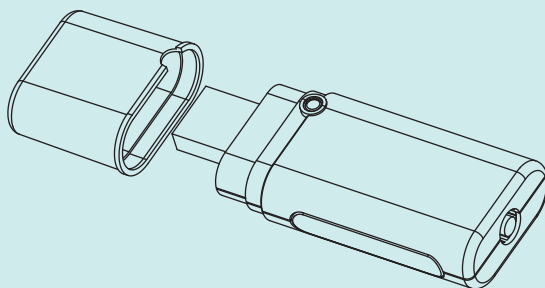


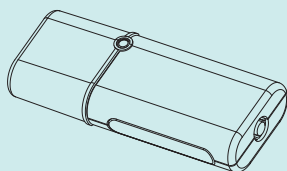
Mini Digital TV Receiver



User Manual

This user manual teaches you about the Digital TV Receiver and how to take full advantage of its features. Information in this document has been carefully checked for accuracy; however,

no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice.



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Windows is the trademark of Microsoft Corporation. Centrino™ is the trademark of Intel, Inc. All other trademarks are the property of their respective owners.

Safety information

Do not disassemble the TV Receiver. Touching the product's internal parts could result in injury. In the event of a malfunction or if the TV Receiver is accidentally broken open, take the product to an authorized service center for inspection.



Regulatory information

This product conforms to the CE regulatory standards.

CE conformity statement

The symbol indicates compliance of this equipment to the EMC Directive and the Low Voltage Directive of the European Union. These markings indicate that this system meets the following technical standards:

EN 55022 — “Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment.”

EN 55024 — “Information technology equipment - Immunity characteristics - Limits and methods of measurement.”

EN55013 — “Sound and television broadcast receivers and associated equipment - Radio disturbance characteristics - Limits and Methods of Measurement.”

EN55020 — “Sound and television broadcast receivers and associated equipment - Immunity characteristics - Limits and Methods of Measurement.”

EN 60950 — “Safety of Information Technology Equipment.”

NOTE: EN 55022 emissions requirements provide for two classifications:

- Class A is for typical commercial areas.
- Class B is for typical domestic areas.

To determine which classification applies to your computer, examine the CE registration label located on the back panel of the device. If the label indicates a Class A rating, the following warning applies to your device:

RF INTERFERENCE WARNING: This is a Class A product. In a domestic environment this product may cause radio frequency (RF) interference, in which case the user may be required to take adequate measures. This device is classified for use in a typical Class B domestic environment.

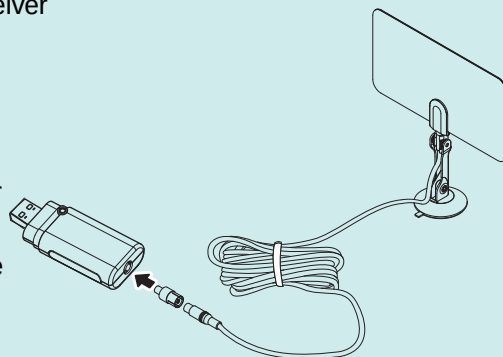
Surge test statement

This unit was not evaluated for the Surge test, IEC 60065. The unit shall be in compliance with the Surge test, IEC 60065, when used in coordination with the host product.

Introduction

Congratulations on purchasing the Digital TV Receiver

This product is designed specially to help you view, record and play back digital TV programs on your computer using a USB interface. The device is powered by the USB interface and needs no external power adapter making it possible to watch high quality TV at home, in your office, in a coffee shop, or at the airport.



System requirements

The following system requirements are necessary to operate the TV Receiver:

- Microsoft Windows 2000/XP/MCE/Vista
- Desktop or Notebook Computer
- 800MHz CPU or above
- 256 MB RAM or above
- VGA Card with at the least 32MB Memory
- Sound Card
- Microsoft Direct X 9.0c
- USB 2.0 port

Special requirements for PIP mode

- VGA card supporting VMR 9
- Pentium 4 2.0 GHz CPU

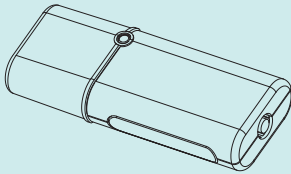
Features

Your TV Receiver has been designed with a wide range of features making it very easy and convenient to watch TV from your PC.

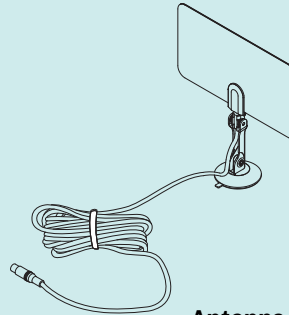
- TV tuner with terrestrial digital TV program reception
- Supports DVB protocol (ETS 300 744)
- USB2.0 high speed interface designed for HDTV
- Digital terrestrial TV and radio program playback
- Realtime digital video recording
- Scheduled recording
- Still picture capture
- Channel scan at 6/7/8 MHz
- EPG (Electronic Program Guide)
- Time-shifting
- PIP (Picture in Picture)
- MTS (SAP, secondary audio program)
- Teletext / Subtitle
- "On-the-Fly Decode" software technique (auto-update channel information)
- Multi-language setup and application program
- Portable device requires no external power supply—powered directly from USB port

Package contents

Make sure that your package contains the following items.



