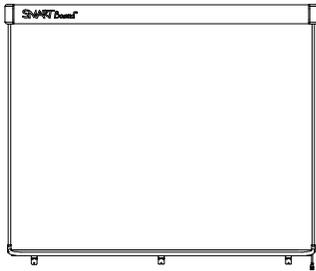


PLEASE THINK BEFORE YOU PRINT



SMART Board™ V280 Interactive Whiteboard Installation and User's Guide

Extraordinary made simple™

SMART™

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 SMART 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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Patent No. US5448263; US6141000; US6320597; US6326954; US6337681; US6540366; US6741267; US6747636; US6803906; US6919880; US6947032; US6954197; US7151533; US7184030; US7236162; US7283126; US7289113; US7499033; CA2058219; CA2252302; EP1297488; DE60124549; CN1310126; ES2279823 and ZL0181236.0.
Other patents pending.

09/2009

Important Information

Before you install and use your SMART Board™ V280 interactive whiteboard, read and understand the safety warnings and precautions in this user's guide and the included warnings document. These safety warnings and precautions describe the safe and correct operation of your SMART Board interactive whiteboard and its accessories, helping you to prevent injuries and equipment damage.

NOTE

In this document, the term “interactive whiteboard” refers to your interactive whiteboard and its accessories and options.

Safety Warnings and Cautions

WARNINGS

- Failure to follow the installation instructions included with your interactive whiteboard, or found in this guide, could result in personal injury or product damage.
- Read the safety warnings, precautions and other important information published by your projector's manufacturer. Do not stare (or allow children to stare) directly into your projector's beam of light. Do not touch (or allow children to touch) your projector because it can become extremely hot during normal operation.
- Two people are required to safely mount your interactive whiteboard on a wall or floor stand because it might be too large for one person to safely maneuver alone. When you lift your interactive whiteboard, you and your assistant should stand on either side of the screen, supporting its weight at the bottom corners while balancing the top with your other hands.
- Do not leave cables on the floor where they can be a tripping hazard. 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 a contrasting color. Handle cables carefully and avoid excessive bending.

- Do not mount your SMART Board V280 interactive whiteboard on an FS670 or FS570 floor stand. These floor stands do not provide the correct locking mechanisms to properly secure your interactive whiteboard. Using these stands could result in personal injury and product damage.
- Move your floor stand-mounted SMART Board interactive whiteboard with care. Quick stops, excessive force and uneven surfaces might cause your product to overturn.
- Do not stand (or allow children to stand) on a chair to touch the surface of your SMART product. Instead, remount your product at the appropriate height, or use an FSV280 height-adjustable floor stand.
- Do not climb (or allow children to climb) on your wall- or stand-mounted SMART Board interactive whiteboard. Climbing on your interactive whiteboard or projector boom could result in personal injury or product damage.



CAUTIONS

- Avoid exposing your SMART product to extreme heat or cold. SMART Board V280 interactive whiteboards can operate in the temperature range of 41°F to 95°F (5°C to 35°C) with up to 80% humidity (non-condensing). The shipping and storage temperature range is from -40°F to 120°F (-40°C to 50°C).
- Do not lean your interactive whiteboard against a wall. Your interactive whiteboard's frame and pen tray brackets are not designed to continuously sustain the product's weight. Make sure that you carefully place it face down on a clean, flat surface instead.
- To ensure a safe installation and to prevent your interactive whiteboard from being accidentally knocked off the wall, make sure that you secure your interactive whiteboard to the wall with the included wall anchors and screws.
- Use only the screws included with your SMART Board V280 interactive whiteboard. Using other screws might damage your product.
- Do not let the top of your interactive whiteboard contact the wall because the caps covering the interactive whiteboard's DVIT™ (Digital Vision Touch) cameras could be damaged.
- Do not add any extra weight or excessive pressure to your wall-mounted interactive whiteboard or its pen tray. SMART designed the wall mounting bracket to support only the weight of your interactive whiteboard during normal use.

- For operating safety and to avoid damage to your SMART Board interactive whiteboard, use only the included high-speed USB 2.0 cable that came with your interactive whiteboard to connect it to a computer that has a high-speed USB 2.0 compliant port and that bears the USB logo. In addition, the USB source computer must be compliant with CSA/UL/EN 60950 and bear the CE mark and CSA and/or UL Mark(s) for CAS/UL 60950.
- Your computer requires the processing power specified in the *SMART Board V280 Interactive Whiteboard Specifications* ([document 121618](https://www.smarttech.com/support) at www.smarttech.com/support) when you use your SMART Board V280 interactive whiteboard with a standard projector. If you add accessories to your computer, including but not limited to an AirLiner™ wireless slate, SMART Response interactive response system or a SMART Document Camera, you must increase the processing power of your computer substantially. SMART will not be held responsible or liable for any damage caused or loss suffered as a result of insufficient processing power.
- Your SMART Board V280 interactive whiteboard is not a dry-erase product. Do not use dry-erase or permanent markers on its surface.
- Do not use harsh chemicals or abrasive cleaners on your interactive whiteboard.

Other Precautions

If you own a SMART product other than a SMART Board V280 interactive whiteboard, refer to the installation manual for your product for relevant warnings and maintenance instructions.

To ensure operating safety and to avoid product damage, observe the following precautions.

- Don't set up and use your interactive whiteboard in an area with excessive levels of dust, humidity or smoke.
- Before installing your SMART Board V280 interactive whiteboard, ensure that the USB cable connections are secure.
- Laptop computers operating in power save battery mode might not provide sufficient power to run your interactive whiteboard reliably. Plug your laptop computer into an AC power receptacle to run your interactive whiteboard.
- Be aware that connecting a webcam to your computer might prevent your SMART Board V280 interactive whiteboard from operating reliably.

- Connect an external power supply (not included) to your SMART Board V280 interactive whiteboard when using a bus powered hub, such as the SMART Active USB Extension Cable, with your product. The external power supply (when required) must meet the Limited Power Source (LPS) requirements of CSA/UL/IEC/EN 60950-1.
- Before you clean your interactive whiteboard, shut down or disconnect the connected computer.
- If your SMART Board interactive whiteboard requires replacement parts, make sure that the service technician uses replacement parts specified by SMART Technologies.
- Be aware that Kensington® locks aren't designed to be a solid protection measure because the lock can be torn out. However, potential thieves might be reluctant to try to sell a product with a broken Kensington lock hole, which would readily identify it as a stolen item.

Contents

Important Information.....	i
Safety Warnings and Cautions	i
Other Precautions.....	iii
Introducing Your SMART Board V280 Interactive Whiteboard.....	1
Introduction	2
Features.....	2
How Does Your SMART Board Interactive Whiteboard Work?	3
Minimum Computer Requirements	4
Contents of Your SMART Board Interactive Whiteboard Shipping Box	4
Standard Replaceable Parts.....	7
Other Accessories	7
Installing and Securing Your SMART Board V280 Interactive Whiteboard	9
Environmental Requirements	10
Installing Your SMART Board V280 Interactive Whiteboard	11
Securing Your Interactive Whiteboard with a Kensington Lock	19
Connecting Your Interactive Whiteboard to a Computer	21
Overview.....	22
Connecting the USB Cable.....	22
Configuring Your Computer Settings.....	24
Installing SMART Product Drivers	25
Orienting Your Interactive Whiteboard.....	26
Using the Interactive Whiteboard Pen as a Mouse.....	28

Getting Started with SMART Notebook Software	29
Installing SMART Notebook Software	30
Clicking, Writing, Erasing and More with the Floating Tools Toolbar	32
Capturing Your Notes and Creating Presentations with SMART Notebook .	36
Recording and Playing Videos, Sharing Applications and Enhancing Your Presentations	39
Writing and Drawing Directly into Software Applications	40
Where to Find More Information	41
Maintenance and Troubleshooting	43
Tips for Trouble-Free Performance	44
Cleaning Your Interactive Whiteboard	45
General Troubleshooting	47
Transporting Your Interactive Whiteboard	60
Contacting SMART Technical Support	61
Specification Drawings	63
Wall-Mounted Cut Away View	63
Wall-Mounted Side View.....	63
Wall-Mounted Front View	64
Extending Your USB 2.0 Cable	65
Mounting Your Interactive Whiteboard on a Floor Stand.....	67
Hardware Environmental Compliance	73
Waste Electrical and Electronic Equipment Regulations (WEEE Directive) .	73
Restriction of Certain Hazardous Substances (RoHS Directive)	73
Batteries.....	74
Packaging	74
Covered Electronics Devices	74
China’s Electronic Information Products Regulations	74
U.S. Consumer Product Safety Improvement Act	74
California Air Resource Board – Airborne Toxic Control Measure	75

Customer Support.....	77
Online Information and Support.....	77
Training.....	77
Technical Support.....	77
Shipping and Repair Status	77
General Inquiries	78
Warranty	78
Registration.....	78
Index	79

Chapter 1

Introducing Your SMART Board V280 Interactive Whiteboard

In This Chapter

Refer to these topics to learn more about your SMART Board V280 interactive whiteboard and its parts and accessories.

Introduction	2
Features.....	2
How Does Your SMART Board Interactive Whiteboard Work?	3
Minimum Computer Requirements	4
Contents of Your SMART Board Interactive Whiteboard Shipping Box	4
Standard Replaceable Parts	7
Other Accessories	7

Introduction

Your SMART product is a wall-mounted, pen-only front projection interactive whiteboard. It enables you to do everything that you can do at your computer—open and close applications, scroll through files, conference with others, create new documents or edit existing ones, visit websites, play video clips and more—by touching the screen with the included pen. When you connect your interactive whiteboard to a computer and a projector, your computer image displays on the screen. You can write over any application in digital ink, and then save these notes to a SMART Notebook file for future reference and distribution.

Your SMART Board V280 interactive whiteboard is a high-speed USB 2.0 bus powered device, with no external power supply. Since USB is the primary connectivity mode, your interactive whiteboard receives power from the computer via the included 16' (5 m) high-speed USB 2.0 cable. There's no power switch on your interactive whiteboard. It's always running when your computer is turned on.

Features

Your SMART Board V280 interactive whiteboard is durable and reliable. It features a rugged, hardened writing surface, a damage-resistant pen and SMART's proprietary DViT (Digital Vision Touch) technology. Your interactive whiteboard measures 77" diagonally and has a 4:3 aspect ratio. A pen tray spans the width of the product.



Feature Highlights

DViT Technology

Two digital cameras located in each corner of the upper valance track the position of the reflective tip of the pen as it moves across the display surface.

Pens

Each interactive whiteboard pen provides an intuitive tip switch interface for power management. These battery-operated pens function equally well for adults and children of all ages, and are designed to withstand the rigors of daily use.

Durable Surface

The hard laminate surface is puncture resistant and optimized for projection.

Kensington Lock Feature

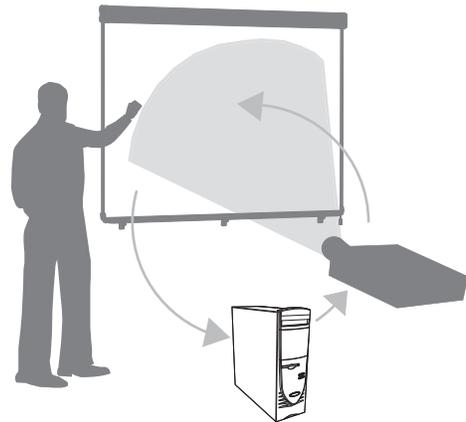
This security feature enables you to lock your interactive whiteboard with a security cable to help safeguard it from theft.

How Does Your SMART Board Interactive Whiteboard Work?

Your SMART Board interactive whiteboard and pen function as input devices for your computer, just like a mouse, enabling you to work in any application available on your connected computer from your interactive whiteboard's screen.

When you connect your interactive whiteboard to a computer running SMART product drivers, the following actions occur:

- The computer runs an application, and then sends the image to your projector.
- Your projector casts the image onto your interactive whiteboard.
- Your interactive whiteboard acts both as your computer's monitor and its input devices, i.e., mouse and keyboard, enabling you to control any application by touching the screen with your pen.



When you install SMART Notebook software on your computer, a Floating Tools toolbar floats over your desktop and any open application. By default, SMART Notebook interprets your pen presses as left mouse clicks. When you select a pen button on the Floating Tools toolbar, SMART Notebook interacts with the computer's mouse driver to change the pointer into a colored pen, which enables you to write over your desktop or any open application with digital ink. You can change pen settings, including the transparency, color or width of the ink. You can then save your notes to a SMART Notebook file, or directly into any Ink Aware application. You can also select and customize other tools, such as the width of the eraser tool you use to erase your notes.

Minimum Computer Requirements

To successfully power your interactive whiteboard and run SMART product drivers, your computer must meet certain minimum operating specifications. For your interactive whiteboard's system requirements, see the *SMART Board V280 Interactive Whiteboard Specifications* ([document 121618](#) at www.smarttech.com/support).

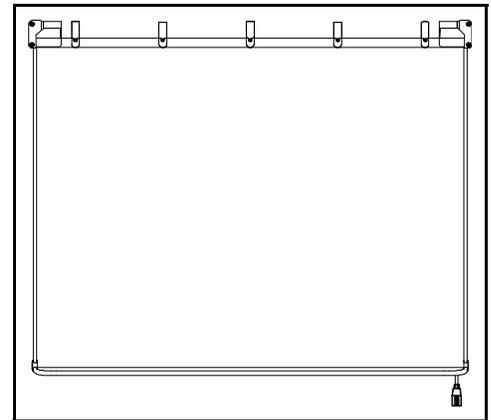
▲ CAUTION

Your computer requires the processing power specified in [document 121618](#) at www.smarttech.com/support when you use your SMART Board V280 interactive whiteboard with a standard projector. If you add accessories to your computer, including but not limited to an AirLiner wireless slate, SMART Response interactive response system or a SMART Document Camera, you must increase the processing power of your computer substantially. SMART will not be held responsible or liable for any damage caused or loss suffered as a result of insufficient processing power.

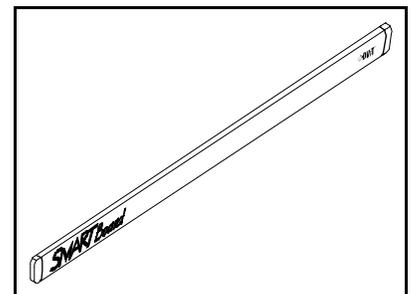
Contents of Your SMART Board Interactive Whiteboard Shipping Box

You'll find the following parts in your interactive whiteboard shipping box:

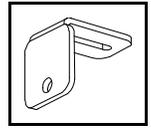
- a SMART Board V280 interactive whiteboard



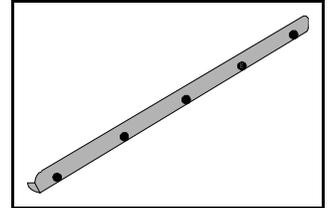
- an interactive whiteboard valance



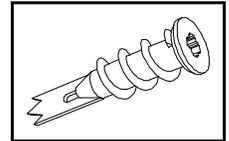
- three L-shaped tabs



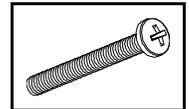
- a 32" (81.3 cm) wall-mounting bracket



- eight self-tapping wall anchors



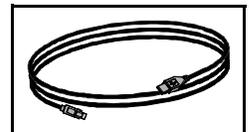
- eight long self-tapping screws



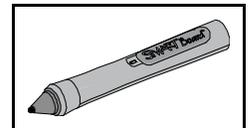
- three small thread-forming screws



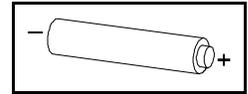
- a 16' (5 m) high-speed USB 2.0 cable



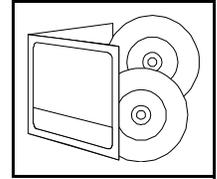
- two battery-operated pens



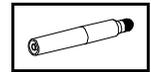
- two AAA alkaline batteries



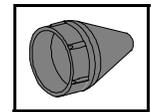
- two software CDs



- four replacement pen nibs



- four replacement pen tips



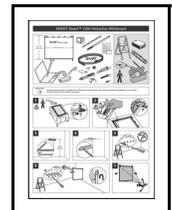
- a limited warranty document



- a product registration card



- textless installation instructions



Standard Replaceable Parts

Contact your [authorized SMART reseller](#) to purchase any of the following items.

