User Manual

V3.3

Contents

Chapter 1. Digital TV Tuner Introduction

1.1 Overview

TBS series digital TV Tuner cards/boxes are designed for receiving/recording digital TV programs(satellite, cable, terrestrial) on computer. There are plenty of choice for users, TBS provides PCI express, PCI or USB interface TV tuner which has single tuner, dual tuner or even quad tuner. Some tuners have Common Interface for watching pay TV with CAM. For example, with the Dual Tuner card TBS6981, users can simultaneously receive dual DVB-S2/S TV channels; this enables the user to watch one channel from one transponder/satellite while recording another channel from a second transponder/satellite. Alternatively the user can use one channel for data download while watching TV on another channel at the same time. TBS series products are fully supported under 32bit/64bit Windows 2000 / XP / Vista / 7 and Linux. The user can use TBS products for high speed satellite internet or data download if such service is provided by service providers.
Also popular DVB softwares like **DVBDream, DVBViewer, DVBlink, DVBcontrol, ProgDVB, Mediaportal,TSreader**…are supported.

1.2 Features

- **Digital Satellite TV & Radio Receiving**
  Enjoy Digital Satellite TV & Radio on the Computer
  Dual/Quad Channels DVB-S2/S Program Receiving to Watch and Record Simultaneously (For TBS 6981/ TBS 6984)
  Both DVB-S2 and DVB-S Program receiving (For DVB-S2 models only)
  Electronic Program Guide (EPG) and Teletext
  Multi Channel Preview and Channel Recall
  Program Watching Reminder
  Favorite List
  Dish Motor Driving Control

- **High Definition & Crystal Clear Video Quality**
  Support HDTV at High Resolution up to 1080i
  Support MPEG2 MPEG4/H.264 Decoding

- **Program Recording and Frame Capture**
  Real time and Scheduled Program Recording
  Time-Shifting free you from brief interruption
  Frame Capture, Edit and Slideshow

- **Software Features**
  4:3 & 16:9 Selectable Aspect Ratio
  Stereo Audio Effect Customization

Remote Control and Hot Keys
Video Quality Adjustment

- **CCM,VCM and ACM mode support (For TBS 6925 and TBS 5925)**
  8PSK /QPSK/16APSK/32APSK Mode
  Blindscan
  Wide range symbol rates support, from 200Ksps to 45Msps
- **Others**
  Broadband Internet via Satellite*
  High-speed Data Download via Satellite*
  IPTV Streaming
  HTPC

*Depends on service providers.

1.3 Hardware & Software Requirement

To use TBS digital satellite TV tuner card/box, you must have satellite **dish**, **LNB**, **cable** and other necessary accessories. You must have one **computer** with the following configurations:
Windows 2000/XP/Vista/7 or Linux
DirectX9.0 or later Version
Available PCI Slot/ Available PCI Express Slot/ Available USB2.0 Port
CD-Rom (Driver and Software Installation)

For DVB-S
1GHz Pentium III CPU or Above
256MB RAM or Above
Graphic Card with at Least 16MB RAM

For DVB-S2 HDTV (1080i/ (AVC/H.264))
3.0 GHz Pentium Ⅳ CPU or Above
1 GB RAM or Above
Graphic Card with at Least 64MB RAM

Chapter 2. Installation

2.1 Hardware Installation

For installing PCI or PCI Express card, power off the computer, remove computer cover and take out cover panel of PCI/PCIe slot in which you want to put the card. Insert the card in PCI/PCIe slot and fix card bracket with screw. Make sure the card fit in PCI/PCIe slot tightly. Put back computer cover.

Set your satellite dish aimed at the right satellite. Connect dish LNB to PCI card "**LNB IN**" with cable.

For installing USB DVB-S/S2 Q-Box, set your satellite dish aimed at the right satellite. Connect dish LNB to Q-Box "**LNB IN**" with cable. Plug the power supply and connect it to Q-Box "**DC7.5V**". Connect USB cord with one end to your computer and the other end to Q-Box "**USB2.0**" .As show in the picture below.

2.2 Software Installation

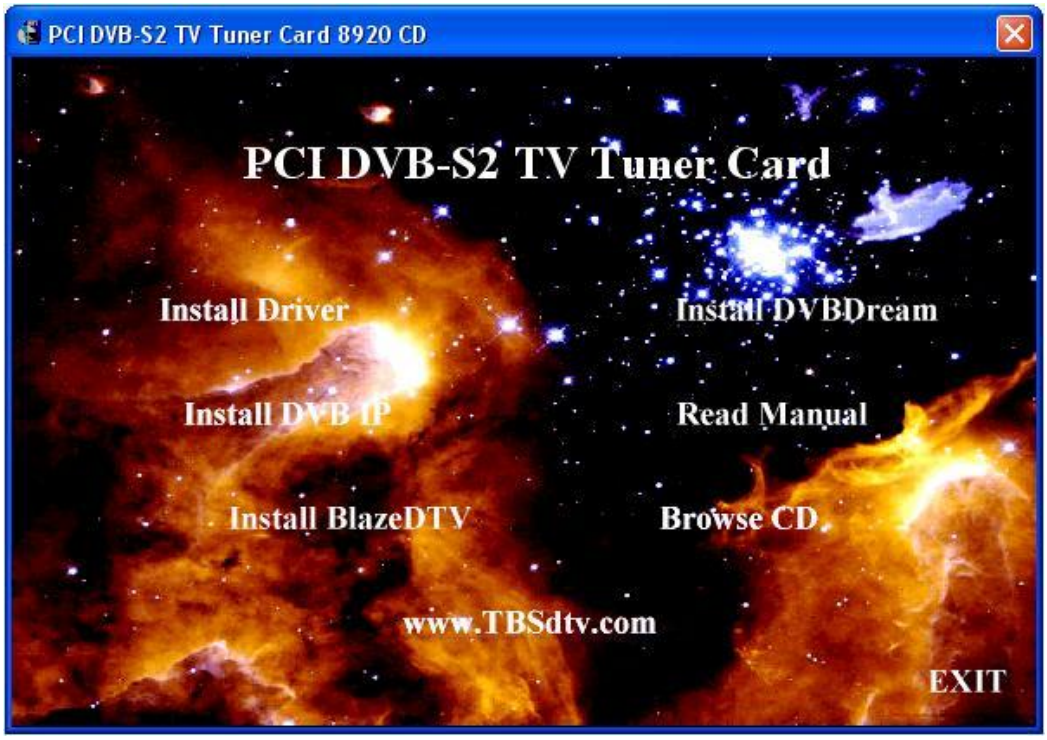
Before you begin, make sure your computer qualify the system requirements. Let's take TBS8920 as an example.

Step1: Cancel "New Hardware Wizard"

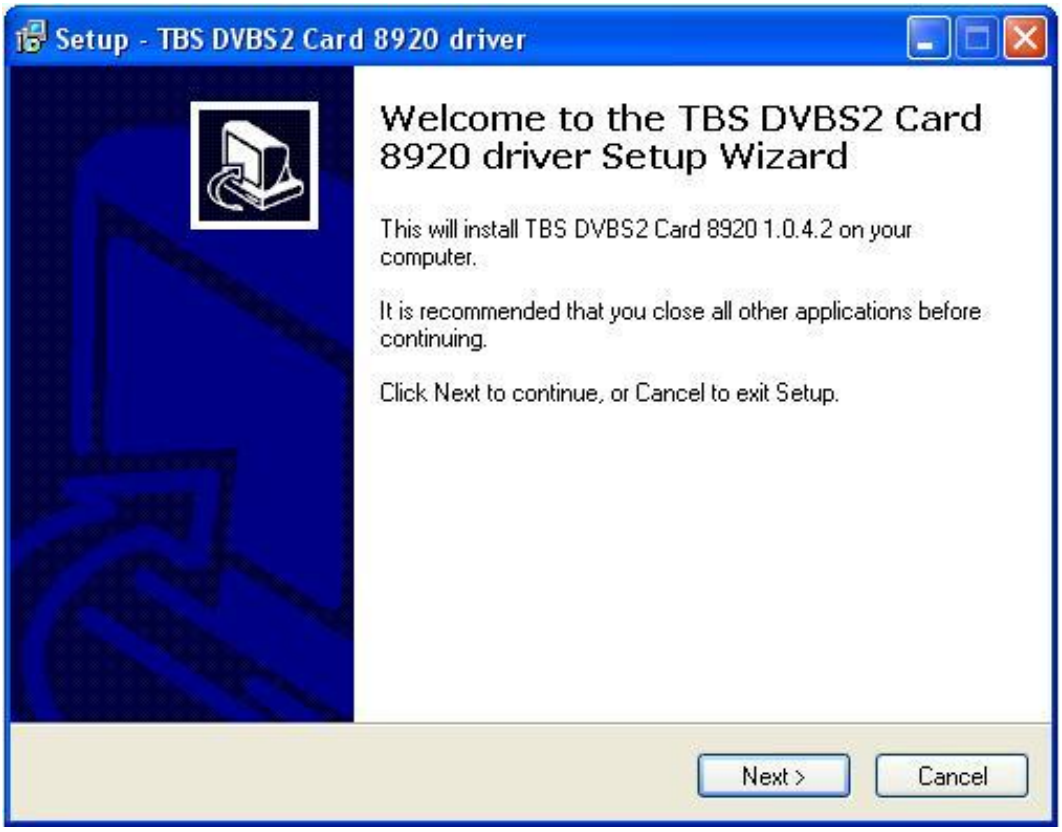
After the hardware installation, Windows may find new hardware, please choose "**Cancel**" from the pop up "**Find New Hardware Wizard**" window. We will install the card driver from Installation CD later.

Step2: Install TBS Card Driver

Insert the Installation CD into your CD-ROM. Click "**Install Driver**" while auto-run appears.

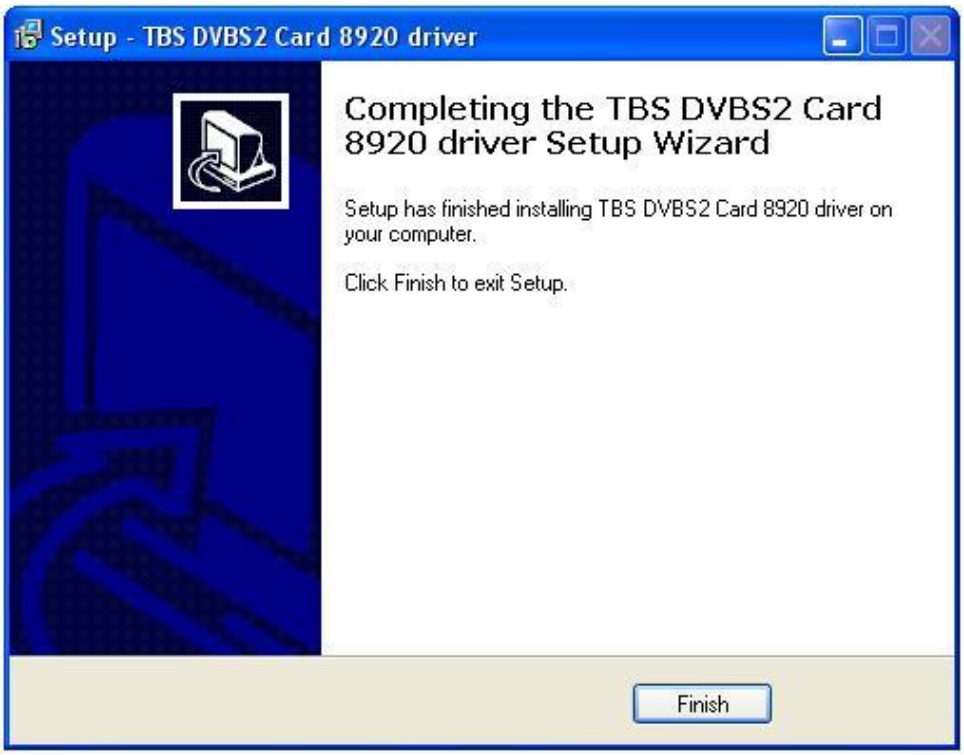


A setup window will pop up.



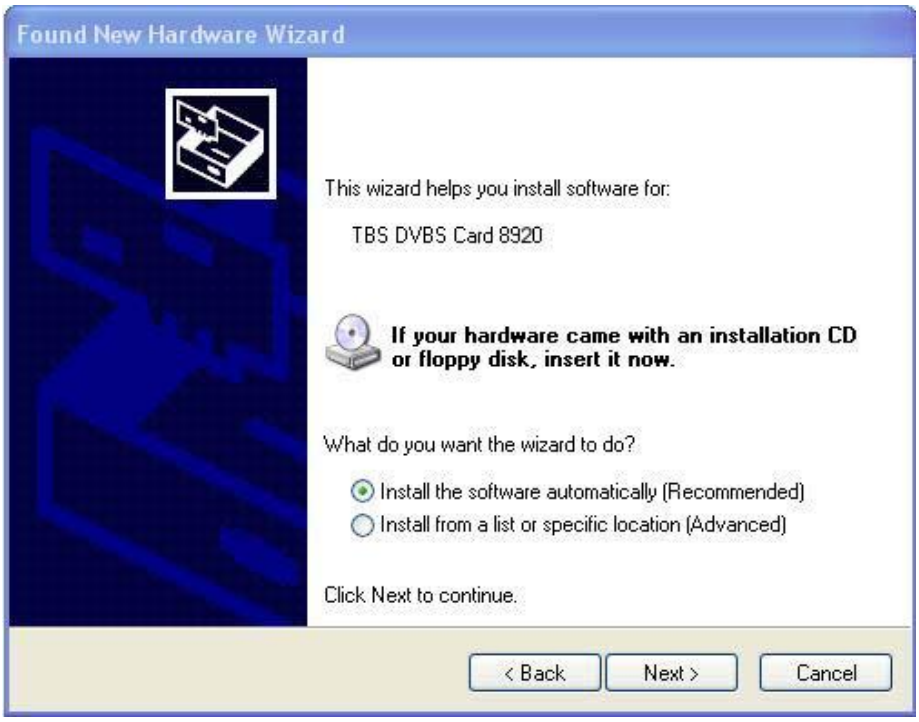
Click "**Next**" to continue. While the below window pop up, Click "**Continue Anyway**".

When driver installation completed, the below window will pop up.



Now, restart computer, "**Find New Hardware Wizard**" window will pop up again. Tick "**No, not this time**" and click "**Next**" to continue.

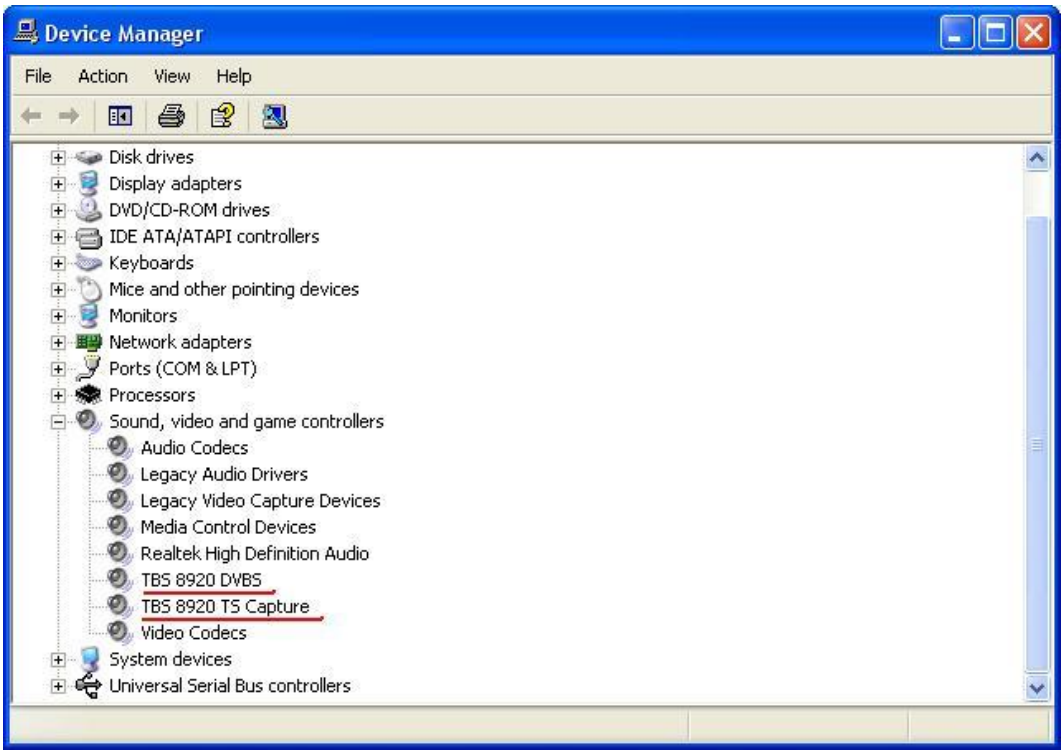
Tick "**Install the software automatically(Recommended)**" and click "**Next**".



The windows below will appear again, click "**Continue Anyway**" to finish driver installation.

After this, another "**Find New Hardware Wizard**" window will pop up, repeat previous steps. To verify if driver was correctly installed, choose "**My Computer**"

, right click and choose "**System Properties**" to pop up "**System Properties**" windows, click "**Hardware**" → "**Device Manager**". Then click "+" infront of "**Sound,video and game controllers**", if you can see "**TBS 8920 DVBS**" and "**TBS 8920 TS Capture**", that means you do have installed driver correctly.

