USB 2.0 Digital TV Receiver (ISDB-T)

DTR-100DB

User's Manual

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CE mark Warning

The is a class A device, In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

WEEE

To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.

Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacture must therefore be allowed at all times to ensure the safe use of the equipment.

Revision

User's Manual for DTR-100DB

Model: DTR-100DB

Rev: 1.0 (August 2008)

Part No. 2081-K10050-000

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1. Introduction

PLANET DTR-100DB is ISDB-T (Integrated Services Digital Broadcasting) Digital TV receiver that offers a complete and cost effective solution for Digital TV broadcasting.

PLANET DTR-100DB connects Digital TV with your computer/notebook, DTR-100DB not only allows you to watch Free-To-Air digital terrestrial television channels with no subscription to pay but also can record real time digital TV programs directly to the hard disk in your computer/notebook.

With its fascinating features, DTR-100DB provides Multi-Channel preview, Real-Time digital video recording (DVR), and Schedule Recording allows you not miss out any favorite TV programs. In addition, it incorporates a MPEG-2 software decoder which delivers a picture quality of HDTV standard and enables a high quality playback of the recordings. DTR-100DB also can deliver Electronic Program Guide (EPG) which offers you more information about the TV programs. You can pause while watching TV program and continue from where you left with Time-Shifting feature, and will never miss a scene.

The supplied Remote Controller gives you easy access to the key functions of the ISDB-T receiver, so you don‘t always have to be seated next to your computer.

With the pocket-sized digital TV receiver connecting with a computer/notebook, you can watch digital TV shows anywhere and anytime and turn your computer/notebook into a personal mobile TV entertainment system.

1.1 System Requirements

- Pentium 4 compatible processor 1.2GHz or higher (2.0GHz recommended)
- Minimum 256MB RAM or above (512MB recommended)
- VGA card with minimum 32MB memory
- AC97 compatible sound card
- 1 GB free HD space
- CD-ROM drive (For software installation)
- One available USB2.0 port
- Microsoft DirectX 9 or above
- Windows 2000(SP4) / XP (SP2) / Vista (32bit)
- Windows Media Player 9 or above

1.2 Features

- Compliant with ISDB-T, 1 Segment QVGA format by H.264/ AVC (ISO/IEC 14496-10)
- Compliant with USB Specification Rev2.0
- Supports Still Image Capture
- Supports BML (Broadcasting Markup Language)
- Supports Subtitle (L-EIT Standard)
- Supports EPG (L-EIT Standard)
- Supports channel auto scan
- Supports Fully Resizable TV (Up to Full Screen)
- Supports Record/ Playback TV programs
- Supports ISDBT 1-Seg programs : CH13~CH62 (CH7~CH69 for Brazil); 470MHz~770MHz(806MHZ for Brazil)
- Supports Audio Format :MPEG-2 AAC (ISO/IEC 13818-7)
- Multiple language (English and Portuguese)
- Software upgradeable

1.3 Specification

- Standard：ISDB-T 1-segment
- Interface：USB V.2.0
- Connectors：
  1 VHF/UHF connector (MCX type)
  1 USB Connector (A type)
- TV Tuner：50 Ohm (UHF/VHF) TV Antenna (Optional)
- Receiving Frequency：430-770 MHz (806MHz for Brazil)
- Bandwidth：6, 7, 8 MHz
- Code Rate：1/2, 2/3, 3/4, 5/6 and 7/8
- Net Weight (app.) ：22.4g
- Operating Temperature：0˚C ~ 55˚C
- Humidity：5 % ~ 95 % (non-condensing)
- Storage Temperature：-10˚C ~ 80˚C
- Supported OS：Windows 2000 / XP / Vista

1.4 Package Contents

- USB 2.0 Digital TV Receiver (ISDB-T)
- Installation CD
- Antenna

Note:

- If any of above items is missing or damaged, please contact your local dealer immediately.
- For Time-Shifting, a Pentium IV 2.0GHz processor or higher is required.

2. Hardware Installation

This chapter explains how to install DTR-100DB hardware with your PC or Notebook.

Please follow the procedures as described below

2.1 Connecting USB Port

Connect USB connector of the DTR-100DB Receiver to the USB port of your computer or notebook.

2.2 Connecting Terrestrial Antenna

Connect supplied ISDB-T antenna to the VHF/UHF port on the backside of the DTR-100DB.

Note:

(1) If you install the DTR-100DB with Notebook, please make sure the "**Power Saving**" function is turned **OFF**. (The "Power Saving" function will lower down the CPU performance and may effect the DTR-100DB's operation).

(2) Be sure to connect the antenna to the DTR-100DB and adjust it to a better reception angle and location every time you play with the Receiver.

3. Software Device Driver & Application Utility Installation

This chapter describes how to install the Device Driver and Software Utilities.

1) After installing the DTR-100DB in your PC or Notebook, the system will find a new hardware device and Windows of "**Found New Hardware Wizard**" will appear. Please click "**Cancel**" to exit the Wizard.

Please insert the Installation CD into your CD drive, the CD will auto-run and show the main installation screen:

>> Documentation

User's Manual: Click this option to read user's manual and specification.

Quick Guide: Click this option to read quick install guide.

>> Driver

Install Driver: Click **Install Driver** to start device driver installation process.

>> Utility

Presto PVR: Click this option to install Presto PVR software.

Microsoft DirectX9: Click this option to install DirectX 9 utility.

Windows Media Player 9: Click this option to install Media Player 9 software.

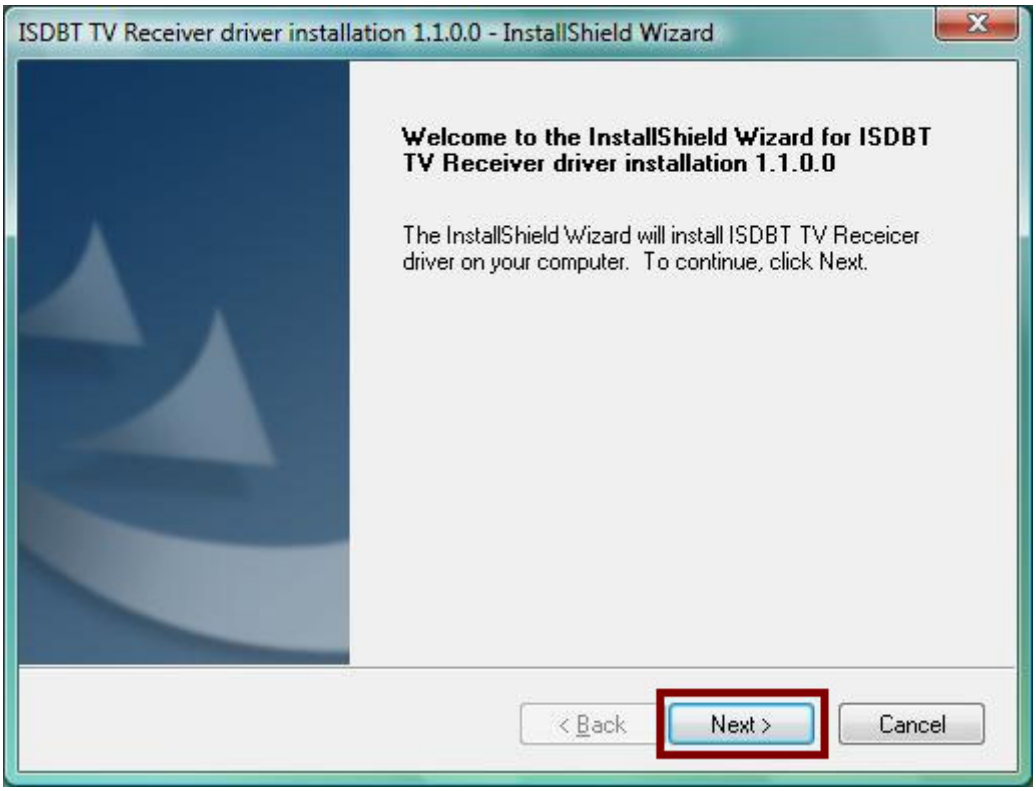
Acrobat® Reader: Click this option to install Acrobat Reader.

Attention: It is highly recommended to install **Microsoft DirectX9** & **Windows Media Play 9** IN THE BEGINNING if your system hasn't had those components yet.

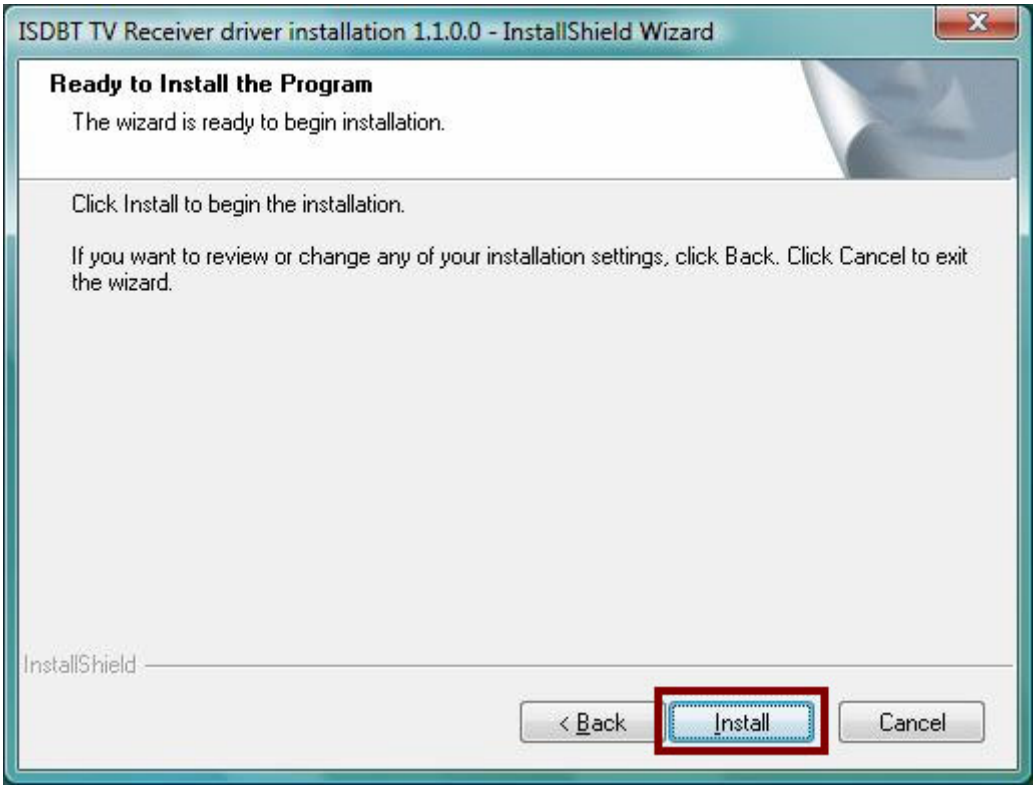
3.1 Install Driver

Step 1: Click "**Install Driver**" from the manual that appears to install the device driver.

