



Installation and User's Guide

SMART Podium ID422w
Interactive Pen Display

DTU-2231

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SMART™

Product Registration

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

Register online as 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 manufacture'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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04/2009

Important Information

Please read this manual carefully before setting up and using your SMART Podium ID422w interactive pen display.

 **WARNING**

If the screen is damaged, don't touch any liquid that leaks from it. This liquid is an irritant. If the liquid makes contact with your skin, eyes or mouth, immediately rinse the area with running water for at least 15 minutes. Consult a physician if the liquid makes contact with your eyes or mouth.

 **WARNING**

If the screen is damaged, be careful of glass fragments that can cut or injure.

 **WARNING**

Do not open or disassemble the interactive pen display. You risk electrical shock from the high voltage inside the casing. Opening the casing also voids your warranty.

 **WARNING**

Do not let children play with the tethered pen. They may accidentally remove the small tip, which can be a choking hazard.

 **WARNING**

Do not disassemble the stand. You risk physical injury or damage to the stand. Disassembling the stand also voids your warranty.

 **WARNING**

Do not operate the display stand incline adjustment levers when the interactive pen display isn't mounted on the stand, and do not lift the stand by the adjustment levers. The stand is spring-loaded and without the weight of the interactive pen display, you risk injury or damage to the stand.

 **CAUTION**

Avoid excessive vibration of the interactive pen display or the tethered pen. Hitting or dropping the interactive pen display can damage the protective plate or other components.

 **CAUTION**

Do not touch the screen with sharp, metallic objects that could scratch the screen's coating or damage the cameras and optical components in the front of the interactive pen display.

 **CAUTION**

Use only a damp cloth to clean the screen. The screen is extremely sensitive to liquids. Don't apply glass cleaner, organic solvents (such as alcohol), or even a mild detergent to the screen. If you use these cleaners, you may damage the screen's finish or the unit's electronics. Using such cleaners also voids the warranty.

 **CAUTION**

Use only a damp cloth or a cloth dampened with very mild detergent to clean the unit casing or tethered pen. Don't apply paint thinner, benzine, alcohol or other solvents to the casing. If you use these cleaners, you may damage the finish. Using such cleaners also voids the warranty.

 **CAUTION**

Use only the power adapter that came with the interactive pen display. Other adapters will not work properly, can damage the interactive pen display, and can create a fire hazard. Using a different power adapter also voids the warranty.

 **CAUTION**

Use only the tethered pen that came with the interactive pen display. Tethered pens or styluses from other products can damage the screen's protective coating

 **CAUTION.**

Do not use the interactive pen display in a facility control system or any other environment that requires extremely high reliability; the interactive pen display can interfere with or cause other electronic devices to malfunction, or other devices can interfere with or cause the interactive pen display to malfunction. Where use is prohibited, turn off the interactive pen display to prevent the possibility of it interfering with or causing other electronic devices to malfunction. SMART doesn't accept any liability for direct or consequential damages.

 **CAUTION**

If you transport the interactive pen display over a distance, we strongly urge you to completely repackage it using the original carton. We designed this packaging with optimal shock and vibration protection. If the original carton is no longer available, pack all components with as much padding as reasonably possible to protect the components from excessive vibration or shock. Do not include loose components in the packaging that could mark, scratch or otherwise damage the screen during the journey.

 **CAUTION**

Put the interactive pen display down carefully to ensure you don't damage the buttons.

Do not place the interactive pen display on a surface that will mark, scratch or damage the screen.

Other Precautions

For proper installation, read this guide carefully and observe the following precautions.

The Interactive Pen Display

- Don't place sharp or heavy objects on the interactive pen display.
- Don't connect or disconnect the video or power cable if the interactive pen display or your computer is on. If you do, you can damage the screen and/or the computer video card.
- Don't block the interactive pen display's ventilation holes, as this can cause it to overheat.
- If you move the interactive pen display, either remove the display unit from the stand and move them separately, or adjust the display stand to its full upright position, and then use both hands to hold the display unit and the stand separately. Use the rotation lock screws to ensure the stand won't separate from the display unit.
- Don't expose your interactive pen display to high voltage electrostatic discharges or to a build-up of electrostatic charge on the screen. This can cause discoloration and blotches on the screen. If discoloration occurs, leave the display on until it disappears.
- If the interactive pen display is damaged, turn off the display and then disconnect the power adapter.

The Tethered Pen

- The tethered pen is a sealed unit that contains electronics but no batteries. If you attempt to open the tethered pen, you'll damage these electronics. This will make the tethered pen unusable and void the warranty.
- Don't touch the screen with any instrument other than the supplied pen because other instruments may damage the screen's protective coating.
- Don't use a pen that has worn down to a sharp or angular tip, as it may damage the screen.
- Don't apply excessive pressure that can shorten the life of the pen.
- Don't immerse the pen in water.

The Environment

- Avoid setting up and using the interactive pen display in an area with excessive levels of dust, humidity and smoke or where it's exposed to direct sunlight, severe temperature changes, heat from other appliances, water or any other liquid. Operate the interactive pen display within a temperature range of 41°F and 95°F (5°C to 35°C) and a humidity range of 20% to 80% (non-condensing). However, you can store the interactive pen display within a temperature range of 14°F to 140°F (-10°C to 60°C) and a humidity range of 20% to 90% (non-condensing).
- Don't modify the power cord. Handle it carefully and avoid bending it excessively. Don't place the power cord in an area where it's likely to be stepped on or pinched by items placed on or against it. If you must run a cable over the floor, lay it in a flat, straight line, and secure it to the floor with tape or a cable management strip of contrasting color.
- The interactive pen display comes with a three-prong, grounding-type power plug (designed to fit into a grounding-type power outlet). If you can't insert the plug into a power outlet, contact an electrician to replace the power outlet. Don't modify the power plug.
- Place the interactive pen display in a location where users will have clear and direct access to the main power plug, as they must be able to disconnect the unit at all times. Always disconnect the interactive pen display before you install any devices or perform any maintenance.
- If possible, disconnect the interactive pen display before any thunderstorms. However, don't touch the unit or the unit's power plug during a thunderstorm, as there is a risk of electrical shock.
- Disconnect the interactive pen display if you won't use it for an extended period.
- If the interactive pen display requires replacement parts, use parts that are specified by SMART Technologies.
- Don't expose the interactive pen display to rain or moisture.

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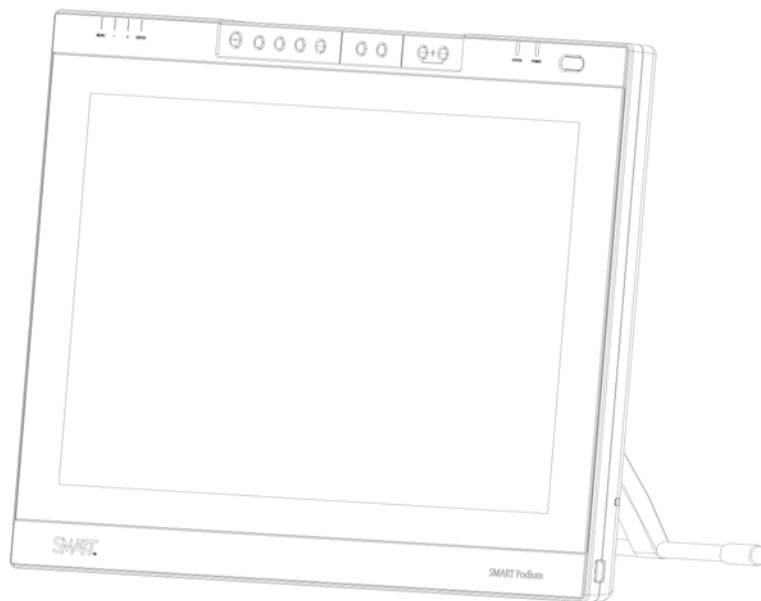
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Chapter 1

Overview

The SMART Podium ID422w works with your computer and SMART Notebook software to create an interactive presentation environment. The ID422w includes dynamic and interactive tools for creating presentations and lessons. When you connect a projector or another monitor to the interactive pen display, you can control applications and create notes using the tethered pen, all while facing the audience.