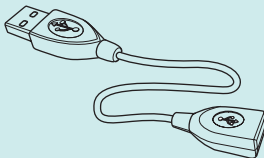
TV Receiver



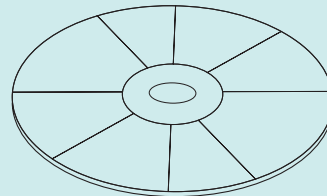
Antenna



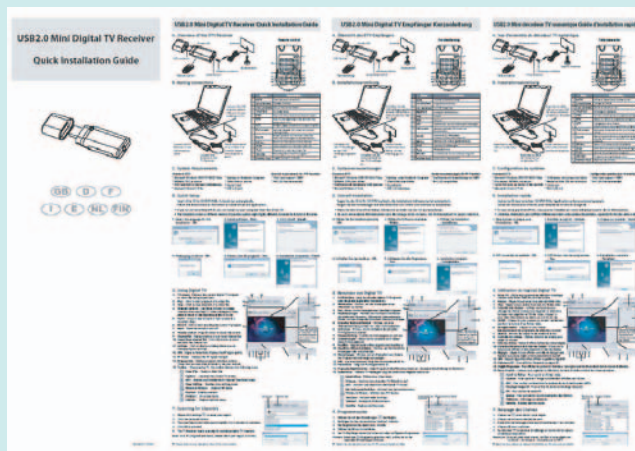
Antenna Connector



USB Extension Cable



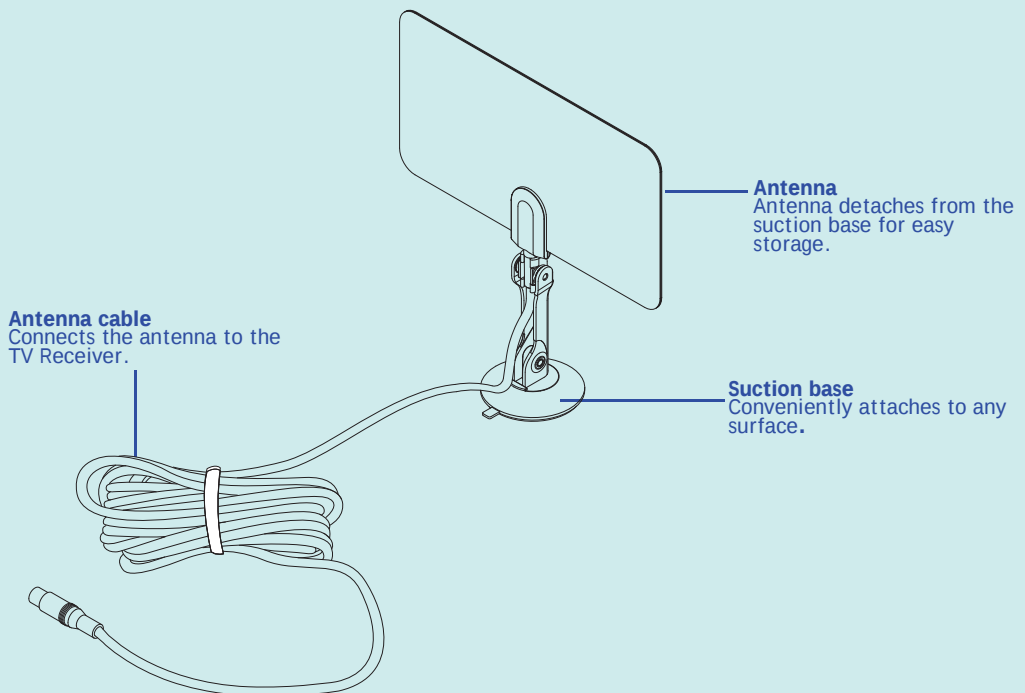
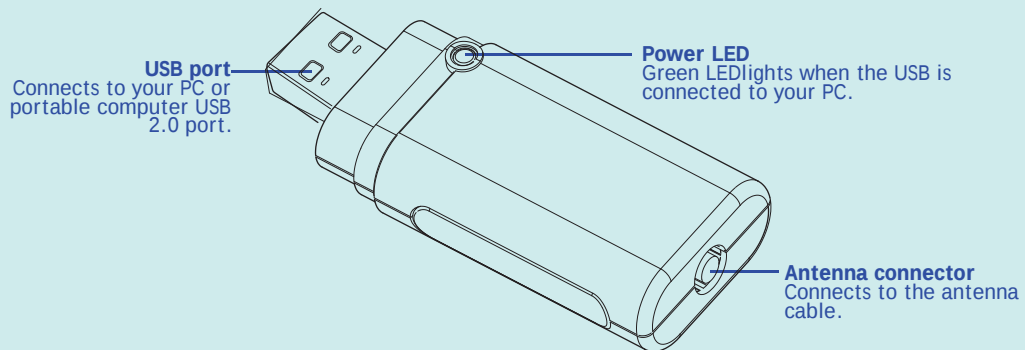
**Compact Disc
(Contains Application Driver & User Manual)**



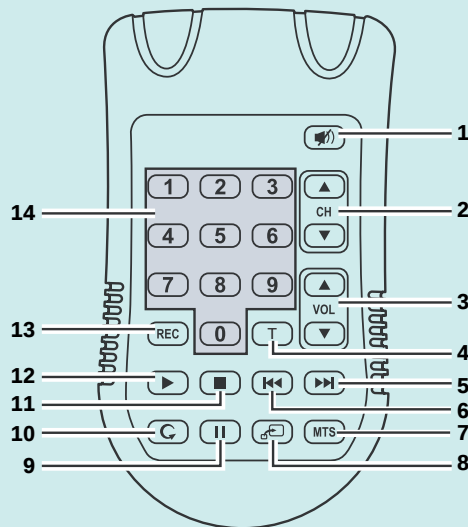
Quick Installation Guide

If any of these items appears to be missing or damaged, contact your nearest vendor for assistance.

