HD-1500

User Manual

Table of contents

1 INTRODUCTION 4
2 MAIN FUNCATIONS AND FEATURE 4
3 THE REMOTE CONTROL 5
4 FRONT AND REAR PANEL 7
4.1 REAR PANEL 7
4.2 FRONT PANEL 7
5 INSTALLATION 7
5.1 CONNECTING THE RECEIVER 7
5.2 INSTALLATION GUIDE 8
6 DAILY USE 8
6.1 INFO. KEY 8
6.2 AUDIO KEY 9
6.3 SUB KEY 10
6.4 RES. KEY 10
6.5 ASPECT RATIO 10
6.6 TELETEXT 11
6.7 EPG 12
6.8 TV CHANNEL AND RADIO CHANNEL LIST 12
6.9 FAVOURITE CHANNEL 13
6.10 PVR FUNCTION 13
6.10.1 INSTANT RECORDING 13
6.10.2 EPG RECORDING 14
6.10.3 TIMER RECORDING 15
6.10.4 PLAYBACK RECORDED PROGRAM 15
6.10.5 MULTIMEDIA PLAYER 16
6.10.6 FORMAT PORTABLE HARD DISK 16
7 MENU 18
7.1 MAIN MENU 18
8 UPDATE THE RECEIVER BY USB2.0 INTERFACE 18
8.1 COPY THE UPDATE FILE TO THE USB DRIVE FROM PC 18
8.2 UPDATE THE RECEIVER BY USB INTERFACE 18
9 SPECIFICATION 20

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 INTRODUCTION

This user manual is intended to guide you through the operation for the DVB-T FTA High Definition Digital Terrestrial Receiver.
The password might require while you try to modify same advance option. Default password is "00000000".

2 MAIN FUNCATIONS AND FEATURE

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

Functions

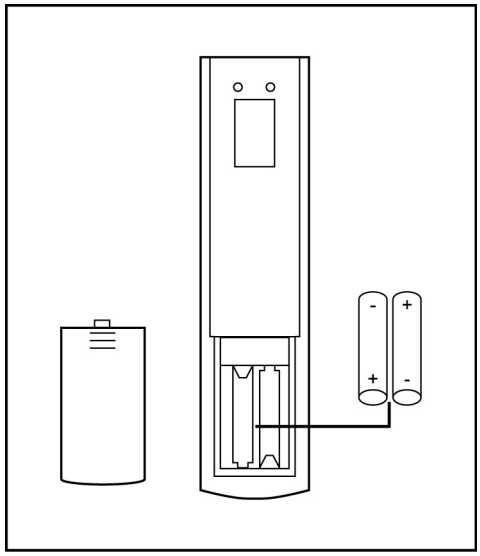
1. Fully compatible with DVB-T FTA digital standard
2. Fully compatible with MPEG-4 H.264/AVC High Definition Digital TV
3. Fully compatible with MPEG-2 High Definition and Standard Definition Output
4. Fully compatible with MPEG-1 Layer I & II, Dolby Digital Audio
5. VHF & UHF input and LOOP OUT
6. Multi-bilingual OSD language , audio language and subtitle language supported
7. 1000 Channels capacity
8. Fully support to Electronic Program Guide(EPG)
9. Support Picture in Graphics(PIG)
10. Support Auto search and Manual search
11. Parental control for channels
12. Plug and Play installation with an ease to use Menu System
13. Coaxial S/PDIF and optical S/PDIF Digital audio output interface
14. Support 576i, 576P, 720P, 1080I Video Resolution supported
15. Support 4:3 and 16:9 Aspect Ratio
16. Support EBU TELETEXT
17. DVB or EBU subtitle selected by the system based on availability on the network
18. Various channel editing function(Favorites, Move, Lock, Delete)
19. Support HDMI High Definition Multimedia Interface(HDMI 1.3)
20. Software upgrade via USB2.0 interface
21. High sensitivity, low Eb/No for receive Digital Television
22. USB 2.0 interface PVR and media player
23. Record digital television FTA program to a USB Flash Drive or an external USB portable hard disk and playback via USB2.0

