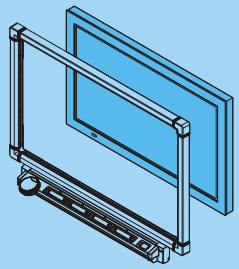
Installation Guide

SMART Board™ *for Flat-Panel Displays*

Interactive Whiteboard



SMART Technologies

Product Registration

If you register your SMART product, we'll notify you of new features and software upgrades.

Register online at www.smarttech.com/registration

Keep the following information available in case you need to contact Technical Support:

Serial Number _____

Date of Purchase _____

FCC Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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Single Mounting Bracket

Printed in Canada 12/2007.

Important Information

Please read this manual carefully before setting up and using the SMART Board™ *for Flat-Panel Displays* interactive whiteboard (SBFPD).

WARNING

Make sure an AC socket outlet is near the SBFPD and remains easily accessible during use.

Assurez-vous qu'une prise secteur se trouve à proximité du SBFPD et demeure facilement accessible durant l'utilisation.

Asegúrese de que hay una toma de corriente alterna cerca del SBFPD y que es fácilmente accesible para su uso.

Stellen Sie sicher, dass sich in der Nähe des SBFPD eine Steckdose befindet und sie während der Verwendung auch leicht zugänglich bleibt.

SBFPD
の近くに電源用のコンセントがあり、使用中に手が簡単に届くことを確認してください。

WARNING

To reduce the risk of fire or electric shock, don't expose this product to rain or moisture.

Pour réduire le risque d'incendie ou de choc électrique, évitez d'exposer ce produit à la pluie ou à l'humidité.

Para reducir el riesgo de incendio o de descarga, no exponga este producto a la lluvia o la humedad.

Um das Risiko eines Feuers oder eines Stromschlags zu reduzieren, darf das Produkt weder Regen noch Nässe ausgesetzt werden.

火事や感電の恐れがありますので、この製品は雨にさらしたり湿気のあるところに置かないでください。

WARNING FOR EUROPEAN CUSTOMERS

The SBFPD should be used only with European TN and TT power distribution systems.

The SBFPD is not suitable for older, IT-type power distribution systems found in some European countries. "This system (IT-type) is widely used isolated from earth, in some installations in France, with impedance to earth, at 230/400V, and in Norway, with voltage limiter, neutral not distributed, at 230V line-to-line." (IEC 60950:1999)

Contact qualified personnel if you're uncertain of the type of power system available where you're installing your SBFPD.

AVERTISSEMENT POUR LES CLIENTS EUROPÉENS

Le SBFPD doit être utilisé uniquement avec les systèmes de distribution d'alimentation européens TN et TT.

Le SBFPD ne convient pas aux systèmes de distribution d'alimentation plus anciens de type IP utilisés dans certains pays européens. "Ce système (type IT) est largement utilisé isolé de la terre, dans certaines installations en France, avec une impédance à la terre, à 230/400V, et en Norvège, avec limiteur de tension, neutre non distribué, à 230V ligne à ligne."(IEC 60950:1999)

Si vous avez des doutes sur le type de système d'alimentation disponible lors de l'installation de votre SBFPD, contactez un personnel qualifié.

ADVERTENCIAS PARA LOS CLIENTES EUROPEOS

La SBFPD sólo se podrá utilizar con los sistemas eléctricos TN y TT europeos.

Este modelo no está disponible para antiguos sistemas eléctricos de tipo IT que aún se utilizan en algunos países europeos. "Este sistema (IT) tiene una utilización muy extendida como núcleo aislado de tierra; en algunas instalaciones en Francia, con impedancia de tierra, a 230/400 V; y en Noruega, con limitador de tensión, a 230 V entre conductores." (CEI 60950:1999)

Si no está seguro del tipo de sistema eléctrico que posee, póngase en contacto con personal cualificado a la hora de instalar su modelo SBFPD.

WARNUNG FÜR EUROPÄISCHE KUNDEN

Das SBFPD darf nur mit europäischen TN- und TT-Netzverteilern verwendet werden.

Das SBFPD eignet sich nicht für ältere Netzverteiler vom Typ IT, die in manchen europäischen Ländern zu finden sind. "Dieses System (IT-Typ) wird, von der Erdung isoliert, in einigen Installationen in Frankreich mit Impedanz zu Erde bei 230/400 V und in Norwegen mit Spannungsbegrenzer, neutral, nicht verteilt, bei 230 V Leitung zu Leitung verwendet." (IEC 60950:1999)

Wenden Sie sich an qualifiziertes Personal, wenn Sie sich nicht sicher sind, welches Stromsystem dort zur Verfügung steht, wo Sie Ihr SBFPD installieren.

ヨーロッパのお客様への警告

SBFPDはヨーロッパの TN および TT 配電システムでのみ、使用する必要があります。

SBFPDはヨーロッパの一部の国で使用されている旧式の IT タイプの配電システムには適していません。「このシステム (IT タイプ) は、地面から離した状態で広く使用されていますが、一部フランスでは 230/400V でインピーダンスを通して接地され、ノルウェイでは、電圧制限器により中性非分散型で 230V のライン間電圧で使用されています」(IEC 60950:1999)

SBFPD をインストールする際に使用可能な電源システムのタイプに関して不明な点がある場合は、担当者までお問い合わせください。

Other Precautions

For operating safety and to avoid damage to the interactive whiteboard and its parts, please read the following information carefully.

- If you transport the interactive whiteboard, we strongly urge you to completely repackage it using the original packaging. This packaging was designed with optimal shock and vibration protection. If the original packaging is no longer available, pack all components with as much padding as reasonably possible to ensure that they are not exposed to excessive vibration or shock.
- Clean the interactive whiteboard surface regularly. Otherwise, dust can build up on the surface, adversely affecting its operation. For further information, see page 31.
- Don’t spray glass cleaner directly onto the interactive whiteboard. Instead, spray the cleaner lightly on a cloth and then gently wipe the glass.
- Avoid setting up and using the interactive whiteboard in an area with excessive levels of dust, humidity or smoke.
- Avoid exposing the interactive whiteboard to extreme heat or cold. The operating temperature range is from 41°F to 85°F (5°C to 29°C) with up to 80% humidity (non-condensing). The shipping and storage range is from 14°F to 95°F (-10°C to 35°C) with up to 80% humidity (non-condensing).
- If possible, unplug the unit before thunderstorms. However, don’t touch the unit or its power plug during a thunderstorm as there is a risk of electrical shock.
- Unplug the unit if you won’t use it for an extended period.
- Use safe practices when you’re plugging in the power cable. For example, plug it in with dry hands and don’t insert it into a dusty outlet. Unplug the interactive whiteboard before you install or service any components.
- Your SMART product comes with a power plug that works with your country’s power outlets. If the power plug is a three-prong, grounding-type power plug (designed to fit into a grounding-type power outlet) and you’re unable to insert the plug into the outlet, contact an electrician to replace the outlet. Don’t modify the power plug.
- Handle the power cord carefully and avoid bending it excessively. Route the power cord so it’s unlikely to be walked on or pinched by items placed upon or against it. If you must run a cable over the floor, lay it in a flat, straight line and secure it to the floor with tape or a cable management strip of contrasting color.
- If your SMART product requires replacement parts, use parts that are specified by SMART Technologies.

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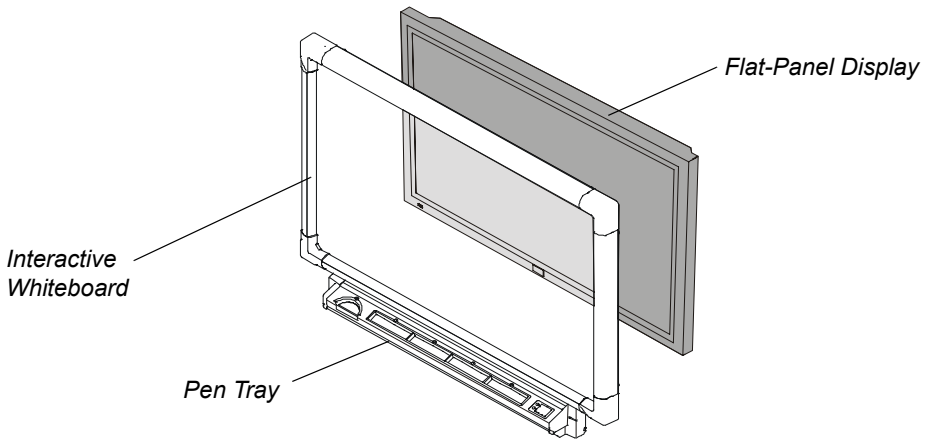
Introduction

The SMART Board *for Flat-Panel Displays* interactive whiteboard adds touch-screen control and writing capability to your flat-panel display while only minimally increasing its depth.



The SMART Board *for Flat-Panel Displays* interactive whiteboard includes an overlay, SMART Board software and a pen tray equipped with an eraser and color pens. With these tools, you can write over the on-screen image by simply picking up a pen and writing on the interactive whiteboard.

NOTE: As an alternative, you can order a controller instead of the pen tray. You won't have access to the pen tray tools, but you'll still have touch control, and you can use the many features of SMART Board software to create written notes.

Interactive Whiteboard Technology

When you've installed the interactive whiteboard, you can view the flat-panel display's image through the interactive whiteboard, and you can control any displayed computer application by touching the interactive whiteboard.

The interactive whiteboard includes DViT™ (Digital Vision Touch) technology, which uses digital cameras to track objects that interact with the interactive whiteboard. Each camera is calibrated to recognize the position of a pen tray tool or your finger.

About This Guide

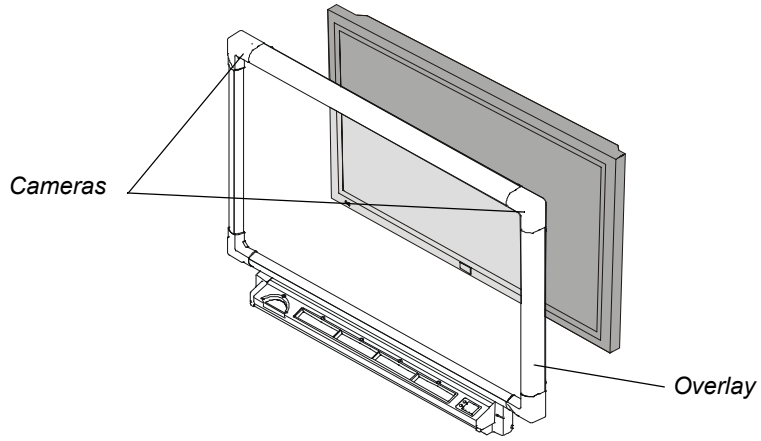
This guide shows you how to install your interactive whiteboard. For operating instructions, refer to the *SMART Board Software User's Guide* or the Help that comes with SMART Board software.

