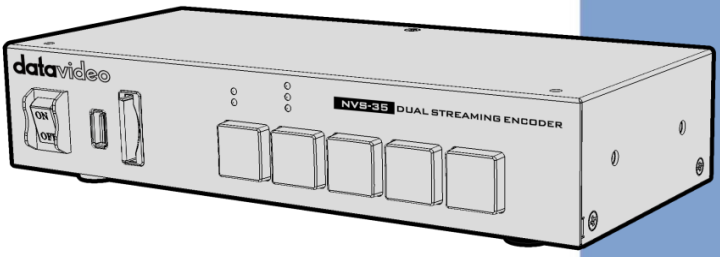
datavideo



VIDEO STREAMING SERVER

NVS-35

Instruction Manual

www.datavideo.com

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Disclaimer of Product & Services

The information offered in this instruction manual is intended as a guide only. At all times, Datavideo Technologies will try to give correct, complete and suitable information. However, Datavideo Technologies cannot exclude that some information in this manual, from time to time, may not be correct or may be incomplete. This manual may contain typing errors, omissions or incorrect information. Datavideo Technologies always recommend that you double check the information in this document for accuracy before making any purchase decision or using the product. Datavideo Technologies is not responsible for any omissions or errors, or for any subsequent loss or damage caused by using the information contained within this manual. Further advice on the content of this manual or on the product can be obtained by contacting your local Datavideo Office or dealer.

FCC Compliance Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

Warnings and Precautions



1. Read all of these warnings and save them for later reference.
2. Follow all warnings and instructions marked on this unit.
3. Unplug this unit from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this unit in or near water.
5. Do not place this unit on an unstable cart, stand, or table. The unit may fall, causing serious damage.
6. Slots and openings on the cabinet top, back, and bottom are provided for ventilation. To ensure safe and reliable operation of this unit, and to protect it from overheating, do not block or cover these openings. Do not place this unit on a bed, sofa, rug, or similar surface, as the ventilation openings on the bottom of the cabinet will be blocked. This unit should never be placed near or over a heat register or radiator. This unit should not be placed in a built-in installation unless proper ventilation is provided.
7. This product should only be operated from the type of power source indicated on the marking label of the AC adapter. If you are not sure of the type of power available, consult your Datavideo dealer or your local power company.
8. Do not allow anything to rest on the power cord. Do not locate this unit where the power cord will be walked on, rolled over, or otherwise stressed.
9. If an extension cord must be used with this unit, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord rating.
10. Make sure that the total amperes of all the units that are plugged into a single wall outlet do not exceed 15 amperes.
11. Never push objects of any kind into this unit through the cabinet ventilation slots, as they may touch dangerous voltage points or short out parts that could result in risk of fire or electric shock. Never spill liquid of any kind onto or into this unit.

12. Except as specifically explained elsewhere in this manual, do not attempt to service this product yourself. Opening or removing covers that are marked “Do Not Remove” may expose you to dangerous voltage points or other risks, and will void your warranty. Refer all service issues to qualified service personnel.
13. Unplug this product from the wall outlet and refer to qualified service personnel under the following conditions:
    a. When the power cord is damaged or frayed;
    b. When liquid has spilled into the unit;
    c. When the product has been exposed to rain or water;
    d. When the product does not operate normally under normal operating conditions. Adjust only those controls that are covered by the operating instructions in this manual; improper adjustment of other controls may result in damage to the unit and may often require extensive work by a qualified technician to restore the unit to normal operation;
    e. When the product has been dropped or the cabinet has been damaged;
    f. When the product exhibits a distinct change in performance, indicating a need for service.

Warranty

Standard Warranty

- Datavideo equipment is guaranteed against manufacturing defects for **one (1) year** from the date of purchase.
- A valid purchase invoice or other proof of purchase must be provided when requesting warranty service.
- The warranty period begins on the actual purchase date. If the purchase date cannot be verified, the warranty period will begin **thirty (30) days after shipment** from a Datavideo office.
- Non-Datavideo branded products (products without the Datavideo logo) are covered by a **one-year warranty** from the date of purchase.
- Damage caused by accident, misuse, unauthorized repair, or exposure to sand, grit, or water is **not covered** under warranty.
- Virus or malware infections on computer systems are **not covered** under warranty.
- Any issues caused by unauthorized third-party software installations that are not required by Datavideo systems are **not covered** under warranty.
- All shipping, mailing, or transportation costs, including insurance, are the responsibility of the owner unless otherwise stated.

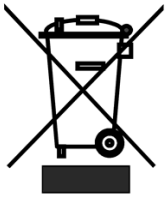
- **Teleprompter glass is not covered** under warranty.
- Accessories, including **headphones, cables, batteries, metal parts, housings, protective cases, cable reels, and consumable items**, are **not covered** under warranty.
- Warranty is valid only in the country or region of purchase.
- All other claims **not explicitly stated** are not covered.
- Your statutory rights remain unaffected.

Five Year Warranty



- Starting January 1, 2026, all Datavideo products that are successfully registered on the Datavideo official website are eligible for a **free four-year extended warranty**, in addition to the standard one-year warranty, for a total of **five years of coverage**.
- **Only registrations completed through the Datavideo official website qualify** for the five-year warranty. Registrations completed through local Datavideo offices, resellers, or authorized distributors **are not eligible**.
- Certain parts with limited service life — including **LCD panels, DVD drives, hard drives, solid-state drives, SD cards, USB thumb drives, lighting equipment, non-PCIe cards, and third-party PC components** — are covered by a **one-year warranty only** and are **not eligible** for the extended warranty.
- **Camera modules** are covered by a **three-year warranty from the date of purchase**.

Disposal



For EU Customers only - WEEE Marking

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

1 Introduction

The Datavideo NVS-35 is a video streaming server designed for various network environments, offering you multiple bitrate settings as well as the flexibility of streaming and recording either individually or simultaneously.

From any SDI/HDMI input sources, the Datavideo's video streaming server generates an H.264 encoded stream that is compliant with RTSP or RTMP(S) protocols. Additionally, you can also connect an external RCA Unbalanced Audio source to the NVS-35.

While encoding the video at bitrates appropriate for live streaming, the Datavideo NVS-35 concurrently records a high-quality MP4 file to an SD card formatted to NTFS or FAT32 file system.

1.1 Features

Major Five Features

- Simultaneous H.264 video streaming and recording at multiple bitrates
- Supports FAT32 and NTFS file format for continuous footage recording
- Selectable audio sources such as SDI/HDMI embedded audio, external audio (RCA unbalanced/XLR balanced) and both
- Supports multilingual web based control interface (English, Traditional Chinese and Simplified Chinese)
- Bicolor LEDs for status indication

Supported Input Formats

- 1080p@23.98/24/25/29.97/30/50/59.94/60 fps
- 1080i@50/59.94/60 fps
- 720p@50/59.94/60 fps
- 480i@59.94 fps
- 576i@50 fps

Operating System and Web Browser for the Web UI

- Operating Systems
  - Microsoft Windows 8.1 (64-bit)
  - Microsoft Windows 10 (64-bit)
- Web Browsers
  - Microsoft Internet Explorer
  - Microsoft Edge

- Google Chrome

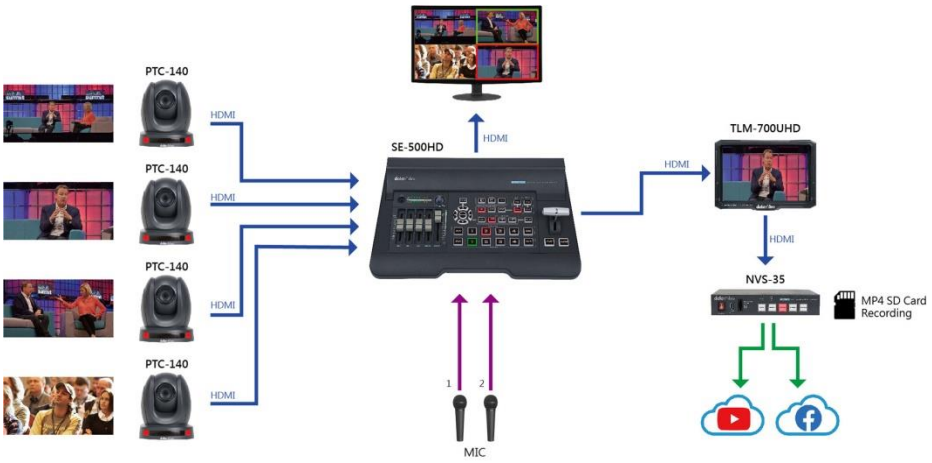
Streaming

- Video streaming protocols are RTSP, RTMP, RTMPS, TS, HLS and SRT supported by the following:
  - Adobe Media Server and Wowza Media Server.
  - Video Players such as VLC.
  - Content Delivery Networks such as Youtube Live.

Recording

- Records MP4 or TS file to an SD card formatted to NTFS or FAT32 file system.

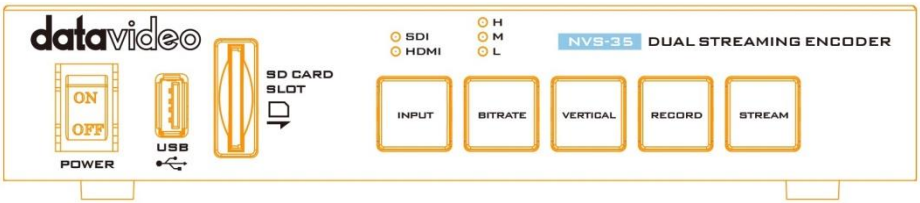
1.2 System Diagram



2 Connections and Control

In this section, we will show you how you can operate the device as well as the device setup.

2.1 Front Panel





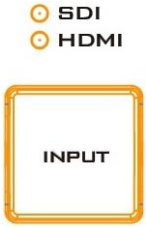
Power Switch
Turn on/off the device.



SD Card Slot
The SD Card Slot allows insertion of an SD Card for video recording **ONLY**.



USB Port
For firmware update **ONLY**, see ***Firmware Upgrade*** for details.



INPUT Button
Press the **INPUT** button to select between SDI and HDMI input sources. The button is always in solid white.

The activated input source will be indicated by the corresponding LED.

- **Green**: Input source activated
- **Off**: Input source deactivated

Note: The Input button is disabled while streaming or recording is in progress.





BITRATE Button
Switch the stream/record bitrate mode using the **BITRATE** button; follow the steps outlined below:

- Push and hold one of the **RECORD** and **STREAM** buttons until the pushed button starts blinking red.
- As soon as the pushed **RECORD** or **STREAM** button is released, the **BITRATE** button will turn solid red.
- While the **BITRATE** button stays solid red, push it to switch between different bitrate modes (H, M or L). Please note that the **BITRATE** button will return to solid white after a few seconds if button push is not sensed.
- To exit, push the the **RECORD** or **STREAM** button again.

Note: The system will return to the previous setting if the BITRATE button is not pushed. The default bitrate is M.

H/M/L LED Indicators
ON (Green): Bitrate mode enabled
OFF: Bitrate mode disabled



RECORD Button
The **RECORD** button activates and deactivates the **RECORD Only** mode; follow the steps outlined below:

Start recording

- When idle, the **RECORD** button is solid white.
- Press and hold the **RECORD** button for approximately 2 seconds.
- When the record function is activating, the **RECORD** button turns from solid white, then blinking red and finally to solid red.
- When the **RECORD** button turns solid red, this indicates that the record function has been successfully activated.

Stop recording

- While recording, the **RECORD** button is solid red.
- Press and hold the **RECORD** button for approximately 2 seconds.
- When the record function is terminating, the **RECORD** button turns from solid red, then blinking red and finally to solid white.
- When the **RECORD** button turns solid white, this indicates that the record function has been successfully terminated.



STREAM Button
The **STREAM** button activates and deactivates the **STREAM Only** mode; follow the steps outlined below:

Start streaming

- When idle, the **STREAM** button is solid white.
- Press and hold the **STREAM** button for approximately 2 seconds.
- When the stream function is activating, the **STREAM** button turns from solid white, then blinking red and finally to solid red.
- When the **STREAM** button turns solid red, this indicates that the record function has been successfully activated.