SMART High-Speed USB 2.0 Cable

An included 16' (5 m) high-speed USB 2.0 cable provides power to your SMART Board interactive whiteboard from your Windows® computer.

Pens

Two LEDs embedded in the tip of each battery-powered pen enable your interactive whiteboard's cameras to track the pen tip as it moves across the screen surface.

SMART Board Interactive Whiteboard Wall-Mounting Kit

A 32" (81.3 cm) wall-mounting bracket comes with five screws and drywall anchors, enabling you to wall-mount your interactive whiteboard simply and securely.

Pen Nibs and Tips

Your interactive whiteboard comes with four replacement pen nibs and tips.

i NOTE

You can also replace the detachable valance and the USB hub. Additionally, you can replace your interactive whiteboard's cameras without special tools. Contact your [authorized SMART reseller](#) to order these field replaceable units.

Other Accessories

Contact your [authorized SMART reseller](#) to order any of the following accessory parts.

Floor Stand

You can also mount your SMART Board V280 interactive whiteboard on a height-adjustable floor stand. To learn more about the FSV280 floor stand, see Appendix C on page 67.

USB Extender Cables

If you wish to extend the length of the included 16' (5 m) USB cable between your interactive whiteboard and your computer, the SMART Active USB Extension Cable can increase this distance by an extra 16' (5 m) to a maximum of 32' (10 m). See Appendix B on page 65 for more information.

Chapter 2

Installing and Securing Your SMART Board V280 Interactive Whiteboard

In This Chapter

Refer to these topics for information about wall-mounting your SMART Board V280 interactive whiteboard.

Environmental Requirements	10
Installing Your SMART Board V280 Interactive Whiteboard	11
Before Installing Your Interactive Whiteboard	11
Recommended Heights for Wall-Mounting	11
Tools Required	12
Wall-Mounting Your Interactive Whiteboard	12
Aligning Your Interactive Whiteboard with Your Projector (Optional)	15
Completing Your Installation	15
Preparing the Pens	18
Securing Your Interactive Whiteboard with a Kensington Lock	19

Environmental Requirements

Before installing your SMART Board V280 interactive whiteboard, review the following environmental requirements.

Environmental Requirement	Parameter
Operating temperature	41°F to 95°F (5°C to 35°C)
Storage temperature	-40°F to 120°F (-40°C to 50°C)
Humidity	5–80% relative humidity, non-condensing
Water and fluid resistance	<ul style="list-style-type: none"> • Intended for indoor use • Don't pour or spray liquids directly on the electronic components
Dust	<ul style="list-style-type: none"> • Moderate dust • Designed for pollution degree 1 (P1) as per EN61558-1, which is defined as "No pollution or only dry non-conductive pollution." Refer to page 45 for detailed instructions on periodically cleaning your interactive whiteboard.
Electrostatic discharge (ESD)	<ul style="list-style-type: none"> • Designed to withstand electrostatic shock • EN61000-4-2 severity level 4 for direct and indirect ESD • No malfunction or damage up to 15kV (both polarities) with a 330 ohm, 150 pF probe (air discharge) • Unmated connectors meet no malfunction or damage up to 8kV for direct (contact) discharge
Conducted and radiated emissions	EN55022/CISPR 22, Class B
Flammability rating	<ul style="list-style-type: none"> • Electronics and connectors: UL 94-V0 • USB enclosure (hub plastics): UL94-HB • USB 2.0 cable: UL VW-1/CSA FT4
Quality assembly	<ul style="list-style-type: none"> • USB cable: IPC/WHMA-A-620 Class 2 workmanship standards for <i>Requirements & Acceptance for Cable & Wire Harness</i> • Digital cameras: IPC-A-610 standards for <i>Acceptability of Electronic Assemblies</i>, to Class 2 specifications (Dedicated Service Electronic Parts)

Installing Your SMART Board V280 Interactive Whiteboard

Before Installing Your Interactive Whiteboard

Before you install your SMART Board V280 interactive whiteboard, choose a location that's protected from direct sunlight. Bright light sources, such as a window with exposure to direct sunlight, can reduce the contrast of the projected image and might affect the performance of your interactive whiteboard's infrared technology.

Also consider where you installed, or plan to install or position, your projector. Position your projector and interactive whiteboard at the correct height and distance apart so that the projected image aligns with the display screen. Remember to leave enough room on either side of your interactive whiteboard for you to stand beside it.

NOTE

You can also mount your SMART Board V280 interactive whiteboard on a floor stand. For more information, see Appendix C on page 67.

Recommended Heights for Wall-Mounting

Consider the general height of your user community when you choose a height for your wall-mounted interactive whiteboard. If your interactive whiteboard is too low, it might force some people to bend over uncomfortably. If it's too high, other people might need to reach up too far. For adults of average height, position your interactive whiteboard's wall-mounting bracket 78 5/8" (2 m) above the floor. The distance to the top of your interactive whiteboard will be 84" (213.4 cm).

For children, shorter adults and adults in wheelchairs, position your interactive whiteboard's wall-mounting bracket 60 3/4" (154.3 cm) above the floor. The distance to the top of your interactive whiteboard will be 66" (167.7 cm).

WARNING

Two people are required to safely mount your SMART Board V280 interactive whiteboard on a wall or a floor stand because it might be too large for one person to safely maneuver alone. When you lift your interactive whiteboard, you and your assistant should stand on either side of the screen, supporting its weight at the bottom corners while balancing the top with your other hands.

NOTE

When you mount your interactive whiteboard lower on the wall, keep it high enough that furniture or other objects won't obstruct the projected image.

Tools Required

To wall-mount your interactive whiteboard you'll need the following tools, which aren't included with your package:

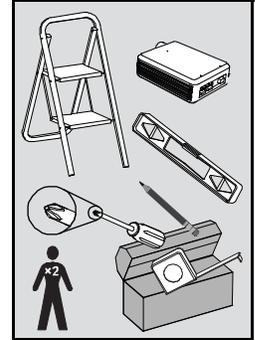
- a Phillips® No. 2 screwdriver



NOTE

All screws must be tightened by hand.

- a ruler or tape measure
- a carpenter's level
- a pencil or other marking device
- a stepladder



Wall-Mounting Your Interactive Whiteboard

Follow this procedure to mount your SMART Board V280 interactive whiteboard on a framed wall surfaced with gypsum or drywall. Some notes are provided for concrete wall installations.



WARNING

Failure to follow these instructions might result in personal injury and product damage.



CAUTIONS

- Do not lean your interactive whiteboard against a wall. Your interactive whiteboard's frame and pen tray brackets are not designed to continuously sustain the product's weight. Make sure that you carefully place it face down on a clean, flat surface instead.
- Use only the screws included with your SMART Board V280 interactive whiteboard. Using other screws might damage your product.



IMPORTANT

After you lay your interactive whiteboard on a clean, flat surface, ensure that the camera USB cable connections are secure.

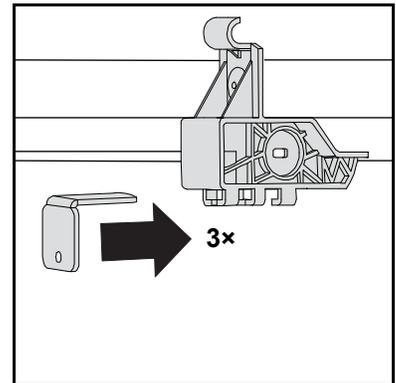


NOTE

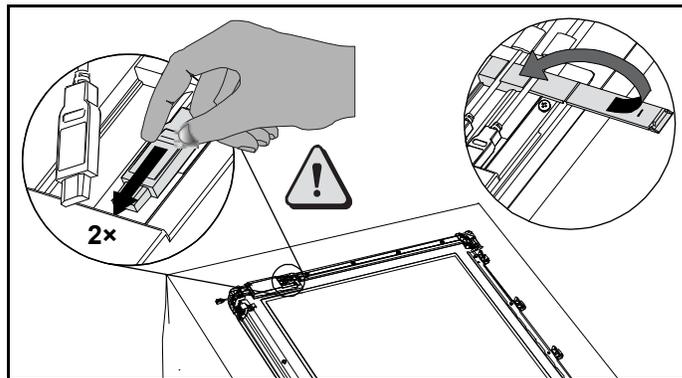
To take full advantage of all the interactive features of your SMART product, you must connect a digital projector (not included).

To mount your interactive whiteboard

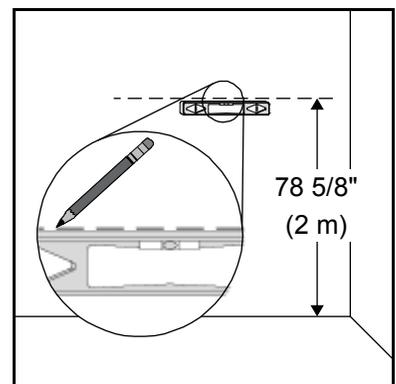
1. Place your interactive whiteboard face down on a clean, flat surface, and then slide an included L-shaped tab into the slot in each of the three pen tray brackets.



2. Ensure that the two USB cables extending from each camera to the USB hub are securely connected, and that the cable clip is fastened, as illustrated below.



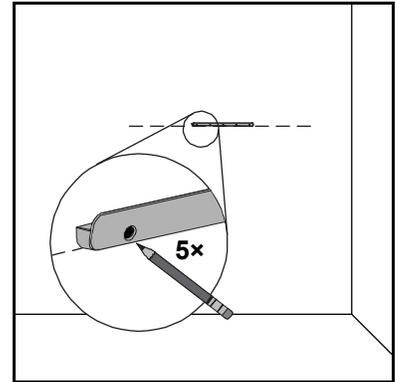
3. Using a pencil, a carpenter's level and a measuring tape or ruler, draw a horizontal line on the wall, centered on the mid-point of your interactive whiteboard's future position. If your projector is already mounted on the ceiling, this is roughly the center of your projected image.



NOTE

The illustration on the right shows a common height for adult users of SMART Board V280 interactive whiteboards. Refer to page 11 for the recommended mounting height for other users.

4. Using the mounting bracket as a template, mark the location of the five mounting holes on the wall.

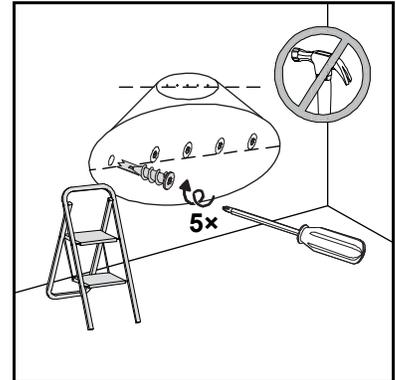


5. Use the Phillips No. 2 screwdriver to secure an included self-tapping wall anchor at each mark.



NOTE

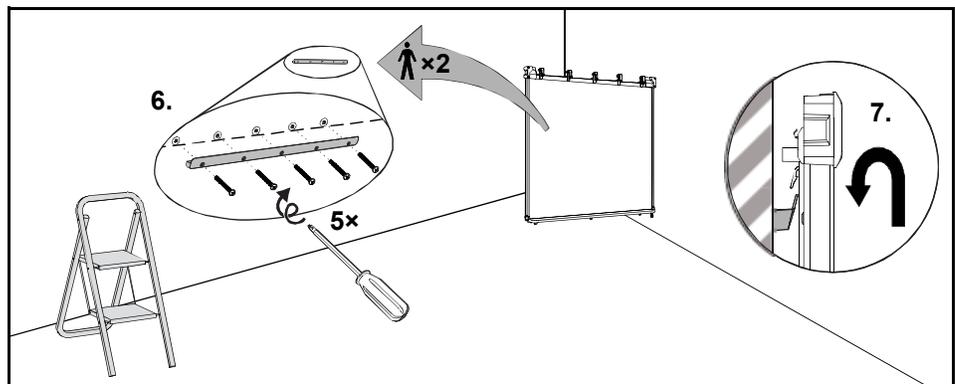
Don't use a hammer to tap these anchors into the wall. If you find it impossible to screw an anchor flush with the wall, you might have encountered a stud. If this is the case, you don't need to use an anchor in this location. The stud will provide adequate support for the screw that secures the bracket to the wall.



NOTES

- For a concrete wall, drill holes at the marks, and insert concrete anchors (not included) into the holes.
- If necessary, stand on a stepladder so that you're able to secure the wall anchors flush with the wall.

6. Using the screwdriver, secure the wall-mounting bracket to the self-tapping wall anchors with five of the included long self-tapping screws.
7. With the help of another person, hang your interactive whiteboard on the center of its wall-mounting bracket.

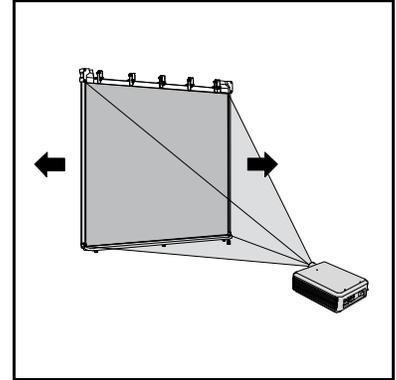


Aligning Your Interactive Whiteboard with Your Projector (Optional)

If your projector is installed in a fixed location, align your interactive whiteboard to the projected image before you secure the L-shaped tabs.

To align your interactive whiteboard with your projector

1. Install or position your projector on a projector platform or stand if necessary, and then turn it on and point the lens of your projector at the center of your interactive whiteboard's screen.
2. Make fine adjustments to the image size, level and focus of the projected image, according to your projector manufacturer's instructions.
3. Slide your interactive whiteboard sideways on its bracket to align it with the projected image.
4. Repeat steps 2 and 3 until your interactive whiteboard is properly aligned.



A correctly aligned image fits squarely on your interactive whiteboard's screen. Each side of the projected image should extend almost to the edge of the display surface.

Completing Your Installation

Refer to the following procedure to finish installing your interactive whiteboard.

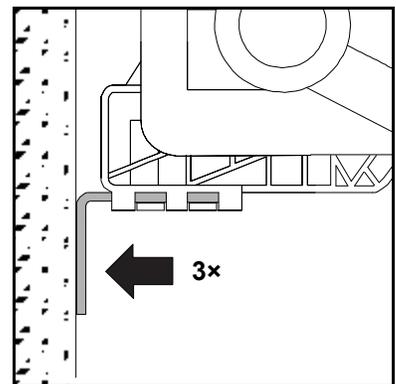
To complete your installation

1. Push your interactive whiteboard securely against the wall, and then slide each L-shaped tab backward until it contacts the wall.

