



DVB-PC TV Stars

User's Guide Part 1 Installation

User's Guide Part 2
Setup4PC/Server4PC

User's Guide Part 3
DVBViewer TE

User's Guide Part 4
Troubleshooting

This manual matches the following products:

TechniSat SkyStar 2 PCI / USB
TechniSat AirStar 2 PCI / USB
TechniSat CableStar 2 PCI

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TechniSat DVB-PC TV Stars - Users Guide Part 1: Installation

Table of contents

Chapter 1: Introduction.....	1
Defining the TechniSat DVB-PC TV Stars	1
Defining SkyStar 2 PCI/USB.....	1
Defining AirStar 2 PCI/USB	1
Defining CableStar 2 PCI.....	1
Using IP services with a DVB-PC TV Star Device.....	1
Using printed help	1
User's guide conventions	1
User task summary	2
Step one: Installation your DVB-PC TV device	2
Step two: Installation of driver and software components	2
Step three: Connect to the services.....	2
Chapter 2: Installing the DVB-PC TV device.....	3
Summary.....	3
System requirements.....	3
Additional system requirements for PCI devices	3
Additional system requirements for USB devices.....	3
Recommended system requirements for MPEG-2 HDTV reception.....	3
Recommended system requirements for MPEG-4/h.264 HDTV reception (optional)	4
Important information.....	5
Package contents.....	5
Static electricity warning	5
Installation of the DVB-PC TV Device.....	6
Installation of the PCI device	6
Installation of the USB device.....	6
Chapter 3: Installing the driver and software components	7
Summary.....	7
Install the driver	7
Update the driver.....	9
Installation of drivers and Software packages.....	10
Installation of the DVB-PC TV Stars applications.....	11
Chapter 4: Connect to services	15
Summary.....	15
SkyStar 2 USB/PCI	15
How to connect to a satellite.....	15
AirStar2 PCI/USB	17
How to connect to terrestrial services	17
CableStar 2 PCI	17
How to connect to cable services	17

Chapter 1: Introduction

Defining the TechniSat DVB-PC TV Stars

Defining SkyStar 2 PCI/USB

SkyStar 2 PCI is a small board that is plugged into a PCI slot of your computer. The SkyStar USB is the USB version that is connected to a USB1.1 port of your computer. It gives you unprecedented access to Internet services and any “Free To Air” broadcast digital satellite television channel (DVB-S).

Defining AirStar 2 PCI/USB

AirStar 2 PCI is a small board that is plugged into a PCI slot of your computer. The AirStar USB is the USB version that is connected to a USB1.1 port of your computer. It gives you unprecedented access to any free to air broadcast digital terrestrial television channel (DVB-T).

Defining CableStar 2 PCI

CableStar 2 PCI is a small board that is plugged into a PCI slot of your computer. It gives you unprecedented access to any free available broadcast digital cable television channel (DVB-C).

Using IP services with a DVB-PC TV Star Device

The TechniSat DVB-PC TV Stars products will request all information by ground-based Internet. In response the requested data will be delivered using satellite, broadband cable or terrestrial systems at high speed.

Using printed help

The DVB-PC TV Stars product range includes the 4 parts of the Users Guide (Part 1: “Installation” / Part 2: “Setup4PC/Server4PC” / Part 3: “DVBViewer TE” / Part 4: “Troubleshooting”).

User’s guide conventions

For clarity, the User’s Guide employs the following conventions:

1. Navigation paths are represented as follows:

“Start” => “Programs” => “TechniSat DVB” => “Setup4PC”

The path shown in this example launches Setup4PC

2. Pay attention to the following:



This icon designates a note, which is an important information to the description above.



This icon designates a warning, which is an important information to the description above.

3. The DVB-PC TV Stars TV application “DVBViewer TechniSat Edition” is designated in the following as “DVBViewer TE”

User task summary

Steps to perform basic user tasks are summarized below.

Step one: Installation your DVB-PC TV device

Follow the steps in chapter 2 “Installing the DVB-PC TV device” to connect the DVB device to your computer.

Step two: Installation of driver and software components

Follow the instructions in chapter 3 “Installing the driver and software components” to prepare your computer for data and audio/video reception.

