TV Tuner Card/Box

My Cinema Series

E2939
Revised Edition V3
February 2007

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Notices

Federal Communications Commission Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received including interference that may cause undesired operation.

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 manufacturer's instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The use of shielded cables for connection of the monitor to the graphics card is required to assure compliance with FCC regulations. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Canadian Department of Communications Statement

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

This class B digital apparatus complies with Canadian ICES-003.

Safety information

Electrical safety

- To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before relocating the system.
- When adding or removing devices to or from the system, ensure that the power cables for the devices are unplugged before the signal cables are connected. If possible, disconnect all power cables from the existing system before you add a device.
- Before connecting or removing signal cables from the motherboard, ensure that all power cables are unplugged.
- Seek professional assistance before using an adpater or extension cord. These devices could interrupt the grounding circuit.
- Make sure that your power supply is set to the correct voltage in your area. If you are not sure about the voltage of the electrical outlet you are using, contact your local power company.
- If the power supply is broken, do not try to fix it by yourself. Contact a qualified service technician or your retailer.

Operation safety

- The ASUS My Cinema U-3000 TV Box becomes hot after prolonged use. Handle the TV Box with care to prevent discomfort from heat exposure. The heat will not affect the operation of the TV box so you may continue using it as desired.
- Before installing the motherboard and adding devices on it, carefully read all the manuals that came with the package.
- Before using the product, make sure all cables are correctly connected and the power cables are not damaged. If you detect any damage, contact your dealer immediately.
- To avoid short circuits, keep paper clips, screws, and staples away from connectors, slots, sockets and circuitry.
- Avoid dust, humidity, and temperature extremes. Do not place the product in any area where it may become wet.
- Place the product on a stable surface.
- If you encounter technical problems with the product, contact a qualified service technician or your retailer.

About this guide

This user guide contains the information you need when installing and configuring the ASUS TV Tuner Card/Box.

How this guide is organized

This user guide contains the following parts:

- **Chapter 1: Hardware information**

  This chapter lists the hardware setup procedures that you have to perform when installing the ASUS TV Tuner Card/Box.

- **Chapter 2: Software information**

  This chapter gives information on how to install device drivers and applications for the ASUS TV Tuner Card/Box.

- **Appendix: Reference information**

  This chapter includes information on the remote controller, the key table, and international TV systems and standards.

Where to find more information

Refer to the following sources for additional information and for product and software updates.

1. **ASUS websites**

   The ASUS website provides updated information on ASUS hardware and software products. Refer to the ASUS contact information.

2. **Optional documentation**

   Your product package may include optional documentation, such as warranty flyers, that may have been added by your dealer. These documents are not part of the standard package.

Conventions used in this guide

To make sure that you perform certain tasks properly, take note of the following symbols used throughout this manual.

DANGER/WARNING: Information to prevent injury to yourself when trying to complete a task.

CAUTION: Information to prevent damage to the components when trying to complete a task.

IMPORTANT: Instructions that you MUST follow to complete a task.

NOTE: Tips and additional information to help you complete a task.

Chapter 1

This chapter lists the hardware setup procedures that you have to perform when installing the ASUS TV Tuner Card/Box.

Hardware information

1.1 System requirements

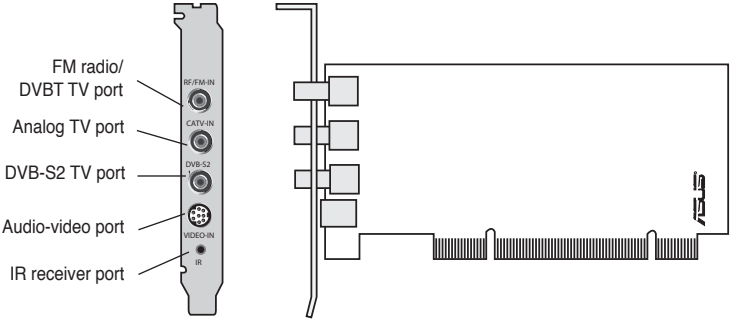
Before installing the ASUS TV Tuner Card/Box, make sure your computer system meets the following requirements:

Item	Description
Slot	For PCI TV tuner card : One available PCI slot For PCI-E TV tuner card: One available PCI Express slot For TV box: One available USB 2.0 port For TV express card: One available Express Card port
Processor	For notebook: Intel® Pentium® M 1.3GHz or above is recommended For PC: Intel® Pentium® 4 2.6GHz or above is recommended
Memory	For XP/MCE: 512MB or higher is recommended For Vista Basic/Vista Premium: 1GB or higher is recommended
Graphics card	Graphics card with at least 32MB video memory
Optical drive	CD-ROM drive for driver installation
Hard disk space	At least 1GB free hard disk space For XP/MCE: 1GB or higher is recommended For Vista Basic/Vista Premium: 15GB or higher is recommended
Audio	Microsoft® DirectX-compatible audio device
Operating system	Microsoft® Windows® Vista Premium/Vista Basic/XP/MCE 2005
Software/utilities	Microsoft® DirectX 9.0 or higher Microsoft® Windows® Media Player 9 or higher

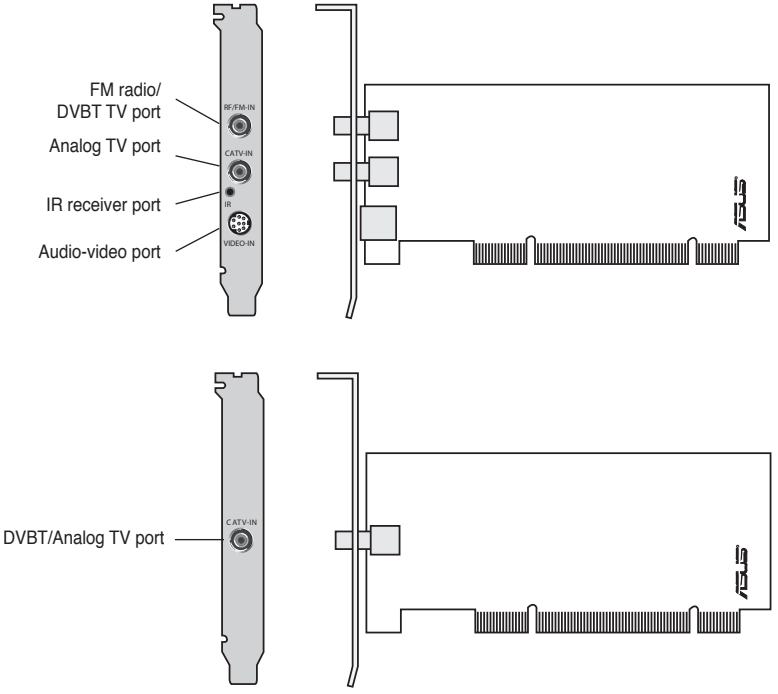
1.2 Card/Box layout

Drawings are for reference only. The actual device layout may vary.

