

PCTV 7010iX Hardware



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Introduction

Congratulations on becoming the proud owner of a Pinnacle PCTV 7010iX!

PCTV 7010iX is a PCI Express 6 in 1 TV card. It allows you to receive digital TV and radio (DVB-T and DVB-S), analog TV and FM radio. Depending on the antenna signals connected, computer performance and the software you are using, you can freely choose the four channels to be received/recorded at the same time:

- 2 DVB-T channels (TV or radio)
plus
2 DVB-S channels (TV or radio)

or

- 1 analog channel (TV or radio)
plus
1 DVB-T channel (TV or radio)
plus
2 DVB-S channels (TV or radio)

or

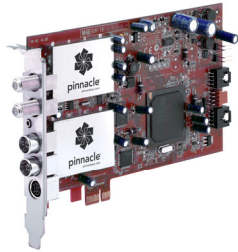
- 2 analog channels (TV or radio)
plus
2 DVB-S channels (TV or radio)

Plus, you can use the analog video input, for example, to digitize your old video cassettes.

Digital satellite TV (DVB-S), as well as digital terrestrial TV (DVB-T), offers an expansive channel selection with excellent picture and audio quality. Additional services, such as interactive TV and IP data reception, are also available. Further information on DVB-T and DVB-S can be found on the internet at www.dvb.org.

And now have fun with your PCTV 7010iX!

Package Contents



PCTV 7010iX
(illustration is a sample)



Video adapter or multi-connector cable



IEC adapter for FM antenna (optional)



Remote control with batteries and
receiver cable
(illustrations are samples)



Installation CD



PDF files on CD-ROM: User Manual,
hardware operating instructions,
remote control operating instructions



Depending on the version of your product, package contents may vary.

Recommended System Requirements

Your system must satisfy the following requirements in order for your PCTV 7010iX to function smoothly:

Bus System

PCI Express Rev. 3.0

Processor

Pentium D with 3.0 GHz or equivalent AMD Athlon 4800

Working memory

512 MB RAM

Hard disk

U-DMA hard disk with 20 GB free disk space

Graphics card

DirectX 9-compatible graphics card

Sound card

DirectX 9-compatible sound card

CD-/DVD burner

Operating system

Windows XP (Home Edition, Professional Edition or Media Center Edition 2005) with the latest Service Pack

For Your Own Safety



If you purchased your PCTV 7010iX together with a PC and it is already installed, skip the next few chapters and continue with the chapter "Connecting the Equipment".

In the interest of your own safety and the flawless functioning of your new PCTV 7010iX and computer system, note the following:

- Computer components are sensitive to static charge. Divert any electrostatic charge from your body before touching the components with your hands or any tools.
- Before opening the computer, make sure that the power plug is disconnected from the wall outlet.

Hardware Installation

Preparing Installation

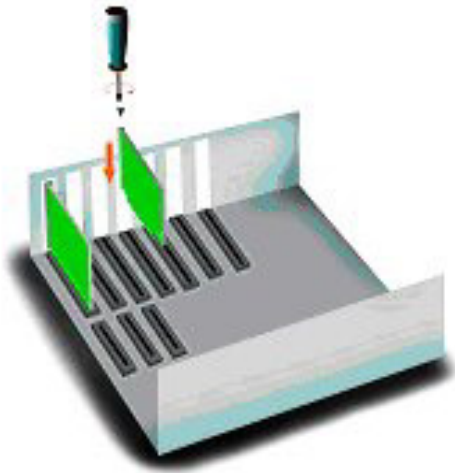


The only tool you need for the installation is a screwdriver.

- Divert any possible electrostatic charge from your body by touching the casing of your PC.
- Turn off your computer and all peripheral devices. Disconnect the computer from the power supply and all necessary components.
- Loosen the computer cover screws and remove the cover.
- Select a free PCI Express slot. Remove the slot cover at the back of the computer. Make sure to keep the screws in a safe place.

Using PCTV 7010iX Hardware

- Insert the card into the PCI Express slot. To do so, hold the card at the top and push it down into the slot while applying even pressure at both ends. Press down on the upper edge so that the card fits firmly in the slot.