Step three: Connect to the services

Follow the steps in chapter 4 “Connect to the services”. In this chapter you get information about how to connect the DVB device correctly to your reception equipment.

Chapter 2: Installing the DVB-PC TV device

Summary

In this chapter the system requirements and the installation of the DVB-PC TV PCI and USB device are described.

System requirements

- IBM compatible PC with Pentium III 700 MHz or higher
- At least 256 MB RAM
- At least 30 MB free hard disk space
- SoundBlaster compatible audio card
- 3D graphic card recommended (with hardware overlay support, up to date drivers)
- Supported operating systems:
 - Windows 2000 Professional/Server (Service Pack 4 required)
 - Windows XP Home/Professional (Service Pack 2 required)
 - Windows XP Professional x64 Edition
 - Windows Server 2003
 - Windows Vista x86/x64
- Additional requirements:
 - Internet Explorer 6 or higher
 - DirectX 9 or higher
 - MediaPlayer 9 or higher
 - at least 10GB or more hard disc space necessary for PVR functionality

Additional system requirements for PCI devices

- one available PCI slot (do not use the one directly under AGP graphic card, if possible)

Additional system requirements for USB devices

- one available USB1.1 port (must be connected directly to PC, not by using a USB hub)

Recommended system requirements for MPEG-2 HDTV reception

- TechniSat SkyStar 2 TV PCI / AirStar 2 TV PCI / CableStar 2 TV PCI
- IBM compatible PC with Intel Pentium 4 or AMD Athlon XP CPU with 2400 MHz or higher
- State of the art AGP or PCI-Express graphic card recommended (with MPEG2 hardware acceleration, hardware overlay support and up to date drivers)
- Recommended operating systems:
 - Windows 2000 Professional (Service Pack 4 required)
 - Windows XP Home/Professional (Service Pack 2 required)
 - Windows XP Professional x64 Edition
 - Windows Vista x86/x64

Recommended system requirements for MPEG-4/h.264 HDTV reception (optional)

- TechniSat SkyStar 2 TV PCI / AirStar 2 TV PCI / CableStar 2 TV PCI
- IBM compatible PC with Intel Pentium 4 DualCore 830 or AMD Athlon X2 CPU with 2 x 3000 MHz or higher
- At least 1024 MB RAM
- State of the art PCI-Express graphic card with 256 MB RAM or higher, with MPEG-4 hardware acceleration, hardware overlay support and up to date drivers)
- Recommended operating systems:
Windows XP Home/Professional (Service Pack 2 required)
Windows XP Professional x64 Edition
Windows Vista x86/x64

Important information



For best results, a screen resolution of 800 x 600 pixels with 16 bit color depth or higher is recommended for use with DVB applications.

A screen resolution of at least (720p) or 1280x720 pixels with 24 bit color depth or higher is recommended for HDTV.



You should update all your system drivers (mainboard, graphics, sound and network adapter drivers) to the current version before installing the driver for the DVB-PC TV device. You also should update your operating system with all service packs and hot fixes available.



Before starting the TV application DVBViewer TE or any other multimedia application on a system running Windows Server Systems 2003, please ensure that you enable the DirectX and DirectSound environments first. Consult the product documentation of your Windows Server Systems 2003 product version for further information.



If you are operating a SMP (simultaneous multi processing), HT (hyper-threading) or DualCore system, it is recommended that you are using the latest driver version, SMP, HT and Dual Core CPU's are not supported by drivers which are older than the version 4.2.11. See User's Guide Part 4 (Troubleshooting) for further information.



If you use a multiple number of PCI cards, you have to calculate with a current of 3A on the 5V rail for each of the used TechniSat DVB-PC TV Stars PCI card.

Please ensure, that the used power supply provides the required current for the used number of PCI cards and that the mainboard is capable to handle the required current. Otherwise the high current load might cause a system breakdown or permanent damage at the used components.

