

digitech

HD Digital Terrestrial Receiver

USER MANUAL

XC4937



Please read this user manual before using or connecting this product.
And keep it handy for future reference.

Table of contents

| | |
|--|----|
| Important Safety Instructions | 01 |
| Precautions | 02 |
| Introduction | 03 |
| Main functions and features | 03 |
| The remote control | 04 |
| Battery Installation | 05 |
| Front and rear panel | 06 |
| Rear panel | 06 |
| Front panel | 06 |
| Installation | 07 |
| Connecting the receiver | 07 |
| Installation guide | 08 |
| Menu | 08 |
| Main menu | 08 |
| Program settings | 09 |
| Picture settings | 09 |
| Channel search settings | 10 |
| Time settings | 10 |
| Option | 10 |
| System settings | 10 |
| USB Settings | 10 |
| Daily use | 11 |
| INFO. key | 11 |
| L/R key | 12 |
| Sub key | 12 |
| PREV/NEXT key & F.R./F.F. key | 12 |
| EPG | 13 |
| TV Channel and radio channel list | 13 |
| Favourite channel | 13 |
| PVR function | 14 |
| Instant recording | 14 |
| Electronic program guide timer recording | 15 |
| Timeshift | 15 |
| Multimedia player | 16 |
| Format partable hard disk | 16 |
| Troubleshooting | 17 |
| Specifications | 17 |

Important Safety Instructions



To reduce the risk of electric shock.
Do not remove cover.
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 the product.

1. Read, follow and keep these instructions.
2. Do not use this apparatus near water.
3. Clean only with a damp cloth. Please unplug power prior to cleaning.
4. Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
5. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
6. Protect the power cord from being walked on or pinched particularly at the plug, receptacles, and the point where they exit from the apparatus.
7. Only use attachments/accessories included within this package.
8. Unplug this apparatus during lightning storms or when unused for long periods of time.
9. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way; such as when the power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

A Class II APPARATUS shall be permanently marked with the words "DOUBLE INSULATION" or "Double Insulated" and "When servicing use only identical replacement parts."

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

Precautions

Please read these precautions before operating this unit.

1. Power cord protection

To avoid any malfunctions of the unit, and to protect against electric shock, fire or personal injury, please observe the following.

- Hold the plug firmly when connecting or disconnecting the AC power cord.
- Keep the AC power cord away from heating appliances.
- Never put any heavy object on the AC power cord.
- Do not attempt to repair the AC power cord in any way.
- Never make or change connections with the power switched on.

2. Placement

Avoid placing the unit in areas of:

- Direct sunlight or heating radiators
- High temperature (over 35°C) or high humidity (over 90%)
- Dust as the internal parts may be seriously damaged.

3. Non-use periods

When the unit is not being used, turn it off. When left unused for a long period of time, the unit should be unplugged from the power source.

4. No fingers or other objects inside

- Touching internal parts of this unit is dangerous, and may cause serious damage to the unit. Do not attempt to disassemble the unit.
- Do not put any foreign object in this unit.

5. Keep away from water

- Keep the unit away from flower vases, tubs, sinks, etc. if liquids are spilled into the unit, serious damage could occur.

INTRODUCTION

This user manual is intended to guide you through the operation for the DVB-T2 FTA High Definition Digital Terrestrial Receiver.

A password will be required when modifying advanced options in the Menu. The default password is "000000".

MAIN FUNCTIONS AND FEATURES

This product is a high performance HDTV Terrestrial receiver. It fully complies with DVB-T2 FTA receiver requirement specifications. It provides users with all digital terrestrial TV and radio signals being broadcast in Standard Definition and High Definition.

