AITech
Vision for Net Media

HDTV USB Digital TV software manual

AITech International Corporation

V2.63-0630

Chapter 1 – DigitalTV Introduction

1.1 Introduction

DigitalTV USB allows you to watch digital TV & Radio programs via USB interface. With DigitalTV software, users are able to watch, record & play back high quality digital TV program on their PC/Notebook.   Please read the instructions carefully before you begin the installation.

1.2 System Requirements

- IBM or IBM compatible computer
- OS: Windows XP
- USB 2.0 Port
- Sound card
- Microsoft DirectX 9.0C or above
- VHF/UHF antenna for ATSC/NTSC products
- CPU: 2 GHz or above
- Memory: 512MB or above
- VGA card with at least 32 MB Memory and **DxVA support**

1.3 Features

- Digital TV and Radio Program Receiving
- Real time Digital Video Recording
- Schedule Recording and Time-shifting
- EPG
- Multi-Channel Preview (FTA Channels Only)
- Transponder, region, and Frequency range Auto Scan
- MPEG-II Software Decoding
- Aspect Ratio
- Single/Multiple Frames Capture
- Favorite List
- Wake Up Recording
- Close Caption
- Software Upgradeable

  (Note: Some features are only provided by content provider, be sure to check if your content provider supports them or not.)

Chapter 2 - Installation Introduction

2.1 Hardware Installation
Step 1: Connect to USB port
Step 2: Connect to the antenna or cable signal.

Note 1: If you try to install DigitalTV USB in your Notebook computer, be sure to switch off the "POWER SAVING" function or it might lower the CPU performance and influence the operation.
Note 2: Reception may vary in different location. Please check local broadcaster for more detail information. Roof antenna is strongly recommended.

2.2 Software Installation
Step 1: Cancel "New Hardware Wizard"
After the computer is turned on, Windows will find New Hardware. Please choose "Cancel" from the pop up windows. We will install the driver later by the DigitalTV installation program automatically.

Step 2: Insert DigitalTV CD-ROM

Insert the DigitalTV driver CD into your CD-ROM drive, the "Autorun" window should appear. Click on "Install Software and Driver". If the "Autorun" window does not appear, please open the "DigitalTV" folder in CD-ROM and launch the "Setup" program manually.

STEP 3: Install finished
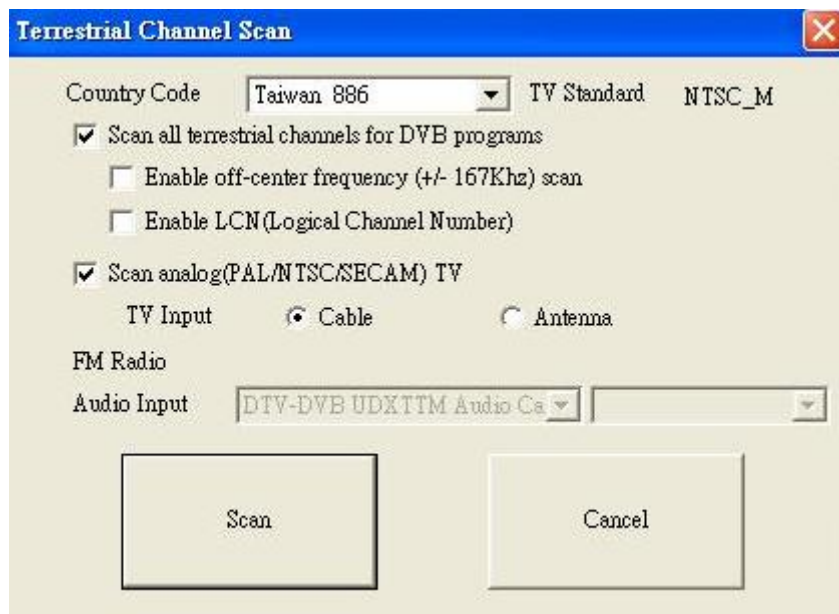You will see DigitalTV icon on your desktop.

Chapter 3 – Channel Scanning

Step 1: On Desktop, click icon DigitalTV.

Step 2: On POP-UP scan channels TABLE

Step 3: Select "United States" and Terrestrial" Scan for DTV

Step 4: Select connected Antenna or Cable Scan for NTSC TV

Chapter 4 DigitalTV Application Programs

4.1 Control Panel

Main control bar and control panel icons:

Icon	Function	Icon	Function
	Open "Favorite List"		Open Extended Panel
	Capture still image.		Language
	Channel up Channel down		Close Caption
	On Line Help		Record Pause Rewind Fast Forward Time Shifting Stop
	Hibernate		Control Speaker on, off, LL, RR
	Signal Strength		Mute
	Volume		Signal Quality
	Configuration		Video Adjustment
	Channel Scan		Capture Pool

	Multi-channel Preview		Record List
	Teletext		

Other Information:

10:34:01 Clock (Set by host computer's time clock)

0000 Channel and program time

Stop/Play/Time Shifting

EPG AV/DVB   Electronic Program Guide/ AV switch

4.2 Functions

● Video Recording

You can record video by clicking on ▤. You can also schedule recordings in the

"Recording Setup" screen in the Properties (configuration) menu ▤. You may

also setup Once/Daily/Weekly schedule recording under Record Mode. Specify
stored location and day when scheduling weekly recording.

