



## TABLE OF CONTENTS

Setting Up the Computer.....	page 1
Adding Cameras.....	page 2
Adjusting Aspect Ratios.....	page 2
Muting Camera Audio.....	page 3
Activating Audio .....	page 3
Setting Up the Scoreboard .....	page 4
Adding Scoreboard Filters .....	page 7
Managing Lower Third Graphics .....	page 8
Cutting Cameras .....	page 9
Managing Camera Shots .....	page 9
Creating/Uploading the Archive .....	page 10
Helpful Hints.....	page 10
Webcast Manager Guide .....	page 11

# Streaming Video Software Manual

*Ensure all equipment is set-up properly before beginning any PackCast Production.*

## SETTING UP THE COMPUTER

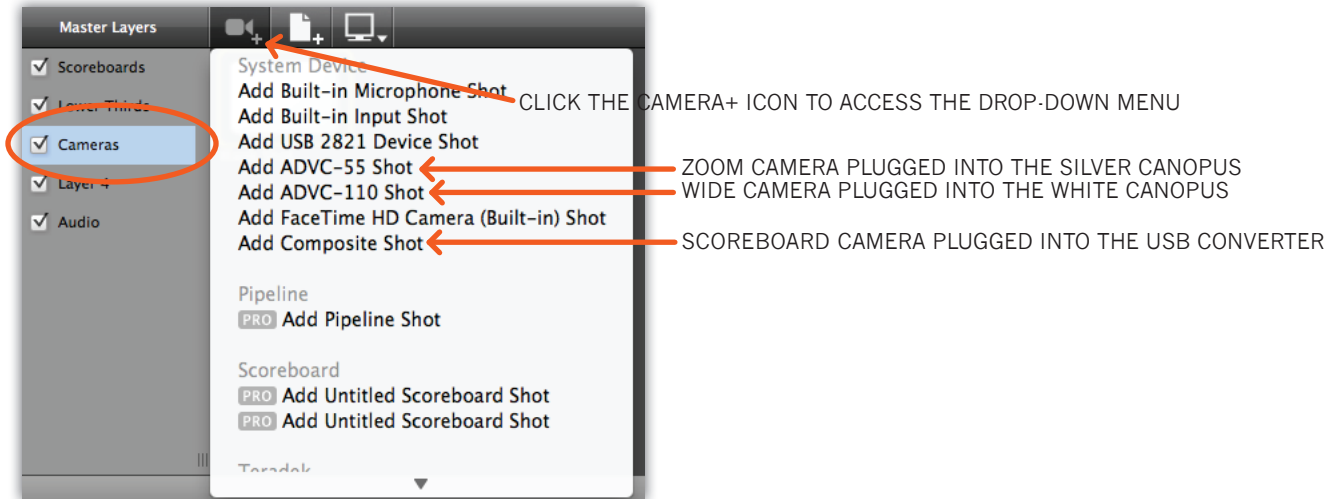
- Turn the MacBook Pro on and test your internet connection by launching Safari.
- Go to <http://www.PackNetwork.com/packcast> to download pertinent files (this is set as the home page).
- Download the master Wirecast file.
- If playing a conference opponent, in the Graphics folder on the desktop delete the away.png file. Select the graphic for the league opponent and press Command+D to duplicate the graphic. Rename that graphic away.png
- *NOTE: The scoreboard graphics are in the graphics folder. If you want to alter/replace those graphics the file names are: topscoreboard.png, topscoreboard-cut.png and bigscoreboard.png. You can edit the Graphics.psd file in the Graphics folder. Save the file as a PNG.*
- Double-click the Wirecast production file (.wcst) that you just downloaded  
*Remember that you must drag graphics into the graphics folder BEFORE launching the production file*

After the computer has been properly set up, follow these steps (which are broken down further throughout this manual) to produce a successful event:

- Add cameras
- Adjust aspect ratios
- Mute the audio on all cameras
- Activate the broadcast audio
- Set up the scoreboard
- Add scoreboard filters (optional)

## ADDING CAMERAS

- Go to the Camera Layer and add all three live video sources to ensure that all cameras are functioning properly.  
To add the cameras:
  - Select the Cameras Layer from the Master Layers area
  - Click the Camera+ icon (see below) next to the words “Master Layer”
  - Select > Add ADVC-55 Shot
  - Click the Camera+ icon, Select > Add ADVC-55 Shot
  - Click the Camera+ icon, Select > Add Composite Shot

