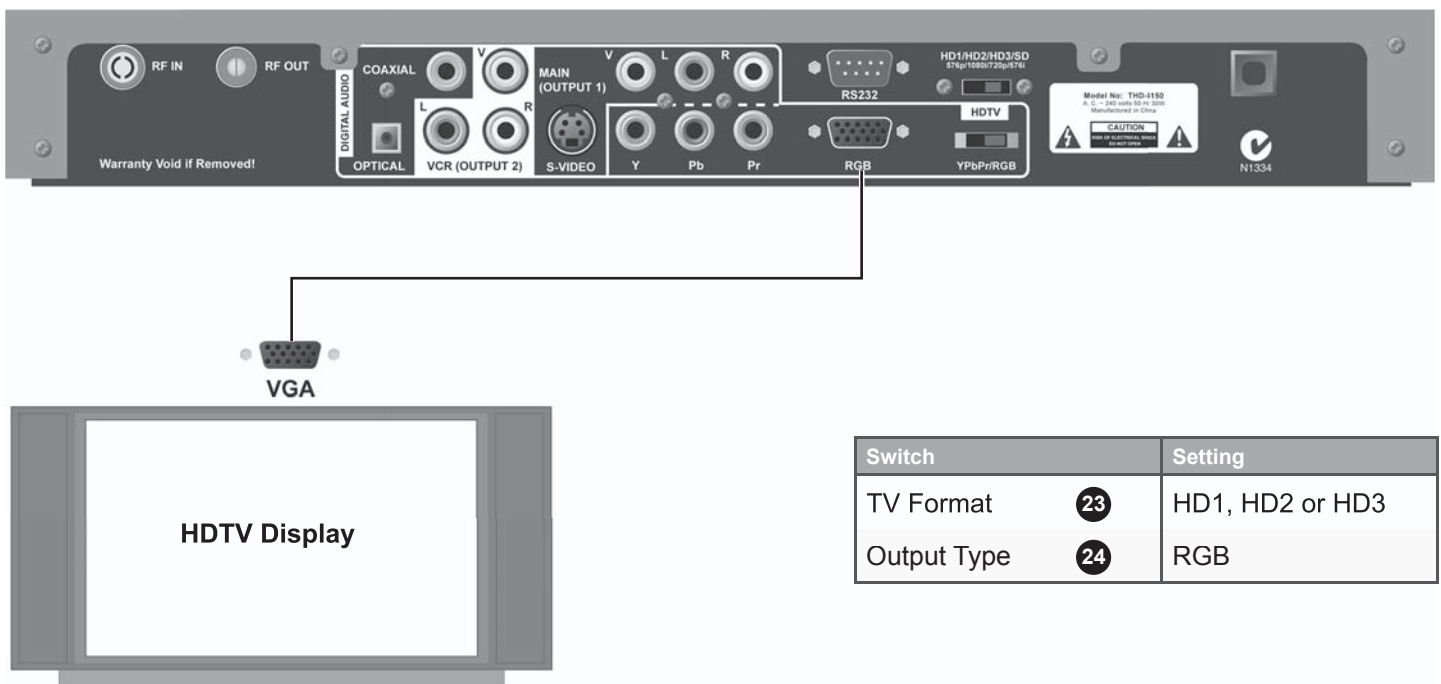
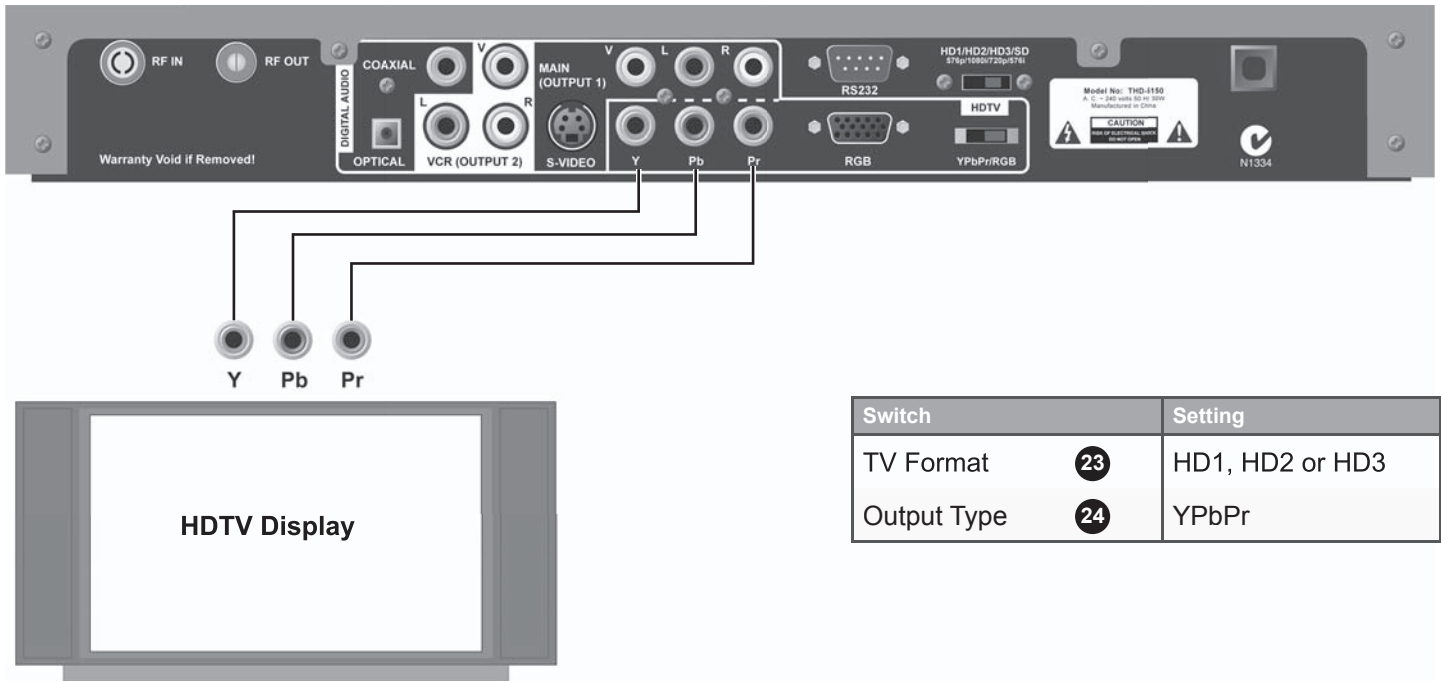
Switch	Setting
HD1	576p (720 x 576 progressive scan)
HD2	1080i (1920 x 1080 interlaced scan)
HD3	720p (1280 x 720 progressive scan)
SD	576i (720 x 576 interlaced scan)

