# Radiance Tech Tip 3 Movable anamorphic lens

#### Introduction

The Radiance can be used for any system that has a movable anamorphic lens. In this system the lens is slid in front of the projector when viewing a 2.35 aspect ratio movie. There are two types of anamorphic lenses, a HE (horizontal expansion) lens and a VC (vertical compression) lens. With either type of lens, a 16.9 projector will project a 2.35 image on the screen, when the lens is in front of the projector.

### **Horizontal Expansion Lens**

A HE lens horizontally expands a 16:9 image to create a 2.35 aspect ratio image on the screen. A system that uses a HE lens is commonly referred to as a "constant height system".

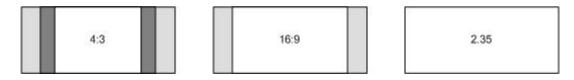


Figure 1, Horizontal Expansion anamorphic lens

- 4:3 The lens is moved out of the image path. The active 16:9 image fills the height of the 2.35 screen and narrow black bars are added on both sides by the Radiance.
- 16:9 The lens is moved out of the image path. The active 16:9 image fills the height of the 2.35 screen
- 2.35 The lens is moved into the image path. The image is horizontally expanded to fill the 2.35 screen.

## **Vertical Compression Lens**

A VC lens vertically compresses a 16:9 image to create a 2.35 aspect ratio image on the screen.



Figure 2, Vertical Compression anamorphic lens

- 4:3 The lens is moved out of the image path. The active 16:9 image fills the 16:9 screen and narrow black bars are added on both sides by the Radiance.
- 16:9 The lens is moved out of the image path. The active 16:9 image fills the 16:9 screen
- 2.35 The lens is moved into the image path. The image is vertically compressed to a 2.35 aspect ratio.

#### The procedure

This is the preferred procedure to configure the Radiance for a system that includes a movable anamorphic lens.

- 1. Set the output aspect ratio by pressing "MWNU, Output, Styles, [Style], Aspect, OK, Output aspect per input aspect, OK".
- 2. Change the 2.35 input aspect to use the "2.35" output aspect.

Input aspect	->	Output aspect
4:3	uses	1.78
Lbox	uses	1.78
16:9	uses	1.78
1.85	uses	1.78
2.35	uses	2.35

- 3. When you are finished, save your new settings by pressing "MENU, Save, Save, OK, OK".
- 4. Set the projector to its default 16:9 mode.
- 5. Set all the video sources to widescreen 16:9 output.
- 6. Press the appropriate input aspect ratio button on the Lumagen remote that matches the aspect of the video input. To horizontally stretch a 16:9 image to fill the 2.35 screen, press "16:9" and then press "NLS".