

**High Definition
Digital Set Top Box
DFTA47HDR**

BUSH



Quick Start Information:

1. Connect your aerial cable to your unit.
2. Connect Power Supply to your unit & wall outlet.
3. Connect the supplied composite & audio cable (Yellow, Red, White) between the STB & Television
4. Insert batteries in the remote control.
5. Switch on and follow on screen instructions.

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Introduction

This user manual is intended to guide you through the operation for the Bush DFTA47HDR High Definition DVBT Terrestrial Receiver.

The password may be required when you attempt to modify some advanced settings. The default password is“000000”.

Main features and functions

This product is a high definition digital set top box. It fully complies with DVB-T receiver requirement specifications. It provides users with free to air high definition and standard definition digital terrestrial television and radio signals being broadcast.

Features:

1. Fully compatible with DVB-T FTA digital standard
2. Fully compatible with MPEG-4 H.264/AVC High Definition Digital TV
3. Fully compatible with MPEG-2 High Definition and Standard Definition Output
4. Fully compatible with MPEG-1 Layer I & II, Dolby Digital Audio
5. Complies with Australian Standards and MEPS requirements
6. Universal Remote Control - capable of operating the set top box
7. Record digital television FTA program to a USB Flash Drive or an external USB portable hard disk and playback via USB2.0 compatible.
8. VHF & UHF Input and Loop Out
9. Fully supported 7 Day Electronic Program Guide(EPG)
10. Automatic and Manual search
11. Parental Control
12. Plug and Play installation with an easy to use Menu System
13. Coaxial SPDIF Digital audio output interface
14. 576i, 576P, 720P, 1080i Video Resolution supported

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15. Supports 4:3 and 16:9 Aspect Ratios
16. Supports Teletext (where broadcast)
17. Subtitles supported based upon availability on the network
18. Channel editing functions (Favorites, Move, Lock, Delete)
19. Supports HDMI High Definition Multimedia Interface(HDMI 1.3)
20. USB 2.0 Input supports mp3, wma, jpeg and bmp media playback and Software Upgrade.
21. Audible feedback supported.

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Remote control

The remote control is shown below and the button functions are listed in the table on page 6.



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Key legend	Description
Home	Press at any time to return to the first scanned in Channel
Power	Switches the Set Top Box between On and Standby
	Press to Mute all audio
TV/Radio	Switch between TV and Radio mode
Swap	Reverts to the previously viewed channel
Repeat	Switch between repeat off,repeat one,repeat random,repeat the folder.
Vol + / Vol -	Increases/Decreases the set top box volume
P+ /P-	Changes the channel up/down
	Moves the cursor up/left/right/down and scrolls through menus
OK	Press to confirm selection
Guide	Accesses Electronic Programme Guide
Back	When accessing the menu, returns to previously displayed screen
Info	Displays information of the current channel being viewed
Exit	Exits the item being viewed
Help	Press to display basic remote control function information
Text	Displays teletext (where available)
Menu	Accesses the set top box menu
ColourButtons (red, green, yellow, blue)	To select different options in the menu
Numbers (0-9)	For direct channel input, or selection of sub menus in the menu
FAV	Press to display the list of selected favourite TV channels
SUB	Turns subtitles on or off

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REC	Press REC key to record the current program while watching TV program
PREV/ NEXT	Previous/Next track
FR/FF	Press these keys to fast forward or rewind during playback
STOP	Press STOP key to stop recording program or stop a program during playback
PLAY/ PAUSE	Play or pause the program during playback
GOTO	Goto select the time for multimedia playing
TIME SHIFT	Press to start timeshifted Television. Please note you will need a USB driver or HDD Plugged into the unit
AUDIO	Changes the audio language when available

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Battery installation

Insert the batteries while observing the correct (+) and (-) polarities as illustrated below:



About the batteries:

- If the remote control unit fails to work even when it is operated near the set top box, please replace the batteries.
- Use size 2 x (AAA) batteries.

