SMART Board™
SBID 6052i Interactive Display Installation and User’s Guide
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.

Trademark Notice
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Portions of the software that ships with this product are copyrighted by Intel Corporation. Portions of the software that ships with this product are copyrighted by ParaGraph, a business unit of Vadem.

Patent No. US6320597; US6326954; US6741267; US6954197; US6972401; US7151533; US7236162; US749033; US7843006; CA2252302; CA2453873; EP1297488; ES2279823; ZL01812360 and DE60124549. Other patents pending. 03/2010
Important Information

Warnings and Cautions
Consider the following warnings and cautions when using your interactive display.

Electric Shock Warnings

**WARNINGS**
To prevent electrical shock hazards that could lead to fire or electrocution, respect the following warnings.

- Do not expose this interactive display to rain or moisture.
- Do not use this interactive display’s polarized plug with an extension cord receptacle or other outlets unless the prongs can be fully inserted.
- Do not open the cabinet or remove the back cover exposing the high voltage components inside. Refer servicing to qualified service personnel.
- Do not insert objects of any kind into the cabinet slots, as they could touch dangerous voltage points, which can be harmful or fatal or could cause electric shock, fire or equipment failure.
- Do not place any heavy objects on the power cord. Damage to the cord could cause shock or fire.
- Immediately unplug all power cords for your interactive display from the wall outlet and refer servicing to qualified service personnel when the following occurs:
  - The power supply cord or plug is damaged.
  - Liquid is spilled into the interactive display.
  - Objects fall into the interactive display.
  - The interactive display is exposed to rain or water.
  - The interactive display was dropped or the cabinet damaged.
  - Structural damage, such as cracking, has occurred.
  - The interactive display does not operate normally when you follow operating instructions.
General Usage Warnings

**WARNINGS**
- The lamps in the interactive display contain mercury. Please dispose of them according to local regulations.
- If the interactive display glass is broken, do not come in contact with the liquid crystal. Handle with care.
- Rest your eyes periodically by focusing on an object at least 5' (1.5 m) away.

**CAUTIONS**
- Handle with care when transporting. Save packaging for transporting.
- Clean the LCD screen surface with a lint-free, non-abrasive cloth. Do not use cleaning solution or glass cleaner.
- Avoid displaying fixed patterns on the screen for long periods of time to avoid image persistence (after image effects).
- Do not spill liquids into the cabinet.
- Do not use your interactive display near water.
- Do not use the interactive display outdoors.
- Do not cover the interactive display’s vent.
- Do not use the interactive display in high temperature, high humidity, dusty or oily areas.
- Allow adequate ventilation around the interactive display, so that heat can properly dissipate.
- Do not block ventilated openings.
- Do not place the interactive display near a radiator or other heat sources.
- Wipe vent holes clean monthly.
- Clean the holes behind the interactive display to remove dirt and dust annually.
- Do not place the interactive display on a sloping or unstable cart, stand or table, as the interactive display could fall, causing serious damage.
- Do not move or mount the interactive display by hanging a rope or wire to the backside handles.
- Do not mount or secure the interactive display using the handles behind the interactive display. It could fall and cause personal injury.
- Do not mount the interactive display face up, face down or upside down for an extended period of time as it could cause permanent damage to the interactive display.

- When using a LAN cable, do not connect to a peripheral device with wiring that might have excessive voltage.

### Power Connectors

Use the power cord provided with this display and according to the table below. If a power cord isn’t supplied with this equipment, please contact your supplier. Use only power cords that match the AC voltage of the power outlet. Also ensure that they comply with your country’s safety standards.

<table>
<thead>
<tr>
<th>Region</th>
<th>North America</th>
<th>European Continental</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S./Canada</td>
<td>120</td>
<td>230</td>
<td>230</td>
</tr>
<tr>
<td>EU (except UK)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Chinese

<table>
<thead>
<tr>
<th>Region</th>
<th>China</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>220</td>
<td>100</td>
</tr>
</tbody>
</table>

**IMPORTANT**

- The interactive display can be serviced only in the country where it was purchased.