The Interactive Screen



The ID422w interactive pen display is a 22" (58.1 cm) Liquid Crystal Display (LCD) interactive screen that acts as an input and output device.

Connect it to a computer with a video card that can support full HD resolution (1920 × 1280) and a refresh rate no higher than 76 Hz.

i NOTE

For the interactive pen display to function properly, connect it to a computer with an appropriate video card. An inappropriate video card may damage the screen.

The Tethered Pen

By using the tethered pen on the interactive pen display, you can control and manipulate items on your screen, and create or remove digital ink. You can store the pen in the compartment on the top of the unit.

The Pen Tool, Function and Display Control Buttons

By using the buttons on the interactive pen display, you can set the current function of the pen, instantly activate programs and configure the display settings.

Use the pen tool buttons to control the function of the pen tool. You can select from different digital ink colors and an eraser button.

Use the function buttons to perform a right-click and to access specific SMART Board tools, such as SMART Notebook software.

Use the on-screen display control buttons to configure the display's settings.

Connection Panel

The interactive pen display connection panel has four connectors: a USB receptacle for connecting the supplied USB cable; a video input receptacle for the video cable from your computer; a video output receptacle for a video cable to a projector or a monitor; and a power receptacle for the power cable.

The interactive pen display also includes two USB connectors on its frame.

Power

The interactive pen display uses a single 12V DC power supply, which comes with the unit.

i NOTE

The interactive pen display switches to the appropriate voltage automatically.

Power Saving

The SMART Podium ID422w conforms to VESA and ENERGY STAR® power saving guidelines.

When you use the SMART Podium ID422w with a Display Power Management Signaling (DPMS) compliant computer or video card, the display automatically complies with the following power saving parameters.

When these power-saving functions are in effect, the screen display is darker than usual.

Computer mode	H-sync	V-sync	Video	Power consumption	Power lamp
Power ON	Yes	Yes	Active	54W, max.	Blue
Standby mode	No	Yes	Blanked	2W, max.	Blue/Orange*
Suspend mode	Yes	No	Blanked	2W, max.	Blue/Orange*
OFF mode	No	No	Blanked	1W, max.	Orange

* Depending on the specifications and settings of your computer and video card, the power light may only change to orange when in standby and suspend modes.

Chapter 2

Installing the SMART Interactive Pen Display

This chapter tells you how to:

- determine the computer system requirements (page 6)
- determine the best location for the interactive pen display (page 7)
- change the angle of the interactive pen display (page 8)
- connect the interactive pen display (page 8)
- integrate a monitor or a projector (page 12)
- attach the pen (page 12)
- install SMART Notebook software (page 14)
- match your computer's and interactive screen's resolutions (page 15)
- adjust the screen settings (page 16)
- orient the screen (page 21)
- secure the interactive pen display (page 21)
- remove the interactive pen display's stand (page 22)

System Requirements

Before installing the SMART Podium ID422w, make sure your computer meets the following minimum system requirements:

- For Windows computers: Windows Vista™, Vista X64, XP, or XP x64. VGA or DVI video connector, available USB port, and CD-ROM drive.
- For Mac computers: OS X, v10.4 or greater. VGA or DVI video connector, available USB port, and CD-ROM drive. ADC connectors require an ADC to DVI adapter, not included.

The SMART Podium ID422w supports both analog (VGA) and digital (DVI) video signals. If updating your video card, complete the video card hardware and software installation before connecting the SMART Podium ID422w. If you have another display that is compatible with your video card, you can connect that display to the card in order to verify the video card is operating correctly.

Although you can quickly connect the SMART Podium ID422w to either a VGA or DVI video card, connecting to a DVI video card generally results in optimum performance.

NOTES

- Depending on the capabilities of your video card and operating system, you may be able to set up the SMART Podium ID422w as a mirrored, extended, or independent display. Refer to your video card documentation for more information on its capabilities.
- When you are working with more than one monitor, the SMART Podium ID422w will map to the monitors based upon how your system is configured. By default, if you are in mirror mode, the pen tablet will map to the entire space on each monitor. See your hardware and operating system documentation for details on configuring your computer and operating system for use with multiple monitors.
- A display toggle function is available for use with multiple monitor systems. This enables you to toggle the screen cursor between the SMART Podium ID422w pen display and your other monitors. For more information, see the electronic Software User's Manual.

The SMART Podium ID422w can be used alone or with another display. You may connect a second device, such as a monitor or LCD projector, to the SMART Podium ID422w DVI-I OUT port. When using this port, the second device will mirror the image on the SMART Podium ID422w. Complete the SMART Podium ID422w installation before connecting a projection device to the unit.

Determining the Best Location for the Interactive Pen Display

Install the interactive pen display in a cool, dry location without excessive levels of dust, humidity and smoke. Operate the interactive pen display in an environment within a temperature range of 41°F and 95°F (5°C to 35°C) and within a humidity range of 20% to 80% (non-condensing). You can store the interactive pen display within a temperature range of 14°F to 140°F (-10°C to 60°C) and a humidity range of 20% to 90% (non-condensing).

Take into consideration that the interactive pen display itself will generate heat whenever it's turned on. To maintain a consistent operating temperature, don't block or cover any of the ventilation holes on the back of the unit. Other external factors can affect the interactive pen display, such as the heat generated by control systems or other electronic equipment. Make sure there is adequate airflow around the unit.

Keep the computer keyboard and the mouse close to the interactive pen display because the pen won't function until you install SMART Notebook software and open SMART Board tools. You should also keep your computer within 19 1/2' (6.0 m) of the unit. This distance protects against signal degradation that occurs with a longer USB cable. The video cable also has length limitations, so you shouldn't use an RGB video cable that's longer than 50' (15 m).

To alleviate glare, you can use the attached tilt stand to angle the interactive pen display. Alternatively, you can use a tilt stand that conforms to the standard sizes set by the Video Electronics Standards Association (VESA). When installing a VESA-compatible stand, use M4 screws (0.16" or 4 mm wide with a 0.03" or 0.7 mm pitch) that are no longer than 0.59" (15 mm).

Setting Up Your Work Area

To minimize fatigue, organize your work area so you can work comfortably. Position your SMART Podium ID422w, the pen, and your keyboard for easy access without unnecessary reaching. The pen display and any other displays should be positioned so you can view them comfortably with a minimum of eyestrain.

- Take short breaks between tasks to stretch and relax your muscles.
- Use a gentle grip when working with the pen.
- Alternate tasks throughout the day.
- Maintain a good posture at all times. Minimize awkward postures and repetitive movements that cause discomfort.
- Change your position if you feel any discomfort due to your work position.

Changing the Angle of the Interactive Pen Display

You can adjust the stand to change the angle of the interactive pen display.

NOTE

For information on how to remove or install the stand, see page 10.

To change the angle of the interactive pen display

1. Hold the interactive pen display to support its weight while you adjust the stand.
2. Push the stand's locking mechanism towards the top of the interactive pen display, adjust the angle of the stand and then release the locking mechanism.

Installing the Interactive Pen Display

There are two primary stages to the installation process:

- Installing the LCD monitor
- Connecting the cables

Stage 1: Installing the LCD Monitor

IMPORTANT

Do not connect the USB data cable until instructed to do so.

To install the LCD monitor

1. Turn off your computer.

CAUTION

Never connect or disconnect the video or power cables while your computer or SMART Podium ID422w are powered on – this can damage the display or video card.

2. If your computer has only one video connector, unplug your previous monitor or add a second video card.
3. Determine if your computer has an analog (VGA) or digital (DVI) connector and set the DVI/VGA switch for the video connection you are using.
4. Making sure to tighten the thumbscrews on the connectors, follow the instructions below for your video connector.
5. Connect the power adapter to the SMART Podium ID422w, connect the adapter's power cable, and then connect the adapter to an AC outlet.
6. Turn on the SMART Podium ID422w.

The power LED will light orange.

