



TBS 6522 Multi-standard Dual Tuner PIC-e card User Manual

Dear Customers,

Thank you so much for choosing this product.

TBS6522 is a Dual PCI Express TV tuner card that supports multiple digital TV standards including ISDB-T/DVB-T2/C2/S2X/S2/T/C/S and enables you to watch TV channel from one transponder/satellite while recording another channel from other transponder/ satellite at the same time.

In order to use this item correctly, please read this manual carefully at the beginning.

1 . Package Contents

- TBS 6522 Multi-standard Dual Tuner PIC-e card.....1 pcs
- DC line..... 1 pcs
- F-IEC Adapter----- 2 pcs

※ If anything is missing, please contact your dealer.

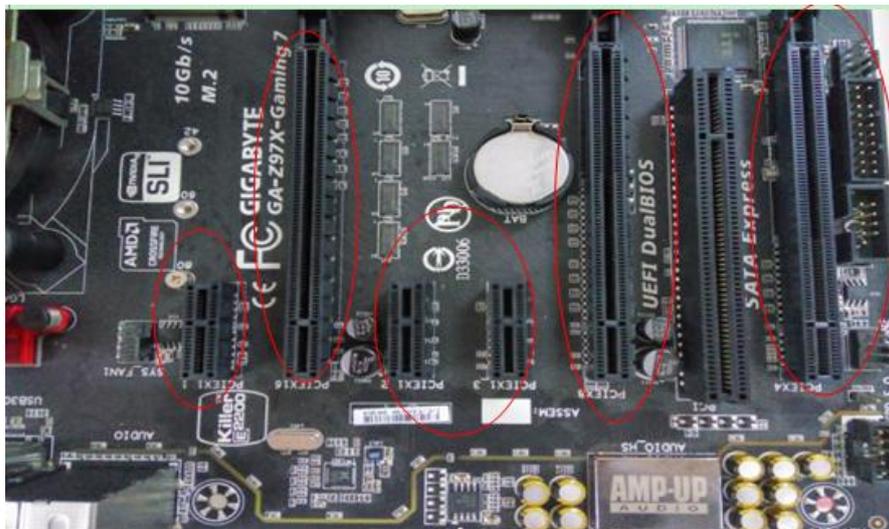
※ If additional information is attached on a separate paper, please be sure to reference.

2. Hardware Installation

2.1 Install Tuner Card

Power off the computer, remove computer cover and take out cover panel of PCIe slot in which you want to put the card. Insert the card in **PCIe slot** and fix card bracket with screw.

Make sure the card fit in PCIe slot tightly. Then put back computer cover.



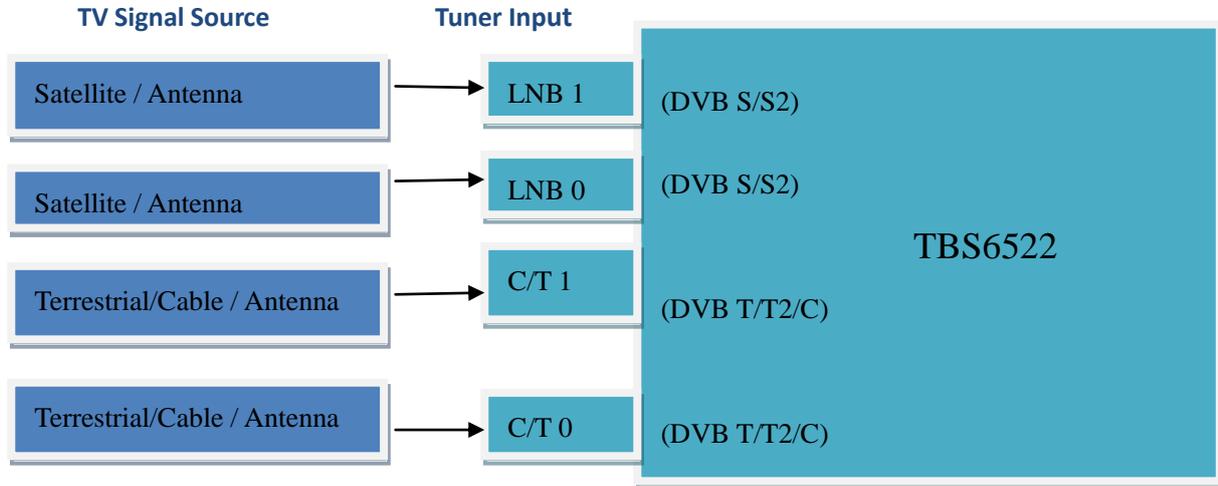
ATTENTION:

- When turn off the computer, please do not touch the PC internal components especially the CPU and VGA chip, which has a high temperature with a risk of burns.
- Please be sure to see the manual of PC and peripheral equipment.



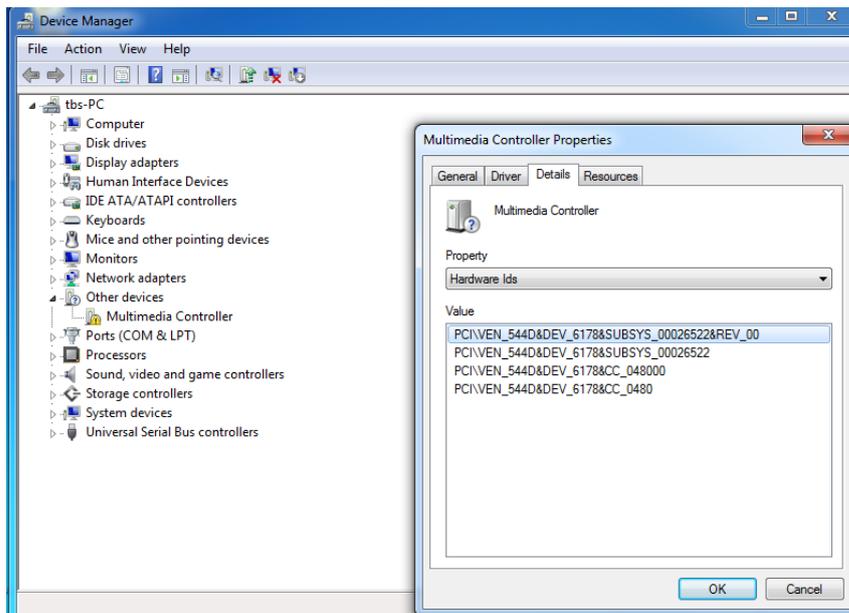
2.2 Connect TV Signal to the TV Tuner on your computer

Please make sure you properly connect the TV signal to the TV tuner on computer in case of the damage to antenna device. Following is a table for your reference:



2.3 Check the device

Open "Device Manager" to check whether TBS6522 is recognized. If the device is recognized, you can see an unknown device under "**Other device**", double click to check its id.



3. Software Installation:

Before you begin, make sure your computer qualify the system requirements.

3.1 Install driver of TBS6522

1) Download the software of TBS6522 from website:

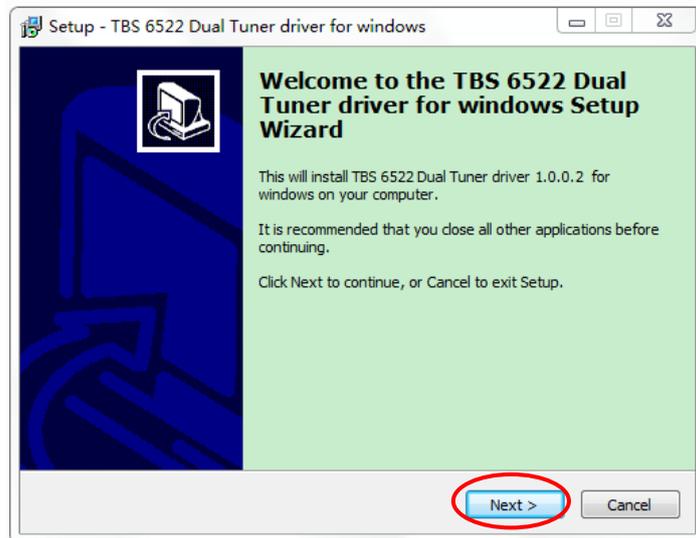
<http://www.tbsiptv.com/index.php?route=product/download>