- Install the interactive display close to an accessible power outlet.
NOTES

• For optimum performance, allow 20 minutes for warm-up.

• Position the interactive display at a 90° angle to windows and other light sources to minimize glare and reflections.

• Adjust the interactive display’s brightness, contrast and sharpness controls to enhance readability.
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Chapter 1
Introduction

Your SMART Board™ interactive display includes all the features of SMART’s proprietary DViT™ (Digital Vision Touch) technology on an NEC LCD monitor so that you can select, write and erase on the interactive surface. You can control computer applications, make notes in digital ink, write over videos and graphs, and save all of your work.

Topics in this chapter include the following:

• Components of the SMART Board Interactive Display
  – LCD Screen on page 2
  – Cameras on page 3
  – Touch Connection Panel on page 3
  – Bottom Terminal Panel on page 3
  – Wireless Remote Control Sensor on page 4
  – Wireless Remote Control on page 4
  – Battery-Powered Pencil on page 4

• Interactive Display Requirements
  – Environmental Requirements on page 6
  – Computer Requirements on page 6
Components of the SMART Board Interactive Display

Physical Location of Components

<table>
<thead>
<tr>
<th>Component Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCD Screen</td>
<td>The screen is 45 3/8&quot; W × 25 3/8&quot; H (115 cm × 64.5 cm), with a 52&quot; (32 cm) diagonal and 16:9 screen format. For information on-screen care and cleaning, see Cleaning the LCD Screen on page 43. For information on troubleshooting display issues, see Troubleshooting Picture Issues on page 32.</td>
</tr>
</tbody>
</table>
### Cameras
The interactive display includes two cameras in the top left and top right corners of the LCD screen. The cameras are under the top cover of the interactive display, and they track finger and pencil positions across the LCD screen.

**IMPORTANT**
Do not attach items such as adhesive notes to the screen because they will interfere with the cameras.

### Reflective Tape
The left, right and bottom sides of the LCD screen have a reflective tape that assists the camera in tracking finger and pencil positions.

**CAUTIONS**
- Do not damage or remove the reflective tape.
- Keep the reflective tape dry.

### Touch Connection Panel
The SMART touch connection panel is behind the interactive display and gathers information from the cameras. You must connect the touch connection panel to your computer for touch interactivity.

For more information on connecting the touch connection panel to your computer, see *Making Power and Computer Connections* on page 12.

### Bottom Terminal Panel
The bottom terminal panel is under the interactive display, and it contains both the main power switch and the connection points for other input devices, such as DVD players, Blue-ray™ or VCRs, or other output devices. For more information on the terminal panel, see *Connecting External Equipment with the Terminal Panels* on page 18.

### Side Terminal Panel
The side terminal panel is on the left side of the interactive display and contains additional connection points. For more information on the side terminal panel, see *Connecting External Equipment with the Terminal Panels* on page 18.

### Control Panel
The control panel enables you to turn the LCD monitor on and off, to change the input source, to change the volume and more.

The control panel is a series of buttons underneath the interactive display. For more information on the control panel, see *Adjusting the Screen with the Control Panel* on page 32.
| **Wireless Remote Control Sensor** | The wireless remote control sensor, in the lower-right corner of the bezel of the interactive display, gathers input from the wireless remote control. For information on the wireless remote control sensor, see *The Wireless Remote Control Sensor* on page 17. |
| **IMPORTANT** | Do not cover or block this area or you could have reduced use of the wireless remote control. |
| **Pencil Ledge** | The interactive display has a pencil ledge to store the battery-powered pencil.  

The interactive display's serial number is underneath the pencil ledge. |
| **Wireless Remote Control** | The wireless remote control enables you to turn the LCD monitor on and off, change the input source, change the volume and more. You can also use the remote control to open the on-screen menu and change the interactive display's settings.  

The wireless remote control requires batteries. For information on installing or changing batteries, see *Installing Batteries in the Wireless Remote Control* on page 16.  