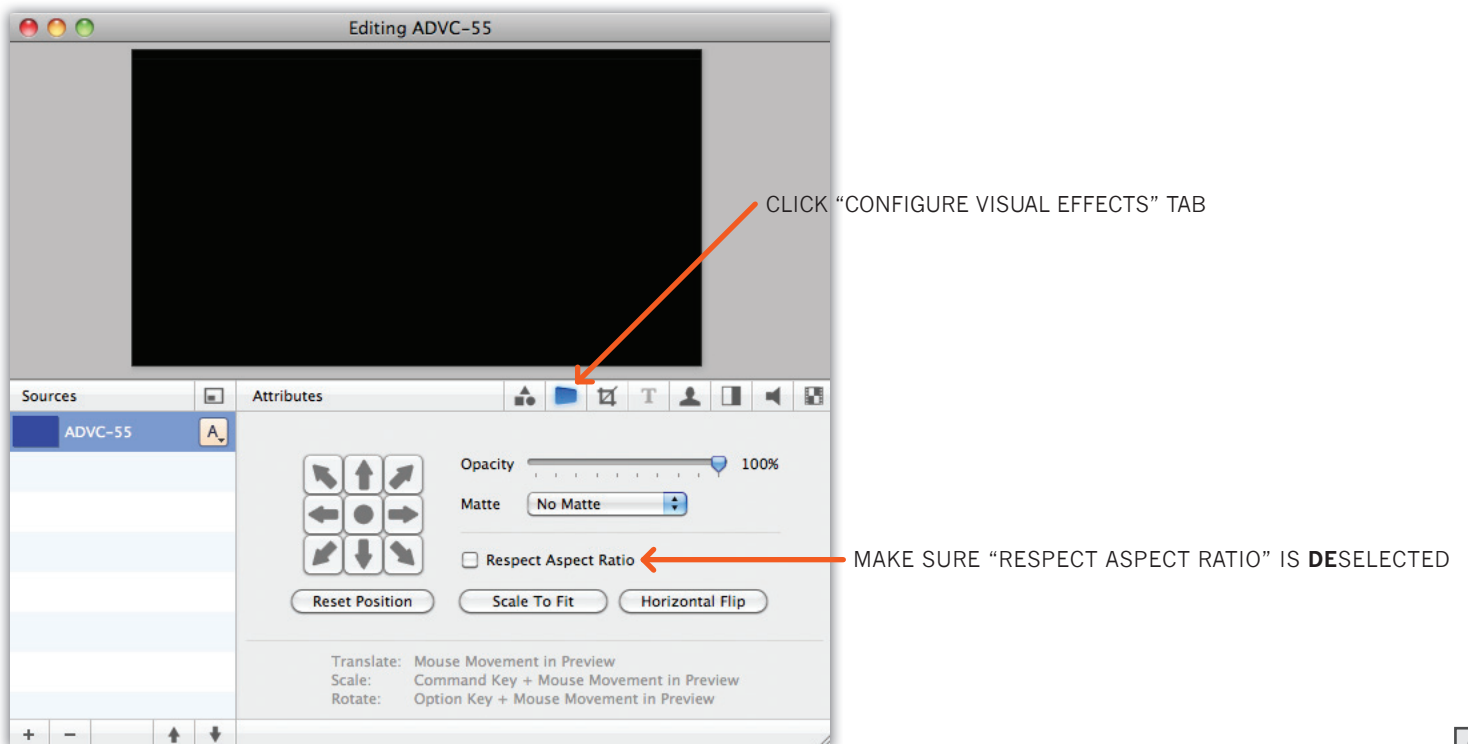


## ADJUSTING ASPECT RATIOS

- If black bars are present on the top and bottom or sides of any of the cameras in the Cameras Layer, you need to adjust their aspect ratios.

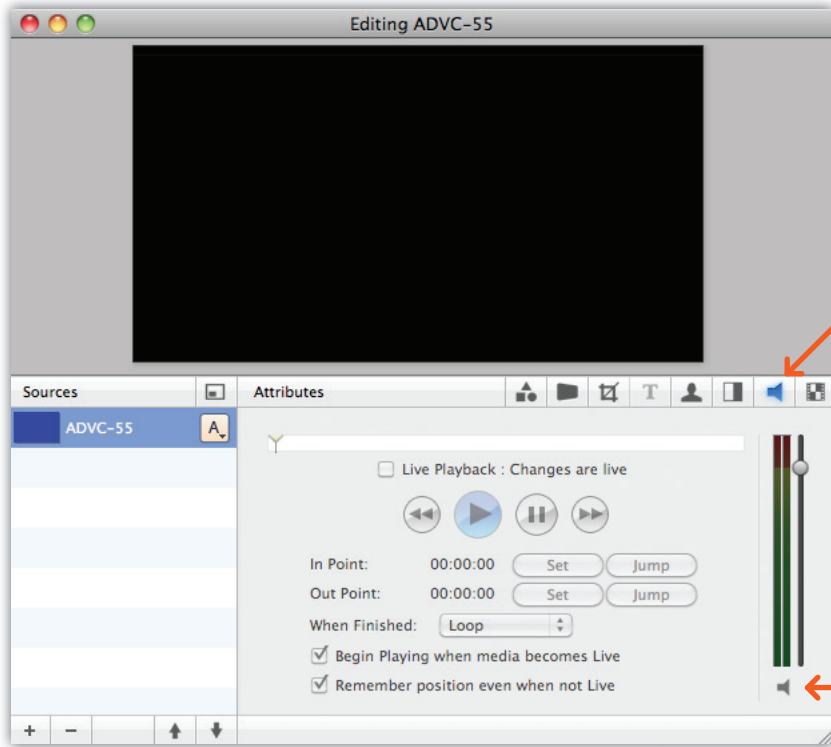
To adjust aspect ratios:

- Double-click the shot of the camera on the Cameras Layer that you need to adjust
- Click the “Configure Visual Effects” tab (see below)
- Make sure the “Respect Aspect Ratio” box is deselected
- Close the editing window
- Repeat the above steps for all cameras that have black bars present