Stop streaming

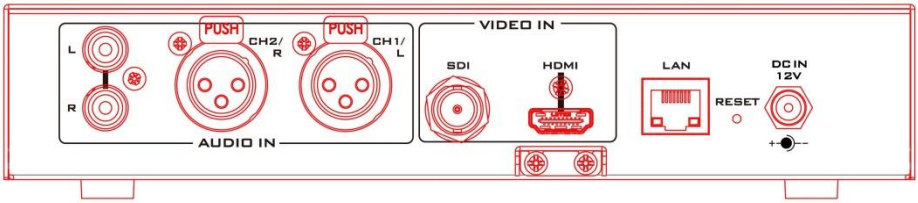
- While streaming, the **STREAM** button is solid red.
- Press and hold the **STREAM** button for approximately 2 seconds.
- When the stream function is terminating, the **STREAM** button turns from solid red, then blinking red and finally to solid white.
- When the **STREAM** button turns solid white, this indicates that the stream function has been successfully terminated.



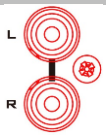
Vertical Button
Press the **Vertical** button to switch video orientation between **Portrait** and **Landscape**. See ***Section 3.4*** for details.

Note: You can also switch video orientation via web user interface; see descriptions of the *Vertical* page for details.

2.2 Rear Panel

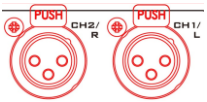


Audio Input



RCA Unbalanced Audio Input

Connect an unbalanced stereo audio source for streaming and recording.



XLR Balanced Audio Input

Connect a balanced audio source for streaming and recording.

Video Input



HDMI Input

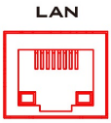
Connect an HDMI video source.



SDI Input

Connect an SDI video souce.

Network



LAN

The LAN port connects the device to the Internet via an Ethernet cable.

Power



DC IN 12V

DC in socket connects the supplied 12V PSU. The connection can be secured by screwing the outer fastening ring of the DC In plug to the socket.



Reset Hole

Insert a needle into the hole then press and hold the reset button until device reset is started.

Note: The device's default IP address is 192.168.1.200.

3 Video Streaming

In this section, we will show you how to set up and start your video streams.

3.1 Streaming Network Connection and Device Search

Let's first detail how to connect the NVS-35 to a network with or without a DHCP server, and acquire the NVS-35's IP address.

Note: The device is DHCP enabled by default.

Connecting to a DHCP Network (DHCP Mode)

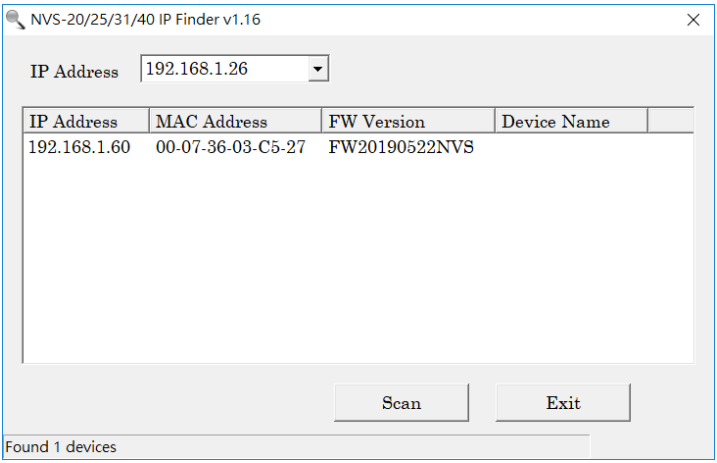
Follow the procedure below to scan your DHCP network for connected NVS-35 devices.

Note: The NVS-35 will be automatically assigned an IP address upon connection to the DHCP network.



1. Connect the NVS-35's LAN port to the network via an Ethernet cable.
2. Turn on the NVS-35's power, which should boot up the device in DHCP mode by default.
3. On your laptop, download the free IP Finder utility program from the product page https://www.datavideo.com/product/NVS-35.
4. Connect the laptop to the same network that the NVS-35 is connected to and double click the IP Finder utility program icon.
5. On the IP finder interface, click the **SCAN** button to start searching for connected devices.





Connecting to a NON-DHCP Network (Static IP)

Upon connection to a non-DHCP network, the NVS-35 will not be assigned of any IP addresses. As such it is recommended that you manually assign a fixed IP address to the device or use the default IP address (**192.168.1.200**).

Fixed IP is primarily used in point-to-point connection, such as directly connecting the PC to the NVS-35. In a non-DHCP environment, the NVS-35 only works in fixed IP mode. To set the NVS-35 to a fixed IP or the **default IP**, please follow the steps outlined below:



1. Connect the NVS-35's LAN port to the network via an Ethernet cable.
2. Turn on the NVS-35's power, which should boot up the device in DHCP mode by default.
3. Search for the NVS-35 device according to the method detailed in the previous DHCP section. Once found, log in to the user interface on the web browser.
4. Open the system page by clicking the "System" tab on the home of the user interface.



5. In the "Network Setting" pane, disable the DHCP mode.
6. You will then be allowed to manually enter the static IP address once the DHCP mode is disabled. The default static IP is 192.168.1.200 or you can also enter an IP of your preference. The subnet mask and default gateway are 255.255.255.0 and 192.168.1.254 respectively.

Device Reset

In Fixed IP mode, if you forget or lose the IP address, do the following to reset the device settings.

1. Power cycle NVS-35.
2. During device bootup, the **BITRATE, VERTICAL, RECORD and STREAM buttons** should illuminate solid red.
3. The device bootup should be complete approximately after 30 seconds and the **BITRATE, VERTICAL, RECORD and STREAM buttons** will turn solid white.
4. Simultaneously press and hold the **RECORD** and **STREAM** buttons until the **BITRATE, VERTICAL, RECORD and STREAM buttons** turn red.
5. Wait for about 5 seconds then release the **RECORD** and **STREAM** buttons and the **BITRATE, VERTICAL, RECORD and STREAM buttons** should start blinking red.
6. The reset is complete as soon as you see the **BITRATE, VERTICAL, RECORD and STREAM buttons** illuminating solid white.

7. The device's network settings should now be the default DHCP mode.
8. Connect the device to a DHCP network and use the IP finder to scan for the device.

Troubleshooting the Network Connection

Connect the NVS-35 to the network and open the IP Finder utility program. Scan for the device. If not found, it is possible that your network is not assigning IP addresses. Reasons of this are outlined as follows:

- Router or DHCP server is not responding to the device's request.
- New devices are blocked by the network administrator.
- Anti-virus software or the firewall blocks the communication.

Solve the problem by attempting the following:

- Turn off the router, wait for 10 seconds then turn on the router again.
- Reset the NVS-35 to the factory defaults (see the previous section for device reset).

If the problem still persists, try the following:

- Temporarily shut down the anti-virus software or firewall.
- Make sure no other devices are connected to the LAN (wired or wireless) because this may result in IP conflicts.

Advanced Troubleshooting

If you still are unable to connect, try the following:

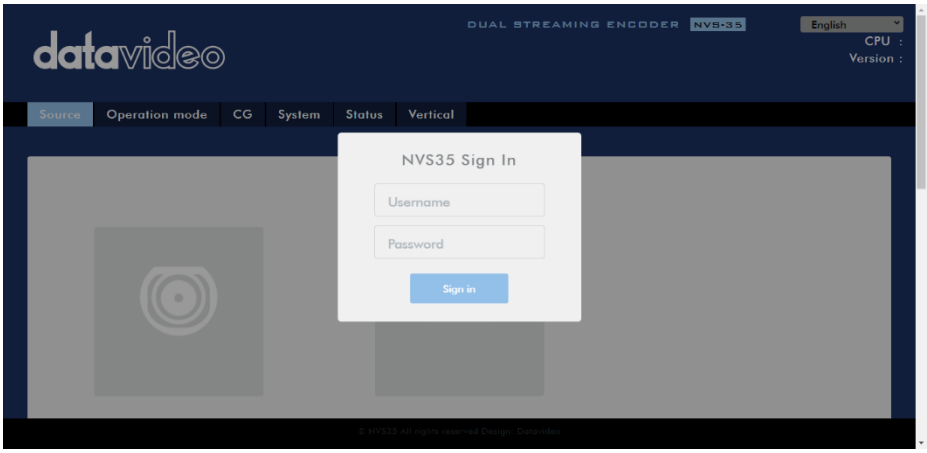
- Use the ARP table to search for the device's MAC address which can be found on the print label at the bottom of your NVS-35.
- MAC address starts with **00:07:36:03:xx:xx**.
- On the command prompt (terminal on MAC OS), enter "**arp -a**" then press enter key to display an ARP list. See if the NVS-35 is successfully connected to the network.
- Execute **services.msc** , and on the right column of the "**Services"** window, locate "**DHCP Client"** then click "**Restart"**.
- On the command prompt, enter **ipconfig/flushdns** followed by **ipconfig/release and ipconfig/renew.**

3.2 Web User Interface

By now, we have obtained the IP address of the NVS-35. To open the web user interface, either double click the device's IP on the IP finder or enter the device's IP into the address bar of a web browser then hit the **ENTER** button. Log in by entering the username as well as the password into the pop-up dialogue box as shown below.

- **Username: admin**
- **Password: 000000**

Click **OK** to log in.



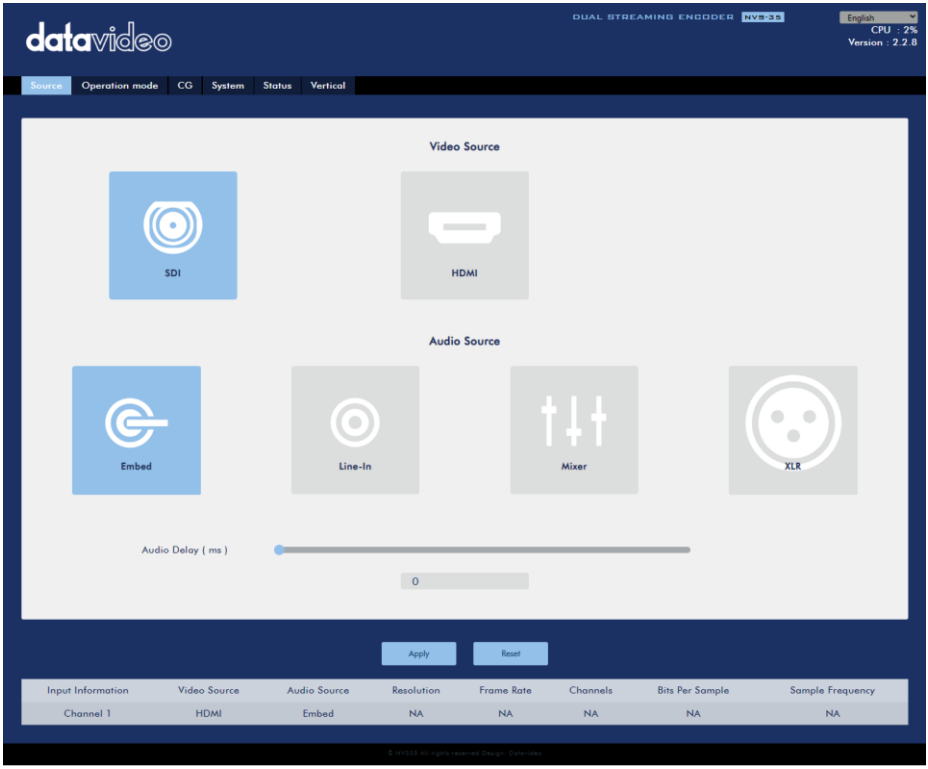
Source

You will see the ***Source*** page immediately after logging into the web UI, on which first select the video source, **SDI** or **HDMI**.

If you've selected SDI, you only need to select the audio source next. The available audio source options are **Embed**, **Line-In** and **Mixer**. Descriptions of which are outlined as follows:

- Embed: SDI embedded audio
- Line-In: External audio from RCA AUDIO IN jacks
- XLR: External audio from XLR Audio IN.
- Mixer: A mix of SDI embedded audio and RCA/XLR AUDIO IN

Please note that you can use the **Audio Delay** slider to adjust the delay of the selected audio source.