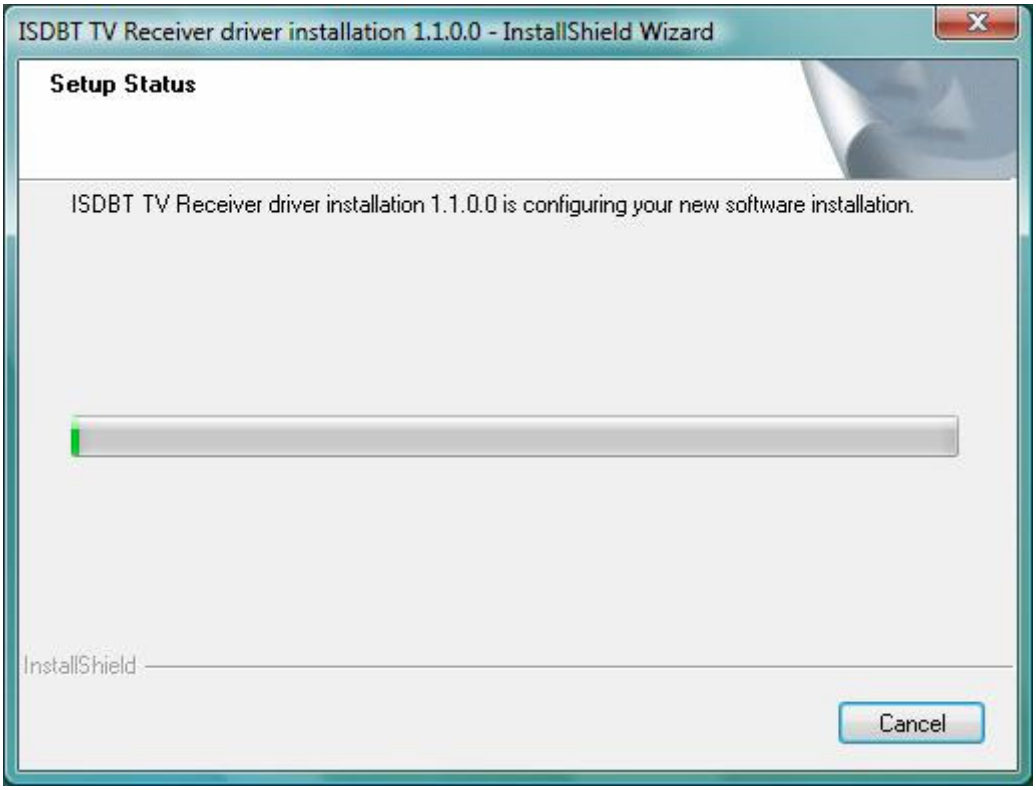
Step 2: The Welcome wizard below will appear. Click "**Next**" to continue.



Step 3: Click "**Install**" to begin installation.

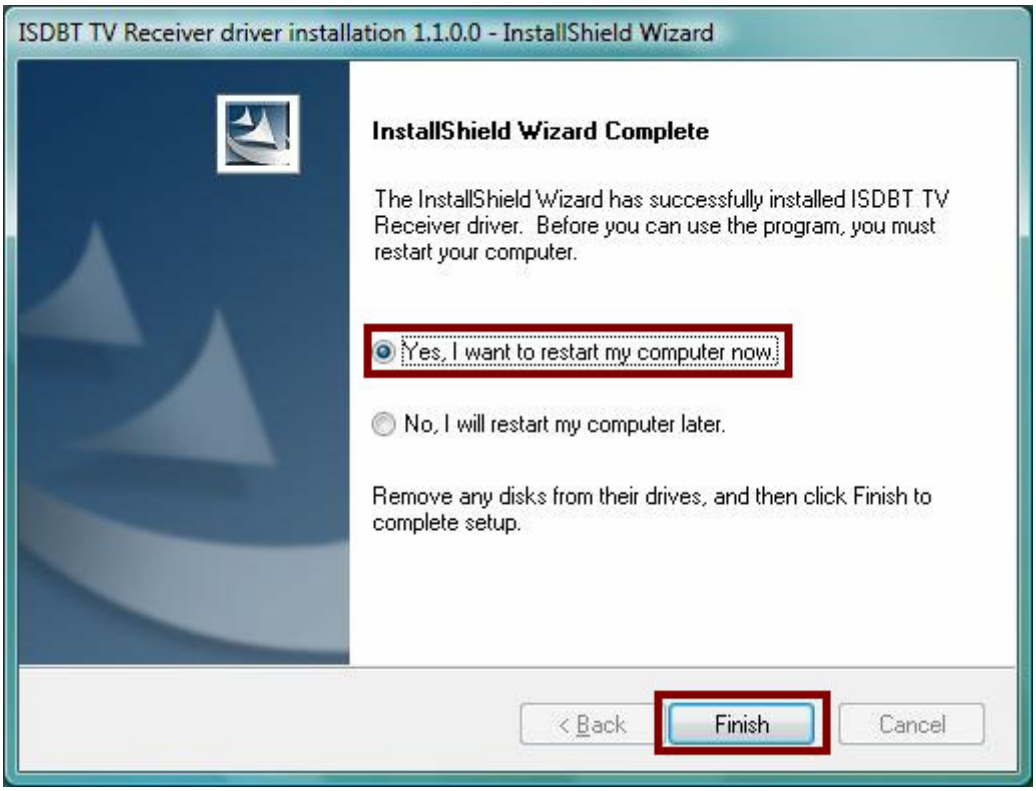


Step 4: Please wait for while during device driver is installing.



Step 5: Click "**Install this driver software anyway**" (For Vista Operation, this screen will appear twice and XP Operation System will appear once; repeat the same action to continue the installation)

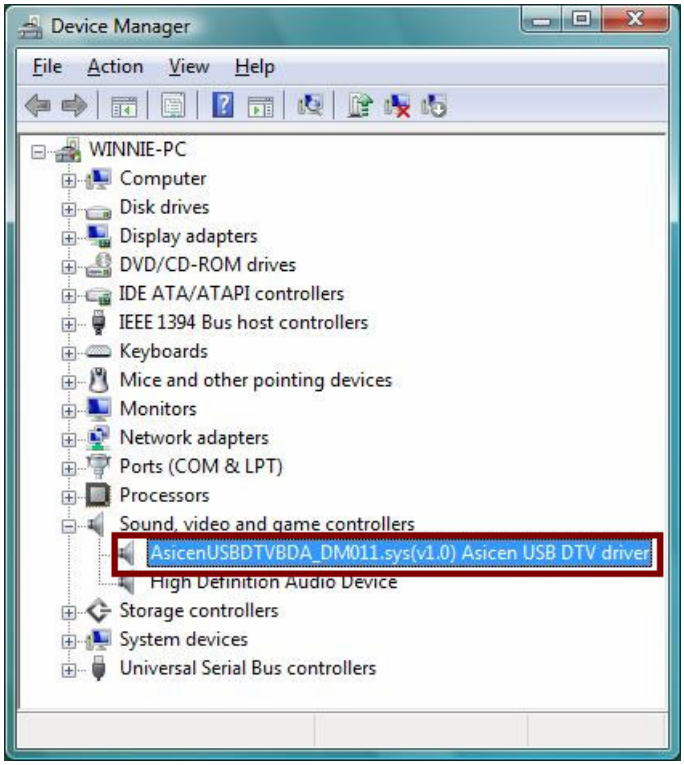
Step 6: Before using the device, it is recommend that restarting the computer for device complete the setting. Choose "**Yes, I want to restart my computer now**" and click "**Finish**" to restart.



Step 6: To check if the driver is properly installed:

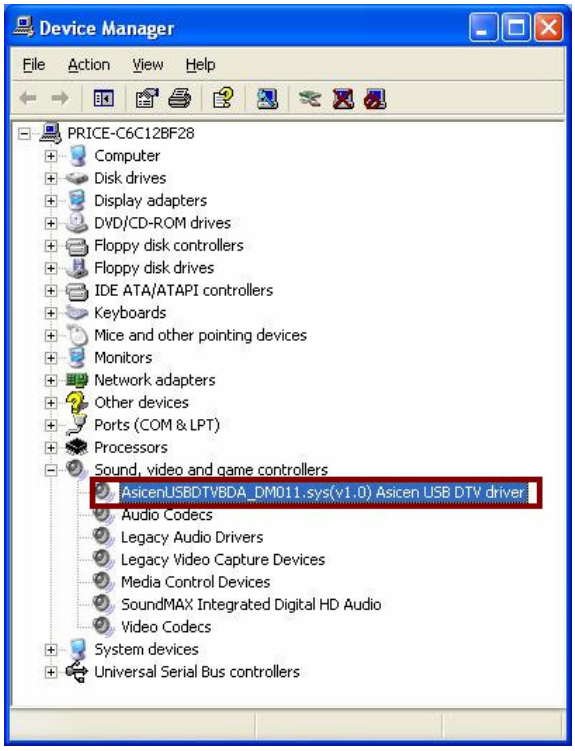
[For Windows Vista]

Click **Start** → **Control Panel** → choose "**Device Manager**".



[For Windows XP]

Click **Start** → **Settings** → **Control Panel** → **System** → "**Hardware**" tab → choose "**Device Manager**".