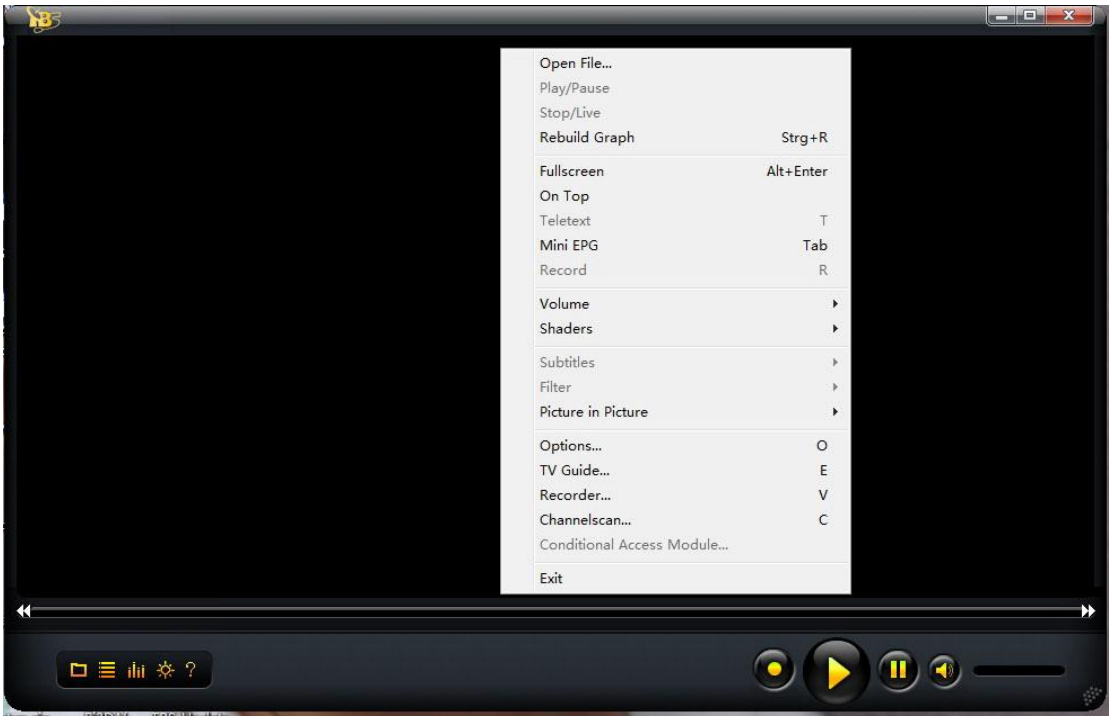


Step3: Install TBSviewer

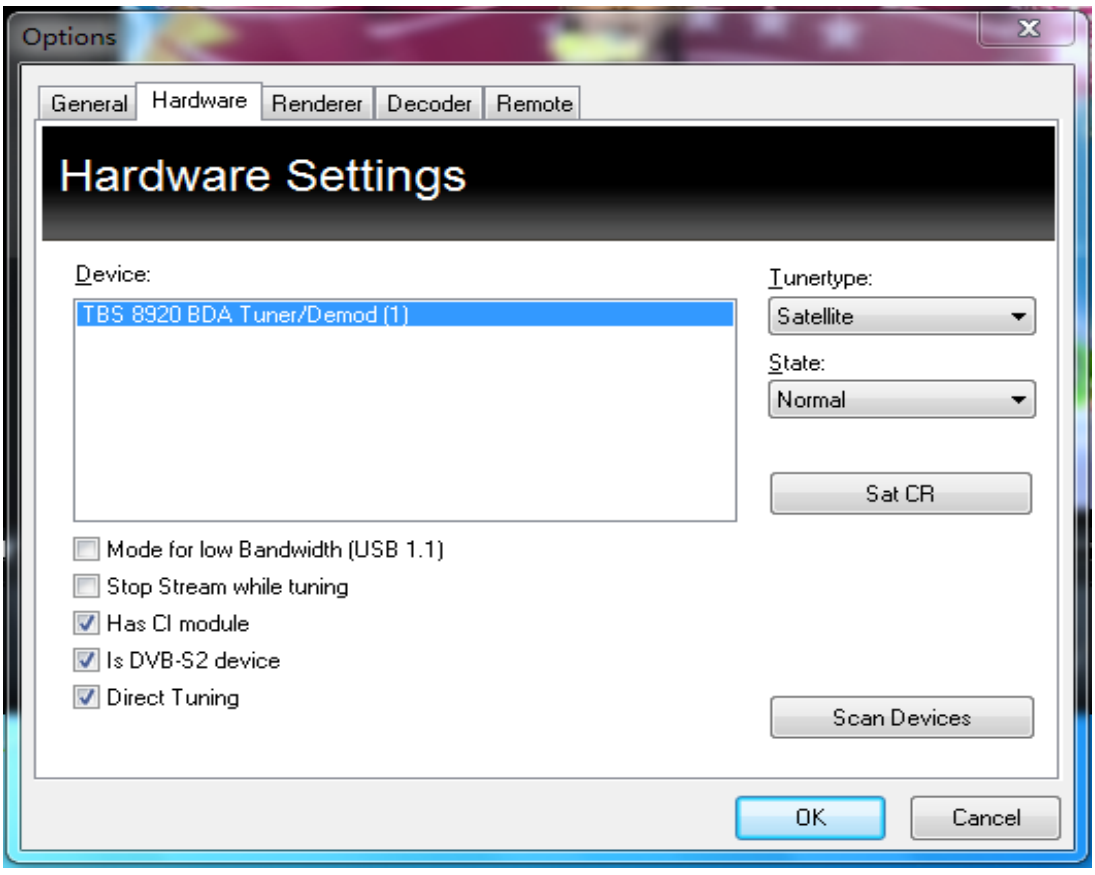
Click "**Install TBSviewer**" from CD auto-run to start installation, click "Next" until installation is completed.

Double click the icon 

to launch TBSviewer, right click to pop out the window and choose the "Options".



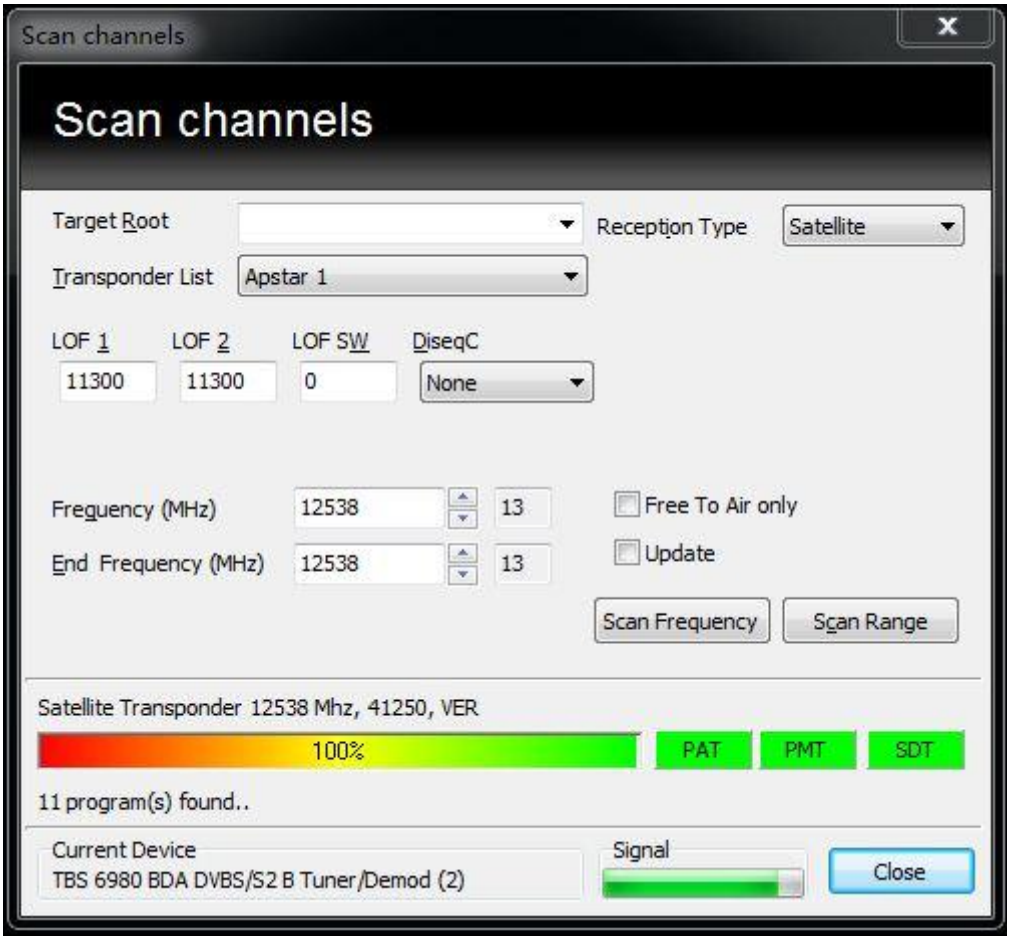
If TBS product device is installed in the computer, For example, TBS 8920 PCI DVB-S2 Tuner Card is installed, you can see "TBS 8920 BDA DVBS/S2 Tuner/Demod(1)" on hardware window.



Chapter 3. How to Use TBSViewer

3.1 Scan Channels

Run TBSViewer and right click to pop out the window, then choose the "**Channelscan**". The windows of "**Scan channels**" will pop up. You can select existing satellite transponders list from the scroll down menu. Then set up the DiseqC, LNB LOF1, LOF2 and LOF SW, input transponder Frequency range here and start scan by frequency or by range.
If you don't use any Diseqc, just choose "None", if you do use Diseqc, choose correct Diseqc type.



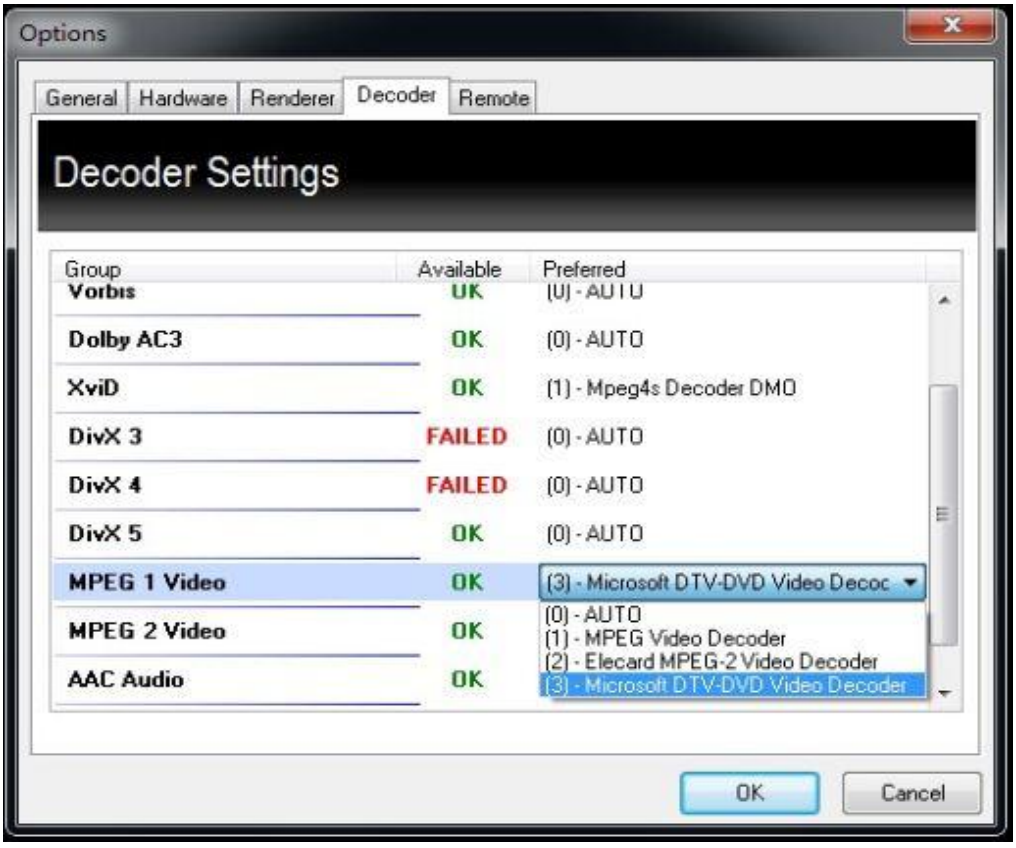
After scan is completed, the found program numbers will be shown and the program list will be automatically saved. You can close the "**Scan channels**" window.

3.2 Watch Satellite TV

Move the mouse to the right part of the TBSViewer main window, the channels list window will appear. Double click a selected channel to play.

TBSviewer allows links to different Video/Audio codecs. To change Video/Audio codec, right click to pop up menu window and click the "**Options**", enter the "**Decoder**" menu. Double click related options to select different codecs.

If your system is Windows 7, you can select "Microsoft DTV-DVD Video Decoder" which is bundled in the system.



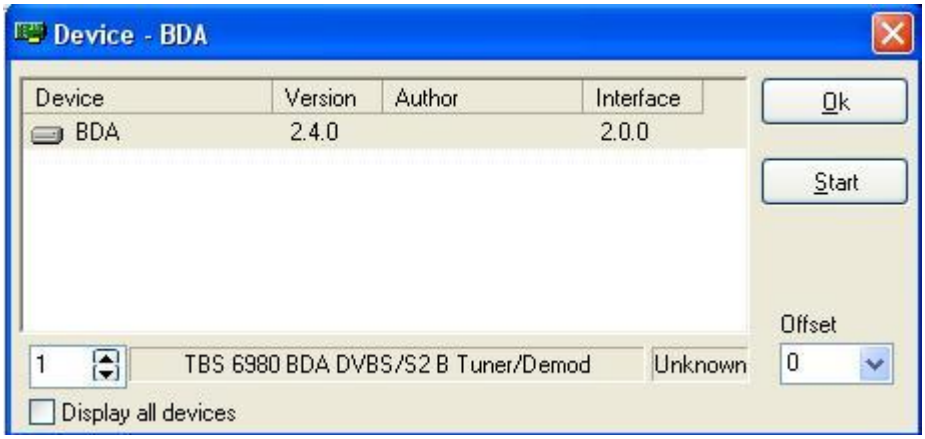
Chapter 4. How to Use DVBDream

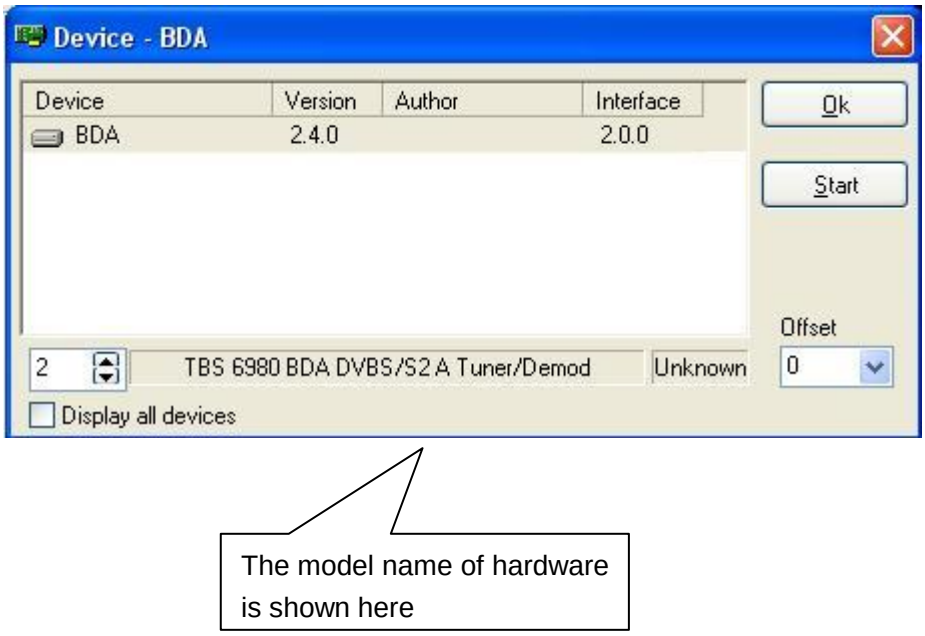
4.1 Install and use DVBDream

Click “Install DVBDream” to start installation, click “Next” until installation is completed.

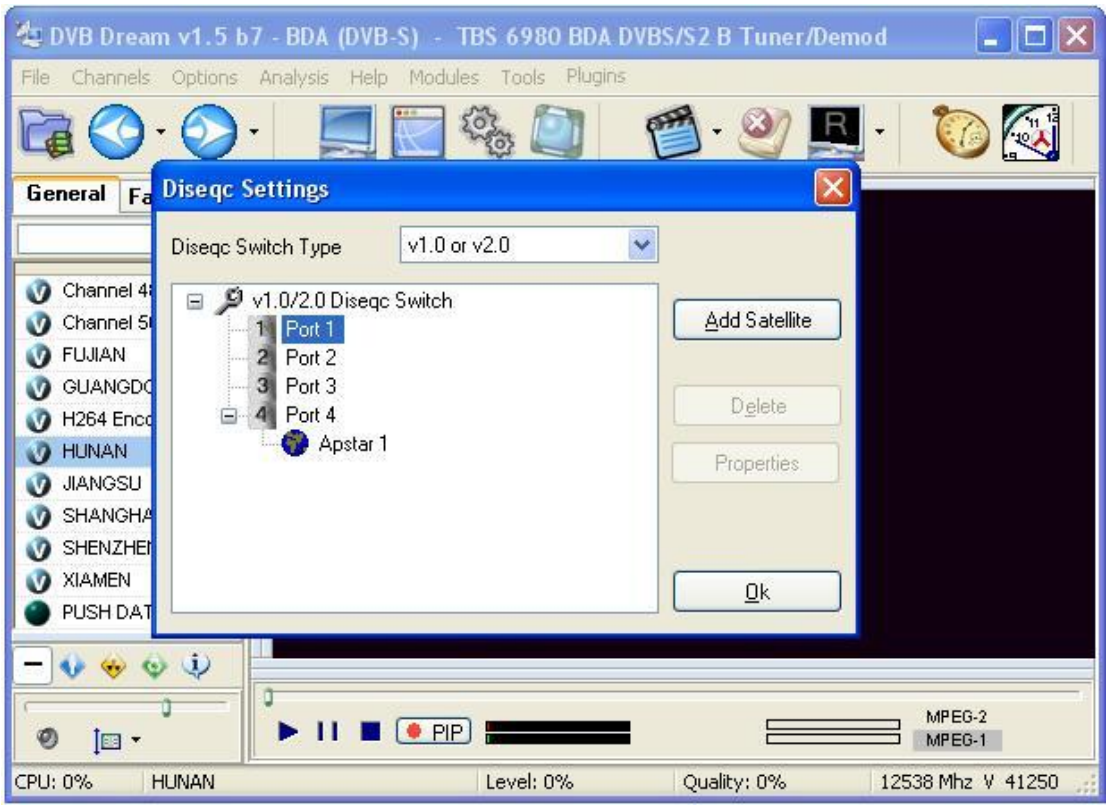
Run DVBDream, if TBS device product is installed in the computer, For example, TBS 6980 PCI-E DVB-S2 Dual Tuner Card is installed, you can see “TBS 6980 BDA DVBS/S2 Tuner/Demod” on top of DVBDream window.