If you've selected HDMI, you will be allowed to adjust the source video's brightness, contrast, hue and saturation by dragging the corresponding sliders as shown in the diagram below. Then, select your audio sources. You may choose to output an HDMI embedded audio (**Embed**), an external audio from RCA AUDIO IN jacks (**Line-In**), an audio source from **XLR Audio IN** or a mix of HDMI embedded audio and RCA/XLR AUDIO IN (**Mixer**).

Please note that you can use the **Audio Delay** slider to adjust the delay of the selected audio source.



At the bottom of the page, you will be able to view video and audio source information such as **Input Information**, **Video Source**, **Audio Source**, **Resolution**, **Frame Rate**, **Channels, Bits Per Sample** and **Sample Frequency**.

Note: The NVS-35 web UI does not update automatically so to learn the latest device status, please refresh the page manually.

While monitoring streaming and recording, please update the page periodically regardless of how you operate the device (using the device's physical buttons only or using the device's physical buttons along with the web UI). This ensures the device information is always up-to-date.

Operation Mode

Click the ***Operation Mode*** tab on the tool bar to open the operation mode configuration page on which the user will be allowed to customize various stream and record settings.

The NVS-35 offers the following operation modes:

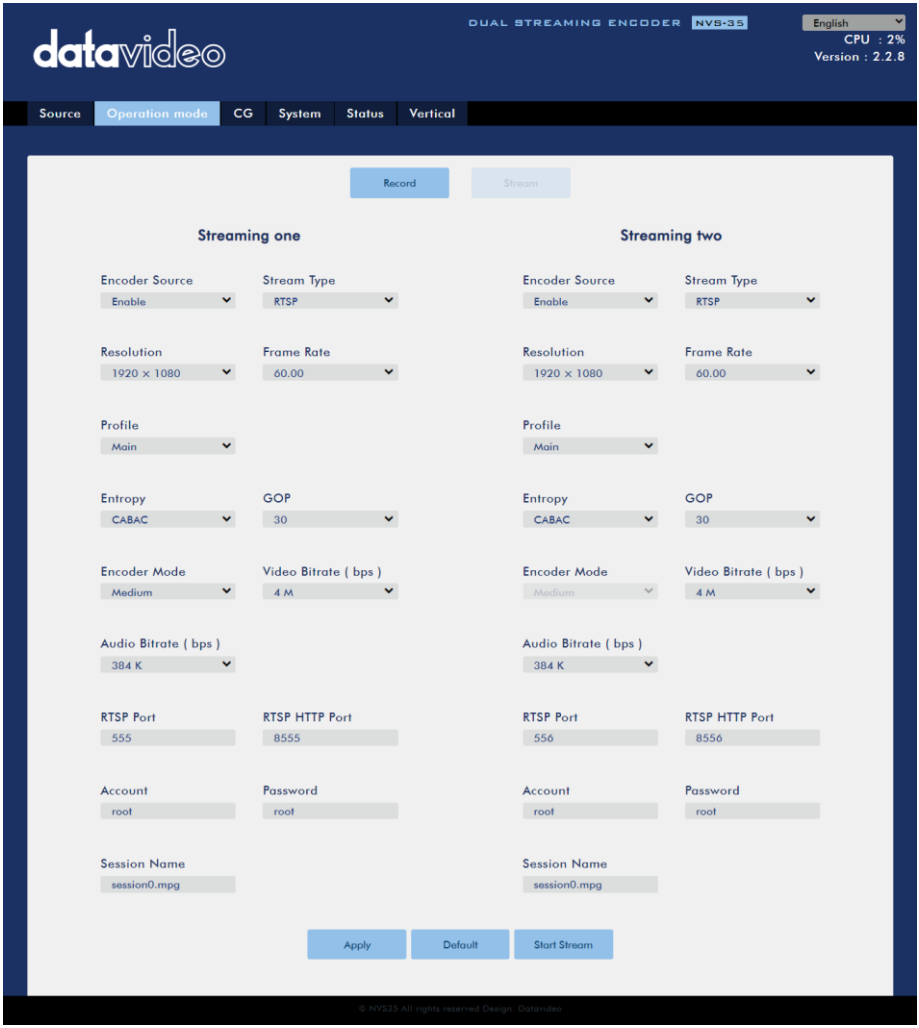
- **Stream**
- **Record**

which will be discussed in detail in this section.

Stream Mode

The NVS-35 has two stream engines allowing you to stream to two different destinations over multiple protocols such as **RTSP**, **RTMP**, **TS, HLS, SRT, Kuaishou** and **DV Cloud**. See ***Section 3.3*** for instructions on each individual stream setup.

The configurable stream video settings are **Encoder Source**, **Stream Type**, **Resolution**, **Frame Rate**, **Profile**, **Entropy**, **GOP, Encoder Mode, Video Bitrate (bps) and Audio Bitrate (bps)** which will be described later in this section.



Note that once your video streams are set up, click **"Apply"** button to apply the new stream settings. Click **"Start Stream"** to open the stream and **"Stop Stream"** to end the stream. To reset, simply click the default button.

Next, we will discuss the stream setting options in greater detail.

Encoder Source

This option allows you to enable the stream encoder for configurations of various parameters. If the stream encoder is not needed, disable this option.

Stream Type

The NVS-35 offers the user four stream types which are **RTSP**, **RTMP**, **TS, HLS, SRT, Kuaishou** and **DV Cloud**. Parameters of each individual protocol will be briefly described below.

RTSP (Real Time Streaming Protocol)

- RTSP Port: The RTSP port number ranges from 554 to 562 and is 555 by default.
- RTSP HTTP Port: The RTSP HTTP port number ranges from 8553 to 8563 and is 8555 by default.
- Account / Password: The RTSP streaming account credentials which are root/root by default.
- Session Name: The default RTSP session name is session0.mpg.

See ***RTSP/TS/HLS*** for details.

RTMP (Real-Time Messaging Protocol)

- RTMP URL: Enter an RTMP URL obtained from any live streaming platform such as Youtube.
  Note: The NVS-35 supports RTMP Publish only and not RTMP Local.
- Stream Name: Enter a stream name or key from any live streaming platform such as Youtube.
- Account / Password: Enter the account name and the password of your RTMP platform account.

See ***RTMP*** for details.

TS (Transport Stream)

- TS URL: Enter a URL for your transport stream.

See ***RTSP/TS/HLS*** for details.

SRT (Secure Reliable Transport)

- Stream Type: Set the device as the caller or listener.
- SRT Port: Enter the port number designated for SRT traffic.
- Caller IP Address: Enter the IP address of the destined device.
- Latency (20 – 8000): Enter the amount of latency in ms to apply to the SRT stream. This field is optional and the default latency is 1000 ms.
- Stream ID: Enter a name for your video stream. Please note that the stream ID is only available when the device is set to Caller.

See ***SRT*** for details.

Kuaishou

This is designed specifically for a streaming platform in China.

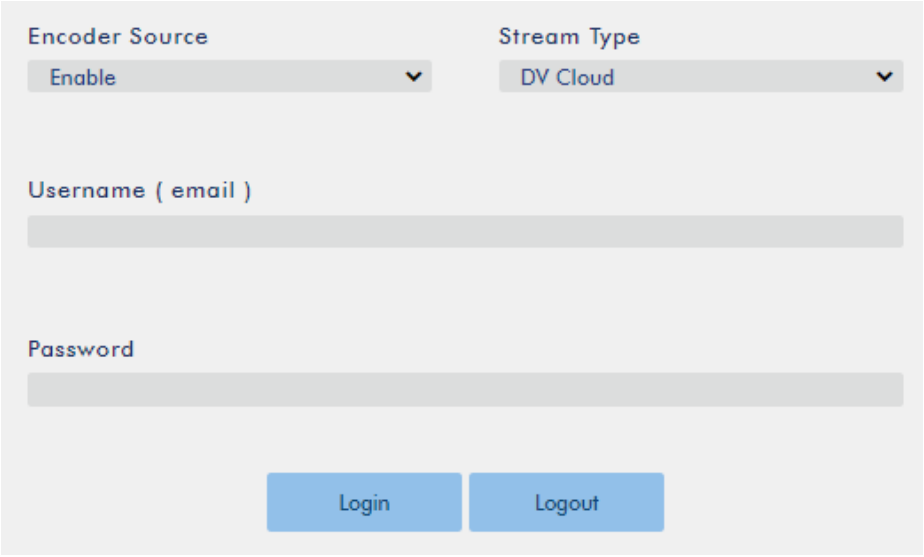
Please note that when streaming, the NVS-35 converts video into data, which are sent across an IP network. High bitrates consume more bandwidth across the IP network. In a gigabit office LAN, high bitrate may not be a concern and Speed/Bandwidth is therefore not a limitation in an NVS-35 application environment.

If your available bandwidth is limited, you should reduce both your resolution and your bitrate accordingly. A good rule of thumb is for the bitrate of your stream to use no more than 50% of your available upload bandwidth capacity on a dedicated line. For example, if the result you get from a speed test shows that you have 2Mbps of upload speed available, your video bitrate should not exceed 1Mbps.

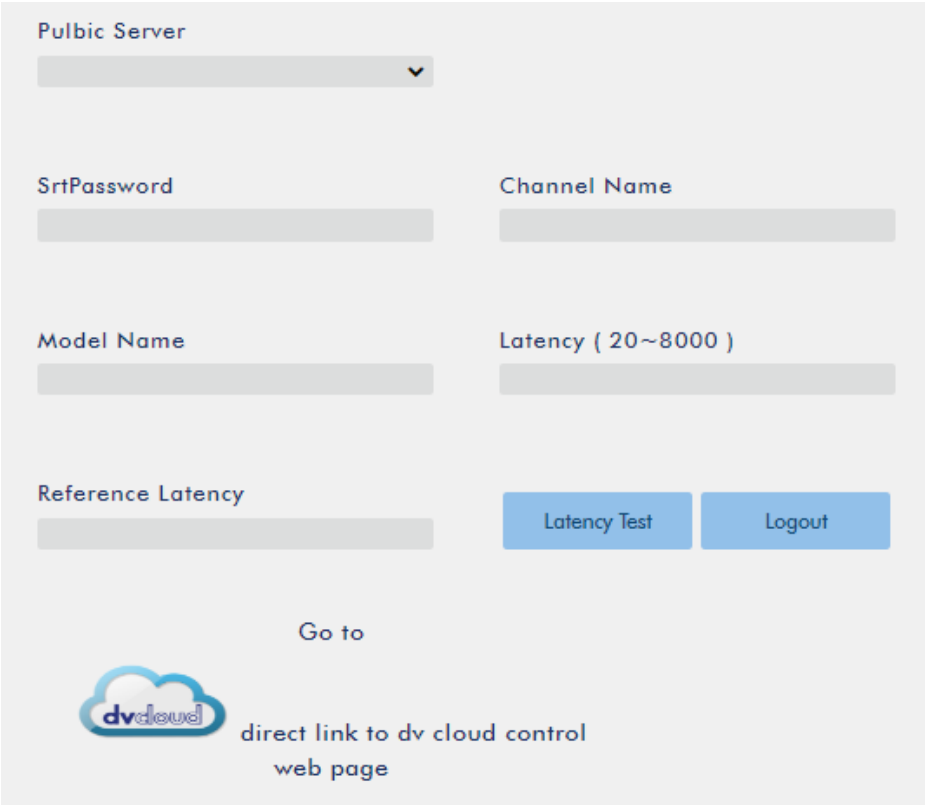
DV Cloud

If you would like to stream or record an input video channel to DV Cloud via SRT protocol, select DV Cloud as the stream type then enter the DV Cloud admin login credentials. The admin login account is the account credentials entered when you sign up for a DV Cloud account.

Please note that if DV Cloud is chosen, you can only use one stream engine to stream your video.



Once logged in, you will see the fields as shown in the diagram below.



Enter the following information.

Encoder Source: Select either the main or sub encoder from the drop-down menu. See the next few sections for details of the encoder settings.

Public Server: DV Cloud server name

SRTPassword: Enter a password to encrypt the SRT stream.

Channel Name: Enter an arbitrary name of the video channel streamed to DV Cloud.

Model Name: Name of the NVS-35

After entering all information, click the **Start Stream** button to view your video channel on DV Cloud as illustrated in the diagram below.



Resolution

The first step of encoder setup is to adjust the image size. It is best to either match your original video source or scale it down. For example, capture at HD 720 and stream at HD 720, or capture at HD 720 and stream at 540 (high).