2) Uncompress the file "TBS6522 Windows Driver":

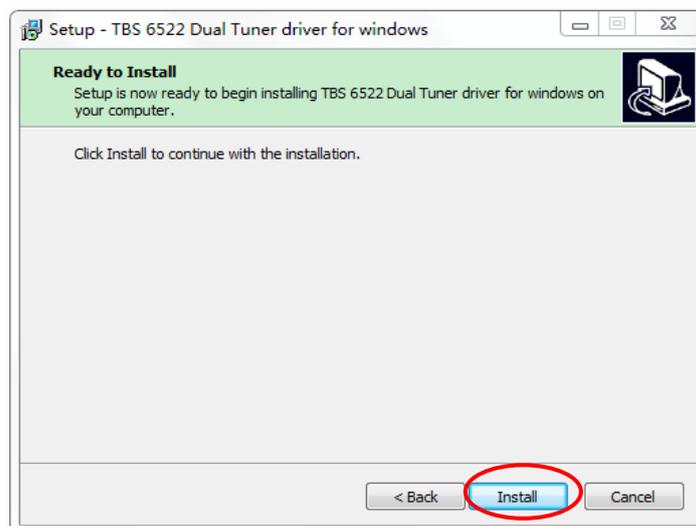


📁 tbs-6522_x64	2016/6/15 星期...	文件夹	
📁 tbs-6522_x86	2016/6/15 星期...	文件夹	
📄 TBS_6522_dvb_driver_setup	2016/6/15 星期...	应用程序	753 KB

3) Click “TBS_6522_dvb_driver_setup”, and then a new window will pop up:

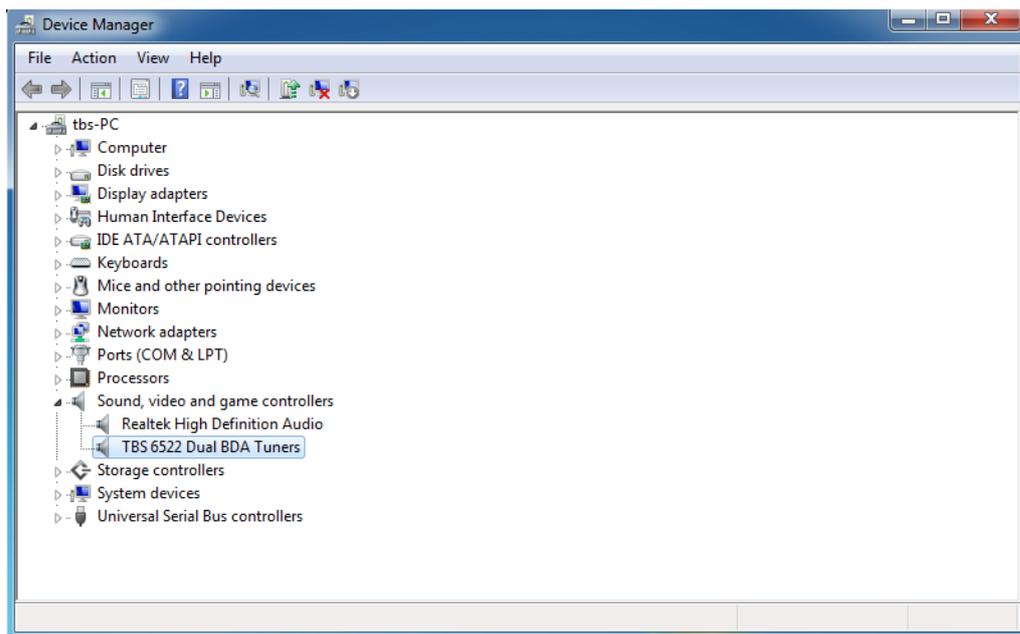


4) Click “Next” → “Install” → “Finish” to complete installation





5) 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 **“+”** in front of **“Sound, video and game controllers”**, if you can see **“TBS6522 Dual BDA tuners”** that means you do have installed driver correctly.