TV Receiver components



About the Remote Control



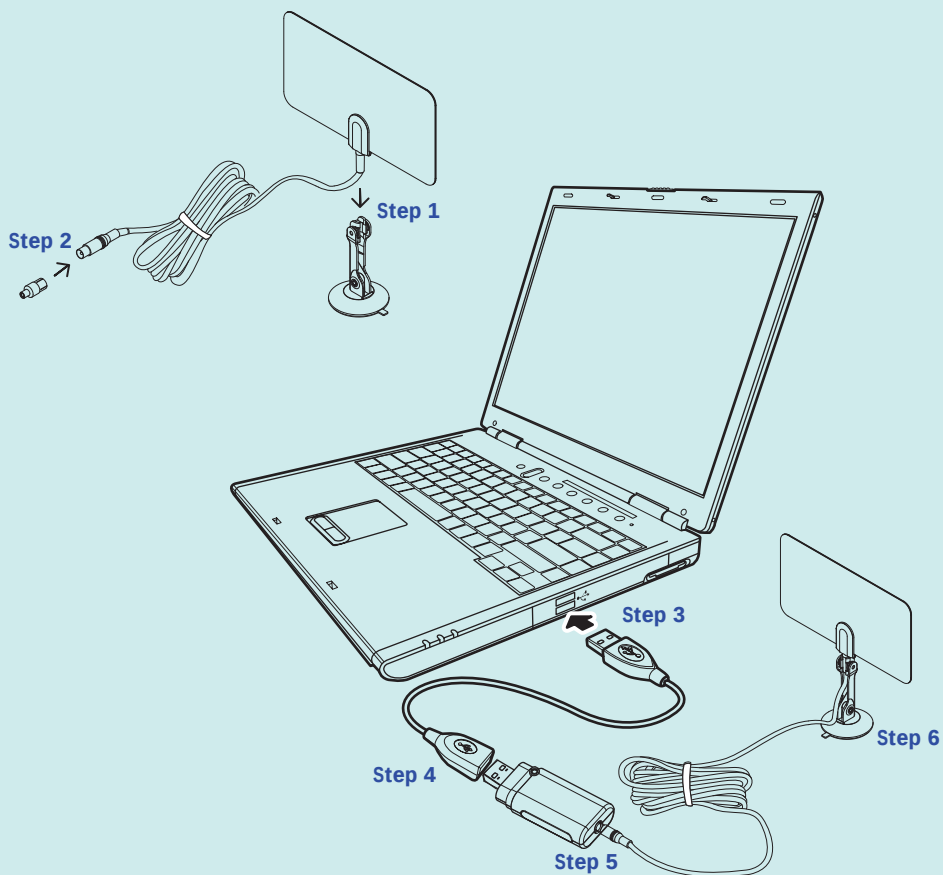
	Name	Description
1.	MUTE	Turns the sound on and off.
2.	CH UP/DOWN	Changes channels.
3.	VOL UP/DOWN	Adjusts the volume levels.
4.	TELETEXT	On-screen texts.
5.	FWD	Plays the file at double the playback speed.
6.	REW	Skips to the beginning of the recorded file being played back.
7.	MTS	Bilingual toggle. (available for bilingual programs)
8.	Full screen	Switches between full screen and normal viewing modes.
9.	PAUSE	Pauses playback of a recorded video file. Press the button again to resume playback.
10.	RECALL	Returns to the previous active channel.
11.	STOP	Stops playback of a recorded video file.
12.	PLAY	Playback of a recorded video file.
13.	RECORD	Recording the current TV program.
14.	Number keys	Toggles among TV channels.

Making connections

Connect the antenna and the USB cable to the TV Receiver as follows:

Step 1. Attach the antenna to the antenna base.

Step 2. Attach the antenna connector to the antenna cable.



Step 3. Connect the USB extension cable to a USB port on your notebook or PC.

Step 4. Connect the TV Receiver to the USB extension cable.

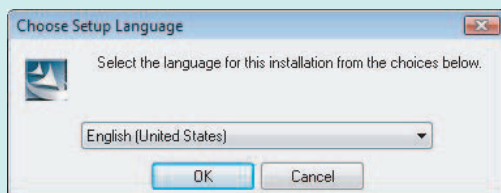
Step 5. Connect the antenna cable to the TV Receiver.

Step 6. Place the antenna on a surface in a location where the reception is good.

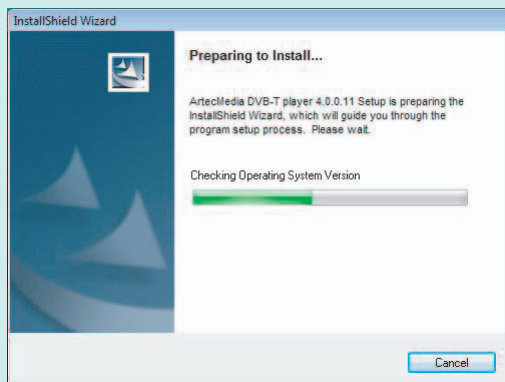
Installing Application and driver

Digital TV, provided on the software CD in your package, is the software application that enables you to view digital TV programs on your computer. The drivers for your TV Receiver are provided on the software CD in your package. Follow the instructions on the screen to install application and driver for your device.

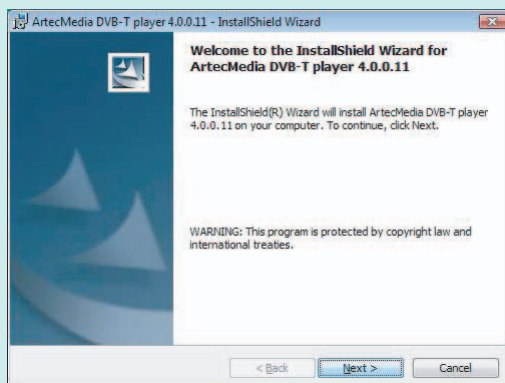
1. Select the language for this installation, click **OK** to install.