Notes:

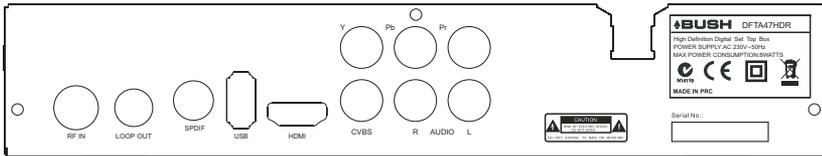
- Do not use rechargeable batteries.
- Do not place the batteries near a heat source such as a heater or fireplace.
- If the remote control unit is not going to be used for a long time, remove the batteries.
- Do not mix old and new batteries.

Caution: Keep batteries out of children's reach. If batteries are swallowed, contact a physician immediately.

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Front and rear panels

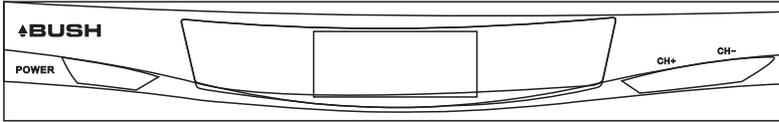
Rear panel



RF IN	Aerial Input
LOOP OUT	Output of Digital Terrestrial TV Broadcast signal - e.g. to VCR/DVD Recorder
USB	USB 2.0 Port for media playback and firmware upgrade
HDMI	High Definition Digital video and audio output for use with televisions with a HDMI input. HDMI version 1.3
CVBS	Composite Video signal output
YPbPr	High Definition Component video output
S/PDIF	Digital audio output
R (Audio)	Audio Output for the right speaker, to be used when either CVBS video output or YPbPr video output is used
L (Audio)	Audio Output for the left speaker, to be used when either CVBS video output or YPbPr video output is used
AC	Power Cable: 230V AC, 50Hz
230V/50Hz	

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Front panel



A red LED indicator on the front panel with the clock displaying the time will indicate if the set top box is in standby mode whilst the green LED with a channel number is an indication that the set top box is operational.

You can access basic functions via these keys including: Power, CH-, CH+.

Installation

Connecting the receiver

How to get good reception

- If your antenna is not in good condition, you should consider replacing it to ensure uninterrupted digital television viewing.
- Viewers in areas of poor analogue reception may require a specialist's advice about antenna requirements for digital reception in their area.
- It is recommended that viewers use quad shielded cable from The antenna to the television.

Connections to a TV

There are several ways of connecting your STB receiver to a television. For High Definition viewing your TV must support either 576p, 720p or 1080i resolution. Also the connection between the STB receiver and TV must be either YPbPr Component or HDMI.

Other connections will provide Standard Definition viewing.

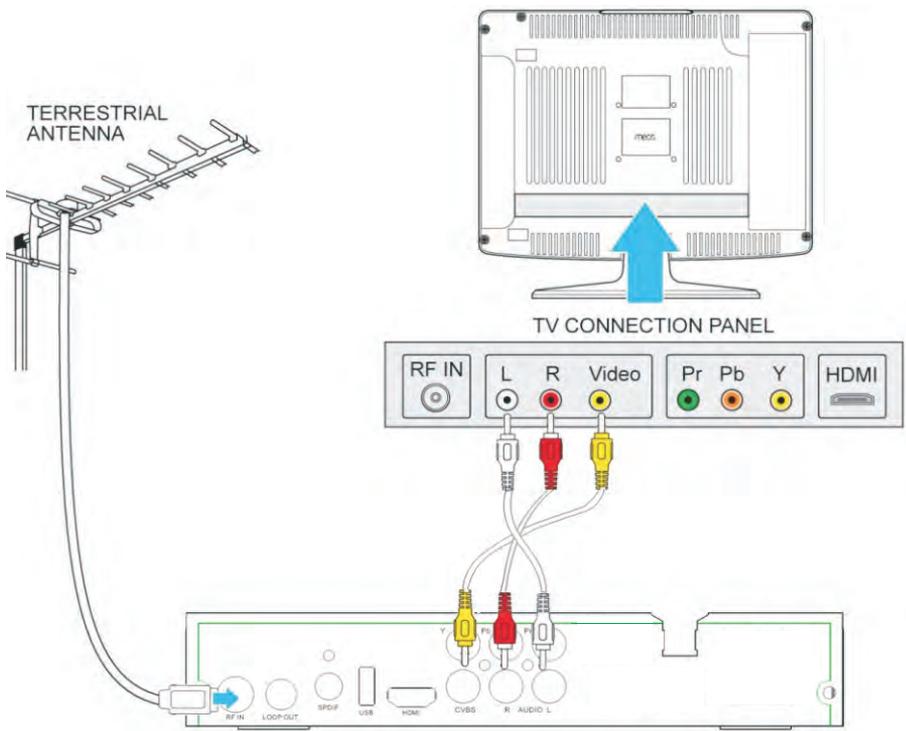
Warning: Please switch OFF the mains power before plugging or unplugging connected cables otherwise it may damage the receiver.