Click “Device” on “Options” menu. You can see TBS model name on the dialog. Some times, if device not started, you need to choose correct device from the up and down arrow and click “Start” to initialize device.
For shifting between different tuner of TBS 6980 card, you can click up or down arrow.
DVB-S: TBS 6980 BDA DVBS/S2 A Tuner/Demod = LNB 1
DVB-S: TBS 6980 BDA DVBS/S2 B Tuner/Demod = LNB 2

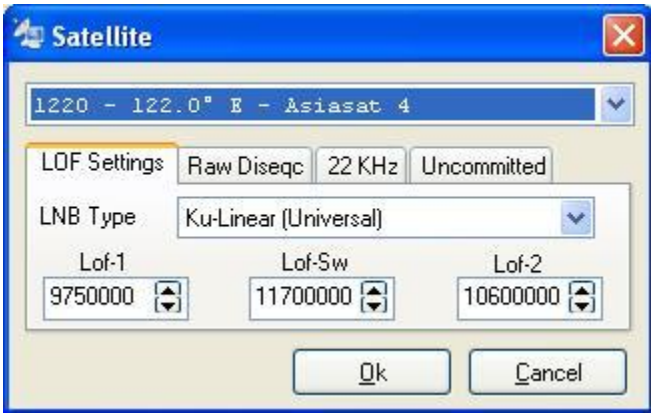




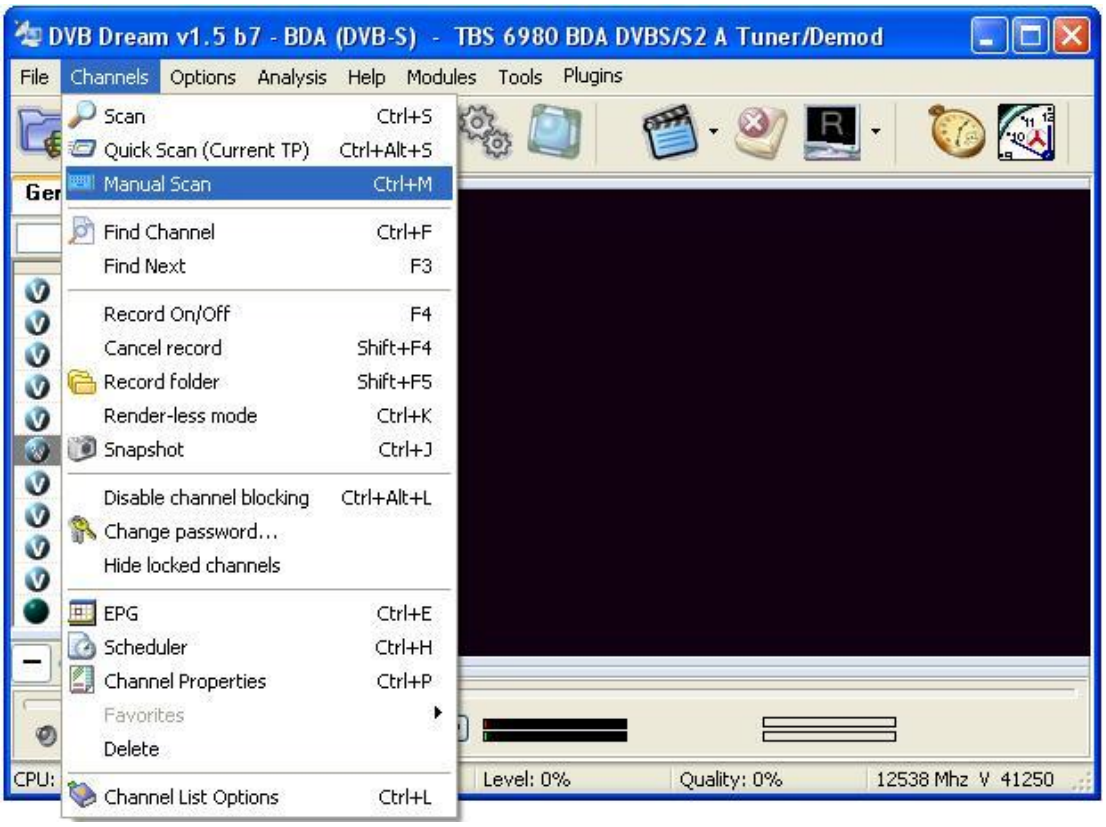
For setting up satellite and DiSeqc switch, click on “Diseqc” on “Options” menu. If you don’t use any Diseqc, just choose “None”, if you do use Diseqc, choose correct Diseqc type, port and click “Add Satellite”.



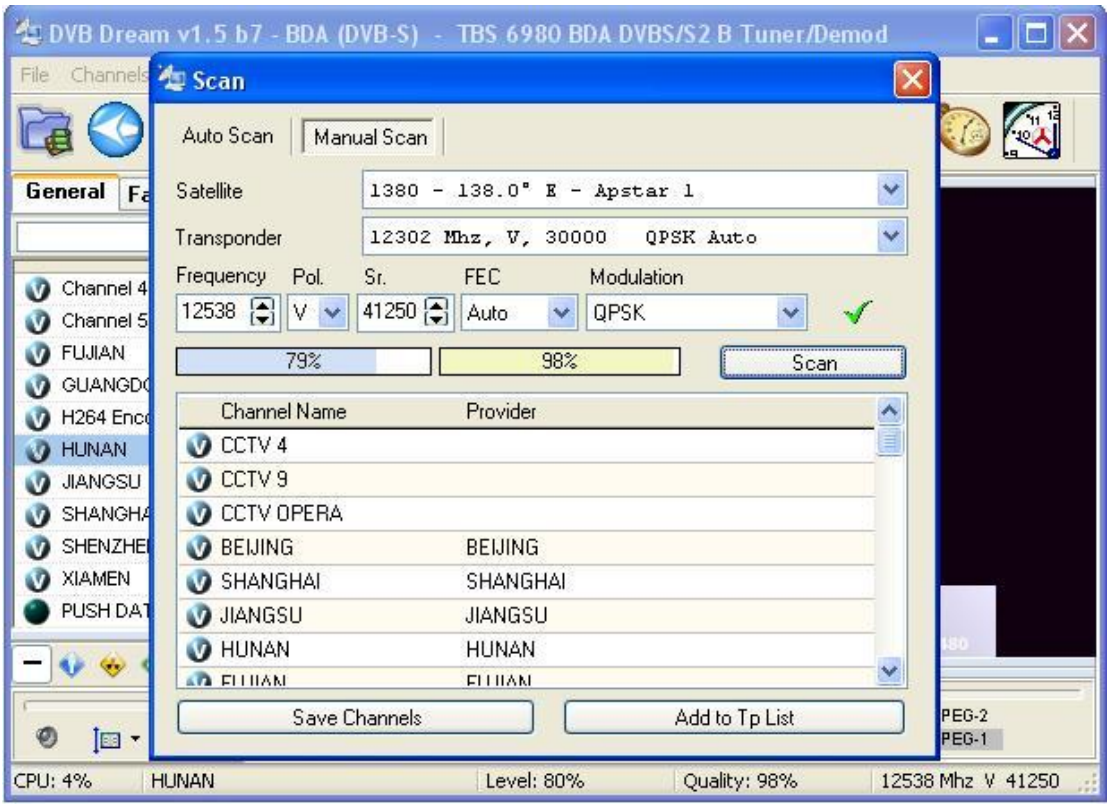
Choose correct satellite from scroll down menu, set up LOF and other parameters.



After Diseqc and LNB setting is completed, Click “Scan” or “Manual Scan” on “Channels” menu.

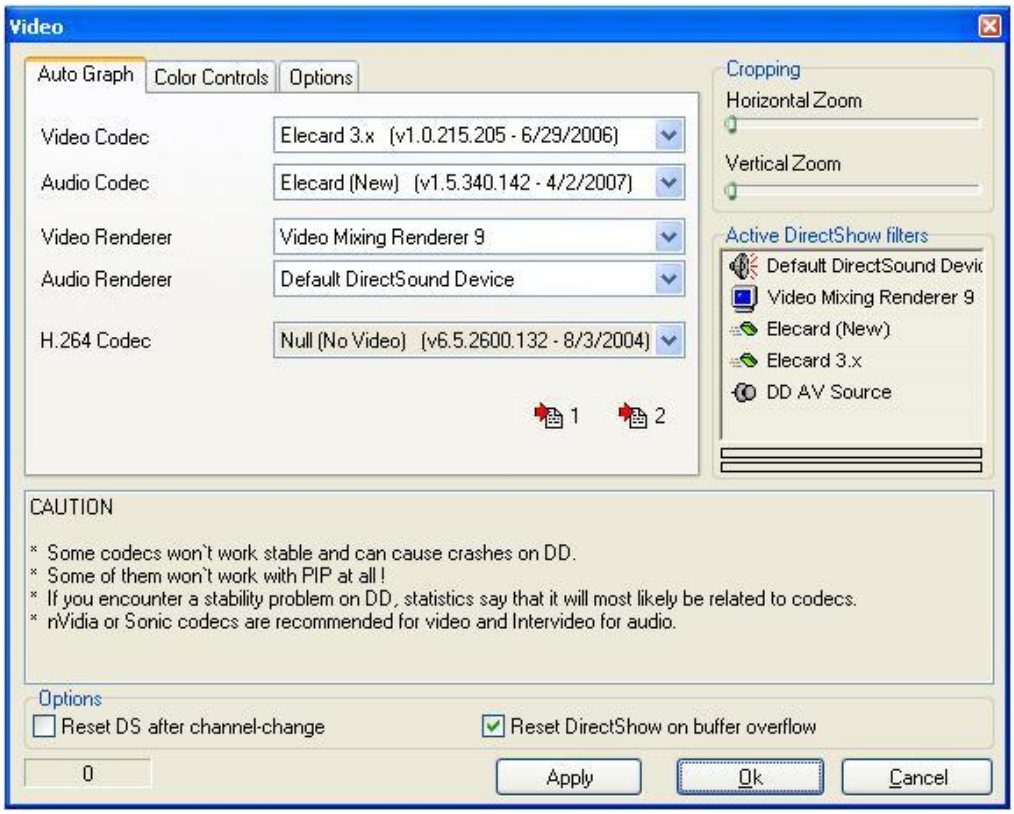


After scanning, Programs in this Transponder or Satellite will be listed, click “Save Channels” to save all the channels available.



Click on the program you want to watch in the channel list to play.

DVBDream allows links to different Video/Audio codecs, to change Video/Audio codec, click "Video" on "Options" menu. Choose the Video/Audio Codec and Renderer you want to use, then click "Ok" and "Apply".



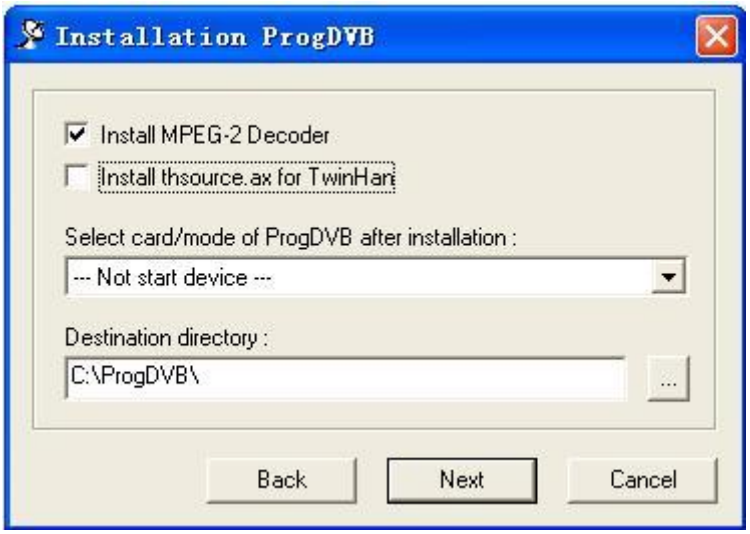
If you're not using the installation of DVBDream from CD, you might need to copy the "**bda.dev**" file from CD DVBDream folder to DVBDream "**Devices**" folder.

Chapter 5. How to Use ProgDVB

ProgDVB Player is one of the popular free DVB software for satellite TV programs. It supports lots of plugins which you can find from internet. TBS Digital Satellite TV tuner card/box can work with **ProgDVB** smoothly. The following user guide is Progdvb version **5.X only**. For user guide about latest version, please go to http://www.progdvb.com/ and download manual at "**Download**" section.

5.1 Install ProgDVB

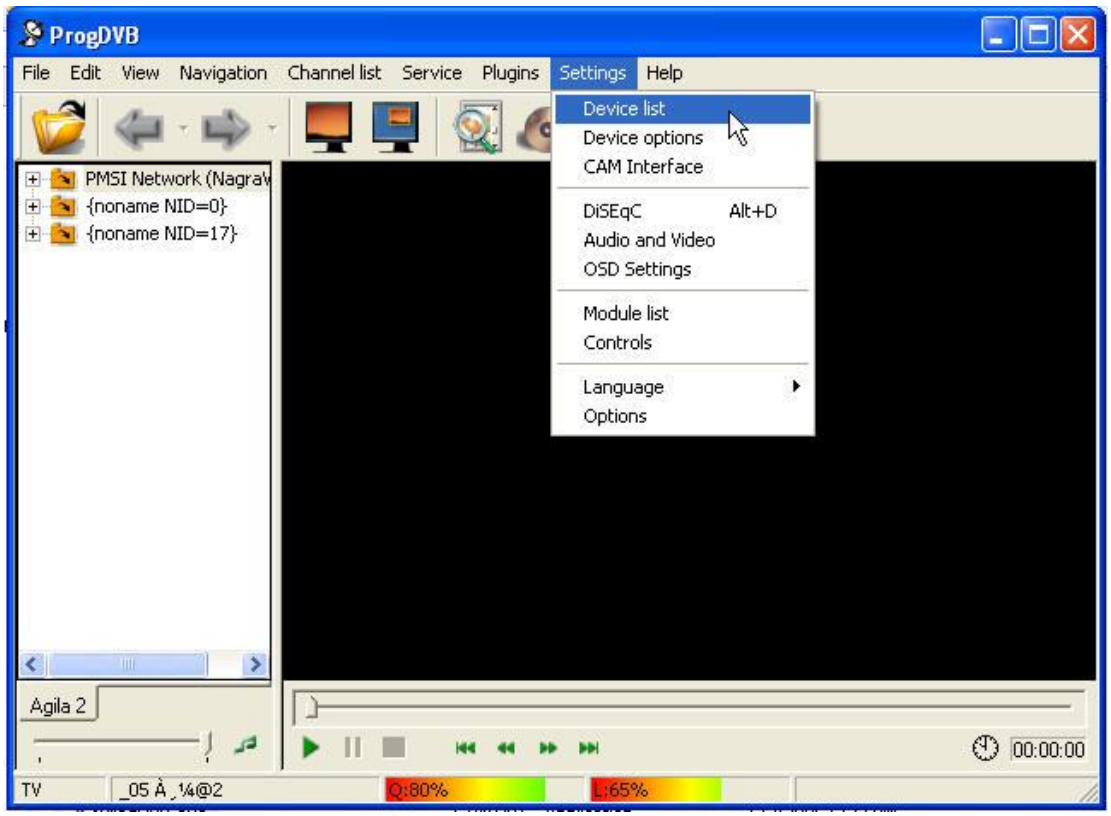
Download the **5.X** version of **ProgDVB** from http://www.progdvb.com/ . Double click installation application to set up **ProgDVB**. You may select "**Not start device**" and start TBS Device from device list later. Also tick "**Install MPEG-2 Decoder**" while installing.