3 THE REMOTE CONTROL

Photograph	Key	Function
	MUTE	Disable Audio output
	STB POWER	Power on/off the STB
	0…..9	0-9 numeral buttons, for input of numbers or for selecting a TV channel
	TV POWER	This is one learning handset and use to learning the handset of TV SET.
	SWAP	Recall last channel while watching digital TV or listening to radio.
	TV/R	Press TV/R key to switch between TV program and Radio program.
	VOL+/VOL-	Increase or decrease the audio output volume
	CH+/CH-	Select next/previous channel
	RED	Function key in different page.
	GREEN	Function key in different page.
	YELLOW	Function key in different page.
	BLUE	Function key in different page.
	MENU	Display menu, press again to exit current menu
	EXIT	Back to previous menu without saving
	INFO.	Press INFO. Key to display the information bar during watch program.
	EPG	Press EPG key to display 7 days EPG information.
	UP/DOWN	Move selection up/down within menus and lists
	LEFT/RIGHT	While watching a channel, the LEFT/RIGHT buttons increases or decreases the audio output volume. Within a menu, press the LEFT button to return to previous menu and the RIGHT button to enter a sub-menu.
	OK	Call up a program list for the current channel while watching digital/TV or listening to the radio. In a menu, this button serves to confirm a selection.
	PGUP/PGDW	Page up/down in lists
	FAV	Display favorites channel
	PVR	Display PVR manager page
	REC	Press REC key to record the current program during watch TV program
	STOP	Press STOP key to stop recording program or stop program during watch PVR program.
	PLAY/PAUSE	Playing or pause the program during watch PVR program
	PIC.	Press PIC. key to select the picture settings
	ASPECT	Press ASPECT key to select suitable aspect ratio of the video output
	TELETEXT	TELETEXT function key
	SUBTITLE	Switch between different subtitles
	AUDIO	Press AUDIO key to set the audio track and audio mode
	RES.	Switch resolutions of video output

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 LCD TV / monitor, please replace the batteries.
- Use size UM-4 (AAA) batteries.

Notes:

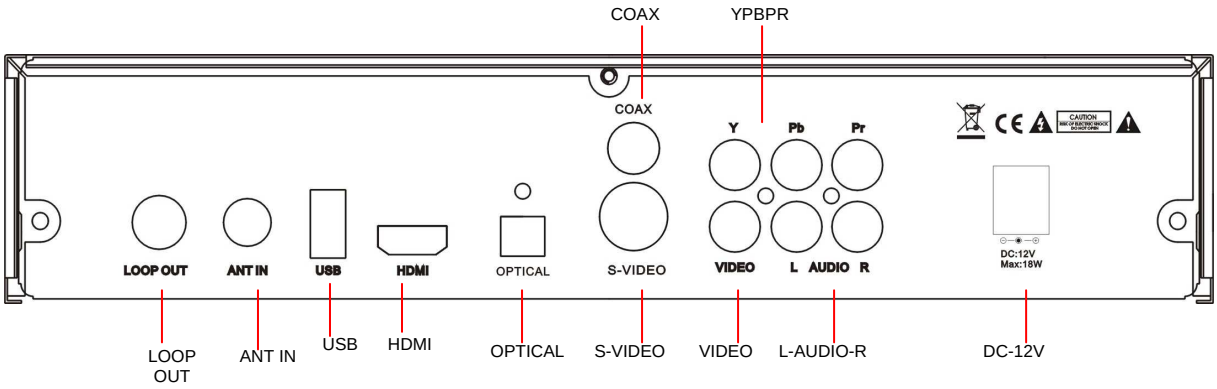
- Do not use rechargeable (Ni-Cd) batteries.
- Does not attempt to recharge, short circuit, disassemble heat or throw the batteries into the fire.
- Do not drop, step on or cause any impact to the remote control unit. This may damage it, resulting malfunction.
- Do not mix old and new batteries.
- If 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.