7. For DVI operation, connect the SMART Podium ID422w DVI to DVI video cable between the DVI IN connector located on the pen display unit and the DVI-D or DVI-I connector on your video card.

For VGA operation, connect the SMART Podium ID422w analog RGB video cable between the DVI IN connector located on the pen display unit and the VGA connector on your video card.

 NOTE

If you are connecting the unit to an Apple ADC or mini-VGA connection, you must obtain an appropriate adapter. Adapters are available at retail outlets.

For ADC operation, connect one end of the SMART Podium ID422w DVI to DVI video cable into the ADC to DVI adapter, connect the other end of the SMART Podium ID422w cable to the DVI IN connector on the pen display unit, and then connect the ADC adapter end to the ADC connector on your video card.

For an Apple mini-VGA connector, plug the VGA end of the SMART Podium ID422w analog RGB cable into the mini-VGA port adapter. Then connect the DVI end of the SMART Podium ID422w cable to the DVI IN connector on the pen display unit, and then connect the mini-VGA port end to the mini-VGA port on your video card.

8. Connect the power adapter to the SMART Podium ID422w, connect the adapter's power cable, and then connect the adapter to an AC outlet.
9. Turn on the SMART Podium ID422w.

The power LED will light orange.

Stage 2: Cable Installation

 CAUTION

- Use only the cables provided with your interactive pen display. Other cables can damage the interactive pen display.
- Don't connect the video or power cables if the interactive pen display or your computer is on. Doing so can damage the interactive pen display or your computer.

LCD Monitor Cabling

 IMPORTANT

- Make sure your video card has a VGA or DVI connector, and that you correctly set the DVI/VGA switch for the video connector you are using.
- Do not attach the USB data cable until instructed to do so.

To connect the monitor cables

1. Use the DVI-I OUT interface to connect a second device, such as a projector or monitor, that mirrors the pen display.

**NOTE**

Fully install the SMART Podium ID422w hardware and software before connecting a projection device to the unit.

**CAUTION**

- Do not connect or disconnect the video or power cables while the SMART Podium ID422w or your computer are turned on – this can damage the display or computer video card.
- Use only the power adapter that came with the SMART Podium ID422w; use of an improper power adapter may damage the unit.
- Make sure that the display refresh rate does not exceed 76 Hz.

2. Turn on your computer.

For Windows systems: The SMART Podium ID422w will automatically install as a default monitor.

For Macintosh systems, a SMART Podium ID422w color profile will be added to your computer's color management system during the tablet software installation process. To activate this color profile for use with the pen display, you may need to select the SMART Podium ID422w profile in the system's ColorSync Utility control panel. For details, see the color management information in your operating system and application documentation.

3. As necessary, configure the display control panel settings for the proper size and color resolution. The maximum (native) resolution of the SMART Podium ID422w is 1920 x 1080 pixels. The display size and color resolution may be constrained by the capabilities of your video card. See the video card manufacturer's documentation for details.

Windows: If you are using the SMART Podium ID422w as a secondary display, you may first need to enable the SMART Podium ID422w in your Display Properties control panel.

4. To fine-tune the display, refer to Adjusting the display, beginning on page 24. If using analog (VGA) mode, see also Adjusting pitch and phase (VGA only) on page 27.
5. After the LCD monitor portion of the SMART Podium ID422w is working to your satisfaction, move on to Step 2: Pen tablet installation to install the pen tablet portion of the SMART Podium ID422w.

For troubleshooting tips, see page 35.

i NOTES

- SMART produces each SMART Podium ID422w LCD panel under very stringent quality standards. We cannot guarantee an absolutely perfect TFT display, and some panels may exhibit a certain number of pixels that show an incorrect color.
- If an image has fine striping (such as screen stripes), it may appear to flicker or display a moiré pattern.
- Do not apply excessive pressure on the display surface, it may cause the appearance of a moiré or pooling pattern. If this occurs, use less pressure on the display screen when working with the pen.
- When a still image is displayed for a long period of time, an after-image may remain for a short time. To prevent this, use a screen saver or other power management feature.

👉 IMPORTANT

To extend the life of the backlight, set your computer's power management to turn off the display when it is not in use for extended periods of time.

**To connect the
USB cable**

1. If you haven't done so already, shut down your computer.
2. Connect the supplied USB cable to the **USB** receptacle on the interactive pen display, and then connect the other end of this cable to an available USB receptacle on your computer.
3. Turn on the computer and the interactive pen display.

i NOTE

If you must install drivers for your computer, search for them in the operating system folders.

Integrating a Monitor or a Projector

If you want, you can connect a projector or another monitor directly to the interactive pen display. With this setup, whatever you display on the interactive pen display also appears on the other display. When you connect a projector or a monitor, the video signal from the computer is automatically sent to the projector or monitor. Other integration options are available if you amplify the video signal (page 11).

Use a projector that can support full HD resolution. Alternatively, use a projector that can support VGA resolution and change the display resolution of the connected computer to 1920 × 1080 pixels (full HD).

To connect a projector or monitor to the interactive pen display

1. Connect a VGA (RGB) video cable (not supplied) to the **RGB Video OUT** receptacle on the interactive pen display.
2. Connect the other end of the cable to the **Video Input** receptacle on your projector or monitor.
3. For details about the projector's connectors, see the instructions that came with your projector.

Attaching the Pen

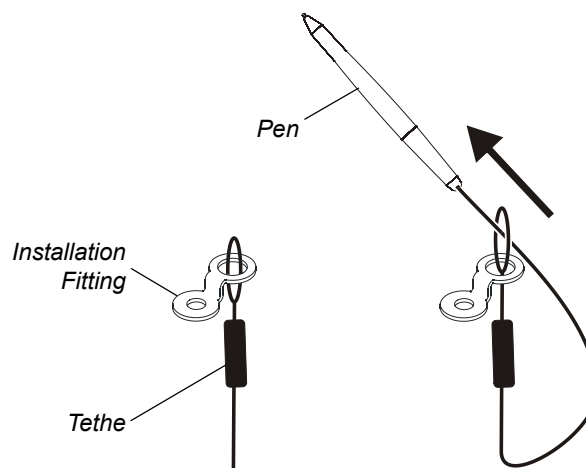
Use the tether to attach the pen to the interactive pen display, so the pen is always within reach.

i NOTE

When you're not using the pen, put it in the storage compartment that's located on the top of the unit.

To attach the tether to the pen and a SMART Podium ID422w

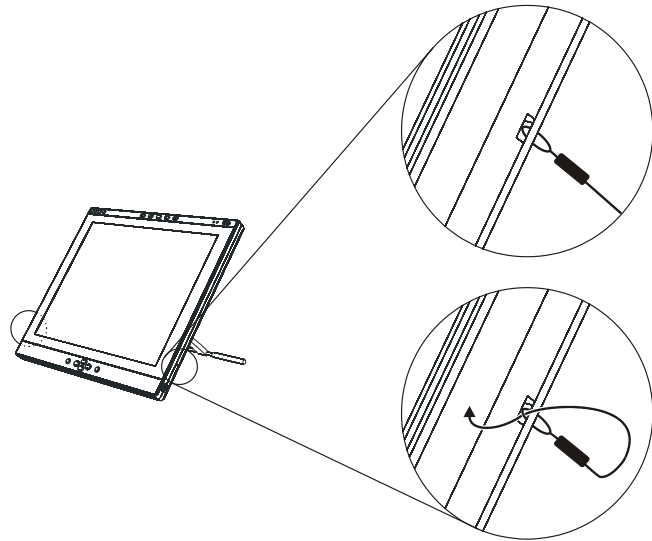
1. There is a loop in the cord at each end of the tether. Thread one loop through the opening at the end of the pen, and then slip the rest of the cord through the loop. Carefully pull the cord until the loop is snug.
2. Thread the other loop through the installation fitting. Then slip the pen and the rest of the tether through the loop. Carefully pull the pen until the loop is snug.



3. Attach the installation fitting to the back of the interactive pen display using a screwdriver or a small coin.

i NOTE

You can attach the installation fitting to any of the four available holes on the back of the interactive pen display. Two of these holes are on the left side (if you view the interactive pen display from the back). The other two holes are close to the connection panel on the right side (if you view the interactive pen display from the back).



