TurBoSight Tech Limited.

www.tbsiptv.com| www.tbsdtv.com
sales@tbsdtv.com| support@tbsiptv.com| support@tbsdtv.com

TBS5927SE Professional Digital Satellite TV Tuner

User Manual



Copyright © TBS Technologies 2005-2026 All Rights Reserved

SAFETY NOTES

Read the user manual before using the equipment, mainly "**SAFETY RULES**" paragraph.
The symbol on the equipment means "**SEE USER MANUAL**". In this manual may also appear as a Caution or Warning symbol.
WARNING AND CAUTION statements may appear in this manual to avoid injury hazard or damage to this product or other property.

USER'S MANUAL VERSION

Version	Date
1.0	October 2026

SAFETY REQUIREMENTS

*** The security can be compromised if not applied the instructions in this manual**.
***** Use this instrument under the **specified environmental conditions**.
***** The user is not allowed to perform changes inside the equipment.
Any change on the equipment must be done exclusively by specialized staff.
***** Use appropriate low-level radiation cables for input / output signals, especially on high level signals.
***** Follow the **cleaning instructions** described in the Maintenance paragraph.

Catalog

1. Product Introduction 3
    1.1 Overview 3
2. Windows Setup and Usage 3
    2.1 Hardware Installation 3
    2.2 Checking Device Recognition 3
    2.3 Driver Installation 4
    2.4 Receiving Satellite Signals 6
    2.5 Other Windows DVB Software 11
3. Linux Setup and Usage 12
    3.1 Hardware Installation 12
    3.2 Checking USB Tuner Recognition 12
    3.3 Installing the Linux Driver 12
4. Scanning and Streaming Software 13
    4.1 DVBlast 13
    4.2 Astra Cesbo 15
5. Support and Contact 23

1. Product Introduction

1.1 Overview

TBS5927SE is the successor of TBS5927, a professional-grade digital satellite TV tuner USB box with USB 2.0 connectivity for PCs.
Beyond standard DVB-S2X/S2/DVB-S QPSK and 8PSK supported by ordinary satellite receivers, it delivers advanced professional reception modes including ACM, CCM, VCM, Multi-Input Stream, 16APSK, 32APSK, Multiple Generic Stream and Combined Single Generic & Single TS — functions unavailable on most mainstream satellite receiving hardware.
Equipped with built-in hardware blind scan, it performs fast automatic blind scan across symbol rates and carrier frequencies, greatly simplifying satellite spectrum exploration.
A tristate MPEG TS output interface is integrated for flexible transport-stream export. With dedicated TBS software tools, users can capture these special broadcast streams effortlessly. Official Windows BDA drivers and Linux drivers are both supplied for broad system compatibility.

2. Windows Setup and Usage

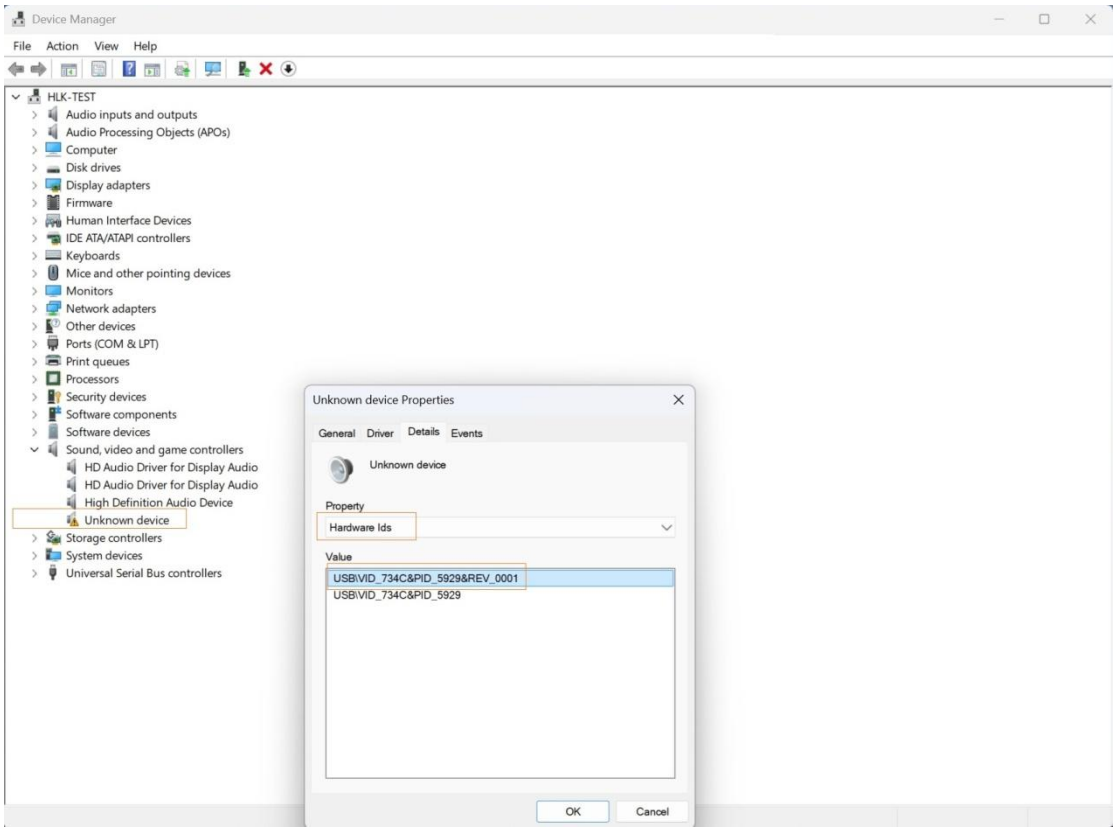
This chapter describes how to connect TBS5927SE to a Windows PC, install the driver, and receive satellite signals with DVBdream.

2.1 Hardware Installation

Connect TBS5927SE to the USB port of the computer with the supplied USB cable. A USB 2.0 port is recommended; USB 3.0 ports may cause compatibility issues.
Power supply: Connect the DC 12V power adapter to TBS5927SE.

2.2 Checking Device Recognition

Go to My Computer --- Properties --- Device Manager. Once the device has been recognized, an "Unknown Device" entry is shown on the first installation, as illustrated below:



It is recommended to check the hardware ID as well, to confirm that the device is TBS5927SE.