Components of the Interactive Whiteboard

There are several configurations of the SMART Board *for Flat-Panel Displays* interactive whiteboard. All configurations include an overlay and SMART Board software, but some configurations also include components such as a pen tray and a Display Control icon strip.

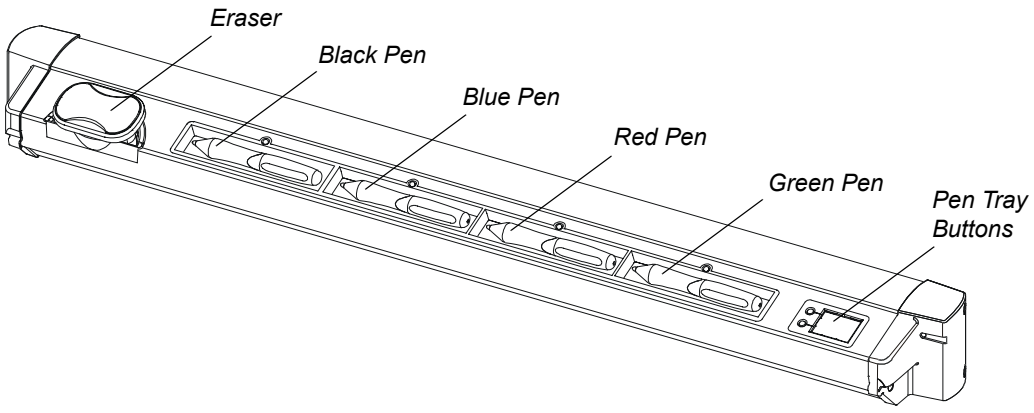
The Overlay

The overlay, which includes embedded digital cameras in the top-left and top-right corners, is mounted onto your flat-panel display.



The Pen Tray

The pen tray attaches to your overlay and includes four colored pens and an eraser. To write over the computer image, just pick up a pen and write on the interactive whiteboard as you'd write on a standard whiteboard.



SMART Board Software

SMART Board software includes all the tools you need to write notes over any application and to save these notes. The software features include:

- Notebook™ software – an application that you can use to organize, save and share your notes. Notebook software also has many writing tools and is great for creating presentations or jotting down notes during a presentation or meeting.
- SMART Recorder – an application that can record everything you do on the screen
- SMART Video Player – an application for the Windows operating system that allows you to play video files, write over these videos, and then save or clear these notes
- SMART Keyboard – a virtual keyboard that you can use to enter text into an application and convert your handwritten notes to typed text

- Floating Tools – a virtual palette of writing tools that increases the screen's interactive functionality, even if you don't have a pen tray
- SMART Board Control Panel – allows you to customize the writing tools and to change the SMART Board software settings
- Aware – an application for the Windows operating system that makes a number of conferencing, graphics, word processing and presentation programs work seamlessly with the interactive screen

Aware applications (sometimes referred to as Ink Aware) are applications that integrate with SMART Board software. When you write over an Aware program, you can save your written notes within the file.

For comprehensive information on using the programs and tools included in SMART Board software, read the supplied *SMART Board Software User's Guide* or the Help that comes with the software. When you read these documents, keep in mind that the SMART Board *for Flat-Panel Displays* interactive whiteboard has the same functionality as a projected SMART Board interactive whiteboard.

The Display Control icon strip

NOTE: Display Control icon strips are available only if you're using a Windows® operating system.

You can use the Display Control icon strip to turn your flat-panel display on and off, change your input source, select a different screen width and perform other tasks, all while standing right at the interactive whiteboard. The Display Control icon strip is optional, and if you find you no longer need it, you can easily disable and remove the strip.

Important Information about Compatibility

Each SMART Board *for Flat-Panel Displays* interactive whiteboard comes with a SMART USB adapter cable that connects the interactive whiteboard to your computer. The adapter cable works only with version 8.1.3 (or later) of SMART Board software for Windows operating systems or version 8.1.2 (or later) of SMART Board software for Macintosh computers.

Table 1:

Windows operating systems that work with this cable	**Windows operating systems that don't work with this cable**
Windows 98/98 SE, Me, 2000 and XP operating systems	Windows 95 and Windows NT® operating systems

You can't use the SMART USB adapter cable if your computer uses Mac OS X v10.1.x. You must either upgrade your operating system to Mac OS X v10.2 (or later), or order the original SMART USB adapter cable (P/N USB-FRU) from SMART Technical Support (page 33).

Table 2:

Macintosh operating systems that work with this cable	**Macintosh operating systems that don't work with this cable**
Mac OS X v10.2 or later Mac OS 8.6 to 9.2 operating systems	Mac OS X v10.1.x

NOTE: If your computer doesn't have a USB port, you can order an optional 20' (6.1 m) straight-through DB9-to-DB9 serial cable from SMART Technical Support (page 33).

Installing SMART Board Software

For the SMART Board *for Flat-Panel Displays* interactive whiteboard to function properly, you must have SMART Board software running on a connected computer.

CAUTION

Don't connect the SMART USB adapter cable to the computer until after you've installed SMART Board software!

If you do this by accident, the *Found New Hardware* wizard appears. Click the **Cancel** button in the wizard, and then unplug the SMART USB adapter cable from the computer. Next, install SMART Board software (version 8.1.3 or later) and then reconnect the cable.

The following procedures guide you through the process of installing SMART Board software. For more information on using this software, read the *SMART Board Software User's Guide* or the Help that's included in the software.

TIP

During the installation, you can choose to make the SMART Board software start automatically so your interactive whiteboard is fully functional whenever you start your computer.

To install SMART Board software

1. Close all open applications on the computer.
2. Insert the SMART Board software CD into your CD drive. The installation program starts automatically. Follow the on-screen instructions.

   If the installation program doesn't start automatically:

   – for the Windows operating system, select **Start > Run** and enter **x:\autorun.exe** (where x: is your CD drive)

   – for Macintosh computers, click the **SMART Installer** icon to open your CD drive and double-click the software application file

Installing the Interactive Whiteboard

IMPORTANT

The installation procedure varies depending upon whether you ordered your interactive whiteboard with or without a pen tray.

To install your SMART Board *for Flat-Panel Displays* interactive whiteboard, you'll have to:

1. mount the overlay on the flat-panel display (see below)
2. attach either a pen tray (page 16) or a controller (page 19)
3. complete the installation (page 21)

CAUTION

Before you mount the flat-panel display and the interactive whiteboard onto a stand or wall mount, make sure that the combined weight does not exceed the maximum weight specified by the stand or wall mount's manufacturer.

To calculate the combined weight, add the flat-panel display's weight (this should be stated in the user's guide for the flat-panel display) to the interactive whiteboard's weight (this is stated in the Support section of www.smarttech.com on the product-specific Specifications page).

Also, if the flat-panel display and the interactive whiteboard are mounted onto a wall, the wall must be strong enough to support the combined weight.

IMPORTANT

Don't mount an interactive whiteboard in portrait mode. The interactive whiteboard will only work when its cameras are in the top-left and top-right corners.

To mount the overlay on a flat-panel display

TIP

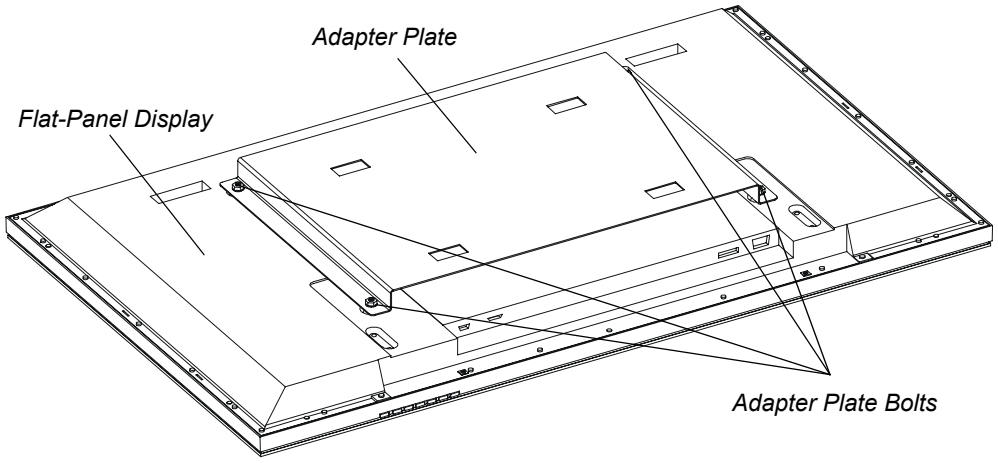
During the installation, you need sufficient room on flat surfaces for both a facedown flat-panel display and a facedown overlay. Clear sufficient space for both before you begin the installation.

CAUTION

You'll need assistance with several of the steps in this procedure. Both the flat-panel display and the overlay are heavy.

1. If your flat-panel display is already installed, check that the flat-panel display and its wall mount or stand still have all of their hardware, including their screws and bolts.

2. With the assistance of another person, carefully remove the flat-panel display from the wall mount or the stand, and place it facedown on a flat surface.

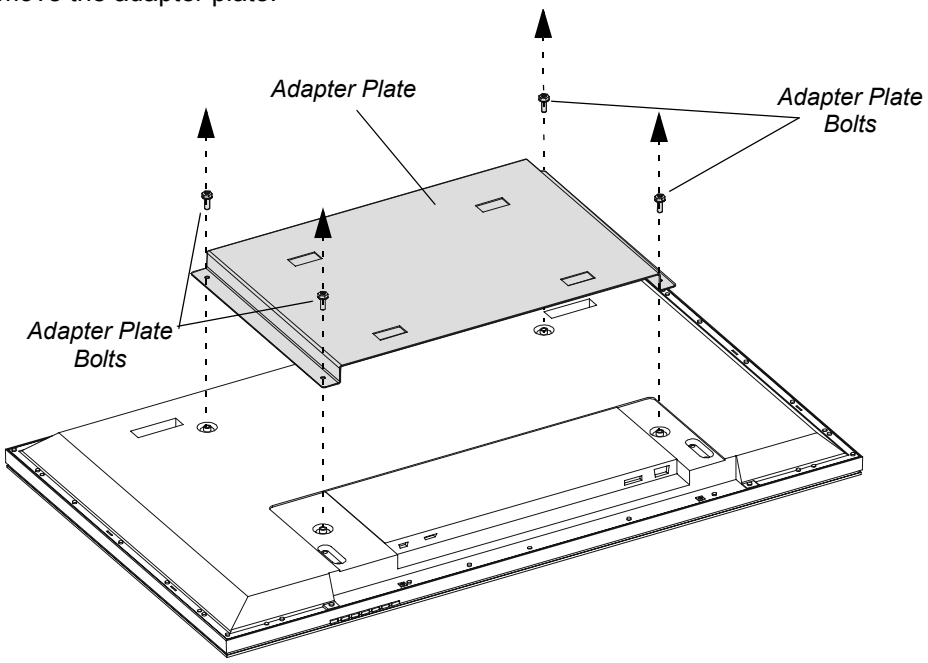


NOTE: The appearance of your flat-panel display and its adapter plate can vary from the diagrams shown in this section. In addition, the number of bolts attaching the adapter plate to your flat-panel display can be four, six or eight. Some figures in this section show four adapter plate bolts and some show six, but the same steps are required regardless of the number of bolts.