1. Fully compatible with DVB-T2 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,
5. VHF & UHF Input and LOOP OUT
6. Multi-bilingual OSD language , audio language and subtitle language supported
7. 999 Channel capacity
8. On Screen Electronic Program Guide (EPG)
9. Supports Picture in Graphics(PIG)
10. Supports Auto search and Manual search
11. Parental control for channels
12. Plug and Play installation with an easy to use Menu System
13. Supports 576i, 576P, 720P, 1080i,1080p Video Resolution。
14. Supports 4:3 and 16:9 Aspect Ratio
15. Various channel editing function(Favorites, Move, Lock, Delete)
16. Supports HDMI High Definition Multimedia Interface(HDMI 1.3)
17. Software upgrade via USB2.0 port compatible
18. USB 2.0 port compatible PVR and Media Player
19. Record digital television FTA program to a USB Flash Drive or an external USB portable hard disk and playback via USB2.0 compatible.

THE REMOTE CONTROL



STANDBY: Turn on / off

Number Key: <0-9>

RECORD (●): TV Program recording

Subtitle: Enter/exit subtitle menu

EPG: Electronic Program Guide

Menu: Enter main menu

Direction key: Up/down/left/right

OK: Confirm selection on operating menu

Or hot-key of "QUICK SELECT" in full-screen playing

VOL +/- : Volume adjusting

TEXT : DVB teletext

SUBTITLE: Subtitle

GOTO: Go forward or backward under replaying recorded file

USB: Play previous USB media

INFO: Display program information in full-screen playing

Mute: Turn off / on voice.

Recall: Return to previous menu

L/R: Audio mode operation

EXIT: Go back directly to full screen display

CH+/CH-: Go next/previous channel.

FAV: Show favourites list

TV/RADIO: Switch between TV and Radio mode

PLAY/PAUSE: Pause/Play program playing or movie playing

Stop: Stop program playing or movie playing

PREV: Previous chapter

NEXT: Next chapter

FR: Rewind

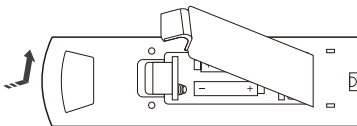
FF: Fast forward

For color keys: Function keys in different window.

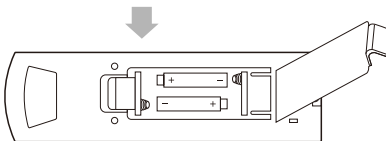
Battery Installation

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

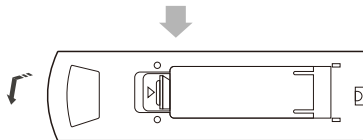
1. Remove the battery cover in the direction of the arrow.



2. Insert two 1.5V AAA batteries, paying attention to the correct polarities (+ and -)



3. Replace the battery cover.



About the batteries

- If the remote control unit fails to work even when it is operated near the receiver, please replace the batteries.
- Use size UM-4 (AAA) batteries.

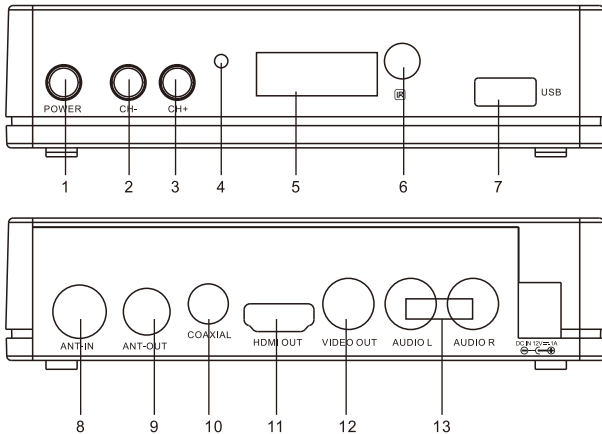
Notes:

- Do not use rechargeable (Ni-Cd) batteries.
- Do not attempt to recharge, short circuit, disassemble or throw the batteries into the fire.
- Do not drop, step on or cause any impact to the remote control unit. This may damage it, resulting in malfunction.
- Do not mix old and new batteries.
- If the remote control unit is not going to be used for a long time, remove the batteries.