**Please Note:** The STB must be turned off and on (1) each time you make a change to the output setting via the switch.

# Connection Options

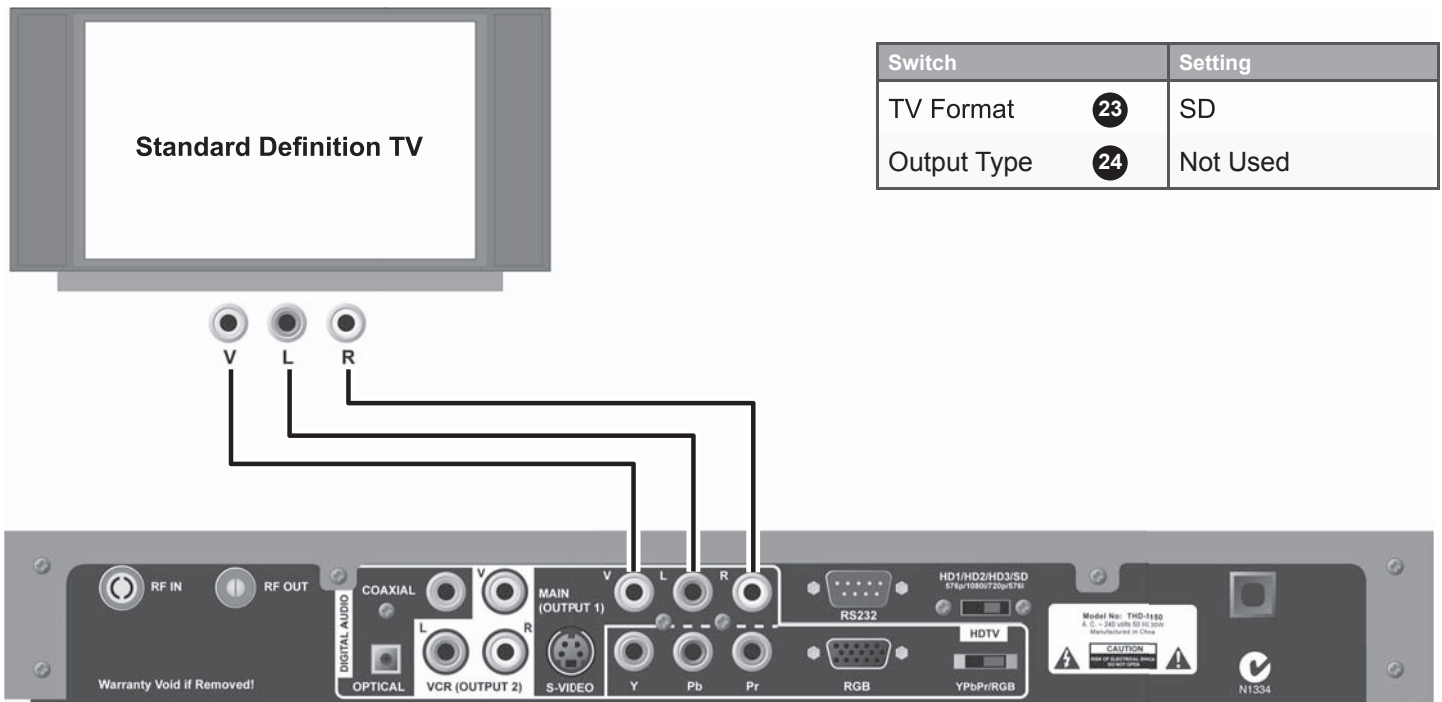
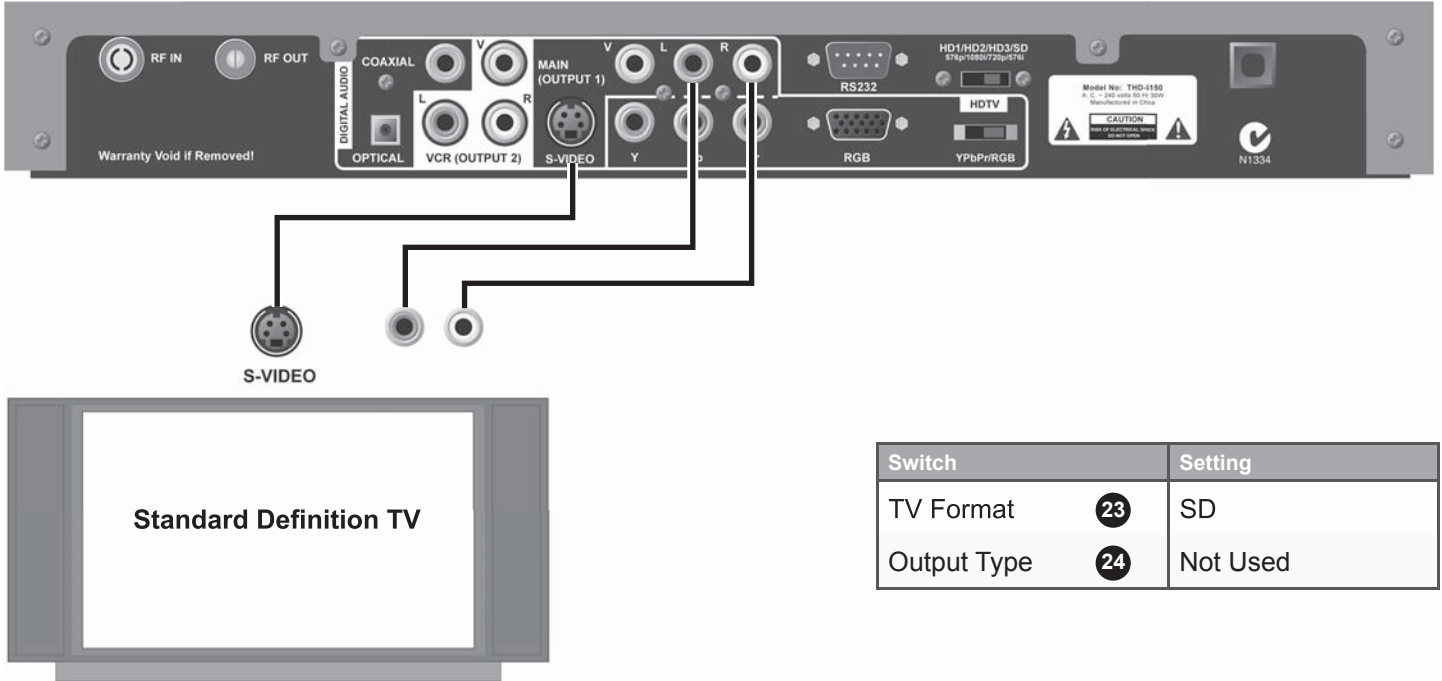
The following diagrams detail the most common ways of connecting the STB to your equipment.

## Connecting to a High Definition Capable Display (Component & RGB)



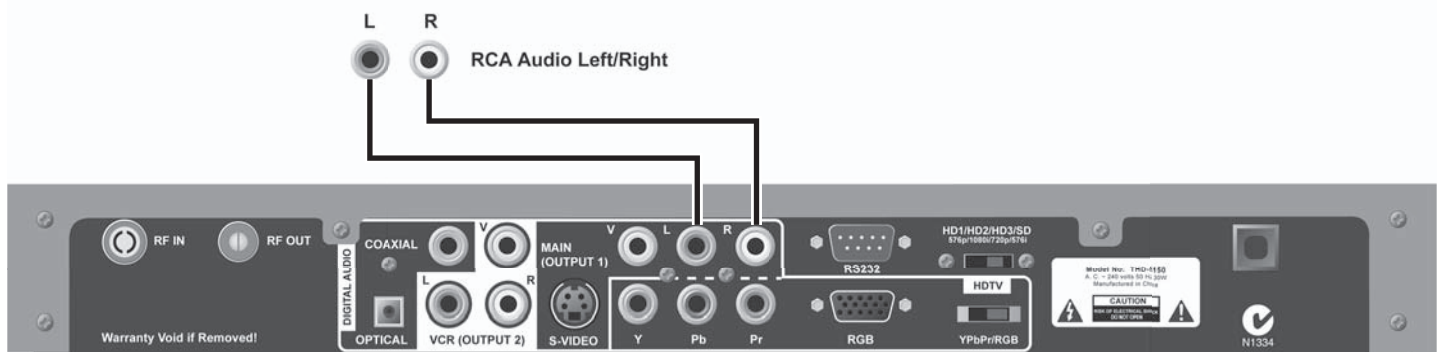
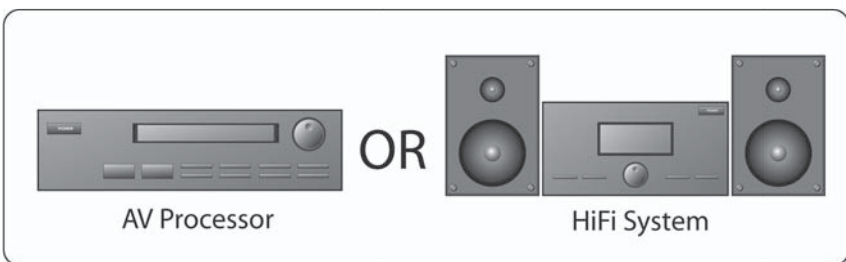
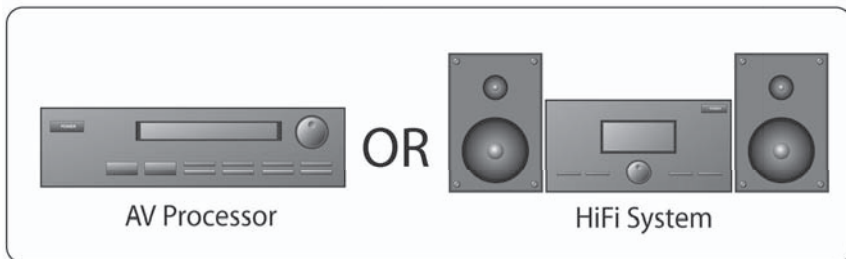
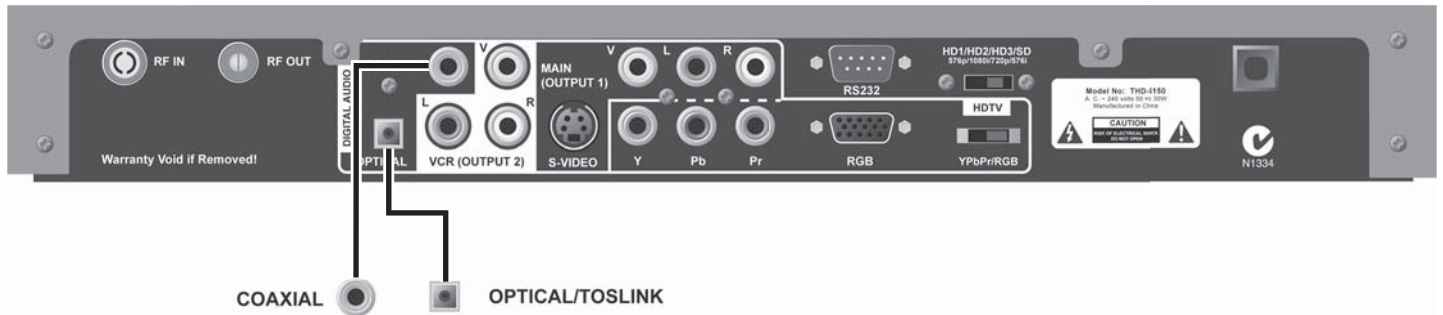
# Connection Options