2.3 Driver Installation

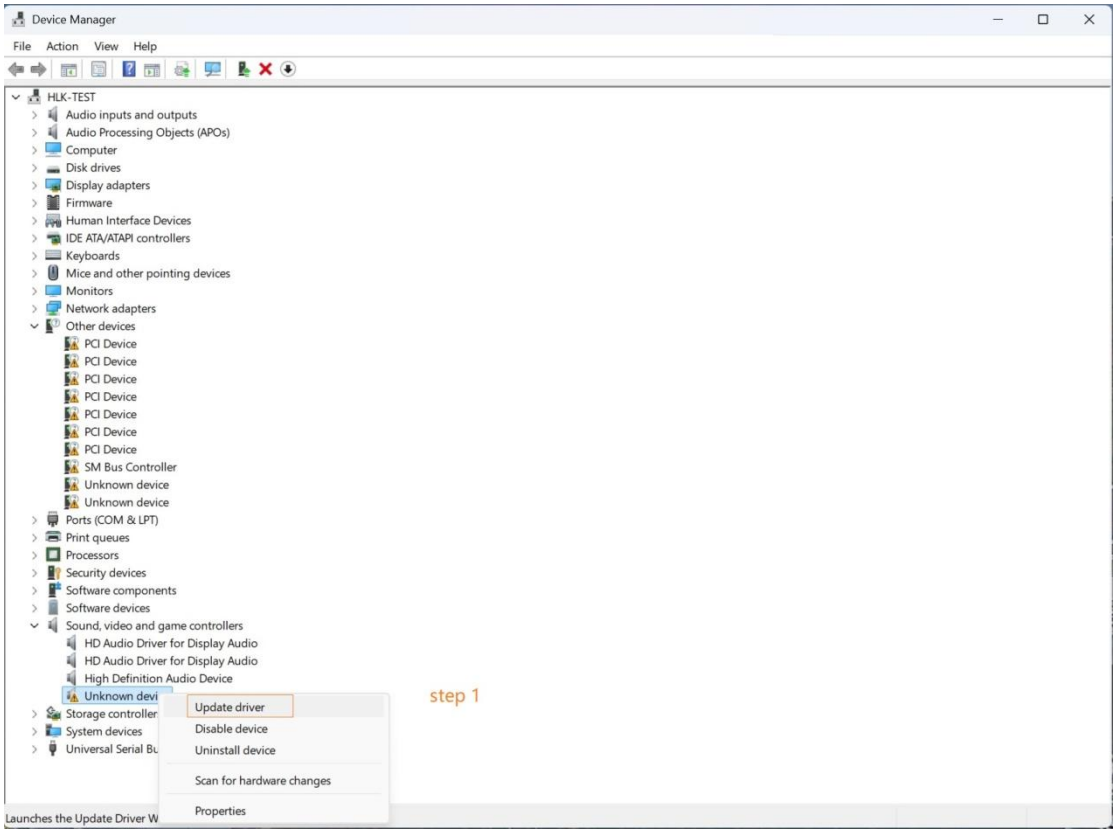
2.3.1 Download the Driver

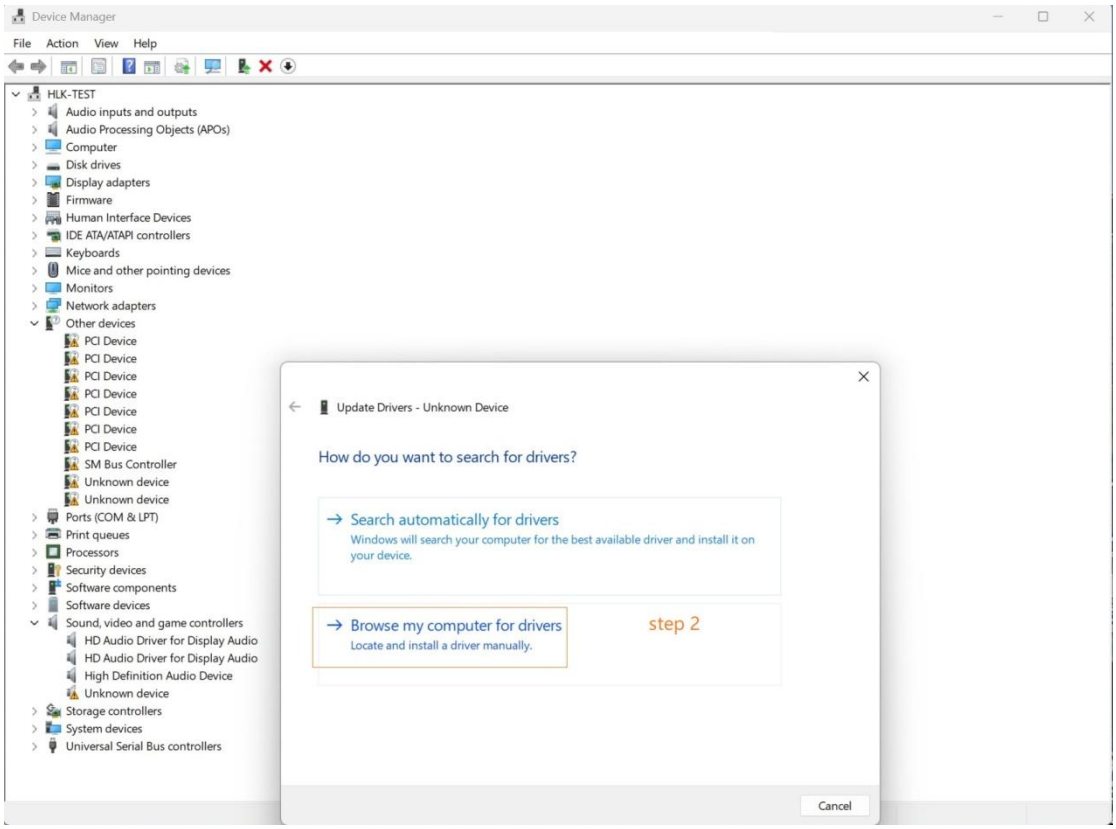
https://www.tbsdtv.com/download/document/tbs5927se/TBS5927SE-20260929.zip

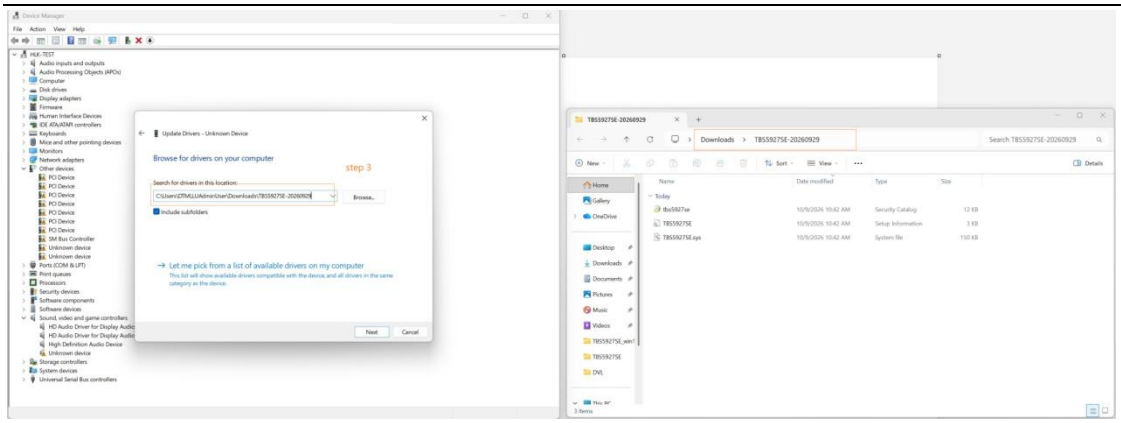
The driver supports Windows 11 64-bit and Windows 10 64-bit systems.

2.3.2 Install the Driver

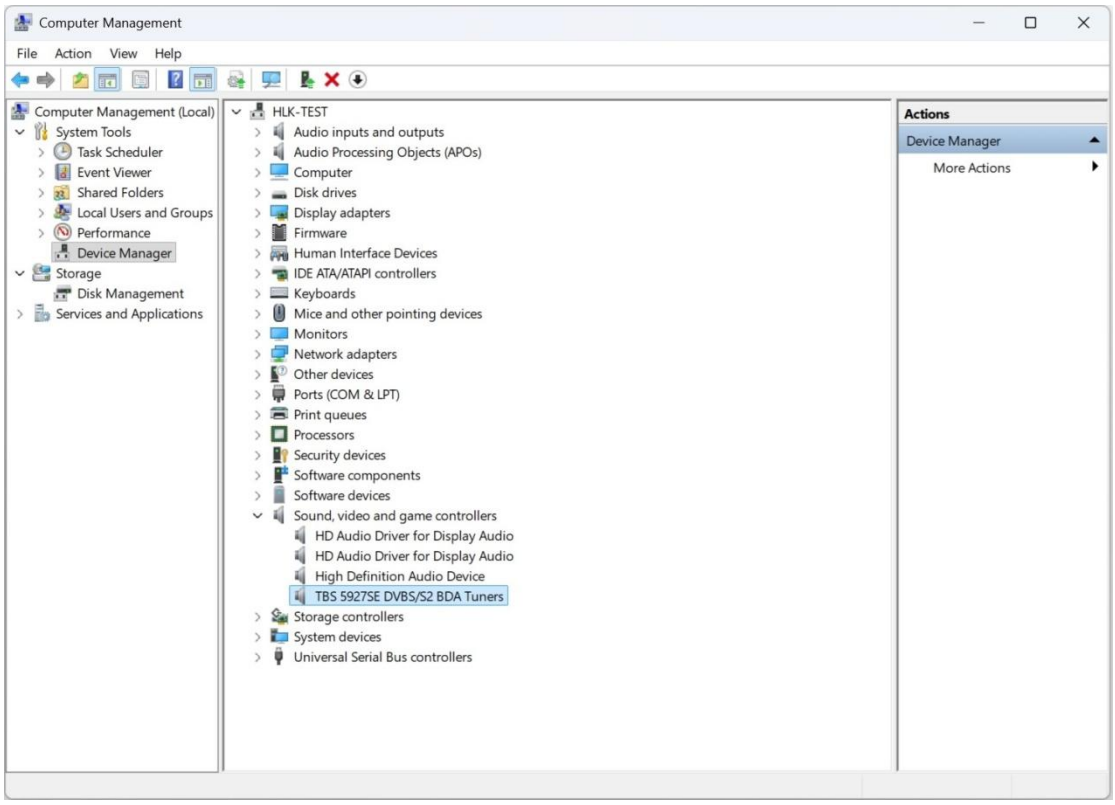
Extract the *.zip driver package and copy the driver directory.


Device Manager
File Action View Help
HLK-TEST
Audio inputs and outputs
Audio Processing Objects (APOs)
Computer
Disk drives
Display adapters
Firmware
Human Interface Devices
IDE ATA/ATAPI controllers
Keyboards
Mice and other pointing devices
Monitors
Network adapters
Other devices
PCI Device
PCI Device
PCI Device
PCI Device
PCI Device
PCI Device
PCI Device
SM Bus Controller
Unknown device
Unknown device
Ports (COM & LPT)
Print queues
Processors
Security devices
Software components
Software devices
Sound, video and game controllers
HD Audio Driver for Display Audio
HD Audio Driver for Display Audio
High Definition Audio Device
Unknown devi
Storage controller
System devices
Universal Serial Bu
Update driver
Disable device
Uninstall device
Scan for hardware changes
Properties
step 1
Launches the Update Driver W


Device Manager
File Action View Help
HLK-TEST
Audio inputs and outputs
Audio Processing Objects (APOs)
Computer
Disk drives
Display adapters
Firmware
Human Interface Devices
IDE ATA/ATAPI controllers
Keyboards
Mice and other pointing devices
Monitors
Network adapters
Other devices
PCI Device
PCI Device
PCI Device
PCI Device
PCI Device
PCI Device
PCI Device
SM Bus Controller
Unknown device
Unknown device
Ports (COM & LPT)
Print queues
Processors
Security devices
Software components
Software devices
Sound, video and game controllers
HD Audio Driver for Display Audio
HD Audio Driver for Display Audio
High Definition Audio Device
Unknown device
Storage controllers
System devices
Universal Serial Bus controllers
Update Drivers - Unknown Device
How do you want to search for drivers?
Search automatically for drivers
Windows will search your computer for the best available driver and install it on your device.
Browse my computer for drivers
Locate and install a driver manually.
step 2
Cancel



After the driver is installed, the device is loaded under "Sound, video and game controllers".



2.4 Receiving Satellite Signals

The following sections use DVBdream as an example to demonstrate how to scan, view and record channels with TBS5927SE.