4 FRONT AND REAR PANEL

4.1 REAR PANEL



Rear Panel	
ANT IN	Digital Terrestrial TV Broadcast signal input
Loop OUT	Output of Digital Terrestrial TV Broadcast signal
USB	USB2.0 Port for firmware upgrade
HDMI	Digital HDTV video output with HDCP. HDMI version 1.1
Video	Composite video signal output
YPbPr	High Definition Component video output
Coaxial	Digital audio output
Audio L/R	Analog Audio output
Optical	Digital audio output
TV SCART	TV SCART Video output
DC-12V	DC 12V 1.5A Power input

4.2 FRONT PANEL

The red LED is a power indicator and the green LED is a signal indication.
User can access those function keys as follow: CH+/UP, CH-/DOWN, VOL+/LEFT and VOL-/RIGHT

5 INSTALLATION

5.1 CONNECTING THE RECEIVER

Connect the antenna to the receiver.

Connect the receiver to TV set.

Connect the receiver to the speaker.

5.2 INSTALLATION GUIDE

Follow the installation guide to enjoy your high definition digital TV world. Follow the help information that at the bottom of the window to select preference menu language and suitable country (Region) and start channel search.

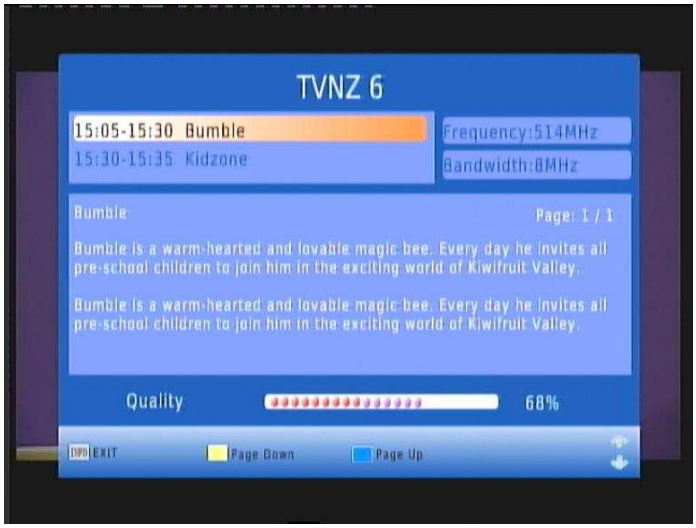
If no channel is found during the channel searching process, the user may adjust the antenna position to obtain optimal TV signal.

6 DAILY USE

6.1 INFO. KEY

Press “INFO” key to displaying base information bar during watching TV programs. Press “INFO.” key twice to displaying further more program information during watching TV.

Base information bar



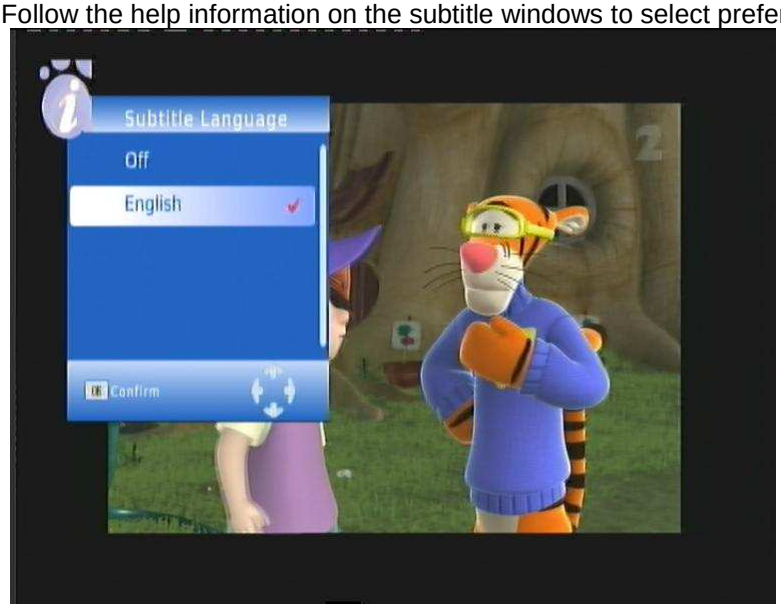
Further more information bar.