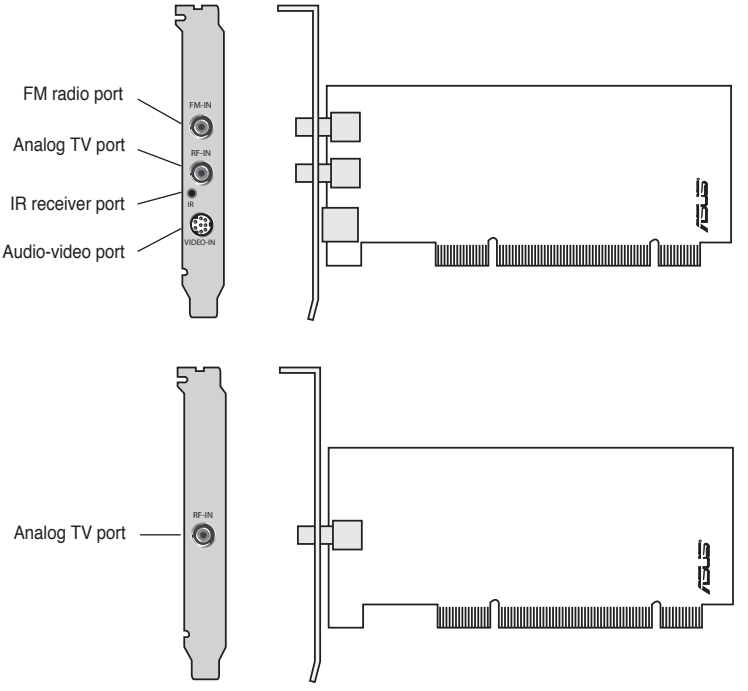
(Quadri) PCI-E TV card



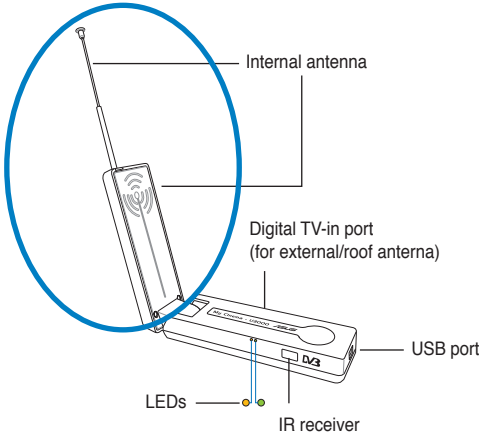
(Hybrid) PCI TV cards



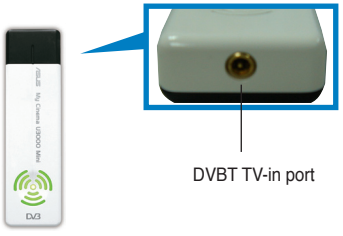
(Analog) PCI TV cards



(DVBT) USB TV boxes

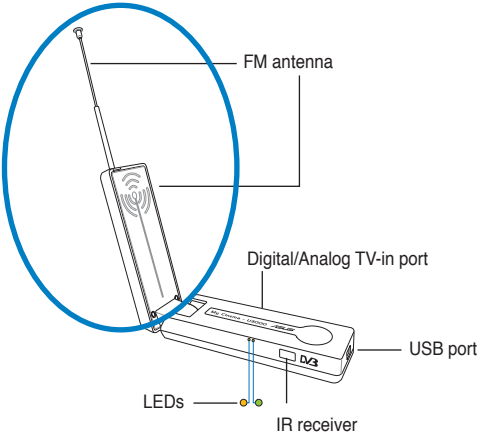


The internal antenna provides easy portability and more chances of digital TV reception when the roof antenna or the external antenna is not available.

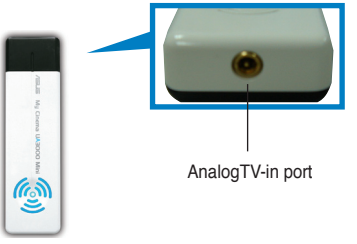


Refer to the LED information table on page 1-8.

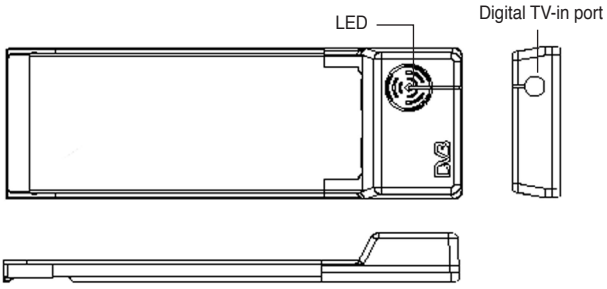
(Hybrid) USB TV boxes



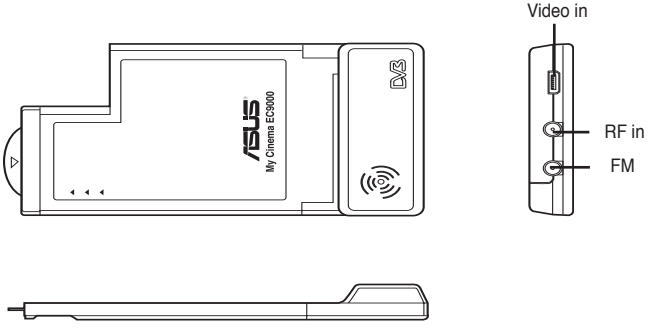
(Analog) USB TV box



(DVBT) Express card



(Hybrid) Express card



Refer to the LED information table on page 1-8.

LED information

For models with two (2) LEDs	
Color	**Description**
LED 1 (Green)	Good signal
LED 2 (Orange)	Poor signal

For models with one (1) LED	
LED On/Off	**Description**
LED On	Good signal
LED Off	Poor signal

1.3 Before you proceed

Take note of the following precautions before you install the ASUS TV Tuner Card/Box.