● Electronic Program Guide (EPG)

Click ▤ on the extended control panel to see the electronic program guide
provided by the content provider. From here you are able to obtain detail
information about the broadcasting programs. EPG will basically show current
and next program info while playing. Internet EPG is not available.
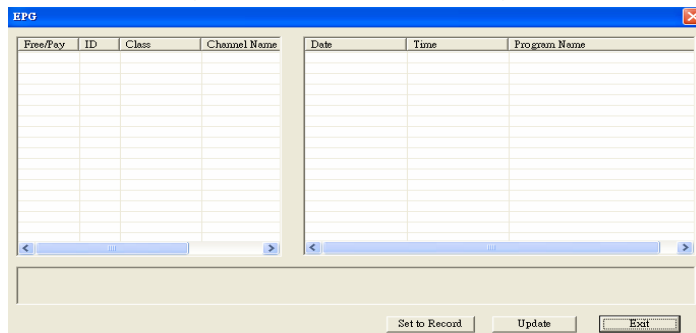
● Multi-Language

Please click on ▤ to change language. (Not all channels support SAP)

Note: Check your content provider to see if the programs support multi-language

● Teletext

The application "Teletext" is a simple teletext browser. To start this function, click

▤ on the control panel when your DIGITAL TV is running.

Note: Teletext is not supported under UK standard

● Time-shifting

When you click , the live program you are watching can be paused.   Click it again, the program will play from the moment that you had paused it so that you won't miss any part of the program.   If you like to go back to the live program, click and it will stop time-shifting function.

Playback recorded file
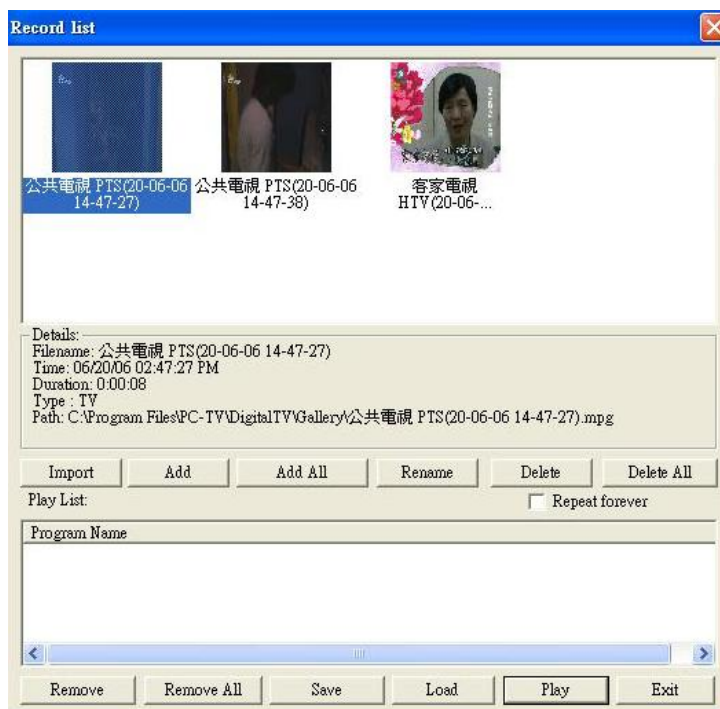
● Multi-Channel Preview

Click on on the control panel to preview multiple channels at the same time.

To watch the program you want, select it and click "Play".