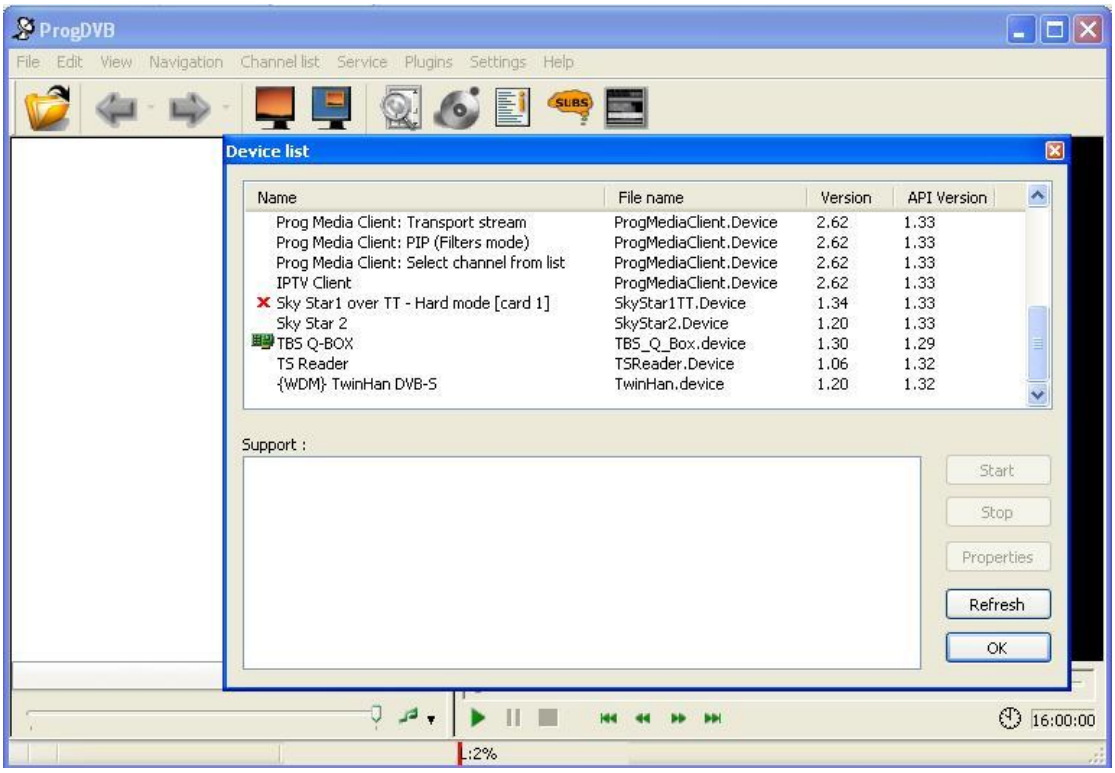
Copy "**BDA.device**" which you can find on Installation CD **..\Progdvb** to the **Modules** directory where you installed **ProgDVB**. For example, if you installed **ProgDVB** at **C:\Progdvb\Progdvb.exe** , then copy **BDA.device** to **C:\Progdvb\Modules** Copy "**Controls.ini**" file to **ProgDVB** root directory to make remote control works with Progdvb.

5.2 Use ProgDVB

Now double click Progdvb.exe, after the main window pop up, click "**Settings**" →"**Device list**" .

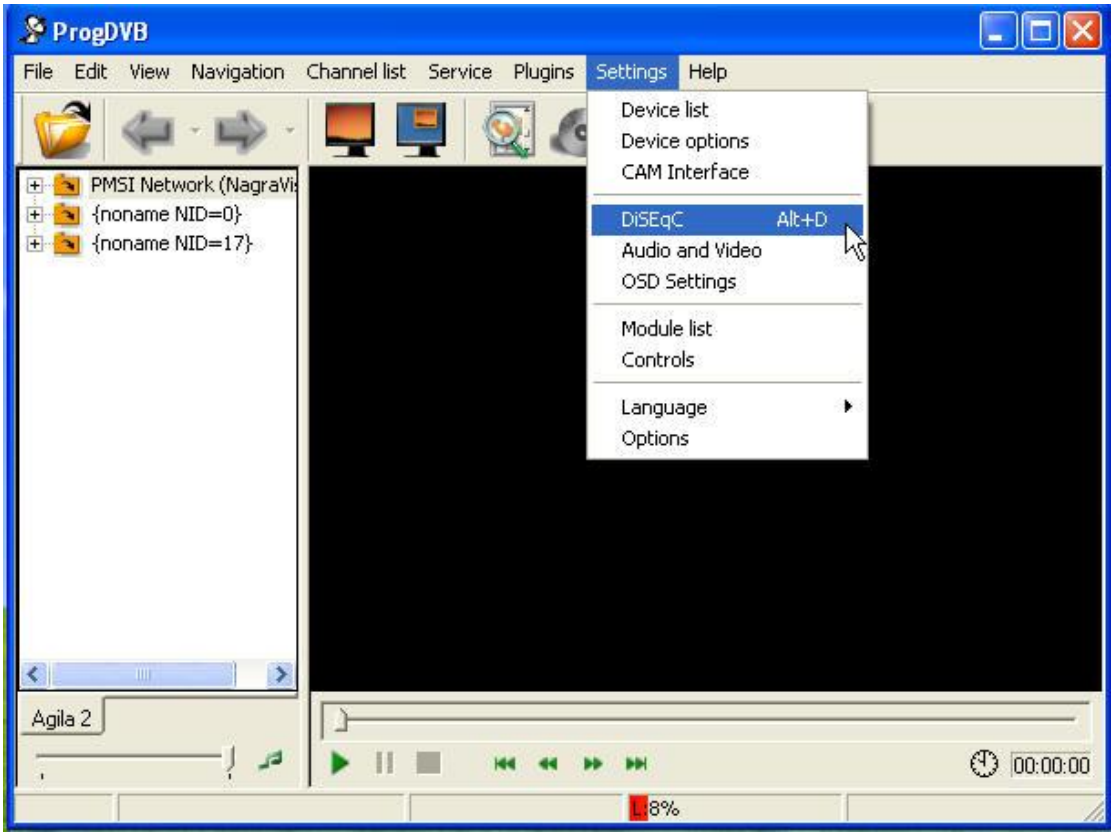


A "**Device list**" window will pop up, find TBS Device in the device list, for example "**TBS Q-Box**" was found in the picture below, click to choose it and click "**Start**", while the icon in front of "**TBS Q-Box**" turn green, TBS Q-Box has been successfully started.

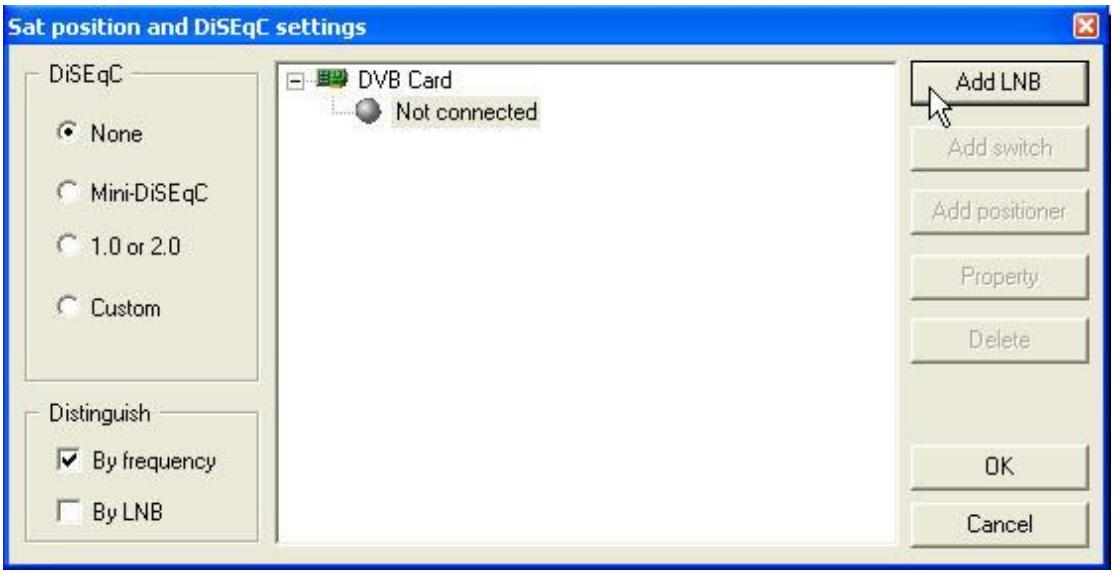


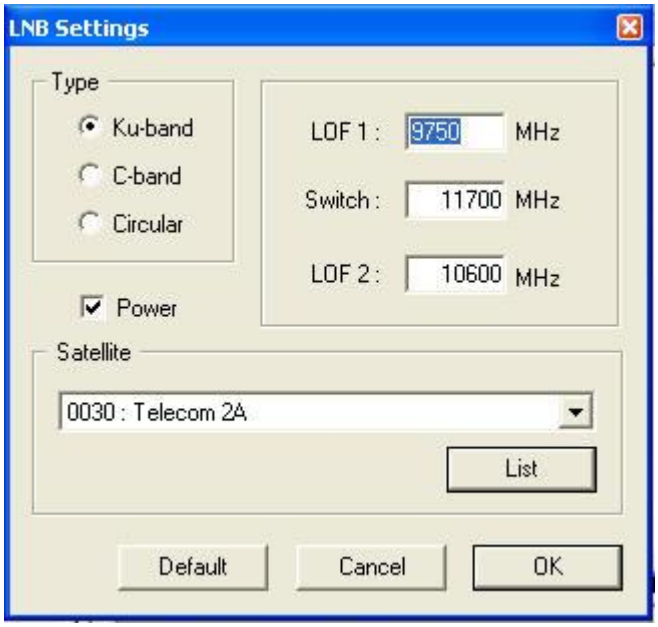
Click “**OK**” to close “**Device list**” window.

Click “**Settings**”→“**DiSEqC**” to pop up “**Sat position and DiSEqC settings**” window.

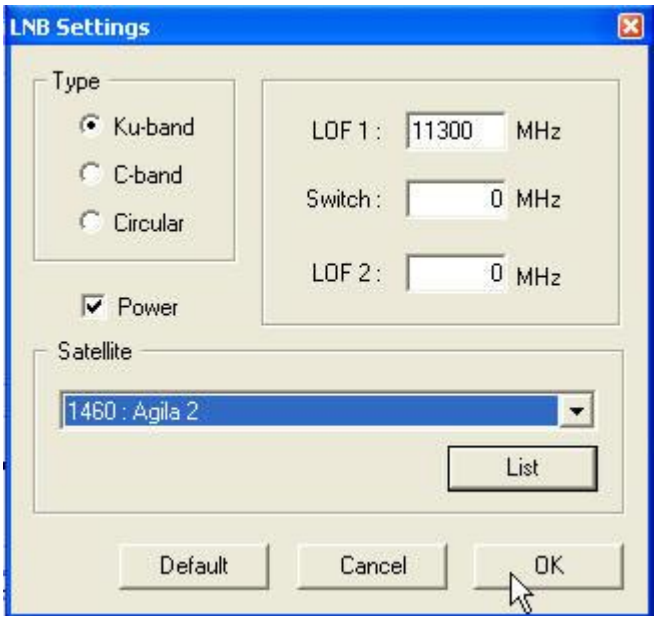


Choose your DiSEqC types from “**None**” “**Mini-DiSEqC**” “**1.0 or 2.0**” and “**Custom**”. Tick “**Distinguish**” “**By frequency**” and click “**Add LNB**” to pop up “**LNB Settings**” window.



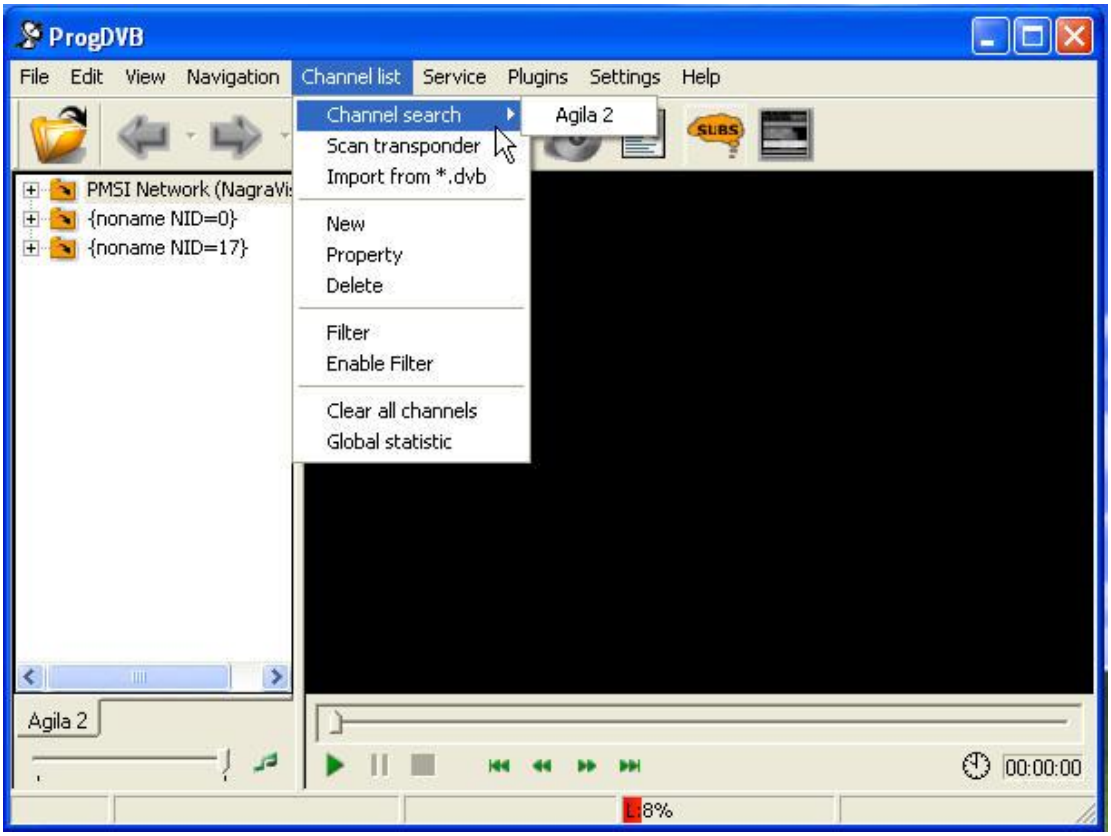


Choose your LNB type and type in your LOF Frequency. Choose the satellite from the scroll down menu.

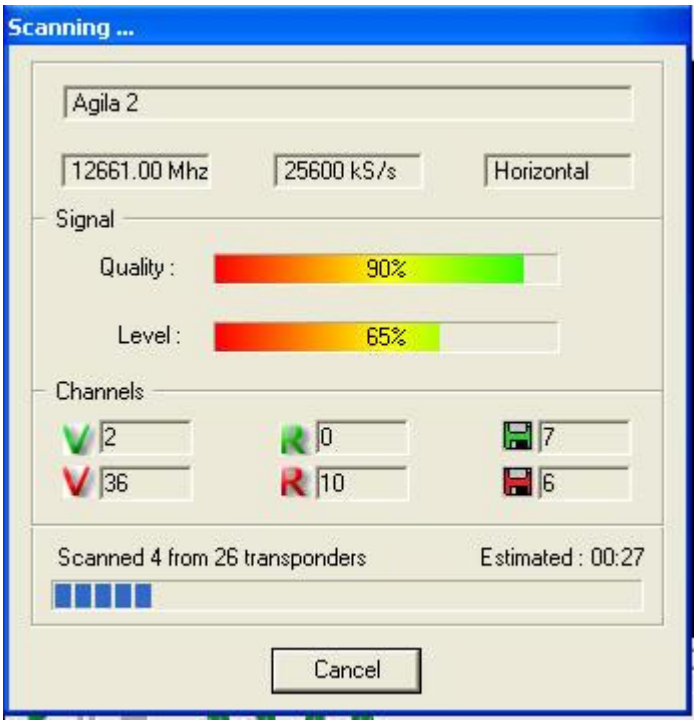


Click "**OK**" to return to "**Sat position and DiSEqC settings**" window. Click "**OK**" again to return to main window.

Click "**Channel list**" → "**Channel search**" → "**Satellite**" to scan all the transponders in your satellite.

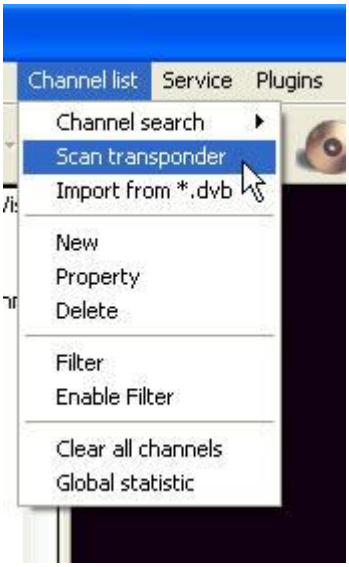


The scanning window as following.

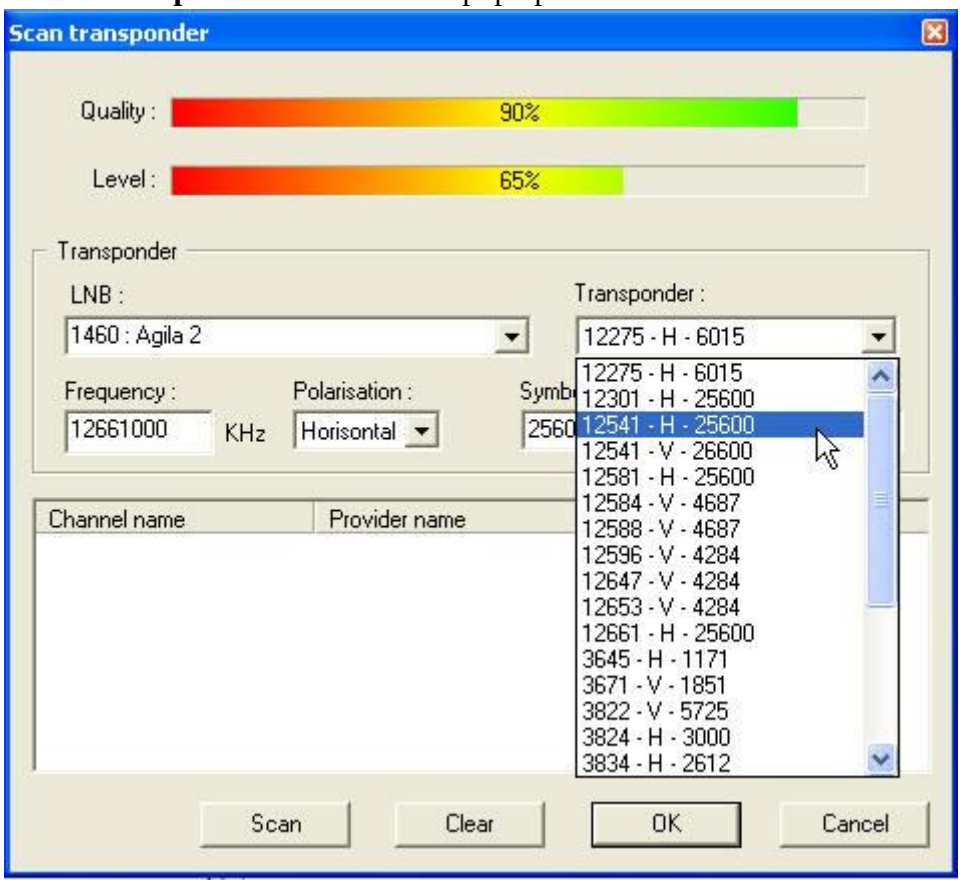


The default Transponder parameters may not be the latest and correct. You'd

better scan each single Transponder by click "**Channel list**"→"**Scan transponder**".