- Unplug the power cord from the wall socket before touching any component.
- Use a grounded wrist strap or touch a safely grounded object or a metal object, such as the power supply case, before handling components to avoid damaging them due to static electricity.
- Hold components by the edges to avoid touching the ICs on them.
- Keep all components, such as the host adapter, in their antistatic bag until you are ready to install them. Likewise, whenever you uninstall any component, place it on a grounded antistatic pad or in the bag that came with it.
- Before you install or remove any component, ensure that the ATX power supply is switched off or the power cord is detached from the power supply. Failure to do so may cause severe damage to the motherboard, peripherals,

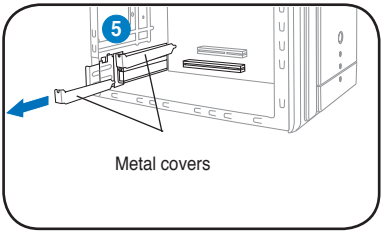
1.4 Installation

- You can install the ASUS TV Tuner Card/Box only on a motherboard with a PCI slot.
- Illustrations in this section are provided only for reference. Your system chassis and configuration may differ from what is shown.

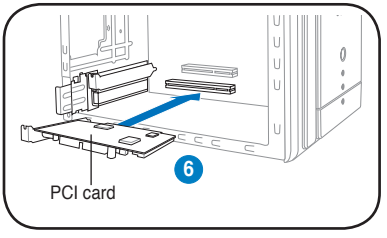
1.4.1 Installing the ASUS TV Tuner Card

To install the ASUS TV Tuner Card:

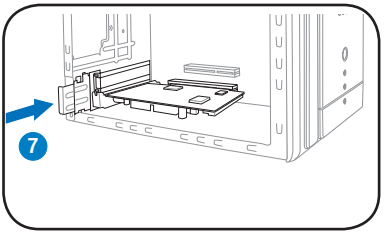
1. Unplug the power cord.
2. Remove the system unit cover. Refer to the documentation that came with your system for detailed instructions.
3. Locate the PCI bus expansion slot. Make sure this slot is unobstructed.
4. Unlock the expansion card cover.
5. Remove the metal cover opposite the slot that you intend to use.



6. Align the card connector with the slot and press firmly until the card is completely seated on the slot.



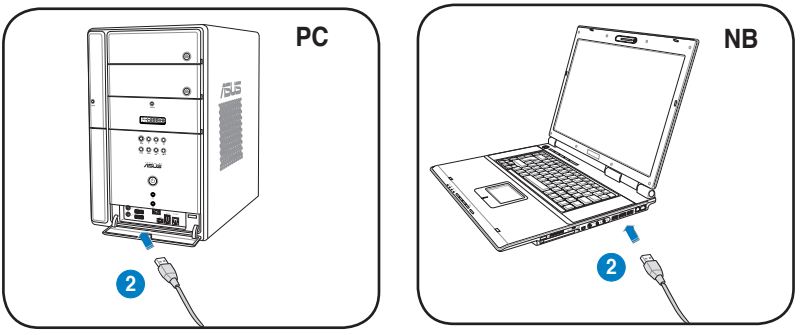
7. Replace the expansion card lock to secure the card to the chassis.



1.4.2 Installing the ASUS USB TV Box

To install the ASUS USB TV Box:

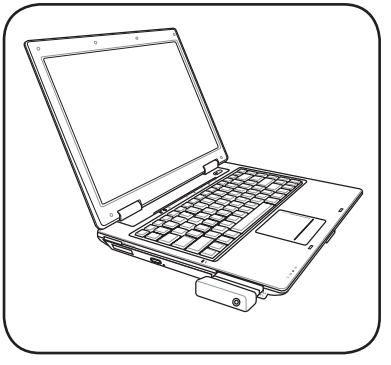
1. Place the ASUS USB TV Box on a flat, stable surface close to your computer.
2. Connect the USB cord A series plug to the USB 2.0 port on your computer.



1.4.3 Installing the ASUS TV Express Card

To install the ASUS TV Express Card:

1. Place your notebook or desktop computer on a flat, stable surface.
2. Locate the Express Card port.
3. Connect the ASUS TV Express Card to the Express Card port on your computer.

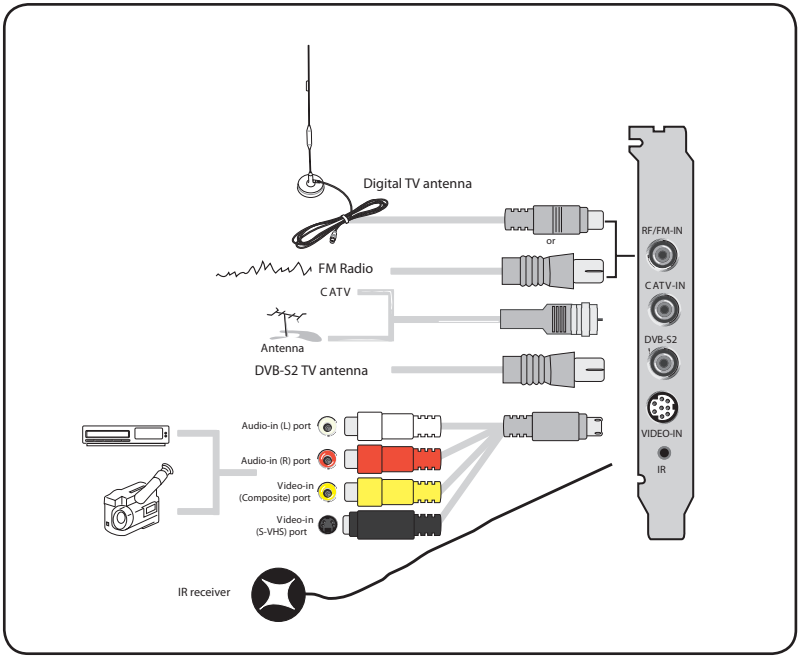


1.5 Connecting cables and devices

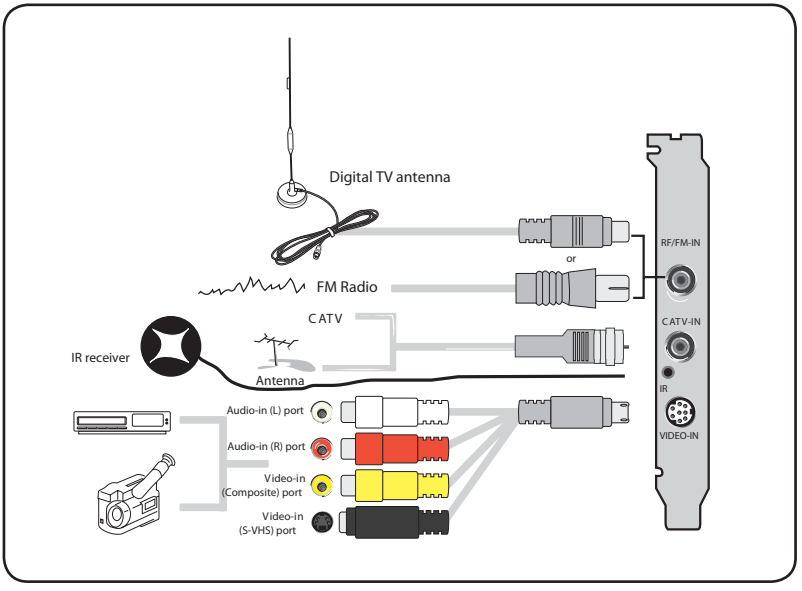
There are various types of cable TV (CATV) and antenna connections. Consult your dealer for the type of adaptor, splitter, A/B switch, or combiner that may be required when connecting the ASUS TV Tuner Card/Box to devices.