## Connecting to an Standard Definition TV (S-video & Composite)



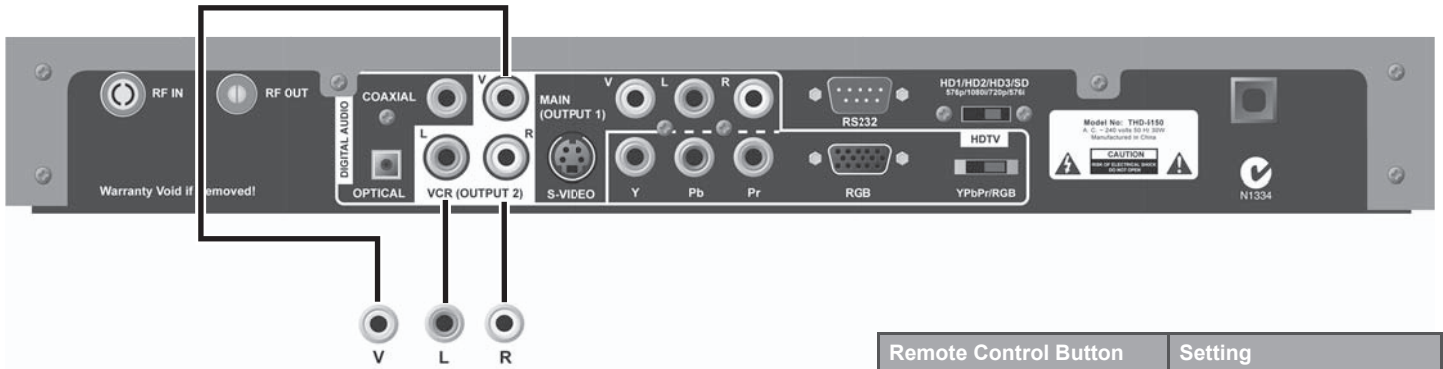
# Connection Options

## Connecting to an Audio or AV Processor or Hi-Fi (Digital Audio & Left/Right)

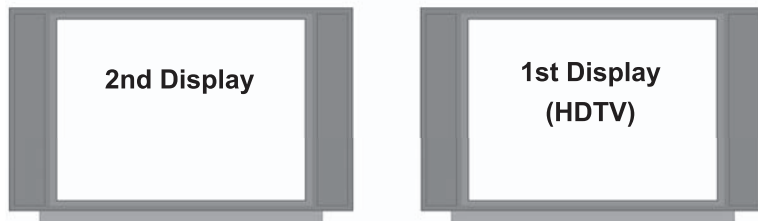
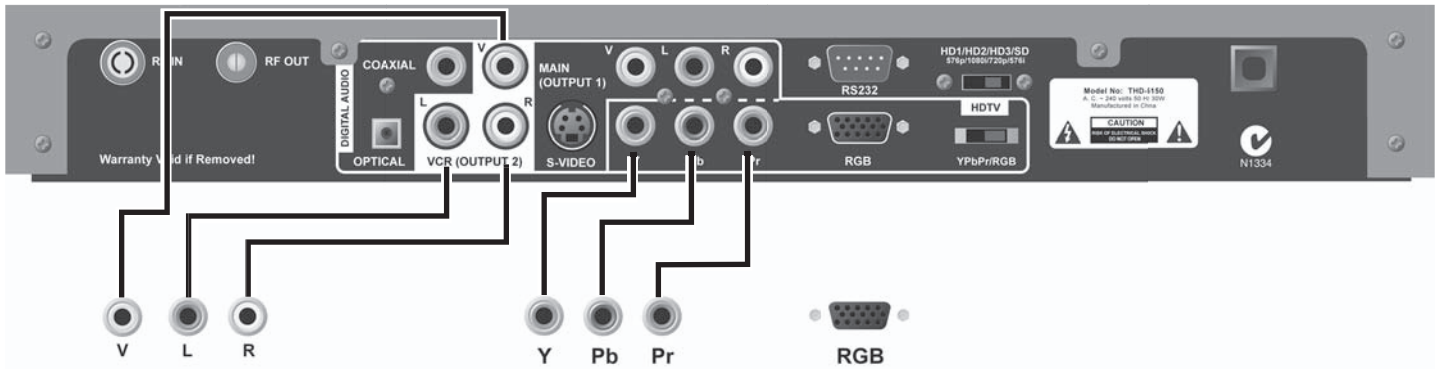


# Connection Options

## Connecting to a VCR or Secondary Display (Secondary Composite Outputs)

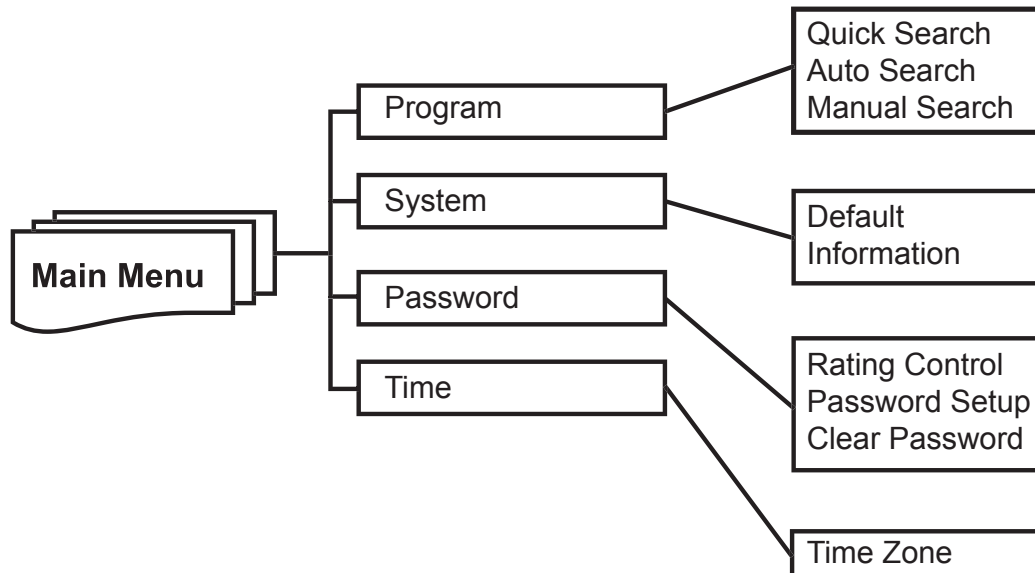


Remote Control Button	Setting
PIP/VCR	<b>38</b> VCR



Switch	Setting
TV Format	<b>23</b> HD1, HD2, or HD3
Output Type	<b>24</b> YPbPr or RGB
Remote Control Button	
PIP/VCR	<b>38</b> VCR