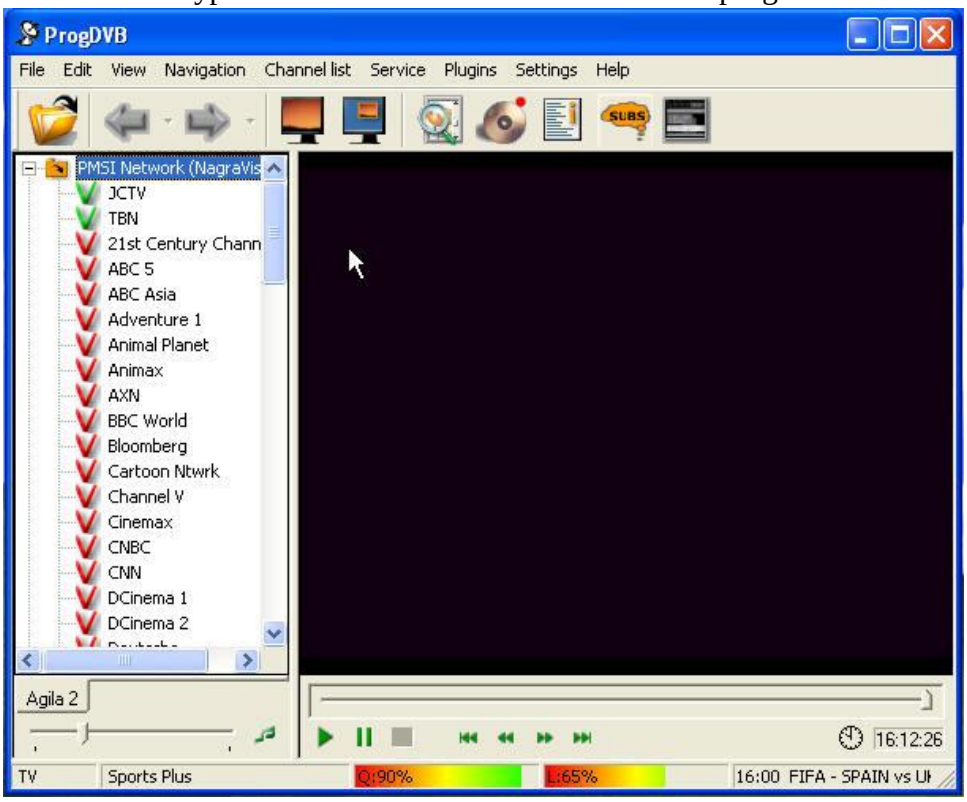
The "**Scan transponder**" window will pop up.



Choose the satellite from the scroll down "**LNB**" menu, choose the transponder from the scroll down "**Transponder**" menu. If you can't find the correct transponder parameter, you can edit the correct "**Frequency**", "**Polarisation**" and "**Symbol rate**"

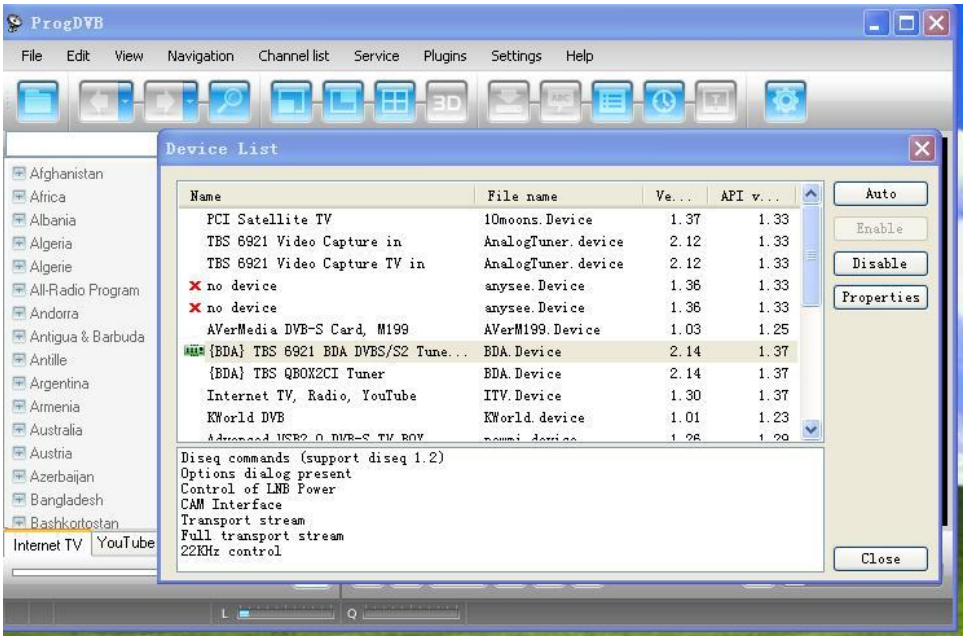
by yourself then click "**Scan**". To check latest satellite Transponder information, please refer to http://www.lyngsat.com

The successfully scanned channels will be saved on the panel which is at the left side of the main window. The channel with green tick is free channel and the channel with red tick is encrypted. The channel with **R** mark is radio program.



5.3 ProgDVB 6.X

To use ProgDVB 6.X version, just put the "**TBS.eBDA**" file in the **ProgDVB** Modules folder **..\ProgDVB\Modules** . The program should detect TBS BDA Tuner automaticly, if not, you can enable the tuner in the "device list".



Chapter 6 . How to Use the TS Capture Tool

TBS6925 and TBS 5925 are known as professional PCI-E DVB-S2 TV Tuner Card/Box, featuring CCM, VCM and ACM mode support and Multiple Transport Stream Receiving.

Here are the procedures of how to use the TS Capture tools to receive CCM, VCM and ACM signals.

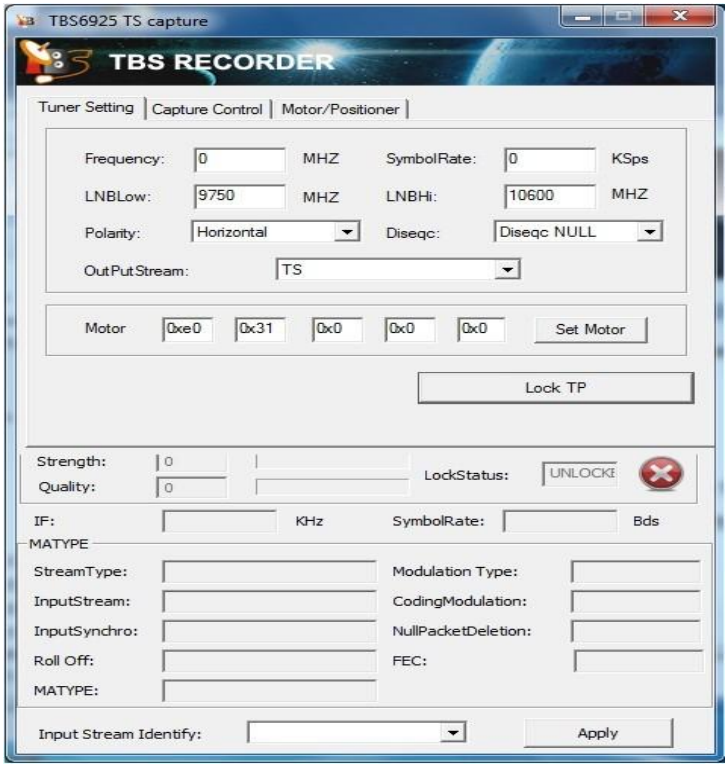
Step 1: Install TS Capture Tool

After installing the TBS 6925/5925's driver on your computer, please click the **"Install TS Capture Tool"**, just click **"Next"** to finish the installation.

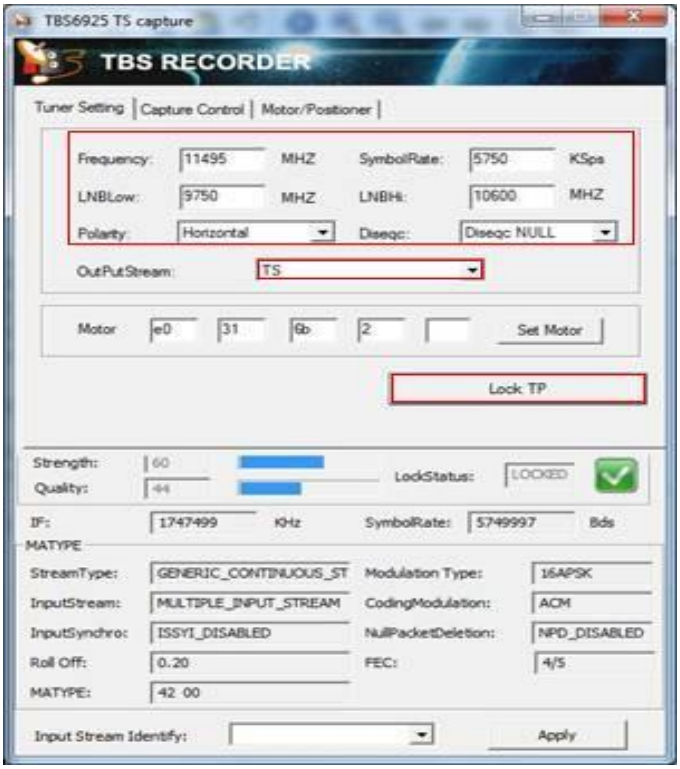
Step 2: Use the TS Capture tools to receive CCM, VCM and ACM Signals

Here we take the **ACM** signals for example:

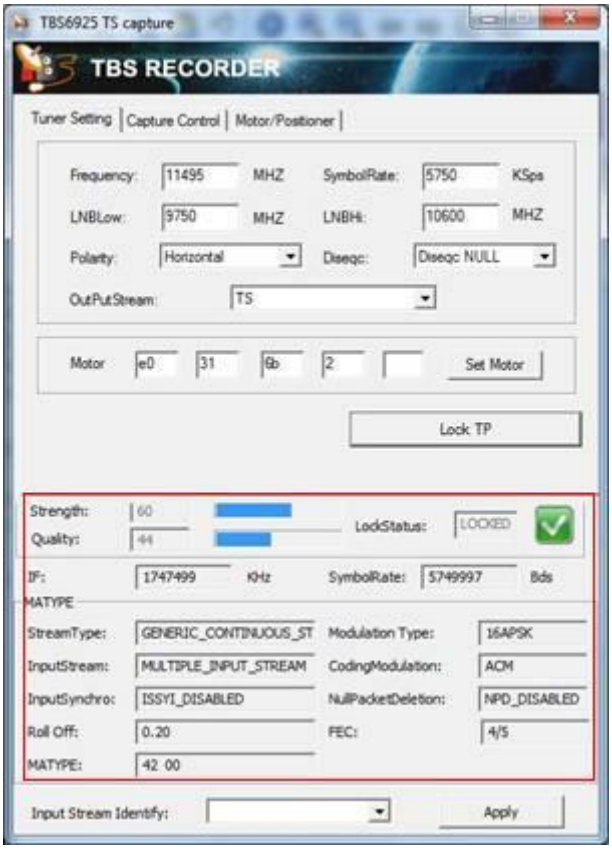
Firstly, run **TBS6925/5925 TS Capture** and a small window will pop up as follows:



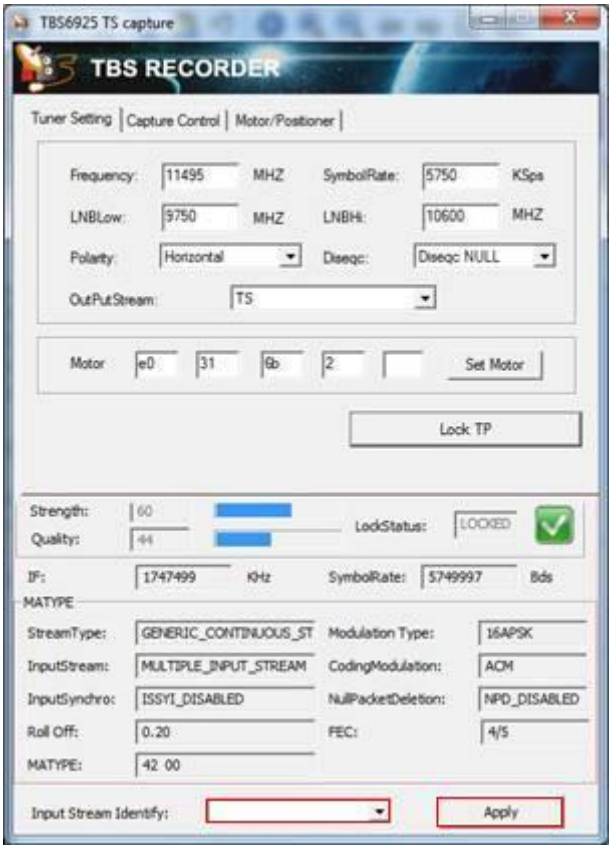
Then click the tap **"Tuner Settings"** on the top and input the information in the first blank. And choose **"TS" or "GS"**for **"OutPut Steam"**. Click **"Lock TP"**:



After that, you can see the data followed:



Then you can choose correct ID in **“Input Stream Identity”**, and click **“Apply”** to add the programs to the TBS Viewer player.



Here are some of the ACM signals (and others) that we have tested so far:

Items	Satellite	Frequency (MHZ)	Symbol Rate (KSps)	Mode
1	Astra2 28.2E	12708 H	5000	ACM
2	Intelsat14 45W	11523 H	9800	ACM
3	Telstar11N37.5W 12	11507 H	2640	ACM
4	Telstar 11N 37.5W	12549 H	1034	ACM
5	Telstar11N 37.5W	11501V	2316	ACM
6	Intelsat907 27.5W	11495V	44100	ACM
7	NSS7 22W	12600H	45000	ACM
8	Telstar12 15W	11497V	5595	ACM
9	Telstar12 15W	11495H	5750	ACM
10	Atlantic Bird 1 12.5W	12718H	36513	ACM

Chapter 7.How to Watch Encrypted Programs with CAM

TBS has series tuners which have common interface support. Let's take TBS 5980 as an example to show you how to set up the hardware and software. TBS 5980 is an USB DVB-S2 TV Box equipped with a CAM (Conditional Access Module) slot in one end of the box for plug-in CAM, which ensures you to connect a CAM with a compatible Pay-TV Smartcard subscription to enjoy Pay-TV channels.

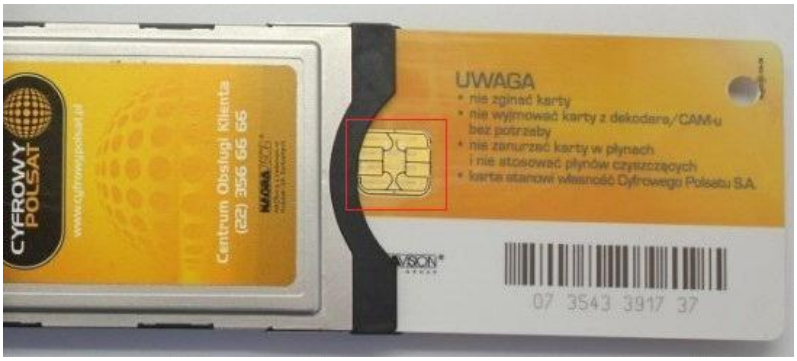
7.1. Installation

For installing 5980 USB DVB-S2 TV Q-Box CI, set your satellite dish aiming at the right satellite. Connect dish LNB to Q-Box "**RF IN**" with cable. Plug the power supply and connect it to Q-Box "**DC7.5V**". Then hook up your PC to the TBS 5980 with an USB cord in "**USB2.0**" port as shown on the picture below.

To activate the CI support function, you also need to insert a CAM into the device. After the CAM is loaded with a smartcard properly, you should insert the CAM into the device.

Procedures:

Step1: Insert the smartcard into the CAM. The smartcard should be inserted with the embedded chip side above into the CAM, so that the chip will face towards the side of the CAM with a bump.

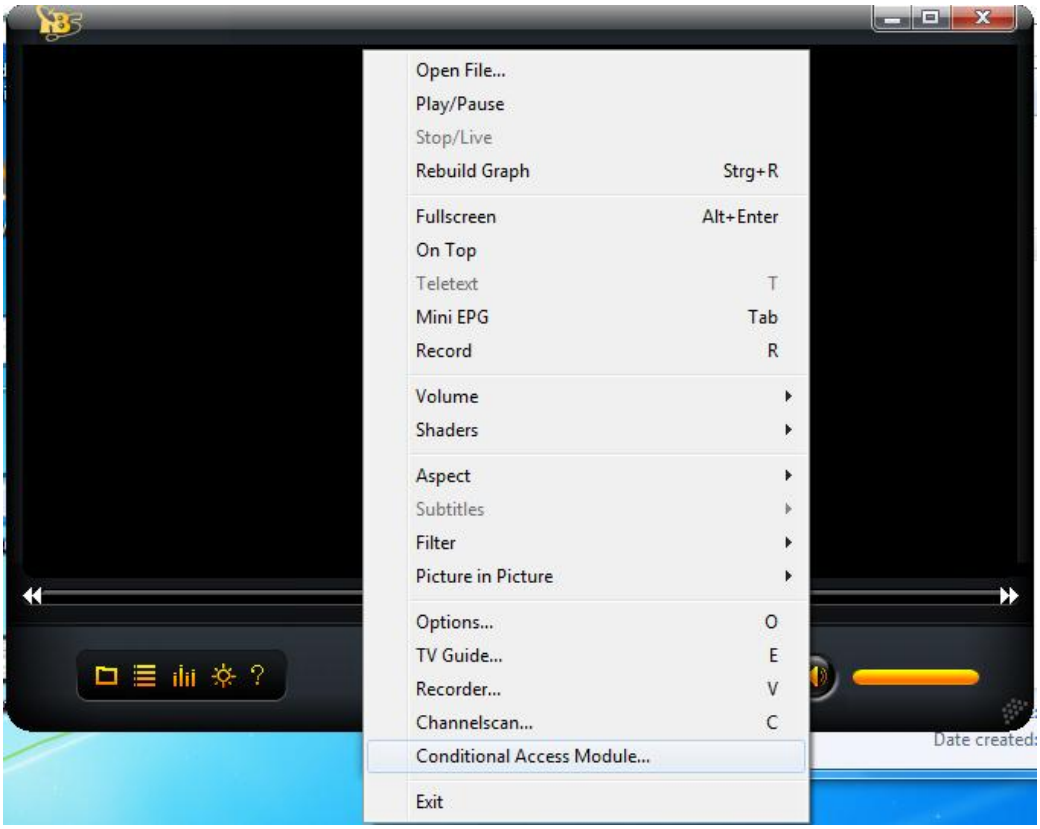


Step2: Loading QBOX CI with the CAM. The bumped side of the CAM and the brand-marked side of the QBOX should face the same direction. The CAM should be inserted in right way as follows so that it can work properly.