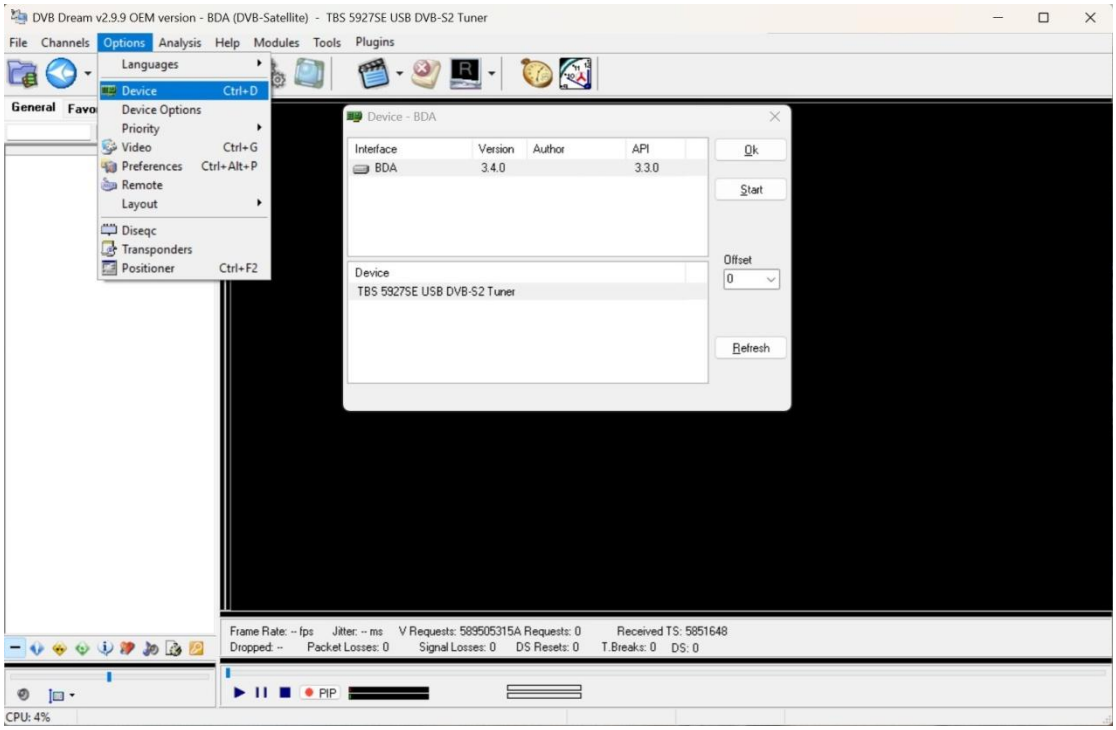
2.4.1 Installing DVBdream

The following link provides the DVBdream OEM version:
https://www.tbsiptv.com/download/common/dvbdream_oem_version_setup_v298.zip
The full version can also be purchased from the official DVBdream website:
https://www.dvbdream.org/

2.4.2 Select the DVB Device

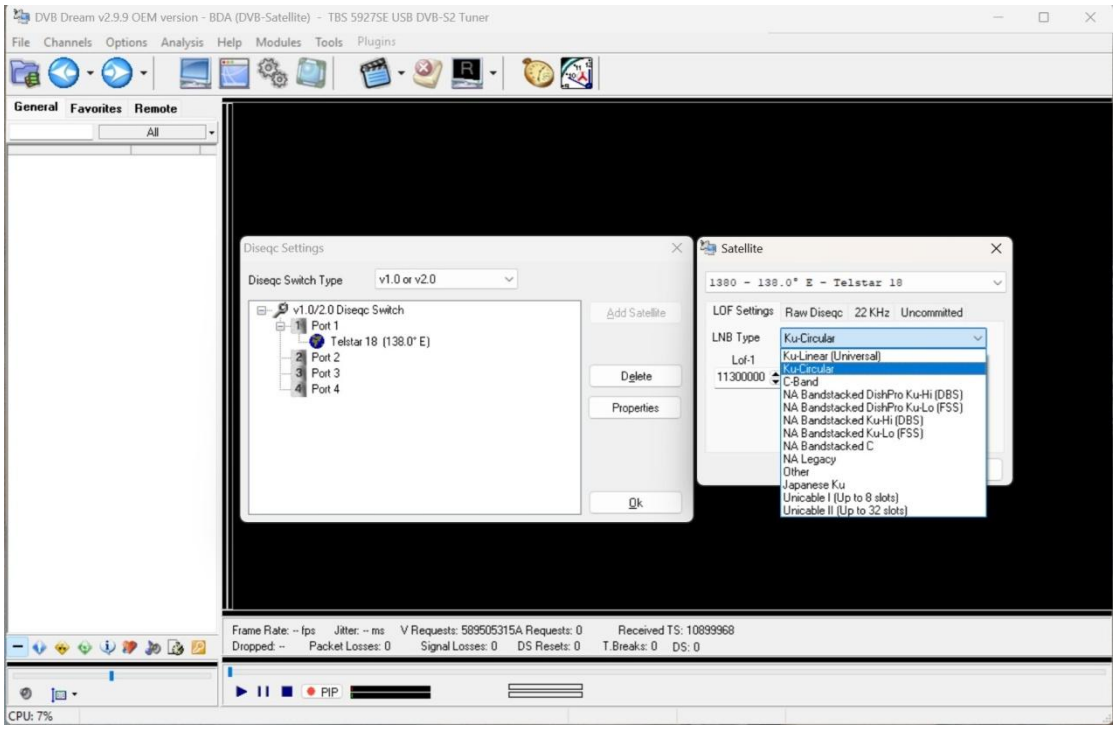
If the computer has multiple DVB devices, select the correct DVB device first:

DVBdream --- Options --- Device to select the DVB device.



2.4.3 Configure Diseqc and LNB Type

DVBdream --- Options --- Diseqc



If the signal is connected directly without using Diseqc, select Port 1 and configure the LNB type there. If Diseqc is used, set the LNB type according to the actual Diseqc in use.

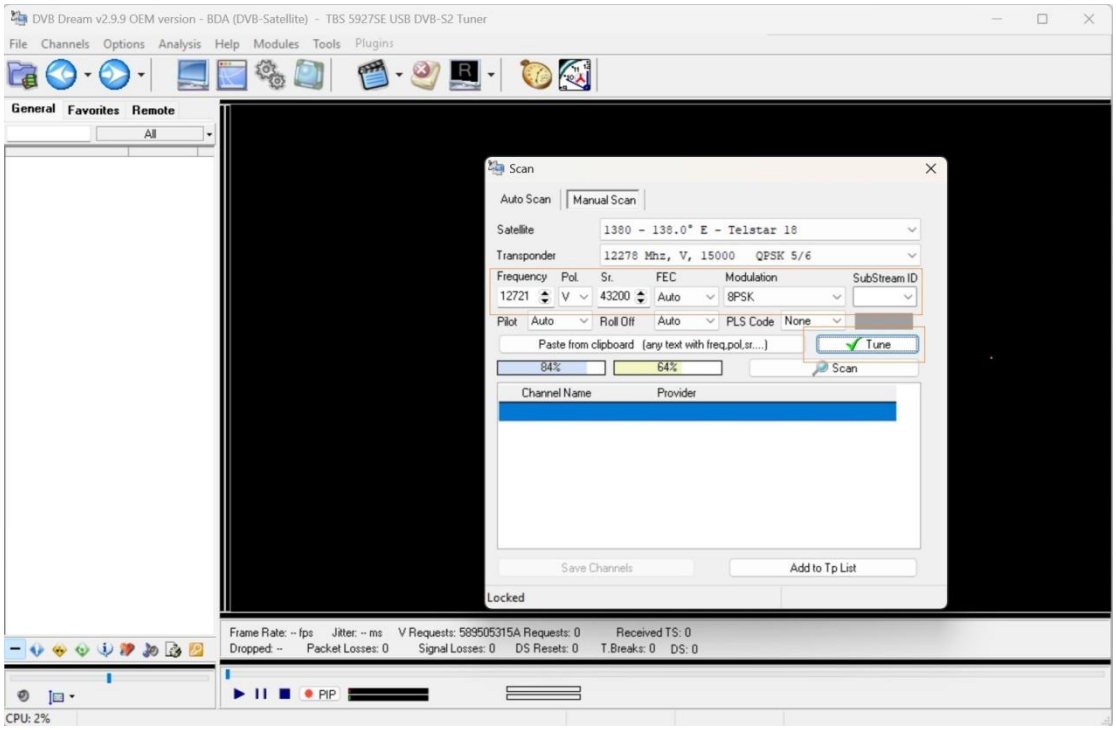
TBS5927SE supports Diseqc V1.0 and V2.0.

Common LNB types are listed below; configure the settings according to the LNB actually used:

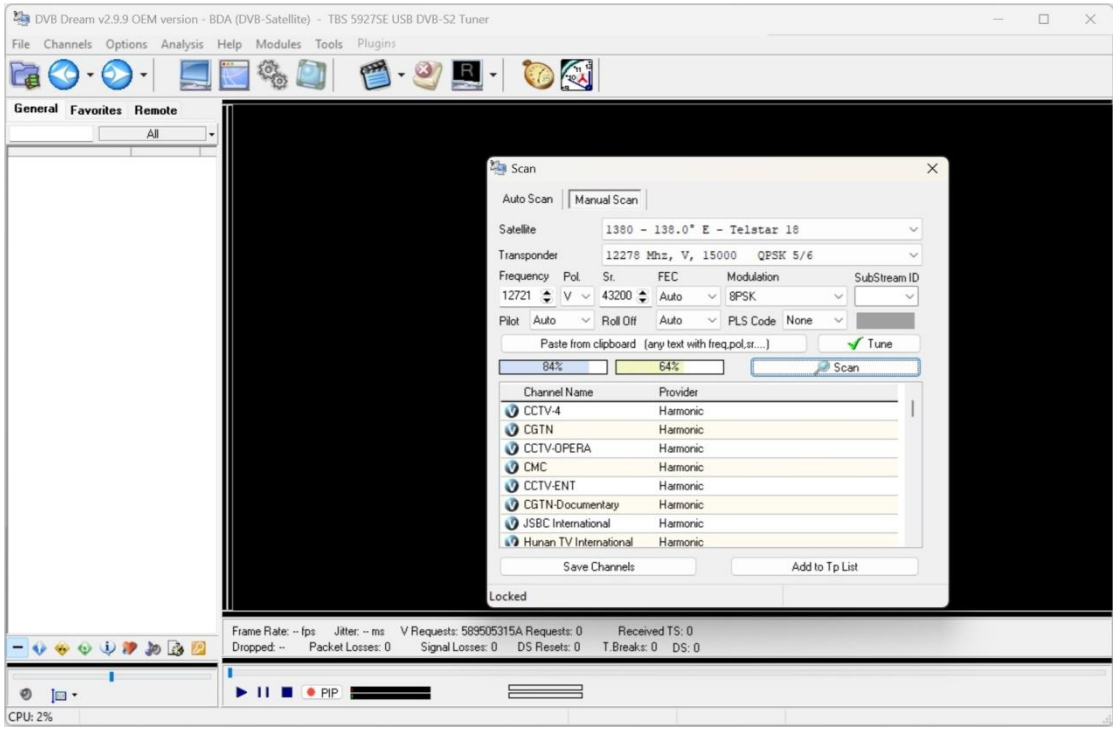
- Ku-Universal dual oscillator: 9750/10600
- Ku-Universal single oscillator: 11300
- Ku-Universal single oscillator: 10750
- C-band single oscillator: 5150
- C-band dual oscillator: 5150/5750

2.4.4 Scan Signal and Channels

DVBdream --- Channels --- Manual Scan: enter the frequency, polarization, symbol rate and modulation mode to scan.