Installing SMART Notebook Software

Your interactive pen display comes with a SMART Notebook software CD, which you can use to install SMART Notebook software on your computer.

NOTE

You'll need to use the computer's keyboard or mouse to perform the installation, as your screen is not touch sensitive until you install and open the SMART Board tools.

To install SMART Notebook software

1. If you haven't done so already, turn on the computer and the interactive pen display.
2. Close all open applications on the computer.
3. Insert the SMART Notebook software CD into the CD drive.
4. For most systems, the CD is self-starting. If the CD doesn't start automatically:
 Select **Start >Run**, and enter **x:\autorun.exe** (where **x:** is your CD drive) (Windows operating systems).
 OR
 Open your CD drive, and double-click the install file (Mac computers).
5. Follow the on-screen instructions.

NOTE

You'll have to use the connected keyboard and mouse, because the pen doesn't work until the SMART Board tools are running.

If SMART Notebook software doesn't recognize the interactive pen display, you may have to activate the port manually using an attached keyboard or mouse. For further information, read the SMART Notebook software online Help. Also, if the interactive pen display is your secondary monitor, you may need to enable it in your **Display Properties Control Panel**.

Because the SMART Board tools must be running before you can use the interactive pen display, ensure the SMART Board tools open automatically when you turn on the computer. When you install SMART Notebook software, select the option to start the SMART Board tools automatically when you start your computer. You'll know the tools are open if you can see the SMART Board icon in the system tray or the Dock.

After the software is installed and running, touch the pen to the interactive screen. The cursor should appear under the tip of the pen. If it doesn't, you may need to orient the screen (page 9) or see the Troubleshooting section of this guide (page 19).

Matching the Resolution

Before the image output of the computer can display properly on the interactive screen, you must set the computer's resolution to the screen's native resolution.

Set the resolution of the computer to 1920 × 1080 pixels (full HD) and set the refresh rate to between 56 Hz and 76 Hz.

If you need to change the display settings on the computer, you must use the mouse.

NOTES

- Depending on your version of the Windows operating system, the dialog box labels may vary slightly. The basic procedure is described below, but the specific steps vary between operating systems.
- Some Mac computers transmit video signals outside the 56 Hz–76 Hz synchronization range. These models cannot be used with the Sympodium interactive pen display.

To set the resolution (Windows computers)

1. Open the Windows Control Panel.
2. Click **Display**.
3. The *Display Properties* dialog box appears.
4. Click the **Settings** tab.
5. Move the slider to change the screen resolution to **1920 × 1080**.
6. Click **OK**.

To set the resolution (Mac computers)

1. Click the **System Preferences** icon in the Dock.
2. Click **Displays**.
3. On the Display tab, select **1920 × 1080**.


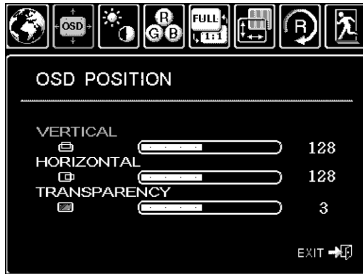
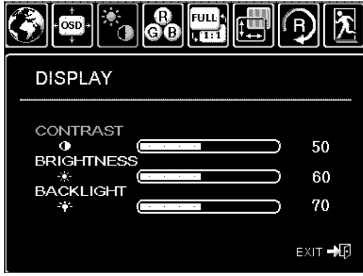

NOTE

Don't set the **Refresh Rate** to higher than 76 Hz.

4. Close the dialog box.

Adjusting the Screen

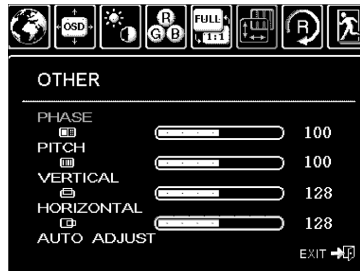
If the interactive screen receives a signal with appropriate horizontal and vertical frequencies, it automatically adjusts the horizontal and vertical position, phase and pitch settings. However, you can fine-tune the screen display settings by using adjustment buttons on the interactive pen display.

OSD Menu	Functions
	<p>Selects a language for the <i>On Screen Display Menu</i>.</p>
	<p>Menu options include:</p> <ul style="list-style-type: none"> • VERTICAL. Adjusts the vertical position of the OSD menu window. • HORIZONTAL. Adjusts the horizontal position of the OSD menu window. • TRANSPARENCY. Changes the opaqueness of the OSD menu background.
	<p>Menu options include:</p> <ul style="list-style-type: none"> • BRIGHTNESS. Increases or decreases the image brightness. • CONTRAST. Increases or decreases image contrast. Note that changes in contrast may affect color accuracy. • BACKLIGHT. Increases or decreases the backlight brightness level.
	<p>Menu options include:</p> <ul style="list-style-type: none"> • 5000K, 6500K, 9300K. Enables you to adjust the pen display color temperature, in degrees Kelvin. • DIRECT displays the colors directly from the video card without any adjustment. • CUSTOM enables you to independently adjust the RED, GREEN, and BLUE display colors. <p>Note: Any manual changes you make to the color settings will invalidate the SMART Podium ID422w color profile.</p>

OSD Menu**Functions**

Menu options include:

- **FULL.** Resizes the image to fill the whole screen.
- **ASPECT.** Resizes the image to fill as much of the screen as possible while maintaining the correct aspect ratio.
- **1:1.** Displays the image at the actual resolution.



Menu options include:

- **PHASE.** (VGA only.) Synchronizes the signal timing of the pen display to that of your graphics card. Use this adjustment when you experience an unstable or flickering image, or horizontal distortion lines.
- **PITCH.** (VGA only.) Changes the display data frequency to match that of your graphics card. Use this adjustment when you experience an unstable or flickering image, or vertical distortion lines.
- **VERTICAL.** (VGA only.) Changes the vertical position of the image. To automatically adjust, use the **AUTO ADJUST** option.
- **HORIZONTAL.** (VGA only.) Changes the horizontal position of the image. To automatically adjust, use the **AUTO ADJUST** option.
- **AUTO ADJUST.** (VGA only.) Choose this function to automatically optimize the display screen image.



Returns the display parameters of the current mode to their factory default settings.

OSD Menu**Functions**

Closes the OSD without making changes.

i NOTE

Some computers and graphics cards may not allow Auto Adjust to function correctly when you first connect the screen. If the display doesn't fit within the LCD panel border or if some portion of the text appears blurred, adjust the pitch and the phase. For best results, set the computer's resolution to the screen's native resolution.

Adjusting the Display

Factory Presets, Auto-sync and User Settings

- Factory presets** For optimal display quality, set your video card to the SMART Podium ID422w's native resolution of 1920 x 1080 pixels (full HD).
- Auto-sync** The SMART Podium ID422w automatically synchronizes to the incoming signal. The auto-sync function sets the horizontal and vertical screen position, as well as pitch and phase. Auto-sync will function when the horizontal frequency is between 30 to 80 kHz, and the vertical frequency is between 50 to 76 Hz. If the SMART Podium ID422w does not automatically synchronize with the incoming signal, you can use the OSD AUTO ADJUST option to initiate display synchronization. Further screen display adjustments can be manually made using the OSD controls.
- Color calibration** Changing the color, color temperature, contrast, brightness, or backlight from their default settings will invalidate the ICC color profile that was included on the Installation CD.

On Screen Display (OSD) Settings

The OSD function enables you to optimize a variety of display settings at the touch of a button. Make adjustments using the OSD controls located on the upper left edge of the unit.

MENU button	Press to open or exit the OSD menu.
+ and - selection buttons	Use these buttons to select an option. When the option you want to adjust is highlighted, press the ENTER button. The current settings and adjustment sub-menu for that option will appear. Note that some settings may not be available when in DVI mode. Use the + or – buttons to select and adjust the option settings. (Press the + button to increase a selected item value. Press the – button to decrease it.)
ENTER button	After making changes, press the ENTER button to save.

