

## ABOUT GEOMETRIC DISTORTION AND CHROMATIC ADJUSTMENTS.

Anamorphic horizontal expansion lenses create a slight “pincushion” shaped curvature especially at the edges of the image which **decreases as the projection distance is increased for a given screen size**. See the Image Geometry estimator in the Lens Selector at [www.panamorph.com](http://www.panamorph.com) for the approximate distortion to expect. Masking the edges of the image by the screen border makes this distortion much less noticeable especially for dramatic content. These lenses may also reveal a slight splitting of white test pattern lines into red, green and blue components most visible at the far left and right sides. While this splitting may not be noticeable at normal viewing distances, any misconvergence can be reduced with the projector’s Panel Alignment feature.

**CLEANING.** Small amounts of dust and wipe marks are very noticeable on lens surfaces with a high brightness projection beam but typically will not impact the image as much as damage from excessive cleaning in pursuit of a "perfect" optical surface. Occasionally blowing off the lens surfaces with clean air is the best way to keep long term performance. If there is any excessive residue or build-up then it is recommended that you clean the optics with professional lens cleaning supplies such as from a camera store while the lens is in front of the lit beam of the projector. This will allow you to quickly see if the cleaning process is causing any damage. Note that the lens can be disassembled for cleaning by removing the front two screws and then carefully removing the components. However, any consequences of such disassembly is not covered by warranty or support.

**LIMITED WARRANTY.** Panamorph, Inc. warrants this product against any change in performance or functionality for a period of twenty-four months from our ship date. During this period, a unit may be repaired or replaced, at the discretion of Panamorph, Inc., by returning it in its original packaging with a copy of your receipt. This warranty does not cover damage resultant from lack of prudent care, accident or misuse (including use with other products in ways not intended); any cosmetic damage not reported within 15 days of purchase; or any performance change caused by the environment in which it is used. All damages are limited to the cost of the product. This warranty is not transferable.

See [www.panamorph.com](http://www.panamorph.com) for projector viewing mode settings with illustrations for various content when using either a 2.4:1 or 2.25:1 screen.

**Panamorph**<sup>®</sup>  
We bring cinema home

# STE-S3

Direct Attach Cinema Format Conversion Lens

## INSTALLATION GUIDE

(Phillips #2 screwdriver required)

For use only with the **Sony VPL-XW5000ES** projector  
in ceiling-mounted orientation

**Specifications:** 6.3" (160mm) diam x 5.75" (147mm) depth. 2 lbs (0.9 kg). Allow 5" (127mm) in front of projector for installation. See back page for warranty.

## IMPORTANT THEATER GUIDANCE

1. Projection screen should have a **minimum 2.5" screen border** and in the **2.25:1** aspect ratio for multimedia content. A **2.4:1** screen may also be used for primarily 2.4:1 content with optical zoom adjustments or cropping for 16:9 content.
2. Projector lens center should be **between 4" below and 12" above the top edge of the screen surface** (about +3 to +5 inches is ideal) and **horizontally centered** on the screen +/- 3 inches.

See the [www.panamorph.com](http://www.panamorph.com) for compatible throw distances, screen sizes and projector viewing mode settings.