Click "Tune" to attempt to lock the signal. If the signal is locked, signal strength and quality are displayed; click Scan to scan for channels:



Once channels have been found, click "Save Channels".

Finally, all channels are stored in the channel list on the left:

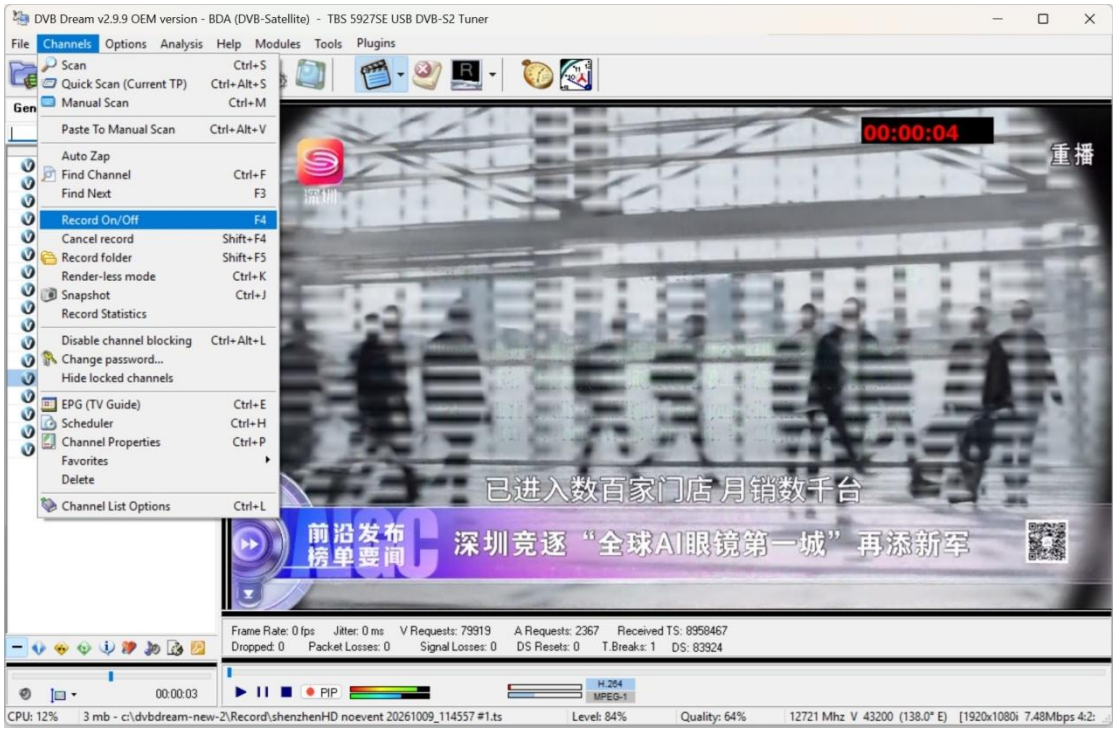


2.4.5 Record Channels

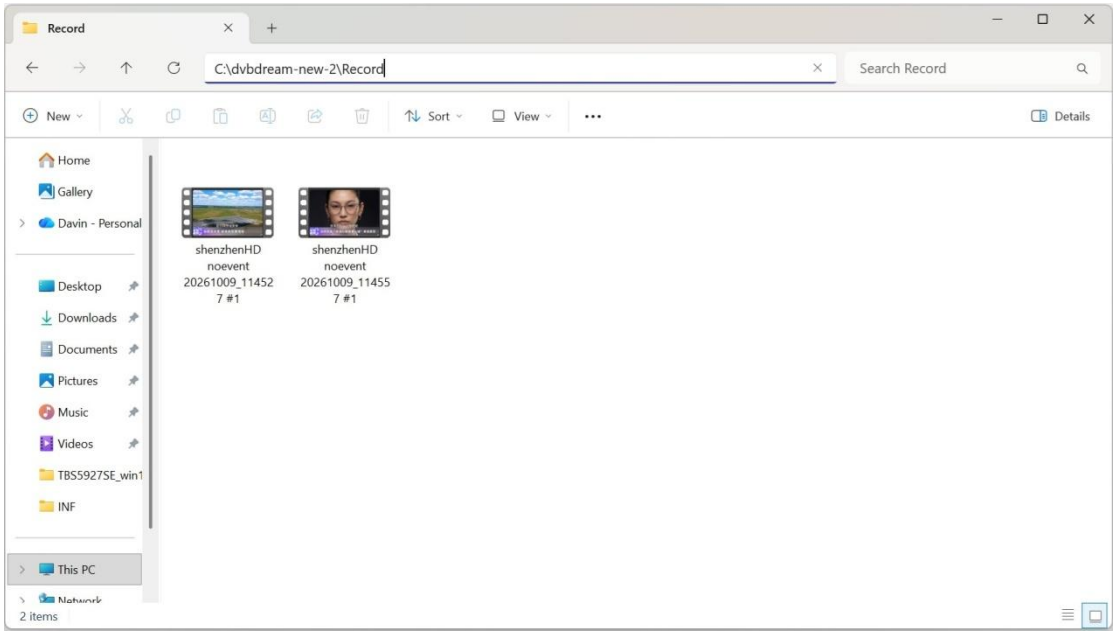
DVBdream supports recording. A single channel can be recorded, or all channels on one transponder can be recorded.

Recording a Single Channel:

DVBdream --- Channels --- Record On/Off, or press the recording shortcut key F4 to start recording.



Recorded files are saved in *.ts format. The storage directory is the Record folder under the DVBdream installation directory:



Recording All Channels on a Transponder:

DVBdream --- Modules --- TSWriter2



Recording can be performed for a specified duration, or until a specified file size is reached:



The recorded files are also saved in the Record folder under the DVBdream installation directory.

2.5 Other Windows DVB Software

Other DVB software under Windows, such as DVBviewer and progDVB, uses settings similar to those of DVBdream.

Most DVB software under Windows does not support streaming; it only supports viewing or recording channels.

For streaming applications, TBS strongly recommends using the device under Linux.

3. Linux Setup and Usage

This chapter describes how to set up TBS5927SE under Linux, including hardware installation, device recognition and driver installation.

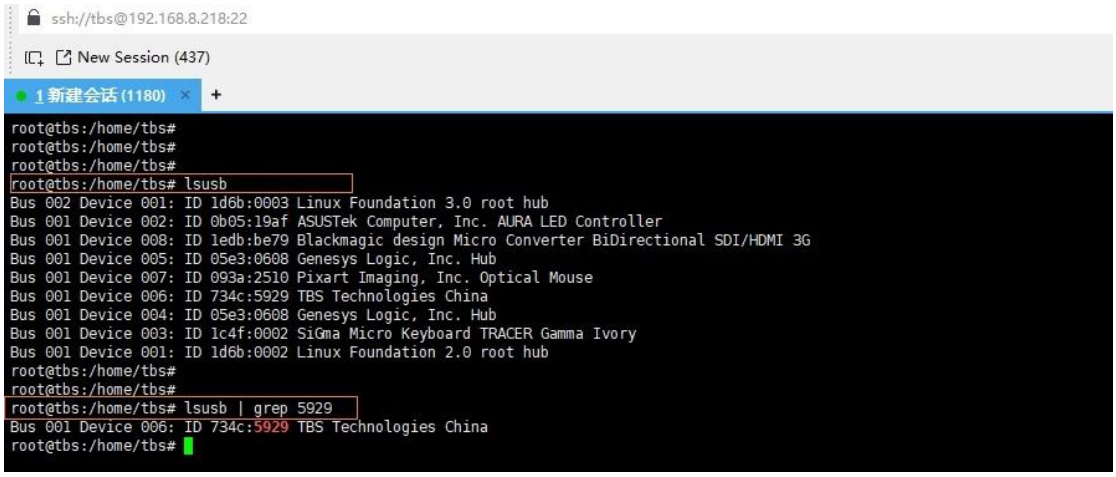
3.1 Hardware Installation

Connect TBS5927SE to the USB port of the computer with the USB cable supplied in the package. A USB 2.0 port is recommended. Depending on the computer, connecting to a USB 3.0 port may cause compatibility issues.
Connect the DC 12V power adapter supplied in the package.