## Main Menu



## Navigation

Navigate the main menu using the remote control:

1. Press MENU (35) button to access the main menu.
2. Press PR+ and PR- (37) buttons to move the highlight upward or downward.
3. Press ENTER (36) button to confirm a selection or enter a sub-menu.
4. Within a sub-menu, use PR+, PR- and VOL+, VOL- (37) to navigate. Press ENTER to activate the selected menu item.
5. Press EXIT (34) button to return to the previous level menu.
6. Press MENU (35) button to exit the main menu and return to your program.



# Main Menu

## Quick Search

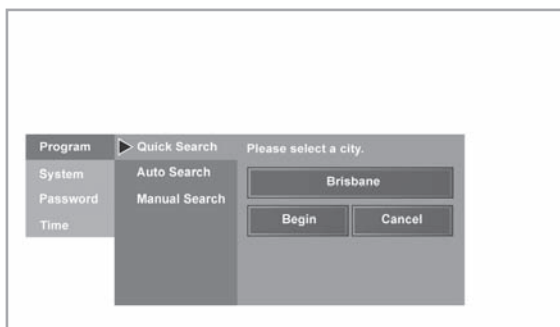


Quick Search will configure the Set Top Box based upon stored values for major metropolitan cities.

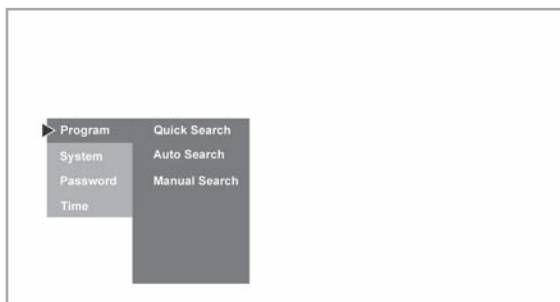
1. Navigate (page 15) to the 'Program' sub-menu and highlight 'Quick Search'. Press ENTER (36) to open 'Quick Search' sub-menu.
2. Highlight the first menu bar and press ENTER (36) to scroll through the list of cities available via Quick Search.
3. Use the PR+, PR-, VOL+, VOL- (37) buttons to move the highlight to 'Begin'. Press ENTER (36) to start searching.

To cancel searching after it has begun, select 'Cancel' and press ENTER (36).

4. Press the Menu (35) button to return to your program.



## Auto Search

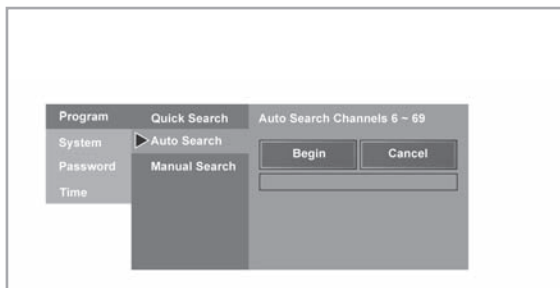


Auto Search scans for the digital channels available through the antenna inputs, storing active channels in the channel list.

1. Navigate (page 15) to the 'Program' sub-menu and highlight 'Auto Search'. Press ENTER (36) to open 'Auto Search' sub-menu.
2. Use the PR+, PR-, VOL+, VOL- (37) buttons to move the highlight to 'Begin'. Press ENTER (36) to start searching.

To cancel searching after it has begun, select 'Cancel' and press ENTER (36).

3. When the Auto Search is complete, the lowest channel number discovered appears on the TV screen.
4. Press the Menu (35) button to return to your program.



## Manual Search

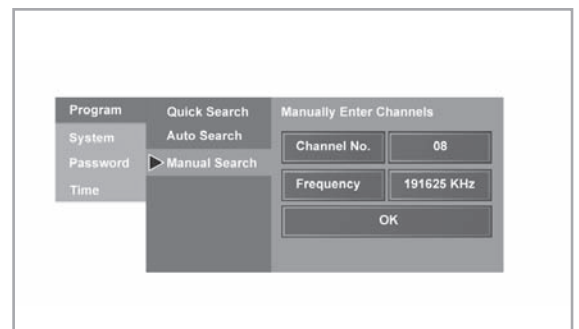
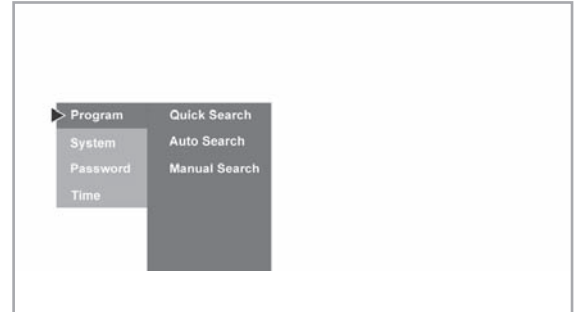
If quick Search and Auto Search have failed Manual Search can be used to manually enter the channel numbers and frequencies.

1. Navigate (page 15) to the 'Program' sub-menu and highlight 'Manual Search'. Press ENTER (36) to open 'Manual Search' sub-menu.
2. Highlight 'Channel No.' and press ENTER (36). Use VOL+/- (37) buttons to move the cursor rightward or leftward and use PR+/- (37) buttons to select number (or directly input the number by digit buttons), then press ENTER (36). Be sure you know the channel number.
3. Use the PR+, PR-, VOL+, VOL- (37) buttons to move the highlight to 'Begin'. Press ENTER (36) to start searching.

To cancel searching after it has begun, select 'Cancel' and press ENTER (36).

4. Press the Menu (35) button to return to your program.

**Note:** Normally it is unnecessary to input the frequency value. However, if you want to input the frequency, you can highlight Frequency Then make use of ENTER, PR+/-, VOL+/- button to input.

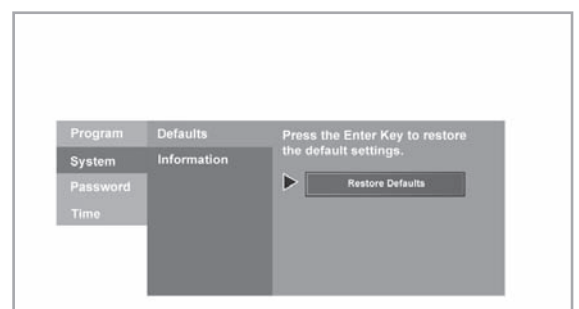
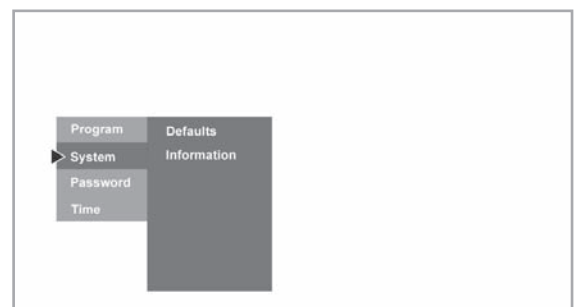


## Restore Defaults

The Set Top Box can be reset to its original factory condition by completing the following steps:

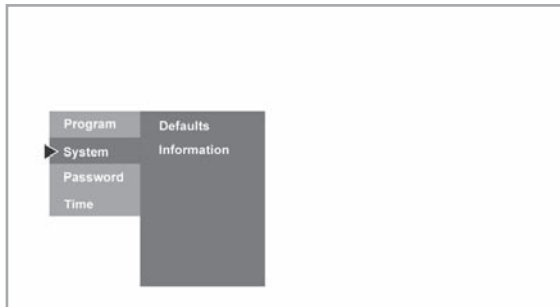
1. Navigate (page 15) to the 'System' sub-menu and highlight 'Defaults'. Press ENTER (36) to open 'Defaults' sub-menu.
2. Highlight 'Factory Defaults' and press ENTER (36) to reset the Set Top Box to factory defaults.
3. A dialogue box will appear to confirm whether you really want to restore factory settings. Select "Yes" to restore factory settings or "No" to cancel the reset function.
4. Press the Menu (35) button to exit the main menu or navigate to the 'Program' sub-menu and search for digital channels.

