



## TBS MOI DVB-S2 Streaming Box\_Tvheadend

**Tvheadend** is a TV tuner server (also known as a PVR backend) and video streaming software for Linux supporting television signal tuning of DVB-S, DVB-S2, DVB-C, DVB-T, ATSC, DTMB, ISDB, IPTV, and Analog video (V4L) as TV tuner input sources.

### How to configure the Tvheadend in Windows

**Step1:** Input: **Http://192.168.1.188:9981<sup>1</sup>** in the address bar of your browser.

**Step 2:** After entering the website, select **“configuration”** > **“TV Adapters”**, then select the TV tuner of **“TurboSight TBS 2990 DVBS/S2 frontend”**

The screenshot shows the web interface of Tvheadend. The browser address bar displays `192.168.1.188:9981/extjs.html`. The navigation menu includes 'Configuration' and 'TV Adapters', both circled in red. The 'TV Adapters' dropdown menu is open, showing 'TurboSight TBS 2990 DVBS/S2 frontend' selected and circled in red. The main content area shows the configuration for this adapter, with the 'Adapter name' field containing 'TurboSight TBS 2990 DVBS/S2 frontend'. The 'Enabled' checkbox is checked, and 'Idle scanning' is also checked. The 'Information and capabilities' panel on the right shows hardware details: Device path: /dev/dvb/adapter0, Device name: TurboSight TBS 2990, Host connection: USB (480 Mbit/s), Intermediate Frequency: 9500000 kHz - 21500000 kHz, Symbol rate range: 1000000 Baud - 4500000 Baud.

<sup>1</sup> the default IP address of MOI is 192.168.1.188, if you have already changed the IP address, for example, to 192.168.1.101, you should enter the `http://192.168.1.101:9981`