The ASUS TV Tuner Card/Box can receive up to 100 channels. If you do not have a CATV system, you may use an indoor or outdoor antenna that carries only VHF channels, or only UHF channels, or VHF and UHF channels to connect to the ASUS TV Tuner Card/Box.

1.5.1 (Quadri) PCI-E TV card

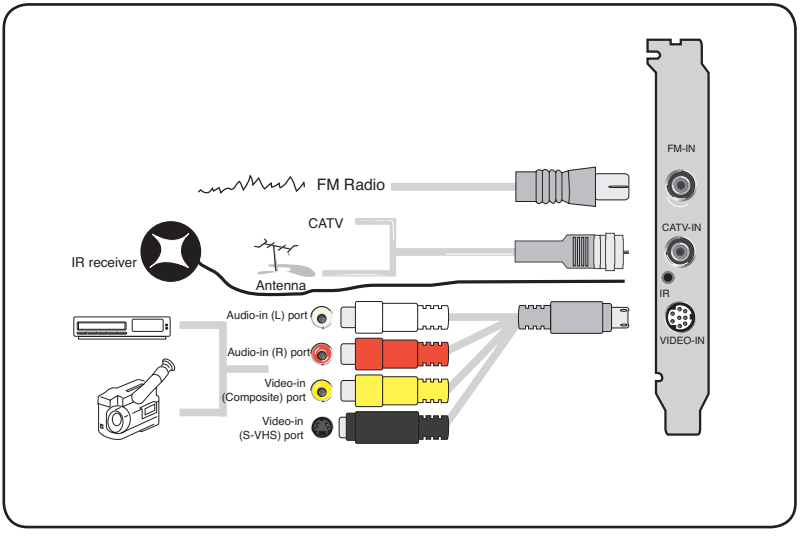


1.5.2 (Hybrid) TV card

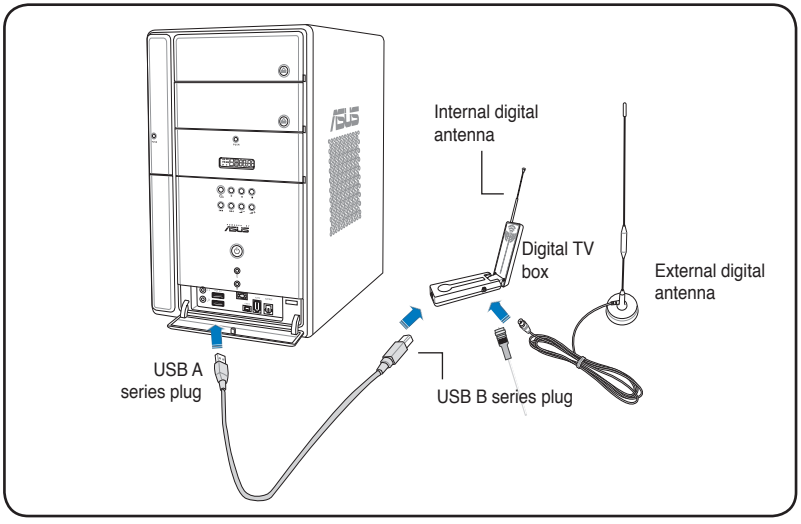


You may connect the Hybrid TV card to all devices as shown in the illustration above. For the Analog TV card, you cannot connect the digital TV antenna.

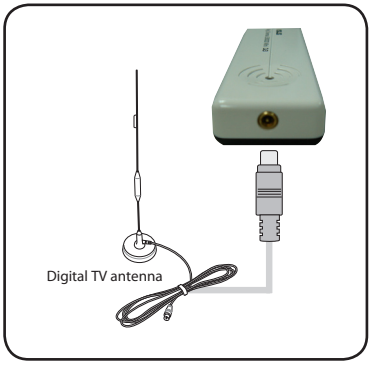
1.5.3 (Analog) TV card



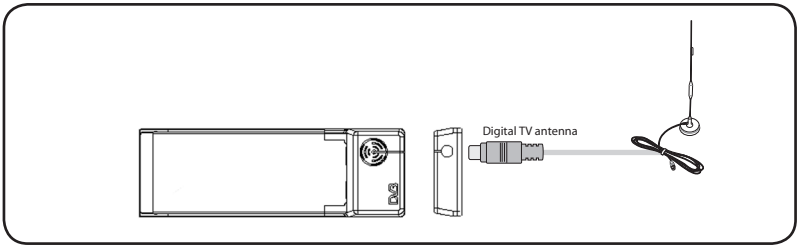
1.5.4 (DVBT) USB TV box



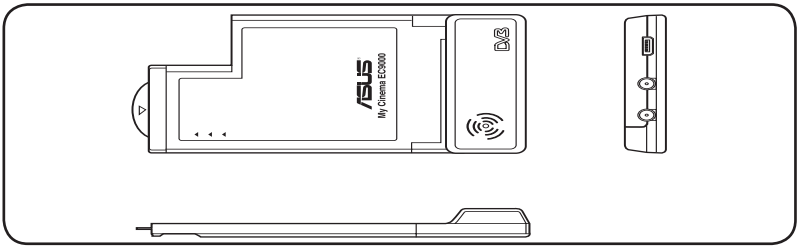
- The ASUS My Cinema U9000 Diversity TV Box has an internal antenna. You may use it, or you may also connect an external antenna/roof antenna to the U9000 Diversity through an MCX-to-IEC adapter.
- The internal antenna provides easy portability and more chances of digital TV reception when the roof antenna or the external antenna is not available.



