

TBS690A User Guide

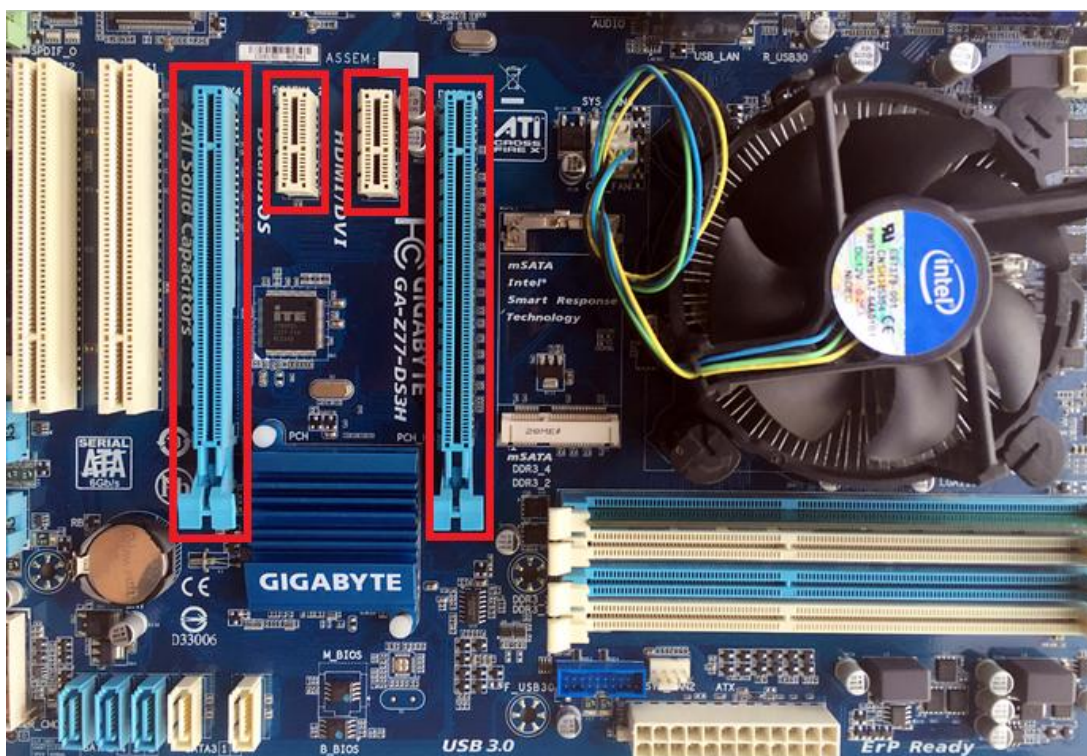
Dear Customers,

TBS690A is a DVB-ASI capture card with 4 channels input, which used to receive DVB transport streams up to 270 Mbps per channel on one card, and the transport streams can be single programs or multi programs. TBS690A is ideal for high-density applications requiring up to four ASI inputs, the input channels can run independently. With minimal power consumption, TBS690A is tailored for industrial applications where reliability is an option.

1. Hardware Installation

1.1 Install DVB-ASI capture card

Keep your PC in a power off status, remove computer cover and take out cover panel of PCI-E slot in which you want to put. Insert the card in PCI-e slot and fix card bracket with screw. Make sure the card fit in PCI-E slot tightly. This card is based on a standard PCIEx1 interface, but also suitable for other PCI-E slots like PCIEx4, PCIEx8 or PCIEx16. Finally, put computer cover back and turn on your computer.

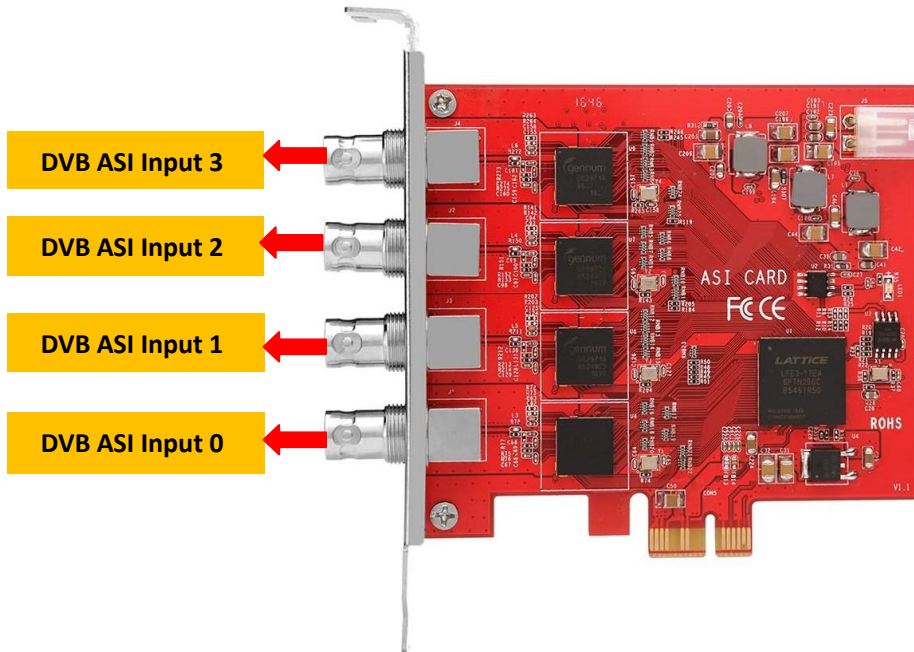


ATTENTION:

- ① 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.
- ② Please make sure to see the user manual of PC and peripheral equipment.

1.2 Connect signal to the DVB-ASI input port

Please make sure connected the correct signal to corresponding input. The following is sequence of the TBS690a DVB-ASI tuner, the sequence counts from the bottom one near the PCIE interface:

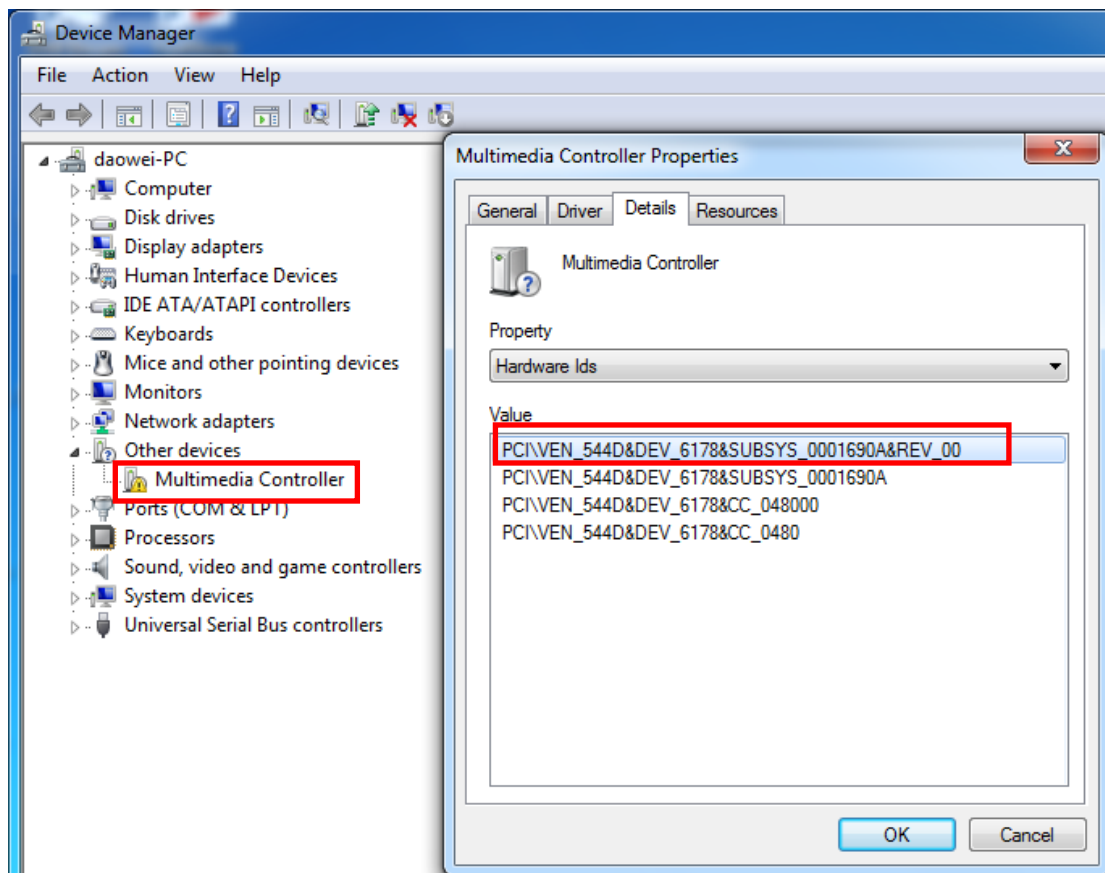


2. Windows driver installation

2.1 Turn on your PC then open “Computer Management”, there you will see an unknown device “Multimedia Controller” in “Other devices” item before the driver install.

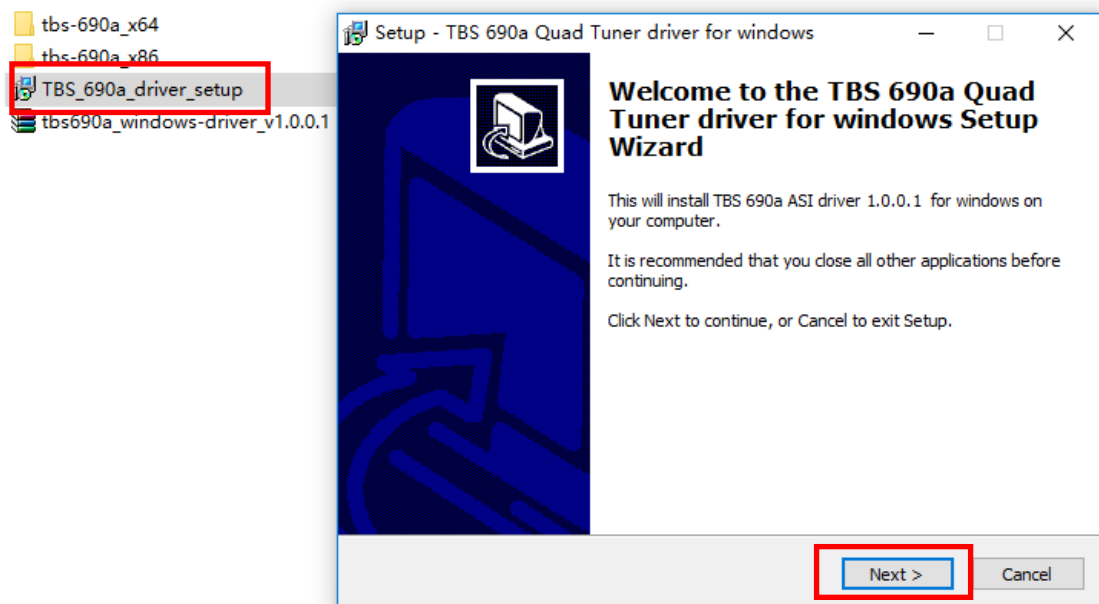
In order to install the driver successfully, you have to do as the prompts step by step. Then you can check the TBS DVB-ASI hardware device ID as follows: Open “Computer Management”, click “Other devices”, finally choose and double click the right hardware device to get more details. Every product has its own private hardware ID.

Please kindly see the following screenshot for your reference.

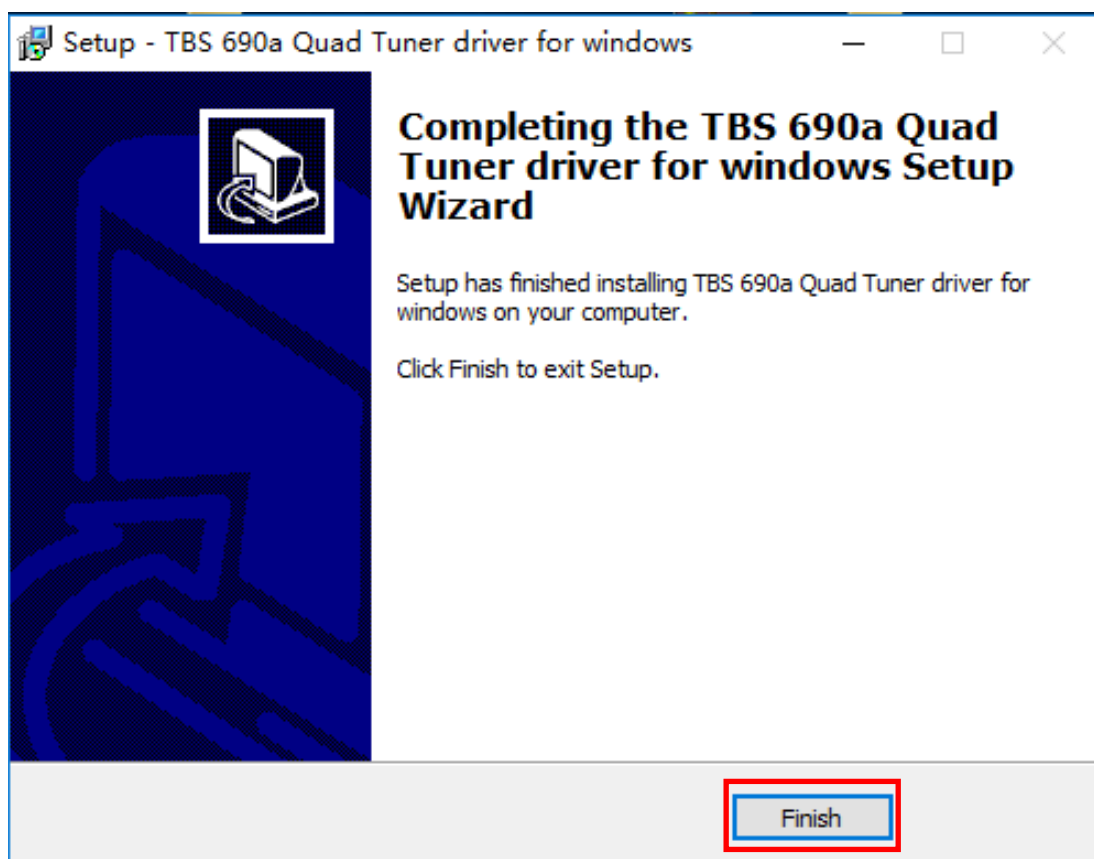
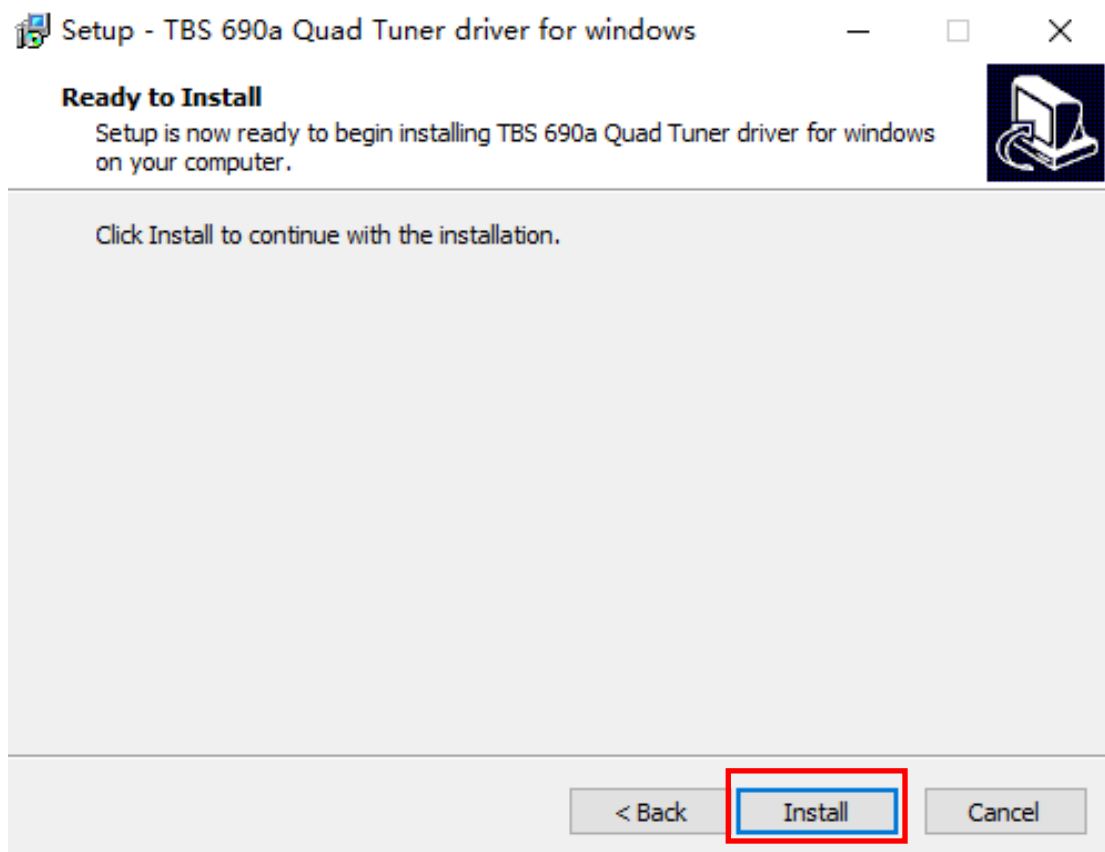