6.2 **AUDIO KEY**

The program might have multilingual audio language and the audio broadcast on different audio mode such as Stereo, Left or Right. All the available audio languages will display on the audio track windows while you press AUDIO key. The screenshot is illustrated below. If there is no audio output after you select the audio language, it indicates that there is no audio on the current audio mode, so you have to select preferable audio mode.

6.3 SUB KEY

The programs might have multilingual subtitle information. All available subtitle languages would display on the subtitle information window while you press SUBTITLE key. The screenshot is illustrated below. Follow the help information on the subtitle windows to select preference subtitle.



6.4 RES. KEY

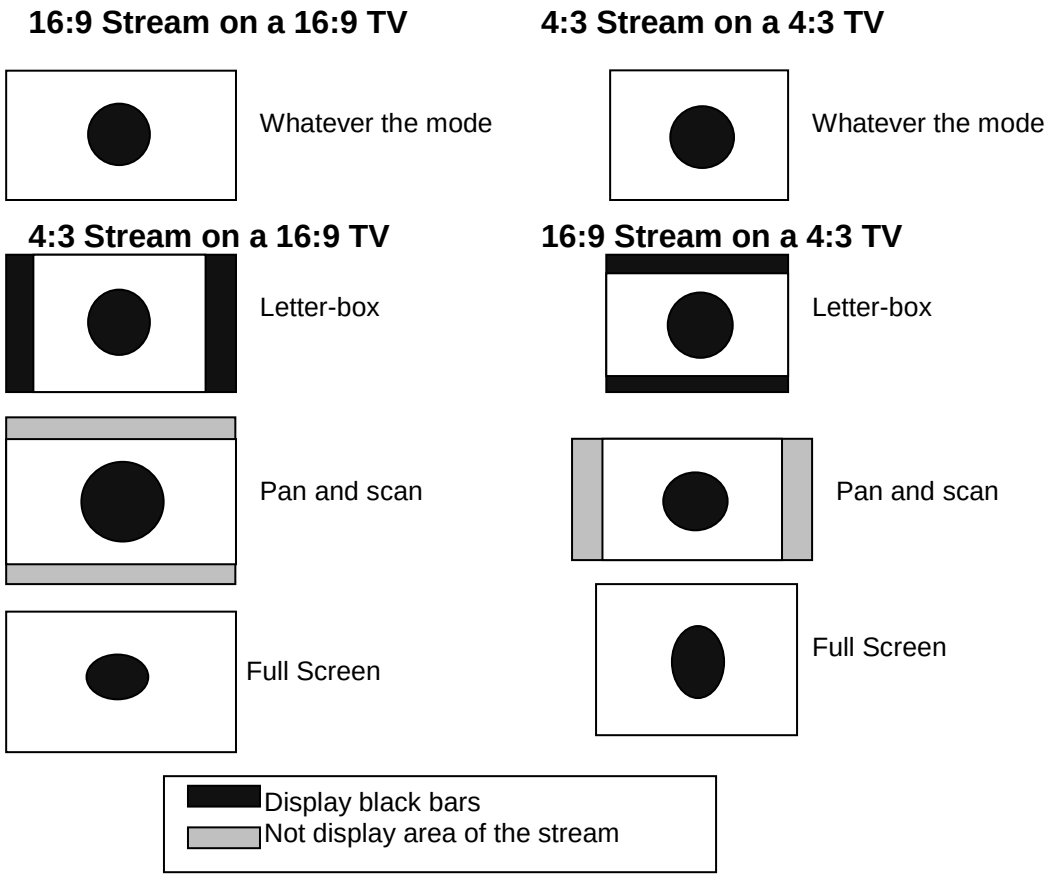
The video programs may have different resolutions 720×576P, 1280×720P and 1920×1080I. Normally, the standard definition programs have 720×576P and high definition programs have 1280×720P,1920 ×1080I. In order to get excellent quality on the TV screen, press RES key on the remote control to display the resolution control window. The screenshot is illustrated below. On the resolution window you could find 576I, 576P, 720P, 1080I and Auto. It is recommended selecting Auto.