## MUTING CAMERA AUDIO

- In order to ensure audio from a camera is not being broadcasted, each camera in the Camera Layer needs to be muted  
To mute a camera:
  - Double-click the shot of the camera on the Cameras Layer that you need to mute
  - Click the “Configure Media Settings” tab (see below)
  - Make sure the Speaker icon in the lower right corner is muted
  - Close the editing window
  - Repeat the above steps for all cameras

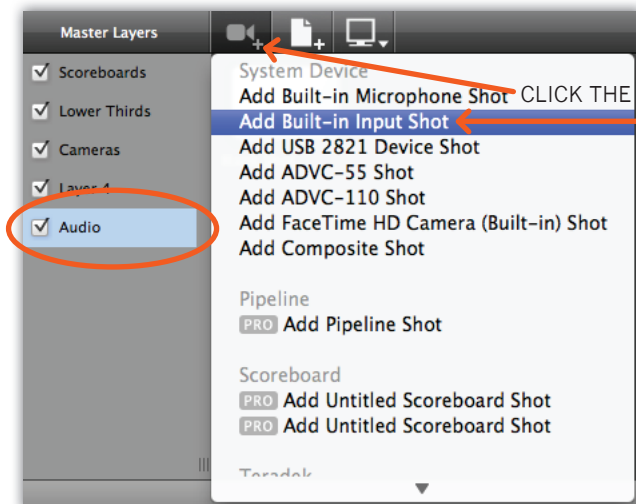


CLICK “CONFIGURE MEDIA SETTINGS” TAB

MAKE SURE THE SPEAKER IS MUTED

## ACTIVATING AUDIO

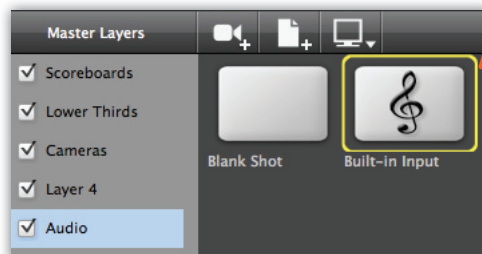
- After setting up the audio equipment according to the diagram, the audio needs to be activated in the broadcast  
To activate the audio:
  - Select the Audio Layer from the Master Layers area
  - Click the Camera+ icon (see below) next to the words “Master Layer”
  - Select > Add Built-In Input Shot
  - Click the “Built-In Input” Icon that has been added to the Audio Layer
  - Click “Go” to make the changes live



CLICK THE CAMERA+ ICON TO ACCESS THE DROP-DOWN MENU

SELECT “ADD BUILT-IN INPUT SHOT”

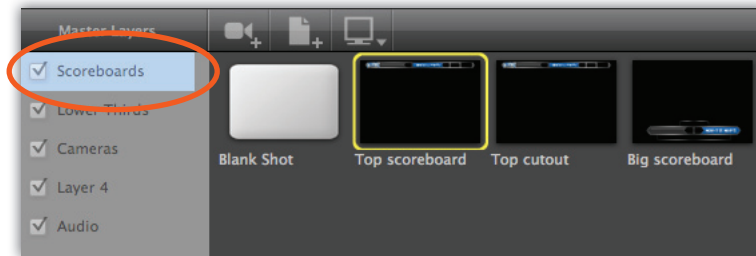
CLICK THE “BUILT-IN INPUT” ICON THAT HAS BEEN ADDED TO THE AUDIO LAYER



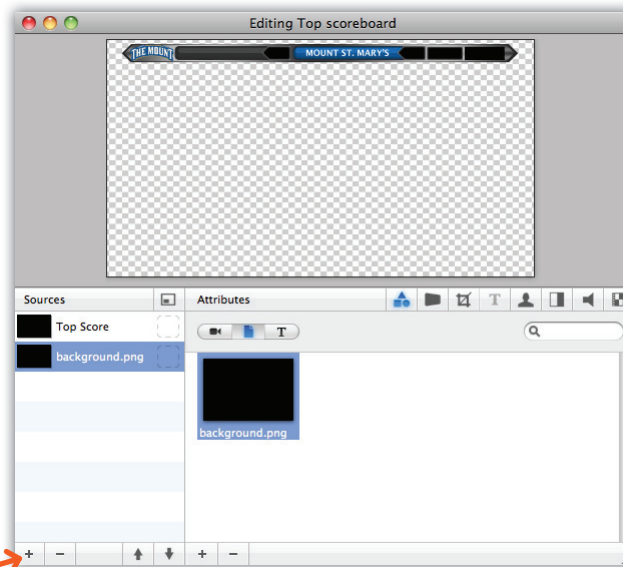
## SETTING UP THE SCOREBOARD

- After setting up the scoreboard camera according to the diagram, the game clock needs to be added to the production  
To set up the scoreboard:

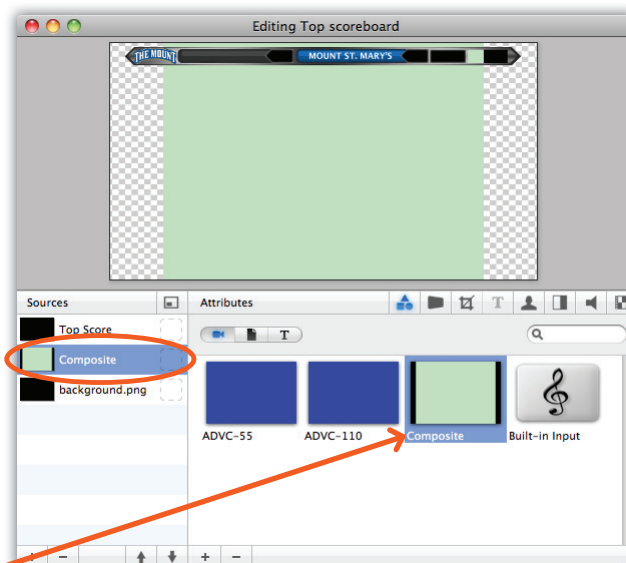
1) Select the Scoreboards Layer from the Master Layers area



- 2) Double-click the appropriate scoreboard shot for the event that you are producing
- the “Top scoreboard” is for sports where you enter in the game score manually, but need a game clock
    - typically football, hockey, soccer, lacrosse, field hockey, baseball, softball, etc.
  - the “Top cutout” is for sports where you will capture the game score from the scoreboard camera
    - typically basketball and volleyball
  - *NOTE: the “big scoreboard” is for all sports to use during pre-game, halftime, post-game, etc.*



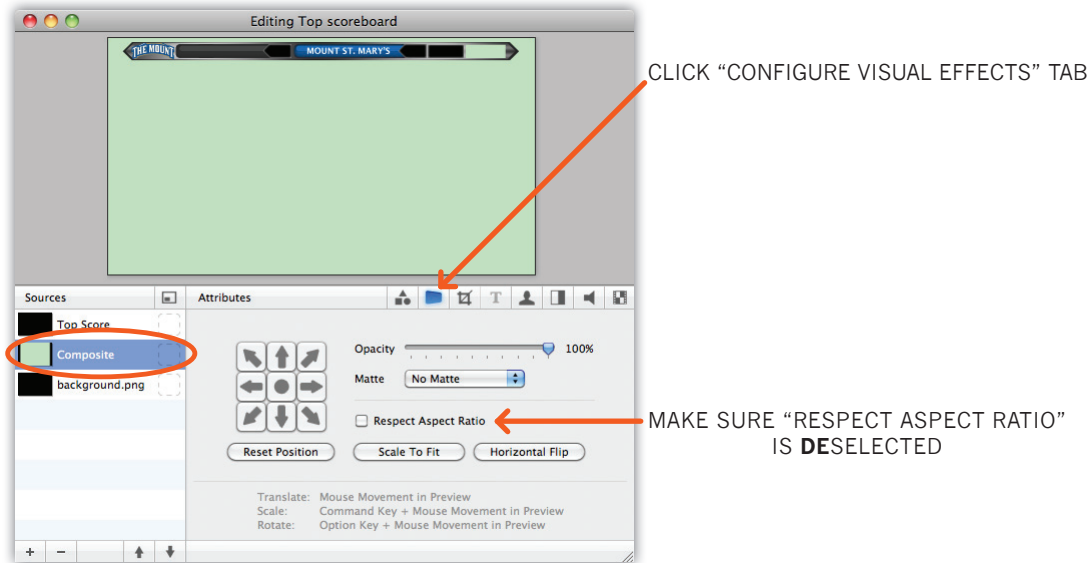
3) Click the “+” button in the lower left of the Editing window to add a source



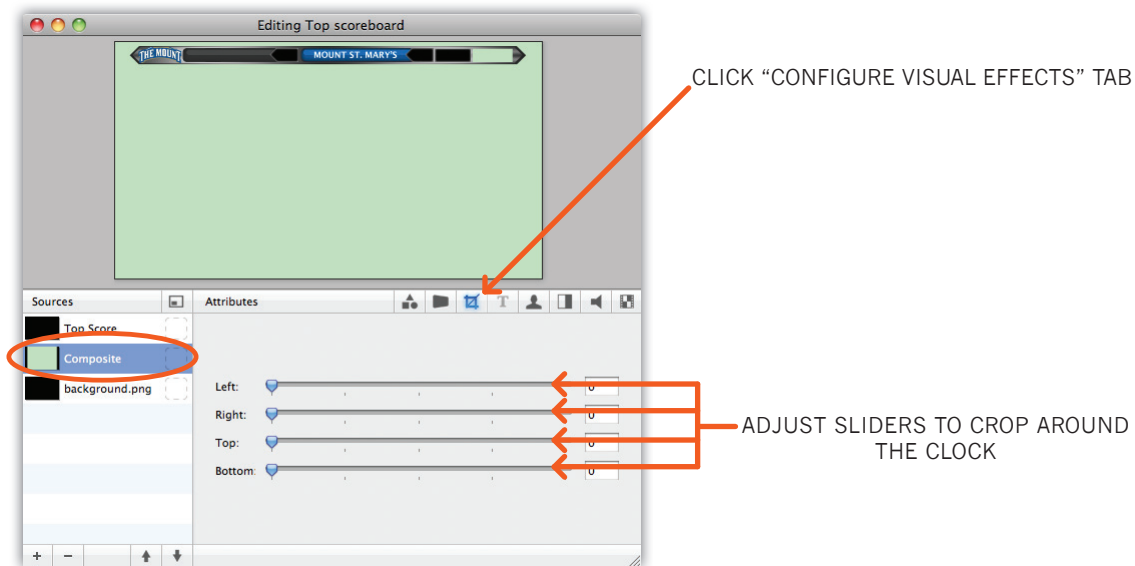
4) Select the “Composite” camera, which is the scoreboard camera, connected to the USB device