3. Remove the bolts that attach the adapter plate to the back of the flat-panel display. Put the bolts in a safe place, as you'll use them later to reattach the adapter plate.

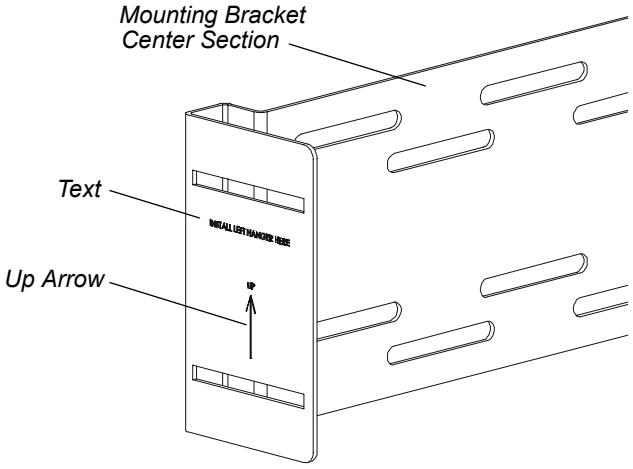
   NOTE: The bolt type varies between different flat-panel displays. You may have received an appropriate tool for removing these bolts with your flat-panel display.

4. Remove the adapter plate.

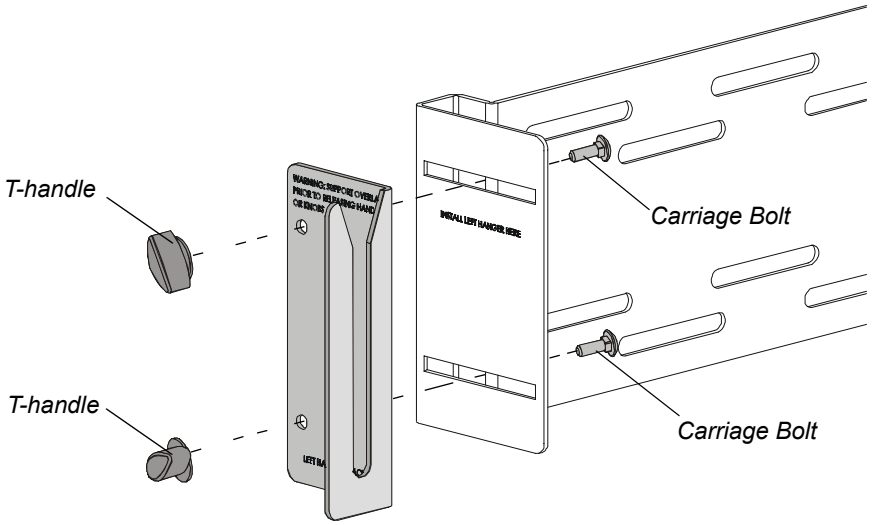


NOTE: Take a moment to look at the text and the arrows on the mounting bracket's center section.

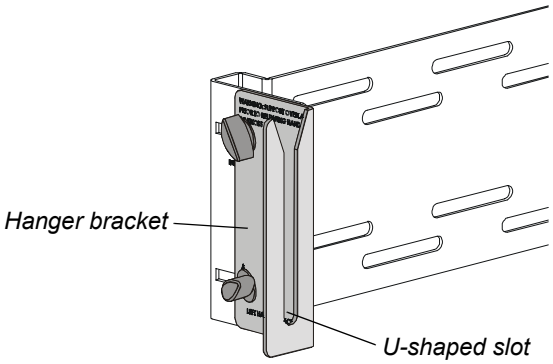
5. Place the mounting bracket's center section on a flat surface with the arrows pointing upwards and the text "Install Left Hanger Here" on your left.



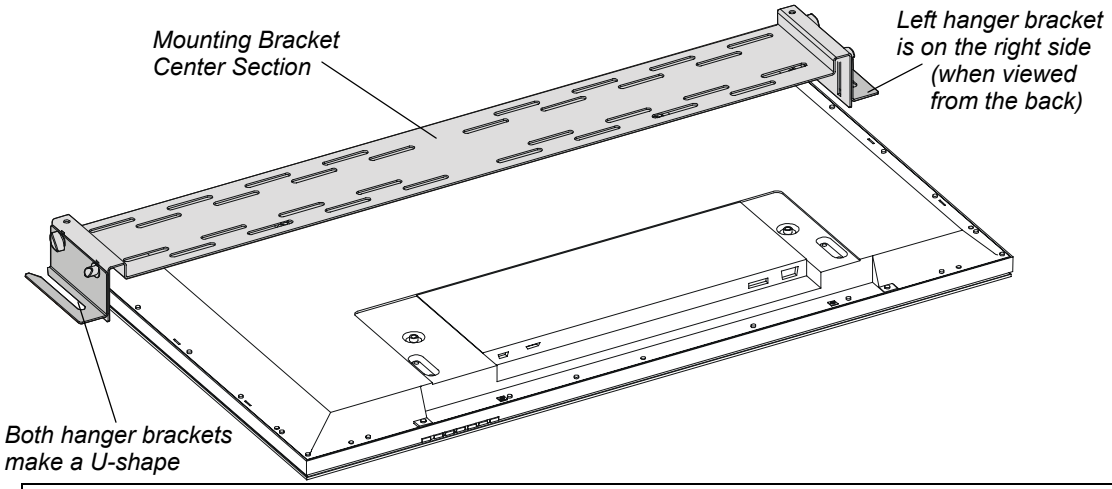
6. Attach the left hanger bracket to the left side of the mounting bracket's center section using T-handles and carriage bolts.



NOTE: When you install a hanger bracket, make sure the U-shaped slot opens at the top of the bracket.



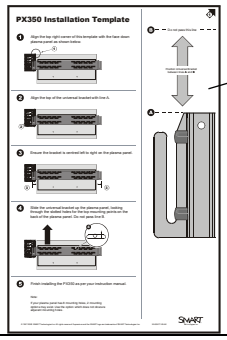
7. Attach the second hanger bracket in the same way.
8. Place the mounting bracket over the flat-panel display *with the left hanger bracket on your right side.* The left bracket goes on your right because you are looking at the back of the flat-panel display. The hanger brackets should face towards the flat surface so that the horizontal section of each bracket makes a U-shape, as shown in the figure below.



CAUTION

If the mounting bracket is mistakenly installed upside-down, the hanger brackets won't be able to support an overlay and the installation will be unsafe.

9. Using the supplied Installation Template as a guide, align the slotted holes in the mounting bracket with the adapter plate bolt holes in the flat-panel display.

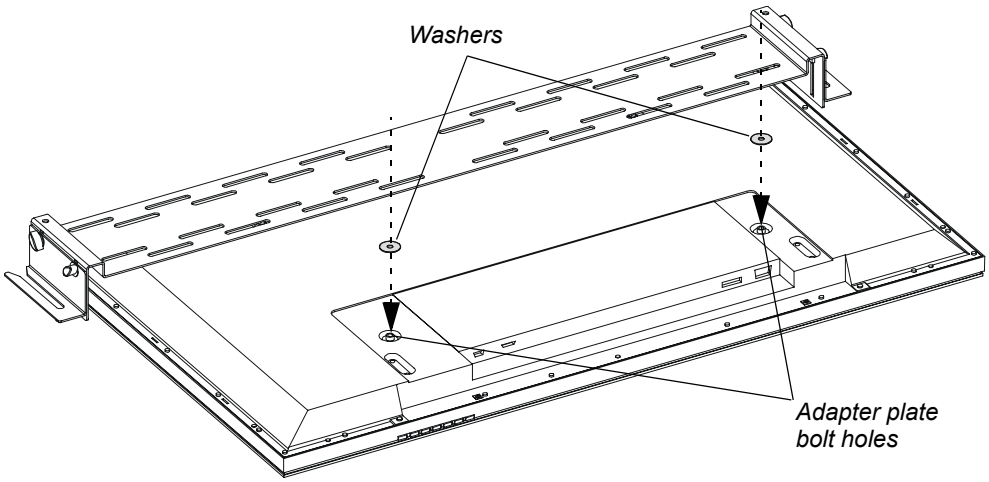


IMPORTANT Obtain the best possible alignment before mounting either the flat-panel display or the overlay. After you mount the overlay, you'll be limited in how much you can move the overlay relative to the flat-panel display. If the overlay is aligned poorly, it obscures some of the flat-panel display's screen.

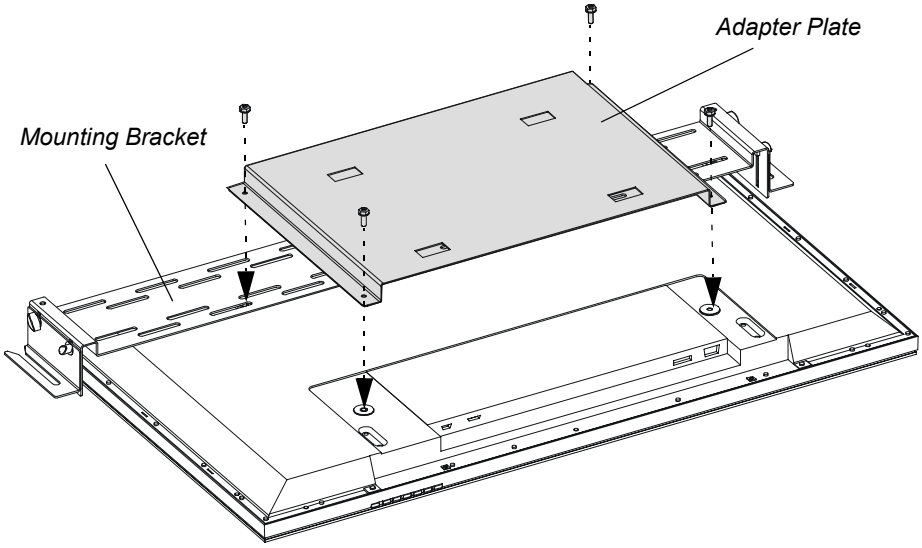
CAUTION

Try not to position the mounting bracket over the flat-panel display's cooling vents. Blocking these vents could cause overheating and damage to the flat-panel display.