Package contents

Each TechniSat DVB-PC TV device package should contain the following items:

- SkyStar 2/ AirStar 2/ CableStar 2 PCI card
- or
- SkyStar / AirStar USB box with power supply and USB cable
- Installation CD (contains user's guide) with driver and software
- Quick Install
- Optional:
remote control with IR receiver

Static electricity warning



To prevent static damage to electronic components, observe the following precautions:

- Touch anti-static or grounded surface such as a large metal object to discharge static electricity from your body before you remove the electronic components from their packaging and before touching system components.
- Handle system components only at the corners. Never touch any of the metal parts of the electronic components, such as golden pins.

Installation of the DVB-PC TV Device

Installation of the PCI device

To install the DVB-PC TV Stars PCI board make certain that the computer is turned off. Proceed the following steps to install the PCI card into your PC system:

1. Turn off the PC.
2. Open the case of your computer to expose the PCI slots.
3. Now you have to choose a free PCI slot. If possible choose a different slot than the slot next to your AGP connector.
4. Unscrew the metal dust protector of the slot you have chosen.
5. Put the DVB-PC TV PCI board into the PCI slot as you can see from the picture below.



Figure 2.1: Inserting the DVB board into a PCI slot

6. Tighten the screw on the DVB-PC TV PCI board.
7. Repeat the steps 3 to 6 for any additional PCI card you want to install.
8. Close the case of your computer case.

Your DVB-PC TV PCI hardware is now installed.

Installation of the USB device

If you want to use a USB1.1 port, connect the DVB-PC TV Stars USB box directly to the root hub of your computer.

After this you also have to connect the power supply to the USB box, if the power supply is part of the package.

If you want to connect multiple TechniSat DVB-PC TV Stars USB boxes onto one computer, you have to connect each device to a separate host controller. The operation of two USB boxes attached to one host controller is not possible.

Your DVB-PC TV USB hardware is now installed.

Chapter 3: Installing the driver and software components

Summary

In this chapter the installation of SkyStar 2 PCI is exemplary described for the operating system Windows XP Professional Service Pack 2. The installation for the other operating systems as Windows 2000, Windows XP Professional x64 Edition, Windows Server Systems 2003 and Windows Vista is nearly the same. The installation process for the other DVB-PC TV Stars is similar to the installation of SkyStar 2 PCI.

Install the driver



Please use the update description if you already installed a prior version of the driver/software release for the TechniSat DVB-PC TV Stars devices.



The installation of PCI and USB DVB-PC TV devices distinguishes in finding new hardware only. The PCI devices will be found as new PCI hardware and the USB devices will be found as new USB hardware.



If you installed multiple DVB-PC TV Stars devices to your system, the “Found New Hardware Wizard” will prompt for each device. You have to process the driver installation for each device. After the last device driver is installed, you can start the software installation.



If you install more TechniSat DVB-PC TV Stars PCI or USB boxes after the software 4.4.0 is installed to the system, the “Found New Hardware Wizard” will appear for the new devices only. After the driver installation has been completed, you have to restart the system and the devices are ready for use.



For installing driver and software components using Microsoft Windows 2000, Windows XP, Windows XP x64 Edition, Windows Server Systems 2003 and Windows Vista you have to be logged in as the local user “Administrator”. If you install the components using another user account with local administrative rights, this might cause trouble during the installation or while operating the device.

TechniSat DVB-PC TV Stars - Users Guide Part 1: Installation

Chapter 3: Installing the driver and software components

When you start your computer for the first time after installing the DVB-PC TV PCI card or after you plugged in the USB box, the message “Found New Hardware” appears. All DVB-PC TV PCI devices are declared as “Network Controller”, all USB devices are declared as “B2C2 Broadband Rcvr USB Adpt.”.

You can either install the drivers before starting the installation of the software or let the device drivers be installed using the software installer. We recommend the use the automatic driver installation during the software installation for inexperienced users.



If you want to install the device drivers automatically during the software installation process press “Cancel” to abort the manual driver installation.



If any problem occurs during this procedure, read the FAQ in Part 4 of the installation documents for help.

Update the driver



The installation of PCI and USB DVB-PC TV devices distinguishes in finding new hardware only. The PCI devices will be found as new PCI hardware and the USB devices will be found as new USB hardware.