Caution

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

FRONT AND REAR PANEL



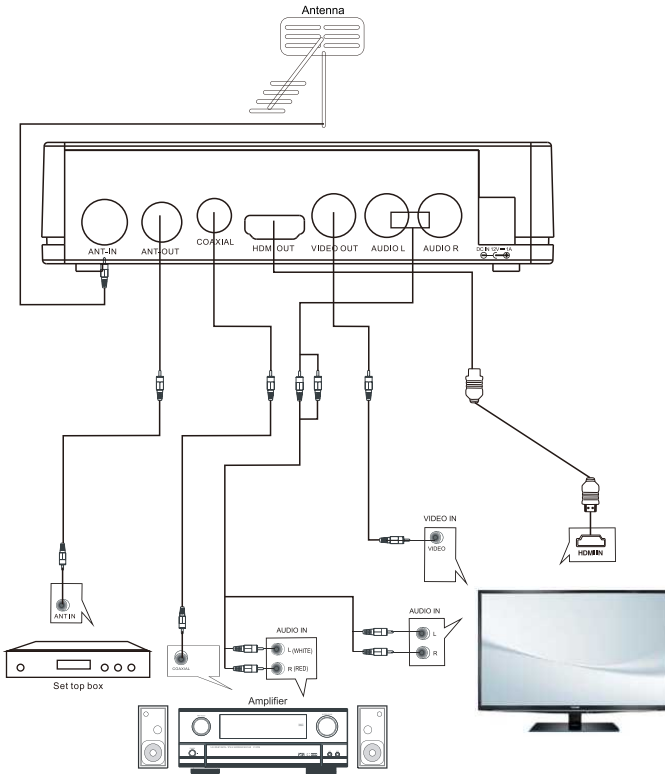
- 1.Power on/off button
- 2.Channel - button
- 3.Channel + button
- 4.Work light(red/green)
- 5.LED display window
- 6.Remote control signal sensor
- 7.USB jack
- 8.Digital Terrestrial TV Broadcast signal input
- 9.Digital Terrestrial TV Broadcast signal output
- 10.Digital audio output
- 11.Digital HDTV video output with HDCP, HDMI version 1.3
- 12.Composite Video output
- 13.Analog audio output

INSTALLATION

CONNECTING THE RECEIVER

Before you connect your STB to your TV please ensure that it's placed on a flat and stable surface. Now that your STB is in position connect it to your TV and any other peripheral devices. Please refer to the below diagram and your TV's user manual for cable installation instructions.

Connect your STB to power power on your TV and the STB before continuing to the initial set up guide.



INSTALLATION GUIDE

If you are using the unit for the first time or have restored the unit to Factory Default, the Installation Guide Menu will appear on your TV screen. Follow the help information that at the bottom of the window to select preference menu language and suitable country (region) and start channel search.

- (1)[OSD Language] Press RIGHT/LEFT key to select a language.
- (2)[Country] Press RIGHT/LEFT key to select your country of residence.
- (3)[Channel Search] Press RIGHT/LEFT or OK key to begin Automatic channel search.



If no channels are found during the channel searching process, please check your antenna connections and antenna are in working order. After the scanning process is completed the receiver will automatically save the scanned channels and display the first channel in the list.

While you are using the unit, if you wish to perform an AUTO search, simply press the SCAN key on the remote control. Or you can access the CHANNEL search menu to do the AUTO/MANUAL channel search. Press the MENU key on the remote and select [Channel Search] using RIGHT/LEFT keys. This Menu provides options to adjust the Search Channel settings. Press UP/DOWN to select an option and press RIGHT/LEFT to adjust the settings. Press EXIT to exit the Menu.

MENU

MAIN MENU

Most functions are available in the main menu. Follow the operation help information on the bottom of the menu to modify the preference options. A password will be required when modifying advanced options in the Menu. The default password is "000000".