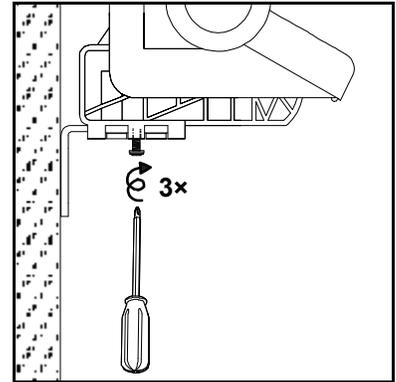


NOTE

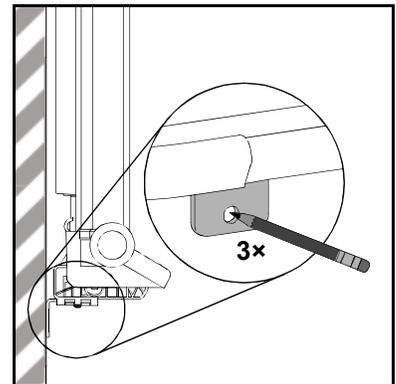
Each of these tabs has an adjustment range of 1/2" (1.5 cm) to accommodate uneven wall surfaces.



- Using the screwdriver, secure each of the three tabs to its corresponding bracket with one of the included small thread-forming screws, as illustrated.



- Using each tab as a template, mark the location of the three holes on the wall.

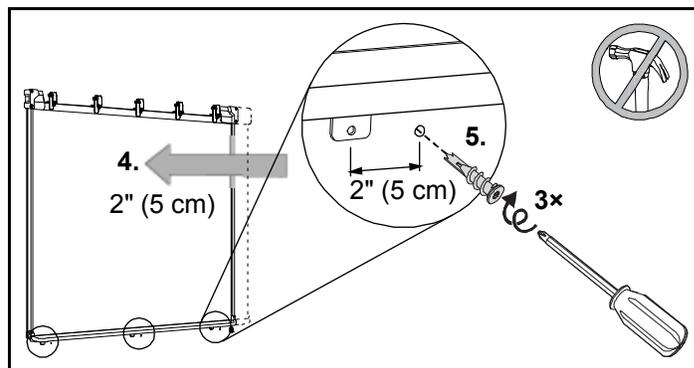


- Slide your interactive whiteboard 2" (5 cm) sideways to the left along the wall-mounting bracket.
- Using the screwdriver, secure an included self-tapping wall anchor at each mark.



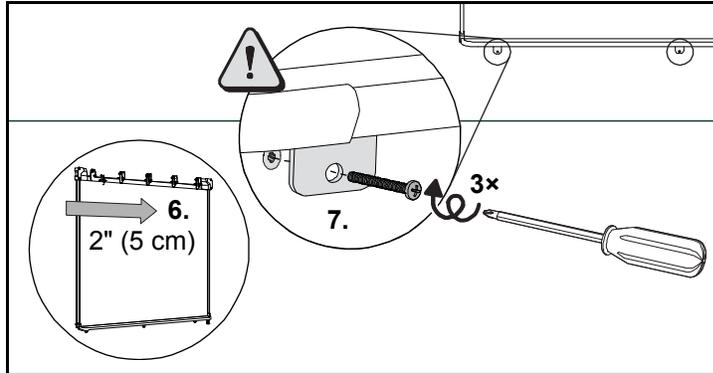
NOTE

For a concrete wall, drill holes at the marks, and then insert concrete anchors (not included) into the holes.



- Slide your interactive whiteboard 2" (5 cm) back to the right along the wall-mounting bracket.

- Using the screwdriver, secure an included long metal self-tapping screw through each of the three tabs and into the wall anchors beneath.



CAUTION

To ensure a safe installation and to prevent your interactive whiteboard from being accidentally knocked off the wall, make sure that you secure your interactive whiteboard to the wall with the included wall anchors and screws.

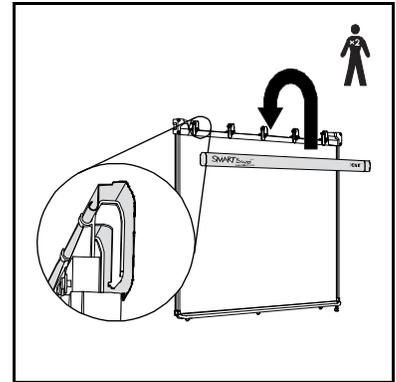
NOTE

If you want to lock your interactive whiteboard with a security cable, see *Securing Your Interactive Whiteboard with a Kensington Lock* on page 19.

- Hook the valance over the clips (at the top of your interactive whiteboard) until the valance snaps in place.

NOTE

If you try to lift your interactive whiteboard by the valance, it will detach.

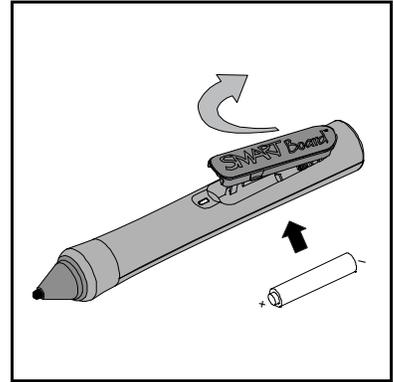


Preparing the Pens

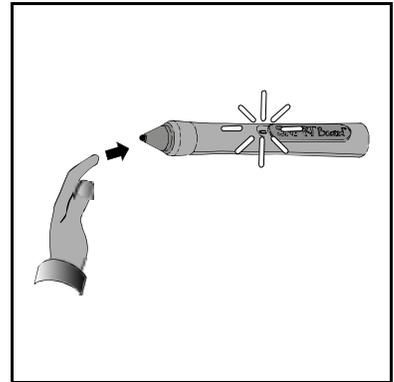
Refer to the following procedure to prepare the included interactive whiteboard pens for use.

To prepare the pens

1. Pull back the battery cover of each pen to open the battery compartment, and then insert an AAA battery, as illustrated.



2. Press the tip switch on the nib of each pen with your finger to check that the pen is working properly. The LED light beside each battery compartment illuminates green. Place the pens on the pen tray.



i NOTES

- A green LED light indicates that the pen is operating properly. A red LED light indicates that less than one hour of battery operating time remains.
- If the pen's LED light doesn't illuminate when you press the tip switch on the nib, see page 60.

After you install your interactive whiteboard, connect your digital projector to your computer by following the manufacturer's instructions included with your projector.

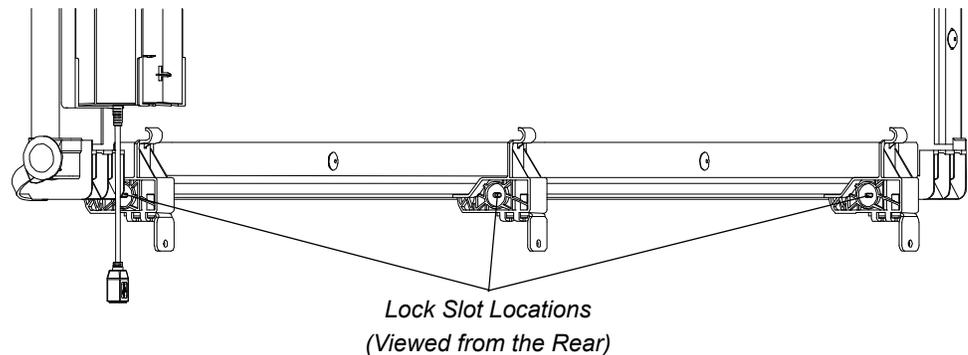
Securing Your Interactive Whiteboard with a Kensington Lock

Secure your interactive whiteboard by attaching a security cable, such as a Kensington cable and lock device (not included), to your interactive whiteboard and an immovable object.

IMPORTANT

Kensington locks are not designed to be a solid protection measure because the lock can be torn out. However, potential thieves might be reluctant to try to sell a product with a broken Kensington lock hole, which would readily identify it as a stolen item.

In each of the three brackets under your interactive whiteboard's pen tray, you'll find a lock slot that accommodates a security cable.



To secure your interactive whiteboard

1. Loop the security cable around a heavy or immovable object, and then thread the lock end of the cable through the loop end of the cable.
2. Insert the prong end of the lock into the lock slot, following the instructions that came with your cable.

NOTE

You might not be able to access the lock slots in the outside brackets from the side that is closest to the outside edge of your interactive whiteboard.

Chapter 3

Connecting Your Interactive Whiteboard to a Computer

In This Chapter

Refer to these topics for information about connecting your SMART Board V280 interactive whiteboard to a computer.

Overview.....	22
Connecting the USB Cable.....	22
Configuring Your Computer Settings.....	24
Recommended Settings.....	24
Matching Your Computer's Resolution to Your Projector's Resolution ..	24
Installing SMART Product Drivers.....	25
Orienting Your Interactive Whiteboard.....	26
Using the Interactive Whiteboard Pen as a Mouse.....	28

Overview

Your SMART Board V280 interactive whiteboard's high-speed USB 2.0 interface enables you to connect your interactive whiteboard to your computer. Because the included USB 2.0 cable provides both a digital signal and power from your computer to your interactive whiteboard, you don't require an additional power supply.

CAUTION

- For operating safety and to avoid damage to your SMART Board interactive whiteboard, use only the included high-speed USB 2.0 cable that came with your interactive whiteboard to connect it to a computer that has a high-speed USB 2.0 compliant port and that bears the USB logo. In addition, the USB source computer must be compliant with CSA/UL/EN 60950 and bear the CE mark and CSA and/or UL Mark(s) for CAS/UL 60950.
- Use only the included high-speed USB 2.0 cable to connect your SMART Board V280 interactive whiteboard to your computer.

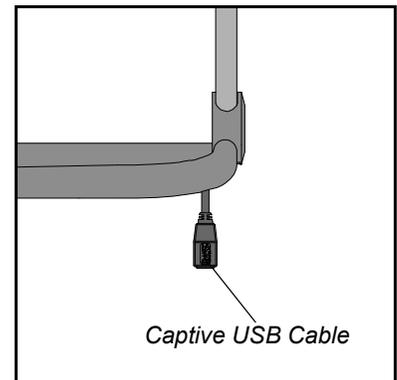
IMPORTANT

Laptop computers operating in battery mode might not provide sufficient power to run your interactive whiteboard reliably. If you're using your interactive whiteboard with a laptop computer, connect your laptop computer to an AC receptacle.

Connecting the USB Cable

Your SMART Board V280 interactive whiteboard has a high-power USB 2.0 high-speed peripheral interface that runs at speeds of up to 480 Mbps. The unit works with USB 2.0 compliant interfaces only.

Your interactive whiteboard's main USB connection is a captive flying lead cable. The connector is a USB Type-B receptacle. This captive cable provides convenient access to the USB receptacle without you having to remove your interactive whiteboard from the wall.



To connect using the included USB cable

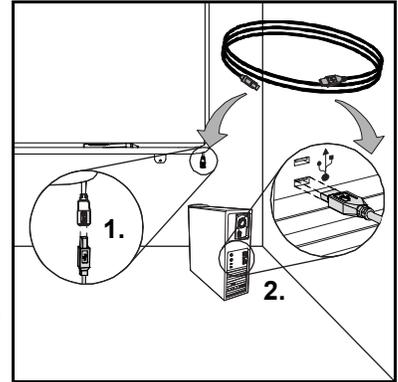
1. Connect one end of the included 16' (5 m) USB cable to the captive connector suspended from your interactive whiteboard's lower-right corner.



NOTE

Use only the included high-speed USB 2.0 cable to connect your SMART Board V280 interactive whiteboard to your computer.

2. Connect the other end to a high-speed USB 2.0 receptacle on your computer.



NOTES

- USB receptacles on the front of your computer might not provide enough power for your interactive whiteboard.
- You need a powered, high-speed USB 2.0 extender cable to exceed 16' (5 m). See Appendix B on page 65 for more information.



IMPORTANT

Laptop computers operating in battery mode might not provide sufficient power to run your interactive whiteboard reliably. Connect your laptop computer to an AC power receptacle to run your interactive whiteboard.

3. Press the power button on your computer to start your interactive whiteboard.
4. If necessary, press the power button on your projector to start it.

Your interactive whiteboard's controller is now receiving power from your computer and you should see the projected computer image on your screen.



NOTE

You might find it easier to see your SMART Board interactive whiteboard's screen if you turn off lights in the room, or close the blinds. Direct sunlight might also affect the performance of your interactive whiteboard.

5. Log on to your computer if required. If your computer doesn't require you to log on, allow your computer to reach its default start screen.

You should now configure your computer settings, and then install SMART product drivers (page 25).

Configuring Your Computer Settings

For optimal configuration, use the following recommended settings for the computer supporting your interactive whiteboard.

Recommended Settings

Configure your computer's power management settings to turn off the monitor after one hour of inactivity and to put the hard disks into standby mode after two hours. This extended period prevents the computer from shutting down unexpectedly (for example, during presentations or meetings that have gaps in computer activity).

Your computer will stop sending an RGB video signal to your projector after a period of idle time, which also triggers the projector to go into standby mode. Similarly, you can put your projector in standby mode by following the manufacturer's instructions included with your projector.

To change the settings in the Windows operating system, double-click the **Power Options** icon in the Windows Control Panel, and then adjust the energy saving features and power management properties in the **Power Schemes** tab. For more information on changing these power management settings, see the instructions included with your operating system.

Matching Your Computer's Resolution to Your Projector's Resolution

Ensure that the resolution settings for your projector and computer match. If your computer's resolution doesn't match the projector's resolution, the image won't properly fill your interactive whiteboard's screen and might shimmer or be distorted.

Set the projector to its optimal image resolution by following the instructions included with your projector, and then set your computer's resolution to match. You can change your computer's screen resolution in the Windows Control Panel. If you need further help changing your computer's resolution, see the instructions included with your operating system.

You might need to adjust your computer's refresh rate to obtain the best results. Set the computer to an initial refresh rate of 60 Hz, and then adjust this rate up or down until you've determined the ideal refresh rate. For more information on changing your computer's refresh rate, see the instructions included with your operating system.

Installing SMART Product Drivers

After you install SMART product drivers on your computer, your SMART Board V280 interactive whiteboard's display will respond to the touch of an interactive whiteboard pen on its screen surface. SMART product drivers include the tools that you need to control computer applications with the included pen, and to write over them in digital ink.

You can install SMART product drivers on any computer that meets certain minimum operating specifications using the software CD included with your SMART product. For your interactive whiteboard's system requirements, see [document 121618](#) at www.smarttech.com/support.

IMPORTANT

Before installing SMART product drivers from the included CD:

- Connect your interactive whiteboard to your computer with the included USB cable, as described on page 23. If you connect your interactive whiteboard to your computer after you install SMART product drivers, you might see an error message stating that SMART Board Service encountered a problem. For more details, see <http://www2.smarttech.com/kbdoc/133790>.
- Remove all versions of SMART software or SMART product drivers previously installed on your computer, and then restart your computer. If you do not know how to remove software, ask your system administrator.

To install SMART product drivers

1. If necessary, turn on your computer and projector, and close all open applications on your computer.
2. Insert the included SMART product drivers CD in your computer's CD drive to launch the software installation screen, and then follow the on-screen instructions.

SMART Board Tools open automatically.