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OPTION 1

Connect the STB receiver via composite video and audio
(For standard definition viewing)

1. Connect the antenna to the RF IN socket on the receiver.
2. Connect the receiver to the TV set via the red, white and yellow composite AV cables.

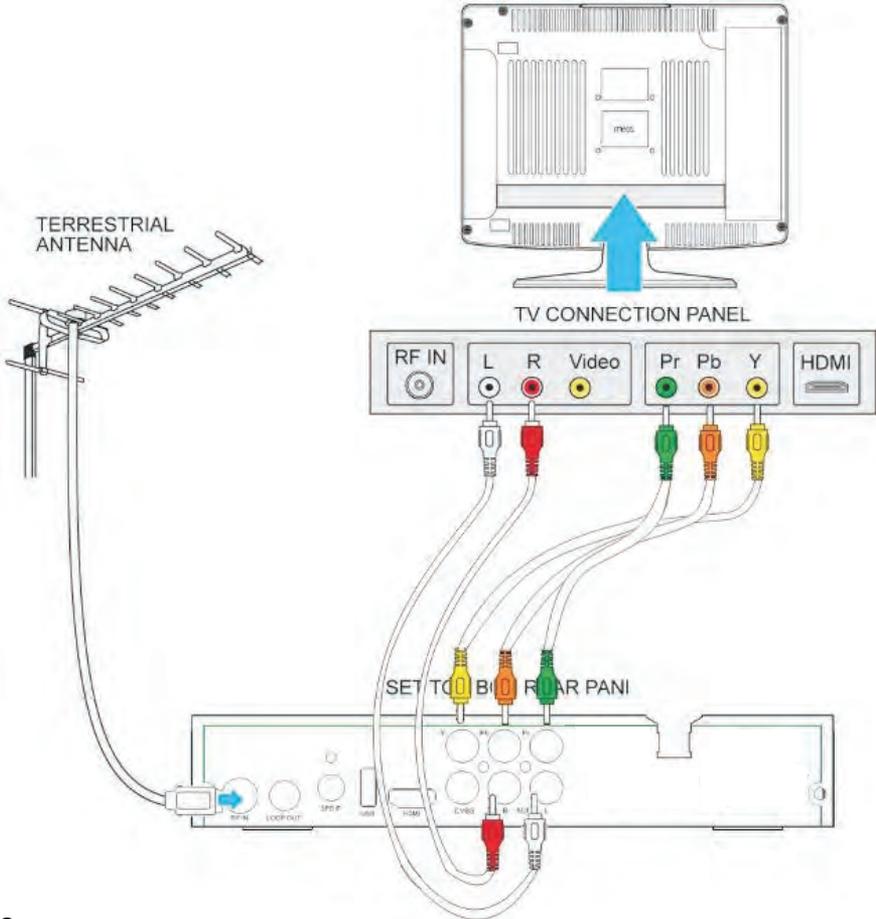


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OPTION 2

Connect the STB receiver via YPbPr output and audio output (For standard definition viewing)

1. Connect the antenna to the ANT IN socket on the receiver.
2. Connect the receiver to the TV set via the green, red and blue component AV cables (this will provide video), and the composite red and white cables (which will provide audio).