2. 2 Install windows driver:

1) Click “TBS_690a_driver_setup”, and then a new window will pop up

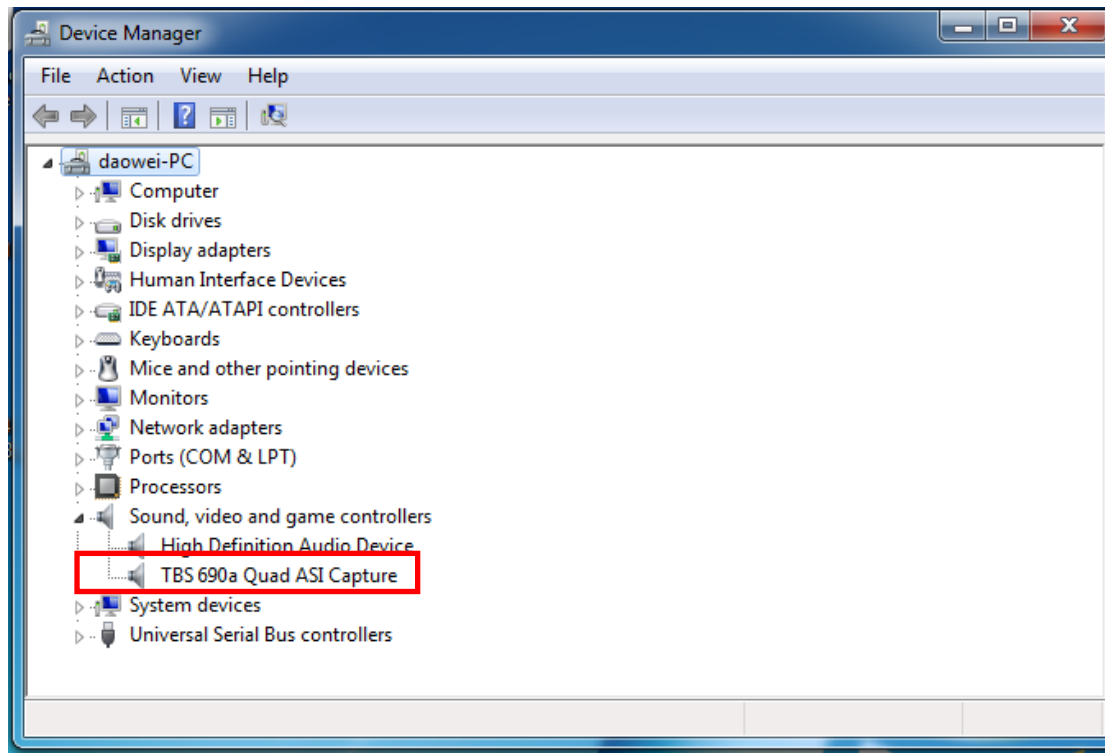


2) Click “Next”→ “Install”→ “Finish” to complete installation



3) To verify whether the driver was correctly installed: Click "My Computer", 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 “TBS690a Quad DVB S/S2 BDA Tuners” that means you have installed driver correctly, and display as below:



3. Play Software Installation

To enjoy satellite TV on PC or record video, you still need to install player software and right set the search parameters. The above series of TBS TV tuner Card is compatible with a lot of software like TBSViewer, DVBDream, ProgDVB etc.

Here is a link is for downloading Player software. For detailed installation instructions, see its Software Installation Instructions.

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

Moreover, you can check some Video Guide on the following link:

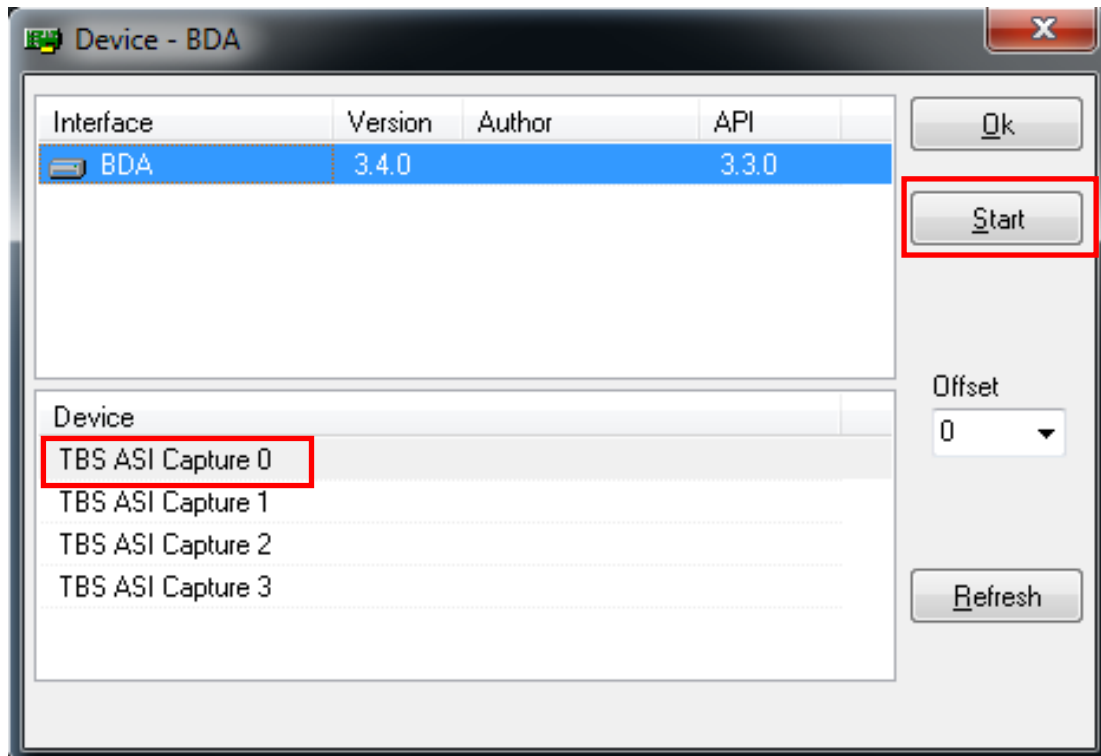
<https://www.youtube.com/user/buydVB/videos>