3. If SMART Board Tools don't open, select **Start > All Programs > SMART Technologies > SMART Board drivers > SMART Board Tools**.

The SMART Board icon  appears in the notification area and your interactive whiteboard communicates successfully with SMART product drivers.

After you install SMART product drivers, you should perform a brief orientation procedure, as described in the following section.

Orienting Your Interactive Whiteboard

Your SMART Board V280 interactive whiteboard includes default orientation data from the manufacturing process. After you install SMART product drivers on your computer, orient your interactive whiteboard. Orienting your interactive whiteboard ensures the greatest possible level of writing and touch accuracy. Orient your interactive whiteboard any time your projector or interactive whiteboard has moved since you last used it, or whenever the mouse pointer isn't properly aligned with the pen when you touch the screen.

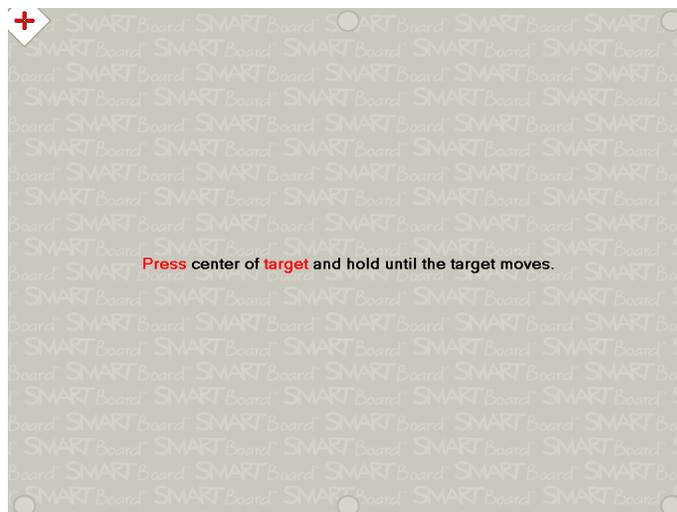
When you orient your interactive whiteboard, ensure that it is away from ambient lighting caused by sunlight or incandescent pot lights. Fluorescent lighting has no effect on your interactive whiteboard's orientation. Ensure that your projector, computer and SMART product drivers are running.

To orient your interactive whiteboard

1. At your computer, click the **SMART Board** icon  in the notification area, and then select **Orient**.

The Orientation screen opens.

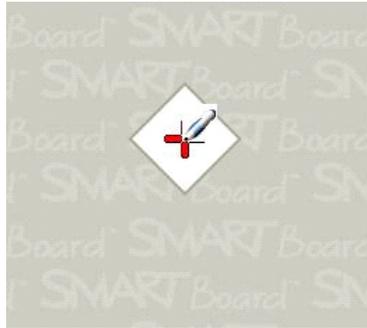
2. Pick up a pen from the pen tray.
3. Beginning at the upper-left corner of the screen, touch the center of the target firmly with the tip of the pen until the target moves to the next point. Try not to flick the pen when you lift it from the screen, and make sure that the direction of the lift is at a right angle to the screen.



Full Orientation Screen

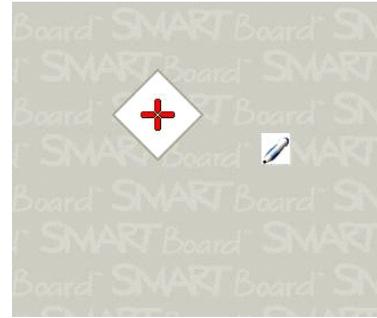
i NOTE

When you press the nib of the pen against your interactive whiteboard's screen, the LED light on the pen illuminates.



Good Orientation Point

The pen touches the center of the target.



Poor Orientation Point

- Repeat step 3 until you arrive at the last point.

i NOTE

If you're not satisfied with the precision of a particular point, press the left arrow key on your computer's keyboard to repeat the orientation for that point.

- At the last point, touch the center of the target firmly and continue pressing until the message "Please wait while Orientation completes" appears.

The Orientation screen closes.

The orientation procedure can be six or fifteen touches, depending on the precision setting you specify in your SMART Hardware Settings in the SMART Notebook control panel. The following procedure shows you how to change the precision setting.

To change the orientation precision

- Select the **SMART Board** icon  once in the Windows notification area, and then select **Control Panel**.
 - Select **SMART Hardware Settings**.
 - Select **Orientation/Alignment Settings** from the drop-down list.
 - Select the desired setting, and then press **OK**.
 - Perform an orientation procedure so that the precision change takes effect.
-

Using the Interactive Whiteboard Pen as a Mouse

Your interactive whiteboard includes two battery-powered pens. After SMART product drivers are running on your connected computer, use these pens to write in digital ink on your desktop image or any open application. If necessary, move the mouse or touch any key on your keyboard to bring your computer out of standby mode.

When you touch your interactive whiteboard's writing surface with the pen, infrared digital cameras located in the upper corners of your interactive whiteboard's frame detect light reflected from the pen's tip above the writing surface, and register the tip's horizontal and vertical (or x and y) coordinates on the display surface. Your computer's mouse driver interprets these coordinates and moves the pointer to the corresponding point on the projected image.

To open an application on your interactive whiteboard, press the tip of the pen twice consecutively on the application's icon. When you double-press the pen to open an application, it is the same as double-clicking your mouse to open an application on your computer. Similarly, each time you single-press on your interactive whiteboard's screen with the pen, it is the same as a single left mouse click.

As you press the pen on your interactive whiteboard, the LED indicator light in front of the battery compartment should illuminate green. If this light is red, the pen's battery charge is low and you should replace the battery. If the applications that you're using don't respond to the touch of the pen, check that the indicator light is illuminated. If it doesn't illuminate, apply more pressure. If it still doesn't illuminate, the pen's battery has no charge or isn't installed. In either case, you should install a fresh battery. See [document 129600](#) at www.smarttech.com/support for more information on troubleshooting your SMART Board V280 interactive whiteboard's pen.

Chapter 4

Getting Started with SMART Notebook Software

In This Chapter

Refer to these topics for information about getting started with SMART Notebook software.

Installing SMART Notebook Software	30
Clicking, Writing, Erasing and More with the Floating Tools Toolbar	32
Clicking (Mouse Mode).....	33
Writing	33
Erasing	34
Using the On-Screen Keyboard to Add Text.....	34
Customizing the Floating Tools Toolbar.....	35
Capturing Your Notes and Creating Presentations with SMART Notebook .	36
Capturing Your Notes and Drawings.....	36
Creating, Managing and Presenting SMART Notebook Files	37
Side Tabs	37
Maximizing the Screen's Viewing Area	38
Converting Your Handwriting to Text	38
Recording and Playing Videos, Sharing Applications and Enhancing Your Presentations	39
Recorder	39
Video Player.....	39

Instant Conferencing Using SMART Bridgit Software	39
Other SMART Tools	39
Writing and Drawing Directly into Software Applications	40
Where to Find More Information	41

Installing SMART Notebook Software

SMART Notebook software enables you to capture and save your notes to a SMART Notebook file, or to write directly into any Ink Aware application. The full capabilities of SMART Notebook include SMART Board Tools and a wide range of digital content.

IMPORTANT

- Before you install SMART Notebook software from the included CD, remove all versions of SMART Board software or SMART Notebook software installed on your computer, and then restart it. If you don't know how to remove software, ask your system administrator.
- Don't remove the Gallery if you want to keep your existing Gallery content.

To fully install SMART Notebook, you must obtain a product key to activate your software. Complete the following steps to obtain a product key.

To obtain a product key

1. In your computer's Web browser, browse to <http://smarttech.com/nb10productkey/>.
2. Type your SMART Board V280 interactive whiteboard's serial number, choose your organization type, and then press **Continue**.

NOTE

To determine your interactive whiteboard's serial number, see page 61.

3. Complete the customer information form.
SMART e-mails you a product key.

NOTE

If you have more than one SMART hardware product, you don't need to complete this procedure for each of your products. Activate each copy of SMART Notebook in your organization with the same product key.

Complete the following steps to install SMART Notebook.

**To install
SMART Notebook**

1. Insert the included SMART Notebook CD in your computer's CD drive.
The *SMART Notebook* window opens.
 2. Press **Install SMART Notebook**, and then follow the on-screen instructions.
 3. During the installation, type the product key that you received from SMART.
 4. When the installation is complete, press **Exit**.
-

 NOTE

If you didn't type the product key during the installation, complete the following steps to activate SMART Notebook after you install it. You must activate SMART Notebook before you can use it.

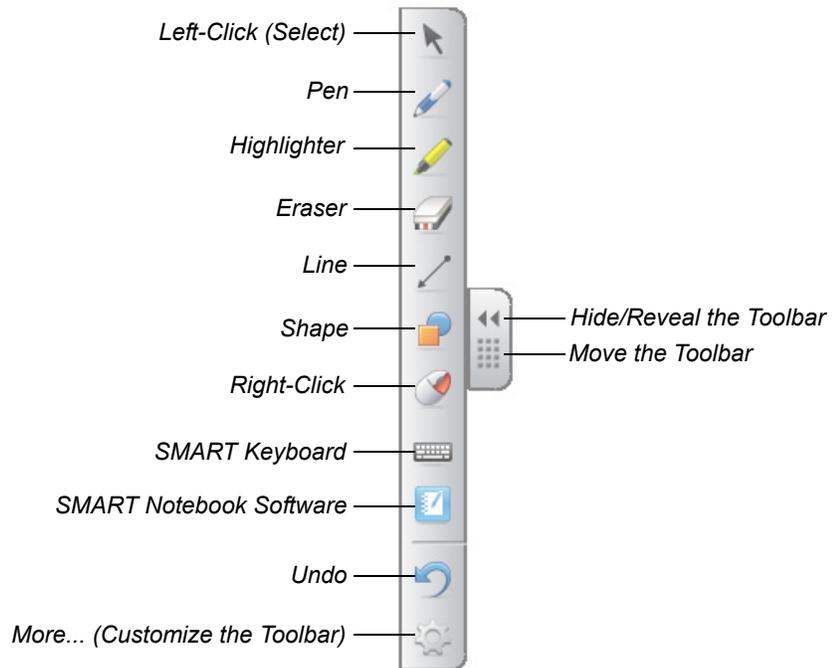
**To activate
SMART Notebook**

1. Press the **SMART Board** icon  in the Windows notification area, and then select **Welcome to Notebook**.
 2. Press the **Help/Support** tab.
 3. Press **Activate Software**.
The *SMART Software Activation* window appears.
 4. Follow the on-screen instructions.
-

Clicking, Writing, Erasing and More with the Floating Tools Toolbar

When working on your interactive whiteboard, the Floating Tools toolbar floats over your desktop and any open application. Using a pen, select a tool from this customizable toolbar to click, write, erase and open SMART Notebook on your interactive whiteboard.

To open the default Floating Tools Toolbar, press the **SMART Board** icon  in the Windows notification area, and then press **Show Floating Tools**.



NOTES

- You can move the Floating Tools toolbar lower down on your screen so that younger students can reach it.
- You're unable to rotate this toolbar horizontally.

Clicking (Mouse Mode)

When you first install SMART product drivers, SMART Notebook defaults to left-click (or mouse) mode, which is represented by the **Left-Click** button on the Floating Tools toolbar. When you press this button with a pen, SMART Notebook interprets your pen presses on your interactive whiteboard screen as left mouse clicks and movements.

Press or double-press application icons on your interactive whiteboard's screen to select and open files. Press the **Right-Click** button on the toolbar to make your next pen press on your interactive whiteboard screen a right-click.

Writing

Press the **Pen** button on the Floating Tools toolbar, and then write on the screen with a pen to begin writing in digital ink. When you press the **Pen** button or any other writing or drawing tool, a border appears around your desktop and a menu becomes available in the upper right-hand corner. This border indicates that the Ink Layer is in place and that you can now write on your desktop in the same way that you would write on a transparent sheet.

NOTE

If the Ink Layer doesn't appear when you select a writing or drawing tool, you might be working in an Ink Aware application, such as Microsoft® Word, Excel® or PowerPoint® software. See page 40 for more information about Ink Aware applications.

For best results, hold the pen perpendicular to the writing surface so that your palm doesn't block the view of the cameras. If you hold the pen at an angle, your writing might be erratic. While you write, maintain constant pressure on the writing surface with the pen. Lift the pen off the screen between strokes so that you don't create extra lines. As you write, stand to the side of your interactive whiteboard so that your shadow doesn't block your audience's view of the screen.

To close the Ink Layer and remove any notes or drawings, press the red **x** in the Ink Layer menu. To restore your notes or drawings, press the **Click here to restore ink** icon in the lower right corner of the screen.

Erasing

To erase your pen strokes, press the **Eraser** button, and then move the pen over the marks that you want to remove from your interactive whiteboard's display. If you draw a circle around your notes with the Eraser tool selected and then press the screen once in the center of the circle, your notes inside the circle disappear.

To select an eraser area size, press the **Eraser** button on the Floating Tools toolbar, and then press your preferred size.



Using the On-Screen Keyboard to Add Text

To open an on-screen keyboard, press the **SMART Keyboard** button. With this keyboard, you can add text to an application or dialog box without leaving your interactive whiteboard to use your computer keyboard.

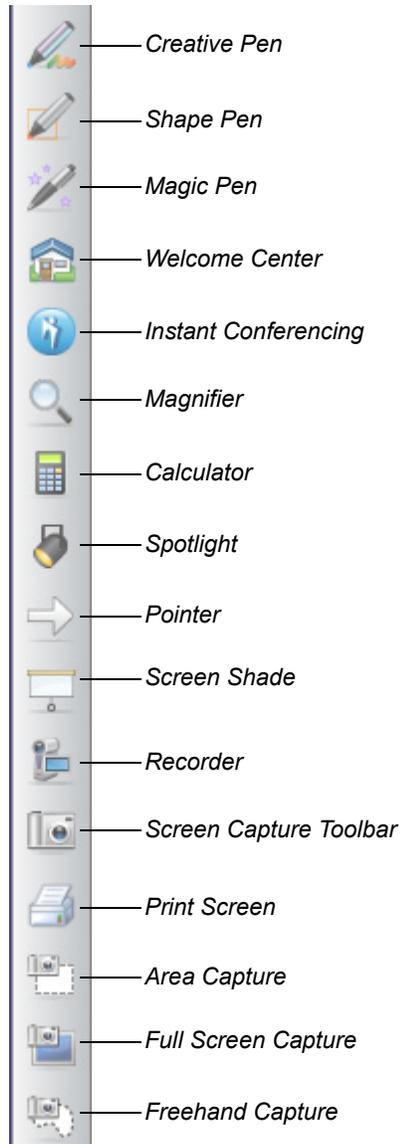
To select a keyboard style, press the **Keyboard** arrow. The default style is the Classic keyboard, which looks like a regular computer keyboard. To open the Preview Pane so that you can type an entire word or sentence before sending any information to an application, press the **Arrow** button in the upper-right corner. When you finish typing, press **Send**.



Customizing the Floating Tools Toolbar

To choose from a variety of toolbar buttons, press the **Customize** button on the Floating Tools toolbar. Add or remove items by dragging them to or from the toolbar. Add or remove as many buttons as you like to fully customize Floating Tools with the buttons you need. To recreate one of the default tool sets, press **Restore Defaults**.