See the following pages for a detailed description of menu options.

NOTES

- After changing a setting, the OSD menu will automatically close after a few moments of inactivity.
- You can also press the MENU button to close the OSD menu. All settings are automatically saved when the OSD menu closes and will be used the next time the unit receives a similar video signal. This is applicable to all display modes. If you make changes to the display appearance and cannot return to the original settings, use the RESET option to return the SMART Podium ID422w to its original factory defaults.

To adjust the screen

1. Press the **Menu** button on the interactive pen display to open the *On Screen Display Menu*.

2. Press the – and + buttons to select an option.

NOTE

You can use only the interactive pen display's – and + buttons to scroll.

3. The available display options are described below.
4. With the option highlighted, press the **Enter** button.
5. Use the – and + buttons to alter the settings for the chosen option.
6. Press the **Enter** button to save your changes.
7. Repeat steps 2 through 5 to perform more adjustments.
8. Press the **Menu** button to exit the *On Screen Display Menu*.

To adjust the pitch and phase

1. Press the **Menu** button.
The *On Screen Display Menu* opens.
2. Use the – and + buttons to select the **Pitch** option, and then press the **Enter** button.
The *Pitch* screen appears.
3. Use the – and + buttons to evenly display the pattern of vertical stripes on the screen.
4. Press the **Enter** button.
5. Use the – and + buttons to select the **Phase** option, and press the **Enter** button.
The *Phase* screen appears.
6. Use the – and + buttons to make the adjustment pattern show clearly.
7. Press the **Menu** button to exit the *On Screen Display Menu*.

 NOTE

When you adjust the pitch and phase in VGA mode, some computers and video cards may not allow the auto-sync function to fully work when the SMART Podium ID422w is first connected. If some portion of text appears blurred, use the AUTO ADJUST option to automatically synchronize to the incoming signal. For optimum display quality, set your video card to the SMART Podium ID422w's native resolution of 1920 x 1080.

Orienting the Screen

To ensure that the pointer appears directly beneath the tethered pen when you touch the interactive screen, the computer needs to know the exact location of the image on the screen. You can ensure the accuracy of the pointer by orienting the screen, a procedure in which you use the tethered pen to touch a grid of red targets.

i NOTE

If the image on the screen is distorted, match the resolution (page 15) and adjust the screen (page 16) before you orient the screen.

To orient the screen

1. (Windows operating systems) Press the **SMART Board** icon in the system tray, and then press **Orient**.

(Mac computers) Press and hold the **SMART Board** icon in the Dock, and then press **Open Orient**.
2. Follow the on-screen instructions.

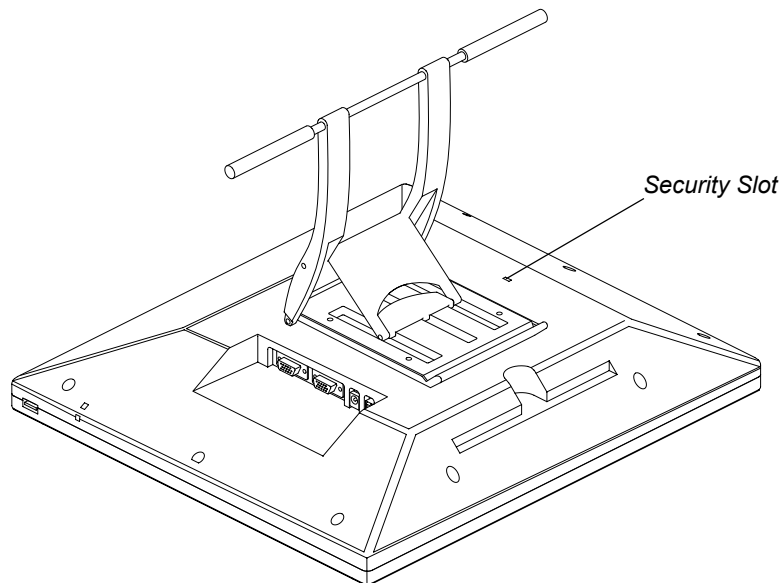
For more details, see the *SMART Notebook software online Help*.

i NOTE

You can also open the orientation screen by pressing and holding the **Keyboard** and **Right-Click** buttons on the interactive pen display for several seconds.

Securing the Interactive Pen Display

You can secure the interactive pen display by attaching a cable (not supplied) between the security slot that's built into the back of the unit and an immovable object.



Removing the Interactive Pen Display's Stand

If you want, you can remove the interactive pen display from its stand.

To remove the interactive pen display's stand

1. Place the interactive pen display facedown on a flat surface.

CAUTION

Place the interactive pen display down slowly and carefully to ensure you don't damage the buttons.

Don't place the interactive pen display on a surface that will mark, scratch or damage the screen.

2. Remove the four screws that attach the stand to the interactive pen display.

To install the interactive pen display on the stand

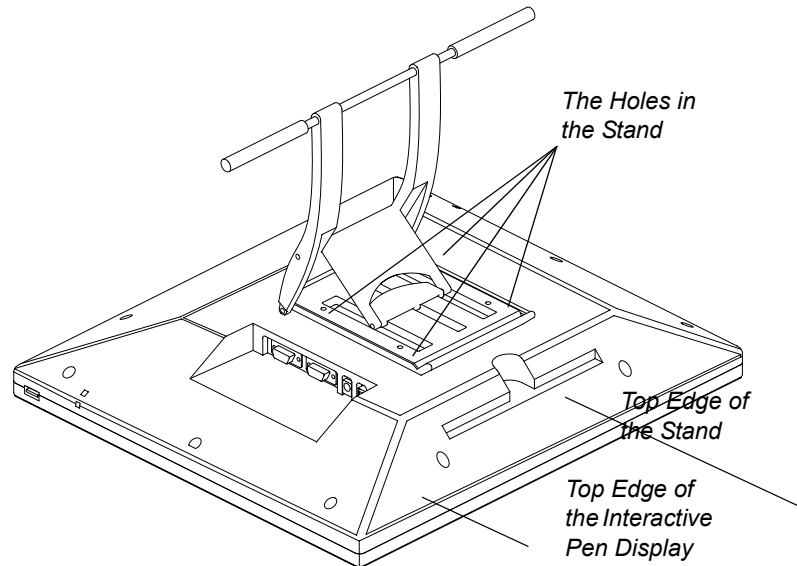
1. Place the interactive pen display facedown on a flat surface.

CAUTION

Place the interactive pen display down slowly and carefully to ensure you don't damage the buttons.

Don't place the interactive pen display on a surface that will mark, scratch or damage the screen.

2. Align the holes in the stand with the four holes in the back of the interactive pen display.



3. Insert and tighten the four screws.
4. Place the interactive pen display face up, with its weight on the stand and the bottom edge of the interactive pen display.

Other Integrations

Depending on the equipment and your expertise, you may want to integrate the interactive pen display with other devices. You can easily adapt the interactive pen display to expand the multimedia capabilities of the equipment in the room. For example, you can integrate your interactive pen display with a projector and a SMART Board interactive whiteboard.

 NOTE

If you want to use a video cable longer than 50' (15 m), you must boost the video signal with a video distribution amplifier.

Chapter 3

Using the Interactive Pen Display

This chapter tells you how to:

- touch the interactive screen (page 26)
- use the function buttons (page 31)
- store the pen (page 31)

The interactive pen display is as easy to use as a pen on paper. By touching the tethered pen to the screen, you can interact with computer applications intuitively. You can also access additional tools and features using the pen tool buttons and function buttons. This chapter tells you how to interact with the screen using the pen, as well as how to use the pen tool and function buttons.

CAUTION

Use only the pen that came with the interactive pen display. Pens or styluses from other products can damage the protective coating of the display.

NOTE

You can use SMART Notebook software to make your presentations interactive and dynamic. For further information on what you can accomplish with SMART Notebook software, see the *SMART Notebook software online Help*. While reading the online Help, keep in mind that:

- a pen touch on the interactive pen display is equivalent to a touch on the interactive whiteboard surface with a finger
- the tethered pen and pen tool buttons function like the SMART pen tray tools on the interactive whiteboard

Touching the Interactive Screen

You can manipulate objects, select items, and create and remove digital ink by touching the screen with the tethered pen.