Note: You may only preview FTA channels from the same transponder.
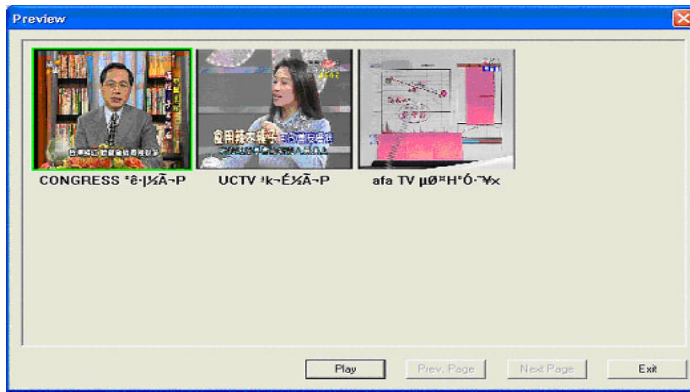
● Video adjustment
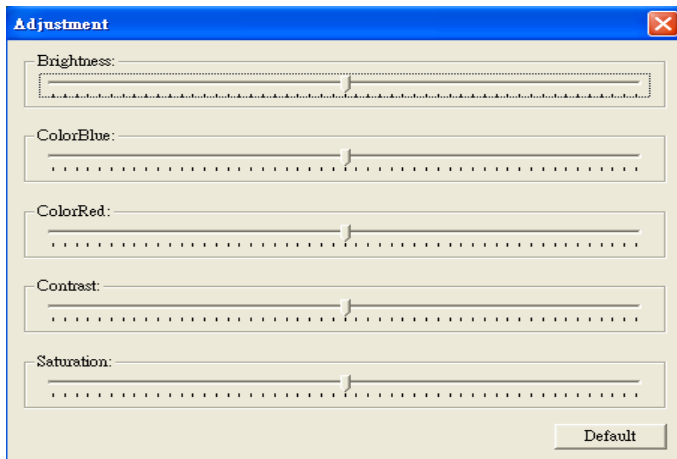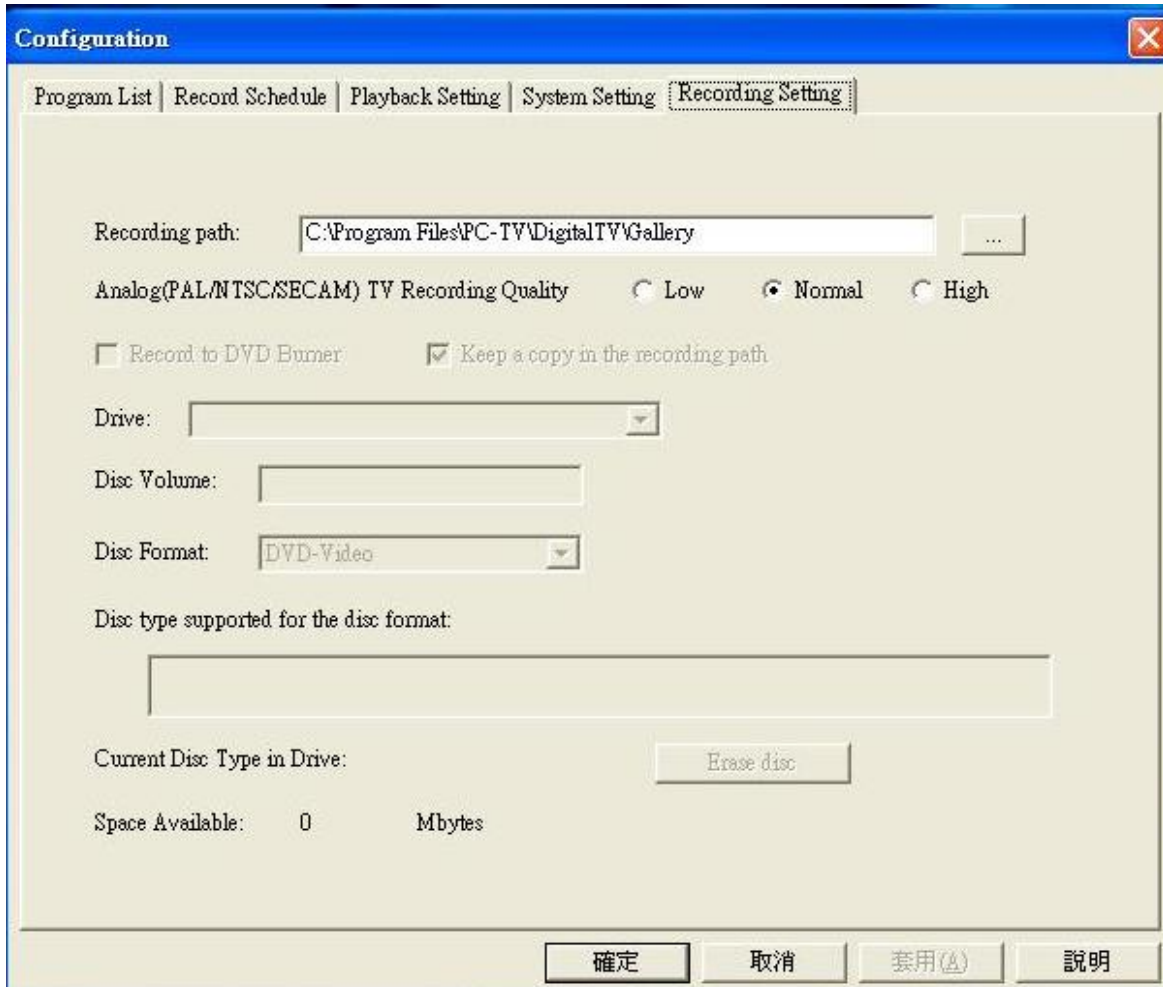
● Capture

Click on to capture a still frame of the program you are currently watching.