Some of the additional buttons are shown below:



Capturing Your Notes and Creating Presentations with SMART Notebook

Create engaging and interactive lesson activities and presentations with colorful clip art, Adobe® Flash® objects, graphics or text using SMART Notebook.

Capturing Your Notes and Drawings

When you're finished writing, capture your notes to a SMART Notebook page by selecting the camera icon in the Ink Layer menu. The new SMART Notebook page opens automatically. To view your captured image, select the unsaved SMART Notebook (.notebook) file from the taskbar.



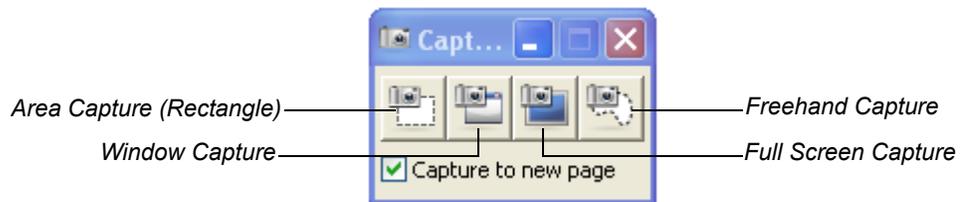
The Digital Ink Layer

Select **File > Save** to save your notes for future reference.

i NOTE

You can change your Digital Ink Layer preferences by right-clicking the Ink Layer and selecting **Ink Layer Setting**.

To display several options for capturing your notes and drawings to a SMART Notebook page, press the Screen Capture Toolbar in Floating Tools. To specify that you want the screen capture to appear on a new page, select **Capture to new page**.



To capture a region of your desktop

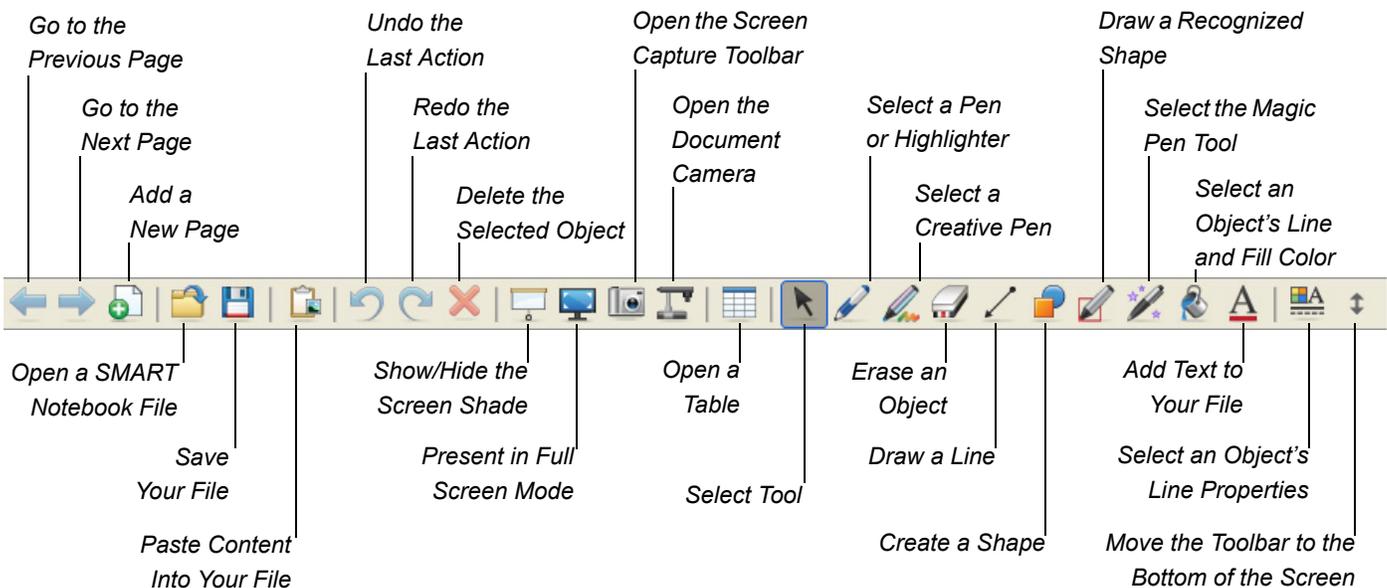
1. Press the **Area Capture** button.
The Area Capture tool appears.
2. Press on any corner of the area that you wish to capture, and then drag the selection box with the pen until it surrounds the entire area.
3. Lift the pen from the screen.
The Area Capture tool captures your selection as a graphic in a new SMART Notebook page, which opens automatically.
4. Select **File > Save** to save your file.

Creating, Managing and Presenting SMART Notebook Files

If a SMART Notebook page isn't already open, press the **SMART Notebook** button on the Floating Tools toolbar to open it, or press the **SMART Board** icon  in the Windows notification area, and then select **Notebook**.

SMART Notebook software enables you to write notes and draw, and to import graphics, text, clip art and entire files from any other application into a SMART Notebook file.

The toolbar at the top of the page provides access to all the buttons that you need to help you work with your SMART Notebook files, and includes many of the same buttons as the Floating Tools toolbar.



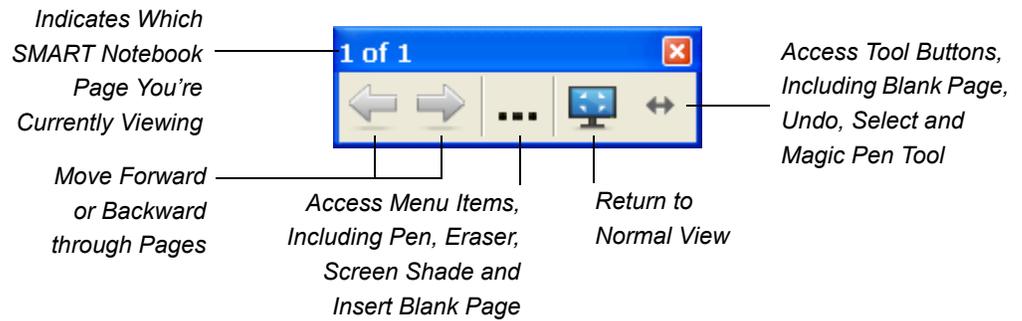
Side Tabs

A SMART Notebook page includes the following side tabs:

- **Page Sorter**  – View a thumbnail image of each page in your SMART Notebook file.
- **Gallery**  – Add custom pages, clip art, animations and video from the Gallery collections to your file.
- **Attachments**  – Add hyperlinks or attachments from other software applications to your file.
- **Properties**  – Add fill effects, color and page recording to your file.

Maximizing the Screen's Viewing Area

To maximize the screen's viewing area, press the **Full Screen Toolbar** button  in the toolbar at the top of your SMART Notebook page. The menus, tabs and title bar disappear. Use the Full Screen toolbar to move through your presentation, access menu options and return to Normal view.



Converting Your Handwriting to Text

To write with a pen on a SMART Notebook page, press the **Pen** button, and then select a pen style. To convert a handwritten word to text, press the **Left-Click (Select)** button, select your word, and then choose its correct spelling from the word object's drop-down menu in the upper right-hand corner.

NOTE

This menu also offers you other options to modify objects, including locking, grouping, flipping or cloning them. You can also change the object's properties.

Recording and Playing Videos, Sharing Applications and Enhancing Your Presentations

To access tools to record and play videos, share voice, video and data over the Internet, and enhance your interactive whiteboard presentations, press the **SMART Board** icon  in the Windows notification area, and then select one of the options outlined below.

Recorder

Recorder enables you to make a video file of everything that you do on your interactive whiteboard. Connect a microphone to record a narration of your actions, and then play the recording on any computer with SMART Notebook Video Player or Windows Media® Player installed.

Video Player

Video Player enables you to write or draw over a frame of video and capture your notes to a SMART Notebook file. Use this application to play video files stored on your computer or to view content from a camera, VCR, CD or DVD. SMART Video Player is compatible with most video and document cameras.

Instant Conferencing Using SMART Bridgit™ Software

SMART Bridgit software enables you to share applications and information on your desktop with anyone, anywhere in the world. Send a simple e-mail invitation to meeting participants and easily alternate control of the desktop with them.

Other SMART Tools

Screen Shade

Gradually reveal information to your audience or class with the Screen Shade tool.

Spotlight

Help focus your audience's attention on a specific part of your screen with the Spotlight tool.

Magnifier

Use the Magnifier tool to select and magnify an area of your interactive whiteboard's screen, for example a spreadsheet cell or an Internet address, so that even people at the back of the room can see what you're doing.

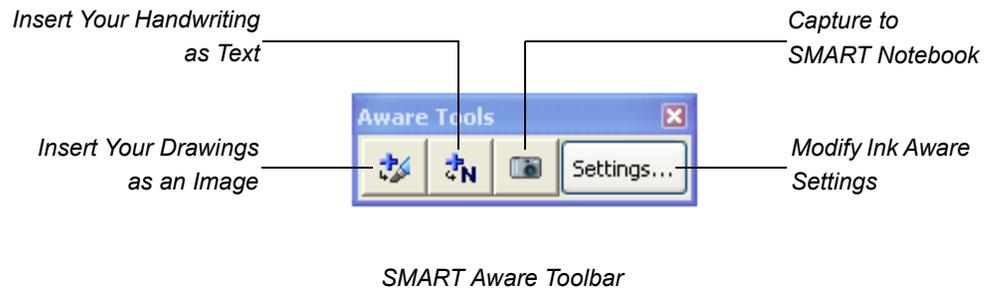
Writing and Drawing Directly into Software Applications

When software is Ink Aware, you can write and draw directly into an active software file and your notes will be visible the next time that you open the file. If the Digital Ink Layer doesn't appear when you select a writing or drawing tool from the Floating Tools toolbar, you may be working in an Ink Aware application.

Ink Aware software applications include:

Microsoft Office	Microsoft Word, Excel and PowerPoint software
Graphic Applications	CorelDRAW®, Microsoft Imaging, Corel® Grafigo™ 2, Microsoft Paint
Presentation Applications	PowerPoint, Corel Presentations™, Microsoft Office Live Meeting, Microsoft NetMeeting 3
Other Applications	AutoCAD®, VoloView Express™, AutoVue™ Professional, Microsoft Windows Journal, Microsoft Office OneNote®, Microsoft Visio®, Adobe Acrobat® Professional 6.0

In an Ink Aware application, similar options to the Ink Layer menu appear in the application's own toolbar or as a floating toolbar.



Where to Find More Information

The SMART Notebook Help Center contains links to a wide range of information, including procedures, concepts, help with applications, tool descriptions, troubleshooting hints, and more. Access the Help Center from the **SMART Board** icon  in the Windows notification area.

For more resources, visit <http://www2.smarttech.com/st/en-US/Country/>, and then select your country. In the Support section of this site, you'll find up-to-date, product-specific information, including setup instructions and specifications. This website's [Training Center](#) also has free learning resources, hands-on lessons and information on how to get more training.

Chapter 5

Maintenance and Troubleshooting

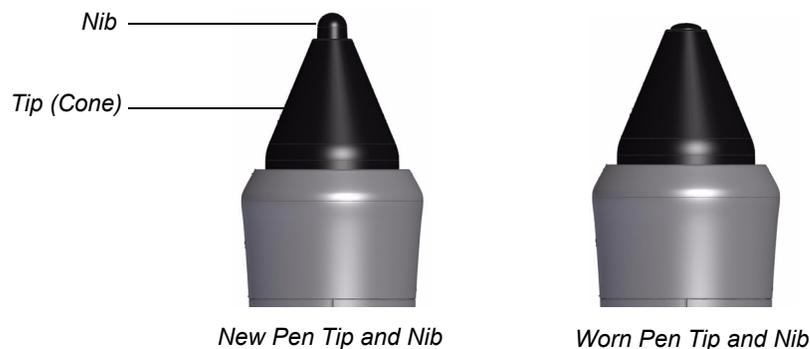
In This Chapter

Refer to these topics for information about maintaining and troubleshooting your SMART Board V280 interactive whiteboard.

Tips for Trouble-Free Performance	44
Safety Tips for Teachers	44
Preventing Damage to Your SMART Board V280 Interactive Whiteboard's Writing Surface	45
Cleaning Your Interactive Whiteboard	45
General Troubleshooting	47
Adjusting the Projected Image	47
Resetting Your Interactive Whiteboard.....	48
Troubleshooting Tips.....	48
Transporting Your Interactive Whiteboard	60
Contacting SMART Technical Support	61

Tips for Trouble-Free Performance

- Ensure that you connect your SMART Board V280 interactive whiteboard to a high-speed USB 2.0 computer interface that's recognized by the operating system and isn't being used by another application.
- Make sure that you regularly install a fresh battery in each pen. Rechargeable batteries are acceptable. When less than one hour of battery life remains, the pen's LED light turns red. With normal use, expect each battery to last approximately seven weeks. You received two new batteries with your SMART Board V280 interactive whiteboard.
- Replace the pen tip (cone) and nib when they wear out. If a pen nib is worn down too far, you might not be able to activate the tip switch inside the pen as you write, and the pen's LED indicator won't illuminate. With normal use, expect each tip and nib to last approximately 25 weeks. Use needle nose pliers to pull the tip and nib out of the pen, and then insert new ones. You received four replacement pen tips and nibs with your interactive whiteboard.



Safety Tips for Teachers

- Tell students not to look directly at the light beam from the projector. Instead, encourage them to keep their backs to the projector when working at the interactive whiteboard. Before students turn to face the class, they should step sideways, out of the projector's beam.
- Make sure that you don't look directly into the projector's light beam. Keep your back to the class when you write over a projected image. Step to the side of your interactive whiteboard before you turn to face the class.
- Tell your students not to touch the projector because it can become extremely hot during normal operation.
- Don't use a chair to increase a student's reach. If your students are unable to reach the top of a wall-mounted interactive whiteboard, you might need to remount it at a lower position.

Preventing Damage to Your SMART Board V280 Interactive Whiteboard's Writing Surface

CAUTIONS

- Your SMART Board V280 interactive whiteboard is not a dry-erase product. Do not use dry-erase or permanent markers on its surface.
- Do not use harsh chemicals or abrasive cleaners on your interactive whiteboard.

Your SMART Board interactive whiteboard is durable. However, take care to prevent damage to the screen and other parts of your product.

- Don't touch the screen with sharp or pointed objects.
- Don't leave adhesive tape on the writing surface for extended periods of time.
- Don't set up and use your interactive whiteboard in an area with excessive levels of dust, humidity or smoke.

Cleaning Your Interactive Whiteboard

IMPORTANT

- Before you clean your interactive whiteboard, shut down or disconnect the connected computer.
- To view dirt or streaks more easily, set your projector to standby (lamp off) mode.

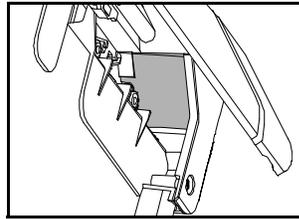
With proper care, your SMART Board interactive whiteboard will provide years of trouble-free service. Follow these tips to keep your interactive whiteboard clean.

- To clean dust, dirt and finger grease, wipe the writing surface with a damp cloth or sponge. Use mild soap, if required.
- If ink is accidentally used on your interactive whiteboard, remove the ink as soon as possible. Ink becomes more difficult to remove the longer it stays on the display surface.
- Cover ink stains with [Sanford Expo® Whiteboard Cleaner](#) (*not* low-odor whiteboard cleaner), and then rub the surface clean with paper towels.