2. During the install.

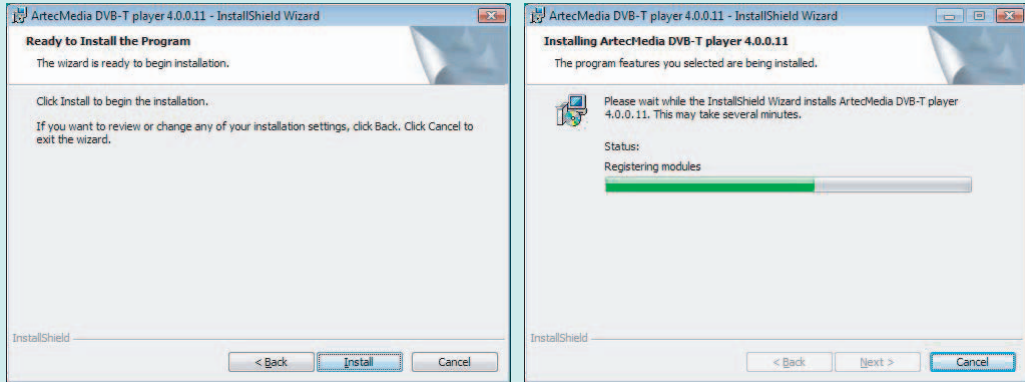


3. Click **Next** to start application installation.

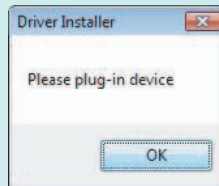


Installing Application and driver

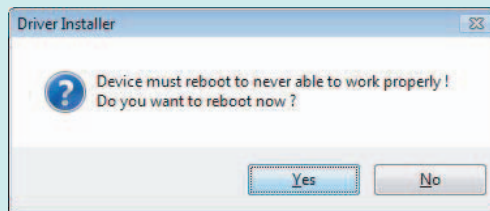
4. Click **Install** to begin the installation.



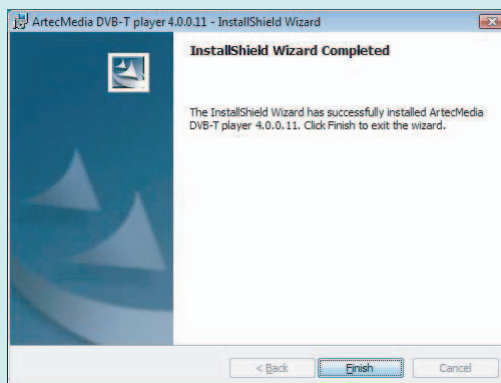
5. Please plug-in USB device, Click **OK** to continue the installation.



6. Please close all programs, click **Yes** to reboot now.



7. Click **Finish** to complete installation.



The installation screen on different versions of operation system might slightly different, however the function is the same.

Using Digital TV

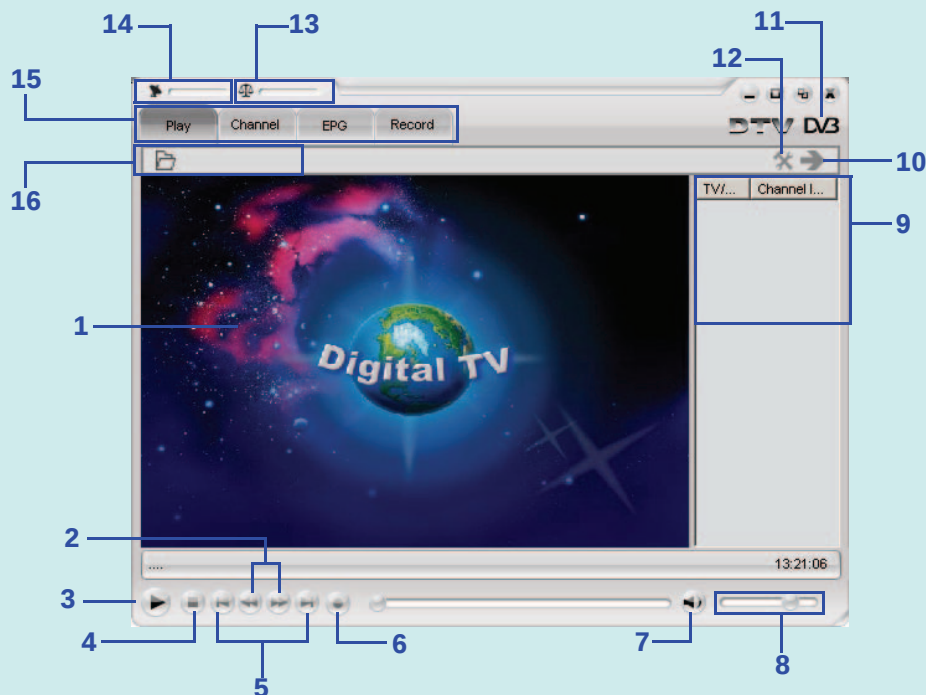
Digital TV enables you to view, record, and play back digital TV signals with ease and simplicity. The simple user interface of this application makes watching TV on your PC a quick and convenient task.

Start Digital TV by clicking **Start | Programs | Ultima | ArtecMedia DVB-T | ArtecMedia DVB-T Player** from the Windows Start Menu.

Or double click the desktop icon.



The following illustrating displays the main components of the Digital TV interface:

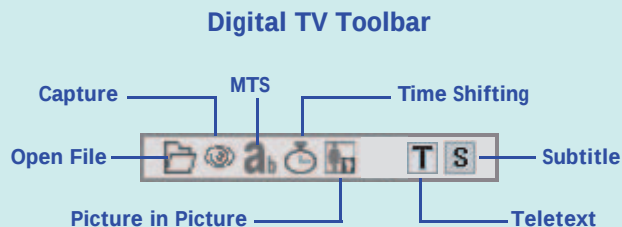


The Digital TV application window consists of the following (counterclockwise from **TV Screen**):

- 1. TV screen:** Displays the current digital TV program or video file being played back.
- 2. FR/FF** : Press to fast forward or fast reverse in a recorded video.
- 3. Play** : Click to start playback of a video file.
- 4. Stop** : Click to stop playback of a video file.
- 5. Channel controls** : Use these buttons to change channels when watching TV. When playing back video, press to move to the beginning or end of a clip.
- 6. Record** : Click to start recording the current TV program.
- 7. Mute** : Turns the sound on and off.
- 8. Volume control** : Drag this slider to adjust the volume.

9. **Channel list**   : Displays stations in your tuned channel list.
10. **Open/Close channel list**  : Click this button to show and hide the channel list.
11. **Version**: Click this item to display the software version.
12. **Settings**  : Click to display a dialog where you can change program settings.
13. **SNR**  (Signal to Noise Ratio) Displays the RF signal quality.
14. **RF Power**  : Displays the radio frequency signal strength.
15. **Program Tabs**     : displays program interface options. These tabs are described in the following sections.