1.5.5 (DVBT) Express Card

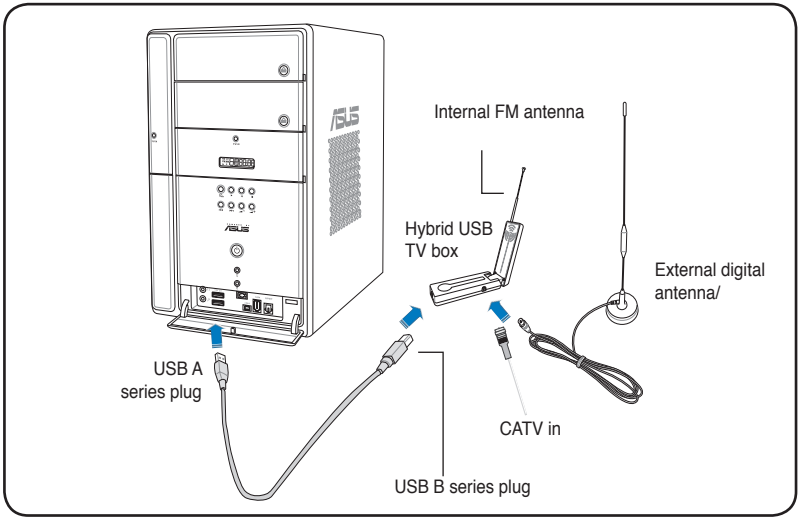


1.5.6 (Hybrid) Express Card

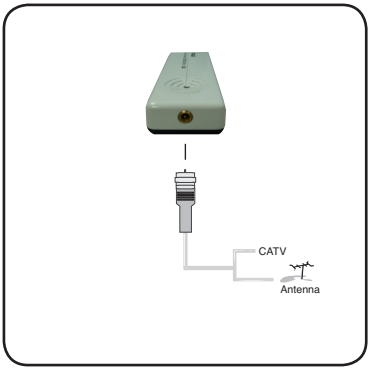


For ATSC Hybrid Express Card, the sequence of the components may be different.

1.5.7 (Hybrid) USB TV box



1.5.8 (Analog) USB TV box



Chapter 2

This chapter gives information on how to install device drivers and applications for the ASUS TV Tuner Card/Box.

Software information

2.1 Device driver installation

You need to install the device drivers to your computer so you can use the ASUS TV Tuner Card/Box. Refer to this section when installing the device drivers.

- Make sure that Windows® XP is installed on your system.
- The screens shown in this section may not exactly match the contents displayed on your screen. Contents of the support CD may change any time without notice.

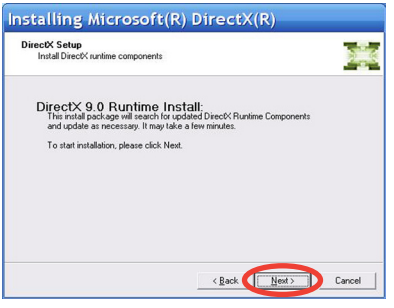
2.1.1 Installing Microsoft DirectX®

Microsoft DirectX® allows 3D hardware acceleration support in Windows® 98, Windows 2000, and Windows XP.

- Make sure you install Microsoft DirectX® *before* installing the ASUS TV Tuner Card driver.
- For software MPEG support in Windows 98, you must first install Microsoft DirectX®, then install a MPEG-compliant video player.

1. Insert the installation CD in the optical drive, or double-click the CD drive in My Computer to display the auto-run screen. You may also run Setup32.exe in the directory \AutoRun of the CD.
2. Read the Microsoft® End User License Agreement. Click **I accept the agreement**, then **Next**.

3. The DirectX(R) Setup box appears. Click **Next** to begin installation.
4. The installation program automatically installs the DirectX® 9.0 runtime libraries into your system.

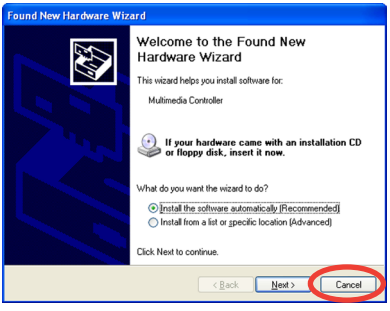


5. This message appears when setup is complete. Click **OK** to finish the installation process.

2.1.2 Installing the driver

Using the ASUS Quick Setup Program (Windows XP/Vista Basic) for the ASUS TV Tuner Card/Box

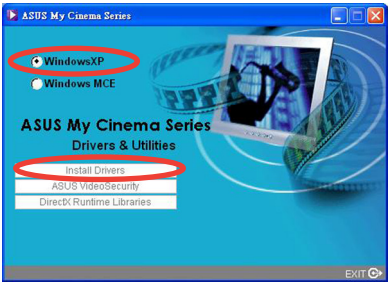
1. Start your computer.
2. Windows® automatically detects the ASUS TV Tuner Card/Box and displays the Found New Hardware Wizard window. Click **Cancel**.



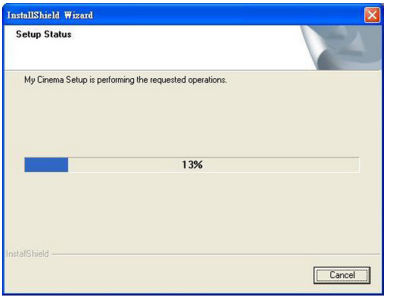
3. Insert the support CD into the optical drive. The Drivers & Utilities setup screen appears.

   Click the radio button for **Windows® XP/Vista Basic**.

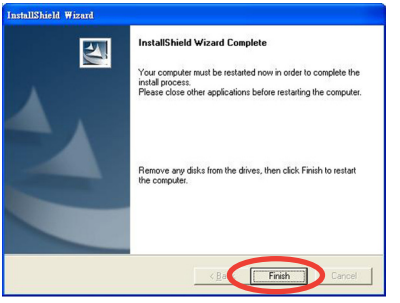
   Click **Install Drivers**.



4. A progress bar appears to indicate the installation status.

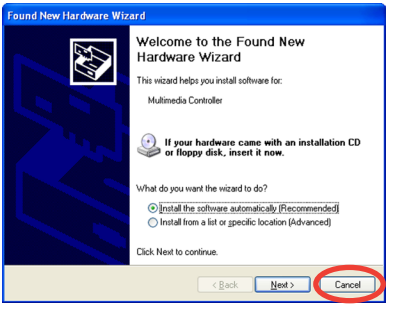


5. After all necessary files have been installed in your system, click **Finish** to complete the installation process.



Using the ASUS Quick Setup Program (Windows® Media Center Edition [MCE] 2005/Vista Premium) for the ASUS TV Tuner Card/Box

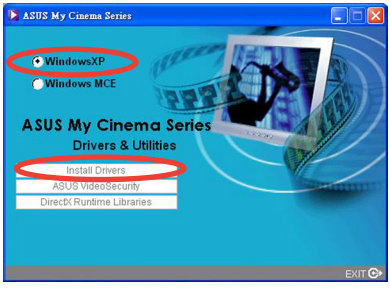
1. Start your computer.
2. Windows® automatically detects the ASUS TV Tuner Card/Box and displays the Found New Hardware Wizard window. Click **Cancel**.