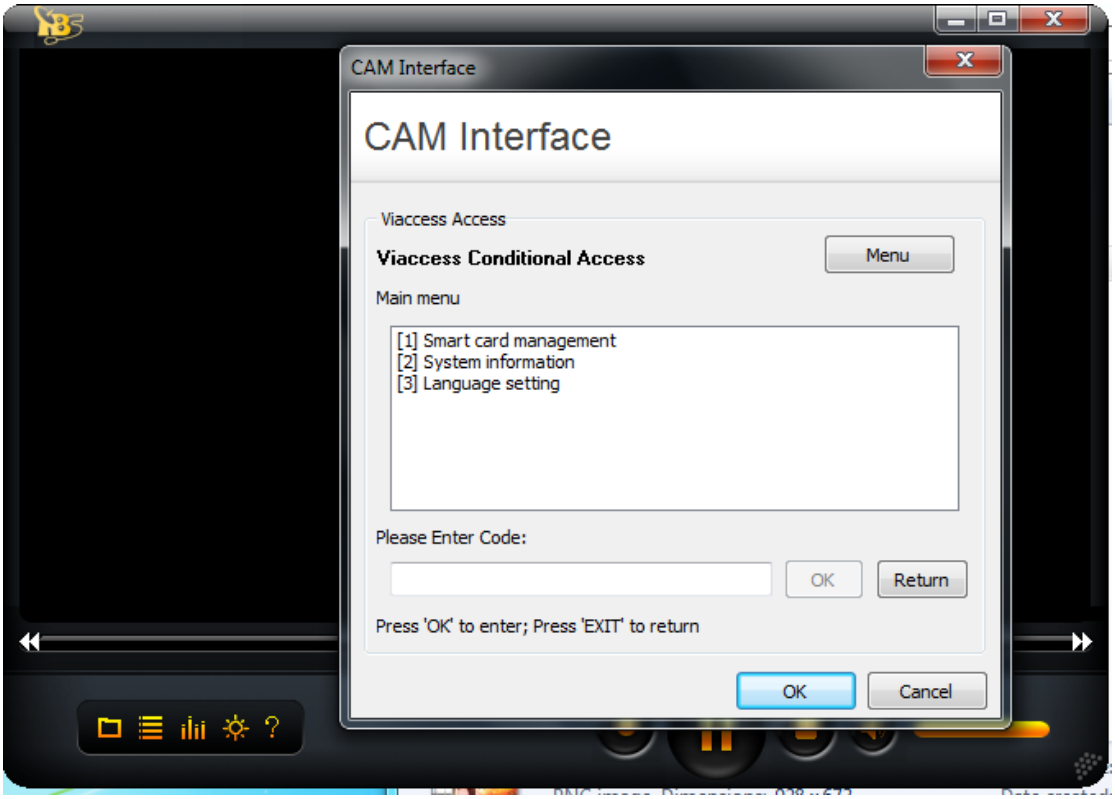
7.2. How to check CAM information

After you have right installed TBS5980 driver and TBSViwer, then you can check CAM information as follows:

Right-click on TBSviewer and select **"Conditional Access Module"**



Then the "**CAM Interface**" window will pop out for your service. You can check the CAM information as shown in the picture.



7.3. TBS CI Tool for Windows Media Center

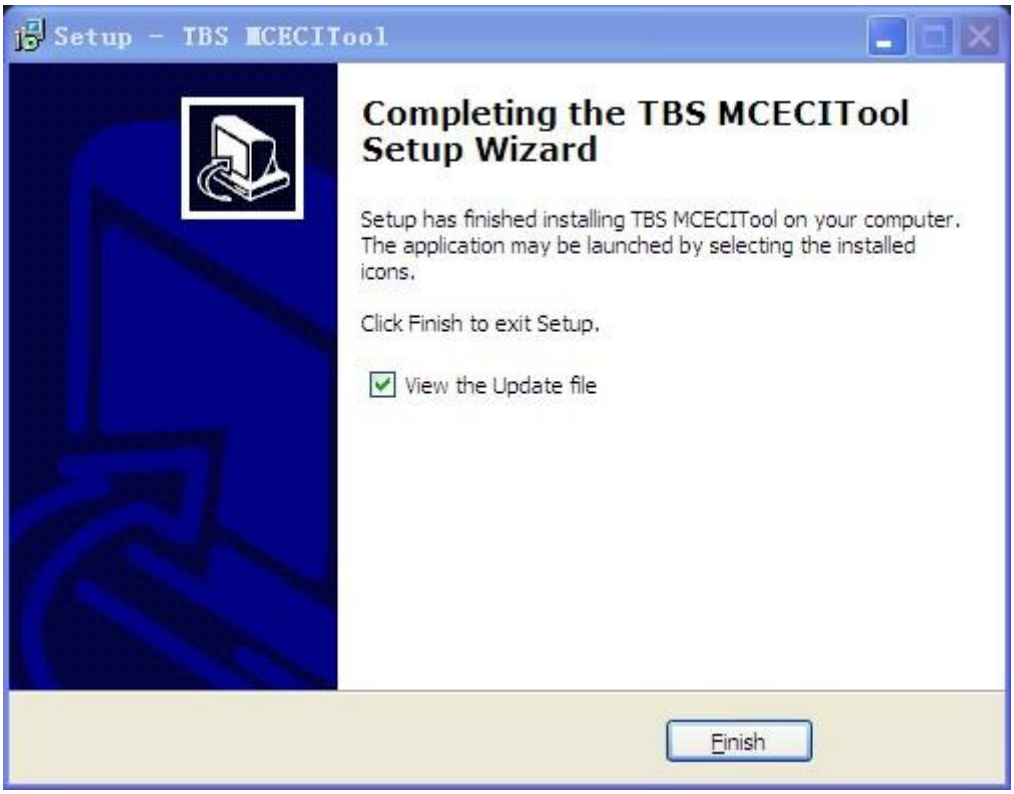
TBS MCE CI Tool is particularly designed for users who want to watch encrypted TV channels on Windows7 Media Center. Before you could use this MCE CI tool, you need to have valid pay-tv card and the compatible CAM for the CA system. Here are the procedures.

After installing the hardware and relevant windows driver for TBS TV tuner and inserting the CAM and pay-tv card properly, then you are ready to install MCECITool.

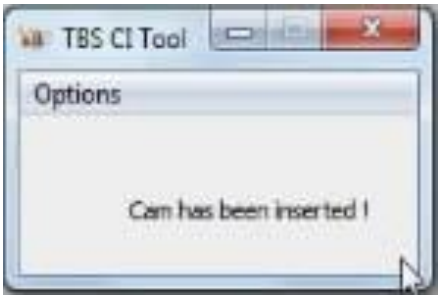
Run the "exe" file 

, and you will see the following window popping out.

Go ahead with the steps until you've finished the installation of the software.

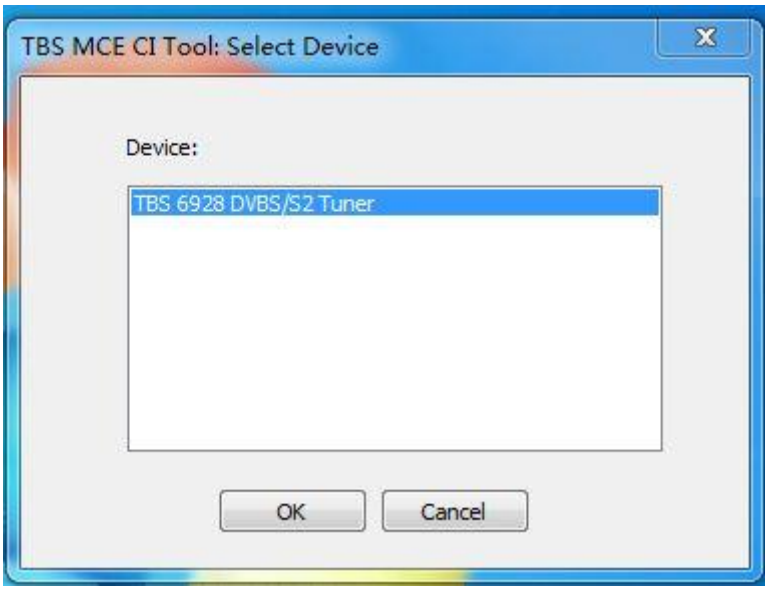


After correctly installing the tool, you can run it on your computer now. The first popped-out window is as follows, indicating if CAM has been inserted. However, if no device is detected, you will not be able to run the tool at all. Then, probably you should check the hardware and windows driver installation of the card again.

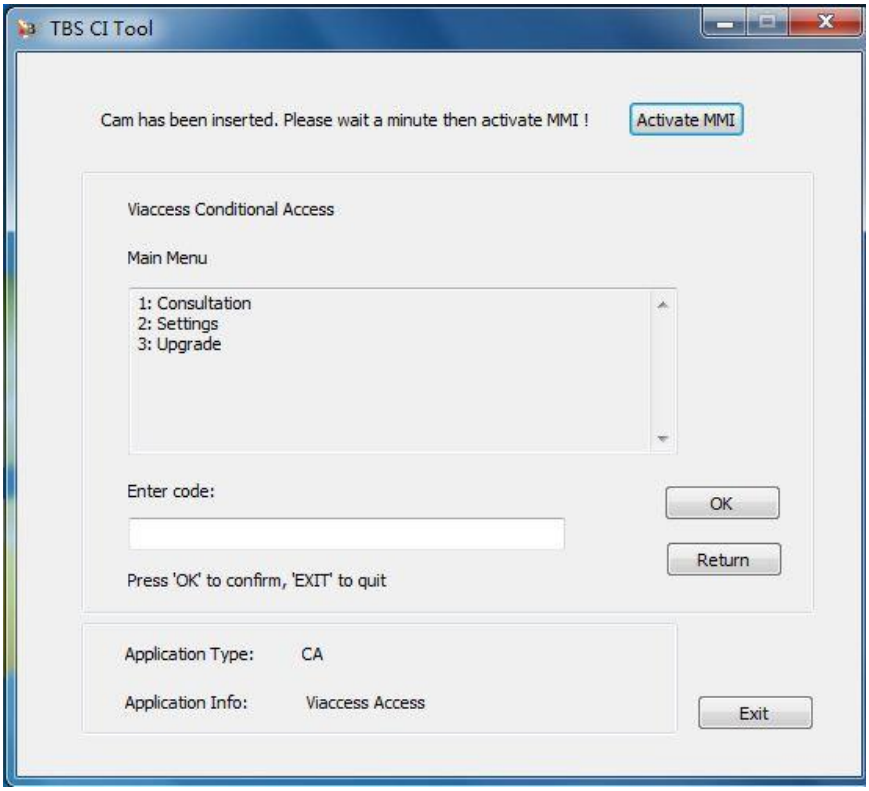


If the window says “Cam has been inserted”, it means that you are ready to use Windows 7 Media Center to watch encrypted channels now. But, please make sure that TBS CI Tool stays open all through the time.

However, if you have several devices in your computer and want to check the hardware information, you can click “Hardware” under the “Option” menu. Then, the following window will pop out, listing all the detected devices. You can choose the one that you want, and click “OK”.

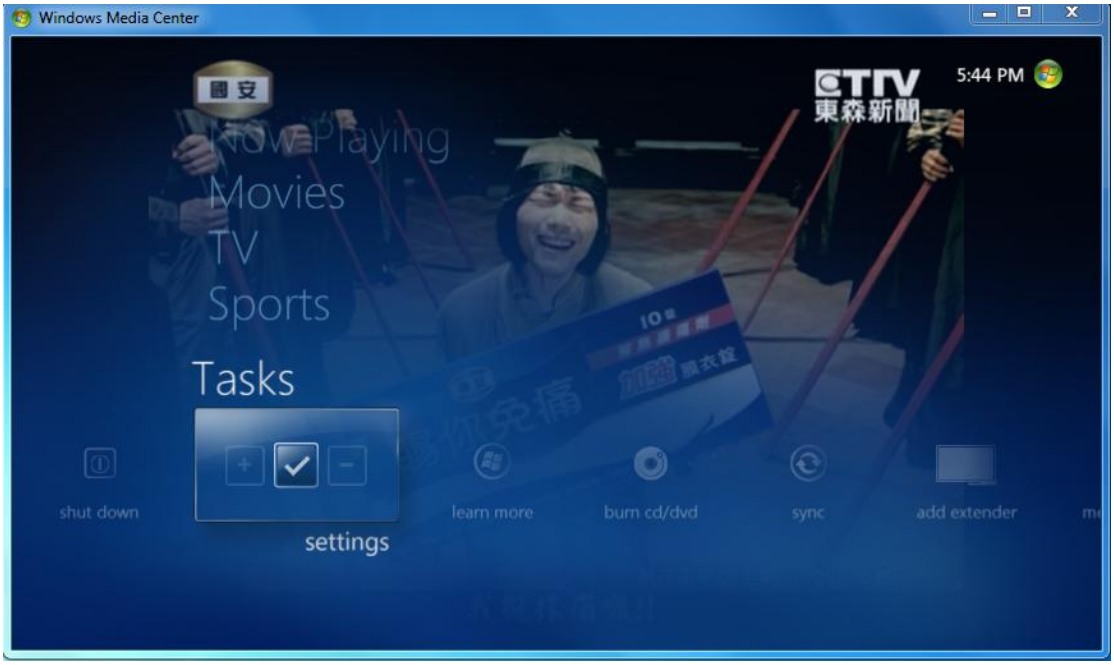


If you want to check the CAM info, you can click “Open MMI” under the “Option” menu, and you will see a new window. Then, you can wait one minute and click “Activate MMI”, and relevant info will be displayed as below. Please do not click “Exit”, or the tool will be closed and not function any more.



Since TBS MCECITool is functioning now, you can open Windows 7 Media Center and start scanning your TV channels. If you do not know how to use Windows Media Center with the card, we have other documents explaining how to use Windows 7 media Center with our cards.

However, there is one thing that is worth mentioning here. The encrypted TV channels that you have already found may not be listed in the channel list automatically. So, you have to edit the channels as follows.



Starting from the main interface, you have to find the “Edit channels” window with the following route “Task”-“Settings”-“TV”-“Guide”-“Edit channels”.

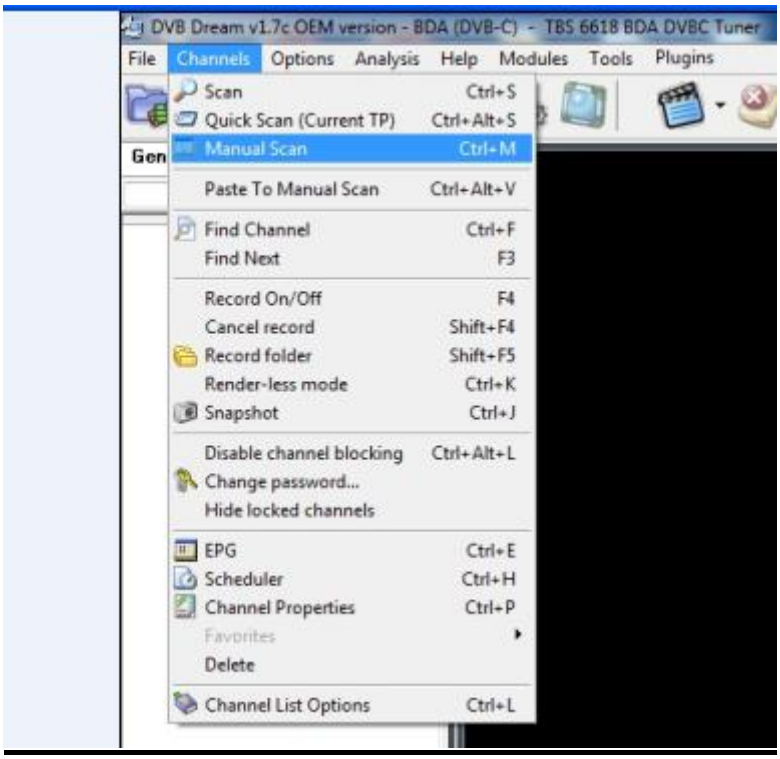
Here, you can tick all the channels that you want, and click “Save”. Then, you can go back to “Live TV” window and watch those encrypted TV channels.

Chapter 8. How to Receive DVB- C Programs

This chapter is about how to receive digital cable TV programs with TBS DVB-C Tuners. Lets' take TBS6618 as an example, TBS6618 is a PCIe interface digital cable TV Tuner internal card for watching and recording digital cable TV on PC. With integrated CI slot, it can be used for watching clear QAM or encrypted Pay TV(By inserting the correct CAM and subscription smartcard into the CI slot, encrypted pay TV will be available).