Press the menu key on the remote control; you can access the Main Menu. There are 7 items for set up. Use the LEFT and RIGHT keys to navigate through the menu. Select the desired option and press the OK key or the RIGHT key to adjust the settings. Press the EXIT key to exit the main menu.



User Manual

A. Program Settings:

You can edit the programs, check the TV Program Guide sort the channels, and set the LCN here.

To edit your program preferences (to lock, Skip, favorite, move or delete a program), you need to enter a password. Enter the default password "000000". The master unlock password is "888888".

The EPG is an on-screen TV guide that shows scheduled programs seven days in advance for every tuned channel. Press the EPG key on the Remote Control to access the Electronic Program Guide.

Sort

Note: it's important to deactivate the LCN function while sorting out the position of the channels. The " Sort" function allows you to sort the channels by different methods:

By LCN: This will sort the channels by ascending order.

By Service name: This will sort the channels in alphabetical order.

By Service ID: This will sort the channels by Service ID.

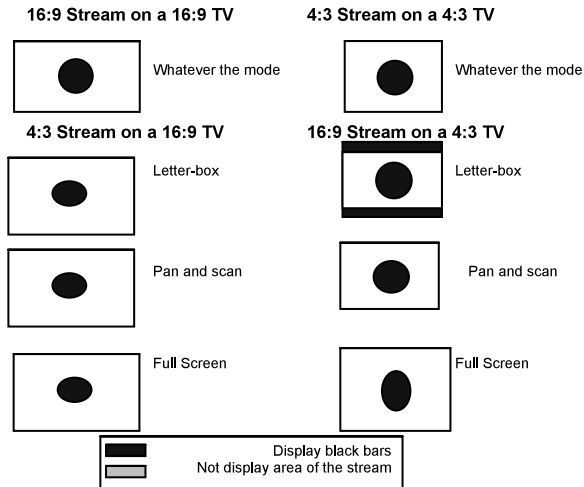
By ONID: This will sort the channels according to the ONID.

B. Picture Settings:

The Picture option allows you to set the different functions such as:

Aspect ratio

The aspect ratio of the video can be 4:3 (also known as Anamorphic Image) or 16:9 (also known as widescreen TV). Normally the aspect ratio of standard definition video should be 4:3 and the high definition video should be 16:9. In order to get excellent quality on the TV set, press the MENU key to enter the menu, and choose the aspect ratio setup menu to set suitable aspect ratio. The screenshot of the aspect ratio window is illustrated below. Here is a description of how the aspect ratio conversion mode chosen, the received stream and the user's television set aspect ratios.



User Manual

Resolution:

You can choose different resolution according to your TV: 576i, 576p, 720p, 1080i, 1080p.
TV format: PAL/NTSC

C. Channel Search settings:

(a) Auto Search: This option will automatically search for TV and Radio channels and save them once the scanning is complete. All previously saved channels and settings will be deleted.

(b) Manual Search: This option allows you to scan for new channels without deleting previously saved channels and settings.

(1) Select " Manual Search" and press the "OK" or "Right" key. The Manual Channel search screen will appear.

(2) Press the " Right" or " Left" keys to select the channel frequency.

(3) Press the " OK" key to start scanning for new channels.

(4) If a new channel is found, it will be saved and stored along with the rest of the channels. If no channels are found, the unit will automatically exit after finishing the scanning process.

D, Time settings:

It allows you to set:

Time offset: Select auto or manual for GMT offset adjustments.

Country Region: Select the Country Region when [Time Offset] is set to AUTO.

Time Zone: Select the Time Zone offset when [Time Offset] IS TO MANUAL.

Power Down (Sleep): Select the desired time for the Auto-shut off function (from 1 hour to 12 hours or set it to Off).

E, Option:

The Menu contains the following options:

OSD Language: Change the ON Screen Display language.

Subtitle language: Select the subtitle language.