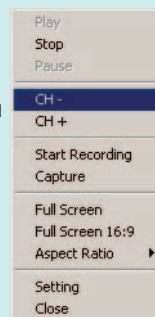
16. **Toolbar**: When playing TV, the toolbar displays the following icons:



- Open File**: opens a video file.
- Capture**: captures the current TV screen.
- MTS**: enables and disables Multi-Channel Television Sound.
- Time Shifting**: enables time shifting mode (see [Time Shifting](#) on page 15).
- Picture in Picture**: enables PIP mode (see [Picture in Picture \(PIP\) mode](#) on page 17).
- Teletext**: On-screen texts.
- Subtitle**: enables subtitle mode.



The functions of the TV Receiver described in the next sections for watching, recording and playing back digital TV programs can also be accessed using the context menu. Right-click the TV screen window to view the various menu options and select the desired option.



Keyboard hotkeys

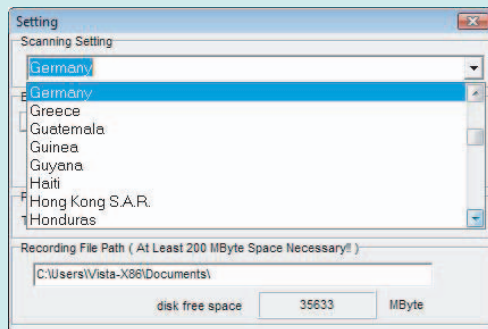
In addition to the buttons on the control panel or the popup menu, you can also use the keyboard hotkeys to perform various functions. The keyboard hotkeys are listed as follows.

- Enter key**: Starts playing TV or a video file.
- +/- keys**: Changes the volume.
- ↑/↓ keys**: Changes the TV channel.
- Space bar**: Stops playing TV or the playback of a video file.
- F2**: Configure various video capture and TV settings (opens the setting dialog).
- C key**: Captures a still image of the current picture frame.

Scanning for TV channels

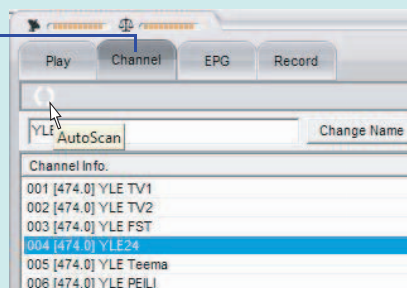
Now that you have set your TV Receiver and installed the necessary software, you can scan for available channels and watch digital TV. To scan for available digital TV signals, do the following:

1. Please click settings  to setup your region.

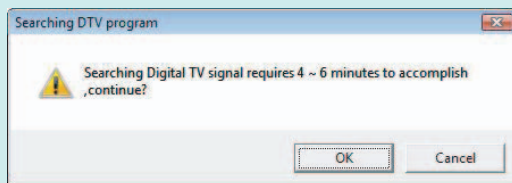


2. Click the Autoscan button.

Channel Tab



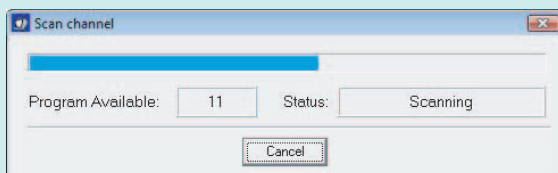
3. The scanning process takes approximately 4 to 6 minutes to complete.



4. Click **OK** to proceed.

5. The TV Receiver starts scanning for available digital TV channels.

(**Note:** If no TV programs are found, please check your region is correct.)



Once the scanning is complete, the available programs are listed in the channel list (see [Using the channel list](#) on page12).



Notes:

- When scanning for the first time, make sure to do so in an open environment (for example, near an open window) so as to receive all the available channels with good signal strength.
- Scan for TV channels again if you travel with your TV Receiver to a new country or region.
- If a program in the channel list or channel information doesn't display properly, double-click the item to enable the Digital TV program to auto update the channel information.

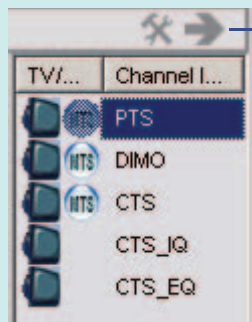
Once the TV Receiver has completed scanning for channels and found available digital TV programs, it displays the first available TV program on the TV screen. Change channels and view other programs using the channel list or the channel control buttons.

Using the channel list

Click  in the Digital TV application window to view the channel list. The list shows all the available digital TV channels.

To view a program, do one of the following:

- Right-click the TV screen and select either **CH+** or **CH-** from the context menu to move up or down the channel list.
- Double-click the desired program name to view it. The list remains open.
- Click  or  in the Digital TV application window to view the next or previous channel respectively.



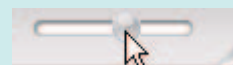
Click to view the channel list.

Click again to hide the channel list.

Adjusting audio

To adjust the volume, do any of the following:

- Drag the volume slider in the Digital TV application window to increase or decrease the volume.
- Press  in the Digital TV window to disable the audio. Press it again to enable the audio.
- Press  in the Digital TV window to listen to the SAP (Secondary Audio Program) such as weather or traffic information.



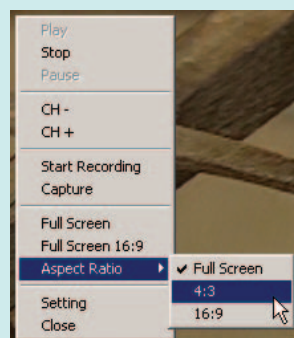
Adjusting video

To adjust the TV screen size, right-click the Digital TV program window to access the context menu. Select **Aspect Ratio** and then choose the desired aspect ratio to view the TV program in the desired screen size.

Full Screen — expands view to fit the screen.