10. Add a supplied washer to each of the exposed adapter plate bolt holes. Don't add washers to the two holes covered by the mounting bracket. The washers compensate for the mounting bracket's thickness.

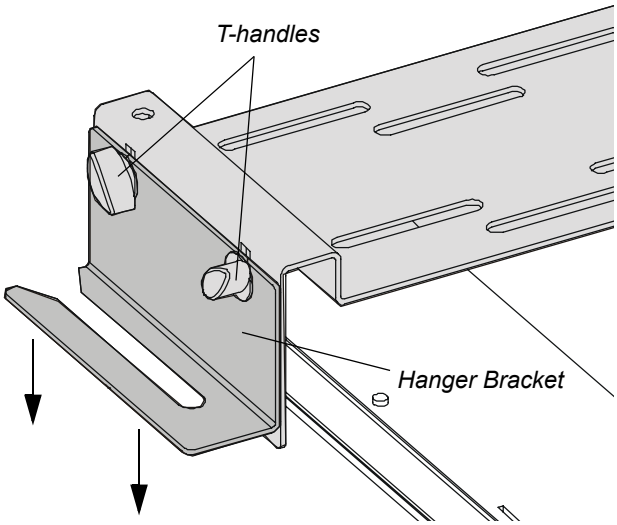


11. Attach the adapter plate over the mounting bracket and the washers using the bolts you removed in step 3.



NOTE: The bolt type varies between different flat-panel displays. You may have received an appropriate tool for attaching these bolts to your flat-panel display.

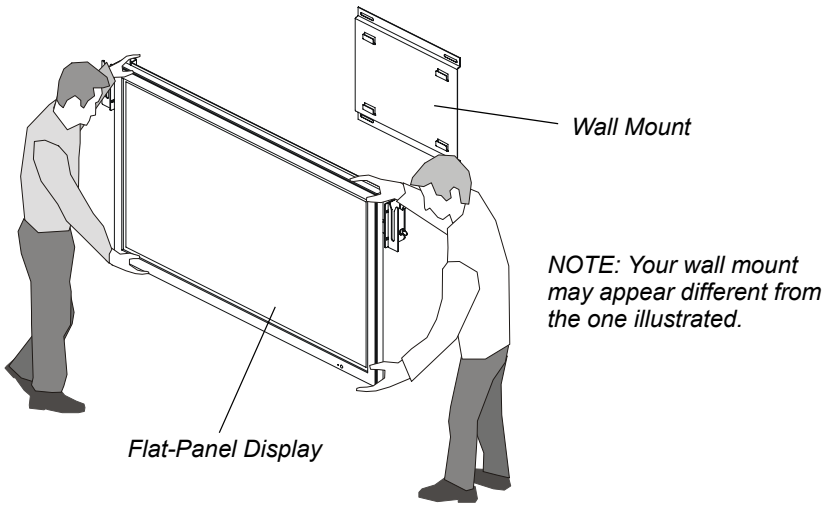
12. Loosen the T-handles on the hanger brackets. Push these brackets towards the flat surface and then tighten the T-handles.



13. With the assistance of another person, mount the flat-panel display onto a wall mount or onto a stand.

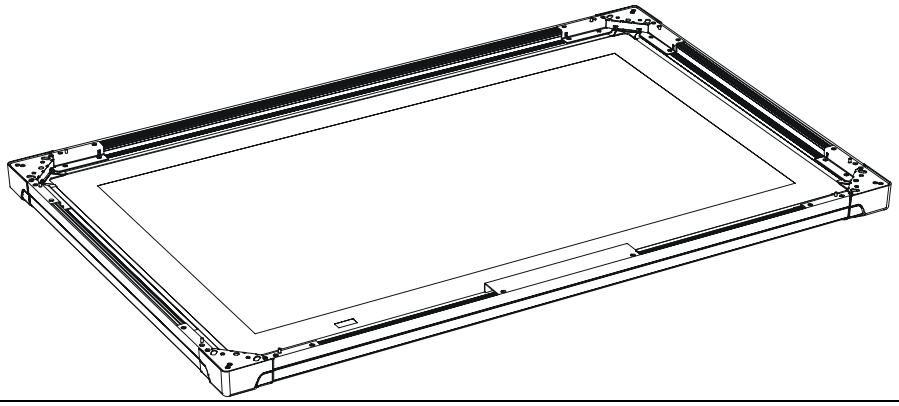
CAUTION

Don't lift the flat-panel display by the mounting bracket.



14. If your flat-panel display has removable handles, remove them to make the overlay's installation easier.
15. If there is anything protruding from the front of the flat-panel display that could potentially scratch the overlay when it's mounted (for example, a manufacturer's name or logo) consider covering it with one of the provided spacing pads.

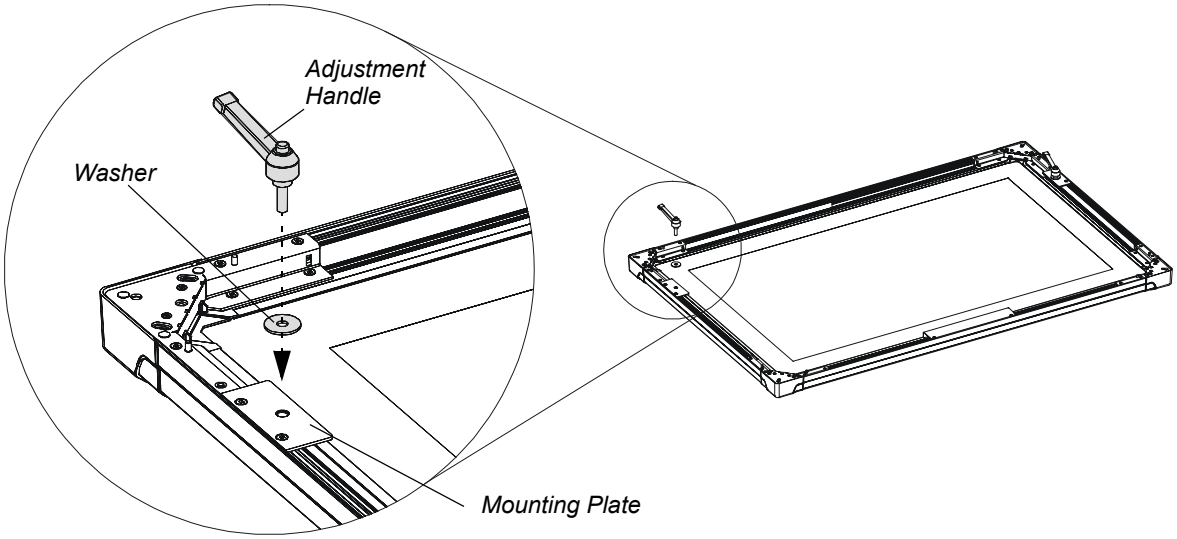
16. Place the overlay facedown on a flat surface.



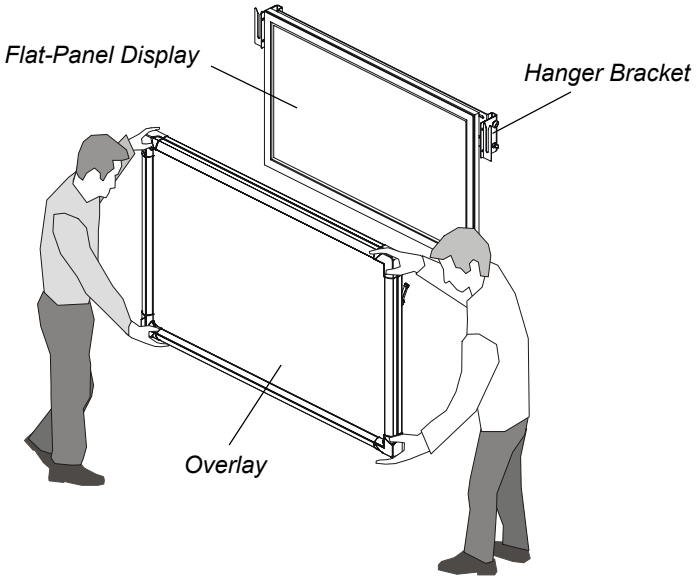
IMPORTANT

In the next step, you'll attach two adjustment handles to the overlay. However, take a moment to familiarize yourself with how to tighten and loosen these handles *before you attach them*.

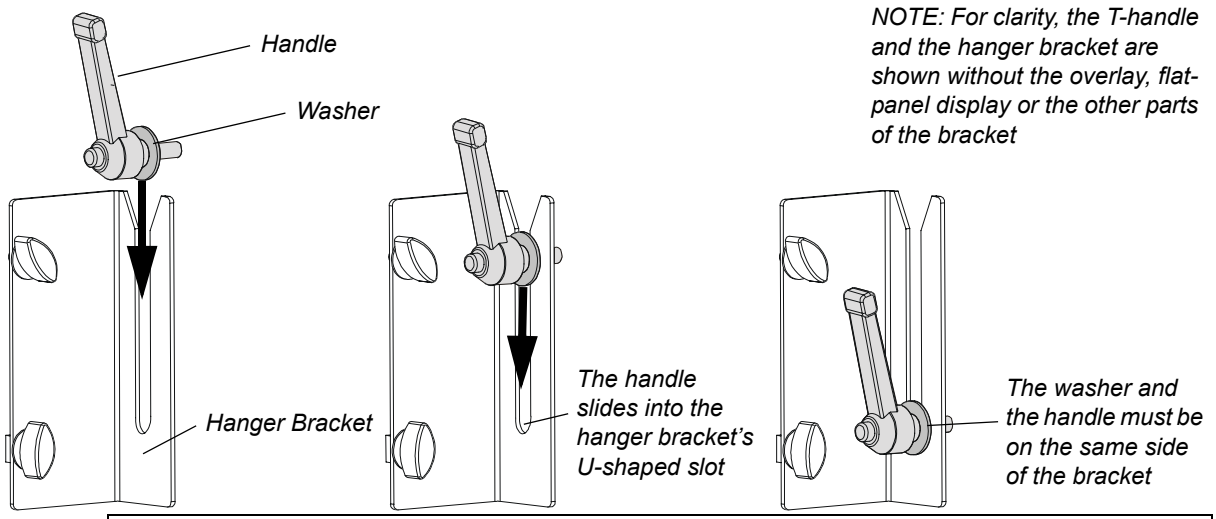
17. Attach a washer and an adjustment handle to the overlay's two mounting plates, leaving approximately 1/4" (0.6 cm) of space between the washer and the mounting plate.



18. With the assistance of another person, mount the overlay onto the flat-panel display by sliding the adjustment handles into the U-shaped slots in the hanger brackets.



NOTE: The adjustment handle *and the washer* must slide behind the hanger brackets. Ensure the handles are aligned with the hanger brackets' U-shaped slots, and temporarily tighten the handles.