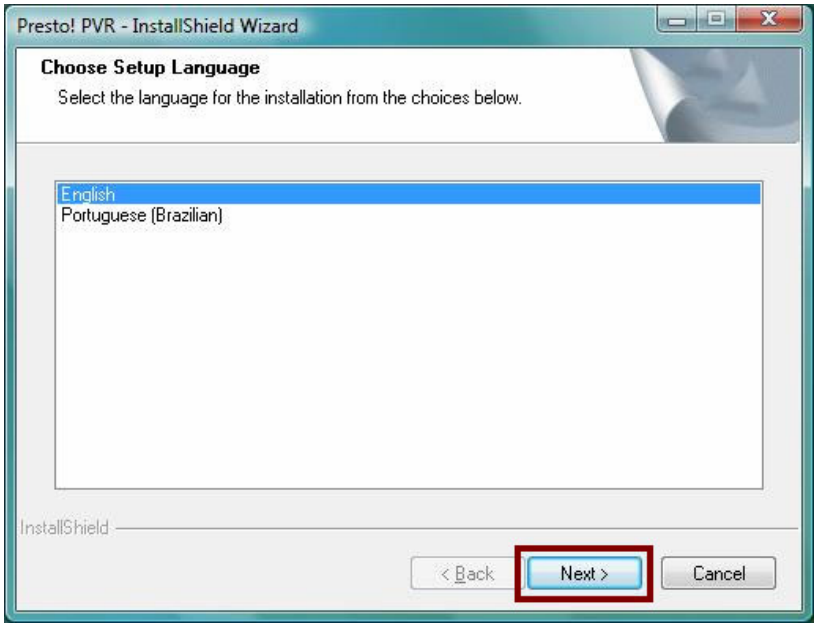


3.2 Install NewSoft Presto! PVR Software

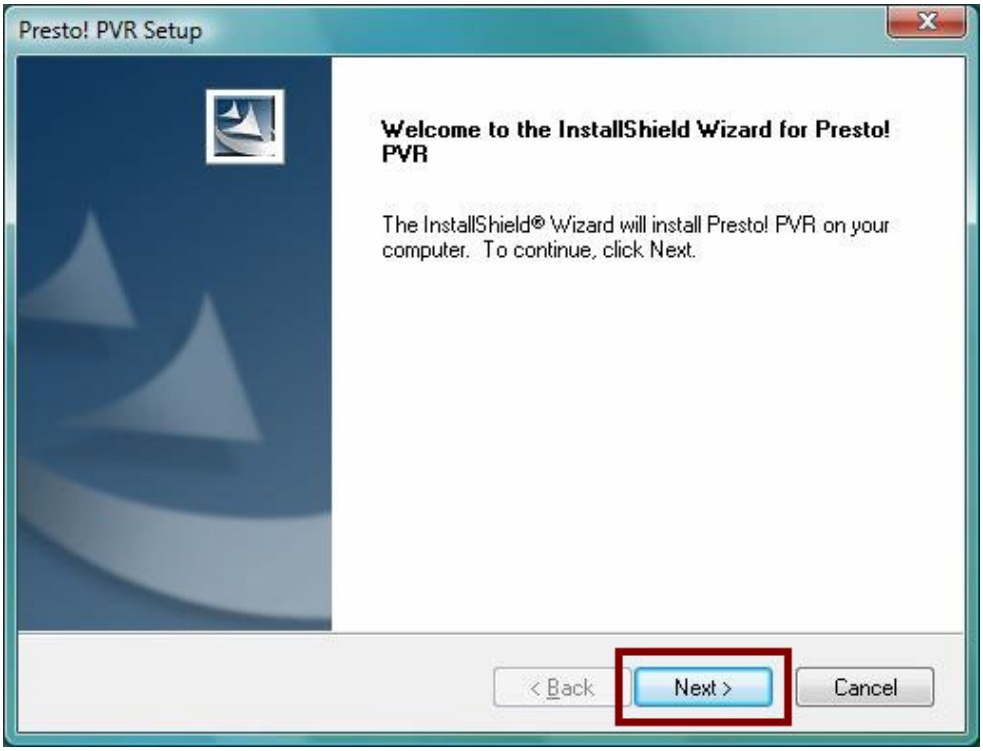
Before you begin, make sure that the antenna is connected to the DTR-100DB device.

Step 1: Run the Installation CD and click "**Presto PVR**" for NewSoft Presto! PVR software installation.

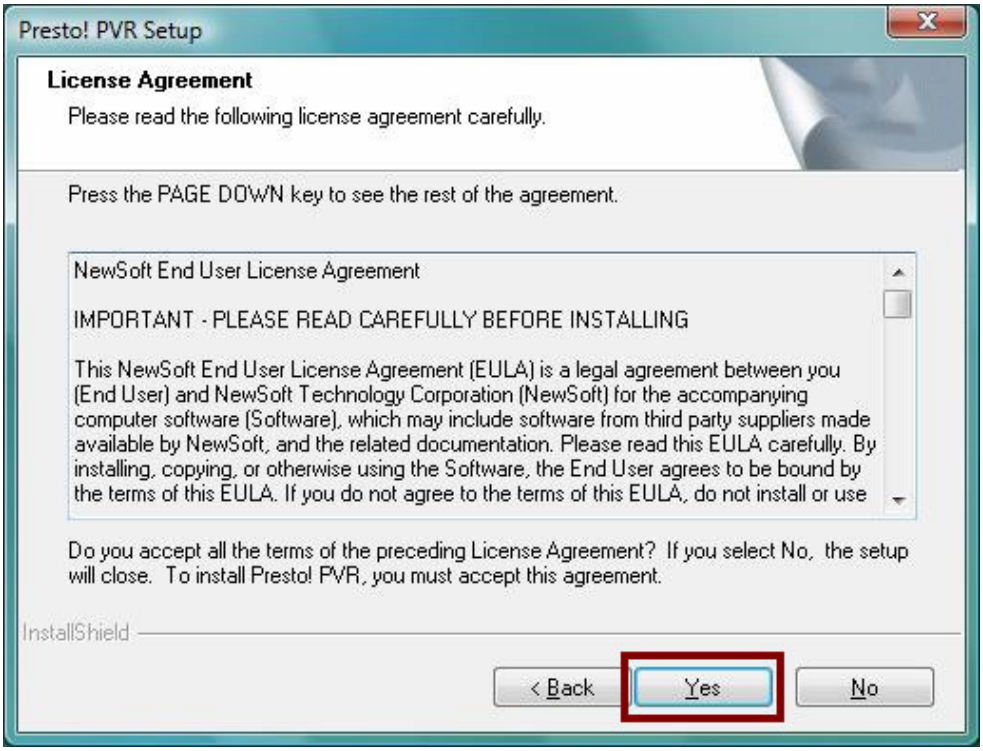
Step 2: Select the languages for this installation from the choices below, and then click "**Next**" to next step.



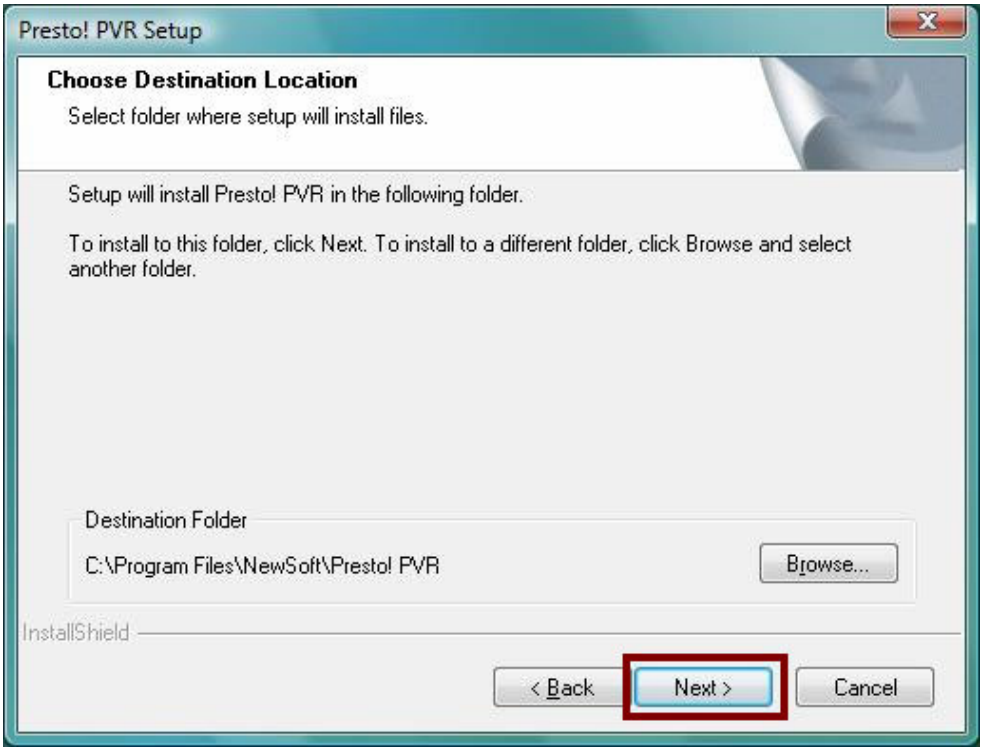
Step 3: The Welcome wizard below will appear. Click "**Next**" to continue.



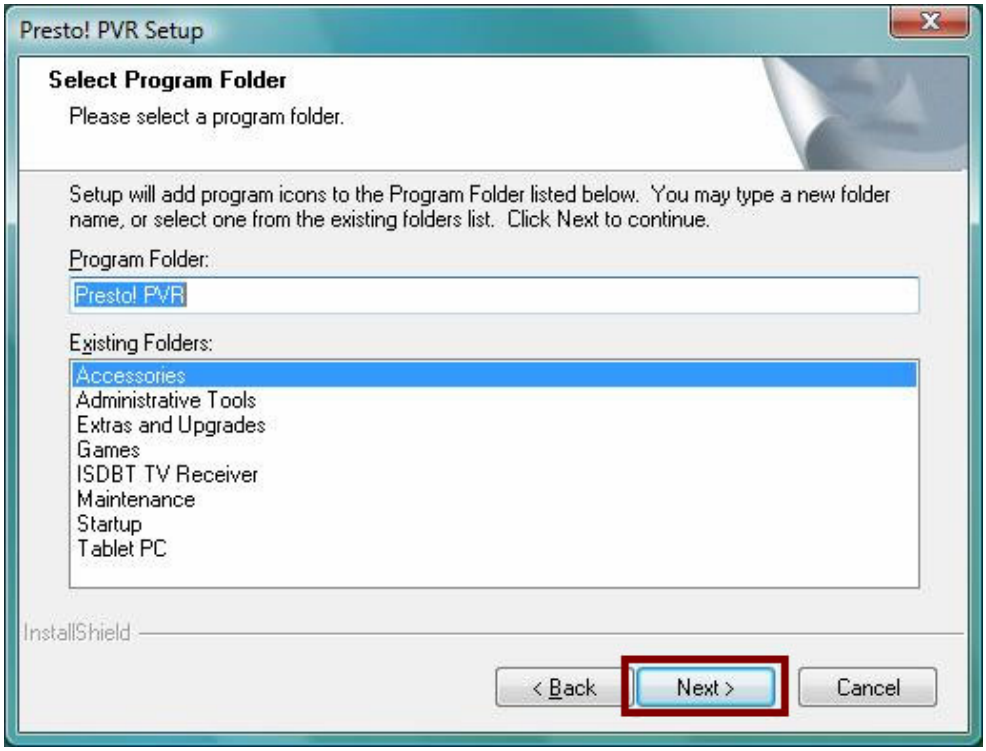
Step 4: Please read the following license agreement carefully. To install Presto! PVR, you must accept this agreement and click "**Yes**".



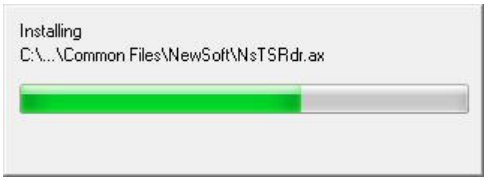
Step 5: Select folder where Setup will install files, and then click "**Next**".