TIP

When removing ink, don't use Sanford Expo Dry Erase Board Doctor, Sanford Expo Cleaning Wipes, low-odor Sanford Expo Whiteboard Cleaner or Windex® glass cleaner, which don't adequately clean the surface of your SMART Board V280 interactive whiteboard and can leave permanent stains.

- If ink remains on your interactive whiteboard for a long period of time, you might need to scrub the ink with Sanford Expo Whiteboard Cleaner for as long as five minutes. Although a faint residue might remain, it isn't usually visible when the projector is on.
- Remove persistent stains by gently rubbing a paste of baking soda and water on the screen surface.
- The digital cameras located in each screen corner under the valance are protected from dust and dirt by protective windows. You only need to clean the camera windows if your interactive whiteboard is located in an extremely dusty environment.



- Rotate the valance upwards in its clips to clean the diagonal surfaces of the camera windows. Gently rub a soft, clean, damp, cotton cloth or cotton-tipped swab on the windows.

CAUTION

Do not use an abrasive cloth or paper towel to clean the camera windows because you might scratch the surface.

General Troubleshooting

Adjusting the Projected Image

If your projector isn't installed in a fixed location, you can correct many image problems by shifting your projector so that the projected image fits squarely on your interactive whiteboard's screen. Optimally, each side of the image should extend almost to the edge of your interactive whiteboard's display surface. You can then adjust the zoom lens to display a focused image.

NOTES

- Don't adjust the image size and geometry based upon your projector's splash screen. The splash screen image is much smaller than the computer's projected image. Before you adjust the projected image, make sure that you set the computer's resolution and refresh rate (see page 24).
- Complete the following procedures only as required.
- If you're unable to adjust the projected image to fill the entire writing surface and you're experiencing difficulty orienting your interactive whiteboard, see *The orientation procedure stops at the first point and won't proceed to the next point* on page 52.

To adjust the projected image

1. If the left and right edges of the projected image aren't parallel, raise or lower your projector at the front or back until the edges are parallel.
2. If the top and bottom edges aren't parallel, turn the projector slowly until the edges are parallel.
3. Further adjust your projector using small, slow movements until you're satisfied with the projected image.
 - Correct the image's horizontal and vertical position by adjusting the height and position of the projector platform or stand.
 - Adjust the image laterally by sliding the projector to the left or right.
 - Adjust the image size by moving the projector forward or backward to increase or reduce the image size until it correctly fills the screen.
4. Make fine adjustments to the image level and size according to your projector manufacturer's instructions.

NOTE

The method for changing the projected image depends on your projector. For more information, see the instructions included with your projector.

5. Create a clear image by adjusting your projector's focus function.

Resetting Your Interactive Whiteboard

If your interactive whiteboard behaves erratically or becomes unresponsive, possibly because of an electrostatic discharge, a power interruption or some other event, you might be able to restore normal operation by resetting your interactive whiteboard.

You can reset your interactive whiteboard by disconnecting and then reconnecting the USB cable. This turns the power off and back on, restarting all components of your interactive whiteboard. All data (including orientation data) stored on the cameras will be retained.

Troubleshooting Tips

This section describes the symptoms, causes and solutions for problems that you might experience with your SMART Board V280 interactive whiteboard.

Try the troubleshooting tips in the following table to quickly resolve most issues with your product.

Symptoms	Cause	Solution
Your computer slows down or stops responding when you connect it to your interactive whiteboard.	Your computer doesn't meet the minimum system requirements for your interactive whiteboard.	Ensure that your computer meets or exceeds the minimum system requirements for your interactive whiteboard. For your interactive whiteboard's system requirements, see document 121618 at www.smarttech.com/support .
	There are too many external peripheral devices connected to your computer, increasing demand on its CPU.	Disconnect any external peripheral devices that you're not using.

Symptoms	Cause	Solution
There is no image projected on your interactive whiteboard's screen, or a "No Input" message appears.	Your projector isn't receiving a video signal.	<ul style="list-style-type: none"> • Check the video cable connections. • Check that the correct video input is selected on your projector. • Ensure that your projector is on, and that it's connected to a power source. • If you're using a laptop computer, switch the external video connection on. Refer to your laptop's user guide for more information.
	Your computer is in standby mode.	Move the mouse or touch any key on your keyboard to bring your computer out of standby mode.
	Your computer is off.	Turn on your computer (or press your computer's reset button), and then log on as usual.
The projected image is blurry, too large or doesn't completely fill your interactive whiteboard's screen.	Your projector's position, zoom and focus settings aren't adjusted.	Adjust the projector's position, zoom and focus settings. Refer to your projector's manual for more information.
	Your computer's video resolution settings don't match your projector's native resolution.	Consult your projector's manual for the correct computer video resolution, and then select Start > Control Panel > Display and change the video resolution to match your projector.
		<p>i NOTE</p> <p>This procedure might vary, depending on your version of Windows operating system and your system preferences.</p>

Symptoms	Cause	Solution
You see a message telling you that your interactive whiteboard requires a high-speed USB 2.0 compliant computer.	Your computer isn't high-speed USB 2.0 compliant.	<p>Replace your computer with a newer, high-speed, USB 2.0 compliant model.</p> <p>For your interactive whiteboard's system requirements, see document 121618 at www.smarttech.com/support.</p> <p>i NOTE</p> <p>This procedure might vary, depending on your version of Windows operating system and your system preferences.</p> <p>To check if your computer is high-speed, USB 2.0 compliant:</p> <ol style="list-style-type: none"> 1. Select Start > Control Panel. The <i>Control Panel</i> window opens. 2. Double-click System. The <i>System Properties</i> window opens. 3. Select the Hardware tab, and then select Device Manager. The <i>Device Manager</i> window opens. 4. Expand Universal Serial Bus controllers. If you see a listed controller with the word "Enhanced" in its name, for example, Intel® ICH8 Family USB2 Enhanced Host Controller, your computer is high-speed USB 2.0 compliant.

Symptoms	Cause	Solution
<p>You see a message telling you that your interactive whiteboard requires a high-speed USB 2.0 compliant computer.</p> <p>(continued)</p>	<p>The included USB cable isn't connected to a high-speed USB 2.0 compliant port on your computer. On some computers, the front USB ports aren't high-speed USB 2.0 compliant.</p>	<p>Try a different USB port.</p>
<p>You see a message telling you that a connected device could operate faster. If you click this message, another message instructs you to connect your interactive whiteboard to a USB 2.0 compliant port.</p>	<p>There are too many devices connected to your computer. As a result, your operating system must use a non-enhanced controller to connect your interactive whiteboard.</p>	<p>Disconnect the additional USB devices to ensure that your interactive whiteboard connects to an enhanced host controller.</p> <p> IMPORTANT Your SMART Board V280 interactive whiteboard does not support webcams connected to your computer. Either your interactive whiteboard or the webcam will not function reliably.</p>
	<p>The included USB cable isn't connected to a high-speed USB 2.0 compliant port on your computer. On some computers, the front USB ports aren't high-speed USB 2.0 compliant.</p>	<p>Try a different USB port.</p>
<p>The SMART Board icon  doesn't appear in the Windows notification area.</p>	<p>SMART Board Tools aren't running.</p>	<p>Start SMART Board Tools.</p> <p>To start SMART Board Tools: Select Start > All Programs > SMART Technologies > SMART product drivers > SMART Board Tools.</p>
	<p>SMART product drivers aren't installed.</p>	<p>Install SMART product drivers on your computer.</p> <p>For details about installing SMART product drivers, see page 25.</p>

Symptoms	Cause	Solution
The orientation procedure stops at the first point and won't proceed to the next point.	<p>The projected image doesn't completely fill the writing surface of your interactive whiteboard.</p> <p>SMART product drivers orientation software is optimized for the field of view of each camera when the projected image fills the entire writing surface. If your projected image is too small, the field of view of the cameras won't include the first orientation point. Therefore, the software won't detect your touch point, and the orientation procedure stalls.</p>	<p>Move your projector away from your interactive whiteboard or adjust the projector's zoom feature so that the projected image fills the entire writing surface, and then repeat the orientation procedure.</p> <p>OR</p> <p>If you can't adjust the projected image to fill the entire writing surface of your interactive whiteboard, perform the following steps:</p> <ol style="list-style-type: none"> 1. In the Windows notification area, select the SMART Board icon , and then select Control Panel. <p>The SMART Notebook control panel opens.</p> <ol style="list-style-type: none"> 2. Select SMART Hardware Settings. 3. From the drop-down menu, select Orientation/Alignment Settings. 4. Clear the Projected image fills the entire display area option. 5. Click Apply. 6. Click Orient/Align the SMART Product. <p>The orientation screen appears.</p> <ol style="list-style-type: none"> 7. Perform the orientation procedure.

Symptoms	Cause	Solution
Your interactive whiteboard's screen doesn't respond when you touch it with a pen, the pointer moves erratically or gaps appear when you draw or write, or the pen doesn't work reliably near the bottom of the screen.	Your interactive whiteboard isn't oriented properly.	Orient your interactive whiteboard. For more information about orienting your interactive whiteboard, see page 26.
	Extra light in the room is affecting your interactive whiteboard's performance.	Close any blinds and shades, or turn off all halogen and LED lights.
	SMART Board Tools aren't running.	Start SMART Board Tools. Select Start > SMART Technologies > SMART Board drivers > SMART Board Tools .
	SMART product drivers aren't installed.	Install SMART product drivers on your computer. For details about installing SMART product drivers, see page 25.
Your interactive whiteboard's screen surface is curved, obstructing the line of sight from your interactive whiteboard's digital cameras to the tip of the pen.		Ensure that you secured your interactive whiteboard to the wall to hold it flat. For more information, see page 15. For more information about checking for surface curvature, see document 135276 at www.smarttech.com/support .
Your computer is running too many applications.		Close some open applications.
The USB power from your laptop, computer or USB extender is too low to power your interactive whiteboard.		Connect your laptop or computer to an AC power receptacle. OR Eliminate or substitute the USB extender. OR Install a powered USB hub.
Your computer doesn't meet minimum specifications.		Upgrade your computer or replace it with a more powerful one. For your interactive whiteboard's system requirements, see document 121618 at www.smarttech.com/support .

Symptoms	Cause	Solution
<p>Pen strokes or parts of letters are missing when you write quickly on your interactive whiteboard.</p> <p>i NOTE This issue doesn't occur when you use handwriting.</p>	<p>Your interactive whiteboard's frame rate might be set too low.</p>	<p>Increase your interactive whiteboard's frame rate.</p> <p>To determine whether your interactive whiteboard's frame rate is set too low, write the same word twice: once slowly, and once quickly. If your strokes are complete in the slow version but not in the quick version, the frame rate is set too low.</p> <p>To increase your interactive whiteboard's frame rate:</p> <ol style="list-style-type: none"> 1. In the Windows notification area, select the SMART Board icon , and then select Control Panel. The SMART Notebook control panel opens. 2. Select About Software and Product Support > Tools > Diagnostics. The <i>SMART Board Diagnostics</i> window opens. 3. Select View > V200 Bar, and then select Frame Rate. The <i>Frame Rate</i> window opens. 4. Move the slider to 60, and then select OK. The <i>Frame Rate</i> window and the V200 bar close automatically. 5. Close the <i>SMART Board Diagnostics</i> window, and then close the SMART Notebook control panel.

Symptoms	Cause	Solution
Unwanted connection lines appear between printed letters when you write quickly on your interactive whiteboard.	The Double-click Zone might be too large for your style of printing. Your interactive whiteboard is incorrectly reading your printing strokes as double-clicks.	<p>Decrease the size of the Double-click Zone.</p> <p>To decrease the size of the Double-click zone:</p> <ol style="list-style-type: none"> 1. In the Windows notification area, select the SMART Board icon , and then select Control Panel. <p>The SMART Notebook control panel opens.</p> <ol style="list-style-type: none"> 2. Select SMART Hardware Settings. 3. From the drop-down menu, select Mouse Settings. 4. In the Double-click Zone, move the slider to the second square from the right. <p>Select Apply, and then select OK.</p> <p>i NOTE</p> <p>If the lines still drag, decrease the size of the double-click zone again. Repeat steps 1 to 3, and then move the slider farther to the right.</p>

Symptoms	Cause	Solution
There is a small red ✕ on the SMART Board icon  .	SMART Notebook software is unable to detect your interactive whiteboard.	Check that the cable extending from each camera to the USB hub behind your interactive whiteboard is securely connected, and that the USB 2.0 cable is connected to both the USB hub (on the back of your interactive whiteboard) and your computer.
	The included USB cable isn't connected to a high-speed USB 2.0 compliant port on your computer. On some computers, the front USB ports aren't high-speed USB 2.0 compliant.	Try a different USB port.
	SMART Board Service isn't running.	<p>Start SMART Board service.</p> <p>To start SMART Board service:</p> <ol style="list-style-type: none"> 1. In the Windows notification area, select the SMART Board icon , and then select Control Panel. <p>The SMART Notebook control panel opens.</p> <ol style="list-style-type: none"> 2. Select About Software and Product Support > Tools > Diagnostics. <p>The <i>SMART Board Diagnostics</i> window opens.</p> <ol style="list-style-type: none"> 3. Select the Service menu, and then select Start. 4. Close the <i>SMART Board Diagnostics</i> window, and then close the SMART Notebook control panel.
There are too many high-speed USB devices connected to your computer.	Disconnect any webcams or other high-speed USB devices.	

Symptoms	Cause	Solution
There is a small red ✖ on the SMART Board icon  . (continued)	The USB CCID Smart Card driver installed on your computer failed to access the Atmel® chip on your interactive whiteboard's USB hub.	Check the SMART Board service log to see if there is an error indicating that the USB CCID Smart Card driver failed to access the Atmel chip. If there is an error, disconnect and reconnect the USB cable.
	<p>i NOTE</p> <p>The USB CCID Smart Card driver encrypts data from each of your interactive whiteboard's cameras, which connect to the USB hub.</p>	<p>To check the SMART Board service log:</p> <ol style="list-style-type: none"> In the Windows notification area, select the SMART Board icon , and then select Control Panel. The SMART Notebook control panel opens. Select About Software and Product Support > Tools > Diagnostics. The <i>SMART Board Diagnostics</i> window opens. Check the SMART Board service log file. If you see the following error, the USB CCID Smart Card driver failed to access the Atmel chip: <pre>22: (4/22 10:13:23.114) - Error: The data necessary to complete this operation is not yet available. (0x8000000a). SBV280 init failed due to Smart Card not connected. Unplug and replug of usb cable might fix the error.</pre> Close the <i>SMART Board Diagnostics</i> window, and then close the SMART Notebook control panel.