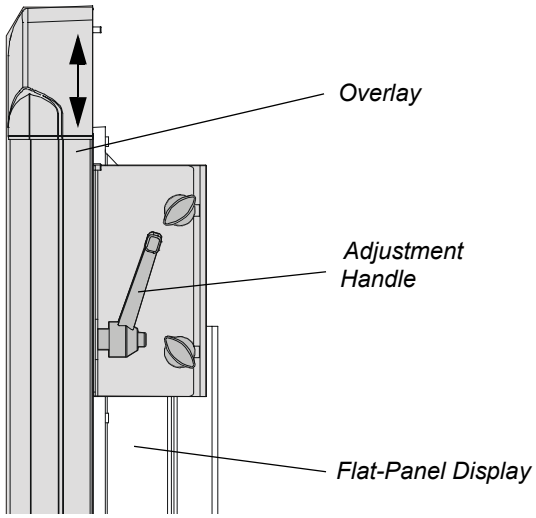


NOTE: For clarity, the T-handle and the hanger bracket are shown without the overlay, flat-panel display or the other parts of the bracket

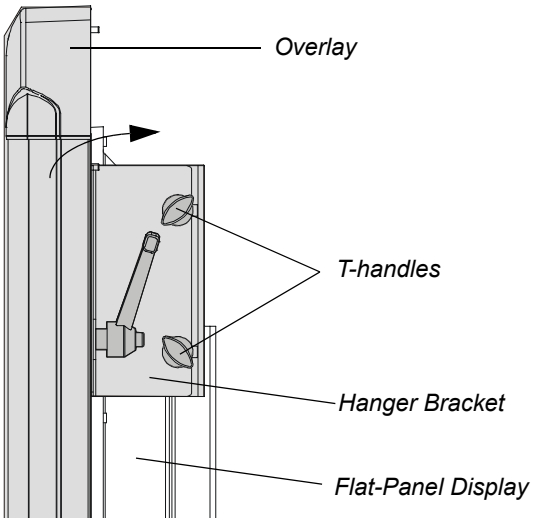
CAUTION

Take care when mounting and then positioning the overlay. The rear of the overlay can be scratched if it's held tight to the flat-panel display and then moved in any direction.

19. With the assistance of another person, and while supporting the overlay, loosen both adjustment handles, vertically adjust the overlay so that you can see *most* of the flat-panel display's screen, and then tighten the handles. You will vertically adjust the overlay more accurately in step 21.



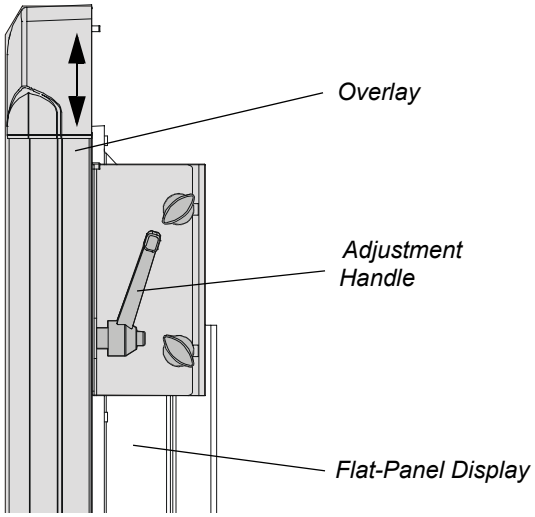
20. With the assistance of another person, and while supporting the overlay, loosen the T-handles on the hanger brackets, carefully slide the overlay toward the flat-panel display so that the glass rests against the flat-panel display, and then tighten the T-handles.



CAUTION

You could damage the hanger bracket if you push the overlay forward with too much force. Support the back of the hanger bracket when you slide the overlay towards it. If this is not possible, slide the overlay as carefully as you can.

21. With the assistance of another person, and while supporting the overlay, loosen both adjustment handles, vertically adjust the overlay so that you can see *all* of the flat-panel display's screen, and then tighten the handles.

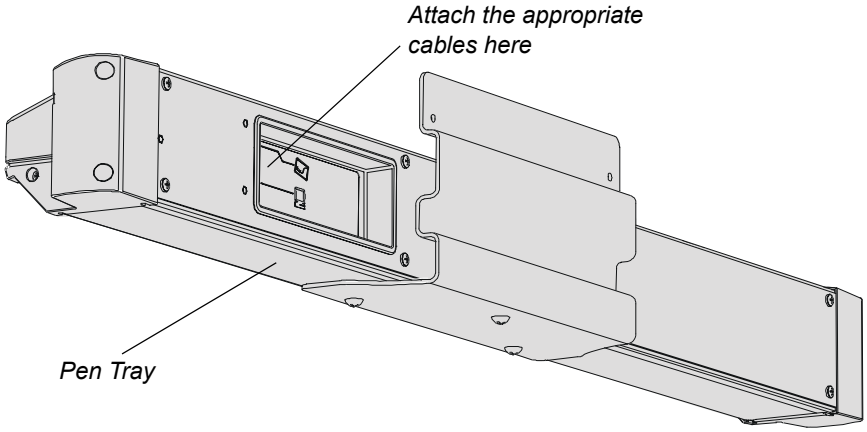


NOTE: To continue the installation, attach either a pen tray (see below) or a controller (page 19).

TIP	If you ever uninstall the overlay, position the adjustment handles so they're facing directly upwards as you lift the overlay out of the hanger brackets. This prevents the handles from catching on the hanger bracket or the T-handles as you move the overlay.

To attach the pen tray

You attach the pen tray to threaded posts on the overlay. You then attach the MOD8 cable and either a SMART USB adapter cable, a DB9-to-DB9 serial cable, or a WC2 Wireless Serial Adapter, depending upon what you ordered.

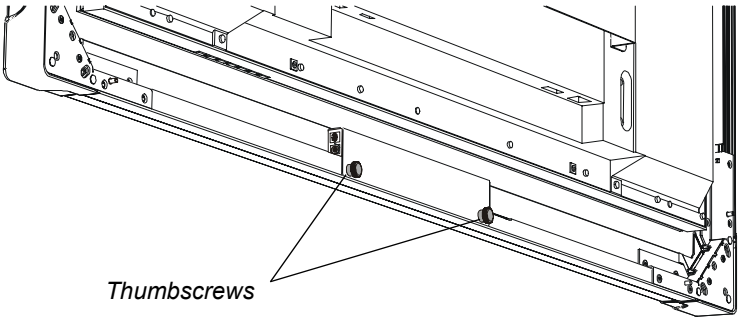


NOTE: Depending upon where and how the interactive whiteboard is mounted, you may need to perform the following steps by touch due to reduced visibility.

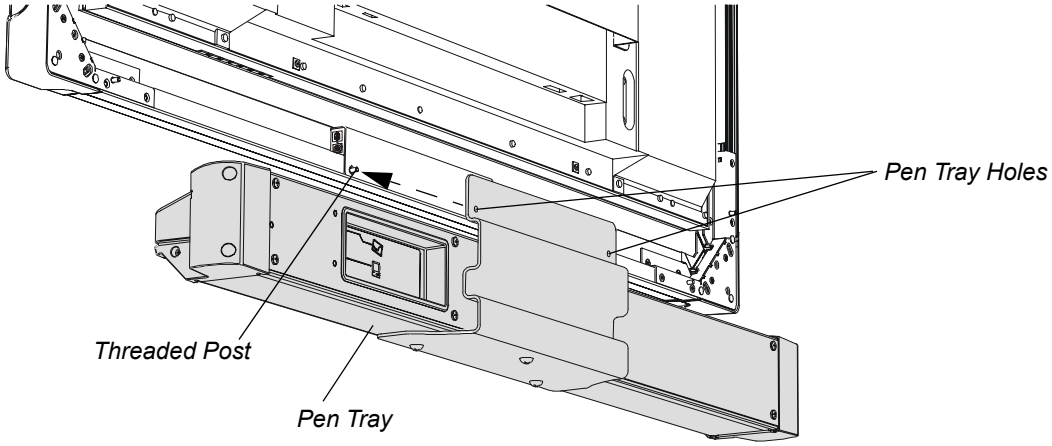
CAUTION

Don’t connect the interactive whiteboard to the computer until after you've installed SMART Board software. For more information, see page 5.

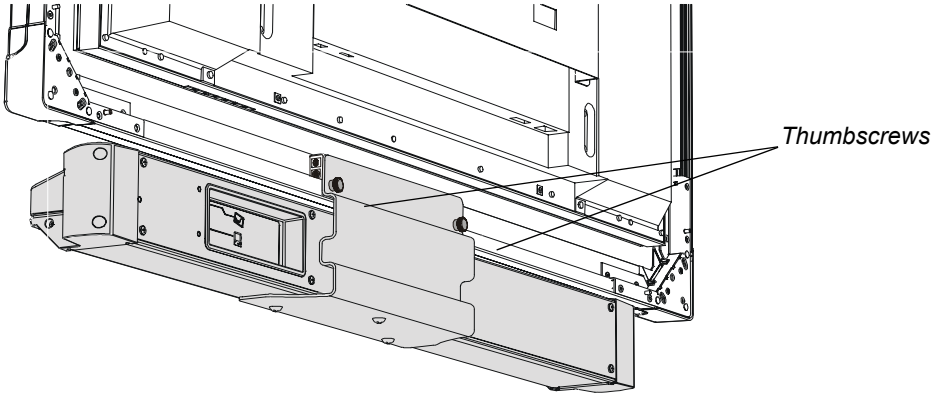
1. Remove the thumbscrews from the pen tray bracket. You need these thumbscrews for step 3.



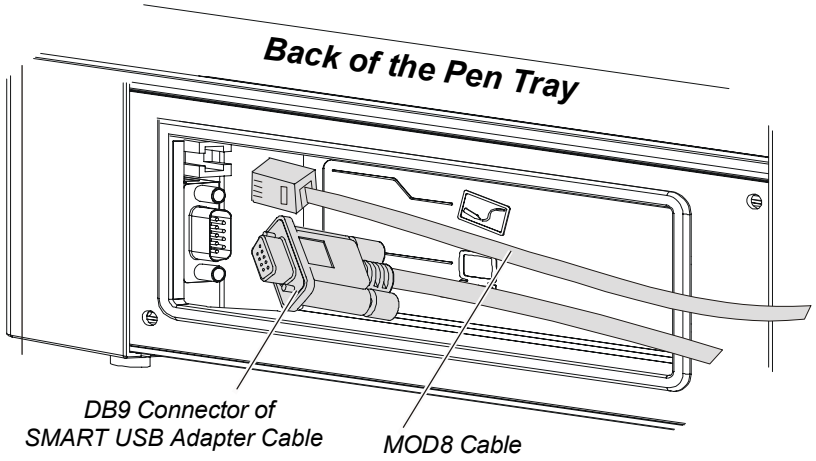
2. Slide the holes in the pen tray over the threaded posts on the pen tray bracket.