For information on the wireless remote control buttons, see *Using the Wireless Remote Control* on page 23.  

For information on troubleshooting the wireless remote control, see *Troubleshooting Wireless Remote Control Issues* on page 36. |
| **Battery-Powered Pencil** | Your interactive display comes with a battery-powered pencil. When you touch the screen with the pencil, digital cameras detect and register the horizontal and vertical (or x,y) coordinates of that object on the screen's surface. The tip of the pencil creates digital ink on the interactive display, and the back of the pencil erases digital ink.  

![Battery-Powered Pencil](image_url)  

For 5 3/8" (13.7 cm)  

For information on troubleshooting with the pencil, see *Troubleshooting Pencil Issues* on page 41. |
Other Accessories
Contact your authorized SMART reseller to order any of the following accessories for your interactive display:

SMART Mobile Stand for Interactive Displays
Allows mobility and 15 3/4" (40 cm) of height adjustment. Order No. FSSBID 100.

Optional Laptop Shelf
Features an adjustable tilt angle of up to 35° from horizontal. Shelf telescopes outward. Order No. FSSBID LTS.

Active USB Extension Cables
If you want to extend the length of the included 16' (5 m) USB cable between your interactive display and your computer, you can connect up to four 16' (5 m) Active USB Extension Cables to extend your interactive display’s USB connection to a maximum of 64' (20 m). Order No. USB-XT.

Cat 5 to USB Extender
Use the Cat 5 to USB Extender to extend your interactive display's USB connection up to 120’ (36.6 m) using an RJ45 Cat 5 cable (not included). The extender includes two 6’ (1.8 m) USB cables to connect your computer and your interactive display to the extender units. Order No.CAT5-XT.

Additional Pencil Nibs
The pencil nib gradually wears down with normal use. Replace the nib as required to prevent damage to your screen. Your product includes additional nibs, which are also available from your authorized SMART reseller. To replace the nib, see Replacing the Pencil Nib on page 45. Order No. IDF-PEN NIBS.
Interactive Display Requirements

Environmental Requirements

<table>
<thead>
<tr>
<th>Environmental Requirement</th>
<th>Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature</td>
<td>41°F to 95°F (5°C to 35°C)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40°F to 120°F (-40°C to 49°C)</td>
</tr>
<tr>
<td>Humidity</td>
<td>5% to 80% relative humidity, non-condensing</td>
</tr>
<tr>
<td>Water and Fluid Resistance</td>
<td>• Intended for indoor use</td>
</tr>
<tr>
<td></td>
<td>• Don’t pour or spray liquids directly on the electronic components</td>
</tr>
<tr>
<td>Electrostatic Discharge (ESD)</td>
<td>• Designed to withstand electrostatic shock</td>
</tr>
<tr>
<td></td>
<td>• EN61000-4-2 severity level 3 for direct and indirect ESD (±4 kV Contact / ±8 kV Air)</td>
</tr>
<tr>
<td>Conducted and Radiated Emissions</td>
<td>• FCC part 15 Class A</td>
</tr>
<tr>
<td></td>
<td>• EN55022 / CISPR 22</td>
</tr>
<tr>
<td>Flammability Rating</td>
<td>• Electronics and connectors: UL 94-V0</td>
</tr>
<tr>
<td></td>
<td>• Plastic enclosures and other mechanical parts: UL 94-HB</td>
</tr>
<tr>
<td></td>
<td>• USB 2.0 cable: UL VW-1 / CSA FT4</td>
</tr>
</tbody>
</table>

Computer Requirements

Your interactive display includes SMART Product Drivers and either SMART Notebook™ software or SMART Meeting Pro™ Premium software.

Your computer requirements will vary based on the software package you selected.

