



# WIRECAST for YouTube

Windows 1.1

## User's Guide



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# Preface

## Copyright Notice

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## Customer Support

For Wirecast for YouTube support, please visit our customer portal at <http://www.telestream.net/wirecastforyoutube/landing.htm>.



# Introduction

## Introduction

This user guide is intended to help you understand how each feature of Wirecast for YouTube operates, and to provide you with information to help make the best live events possible.

## Topics

- [Wirecast for YouTube Features](#)
- [Getting Started](#)
- [Two Ways to Use Wirecast for YouTube](#)
- [Main Window](#)
- [Preview](#)

## Wirecast for YouTube Features

Wirecast for YouTube provides support for multiple cameras and inputs, including selected Blackmagic, Viewcast Osprey and Matrox Multi capture cards. Users can stream their computer desktop (including computer audio) using Desktop Presenter. Other key features of Wirecast for YouTube include: title overlays, media file overlays, and composite shots.

## Getting Started

We suggest that you first work through the topics in [Getting Started](#). They are quick, informative, and the easiest way to become familiar with Wirecast for YouTube. The section takes about thirty minutes to work through and provides a brief overview of how to set up a basic live event and create your own stream.

Next, you should read [Making Great Live Events](#). This topic shows you how you can easily make changes in your setup and improve the quality of your live events.

## Two Ways to Use Wirecast for YouTube

There are two different ways you can use Wirecast for YouTube:

- **Subject Is Operator.** The person conducting the live event also operates Wirecast for YouTube.
- **Subject Plus Operator.** The subject concentrates on the content and someone else operates Wirecast for YouTube. In this mode, the subject never needs to know in detail how Wirecast for YouTube works.

## Subject Is Operator

In this mode of operation, the person conducting the live event simultaneously operates Wirecast for YouTube. Here are some suggestions for using Wirecast for YouTube when you are both the subject and operator:

- **Keep it simple.** Set up Wirecast for YouTube to make it easy for you to be the operator and the subject. Set up your titles so that you need to make very few changes during your live event. Use a minimum number of shots so it's easy for you to see which shot to choose.
- **Do not use Preview Mode.** When Preview Mode is not used, the AutoLive mode is automatically on. In AutoLive Mode, shots are placed directly into the Live Stream window as soon as they are selected.
- **Pre-configure your shots.** Make sure that all shots are created prior to your live event. Do not try to create or modify shots while streaming them.

## Subject Plus Operator

In this mode of operation, an engineer (or operator) is responsible for using Wirecast for YouTube, and the subject concentrates on the content of the live event. Here are some

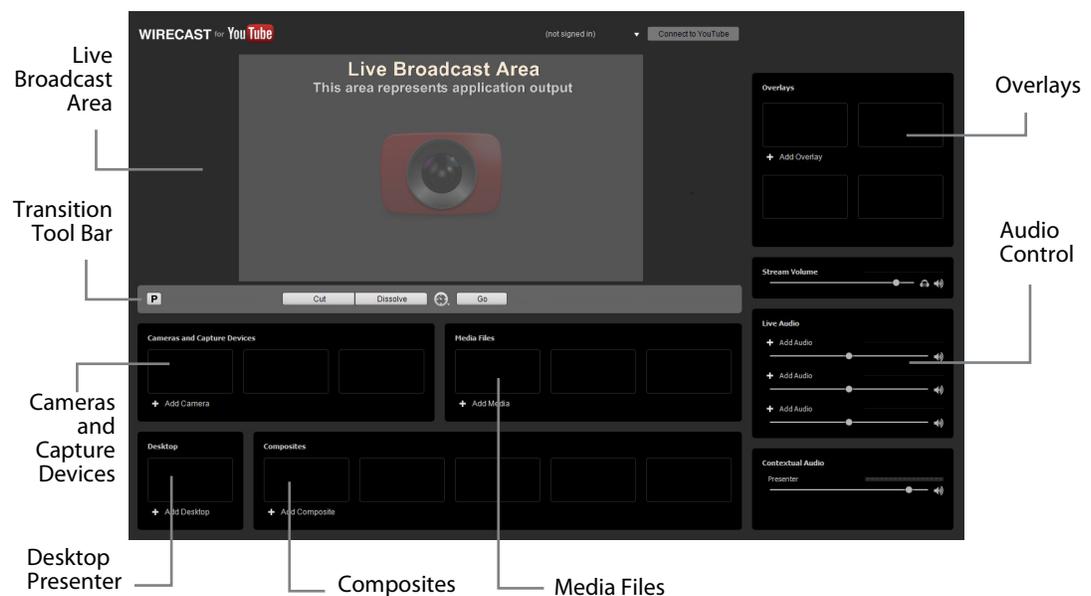
suggestions for using Wirecast for YouTube when you have both an operator and a subject:

- **Use Preview Mode.** The operator should use Preview mode to examine all shots before they become live.
- **Use the selectable windows to make more shots available.** Wirecast for YouTube provides several displays for staging potential shots. These are: Camera and Capture Devices, Media Files, Desktop Presenter, Composite shots, and Overlays. Shots can be added to these panels providing a greater selection of resources to select for streaming.

## Main Window

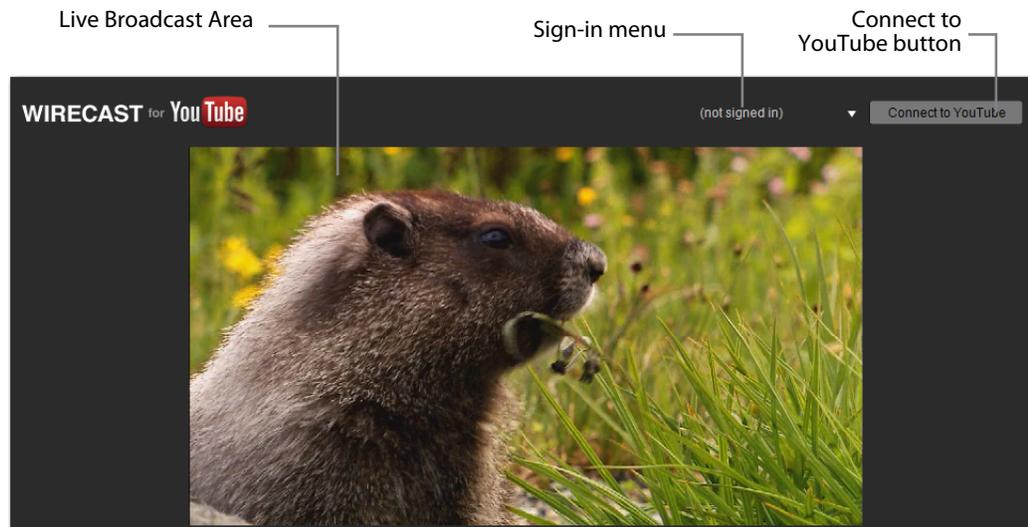
Wirecast for YouTube is designed to be immediately usable with a few mouse clicks. It enables you to select from a variety of shots and media that are displayed in the Main window. The Wirecast for YouTube main window has eight display panels.

The Audio Control panel is located in the lower right portion of the main window.

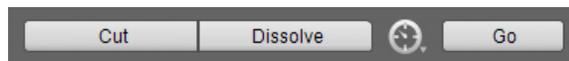


**Live Broadcast Area.** This display shows what your audience will see when you stream your live event. When shots or media are placed in this display (by selecting a resource in AutoLive mode, or by clicking the Go button in Preview Mode) your shot

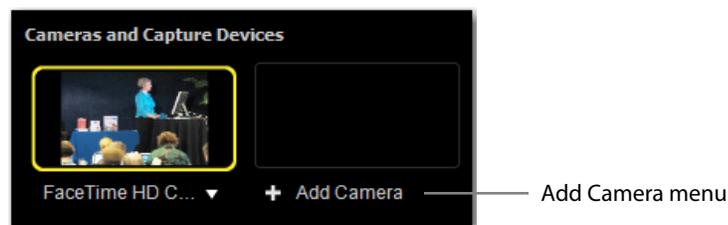
immediately becomes part of your live stream. Also located in the Live Broadcast window is the *Sign-in* menu and the *Connect to YouTube* button.



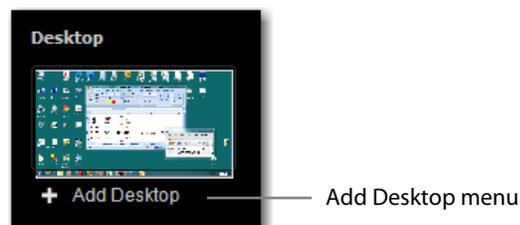
**Transition Tool Bar.** Transition controls enable you to select the type of transition (Cut or Dissolve) and execute a transition to live stream (Go). The Go button is only visible in Preview Mode.



**Cameras and Capture Devices.** The *Add Camera* menu enables you to select a camera or other capture device to stream. Up to three sources can be added.



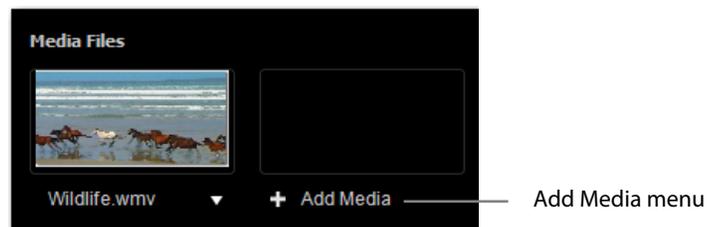
**Desktop.** The Desktop menu enables you stream the desktop of any computer by launching Desktop Presenter. Only one desktop at a time can be selected.



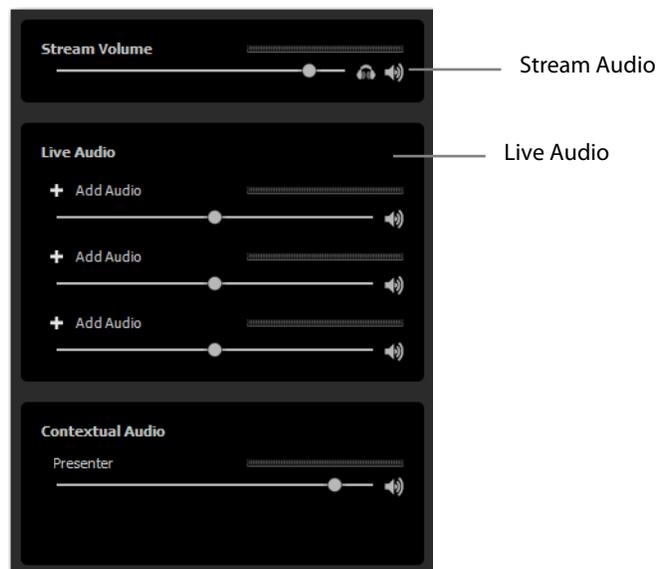
**Composites.** The *Composites* menu enables you to create a composite of any two video sources. There are a number of dual-screen configurations from which to choose. Up to five composite shots can be added.



**Media Files.** The *Add Media* menu enables you to select a media source for display in your live stream. Up to three sources can be added.



**Audio Controls.** Four slider bars enable you to control the master volume of your stream along with the volume of three selected audio sources. *Stream Volume* is the master audio that controls all audio that is streaming out in your stream. *Live Audio* enables you to select individual audio sources and control the volume of each one. Any of the audio controls can be muted by clicking on the speaker icon to the right of its slider bar.

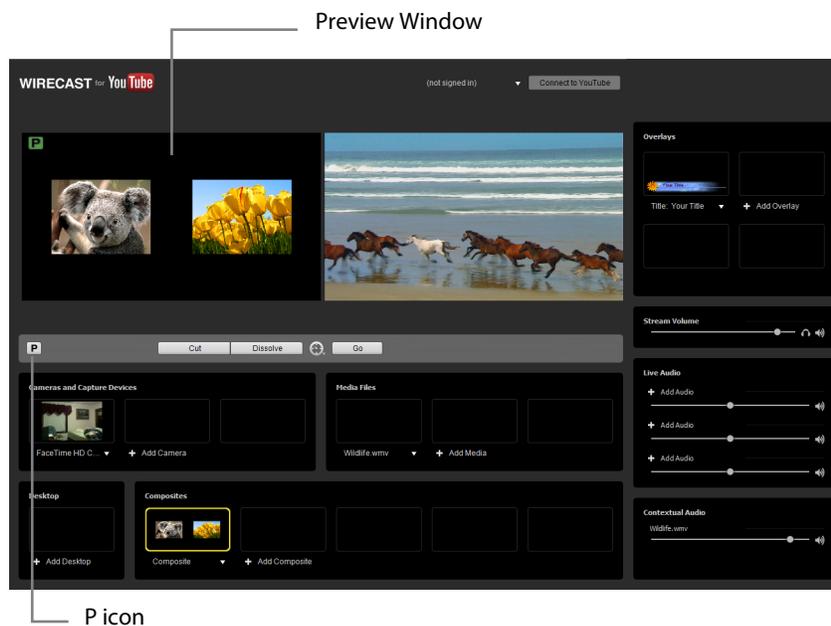


**Overlays.** The *Add Overlay* menu enables you to select a source to be overlaid on the live stream. The most common use of an overlay is to add a title. Titles can overlay up to four lines of text (depending on the title selected) in the Live Broadcast display.



## Preview

Preview Mode provides a display that shows what the stream will look like if you click the Go button. To activate the Preview Mode, select *Preview Mode* from the Tools menu, or click the P icon on the left side of the Tool Bar. When in Preview mode, AutoLive mode is inactive.



# Getting Started

## Introduction

The best way to get started using Wirecast for YouTube is to quickly work through all its main features. This section contains three Getting Started topics: how to create a live event, how to create composite shots, and how to stream on YouTube.

As you work through these topics, you will also become familiar with important Wirecast for YouTube concepts and how you can use them to deliver high quality live streams. The more you know about Wirecast for YouTube, the better it will serve your streaming objectives.

## Topics

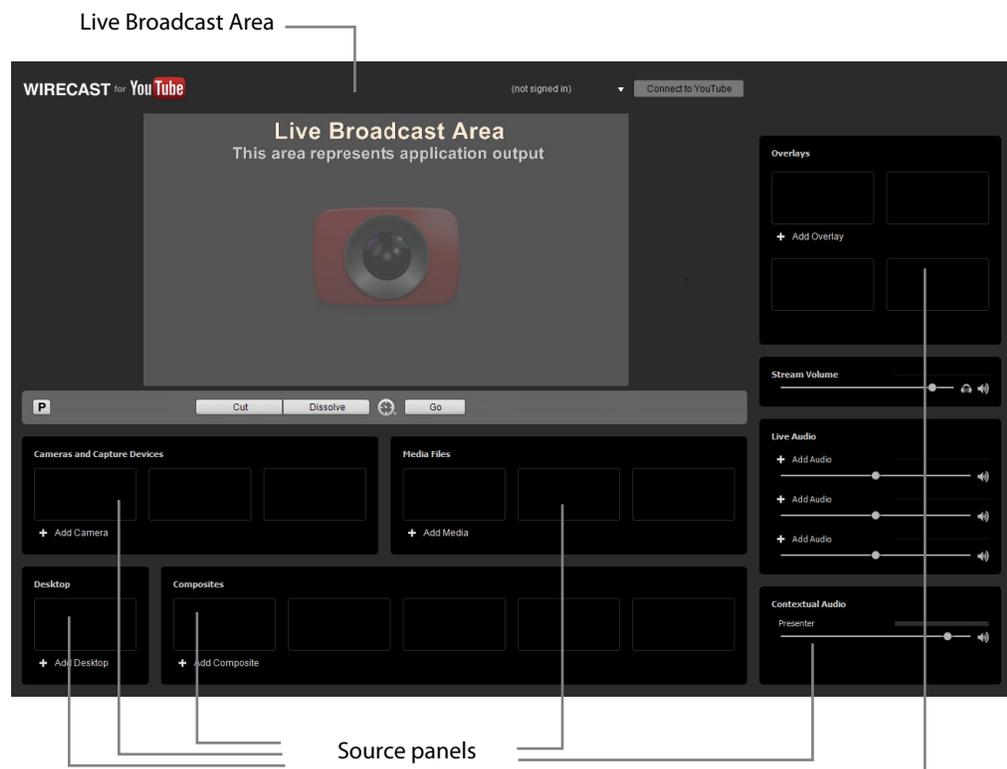
- [Creating a Live Event](#)
- [Creating Composite Shots](#)
- [Live Streaming](#)

## Creating a Live Event

Creating a live event for streaming using YouTube is easy and straightforward. First, make all needed cameras and media sources available in the main window area. Do this by adding new sources to one of five panels in the main window, making them available for streaming.