Audio language: If the program has multi-languages. Set your preference here.

F. System settings:

The menu contains the following options:

Parental Guidance: The options for setting up the age reference starts from 4 years to 18 years. To access this function you will require to input a code. The default password is " 000000". This function can also be deactivated simply by setting it to OFF.

Set Password: It allows you to modify the default password, which is " 000000".

Restore Factory Default: It allows you to restore the unit to its default factory settings. You will be asked to enter your password " 000000". Press " OK" key once done.

Note: This function will delete all your saved channels and your personal settings.

Information: You can check the software version of your unit.

G. USB Settings:

The USB menu has 5 options:

MULTIMEDIA:

While in TV mode, press the " USB" button to access to the Multimedia menu. The menu contains 4 different icons: Music, Photo, Movie, and PVR.

Music Playing: Select " MUSIC" icon, move the cursor to enter the path of the desired audio file. Press the OK button to play the selected audio file.

Photo Viewing: Choose PHOTO icon, and enter the path of the desired photo files. Press OK button to view the desired photo files.

Movie Playing: Choose MOVIE icon, and move the cursor to choose the path of the desired video files. Press the OK button to play the desired video files.

User Manual

PVR Playing: Select PVR icon. Select the recorded file you want to play, press OK to begin playback. Press the RECALL key to move up to the next Folder. Press the RED key to switch between Preview and Full screen modes. Use the YELLOW key to delete the file you don't want. Press the GREEN key to rename the recorded file if desired.

(2)Photo configure: You can adjust the slide time, slide mode and aspect ratio here.

(3)Movie configure: You can set the Aspect Ratio , Subtitle Specific, Subtitle background and Subtitle Font-colour here.

(4)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 choose the option FORMAT to format your USB compatible device in Fat 32 of NTFS formats.

(5)The USB port is also used to perform a software Update:

(a)COPY THE SOFTWARE UPDATE FILE FROM YOU PC TO A USB FLASH DRIVE

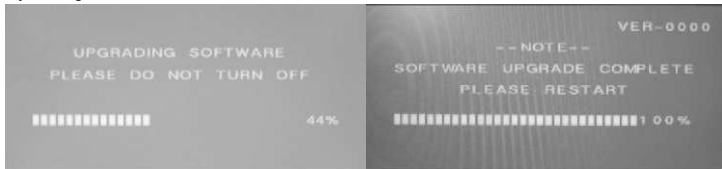
1.To upgrade your unit via USB, plug the USB copactible drive to the PC and backup the entire data of the USB drive. Right click the USB drive and select Format item. Format at USB drive as FAT32 file system.

NOTE: To perform a software upgrade of the Receiver, please ensure the USB Flash Drive or Portable hard disk is in FAT32 file system format. The USB port for software updates is not compatible with USB Flash drives or Portable Hard Disk Drives in NTFS, FAT16 or U3 PRO File System formats.

2, Press MENU, move right to enter SYSTEM SET UP, move down to enter SOFTWARE UPDATE. Press ENTER and enter USB drive, choose update file name.



NOTE: Please do not remove the USB drive from the receiver or power off the receiver during the upgrade process. This may damage the receiver.



Daily use
INFO, KEY

Press "INFO" key to display the Information banner while viewing TV programs.
Information banner:

User Manual



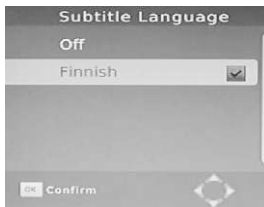
L/R KEY

Some programs may have multilingual audio language and this audio broadcast may be on a different audio mode such as Stereo, Left or Right. All the available audio languages will be displayed on the audio track window when you press the L/R key. The Screenshot illustrates this below. If there is no audio output after you have selected the audio language. It indicates that there is no audio on the current audio mode, so you have to select the previous audio mode.