**Please Note:** A factory defaults reset will wipe all of the channel information from the Set Top Box. After a reset a Quick, Auto or Manual Search will need to be completed to view available digital channels.



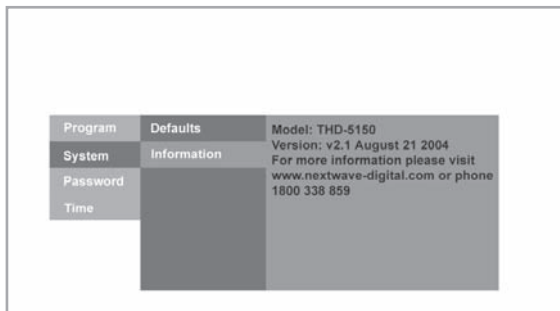
# Main Menu

## Information

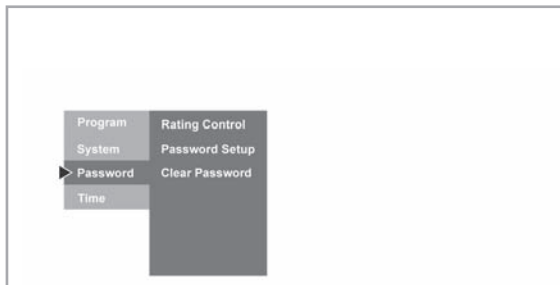


The information menu displays data about the model number, software version and the address of the internet support site. This information may be of use for diagnosing possible problems.

1. Navigate (page 15) to the 'System' sub-menu and highlight 'Information'. Press ENTER (36) to open 'Information' sub-menu.
2. The system information (e.g. software version) is displayed.
3. Press the Menu (35) button to return to your program.

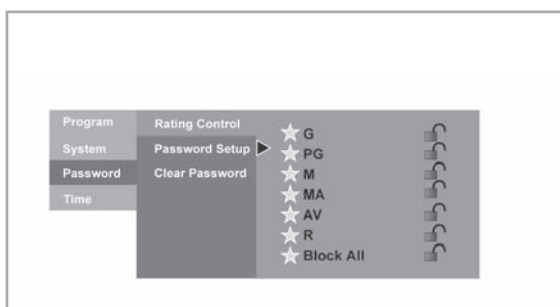


## Rating Control



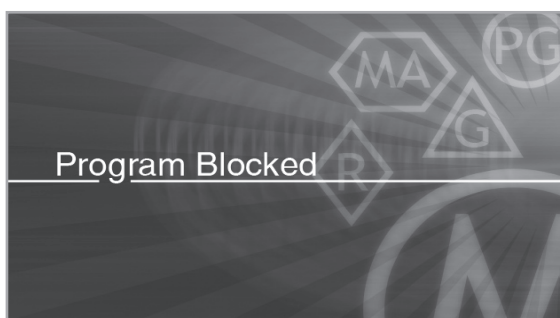
Rating Control blocks programs according to their classification so that children can not view certain programs. Parents can set the ratings limit in the Ratings Control sub-menu.

1. Navigate (page 15) to the 'Password' sub-menu and highlight 'Rating Control'. Press ENTER (36) to open 'Rating Control' sub-menu.
2. If a system password has been set (see page 19) you will be required to enter it now using the numeric (28) buttons. If the correct password is provided the 'Rating Control' sub-menu will be accessible.
3. Press PR+/- to move the highlight upward or downward and press ENTER to either block or unblock a rating.



Use the 'Block All' setting to completely block all viewing. The menu can still be accessed to unblock all programs.

4. Press the Menu (35) button to return to your program.

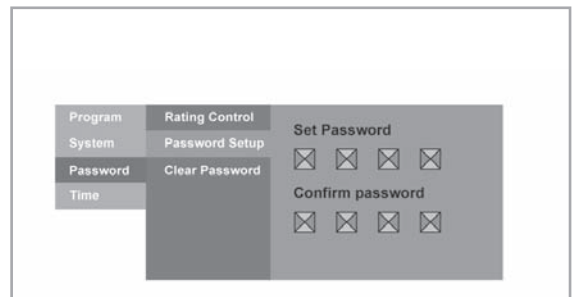
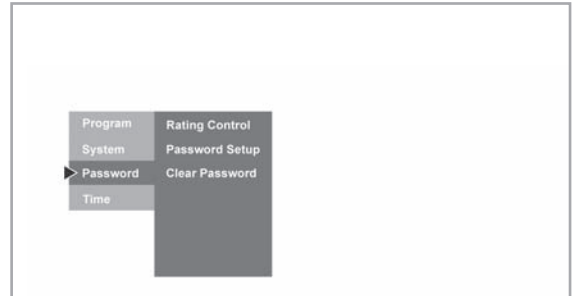


## Password Setup

The Password Setup menu is used to set a new system password or to change an existing system password. By default, no system password is set. A password may be set if desired to prevent unintended alterations to the system configuration.

### To set a new password:

1. Navigate (page 15) to the 'Password' sub-menu and highlight 'Password Setup'. Press ENTER (36) to open 'Password Setup' sub-menu.
2. Use the numeric (28) buttons to enter a new four digit system password. Confirm the new password using the numeric buttons.
3. Press the Menu (35) button to return to your program.



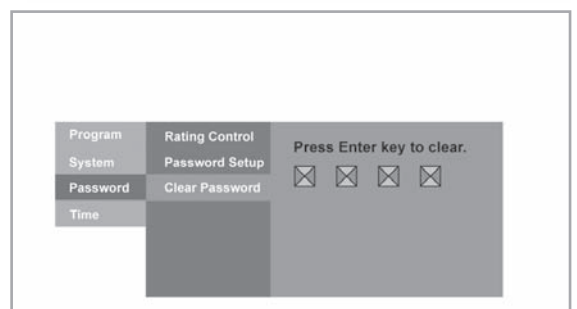
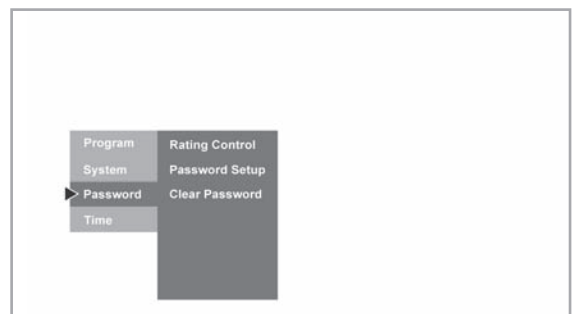
### To change an existing system password:

1. Navigate (page 13) to the 'Password' sub-menu and highlight 'Password Setup'. Press ENTER (36) to open 'Password Setup' sub-menu.
2. Use the numeric (28) buttons to enter the old password.
3. Use the numeric (28) buttons to enter a new four digit system password. Confirm the new password using the numeric buttons.
4. Press the Menu (35) button to return to your program.