## The Main Window

Wirecast for YouTube has two main display areas: Live Broadcast Area and source panels. The Live Broadcast is the large area in the upper-left portion of the main window. It displays what Wirecast for YouTube will stream to your viewers. The source media panels are located in the lower half of the window, and along the right side. They display the shots and sources available for streaming.

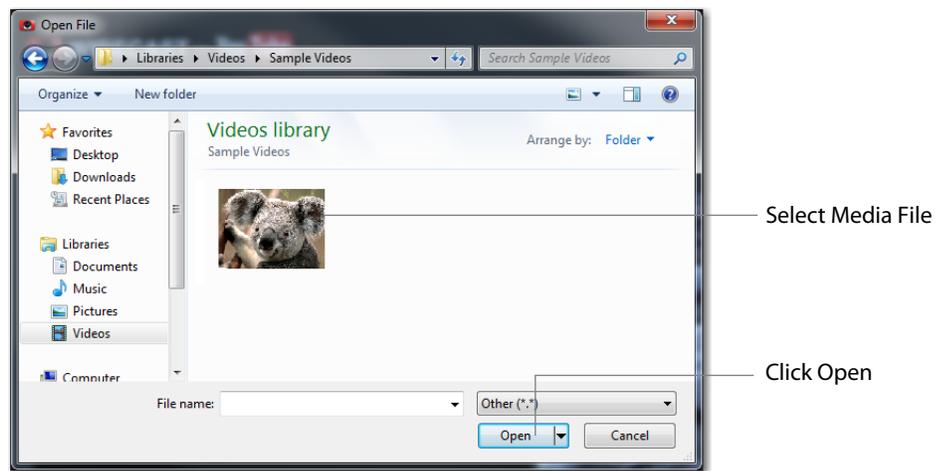


## What is a Shot?

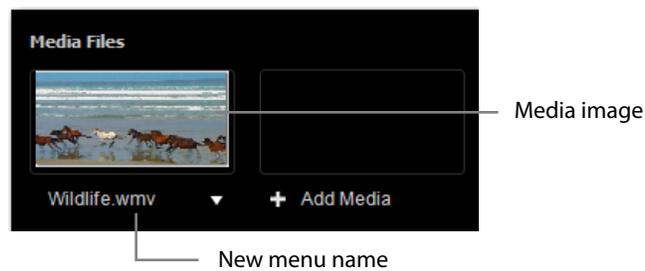
Wirecast for YouTube uses the concept of a *shot* to construct live events. In its simplest form, a shot contains one piece of media such as a photo or a video clip. But it can also be a dual-source composite, like a live camera with a title. Shots are important because they enable you to configure sources before you stream your live event.

## Adding a Shot

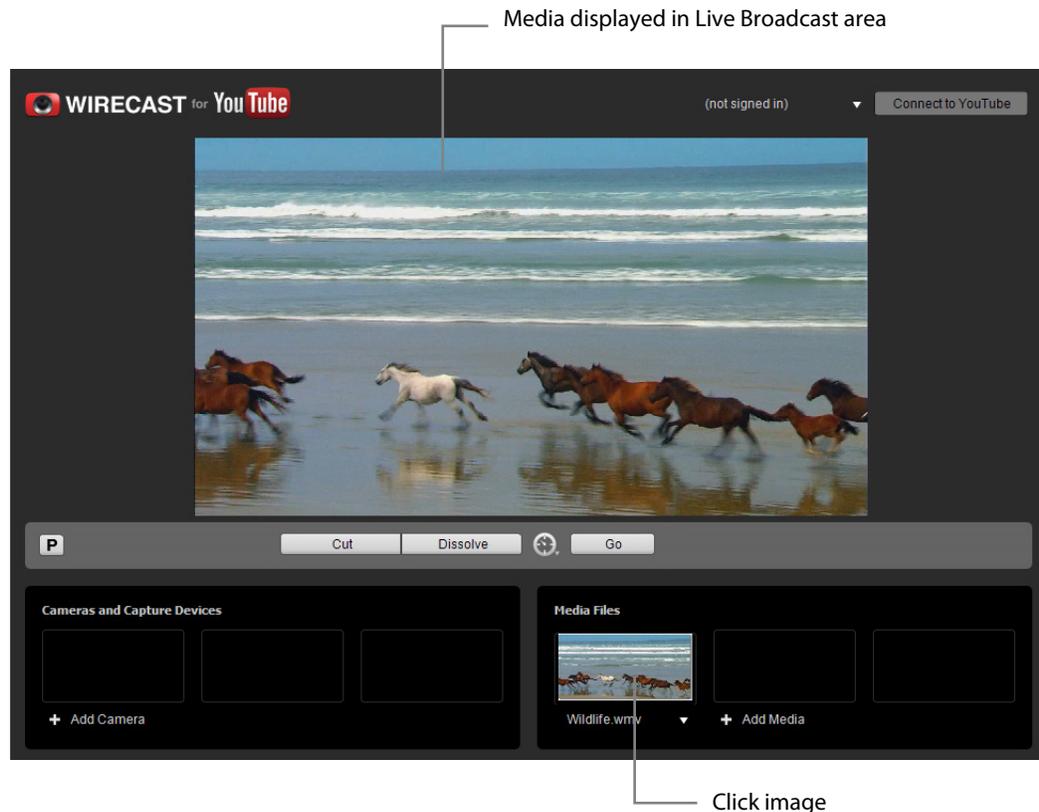
Individual shots are displayed in the Source Media panels. Add a media file by clicking *Add Media* and navigating to a media file.



Once you have added a media file, an icon of it is displayed in the panel. Additionally, the menu is assigned a new name using the name of the media file.



Click the media file image to make it active in the Live Broadcast window.

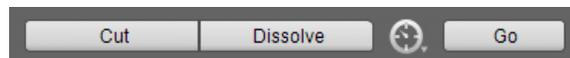


The shot smoothly fades into the Live Broadcast Area display. This is called “taking a shot live”. Click the media image again and the Live Broadcast display fades to a blank screen. This enables you to display nothing, which is sometimes useful.

## Transitions and Go Button

### Transitions

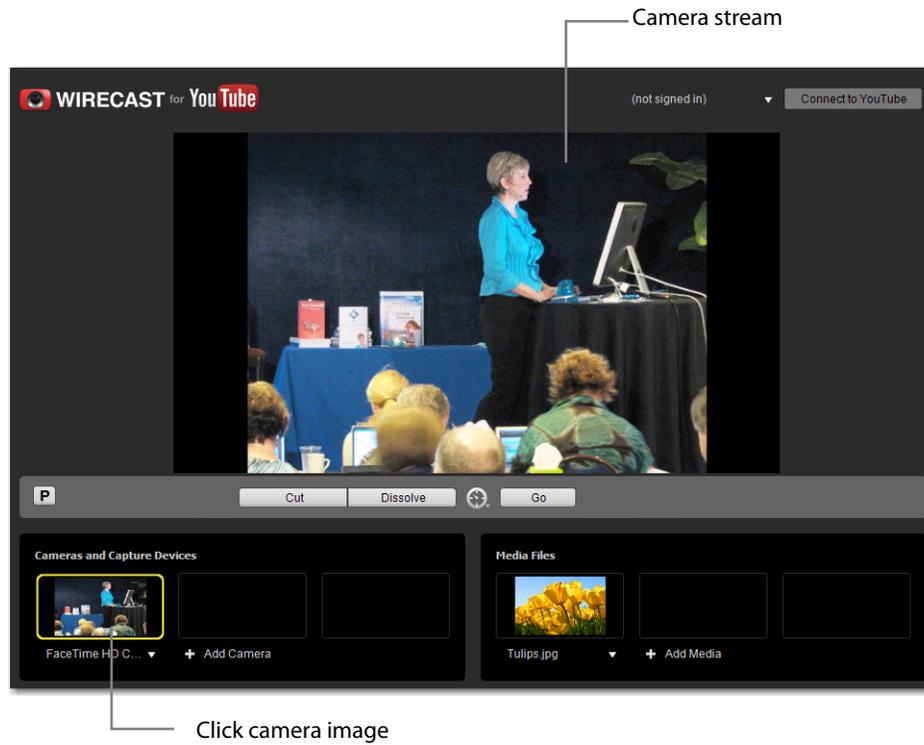
In the previous example, a fade occurred when you clicked on a shot image. Transition controls are located just below the Live Broadcast Area where two kinds of transitions are shown: Cut and Dissolve.



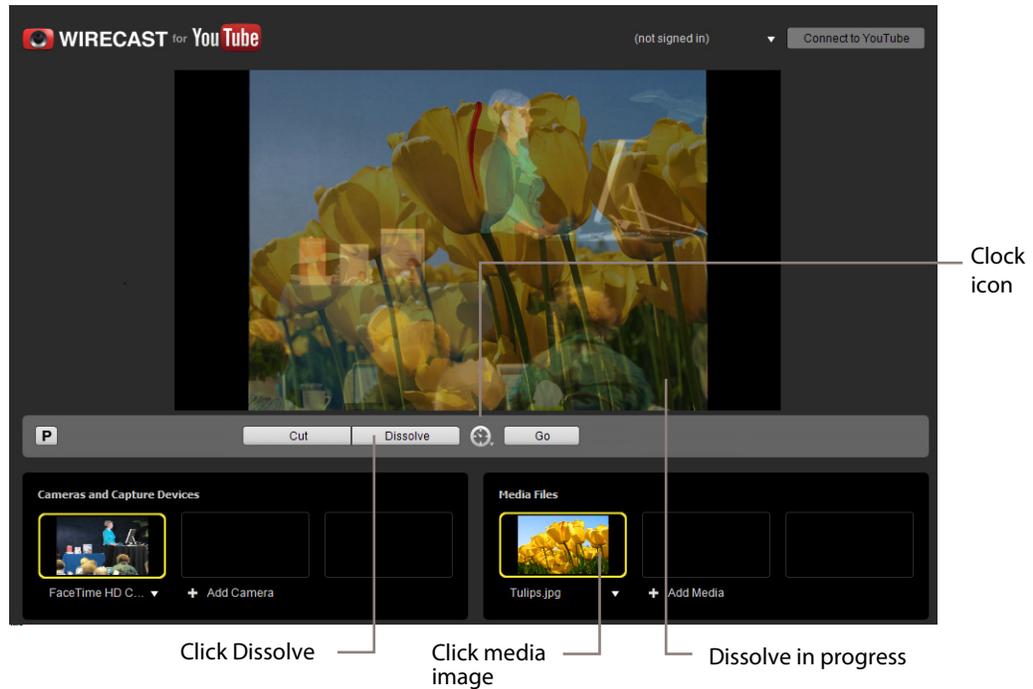
When Cut is selected, transitions are immediate. When Dissolve is selected, transitions fade in gradually.

To see the effect of a Dissolve transition, first click *Dissolve* then add a media file and a camera. Once you have added a camera, its image is displayed in the *Cameras and*

*Capture Devices* panel. Click on the new camera image and the camera will become active in the Live Broadcast area.



To do a Dissolve transition, click the image in the Media Files panel. The Live Broadcast display will smoothly fade from the camera image to the media file image.

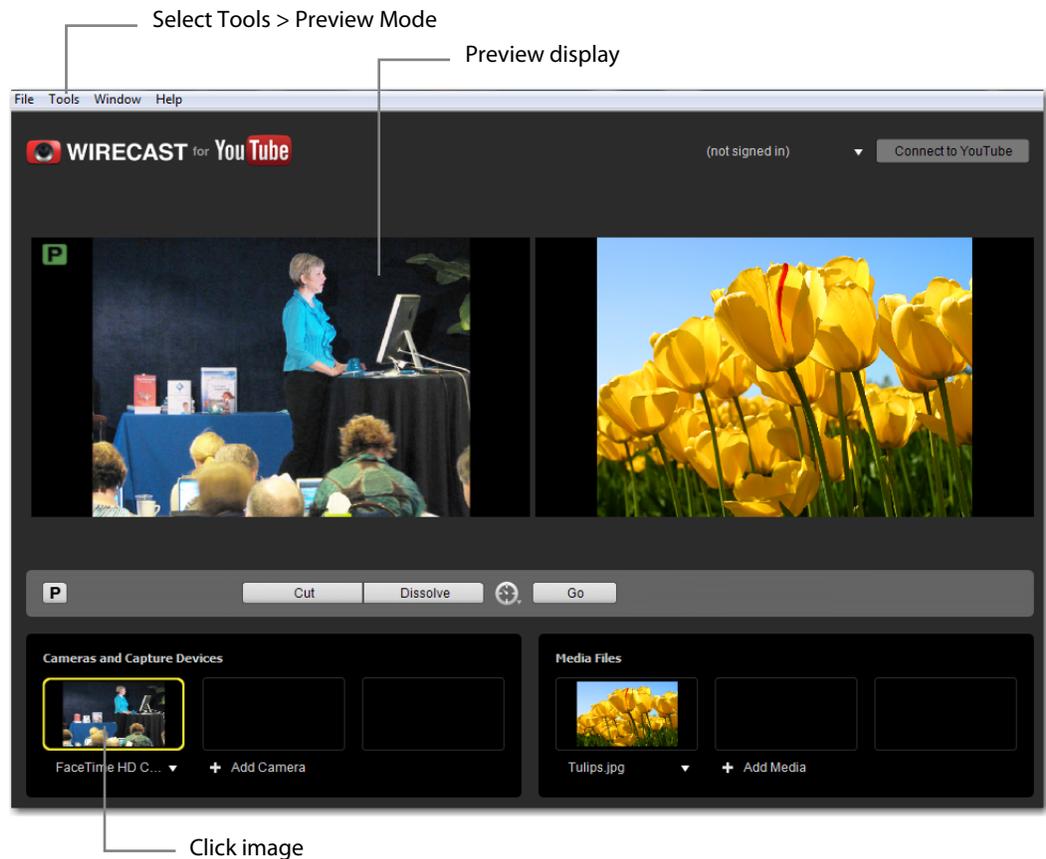


You can control how fast a transition will occur, by clicking the clock (transition speed) icon and selecting one of five transition times: 4 seconds, 2 seconds, 1 second, 1/3 second, or 1/6 second.

## The Go Button

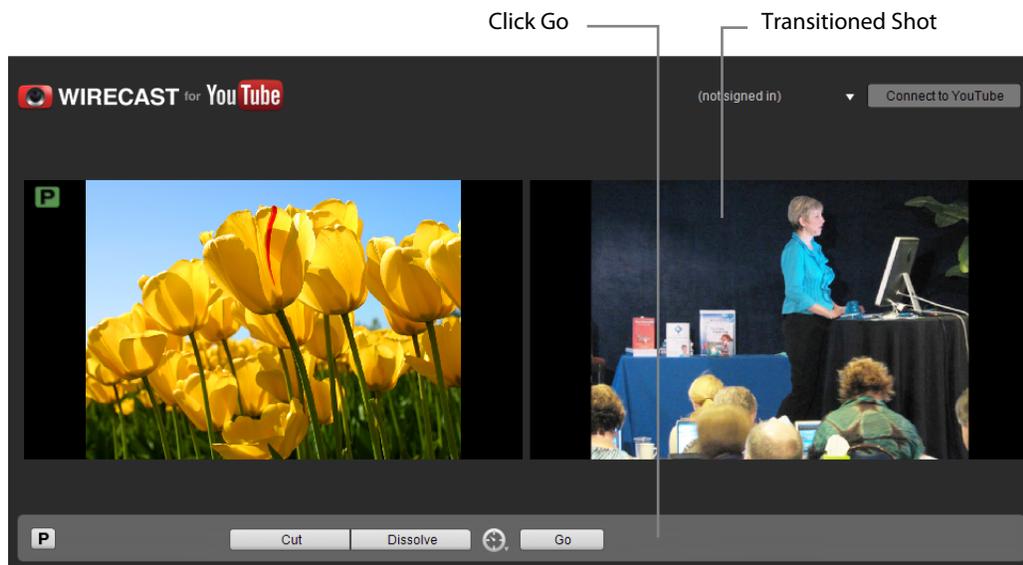
The Go button is visible only when you are in Preview Mode. Preview mode enables you to see what your stream will look like before you take it live in the Live Broadcast display. When you are in Preview Mode, Wirecast for YouTube provides a preview screen to the left of the Live Broadcast display. To turn on Preview Mode, select *Preview Mode*

under the *Tools* menu at the top of the main window. Click a source image (like a camera) to display it in the Preview display.



To transition the preview shot into the Live Broadcast area, click *Go*. Notice that not only does the preview shot transition into the Live Broadcast display, but what was in the

Live Broadcast transitions back into the Preview display. Every time Go is clicked, these two displays exchange shots.