Symptoms	Cause	Solution
<p>There is a small red ✖ on the SMART Board icon .</p> <p>(continued)</p>	<p>The camera calibration data is lost.</p>	<p>Restore the back-up camera data from the registry.</p> <p>To restore the back-up camera data:</p> <ol style="list-style-type: none"> 1. In the Windows notification area, select the SMART Board icon , and then select Control Panel. <p>The SMART Notebook control panel opens.</p> <ol style="list-style-type: none"> 2. Select About Software and Product Support > Tools > Diagnostics. <p>The <i>SMART Board Diagnostics</i> window opens.</p> <ol style="list-style-type: none"> 3. Select Default (or Restore Camera Defaults) to restore the camera data. 4. Close the <i>SMART Board Diagnostics</i> window, and then close the SMART Notebook control panel. <p>i NOTE The Connection Wizard enables the Restore Camera Defaults button if both cameras are detected but your interactive whiteboard isn't detected.</p>

Symptoms	Cause	Solution
<p>There is a small red ✕ on the SMART Board icon .</p> <p>(continued)</p>		<p>Stop and then start SMART Board service.</p> <p>To stop SMART Board service:</p> <ol style="list-style-type: none"> 1. In the Windows notification area, select the SMART Board icon , and then select Control Panel. <p>The SMART Notebook control panel opens.</p> <ol style="list-style-type: none"> 2. Select About Software and Product Support > Tools > Diagnostics. <p>The <i>SMART Board Diagnostics</i> window opens.</p> <ol style="list-style-type: none"> 3. Select the Service menu, and then select Stop. 4. Close the <i>SMART Board Diagnostics</i> window, and then close the SMART Notebook control panel. <p>To start SMART Board service:</p> <ol style="list-style-type: none"> 1. Repeat steps 1 and 2, above. 2. Select the Service menu, and then select Start. 3. Close the <i>SMART Board Diagnostics</i> window, and then close the SMART Notebook control panel. <hr/> <p>Restart your computer.</p>

Symptoms	Cause	Solution
The pen's LED status light doesn't illuminate green when you press the tip switch on the nib with your finger or against your interactive whiteboard. The screen also doesn't respond when you touch it with a pen, and you're unable to write in digital ink.	The pen's battery is weak or dead.	Replace the old battery with a new or recharged one. For more information about checking your pen's battery charge, see document 129600 at www.smarttech.com/support .
	The pen nib is worn down. It isn't long enough to press the switch inside the pen.	Replace the pen nib and tip (cone). You received four replacement pen nibs and tips with your interactive whiteboard. For more information about checking and replacing your pen's nib, see document 129600 at www.smarttech.com/support .
	The battery orientation is backward.	Remove the battery, and then insert it as illustrated inside the battery compartment.

Transporting Your Interactive Whiteboard

Save your original SMART Board interactive whiteboard packaging so that it's available if you need to transport your interactive whiteboard. When required, repack your interactive whiteboard with as much of the original packaging as possible. This packaging was designed with optimal shock and vibration protection. If your original packaging is no longer available, you can purchase the same packaging directly from your [authorized SMART reseller](#).

Contacting SMART Technical Support

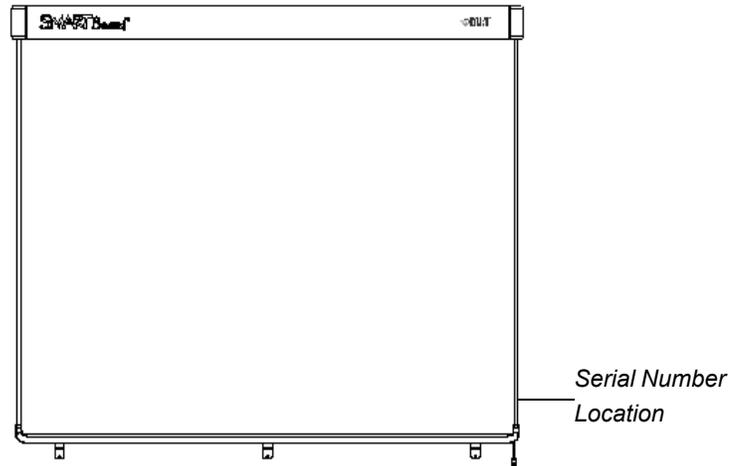
SMART Technical Support welcomes your call. However, if you experience difficulty with your SMART product, you might want to contact your [authorized SMART reseller](#) first. Your local reseller might be able to resolve the issue without delay.

Before contacting SMART Technical Support, make note of your SMART Board V280 interactive whiteboard's serial number, and then note it in the inside cover of this manual (if you printed it).

To determine your interactive whiteboard's serial number

The serial number is located on the lower right edge of your interactive whiteboard's frame if you are facing the front of your interactive whiteboard, and also under its pen tray.

The serial number matches your interactive whiteboard's model number and has the following format: SBV280-xxxxxx.

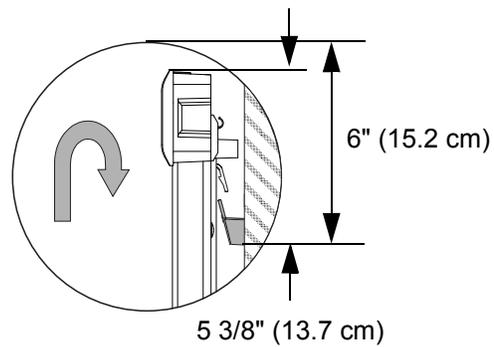


Appendix A

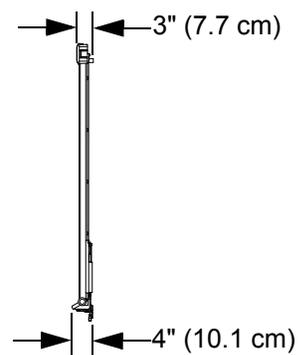
Specification Drawings

Wall-Mounted Cut Away View

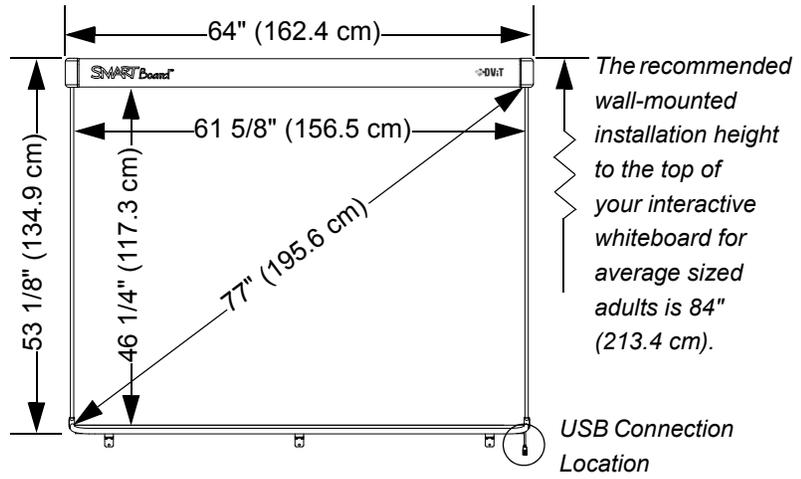
Leave at least 5/8" (1.6 cm) headroom to wall-mount your interactive whiteboard.



Wall-Mounted Side View



Wall-Mounted Front View



All dimensions +/- 1/8" (3.2 mm)

Appendix B

Extending Your USB 2.0 Cable

The 16' (5 m) high-speed USB 2.0 cable included with your SMART Board V280 interactive whiteboard is within the limit defined by the USB 2.0 standard for maximum length.

However, if this cable isn't long enough to reach from your computer to your interactive whiteboard, you can use a bus powered hub such as the SMART Active USB Extension Cable (Part No. USB-XT) to extend your USB connection by 16' (5 m). This configuration provides a total 32' (10 m) reach between your interactive whiteboard and your computer. See the diagram on the following page.



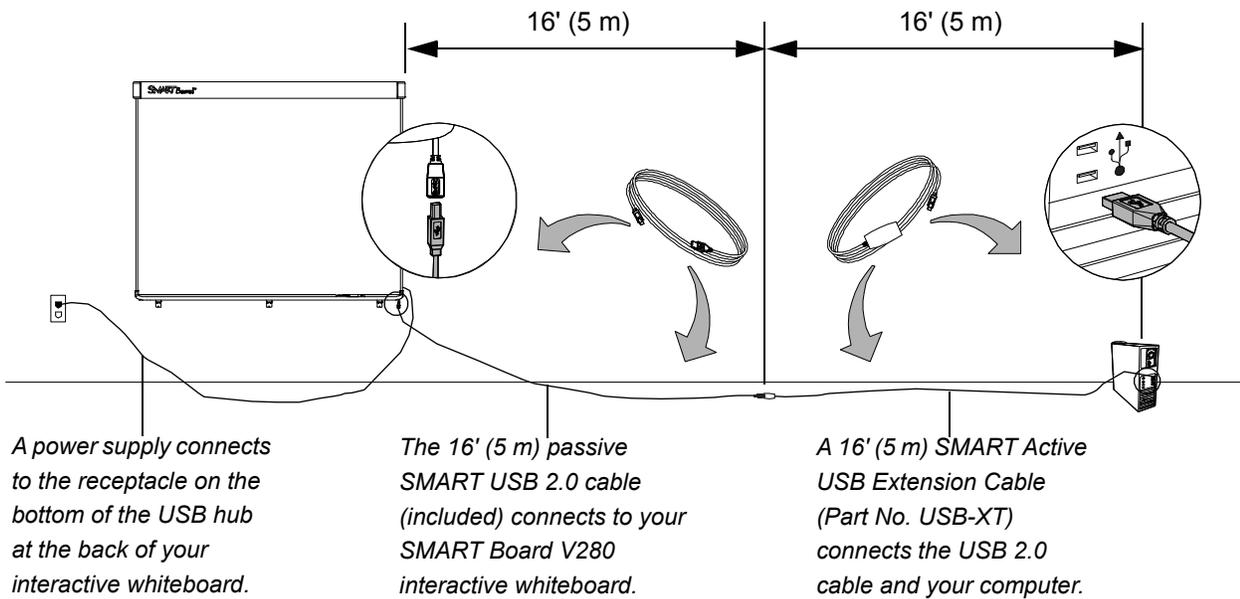
*SMART Active USB Extension Cable
(SMART Part No. USB-XT)*

IMPORTANT

- Connect an external power supply (not included) to your SMART Board V280 interactive whiteboard when using a bus powered hub, such as the SMART Active USB Extension Cable, with your product. This power supply ensures that your interactive whiteboard receives enough power to function reliably.
- Passive USB extension cables are not supported. (An active device includes circuitry for regenerating the USB signals.)
- The external power supply (when required) must meet the Limited Power Source (LPS) requirements of CSA/UL/IEC/EN 60950-1.

This external power supply should meet the following specifications.

Specification	Parameter
Power Supply	<ul style="list-style-type: none"> • 5.0 V DC with 5% or better regulation • 1.5 A of current (typical draw - 500 mA)
Connector	1/4" × 1/8" (5.5 × 2.1 mm), center positive coaxial connector
International Support	120-240 VAC Input
Certifications and Compliance	Limited Power Source (LPS) requirements of CSA/UL/IEC/EN 60950-1



Extending the USB Connection Between Your Interactive Whiteboard and Your Computer

Appendix C

Mounting Your Interactive Whiteboard on a Floor Stand

Before Mounting Your Interactive Whiteboard on a Floor Stand

Before mounting your SMART Board V280 interactive whiteboard on an FSV280 floor stand, carefully read and observe the following instructions for operating safety and to avoid damage to your product.

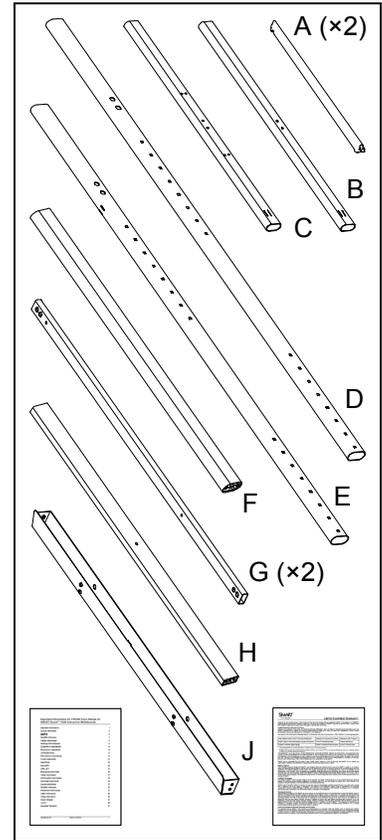
WARNING

- Two people are required to safely mount your interactive whiteboard on a floor stand because it might be too large for one person to safely maneuver alone. When you lift your interactive whiteboard, you and your assistant should stand on either side of the screen, supporting its weight at the bottom corners while balancing the top with your other hands.
- Do not leave cables on the floor where they can be a tripping hazard. 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 a contrasting color. Handle cables carefully and avoid excessive bending.
- Do not mount your SMART Board V280 interactive whiteboard on an FS670 or FS570 floor stand. These floor stands do not provide the correct locking mechanisms to properly secure your interactive whiteboard. Using these stands could result in personal injury and product damage.
- Move a floor stand-mounted interactive whiteboard with care. Quick stops, excessive force and uneven surfaces may cause your interactive whiteboard to overturn.

Contents of Your FSV280 Floor Stand Shipping Box

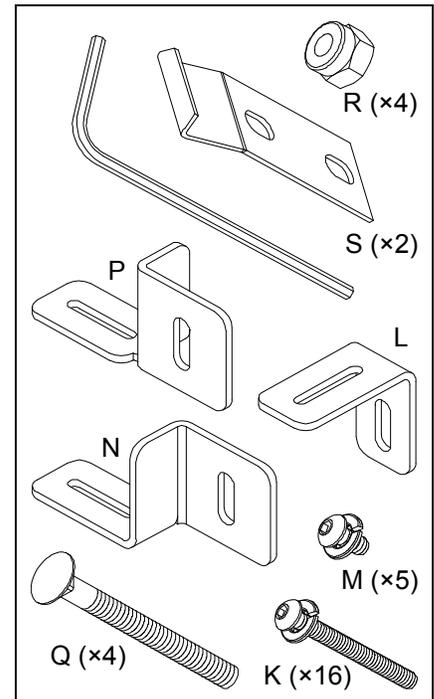
Your FSV280 floor stand shipping box contains:

- Two upright braces (A)
- Left foot (B)
- Right foot (C)
- Left upright (D)
- Right upright (E)
- Bottom cross-bar (F)
- Two vertical frame parts (G)
- Bottom frame part (H)
- Top frame part (J)
- One-year limited product warranty document
- Multi-lingual product warnings document
- Textless installation instructions (not shown)



You also received a hardware kit containing the following smaller parts:

- Sixteen 1 1/2" (3.8 cm) button-head screws with split washers (K)
- Center interactive whiteboard support bracket (L)
- Five 1/2" (1.3 cm) button-head screws with split washers (M)
- Right interactive whiteboard support bracket (N)
- Left interactive whiteboard support bracket (P)
- Four carriage bolts (Q)
- Four locking nuts (R)
- Two security brackets (S)
- 5/32" (4 mm) hex key



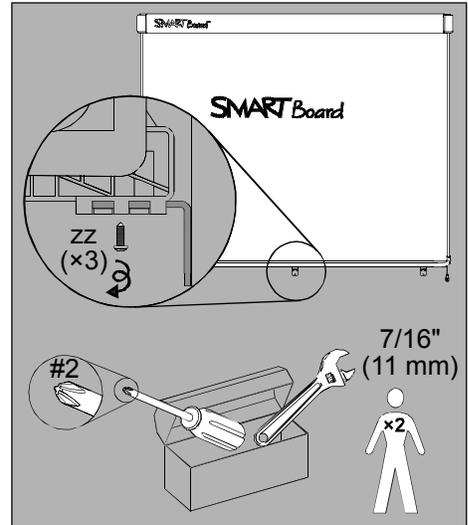
Other Tools and Parts Required

To mount your SMART Board interactive whiteboard on a floor stand, you'll also need the following tools and parts, which aren't included with your floor stand:

- a Phillips No. 2 screwdriver
- a 7/16" (11 mm) wrench
- three small thread-forming screws (included with your SMART Board V280 interactive whiteboard)

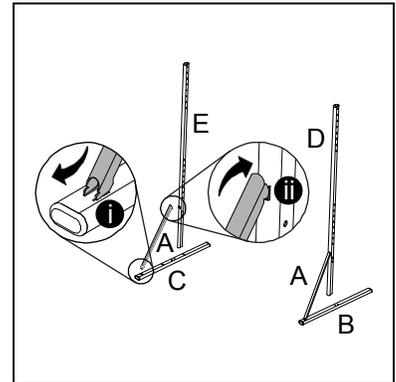
i NOTE

You'll need the help of another person to mount your interactive whiteboard on a floor stand.