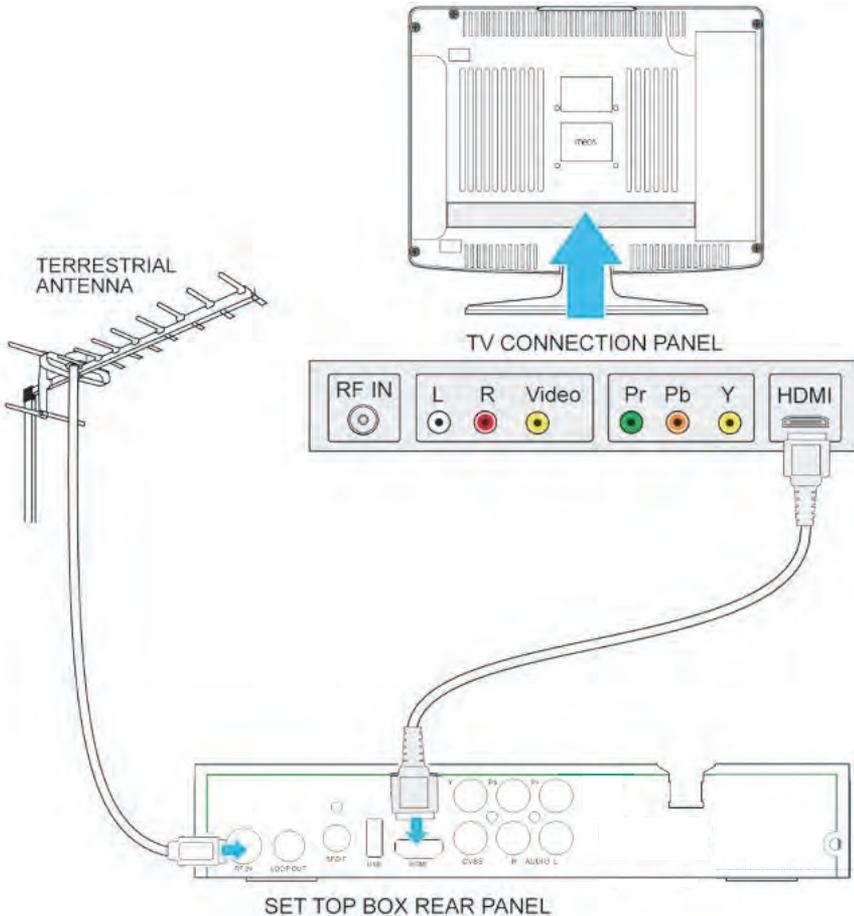


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OPTION 3

Connect the STB receiver via HDMI
(For optimum high definition viewing)

1. Connect the antenna to the ANT IN socket on the receiver.
Connect the receiver to the TV set via a HDMI cable.
2. This will provide both video and audio.



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Installation guide

Ensure that all connections have been made properly, turn on the TV and make sure the receiver is connected to the Main Power. Make sure that the on/off switch on the back panel of the set top box is switched to on. Press the Power button on the front panel of the receiver to switch receiver on. If you are using the receiver for The first time or restored to Factory Default, the Installation Guide Menu will appear on your TV screen.



1. Select the On Screen Display language (OSD Language). Press the RIGHT/LEFT key to modify the language.
2. Select the Country. Press the RIGHT/LEFT key to select your country of residence.
3. Select Channel Search and press RIGHT or OK key to begin Automatic channel search.
4. Once channel tuning is complete, you are now ready to watch TV.

Basic operation

Program settings

To access the Menu,

1. Press the MENU button.



To access the program settings,

1. Select Program.
2. Press OK.

The Menu provides options to adjust the Program settings.

1. Select an option.
2. Press OK or RIGHT to adjust that setting.
3. Press the EXIT button to exit the Menu.

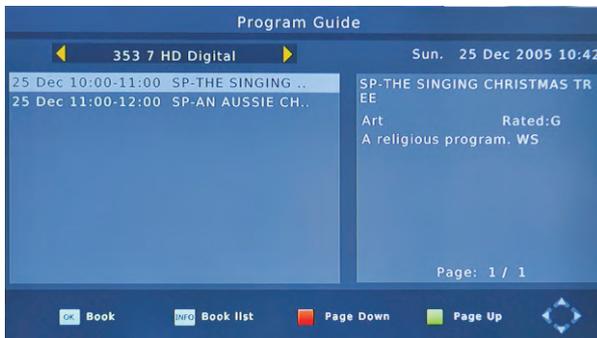
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Program Edit



To edit your program preferences (Move, Skip, Lock, Delete or set as a Favourite), you will need to enter the Program Edit Menu. This Menu requires a password to access. Enter the default password '000000'.