## Clear Password

To clear a system password complete the following steps:

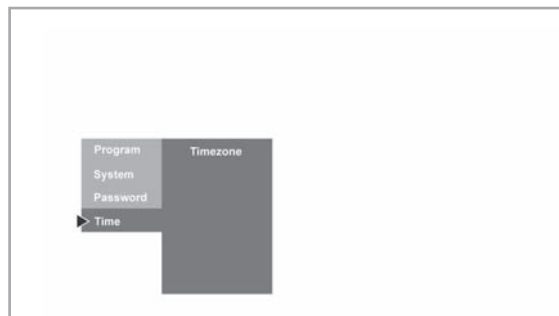
1. Navigate (page 15) to the 'Password' sub-menu and highlight 'Clear Password'. Press ENTER (36) to open 'Clear Password' sub-menu.
2. Use the numeric (28) buttons to enter the old password.
3. A dialogue box will ask "Sure to clear password?". Select Yes and press ENTER (36).
4. The system password is now cleared.
5. Press the Menu (35) button to return to your program.



# Main Menu

## Timezone

1. Navigate (page 15) to the 'Time' sub-menu and highlight 'Select Timezone'. Press ENTER (36) to open 'Select Timezone' sub-menu.
2. Use PR+ PR- (37) buttons to highlight your state. Press ENTER (36) to select the appropriate time zone.
3. Press the Menu (35) button to return to your program.



# Main Display User Functions

**Please Note:** Information displays for the PiP and VCR outputs (channel list, information banner and EPG) will be available on the main screen only. All controls (volume, audio menu) are displayed on the main screen only.



To perform the following functions, bring up the Program List and press ENTER (36) to select the desired channel. This will enable you to control main screen functions.

## Aspect Ratios

You can adjust the aspect ratio between 4:3 Full, 4:3 Letterbox and 16:9 Full for the main display by repeatedly pressing the ASPECT (41) key.

- Set Aspect Ratio to 16:9 FULL for widescreen display.
- Set Aspect Ratio to 4:3 FULL for 4:3 display.
- Set Aspect Ratio to 4:3 LETTERBOX for 4:3 display.

## Audio Menu

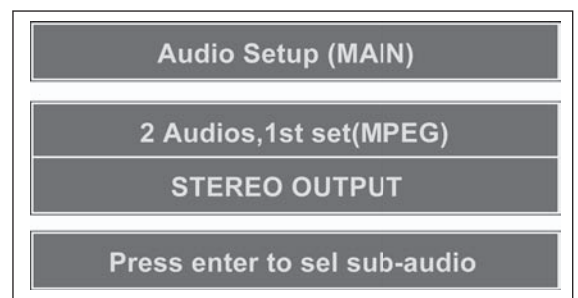
Broadcasters transmit two forms of audio. MPEG audio is standard for all channels. Some channels broadcast AC3 audio as well.

To enjoy surround sound you can select from these two audio formats. Using your optical and coaxial digital audio outputs and a surround sound processor you can benefit from these two audio formats. 5.1 sound when available, can be received as well.

The format of the audio the STB outputs can be changed using the AUDIO (30) button. This activates a menu which allows selection of the digital audio format (AC3/MPEG).

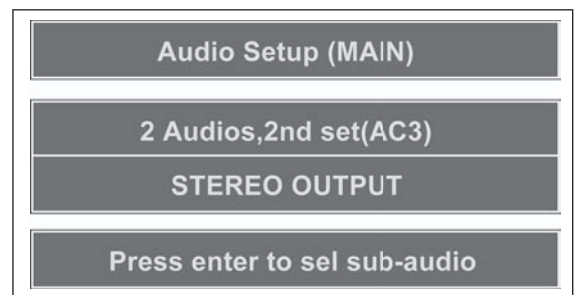
**To select MPEG audio complete the following steps:**

1. Press the AUDIO (30) key to enter the audio menu.
2. Use the PR+/- and VOL+/- (37) keys to select the audio format and output type submenus. Press ENTER (36) to alter either of these settings.
3. Press EXIT (34) to exit the menu.



**To select AC3 audio complete the following steps:**

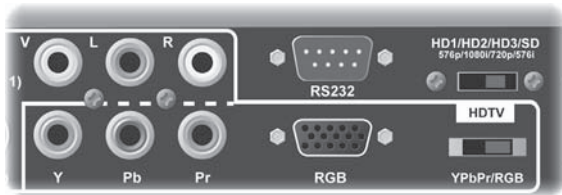
1. Press the AUDIO (30) key to enter the audio menu.
2. Use the PR+/- and VOL+/- (37) keys to select the audio format and output type submenus. Press ENTER (36) to alter either of these settings.
3. Press EXIT (34) to exit the menu.



# Main Display User Functions

## Altering the volume of the Main Output

You can adjust the volume to your desired level for the main audio output by pressing the VOL+ and VOL- (37) buttons.

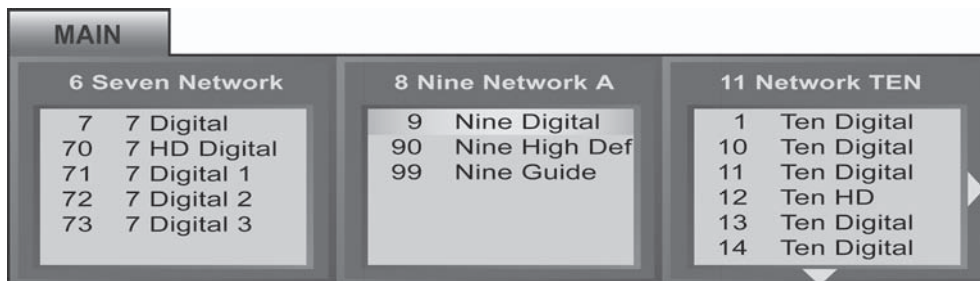


Please Note, this will only vary the output available via the RCA terminals (left & right).

Please Note: Volume control for your coaxial and optical outputs can only be varied by your Audio amplifier or AV processor.

## Program List

The channel list for the main channels can be displayed by pressing the LIST (33) button.

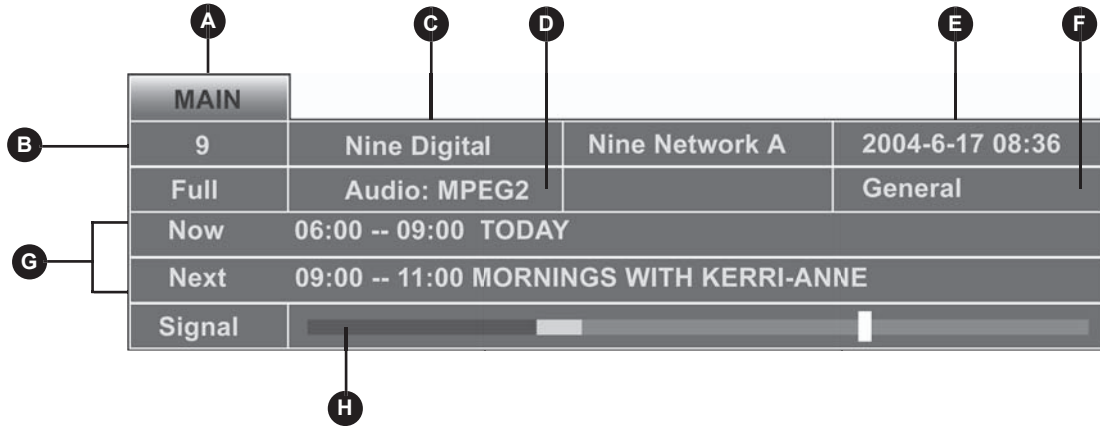


1. press LIST (33) button to call up the Program List.
2. Use the PR+, PR-, VOL+, VOL- (37) buttons to highlight the channel.
3. If the list contains a large number of networks, continue to press the VOL+ (37) button to scroll right through the extra pages.
4. If each network contains a large number of channels continue to press the PR- (37) button to scroll down through the extra channels.
5. Press ENTER (36) to select that channel. The desired channel will now be displayed on the main display.
6. Press the EXIT (34) button to return to your program.

# Main Display User Functions

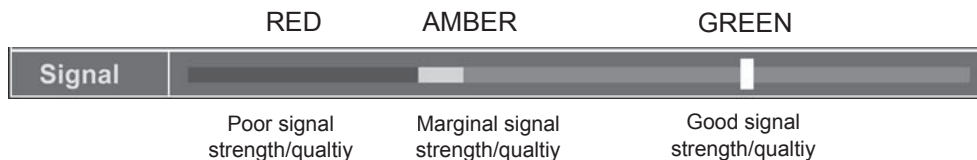
## Information Banner

You can quickly check the status of currently displayed program by pressing the DSP (29) button.