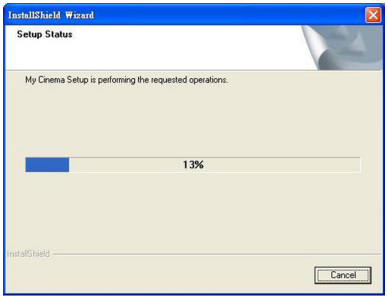
3. Insert the support CD into the optical drive. The Drivers & Utilities setup screen appears.

   Click the radio button for **Windows XP/Vista Basic**.

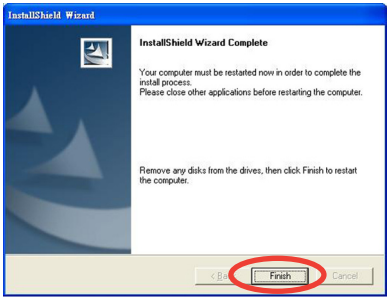
   Click Install Drivers.



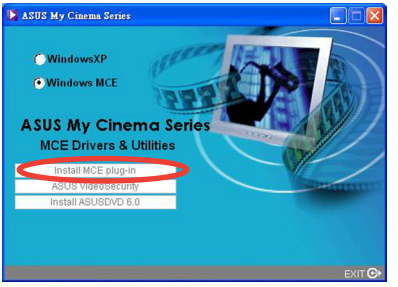
4. A progress bar appears to indicate the installation status.



5. After all necessary files have been installed in your system, click **Finish** to complete the driver installation process.



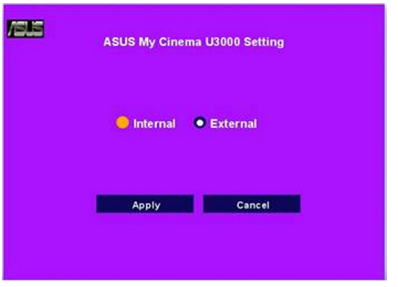
6. On the MCE Drivers and Utilities setup screen, click **Install MCE plug-in**.



The following step is only for the ASUS TV Box which featured two antennas.

7. Go to **MCE > More Programs > ASUS TV Setting**. Select the antenna you intend to use.

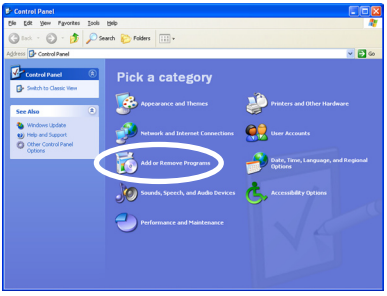
   Click **Apply**.



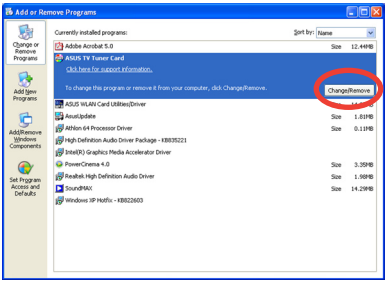
2.1.3 Uninstalling the driver

If you want to update the driver, or if you no longer need them, refer to this section to completely uninstall the drivers from your system to save disk space.

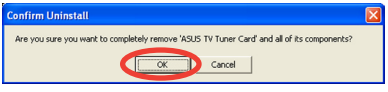
1. Click Start > Control Panel.
2. Double-click the Add or Remove Programs icon.



3. Click the ASUS TV Tuner Card/Box Drivers from the list.
4. Click Change/Remove.

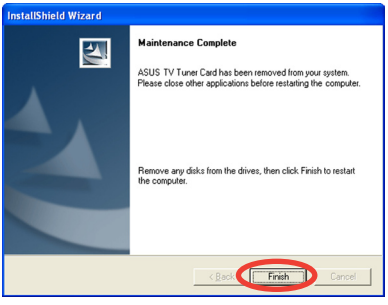


5. A dialog box appears. Click OK to completely remove all ASUS TV Tuner Card/Box components; otherwise, click Cancel.



6. Close other applications before restarting the computer.

   Click Finish.



2.2 CyberLink® PowerCinema *(optional)*

If you are running Windows MCE/Vista Premium, you can not watch TV by using the CyberLink® PowerCinema and MCE application at the same time.

This application allows you to watch TV and DVDs, listen to FM radio or music CDs, or browse pictures stored in your computer. Use the mouse or the remote controller to navigate through the user interface. For details on the remote controller, see the Appendix.

Refer to the **Cyberlink® PowerCinema 5 User's Guide** in the Support CD for more details about this application.

2.3 ASUS Splendid Technology

ASUS Splendid Analog TV Video Enhancement Technology takes computer graphics capabilities to the next level by automatically enhancing image quality, depth, color intensity, and image details for the best visual results. With ASUS Splendid meeting high visual demands, watching movies and TV on your computer can indeed be a splendid experience.

Splendid Video Enhancement Technology

ASUS Splendid Video Enhancement Technology makes colors come alive and brings out optimum brightness and contrast levels even in dark scenes. You may choose from four viewing profiles for different video viewing conditions. Select the profile that best that suits your viewing environment: Enriched (Standard), Vivid Color (Color-enhanced), Theater (Cinematic effects), and Crystal Clear (Enhanced contrast.)

2.4 ASUS VideoSecurity Online

VideoSecurity Online is a powerful monitoring and motion-detecting software. With video capture devices such as CCD, V8, digital Hi-8 and others, you can use VideoSecurity Online to:

- find intruders;
- monitor your environment;
- detect changes in a specified location; and
- know in advance who your visitors are.

Upon detection of any variation, whether it is an error or not, VideoSecurity Online will do the following:

- Save the date/time information on when the condition started, and when to release tracing to a database file. (watchdog.mdb)
- Capture the condition detected and save it into a bitmap file with reference to an image that represents the normal situation before VideoSecurity Online started detecting the variation. You may view any image processing software to view, modify, or distribute the image.

This database file is saved in the Programs folder.

VideoSecurity Online also lets you choose from four options on how to handle the variation or unusual condition detected.

2.5 ASUS EZVCR

ASUS EZVCR is a program that allows you to watch and record live TV on your PC or notebook. ASUS EZVCR also lets you to listen to radio programs on systems that support this function.

For more information, check the help file in EZVCR.

The image below shows the main ASUS EZVCR user interface window.