EPG (Electronic program guide)



The EPG is an on-screen TV guide that shows scheduled programs seven days in advance for every tuned channel (when broadcast). Press the GUIDE button on the Remote Control to access guide Directly.

You can use the LEFT/RIGHT to view what is on other channels. Press the red key to skip forward 24 hours, and the green key to skip back 24 hours. Press the INFO key to book programme reminders .

Sort

Sort your channels from the following options:

[LCN] Sort the channels in ascending order

[ONID] Group the channels by broadcaster

[Service Name] Sort the channels in alphabetical order

[Service ID] Sort the channels according to the station

LCN (Logical channel number)

Set LCN on or off.

Picture setting



1. Press MENU then select Picture, and then press OK.
2. The Menu provides options to adjust the video settings.
3. Press UP/DOWN to select an option.
4. Press RIGHT/LEFT to adjust that setting.
5. Press EXIT to exit the menu.

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Aspect Ratio

Set the display format to one of the following to select the best display for your television

4:3 Full

4:3 Pan & Scan

4:3 Letter Box

16:9 Full Screen

Auto

Resolution

If the video does not appear correctly, change the setting. The default setting is to match the most common setting for HDMI, is 1080i.

The resolution options include 576i, 576P, 720P and 1080i.

TV Format

If the video does not appear correctly, you need to change the settings. PAL is the standard format for Australia. NTSC is the other settings option.

Channel search

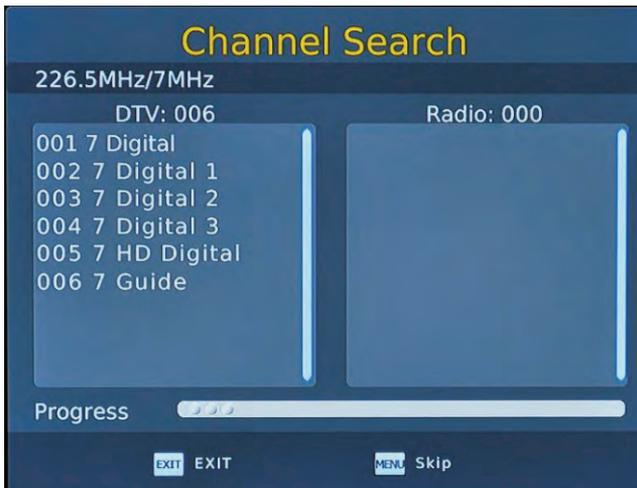
1. Press MENU and select Channel.
2. Press OK.

The Menu provides options to adjust the channel search settings.



1. Select an option and press RIGHT/LEFT to adjust the settings.
2. Press EXIT to exit the Menu.

Auto search



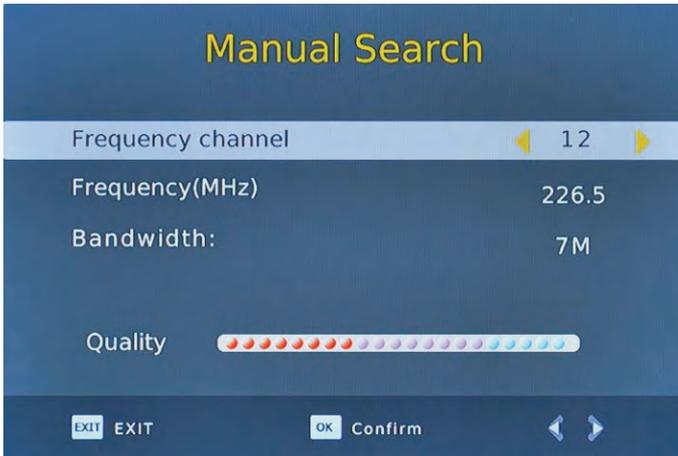
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This option will search and install all channels automatically. This option overwrites all preset channels.

1. Select Auto Search and press OK or RIGHT to start channel search.
2. To cancel channel search at any time, press EXIT.