3.2 Checking USB Tuner Recognition

The device ID of TBS5927SE is defined as "5929", because 5927 has already been used by other models. You can therefore check directly whether device "5929" has been recognized:
ls usb | grep 5929

If the device has been recognized, the following output should appear:

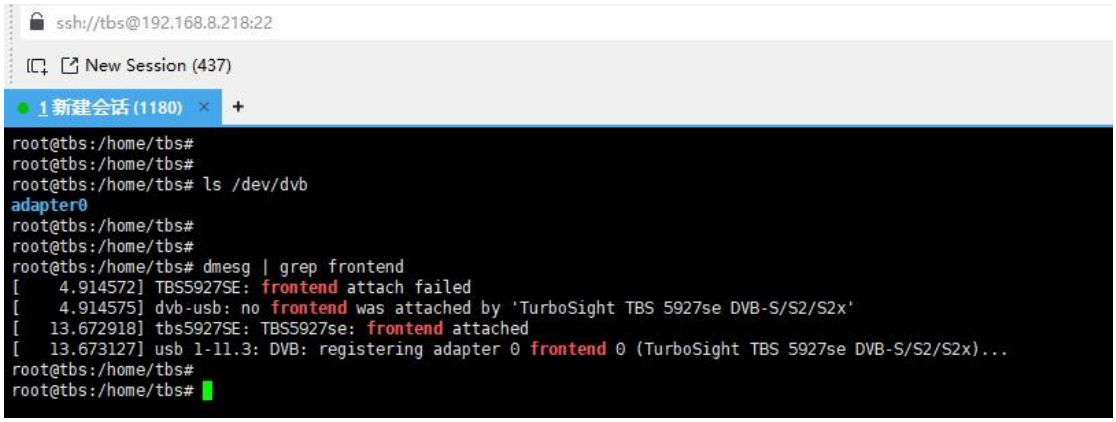


3.3 Installing the Linux Driver

The Linux driver can be installed quickly with the command below:
curl -sSf https://www.tbsdtv.com/download/document/linux/drv-tbs.sh | sh

For details, please refer to:
https://www.tbsiptv.com/help_center/tbs_driver_installation/linux.html
Finally, restart the machine and check whether the driver has been loaded correctly. If it has, devices are available under /dev/dvb:
ls /dev/dvb

Or:
dmesg | grep frontend



4. Scanning and Streaming Software

This chapter introduces two applications commonly used with TBS5927SE for channel scanning and stream output: DVBlast and Astra Cesbo.

4.1 DVBlast

4.1.1 Installing DVBlast

sudo apt install dvblast (Ubuntu)

su yum install dvblast (Rocky Linux)

4.1.2 Scanning Channels

Parameters such as "frequency, polarization, symbol rate and modulation mode" must be entered in order to scan for channels. For example, for satellite "138.0E" with transponder "12375, V, 9500, DVBS2":

12375 V China 56-58	DVB-S2 8PSK 9500 2/3			1-1		6.6		远方的星星 250618
		1	Phoenix InfoNews Channel	MPEG-4/HD	33	32 Chi		
		2	Phoenix Chinese Channel	MPEG-4/HD	36	35 Chi		

The scan command is:
10825000 -s 9500000 -v 13 -m psk_8 -a 0

Regarding the frequency conversion 12375 > 10825: the LNB type in use is a single-oscillator Universal LNB with an oscillator frequency of 11300, while DVBlast defaults to a dual-oscillator Universal LNB. The frequency therefore has to be converted, while polarization, symbol rate and modulation mode remain unchanged:
12375 - 11300 + 9750=10825

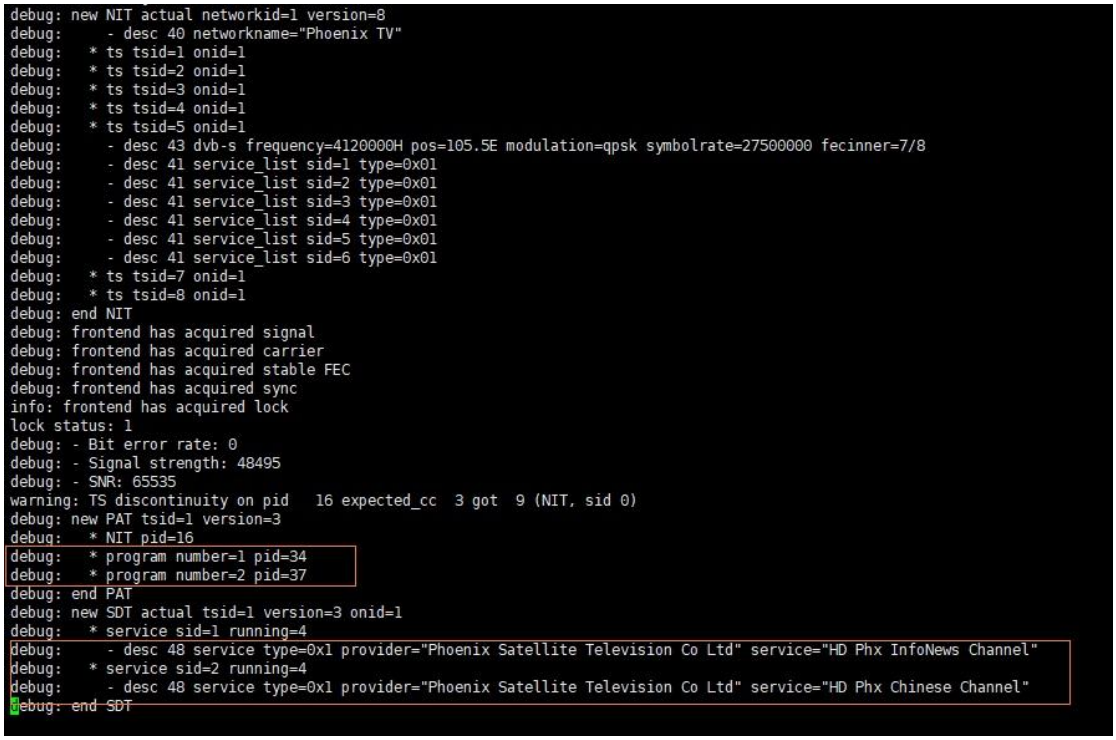
If the LNB type in use is a dual-oscillator Universal 9750/10600, channels can be scanned directly:
12375000 -s 9500000 -v 13 -m psk_8 -a 0

The scan results are printed by DVBlast. For example, two channels were found on tp-12375:
Program number:

- program number=1 pid=34
- program number=2 pid=37

Program name:

- HD Phx InfoNews Channel
- HD Phx Chinese Channel



4.1.3 Streaming

DVBlast streaming requires a *.conf configuration file in which the channels to stream and the RTP/UDP address and port are specified.
For example, to stream the channel "HD Phx InfoNews Channel", create the configuration file as follows:
vi dvb1.conf

"dvb1.conf":
239.255.0.1:1234/udp 1 1

- 239.255.0.1: UDP stream address;
- 1234: port number;
- /udp: output over the UDP protocol;
- 1: flag bit;

- 1: program number of the channel "HD Phx InfoNews Channel".

The final streaming command is:
dvblast -f 10825000 -s 9500000 -v 13 -m psk_8 -a 0 -c /xxx/xxx/dvb1.conf

Stream address: udp://@239.255.0.1:1234

For RTP output, for example the channel "HD Phx Chinese Channel", create the configuration file "dvb2.conf":
"dvb2.conf":
239.255.0.2:1235 1 2
The streaming command is:
dvblast -f 10825000 -s 9500000 -v 13 -m psk_8 -a 1 -c /xxx/xxx/dvb2.conf

The final stream address is: rtp://239.255.0.2:1235

RTP/UDP multicast specifies a target address for the stream. For example, to stream to the device with IP address 192.168.8.100:
Configuration file:
"dvb3.conf":
192.168.8.100:1236/udp 1 2

"dvb4.conf":
192.168.8.100:1237 1 2
DVBlast is controlled from the command line only. For more detailed usage, please refer to the official DVBlast website:
https://github.com/gfto/dvblast

4.2 Astra Cesbo

Astra Cesbo is commercial software. A license is required before use. The license can be purchased, or the 40-day trial license provided by the official website can be used.
https://cesbo.com/

4.2.1 Installing Astra

curl -Lo /usr/bin/astra https://astra.cesbo.com/latest

Set the executable permission:
chmod +x /usr/bin/astra

Create a directory for Astra to store the configuration file and the license.
mkdir -p /etc/astra

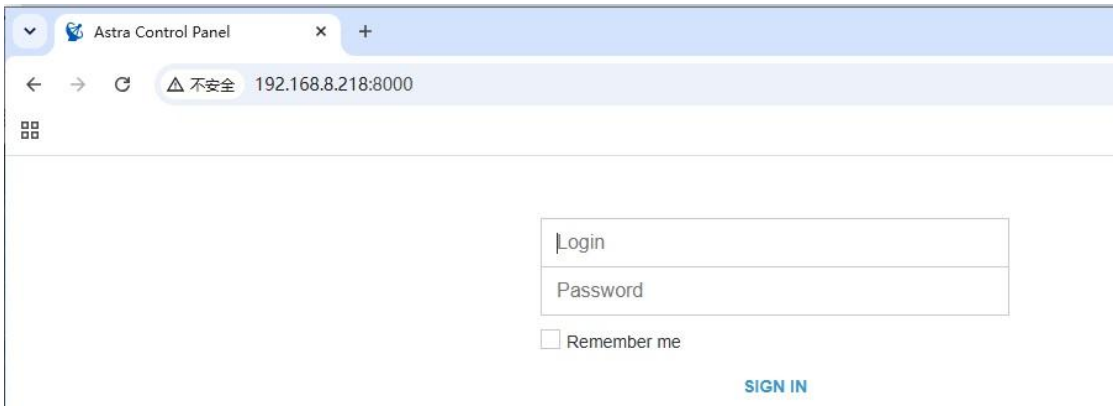
Create the Astra configuration file in this directory:

vi /etc/astra/astra.conf

Place the license file "license.txt" obtained earlier in the same directory, /etc/astra/.
Run Astra:
astra -c /etc/astra/astra.conf -p 8000 -daemon