Interactive Displays using SMART Notebook Software

• A computer using either a Windows or Mac operating system

• System requirements are in the *SMART Notebook 10 Release Notes* (document 126571)

Interactive Displays using SMART Meeting Pro Premium software

• A computer using the Windows operating system

• System requirements are in the *SMART Meeting Pro Premium Release Notes* (document 144278)
Chapter 2
Installing the Interactive Display

This chapter describes considerations and concerns for trained, professional installers installing the interactive display on a wall-mount or mobile cart. Once the interactive display has been installed, see the next chapter Setting Up the Interactive Display on page 11 for instructions on connecting the computer and interactive display.

**WARNINGS**

- Failure to follow the recommended mounting procedures could result in damage to the equipment or injury to the user or installer.
- Product warranty does not cover damage caused by improper installation. Failure to follow these recommendations could void the warranty.
- The interactive display is heavy. Installers must wear protective footwear.

**IMPORTANT**

To wall-mount this interactive display, your installers require a standard VESA® 400 mm × 400 mm mounting plate, not included with your interactive display.

Topics in this chapter include the following:

- Selecting the Mounting Location
  - Recommended Mounting Height on page 9
  - Important Mounting Considerations for Trained Installers on page 9
- Mounting the Interactive Display on page 9
Selecting the Mounting Location

Consider the following when you select a location for your interactive display.

- If you want to install the interactive display on a wall, the wall must be strong enough to support the interactive display and the mounting accessories. The interactive display weighs 132 lb. (60 kg).
- Do not install the interactive display in locations where a door or gate can hit it.
- Do not install the interactive display in areas where it will be subjected to strong vibrations and dust.
- Do not install the interactive display near where the main power supply enters the building.
- Do not install the interactive display where people can easily grab and hang onto it or the mounting apparatus.
- Allow adequate ventilation or provide air conditioning around the interactive display, so that heat can properly dissipate away from the unit and mounting apparatus.
- When mounting the interactive display in a recessed area, such as in a wall, leave at least 4" (10 cm) of space between the interactive display and the wall for proper ventilation.
Mounting the Interactive Display

Trained, professional installers are required to install the interactive display. The SMART product warranty doesn’t cover damage caused by improper installation, remodelling or natural disasters. Failure to comply with recommendations in this guide could void the warranty.

⚠️ WARNINGS

- Prior to mounting the interactive display, inspect the location to ensure that it is strong enough to support the weight of the unit. The interactive display weighs 132 lb. (60 kg).
- Do not mount the interactive display yourself. A trained, professional installation team of three or more installers is required.

Recommended Mounting Height

Use the illustration below to determine the appropriate height for your interactive display.

Important Mounting Considerations for Trained Installers

⚠️ WARNING

Use an installation team of three or more trained, professional installers.

Consider the following when mounting the interactive display on a wall:

- Inspect the installation location to ensure that it’s strong enough to support the weight of the interactive display. Not all walls are capable of supporting the weight of the interactive display.
- To ensure safe installation, use two or more brackets to mount the interactive display. Mount the interactive display to at least two points on the installation location.
• When using mounting accessories, they must comply with the VESA-compatible (FDMIv1) mounting method.
• Use M6 screws of the appropriate length.
• The recommended fasten force is 470–635 N·cm. Mounting interfaces that comply with the UL1678 standard in North America are recommended.
• Refer to the instructions included with the mounting equipment for detailed information.

Consider the following when mounting the interactive display on a stand:

• Follow the instructions included with the stand or mounting apparatus. Use only those devices recommended by the manufacturer.
• Install the interactive display carefully and avoid pinching your fingers.
• To ensure the interactive display doesn't tip, fasten it to a wall using a cord or chain. Ensure the wall and all fastening materials can support the weight of the interactive display.
Chapter 3
Setting Up the Interactive Display

The following chapter includes information on connecting external equipment, connecting the power cord, attaching the cable cover and installing batteries into the pencil and remote control.