For installing driver and software components using Microsoft Windows 2000, Windows XP, Windows XP x64 Edition, Windows Server Systems 2003 or Windows Vista you have to be logged in as the local user “Administrator”. If you install the components using another user account with local administrative rights, this might cause trouble during the installation or while operating the device.



If you have installed a multiple number of TechniSat DVB-PC TV Stars devices, you have to perform the driver update for each device installed to your system.

After system startup you have to close the application Server4PC, which is located in system tray.



Figure 3.6: Server4PC

Now start the software installation process as described above. The software installer will automatically update the device driver for all installed devices and will update the software package installed.

The next step will be the installation routine as described as follows.

Installation of drivers and Software packages

Currently there are two software products shipped with your DVB-PC TV device: Server4PC and DVBViewer TE.

You start the driver and software installation process by pressing the “Installation” button in the auto start application.



Figure 3.11: DVB-PC TV splash screen

Using the splash screen you also will get access to the manuals folder on the CD. Here you will find the current manuals in several languages.

If you press the “Software Tools” button, you will get access to the software tools folder on the CD. Here you will find clients for several data services client applications and other DVB related tools.

The “Exit” button will close the splash screen.

If this screen does not appear, start the Explorer and browse into the “Install” directory on your CD drive. Start the application “setup.exe” to start the installation process.

Installation of the DVB-PC TV Stars applications

The installation of the data reception application Server4PC is a run trough installation.



When you start the setup using Windows Vista, the “User Account Control” will appear:

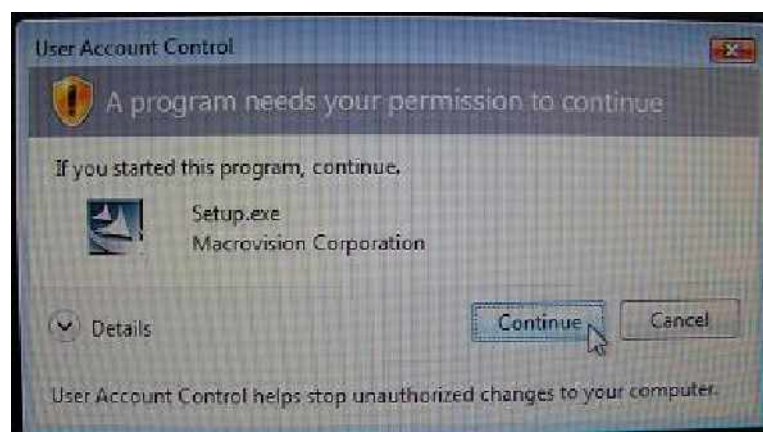


Figure 3.12: Windows Vista “User Account Control”

Please confirm this request by pressing “Continue”. If you press “Cancel” the Setup will be aborted and the installation of the driver and software will not continue.

