Discover Video

Streamsie PC

User Guide

General Description

The Discover Video Streamsie® PC is an advanced live and VoD streaming encoder for Windows computers. A version for Apple computers may be available, please check www.discovervideo.com for information.

Streamsie provides advanced functionality but with minimum complexity. It is therefore appropriate for use by a non-technical community such as trainers, teachers, students, business executives, volunteers, etc. Streamsie supports two live audio/video sources and presents them in a user-selected arrangement such as full screen and various picture-in-picture templates. Streamsie streams and records in standard H.264 (MPEG-4 Part 10) format using values that are specified on the server that Streamsie connects to. It is compatible with DEVOS, Streamsie Service, and 3rd party systems (i.e. you may upload a Streamsie recording to YouTube). Via DEVOS or Streamsie Service, live and on-demand videos created with Streamsie may be viewed on desktops, mobile devices such as iPhone, iPad, Android, and on Roku players and Samsung Smart TVs.

Requirements

- Windows 7, Windows 8.1, Windows 10

- 74 Mb storage for program

- Adequate storage on drive C for recording

- Quad CPU recommended (Intel Core i7)

- Video Input Device (Webcam, Captiva, Live-2, etc.)

- Network connection to DEVOS or Streamsie Service

Installation

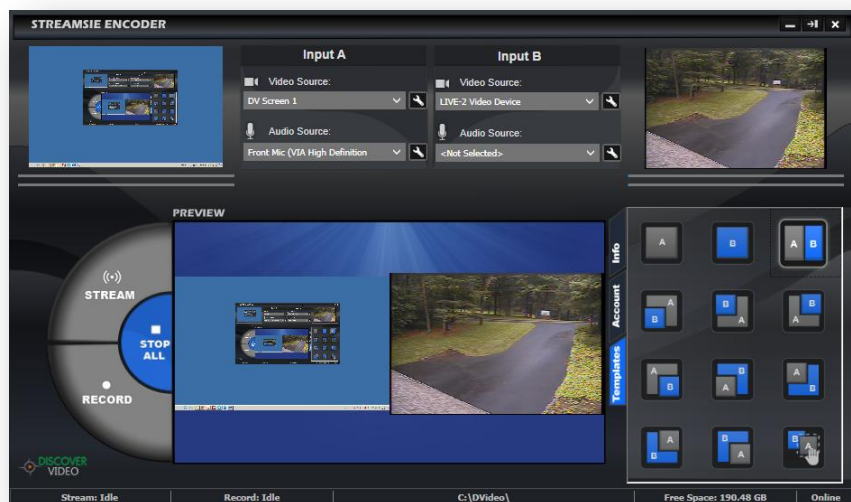To install or re-install Streamsie PC, run the installation program.

During installation, you will be prompted for your name, email, phone, etc. This information is used by your system to alert you in case Streamsie is running on an account already in use so you can know who is using the account. This information is not sent to Discover Video or 3rd parties. It would be a bad idea to enter the same information for every installation as that would defeat the purpose of this handy feature.

You will also see information related to Streamsie Remote Control. The remote control allows iPhone/iPad and desktops to control your copy of Streamsie remotely using the password you have set. By default, the remote control password is "streamsie".   To change this, simply run the installer again.

Getting Started

Launch the Streamsie PC from the Windows Start menu.

Streamsie will not operate until it is connected to a Discover Video server or service (DEVOS, Streamsie Service, etc.). Select the Account tab and enter the server, account number, and password, then select Sign In.

Streamsie PC supports one or two video inputs which may be selected from the Video and Audio Source dropdown selectors. For example, Input A might be camera 1 and Input B might be camera two. Or Input A might be your computer screen and Input B might be a camera. Similarly, select the desired audio inputs.

There are two built-in Screen Capture sources:

DV Screen 1 -- Captures your entire screen

DV Screen 2 -- Magnifies an area around your mouse to provide screen detail

Streamsie PC is tested to work with Captiva, Live-2, and other standard video capture devices that are compliant with DirectShow. While many third party web cams and other devices should work well, some vendors have software drivers that may not work well and results may vary.

Streamsie PC streaming and recording values are configured by the server account used. There are no local Streamsie PC settings.

Operation

Stream

The Stream button is a toggle: press once to start streaming, press again to stop streaming.

Record

The Record button is a toggle: press once to start recording, press again to stop recording.

Pause

While recording, you may select Pause. Pause will suspend recording but leave the file open so that you may continue recording by again pressing Pause.

Stop All

Select Stop All to stop both streaming and recording at the same time.

Templates

There are 12 templates available from the Templates Tab. Each template button illustrates the layout of the output when selected. Templates cannot be customized by the user except for Template 12 (see notes).

Status Bar

The bottom of the program shows status:

- Streaming state and duration

- Recording state and duration

- Location of recorded video files. Double-Click on this area to open file explorer to this folder.