3. Attach the thumbscrews you removed in step 1.



4. Connect the MOD8 cable to the pen tray (see the next illustration). You'll connect the other end of this cable to your computer when you complete the installation.
5. Connect the DB9 end of the SMART USB adapter cable to the pen tray. You'll connect the other end of this cable to your computer when you complete the installation.



OR

If you ordered a straight-through DB9-to-DB9 serial cable with your interactive whiteboard, connect one end of the cable to the pen tray. You'll connect the other end of this cable to your computer when you complete the installation.

NOTE: You can order a straight-through DB9-to-DB9 serial cable from SMART Technologies. To do this, contact SMART Technical Support (page 33).

OR

If you ordered the WC2 Wireless Serial Adapter (Part No. WC2-NA) with your interactive whiteboard, connect one radio to the pen tray. To do this, follow the instructions that came with your kit. You'll connect the second radio to the computer later.

NOTE: If you install a pen tray, don't attach the controller. To complete the installation, see page 21.

To attach the controller

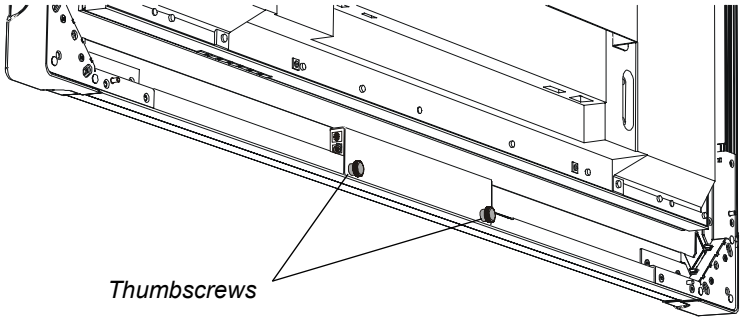
CAUTION

Don't connect the interactive whiteboard to the computer until after you've installed SMART Board software. For more information, see page 5.

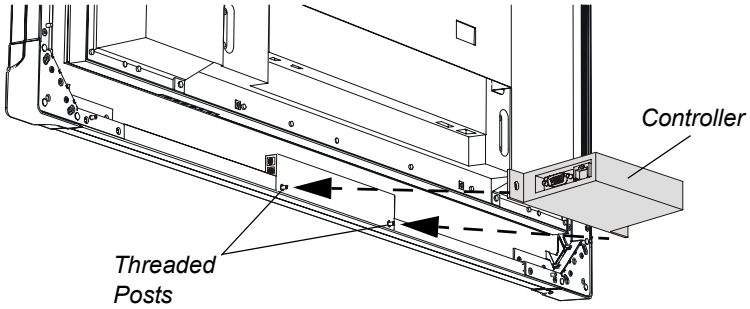
If you purchased the SMART Board *for Flat-Panel Displays* interactive whiteboard without the pen tray, you must install a controller unit.

NOTE: Depending upon where and how the interactive whiteboard is mounted, you may need to perform the following steps by touch due to reduced visibility.

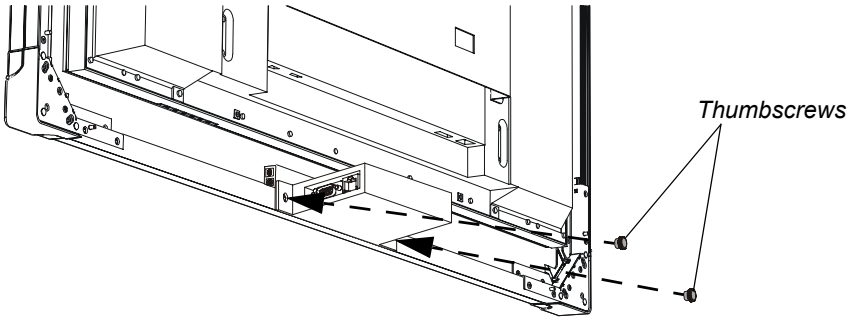
1. Remove the thumbscrews from the back of the overlay. You need these thumbscrews for step 3.



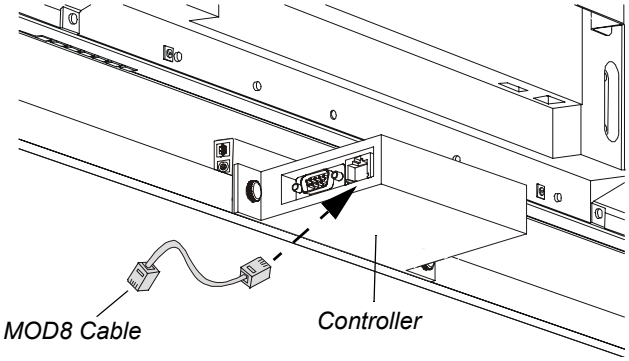
2. Slide the holes in the controller over the threaded posts on the overlay.



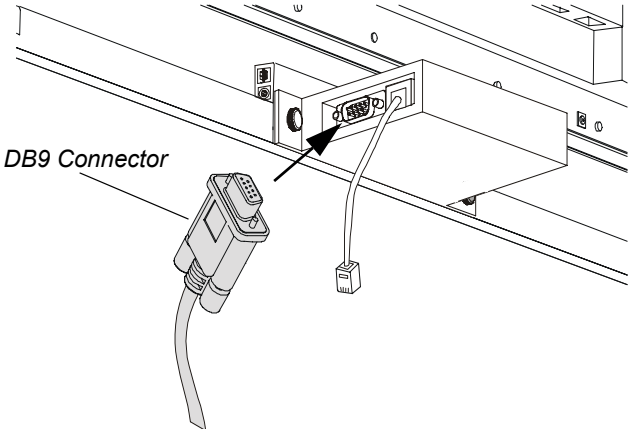
3. Attach the thumbscrews that you removed in step 1 to the threaded posts to hold the controller to the overlay.



4. Connect the MOD8 cable to the controller.



5. Connect the DB9 end of the SMART USB adapter cable to the controller. You'll connect the other end of this cable to your computer when you complete the installation.



   OR

   If you ordered a straight-through DB9-to-DB9 serial cable with your interactive whiteboard, connect one end to the controller. You'll connect the other end of this cable to a serial port on your computer when you complete the installation.

   NOTE: You can order a straight-through DB9-to-DB9 serial cable from SMART Technologies. To do this, contact SMART Technical Support (page 33).

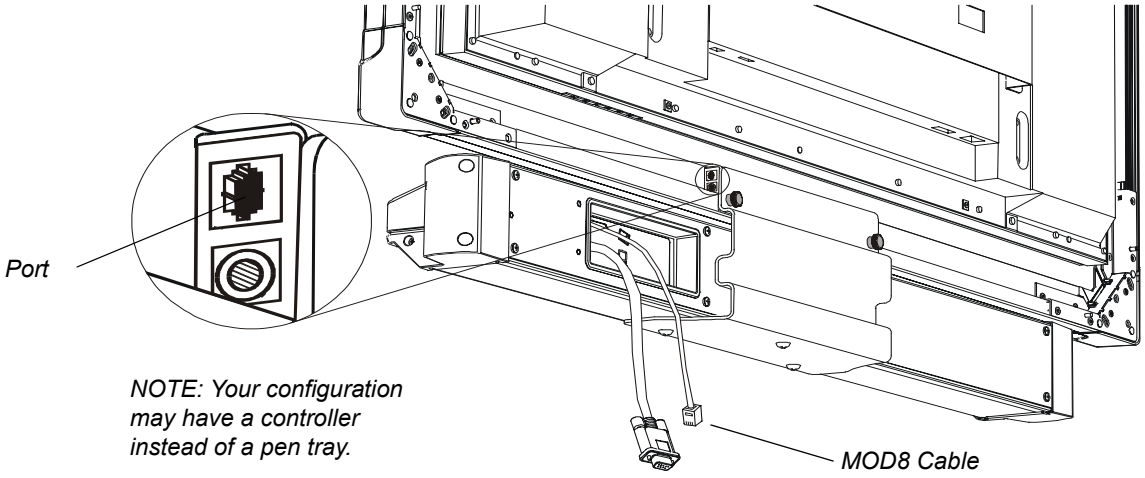
   OR

   If you ordered the WC2 Wireless Serial Adapter (Part No. WC2-NA) with your interactive whiteboard, connect one radio to the controller. To do this, follow the instructions that came with your kit. You'll connect the second radio to the computer later.

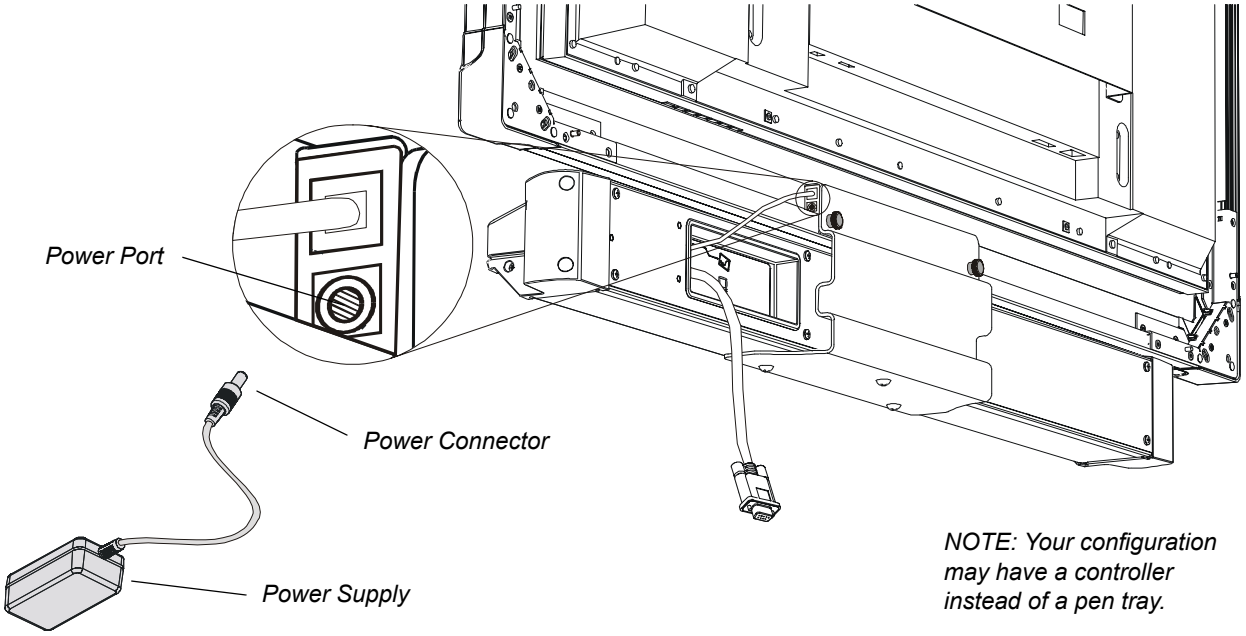
To complete the installation, see below.