SUB KEY

Certain programs have multilingual subtitle information. All available subtitle languages will be displayed in the subtitle information window when you press the SUBTITLE key. The screenshot illustrates this below. Follow the help information in the subtitle window to select preferred subtitle.



PREV/NEXT KEY & F.R./F.F. KEY

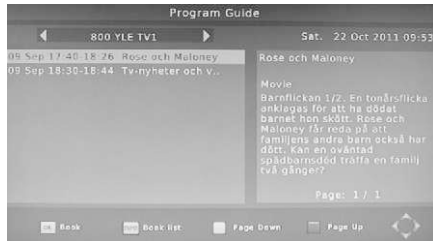
The PREV/NEXT key and F.R./F.F. key can be used during playback of multimedia programs from your external USB device. Press the PRE/NEXT key to go to the previous/next program and F.R./F.F. key to fast forward or rewind during playback.

User Manual

EPG

Press EPG key to display the on screen electronic program guide.

This displays a 7 ay Electronic Program Guide for all programs being broadcast from all broadcasters.



TV CHANNEL AND RADIO CHANNEL LIST

Press OK key to display all TV channels or all Radio channels. Follow the help information at the bottom of the window to select preferred channel.



FAVOURITE CHANNEL

Setting up Favourite TV or Radio Channels:

You Can add preferred channels to a favourite's channel list. Press the Menu key to access the Program Edit Menu. The Favourite channel option allows you to classify the channels by different genre: Movies/News/Sports/Music. Press the "FAV" or "OK" key to confirm your selection. A heart shaped symbol will appear next to that channel which confirms your selection.



Disable Favourite TV or Radio Channels:

Press the Menu key to access the Program Edit Menu. The list of the favourite channels will be displayed. Highlight the desired channel to disabled. Press "FAV" button, select the "Disable" option and press the "FAV" or "OK" key to cancel. Press the "Exit" key to exit the menu.

User Manual

View Favourite Channel:

While in normal viewing mode, press the "FAV" key to access to your favourite channel menu. Press the LEFT or RIGHT keys on your remote to access to the classified Sub-Menu (Movies/News/Sports/Music). Press the UP or DOWN keys to browse through your favourite channels. Press the "OK" key to select your favourite channel.

Delete a TV or RADIO Program:

Press the Menu key to access the Program Edit Menu. Select the program you wish to delete and press the "BLUE" key on your remote. A warning message will appear on your TV screen. Press the "OK" key to confirm the deletion of the channel. Repeat the above procedure to delete further channels.

Skip TV or RADIO Channel:

Press the Menu key to access the Program Edit Menu. Select the channel you would like to "Skip" and press the "GREEN" key on your remote. A skip symbol will appear. Now the channel is marked as a SKIP. To save your settings and exit the menu, press the "Exit" key.

Move a TV or RADIO Program:

Press the Menu key to access the Program Edit Menu. Select the desired channel you wish to move and press the "RED" key on your remote. A "MOVE" symbol will appear on your TV screen. Press the UP or DOWN keys to move the channel to the desired position. Press the "OK" key to confirm your selection. Repeat the above process to move further channels.

WARNING:

To use the PVR Function, Instant recording function, TV program guide timer recording function, TIMESHIFT function, Playback recorded program function and Multimedia player function it is necessary to connect an external device such as a USB flash drive or an external hard disk drive to the USB port. The maximum capacity of HDD supported by the STB is up to a size of 500GB. It support FAT32 and NTFS file formats.

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.

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

MENU => PROGRAM EPG=>Program Guide => Planning => Schedule => Event add => Timer Recording

You will never miss any of your favourite program again with the Electronic Program Guide recording feature. While in TV mode, press the "EPG" 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 at any time 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.



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 "PLAY" 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 begin the TIMESHIFT function of f.F.(Fast Forward) to catch up to live viewing. If you wish to stop the TIMESHIFT function, press the "STOP" key.

A dialogue box will be displayed on the screen asking you to confirm. Press "OK" to stop the TIMESHIFT.