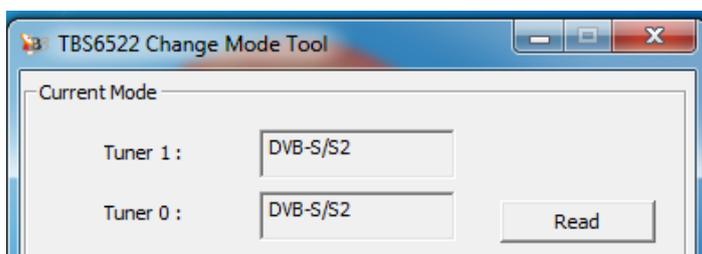
3.2 Install Change Mode Tool

The default mode of TBS6522 is DVB-S/S2. You could use below tool to set other mode you want.

1) Download TBS6522 Change Mode tool from the website:

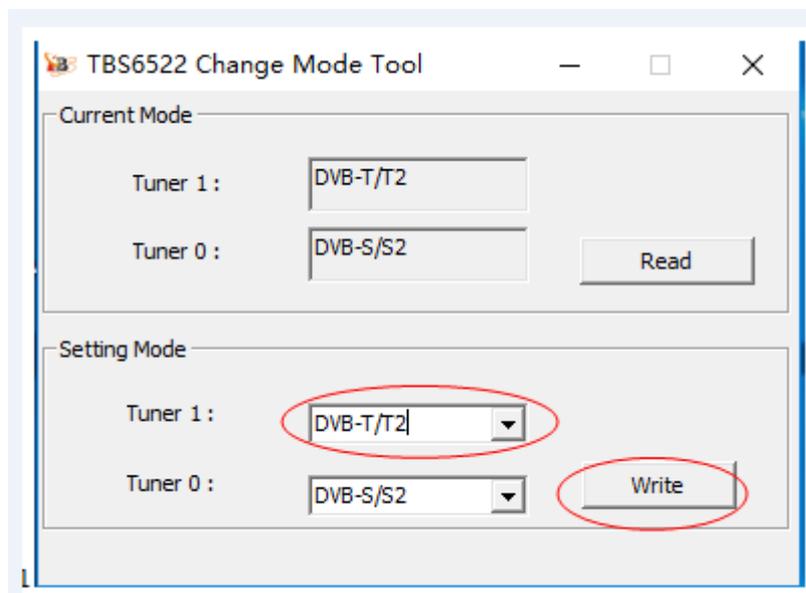
<http://www.tbsiptv.com/index.php?route=product/download&path=3>

2) Open the Change Mode Tool → select mode → click “write”





3) Wait about 8 seconds to get the new mode you want.



4) Remember to connect the corresponding antenna after you set a new mode.

3.3 Install the player software

To enjoy satellite TV on PC or record video, you still need to install player software and right set the search parameters.

TBS6522 is compatible with a lot of software like TBSViewer, DVBDream, ProgDVB etc.
Below is the website to download player software:

<http://www.tbsiptv.com/index.php?route=product/download&path=6>

For detailed installation instructions, see *Software Installation Instructions*.