Topics in this chapter include the following:

- Making Power and Computer Connections on page 12
- Installing SMART Software on page 13
- Enabling the Pencil on page 15
- Enabling the Wireless Remote Control on page 16
- Connecting External Equipment with the Terminal Panels on page 18
Making Power and Computer Connections

To make power and computer connections

1. Connect the supplied VGA cable from your computer or SMART hub’s video output connection to the terminal pane. For more information, see Connecting External Equipment with the Terminal Panels on page 18.

2. Connect the supplied power cable from the AC IN connector in the interactive display’s bottom terminal panel to the AC power outlet.

   **NOTE**
   Optionally, you can cover the bottom terminal panel with the supplied cover to secure the cables. Six screws are supplied for this cover.

3. Connect the supplied power cable from the touch connection panel of the interactive display to the AC power outlet.

4. Connect the supplied USB 2.0 cable from the touch connection panel to a USB 2.0 receptacle on the computer.

   **NOTE**
   USB 1.1 cables or receptacles result in reduced performance.

5. Connect your computer to the Internet.

   **IMPORTANT**
   If your interactive display was purchased with SMART Meeting Pro Premium, you require an Internet connection for software installation.

6. Connect the power cable from your computer to the wall outlet.
Turning On Your Interactive Display

1. Turn on the computer.
2. Press the main power switch on the bottom terminal panel to turn on the interactive display. For more information about the bottom terminal panel, see page 18.

Your computer’s logon screen or desktop appears on the screen. If you don’t see either, refer to the Troubleshooting on page 29.

NOTE
You can interact with the computer using a keyboard or mouse. In order to interact by touch with the interactive display, you need to install SMART software.

Installing SMART Software

To use the interactive display, you need to install software on the interactive display’s computer. This software includes:

• SMART Product Drivers, which enables touch interactivity and digital ink.
• SMART Notebook collaborative learning software from the included installation CD.

OR
SMART Meeting Pro Premium collaboration software from an Internet download.

Installing SMART Notebook on Your Computer

The SMART Notebook CD includes two components:

• SMART Product Drivers
• SMART Notebook

IMPORTANT
• An Internet connection is recommended during installation to get a software activation key and download software updates.
• For computer requirements, see the SMART Notebook release notes (document 126571).

1. Place the included installation CD in the computer’s CD tray.

The installation wizard appears.
2. Follow the on-screen instructions. You will be prompted to enter your product activation key. You must register your interactive display online using the serial number found underneath the pencil ledge.

3. Click the **SMART Board** icon in the notification area (Windows computers) or the Dock (Mac computers), and then select **Check for Updates**.

   The **SMART Product Update** window appears.

4. Follow the on-screen instructions to update to the latest versions of both **SMART Notebook** and **SMART Product Drivers**.

### Installing **SMART Meeting Pro Premium** on Your computer

The **SMART Meeting Pro Premium** software download includes two components:

- **SMART Product Drivers**
- **SMART Meeting Pro Premium**

**IMPORTANT**

- **SMART Meeting Pro Premium** is available only as an Internet download.
- This software requires a computer with a Windows operating system. For other computer requirements, see the **SMART Meeting Pro Premium** release notes (document 144278).
- Your product ships with an activation key for **SMART Meeting Pro Premium**. Please retain this activation key for your records.

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**To download **SMART Meeting Pro Premium****

2. Click the **SMART Meeting Pro Premium** link.
3. Click the **Download** link.
4. Follow the onscreen instructions to save the **SMARTMeetingProPremiumWrapper.exe** file to your desktop.

**To install **SMART Meeting Pro Premium** and **SMART Product Drivers****

1. Double-click the **SMARTMeetingProPremiumWrapper.exe** file.
2. Follow the on-screen instructions. You will be prompted to enter your product activation key.
3. Click the **SMART Board** icon in the notification area (Windows computers) or Dock (Mac computers), and then select **Check for Updates**.

   The **SMART Product Update** window appears.
4. Follow the on-screen instructions to update to the latest versions of both SMART Meeting Pro Premium and SMART Product Drivers.

Enabling the Pencil

Once you install SMART Product Drivers, you can interact with your computer’s desktop and applications by touching the screen with a finger or other object. Your interactive display includes a battery-powered pencil that provides greater touch precision and ease of use, and allows you to draw with digital ink.