You should never be scaling up and streaming at a higher resolution than your original video source. For example, it does not make sense to capture at 720 and stream at 1080. Note that you will also have no gain in quality and you are using more bandwidth than is necessary for your viewers.

You should also be aware that higher resolutions require greater processing power to encode the stream. Attempting too high of a resolution on too little processing power can result in degraded image quality and corrupted or interrupted streams or recordings.

Resolutions available for the stream encoder are listed as follows:

- 1920x1080
- 1280x720
- 720x576
- 720x480
- 640x480
- 320x240

Frame Rate

Select a frame rate from the drop-down menu for video streaming. Note that frame rates should always match the frame rate of the video source.

- 60.00
- 59.94
- 50.00
- 30.00
- 29.97
- 25.00
- 20.00
- 15.00

Video Bitrate (bps)

The bitrate of the video specifies the amount of information stored in the video. The higher the bitrate is, the clearer the video is. However, when choosing your encoder settings for streaming, you should first check your available upload bandwidth. A good rule of thumb is for the bitrate of your stream to use no more than 50% of your available upload bandwidth capacity on a **DEDICATED** line. For example, if the result you get from a speed test shows that you have 2Mbps of upload speed available, your combined audio and video bitrate should not exceed 1Mbps.

Usually high bitrate means good image quality; however, there are also exceptions. For example, SD video may appear acceptable at 1000 Kbps (1M) but HD video is unacceptable at 1000 Kbps.

Available video bitrates are listed as follows:

- 10M
- 8M

- 6M
- 4M
- 2M
- 1M
- 512K
- 256K

Audio Bitrate (bps)
The NVS-35 offers the user the following audio bitrates at which you may want to stream the audio. It is recommended to select 128Kbps or higher.

- 384K
- 256K
- 128K
- 64K
- 32K

Encoder Mode
The Encoder Mode sets the video bitrate mode for your video stream. The available modes are listed as follows:

- High (8M)
- Medium (4M)
- Low (2M)

Tip: You can also switch between different bitrate modes by pressing the Bitrate button on the front panel. See *Section 3.4* for details.

Profile
Profile sets the H.264 encoding profile for your stream. The available options are **Baseline**, **Main**, and **High**. Typically, **High** profile provides the best image quality and is suitable in most instances. However, depending on the decoder used when viewing the stream, such as with mobiles devices, a Main or Baseline profile may be required.

- High
- Main
- Baseline

Entropy

There are two coding options available for generating H.264 content:

- CAVLC (Context-Adaptive Variable Length Coding)
- CABAC (Context-based Adaptive Binary Arithmetic Coding)

CABAC encoding provides a 7-10% quality improvement over CAVLC but requires an extra 10-15% CPU. CABAC encoding is only available in H.264 Profiles Main & High. When targeting at low-powered devices, such as older cell phones and tablets, we recommend the Baseline Profile that uses CAVLC which requires less computing power.

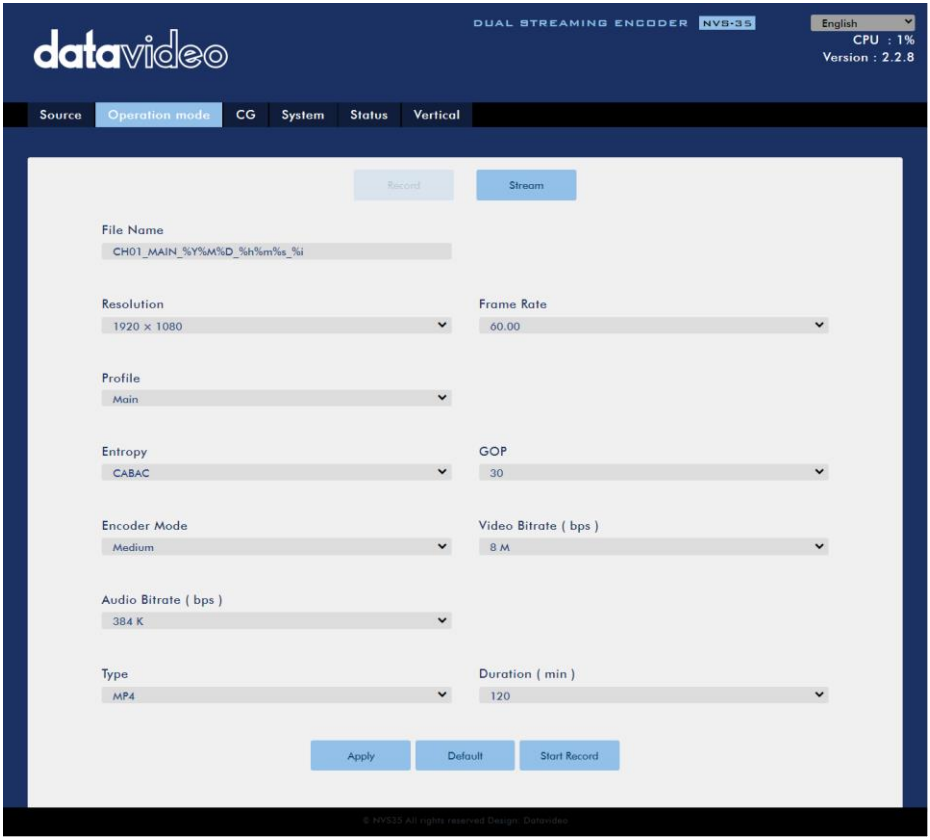
GOP

GOP pattern with longer GOP length encodes video very efficiently. Shorter GOP lengths usually work better with video that has quick movements, but they do not compress the data rate as much. Depending on your applications, you can select 16 GOP sizes ranging from 1 to 255.

- 255
- 240
- 200
- 120
- 100
- 60
- 50
- 30
- 25
- 20
- 15
- 10
- 5
- 3
- 2
- 1

Record Mode

The NVS-35's record engine allows you to record your program on the SD card. See ***Section 5*** for a list of recommended SD cards. The record parameters shown in the diagram below will be discussed in detail in this section.



Note that after you've configured the record settings, click **"Apply"** to apply the new record settings. Click **"Start Record"** to start recording and **"Stop Record"** to end recording. To reset, simply click the default button.

File Name

Enter the name of your record file.

Resolution

Recording resolution is the number of pixels (dots) used to create an image. Higher resolutions use more pixels to create an image. This means that greater amount of

details can be expressed in the image, but larger file sizes and a greater amount of storage (i.e. hard drive space) are required to save the images or video.

Resolutions available for your recorder are listed as follows:

- 1080x1920
- 720x1280
- 576x720
- 480x720
- 480x640
- 240x320

Frame Rate

Select a frame rate from the drop-down menu for video recording.

- 60.00
- 59.94
- 50.00
- 30.00
- 29.97
- 25.00
- 20.00
- 15.00

Frame rate greatly impacts the style and viewing experience of a video. Different frame rates yield different viewing experiences, and choosing a frame rate often means choosing between things such as how realistic you want your video to look, or whether or not you plan to use techniques such as slow motion or motion blur effects.

Below is a list of common options for different applications:

- ***24fps*** – This is the standard for movies and TV shows, and it was determined to be the minimum speed needed to capture video while still maintaining realistic motion.
- ***30fps*** – Videos with a lot of motion, such as sports, will often benefit from the extra frames per second.
- ***60+fps*** – Anything higher than 30fps is mainly used to create slow motion video or to record video game footage.

Video Bitrate (bps)
The bitrate of the video specifies the amount of information stored in the video. The higher the bitrate is, the clearer the video is.

Available video bitrates are listed as follows:

- 16M
- 12M
- 8M
- 6M
- 4M
- 2M
- 1M
- 512K
- 256K

Recommended video bitrates

- **720P or lower** – 8 – 10 mbps
- **1080P or higher** – 15 mbps or higher

Audio Bitrate (bps)
The NVS-35 offers the user the following audio bitrates at which you may want to record the audio. It is recommended to select 128Kbps or higher.

- 384K
- 256K
- 128K
- 64K
- 32K

Encoder Mode
The Encoder Mode sets the video bitrate mode for your recording. The available modes are listed as follows:

- High (8M)
- Medium (4M)
- Low (2M)

Tip: You can also switch between different bitrate modes by pressing the Bitrate button on the front panel. See *Section 3.4* for details.

Profile

Profile sets the H.264 encoding profile for your recorder. The available options are **Baseline**, **Main**, and **High**. Typically, **High** profile provides the best image quality and is suitable in most instances. However, depending on the decoder used when viewing the recording, a Main or Baseline profile may be required.

- High
- Main
- Baseline

Entropy

There are two coding options available for generating H.264 content:

- CAVLC (Context-Adaptive Variable Length Coding)
- CABAC (Context-based Adaptive Binary Arithmetic Coding)

CABAC encoding provides a 7-10% quality improvement over CAVLC but requires an extra 10-15% CPU. CABAC encoding is only available in H.264 Profiles Main & High. When targeting at low-powered devices, such as older cell phones and tablets, we recommend the Baseline Profile that uses CAVLC which requires less computing power.

GOP

GOP pattern with longer GOP length encodes video very efficiently. Shorter GOP lengths usually work better with video that has quick movements, but they do not compress the data rate as much. Depending on your applications, you can select 16 GOP sizes ranging from 1 to 255.

- 255
- 240
- 200
- 120
- 100
- 60
- 50
- 30

- 25
- 20
- 15
- 10
- 5
- 3
- 2
- 1

CG

The CG function allows the user to place scrolling texts (News), a still picture (Graphic), a logo and an animated image above the video layer. Various CG layers will be discussed in this section.

News

News allows you to place the scrolling text over the video.

First pre-enter the scrolling text content into a text file then upload the text file to NVS-35. Lastly, customize the following text properties.

Note: You can only enter up to 15 lines of text into the text file only and for Chinese text, please set the font type to UTF-8.

Size: Set the font size to large, medium or small.

Please note that the news text may be cropped by edges of the screen when setting the font size to large.

See the table below for the corresponding English and Chinese font sizes:

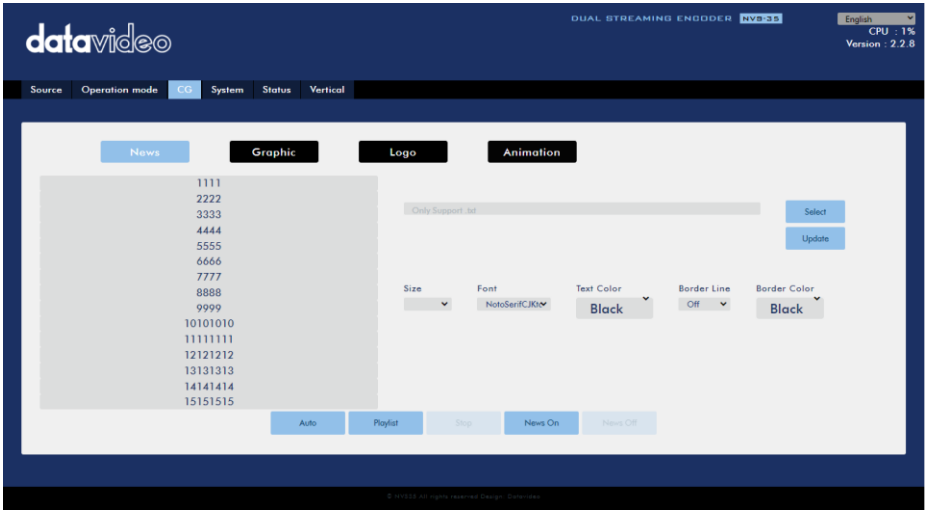
Size	English	Chinese
Large	Lowercase → 23 Uppercase → 29	16
Medium	Lowercase → 37 Uppercase → 48	26
Small	Lowercase → 56 Uppercase → 72	40

Font: NotoSerifCJKtc and Open are the two available font types.

Text Color: You can set the text color to Black, Blue, Green, Orange, Red, White or Yellow.

Border Line: Select ON to enable the border line of the text entered.

Border Color: The border line color can be set to Black, White or Yellow.



After you've entered and configured the scrolling text, you may enable them on the video using one of the three ways described below:

Click "**AUTO**" to play the scrolling text and change lines for every 6 seconds.

Click "**Start Playlist**" to play the scrolling text and change lines only when the space key is pressed. At the 15th line (last line), press the space key to return to the first line.