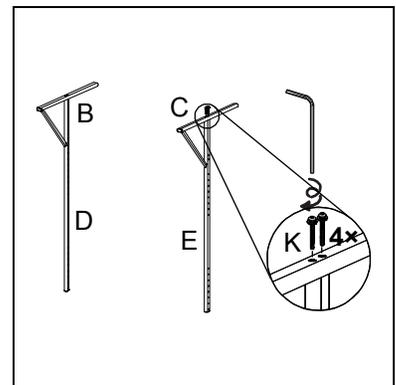


To mount your interactive whiteboard on an FSV280 floor stand

1. Hook the blunt end of each upright brace (A) into the left and right feet (B and C), and then guide the opposite hooked end of each brace (A) into the left and right uprights (D and E), as illustrated.



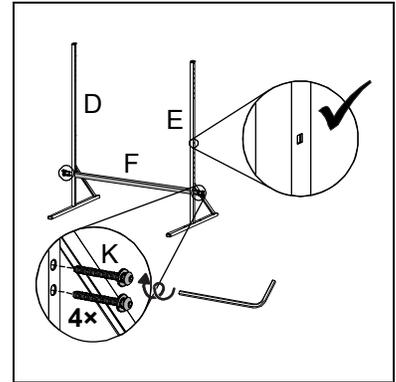
2. Align each foot until it's perpendicular to its corresponding upright, and then secure them with two 1 1/2" (3.8 cm) button-head screws (K). Use the included hex key to tighten the screws.



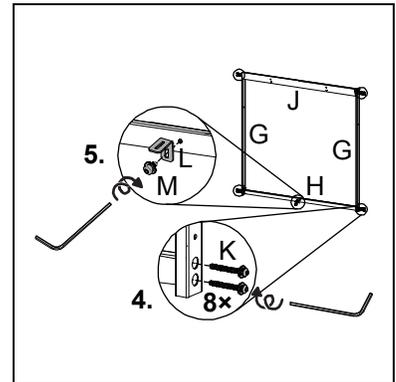
- Secure the bottom cross-bar (F) to the uprights (D and E) with two 1 1/2" (3.8 cm) button-head screws (K). Use the included hex key to tighten the screws.

**NOTE**

The square holes on the uprights (D and E) must face outward.

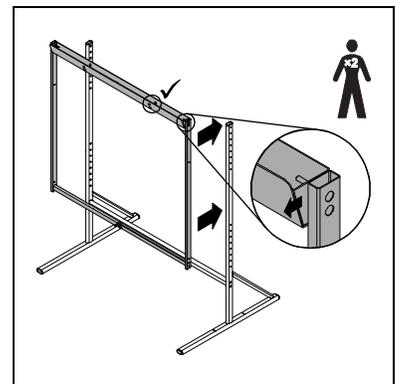


- Secure both the vertical frame parts (G) to the bottom and top frame parts (H and J) with two 1 1/2" (3.8 cm) button-head screws (K), as illustrated. Ensure that the vertical frame parts (G) are on the outside of the frame assembly, and that both the angled, tabbed side of the top frame part (J) and the center hole on the bottom frame part (H) face outward. Use the included hex key to tighten the screws.

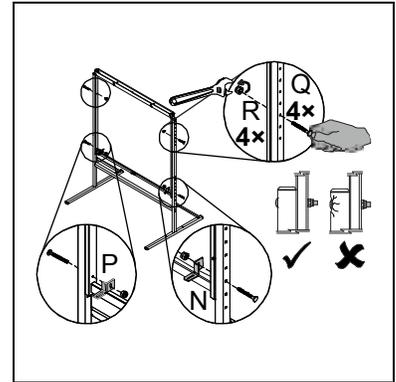


- Secure your interactive whiteboard support bracket (L) to the center of the bottom frame part (H) with a 1/2" (1.3 cm) button-head screw (M), as illustrated. Use the included hex key to tighten the screws.

- With the help of another person, fit this frame between the uprights of the support assembly that you completed in step 3.

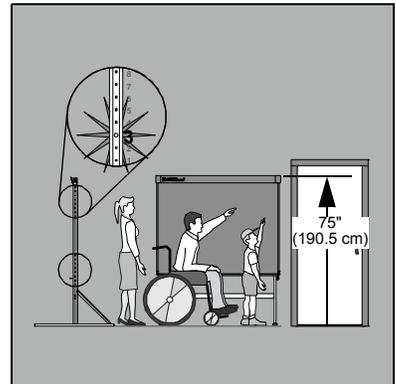


7. Secure the frame to the upright support assembly in four places with a carriage bolt (Q) and a locking nut (R), as illustrated. For the two lower locations, insert the right and left interactive whiteboard support brackets (N and P) between the locking nut (R) and the right or left vertical frame part, as illustrated. Use your 7/16" (11 mm) wrench to tighten the locking nuts.

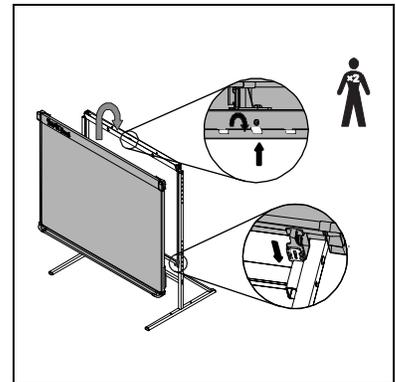


i NOTES

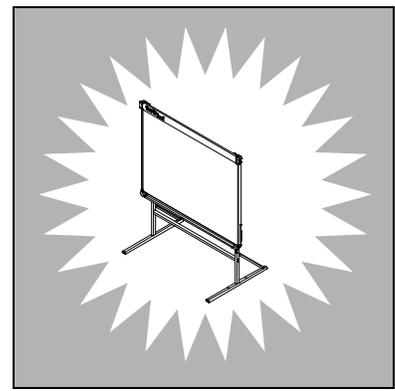
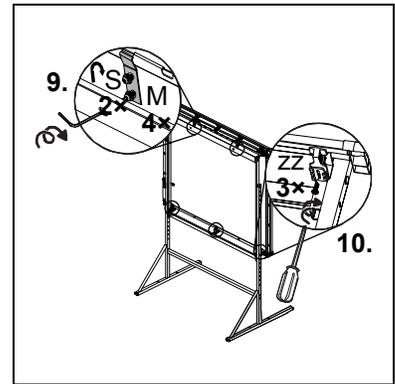
- Do not over-tighten these nuts.
- If you secure the frame to the third hole from the bottom on the upright support assembly, the distance to the top of your interactive whiteboard will be 75" (190.5 cm), which will enable you to move your floor stand-mounted interactive whiteboard through an 80" (2 m) high door opening.



8. With the help of another person, hang your SMART Board V280 interactive whiteboard on the floor stand so that the tabs at the top of the frame fit into the slots in the wall-mounting bracket on the back of your interactive whiteboard. Slide the three interactive whiteboard support brackets on the floor stand into the corresponding brackets under your interactive whiteboard's pen tray.



9. Insert each security bracket (S) into the empty slot above the double holes in the wall-mounting bracket at the back of your interactive whiteboard. Secure it with two 1/2" (1.3 cm) button-head screws (M). Use the included hex key to tighten the screws.
10. Secure each of the three interactive whiteboard support brackets to its corresponding pen tray bracket with one of the small thread-forming screws (zz) included with your SMART Board V280 interactive whiteboard.



Appendix D

Hardware Environmental Compliance

SMART Technologies supports global efforts to ensure that electronic equipment is manufactured, sold and disposed of in a safe and environmentally friendly manner.

Waste Electrical and Electronic Equipment Regulations (WEEE Directive)

Waste Electrical and Electronic Equipment regulations apply to all electrical and electronic equipment sold within the European Union.

When you dispose of any electrical or electronic equipment, including SMART Technologies products, we strongly encourage you to properly recycle the electronic product when it has reached end of its life. If you require further information, please contact your reseller or SMART Technologies for information on which recycling agency to contact.

Restriction of Certain Hazardous Substances (RoHS Directive)

This product meets the requirements of the European Union's Restriction of Certain Hazardous Substances (RoHS) Directive 2002/95/EC.

Consequently, this product also complies with other regulations that have arisen in various geographical areas, and that reference the European Union's RoHS directive.

Batteries

Batteries are regulated in many countries. Check with your reseller to find out how to recycle used batteries.

There are special regulations that must be met when shipping a product that has a lithium ion battery packaged with the product or shipping a lithium ion battery. When returning a SMART Technologies product which contains a lithium ion battery or returning a lithium ion battery, call SMART Technologies RMA for information on these special shipping regulations:

- 1.866.518.6791, Option 4 (U.S./Canada)
- 1.403.228.5940 (all other countries)

Packaging

Many countries have regulations restricting the use of certain heavy metals in product packaging. The packaging used by SMART Technologies to ship products complies with applicable packaging laws.

Covered Electronics Devices

Many U.S. states classify monitors as Covered Electronic Devices and regulate their disposal. Applicable SMART Technologies products meet the requirements of the Covered Electronic Devices regulations.

China's Electronic Information Products Regulations

China regulates products that are classified as EIP (Electronic Information Products). SMART Technologies products fall under this classification and meet the requirements for China's EIP regulations.

U.S. Consumer Product Safety Improvement Act

The United States has enacted the Consumer Product Safety Improvement Act which limits the lead (Pb) content in products used by children. SMART Technologies is committed to complying with this initiative.

California Air Resource Board – Airborne Toxic Control Measure

California has enacted a law to restrict the emissions of Formaldehyde from Composite Wood Products. The SMART Technologies products that contain Composite Wood Products are compliant with this regulation.

Appendix E

Customer Support

Online Information and Support

Visit www.smarttech.com/support to view and download user's guides, how-to and troubleshooting articles, software and more.

Training

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

Technical Support

If you experience difficulty with your SMART product, please contact your local reseller before contacting SMART Technical Support. Your local reseller can resolve most issues without delay.

NOTE

To locate your local reseller, visit www2.smarttech.com/st/en-US/Where+to+Buy.

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

Online	www.smarttech.com/contactsupport
Telephone	+1.403.228.5940 or Toll Free 1.866.518.6791 (U.S./Canada) (Monday to Friday, 5 a.m. – 6 p.m. Mountain Time)
Fax	+1.403.806.1256
E-mail	support@smarttech.com

Shipping and Repair Status

Contact SMART's Return of Merchandise Authorization (RMA) group, Option 4, +1.866.518.6791, for shipping damage, missing part and repair status issues.

General Inquiries

Address SMART Technologies
3636 Research Road NW
Calgary, AB T2L 1Y1
CANADA

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

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.

Index

A

- accessories, 7
 - floor stand, 7, 11
 - pen, 7
 - USB 2.0 cable, 7
 - USB extender cables, 7
 - wall-mounting kit, 7
- adjusting projected image, 47
- airborne toxic controls, 75
- aligning your interactive whiteboard to your projector, 15
- aspect ratio, 2

B

- batteries, 74
- Brigit conferencing software (SMART), 39

C

- California Air Resource Board, 75
- cameras
 - cleaning, 46
- Chinese regulations, 74
- cleaning, 45
 - erasing ink, 45
 - under valance, 46
- computer
 - connecting to interactive whiteboard, 21
 - matching resolution to projector, 24, 47
 - recommended settings, 24
 - refresh rate, 24, 47
 - system requirements, 4
- concrete installation, 12, 14, 16, 74

- contact information, 78
- contacting SMART
 - online resources, 41
 - technical support, 60, 61
- covered electronic devices, 74
- customer support, 77–78

D

- damage, preventing, 45
- Digital Vision Touch (DVIT) technology, 2
- documentation, 77
- dust, 10, 45

E

- EIP regulations, 74
- electrostatic discharge, 10
- emissions, 10
- environmental compliance, *See* hardware environmental compliance
- environmental requirements, 10
- European Union regulations, 73

F

- flammability, 10
- Floating Tools
 - customizing, 35
- floor stand, 7, 11

G

- general inquiries, 78

H

hardware environmental compliance, 73–74
 humidity, 10, 45

I

inquiries, 78
 installation
 concrete wall, 12, 14, 16
 connect to computer, 21
 connect USB cable, 22
 location, 11
 pen battery, 18
 SMART product drivers, 25
 tools, 12
 installation height
 adults, 11
 children, 11

K

Kensington lock, 17, 19

L

Limited Equipment Warranty, 78
 lithium ion batteries, 74

M

maintenance, 43

N

Notebook Software, *See* SMART
 Notebook software

O

online resources, 41
 online support, 77
 orientation, 26
 precision, 27

P

packaging, 74
 parts, accessories, 7
 pens, 7
 install battery, 18
 LED indicator, 18
 nibs and tips, 7, 44
 working with, 28
 projector
 adjusting image, 47
 aligning interactive whiteboard, 15
 resolution, 24
 standby mode, 24

Q

quality assembly, 10

R

registration, 78
 regulatory compliance, *See* hardware environmental compliance
 replacement parts, 7
 floor stand, 7, 11
 pen, 7
 USB 2.0 cable, 7
 USB extender cables, 7
 wall-mounting kit, 7
 resetting your interactive whiteboard, 48
 resolution
 computer, 24, 47
 projector, 24
 RoHS directive, 73

S

- safeguarding your interactive whiteboard, 19
- serial number, 61
- shipping box
 - ordering, 60
- SMART Board V280 interactive whiteboard
 - clicking (mouse mode), 33
 - features, 2
 - how it works, 3
 - orienting, 26
 - resetting, 48
- SMART Bridgit conferencing software, 39
- SMART Notebook software, 2, 3, 30
 - capturing notes and drawings, 36
 - converting handwriting to text, 38
 - customizing Floating Tools, 35
 - erasing digital ink, 34
 - Floating Tools, 32
 - full screen, 38
 - getting started, 29
 - importing graphics/text/files, 37
 - Ink Aware applications, 40
 - installing, 25
 - online resources, 41
 - other tools, 39
 - presentations, 36
 - side tabs, 37
 - writing with digital ink, 33

- SMART technical support, 77
- smoke, 45
- specifications, 63
- support, 77–78

T

- technical support, 60, 61, 77
- temperature, operating, 10
- training, 77
- transporting, 60
- troubleshooting, 43
- troubleshooting articles, 77

U

- U.S. regulations, 74
- USB
 - cable, 7, 22
 - extender cables, 7, 23
 - USB 2.0 interface, 2, 22, 44
- user's guides, 77

W

- warranty, 78
- water and fluid resistance, 10
- WEEE directive, 73

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