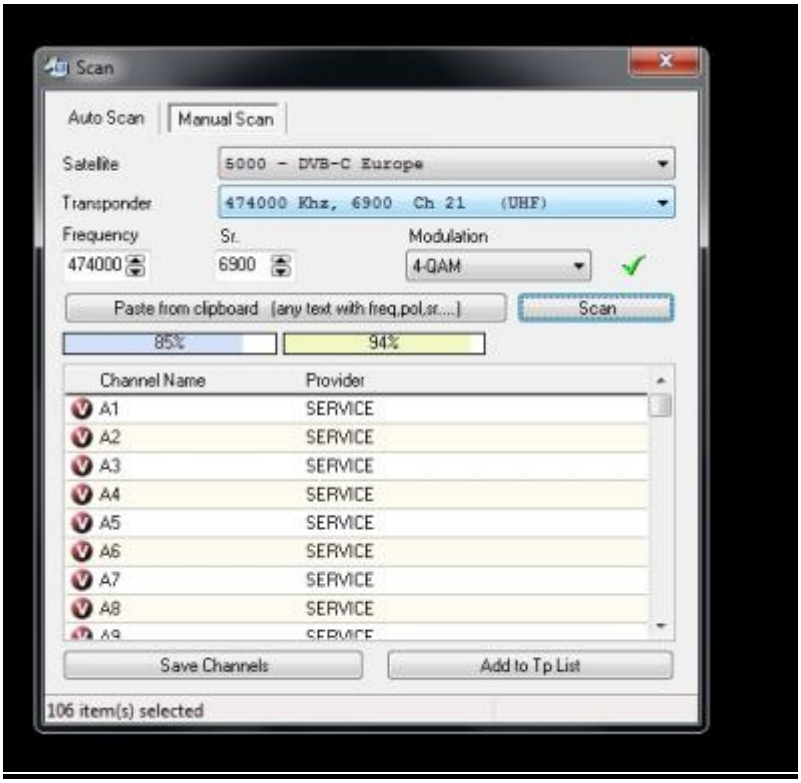
Next, take DVB Dream for example

1. Click "Channels"→"Manual Scan"



Select the suitable frequency list for you. For example, if you're located in Europe, you may select "5000 – DVB-C Europe". Or if you know exactly your cable TV broadcasting parameters, you may input "Frequency", "S.r"(Symbol Rate), "Modulation by yourself and then click "scan".


Scan
Auto Scan
Manual Scan
Satellite
5000 - DVB-C Europe
Transponder
474000 Khz, 6900 Ch 21 (UHF)
Frequency
Sr.
Modulation
474000
6900
256-QAM
Paste from clipboard (any text with freq,pol,sr....)
Scan
Channel Name
Provider
Save Channels
Add to Tp List
105 item(s) selected


Scan
Auto Scan
Manual Scan
Satellite
5000 - DVB-C Europe
Transponder
474000 Khz, 6900 Ch 21 (UHF)
Frequency
Sr.
Modulation
474000
6900
4-QAM
Paste from clipboard (any text with freq,pol,sr....)
Scan
85%
94%
Channel Name
Provider
A1 SERVICE
A2 SERVICE
A3 SERVICE
A4 SERVICE
A5 SERVICE
A6 SERVICE
A7 SERVICE
A8 SERVICE
Save Channels
Add to Tp List
106 item(s) selected


DVB Dream v1.7c OEM version - BDA (DVB-C) - TBS 6618 BDA DVBC Tuner
File Channels Options Analysis Help Modules Tools Plugins
General Favorites Remote
All
A1 SERVICE
A10 SERVICE
A11 SERVICE
A12 SERVICE
A2 SERVICE
A3 SERVICE
A4 SERVICE
A5 SERVICE
A6 SERVICE
A7 SERVICE
A8 SERVICE
A9 SERVICE
海綿寶寶
東森幼幼
你最愛跟你的凱倫一起
做些什麼事啊
Evaluation period has expired. Ple
PIP
MPEG-2
MPEG-2
CPU: 53%
A1 (Viaccess)
Level: 100%
Quality: 94%
474 Mhz V 6900 (-140.0° W) [544x480 4:2:0 29.9fps VBR:106kbps 4:3]

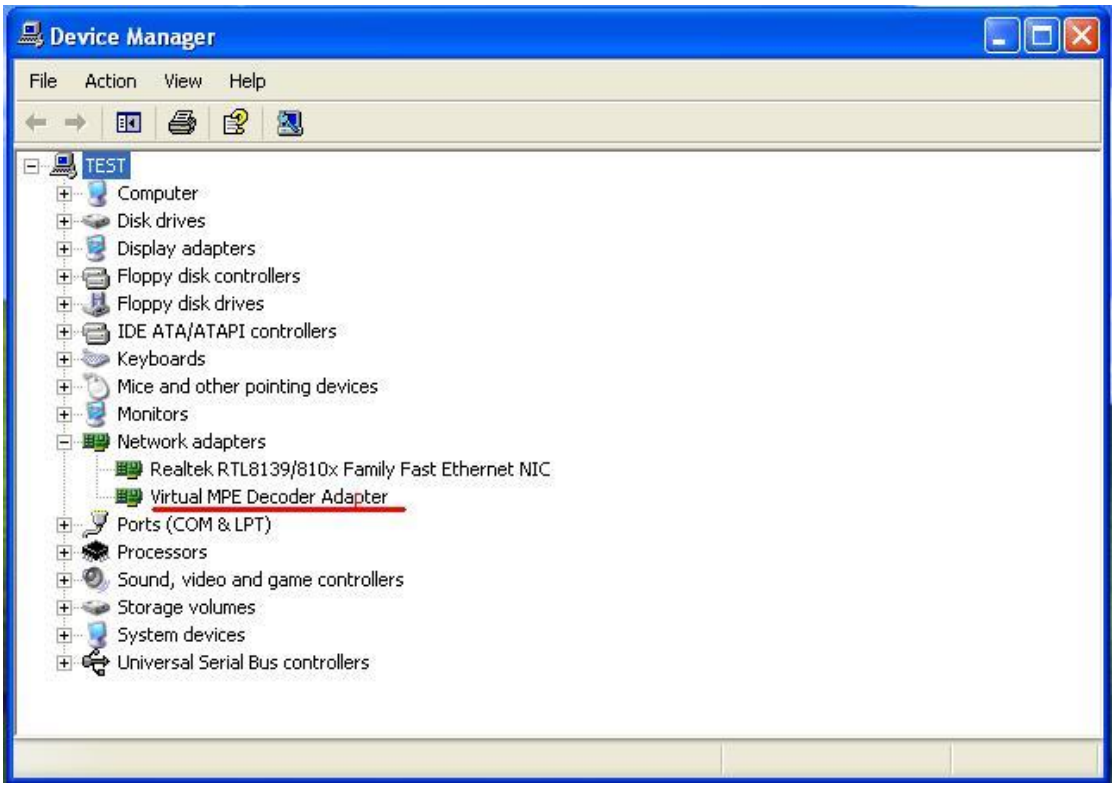
Chapter 9. DVB IP software

TBS Digital satellite TV tuner card/box can be used to download data from satellite or browse internet via satellite. It works with "**Skygrabber**" and "**Skynet**". You may download them at http://www.skygrabber.com Also you can install TBSdata in CD for those purpose. Click "**Install IP Data**" on CD autorun, click "**Continue Anyway**" till installation completed.

This will install Virtual MPE Decoder Adapter and TBS-IPdata software in your computer. You may check it at "**Properties**" of "**My Network Places**".

Or you can choose "**My Computer**" 

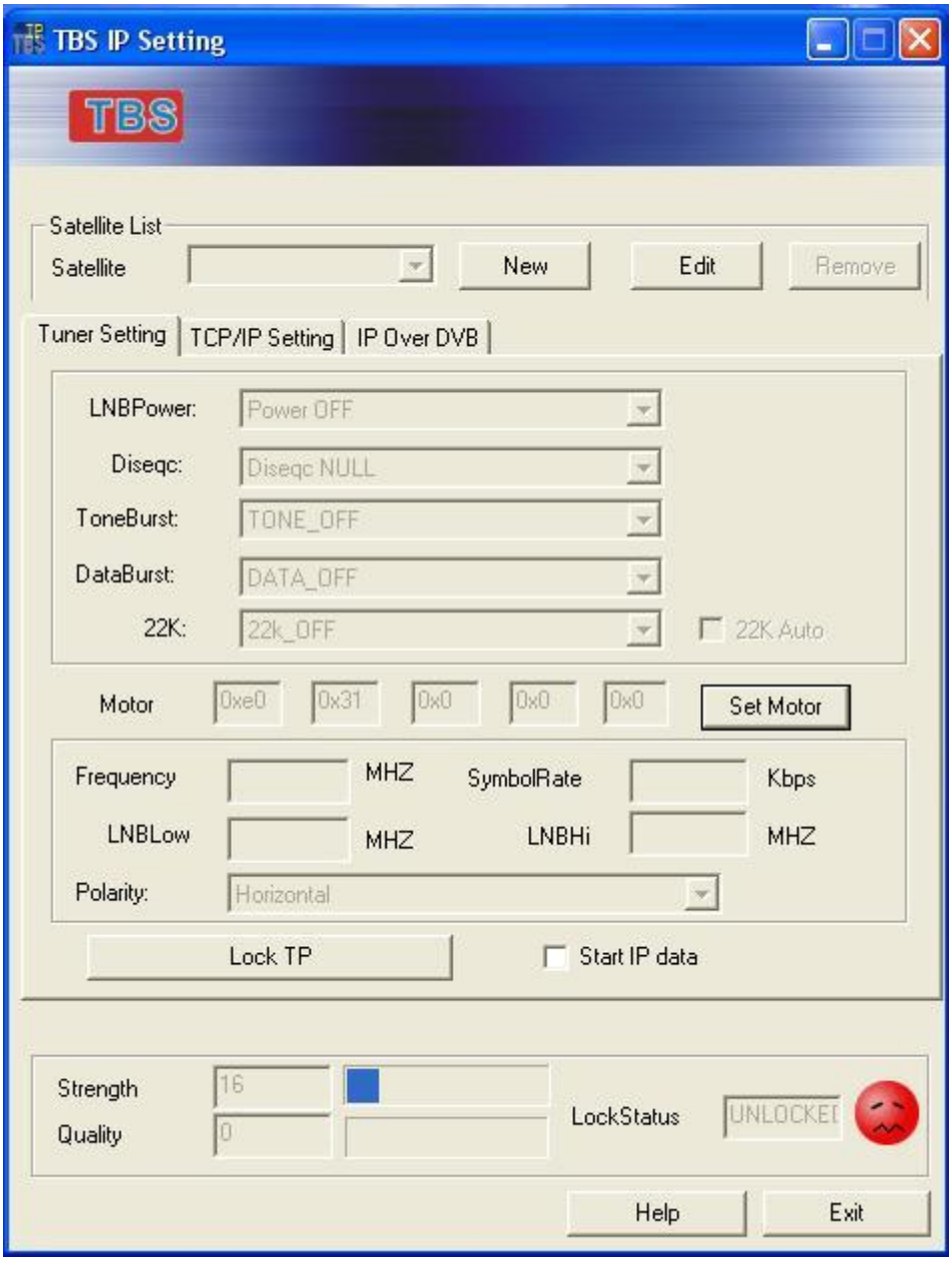
, right click and choose "**System Properties**" to pop up "**System Properties**" windows, click "**Hardware**" → "**Device Manager**", then click "+" in front of "**Network adapters**" .



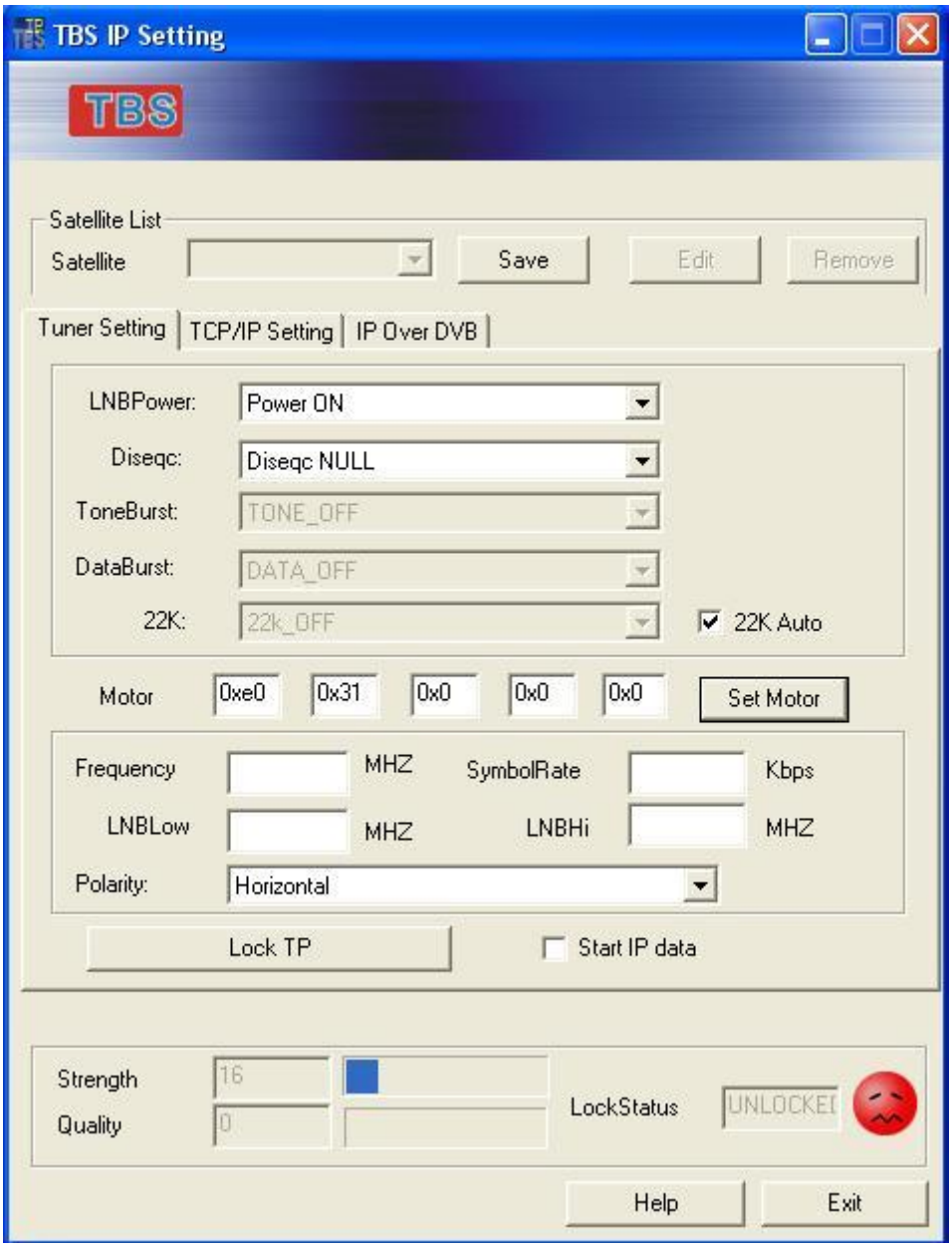
9.1 Use TBS-IPdata to lock TP

Double click TBS-IPdata icon 

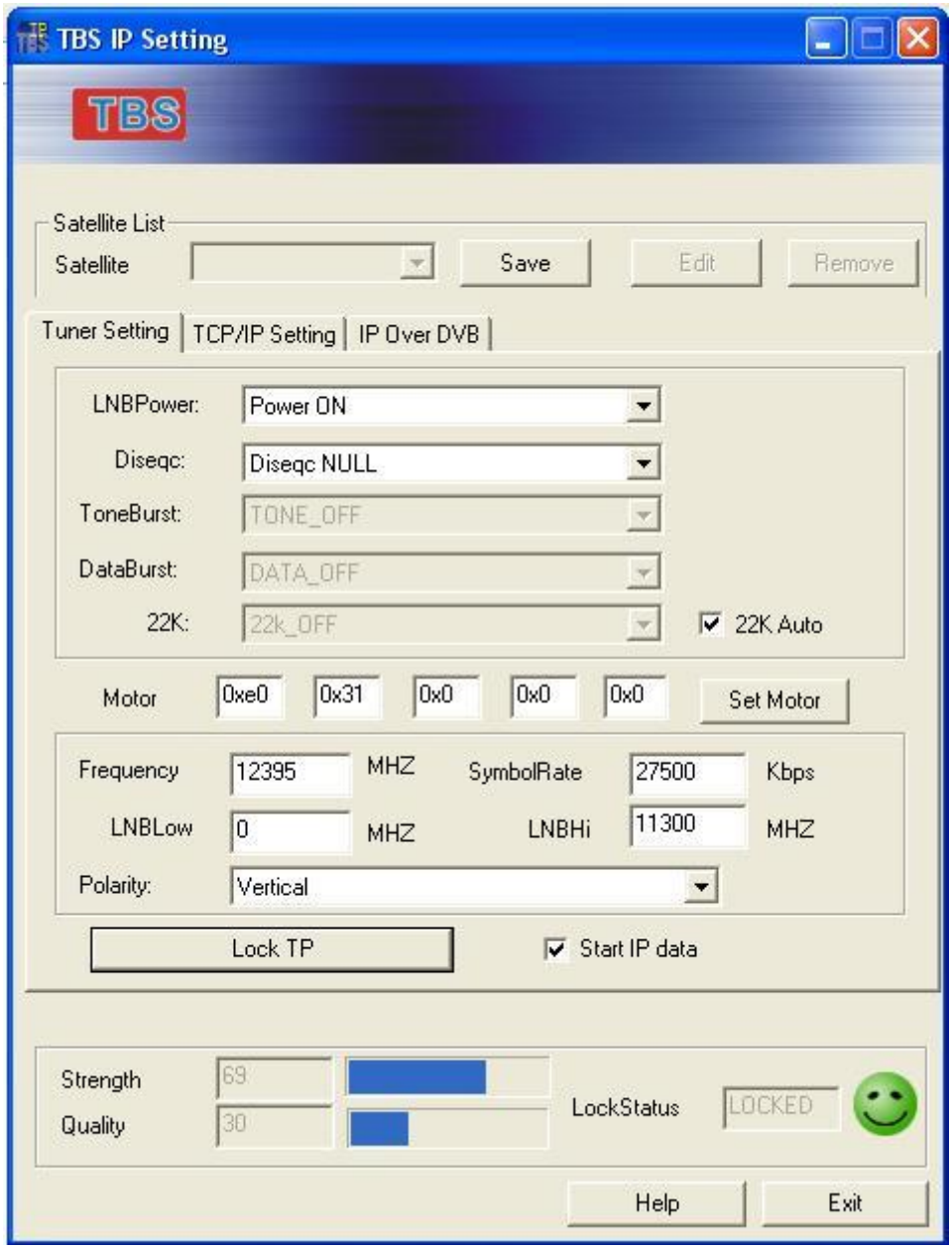
to start software.