Click "**News On**" to select any text preview box with the mouse. When the text line turns red as the mouse cursor is hovered over, that particular line of text is too long and certain parts have been cropped on the screen.

Graphic

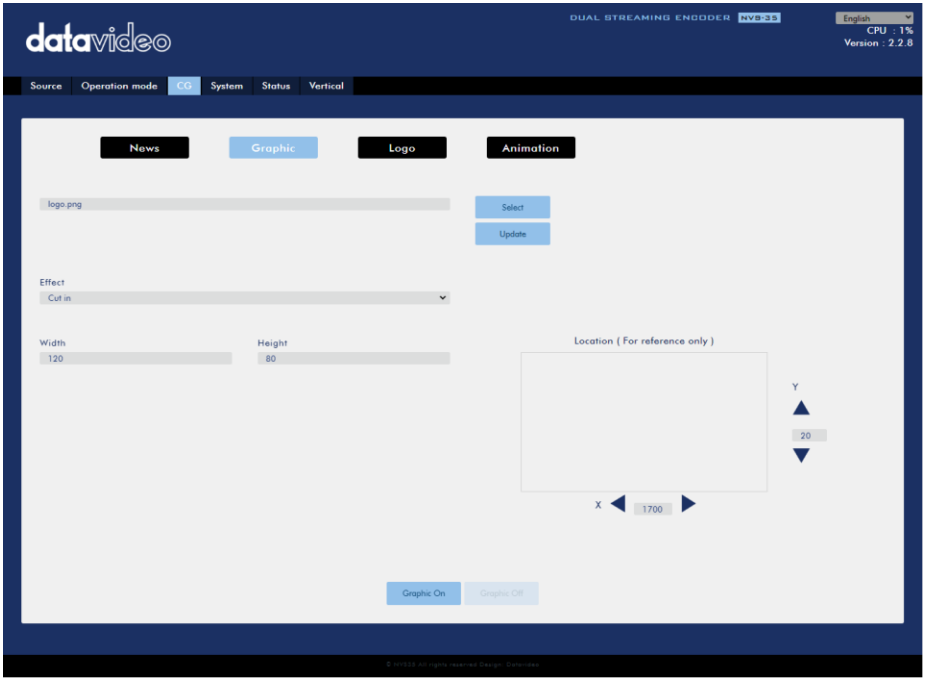
You can also add a picture to the video. You will be required to select a png file from your local hard disk. Click **Select** to browse the hard drive for your graphic file then click **Update** to start the upload.

After the graphic file has been successfully uploaded, you can adjust the size by entering appropriate values in the **Width** and **Height** fields.

The **Effect** drop-down list sets how the image enters the video. Select "**Cut in**" if you want the image to appear with no effect. If you want the image to enter from either side of the screen, select "**Left to Right**" or "**Right to Left**".

Lastly, set the coordinates of the image. The position of the image on the screen will be shown in the location box.

To turn on the graphic image, simply click the **Graphic ON** button which can be found at the bottom of the page.



Logo

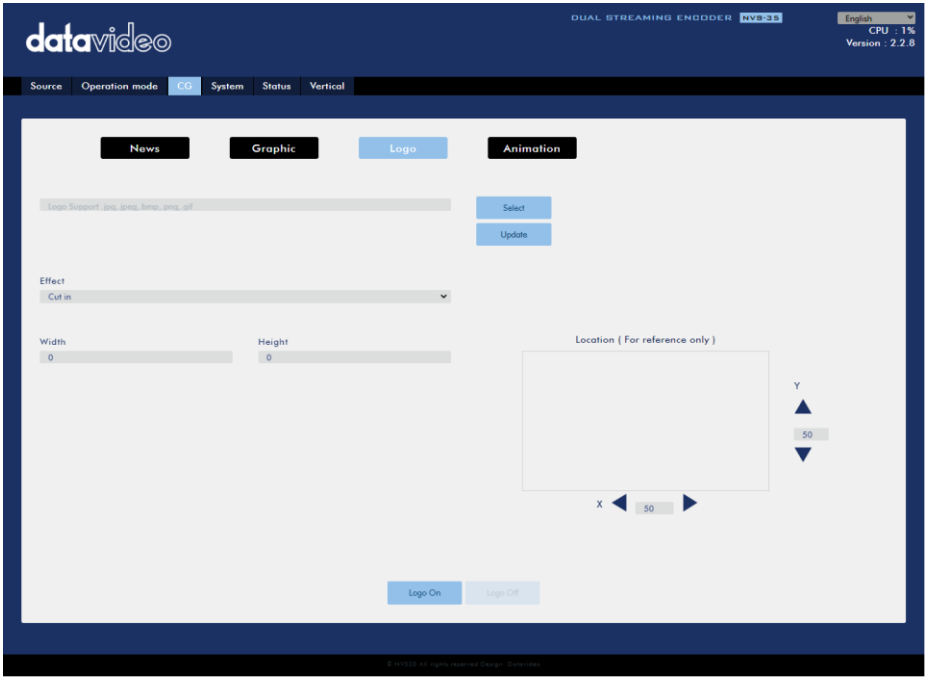
You can also add a logo to the video. You will be required to select a jpg, jpeg, bmp, png or gif file from your local hard disk. Click **Select** to browse the hard drive for your logo file then click **Update** to start the upload.

After the logo file has been successfully uploaded, you can adjust the size by entering appropriate values in the **Width** and **Height** fields.

The **Effect** drop-down list sets how the logo enters the video. Select "**Cut in**" if you want the logo to appear with no effect. If you want the logo to enter from either side of the screen, select "**Left to Right**" or "**Right to Left**".

Lastly, set the coordinates of the logo. The position of the logo on the screen will be shown in the location box.

To enable the logo, simply click the **Logo ON** button which can be found at the bottom of the page.



Animation

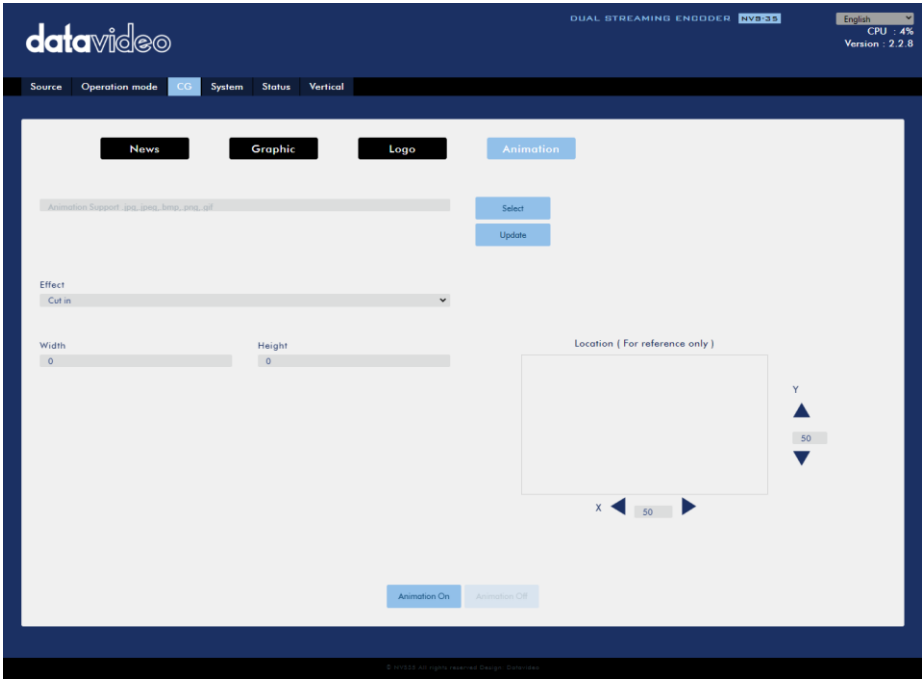
You can also add an animation to the video. You will be required to select a jpg, jpeg, bmp, png or gif file from your local hard disk. Click **Select** to browse the hard drive for your animation file then click **Update** to start the upload.

After the animation file has been successfully uploaded, you can adjust the size by entering appropriate values in the **Width** and **Height** fields.

The **Effect** drop-down list sets how the animation enters the video. Select "**Cut in**" if you want the animation to appear with no effect. If you want the animation to enter from either side of the screen, select "**Left to Right**" or "**Right to Left**".

Lastly, set the coordinates of the animation. The position of the animation on the screen will be shown in the location box.

To enable the animation, simply click the **Animation ON** button which can be found at the bottom of the page.



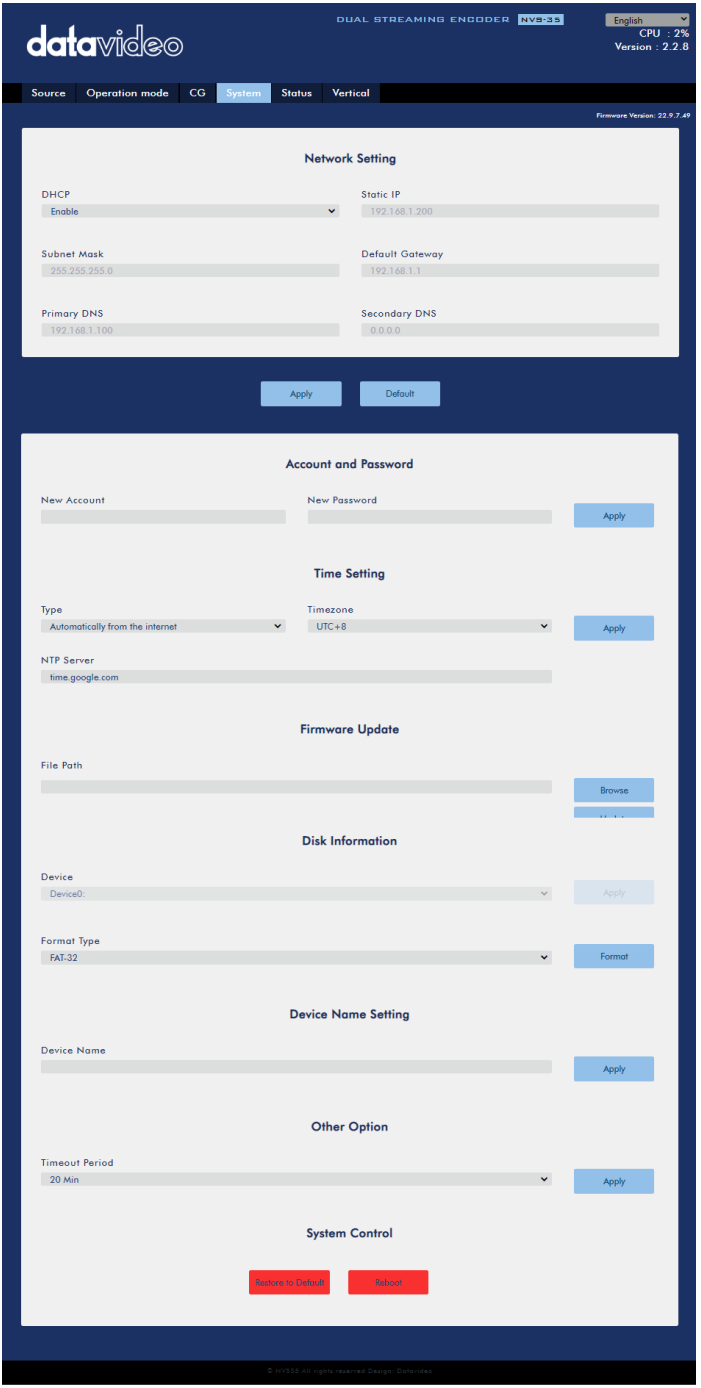
System

The system page allows the user to configure several network and system related settings.

The network settings are **DHCP enable/disable**, **static IP address**, **subnet mask**, **default gateway**, **primary and secondary DNS**, and etc.

The system settings are **account credentials**, **time settings**, **firmware update**, **disk format** and **device name**.