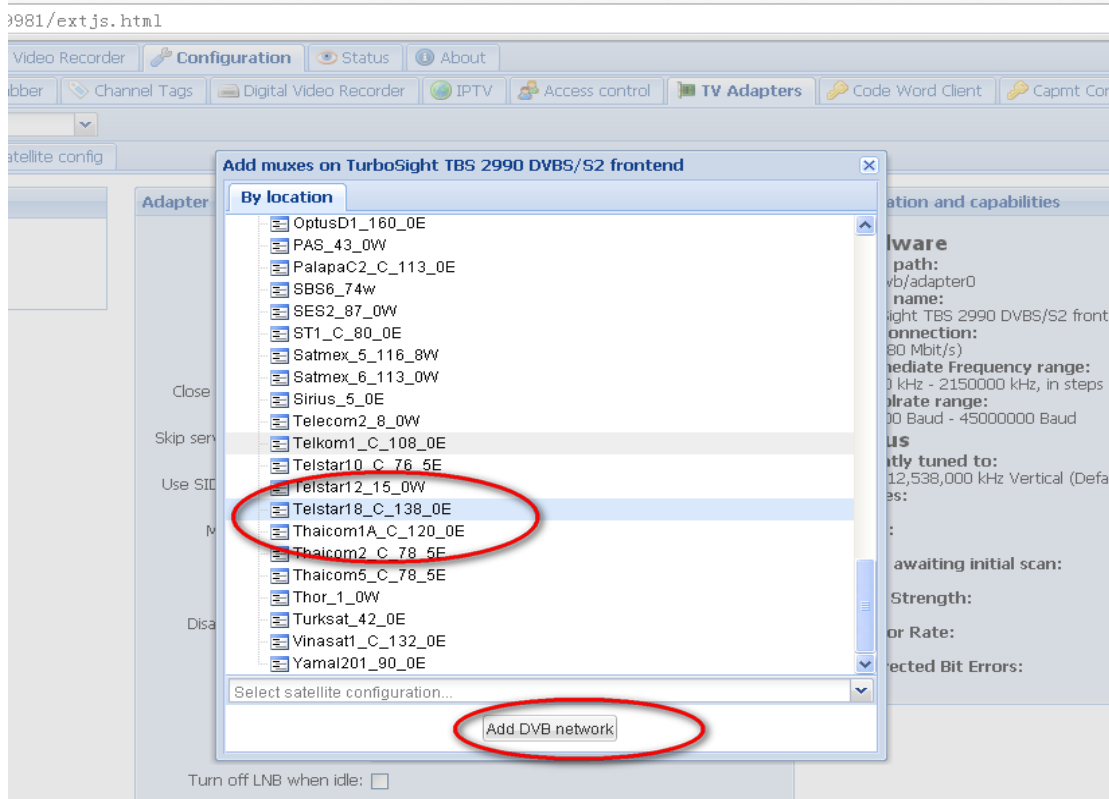


**Step 3: “Adapter configuration”,** please enable the ‘Adapter name’ (see picture) and then save the configuration.

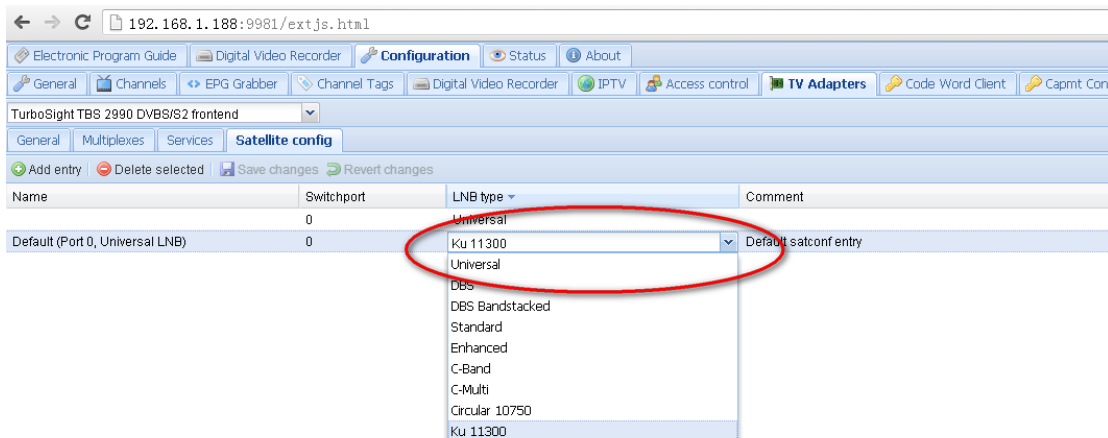
The screenshot shows the configuration interface for a TurboSight TBS 2990 DVBS/S2 frontend. The 'Tools' section on the left contains two buttons: 'Add DVB Network by location...' (circled in red) and 'Map DVB services to channels...'. The 'Adapter configuration' section on the right shows the following settings:

- Adapter name: TurboSight TBS 2990 DVBS/S2 frontend
- Enabled:  (circled in red)
- Autodetect muxes:
- Skip initial scan:
- Idle scanning:
- Close device handle when idle:
- Skip service availability check when mapping:
- Use SID as channel number during mapping:
- Monitor signal quality:
- Full mux reception: Auto (dropdown menu)
- Grace Period: 0 (input field)
- Disable PMT monitoring:
- Original Network ID: 0 (input field)

Add DVB networks by location, select satellite, Take “**Satellite138°E**” for example, choose “**Satellite138°E**” and select “**Default (Port 0, Universal LNB)**”, click icon of “**Add DVB network**”.



**Step 4:** Select “satellite configuration”, double click ‘LNB type’ to select proper LNB type.



Select “multiplexes”> “add mux(es) manually”. Configure the satellite parameters.



| Enabled                             | Play                 | Network | Frequency    | Modulation              | Polarisation | Satellite config             |
|-------------------------------------|----------------------|---------|--------------|-------------------------|--------------|------------------------------|
| <input checked="" type="checkbox"/> | <a href="#">Play</a> | CCTV    | 12,538,00... | 41250 kBaud, SYS_DVB... | Vertical     | Default (Port 0, Universa... |
| <input type="checkbox"/>            | <a href="#">Play</a> |         |              |                         |              |                              |
| <input type="checkbox"/>            | <a href="#">Play</a> |         |              |                         |              |                              |
| <input type="checkbox"/>            | <a href="#">Play</a> |         |              |                         |              |                              |
| <input type="checkbox"/>            | <a href="#">Play</a> |         |              |                         |              |                              |

Take "Satellite138°E" for example, the frequency is 12538000, the symbol rate is 41250000, FEC is AUTO (you can see all the information in the following picture)



The screenshot shows the configuration interface for the TurboSight TBS 2990 DVBS/S2 frontend. The 'Multiplexes' tab is active. A dialog box titled 'Add mux(es) manually...' is open, allowing the user to define a new multiplex. The dialog contains the following fields:

- Frequency (kHz): 125380000
- Symbolrate (baud): 41250000
- FEC: Auto
- Delivery System: SYS\_DVBS
- Constellation: QPSK
- Polarisation: Vertical
- Satellite config: Default (Port 0, Universal)

The 'Add' button at the bottom right of the dialog is highlighted with a red circle. On the right side of the dialog, there is a table of modulation options:

| Modulation              | Pola  |
|-------------------------|-------|
| 41250 kBaud, SYS_DVB... | Verti |
| 3034 kBaud, SYS_DVBS... | Verti |
| 3255 kBaud, SYS_DVBS... | Verti |
| 30000 kBaud, SYS_DVB... | Verti |
| 30000 kBaud, SYS_DVB... | Verti |

After input the satellite parameters, please click “add”

**Step 5:** Name the channel

Choose the channels you want to broadcast, and rename them. Double click the following area, name the



channels. Then click “save changes”.

TurboSight TBS 2990 DVBS/S2 frontend

General Multiplexes **Services** Satellite config

Save changes Revert changes Max selected

| Ena...                              | Service name | Play                 | Channel name | DVB charset | EPG                                 | Type | Provider  | Network |
|-------------------------------------|--------------|----------------------|--------------|-------------|-------------------------------------|------|-----------|---------|
| <input checked="" type="checkbox"/> | BEIJING      | <a href="#">Play</a> | BEIJING      | auto        | <input checked="" type="checkbox"/> | SDTV | BEIJING   | CCTV    |
| <input checked="" type="checkbox"/> | CCTV 4       | <a href="#">Play</a> | CCTV 4       | auto        | <input checked="" type="checkbox"/> | SDTV |           | CCTV    |
| <input checked="" type="checkbox"/> | CCTV NEWS    | <a href="#">Play</a> | CCTV NEWS    | auto        | <input checked="" type="checkbox"/> | SDTV |           | CCTV    |
| <input checked="" type="checkbox"/> | CCTV OPERA   | <a href="#">Play</a> | CCTV OPERA   | auto        | <input checked="" type="checkbox"/> | SDTV |           | CCTV    |
| <input checked="" type="checkbox"/> | FUJIAN       | <a href="#">Play</a> | FUJIAN       | auto        | <input checked="" type="checkbox"/> | SDTV | FUJIAN    | CCTV    |
| <input checked="" type="checkbox"/> | GUANGDONG    | <a href="#">Play</a> | GUANGDONG    | auto        | <input checked="" type="checkbox"/> | SDTV | GUANGDONG | CCTV    |
| <input checked="" type="checkbox"/> | HUNAN        | <a href="#">Play</a> | HUNAN        | auto        | <input checked="" type="checkbox"/> | SDTV | HUNAN     | CCTV    |
| <input checked="" type="checkbox"/> | JIANGSU      | <a href="#">Play</a> | JIANGSU      | auto        | <input checked="" type="checkbox"/> | SDTV | JIANGSU   | CCTV    |
| <input checked="" type="checkbox"/> | SHANGHAI     | <a href="#">Play</a> | SHANGHAI     | auto        | <input checked="" type="checkbox"/> | SDTV | SHANGHAI  | CCTV    |
| <input checked="" type="checkbox"/> | SHENZHEN     | <a href="#">Play</a> | SHENZHEN     | auto        | <input checked="" type="checkbox"/> | SDTV | SHENZHEN  | CCTV    |
| <input checked="" type="checkbox"/> | XIAMEN       | <a href="#">Play</a> | XIAMEN       | auto        | <input checked="" type="checkbox"/> | SDTV | XIAMEN    | CCTV    |