Installing a Battery in the Pencil

The pencil is powered by the included AAA battery.

To install a battery in the pencil

1. Grasp the eraser end of the pencil in one hand and the top of the pencil in the other, and then carefully pull the two sections apart.

2. Insert the supplied AAA battery into the battery compartment, matching the markings on the holder to the markers on the battery.

3. Carefully push the two sections of the pencil together, and then place the pencil on the interactive display’s pencil ledge.

⚠️ CAUTION

Use the pencil carefully. Dropping it can break it.
Using the Pencil
The pencil provides more precise touch contact for both drawing and mouse-actions.

To use the pencil
Drag the pencil nib across the screen to create digital ink.

OR

Press an item or icon on the desktop as you would click a mouse.

If your pencil doesn’t draw digital ink or allow interaction with the desktop, see Troubleshooting Pencil Issues on page 41.

Enabling the Wireless Remote Control
Your wireless remote control replicates many of the features found in the control panel, allowing you to turn the interactive display on or off, or access monitor display and audio settings from a distance of 23’ (7 m).

Installing Batteries in the Wireless Remote Control

WARNING
Do not touch exposed battery acid.

CAUTIONS
• Incorrect use of batteries can result in leaks or bursting.
• Do not mix battery brands.
• Do not combine new and old batteries. it can shorten a battery’s life or, cause it to leak battery acid.
• Remove dead batteries immediately to prevent battery acid from leaking into the battery compartment.

To install batteries
1. Press the door on the underside of the wireless remote, and then slide it to open the cover.
2. Insert two 1.5V AA batteries in the remote control. Ensure the (+) and (-) markings on the batteries align with the markings in the remote control.
3. Replace the cover.
TIP

If you don't intend to use the wireless remote control for a long period of time, remove the batteries.

The Wireless Remote Control Sensor

The wireless remote control sensor is located in the lower-right corner of the interactive display. It allows remote control of the LCD monitor from a distance of 23' (7 m).

For more information on the wireless remote control range, see Wireless Remote Control Range on page 24.

Using the Wireless Remote Control

The wireless remote control allows you to adjust display, audio and power settings. For more information on the wireless remote control buttons, see Wireless Remote Control Buttons on page 25.

If your wireless remote control doesn’t allow you to turn your interactive display on or off or to view display settings, see Troubleshooting Wireless Remote Control Issues on page 36.
Connecting External Equipment with the Terminal Panels

The interactive display's terminal panels enable you to connect external equipment to the interactive display.

**Bottom Terminal Panel**

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<td>4</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>1. Main Power Switch</td>
<td>2. AC IN connector</td>
<td>3. DISPLAYPORT connector</td>
<td>4. HDMI connector</td>
<td>5. DVI IN (DVI-D)</td>
<td>6. VGA IN (mini D-Sub 15 pin)</td>
<td>7. RGB/HV IN [R, G, B, H, V] (BNC)</td>
<td>8. RGB/HV OUT (BNC)</td>
<td>9. VIDEO IN connector (BNC and RCA)</td>
<td>10. VIDEO OUT connector (BNC)</td>
</tr>
<tr>
<td>11. DVD/HD connector (RCA)</td>
<td>12. S-VIDEO IN connector (Mini DIN 4 pin)</td>
<td>13. AUDIO IN 1, 2, 3</td>
<td>14. AUDIO OUT</td>
<td></td>
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**Side Terminal Panel**

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<tbody>
<tr>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>15. External speaker terminal</td>
<td>16. LAN port (RJ-45)</td>
<td>17. External control (D-sub 9 pin)</td>
<td>18. Wired remote control in/out</td>
<td></td>
</tr>
</tbody>
</table>
To connect external equipment

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Turn off your interactive display.</td>
</tr>
<tr>
<td>2.</td>
<td>Ensure your external equipment is connected to its power source and is turned off.</td>
</tr>
<tr>
<td>3.</td>
<td>Connect the interactive display to the external equipment with an approved cable, ideally supplied with the external equipment.</td>
</tr>
<tr>
<td>4.</td>
<td>Turn on the interactive display and the external equipment.</td>
</tr>
</tbody>
</table>
CHAPTER 3 – SETTING UP THE INTERACTIVE DISPLAY
Chapter 4
Using the Interactive Display

This chapter includes information on how to use your interactive display, turning your interactive display on and off, turning your LCD screen on and off, controlling your computer by pressing the screen, using the remote control, and more.