The system page is shown in the diagram below.


datavideo
DUAL STREAMING ENCODER NVS-35
English
CPU : 2%
Version : 2.2.8
Source
Operation mode
CG
System
Status
Vertical
Firmware Version: 22.9.7.49
Network Setting
DHCP
Enable
Static IP
192.168.1.200
Subnet Mask
255.255.255.0
Default Gateway
192.168.1.1
Primary DNS
192.168.1.100
Secondary DNS
0.0.0.0
Apply
Default
Account and Password
New Account
New Password
Apply
Time Setting
Type
Automatically from the internet
Timezone
UTC+8
Apply
NTP Server
time.google.com
Firmware Update
File Path
Browse
Disk Information
Device
Device0:
Apply
Format Type
FAT-32
Format
Device Name Setting
Device Name
Apply
Other Option
Timeout Period
20 Min
Apply
System Control
Restore to Default
Reboot

Network Setting

In network settings, you can either manually enter the IP address or set the device to DHCP mode which allows the router to automatically assign the IP address to the NVS-35.

DHCP

In DHCP mode, the router automatically assigns the IP address to the device. If you want to manually configure the network settings, disable this option.

Static IP Address

If the DHCP is disabled, the static IP field will be activated for the user to manually enter the IP address. The static IP address is 192.168.1.200 by default.

Tip: If you do not know the device's IP address, you can always reset the device to restore default network settings. See *Device Reset* for instructions.

Subnet Mask

Static IP address mode requires the **subnet mask**, which is 255.255.255.0 by default.

Default Gateway

Static IP address mode requires the **default gateway**, which is 192.168.1.254 by default.

Primary DNS (Optional)

Primary DNS is required in static IP mode only but is optional.

Secondary DNS (Optional)

Secondary DNS is required in static IP mode only but is optional.

Account and Password

Set the NVS-35's login name and password here. Click **Apply** to save the new login credentials.

Time Setting

In time setting, you are allowed to select the reference time source for the NVS-35.

Type and Timezone

In this drop-down menu, you can either select to allow the device to retrieve the time automatically from the Network Time Protocol (NTP) server by selecting "**Automatically from the Internet**" or locally by selecting **"Manual"**.

After you've selected how you want to set the device time, select a time zone from the **Timezone** drop-down menu. For example, UTC+1 a time offset that adds one hour to Coordinated Universal Time and UTC-1 is one hour behind Coordinated Universal Time.

NTP Server

If you've selected "**Automatically from the Internet**," you will need to enter the NTP server address here. An example of the NTP server address is time.google.com.

Manual

If you've selected "**Manual**", the **Date** and **Time** fields will appear showing the device's system date and time values. A calendar will appear after the **Date** field is clicked. Simply click a day to set the date. Enter the time in the **Time** field.



After you've configured the time settings, click **Apply** to save the new settings.

Firmware Update

Click **Browse** to search for the latest firmware file saved on the PC's hard disk. **Please note that the device will verify the selected file to make sure the correct firmware file is uploaded.** After the latest firmware file is uploaded, click **Update** to start the firmware update.

Disk Information

In this pane, you will be allowed to select a storage device for disk formatting. The available format types are listed as follows:

- FAT-32
- NTFS
- EXFAT

Click **Format** to start formatting.

Device Name Setting

Enter a name for this device and click **Apply** to save the name.

Other Option

Timeout Period

This sets the timeout period for the current login. See below for available options.

- 20 Min
- 120 Min
- 1 Day
- 7 Day
- Never

System Control

Restore to Default

Click to restore the system's default settings.

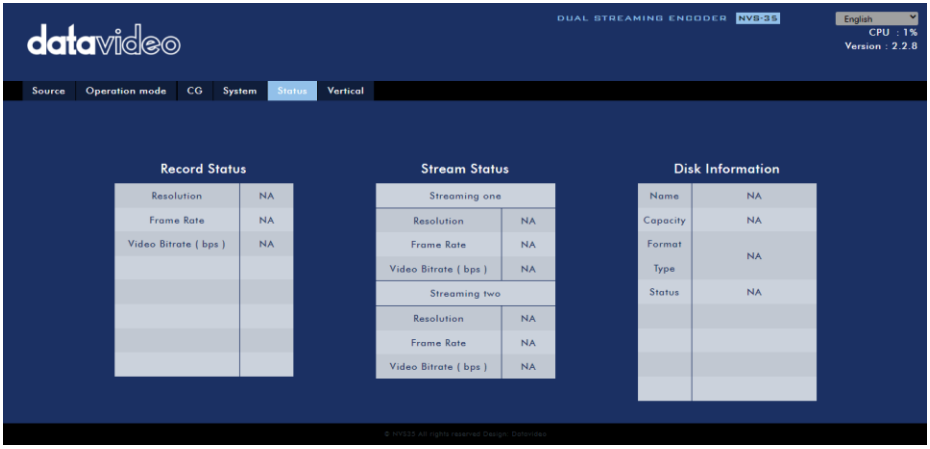
System Reboot

Click to reboot the NVS-35.

Status

The status page shows **Record**, **Stream** and **Disk** information as depicted in the diagram below.

Note: The NVS-35 web UI does not update automatically so to learn the latest device status, please refresh the page manually.



While monitoring streaming and recording, please update the page periodically regardless of how you operate the device (using the device's physical buttons only or the device's physical buttons along with the web UI). This ensures the information page is always up-to-date.

Vertical

On this page, you will be able to change your stream video orientation.

- Crop allows 16:9 video output and left/right image crop.
- Rotate is designed for video production; if the camera is placed upside down, this mode will reverse it.



3.3 Operations

In this section, we will discuss how to customize your operation mode, how you can play the video via different streaming protocols and how to place texts on your video.

Video Streaming

The NVS-35 provides the user with different options for video streaming such as RTSP, TS, RTMP, HLS and SRT.

This section discusses settings of these options and how to stream your video using these methods.

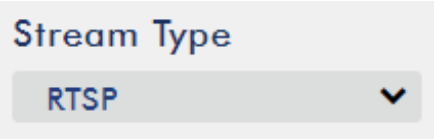
RTSP/TS/HLS

In the **RTSP/TS/HLS** modes, the **NVS-35** is a stream server allowing any client device to connect and playback your video stream. However, if you would like to stream to multiple client devices, we recommend using a separate media server to set up your streaming environment.

The following operation procedure uses VLC media player to playback video stream. If your PC or laptop does not have VLC media player installed, please visit VideoLAN's official homepage (https://www.videolan.org/) and download the installation file then install the program.

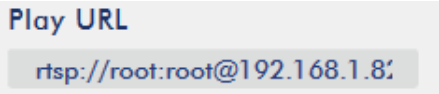
Follow the steps below to obtain the RTSP URL:

1. On the web UI, click "**Operation Mode**" → "**Stream**" to open the stream settings page.
2. Select **RTSP** from **Stream Type** drop-down menu.



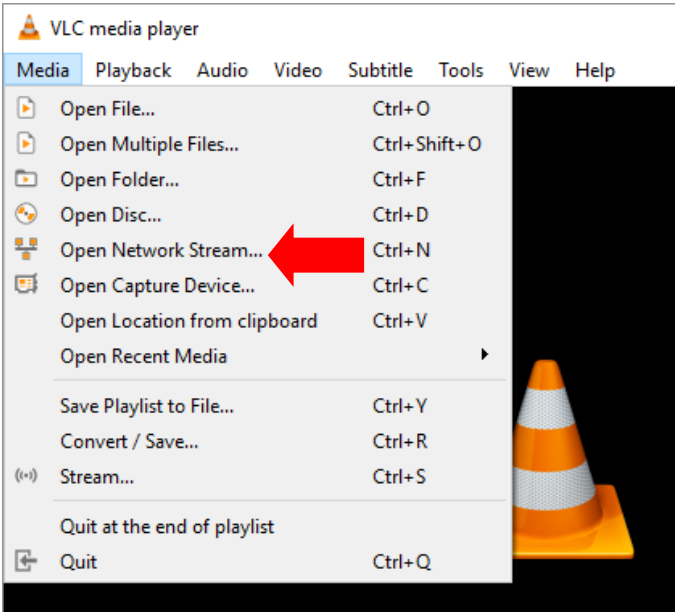
3. Click the **Start Stream** button to generate the RTSP URL based on the provided account, password and session name.

4. If you use the device's default settings, the following RTSP URL will be automatically generated: **rtsp://root:root@192.168.1.82:556/session0.mpg**

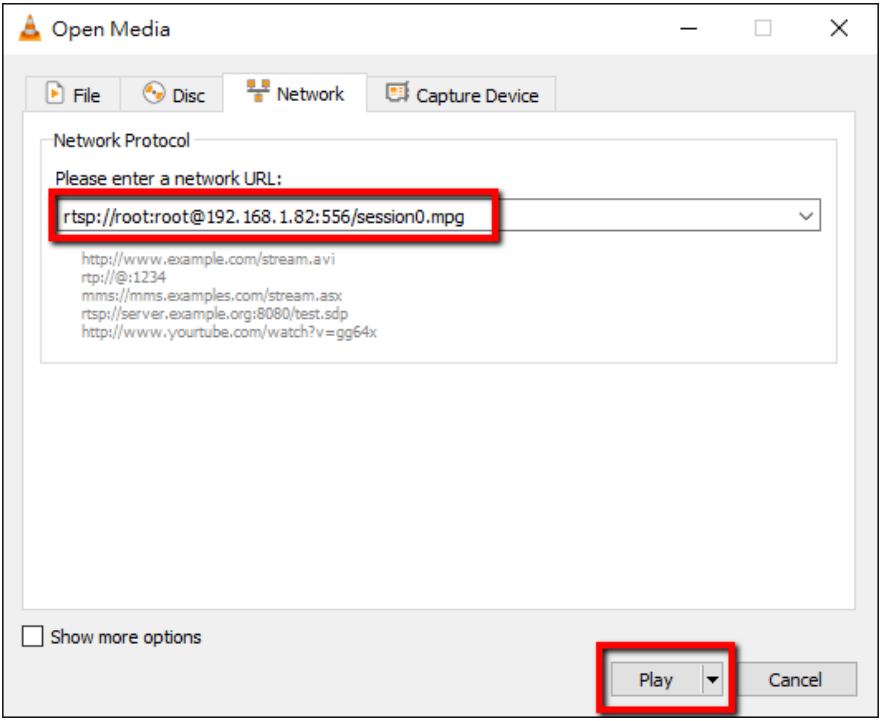


5. To view the RTSP video stream, enter the RTSP URL into the client device.

6. Open VLC then click **Open Network Stream** (shown in the diagram below).



7. As shown in the diagram below, enter the stream URL then click **Play** to start streaming.



Follow the steps below to obtain the TS URL:

1. On the web UI, click "**Operation Mode**" → "**Stream**" to open the stream settings page.
2. Select **TS** from **Stream Type** drop-down menu.