1. First the language menu appears. Choose your language (e.g. English) and click “OK” to proceed.

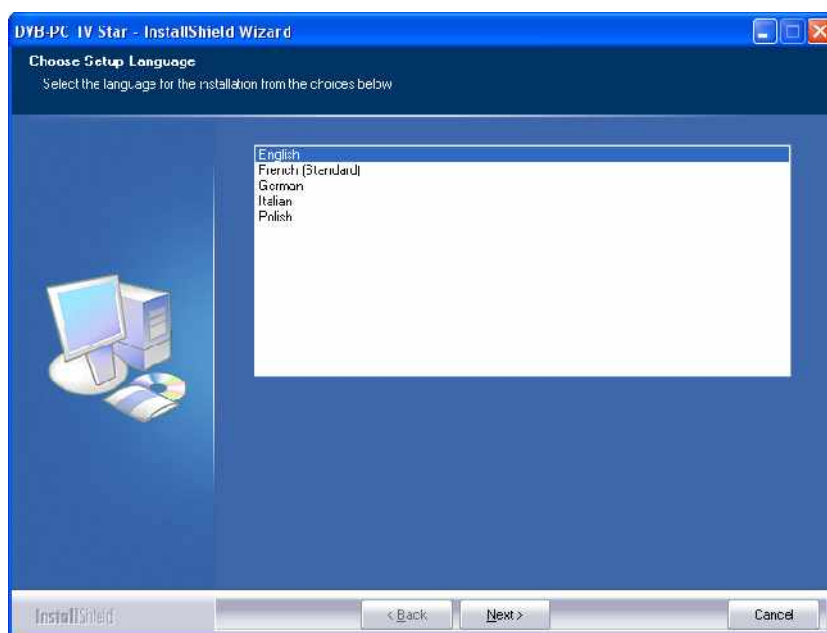


Figure 3.13: Choose Setup Language

2. After you selected the setup language the setup will install the current drivers for your TechniSat DVB-PC TV Stars devices installed to the system. If you already installed an older version of the TechniSat DVB-PC TV Stars drivers and software, the setup will automatically update the system with the current

TechniSat DVB-PC TV Stars - Users Guide Part 1: Installation

Chapter 3: Installing the driver and software components

driver.