## Creating Composite Shots

The previous topic used only the Main window, and explained various ways in which you can use an existing shot. This topic demonstrates how to create composite shots to improve your live events.

Shots can be configured in different ways. Some shots are a single photo, a video clip, or a camera. Other shots can have titles and overlays (like a company logo) added to them to present more information to your viewer.

When you stream an event, you are choosing the shot you wish to display in real time. Creating a composite enables you to make shots you need for your stream before you use them. This topic will show you how to create composite shots (shots with two sources) and overlay shots (shots with titles added to them).

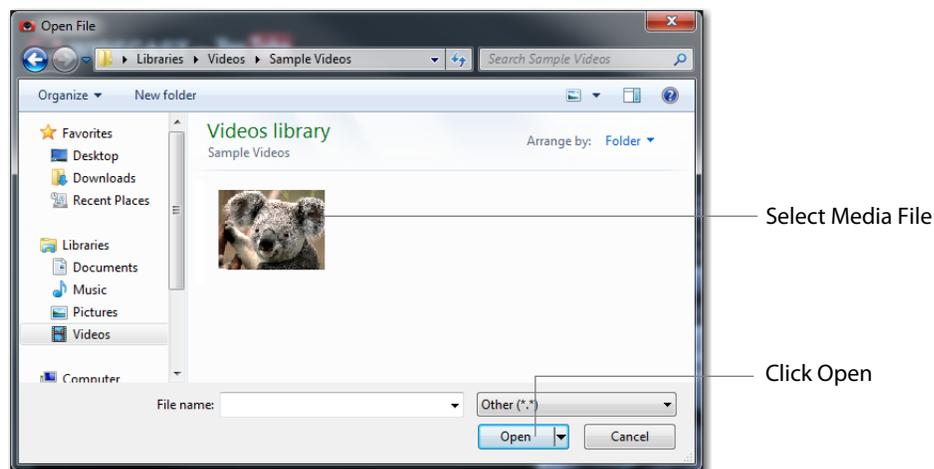
## Composite Shots

A composite shot is a shot that is composed of two sources. Such shots can be configured in many ways (side by side, stacked, picture in a picture, etc.).

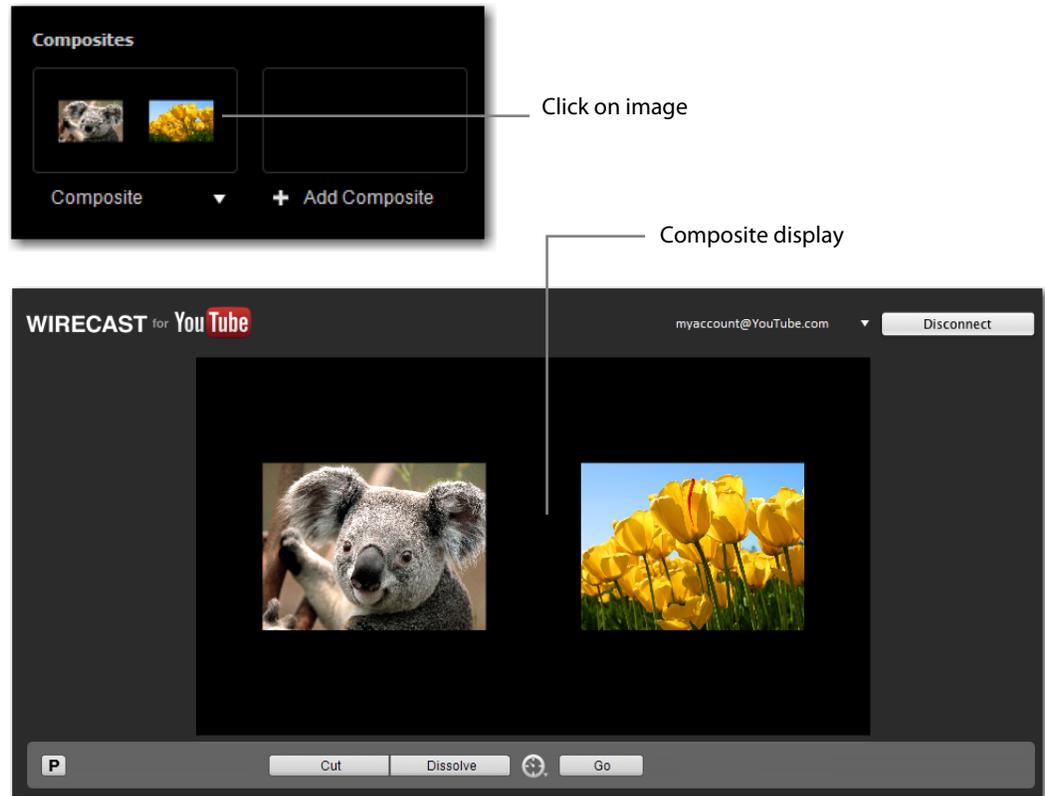
To create a side by side composite shot, for example, select *Side By Side* from the *Add Composite* menu.



When the A/B image displays in the panel, select *Source A* from the *Add Composite* menu. When the dialog box displays, navigate to a video image or clip, select it, and click *Open*.



Repeat this procedure for *Source B*. After both sources (A and B) are added, an image of each is displayed in the composite panel. Click on this composite image to add it to your stream.



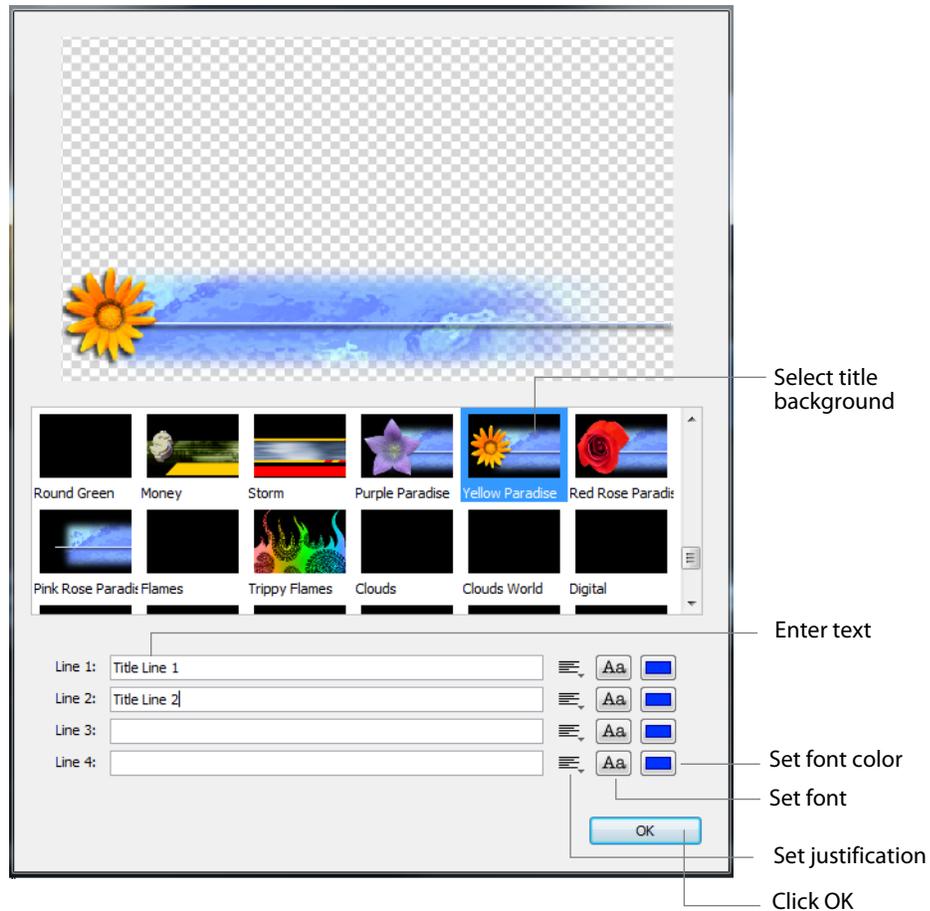
You can also swap the two sources (A and B) by selecting *Swap Source A and B* from the *Add Composite* menu.

## Title Overlays

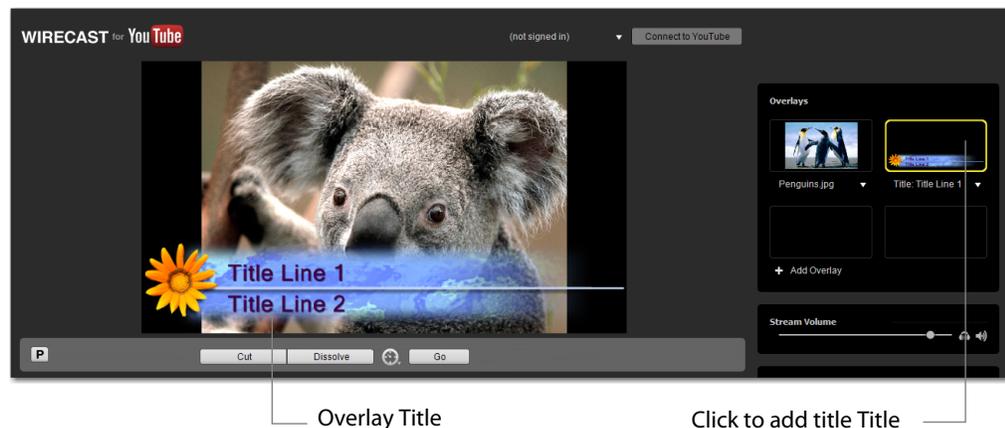
Overlays are sources that are added (overlaid) on an existing shot. This is very handy for creating titles to be displayed on top of a video clip, camera, or a photo. Titles are the most common type of overlay, but any source media can be used as an overlay.

To add a title overlay, select *Configure Title* from the *Add Overlay* menu. When the configuration window opens, select a title background and enter up to four lines of

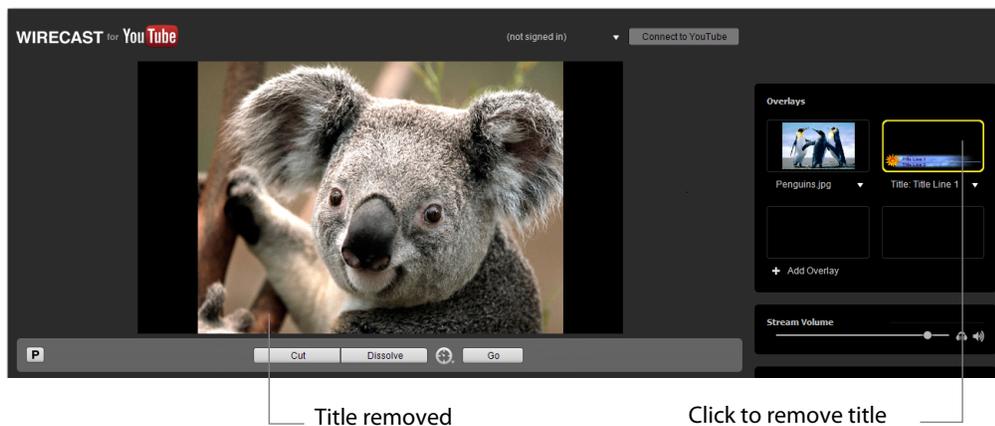
text. Configure each line of text by clicking the justification, font, and font color icons. Click OK when finished.



The selected Title is displayed in the *Overlays* panel. Click on the title image to add it to your Live Broadcast display. If you are in Preview Mode, it will add it to your preview display.



If you click the title overlay image again, it will remove the overlay from your Live Broadcast display.



## Live Streaming

This topic demonstrates how to setup and stream your Wirecast for YouTube live events. Streams are sent to YouTube by establishing an account, setting up your live event on YouTube, signing into YouTube from Wirecast for YouTube, then connecting to YouTube and start streaming. All streams use a Flash H.264 encoder.

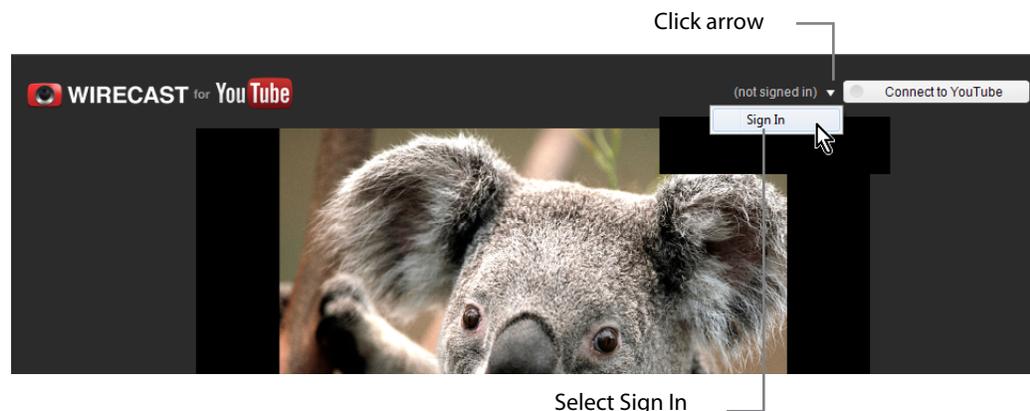
**Note:** Live streaming over YouTube is available only to YouTube partners who have been authorized for live streaming. Please contact YouTube directly with any inquiries regarding eligibility requirements.

## Setup a YouTube Event

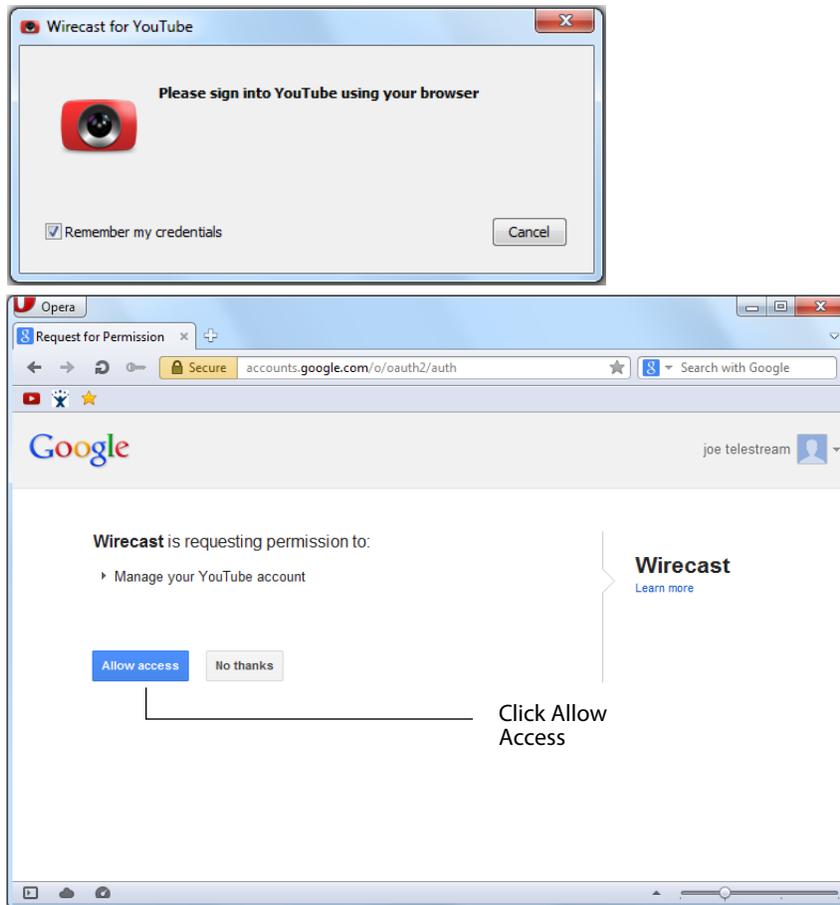
In order to stream your event, you must first set it up on YouTube using a Web browser. To do this log into YouTube using your account username and password, and get into the *Video Manager*. From there you will create a live event, set the streaming resolution, and choose other settings. (See the [YouTube Live Streaming Guide](#) for details on how to create a live event).