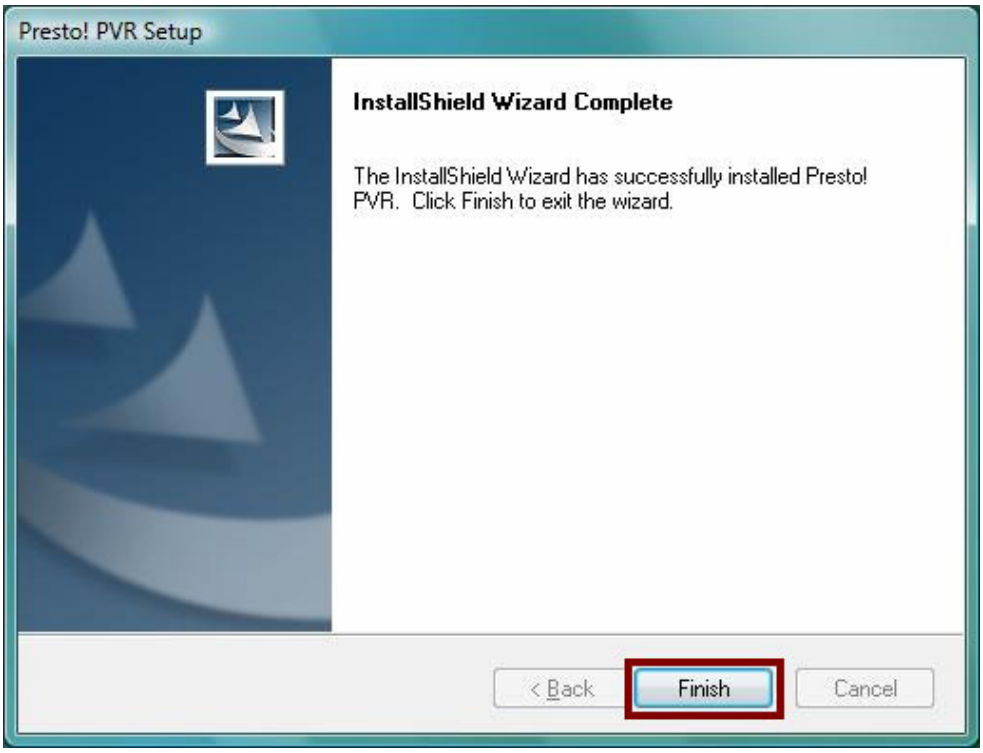
Step 6: Select Program Folder and click "**Next**" to continue.



Step 7: Please wait for while for setup procedure.



Step 8: After Wizard has successfully installed TotalMedia, click "**Finish**" to exit the Wizard.



Step 9: There will be 1 desktop icon shown after the installation:

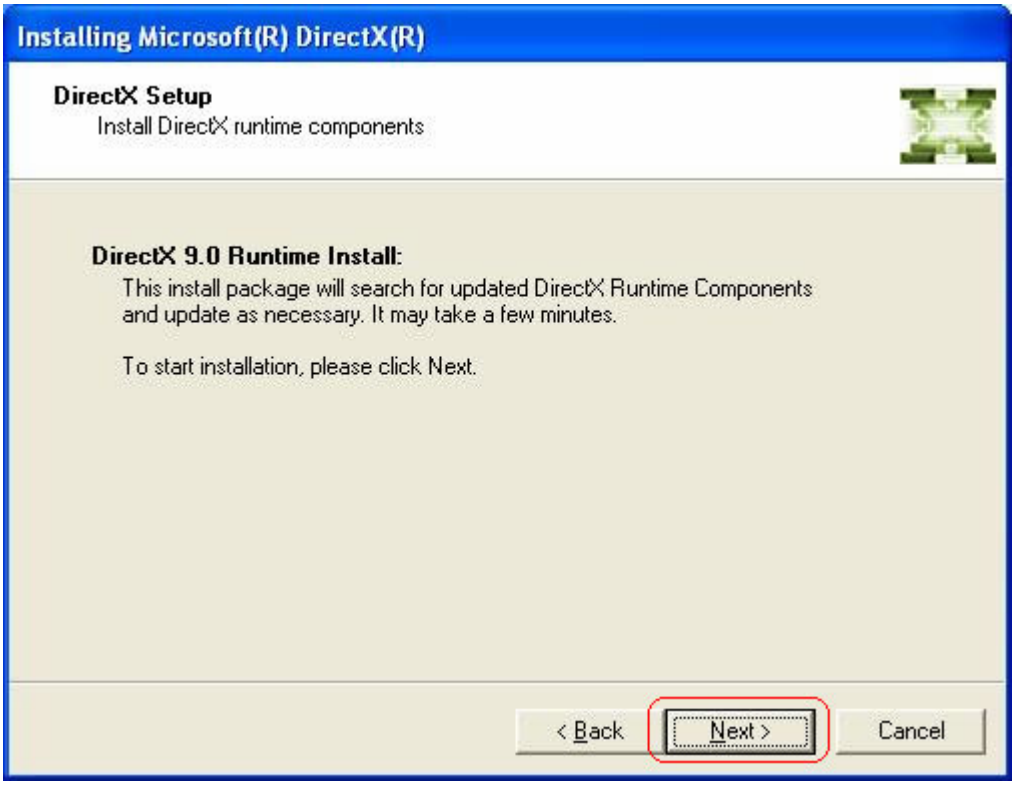
3.3 Install Microsoft DirectX9

Before installing device driver, it is necessary to install DirectX 9 or higher for your Operating System. If your system already has DirectX 9 or higher version, you can skip this part of installation and go to **3.1 Install Driver** for device driver installation.

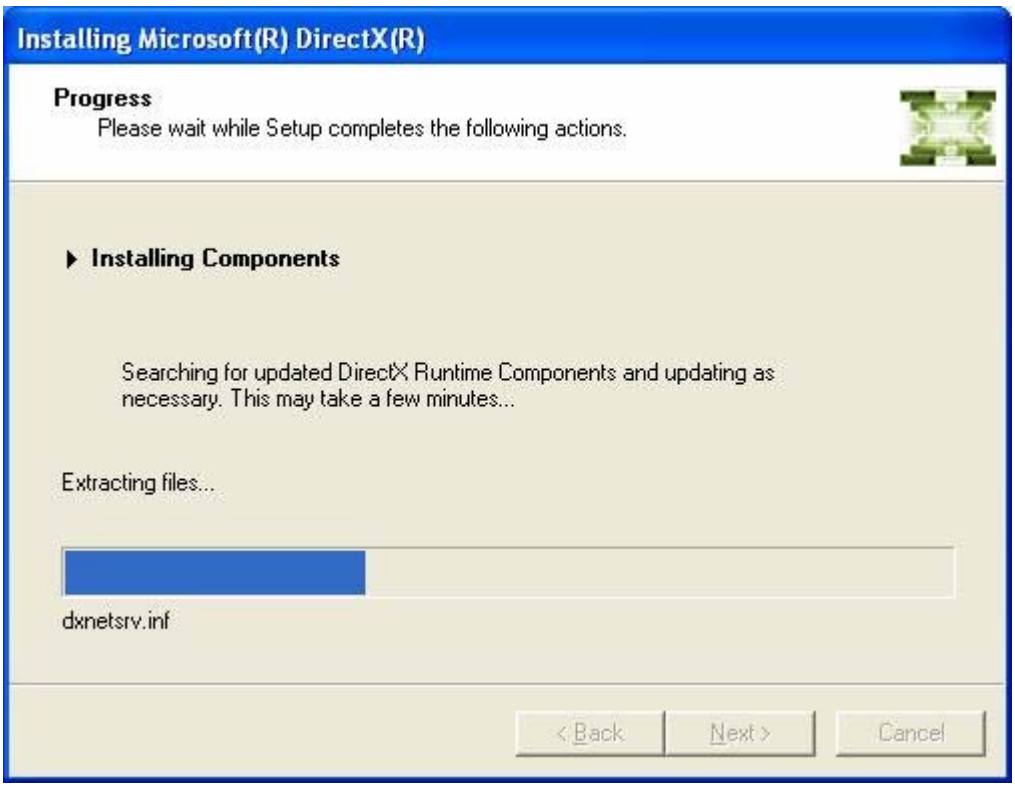
Step 1: Click "**Microsoft DirectX 9**" to start installing DirectX9.

Step 2: In "**Installing Microsoft® DirectX®**" window, select "**I accept the agreement**", and then click "**Next**" to continue.

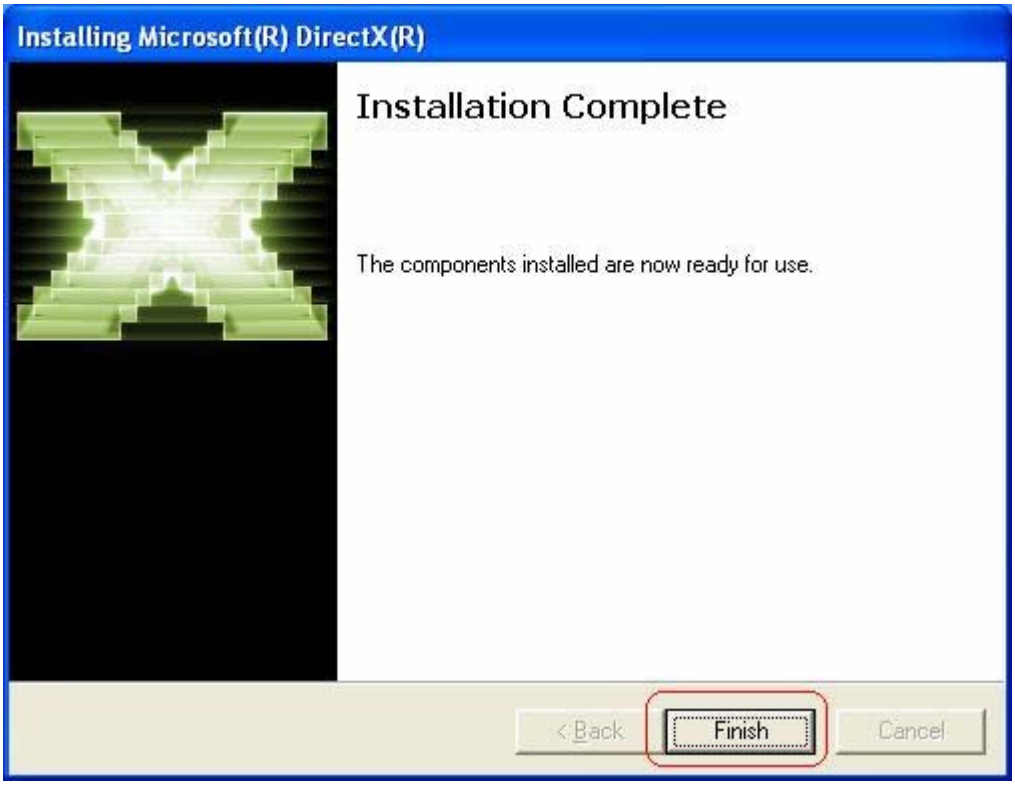
Step 3: Click "**Next**" to continue installation.