4.2.2 Logging into the Astra Web GUI

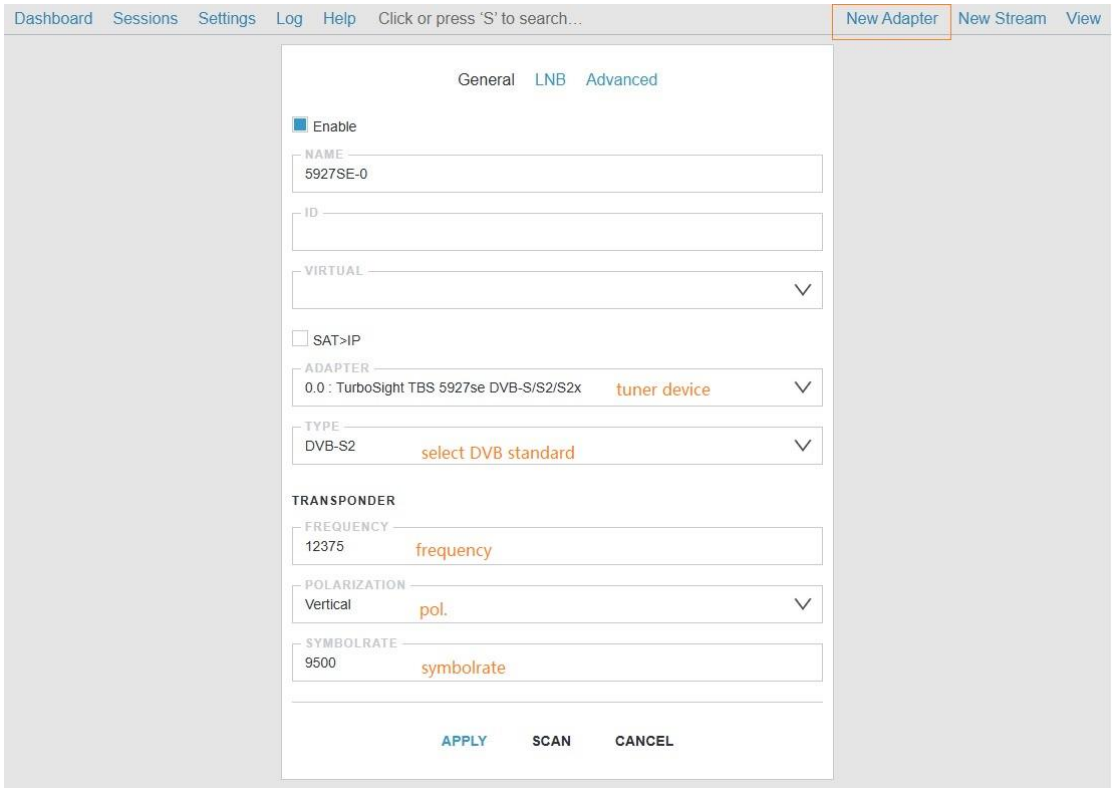
Astra supports web GUI control.
For example, if Astra is installed at IP address 192.168.8.218 on a Linux system, log in to the web page at http://192.168.8.218:9981



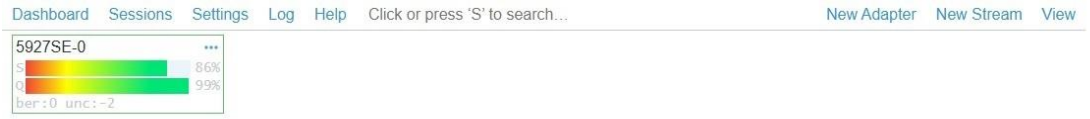
Default user name / password: admin/admin
After entering the page, the password can be changed.

4.2.3 Scanning Channels

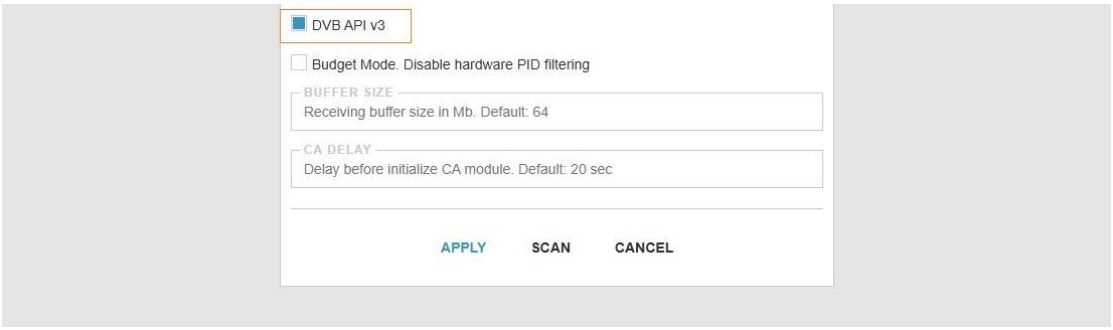
Click "New Adapter" ---> select the tuner device, specify the signal format, and enter the "frequency, polarization and symbol rate".



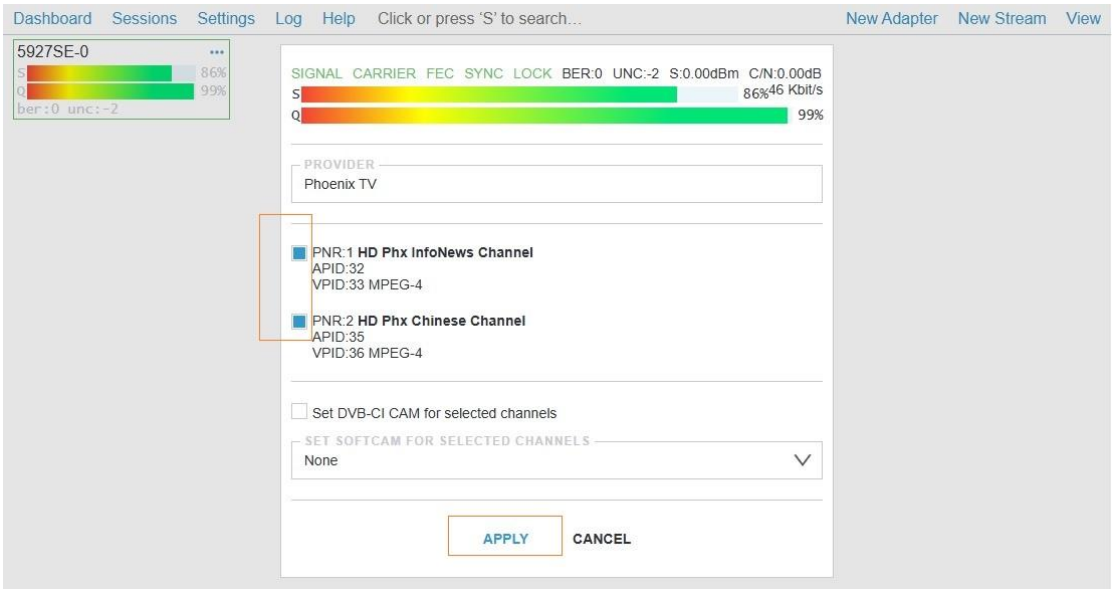
Finally, click Apply (APPLY) to check whether the signal can be locked. If the signal is locked, signal strength and quality are displayed:



If the signal quality "Q" shows 0%, go to the "Advanced" settings page and enable DVB API V3, as illustrated below:



Edit "5927SE-0" again and click "SCAN" to scan out the channels. The desired channels can be selected at the same time, as shown below:



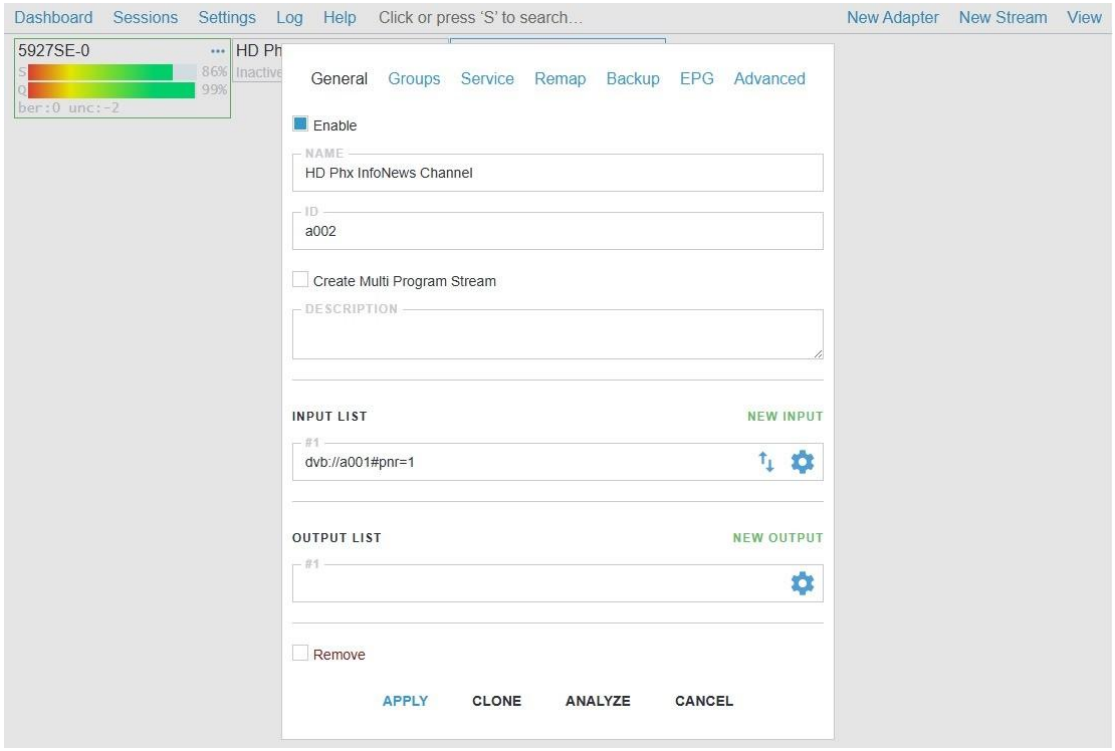
4.2.4 Configuring Stream Output

Select the appropriate output protocol according to your needs and configure it. Astra supports the http, hls m3u8, udp, srt caller and listener protocols.