## SETTING UP THE SCOREBOARD (CONTINUED)

- 6) Click the “Configure Visual Effects” tab (see below)
- Make sure the “Respect Aspect Ratio” box is deselected



- 7) Click the “Configure Cropping” tab (see below)
- Using the sliders, adjust the cropping attributes to crop around the game clock



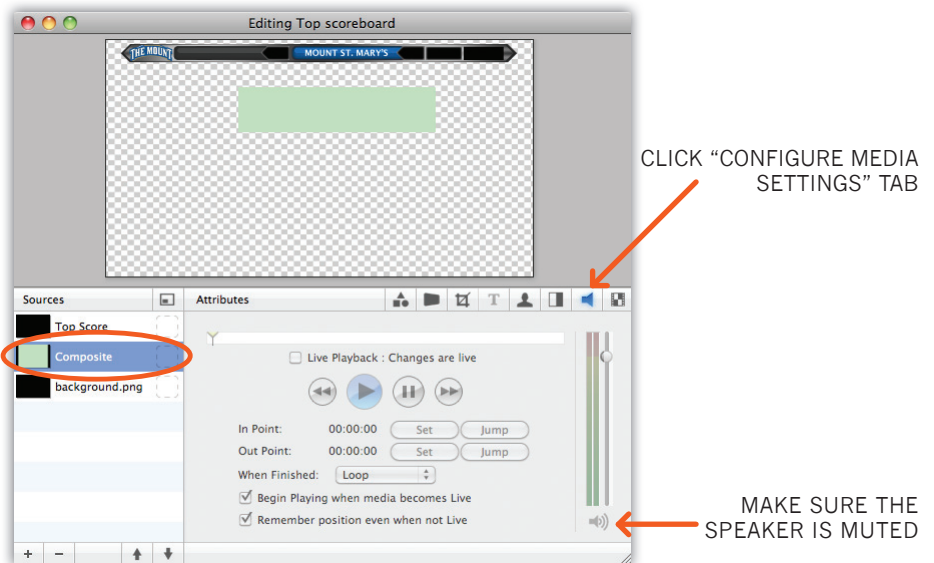
8) After cropping around the game clock, resize the shot to fit in the scoreboard bar by holding down the Command Key and clicking and dragging the video in the Editing window

9) Once the clock is resized properly, click and drag the game clock in the Editing window to fill the space in the top right of the scoreboard bar

10) Click the “Configure Media Settings” tab (see right)

11) Make sure the Speaker icon in the lower right corner is muted

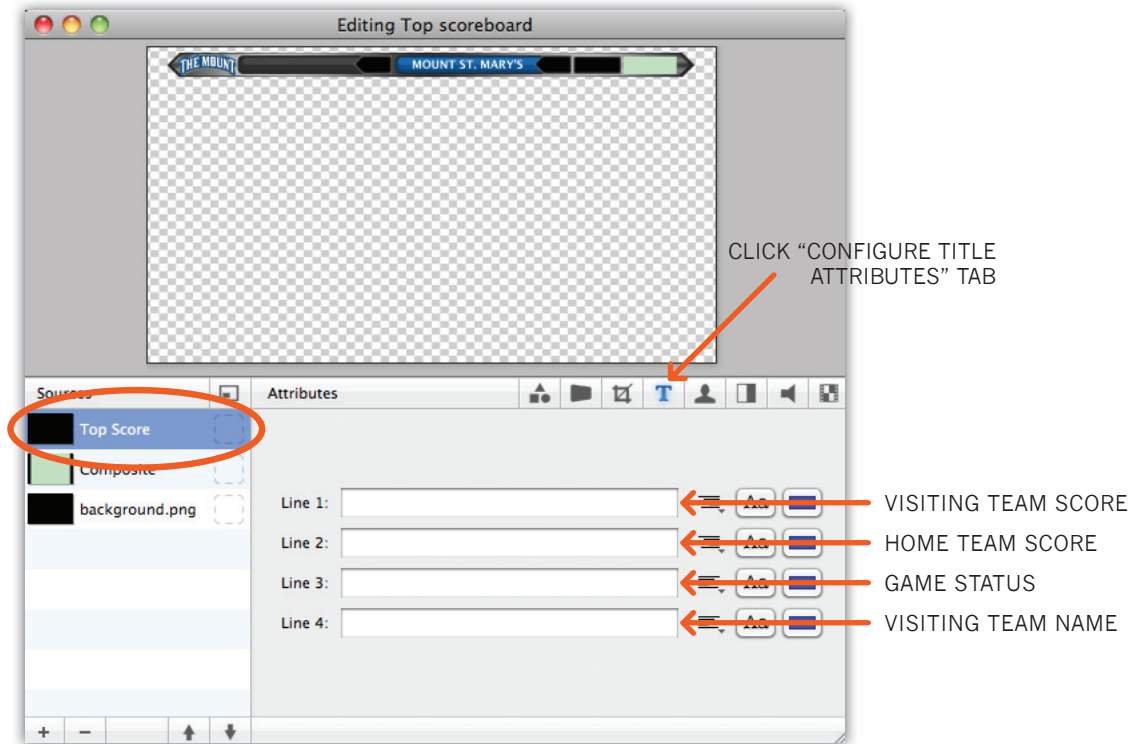
• *NOTE: If no audio is connected to the USB device, the speaker toggle won't be active to mute the sound.*