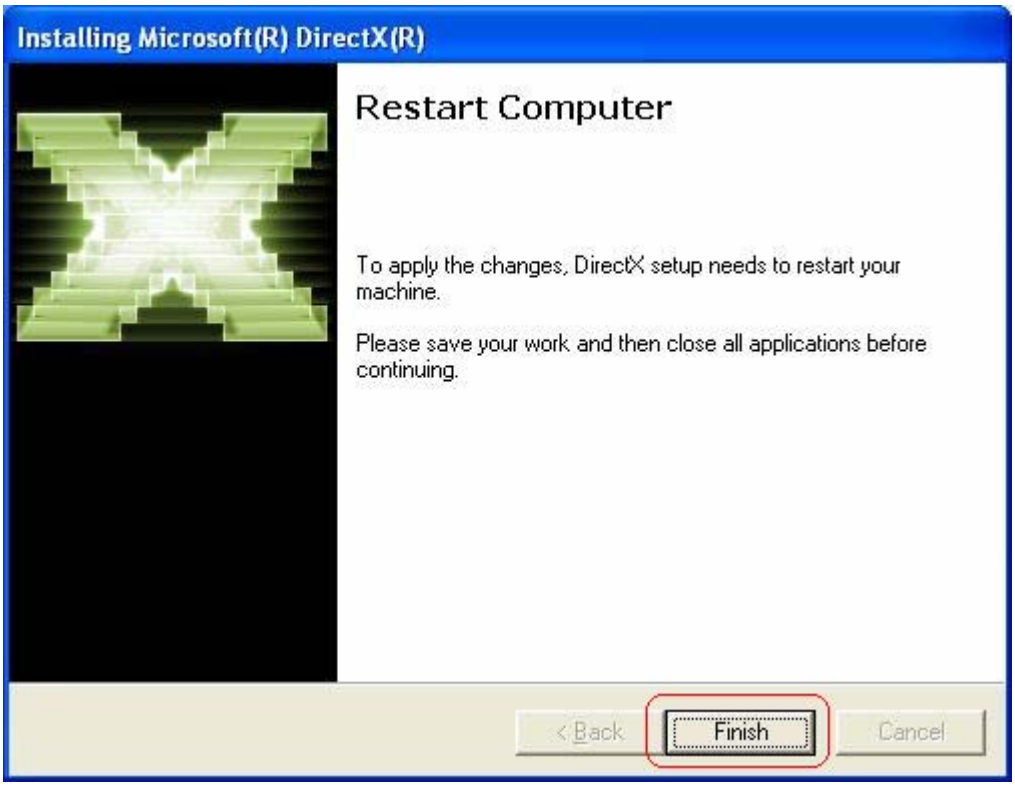
Step 4: Waiting for the operating system finishes installing DirectX 9 components.



Note: If your system had already been installed DirectX9 or higher version before, the "**Installation Complete**" window below will appear. Click "**Finish**" and the components are ready to use. Then, please go to 3.1 "**Install Windows Driver**" for device driver installation.



Step 5: After operating system completes DirectX9 installation, the "**Restart Computer**" window below will appear. Click "**Finish**" to restart your system.



Step 6: Once the computer is rebooted, your system will find the DTR-100DB hardware device which are not installed yet. When the below Wizard window is shown, please click "**Cancel**" to continue.

After you finish those steps, please run the **Installation CD** again and click "**Install Driver**" to install the Device Drivers. (Please refer to the next section "**3.2 Install Driver**")

3.4 Install Windows Media Player 9

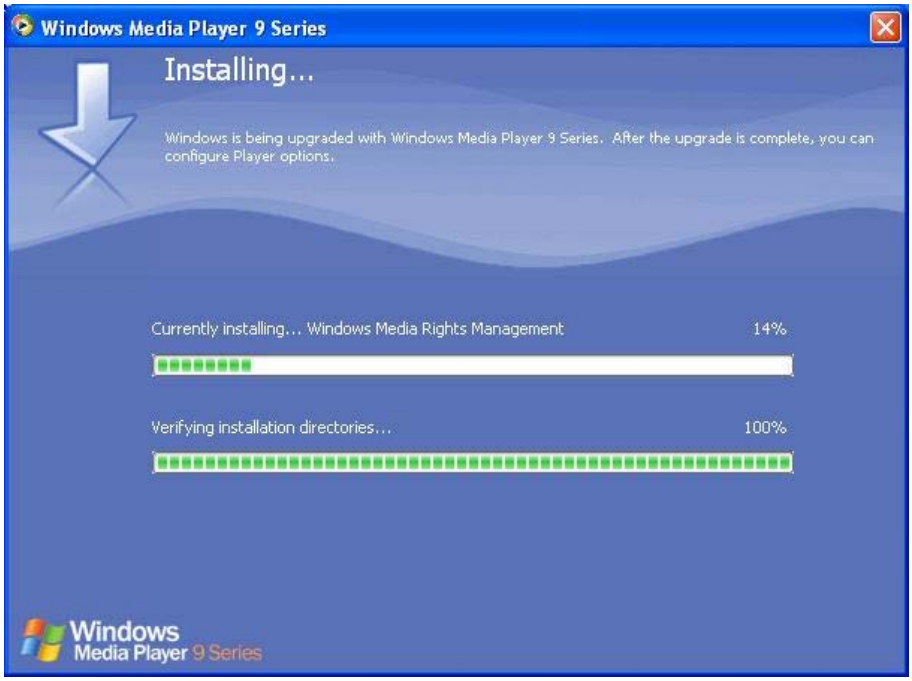
Before installing NewSoft Presto! PVR application program, it is necessary to install Media Player 9 or higher for your Operating System. If your system already has Media Player 9, you can skip this part of installation and go to **3.2 Install NewSoft Presto! PVR software** for NewSoft Presto! PVR software installation.

Step 1: Click "**Windows Media Player 9**" button from setup program of the installation CD.

Step 2: Select the language version which you want to install and click "**OK**" to continue.

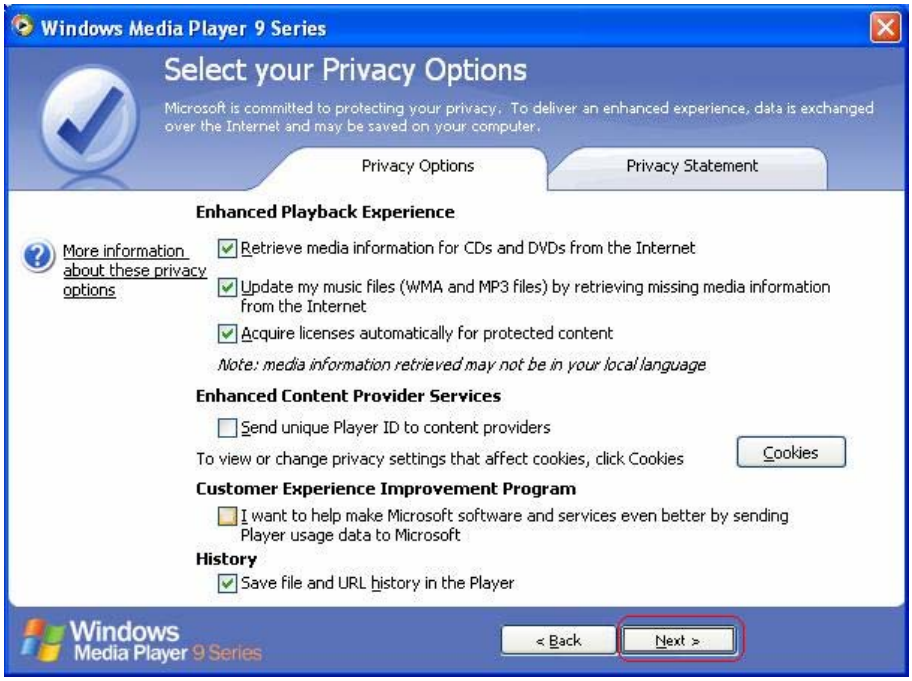
Step 3: Click "**I Accept**" to continue the next step.

Step 4: Please wait for a few seconds for Installing.

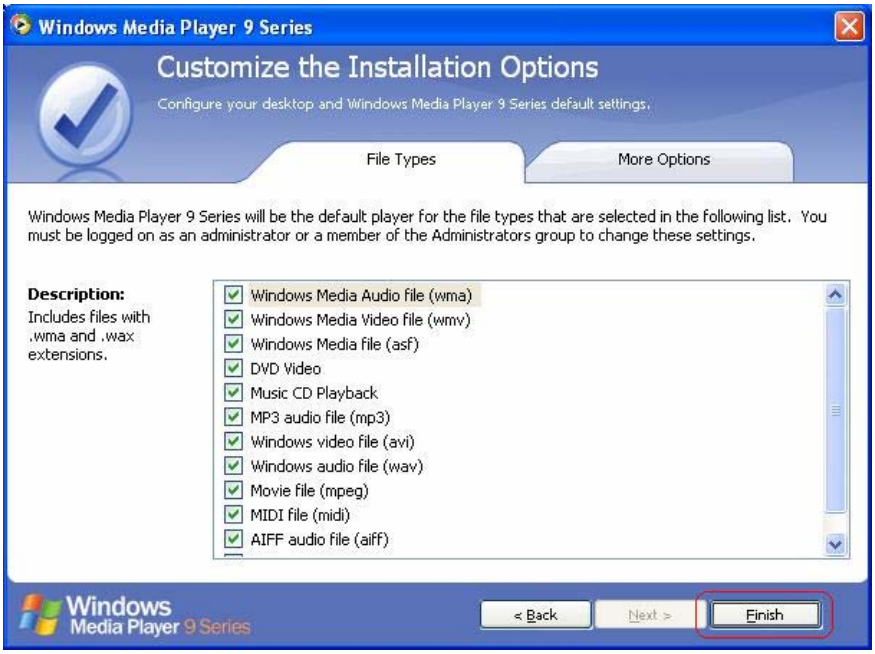


Step 5: Click “**Next**” to continue.

Step 6: Select your Privacy Options in this step and click “**Next**” to continue.



Step 7: Configure your desktop and Windows Media Player 9 Series default settings, and then click "**Finish**" to exit the wizard.



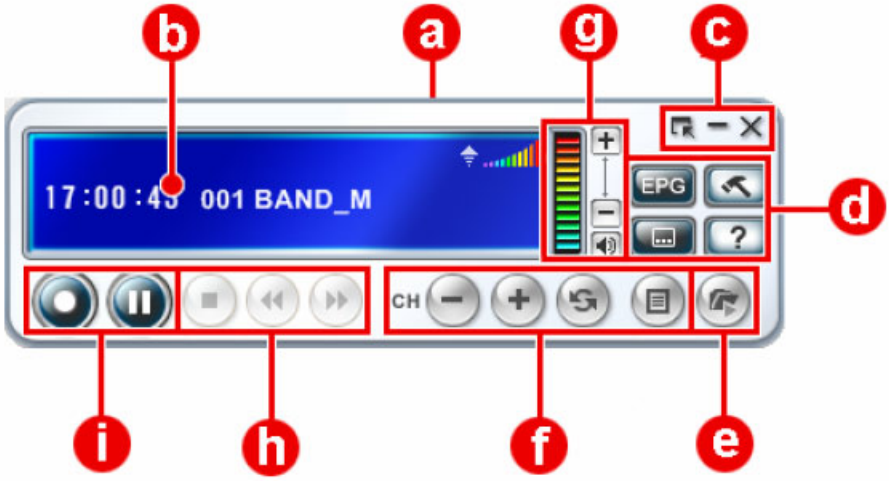
4. Launching Presto! PVR Application

NewSoft Presto! PVR is an application for turning your computer into a media center. It allows you to watch and record your favorite TV programs. You have the convenience of a VCR without having to rewind any tape.