4:3 — standard TV or monitor size; black bars appear on the sides.

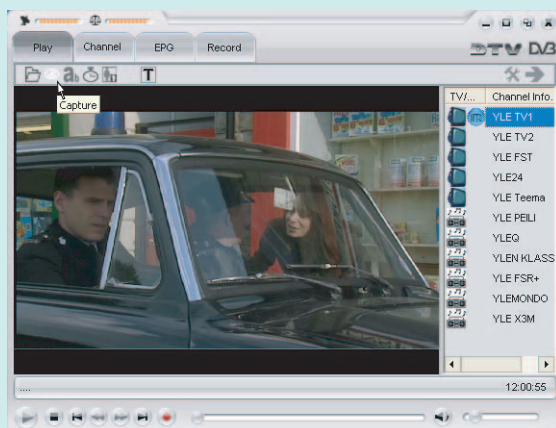
16:9 — high definition TV (HDTV) format; black bars appear on the top and bottom.



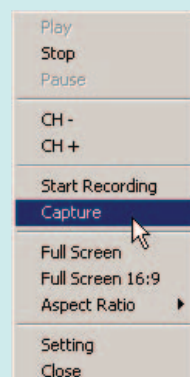
Capturing still images

To capture a still image of the current picture, do one of the following:

- Click the **Capture** button  in the Digital TV application program.

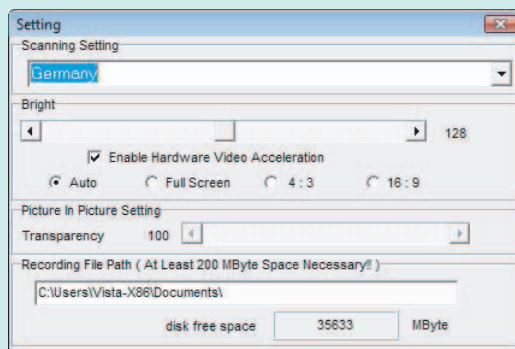


- Right-click the Digital TV program window to access the context menu. Select the **Capture** option.



To specify where the still images are saved on your disk, do the following:

- Press the Settings button  to open the settings dialog.
- Type the path in the **Recording File Path** text box to specify where the captured images are saved on your hard disk.



Recording TV programs

The TV Receiver provides the additional feature of recording and playing back your favorite TV programs. You can record a TV program manually at any time or you can also set up a timer recording that will record the program automatically.



When you start recording, all other functions are disabled. You can only adjust the volume and use the Stop button to stop recording when the TV Receiver is recording.

Recording manually

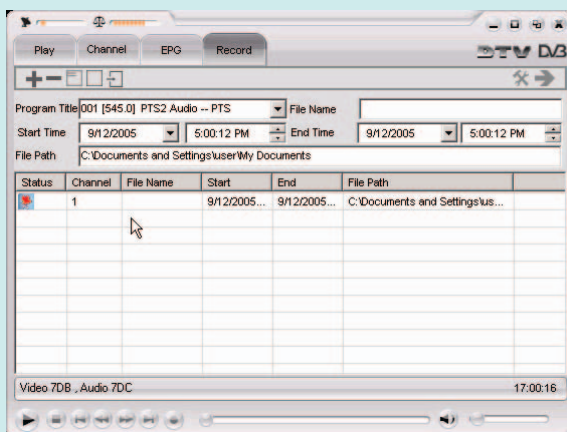
To record a TV program, do the following:

1. Press the **Record** button  in the Digital TV program window.
2. Press the **Stop** button  in the Digital TV program window to stop recording.

Setting up timer recording

To record a TV program at a scheduled time, do the following:

1. Press the **Record** tab in the Digital TV program window.
2. Click the **Program** drop-down box and scroll to select the desired TV channel which you want to record.
3. Click the **Start** date and time combo-boxes to set the time at which recording starts.
4. Click the **End** date and time combo-boxes to set the time at which recording ends.
5. Type the file name in the **File Name** text box to specify where the recorded files are saved on your computer's hard disk.
6. Click  to save your recording schedule. The recording schedule is displayed in the list under Status.
7. Repeat the above procedure if you want to record multiple TV programs.
8. Select a recording schedule and click  to cancel the recording if needed.
9. Click  to edit the recording schedule parameters.
10. Click  to save the job.





- The scheduled recording uses your PC's system time for recording. Verify that the system time is set correctly to ensure correct recording.
- All the recorded programs are saved in MPG (DVB media file) format and named with the TV program name and the date and time of recording. For example, a file with the name
PTS_1(20050831-143928).mpg was recorded from the PTS_1 TV program on 31st August 2005 starting from 2.39.28 pm.
- Do not schedule recordings that overlap (for example, do not schedule a recording at 10:30 am to 1:30 pm and also one at 1:30 pm to 3:00 pm).

Time Shifting

The Time Shifting function is used for recording a short time segment of a TV program. This is useful when you are interrupted momentarily such as a telephone call. To perform a Time Shift record:

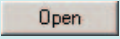
1. Set the amount of time you want the TV to record in the settings dialog.
2. Click the Time Shifting button  on the Digital TV control panel, wait for about 10 seconds, then click Play  or press the Enter key on the keyboard to continue watching TV.
3. Slide the Progress Bar to view any part of the ten minute recording.
4. Click Stop  or Time Shifting , or press the Space bar to stop recording.



When you do a second recording using this method, it will record over the first recording.