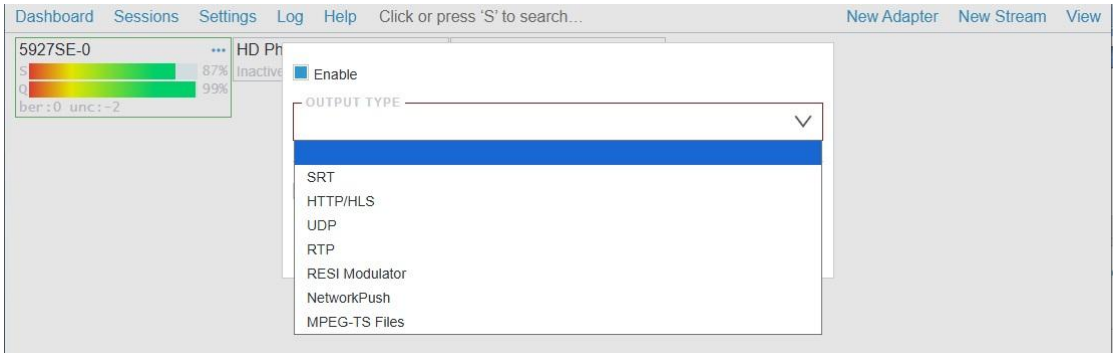
Click a channel to edit it and configure the streaming output:



Configure the output in OUTPUT LIST:



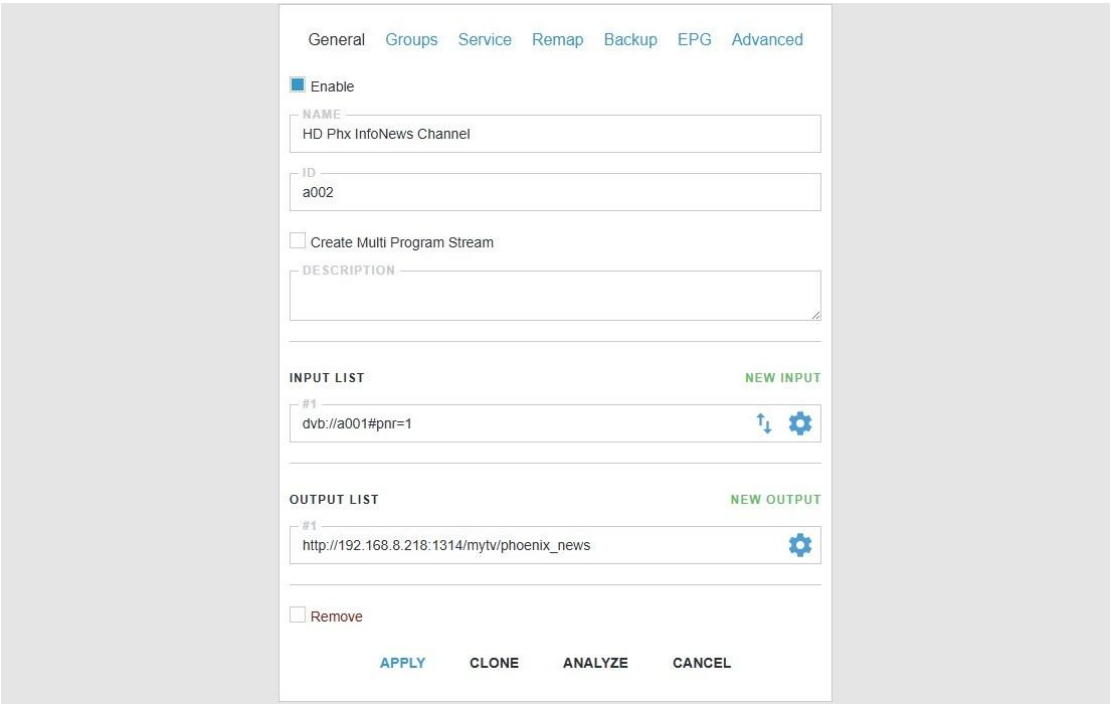
Supported output protocols:



HTTP Output:

HTTP URL format: http://host ip:port/xxx/xxx

For example: http://192.168.8.218:1314/mytv/phoenix_news

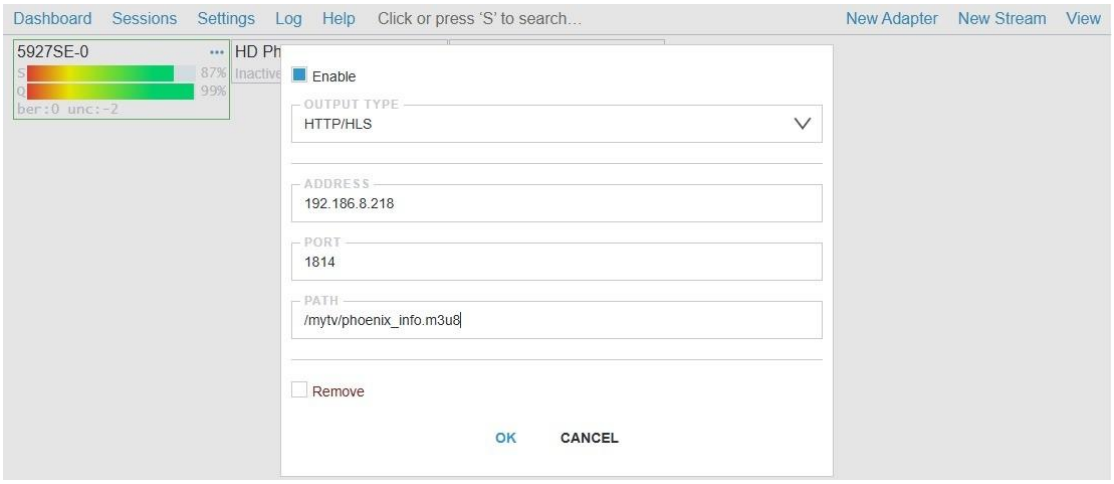


Play the HTTP stream:



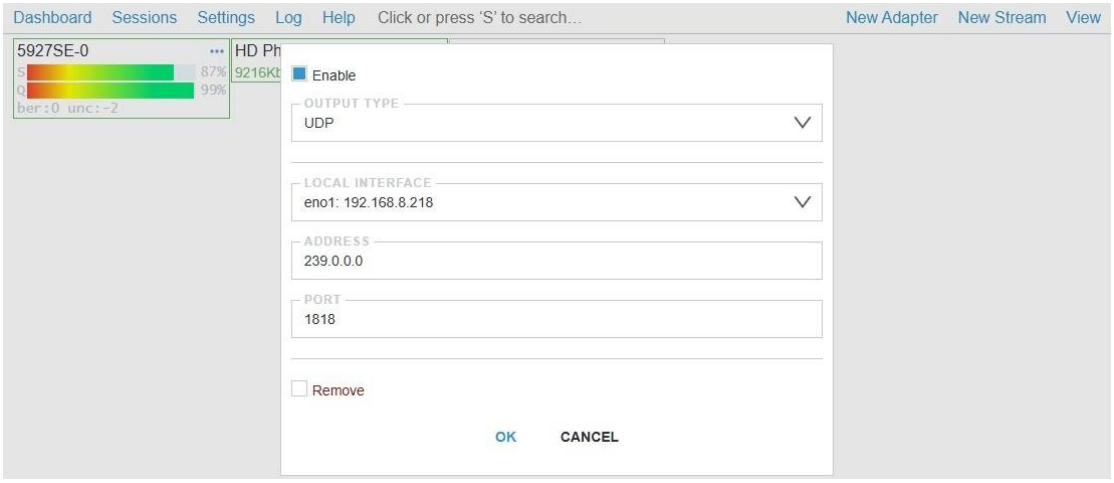


HLS (m3u8) Output:



HLS m3u8 stream address: http://192.168.8.218:1814/mytv/phoenix_info.m3u8

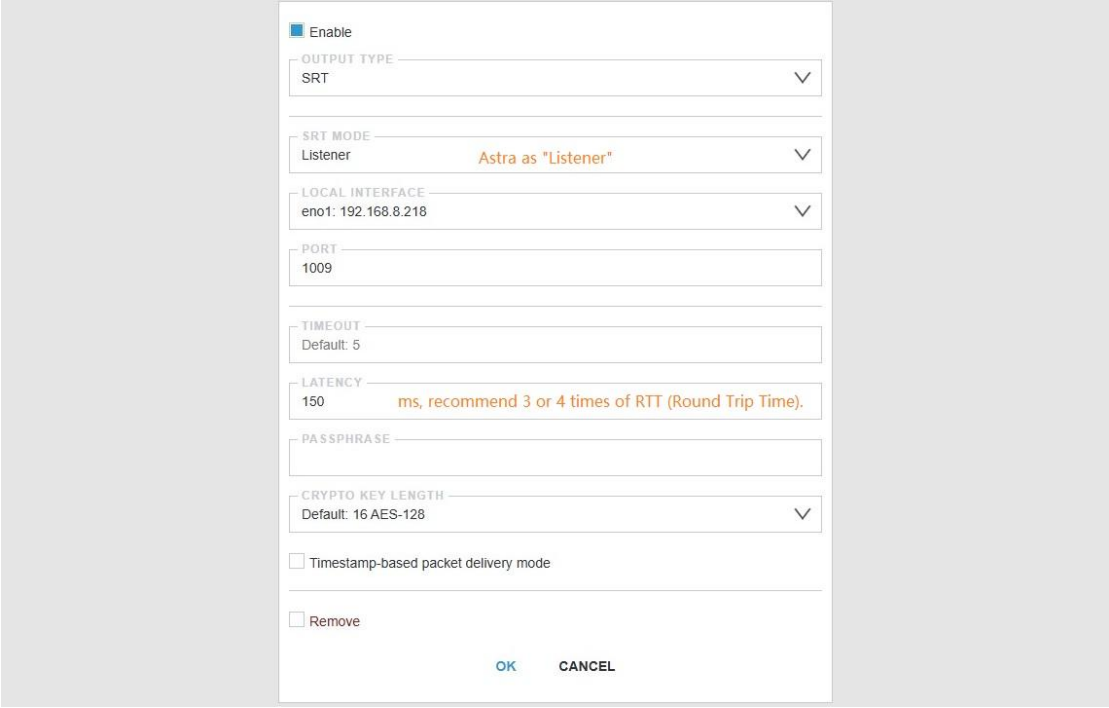
UDP Multicast:



UDP stream address: udp://@239.0.0.0:1818

SRT Listener:

For example, Astra SRT "Listener" --- VLC media player as SRT "Caller".