4.1 Main screen & Menu

4.1.1 Main Screen

The Presto! PVR screen is very compact and useful. Here is the overview of the various display and buttons.



a	**Program Status**	At the top of the presentation area, the program status (Recording or playing), as well as the video quality, will be listed. **Note: The Program status will appear only when playing or recording a program.**
b	**Information Window**	List the time along with the channel number and name.
c	**Full Screen** **Minimize Screen** **Close Screen**	There are the buttons for controlling the viewer.
d	**EPG / Captions** **Settings / Help**	There are special feature buttons.
e	**History**	Check the programs that have already been record
f	**Previous Channel** **Next Channel** **Last Channel** **Channel List Viewer**	There buttons are for choosing a channel to watch on TV. Either by going up or down a channel goes back to the previously viewed channel, or choosing from the channel list.
g	**Increase Volume** **Decrease Volume** **Mute**	The volume controls let you turn it up and down as well as off, and the indicator show the current volume level
	Stop	The program control buttons are used for going forward, going backward, or to stop time shifting and recording. They are

	Backward **Forward**	available after recording or time shifting button is clicked or after you have chosen a program or video to play from the **History** dialog box.
	Record **Pause**	These buttons are used for recording program or time shifting.

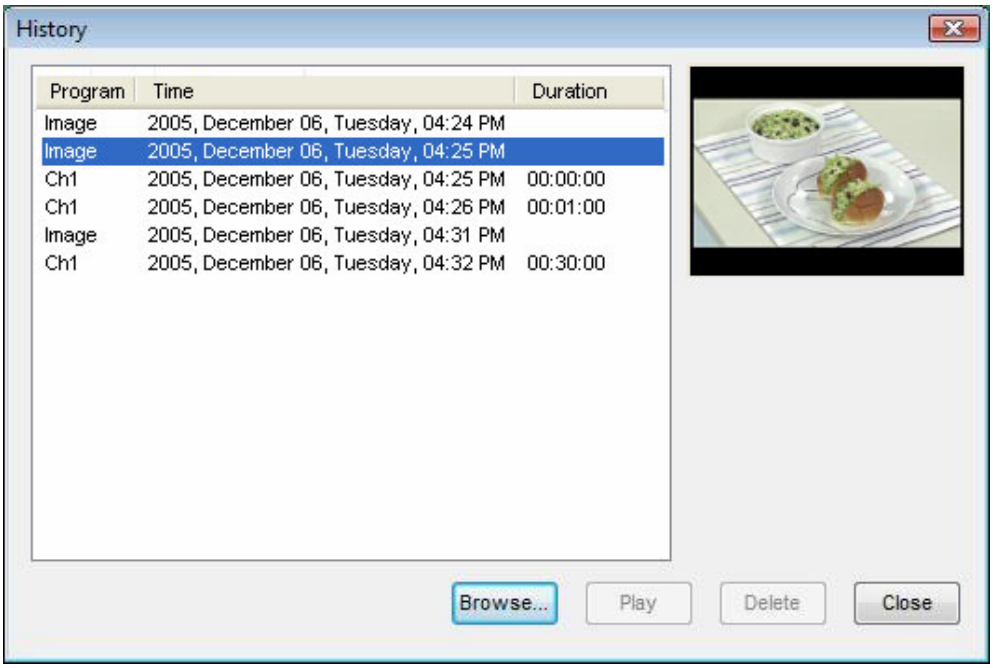
4.1.2 Screen Menu

If you right-click the Presto! PVR screen when a video is playing, you will see the menu below. This will give you quick control over how you watch the program.

Aspect Ratio	This selects the ratio of width and height for your Presto! PVR screen. You can choose **Original Ratio**, **Free Ratio**, **4:3**, **16:9**. Choosing **Free Ratio** will allow you to distort your TV picture by dragging the lower-right corner of the screen. If you have chosen **Original Ratio**, the ratio will not change as you resize the picture.
Size	Click to change the size of the display window or restore it to the original size.
Full Screen	Click to see the program in the entire video screen. Press the **ESC** key to restore the screen to the most recently selected size.
Sound	If the program has multiple sound tracks, you can switch them here.
Mute	Click to turn the audio off and on.
EPG	Click to get a current TV schedule online.
Closed Caption	Click to get captions for Digital TV.
Channel Surfing	Click to browse TV channels in a tiled window. The screen will be organized into non-overlapping frames. You can play a channel by double-clicking its thumbnail.
Exit	Click to close the program.
About Presto! PVR	Click to display the program version information.

4.1.3 History

Click on the Menu to see the programs you have recorded, with the most recent listed first.



-- Click **Browse** to open a dialog box to find and select a video to play.

-- Click **Play** to watch the selected program.

-- Click **Delete** to erase a selected program from the hard disk.

-- Click **Close** to exit the **History** dialog box.

Note 1: In the History dialog box, Presto! PVR will show thumbnails of images, but not videos.

Note 2: You can go forward or backward by click the or buttons, or bu dragging the slider .

4.1.4 Taskbar Commands

After Presto! PVR has been successfully installed on your system, the program icon will appear on the system tray that can be used to start and monitor Presto! PVR. There are 3 commands that you can choose from:

-- **Start Presto! PVR:** This command quickly launches Presto! PVR. It is unavailable when the program is running.

-- **Set Schedule:** The command takes you directly to the **Schedule** tab of the **Settings** dialog box.

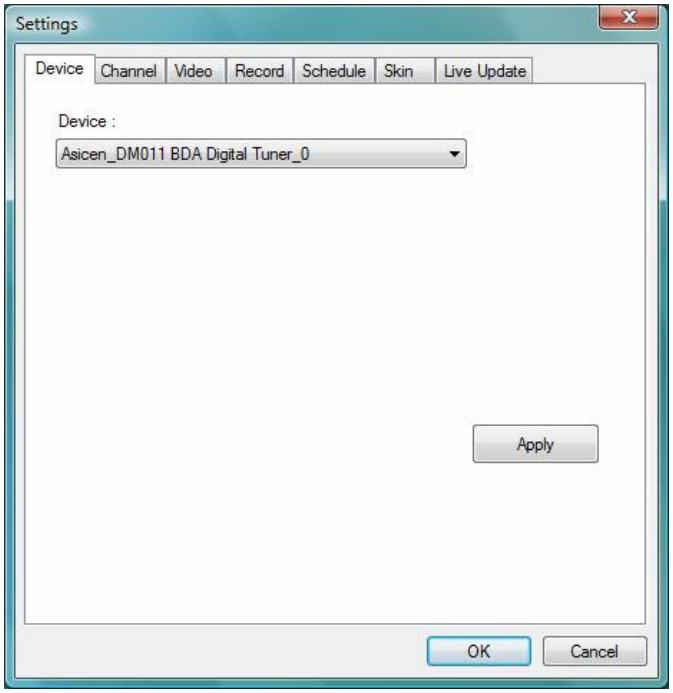
-- **Quit**: Clicking this command stops all Presto! PVR tasks and remove the icon from the system tray.

4.2 Settings

Click to see the Settings dialog box to help you personalize your Presto! PVR program.

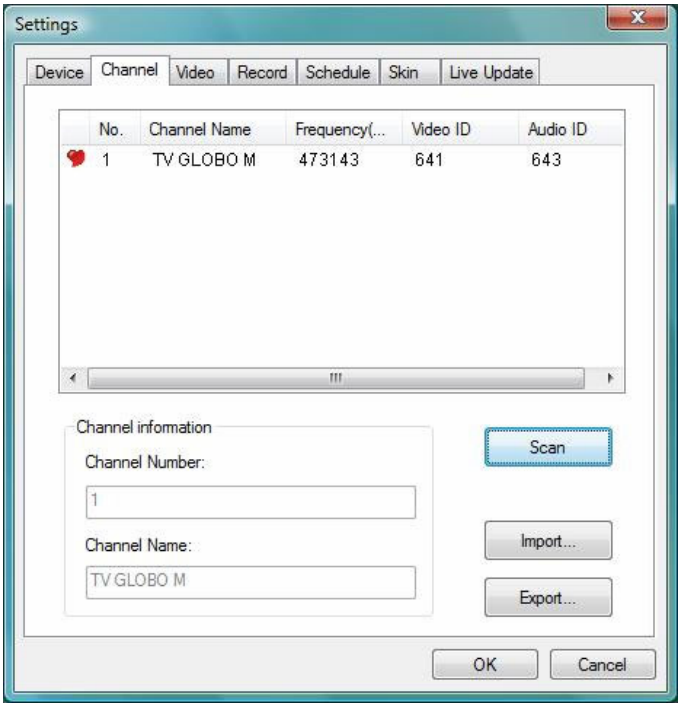
4.2.1 Device

On the Device tab, you can select how you control the Prest0! PVR device. Available Presto! PVR devices are listed



4.2.2 Channel

You can scan for available television channels.



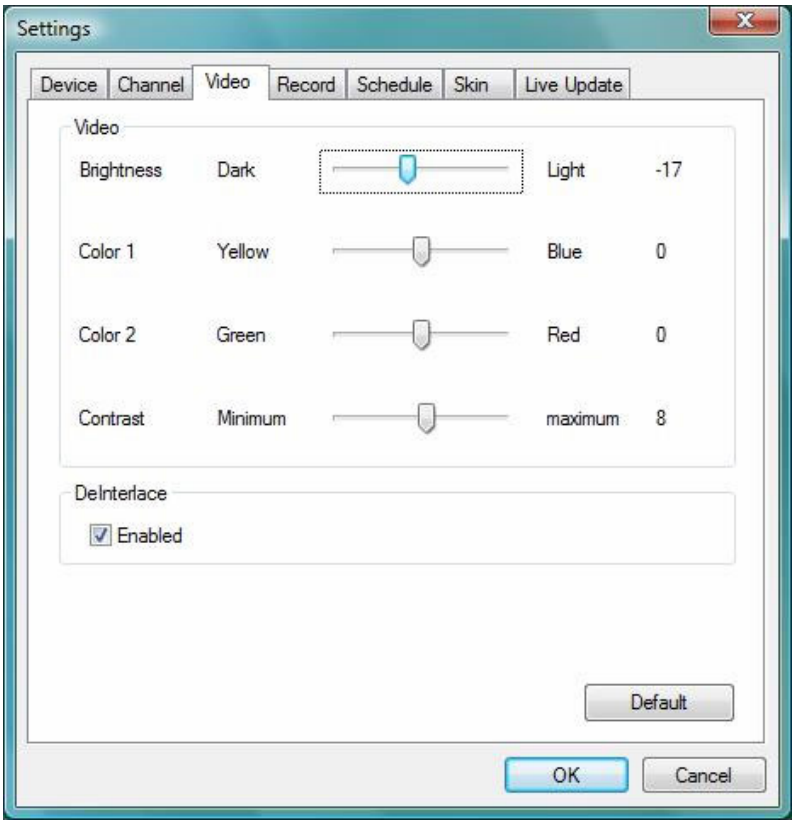
-- Scan: Click to look for all available channels and list them. Channels will have a mark in front of their listings. Clear the heart to remove it from the list. Then it will not be listed in the selection panel and won't be available when changing channels.

-- Export/Import: You can use these two functions to export or import the channel list file, so that you don't need to rescan when using other computers.

-- Channel Information: You can edit the name for each channel. Type a name that may help you be clearer about what kind of show it is.