Playing back recorded programs

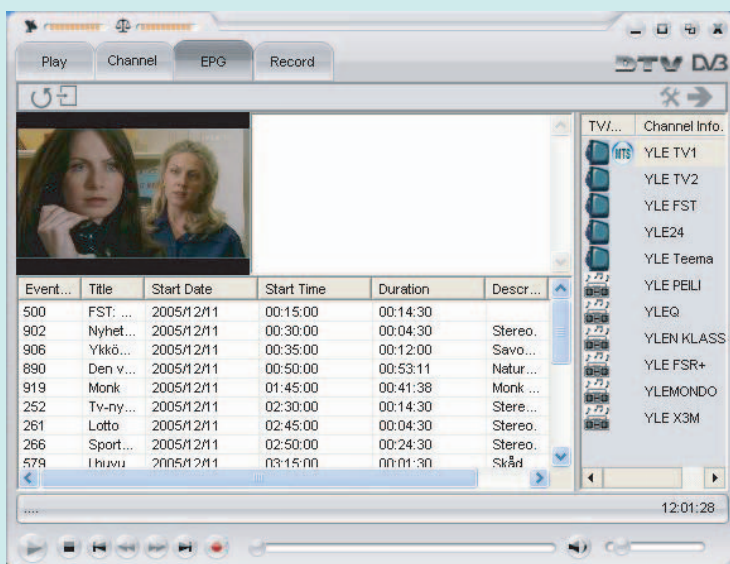
To play back recorded files, do the following:

1. Click  in the Digital TV program window to open recorded files.
2. Locate the required recorded file on your hard drive from the dialog box shown and click **Open**  to start playback of the file.
3. Stop playback by pressing the **Stop** button  in the Digital TV application window.
4. Pause playback by pressing the **Pause** button  on the remote control.
5. Press **Fast Forward**  to skip forward through a program at 0.5, 1.5, or 2.0 X normal speed. Press **Fast Reverse**  to skip backwards through a program at 0.5, 1.5, or 2.0 X normal speed.

Setting up timer recording using EPG

To set up a scheduled recording using the Electronic Program Guide (EPG) function:

1. Select the Channel you want to record.
2. Click the EPG tab to display the ProgList.



The left side of this screen displays the current TV channel.

The right side provides a description of the current channel.

The bottom section provides a list of programs with times they will be shown.

3. Press the **Set Record** button  and the Schedule Recording page as described in [Setting up timer recording](#) on page 14, appears.
4. Press the **Save** button  to save the scheduled recording.

Picture in Picture (PIP) mode

Picture in Picture (PIP) mode enables you to view two channels at the one time.

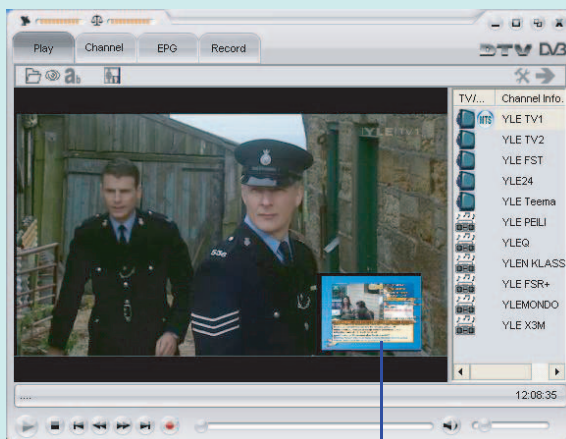


PIP can only be used with channels that belong to the same TV station.

1. Press the PIP button  on the Digital TV control panel to display a second channel in a smaller screen, within the main screen.

Other functions of PIP mode are as follows.

- Press the  or  buttons to change the PIP screen's channel.
- Double-click the PIP screen to swap the PIP screen's channel with that of the main screen.
- Click the PIP screen and drag it to reposition it.
- Click and drag the corners of the PIP screen to resize it.



PIP screen

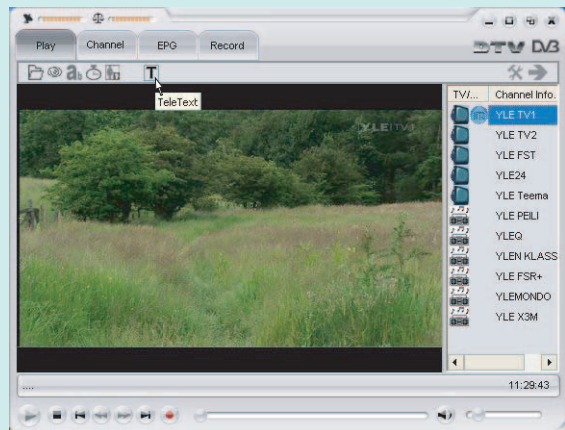


- PIP mode only works for different channels broadcast from the same TV station.
- If a TV station is only broadcasting less than six channels when in six-channel PIP mode, the remaining channels display a black screen.
- If the video card does not support VMR 9 hardware acceleration, the PIP function will be disabled.

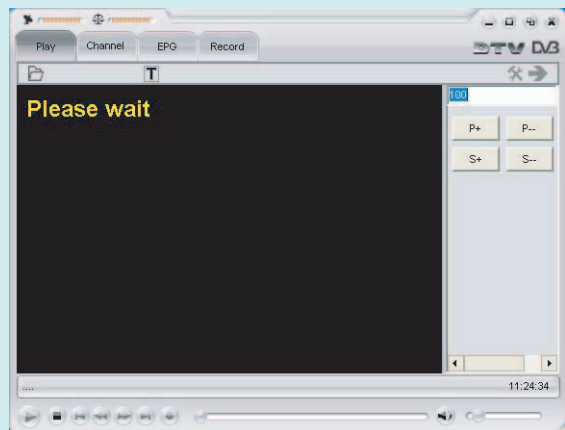
Teletext mode

To view more information about teletext.

1. Press the **T** button to open the teletext function.



2. Data collecting please wait...



Other functions of Teletext mode are as follows.

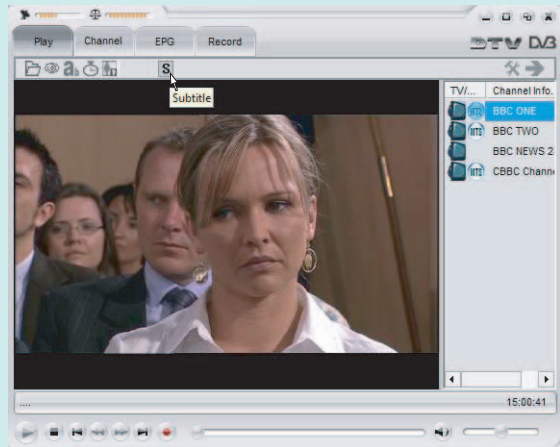
- Press the **P+** or **P-** buttons to displays the preceding or the succeeding teletext in main page.
- Press the **S+** or **S-** buttons to switches to the next or the previous sub page.
- Press **T** again to return to your program.