3. Now the installation process will start. Click “Next” to proceed.

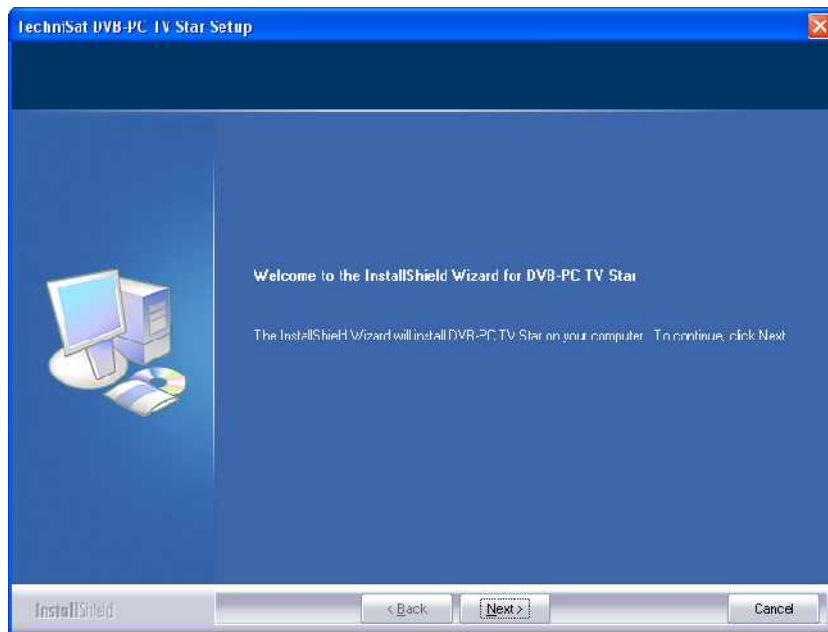


Figure 3.14: Welcome

TechniSat DVB-PC TV Stars - Users Guide Part 1: Installation

Chapter 3: Installing the driver and software components

4. Read the TechniSat DVB License Agreement and click “Yes” to accept this agreement.

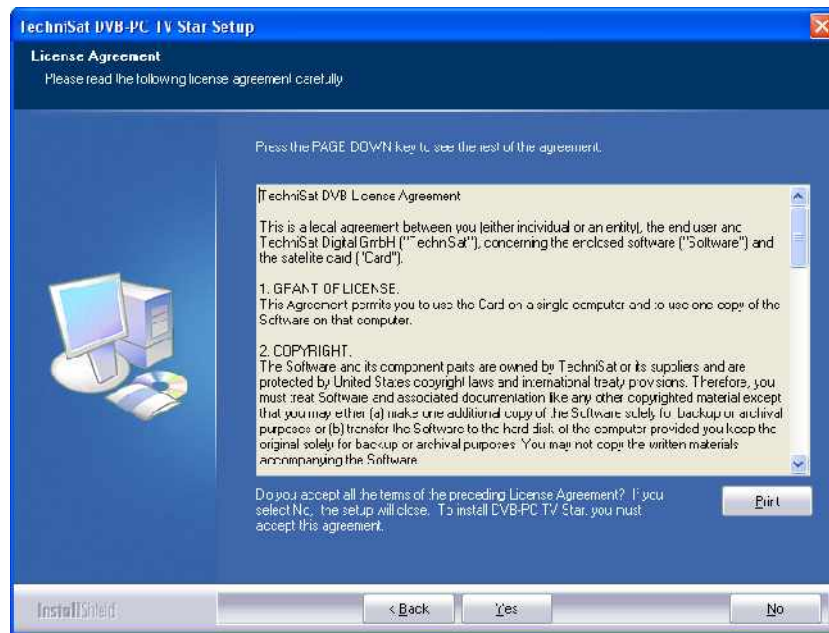


Figure 3.15: Software License Agreement

5. Use the default destination folder or choose your program destination path by using the “Browse” button. Press “Next” to proceed.

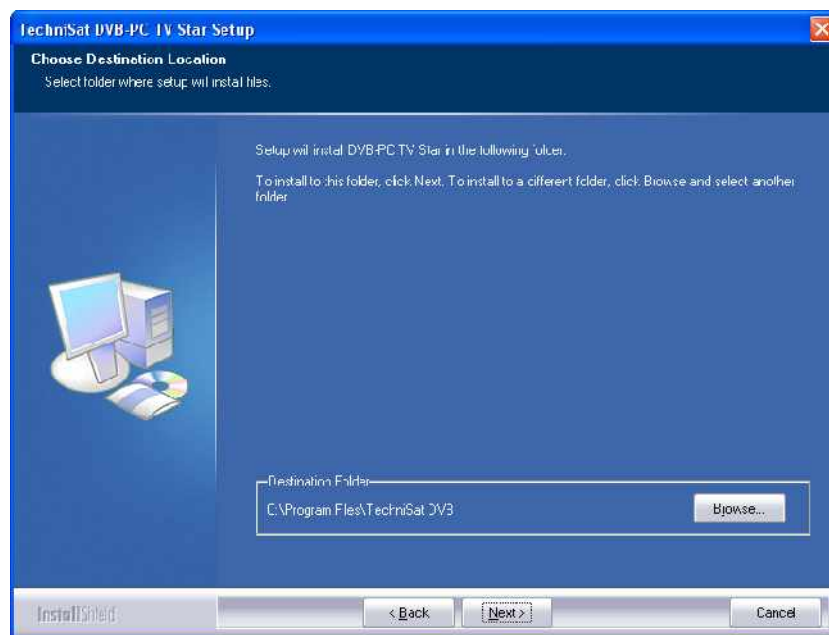


Figure 3.16: Choose Destination Location

TechniSat DVB-PC TV Stars - Users Guide Part 1: Installation

Chapter 3: Installing the driver and software components

6. Press “Next” to proceed.

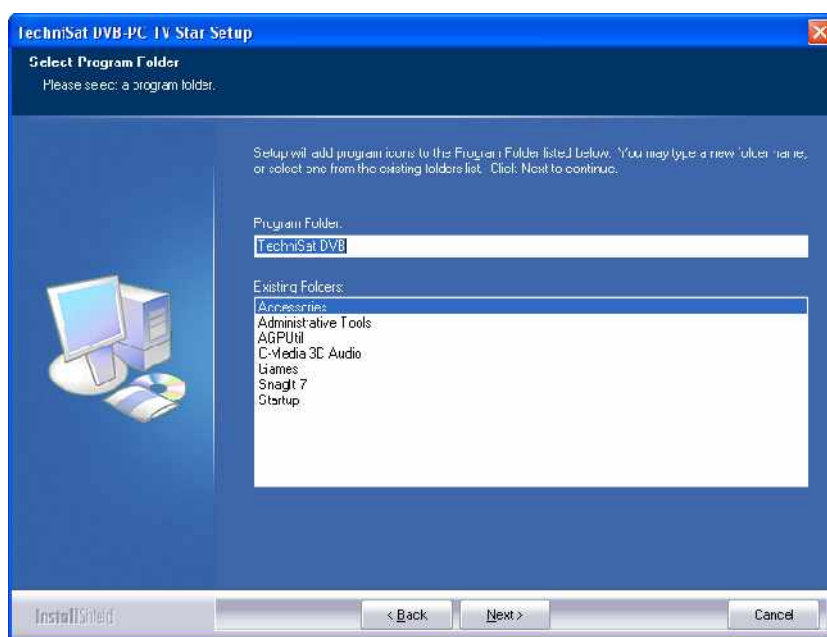


Figure 3.17: Select Program Folder

The setup will now perform the software installation.