To complete the installation

1. Connect the MOD8 cable to the corresponding port on the back of the overlay. You connected the other end of this cable to either the pen tray or the controller earlier.

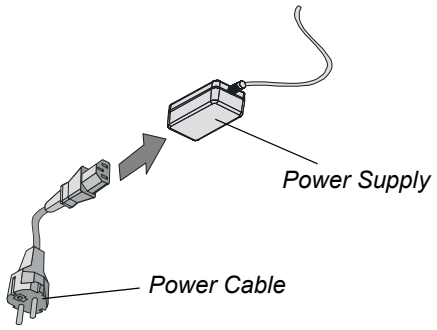


2. Connect the power supply connector to the overlay's power port.



NOTE: The power supply connector doesn't go all the way in.

3. Connect the power cable to both the power supply and a power outlet.



NOTE: Your power cable might look different because your interactive whiteboard comes with a power cable that works with your country's power outlets.

4. Connect the SMART USB adapter cable to a USB port on your computer. You connected the other end of this cable to either the pen tray or the controller earlier.

   OR

   If you ordered a straight-through DB9-to-DB9 serial cable, connect it to an available serial port on your computer. You connected the other end of this cable to either the pen tray or the controller earlier. You need to select the computer's serial port in the SMART Board software (page 26) after you've connected the interactive whiteboard.

   NOTE: You can order a straight-through DB9-to-DB9 serial cable from SMART Technologies. To do this, contact SMART Technical Support (page 33).

   OR

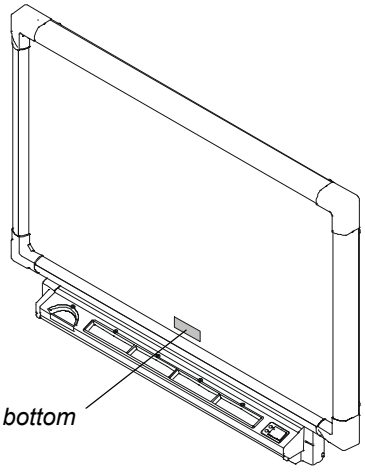
   If you're using the WC2 Wireless Serial Adapter (Part No. WC2-NA), connect the second radio to your computer by following the instructions that came with the kit.

5. If you want to use the optional Display Control icon strip, peel off the back of the strip to expose the adhesive, and then attach the strip to the front of the interactive whiteboard.

   NOTE: Display Control icon strips are available only with a Windows operating system.

   Position this strip as close to the bottom of the frame as you can (in the black border), and center it on the interactive whiteboard, as shown. You can't position the strip at any other location.

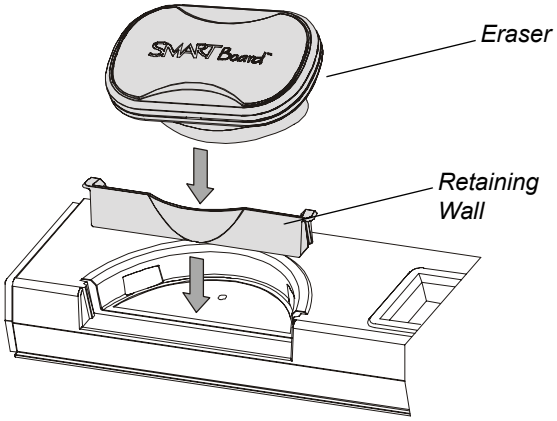
Display Control Icon Strip



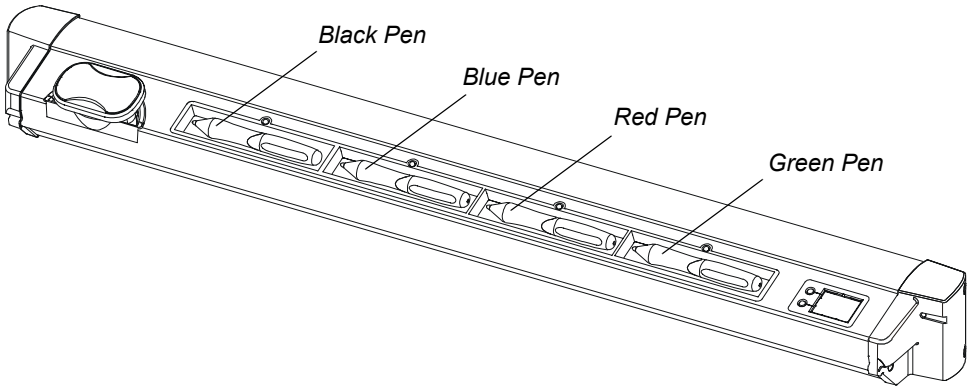
   For information on using the Display Control icon strip, see page 30.

   You must also connect the provided RS-232 cable to your flat-panel display and the computer (page 27).

6. Attach the eraser's retaining wall and place the eraser in its slot.



7. Place the four pens in the appropriate locations.



Preparing the Interactive Whiteboard for Use

When you've installed SMART Board software (page 5), set up your SMART Board *for Flat-Panel Displays* interactive whiteboard and connected it to the computer (page 7), the interactive whiteboard still isn't quite ready to use. You must:

- open SMART Board software (see below)
- orient SMART Board software (see below)
- configure the COM port in the software (if you've used the optional DB9-to-DB9 serial cable to connect the interactive whiteboard to a serial port on your computer) (page 26)
- set up the On-Screen Display Controls to control the flat-panel display from the interactive whiteboard (page 28) (Windows computers only)
- configure the Display Control icon strip (page 29) (optional, for Windows computers only)

Opening SMART Board Software

Open SMART Board software to access a wide range of software tools, such as Notebook software, SMART Video Player, the SMART Keyboard and the Floating Tools.

You'll know the SMART Board tools are open if you see the SMART Board icon in your system tray (Windows computers) or in the Dock (Macintosh computers). Press this icon to view a menu of all available software tools.

NOTE: The SMART Board tools must be open before you can perform *any* of the procedures described in this section.

For more information on using the tools in SMART Board software, read the *SMART Board Software User's Guide* or the Help that's included in the software.

To open the SMART Board tools

For Windows operating systems, select **Start > Programs > SMART Board Software > SMART Board Tools**. The SMART Board icon appears in your system tray.

For Macintosh computers, open the SMART Board Software folder and select **SMART Board Tools**. The SMART Board tools button appears in the Dock.

Orienting SMART Board Software

You can orient your interactive whiteboard to ensure that the computer accurately tracks your contact with the screen. Although SMART Board software assigns a default orientation to your interactive whiteboard that's normally adequate, you can perform an orientation to ensure the greatest possible level of accuracy.

The default orientation level is a 9-point, Standard orientation. If you find this level isn't precise enough, use the Fine, 20-point orientation level. You can also use the Quick, 4-point orientation level.

To orient the interactive whiteboard

1. Press the **SMART Board** icon in the system tray (Windows computers) or in the Dock (Macintosh computers), and press **Orient**.

   The orientation screen appears.

2. Follow the on-screen instructions, pressing your finger squarely on each target.

   NOTE: If you press on the targets out of sequence or inaccurately, a *Bad Orientation Point* dialog box appears. Use the mouse to click **OK**, because touch awareness isn't available.

3. When the orientation screen disappears, test the orientation by moving your finger across the interactive whiteboard. The pointer should track your finger very closely and appear directly beneath the center of your fingertip.

   NOTE: If the pointer doesn't accurately track your finger, calibrate the digital cameras (page 32).

To change the orientation level

1. Press the **SMART Board** icon in the system tray (Windows computers) or in the Dock (Macintosh computers), and press **Control Panel**.
2. Press **SMART Board Settings**.
3. Select **Alignment/Orientation Precision** from the drop-down list.
4. Press **Quick (4 points)**, **Standard (9 points)** or **Fine (20 points)**.
5. Press **OK**.

   NOTE: This setting remains in effect for all subsequent orientations until you change the orientation level again.

Configuring the COM Port for a Serial Connection

If you connect the interactive whiteboard to a serial port on your computer using the optional DB9-to-DB9 serial cable, you must select the serial (COM) port in SMART Board software.

NOTE: If you've connected the standard SMART USB adapter cable to a USB port on your computer, you don't need to configure a serial (COM) port. Ignore the procedure that follows.

To configure a COM port

1. Press the **SMART Board** icon in the system tray (Windows computers) or in the Dock (Macintosh computers), and press **Control Panel**.
2. Press **SMART Board Settings**.

   The *SMART Board Settings* dialog box appears.

3. Press the **Add SMART Product** arrow button.

4. If you know to which port you connected the interactive whiteboard, select **Manually choose COM port**. The *Select COM Port* dialog box appears. Highlight the correct port from the list, and press **Select**.

   OR

   If you're unsure of the correct port, click the **Automatically Detect SMART Hardware** button. SMART Board software locates the correct port for the attached interactive whiteboard.

   The Ready light in the pen tray should change to green to indicate that the interactive whiteboard is now touch sensitive.

Setting Up the On-Screen Display Control

NOTE: Display Control icon strips are available only if you're using a Windows operating system.

With the On-Screen Display Control set up, you'll never again hunt for an elusive remote control because you can control your flat-panel display right at the screen using this handy feature in SMART Board software. Use the Display Control to control the volume, power and input source for your interactive whiteboard.

The On-Screen Display Control also prevents image burn-in. When an installed screen saver activates, the Display Control waits for a specified period and then puts the flat-panel display into sleep mode. If you don't have a screen saver installed, try using the Bulb Saver program.

As soon as activity resumes on the interactive whiteboard—e.g., after you touch the interactive whiteboard or move the mouse—the Display Control reactivates the flat-panel display.

For the On-Screen Display Control to work, you'll need:

- an available port on your computer
- an RS-232 cable connection from the flat-panel display to the computer
- an installed and active screen saver

The following procedures show you how to:

- connect the flat-panel display to a computer (this page)
- configure the On-Screen Display Control (page 28)
- use the On-Screen Display Control (page 28)

To connect the flat-panel display to a computer

1. Connect one end of the provided RS-232 cable to an available port on the computer.

   NOTE: Your computer must be running the Windows operating system.

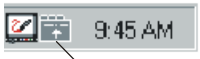
2. Connect the other end of the RS-232 cable to the flat-panel display.

To configure an On-Screen Display Controller

1. If you haven't already done so, connect the flat-panel display to your computer. (See the previous procedure.)

2. Press the **SMART Board** icon in the system tray and press **Control Panel**.
3. Press **SMART Board Settings**.
4. Select **Display Control Settings** from the drop-down list.
5. Select the **Manufacturer**, the **Model** of your flat-panel display and the **Communications Port** on your computer that you've connected the serial cable to.
6. In **Automatic Standby**, specify how long the flat-panel display should wait after the screen saver activates before going into sleep mode.
7. Press **OK**.