System requirements

Software

- Microsoft Windows XP with SP2 and Microsoft DirectX® 9 or above.
- ASUS DVD 6.0

Hardware

- ASUS TV Tuner device
- Sound card
- Processor: Intel® Pentium 4 2GHz or above, AMD K7-2000+ or above, Intel® Centrino 1G or above
- Memory: At least 256 MB
- VGA card: At least 64 MB RAM
- Hard disk space: At least 500 MB free hard disk space

Appendix

This chapter includes information on the optoinal remote controller, the key table, and international TV systems and standards.

Reference information

A.1 Remote controller *(optional)*

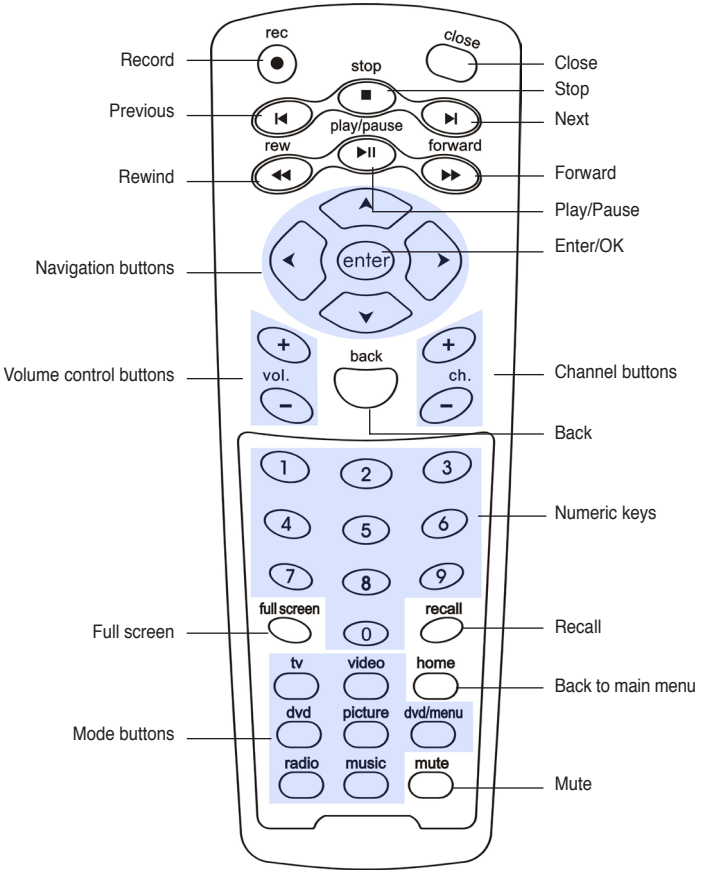
The optional remote controller is designed for the CyberLink® PowerCinema software application only. Use the remote controller for an enjoyable TV-watching experience through the CyberLink® PowerCinema windows.

Remote controller specifications

Operating range	5 meters (max)
Power source	3 V (2 x “AAA” batteries)
Receiver	Infrared receiver (supplied)

A.1.1 39-key remote controller

Layout



Key table

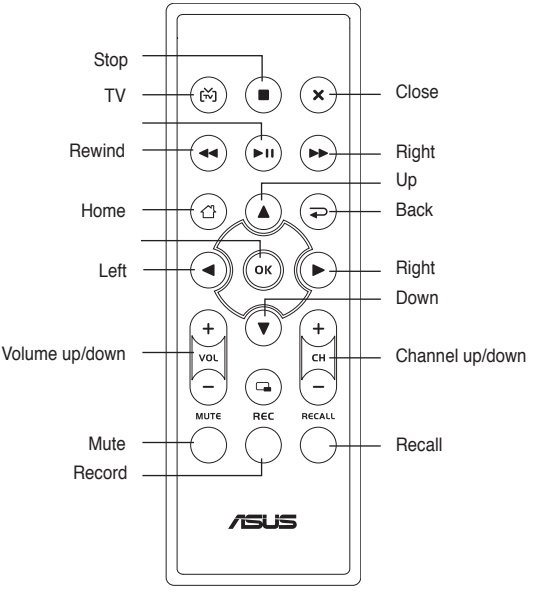
Button	Mode					
	TV	FM	DVD	VIDEO	PHOTO	MUSIC
tv	TV mode	–	–	–	–	–
radio	–	Radio mode	–	–	–	–
dvd	–	–	DVD mode	–	–	–
video	–	–	–	Video mode	–	–
picture	–	–	–	–	Photo mode	–
music	–	–	–	–	–	Music mode
home	Back to main menu	Back to main menu	Back to main menu	Back to main menu	Back to main menu	Back to main menu
dvd/menu	–	–	DVD menu	–	–	–
mute	Mute	Mute	Mute	Mute	Mute	Mute
full screen	Full screen	Full screen	Full screen	Full screen	Full screen	Full screen
recall	Back to previous channel	–	–	–	–	–
back	Back to previous page	Back to previous page	Back to previous page	Back to previous page	Back to previous page	Back to previous page
+ ch. −	Channel up/down	Search forward/ backward	Next/ previous chapter	–	–	–
+ vol. −	Volume up/down	Volume up/down	Volume up/down	Volume up/down	Volume up/down	Volume up/down
0 ~ 9	0 ~9	0 ~9	0 ~9	–	–	–
enter	Enter	Enter	Enter	Enter	Enter	Enter
▲	Up	Up	Up	Up	Up	Up
▼	Down	Down	Down	Down	Down	Down
◀	Left	Left	Left	Left	Left	Left
▶	Right	Right	Right	Right	Right	Right
rec	Record	Record	Record	Record	Record	Record

(Continued on the next page)

Button	Mode					
	TV	FM	DVD	VIDEO	PHOTO	MUSIC
close	Close app	Close app	Close app	Close app	Close app	Close app
stop	Stop	Stop	Stop	Stop	Stop	Stop
	Previous chapter	Previous chapter	Previous chapter	Previous chapter	Previous chapter	Previous chapter
	Next chapter	Next chapter	Next chapter	Next chapter	Next chapter	Next chapter
rew	Rewind	Rewind	Rewind	Rewind	Rewind	Rewind
forward	Forward	Forward	Forward	Forward	Forward	Forward
play/pause	Play/pause	Play/pause	Play/pause	Play/pause	Play/pause	Play/pause