7. After this, the installation of Server4PC and DVBViewer TE has been completed. You **have** to restart your computer system to activate the changes. Please save your data and close all applications first. Then click “Finish” to complete the setup and restart your computer.

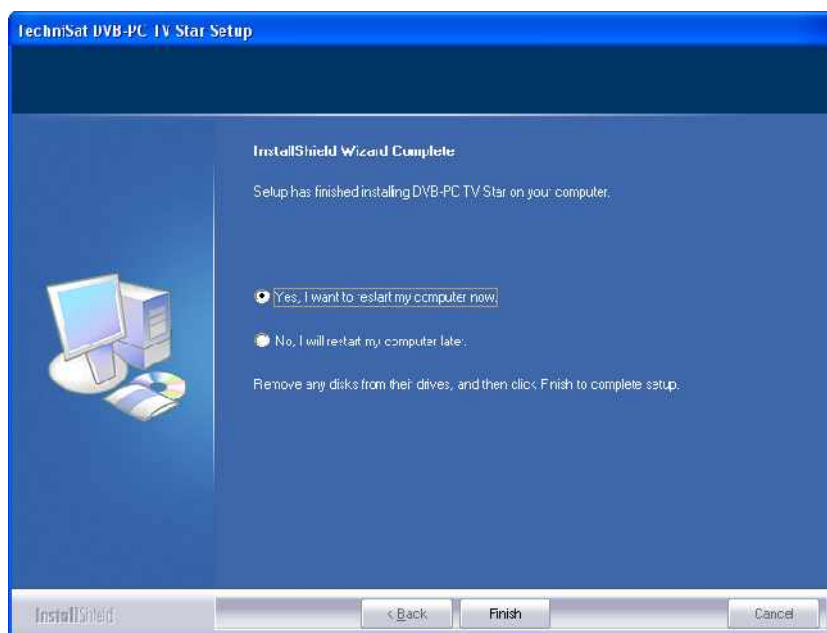


Figure 3.18 Setup Complete

The functionality of Server4PC is described in part 2 of the DVB-PC TV Stars documentation set. The functionality of DVBViewer TE is described in part 3 of the DVB-PC TV Stars documentation set. If any problem occurs, read the part 4 of the DVB-PC TV Stars documentation set, please.

Chapter 4: Connect to services

Summary

In this chapter you will get all information about the needed connection of your DVB-PC TV device with the reception equipment. You learn about the different connection methods used in combination with DVB-S (satellite), DVB-C (cable) and DVB-T (terrestrial) reception devices.

SkyStar 2 USB/PCI

This part explains how to connect the SkyStar 2 PCI/USB to your reception equipment and which components are required.

How to connect to a satellite



For reception of DVB services in combination with most common satellite systems (e.g. Astra 19.2°E) a universal LNB with a frequency range between 10.7 to 12.75GHz is required

There are three connection methods in combination with satellite reception possible:

- Using a Single-LNB/Twin-LNB/Quattro Switch-LNB
In this case the SkyStar 2 PCI/USB is connected directly to the LNB as shown in this picture:

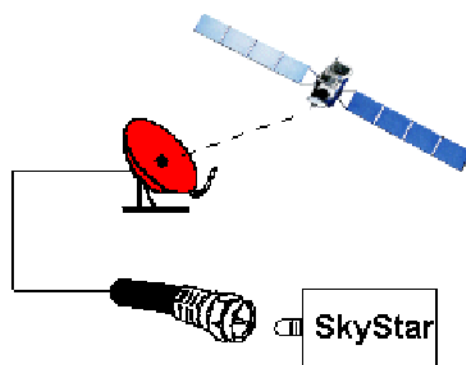


Figure 4.1: Connect a single LNB to SkyStar 2 TV PCI

- Using a multiswitch to increase the number of set top boxes, which uses one Quattro-LNB.