## SETTING UP THE SCOREBOARD (CONTINUED)

12) To edit the text fields on the scoreboard:

- Select the “Top Score” from the list of Sources (see below)
- Click the “Configure Title Attributes” tab
- The different lines edit different fields in the scoreboard



• If the “Top cutout” scoreboard graphic is being used, the visiting team and home team scores both need to be added to the scoreboard using the same method used to add the game clock (REPEAT STEPS 3-11)

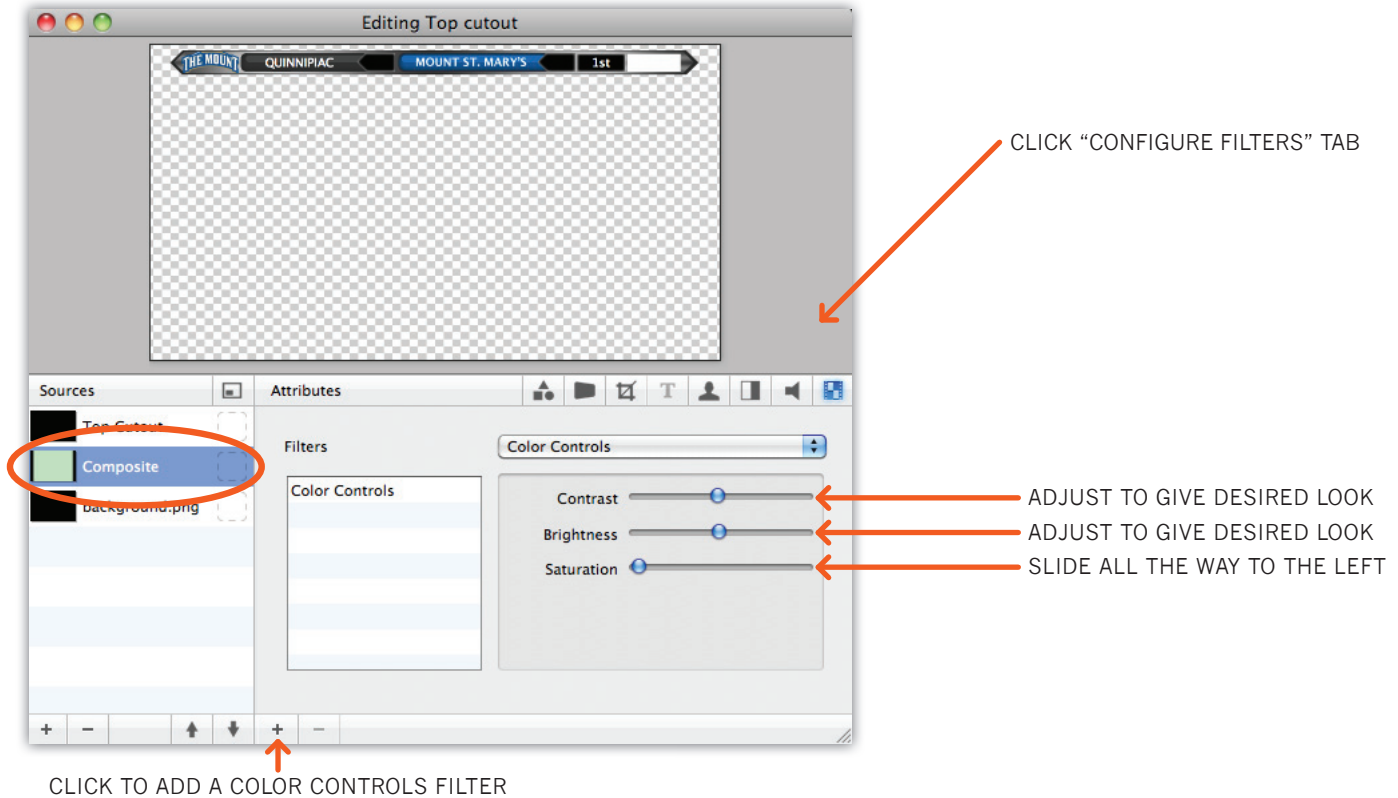
- Close the editing window

## ADDING SCOREBOARD FILTERS (OPTIONAL)

- A filter can be added to the Composite video sources in the “Top scoreboard” or “Top cutout” graphics to give a more desirable look.