## Sign in to YouTube

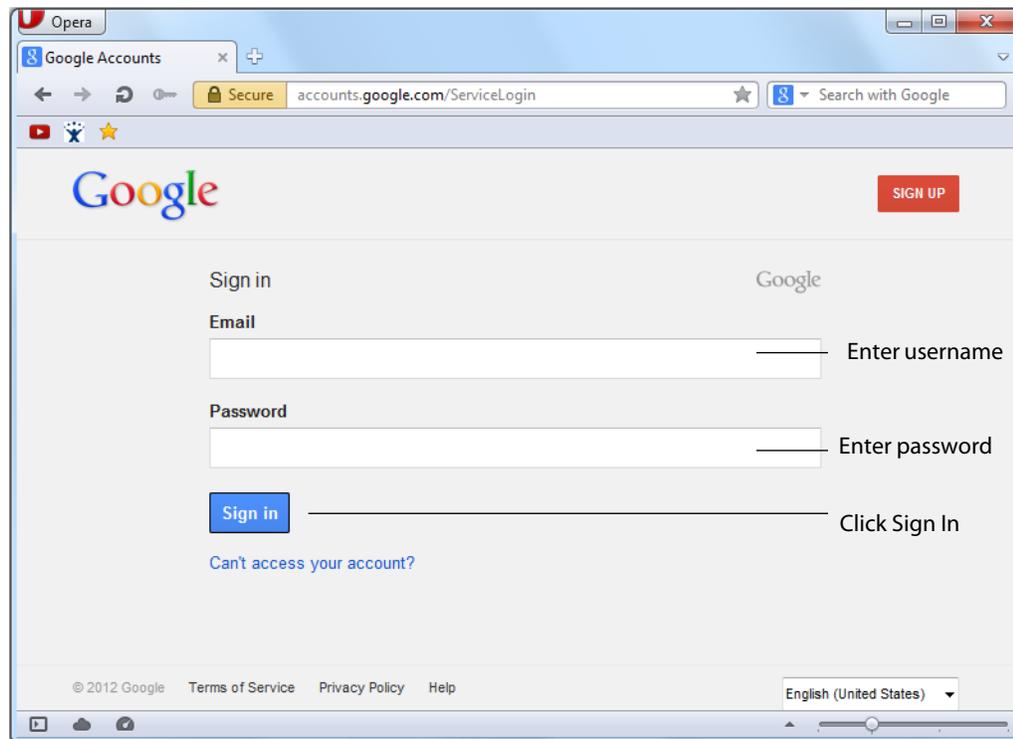
In Wirecast for YouTube, click the menu arrow at the top of the Live Broadcast area display and select *Sign In*.



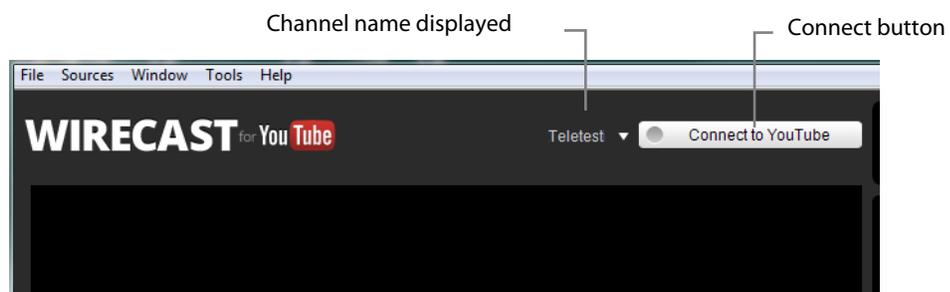
If you have already signed in to YouTube, a dialog box displays and a browser is opened requesting permission to access your YouTube account. Click *Allow Access* to continue.



If you are **not** already signed in to YouTube, the sign in fields are displayed in your browser. Enter your username (channel name) and password, and click *Sign In*.

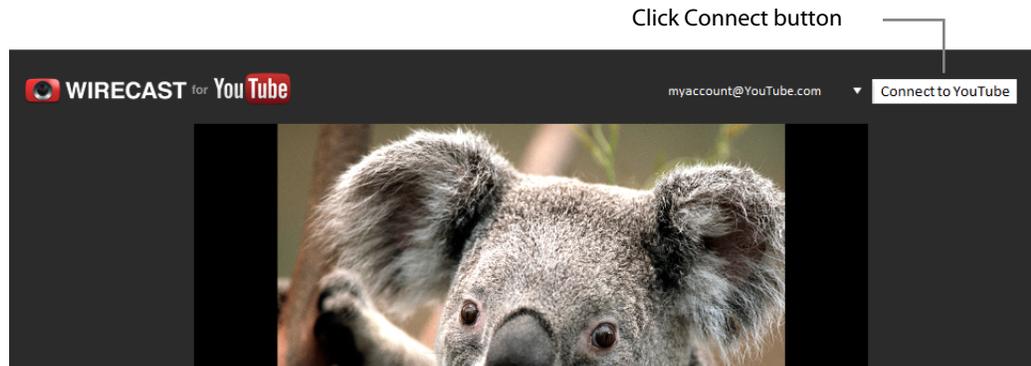


Once you have signed in, your channel name displays and the *Connect to YouTube* button turns white.



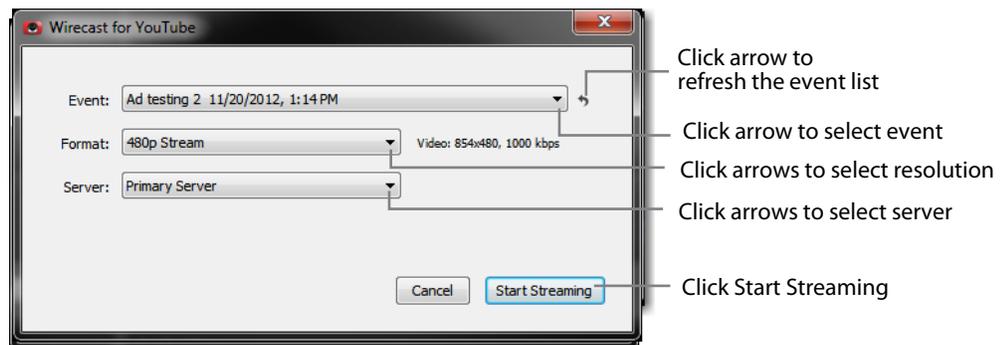
## Connect to YouTube

Once you have signed in to YouTube, you can connect to YouTube and stream your event. To connect to YouTube, click the *Connect to YouTube* button at the top of the Live Broadcast Area display to start streaming.

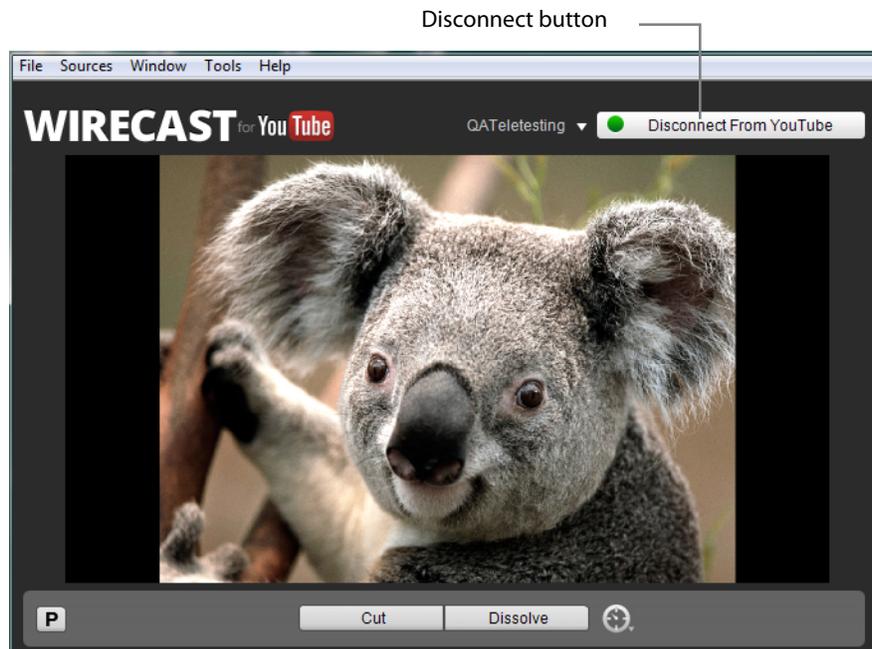


When the connection dialog box displays, click the arrow buttons to manually select an *Event* you want to stream. If you do not find your event on the list, click the curved arrow to fetch the active events on YouTube.

Select a video resolution from the *Format* drop-down menu. If you have configured multiple resolutions when scheduling your event in YouTube, you will need a separate instance of Wirecast for YouTube for each resolution. Keep in mind that high quality video requires greater CPU usage. Select a server (Primary, secondary, or both) from the Server menu. Click *Start Streaming* when finished.



Once you have connected to YouTube to stream your event, the *Connect to YouTube* button is changed to *Disconnect from YouTube*. You may click this disconnect button at any time to disconnect from YouTube and terminate your live streaming.



**Note:** You must click *Stop Streaming* on your YouTube channel *before* you stop your encoder in Wirecast For YouTube. If you do not, viewers will see an error displayed in their viewer.



# Adding Media

## Introduction

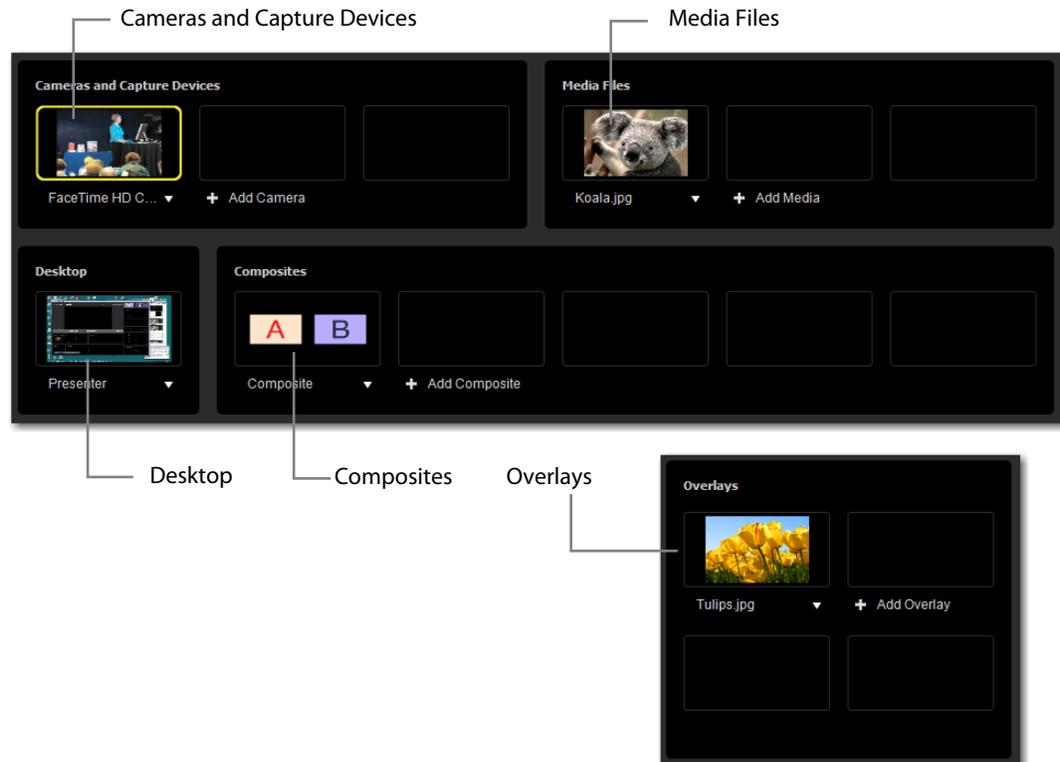
Wirecast for YouTube makes it very easy to add media to your live event. All media sources and cameras available for streaming are displayed in several panels located in the main window. Adding a new source to your live event is as easy as clicking on its image.

## Topics

- Source Media Panels
- Adding Media Files
- Adding Cameras
- Adding Composite Sources
- Adding Overlays
- Adding Desktop Shots
- Movies

## Source Media Panels

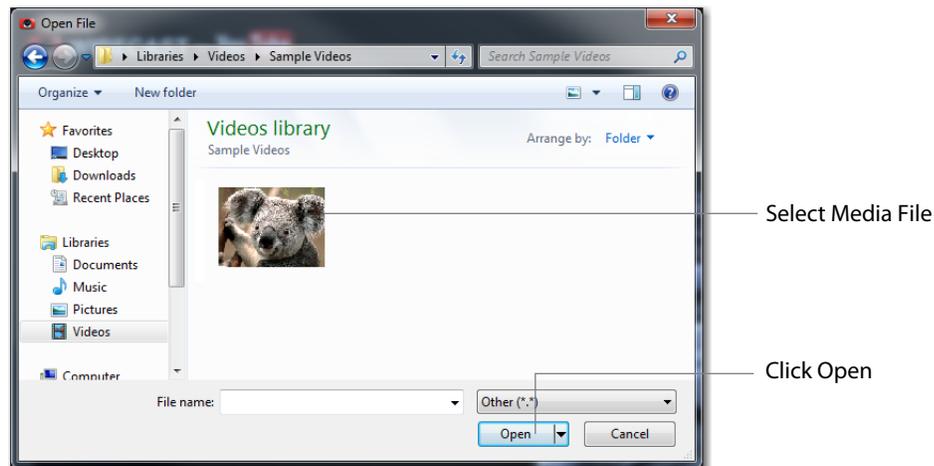
Wirecast for YouTube provides five source media panels: Camera and Capture Devices, Media Files, Desktop, Composites, and Overlays.



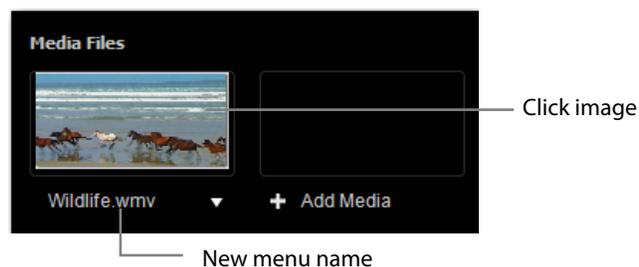
Each media panel has a pull-down menu enabling you to select a media source. To add a source, click the *Add* drop-down menu and select a media by navigating to it.

## Adding Media Files

Media files can be photos or video clips. Video clips often have audio associated with them. The audio can be assigned to a slider control in the Audio panel (see [Using Audio Controls](#)). To add a new media file, click *Add Media*, select *Add Media File*, and navigate to a media file using the *Open File* dialog box that is displayed.



After you have selected a media file, it is displayed in the *Media Files* panel and the menu is changed to the name of the media file. To add this media file to your stream, click the image displayed in the panel.



Once you have selected a source and it is displayed in the *Media Files* panel, you can modify how it will be played in your stream. There are three options and they are selected from the drop-down menu under the source image. These three options are:

- **Stretch to Fit** Causes the media to stretch to fit the display area when it is played.
- **Always Play From Start** Causes the media to play from the beginning every time it is used.
- **Loop Media** Causes the media to loop back to the beginning and play again upon completion.

A media file can be removed from the *Media Files* panel by selecting *Remove Media* from its drop-down menu.

## Adding Cameras

To add a camera to the *Camera and Capture Devices* panel, click *Add Camera* and select a camera from the list of available cameras. Cameras are discovered and listed automatically by Wirecast for YouTube. If no cameras are listed, it means you do not have any cameras available.

After you select a camera, it is displayed in the *Camera and Capture Devices* panel, and the menu changes to the name of the camera. To add this camera file to your stream, click the image displayed in the panel.



Once you have selected a camera and it is displayed in the *Camera and Capture Devices* panel, you can modify how it is played in your stream by selecting *Configure Device* from the drop-down menu under the source camera image. (See [System Devices](#) to configure a device.)

A camera can be removed from the *Camera and Capture Devices* panel by selecting *Remove Camera* from its drop-down menu.