VLC must be version V3.0.8 or higher to support SRT, and the VLC player supports SRT Caller mode only, not SRT Listener.

Finally, the SRT stream address obtained in the VLC player is:

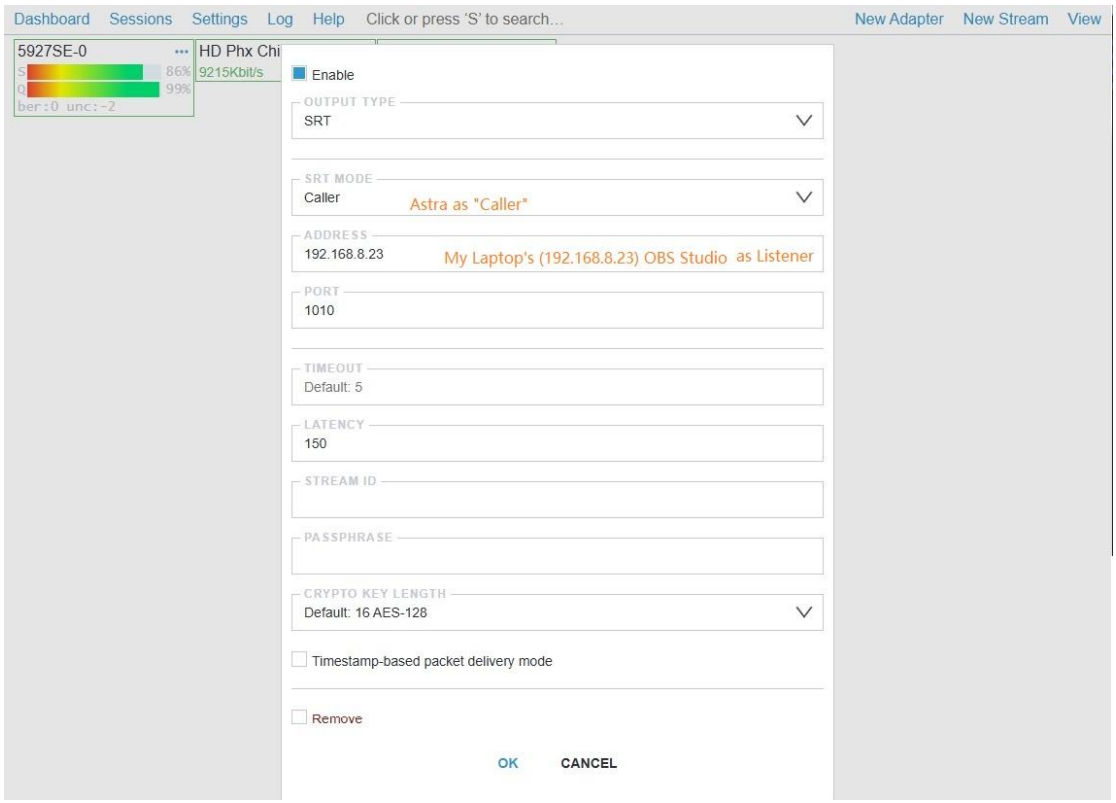
srt://192.168.8.218:1009?mode=caller



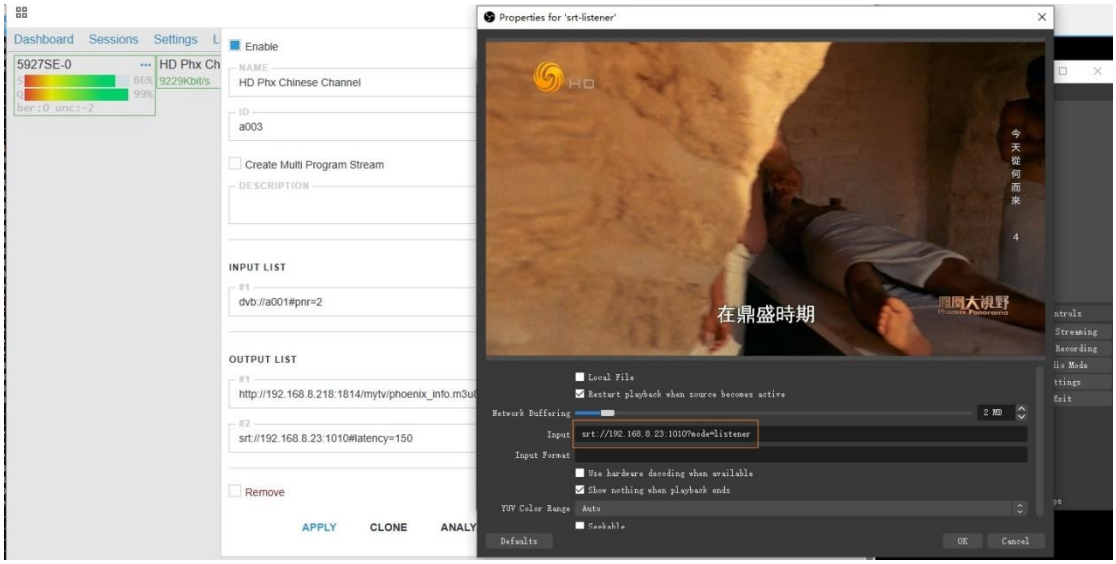
SRT Caller:

For example, Astra acts as SRT "Caller" and OBS acts as SRT "Listener", establishing the connection and transferring the stream to OBS.

For example, OBS installed on the computer 192.168.8.23 acts as the SRT "Listener":

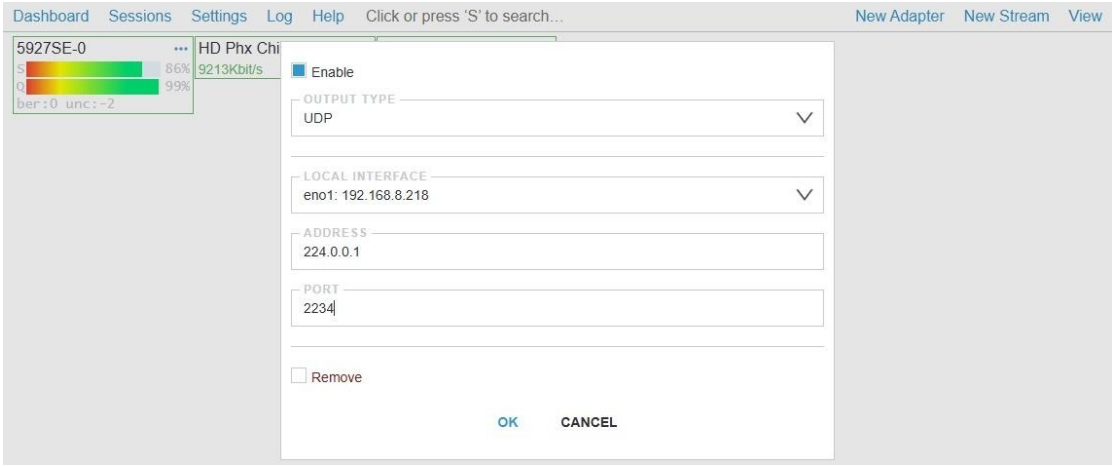


The stream address in OBS Studio is:
srt://192.168.8.23:1010?mode=listener



UDP Streaming:

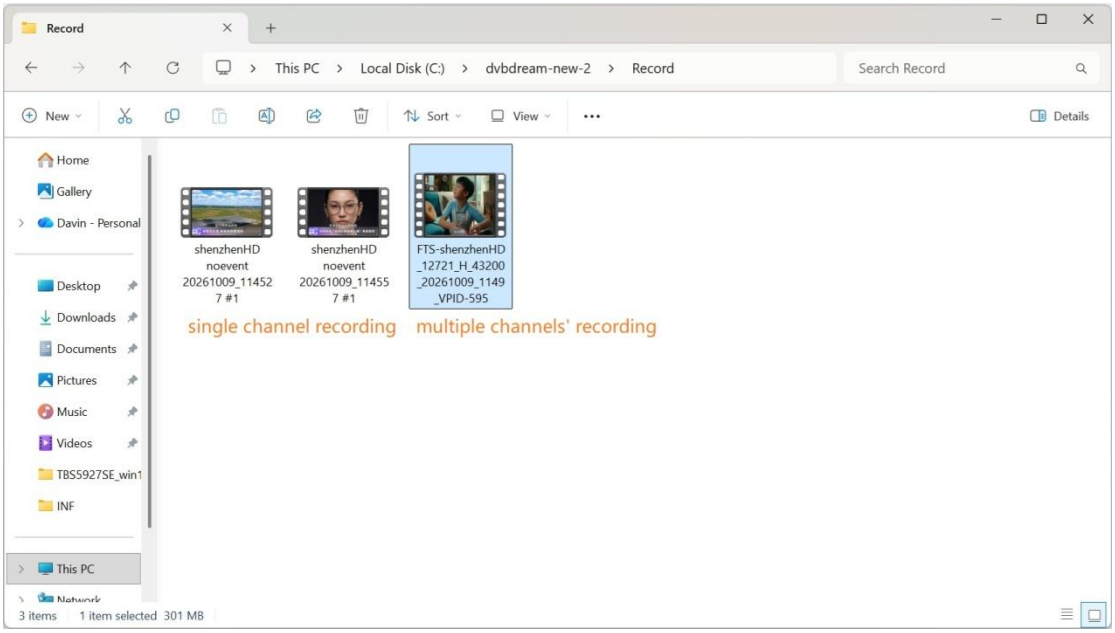
Astra supports UDP unicast and multicast streaming.



Stream address: udp://@224.0.0.1:2234

For more detailed Astra Cesbo configuration, please refer to:

https://astra.cesbo.com/en/quick-start/



Other DVB software under Linux, such as Tvheadend and mumuDVB, follows a similar procedure. The key point is to select suitable software according to the required output protocol, because different DVB software supports different output protocols.

5. Support and Contact

If you need any further assistance with TBS5927SE, please contact us:

Support@tbsdtv.com