4.3 Configuration Page

Recording setup

- Recording Path

Select a file where you want to save recorded files.

- Analog/Capture recording quality

You may select Analog/Capture recording quality as high or low (higher recording quality takes more space)

Playback setting
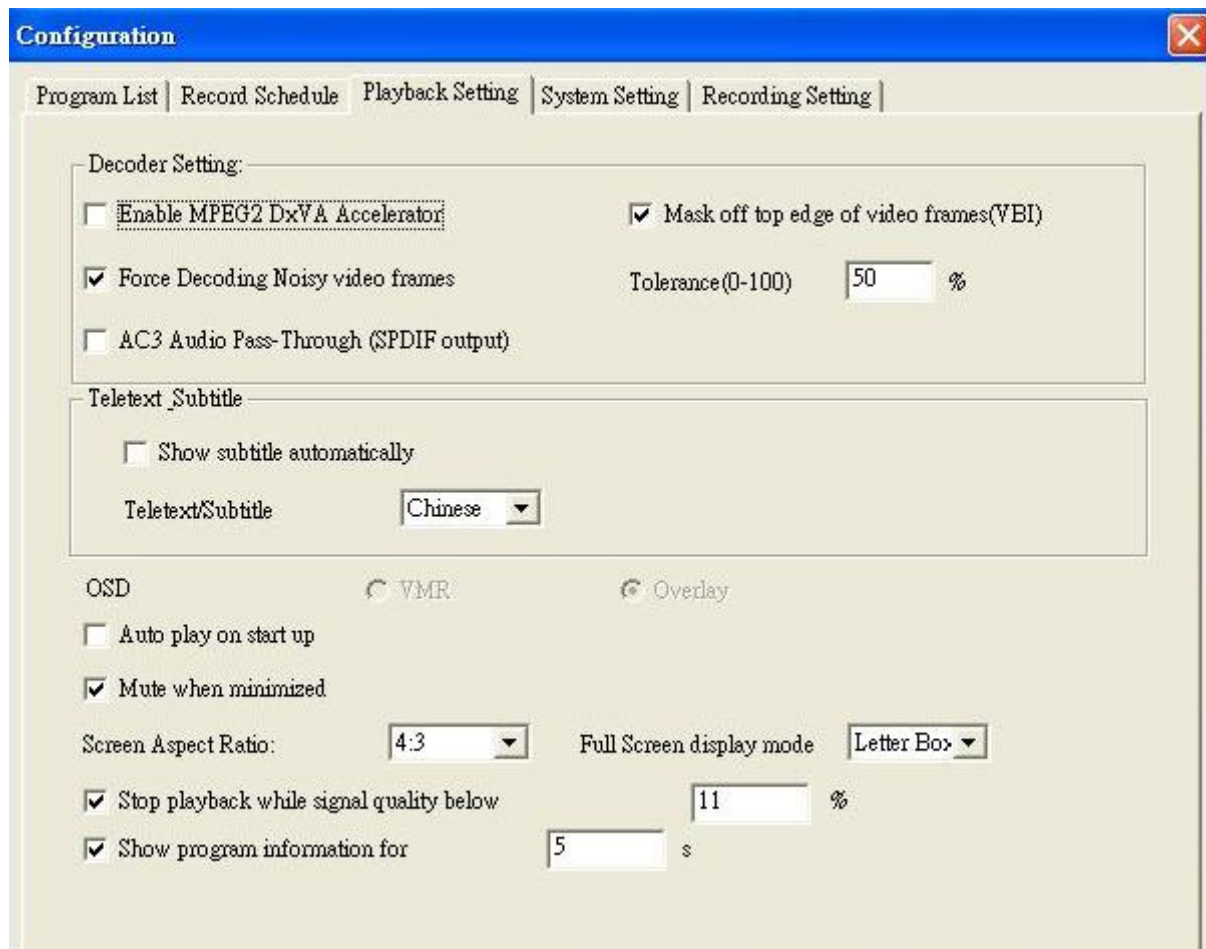
● MPEG2 accelerator setting

If your VGA card supports DxVA function, you may enable this function to share CPU loading

● VBI setting

If your TV program has pixel mixing in video edge, you may select here to cut it out

● Force Decoding noisy video frames setting

You may select here to force software to play TV program with bad reception

● AC3 Audio Pass_Through (SPDIF output)

If you have Dolby sound card, you may enable this function to get 5.1 channel sound effects. (Not all TV program carry Dolby sound)

● Subtitle setting

NOT available under ATSC

● OSD

Enable "Auto play on star up" and then the OSD will show on the screen when you start the player.