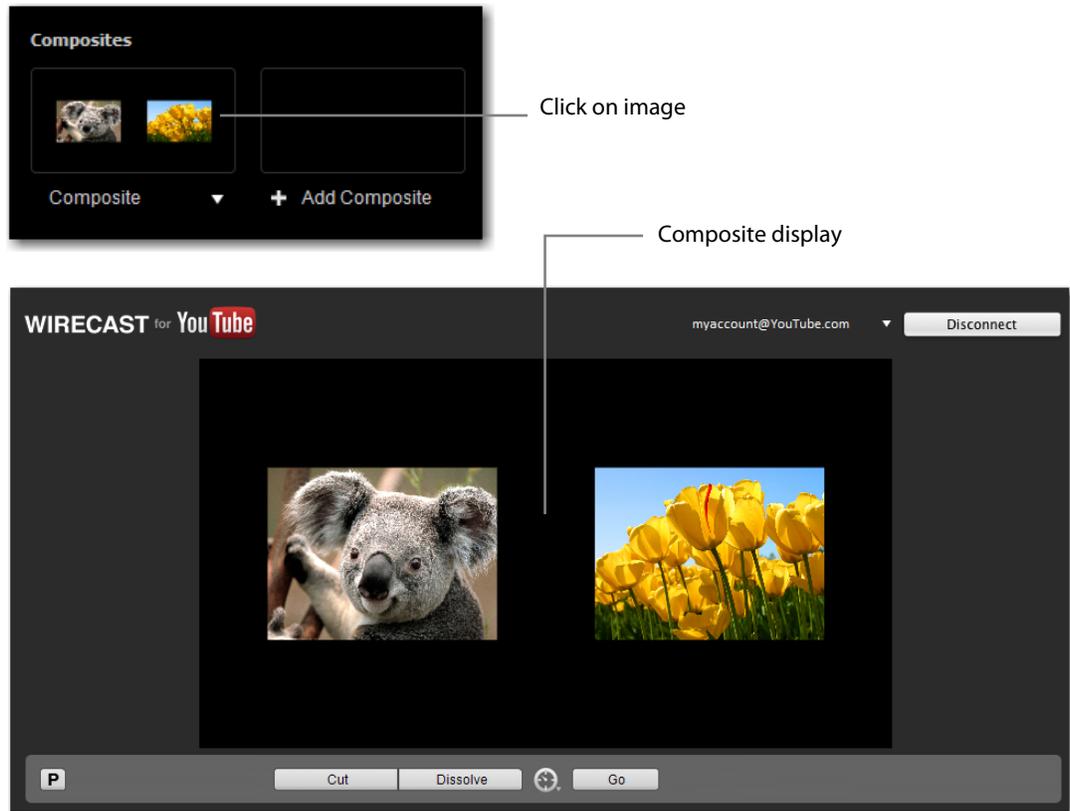
## Adding Composite Sources

If you want to add a composite of two sources in the same shot, use the *Add Composite* menu. For example, to add two video sources side by side, click *Add Composite* and select *Side By Side*.

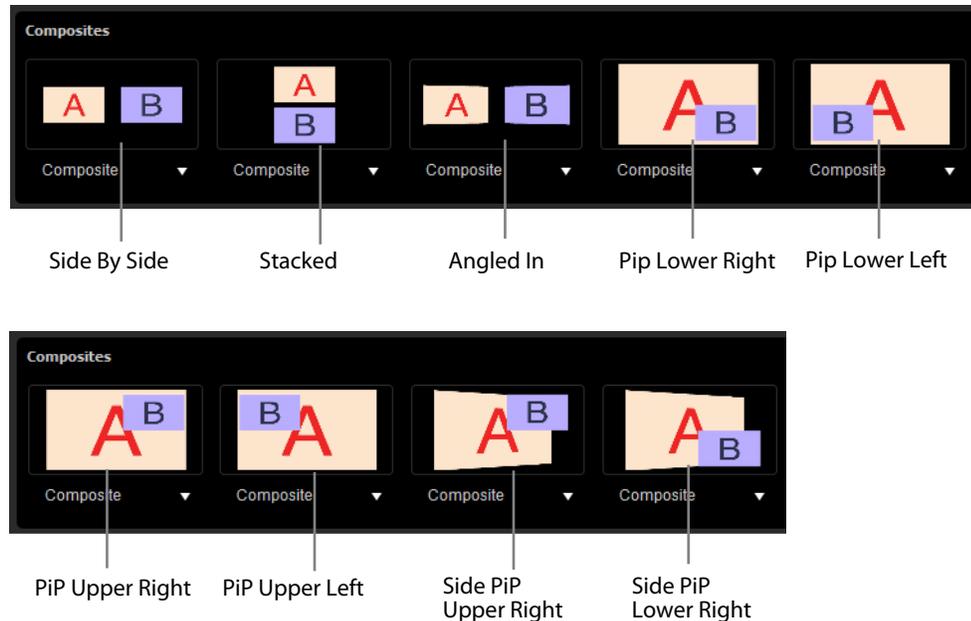


When the A/B image displays in the panel, select *Source A* from the *Add Composite* menu. When the dialog box displays, navigate to a video image or clip, select it, and click *Open*. Repeat this procedure for *Source B*. After both sources (A and B) are selected,

an image of each is displayed in the composite panel. Click on this composite image to add it to your stream.



There are nine different composite configurations: Side By Side, Stacked, Angled In, PiP Lower Right, PiP Lower Left, PiP Upper Right, PiP Upper Left, Side PiP Upper Right, and Side PiP Lower Right.



You can also swap the two sources (A and B) by selecting *Swap Source A and B* from the *Add Composite* menu.

A composite can be removed from the *Composites* panel by selecting *Remove Composite* from its drop-down menu.

## Adding Overlays

Overlays are sources that are imposed on top of your video. These can be a media file, a photo, or a title. Titles are the most common type of overlay. (See [Using Overlays](#)).

## Adding Desktop Shots

Wirecast for YouTube enables you to stream any portion of any computer desktop using Desktop Presenter. To use a desktop presenter in your stream see [Using Desktop Presenter](#).

## GIF and Transparency

GIF files are a special case because they only offer transparency and not a true Alpha Channel. The GIF format enables you to define part of the image as transparent (completely invisible), but does not enable you to define it as partially transparent. Some GIF images use transparency for much of the image. However, near the edges of the visible data, transparency cannot be used. This happens quite often when there is a shadow near the edges of the visible data. The author of the GIF often assumes a

certain background color (white, for example) and that color becomes embedded in the actual image.

When Wirecast for YouTube displays these types of images, the edges of the visible data will show the background that was saved in the GIF. This is not a defect in Wirecast for YouTube and, therefore, Wirecast for YouTube can only present the data as it exists in the GIF. The solution is to obtain the original image and re-save the image as either TIFF or PNG. Both of these formats offer full Opacity.

## Movies

Wirecast for YouTube supports a wide variety of movie formats (MOV, AVI, WMV, etc). Sometimes, however, you need to install a codec to use these formats. A very commonly desired codec is DivX®. Wirecast for YouTube informs you if a codec is missing or if you need to install one. It is beyond the scope of this user guide to describe all of the possible codecs available on the market today, or explain the installation details. Contact the codec provider for details on installation.

## Problems Showing Movie Types

If you are having difficulty, try to open the media with QuickTime player and/or Windows Media Player before contacting technical support. If these players cannot open the file, the codec is most likely improperly installed (or there is no available codec for that media).

**Note:** Wirecast for YouTube does not currently support some file formats (.mpg, .mpeg, .m1v, .m2v). The solution is to convert the media into a different type such as MPEG-4.

## AVI Video

Some AVI files may play the audio but not the video. The solution is to convert the media into a supported type, such as MPEG-4.

## Real Media

Real Media Files (.RM) are **not** supported by Wirecast for YouTube. The solution is to convert the media into a different type such as MPEG-4.



# Using Overlays

## Introduction

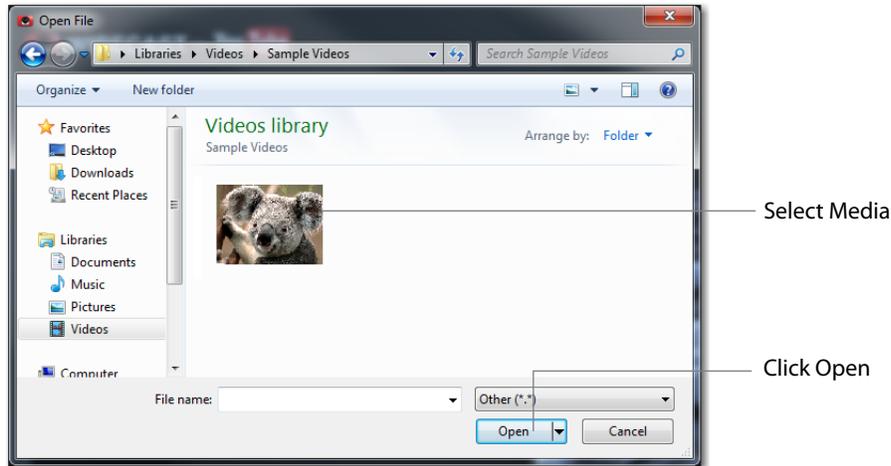
Overlays provide a way to add an additional media source on top of your live stream. The most common type of overlay is a title. Wirecast for YouTube offers a wide variety of title banner templates to use in your stream. Adding a professional looking title is as simple as selecting a template and adding your text.

## Topics

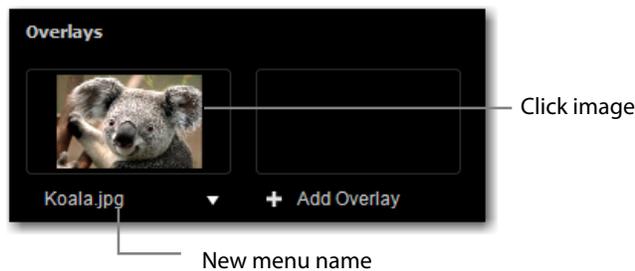
- [Adding Media Overlays](#)
- [Adding Title Overlays](#)

## Adding Media Overlays

To add a media overlay, select *Add Media File* from the *Add Overlay* menu. When the *Open File* dialog box displays, navigate to your media, select it, and click *Open*.



After you select a media file overlay, it is displayed in the *Overlays* panel and the menu changes to the name of the media file. To add this overlay to your stream, click the image displayed in the panel. If you are in Preview Mode, the program adds the overlay to your preview display. Click on the overlay media again to remove it from your Live Broadcast display.



A media overlay can be removed from the *Overlays* panel by selecting *Remove Overlay* from its drop-down menu.

## Adding Title Overlays

To add a title overlay, select *Configure Title* from the *Add Overlay* menu. When the configuration window opens, select a title background and enter up to four lines of

text. Configure each line of text by clicking the justification, font, and font color icons. Click OK when finished.

Select title background

Enter text

Set font color

Set font

Set justification

Click OK

The selected title is displayed in the Overlay window. Click on it to add it to your Live Broadcast display. If you are in Preview Mode, the program adds the title to your preview display.

Overlaid title

Click to add title

If you click the title overlay image again, the program removes the title from your Live Broadcast display.



Title removed

Click to remove title

A title overlay can be removed from the *Overlays* panel by selecting *Remove Overlay* from its drop-down menu.

# Using Audio Controls

## Introduction

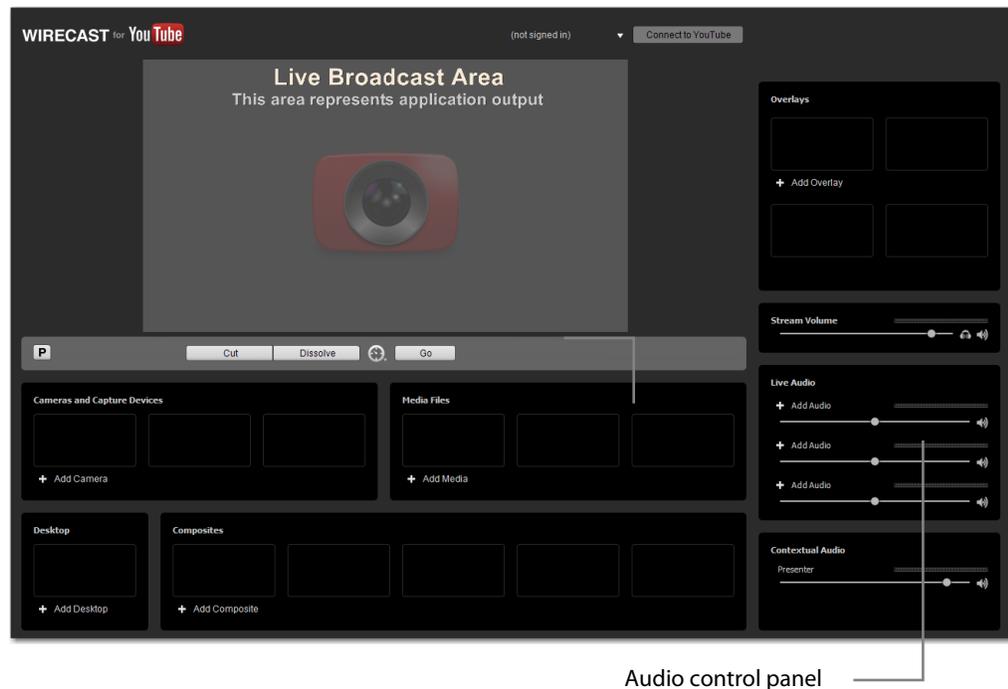
The Audio Control panel enables you to monitor and control all of the audio sources. This section describes how to use the Audio Control panel.

## Topics

- The Audio Panel
- Assigning Audio sources
- Master Audio

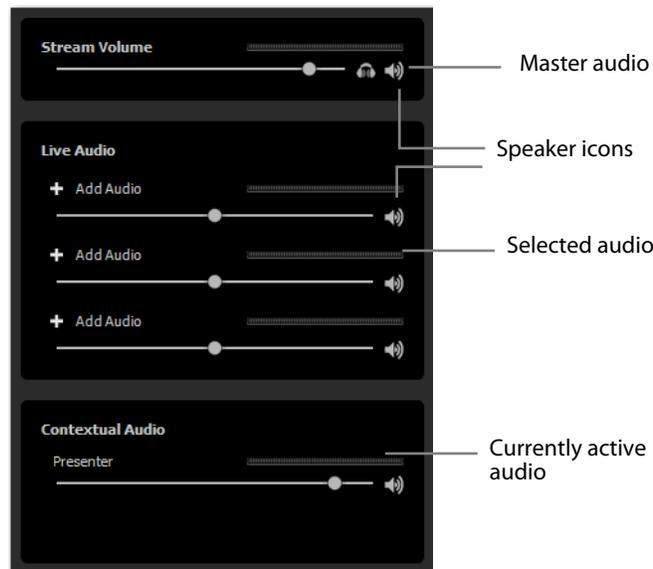
## The Audio Panel

The Audio Control panel is located in the lower right portion of the main window.



Four slider bars enable you to control the master volume of your stream, along with the volume of three selected audio sources. *Stream Audio* is the master volume that controls all audio streaming in your stream. *Live Audio* enables you to select individual audio sources and control the volume of each one. Move the slider to the right to increase the volume, or to the left to decrease it. Contextual Audio is the volume of the

currently selected shot. Any of the audio controls can be muted by clicking the speaker icon to the right of its slider bar (click it again to un-mute it).



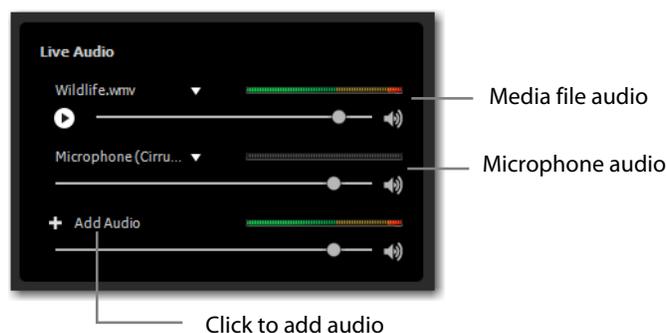
Live Audio controls can be assigned to any hardware audio sources you are using. This includes microphones, audio input feeds, cameras, capture cards, etc.

## Assigning Audio sources

To assign audio sources to the *Live Audio* sliders, click *Add Audio* and select a source (*Microphone*, *Digital Audio*, *Media File*, etc.). You can also navigate to a media source file and assign its audio to the control. Once an audio assignment is made, the menu displays the name of the source selected.

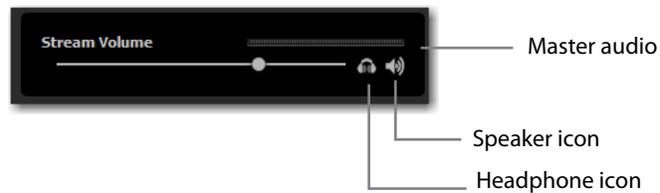
*Microphone* and *Digital Audio* are not the only options here, the program lists whatever audio input sources your machine currently has available (same with camera sources).

If you are using a laptop with no extra devices attached, it looks as described. However, if you have a USB microphone or a webcam with audio, that may also show up on this list.



## Master Audio

*Stream Volume* is the master audio control. It controls the volume of all the assigned Live Audio controls. Move the slider to the right to increase the volume, or to the left to decrease it. You can mute the stream volume by clicking the speaker icon (click it again to un-mute it). However, if you want to mute just your local audio feed without effecting the stream audio output, click the headphones icon (click it again to un-mute it).



