

Keystone Adjustment for SMART Board™ 600i Interactive Whiteboard Systems



Applies to: SMART Board™ 600i interactive whiteboard systems

Symptoms

The projected image appears wider at the top or the bottom of the interactive whiteboard's screen.

Cause

When you use standard projectors, keystone errors occur when the projected image isn't perpendicular to the screen. The image appears wider at the bottom when the distance from the projector lens to the bottom of the screen is greater than the distance to the top of the screen. The image appears wider at the top when the distance from the projector lens to the top of the screen is greater than the distance to the bottom of the screen.



*Bottom of Interactive Whiteboard
is Too Far from the Projector Lens*



*Top of Interactive Whiteboard
is Too Far from the Projector Lens*

Keystone errors can occur when you mount the Unifi™ 35 short-throw, high-offset projector and the interactive whiteboard used in SMART Board 600i interactive whiteboard systems on an uneven surface, or on a wall that has obstructions such as a whiteboard or aluminum rails.

Solutions

When possible, position the interactive whiteboard so that it aligns with the projected image. This eliminates keystone errors. If your installation prevents you from moving the interactive whiteboard, you may be able to adjust the Unifi 35 projector boom alignment to correct image distortion.

NOTE: Do not adjust the projector boom alignment unless necessary.

- If you move the projector to a new location you must return its alignment to factory settings.
- If your projector requires service, you must adjust the replacement projector.

Solution 1: Align the Interactive Whiteboard

WARNING

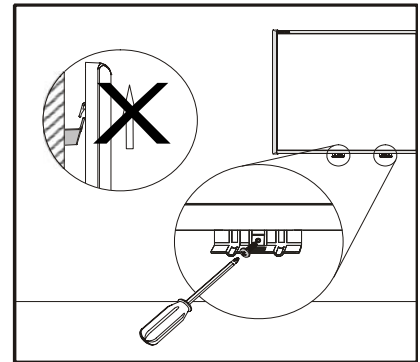


It takes two people to safely lift the interactive whiteboard on or off its wall mount bracket.

NOTE: Do not attempt the following procedures unless you are familiar with the installation procedures described in the [SMART Board 600i Interactive Whiteboard System Installation and User's Guide](#).

To prepare to align the interactive whiteboard

1. If your 600i system is fully installed, remove the pen tray from the interactive whiteboard.
2. Remove the screws from the pen tray brackets, and put them aside.
The bottom of the interactive whiteboard is free from the wall. Don't lift the interactive whiteboard off the wall mount bracket.
3. Connect the projector's power cable to a wall outlet, and then turn on the projector using the remote control.



To adjust the projected image if it is wider at the bottom

1. While holding the interactive whiteboard against the wall, measure the space between the bottom frame and the wall.
2. Gently pull the bottom of the interactive whiteboard away from the wall until the sides of the image are parallel, and then measure how far you moved the bottom of the interactive whiteboard.

NOTE: You may have to adjust the projector boom length and focus slightly during this step.

3. Make two spacers of the correct thickness to put behind the bottom corners of the interactive whiteboard.
4. Lift the interactive whiteboard from the wall mount bracket, and then place it face down on a flat surface.
5. Tape one of the spacers to the back of the SC9 controller module, and the other to the round pad on the back of the left frame.
6. Return the interactive whiteboard to the wall mount bracket.
7. Replace the two pen tray bracket screws, and then replace the pen tray.

To adjust the projected image if it is wider at the top

1. While holding the interactive whiteboard against the wall, measure the space between the top frame and the wall.
2. Lift the interactive whiteboard off its mounting bracket, and then hold the interactive whiteboard against the wall at the same height as when it was mounted.
3. Pull the top of the interactive whiteboard away from the wall until the sides of the image are parallel, and then measure how far you moved the top of the interactive whiteboard.

NOTE: You may have to adjust the projector boom length and focus slightly during this step.

4. Put the interactive whiteboard aside.
5. Make a spacer of the correct thickness to fit behind the wall mount bracket.
6. Remove the wall mount bracket screws using a Phillips® No. 2 screwdriver, and then remove the bracket.
7. Place the spacer behind the wall mount bracket, and then replace the bracket.
8. Return the interactive whiteboard to the wall mount bracket.
9. Replace the two pen tray bracket screws, and then replace the pen tray.