Now we take DVBDream as an example:

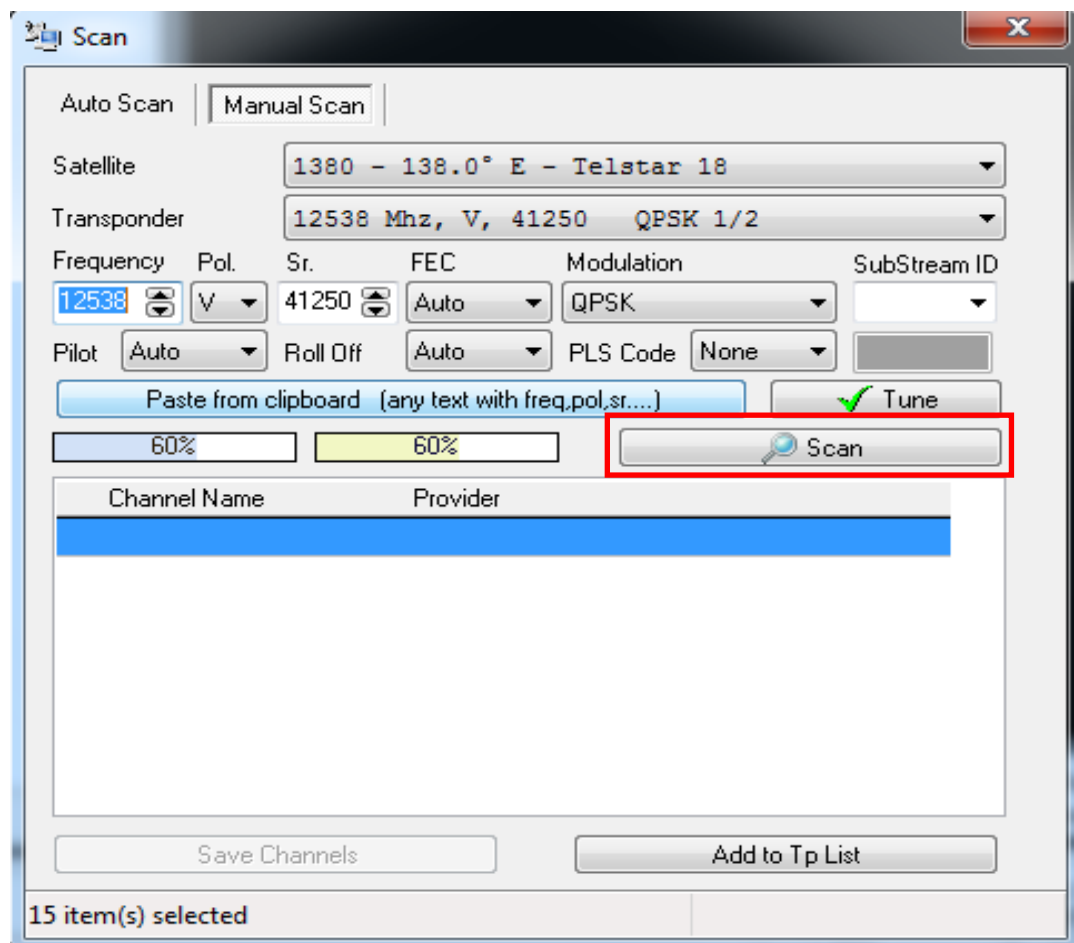
1> download the software OEM version from website:

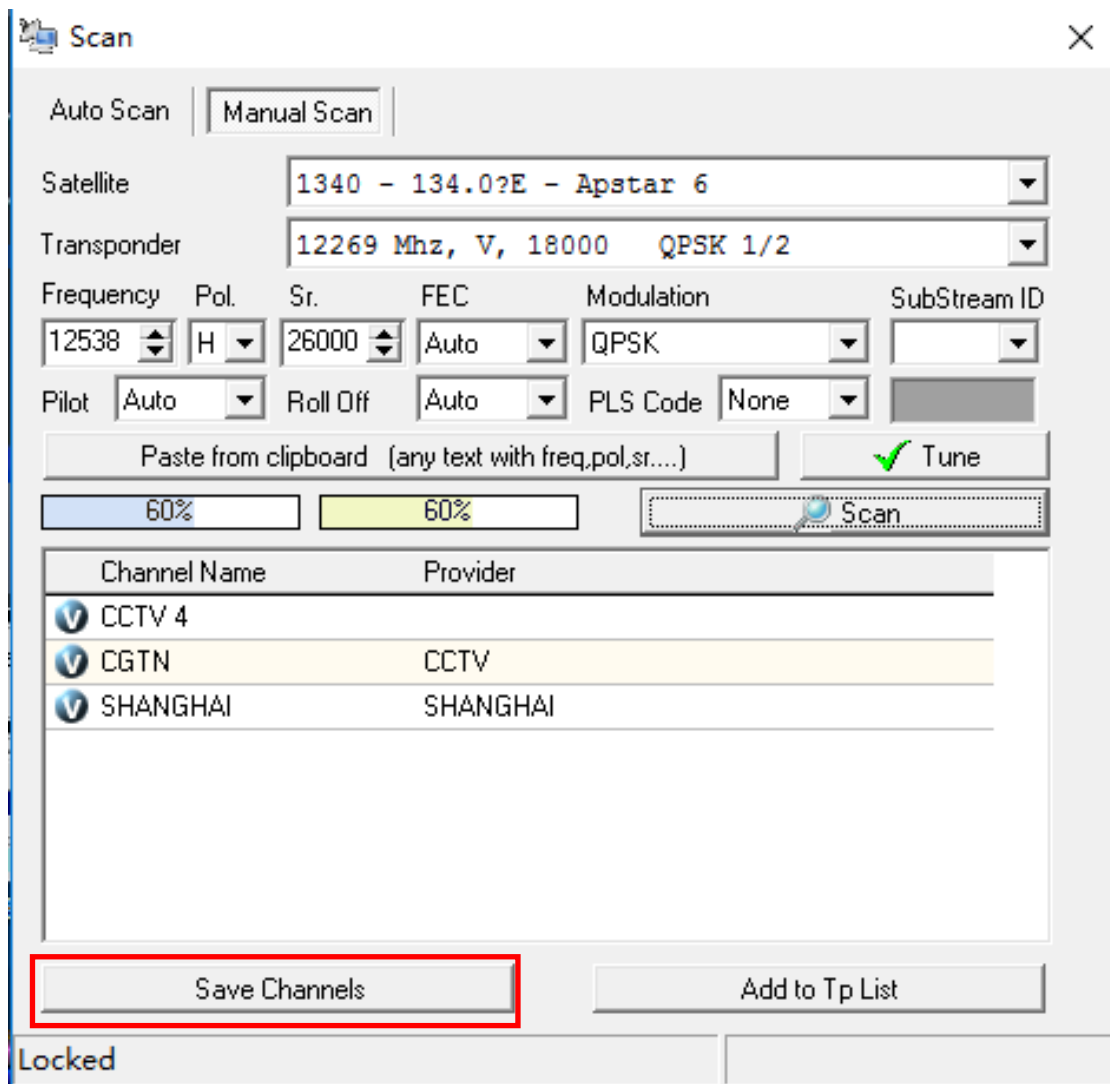
http://www.tbsiptv.com/download/common/dvbdream_oem_version_setup_v2921.zip