To add a filter:

- In the “Scoreboards” layer, double-click the scoreboard you wish to edit
- Select the “Composite” video from the list of Sources (see below)
- Click the “Configure Filters” tab
- Click the “+” button to add a Color Control filter
- Move the Saturation slider all the way to the left
- Adjust the Contrast and Brightness sliders to give the Composite camera a crisp black & white look
- Add filters to other Composite sources in the scoreboard editing window
- Close the editing window

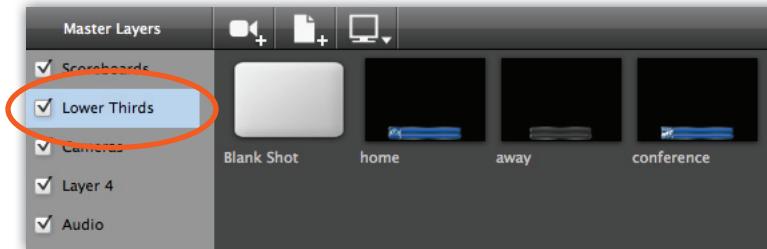


## MANAGING LOWER THIRD GRAPHICS

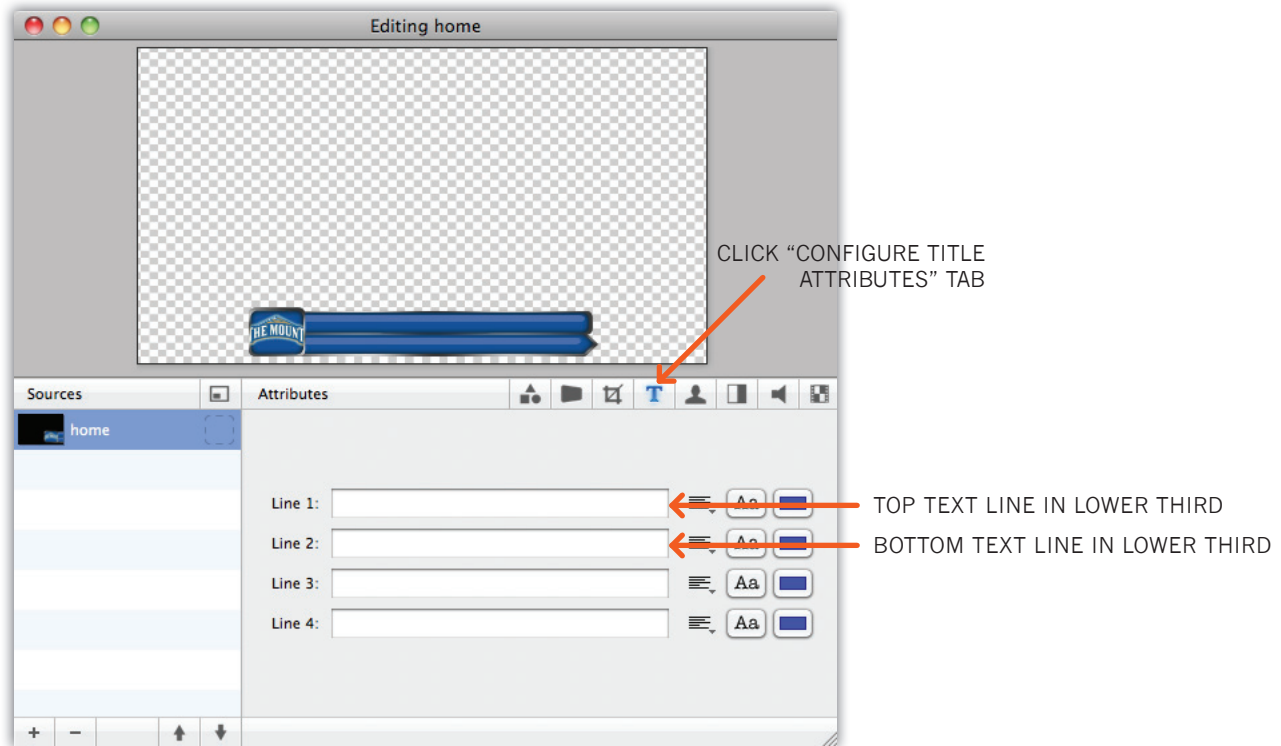
The template wirecast file available for download at [www.PackNetwork.com/packcast](http://www.PackNetwork.com/packcast) is set with Home, Away and Conference lower third graphics for use throughout the broadcast. These graphics have live text fields that can be edited, duplicated and renamed throughout the event to allow for a more complex and organized broadcast.

Editing a lower third graphic:

- Select the Lower Thirds layer from the Master Layers area (see below)
- Double-click the graphic (home, away or conference) you wish to edit



- Click the “Configure Title Attributes” tab (see below)
- The first two Lines edit different fields in the lower third
- Close the editing window



Duplicating a lower third graphic:

- Select the Lower Thirds layer from the Master Layers area
- Press “Command+D”

Renaming a lower third graphic:

- Select the Lower Thirds layer from the Master Layers area
- Press “Command+R”
- Rename the shot
- Click “OK”