TurboSight TBS 2990 DVBS/S2 frontend

Save changes Revert changes Map selected

| Ena...                              | Service name | Play                 | Channel name | DVB charset | EPG                                 | Type | Provider  | Network |
|-------------------------------------|--------------|----------------------|--------------|-------------|-------------------------------------|------|-----------|---------|
| <input checked="" type="checkbox"/> | BEIJING      | <a href="#">Play</a> | BEIJING      | auto        | <input checked="" type="checkbox"/> | SDTV | BEIJING   | CCTV    |
| <input checked="" type="checkbox"/> | CCTV 4       | <a href="#">Play</a> | CCTV 4       | auto        | <input checked="" type="checkbox"/> | SDTV |           | CCTV    |
| <input checked="" type="checkbox"/> | CCTV NEWS    | <a href="#">Play</a> | CCTV NEWS    | auto        | <input checked="" type="checkbox"/> | SDTV |           | CCTV    |
| <input checked="" type="checkbox"/> | CCTV OPERA   | <a href="#">Play</a> | CCTV OPERA   | auto        | <input checked="" type="checkbox"/> | SDTV |           | CCTV    |
| <input checked="" type="checkbox"/> | FUJIAN       | <a href="#">Play</a> | FUJIAN       | auto        | <input checked="" type="checkbox"/> | SDTV | FUJIAN    | CCTV    |
| <input checked="" type="checkbox"/> | GUANGDONG    | <a href="#">Play</a> | GUANGDONG    | auto        | <input checked="" type="checkbox"/> | SDTV | GUANGDONG | CCTV    |
| <input checked="" type="checkbox"/> | HUNAN        | <a href="#">Play</a> | HUNAN        | auto        | <input checked="" type="checkbox"/> | SDTV | HUNAN     | CCTV    |
| <input checked="" type="checkbox"/> | JIANGSU      | <a href="#">Play</a> | JIANGSU      | auto        | <input checked="" type="checkbox"/> | SDTV | JIANGSU   | CCTV    |
| <input checked="" type="checkbox"/> | SHANGHAI     | <a href="#">Play</a> | SHANGHAI     | auto        | <input checked="" type="checkbox"/> | SDTV | SHANGHAI  | CCTV    |
| <input checked="" type="checkbox"/> | SHENZHEN     | <a href="#">Play</a> | SHENZHEN     | auto        | <input checked="" type="checkbox"/> | SDTV | SHENZHEN  | CCTV    |
| <input checked="" type="checkbox"/> | XIAMEN       | <a href="#">Play</a> | XIAMEN       | auto        | <input checked="" type="checkbox"/> | SDTV | XIAMEN    | CCTV    |

Go to “configuration”> “channel”> “add channel”, you will see all channels you broadcast.

192.168.1.188:9981/extjs.html

Configuration Status About

Channels EPG Grabber Channel Tags Digital Video Recorder IPTV Access control TV Adapters Code Wc

Add channel Delete selected Save changes Revert changes

| Numb... | Name       | Play                 | EPG Grab source | Tags                         | Icon (full URL) |
|---------|------------|----------------------|-----------------|------------------------------|-----------------|
| Not set | BEIJING    | <a href="#">Play</a> |                 | TV channels, SDTV, BEIJING   |                 |
| Not set | CCTV 4     | <a href="#">Play</a> |                 | TV channels, SDTV,           |                 |
| Not set | CCTV NEWS  | <a href="#">Play</a> |                 | TV channels, SDTV,           |                 |
| Not set | CCTV OPERA | <a href="#">Play</a> |                 | TV channels, SDTV,           |                 |
| Not set | Channel 12 | <a href="#">Play</a> |                 | No tags                      |                 |
| Not set | Channel 13 | <a href="#">Play</a> |                 | No tags                      |                 |
| Not set | FUJIAN     | <a href="#">Play</a> |                 | TV channels, SDTV, FUJIAN    |                 |
| Not set | GUANGDONG  | <a href="#">Play</a> |                 | TV channels, SDTV, GUANGDONG |                 |
| Not set | HUNAN      | <a href="#">Play</a> |                 | TV channels, SDTV, HUNAN     |                 |
| Not set | JIANGSU    | <a href="#">Play</a> |                 | TV channels, SDTV, JIANGSU   |                 |
| Not set | SHANGHAI   | <a href="#">Play</a> |                 | TV channels, SDTV, SHANGHAI  |                 |
| Not set | SHENZHEN   | <a href="#">Play</a> |                 | TV channels, SDTV, SHENZHEN  |                 |
| Not set | XIAMEN     | <a href="#">Play</a> |                 | TV channels, SDTV, XIAMEN    |                 |

Enter [URL:http://192.168.1.188:9981/playlist](http://192.168.1.188:9981/playlist) via VLC and XBMC software to play the satellite TV programs



Reference:

TVHeadend

<https://www.lonelycoder.com/redmine/projects/tvheadend/wiki>

XBMC

<http://xbmc.org/>

VLC

<http://www.videolan.org/index.html>