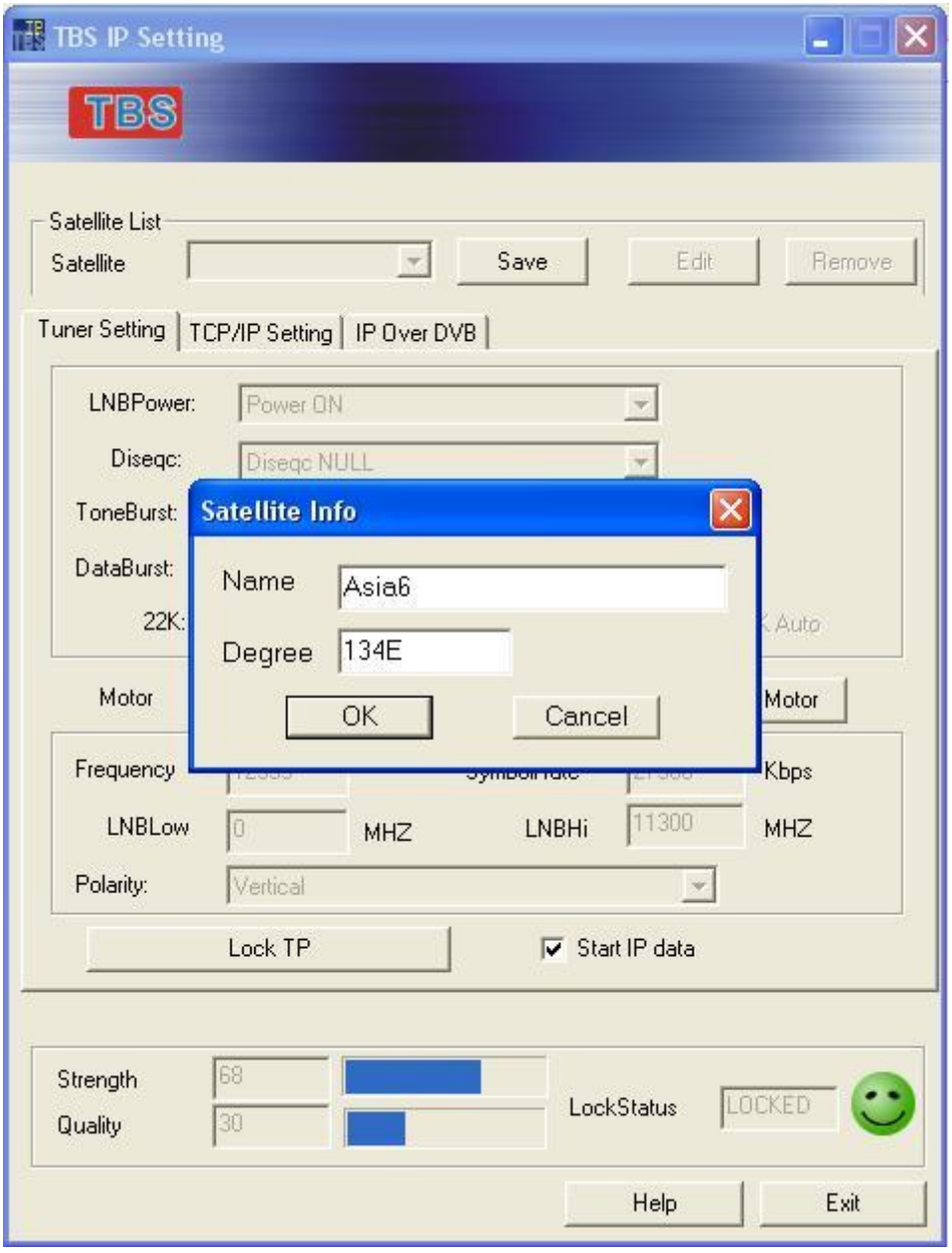
Click "**new**" to set satellite parameter, the grey bar will turn white.



Select **LNBPower "Power ON"**. If you are not using any Diseqc switch, just select **"Diseqc NULL"**. If your dish is connected to a Diseqc switch, select the switch port your dish being connected. For example, selecting **"Diseqc D"** means connecting to switch port LNB4, selecting **"Diseqc B"** means connecting to switch port LNB2. Tick **"22K Auto"** if you don't know when exactly to keep 22K on. Type in the **Frequency, SymbolRate** and select **Polarity** of Transponder. Also Type in LNB L.O.F. For example, for Ku Universal LNB low L.O.F. 9750MHz, high L.O.F.10600MHz, type in **LNBLow** 9750MHz, **LNBHi** 10600MHz. For Ku circular LNB L.O.F. 11300MHz, type in **LNBLow** 0MHz, **LNBHi** 11300MHz.



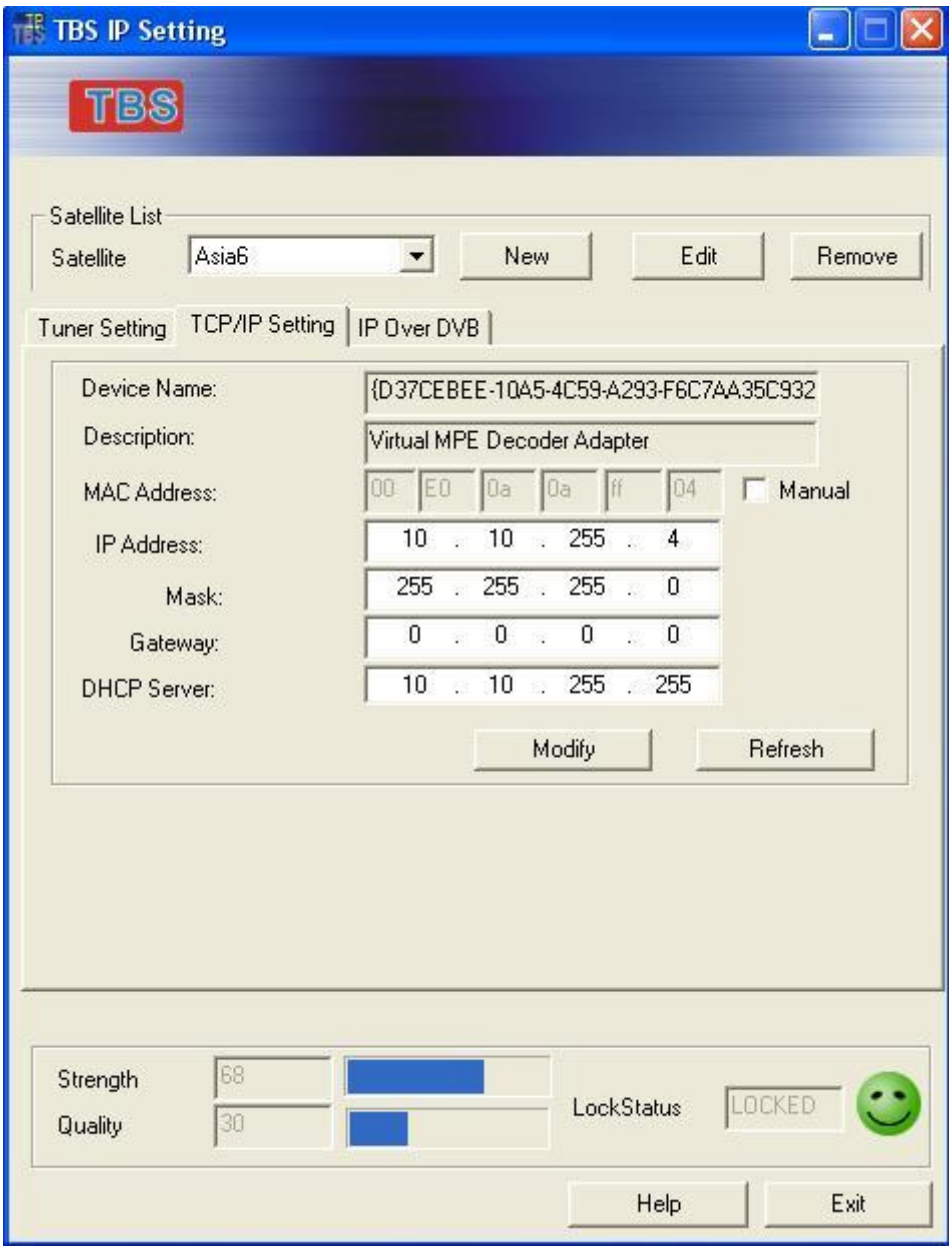
Click **"Lock TP"** after finishing setting. If TP signal is locked, the face on bottom right will turn green and smile. Then tick **"Start IP data"** to receive IP data. Click **"Save"** to save settings.



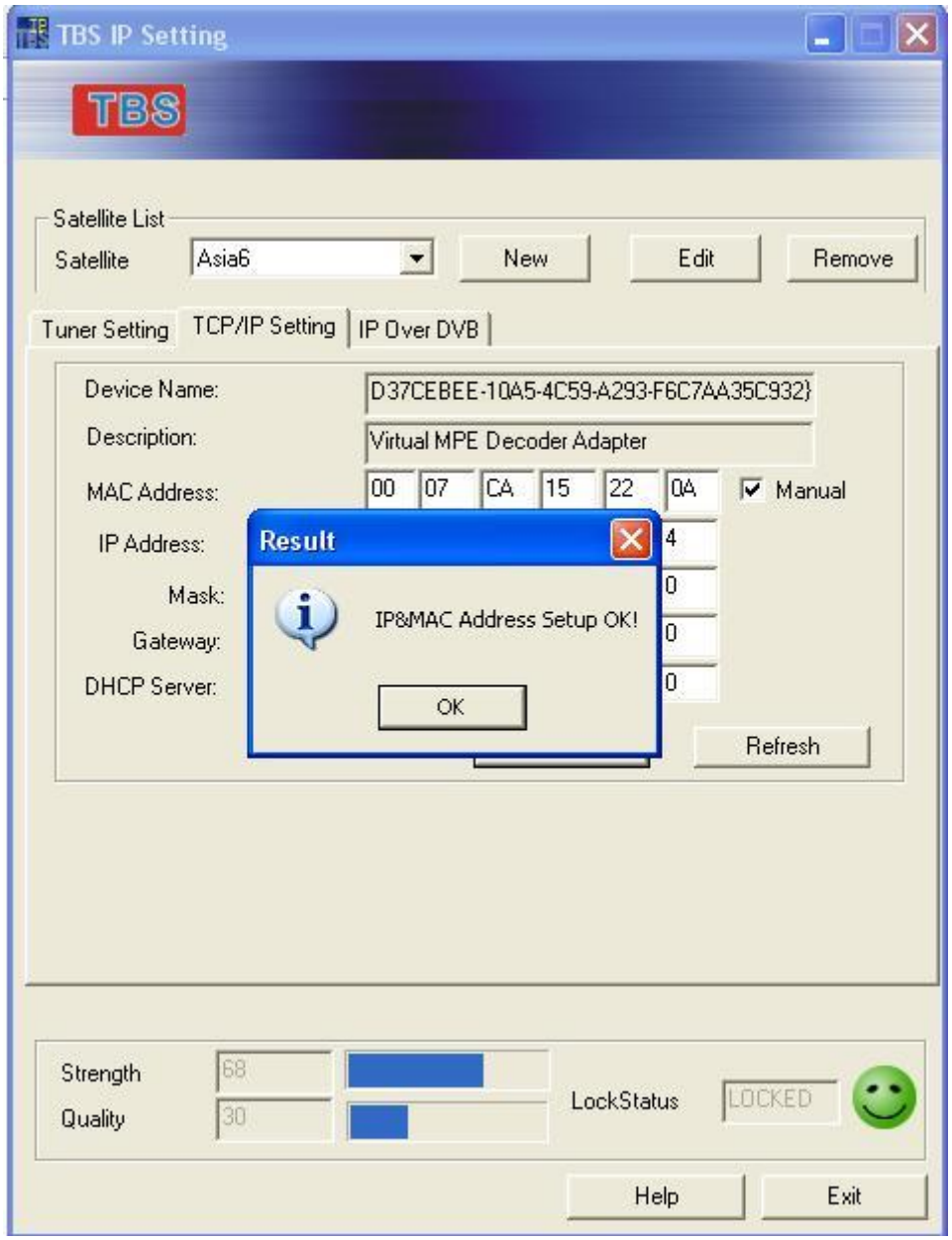
Fill in the Name and Degree which you want to save and click OK. Next time you may use saved settings by selecting from **"Satellite List"**.

9.2 TCP/IP and MAC Address

Click **"MAC Filter"** bar to set up IP and MAC address.



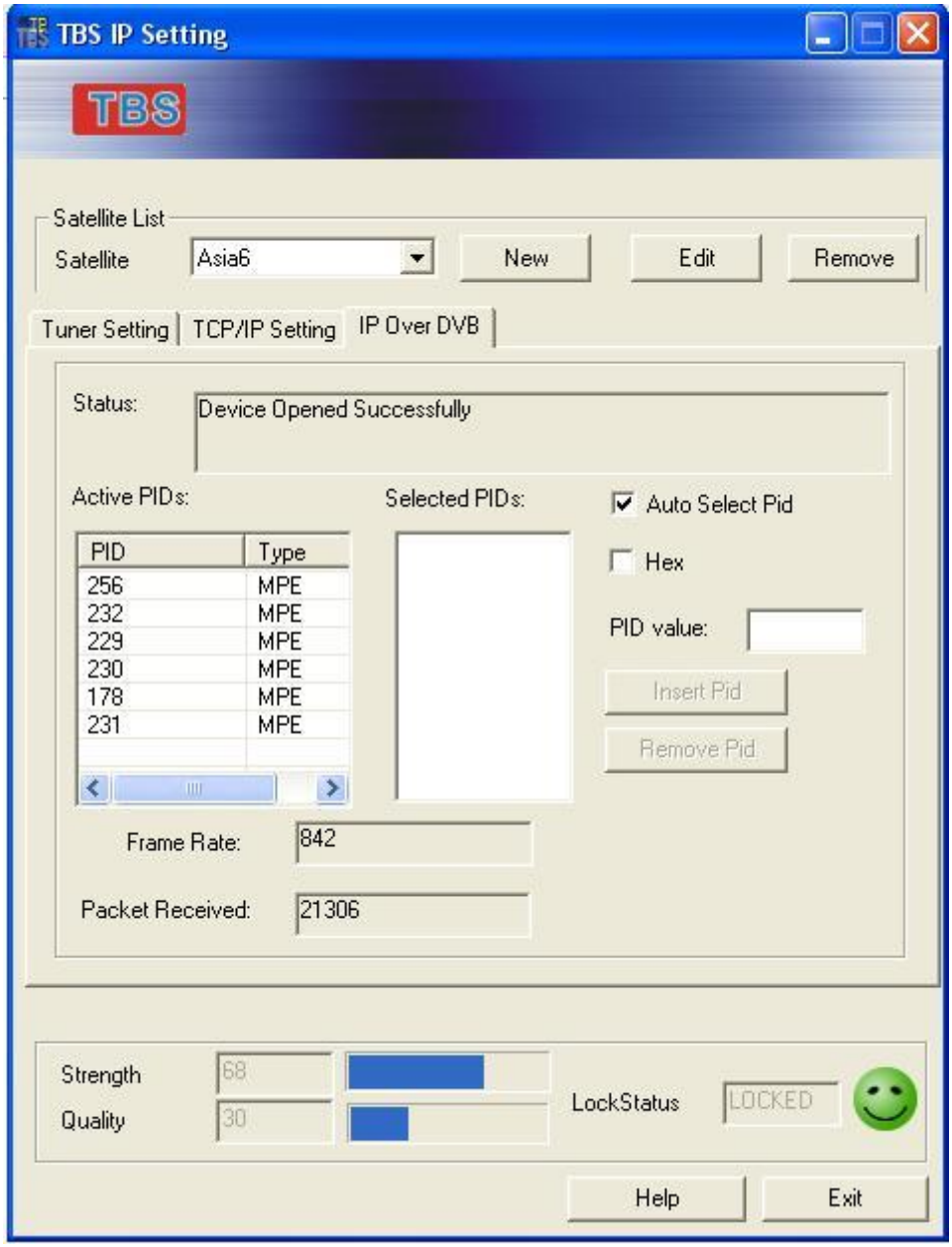
Fill in "**IP Address**", "**Mask**", "**Gateway**" and "**DHCP Server**". Then click "**Modify**", wait a few seconds till "**IP&MAC Address Setup ok!**" window pop up.



You can also tick "**Manual**" to fill in any MAC Address you want, but don't forget to click "**Modify**" after any change.

9.3 Pid Setting

Click "**IP Over DVB**" to set up Pids. Tick "**Auto Select Pid**" to choose all Pids automatically. Or you can untick "**Auto Select Pid**" , insert Pids by yourself. Tick "**Hex**" to insert Pids in Hex.



For details of internet via satellite function, please enquire your satellite internet provider.