Manual search

This option allows you to install new channels manually. This option adds new channels without changing the current channels list.



1. Select Manual Search then press OK or RIGHT. The channel search screen will appear.
2. Press the RIGHT/LEFT key to select the channel frequency.
3. Press OK to start searching channels.

If a channel is found, it is saved and added to the channels list.

Country

Select your country of residence in the list displayed.

Antenna power

This function allows you to enable Antenna Power if an external active antenna is connected.

Time setting

1. Press MENU.
2. Select Time, and then press OK.

The menu provides options to adjust the time settings.



3. Press UP/DOWN to select an option.
4. Press RIGHT/LEFT to adjust the setting.
5. Press EXIT to exit the menu.

Time offset

Selecting auto will automatically set the offset based upon the Country Region, whilst selecting manual allows the user to customise GMT offset settings.

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Country region

Modify based on the region where the set top box is installed.

Time zone

May be customised when the time offset is set to manual.

Sleep

Allows the set top box to be programmed to switch off automatically after a set period of time.

Daylight time

May be modified when the time offset is set to manual to indicate whether the daylight saving time is active or not.

Option

1. Press MENU and then select Option.
2. Press OK.

The menu provides options to adjust multiple language and user settings.



3. Select an option and press RIGHT/LEFT to adjust the setting.
4. Press EXIT to exit the Menu.

OSD language

This setting allows you to customise the On Screen Display (OSD) Language from the nine languages available.

Subtitle language

If subtitles are broadcast in another language, you may select the language used to broadcast subtitles.

Audio language

If audio is broadcast in another language, you may select the language used to broadcast subtitles. If the language is not available, the default program language will be used.

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Digital audio

Modify the format of digital audio being output between PCM, RAW and Off.

OSD Transparency

Customises the transparency of the on screen display including information and the menu.

Audible Feedback

When turned on this function provides a beep via the audio to advise the user that the set top box has received the remote control command.

System setting

1. Press MENU and select System.
2. Press OK.
3. The menu provides options to adjust the system settings.



4. Press the UP/DOWN key to select an option.
5. Press RIGHT/LEFT to adjust the setting.
6. Press EXIT to exit the Menu.

Parental Guidance

You can restrict access to channels by rating that are unsuitable for children. To restrict/lock the channel you will need to enter either the default password '000000' or your own password (if you have modified it).

Set Password

1. Select this option to change the password.
2. Enter your 'old' password or the default password '000000'. You will then be asked to enter a new password.
3. Re-enter your new password to confirm.
4. After it is confirmed, press EXIT to exit the Menu.

Restore Factory Default

This option will delete all preset channels and settings and return the box to the initial installation screen.

To reset your Set Top Box to the default factory settings,

1. In Main Menu select [Restore Factory Default]
2. Press OK or RIGHT to select.
3. Enter your password or the default password '000000'
4. Press OK to confirm and reset the settings.

Information

Select to view model, software and hardware information.

Software Update

OAD

When set to "On", the set top box will begin searching for new software from over air broadcasts according to your set time in "Start Time".

USB Upgrade

Allows the unit to be upgraded via USB (if required).

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Lip Sync Control

You can adjust the lip sync control time is 10 to 200ms.

USB

This function provides the ability to playback multimedia or upgrade the set top box via the USB port.



1. Press MENU and select USB.
2. Press OK.

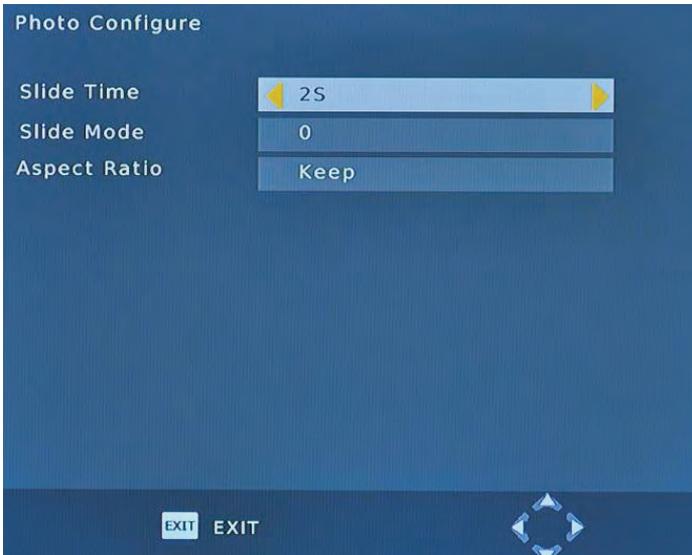
Multimedia

Select to play back multimedia including music , photo, movie,PVR files via USB.