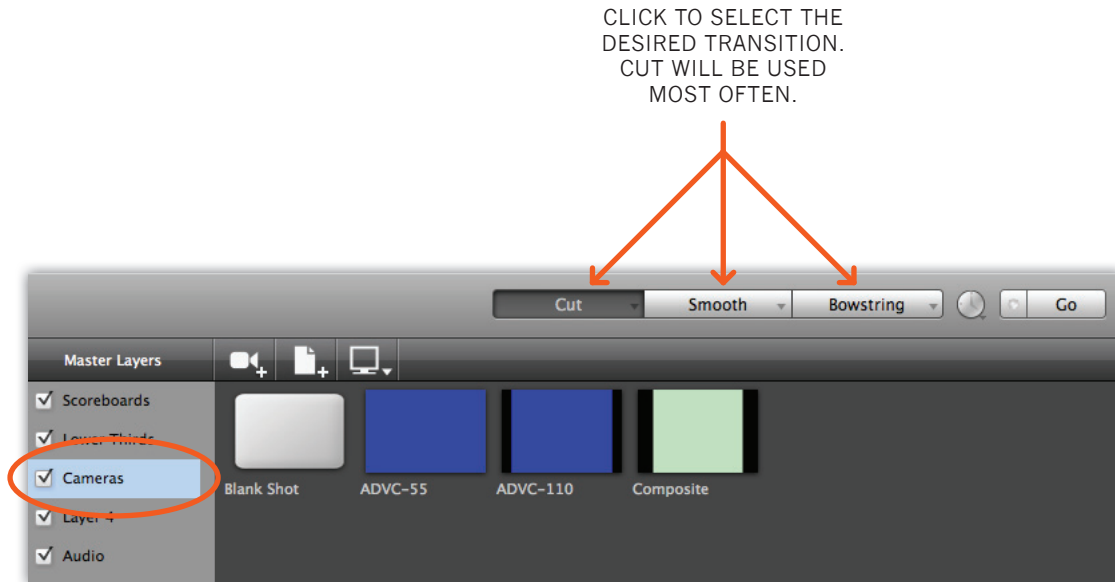
## CUTTING CAMERAS

The simplest function in Wirecast is perhaps the most important to the production: cutting cameras. The process is simple, but there are a few good guidelines to always follow:

- 1) During live action ALWAYS use the Cut transition.
- 2) The Smooth transition can be used, but typically only during the anthem or when a more artsy look is desired.
- 3) Less is more. Just because there may be two or three camera angles at the producers disposal doesn't mean that they need to be used at all or even often. Incorrectly timed cuts often leave the viewer disoriented and upset. If the camera angle you are cutting to isn't a worthy shot or the timing isn't right, then just leave the action on the "wide" camera.

Cutting between cameras:

- Select the Cameras layer from the Master Layers area (see below)
- Select the camera angle you wish to cut to
- This camera angle will appear in the preview window on the left
- When you are ready to make that angle live, simply click "Go" or Command+G



## MANAGING CAMERA SHOTS

As is the case when managing lower third graphics, camera shots can also be edited, duplicated and renamed throughout the broadcast.

Duplicating a camera shot:

- Select the Cameras layer from the Master Layers area
- Press "Command+D"

Renaming a camera shot:

- Select the Cameras layer from the Master Layers area
- Press "Command+R"
- Rename the shot
- Click "OK"

## WEBCAST MANAGER GUIDE

Webcast Manager is the Content Management System used to manage your dot TV website.

Use the steps below at the following times:

- Before the game to start the live webcast
- After the game to indicate the webcast is final
- After the archive is posted to make the archive available

Please note: The login page is located at <http://www.yoursite.tv/webcastmanager>

Step 1: Log in

Step 2: Select "Edit Webcasts"

Step 3: Select the team event you are producing and click "Edit Webcasts"

Step 4: Select the radio button corresponding with the event you are producing and click "Edit this Webcast"

Edit	Delete	Sport	ID	Day of Week	Month	Day	Year
<input type="radio"/>	<input type="checkbox"/>	Basketball-M	1	Sunday	11	16	2008
<input type="radio"/>	<input type="checkbox"/>	Basketball-M	2	Wednesday	11	19	2008
<input type="radio"/>	<input type="checkbox"/>	Basketball-M	3	Saturday	12	6	2008
<input type="radio"/>	<input type="checkbox"/>	Basketball-M	4	Saturday	12	27	2008
<input type="radio"/>	<input type="checkbox"/>	Basketball-M	5	Sunday	1	4	2009
<input type="radio"/>	<input type="checkbox"/>	Basketball-M	6	Wednesday	1	7	2009
<input type="radio"/>	<input type="checkbox"/>	Basketball-M	7	Wednesday	1	14	2009
<input type="radio"/>	<input type="checkbox"/>	Basketball-M	8	Thursday	1	22	2009
<input type="radio"/>	<input type="checkbox"/>	Basketball-M	9	Saturday	1	31	2009
<input type="radio"/>	<input type="checkbox"/>	Basketball-M	10	Saturday	2	7	2009
<input type="radio"/>	<input type="checkbox"/>	Basketball-M	11	Thursday	2	19	2009
<input type="radio"/>	<input type="checkbox"/>	Basketball-M	12	Thursday	2	26	2009
<input type="radio"/>	<input type="checkbox"/>	Basketball-M	13	Sunday	3	1	2009

Step 5: Change the state of the webcast you are producing (be sure to follow instructions). Click "Change this Webcast"

Step 6: Click the three Standard Update Steps in succession to ensure the website updates properly. Pause between each step to allow the system to run the scripts

Step 7: Most importantly, be sure to proceed to your dot TV home page and check the links to ensure updates went through successfully