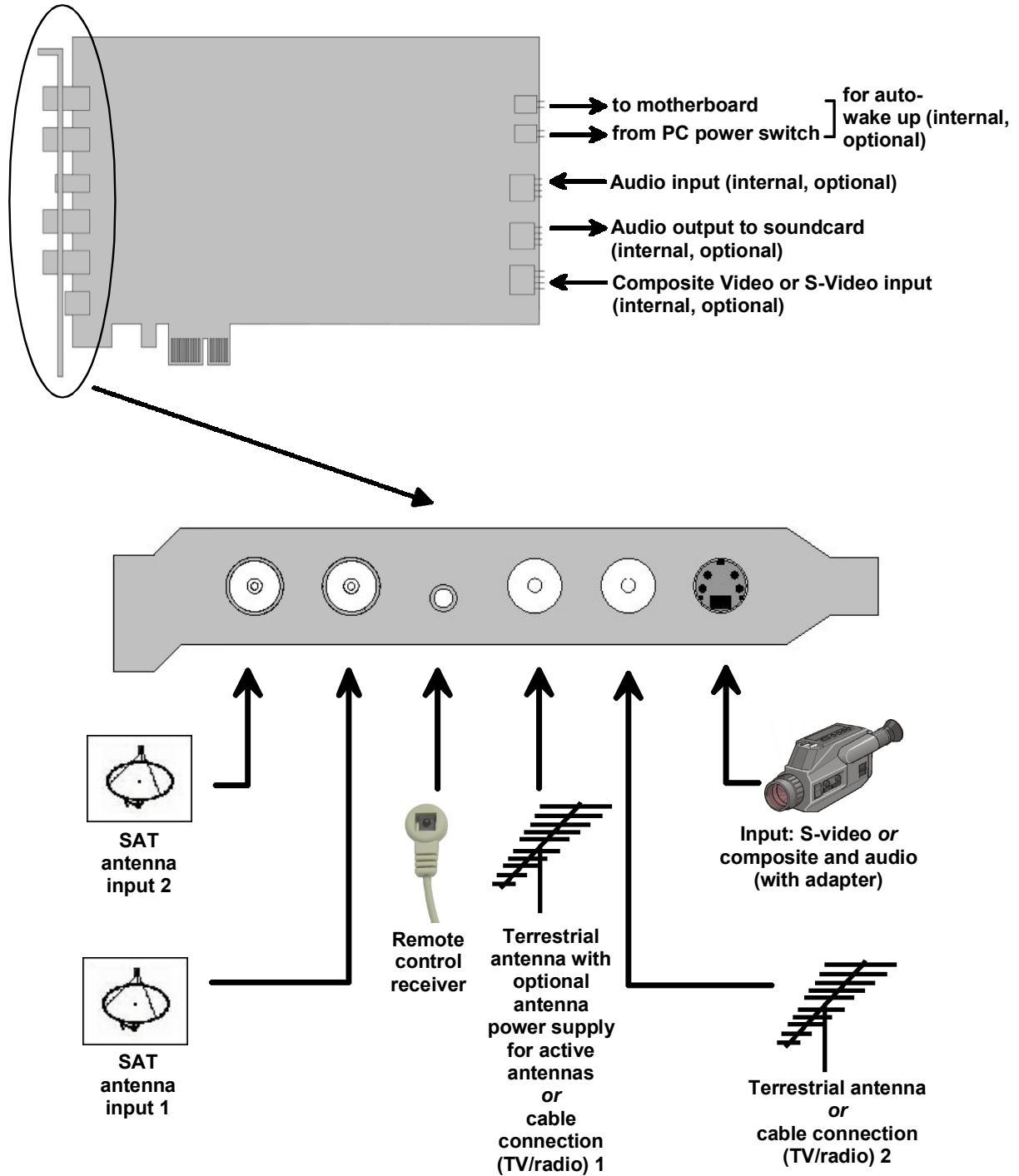


- If you cannot easily insert the card into the slot, do not use force since this may bend the contact springs on the socket connector. Instead, remove the card and try to insert it again.

After Installation

- After you have inserted the hardware, tighten the card retaining bracket firmly on the back of the computer.
- Now place the cover onto your computer and connect the peripheral devices.

Connecting the Equipment



Tips on DVB-T reception

For optimal digital terrestrial TV reception please observe the following instructions:

- Connect to a roof antenna if one is available.
- If you wish to use the indoor antenna, it should be located as near as possible to a window.
- Wherever possible, place the antenna in the direction of the nearest transmitter.
- Try to position any indoor antenna as high as possible (for example, on top of a cupboard).
- An indoor antenna should not be located near a computer monitor, television or the like.
- Make certain to have the proper polarization if you use an active flat antenna (if you are not certain, you can find out whether the antenna should have a transverse or upright position by trial and error).
- For active antennas without a separate power supply, please use the Antenna input 1 and activate the antenna power supply.
- Only double-shielded antenna cable should be used.