# Streaming

## Introduction

Streams are sent to YouTube by establishing an account, setting up your event on YouTube, signing into YouTube from Wirecast for YouTube, then connecting to YouTube and begin streaming.

**Note:** Live streaming over YouTube is available only to YouTube partners who have been authorized for live streaming. Please contact YouTube directly with any inquiries regarding eligibility requirements.

## Topics

- [Live Streaming](#)
- [Flash Log Files](#)

## Live Streaming

This topic demonstrates how to setup and stream your Wirecast for YouTube live events. Streams are sent to YouTube by establishing an account, setting up your live event on YouTube, signing into YouTube from Wirecast for YouTube, then connecting to YouTube and begin streaming. All streams use a Flash H.264 encoder.

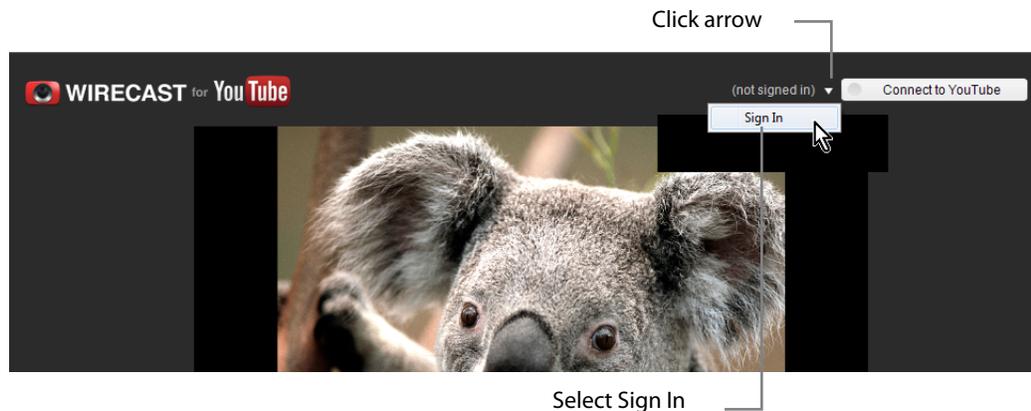
**Note:** Live streaming over YouTube is available only to YouTube partners who have been authorized for live streaming. Please contact YouTube directly with any inquiries regarding eligibility requirements.

## Setup a YouTube Event

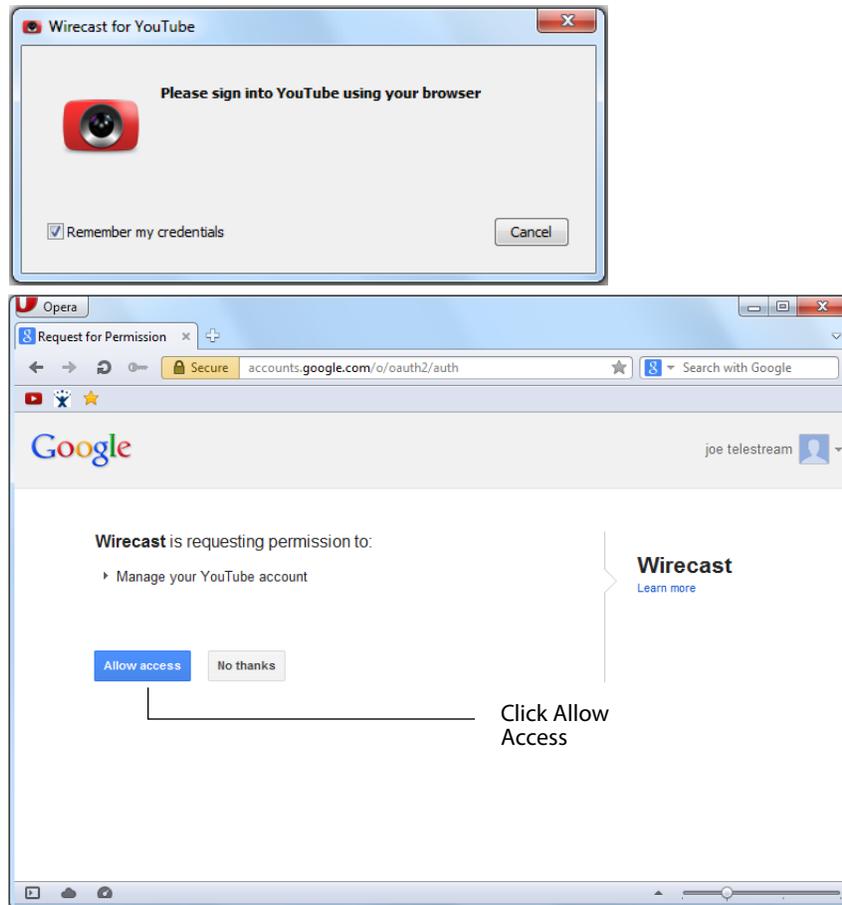
In order to stream your event, you must first set it up on YouTube using a Web browser. To do this log into YouTube using your account username and password, and get into the *Video Manager*. From there you will create a live event, set the streaming resolution, and choose other settings. (See the [YouTube Live Streaming Guide](#) for details on how to create a live event).

## Sign in to YouTube

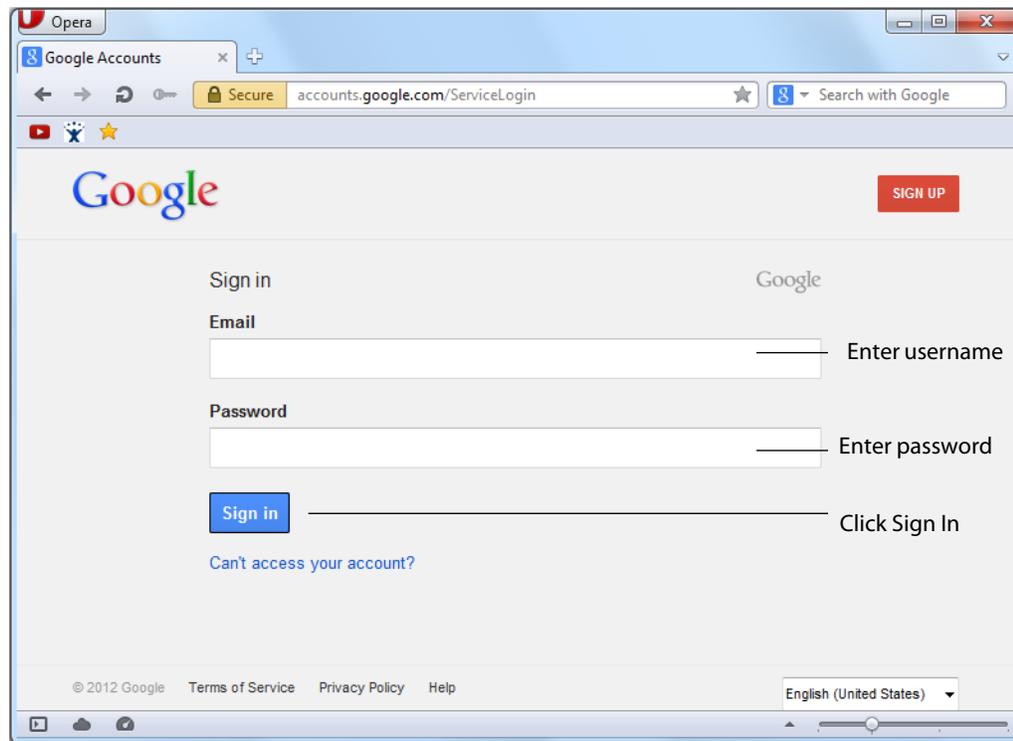
In Wirecast for YouTube, click the menu arrow at the top of the Live Broadcast area display and select *Sign In*.



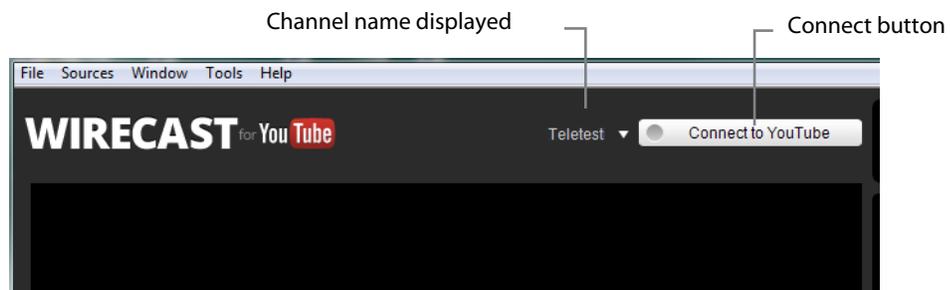
If you have already signed in to YouTube, a dialog box displays and a browser is opened requesting permission to access your YouTube account. Click *Allow Access* to continue.



If you are **not** already signed in to YouTube, the sign in fields are displayed in your browser. Enter your username (channel name) and password, and click *Sign In*.

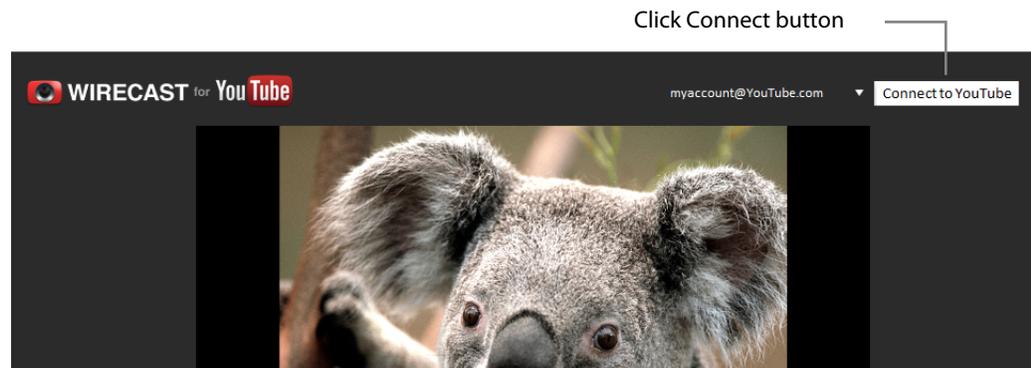


Once you have signed in, your channel name displays and the *Connect to YouTube* button turns white.



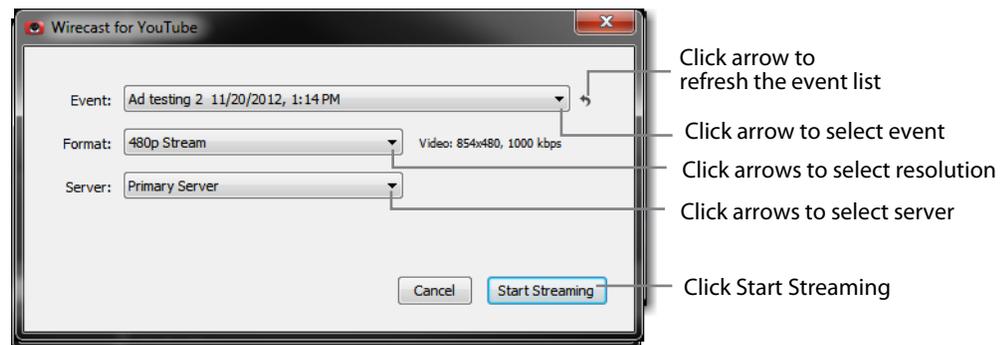
## Connect to YouTube

Once you have signed in to YouTube, you can connect to YouTube and stream your event. To connect to YouTube, click the *Connect to YouTube* button at the top of the Live Broadcast Area display to start streaming.

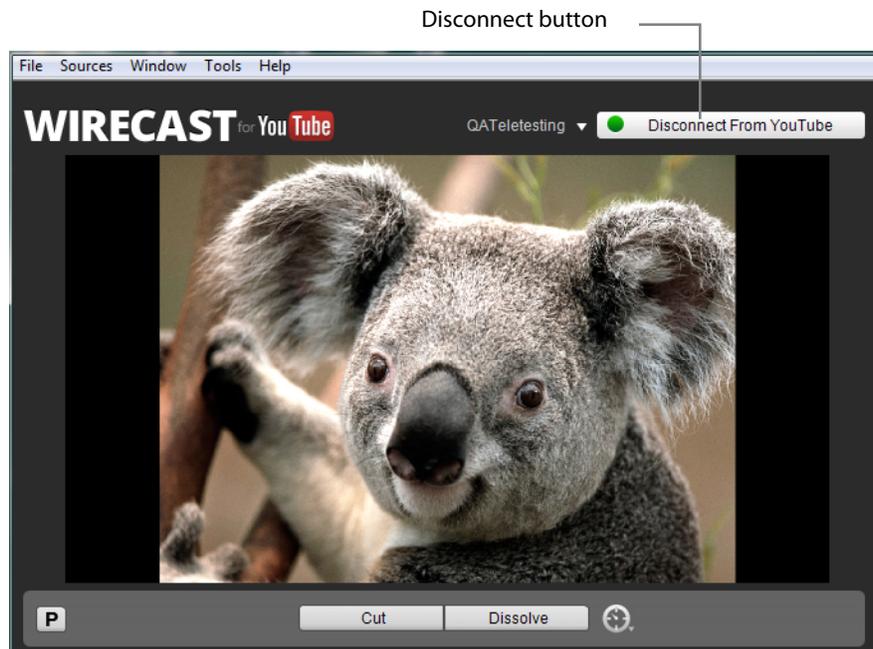


When the connection dialog box displays, click the arrow buttons to manually select an *Event* you want to stream. If you do not find your event on the list, click the curved arrow to fetch the active events on YouTube.

Select a video resolution from the *Format* drop-down menu. If you have configured multiple resolutions when scheduling your event in YouTube, you will need a separate instance of Wirecast for YouTube for each resolution. Keep in mind that high quality video requires greater CPU usage. Select a server (Primary, secondary, or both) from the Server menu. Click *Start Streaming* when finished.



Once you have connected to YouTube to stream your event, the *Connect to YouTube* button is changed to *Disconnect from YouTube*. You may click this disconnect button at any time to disconnect from YouTube and terminate your live streaming.



**Note:** You must click *Stop Streaming* on your YouTube channel *before* you stop your encoder in Wirecast For YouTube. If you do not, viewers will see an error displayed in their viewer.

## Flash Log Files

Wirecast for YouTube generates log files when streaming to a flash-based destination. The files are generated in a rotating fashion with file names of `flash_log.txt`, `flash_log_1.txt`, `flash_log_2.txt`, etc. Technical support may ask for these log files when attempting to diagnose a flash connection issue.

# User Interface

## Introduction

These topics describe the menus and menu items in Wirecast for YouTube.

## Topics

- File Menu
- Sources Menu
- Window Menu
- Tools Menu
- Help Menu
- Keyboard Short-cuts

## File Menu

**New** Creates a new Wirecast for YouTube instance.

**Open** Displays the Open dialog window for opening an existing Wirecast for YouTube instance.

**Open Recent** Displays up to fifteen of the most recently accessed instances. Every time an instance is opened or saved it is entered into the this list.

**Save** Saves the current instance. If the instance has not previously been saved, the *Save As* dialog window displays, enabling you to name the instance.

**Save As** Displays the *Save As* dialog window so that the instance can be saved using a new file name.

**Close Window** Closes the currently active Wirecast for YouTube window. If Wirecast for YouTube is still streaming, you are prompted to stop the stream. If the instance has not been saved, you are prompted to save the instance before closing.

**Preferences** Opens the Preferences window. If the Preferences window is already open, it will be made active.

**Exit** Closes all instances and then exits. If the stream is playing, you are prompted to stop the stream. If a instance has not been saved, you are prompted to save the instance before exiting.

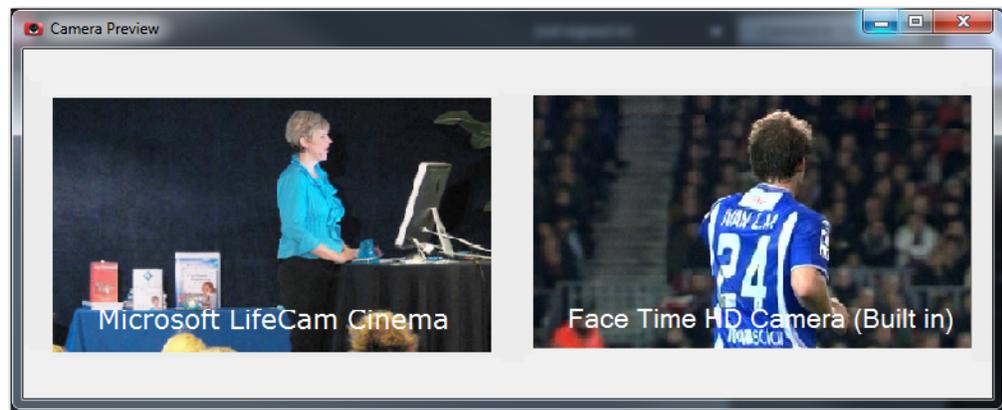
## Sources Menu

**Show Source Settings** Opens the Source Settings window.

**Show USB Devices** Opens a list of all USB devices. (See [Show USB Devices](#)).

## Window Menu

**Camera Preview** Shows a preview of all cameras currently connected to your computer.



**Instance Windows** All open instance windows are listed at the bottom of this menu.

## Tools Menu

**Preview Mode** Preview mode adds a preview display in the Live Broadcast area. Select *Preview Mode* to activate it. When activated, a check mark displays. Select again to deactivate preview mode.