Because the SMART Podium ID422w surface will be a little higher than your desk, you can adjust the height of your desk or chair to assure comfortable use of the device.

TIP

- Be careful that you do not pull the cables out of their connections by accidentally moving the SMART Podium ID422w too far from the computer.
- You can also mount the SMART Podium ID422w onto articulated arms or other third-party stands meeting the VESA 100 specification for display stands

Using the Pen

The pen is cordless, battery-free, and senses the amount of pressure you apply to the tip. Hold the pen like you would a normal pen or pencil. As you work with the SMART Podium ID422w, you can rest your hand lightly on the display screen, just as if it were a drawing board or sheet of paper. You can tilt the pen in any way that feels most comfortable for drawing.

Pen Components

Eraser: When equipped and the eraser is brought within 5 mm (0.2 inch) of the display, the tablet reports the pen location. Pressure information is reported as you press down on the eraser.

Pen tool buttons make sure the programmable buttons are in a convenient location where you can toggle them with your thumb or forefinger but not accidentally press it while writing or drawing. You can use the buttons whenever the pen tip is within 5 mm (0.2 inch) of the display screen surface; you do not need to touch the pen tip to the display surface. Toggle the switch in either direction to activate the button functions.

Pen tip (replaceable nib): The pen is activated as soon as it is brought within 5 mm (0.2 inch) of the pen display screen. This allows you to position the screen cursor without touching the pen tip to the display screen. When pressure is applied to the pen tip, the pen simulates a primary mouse button click.

i NOTES

- When the pen is not in use, place it in the pen storage compartment, or lay it flat on your desk. To maintain the sensitivity of your pen, do not store the pen in a container where it will rest on its tip.
- Some product configurations may come with a pen that has no buttons or eraser. In that case, you can ignore all explanations within this guide regarding the side switch or eraser.

👉 IMPORTANT

Use only the pen that came with your SMART Podium ID422w pen display. Other pens may not function properly. Also, the SMART Podium ID422w pen tip is specifically designed for use with the SMART Podium ID422w pen display – the tips on other pens could damage the protective coating on the pen display screen.

Basic Pen Operation

Pointing and selecting

Move the pen slightly above the SMART Podium ID422w display screen to position the screen cursor; you do not need to touch the display surface. The cursor jumps to the location where you place the pen. Press the pen tip on the display screen to make a selection.

i NOTE

If the screen cursor does not jump to a position close to the pen tip when you place the pen on the display screen, the pen tablet driver may not be installed or is not loading. Install the driver software if necessary.

Clicking

Tap the display screen once with the pen tip, or touch the pen to the display screen with enough pressure to register a click.

💡 TIPS

Windows:

To make navigating with the pen easier, configure Windows to select when the pen is over an icon and to launch the icon with a single click. To turn on this feature, first open a folder.

- For Windows Vista, From the ORGANIZE pull-down menu select **FOLDER AND SEARCH OPTIONS**. From the GENERAL tab select SINGLE-CLICK TO OPEN AN ITEM (POINT TO SELECT).

- For Windows XP, from the TOOLS pull-down menu choose **FOLDER OPTIONS...** From the GENERAL tab select **SINGLE-CLICK TO OPEN AN ITEM (POINT TO SELECT)**.

Double-clicking

Press the upper side switch, or quickly tap the display screen twice in the same place with the pen tip. Double-clicking is easier when the pen is perpendicular to the tablet screen. See the electronic Software User's Manual for information on fine-tuning the double-click area.

Dragging

Select an object, then slide the pen tip across the display screen to move the object.

Using the pen tool buttons

The pen may be equipped with tool buttons. The programmable functions can be selected by rocking the switch in either direction. You can use the buttons whenever the pen tip is within 5 mm (0.2 inch) of the display screen surface; you do not need to touch the pen tip to the display surface in order to use the button. By default, the upper button is set to DOUBLE CLICK, and the lower button is set to RIGHT CLICK.

Drawing and writing with pressure sensitivity

The pen responds to the nuance and inflection of your hand movements, enabling you to create natural-looking pen and brush strokes within applications that support this feature. To draw and write with pressure, select a pressure-sensitive tool from your application's tool palette. As you work on the screen surface, use various amounts of downward pressure on the tip of the pen. Press lightly for thin lines or softer color. Press harder for thick lines or dense color.

Erasing

In supporting applications, the pen's eraser works like the eraser on a pencil. In text applications, use the eraser to select text, then lift the eraser from the tablet to delete the text.

Using the Pen Tool Buttons

Use the pen tool buttons to control how the interactive pen display responds to your screen presses. You can use the pen tool buttons to left-click, right-click, write digital ink (in black, blue or red) or erase when you press the screen.

Clicking and Mouse Modes



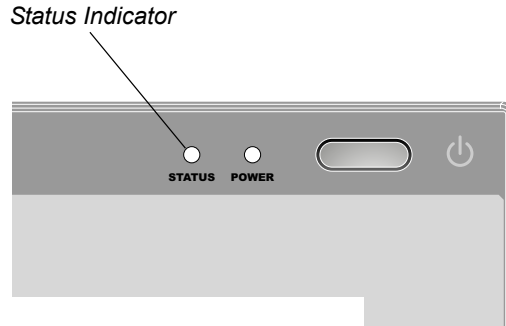
When you press the **Select** pen tool button, each screen press is interpreted as a left-click until you press a different pen tool button.

Press the **Select** button and then press the tip of the tethered pen to the interactive screen. To double-click, press twice with the pen. To drag an object, press and hold the object with the tip of the pen, and drag it to its new location.

TIP

If the pointer doesn't appear directly under the tip of the tethered pen, orient the interactive pen display to improve the accuracy (page 12).

The interactive pen display's Status indicator glows blue when the pen touches the screen.

**Right-Clicking**

When you press the **Right-Click** pen tool button, the next contact with the interactive screen is interpreted as a right-click.

NOTE

You can reconfigure the **Right-Click** button to perform other functions. For details on customizing this button, see the *SMART Notebook software online Help*.

Writing on the Screen and Saving Your Notes

When the SMART Board tools are running on a connected computer, you can use the interactive pen display's **Digital Ink** pen tool buttons to create notes over any computer application.

To create notes, press one of the **Digital Ink** pen tool buttons and write or draw on the screen, just as you would write or draw on paper. As you do so, a stream of digital ink follows the tethered pen.

NOTE

You can write notes over computer applications only if the SMART Board tools are running on the computer. You'll know the SMART Board tools are running if you can see the **SMART Board** icon in the system tray or the Dock.

When you write over an application, you can save your notes. However, the available save options depend on whether that program is Aware (sometimes referred to as Ink Aware). An Aware application recognizes a note as a program component, but a non-Aware application doesn't.

To save your note as part of the file in an Aware application, save the file as you normally would. In some Windows applications, such as Microsoft Word and Excel, you can select additional toolbar options, such as saving your note into a .notebook file or saving your note as text.

If the interactive pen display is connected to a Windows computer, you can capture your note and the application background, and then you can save them into a .notebook file for both Aware and non-Aware applications. For more information, see the *SMART Notebook software online Help*.

If your interactive pen display is connected to a Mac computer, you can capture the entire screen. For more information, see the *SMART Notebook software online Help*.

Using the Eraser

When you press the **Eraser** button, you can use the tethered pen to erase your notes from the screen.

To erase a note

1. Press the **Eraser** button.
2. Drag the pen over the note you want to erase.





NOTE

you can change the size of the eraser. For more information, see the *SMART Notebook software online Help*.

Using the Function Buttons

You can press the function buttons to launch:

-  • SMART Notebook software – an application that helps you organize, save and share your notes.
-  • SMART Keyboard – a virtual keyboard that floats over your active application and lets you enter typed text at the cursor location.