<b>A</b>	The title displays either (Main or PiP/VCR) depending on which output stream is selected (See page 26 for information on PiP).
<b>B</b>	Displays channel number.
<b>C</b>	Channel Name.
<b>D</b>	Audio Stream Type.
<b>E</b>	Current date and time.
<b>F</b>	Displays the classification for the current program.
<b>G</b>	Displays current and upcoming programs.
<b>H</b>	Signal Strength indicators (more detail below).

## Signal Strength



The signal strength bar at the bottom of the information banner indicates the level and quality of signal that is received by the set top box for each channel.

# Main Display User Functions

## EPG

The EPG displays information about current and upcoming programs. The EPG is accessed by pressing the DSP button while viewing the channel banner.

1. Press the DSP (29) button twice to bring up the EPG.
2. Press EXIT (34) to return to normal viewing.

EPG (MAIN)		
Start	Stop	Event Name
06:00	09:00	TODAY
09:00	11:00	MORNINGS WITH KERRI-ANNE

TODAY

## Teletext and Closed Captions

Network Seven in metropolitan areas transmits Teletext as part of their broadcast. THD-5150 can display Teletext even if your TV set is not Teletext capable.

### To access Teletext Pages:

1. Press the TTX (31) button on the remote control. By default, P100 (Main Index) will be found. If the broadcaster is not transmitting teletext, the closed caption page (P801) will be displayed after 15 seconds.
2. Navigate by entering the desired page number with the numeric (28) buttons on the remote control.
3. Exit Teletext by pressing the EXIT (34) button on the remote control.

All Networks frequently transmit closed captions as part of their broadcast.

### To access Closed Captions:

1. Press the TTX (31) button on the remote control.
2. Select page 801 with the numeric (28) buttons on the remote control. If the program has closed captions it will be displayed on the screen.
3. Press the EXIT (34) button on the remote to stop closed captions. This will allow you to change channels.

**Please Note:** While closed captions are active, you are unable to change channels. To view Teletext without active pictures, press the MIX (32) button.

# Dual View Functions

## Dual View Features

The THD-5150 is capable of decoding two separate digital channels. The unit can display a second independent channel in picture in picture mode **OR** via secondary output connected to a VCR/DVD Recorder or a Standard Definition TV.

You cannot view PiP and activate the secondary output simultaneously.

**Please Note: Information displays for the PiP and VCR outputs (channel list, information banner and EPG) will be available on the main screen only. All interfaces are displayed on the main screen.**

## Remote Keys controlling PiP functionality

The following keys (35 ~ 45) on the remote control are for use with the second channel that is either PiP or available via VCR output.

1. To activate Picture in Picture, press the On/Off (40) button.
2. To switch between either PiP display or output to a VCR/DVD or SDTV press the PiP/VCR (38) button.
3. Change PiP channels using the PR+ (41) and PR- (44) buttons.
4. The channel List for the PiP window can be displayed by pressing the LIST (45) button.
5. The programs in the PiP and Main window can be swapped by pressing the SWAP (42) button.
6. The PiP window can be positioned by repeatedly pressing the POS (43) button.
7. The aspect ratio of the PiP window is altered by the ASPECT (39) button.



PiP		
6 Seven Network	8 Nine Network A	11 Network TEN
7 7 Digital	9 Nine Digital	1 Ten Digital
70 7 HD Digital	90 Nine High Def	10 Ten Digital
71 7 Digital 1	99 Nine Guide	11 Ten Digital
72 7 Digital 2		12 Ten HD
73 7 Digital 3		13 Ten Digital
		14 Ten Digital

PiP			
9	Nine Digital	Nine Network A	2004-6-17 08:36
Full	Audio: MPEG2	Teletext	No Class
Now	06:00 -- 09:00 TODAY		
Next	09:00 -- 11:00 MORNINGS WITH KERRI-ANNE		
Signal	[Progress bar]		

EPG (PiP)		
Start	Stop	Event Name
06:00	09:00	TODAY
09:00	11:00	MORNINGS WITH KERRI-ANNE
MORNINGS WITH KERRI-ANNE		

# Dual View Functions

**Please Note:** Information displays for the PiP and VCR outputs (channel list, information banner and EPG) will be available on the main screen only. All interfaces are displayed on the main screen.

## Switching between PiP or Secondary Output (VCR)

The PiP/VCR (38) button performs this function:

1. Pressing it once will switch PiP to the VCR output.  
(via RCA terminals)
2. Pressing the button again will switch back to PiP mode.

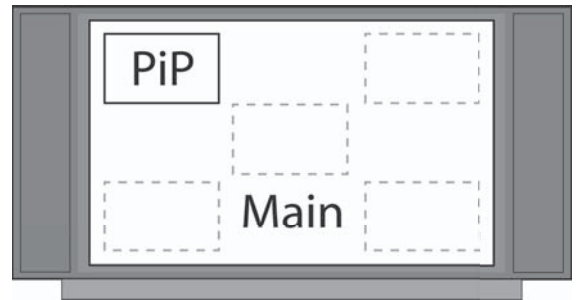
PiP --> VCR, Please Wait...

VCR --> PiP, Please Wait...

**Please Note:** the STB will momentarily display a message as it switches between outputs.

## Picture in Picture (PiP)

1. To activate Picture in Picture, press the On/Off (40) button.
2. Change PiP channels using the PR+ (41) and PR- (44) buttons.
3. PiP can be moved around the main screen using the POS (43) button and displayed in the positions shown.
4. To list and select channels available in PiP mode, press the LIST (45) button and navigate list using PR+/- (37) and VOL+/- (37).



**Please Note:** For this function the PiP/VCR has to be set to PiP mode. This is set with the PiP/VCR (38) key.

## Secondary Output (VCR, DVD Recorder or SD TV)

1. To switch signal to VCR output, press the PiP/VCR (38) button.
2. Change secondary channels using the PR+ (41) and PR- (44) buttons.
3. To list and select channels available in VCR mode, press the LIST (45) button and navigate list using PR+/- (37) and VOL+/- (37).

**Please Note:** For this function the PiP/VCR has to be set to VCR mode. This is set with the PiP/VCR (38) key.

# Dual View Functions

## Program List for PiP or secondary output (VCR/DVD Recorder or SDTV)

The channel list for the secondary (VCR/PIP) output can be displayed by pressing the LIST (45) button.

1. Press the LIST (45) button to call up the Program List.
2. Use the PR+/- and VOL+/- (37) buttons to highlight the channel.
3. If the list contains a large number of networks, continue to press the VOL+ (37) button to scroll right through the extra pages.
4. If each network contains a large number of channels continue to press the PR- (37) button to scroll down through the extra channels.
5. Press ENTER (36) to select that channel. The desired channel will now be displayed on the PiP window or Secondary Output.
6. Press the Menu (35) button to return to your program.

PIP		
6 Seven Network	8 Nine Network A	11 Network TEN
7 7 Digital	9 Nine Digital	1 Ten Digital
70 7 HD Digital	90 Nine High Def	10 Ten Digital
71 7 Digital 1	99 Nine Guide	11 Ten Digital
72 7 Digital 2		12 Ten HD
73 7 Digital 3		13 Ten Digital
		14 Ten Digital



To perform the following functions, bring up the Program List and press ENTER (36) to select the desired channel. This will enable you to control dual view functions. Please also note that for 5 seconds after activating PiP using PiP/VCR (38) button or the other PiP control buttons, other functions, including channel change and volume controls, will affect the PiP or secondary output instead of the main output. Please wait for 5 seconds for main output controls to reactivate.

## Selecting PiP or secondary output (VCR/DVD Recorder or SDTV) Aspect Ratios

You can adjust the aspect ratio between 4:3, 4:3 letterbox and 16:9 for the PiP or Secondary display (VCR/DVD Recorder or SDTV) by repeatedly pressing the ASPECT (39) key.