6.5 ASPECT RATIO

The aspect ratio of the video can be 4:3 (also know as Anamorphic Image) or 16:9 (also know 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 ASPECT key 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.

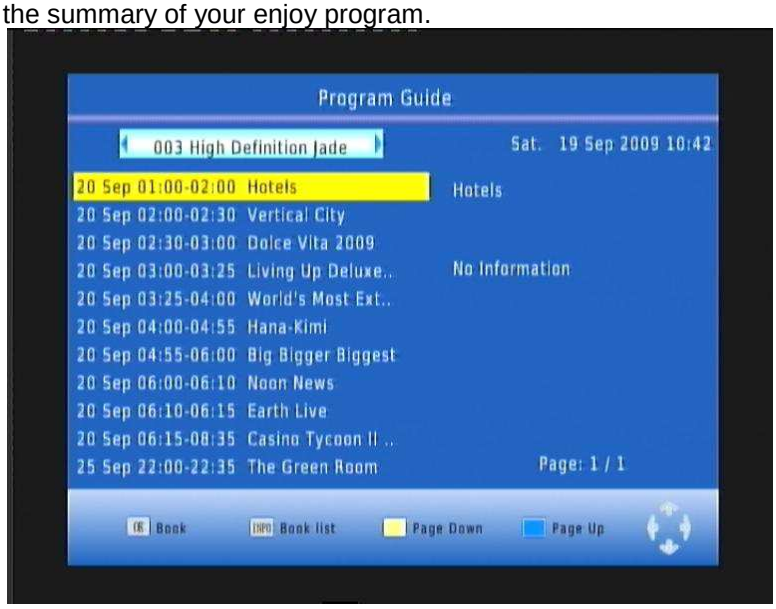


6.6 **TELETEXT**

Press TELETEXT key to launch the TELETEXT window during any TV channels. The entire TELETEXT with different language will display on the TELETEXT window.

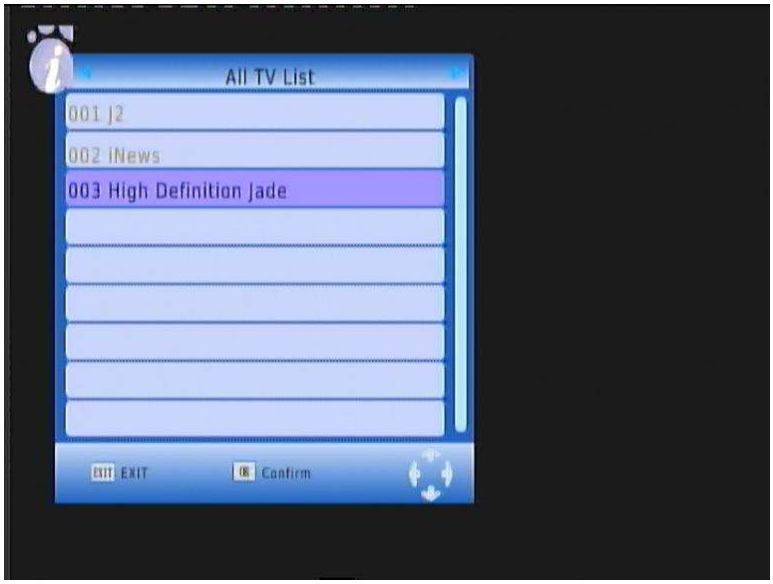
6.7 **EPG**

Press EPG key to display the weekly electronic program guide. You could find when your enjoy program start and the summary of your enjoy program.



6.8 **TV CHANNEL AND RADIO CHANNEL LIST**

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



6.9 FAVOURITE CHANNEL

You can add preference channels to favourite's channel list on the channel edit window. Press FAV key to launch your favourite's channel list.