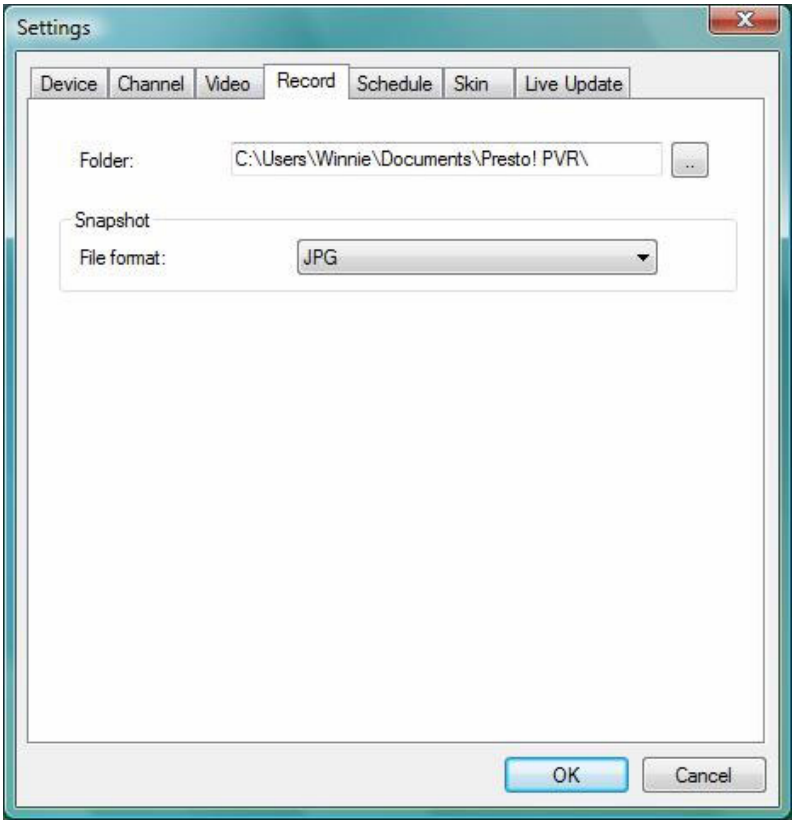
4.2.3 Video

On the **Video** tab, you can adjust the brightness and color in the picture. Enable **Deinterlace** to prevent lines from appearing in the video.



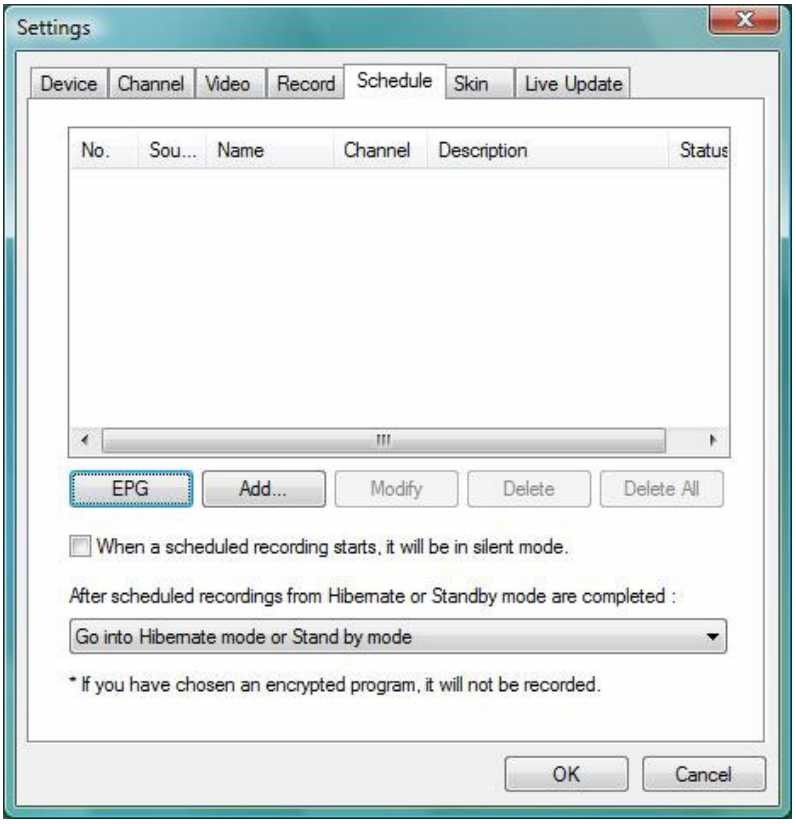
4.2.4 Record

This tab will let you select a location to store recorded video files. You can also change the file format (JPG, PNG, and BMP) to save screenshots in the **Snapshot** section.



4.2.5 Schedule

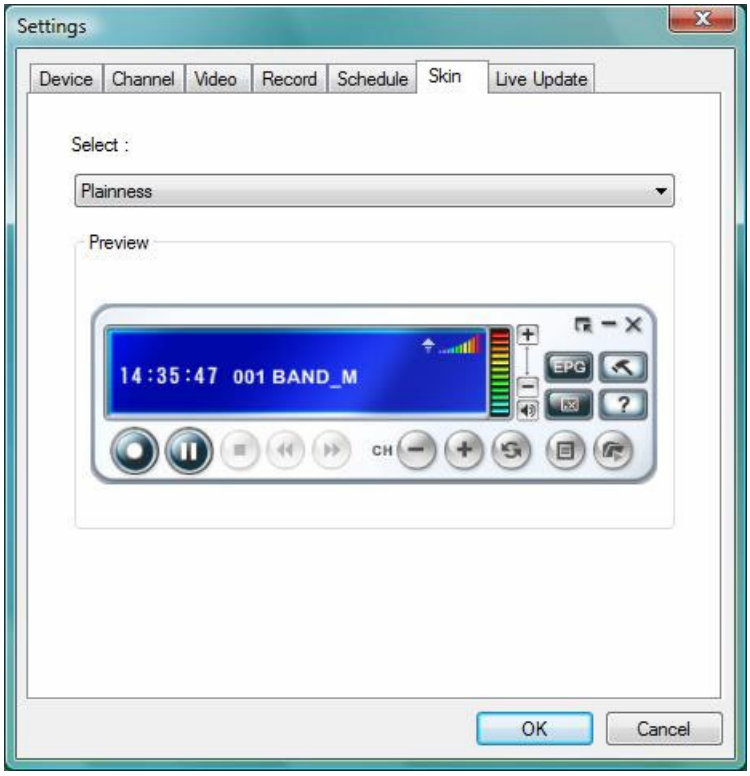
This schedule will display the programs that have been selected for recording at a later date. For more information, see **4.3.4 Scheduling Your Program Recording.**



4.2.6 Skin

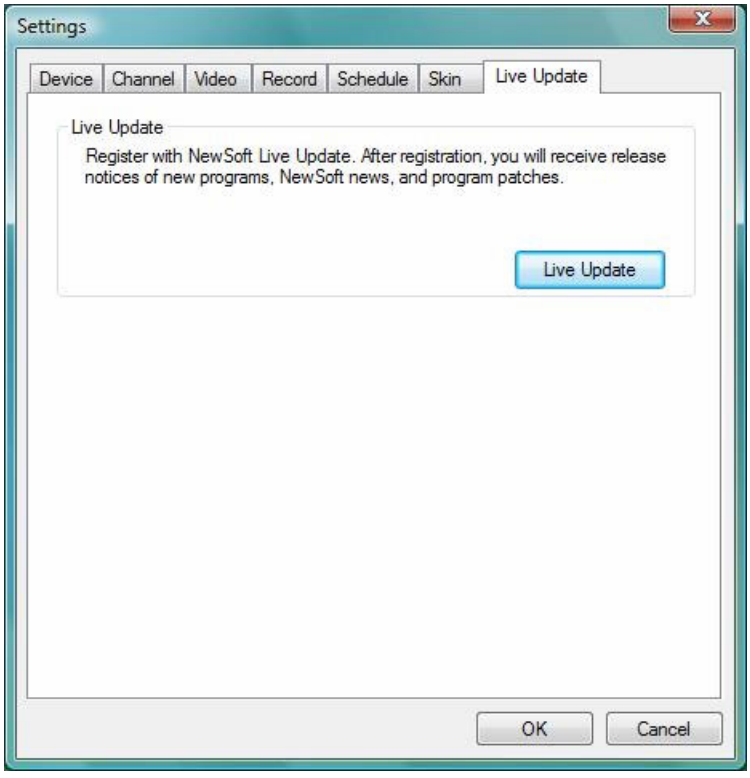
In this tab, you can change the menu skin. Choose a different skin from the **Select** list and see how it looks in the Preview window. Click **OK** to accept the change.

Note: Depending on the program version, this feature may not be available.



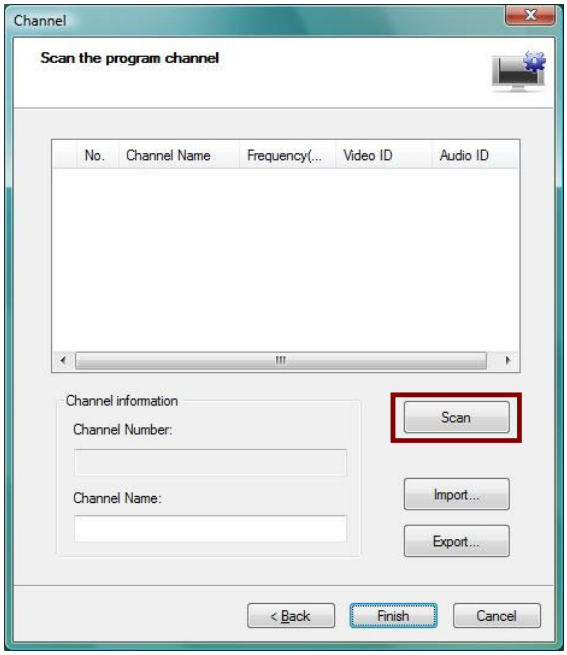
4.2.7 Live Update

In this tab, you can check for product updates and news under **Live Updates**.



4.3 Using Presto! PVR

After the installation, the wizard will open to let you choose what device you will be using. After selecting the device, the **Channel** Dialog box will open so that you can **scan** for available channel or load a pre-scanned channel list.



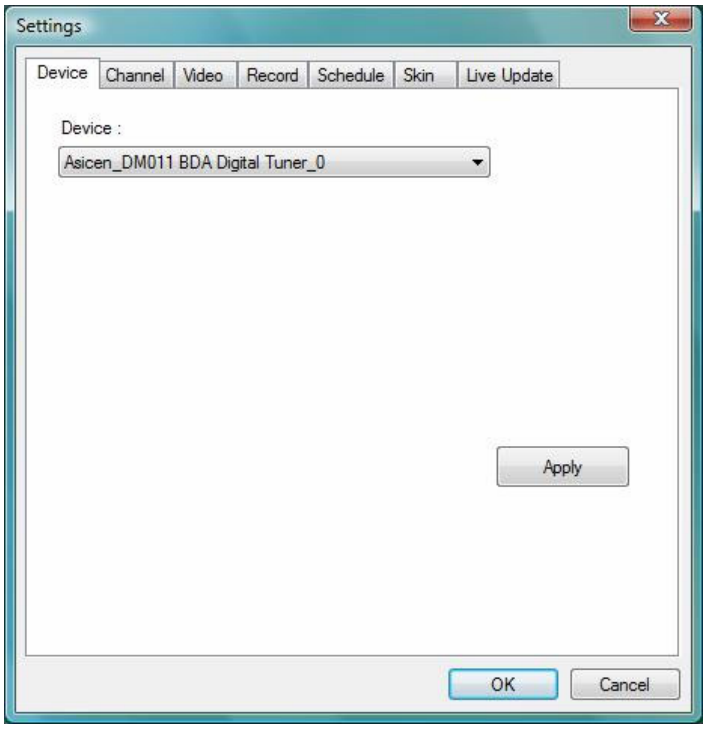
This easy-to-use application provides useful functions such as full screen view, channel selection, recording, programmed recording, settings, and help. Here are explanations of how to perform the most common functions.