NOTE

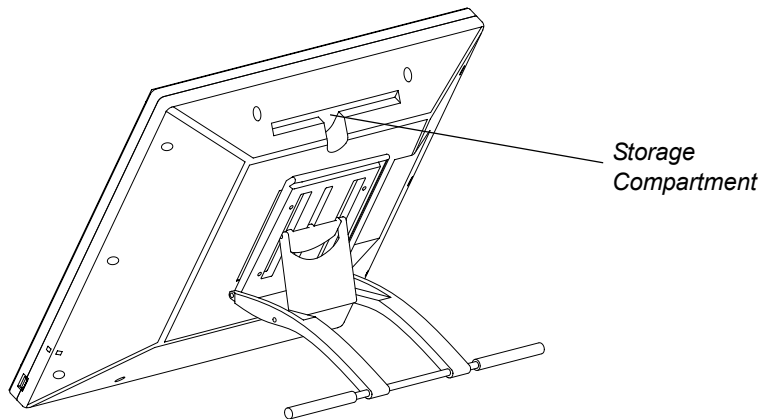
You can reconfigure the **Keyboard** button. For details on customizing this button, see the *SMART Notebook software online Help*.



- Floating Tools – a virtual palette of tools.
- Screen Capture tools – a set of tools you can use to capture an on-screen image and insert it into Notebook software.

Storing the Pen

When you're not using the pen, put it in the storage compartment that's located on the top of the unit.



Chapter 4

Maintaining the Interactive Pen Display

This chapter tells you how to keep the SMART Podium clean and replace the pen tip when it wears down.

Cleaning the Screen

You should clean the interactive screen once a week because dirt and dust can stick to the screen.

To clean the screen, use an antistatic cloth. If necessary, slightly moisten the cloth with water. Apply only light pressure, and avoid making the surface wet.

CAUTION

The screen is extremely sensitive to liquids. Don't apply glass cleaner, any organic solvent (such as alcohol), or even a mild detergent to the screen. If you use these cleaners, you may damage the screen's finish or the unit's electronics. Also, you'll void the warranty.

Cleaning the Pen

To clean the pen, use a soft cloth with a mild detergent.

The tethered pen is a sealed unit that contains electronics but no batteries. If you attempt to open the tethered pen, you'll damage these electronics. This will make the tethered pen unusable and void the warranty.

Don't immerse the pen in liquid.

Don't use a pen if the tip has worn down to become sharp or angular, as it may damage the screen. Replace the tip when you notice it becoming short or angular.

Replacing the Pen Tip

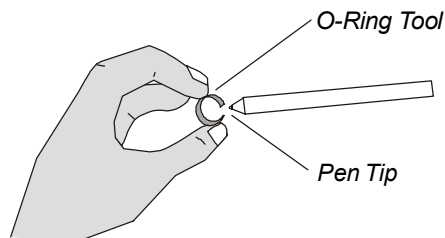
Your interactive pen display comes with five replacement pen tips and an o-ring tool to assist in tip replacement. If you require more replacement tips, contact Technical Support page 25.

i NOTE

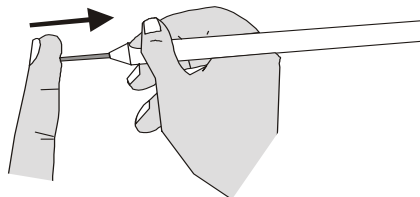
If you misplace your o-ring tool, you can use a pair of tweezers or pliers to remove the old tip.

To replace the pen tip

1. Using the o-ring tool, grab the pen tip, and slide it straight out of the pen.



2. Insert a new tip straight into the barrel of the pen. Push the tip firmly until it stops.



Chapter 5

Troubleshooting

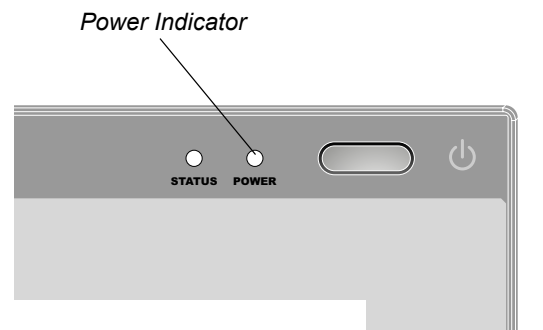
This chapter offers suggestions for troubleshooting your interactive pen display.

SMART designed this pen display tablet to work reliably, but if you are having trouble, we recommend you do the following:

- If the device driver failed to load properly, first perform the recommended action in any error message that may appear on your screen. If that does not solve the problem, review the troubleshooting procedures in this chapter.
- If you have tried the suggestions in this guide and still cannot resolve the problem, then contact technical support (page 47).

Checking the Interactive Pen Display's Power

The power indicator shows whether power is reaching the interactive pen display.



If the Power Indicator is...	this indicates that the interactive pen display is...
illuminated blue	turned on and receiving a video signal from your computer.
illuminated orange	turned on but isn't receiving a video signal from your computer.
off	turned off or the power cable isn't properly connected to the power adapter or to an active AC outlet.

If the power indicator is illuminated blue, but you can't see an image on the display, read the section entitled *Image Problems* on page 38.

If the power indicator is illuminated orange, make sure that:

- the video cable is correctly connected to the interactive pen display and the computer.
- the video cable isn't bent or broken and doesn't have bent or broken pins in either connector.

**NOTE**

If you're using a video cable adapter, check those connections as well.

- the video card in your computer isn't installed correctly, or isn't operating properly.
- the computer is on and not in Sleep or Power Management mode.

If the problem persists after you check these things, read the section entitled *Image Problems* on page 38.

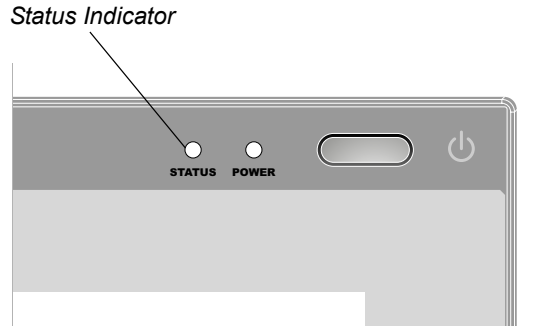
If the power indicator is off, make sure that:

- the interactive pen display's power cable is connected properly.
- the interactive pen display is turned on.

If the power indicator still doesn't illuminate, contact SMART Technical Support (page 47).

Checking the Interactive Pen Display's Status

The Status indicator shows whether the pen is interacting with the display.



If the Status Indicator is...	this indicates that...
illuminated blue	the tethered pen is touching the interactive screen and the interactive pen display is communicating correctly with your computer.
off	either the tethered pen isn't touching the interactive screen or the interactive pen display isn't communicating correctly with your computer.

If you touch the pen to the interactive screen and the Status indicator doesn't turn blue, make sure that:

- the Power indicator is on.
- the USB cable is properly connected to an active port on the computer and to the interactive pen display.
- the computer's USB interface isn't disabled.
- the display is registered in your computer as a USB device.
- you're using the correct pen (not one from another display).

If you touch the pen to the interactive screen and the Status indicator still isn't blue, contact Technical Support (page 47).

Image Problems

Display Troubleshooting

If you encounter problems with the SMART Podium ID422w display, refer to the following tables; your problem may be described here and you can try the solution offered. For additional information about color issues, see the documentation that came with your operating system or applications.

General Display Problems

Symptom	Solution
No display. The power LED is off.	<ul style="list-style-type: none"> • Verify that the AC power cable is connected, and that the SMART Podium ID422w power switch is turned on.
No display. The power LED is lit blue.	<ul style="list-style-type: none"> • Check the contrast, brightness, and backlight controls. • Adjust as necessary. Or, open the OSD menu and select the RESET option.
The power LED is lit orange. A 'no signal go to power save' message appears briefly on your display screen.	<ul style="list-style-type: none"> • Your computer may be in a power management mode. • Touch the pen tip to the display screen, move the mouse, or depress any key on your keyboard. • Turn off both your computer and the SMART Podium ID422w pen display tablet. Check the video cable for bent or broken connector pins. Then properly connect the video cable and turn on the SMART Podium ID422w and your computer. • Verify that the DVI/VGA switch is properly set. Restart your computer after changing the position of the switch. • Verify that the video card is properly installed.