Solution 2: Align the Unifi 35 Projector Boom

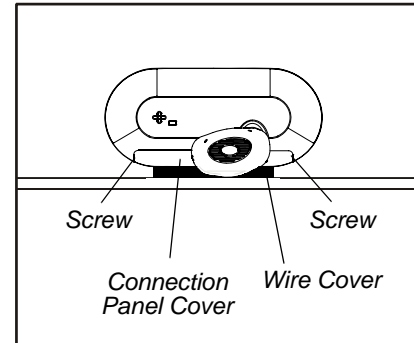
CAUTION



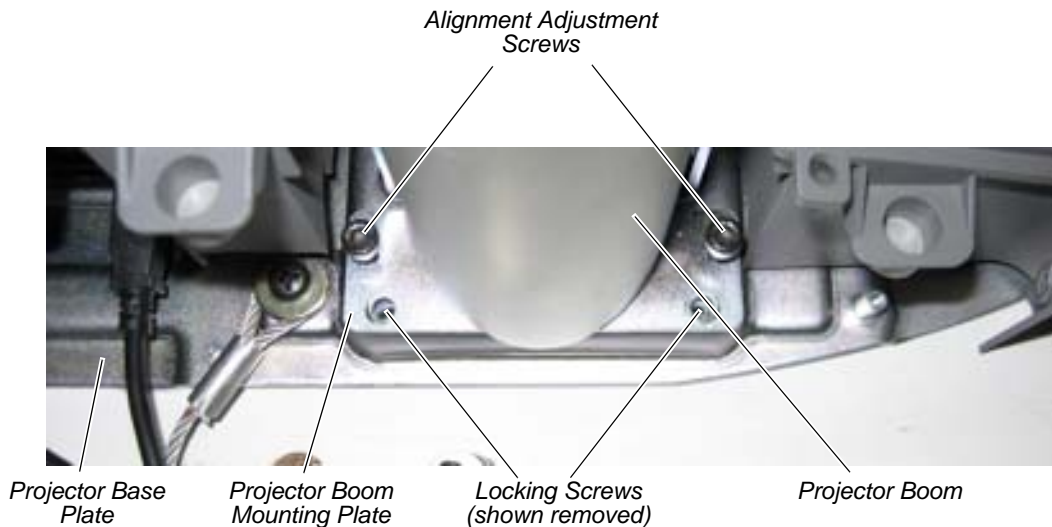
Read the following procedure carefully before adjusting the boom alignment. Improper adjustment can damage the projector severely, potentially voiding the projector's warranty.

To adjust the Unifi 35 projector boom alignment

1. Remove the screws from the connection panel cover using a Phillips No. 1 screwdriver, and then remove the connection panel cover and the wire cover from the base of the projector.



2. Completely remove the two locking screws from the projector boom mounting plate and set them aside.



CAUTION



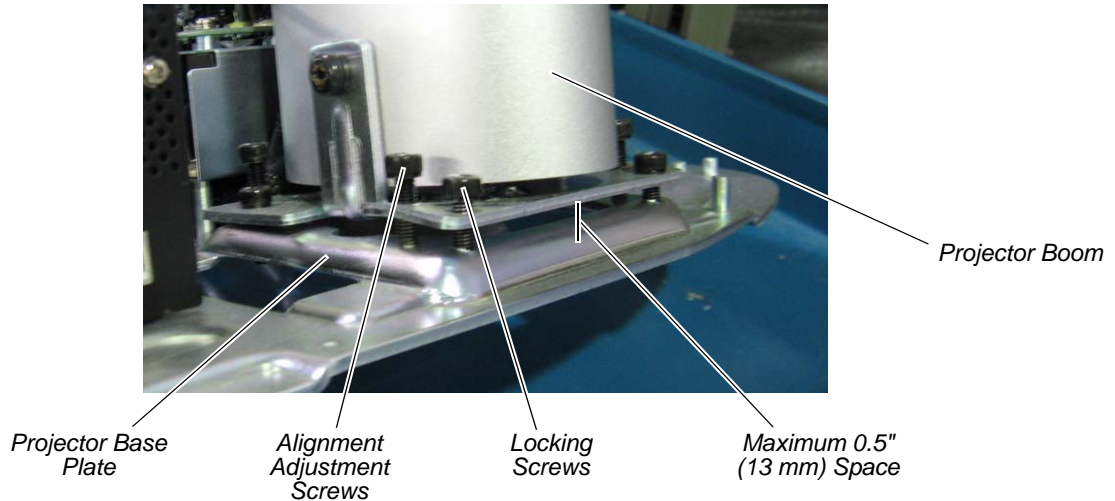
You can damage the projector boom mounting plate or the projector base plate if you do not remove the locking screws before adjusting the boom alignment adjustment screws.

3. Adjust both adjustment screws at the same time, and don't turn the screws more than a quarter turn (90°) at a time.
 - If the image is wider at the bottom, turn the adjustment screws counter-clockwise to lower the boom.
 - If the image is wider at the top, turn the adjustment screws clockwise to raise the boom.

NOTE: You may have to adjust the projector boom length and focus slightly during this step.

4. After adjusting the screws, check the projected image for keystone error.
5. Repeat steps 3 and 4 until the keystone error is eliminated.

NOTE: When you raise the boom, do not allow more than 0.5" (13 mm) space between the bottom of the mounting plate and the projector base plate. If you can't eliminate the keystone error, contact your SMART technical support representative.



6. Replace the locking screws, and then tighten them to prevent the adjustments from changing.
7. Replace the connection panel cover and wire cover onto the base of the projector.

Background

During the manufacturing process, SMART precisely aligns the Unifi 35 projector. When you install the system on a flat wall using the procedures in the [SMART Board 600i Interactive Whiteboard System Installation and User's Guide](#), you don't need to perform keystone adjustment. If you've followed the installation procedures carefully and the projected image isn't aligned, your projector may have been damaged during shipping. Contact your SMART service representative.

First Published: August 7, 2007

Last Updated: October 17, 2007

SMART Technologies
1207 – 11 Avenue SW, Suite 300
Calgary, AB T3C 0M5
CANADA



www.smarttech.com/support www.smarttech.com/contactsupport
Support +1.403.228.5940 or Toll Free 1.866.518.6791 (Canada/U.S.)

© 2007 SMART Technologies ULC. All rights reserved. Unifi, smarttech and the SMART logo are trademarks or registered trademarks of SMART Technologies ULC in the U.S. and/or other countries. All other third-party product and company names may be trademarks of their respective owners. U.S. Patent Nos. 5,448,263; 6,141,000; 6,326,954; 6,337,681; 6,540,366; 6,741,267; 6,747,636 and 7,151,533. Canadian Patent No. 2,058,219. U.S., Canadian and other patents pending. Contents are subject to change without notice. 10/2007.