4.3.1 Receive a Channel

To receive a channel through your network, please connect the antenna to the Presto! PVR device and make the proper settings.

Step 1: Click to open the **Settings** dialog box, and click the **Device** tab.

Step 2: Choose a device from the **Device** list.

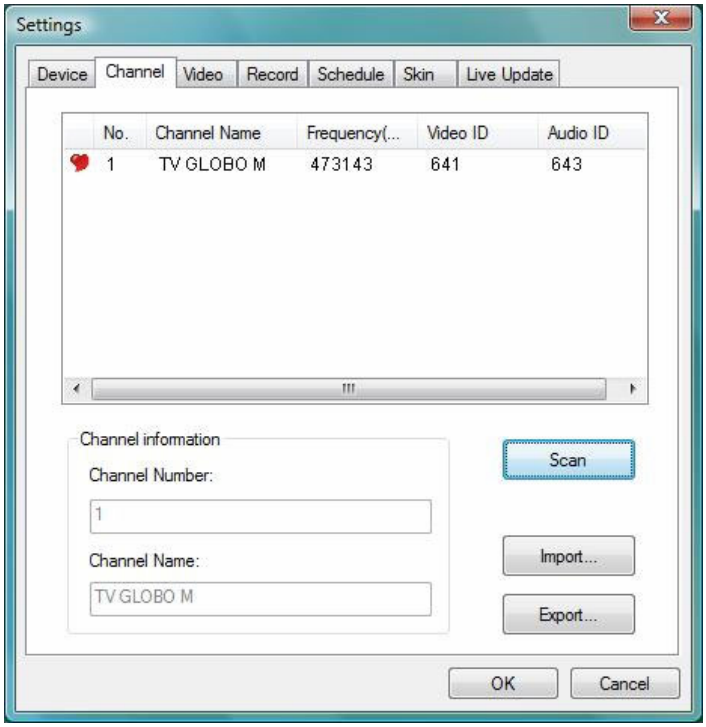


Step 3: Click the Channel tab, and then do one of the followings:

- Click **Scan** to search for channels. If channels found, it will be included in the channel list. When finished, you can choose a channel and change its name.
- **Import** and **Export** channel lists. Using this feature, you won't need to scan for channels when using Presto! PVR on different computers.

- Select the red heat next to a channel to make it a favorite channel. Clear the heart to remote it from the list.

Step 4: Click **OK** to close the **Settings** dialog box and watch TV.



4.3.2 Choose a Channel

After you have installed Presto! PVR and scanned for channels, you can click and select a channel from the list. Click or to switch between channels, and to go to the last channel viewed.

Another way to choose a channel is to right-click the program viewer and selects **Channel Surfing** from the screen menu. You will see available channels in thumbnail form. You can play any channel by double-clicking the thumbnail. Click **Esc** to go back to live programming,

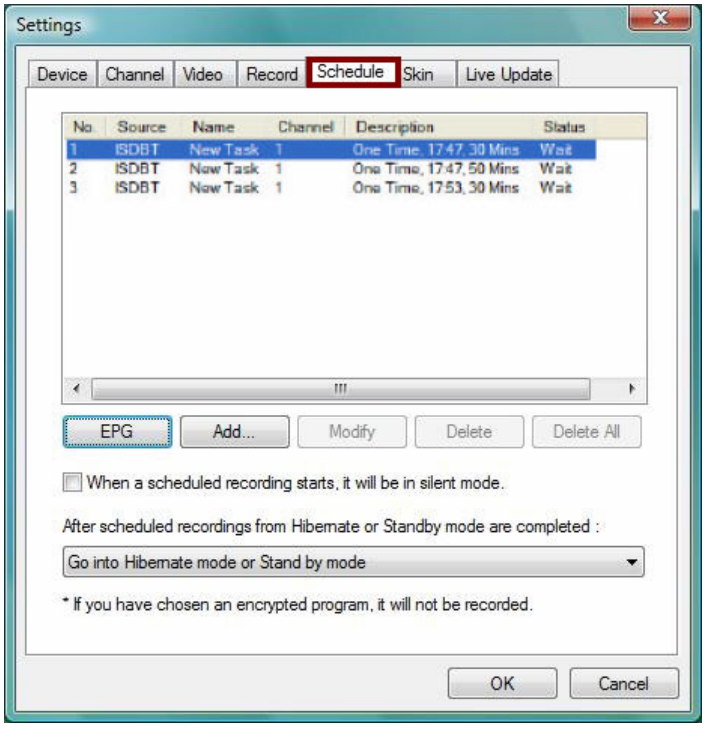
4.3.3 Recording a Program

When you find a good show, click to start recording and the recorded program will be saved in the working folder specified in the settings. You can click to stop recording, and the preview screen will return to the current program.

When recording, you can go to Full screen, minimize, and restore, but you **CANNOT** change channels, or close the program.

4.3.4 Scheduling Your Program Recording

You can add, modify, or delete items for recording programs in the future. For this, you will have to open the **Settings** dialog box by click and selecting the **Schedule** tab.



- **EPG**: To get an online listing of current TV programs.
- **Add…**: To schedule additional recording
- **Modify…**: To Change the schedule for selected recordings
- **Delete…**: To cancel a selected recording
- D**elete All**: To cancel all scheduled recordings.
- If you want to use Silent mode while recording, click **When a scheduled recording starts, it will be in silent mode**.
- You can choose the action to be taken when a scheduled recording is finished from the **After scheduled recordings from Hibernate or Standby mode are completed** box. (The selected option will not be applied unless the computer was awoken from Hibernate or Standby mode to make the schedule recording.)

4.3.5 Time Shifting

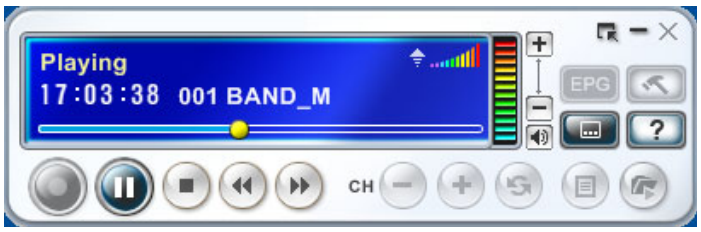
While watching the big game, you can click the pause button, and go get another bag of chips without missing any of action. When you come back and click the play button, you will resume watching from the point at which you paused. The illustrations below show how the buttons will change during time shifting.

-- Click to prepare the recording of programming for time shifting. Please refer to blow illustration.

-- When the button change to , click it to start time shifting. You ca also continue watching the program from the point at which it was paused by clicking this button. Please refer to below illustration.

-- During time shifting, you can go forward or backward over parts of the program by clicking the or buttons. You can also move the slider to the right or left to skip parts of the show that are less interesting. Please refer to below illustration.

-- Click to pause. The preview screen will freeze, but the recording will continue. Please refer to below illustration.



-- Click to stop time shifting and refer to the live program. Please refer to below screen.

Note:

1. When pausing time shifting, you can change the screen size, adjust the volume, and turn closed captions on and off. However, you cannot change channels, adjust the configuration, or close the program,.

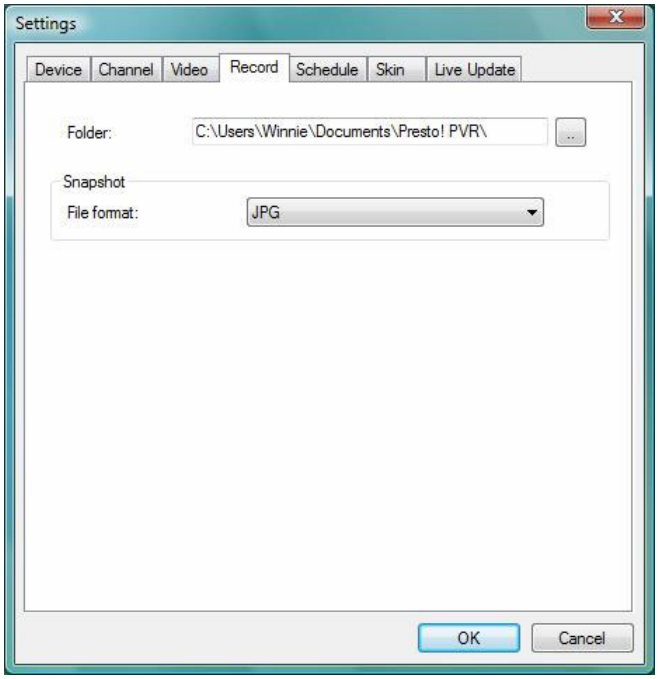
2 When closed captions is supported, you can turn it on and off during time shifting.

4.3.6 Adjust the Volume

Use the plus and minus buttons to increase and decrease the volume. The indicator will reflect the changes. Click the speaker button will turn the sound on and off.

4.3.7 Taking Snapshots

Use **CTRL + Alt + S** to capture the screen at the moment. The snapshots will be save in the working folder. You can change the file format to save the snapshot on the **Record** tab of the **Settings** dialog box.



EC Declaration of Conformity

For the following equipment:

*Type of Product : USB 2.0 Digital TV Receiver (ISDB-T)
*Model Number : DTR-100DB

* Produced by:
Manufacturer's Name : **Planet Technology Corp.**
Manufacturer's Address : 11F, No. 96, Min Chuan Road, Hsin Tien
Taipei, Taiwan, R.O.C.

is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (89/336/EEC, 92/31/EEC, 93/68/EEC).
For the evaluation regarding the Electromagnetic Compatibility, the following standards were applied:

EN 55013	(2001 + A1: 2003 + A2: 2006)
EN 61000-3-2	(2006) (not applicable)
EN 61000-3-3	(1995 + A1: 2001 + A2: 2005) (not applicable)
EN 55020	(2002 + A1: 2003 + A2: 2005)
S1, Input immunity	
S2a, Immunity from conducted voltages (not applicable)	
S2b, Immunity from conducted currents	
S3 Immunity from radiated fields	
S4 Screening effectiveness (not applicable)	
IEC 61000-4-2	(2001 ED. 1.2)
IEC 61000-4-3	(2006 ED. 3.0)
EN 61000-4-4	(2004 ED. 2.0) (not applicable)

Responsible for marking this declaration if the:

☒ **Manufacturer** ☐ **Authorized representative established within the EU**

Authorized representative established within the EU (if applicable):

Company Name: **Planet Technology Corp.**

Company Address: **11F, No.96, Min Chuan Road, Hsin Tien, Taipei, Taiwan, R.O.C**

Person responsible for making this declaration

Name, Surname **Jonas Yang**

Position / Title : **Product Manager**

Taiwan	**16th August, 2008**	Jonas
Place	*Date*	*Legal Signature*