- Free Space. Shows your available disk space.

- Online Status. Shows if you are connected to the server.

Toolbar

The upper right corner of Streamsie PC has an icon that causes the program to shrink to a toolbar on the right side of your computer screen.

The toolbar will automatically hide and will reappear when you move your mouse the right of your screen.

Using the toolbar, you can control streaming, recording, recording pause, and select templates.

The toolbar is used when capturing your desktop so that the Streamsie PC program itself is not captured.

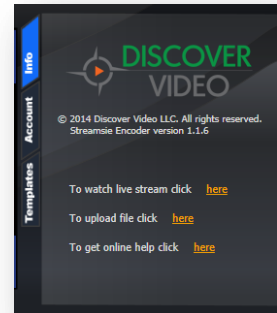Select the icon at the top of the toolbar to restore Streamsie PC.

Info Tab

The Info Tab provides links to your live video stream, which is useful to monitor/verify your live stream on the network.

Upload file link opens your browser to the system's upload page where you may select you video (browse to files you have recorded in C:\DVideo).

Help brings you to this manual and related documentation.
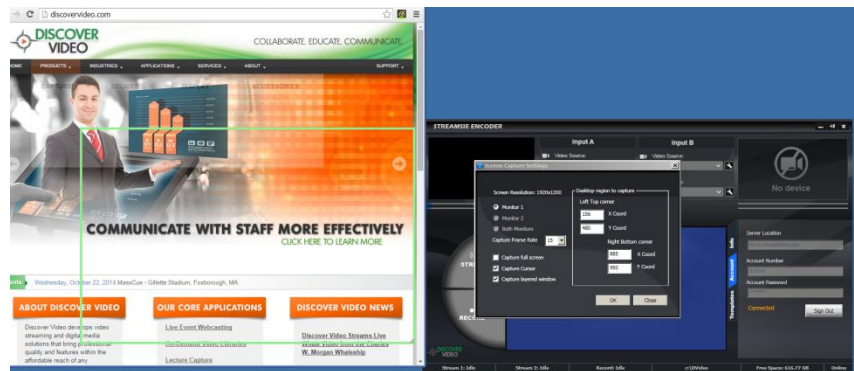
Function Keys

In addition to the buttons, the following function keys are available:

ALT+Insert -- Start/Stop Stream
ALT+Home -- Start/Stop Recording
ALT+PgUp -- Pause Recording
ALT+PgDown -- Un-pause Recording
ALT+End -- Stop Streaming and Recording

Screen Capture

Streamsie PC allows you to capture your computer screen. You can capture full screen or an area of your screen. You can also capture the screen from an external source via Captiva or a 2nd monitor[1].

To set the desired feature, select DV Screen 1 and select the wrench icon to display the screen capture settings. To set screen capture area, uncheck "Capture Full Screen" and a green box appears. Adjust the size by grabbing the lower right corner, and adjust the position by grabbing any edge.

Background Image

Streamsie uses the image in C:\DVideo\background.jpg for the background image. You can use virtually any image by simply changing the name. For example, you can rename "backgound.jpg" to "background_1.jpg", then rename "myimage.jpg" to "backround.jpg" and the change will occur on-the-fly.

The help page gives you access to a handy accessory that can change the background for you.

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[1] Screen capture from 2nd monitor depends on the graphic adapter in use. If you have trouble with this, you may need to capture only from the primary monitor screen.
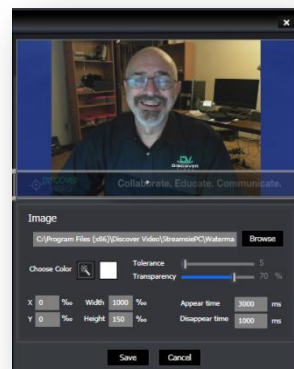
Streamsie PC Pro

Streamsie PC Pro is identical to Streamsie PC except it supports Watermarks ("image overlay") and Chroma Key ("green screen").

Watermarks / "Lower Thirds"

Watermarks allow you to insert images over your video, and to adjust the size, position, and transparency of the image. Simply select the image to insert it into the video, and select it again to remove it from the video. The image may be any bitmap (.bmp) image. If you have a jpeg or other format image, you can open it in Paint and save it as .bmp.

Select an empty slot to add a new image and browse to the image file. To adjust size and position, simply drag the image to the desired position.

You may edit or adjust any image setting using the wrench icon for the image, or delete it by selecting the delete icon.

You can use any graphics editor to create or modify a collection of images to use for "Lower Thirds" titles.   For example, you might create a blank banner called "mybanner.bmp". Then open "mybanner.bmp", edit it to insert a person's name, and save it as "jones.bmp". Repeat for "smith.bmp", etc. Now you have a collection of name titles, insert them into Streamsie and use them as title graphics as you interview each person.