3. Enter the TS URL. Note that the TS URL shown below is only for illustration purpose.

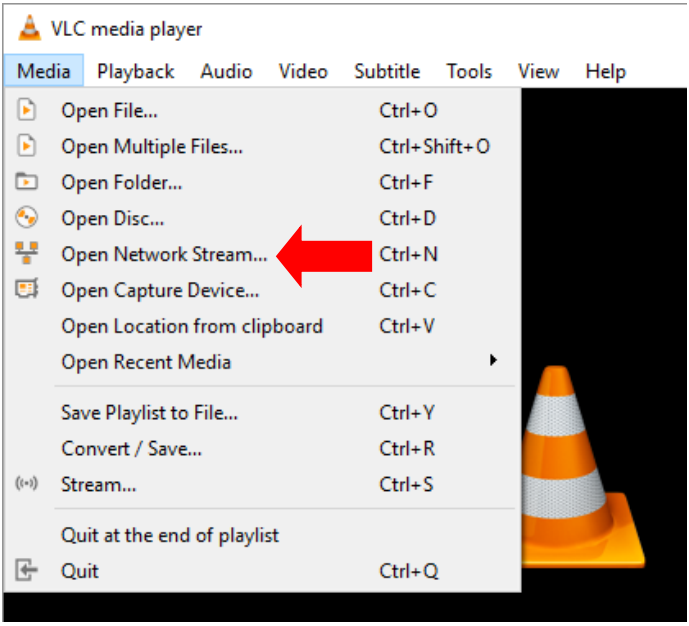


4. Click the **Start Stream** button to start the stream.

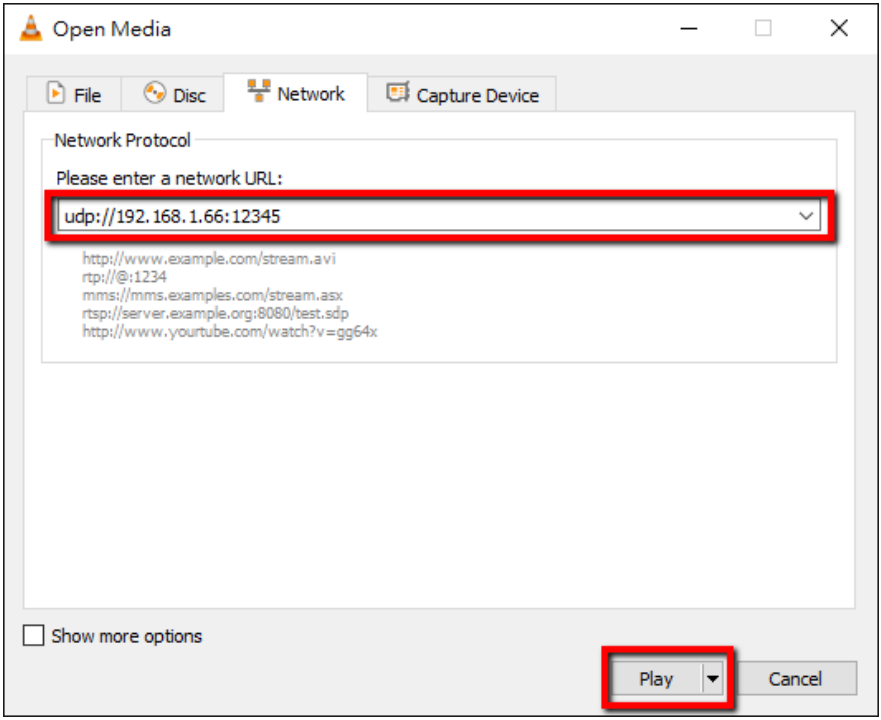


5. Enter the TS play URL into the client device to which the video stream is delivered over TS protocol.

6. On the computer, open VLC then click **Open Network Stream** (shown in the diagram below).



7. As shown in the diagram below, enter the stream URL then click **Play** to start streaming.



Follow the steps below to obtain the HLS URL:

1. On the web UI, click "**Operation Mode**" → "**Stream**" to open the stream settings page.
2. Select **HLS** from **Stream Type** drop-down menu.

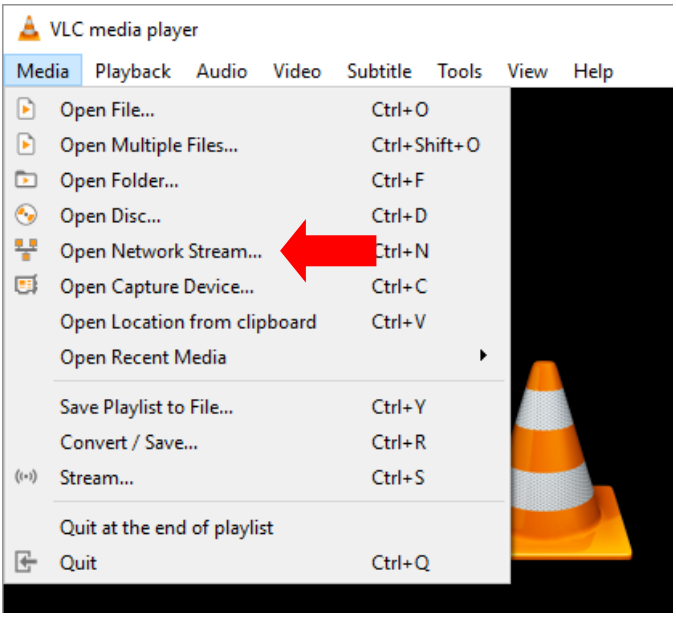


3. Click the **Start Stream** button to start the stream.

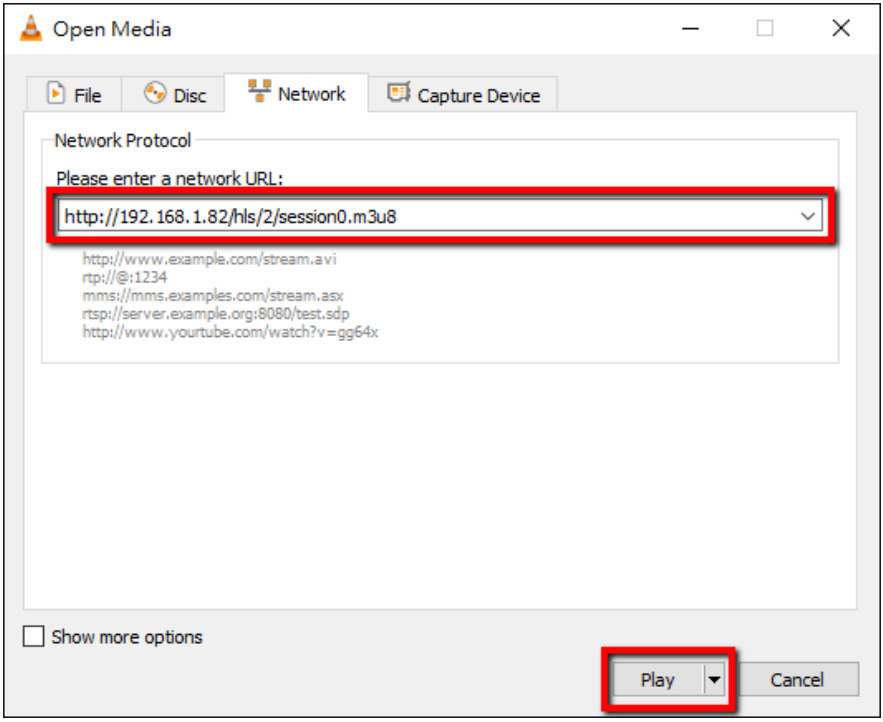


4. Based on your settings, the device will automatically generate a .m3u8 stream URL: http://192.168.1.82/hls/2/session0.m3u8

5. Enter the **HLS** URL into the client device.
6. Open VLC then click **Open Network Stream** (shown in the diagram below).



7. As shown in the diagram below, enter the stream URL then click **Play** to start streaming.



8. You can also play .m3u8 stream URL using the devices listed as follows:

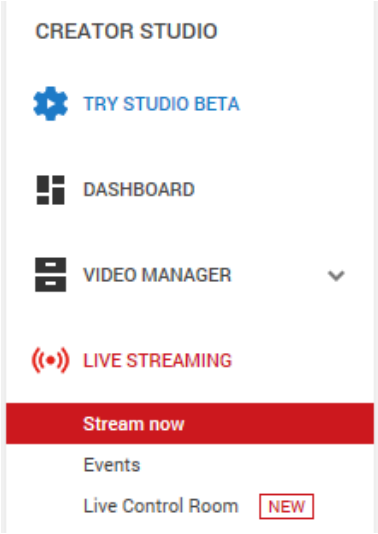
    - iPhone, iPad and MacBook: Use Safari to open the .m3u8 stream URL.
    - Windows 10: Use Microsoft Edge to open the .m3u8 stream URL.

RTMP

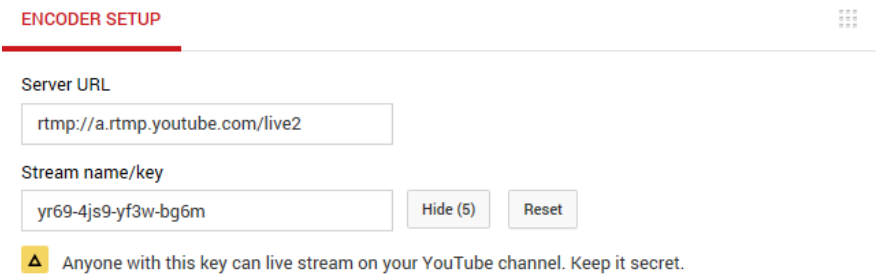
In **RTMP** mode, the NVS-35 can only send one data stream to one CDN or media server that supports the **Real-Time Messaging Protocol (RTMP)**. An example of the **RTMP** media server is **Youtube**.

In the following section, we will show you how to set up an **RTMP** stream to **Youtube**. The step-by-step account setup is outlined as follows:

1. First obtain Server URL and Stream name/key from Youtube.
2. Open the Youtube Live Dashboard https://www.youtube.com/live_dashboard
3. On the left column, locate and click “Stream now.”



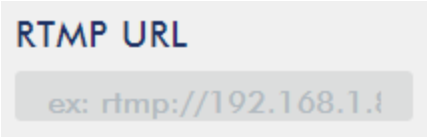
4. On the right, scroll down to the bottom where you will be able to find **Server URL** and **Stream name/key**.



5. On the NVS-35, open the **Stream** operation mode page.
6. Select **RTMP** from the Stream Type drop-down menu.



7. Enter the **Server URL (rtmp://a.rtmp.youtube.com/live2)** obtained from the **Youtube Live Streaming** page into the **RTMP URL** field.



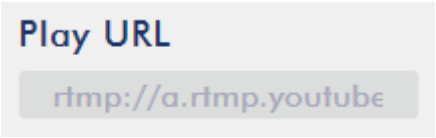
8. Enter the **Stream name/key (yr69-4js9-yf3w-bg6m)** obtained from the **Youtube Live Streaming** page into the **StreamName** field.



9. As required by the live streaming channel, enter your Youtube account name and password into the **Account** and **Password** fields.



10. Click the **Start Stream** button to start streaming the live video on the **Youtube Live Streaming** page. You should also see an **RTMP URL** generated.



11. At this point, you should be able to view your stream video on Youtube.
12. To stop live streaming, simply click the **Stop Stream** button.

SRT

When setting up an SRT stream on NVS-35, you can configure it as an SRT source encoder (caller mode) or an SRT destination decoder (listener mode).

To establish an SRT link between the source and destination devices, ensure that one device is a Listener and the other is a Caller. The device you set as the caller or listener is entirely arbitrary.

To access the device's SRT settings, log in to the web UI, select the **"Operation Mode"** tab, then click the **"Stream"** button to open the stream settings page.

Now, follow the steps below to set up the SRT traffic:

1. Select **SRT** from **Stream Type** drop-down menu.



2. Scroll down to the bottom and locate a second **Stream Type** drop-down menu in which you will be able to set the device to the Caller (source) or Listener (destination) mode.



   a. If Caller is selected, do the following:
      - In the **IP Address and SRT Port** fields, enter the IP address and the port number of the destination device (decoder) respectively. If your SRT stream destination is a CDN or media server, the IP address and the port number should be provided by the service provider.
      - In the **Latency** field, enter the amount of latency to apply to the stream. The default value is 1000 ms.
      - In the **Stream ID** field, enter a name for your video stream.
   b. If Listener is selected, simply enter a port number that you intend to use on this device for the SRT stream.

3. Click the **Start Stream** button to start the SRT stream.

3.4 Stream and Record Buttons

The **INPUT, RECORD**, **STREAM**, **VERTICAL** and **BITRATE** buttons on the front panel give the user certain controls of the record and stream functions. In this section, we will cover operations of these four buttons in detail.



Input Button

Press the **INPUT** button to select between SDI and HDMI input sources. The button is always in solid white.

The activated input source will be indicated by the LEDs above the button.

- **Green**: Input source activated
- **Off**: Input source deactivated

Note: The Input button is disabled while streaming or recording is in progress.

Record Button

Press the **RECORD** button to start/stop recording.

The table below summarizes the **RECORD** Button LED behaviors:

	RECORD Button
Solid White	Record function in idle state
Blinking Red	Record function is activating or resetting
Solid Red	Record function activated

Start recording

- When idle, the **RECORD** button is solid white.
- Press and hold the **RECORD** button for approximately 2 seconds.
- When the record function is activating, the **RECORD** button turns from solid white, then blinking red and finally to solid red.
- When the **RECORD** button is solid red, this indicates that the record function has been successfully activated.

Stop recording

- While recording, the **RECORD** button is solid red.
- Press and hold the **RECORD** button for approximately 2 seconds.
- When the record function is terminating, the **RECORD** button turns from solid red, then blinking red and finally to solid white.
- When the **RECORD** button is solid white, this indicates that the record function has been successfully terminated.