● Auto play setting

You may select to play TV program directly after launching software

● Mute setting

You may mute it when software is in minimum mode

- Aspect ratio setting/ Full screen setting

You may select TV program to show in different aspect ratio

- Stop playback while signal quality below

You may stop playing TV program when signal strength is below a specific degree

System setting
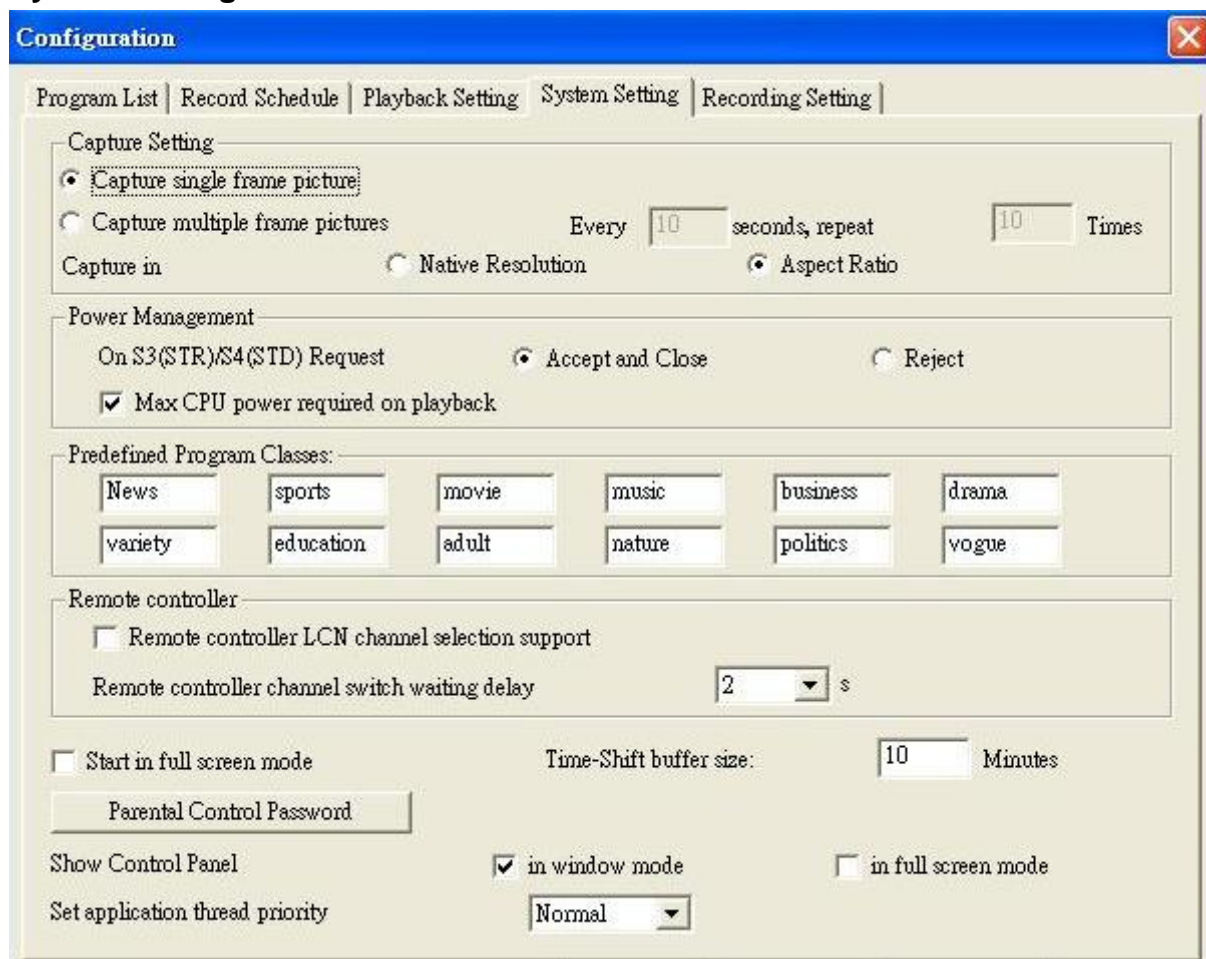
- Capture setting

You may select to capture signal or multiple frames in native resolution or aspect ration (small size picture) format. You can set time and interval for multi-capture.

- Power management

If you choose "Reject", Digital TV will stop your system from getting into hibernate mode.

- Predefined Program Classes

You may change Predefined program classes to classify program in "Program List" page.

- Remote Controller LCN channel selection support

You may set remote controller as "Logic Channel Number" mode (Recommended for UK, France) or "Normal" mode (Recommended for other areas).

- Remote Controller channel switch waiting delay 2 seconds

Channel changes 2 seconds after you press on the up or down button.