A.1.2 21-key remote controller

Layout



Key table

Button	Mode					
	TV	FM	DVD	VIDEO	PHOTO	MUSIC
	TV mode	–	–	–	–	–
	Stop	Stop	Stop	Stop	Stop	Stop
	Close	Close	Close	Close	Close	Close
	Rewind	Rewind	Rewind	Rewind	Rewind	Rewind
	Play/Pause	Play/Pause	Play/Pause	Play/Pause	Play/Pause	Play/Pause
	Forward	Forward	Forward	Forward	Forward	Forward
	Back to main menu	Back to main menu	Back to main menu	Back to main menu	Back to main menu	Back to main menu
	Back to previous	Back to previous	Back to previous	Back to previous	Back to previous	Back to previous
CH	Channel up/down	Search forward/ backward	Next/ previous chapter	–	–	–
VOL	Volume up/down	Volume up/down	Volume up/down	Volume up/down	Volume up/down	Volume up/down
OK	Enter	Enter	Enter	Enter	Enter	Enter
	Up	Up	Up	Up	Up	Up
	Down	Down	Down	Down	Down	Down
	Left	Left	Left	Left	Left	Left
	Right	Right	Right	Right	Right	Right
REC	Record	Record	Record	Record	Record	Record
MUTE	Mute	Mute	Mute	Mute	Mute	Mute
RECALL	Back to previous channel	–	–	–	–	–

A.2 International TV systems and standards (Analog TV)

- TV systems and standards may change anytime without notice. This list is provided for reference only.
- Make sure that your TV card conforms with the system or standard used in your country or location.

AREA	TV	COLOR	STEREO	SUBTITLE
Albania	B/G	PAL		
Argentina	NPAL-N			
Australia	B/G	PAL	FM-FM	Teletext
Austria	B/G	PAL	FM-FM	Teletext
Azores Is. (Portugal)	BPAL			
Bahamas	MNTSC			
Bahrain	BPAL			
Barbados	NNTSC			
Belgium	B/G	PAL	Nicam	Teletext
Bermuda	MNTSC			
Brazil	MPAL-M	MTS		
Bulgaria	DSECAM			
Canada	MNTSC	MTS		CC
Canary Is.	BPAL			
China	DPAL			
Colombia	NNTSC			
Cyprus	BPAL			
Czech Republic	D/K	SECAM/PAL		
Denmark	BPAL	Nicam		TeleText
Egypt	BSECAM			
Faroe Islands (DK)	BPAL			
Finland	B/G	PAL	Nicam	TeleText
France	E/L	SECAM		Antiope
Gambia	I	PAL		
Germany	B/G	PAL	FM-FM	TeleText
Germany (prev East)	B/G	SECAM/PAL		
Gibraltar	BPAL			
Greece	B/H	SECAM		
Hong Kong	I	PAL	Nicam	
Hungary	B/G & D/K	PAL (was SECAM)	Nicam (Budapest only)	
Iceland	BPAL			
India	BPAL			
Indonesia	BPAL			
Iran	HSECAM			
Ireland	I	PAL	Nicam	TeleText

(Continued on the next page)

AREA	TV	COLOR	STEREO	SUBTITLE
Israel	B/G	PAL	Nicam	TeleText
Italy	B/G	PAL	FM/FM	TeleText
Jamaica	M		SECAM	
Japan	M		NTSC	Matrix
Jordan	B		PAL	
Kenya	B		PAL	
Korea	M		NTSC	
Luxembourg	B/G	PAL		TeleText
Madeira	B		PAL	
Madagascar	B		SECAM	
Malaysia	B		PAL	
Malta	B/G	PAL		
Mauritius	B		SECAM	
Mexico CC	M		NTSC	MTS
Monaco	L/G	SECAM/PAL		
Morocco	B		SECAM	
Netherlands	B/G	PAL	FM-FM	TeleText
New Zealand	B/G	PAL	Nicam	TeleText
North Korea	D, D/K	SECAM/PAL		
Norway	B/G	PAL	Nicam	
Pakistan	B		PAL	
Paraguay	N		PAL	
Peru	M		NTSC	
Philipines	M		NTSC	
Poland	D/K	PAL		Teletext
Portugal	B/G	PAL	Nicam	Teletext
Romania	G		PAL	
Russia	D/K	SECAM		
Saudi Arabia	B		SECAM	
Seychelles	I	PAL		
Singapore	B		PAL	
South Africa	I	PAL		
South Korea	N		NTSC	
Spain	B/G	PAL	Nicam	
Sri Lanka	B/G	PAL		
Sweden	B/G	PAL	Nicam	Teletext
Switzerland	B/G	PAL	FM-FM	TeleText
Tahiti	KI	SECAM		
Taiwan	M		NTSC	
Thailand	B		PAL	
Trinidad	M		NTSC	
Tunisia	B		SECAM	
Turkey	B	PAL		TeleText
Ukraine	D/K	SECAM		
United Arab Emirates	B/G	PAL		
United States	M	NTSC		
United Kingdom	I	PAL		
Vietnam	M/D	NTSC/SECAM		
Yugoslavia	B/G	PAL		
Zambia	B/G	PAL		
Zimbabwe	B/G	PAL		

A.3 International TV systems and standards (DVB-T)

TYPE	LOCATION	BW	BAND
DVB-T+PAL	Australia	7 MHz	V/UHF
DVB-T+PAL	Austria	8 MHz	UHF
DVB-T+PAL	Belgium	8 MHz	UHF
DVB-T+PAL	China	–	–
DVB-T+PAL	Denmark	8 MHz	UHF
DVB-T+PAL	Estonia	8 MHz	UHF
DVB-T+PAL	Faroe Island	8 MHz	UHF
DVB-T+PAL	Finland	8 MHz	UHF
DVB-T+PAL	France	–	–
DVB-T+PAL	Germany	7/8 MHz	V/UHF
DVB-T+PAL	Hungary	8 MHz	UHF
DVB-T+PAL	Italy	7/8 MHz	V/UHF
DVB-T+PAL	India	–	–
DVB-T+PAL	Ireland	8 MHz	UHF
DVB-T+PAL	Latvia8 MHz	UHF	
DVB-T+PAL	Lithuania	–	–
DVB-T+PAL	Luxembourg	–	–
DVB-T+PAL	Netherland	8 MHz	UHF
DVB-T+PAL	Norway	8 MHz	UHF
DVB-T+PAL	Poland	8 MHz	UHF
DVB-T+PAL	Portugal	8 MHz	UHF
DVB-T+PAL	Singapore	8 MHz	UHF
DVB-T+PAL	Slovakia	–	–
DVB-T+PAL	Slovenia	7/8 MHz	V/UHF
DVB-T+PAL	S-Africa	8 MHz	UHF
DVB-T+PAL	Spain	8 MHz	UHF
DVB-T+PAL	Sweden	8 MHz	UHF
DVB-T+PAL	Switzerland	8 MHz	UHF
DVB-T+PAL	UK	8 MHz	UHF
DVB-T+NTSC	Taiwan	6 MHz	UHF