Stream Button

Press the **STREAM** button to start/stop streaming.

The table below summarizes the **STREAM** Button LED behaviors:

	STREAM Button
Solid White	Stream function in idle state
Blinking Red	Stream function is activating or resetting
Solid Red	Stream function activated

Start streaming

- When idle, the **STREAM** button is solid white.
- Press and hold the **STREAM** button for approximately 2 seconds.
- When the stream function is activating, the **STREAM** button turns from solid white, then blinking red and finally to solid red.
- When the **STREAM** button is solid red, this indicates that the record function has been successfully activated.

Stop streaming

- While streaming, the **STREAM** button is solid red.
- Press and hold the **STREAM** button for approximately 2 seconds.
- When the stream function is terminating, the **STREAM** button turns from solid red, then blinking red and finally to solid white.
- When the **STREAM** button is solid white, this indicates that the stream function has been successfully terminated.

Bitrate Button

Follow the steps below to switch the stream bitrate mode using the **BITRATE** button:

- Push and hold one of the **RECORD** and **STREAM** buttons until the pushed button starts blinking red.
- As soon as the pushed **RECORD** or **STREAM** button is released, the **BITRATE** button will turn solid red.

- While the **BITRATE** button stays solid red, push it to switch between different bitrate modes (H, M or L). Please note that the **BITRATE** button will return to solid white after a few seconds if button push is not sensed.
- To exit, push the the **RECORD** or **STREAM** button again.

Note: The system will return to original settings if the BITRATE button push is not sensed. The default bitrate is M.

Vertical Button

Press the **Vertical** button to switch video orientation between **Portrait** and **Landscape modes**.

3.5 Restoring Factory Defaults

On the system page, scroll down to **System Control** in which you should be able to find the **Restore to Default** button. Click to restore the system's factory defaults. Alternately, you can follow the steps below to restore the NVS-35's factory defaults.

1. Power cycle NVS-35.
2. During device bootup, the **BITRATE, VERTICAL, RECORD and STREAM buttons** should illuminate solid red.
3. The device bootup should be complete approximately after 30 seconds and the **BITRATE, VERTICAL, RECORD and STREAM buttons** will turn solid white.
4. Simultaneously press and hold the **RECORD** and **STREAM** buttons until the **BITRATE, VERTICAL, RECORD and STREAM buttons** turn red.
5. Wait for about 5 seconds then release the **RECORD** and **STREAM** buttons and the **BITRATE, VERTICAL, RECORD and STREAM buttons** should start blinking red.
6. The reset is complete as soon as you see the **BITRATE, VERTICAL, RECORD and STREAM buttons** illuminating solid white.
7. The device's network settings should now be the default DHCP mode.
8. Connect the device to a DHCP network and use the IP finder to scan for the device.

3.6 Firmware Update

Datavideo usually releases new firmware containing new features or reported bug fixes from time to time. See ***Section 4 Firmware Update*** for instructions on firmware update.

4 Firmware Upgrade

Datavideo usually releases new firmware containing new features or reported bug fixes from time to time. Customers can either download the NVS-35 firmware as they wish or contact their local dealer or reseller for assistance.

This section outlines the firmware upgrade process which should take ***10 minutes to complete***.

The existing NVS-35 settings should persist through the *firmware upgrade process, which should not be interrupted once started* as this could result in a non-responsive unit.

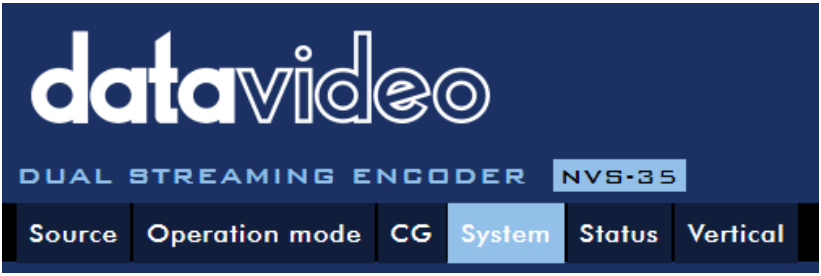
1. Log in the NVS-35 web interface with the following credentials:

Username: admin

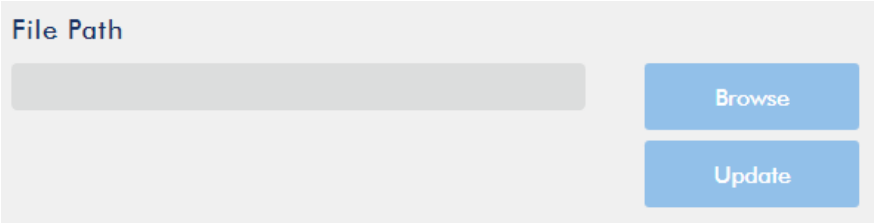
Password: 000000



2. Click the **System** tab to open the system configuration page.



3. Scroll down to **Firmware Update** pane then click the **Browse** button to search for the latest firmware file on the PC's hard disk. **Please note that the device will verify the selected file to make sure the correct firmware file is uploaded.**



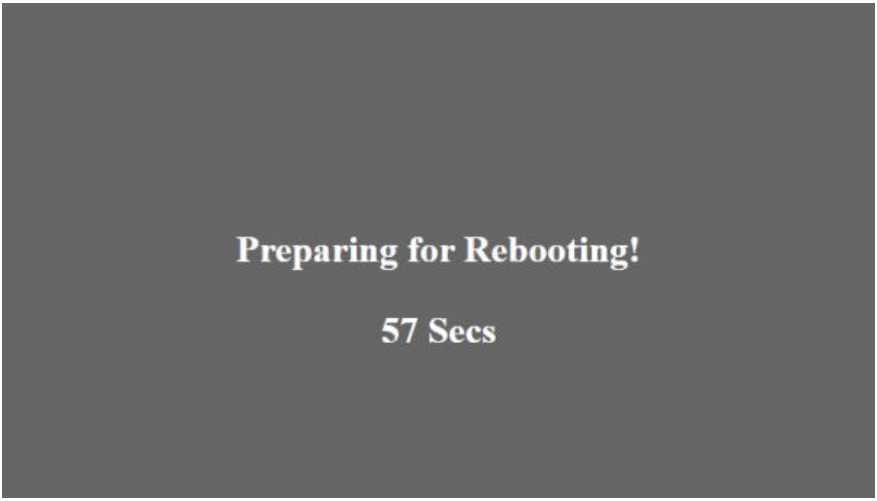
4. After double clicking the firmware file, you will see the loading prompt as shown below, indicating that the file is being uploaded to the NVS-35.



5. Once the file has been successfully uploaded, you will see a file upload success message. Click the **Update** button to start the firmware update process.



6. The device will reboot itself after it is updated successfully.



Note: If the device is recording or streaming, you must turn them off before initiating the firmware update.

5 Recommended SD Cards

You should only use Class 10 SD card or above. In this appendix, you will find a list of SD cards recommended by Datavideo.

Recommended SD Cards			
No.	**Brand**	**Model**	**Pictures**
1	**Kingston**	SDHC I C10 16GB	
2	**SANDISK** **Extreme**	SDXC I C10 U3 V30 64GB	
3	**SONY**	SDXC I C10 U1 64GB	
4	**SANDISK** **Extreme PRO**	SDXC I C10 U3 128GB/64GB	 

Recommended SD Cards			
No.	**Brand**	**Model**	**Pictures**
5	**SONY**	SDXC I C10 U3 64GB	
6	**TOSHIBA**	SDHC C10 16GB	
7	**SANDISK Extreme**	SDHC C10 16GB	
8	**ADATA Premier Pro**	microSDXC I UHS-I U3 Class 10 with SD adapter 64GB/16GB	 

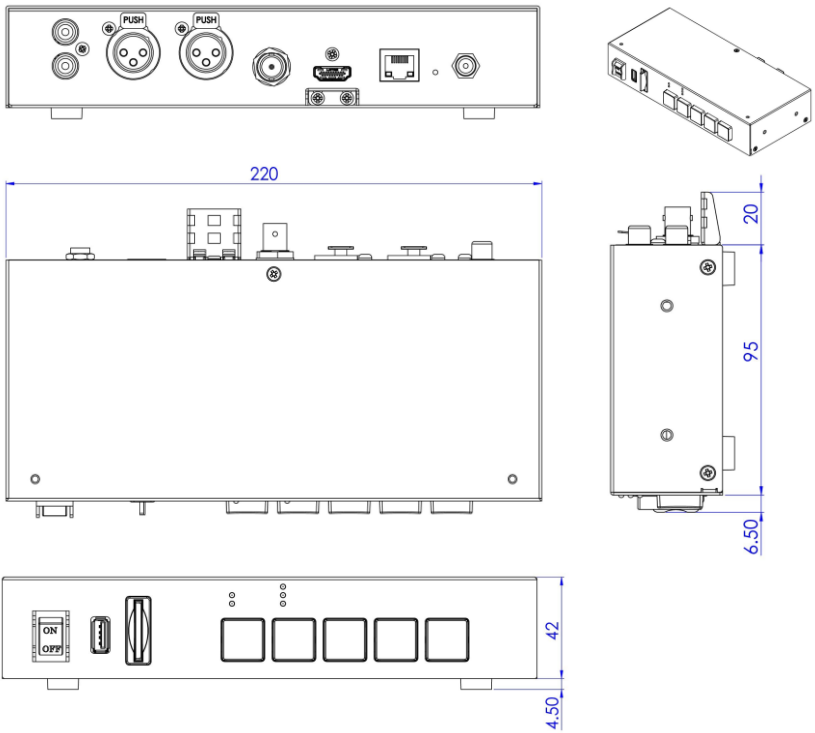
Recommended SD Cards			
No.	**Brand**	**Model**	**Pictures**
9	**SANDISK ULTRA®**	SDHC™/SDXC™ UHS-I 128GB	
10	**Transcend**	300S UHS-I SDHC 64GB/32GB	 

6 Frequently-Asked Questions

This section describes problems that you may encounter while using the NVS-35. If you have any questions, please refer to related sections and follow all suggested solutions. If problem still exists, please contact your distributor or the service center.

No.	Problems	Solutions
1	**Unable to update firmware on MAC OS.**	It is recommended to run NVS-35 web UI on Windows and the recommended browsers are Microsoft Edge, Google Chrome and Firefox.

7 Dimensions



All measurements in millimeters (mm)

8 Specifications

Interface	
Video Input	• HDMI x 1 • SDI x 1
Supported Input Video Resolution	• 1080p60/59.94/50 • 1080p30/29.97/25/24/23.98 • 1080i60/59.94/50 • 720p60/59.94/50 • 480i59.94, 576i50
Audio Input	• SDI Embedded Audio x 1 • HDMI Embedded Audio x 1 • 1 RCA Unbalanced audio pair • 1 XLR Balanced audio pair • A mix of embedded audio and RCA/XLR Audio IN
Video Encoding	H.264/ AVC , Main / High Profile Level 4.1
Video Bitrate	• Record&Stream: 36Mbps(1080p50/60) • Record Only: Up to 16Mbps(1080p50/60) • Stream Only: Up to10Mbps(1080p50/60)
Audio Mode	Stereo/Mono
Audio Bitrate	Stereo: 64 – 384 Kbps Mono: 32 – 192 Kbps
Streaming Protocols	• TS over TCP/UDP (unicast & multicast) • RTSP over HTTP/TCP/UDP (RTSP Elementary Streaming) • RTMP / RTMPS (Publish) • SRT • HLS
Network Interface	RJ-45 x 1 (Ethernet 10/100 Mbps)
Recording File Format	MP4/TS
Storage Media	SD Card x 1
Storage File System	FAT / NTFS / exFAT
Special Features	Vertical Video Streaming (Rotate and Crop)
Power Supply	DC 12V 11 W
Dimensions (LxWxH)	220(W) x 95(D) x 47(H) mm
Weight	0.78 kg
Operating Temperature	0°C to 40°C (32°F to 122°F)

Notes

Notes

Notes

Service & Support

It is our goal to make your products ownership a satisfying experience. Our supporting staff is available to assist you in setting up and operating your system. Please refer to our web site www.datavideo.com for answers to common questions, support requests or contact your local office below.

Please visit our website for latest manual update.
https://www.datavideo.com/product/NVS-35

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