Chroma Key

Chroma Key causes a color in a video to become transparent. When transparent, anything "under" the video shows through. This commonly seen in TV weather reports where the reporter is actually standing in front of a green screen and the green is replaced with a weather map.

Streamsie PC Pro supports Chroma Key for both videos. Select the color you want to use by selecting the Red, Green, or Blue color, or select the Rainbow color to select any color. When selecting any color, click on Choose Color and move the selector to the color in the image snapshot you wish to select. Then adjust the tolerance to achieve the desired effect.

Good, even lighting and a quality camera really matter for any Chroma Key! Webcams may not give a good result.
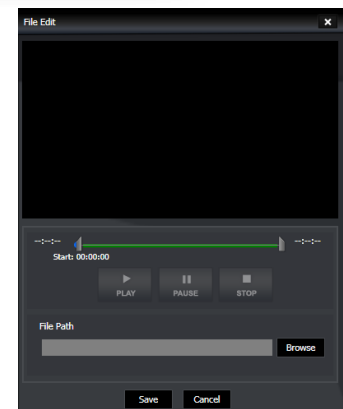
File as Input

Streamsie Pro allows you to integrate a video file into your production. You can use a local video file as a "pre-roll" to introduce your event, to insert a recorded video, or for any other purpose. Up to 3 videos may be loaded at a time.

Select "File as Input" and select an unused video by clicking on the + symbol. This will open the File Edit dialog. Browse to the video file you wish to import and play it.

Use the start and end markers in the timeline slider bar to set the start and end position of your video and select Save.

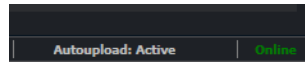To play your video in a production, select either A or B. Note that the video will loop until it is unselected.

To check on the quality of audio/video, double-click on the Streamsie Preview window which will enable audio output (be sure you are not using a local microphone when you do this to avoid audio feedback).

Note that file input do not have a volume control and the audio will play at the level in the file.

Upload After Record

You can option Streamsie to automatically upload video upon stopping a local recording. Streamsie will wait 5 seconds then being the upload. During upload, you can begin a new recording or start a live stream.

If Autoupload is enabled, Streamsie will display "Autoupload: Active" in the lower right portion of the status bar. During upload, the percent complete will be displayed. Uploads that in process may also be cancelled by selecting the cancel button that is shown during upload.

Notes

- Streamsie output is always 16:9 aspect ratio. This means that if you use a 4:3 video source, it will be centered in the 16:9 output.

- Be careful NOT to use the same audio source for input A and B.

- The background image is called "background.jpg" and it is located in the video folder (default C:/DVideo/background.jpg). You can place a new image here and rename it to background.jpg to change the background image, or use the free background selector program.

- For highest quality Screen Capture, set your screen resolution to 1920 x 720.

- You may conduct screen capture "webcasts" using Streamsie PC, for example to demonstrate something on your computer. Viewers may be instructed to view full screen mode in the player. For best results, use a high output resolution (1920 x 720), and low frame rate. If you are using a telephone for audio, you have several choices:

    a) Set Streamsie PC audio source to none and speak into the telephone only.

    b) Use Streamsie PC audio and mute the telephone and turn down the telephone audio so your viewers hear only your high quality sound.

c) Use Streamsie PC audio and the telephone, but tell your viewers to mute the player audio. This will allow you to record your session with audio.

- Streamsie is capable of delivering two simultaneous live streams at two different resolutions and bit rates. This feature is configured on the server that Streamsie connects to.

Customize Template

You can customize the templates by editing the file "TemplateSettings.xml" which is located in the Streamsie PC install folder. NOTE: Changing these settings will not change the icon display, so if you make dramatic changes to a template be aware that the icon may no longer match your settings!

Simply open the file in notepad or similar and edit the desired template values:

ZOrder -- sets which input is on top

KeepAR -- sets aspect ratio, true/false

Vert/Horiz Align -- left, right, center

Size -- sets size of the video in the template

```
<TEMPLATESLIST>
 <TEMPLATE>
  <ID>1</ID>
  <Name>V1 FullScreen</Name>
  <ZOrder>1</ZOrder>
  <Input1>
   <KeepAR>true</KeepAR>
   <VerAlign>center</VerAlign>
   <HorAlign>center</HorAlign>
   <Size>100</Size>
  </Input1>
  <Input2>
   <KeepAR>true</KeepAR>
   <VerAlign>top</VerAlign>
   <HorAlign>left</HorAlign>
   <Size>0</Size>
  </Input2>
 </TEMPLATE>
  .
  .
  .
 <TEMPLATE>
  <ID>12</ID>
  <Name>PIP: In1[RB] + In2[Full]</Name>
  <ZOrder>1</ZOrder>
  <Input1>
   <KeepAR>true</KeepAR>
   <VerAlign>Bottom</VerAlign>
   <HorAlign>Right</HorAlign>
   <Size>20</Size>
  </Input1>
  <Input2>
   <KeepAR>true</KeepAR>
   <VerAlign>Top</VerAlign>
   <HorAlign>Left</HorAlign>
   <Size>85</Size>
  </Input2>

 </TEMPLATE>

</TEMPLATESLIST>
```

You can add Template ID 13, 14, etc. and and they will appear with the as new icon with C-1, C-2, etc.