Symptom	Solution
A 'cable disconnect go to power save' message appears briefly on your display screen.	<ul style="list-style-type: none"> • Check that your computer is turned on. • Verify that you are using the video cable that came with the SMART Podium ID422w. • Check that the SMART Podium ID422w video cable is fully connected. • Turn off both your computer and the SMART Podium ID422w pen display. • Check the video cable and any video adapters for bent or broken connector pins. Then properly connect the video cable and any necessary adapters.
An 'out of range' message appears briefly on your display screen.	<ul style="list-style-type: none"> • The input signal frequency is incorrectly set or not compatible with the SMART Podium ID422w. Set the refresh rate (vertical frequency) between 50 and 75 Hz. If your video card driver supports adjustment of the horizontal frequency, make sure it is set to some value between 30 and 80 kHz. On a single monitor system you will need to connect a different display to change the refresh rate. • The resolution is set too high (1920 x 1080, maximum). • The refresh rate is set too high (76 Hz maximum). • Set the display properties to detect plug and play monitors.
A 'set refresh range' message appears briefly on your display screen. The image appears multiple times on the display.	<ul style="list-style-type: none"> • The maximum refresh rate is 76 Hz. Set the refresh rate (vertical frequency) to some value between 56 and 76 Hz. • Do not extend the video cable. Do not use an input selector switch box.
When a still image is displayed for a long period of time without refreshing the screen, an after-image remains for a short period of time.	<ul style="list-style-type: none"> • Use a screen saver or other power management feature.

Symptom	Solution
Color quality is inaccurate.	<ul style="list-style-type: none"> • Open the OSD menu and select the RESET option. • Be sure the SMART Podium ID422w color profile has been installed and is selected as the profile for use with your operating system and applications. • Any changes to the contrast setting should be made in small increments as changes in contrast may affect color accuracy.
The color white does not display as white.	<ul style="list-style-type: none"> • Be sure the SMART Podium ID422w color profile has been installed and is selected as the profile for use with your operating system and applications. • Verify that the display is operating at the factory default settings. If that is not sufficient, then adjust color as necessary. For details on color management, refer to your operating system and application documentation. • Verify that the video cable and connector are fully connected.

VGA Display Problems

Symptom	Solution
The display ripples or flickers.	<ul style="list-style-type: none"> • Open the OSD menu and select the AUTO ADJUST option. • Then, if necessary, manually adjust pitch and phase. • Verify that the display adapter or video card matches the specifications for the SMART Podium ID422w. • Adjust the refresh rate in the Display Properties control panel.

Symptom	Solution
The display is not clear. Text or other portions of the screen appear blurred	<ul style="list-style-type: none"> • Set the display resolution of your video card to 1920 x 1080. • Turn off the SMART Podium ID422w, then turn it back on. • Open the OSD menu and select the AUTO ADJUST option. If necessary, manually adjust the brightness, pitch, and phase settings.
The display and LCD panel are not lined up. The display size is not correct.	<ul style="list-style-type: none"> • Open the OSD menu and select the AUTO ADJUST option. • As necessary, adjust pitch and phase, and horizontal and vertical position. Note that some video cards may not show the display in proper sizing.
The display ripples or shows a moiré pattern. The display color is not even.	<ul style="list-style-type: none"> • Open the OSD menu and select the AUTO ADJUST option. If this does not solve the problem, select the RESET option to set the display back to the factory default settings. • As necessary, adjust pitch and phase.

Windows-Specific Problems

Symptom	Solution
After changing right- and left-handed settings in the computer's mouse control panel, the pen tip no longer functions properly.	Restart Windows for your tool settings to be correctly recognized.

Mac-Specific Problems

Symptom	Solution
<p>At startup, a dialog box appears telling you that either the driver failed to load or the tablet preferences have not yet been created.</p>	<ul style="list-style-type: none"> • The pen display tablet was not detected at startup. Make sure the USB interface cable is securely connected to an active USB port on your computer or to a USB hub. Make sure that the pen display power LED is on. If this does not correct the problem, see Troubleshooting on page 38. • From the GO menu, select the UTILITIES folder and launch the SYSTEM PROFILER. Select USB from the HARDWARE section of the CONTENTS list. Your USB pen display model should be listed. • If a pen display model is not listed, check the pen display's USB cable connection or try plugging the pen display into a different USB port. • If you are still having problems, go to the UTILITIES folder, open the DISK UTILITY program, and run REPAIR DISK PERMISSIONS from the FIRST AID tab. If this does not help, contact your technical support representative.

Symptom	Solution
Inkwell does not work correctly with the pen display.	<ul style="list-style-type: none"> • There may be a problem with the Inkwell preferences. Remove the damaged preference files as follows. They will be recreated when you enable handwriting recognition. <ol style="list-style-type: none"> 1. Open the System Preferences pane, choose SHOW ALL and select INK. Then turn off handwriting recognition. 2. From the GO menu, choose your HOME. Open the LIBRARY and PREFERENCES folders. Remove the following preferences: com.apple.ink.framework.plist com.apple.ink.inkpad.plist com.apple.ink.inkpad.sketch 3. Go back to SYSTEM PREFERENCES and INK, and then enable handwriting recognition. 4. Test the Inkwell function using your Wacom pen display tablet and pen. 5. If this procedure does not resolve your problem with Inkwell, contact Apple Support for further assistance.

Control and Writing Problems

If the pointer doesn't accurately follow the movement of the pen, orient the interactive pen display.

Before you can write on the screen in digital ink, SMART Board tools must be running the attached computer. You'll know that the SMART Board tools are running if you can see the SMART Board icon in the system tray or the Dock.

If the digital ink doesn't appear as you expect, check the customizable pen settings within SMART Notebook software. For more information on setting digital ink properties (such as color, line thickness, line style and transparency) refer to the *SMART Notebook software online Help*.

Appendix A

Regulatory Compliance

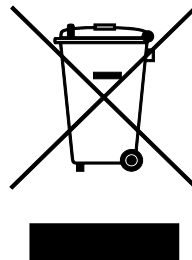
Waste Electrical and Electronic Equipment Regulations

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 products, we strongly encourage you to contact your local WEEE recycling agency for recycling and disposal advice.

Your SMART product required the extraction and use of natural resources for its production. It may contain hazardous substances. By disposing of electrical and electronic equipment appropriately, you lower the impact of these substances upon health and the environment and reduce the pressure on natural resources. Recycling agencies can reuse or recycle most of the materials from your product.

Please think about how you intend to dispose of any product that has a WEEE symbol or accompanying WEEE guidelines.



If you need more information on the collection, reuse and recycling of electrical and electronic equipment, please contact your local WEEE recycling agency.

Alternatively, contact your local reseller or SMART Technologies for information on the environmental performance of our products.

Restriction of Certain Hazardous Substances (RoHS) Directives

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

This product meets the requirements of the European Union's Restriction of Certain Hazardous Substances (RoHS) Directive 2002/95/EC, as well as the People's Republic of China's Control of Pollution Caused by Electronic Information Products (China RoHS).

Subsequently, this product also complies with other, less stringent directives that have arisen in various geographical areas, and that incorporate the European Union's RoHS directive as a basis.

For more information, refer to your local regulations or visit www.smarttech.com.

Appendix B

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 5, +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.

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Contact SMART Technologies

Toll Free 1.866.518.6791 (U.S./Canada)
or +1.403.228.5940

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FCC ID: HV4DTU2231

FCC Compliance and Advisory Statement

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, according to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correct the interference by one or more of the following measures:

- 1.Reorient the receiving antenna.
- 2.Increase the separation between the equipment and receiver.
- 3.Connect the equipment into and outlet on a circuit different from that to which the receiver is connected.
- 4.Consult the dealer or an experienced radio/TV technician for help.

Any special accessories needed for compliance must be specified in the instruction manual.

Warning: A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used. Use only shielded cables to connect I/O devices to this equipment.

CAUTION: Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.