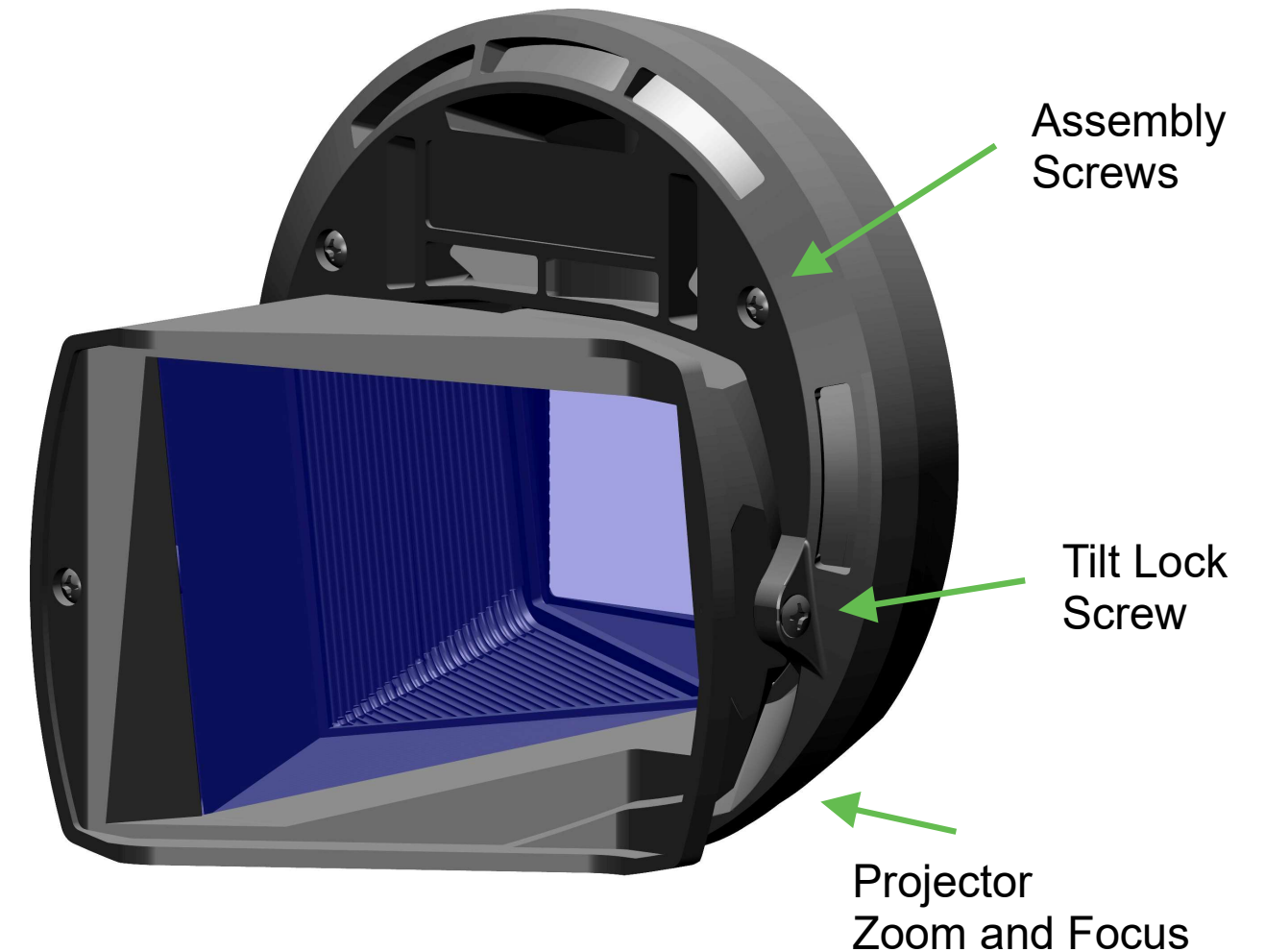
# STE-S3 Installation Steps

- 1 INSTALL THE LENS RETAINER.** Remove the two front assembly screws and remove the retainer. Adjust the projector lens shift to vertically and horizontally center the projector lens. Squeeze the retainer and work it into the projector opening to nest with the inside rim of the projector housing with **prongs toward the ceiling** and the **top ridge aligned with the projector top-front rib**. Tighten the three retainer screws just enough to prevent rotation.



- 2 PREPARE THE PROJECTOR.** Adjust the projector roll, tilt and/or yaw so the projector test pattern lines are square to the screen edges. Adjust the zoom and vertical lens shift so the test pattern is centered and fits the screen height. Now **show a 2.4:1 movie** instead of the test pattern. Set the Sony anamorphic lens menu setting to **1.32x** for a 2.25:1 screen or **1.24x** for a 2.4:1 screen. Set the Sony Aspect button on the remote to **V-Stretch**.

- 3 INSTALL THE STE LENS.** After removing the rear STE lens cover, install the STE lens/mount assembly over the retainer prongs. Insert and tighten the two assembly screws to secure (**do not over tighten**). Remove the front protective film.



- 4 ADJUSTMENTS.** Tilt the STE lens in its mount to make any residual image top curvature the same but opposite that at the bottom. Make final adjustments to projector zoom and vertical lens shift to produce the best fit of the image to the screen. Lock the STE lens tilt by tightening the single Phillips tilt lock screw (do not over tighten). As desired you may want to adjust the panel alignment in the projector (see Sony instruction manual).

- 5 DECIDE HOW TO WATCH OTHER CONTENT.** Use the Sony "Aspect" button to select **Squeeze** (anamorphic to 1.24x) to watch 16:9 content (including menus) in the screen center, or **Normal** to stretch 16:9 content to fill the entire screen width. On a 2.4:1 screen zoom down the image to avoid cropping the top and bottom. Use V-Stretch with 1.24x for 2.0:1-2.2:1 content.