**Local Recording** Enables you to make a local recording of your streaming event. Select Local Recording, then enter the name of your recording.

**Output to Hangouts** When checked, enables Virtual Camera in Google Hangouts.

**Output to Virtual Microphone** When checked, enables Virtual Microphone in Google Hangouts. Checking or unchecking this option requires you to restart Wirecast For YouTube.

## Help Menu

**Wirecast for YouTube Help** Opens the online help version of the User Guide.

**Show Tutorial** Opens an on-line tutorial ([Getting Started](#) topics).

**Check for Updates** Checks on-line to see if the currently used version of Wirecast for YouTube is the latest version. If it is up-to-date, a dialog box displays this. If the version is not current, you are given an opportunity to download the latest version.

**Acknowledgments** Opens on-line help to acknowledgments.

**About Wirecast for YouTube** Displays version and copyright information about Wirecast for YouTube.

**Upgrade to Wirecast Pro** Goes to the Wirecast Pro Web page on the Telestream Web site.

## Keyboard Short-cuts

This section provides a list of all keyboard short-cuts used in Wirecast or YouTube. They are arranged according to how they appear in the drop-down menus in the main window.

**Table 1.** File Menu Keyboard Short-cuts

File Menu	Keyboard Short-cut
New	Ctrl+N
Open	Ctrl+O
Open Recent	
Save	Ctrl+S
Save As	Ctrl+Shft+S

**Table 1.** File Menu Keyboard Short-cuts

<b>File Menu</b>	<b>Keyboard Short-cut</b>
Close Window	
Preferences	Ctrl+comma
Exit	

**Table 2.** Sources Menu Keyboard Short-cuts

<b>Sources Menu</b>	<b>Keyboard Short-cut</b>
Show Source Settings	
Show USB Devices	

**Table 3.** Window Menu Keyboard Short-cuts

<b>Window Menu</b>	<b>Keyboard Short-cut</b>
Camera Preview	
Document Windows	

**Table 4.** Tools Menu Keyboard Short-cuts

<b>Tools Menu</b>	<b>Keyboard Short-cut</b>
Preview Mode	
Local Recording	
Output to Hangouts	
Output to Virtual Microphone	

**Table 5.** Help Menu Keyboard Short-cuts

<b>Help Menu</b>	<b>Keyboard Short-cut</b>
Wirecast For YouTube Help	Ctrl+?
Show Tutorial	
Check for Updates	

**Table 5.** Help Menu Keyboard Short-cuts

Help Menu	Keyboard Short-cut
Acknowledgments	
About	
Upgrade to Wirecast Pro	

**Table 6.** Misc Keyboard Short-cuts

Misc	Keyboard Short-cut
Go	Ctrl+G



# Using the Source Settings

## Introduction

These topics describe how to use the Source Settings editor.

## Topics

- [Overview](#)
- [System Devices](#)
- [Desktop Presenter](#)
- [Capture Cards](#)
- [Show USB Devices](#)

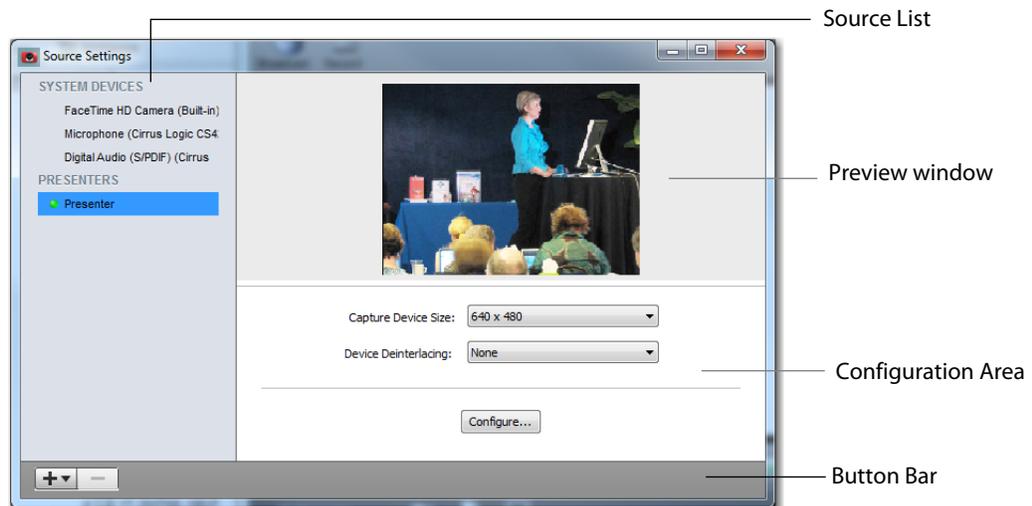
## Overview

To open the Source Settings window, select *Sources > Show Source Settings*.

The Source Settings window is divided into four sections: source list, preview window, configuration area, and button bar:

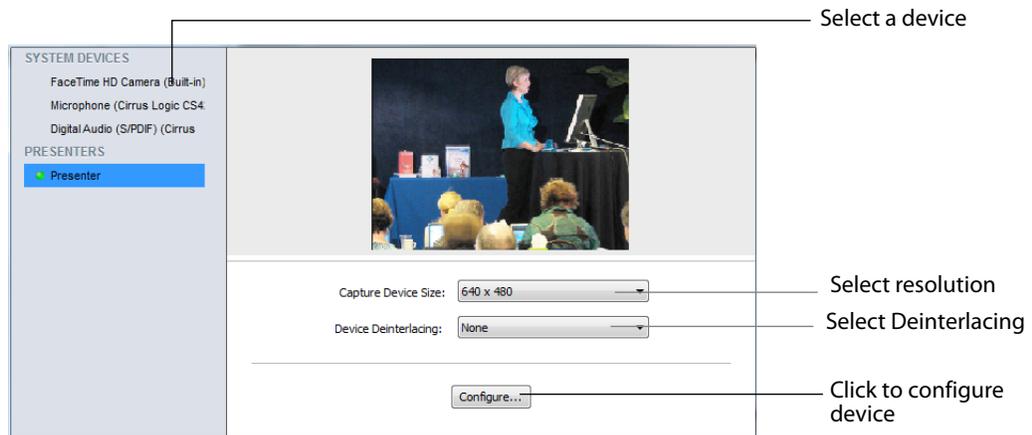
- The *source list* displays all the devices detected by Wirecast for YouTube (USB and FireWire devices, microphones, line inputs, Webcams, etc). Sources to be used are selected from this list.
- The *preview window* provides a preview of the video coming from a selected source.
- The *configuration area* is for configuring sources. When a source is selected from the source list, the configuration options for that source are displayed.
- The *button bar* contains two buttons. Click the plus (+) button to manually add new sources. Click the minus (-) button to remove them.

**Note:** All sources listed in the Source Settings window are also accessible through the Add Live Source button in the main window toolbar.

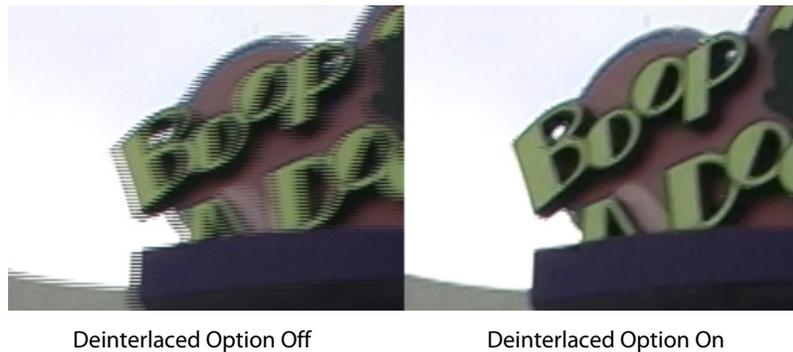


## System Devices

System devices include Firewire devices, USB cameras, and other USB devices. Click on a device to select it. Two drop-down menus and a configuration button are displayed. The *Capture Device Size* menu selects the device resolution from 160x120 to 1920x1080, depending on the camera. The Device Deinterlacing menu selects either None or Blend. *None* turns off deinterlacing enabling the video to interlace normally. *Blend* turns deinterlacing on, enabling the video to avoid interlacing problems during motion. Click *Configure* to configure the selected device.

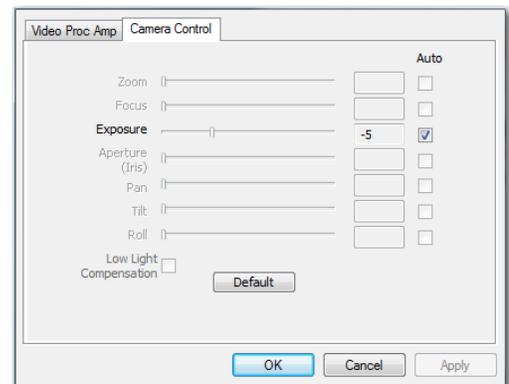
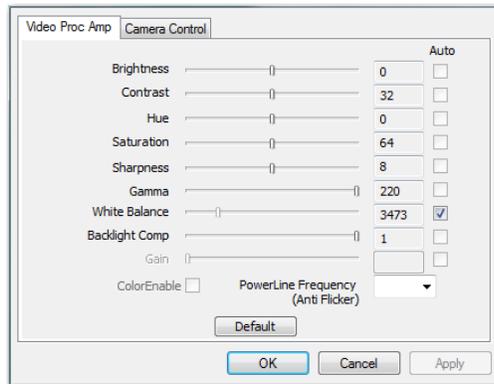


Deinterlacing causes a device to operate without interlacing. Selecting this option prevents your source images from looking jagged during fast motion (i.e. moving a camera quickly).



When you click *Configure*, a properties window displays with two tabs. The *Video Proc Amp* tab enables you to set the video display properties. The *Camera Control* tab

enables you to set camera image properties. Any properties that do not apply to the selected camera are greyed-out.

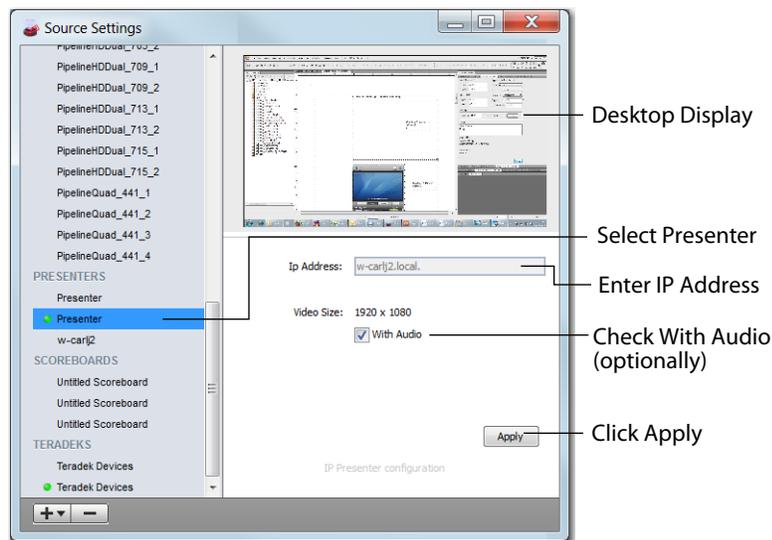


## Desktop Presenter

The Desktop Presenter (DPT) is a utility application that enables Wirecast for YouTube to stream the desktop of any computer running Desktop Presenter.

Desktop Presenter is normally auto-detected by Wirecast for YouTube and is automatically added to the list of sources. However, if a DTP is not detected, or if you want to add one in a remote location, you can manually add it by selecting *Sources > New Presenter* from the menu in the Main window.

You can then setup the presenter in the Source Settings window by entering an IP address of the target computer, optionally checking the With Audio checkbox, and clicking Apply:



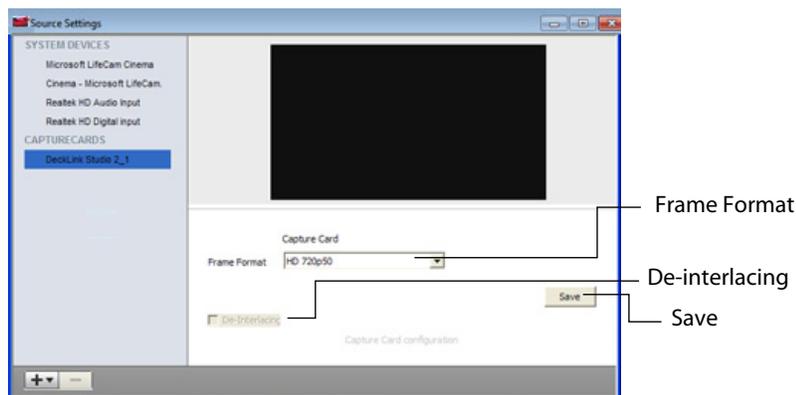
**Note:** When a Desktop Presenter has been auto-detected, the IP Address field is disabled.

For more information, see [Using Desktop Presenter](#).

## Capture Cards

Capture Cards are hardware extensions that enable you to bring in video from more advanced HDMI and SDI sources. Most capture cards are automatically configured to the best settings. Some cards (Blackmagic Intensity Pro, for example) require manual adjustments. When a Capture Card is selected, you can select the Frame Format. Clicking *Save* will cause the video to display. You can also check the *De-interlacing* checkbox to turn on de-interlacing. Once configured, you can add Capture Cards from the Live Source drop-down menu in the Main window.

If you experience difficulty with your Capture Card, make sure you have the latest driver from the vendor and that it is installed correctly before contacting Customer Support.

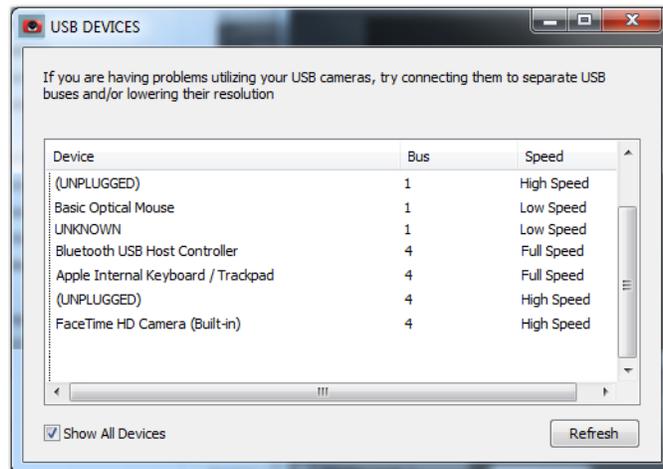


Capture cards supported by Wirecast for YouTube:

- Blackmagic Intensity Pro
- Blackmagic Decklink Studio
- Blackmagic Decklink SDI
- Blackmagic Decklink Duo
- Blackmagic Decklink Extreme 3D
- Osprey 240e, 450e, 700e
- Matrox Multi

## Show USB Devices

To view a list of all USB devices select *Show USB Devices* from the *Sources* menu. The list displays all connected USB devices, the USB bus on which each USB device is located, and the speed of the device. Click *Show All Devices* to display all available USB devices, otherwise only video devices are listed. Click *Refresh* to update the list.





# Using Preferences

## Introduction

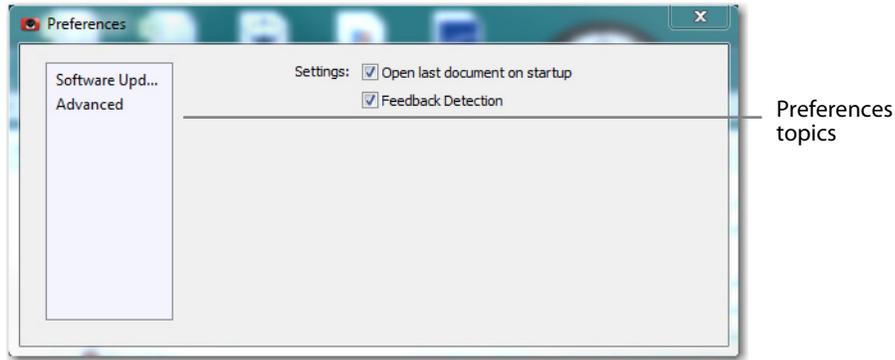
Wirecast for YouTube is designed to enable you to configure many important options. Preferences enable you to set up Wirecast for YouTube, set Desktop Presenter options, manage your licenses, update your software, and set advanced video options.