2> Install it and open it, then select a device under “Options”-“Device” item:

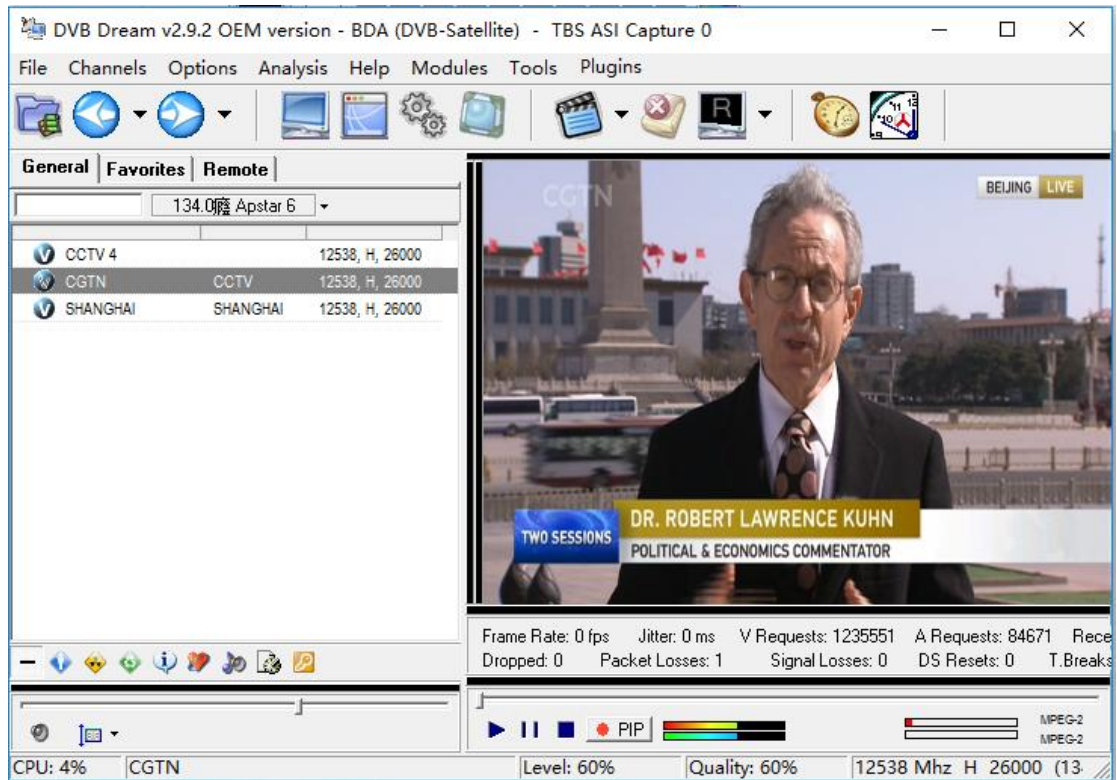


3> Now go to scan the channel. Just take it as a DVBS tuner card, set a Diseqc, type the corresponding parameters then click “Scan ” button, Like this:





Click “Save Channels” at last. Now you can enjoy them in the channel list:



ATTENTION:

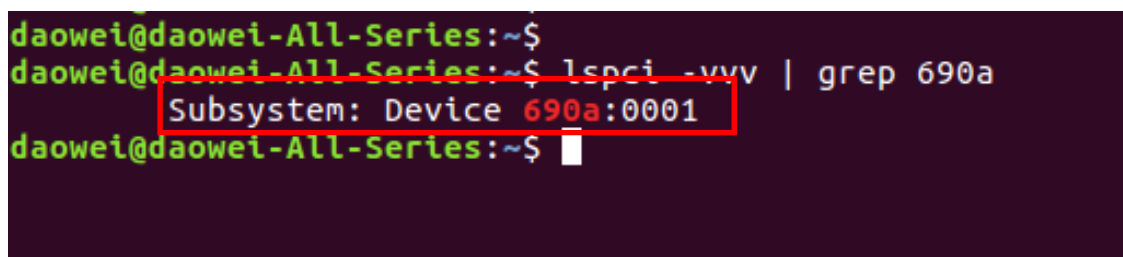
- ① In some case, the card can not be detected by your PC, you can't see the device in Device manager, please try to change a PCIe slot and try again; or the golden finger is oxidized in the air, try to clean it by an eraser.
- ② Don't insert or pull the card out directly when your computer is working, otherwise it will damage your tuner card.

4. Linux open source drive installation

For Linux OS, our open source driver has supported TBS690a. Detailed steps about how to install the Linux driver, please visit the following website:

https://github.com/tbsdtv/linux_media/wiki

4.1 # `lspci -vvv | grep 690a` (This command aims at checking whether the DVB-ASI device can be detected by your motherboard. If not, you must go back to check, maybe the device is not installed correctly or try to change a PCI-E slot.)



4.2 Create a directory named “tbsdriver” for your source first.

mkdir tbsdriver (See screenshot below.)

```
xtream@xtream-To-be-filled-by-0-E-M:~$ sudo -s
[sudo] password for xtream:
root@xtream-To-be-filled-by-0-E-M:~# mkdir tbsdriver
root@xtream-To-be-filled-by-0-E-M:~#
```

4.3 Execute this command to install the tool “git”. (See screenshot below.)

apt-get install git

```
xtream@xtream-To-be-filled-by-0-E-M:~$ sudo -s
[sudo] password for xtream:
root@xtream-To-be-filled-by-0-E-M:~# apt-get install git
Reading package lists... Done
Building dependency tree
Reading state information... Done
Suggested packages:
  git-daemon-run | git-daemon-sysvinit git-doc git-el git-email git-gui gitk
  gitweb git-arch git-cvs git-mediawiki git-svn
The following NEW packages will be installed:
  git
0 upgraded, 1 newly installed, 0 to remove and 138 not upgraded.
Need to get 0 B/3,006 kB of archives.
After this operation, 24.0 MB of additional disk space will be used.
Selecting previously unselected package git.
(Reading database ... 211973 files and directories currently installed.)
Preparing to unpack .../git_1%3a2.7.4-0ubuntu1_amd64.deb ...
Unpacking git (1:2.7.4-0ubuntu1) ...
Setting up git (1:2.7.4-0ubuntu1) ...
root@xtream-To-be-filled-by-0-E-M:~#
```

4.4 Enter the directory “tbsdriver” you created before, and then download source “media build” and “media”. (See the following screenshot.)

git clone https://github.com/tbsdtv/media_build.git

git clone --depth=1 https://github.com/tbsdtv/linux_media.git -b latest ./media

```

root@xtream-To-be-filled-by-0-E-M:~/Desktop# cd tbsdriver/
root@xtream-To-be-filled-by-0-E-M:~/Desktop/tbsdriver# git clone https://github.com/tbsdtv/media_build.git
Cloning into 'media_build'...
remote: Counting objects: 3398, done.
remote: Total 3398 (delta 0), reused 0 (delta 0), pack-reused 3398
Receiving objects: 100% (3398/3398), 640.51 KiB | 3.00 KiB/s, done.
Resolving deltas: 100% (2415/2415), done.
Checking connectivity... done
root@xtream-To-be-filled-by-0-E-M:~/Desktop/tbsdriver# git clone --depth=1 https://github.com/tbsdtv/linux_media.git -b latest ./media
Cloning into './media'...
remote: Counting objects: 59051, done.
remote: Compressing objects: 61% (33904/55580)