- Start in full screen mode

You may select to start program as "full screen" mode or "normal size" mode

- Time-Shifting buffer size

You may select maximum Time-Shifting time; the longer time you set, the bigger disk space will be required.

- Parental control password

You may set password to specific channels to avoid children from watching adult programs. Password will be required when anyone want to watch these specific channels.

- Control panel setting

You may the size of the screen as" Windows mode" or "Full screen mode"

- TV Application Priority

You may select TV program as first priority program of your PC. If other application programs are used when playing TV, they will take CPU resource and slow down the player.

Recording setup
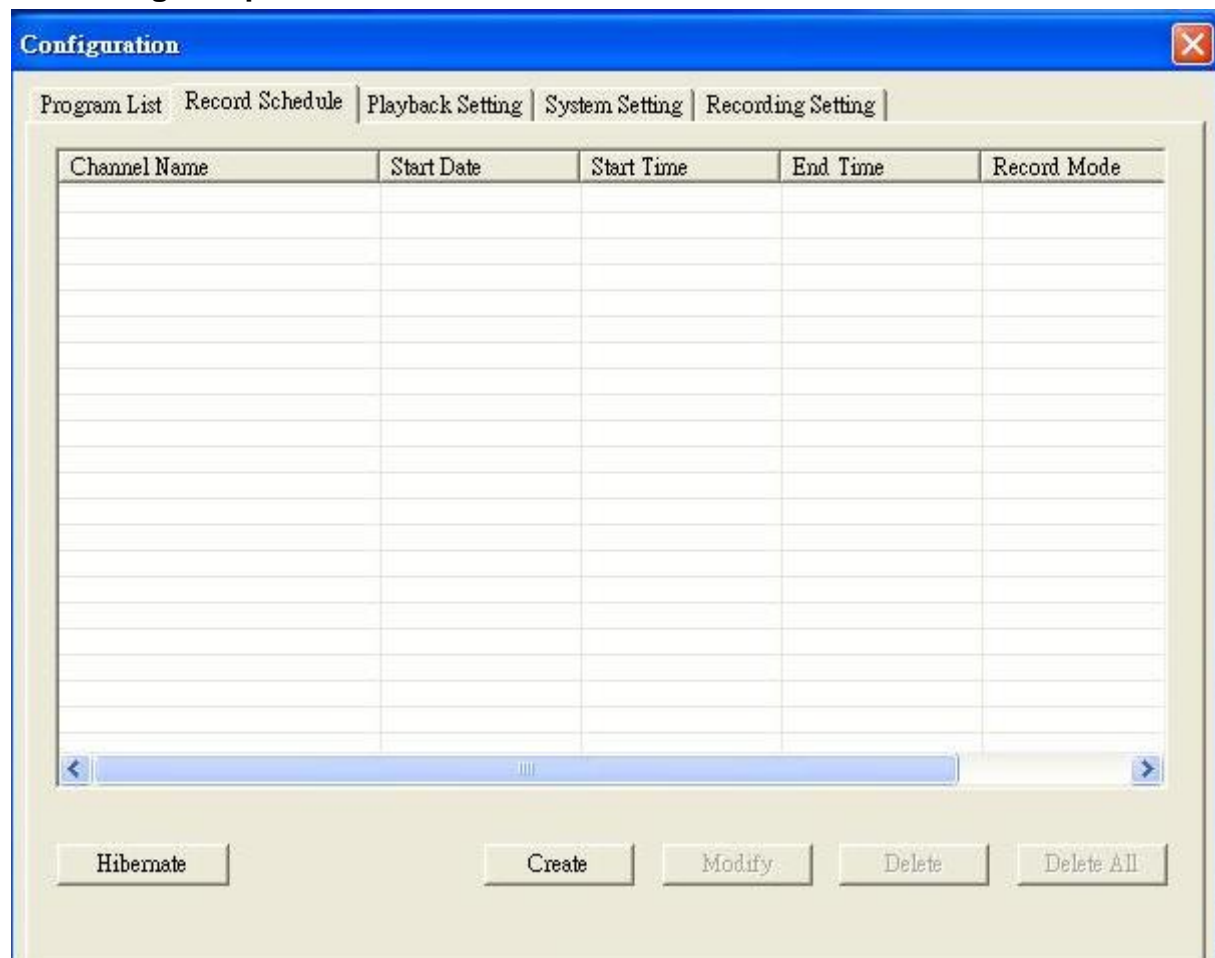
You may create/modify/delete schedule recording here

4.4 Right Click Menu

Right click your mouse over the DIGITALTV interface to open a pop up menu:

✔ Play Pause Stop Record Fast Rewind Fast Forward Time Shifting	Play: Play video Pause: Pause the video you are currently watching Stop: Stop the video you are currently watching Record: Record the video program you are currently watching Rewind: Rewind when you are watching recorded video Fast Forward: Fast forward when you are watching recorded video Time Shifting: Start or pause the "Time Shifting" function
Channel Up Channel Down Last Channel EPG Preview Capture Teletext Apid (SAP) switch Mute	Channel Up: Change to previous channel Channel Down: Change to next channel Last Channel: Change to the last channel EPG: Show EPG window Preview: Multi-channel preview (only for FTA channels) Capture: Capture a still frame of the video Teletext: Show "Teletext" window. Apid (SAP): Switch audio from different sources Mute: Turn the sound off
Configuration Channel Scan Recording ✔ Favorite List ✔ Control Panel	Configuration: Show configuration page Channel Scan: Show Channel Scan setting page. Record List: Open record list Favorite List: Open favorites list Control Panel: Show control panel
Top Most	Top Most: Place DIGITAL TV always on the top
About	About: Display version information of DIGITAL TV.
Exit	Exit: Turn off DIGITAL TV.

4.5 Keyboard Shortcuts

Function	Keyboard Shortcut
Play	Enter
Stop	End
Pause	Space bar
Full Screen	Z
Properties windows	O
Record	Home
Stop Record	End
Program list	L
Time Shifting	T
Channel up	Page up
Channel down	Page down
Volume up	Shift + Arrow up
Volume down	Shift + Arrow down
Help	F1
Key cancel	Esc
Key enter	Enter
DIGITAL TV Exit	X
Mute	M
Right Speaker	Ctrl + R
Left Speaker	Ctrl + L
Favorites List	V
EPG	E
Preview	K
Fast Forward	F
Rewind	R

Appendix 1   Trouble Shooting

General

1. Windows cannot recognize Digital TV USB correctly

You may switch to a different USB slot and try again.   Please make sure that your USB plug and USB port is clean

2. Error message shows up "Setting error! Fail to play the program!" or "Fail to play your program":

- Please check the driver of VGA card and sound card
- Please make sure the hardware and software settings are correct, and try TV channel scanning again
- Please install Microsoft DirectX9.0C and Media Player 9.0 or higher version
- Might be due to poor signal quality so that DIGITAL TV can not receive enough data of program or received wrong data.
- It is a paid channel and you are not authorized to see
- Make sure to use the latest DIGITAL TV software version for decoder. Register C:\Program Files\PC-TV\Common\Bin\claud.ax and CLVSD-dtv.ax again with regsvr32.exe in C:\Windows\System32.

3. Screen blacked out when playing or playback freezes on first picture.

Find and install the latest VGA driver and DirectX 9.0C and check if any other DTV players are installed.   If yes, remove them and uninstall all the filter drivers

4. Which format is recorded by DIGITAL TV?   Why do I have problem with converting/burning this file?

MPEG2.   However, since some broadcasters have problems at Kpbs rate in their TS (which is over DVD format limit), you will need to use MPEG editing software to adjust Kpbs rate.

5. Error message "Hardware setting error"

Please reinstall driver

6. Video playing but Audio failed

Please checks the sound card or the volume setting.

7. Why my EPG, Teletext and Subtitle cannot be shown?

In some areas, the broadcasters do not provide the mentioned services, please contact you broadcaster for confirmation.

8. Cannot find driver for R/C receiver.

Please re-plug the receiver or change different USB port.   You do not need to install additional drivers because it will install the built-in HID driver in your OS.

9. Remote control does not work

Check remote control batteries.   Check remote receiver: the red light on receiver will remain ON as it is getting signal from the remote control.   Also, point your remote control to the receiver when in use.

ATSC

1.   Why cannot I lock any channels when auto-scanning?
■   Check whether the antenna connects to the device correctly.
■   Check whether the signal in your area is strong enough.

2.   When the pictures are not playing smoothly,
Set application thread priority to "High" from System Setting.
Enable "Max CPU power required on playback from System Setting.
Enable "MPEG2 DxVA Accelerator" from System Setting.

3.   Digital Cable : All digital Cable signal, including HDTV through cable, are controlled by the cable companies. They usually require additional "DCR" – Digital Cable Ready Equipment and a monthly fee in order to get digital HDTV signal through cable. Please contact your TV cable company on the details of "DCR" equipment. Digital TV support off the air ATSC digital broadcast, but does not support digital TV signal through cable at this time.

For even better reception, you may attach the unit to a larger indoor or outdoor ATSC/HDTV antenna. By doing so, you may receive more ATSC channels and have few drop outs.