Photo Configure

This allows the user to customise slide time, the mode that the slides appear via, and the image aspect ratio.



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Movie Configure

This allows the user to customise the Subtitle Specific, Subtitle background and Subtitle Font-colour.



PVR Configure

Record Device, here you can view information of your connected USB storage device which includes Format Type, Total and Free space available on drive.



You can adjust the Timeshift Size from 0.5GB to 4.0GB, step-by-step is 0.5GB.



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A Format hard disk function has also been provided. Formatting a hard disk will permanently delete all the data on the hard disk. It is strongly recommended to backup all the data before formatting your hard disk drive.



PVR Function

The PVR function of your receiver allows you to record and playback your favourite programs. Instant recordings, TV program Guide recordings and timer recordings are all available.

NOTE: To use the PVR function and TIMESHIFT function, make sure you have a USB Hard Disk Drive or a USB Flash Drive connected to the USB port of the receiver. Please note that due to buffer speed requirements some USB Flash Drives may not be compatible for use with the Timeshift function. The maximum capacity of HDD supported by the STB is up to a size of 500GB. It supports FAT32 and NTFS file formats.

1) Instant recording

Press the REC. key to start instant recording of the TV program currently being viewed, the recording symbol would be displayed in the top left of the screen. Press the INFO. key to view information of the instant recording. Press the STOP key to stop the instant recording.



2)Electronic Program Guide Timer recording

You will never miss any of your favourite programs again with the Electronic Program Guide recording feature.

While in TV mode, press the “GUIDE” key to access the on screen Electronic Program Guide, select the channel and program you wish to record. Press the “OK” key to select the desired program to be recorded. A Schedule Event window will appear. Select and set the correct parameters to schedule the recording.

Set the Mode option to “Record”. This program will be automatically recorded at the scheduled time.

You can edit the set timer recording in the Schedule Event Menu by editing the channel number, name, date, start time, and end time. Select the option of Once, Daily, Weekly or Monthly recording as desired.

Once the recording schedule setup has been set, you can edit the schedule recording by pressing the “GREEN” key or delete the scheduled recording by pressing the “BLUE” key on your remote. After having finished the Schedule Recording setup, press the “EXIT” key to save and exit.



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3)TIMESHIFT

The TIMESHIFT function allows you to pause the TV program being viewed. Once paused the tv program is being stored on your connected USB Hard Drive or Flash Drive.

When watching a program, press the “PAUSE” key on the remote control to activate the function. You can now use the F.R. (Rewind function) to go back to the point you began the TIMESHIFT function or F.F. (Fast Forward) to catch up to live viewing. If you wish to stop the TIMESHIFT function, press the “STOP” key.

If you press the “INFO” key, you can access the TIMESHIFT information screen.



WARNING:

For the compatibility of HDD and USB devices with TIMESHIFT and PVR function, please refer to the table below:

TIMESHIFT PVR RECORD FORMAT

USB device doesn't work Works Fat32

3.5inch HDD Works Works NTFS

2.5inch HDD Works Works NTFS / FAT 32

1.8inch HDD doesn't work Works NTFS / FAT 32

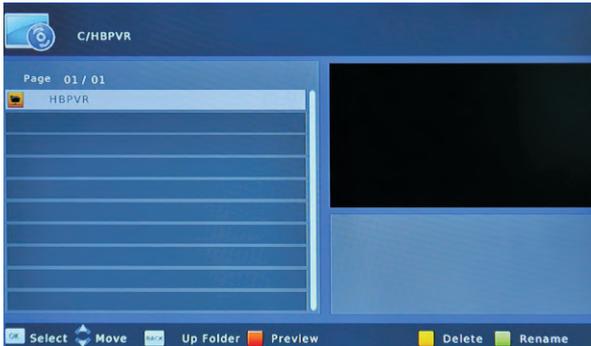
Please make sure that you are NOT using an USB device or a 1.8inch HD for TIMESHIFT function.