## Topics

- [Accessing Preferences](#)
- [General](#)
- [Software Update](#)
- [Advanced](#)

## Accessing Preferences

To open the Preferences window, select Preferences from the File menu (or press the Ctrl + Comma keys). Preferences are grouped under four topics: General, Performance, Software Update, and Advanced. Click one of these topics to view and change its preferences.



Wirecast for YouTube automatically saves your preferences every time you make a change, and the changes are immediately applied.

## Resetting Preferences

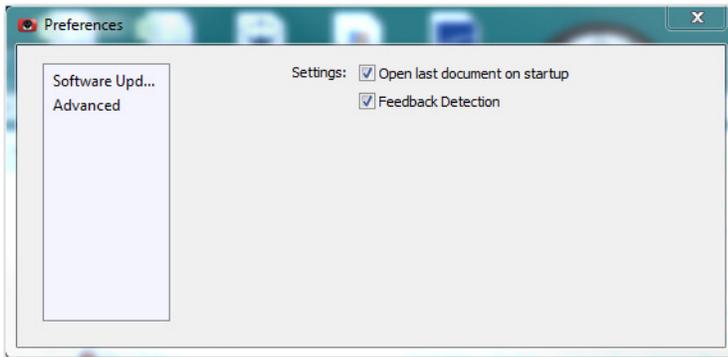
To reset your preferences, quit Wirecast for YouTube and then delete the files located at:

- Windows 7 and Vista: C:\Users\<<USERNAME>\AppData\Roaming\Vara Software\Wirecast for YouTube Preferences.
- Windows XP: C:\Documents and Settings\<<USERNAME>\Application Data\Vara Software\Wirecast for YouTube Preferences

**Note:** In some Windows directories, you may need to enable the *Show Hidden Files* option to view the folder containing the Wirecast for YouTube Preferences file.

## General

There are two general preferences: *Open last document on startup* and *Feedback Detection*.



## Open Last Document on Startup

When checked, the last document (instance) you used is opened when Wirecast for YouTube starts up. Checked is the default.

## Feedback Detection

When checked, the computer audio is disabled whenever feedback is detected (live feed is unaffected). Checked is the default.

When feedback is detected, the following warning displays with an option to turn off feedback detection:



*Desktop Presenter Frame Rate* defines how many frames per second (FPS) Wirecast for YouTube requests from the Desktop Presenter. You can select Automatic, 30 FPS, 15 FPS, or 5 FPS from the drop-down menu. Automatic is the default.

When Automatic is selected, Wirecast for YouTube attempts to maintain a 30 FPS rate. However, the frame rate may be reduced as the actual FPS output changes. For example, if your true streaming rate is very low, Wirecast for YouTube may choose to reduce the frame rate to Desktop Presenter to match this slow rate.

If Automatic is not selected, Wirecast for YouTube always attempts to maintain the selected rate, regardless of the streaming FPS.

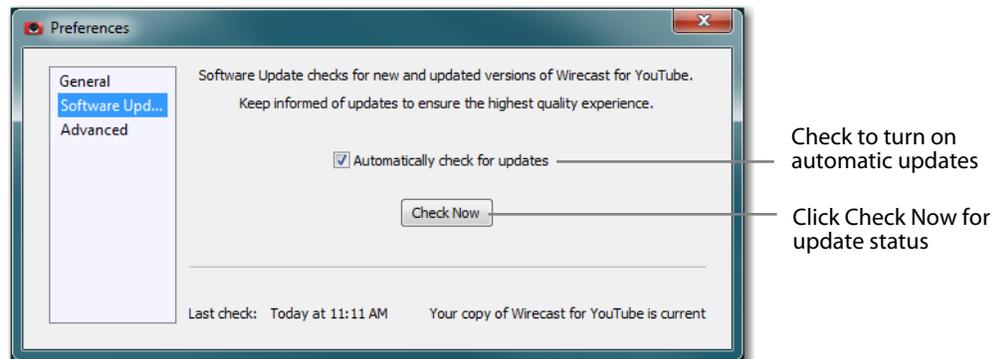
*Desktop Presenter Quality* defines the quality of each frame Wirecast for YouTube receives from Desktop Presenter. You can select: Automatic, Highest, Normal, or Lowest from the drop-down menu. Automatic is the default.

If the video motion from Desktop Presenter is low (a keynote presentation, for example), you can use a slower frame rate which enables you to increase the quality.

## Software Update

The Software Update preference enables you to automatically or manually check for updates to Wirecast For YouTube. Check *Automatically check for updates* to turn on

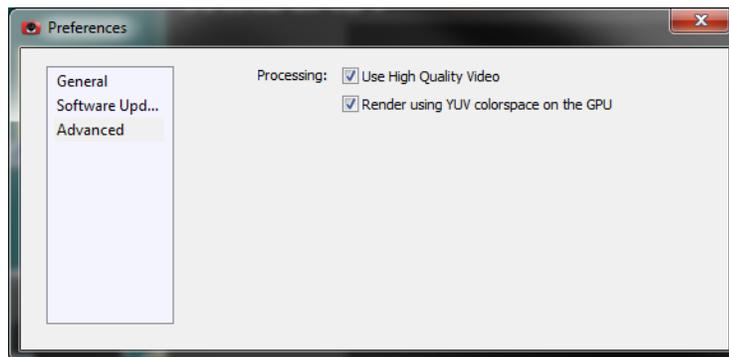
automatic update checking each time Wirecast for YouTube is launched. Checked is the default. Click *Check Now* to immediately check for updates



**Note:** No personal information is transferred to during update checking.

## Advanced

There are two advanced preferences: *Use High Quality Video*, and *Render using YUV colorspace on the GPU*.



Check the *Use High Quality Video* checkbox to increase the quality of decoding performed on your source media files. If CPU usage is near 95%, or if the frames per second (FPS) is consistently well below your target, uncheck *Use High Quality Video* to remedy this. Checked is the default.

If *Render using YUV colorspace* is checked, video frames will be rendered on the GPU using YUV rather than RGB. This will typically provide a performance advantage and save on memory. However, with some graphics cards this can result in very noticeable degradation of video quality.

In some troubleshooting situations, you may need to send detailed debugging information to help technical support understand issues you have reported. At the request of customer service or technical support, click the *Upload Debug File* button to upload a text file to our server for our engineers to review.

**Note:** Use this feature only under direction of our customer service or support staff. No personal information is transmitted.



# Making Great Live Events

## Introduction

These topics provide helpful information about how to prepare for creating great live events.

## Topics

- Introduction
- High Quality Audio
- Good Lighting

## Introduction

There are many ways to make a good live event even better. But this appendix focuses on two main things to remember about video streaming:

- **High Quality Audio Input** Great looking video with poor audio input appears unprofessional.
- **Good Lighting** Poor lighting can ruin an otherwise excellent live event. If you are doing chroma keying, this may become the most important part of your setup.

When video is saved to disk or sent over the network, it needs to be compressed. The compression process is done by encoders (codecs) which are optimized to work with clean input data. This means that if the audio or video is muddy to start with, it remains muddy after compression. Some codecs may even highlight poor input because the algorithm is built to look for differences.

Your goal should be to give the best possible quality audio and video to the compression process as possible. This means making sure what you see in the Live area is the best possible quality because Wirecast for YouTube takes exactly what you see and sends it to the codecs.

## High Quality Audio

Audio has an artistic aspect to it. You can make a great live event even better by remembering to focus on a few details. Here are some suggestions on producing clean audio.

- **Use a Good Microphone** Though this may sound obvious, a good microphone can make a huge difference. Most DV cameras have an audio input for an external microphone. Use this, whenever possible, instead of the built-in microphone that comes with the camera. Built-in microphones are usually not good quality and picks up hum from the electronics inside the camera. Even when it is not a great microphone, an external microphone almost always sounds better.
- **Use a Microphone Splitter** If you are doing an interview with one camera, you can use two microphones with a splitter (less than \$5). This often gives better results than one omni-directional microphone at a distance. You can also use a dual lapel microphone with a splitter.
- **Position the Microphone Properly** Place any microphone as close to the sound source as possible, even when using omni-directional microphones, because sound volume decreases greatly the farther away the microphone is placed. Stronger signals coming into the microphone results in better quality.
- **Use Lapel Microphones** Even inexpensive (less than \$20) lapel microphones can make a huge difference because it places the microphone much closer to the person speaking.
- **Control Environmental Noise** If a chair squeaks, use a different one. If you have a wood floor and you can hear people shuffling their feet as they talk, put down a rug. Do whatever it takes to keep noise at a minimum. Microphones pick up everything.

## Good Lighting

Do not underestimate the power of lighting. When an event is shot outdoors, a great deal of attention goes into lighting. For professionals, lighting is viewed as an artistic task. Many people make their living controlling lighting, so there is a lot to it. Here are a few suggestions to help you obtain reasonably good lighting:

- If you are using only one lighting source, do not shine it directly on your subject. You should diffuse the light.
- Avoid deep shadows. Make sure you fill all areas of your subject with light. Sometimes this requires adjusting the light to bounce off a different wall or use two lights. Placing a light low and another one high is often a good way to light evenly.
- Do not light too evenly. If you evenly light a set, you may actually be worse off than not lighting the set at all. Take a sample shot and see if it looks natural. Good lighting usually has a little more light coming from above than any other direction. You should very rarely light just from below a subject.
- Beware of having too much light on your subject. If your subjects are people and you must use a lot of light, use make-up to compensate for the overly bright lighting. This is not necessarily a bad thing, but you must choose how much effort you want to go through to make a good live event. If your lighting balance is excellent, you will can avoid make-up on your subjects. The key in adjusting the lighting is to look at your subject and make sure they do not look washed out.
- Watch professional events and learn from them. As you watch, notice the lighting instead of watching the program. Notice how they employ the suggestions listed above.

These guidelines might seem to suggest subtle improvements, but good lighting can make an amateur video look professional and a professional video look fabulous. The important thing to remember is that one or two properly placed lights makes a huge difference in the quality of your live event.

## Triangular Lighting

One advanced and very effective approach to good lighting is known as *triangular lighting* (or *three light setup*). Although this may sound complicated, it is actually quite simple. It involves setting up three lights (sometimes using natural light as one of the light sources), in a configuration that achieves a good balance. Here are the main elements of Triangular Lighting:

- **Main Light (Key Light)** This is the strongest of your lights and does most of the work. This light normally comes from one side of the camera (the left, for example) and is a slightly raised. However, using just the main light results in shadowing.
- **Fill Light** This is a soft light placed directly in front of subject. It removes shadows and fills in the image. It is usually direct and usually comes from the same direction as the camera (or just to the side and behind it). It could be, for example, placed on the same level as the head of a person you are lighting. If you use only a fill light, your subject might appear too dark. The only purpose of a fill light is to add to the main

light by filling in shadows. If your key light comes from the left of your camera, your fill light should come from the right, and vice versa.

- **Back Light (Rim Light)** This light is directed from behind the subject and above it. This is the hardest light to explain, but the best way is to describe it as an accent of your subject. If you look at a typical high school yearbook picture, you will notice that the top-left (or top-right) part of each head shot has a highlight of light in it. This light is the *back light*. It is also called a *rim light* because it makes a slight rim around the edge of the head of your subject. This light normally comes from behind and above the subject, and it is focused. Make sure it is not directed at the camera.

Most serious lighting starts with these three basic lights. There are also some great Websites that describe these techniques in great detail.

# Hardware Recommendations

## Introduction

These topics describe hardware requirements and features for use with Wirecast for YouTube.

## Topics

- FireWire
- Universal Serial Bus (USB)
- DV Cameras
- Sleep Mode

## FireWire

FireWire is a hardware protocol that you can use to connect devices (cameras, hard drives, etc.) to your computer. It is important to understand that saturating your FireWire bus (using up all available bandwidth) does lead to problems in Wirecast for YouTube, resulting in choppy audio and video.

### Bandwidth Limits

There is an absolute limit to the bandwidth available to your FireWire devices (400 or 800 megabits per second). If the sum of your devices goes over the limit, you saturate (use up) all the available bandwidth. For example, if you have a camera attached to the FireWire bus and you saturate the bus, the output contains dropped frames which produces choppy video.

If you use a FireWire hub and plug several devices into the hub, you share the maximum bandwidth on the FireWire bus. Adding a hub does not add bandwidth to the bus, just more places to plug in devices. Likewise, you might have several FireWire ports on your computer, but they are often all connected to the same bus. You have to add a separate FireWire card to increase the bandwidth.

### Bandwidth Use

If you have a hard disk connected to a FireWire hub and also have a camera connected to the same hub, it may appear to work but the bus can still become saturated. For example, when new email arrives and your email program accesses a file on your FireWire drive, it can cause FireWire saturation.

Be mindful of this limitation when connecting hardware to your computer. Just because your setup works when you first put it together does not mean it will always work. Experiment with your setup and make sure that you have enough FireWire bandwidth to share all of your devices without experiencing choppy video.

Normally, a camera requires around 25 Mbps (megabits/second) to deliver audio and video to Wirecast for YouTube. However, some cameras may require 100 Mbps or more.

## Universal Serial Bus (USB)

Many cameras use USB instead of FireWire to connect to the computer, and the same bandwidth problems apply to USB connections. Keep as few devices on the bus as possible to prevent saturation, and keep in mind that even if you have multiple USB sockets they are often attached to the same USB bus. Standard USB supports up to 12 Mbps and high-speed USB supports up to 480 Mbps.

## DV Cameras

Generally, you should not attach more than one camera to a FireWire or USB bus, even when using high-speed busses. The main reason for this is that most cameras will conflict with other devices on the same bus. For example, on FireWire bus each camera

is expected to negotiate the channel it will use to transmit. Some cameras do not negotiate at all or ignore the results of the negotiation and a conflict will result. This causes problems in Wirecast for YouTube because the incoming signal is from two cameras.

Also, since some cameras randomly pick a transmission channel, there is always a chance that two will choose the same channel.

## Sleep Mode

When a computer puts a monitor in sleep mode (screen saver mode) it also turns off the video card. Since Wirecast for YouTube uses your video card for streaming, your stream is interrupted when the computer enters sleep mode. Wirecast for YouTube automatically tells the operating system not to put your monitor in sleep mode, but if you force your monitor into sleep mode, your stream will stop.



# Installation

## Introduction

This appendix guides you through installing (or upgrading) and activating Wirecast for YouTube.

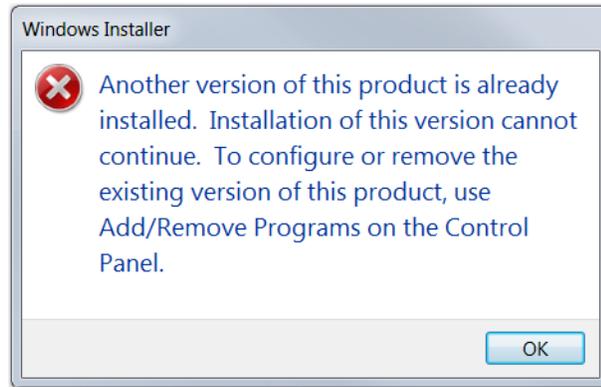
## Topics

- [Installing Wirecast for YouTube](#)
- [Uninstalling Wirecast for YouTube](#)

## Installing Wirecast for YouTube

To install Wirecast for YouTube, follow these steps:

1. Download the installer from Live Events in the Video Manager when you are logged in to your YouTube channel.
2. Run the installer (.exe) program and follow the instructions provided
3. If you have an existing version of Wirecast for YouTube already installed on your computer, the installer instructs you to remove the previous version.



4. Agree to the license terms and follow the instructions displayed by the installer program.

## Uninstalling Wirecast for YouTube

To uninstall Wirecast for YouTube, follow these steps:

1. Run the Wirecast for YouTube installer (.exe) program.
2. The installer will ask if you want to repair or remove the existing version. Select *Remove* to uninstall the existing version of Wirecast for YouTube.

# Acknowledgements

## Acknowledgements

### Overview

Portions of this software may utilize the following copyrighted material, the use of which is hereby acknowledged:

- Darwin Streaming Server
- FFmpeg Project

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires

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This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

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Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not.

Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.) Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6.

Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

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c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

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