To save the space of the USB hard drive, the recorded program is not under time shift mode.

If you press the "INFO" you can access TIMESHIFT information screen.



User Manual

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 | Works | 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 |

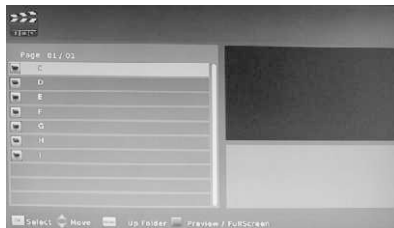
Please mark sure that you are NOT using an USB device or a 1.8inch HD for TIMESHIFT function.

4) Multimedia player

MENU+ multimedia you can now select to view photos, play mp3 music files and view movie files via the multimedia player/known supported files are outlined below.

NTFS, FAT32 and FAT16 file systems are supported.

| Player | Supported file |
|--------|--|
| Photo | JPEG, BMP, PNG |
| Music | *.mp3, *.aac |
| Movie | *.avi, *.mpg, *.dat, *.vob, *.mkv, *.mjpeg |



5) Format portable hard disk

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.



User Manual

8. Troubleshooting

The below table is a list of common problems that many occur with your receiver.

| Fault | Possible Cause | Solution |
|--|--|--|
| Power on, but nothing displayed on screen | Unit not turned on at mains switch | Ensure power plug is plugged into wall socket and switch is on. |
| TV picture drops out and the unit displays "No signal" | Antenna is not properly connected or you are in a bad reception area | Talk to your local TV antenna technician about reception problems in your area and whether a new antenna would benefit you |
| Receiving digital TV but missing some channels | Antenna is not properly connected or you are in a bad reception area | Talk to your local TV antenna technician about reception problems in your area and whether a new antenna would benefit you |
| Remote is not working | Batteries are flat or there is interference | Try replacing the batteries in the remote and ensure that there is no direct sunlight on the remote or unit |

9. SPECIFICATIONS

TUNER

| | |
|-----------------------|------------------------|
| Input connector | IEC16902, Female |
| Input Frequency range | VHF&UHF |
| Num of RF input | 1 |
| Input impedance | 75ohm |
| RF output connector | (bypass)IEC 169-2 male |
| Loop through | 177.5-866MHz |

Demodulation

| | |
|------------------------|--|
| Standard | ETSU EN300 744 |
| Guard interval models | 1/32, 1/16, 1/8 active symbol duration |
| FEC Modes rate | 1/2, 2/3, 3/4, 5/6, 7/8 |
| Carriers/constellation | all modes supported including non hierarchical |
| Demodulation | COFDM(QPSK/QAM16/QAM64/QAM256)2k and 8K. |

User Manual

Video decoder

| | |
|------------------|--|
| Stand | 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-4 H.264/AVC SD/HS DIVX 4.X-5.X JPEG, BMP, PNG, Motion JEG AVI,VOB, MOV, MKV |
| Aspect ratio | 4:3,16:9 |

AUDIO DECODER

| | |
|----------------|--|
| Standard | SO/IEC13818-3 TR1011154 |
| Audio decoding | MPEG-1 and MPEG-2 layer 1 &11, and HE-AAC digital audio |
| Sample rate | 32KHZ, 22.1KHZ,44.1KHZ,48KHZ |

Subtitle

| | |
|----------|--------------|
| Subtitle | DVB subtitle |
|----------|--------------|

Accessories

| | |
|---------------------|---|
| Remote control unit | IR(36khz)RC3/ other on request (38KHZ)NEC |
| Batteries | 2*AAA RO3P type |
| User manual | 1pc |
| AV cable | 1pc |
| Car Charger | 1pc |
| AC Adapter | 1pc |

Power

| | |
|---------------------|---------------|
| DC input | DC IN 12V/ 1A |
| Power consumption | <8w |
| Standby consumption | 1W |