Mute

Power

Full Screen

Channel UP/DOWN

Stop

Volume UP/DOWN

Record

FAVORITE

Back

Play

1	2	3	4
5	6	7	8
9	0	A/D	TS

ATSC/Analog Switch

Time Shifting

20
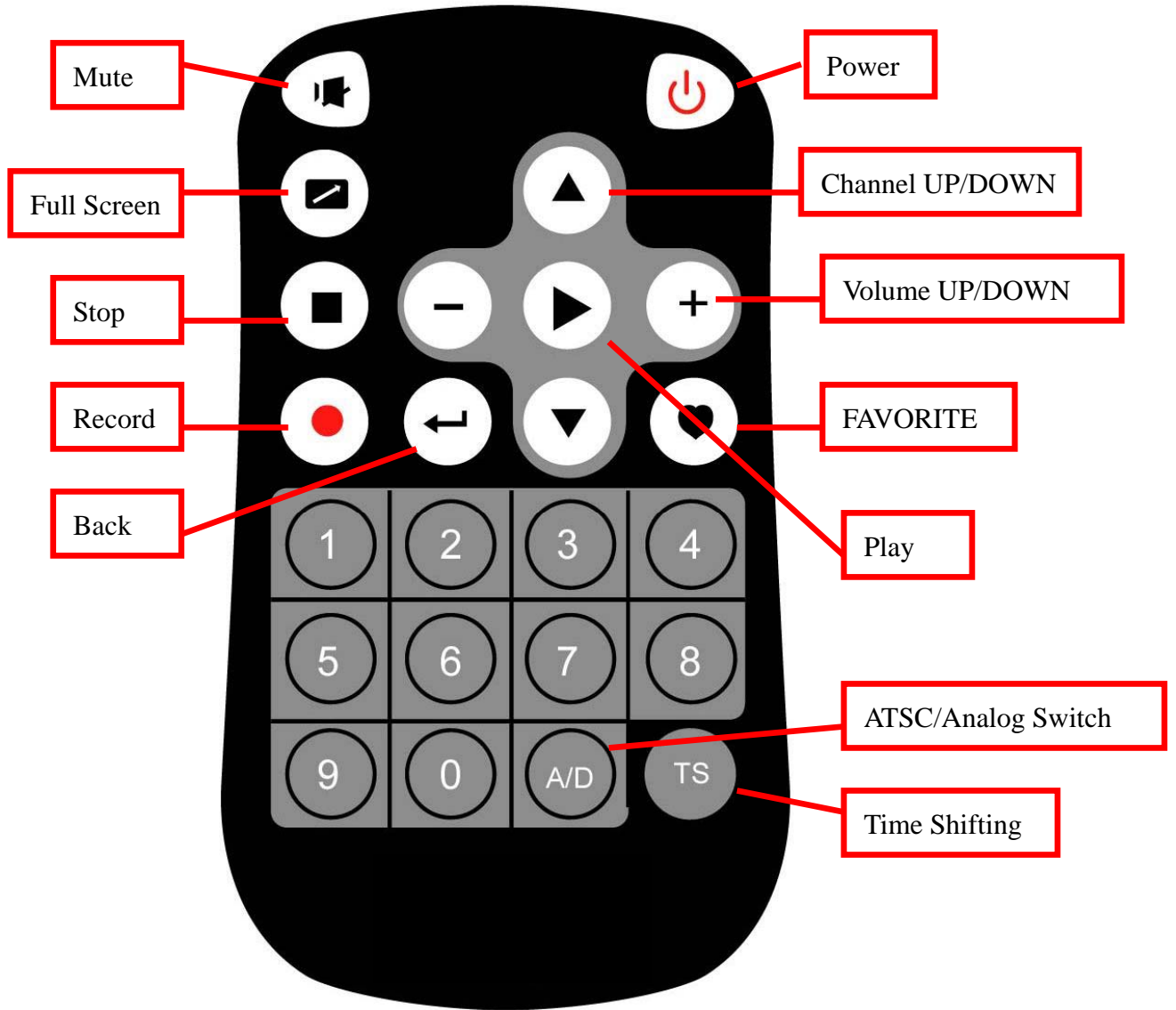
Warranties

This appendix documents the product warranty applicable to the United States only, as well as information about FCC radio frequency interference. For warranty information outside of the United States, please contact your local distributor.

Limited Warranty

This AITech product is warranted to be free from failures due to defects in material and workmanship for one year from the date of original purchase as evidenced by a copy of the purchase receipt. During the warranty period, AITech, at AITech's sole discretion, will repair or replace at no charge, the product which, in its opinion, is defective.
A Return Merchandise Authorization (RMA) number must be obtained from AITech prior to returning any merchandise for repair or replacement.
Merchandise sent to AITech without an RMA will be returned unopened.

The original purchaser is responsible for packing the product for shipment and for the charges to ship the failed product to AITech.
AITech is responsible for charges to ship the repaired or replaced product. If any charge to you is involved, the replacement product will be shipped C.O.D. If the failed product has been modified in any way without the consent of AITech or if the failure is the result of misuse, abuse, or misapplication, AITech has no obligation to repair or replace the failed product.

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FCC Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

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