- Set Aspect Ratio to 16:9 FULL for widescreen display.
- Set Aspect Ratio to 4:3 FULL for 4:3 display.
- Set Aspect Ratio to 4:3 LETTERBOX for 4:3 display.

## Changing the volume of the secondary output (VCR/DVD Recorder or SDTV)

You can adjust the volume to your desired level for the secondary output by pressing the VOL+/- (37) buttons.



## Bringing up the Electronic Program Guide (EPG) for PiP or Secondary Output

The EPG can be displayed by pressing the DSP (29) button twice.

1. Press the DSP (29) button to bring up the information banner.
2. Press the DSP (29) button again to bring up the Electronic Program Guide (EPG).

EPG (PiP)		
Start	Stop	Event Name
06:00	09:00	TODAY
09:00	11:00	MORNINGS WITH KERRI-ANNE

MORNINGS WITH KERRI-ANNE

## Troubleshooting

Symptom	Solution
No power.	<ul style="list-style-type: none"> <li>Plug the power cord into the outlet securely.</li> </ul>
No picture.	<ul style="list-style-type: none"> <li>Check your antenna input or location.</li> <li>Make sure the correct video display format is selected.</li> <li>If the STB is connected to your monitor or TV via VIDEO OUT jack on the back panel, the display format must be SD. Otherwise you may not be able to see a picture.</li> <li>If STB is connected to your monitor or TV via YPbPr port or RGB on the back panel, the display must not be SD. Otherwise you may not be able to see a picture.</li> <li>If STB is connected to your monitor or TV via YPbPr port on the back panel, the YPbPr/RGB selection switch must be flipped to YPbPr. Otherwise you may not be able to see a picture.</li> <li>If STB is connected to your monitor or TV via RGB on the back panel, the YPbPr/RGB selection switch must be flipped to RGB. Otherwise you may not be able to see a picture.</li> <li>Check to make sure all the cables are installed correctly and that the proper source is selected on your TV.</li> <li>The antenna signal strength may be low. Check the signal strength and adjust the antenna location and direction.</li> </ul>
Normal picture but no sound.	<ul style="list-style-type: none"> <li>Check volume levels.</li> <li>Make sure the TV is not muted.</li> <li>Check the STB is connected properly.</li> </ul>
Picture is distorted.	<ul style="list-style-type: none"> <li>Make sure the proper format is selected.</li> <li>Make sure the proper aspect ratio is selected.</li> <li>Make sure the video output is connected to the TV.</li> </ul>
Available channels are missing.	<ul style="list-style-type: none"> <li>The only way that you can find all the available channels is by running the auto search in the program menu.</li> </ul>
No teletext.	<ul style="list-style-type: none"> <li>Make sure the channel you are watching carries teletext information.</li> </ul>
The remote control does not work properly.	<ul style="list-style-type: none"> <li>Point the remote control at the remote sensor of the STB.</li> <li>Operate the remote control within 23ft (7m).</li> <li>Remove any obstacles in the way.</li> <li>Replace the batteries with new ones.</li> </ul>

## Specifications

### Video

Formats	MP@HL/MP@ML
Output System	DVB-T Compliant 16:9 High Definition (1080i /720P/ 576P) and PAL (576i)
Aspect Ratio	16:9, 4:3, 4:3 (Letterbox)
Picture Resolution	1920 x 1080i, 1280 x 720p, 720 X 576p, 720 X 576i
HD (Main) Video Output	Component YPbPr (RCA), RGBHV (D-SUB)
SD (Main) Video Output	S-Video (Mini DIN), CVBS
SD (VCR) Video Output	CVBS
HD Display Mode	HD1 (576p) / HD2 (1080i) / HD3 (720p)

### Audio

Formats	Digital 5.1/MPEG-1 layers 1 and 2
Sample Rate	32/44.1/48 KHz
Mode	Stereo/Dual
Output Connector (Main)	Digital Coaxial/Optical Audio Output / RCA (L/R)
Output Connector (VCR)	RCA (L/R)

### Terrestrial Input Signal

Frequency	51 ~ 858 MHz
Loop Through	51 ~ 858 MHz
Bandwidth	7MHz
Demodulator	COFDM
FFT mode	2k, 8k
Constellation	QPSK, 16QAM & 64QAM
Guard Interval	1/4, 1/8, 1/16, 1/32
Inner Coding Rate	1/2, 2/3, 3/4, 5/6, 7/8

### Controller Features

CPU Speed	390 Dhrystone MIPS
RAM Memory	64 MB DDR
Flash Memory	8 MB
Serial Port	RS-232 (Upgrade)

### Power

Input Voltage	90~260VAC 47~60Hz
Consumption	30W

### Environmental Condition

Operating Temperature	5°C ~ 40°C
Dimension	W X D X H (mm) 350 x 245 x 50
Weight(Kg)	3.7Kg

# Glossary

## **Component Video (YPbPr)**

Video system in which the luminance information and two colour difference signals are sent via three cables (Used to minimise bandwidth).

## **CVBS - (Composite Video Baseband Signal)**

Video system in which the entire video signal is sent via an individual cable. Available through RCA connections.

## **EPG - Electronic Program Guide**

Contains information about current program ('Now') and the next program ('Next'). Additionally, provides short descriptions about the current program.

## **HDTV - High Definition Television**

HDTV is a high quality Digital TV signal, with greater resolution than Standard Definition (SDTV). Only display devices that support this increased resolution will receive the full benefit of HDTV.

## **Resolution**

Refers to the number of pixels (horizontally & vertically) a display device has. The greater the number of pixels, the sharper the picture quality will be.

## **RGB Video**

Red, Green & Blue Video signals available via the D-SUB output.

## **STB - Set Top Box.**

## **Standard Definition Television (SDTV)**

SDTV is a high quality Digital TV signal, with greater quality than traditional analogue TV signals. Users will require a Digital Set Top Box or a TV that supports SDTV signals to receive the new broadcast signal.

## **S/PDIF - Sony Philips Digital Interface**

Digital audio available via optical and coaxial connections. Use with Audio/Video Processor. 5.1 Digital and MPEG audio available through these outputs.

## **S-Video - Super Video**

Video system in which the colour and brightness signals are sent separately via an individual cable. Available via a mini-DIN connection.

## **Teletext**

Teletext is a one-way information retrieval service. A fixed number of information pages are repetitively broadcast on unused portions of a TV channel bandwidth. This STB allows teletext to be displayed on a non-teletext TV.

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*For more information, please visit the NextWave Digital web site:*

**[www.nextwave-digital.com](http://www.nextwave-digital.com)**

## FOR THE NEXTWAVE HD-5100 AUSTRALIAN DIGITAL TV RECEIVER

This product carries a warranty against any defect in workmanship for a period of twelve months from date of purchase.

Under warranty,  
repairs will be carried out at an  
approved Service Centre

Please keep this Warranty Certificate with your tax invoice as proof of purchase. It will be needed when claiming service in terms of this warranty.

The Warranty shall not apply to malfunction or damage after installation, resulting from transport and/or handling or to malfunction or damage due to incorrect voltages or faults in the house wiring, Product misuse, improper use, abuse, neglect or negligence by the Purchaser or anybody else, or any use of the Product other than that described in the operating manual, malfunction or damage due to fire, earthquake, flood, lightning or any other natural disaster, abnormal voltage, war or any other disturbance (revolution, riot etc), unforeseen accidents, wear and tear, or any other external factors beyond the Manufacturer's control or the control of any Authorised Service Centre, or to any product installed, repaired, adjusted, rebuilt, modified, changed or converted by any person (including the Purchaser) other than Authorised installers or Service Centres, and any Product on which the serial number has been changed, tampered with or removed.

This warranty shall not apply to batteries or any other parts of a limited natural life.

Where the Purchaser wishes to return the Product other than by hand to an Authorised Service Centre for warranty service, the Purchaser should contact the Authorised Service Centre to make the necessary arrangements and the Product should be returned, at the Purchaser's risk and expense together with a copy of the Warranty Certificate, a valid proof of purchase and a detailed written explanation of the problem.



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