6.10 PVR FUNCTION

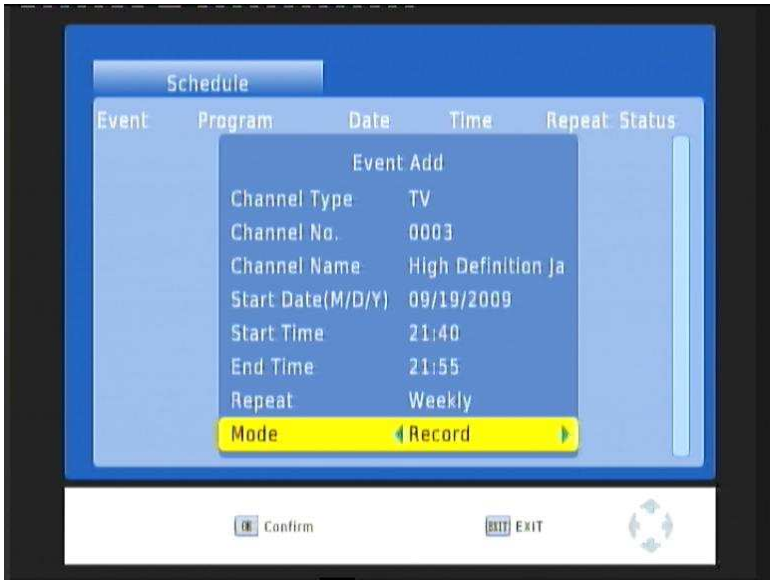
Base on USB PVR function you could record the preference program and playback. Instant recording, EPG recording and timer recording were available.

6.10.1 Instant recording

Press REC. key to start instant recording during watch TV and the recording symbol would be display on the left top of the screen. Press **INFO.** key to get further more information of instant recording. Press **STOP** key to stop instant recording.

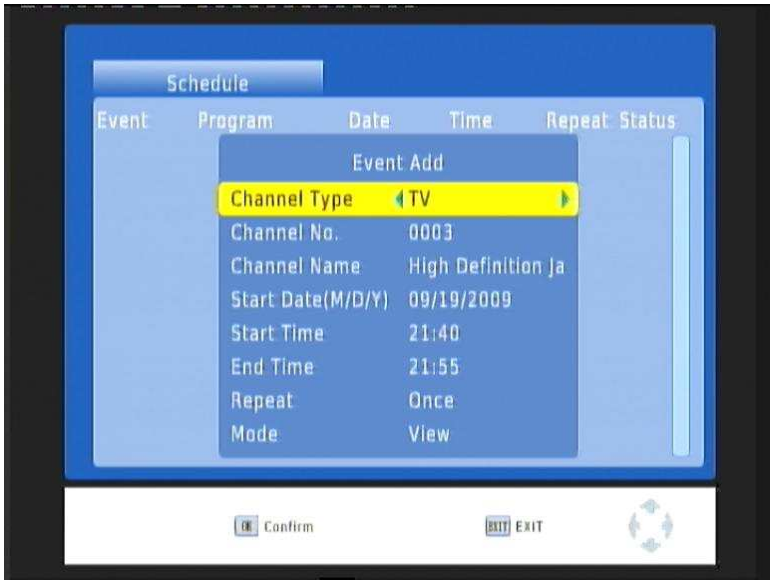
6.10.2 EPG recording

You will never loss any preference program base on fully EPG recording feature. Press OK key to start EPG recording while you browser the EPG. You also could edit or delete EPG recording event on schedule window.



6.10.3 Timer recording

You could record preference program freely with timer recording feature. Go to EPG window and press INFO key to enter to the schedule window. You could add, edit and delete timer recording event on schedule window.



6.10.4 Playback recorded program

Press PVR key to display the recorded program. Follow the help information to preview, playback the recorded program and edit the recorded program.

6.10.5 Multimedia player

Multimedia player feature also has been integrated on the receiver. Press PVR key to display multimedia player window. You could show your preference photo, playing music and movie on multimedia player. Known supported file were illustration below. NTFS, FAT32 and FAT16 file system could be supported at the moment.

Player	Supported file
Photo	JPEG, BMP, PNG
Music	*.wma, *.mp3, *.m4a, *.aac
Movie	*.avi, *.mpg, *.dat, *.vob, *.div, *.mov, *.mkv, *.mjpeg, *.ts, *.trp, motion jpeg

6.10.6 Format portable hard disk

Format hard disk function also has been provided. Format hard disk would delete all the data on the hard disk. It is strongly recommended to backup all the data before format the hard disk.