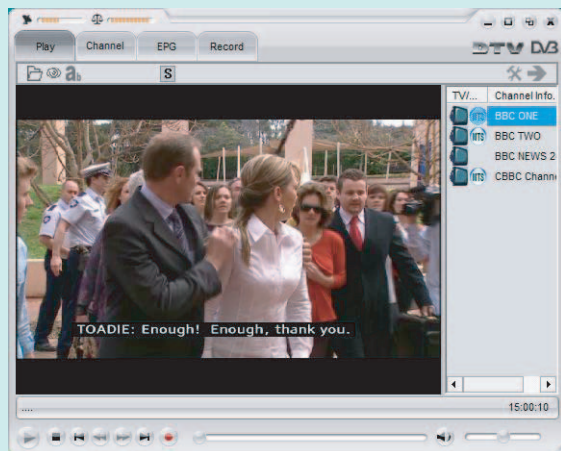
Subtitle mode

If subtitles are provided, the symbol is shown at the bottom in the Application.

1. Press the **S** button to display the subtitle.



To display the subtitle.



Specifications

Key Features	Supports DVB Protocol (ETS 300 744)
	USB2.0 High Speed Interface Designed for HDTV
	Digital Terrestrial TV and Radio Program Playing
	Real Time Digital Video Recording
	Schedule Recording
	Still Picture Capture
	Channel scan at 6/7/8 MHz
	EPG (Electronic Program Guide)
	Time-Shifting
	PIP (Picture in Picture)
	MTS (SAP, secondary audio program)
	Teletext / Subtitle
	"On-the-Fly Decode" software technique (Auto-update channel information)
	Multi-language Setup and Application Program
	Portable Device without any extra power required
System Requirements	Microsoft Windows 2000/XP/MCE/Vista
	Desktop or Notebook Computer
	800MHz CPU or above (P4 1,8 GHz recommended)
	256M RAM or above
	VGA Card with at the least 32 MB Memory
	Sound Card
	Microsoft Direct X 9.0c
	USB 2.0 port
Special requirements for PIP mode	VGA card supporting VMR 9
	Pentium 42.0 GHz CPU
Tuner	Input Terminal: 75 Ohm Din
	Receiving Frequency: 48.25 ~ 863.25 MHz Tuning Range
COFDM & FEC	Fully DVB-T Compliant
	2K or 8K FFT Size
	Bandwidth: 6/7/8 MHz Select by your country
De-Multiplexing	Engine: Hardware
	Stream capture: PES & TS
A/V Format	Video format: MPEG-II Main Profile & Main Level
	Audio format: MPEG-II Audio layer I & II
	Available to transfer TS(DVB format) to PS(DVD format).

Frequently asked questions

This section addresses some of the common questions or problems encountered while using the TV Receiver.

? After installing Digital TV, why do I still find the Found New Hardware Wizard pop up on my computer screen when I connect my TV Receiver?

For Windows 2000 and XP, a USB as well as DVB adapter driver is required. If you change USB ports, you need to install the driver again. Refer to [Installing Application and driver](#) on page 7 for more information.

? Where can I find the drivers for my portable digital TV Receiver when Windows can not find them automatically?

Make sure that the driver CD is in your CD-ROM drive. The driver for Windows 2000 and XP is in the D:\Drivers\Win2K&XP folder (assuming that D:\ is your CD-ROM drive). Make sure that you use the correct driver according to the operating system running on your computer.

? Why do I still have problems detecting hardware?

This happens if the drivers were not installed correctly, or the software installation process terminated early or abnormally. Check the list of hardware devices using **Device Manager**. To access **Device Manager**, click the **System** icon in the control panel and choose the **Hardware** tab. Click the **Device Manager** button to view the **Device Manager** screen. If a device named **Unknown Device** is present under **Sound, video and game controllers**, but has a yellow ! mark next to it, as shown, you will need to reinstall the driver. Also, if a **USB device** is displayed with an error icon under **Other devices**, you will need to reinstall the driver.

With the USB connection still plugged in, double click the device name and when a dialog box appears, click **Reinstall** and follow the original installation procedure.

? Why can I not find any channels during auto scanning?

- Check that the antenna is connected to the TV Receiver properly with the cable.
- Make sure that DVB-T signal is available where you are geographically located.

? Why does my TV Receiver fail to play video?

- Make sure that a sound card has been installed on your computer and is working properly. Even if you do not want to listen to audio while watching TV, the sound card should be installed for correct operation of your TV Receiver.
- Make sure that you have DirectX 9.0c or higher installed on your computer.
- Check the DVB signal strength in the Digital TV window (see [RF Power :](#) on page10) and verify that DVB signals are available in the area where you are located.

? When showing TV programs, the picture playback is not smooth. Why does this happen?

- Digital TV uses a software MPEG-II decoder for decoding the video signals. Hence, the video quality is dependent on CPU speed. Make sure that your computer has a CPU such as a Pentium III, 800 MHz or higher (or AMD equivalent). See [Package contents](#) on page 3 for more information.
- In order to have your CPU operating with maximum efficiency, we recommend that you close all other applications on your computer when watching digital TV programs.

Frequently asked questions

- Make sure that the **Power Saving** function in your portable computer is disabled, as this could slow down the CPU performance and affect the operation of Digital TV.
- Check the DVB signal strength in the status window (see [RF Power :](#) on page10) and verify that DVB signals are available in the area where you are located.



When viewing digital TV programs on your portable computer, the TV Receiver is running the computer's CPU at maximum efficiency and full speed. This means that the portable computer's battery may be discharged faster than when in normal use.