Full Chroma Key

You can create a new template that has video A and video B both set to full screen. In the following example, input A is on top because ZOrder is

set to 1. Use a template like this to have full screen Chroma Key (e.g. live video A is shown on top of live video B, assuming video A has chroma key enabled):

```
<TEMPLATE>
   <ID>13</ID>
   <Name>PIP: In1[Full] + In2[Full]</Name>
   <ZOrder>1</ZOrder>
   <Input1>
    <KeepAR>true</KeepAR>
    <VerAlign>Bottom</VerAlign>
    <HorAlign>Right</HorAlign>
    <Size>100</Size>
   </Input1>
   <Input2>
    <KeepAR>true</KeepAR>
    <VerAlign>Top</VerAlign>
    <HorAlign>Left</HorAlign>
    <Size>100</Size>
   </Input2>
</TEMPLATE>
```

You can download the free background selector program from the help menu. This program will install custom templates for Chroma Key A over B and B over A.

CPU Usage

Streamsie PC requires a significant percentage of CPU use on your computer. **If you encounter performance issues, please monitor CPU use![2]** The actual CPU use depends on these factors:

- Output Resolution -- Higher resolutions require much more CPU than lower resolution. If your CPU is too high, set the output size to a smaller resolution.

- Frame Rate -- Higher frame rates use more CPU. In most cases, there will be not detectable difference between 30 fps and 25, 20, or even 15 fps, especially for "talking head" videos.

- Dual Rate Streaming -- Streamsie can send two live streams, each at different rates/resolutions. Dual rate streaming requires twice as much CPU as single rate streaming (and up to twice the bandwidth use). Use conventional single rate streaming in most cases.

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[2] Access the Windows Task Manager to view CPU usage

- Streaming and Recording -- Streaming uses CPU and recording uses CPU. If you are on a low performance computer, do only one (you can record your live stream on the DEVOS or Streamsie Service server if desired).

Recommended Video Input Devices

While Streamsie should work with most DirectShow compliant video input devices, we recommend:

Captiva All-In-One -- This is a USB 3.0 device that supports a single input channel using either HDMI, SDI/HDSDI, DVI, VGA, Component or Composite video. Audio may be embedded in HDMI and SDI, or may be analog for the other input types.

Captiva Dual HD -- This is a USB 3.0 device that supports a two input channels using either HDMI, DVI, VGA, Component or Composite video. Audio may be embedded in HDMI. This device is ideal for capturing presentations where the video is HDMI from a camera, and VGA/DVI/HDMI from a computer.

Captiva HD+SD -- This is a USB 3.0 device that supports a two input channels. One channel supports HDMI, DVI, VGA and one channel supports composite/SVideo. Audio may be embedded in HDMI and SDI, or may be analog for the other input types.

Captiva HDMI -- This is a USB 3.0 device that supports a single channel HDMI input.

MISO -- This USB device give you composite, HDMI, component, VGA and DVI input.

PCIe Cards are also available.

Licensing

Streamsie PC is licensed on a per-account basis by DEVOS, Arcus, or Streamsie Service. You may install Streamsie PC on multiple computers, but each Streamsie PC must connect to a *currently unused* account for it to become operational.

For example, you can install Streamsie on your office computer, your laptop, your Microsoft Surface computer, and your home computer. You can set all of these installations to use the same Streamsie account on a DEVOS system. If your office computer Streamsie PC is in use, and you try to start any of the other installations, Streamsie PC will indicate that the account is in use (and will inform you who is using it). When you log out of the account, the other Streamsie PC's will become available for use.

Streamsie accounts belong to a specific user, and each user should have their own Streamsie account. While an account can be shared among different users, you may find such use confusing and limiting.

If Streamsie PC is installed on all computers in an organization, a user can potentially use any computer by simply logging in to Streamsie with their DEVOS account. For example, an instructor can capture lectures in "classroom 1" today, and "classroom 2" tomorrow by simply using their Streamsie account in each classroom.

Tip: When you install Streamsie, you are prompted for your contact information. This is used to inform you if your account is being used by someone, and may also be used by Discover Video to alert you to software updates and related information. In the above example, you should use a different name for each installation, such as "John Office", "John Home", etc. to assist in identification.

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