Technical Data

Bus System

- PCI Express Rev. 3.0

Video Decoder / Analog Demodulator / PCI Express Controller

- Philips SAA7162

Analog TV / DVB-T Tuner

- 2 x Philips TDA 8275A
Frequency range: 45.75 – 863.25 MHz.

Satellite TV Tuner

- 2 x Zarlink ZL 10037
Frequency range: 950 – 2150 MHz.

DVB-T Demodulator

- 2 x Philips TDA 10046A
 - 16,64 QAM, QPSK
 - 6,7,8 MHz bandwidth

DVB-S Demodulator

- 2 x Zarlink ZL 10313

Supported Formats

- DVB-S
- DVB-T
- PAL / SECAM / NTSC
- FM Radio

Antenna Input Terminals

- Satellite antenna input F-connector
- Two 75 Ohm IEC input ports for DVB-T and/or analog TV
 - Both antenna input terminals are randomly usable
 - Antenna input 1 supplies power to active interior antennas without its own power supply.

A/V Input and Output

- A/V input mini-DIN 7-pin for S-video, composite video and stereo audio (depending on the adapter)
- Internal video input (S-video and composite video)
- Internal audio output (to the sound card) using a four pin connector
- Internal audio output using a four pin connector

Additional Connectors

- IR remote connector to attach optional IR receiver cable
- Internal Wake-Up connector

Sensitivity

- DVB-T: minimum -86 dBm
- Analog: minimum 30 dB μ

Signal-to-Noise Ratio for Analog TV

- Minimum 41 dB @ 60 dB μ



Konformitätserklärung nach ISO/IEC Guide 22

Declaration of conformity in accordance with ISO/IEC Guide 22

Nr. / No 1.00


Anbieter / *Supplier* : **Pinnacle Systems GmbH**
 Anschrift / *Address* : Frankfurter Strasse 3c
 38122 Braunschweig, Germany
 Produkt / *Product* : **PCTV 7010iX**

Das oben beschriebene Produkt ist konform mit: / *The product described above is in conformity with:*

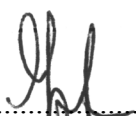
Dokument-Nr. <i>Document No.</i>	Titel <i>Title</i>
EN 55013 : 2002	Funkstöreigenschaften von Rundfunkempfängern und verwandten Geräten der Unterhaltungselektronik <i>Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment</i>
EN 55020 : 2003	Störfestigkeit von Rundfunkempfängern und verwandten Geräten der Unterhaltungselektronik <i>Electromagnetic immunity of broadcast receivers and associated equipment</i>
EN 61000-4-2 : 2001	Störfestigkeit gegen Entladung statischer Elektrizität <i>Electrostatic discharge immunity test</i>
EN 61000-4-3 : 2001	Störfestigkeit gegen hochfrequente elektromagnetische Felder <i>Radiated, radio-frequency, electromagnetic field immunity test</i>
EN 61000-4-4 : 2002	Störfestigkeit gegen schnelle transiente elektrische Störgrößen/BURST <i>Electrical fast transient/burst immunity test</i>
EN 61000-4-5 : 2001	Störfestigkeit gegen Stoßspannungen/SURGE <i>Surge immunity test</i>
EN 61000-4-6 : 2001	Störfestigkeit gegen leitungsgeführte Störgrößen, induziert durch hochfrequente Felder <i>Immunity to conducted disturbances, induced by radio-frequency fields</i>
EN 61000-4-8 : 2001	Störfestigkeit gegen Magnetfelder mit energietechnischen Frequenzen <i>Power frequency magnetic field immunity test</i>
EN 61000-4-11 : 2001	Störfestigkeit gegen Spannungseinbrüche, Kurzzeitunterbrechungen und Spannungsschwankungen <i>Voltage dips, short interruptions and voltage variations immunity tests</i>
EN 61000-3-2 : 2001	Grenzwerte für Oberschwingungsströme <i>Limitations for harmonic currents</i>
EN 61000-3-3 : 2002	Grenzwerte für Spannungsschwankungen und Flicker <i>Limitations of voltage fluctuations and flicker</i>
EN 60950 : 2001	Sicherheit von Einrichtungen der Informationstechnik <i>Safety of information technology equipment</i>

Dieser Erklärung liegt zugrunde: Prüfbericht(e) des EMV-Prüflabors
This certification is based on: Test report(s) generated by EMI-test laboratory

Braunschweig, 18. Januar 2006 / *January 18th, 2006*



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 (Rechtsverbindliche Unterschrift / *Legally Binding*)