Record Device
Disk
C: (USB1)
Media Type
NTFS
Total Space
149.04 GB
Free Space
57.88 GB
EXIT
EXIT
OK
Confirm

7 MENU

7.1 MAIN MENU

Most function is available on main menu. Follow the operation help information on the bottom of the menu to modify preference option. The password was required while you trying to modify the settings. Default password is "00000000".

8 UPDATE THE RECEIVER BY USB2.0 INTERFACE

8.1 COPY THE UPDATE FILE TO THE USB DRIVE FROM PC

1. Please go to service website or contact our customer service to get the latest software for updating the Receiver.

2. Plug the USB drive to the PC and backup the entire data of the USB drive. Right click the USB drive and select Format item. Format the USB drive as FAT32 file system.

3. Copy the update file that name as "SMC7828.AP" to the root of the USB drive. Then remove the USB drive from the PC.

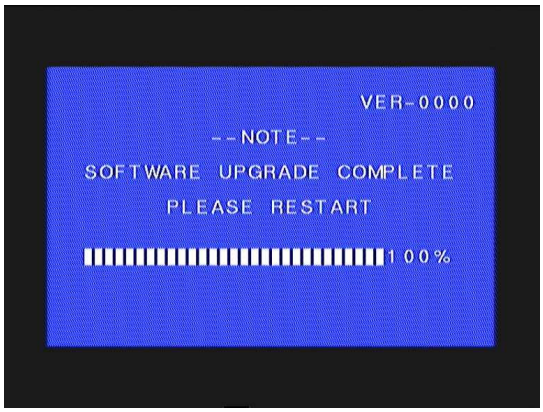
Warning: The USB interface is for software upgrade of the Receiver only using a USB Flash Drive with FAT32 file system format. The USB interface could not support the USB Flash drive that with U3 PRO System. Never connect a portable hard disk to the USB interface of the Receiver.

8.2 UPDATE THE RECEIVER BY USB INTERFACE

1. Plug the USB drive that with the update file to the USB interface of the receiver.
2. Go to main menu and press "6666" to start upgrade process. While the upgrade progress showing 100% and update finish, remove the USB flash drive and power on the receiver again.

NOTE: Please do not remove the USB drive from the receiver and power off the receiver during upgrading process. Otherwise the receiver may not work properly.

VER-0000
UPGRADI NG SOFTWARE
PLEASE DO NOT TURN OFF
60%


VER-0000
--NOTE--
SOFTWARE UPGRADE COMPLETE
PLEASE RESTART
100%

9 SPECIFICATION

Tuner

Input Connector	IEC 16902. Female
Input Frequency Range	VHF&UHF
Num of RF Inputs	1
Input impedance	75 ohm
RF output Connector	(bypass)IEC 169-2 Male
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	1/2,2/3,3/4,5/6,7/8
Carriers/Constellation	All modes supported including non hierarchical
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	128 MB DDR2 SDRAM (2×64MB)
FLASH memory	8 MB NOR FLASH
Display Planes	7 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-4 H.264/AVC SD/HD DivX 3.X ~ 6.X JPEG,BMP,PNG, Motion JPEG AVI, VOB, MOV, MKV
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, E-AC3,WMA and HE-AAC Digital Audio
Dolby Digital (AC-3)	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
SCART	TV SCART
HDMI	Digital HDTV video output with HDCP. HDMI **version 1.3**
USB	USB2.0

Front Panel

bi-colored LED	Red / Green to indicate the various states of the STB
7-segments LED	To display the channel number or/and other information
Keys	7 keys (Standby, P+, P-, V+, V-, Menu, OK)

Accessories

Remote control unit	IR (36kHz) RC3 / other on request (38kHz)NEC
Batteries	2 x AA R6 type
User Manuel	1 in English
RCA cable	1

Power

AC input range	12V/1.5A
Power consumption	< 18W
Standby consumption	< 3W

Physical

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