```

4.5 Enter the directory of “media build”, execute “make dir DIR=../media” as the following screenshot.

make dir DIR=../media

```

root@xtream-To-be-filled-by-0-E-M:~/Desktop/tbsdriver# ls
media  media_build
root@xtream-To-be-filled-by-0-E-M:~/Desktop/tbsdriver# cd media_build/
root@xtream-To-be-filled-by-0-E-M:~/Desktop/tbsdriver/media_build# make dir DIR=../media
make -C linux/ dir DIR="../media"
make[1]: Entering directory '/home/xtream/Desktop/tbsdriver/media_build/linux'
rm -rf drivers firmware include sound .patches_applied .linked_dir .git_log.md5 git_log
Searching in ../../media/Makefile for kernel version.
./use_dir.pl ../../media
sync file: firmware/av7110/Boot.S
sync file: include/uapi/linux/media-bus-format.h
sync file: include/uapi/linux/v4l2-dv-timings.h
sync file: include/linux/fence.h
sync file: include/linux/compiler-gcc.h
sync file: include/linux/dma-buf.h
sync file: sound/pci/bt87x.c
sync file: include/uapi/linux/videodev2.h
sync file: firmware/ttusb-budget/dspbootcode.bin.ihex
sync file: include/linux/cec-funcs.h
sync file: include/trace/events/vb2.h
sync file: include/sound/aci.h
sync file: include/uapi/linux/usb/video.h
sync file: firmware/cpia2/stv0672_vp4.bin.ihex
sync file: include/linux/ti_wilink_st.h
sync file: include/linux/pci_ids.h

```

4.6 # make distclean (See screenshot below.)


```

root@xtream-To-be-filled-by-0-E-M:~/Desktop/tbsdriver/media_build# make distclean
make -C /home/xtream/Desktop/tbsdriver/media_build/v4l distclean
make[1]: Entering directory '/home/xtream/Desktop/tbsdriver/media_build/v4l'
No version yet, using 4.7.0-040700rc3-generic
rm -f *.o *.ko *.o.cmd *.ko.cmd *.mod.c av7110_firm.h fdump \
    config-compat.h Module.symvers Module.markers modules.order \
    *.unsigned *.ko.unsigned.cmd
make -C firmware clean
make[2]: Entering directory '/home/xtream/Desktop/tbsdriver/media_build/v4l/firmw
are'
rm -f ihex2fw
rm -f vicam/firmware.fw ttusb-budget/dspbootcode.bin cpia2/stv0672_vp4.bin av7110
/bootcode.bin
make[2]: Leaving directory '/home/xtream/Desktop/tbsdriver/media_build/v4l/firmw
are'
rm -f .version *.o.flags *.o.d *.mod.gcno Makefile.media \
    Kconfig Kconfig.kern .config .config.cmd .myconfig \
    .kconfig.dep
rm -rf .tmp_versions .tmp*.ver .tmp*.o *.gcno
rm -f scripts/lxdialog scripts/kconfig
make -C firmware distclean
make[2]: Entering directory '/home/xtream/Desktop/tbsdriver/media_build/v4l/firmw
are'
rm -f ihex2fw
rm -f vicam/firmware.fw ttusb-budget/dspbootcode.bin cpia2/stv0672_vp4.bin av7110
/bootcode.bin

```

4.7 # make -j4

```

root@xtream-To-be-filled-by-0-E-M:~/Desktop/tbsdriver/media_build# make -j4
make -C /home/xtream/Desktop/tbsdriver/media_build/v4l
make[1]: Entering directory '/home/xtream/Desktop/tbsdriver/media_build/v4l'
No version yet, using 4.7.0-040700rc3-generic
scripts/make_makefile.pl
make[2]: Entering directory '/home/xtream/Desktop/tbsdriver/media_build/linux'
Updating/Creating .config
make[2]: Entering directory '/home/xtream/Desktop/tbsdriver/media_build/linux'
Syncing with dir ../../media
Syncing with dir ../../media
Applying patches for kernel 4.7.0-040700rc3-generic
patch -s -f -N -p1 -i ../backports/api_version.patch
patch -s -f -N -p1 -i ../backports/pr_fmt.patch
make[3]: Entering directory '/home/xtream/Desktop/tbsdriver/media_build/linux'
Unapplying patches
patch -s -f -R -p1 -i ../backports/api_version.patch
make[3]: Leaving directory '/home/xtream/Desktop/tbsdriver/media_build/linux'
Applying patches for kernel 4.7.0-040700rc3-generic
patch -s -f -N -p1 -i ../backports/api_version.patch
patch -s -f -N -p1 -i ../backports/pr_fmt.patch
1 out of 1 hunk FAILED -- saving rejects to file drivers/media/platform/s3c-camif
/camif-core.c.rej
1 out of 1 hunk FAILED -- saving rejects to file drivers/media/platform/s3c-camif
/camif-regs.c.rej

```

4.8 # make install (See screenshot below.)

```

root@xtream-To-be-filled-by-0-E-M:~/Desktop/tbsdriver/media_build# make install
make -C /home/xtream/Desktop/tbsdriver/media_build/v4l install
make[1]: Entering directory '/home/xtream/Desktop/tbsdriver/media_build/v4l'
-e
Installing /lib/modules/4.7.0-040700rc3-generic/kernel/mm files:
frame_vector.ko

Removing obsolete files from /lib/modules/4.7.0-040700rc3-generic/kernel/drivers/media/dvb/firewire:

Removing obsolete files from /lib/modules/4.7.0-040700rc3-generic/kernel/drivers/media/common/tuners:

Removing obsolete files from /lib/modules/4.7.0-040700rc3-generic/kernel/drivers/media/dvb/ttpci:

Removing obsolete files from /lib/modules/4.7.0-040700rc3-generic/kernel/drivers/media/dvb/bt8xx:

Removing obsolete files from /lib/modules/4.7.0-040700rc3-generic/kernel/drivers/media/video/cx18:

Removing obsolete files from /lib/modules/4.7.0-040700rc3-generic/kernel/drivers/media/video/hdpvr:

Removing obsolete files from /lib/modules/4.7.0-040700rc3-generic/kernel/drivers/media/video/saa7164:

Removing obsolete files from /lib/modules/4.7.0-040700rc3-generic/kernel/drivers/media/video/pwc:

```

4.9 Executed all above commands, you should have completed driver installation. Reboot your computer and enter the following command to check if the adapters are loaded successfully.