4)Playback of a recorded program

When you want to playback of a recorded program, follow the step below, it can display the recorded programs.

1. Press MENU and select USB
2. Press OK
3. Select the PVR
4. Choose the HBPVR folder

Follow the help information at the bottom of the screen to preview, playback, edit or delete the recorded programs.



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Specifications

Tuner

Input Connector	IEC 16902. Female
Input Frequency	Range VHF&UHF
Number of RF Inputs	1
Input impedance	75 ohm
Loop through	47-862 MHz

Demodulation

Standard	ETSI EN300 744
Guard interval Modes	1/32,1/16,1/8 Active Symbol duration
FEC Modes Rate	All modes supported including non hierarchical
Carriers/Constellation	(bypass)IEC 169-2 Male
Demodulation	COFDM(QPSK/QAM16/QAM64) 2K and 8K
Network	MFN/SFN
Channel bandwidth	7 and 8 MHz wide channel 21-68PLL

System Resources

SDRAM memory	512Mb DDR2 SDRAM (64MB)
FLASH memory	4MB NOR FLASH
Display Planes	4 SEGMENTS LED
Graphic resolution	ARGB8888

Video Decoder

Standard	ISO/IEC 13818-2 and ISO/IEC 14496-10
Transport stream	ISO/IEC 13818-1
Video decoding	MPEG-2 SD/HD (MP@ML and MP@HL), MPEG-4H.264/AVC SD/HD
Div	X3.X ~ 6.X JPEG,BMP,PNG, Motion JPEG
Aspect ratio	4:3, 16:9

Audio Decoder

Standard	ISO/IEC13818-3 TR1011154
Audio decoding	MPEG-1 and MPEG-2 Layer I & II, Dolby Digital Audio,Dolby D+,WMA and HE-AAC Digital Audio
Dolby Digital (Dolby D)	Stereo down-mixing to analog and digital audio outputs(including HDMI). For digital outputs, L-PCM stereo encoding is provided.
Sample rate	32 kHz, 22.1 kHz, 44.1KHz,48 kHz

Subtitles & Teletext

Subtitle	DVB Subtitle
Teletext	EBU TELETEXT

Rear Panel

CVBS outputs	1 CVBS video output
Audio CINCH	2 Analog Audio L/R connectors (White/red color)
Optical S/PDIF	Digital Audio output
YPbPr outputs	Analog HDTV video output
HDMI	Digital HDTV video output. HDMI version 1.3
USB	USB2.0

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Front Panel

IR activity LED	Red means IR activity
Bi-colored LED	Red means OFF and GREEN means ON
4-segments LED	To display the time,channel number or/and other information
Keys	POWER,CH+,CH-

Accessories

Remote control unit	Remote Control
Batteries	2 x AAA
User Manual	1 in English
Quick Start Guide	1 in English
RCA cable	1

Physical

Operating Temperature	+5 ~ 45 °C
Storage Temperature	-10 ~ +70 °C
Size (W x H x D) (mm)	220x141x38 mm

Product Warranty

Keep your receipt or proof of installation as proof of purchase.

This product is warranted for any defect in materials or workmanship for one year after the original date of purchase.

This product is for normal domestic and office use only.

This warranty does not cover damage from misuse or neglect, accidental damage, vermin infestation, excessive voltages such as lightning or power surges or any alternation that affects the performance or reliability of the product.

This guarantee is subject to the following provisions:

1. It is only valid within boundaries of the country of purchase
2. The product must be correctly assembled and operated in accordance with the instructions contained in the manual
3. This product must be used solely for domestic purposes
4. The guarantee does not cover accidental damage
5. The guarantee will be rendered invalid if the product is resold or has been damaged by inexpert repair
6. The manufacturer disclaims any liability for incidental or consequential damaged

PO BOX 6287

Silverwater NSW 1811



For more information, support and to
register your warranty visit:

www.bushaustralia.com.au

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.