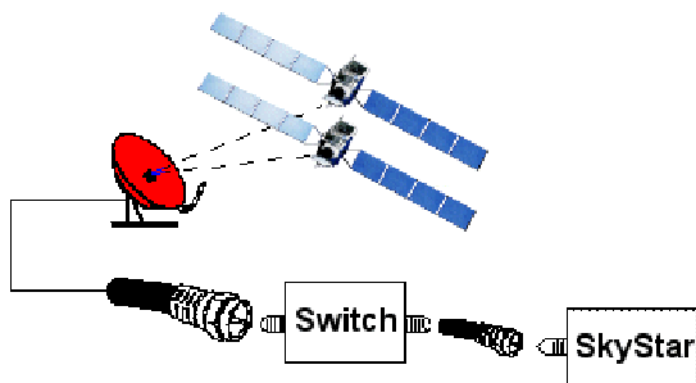


Figure 4.2: Connect two single LNB's to SkyStar 2 TV PCI

- Using a DiSEqC switch to receive multiple satellites with your SkyStar 2 / SkyStar USB.

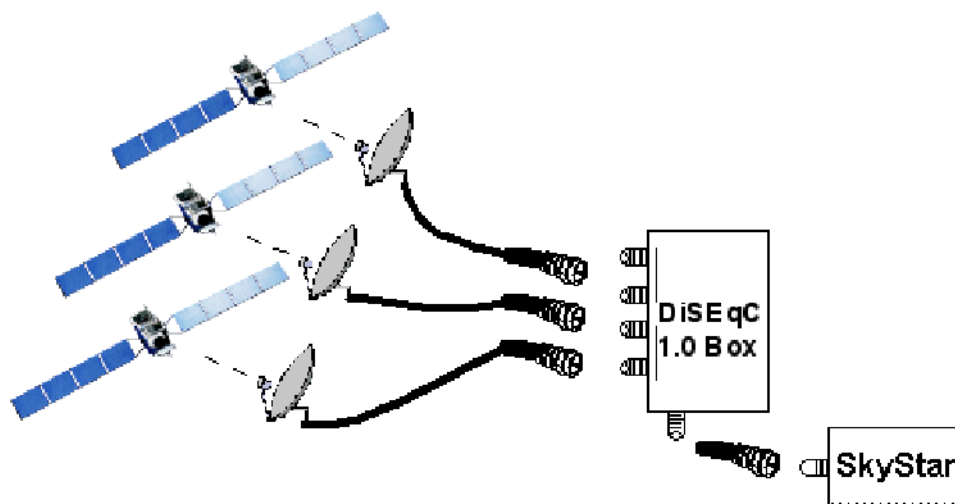


Figure 4.3: Connecting up to four LNB's to SkyStar 2 TV PCI



SkyStar 2 PCI/USB does support DiSEqC 1.0 only. With this DiSEqC Level it is possible to receive up to 4 satellites with 4 frequency areas per satellite. Almost all DiSEqC 2.0 switches are compatible to DiSEqC 1.0 devices, because DiSEqC 2.0 is backward compatible to DiSEqC 1.0.



The SkyStar 2 TV PCI / USB is not designed to be operated in combination with DiSEqC 1.2 / USALS satellite dish positioner systems. The usage of such systems will cause permanent damage to your DVB-PC TV device and possibly to your computer.

AirStar2 PCI/USB

This part explains how to connect the AirStar 2 PCI/USB to your reception equipment and which components are required.

How to connect to terrestrial services

You need at least a passive or active Antenna (e.g. TechniSat DIGIFLEX TT1) and connect this antenna to your AirStar 2 PCI card or USB box. If you need the information, which antenna type (passive or active) is required, ask your local reseller.

CableStar 2 PCI

This part explains how to connect the CableStar 2 PCI to your reception equipment and which components are required.

How to connect to cable services

If your building has a broadband cable wiring, you simply have to connect your CableStar PCI to your broadband outlet using an antenna cable. No additional equipment is required.