#reboot

#dmesg | grep frontend

```

daowei@daowei-All-Series: ~
daowei@daowei-All-Series:~$ dmesg | grep frontend
[ 4.700876] begin Attaching frontend
[ 4.804493] end Attaching frontend
[ 4.932698] TBSECP3 driver 0000:01:00.0: DVB: registering adapter 0 frontend 0
(TurboSight TBS 690a ASI Capture )...
[ 5.054178] begin Attaching frontend
[ 5.157020] end Attaching frontend
[ 5.285288] TBSECP3 driver 0000:01:00.0: DVB: registering adapter 1 frontend 0
(TurboSight TBS 690a ASI Capture )...
[ 5.406927] begin Attaching frontend
[ 5.509569] end Attaching frontend
[ 5.637980] TBSECP3 driver 0000:01:00.0: DVB: registering adapter 2 frontend 0
(TurboSight TBS 690a ASI Capture )...
[ 5.760921] begin Attaching frontend
[ 5.862147] end Attaching frontend
[ 5.990386] TBSECP3 driver 0000:01:00.0: DVB: registering adapter 3 frontend 0
(TurboSight TBS 690a ASI Capture )...
[ 130.511164] TBSECP3 driver 0000:01:00.0: DVB: adapter 2 frontend 0 frequency 0
out of range (950000..2150000)
[ 130.512733] TBSECP3 driver 0000:01:00.0: DVB: adapter 1 frontend 0 frequency 0
out of range (950000..2150000)
[ 130.513520] TBSECP3 driver 0000:01:00.0: DVB: adapter 0 frontend 0 frequency 0
out of range (950000..2150000)
daowei@daowei-All-Series:~$

```

Or open this directory “/dev/dvb”, you will see there are 4 adapters if it’s installed successfully:

ls /dev/dvb

```
daowei@daowei-All-Series:/dev/dvb$ ls
adapter0 adapter1 adapter2 adapter3
daowei@daowei-All-Series:/dev/dvb$
```

5. If you would like to get latest driver source, please enter the “tbsdriver /media” directory and execute the following commands to update the drivers. (See the commands below.)

```
# cd media
# git remote update
# git pull
# cd ../media_build
# git remote update
# git pull
# make
# sudo make install
# reboot
```

```
root@zhangweihua: ~/Desktop/tbsdriver/media_build
root@zhangweihua:~/Desktop/tbsdriver/media# git remote update
Fetching origin
root@zhangweihua:~/Desktop/tbsdriver/media# git pull
Already up-to-date.
root@zhangweihua:~/Desktop/tbsdriver/media# cd ../media_build
root@zhangweihua:~/Desktop/tbsdriver/media_build# git remote update
Fetching origin
root@zhangweihua:~/Desktop/tbsdriver/media_build# git pull
Already up-to-date.
root@zhangweihua:~/Desktop/tbsdriver/media_build# make
make -C /home/zhangweihua/Desktop/tbsdriver/media_build/v4l
make[1]: Entering directory '/home/zhangweihua/Desktop/tbsdriver/media_build/v4l'
creating symbolic links...
make -C firmware prep
make[2]: Entering directory '/home/zhangweihua/Desktop/tbsdriver/media_build/v4l/firmware'
make[2]: Leaving directory '/home/zhangweihua/Desktop/tbsdriver/media_build/v4l/firmware'
make -C firmware
make[2]: Entering directory '/home/zhangweihua/Desktop/tbsdriver/media_build/v4l/firmware'
make[2]: Nothing to be done for 'default'.
make[2]: Leaving directory '/home/zhangweihua/Desktop/tbsdriver/media_build/v4l/'
```

6. Open Source install tips

```
1./bin/sh: 1: lsdiff: not found
#sudo apt-get install patchutils
```

```
2.you may need to install the Proc::ProcessTable module
#sudo apt-get install libproc-processtable-perl
```


3.fatal error: drx39xyj/drx39xxj.h: No such file or directory

```
#mkdir -p v4l/drx39xyj
```

```
#cp v4l/drx39xxj.h v4l/drx39xyj/
```

4.Can not find the 6909 firmware

#Do not forget the firmware install steps

5.If you find module load errors like "module has wrong symbol version" means that there still are old modules from your previous media tree installation (usually duplicated modules in two different places).

```
#sudo rm -rf lib/modules/uname -r/kernel/drivers/media/*
```

6.Cannot use CONFIG_CC_STACKPROTECTOR_STRONG: -fstack-protector-strong not supported by compiler

```
#sudo add-apt-repository ppa:ubuntu-toolchain-r/test
```

```
#sudo apt-get update
```

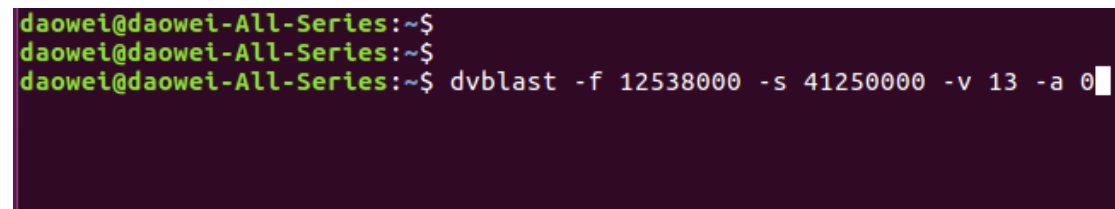
```
#sudo apt-get install gcc-4.9 g++-4.9
```

```
#sudo rm /usr/bin/gcc sudo ln -s /usr/bin/gcc-4.9 /usr/bin/gcc`
```

7. Application DVBLast

7.1 Scan ASI signal. For this DVB-ASI device, just scan it a BS/S2 tuner card. Like this:

```
# dvblast -f 12538000 -s 41250000 -v 13 -a 0
```

A terminal window with a dark background and light-colored text. The prompt is 'daowei@daowei-All-Series:~\$'. The command 'dvblast -f 12538000 -s 41250000 -v 13 -a 0' has been entered and executed, as indicated by the cursor at the end of the line.

```
daowei@daowei-All-Series:~$  
daowei@daowei-All-Series:~$  
daowei@daowei-All-Series:~$ dvblast -f 12538000 -s 41250000 -v 13 -a 0
```

For this DVB-ASI capture card, these parameters “-f”, “-s”, “-v”, “-a”,”

-f: frequency; -s: symbol rate; -v: LNB voltage; -a: adapter number;

The most important parameter is “-a”, it’s needed an exact value. This is a difference compared with DVBS/S2 tuner card.

7.2 Play channels out. If you want to play channels out, you must to create a configuration file to specify your stream out. DVBLast supports rtp/udp protocol.

7.2.1 Create an configuration file “dvb.conf”

```
# vi dvb.conf
```

Type the following words:

```
239.255.0.1:1240 1 258 (this is for rtp)
```

```
239.255.0.1:1240/udp 1 258 (this is for udp)
```

It means you are going to play the program number=258, it’s the channel “CGTN”.

239.255.0.1: multicast address;

1240: port;

1: static parameter;

225: program number;

For the program number, it can be checked from DVBLast message:

```
debug: * program number=257 pid=257
debug: * program number=258 pid=261
debug: * program number=260 pid=269
debug: * program number=261 pid=272
debug: end PAT
debug: new SDT actual tsid=0 version=11 onid=0
debug: * service sid=257 running=4
debug:   - desc 48 service type=0x1 provider="" service="CCTV 4"
debug: * service sid=258 running=4
debug:   - desc 48 service type=0x1 provider="CCTV" service="CGTN"
debug: * service sid=260 running=4
debug:   - desc 48 service type=0x1 provider="BEIJING" service="BEIJING"
debug: * service sid=261 running=4
debug:   - desc 48 service type=0x1 provider="SHANGHAI" service="SHANGHAI"
debug: end SDT
debug: new NIT actual networkid=0 version=11
debug: end NIT
```

7.2.2 Run this command:

```
# dvblast -f 12538000 -s 41250000 -v 13 -a 0 -c dvb.conf
```

7.2.3 Now open a media player to play, the URL should be: `rtp://239.255.0.1:1240`



8. Application Astra (trial version)

8.1 Install Astra then create an empty test.json file:

```
# vi test.json
```

8.2 Open Astra:

```
# astra -c test.json -p 8040 --daemon
```

```
root@daowei-All-Series:~#  
root@daowei-All-Series:~#  
root@daowei-All-Series:~#  
root@daowei-All-Series:~# astra -c /etc/astra/test.json -p 8040 --daemon
```

8.3 login Astra WEBUI to configure. Select an adapter first, enter the parameters, just take it as a DVBS tuner card. See the following screenshot:

Astra Control Panel

192.168.8.110:8040/#/adapter/0

Astra 5.61 Streams Adapters Softcam Sessions Settings Log

Enable ☒

Name * 690a_0

Adapter * 0.0 : TurboSight TBS 690a ASI Capture [FF:FF:FF:FF] Refresh

DVB-S2 ☐

TP * 12538 Horizontal 41250

Advanced Options ☐

Save Apply Back Scan

8.4 Click “Apply” button firstly, and go back to do “Scan”. Wait for a few seconds, when channels were scanned out, chose the programs you want and click “Save”. Please remember that the sequence of your operations cannot be reversed:

192.168.8.110:8040/#/adapter/a001

Astra 5.61 Streams Adapters Softcam Sessions Settings Log

DVB-S2 ☐

TP * 12538 Vertical 41250

Advanced Options ☐

Remove Adapter ☐

Step 3 Save Step 1 Apply Back Step 2 Stop

Status SIGNAL CARRIER FEC SYNC LOCK BER:99+ UNC:0 4353Kbit/s

Signal 70%

SNR 64%

CGTN PNR: 258 TV FTA	BEIJING PNR: 260 TV FTA	SHANGHAI PNR: 261 TV FTA
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8.5 Streaming channels out. Astra supports http, udp/rtp protocol, choose the one you want.

192.168.8.110:8040/#/stream/a002

Astra 5.61 Streams Adapters Softcam Sessions Settings Log

Enable ☒

Name * CGTN

Type * Single Program Stream

INPUT LIST ADD AN INPUT

Input #1 dvb://a001#pnr=258

OUTPUT LIST ADD AN OUTPUT

Output #1 http://192.168.8.110:1236

Advanced Options ☐

Remove Stream ☐

Apply Back

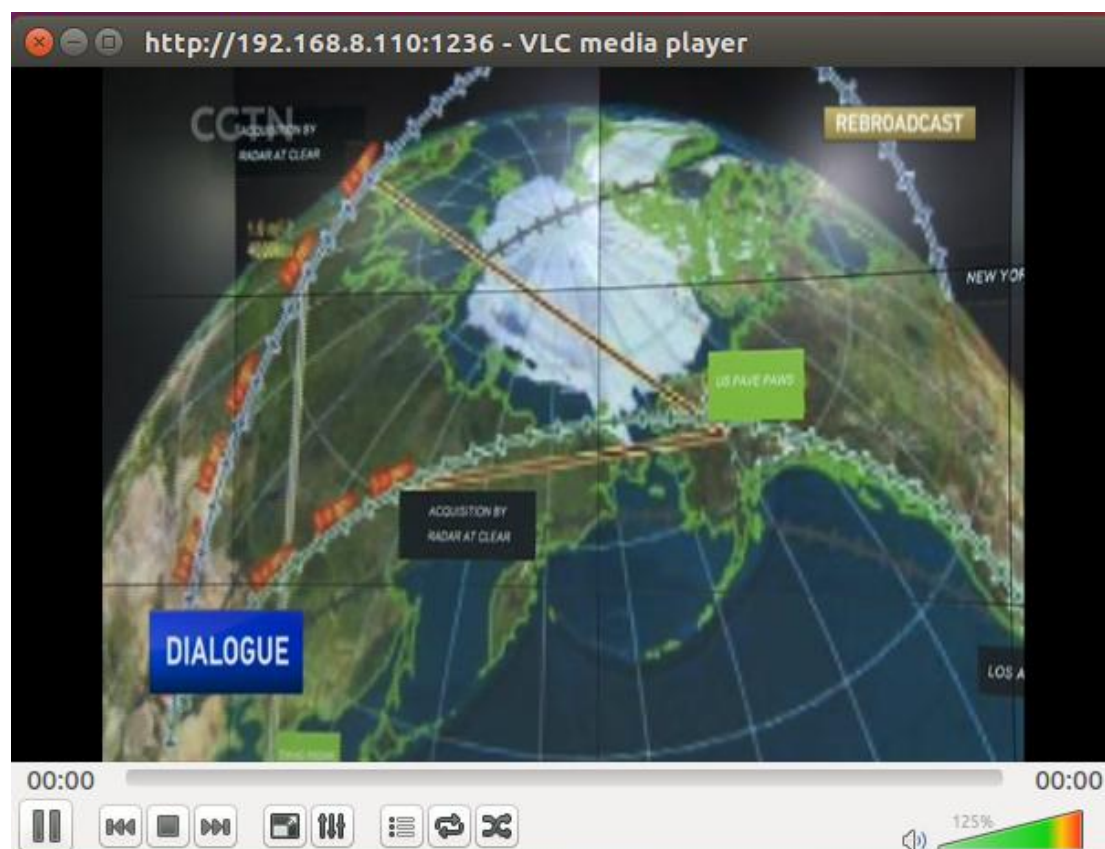
8.6 Now you can open a media player which support network stream to play your channels. If every operation is correct, the status should be:

192.168.8.110:8040/#/stream

Astra 5.61 Streams Adapters Softcam Sessions Settings Log Search

CGTN
4313Kbit/s

URL is <http://192.168.8.110:1236>:



FAQ

Linux:

1. How to install the driver

Closed Driver install steps:

<http://www.tbsdtv.com/forum/viewtopic.php?f=86&t=9875>

Open Source Detail steps:

<http://www.tbsdtv.com/forum/viewtopic.php?f=86&t=9960>

2. Can not compile the driver in CentOS 7

Check your kernel version:

```
# uname -a
```

Link the build folder .Go to this folder such as :

```
cd /lib/modules/3.10.0-327.13.1.el7.x86_64/
```

```
ln -sf /usr/src/kernels/3.10.0-327.10.1.el7.x86_64/ build
```

Then install the driver as normal steps

3. How to use astra.

Script Guide:

<http://www.tbsdtv.com/forum/viewtopic.php?f=86&t=9862>

Video Guide:

<http://www.tbsdtv.com/forum/viewtopic.php?f=86&t=9976>

4. How to use mumudvb

<http://www.mumudvb.net/doc/mumudvb-1.7.3/QUICKSTART.html>

http://www.mumudvb.net/doc/mumudvb-1.7.3/README_CONF.html

Windows:

1. Windows 7 x64 Code 52 issue

Please check this guide:

<http://www.tbsdtv.com/forum/viewtopic.php?f=86&t=9989>

2. Does your driver support windows 10?

No problem you can feel free using windows xp,vista/7/8/10

3. Can't watch the HD channels, only picture or only audio.

Make sure that you have installed the right video and audio decoder.

4. Where i can get the TSReader dll support?

You can get it on our downloadpage:

http://www.tbsdtv.com/download/document/common/tsreader-bdasource_v1.0.8.7-20150604.zip

5. Where i can get the StreamReader dll support?

You can get it on our download page :

http://www.tbsdtv.com/download/document/common/streamreader-dll_v1.0.0.3.zip

6. Why can't use it with Windows Server 2008

Please install this patch for your windows server 2008:

http://www.tbsdtv.com/download/document/common/win2008_bda.zip

7. The card don't been detected by motherboard.

Please refer to attached pics to change some pcie setting on BIOS and update the BIOS to the latest version. Make sure set the PCI-E link speed to Gen1 like this ,as most users after set the BIOS it can detect our card so you can have a try.

8. How to set dvbdream support 8 diseqc?

Open "Options" item then select "Diseqc", Diseqc Switch Type "None".

After add one satellite,open "Properties", can set diseqc port by "Uncommitted" from 0 to 15

9. What kind of antenna to use (DVB-T/DVB-T2 Card)?

Our all dvb-t/t2 card just support the parasitic antenna. If you use the active antenna, you need supply power to antenna.

10. Whether support CI+?

Our all CI card just support the CI, do not support CI+.