   The On-Screen Display Control activates automatically. A Display Control icon appears in the system tray. You can control many flat-panel display functions just by pressing on this icon.



On-Screen Display Controller Icon

8. If you don't have a screen saver installed, activate SMART Bulb Saver (page 29).

   NOTE: The Display Control won't work unless you either activate the SMART Bulb Saver or have a screen saver installed.

IMPORTANT	If you connect a different computer (for example, a laptop) to the interactive whiteboard, turn the SMART Bulb Saver off. This screen saver responds to periods of inactivity in the internal computer, so if you don't turn off the SMART Bulb Saver, it can unexpectedly interrupt the image from an external computer.

To use the On-Screen Display Control

1. Press the **On-Screen Display Control** icon in your system tray.

   A menu of commands appears.

2. Adjust and control your flat-panel display by selecting any of these commands.

Using the SMART Bulb Saver

If you want to use the On-Screen Display Control but have no screen saver installed, consider using the SMART Bulb Saver instead.

NOTE: The SMART Bulb Saver is available only with a Windows operating system.

The SMART Bulb Saver is designed especially for use with the interactive whiteboard, and it's highly configurable. You can set the bulb saver to put your flat-panel display into standby mode, shut down the computer and log off the current user after a specified period of inactivity, and you can designate a custom image as the screen saver graphic.

NOTE: If you've installed a screen saver, you can still use the SMART Bulb Saver as an alternative.

To activate the SMART Bulb Saver

1. Connect a serial cable from the flat-panel display to an available serial port on your computer.

   NOTE: You may already have connected the flat-panel display to the computer to activate the On-Screen Display Control (page 28).

2. Open the Windows Control Panel for your computer.
3. Double-click the **Display** icon.

   The *Display Properties* dialog box appears.

4. Press the **Screen Saver** tab.
5. Select **SMART Bulb Saver** from the list of screen savers.
6. Press the **Settings** button.

   The *SMART Bulb Saver* dialog box appears.

   If you previously installed an On-Screen Display Control for your flat-panel display, you'll see that the serial port has been selected and associated with the display, and the delay time has been specified. Proceed to step 8.

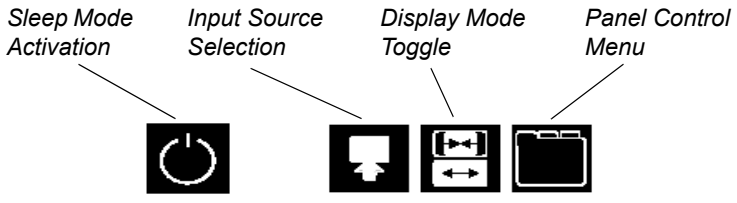
7. If you haven't configured the On-Screen Display Control, configure it now by pressing the **Display Control Panel** button (see page 28).
8. To set the parameters for shutting down the computer and logging off the current user, press the **Shut Down** tab and follow the on-screen instructions.
9. To specify a custom bitmap or company logo as the SMART Bulb Saver graphic, press the **Custom** tab and browse to the graphic file you want to use.
10. Press the **Apply** button, and then press **OK**.

Configuring the Display Control Icon Strip

The Display Control icon strip is a set of icons that you can use to:

- turn your flat-panel display on and off
- select a different input source (e.g., your computer or, if connected, a VCR or DVD player)
- select a different screen width
- access the Panel Control menu

NOTE: Display Control icon strips are available only if you're using a Windows operating system.



The table below summarizes the function of each icon in the strip.

Press this icon...	To do this...
Sleep Mode Activation	Put the flat-panel display into sleep or standby mode
Input Source Selection	Select an input source (e.g., computer, VCR or DVD player)
Display Mode Toggle	Select a screen width option
Panel Control Menu	Access a menu of audio and video controls for your flat-panel display

If you find you no longer need the Display Control icon strip, you can easily disable and remove it (page 30).

To configure the Display Control icon strip

1. Connect the flat-panel display to a serial port on your computer (page 21).
2. Configure the On-Screen Display Control for the flat-panel display (page 28).
3. Press the **SMART Board** icon in the system tray, and press **Control Panel**.
4. Press **SMART Board Settings**.
5. Select **Set Up Icon Strips** from the drop-down list.
6. Press **Display Control Strip**.

   An orientation screen appears.
7. At the interactive whiteboard, press the circled **A** on the Display Control icon strip (see the illustration below).
8. Press the circled **B** at the right edge of the Display Control icon strip.

NOTE: If you press on a point that's too far from the actual letters on the icon strip, you'll receive an error message asking you to repeat this procedure.

To disable and remove the Display Control icon strip

1. Press the **SMART Board** icon in the system tray, and press **Control Panel**.
2. Press **SMART Board Settings**.
3. Select **Set Up Icon Strips** from the drop-down list.
4. Press **Remove All Strips**.
5. If you want, peel off the Display Control icon strip from the front of the interactive whiteboard.

Cleaning and Troubleshooting

Cleaning

Shut down your computer before you clean the interactive whiteboard. If you touch the interactive whiteboard when the computer is in any other state (for example, with a program open or at the desktop), you can activate program components or scramble desktop icons.

Clean the interactive whiteboard surface regularly so that dust buildup doesn't interfere with the interactive whiteboard's operation.

Don't spray glass cleaner directly onto the interactive whiteboard. Instead, spray the cleaner lightly on a cloth and then gently wipe the glass.

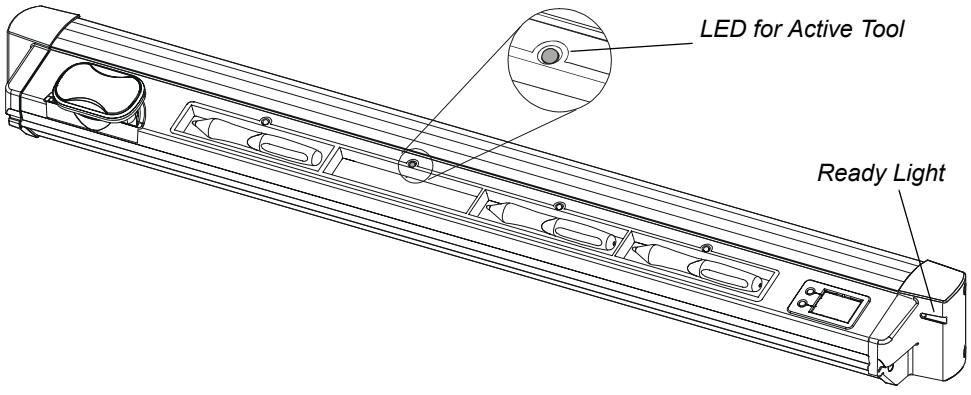
Remove marks made with a permanent marker by completely covering them with the ink from a dry-erase marker (*not* a low-odor or unscented marker). Then wipe with a soft cloth. Dry-erase ink contains solvents that work to remove permanent ink. If any trace of the original permanent ink remains, spray the area with standard glass or whiteboard cleaner and wipe clean.

You can also use whiteboard cleaner, such as Expo® Board Doctor. To remove permanent ink with this product, cover the ink with the solvent, let it dry, and then erase the ink.

Troubleshooting

The interactive whiteboard uses light-emitting diodes (LEDs) to communicate status information. Use this information for your troubleshooting investigation.

On the pen tray, a Ready light (LED) glows red when the pen tray has power and green when the SMART Board driver is running (indicating that the pen tray is active). Each pen tray tool has an LED above its holder. When you pick up a tool, the LED illuminates green, and when you replace that tool, the LED stops glowing.



If you look at the back of the interactive whiteboard, you'll see two LEDs behind the bracket that holds the pen tray to the overlay. One LED glows red to indicate that the interactive whiteboard is receiving power. The second LED glows green when the corner cameras and the master controller inside the pen tray are communicating properly.

If you encounter a problem with the interactive whiteboard, check all the cable connections. If this doesn't solve the problem, note the color of the LEDs described above and contact SMART Technical Support (page 33).

Calibrating the Cameras

Digital cameras in the corners of the interactive screen track objects such as your finger or a pen tray pen. If the cameras become misaligned for any reason, you can experience "broken ink" (gaps in your writing) or an area of the screen that's unresponsive to touch.

Fortunately, you can realign the cameras by performing a simple calibration procedure, as described below. If you think that you need to calibrate the DT770's cameras, contact SMART Technical Support (page 33).

NOTE: Don't perform the following steps unless you're told to by SMART Technical Support.

To calibrate the cameras

1. Press the **SMART Board** icon in the system tray (Windows computers) or in the Dock (Macintosh computers), and press **Control Panel**.
2. Press **SMART Board Settings**.
3. Select **Advanced Settings**. from the drop-down list.
4. In **DViT Settings**, press the **Calibrate** button.

   The calibration screen appears.
5. Press the center of each target and hold until the target moves.

   After you press the final target, the orientation screen appears.
6. Complete the orientation.
7. Press **OK**.

Customer Support

Online Support

www.smarttech.com/support

Visit the SMART Technologies support site to view and download user's guides, "how-to" and troubleshooting articles, software and more.

Training

Visit *www.smarttech.com/trainingcenter* for free training materials and information about our training services.

Contacting SMART Technical Support

SMART Technical Support welcomes your call. However, if you experience difficulty with your SMART product, you may want to contact your local reseller first. Your local reseller may be able to resolve the issue without delay.

All SMART products include free online, telephone, fax and e-mail support:

Online: *www.smarttech.com/contactsupport*

Telephone: +1.403.228.5940 or
Toll Free 1.866.518.6791 (Canada/U.S.)
(Monday to Friday, 5 a.m. – 6 p.m. Mountain Time)

Fax: +1.403.806.1256

E-mail: support@smarttech.com

General Inquiries

Address: **SMART Technologies**
1207 – 11 Ave SW, Suite 300
Calgary, AB T3C 0M5
CANADA

Switchboard: +1.403.245.0333 or
Toll Free 1.888.42.SMART (Canada/U.S.)

Fax: +1.403.228.2500

E-mail: info@smarttech.com

Warranty

Product warranty is governed by the terms and conditions of SMART's "Limited Equipment Warranty" that shipped with the SMART product at the time of purchase.

Registration

To help us serve you, register online at *www.smarttech.com/registration*.

Sending Feedback

You can help us improve our technical documentation by e-mailing your comments to Documentation@smarttech.com.

Obtaining More Information on SMART Products

Visit *www.smarttech.com/support* to:

- download PDF versions of our user guides, installation instructions and more
- read technical bulletins, FAQs and tips
- troubleshoot a problem
- explore our resource centers to learn about conferencing and room control systems

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