4 . Product Specification

ISDB-T	6,7 and 8 MHz bandwidth
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	Partial reception supported
	Carrier recovery:±600 kHz
	Timing recovery:±200 ppm
DVB-T2 and T2-Lite	Bandwidth: 1.7, 5, 6, 7 or 8 MHz
	DVB-T2 versus DVB-T automatic detection
	Carrier recovery: ±600 kHz
	Timing recovery: ±200 ppm
DVB-T	Bandwidth: 6, 7, 8 MHz. ACI filtering for 7 MHz channels enables use of a fixed 8 MHz IF filter
	Carrier recovery: ±600 kHz
	Timing recovery: ±200 ppm
	Supports all C.R.; G.I.;LP and HP streams
	Advanced terrestrial channel equalizer
DVB-C2	Notch management
	Timing recovery:±200 ppm
	Advanced cable channel equalizer
DVB-C and ITU-T J.83 Annex B	DFE equalizer specific for cable network
	Carrier recovery: ±11% of Symbol rate
	Timing recovery: ±1000 ppm
DVB-S/S2/S2X	Enhanced immunity to co-channel interferers
	Programmable carrier recovery range
	Timing recovery: ±1000 ppm
Power Consumption	Input/ Power: 12V/6~18W
	temperature 0°~ 60°
Other Information:	
System Requirements	Windows XP / Vista/ 7/8/10, Linux
	Available PCI Express x1, x4, x8 or x16 slot
	Digital TV signal (ISDB-T/DVB-T2/C2/S2X/S2/T/C/S)
Dimension:	TV tuner card size 130mm*92mm
	Net weight 115g
	Gift Box Size 200*130*30mm
	Weight 210g

5 . Linux driver(ubuntu 16.04):

5.1 Linux driver install:

```

bob@bob-All-Series:~$ cd /home/bob/Documents/
bob@bob-All-Series:~/Documents$ mkdir tbsdriver
# git clone https://github.com/tbsdtv/media_build.git
# git clone --depth=1 https://github.com/tbsdtv/linux_media.git -b latest ./media
# cd media_build
# make dir DIR=./media
# make distclean
# make
# make install
# reboot

```



5.2 After installed driver, run the command “dmesg | grep frontend” to check whether your device is loaded successfully, you will see:

```
bob@bob-All-Series: ~  
bob@bob-All-Series:~$ dmesg | grep frontend  
[ 2.915288] TBSECP3 driver 0000:02:00.0: DVB: registering adapter 0 frontend 0 (Silicon Labs Si2183)...  
[ 2.915324] TBSECP3 driver 0000:02:00.0: DVB: registering adapter 0 frontend 1 (Silicon Labs Si2183)...  
[ 3.039660] TBSECP3 driver 0000:02:00.0: DVB: registering adapter 1 frontend 0 (Silicon Labs Si2183)...  
[ 3.039721] TBSECP3 driver 0000:02:00.0: DVB: registering adapter 1 frontend 1 (Silicon Labs Si2183)...  
bob@bob-All-Series:~$
```

5.3 Dvblast to scan channels:

5.3.1 DVBS/S2:

adapter0:

```
# cd /dev/dvb/ adapter0
```

```
# ln -s demux0 demux1
```

```
# ln -s dvr0 dvr1
```

```
dvblast -f 12538000 -s 41250000 -v 13 -a 0 -n 1 (DVBS)
```

```
dvblast -f 12660000 -s 45000000 -v 13 -m psk_8 -a 0 -n 1(DVBS2)
```

```
dvblast -f 12630000 -s 43200000 -v 18 -m psk_8 -a 0 -n 1(DVBS2)
```

adapter1:

```
# cd /dev/dvb/ adapter1
```

```
# ln -s demux0 demux1
```

```
# ln -s dvr0 dvr1
```

```
dvblast -f 12538000 -s 41250000 -v 13 -a 0 -n 1(DVBS)
```

```
dvblast -f 12660000 -s 45000000 -v 13 -m psk_8 -a 1 -n 1(DVBS2)
```

```
dvblast -f 12630000 -s 43200000 -v 18 -m psk_8 -a 1 -n 1(DVBS2)
```

5.3.2 DVBT/T2:

Adapter0:

```
dvblast -f 474000000 -b 8 -a 0
```

adapter1:



dvblast -f 650000000 -b 8 -a 1

5.3.3 DVBC:

adapter0:

Dvblast -f 474000000 -s 6900000 -a 0 -5 DVBC_ANNEX_A

adapter1:

dvblast -f 474000000 -s 6900000 -a 1 -5 DVBC_ANNEX_A