Topics in this chapter include the following:

• **Turning the Interactive Display On and Off**
  – *Turning On the Interactive Display* on page 22
  – *Turning Off the Interactive Display* on page 22
  – *Using Power Management* on page 22

• **Using the Touch Interactive Screen** on page 23

• **Using the Wireless Remote Control**
  – *Wireless Remote Control Range* on page 24
  – *Wireless Remote Control Buttons* on page 25
Turning the Interactive Display On and Off

Turning On the Interactive Display

1. Set the interactive display’s main power switch to on. This is on the terminal panel, see page 2.

2. Press the power button on the control panel.
   OR
   Press the power button on the remote control.

3. Turn on the computer.

Turning Off the Interactive Display

1. Turn off your computer.

2. Press the power button on the control panel.
   OR
   Press the power button on the remote control.

3. Set the LCD monitor’s main power switch to off. This is on the terminal panel, see page 2.

Using Power Management

The LCD monitor follows the VESA approved Display Power Management (DPM) function.

Power management is an energy-saving function that enables your LCD monitor to automatically enter a power-saving mode if you haven’t used the keyboard or the mouse for a fixed period. This reduces the power consumption of the LCD monitor and potentially increases the life of the interactive display.

If your LCD monitor enters power-saving mode, you can turn it on at any time by touching the screen.
Using the Touch Interactive Screen

Using the interactive display, you can perform normal computer operations by pressing the with your finger and you can write in digital ink using the supplied pencil.

⚠️ CAUTIONS

- Write with light pressure on the surface. Writing with excessive force can damage the screen. SMART Technologies is not responsible for damage to your LCD monitor incurred by improper use.
- Replace the pencil nib when it wears down. If a pencil nib wears down too far, you might scratch or damage the screen. For more information, see page 45.
- Do not touch the screen with sharp or pointed objects such as fingernails, keys, pens or jewelry.

To left-click
Press the screen with your finger.

To right-click
Press the screen with your finger and wait until the menu appears.

To write or draw
1. Pick up the supplied pencil.
2. Write or draw on the screen.

To erase
1. Pick up the supplied pencil.
2. Press the eraser end of the pencil on the screen, and then move the eraser over the digital ink you want to erase.
   OR
   Press the eraser end on the screen, move it in a circle around the area you want to erase, and then tap the middle of the circle with the eraser.

Using the Wireless Remote Control

The wireless remote control enables you to turn the LCD monitor on and off, change the input source, change the volume, and more. You can also use the remote control to open the on-screen menu, and then change the monitor’s settings.

If your wireless remote control doesn’t respond, see Troubleshooting Wireless Remote Control Issues on page 36.
CAUTIONS

- Do not subject the wireless remote control to strong shock.
- Do not allow water or other liquids to splash the remote control. If the remote control gets wet, wipe it dry immediately.
- Avoid exposing the wireless remote control to heat or steam.
- Do not open the wireless remote control except for the battery compartment.

IMPORTANT

The remote control system can’t function when strong illumination strikes the remote control sensor or when there is an object in its path.

Wireless Remote Control Range

The wireless remote control has a range of 23’ (7 m) and an angle of 30° from perpendicular to the wireless remote control sensor, which is located in the lower-left corner of the display.
Wireless Remote Control Buttons
The table below explains the function of the most commonly used buttons.

<table>
<thead>
<tr>
<th>Button</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER ON</td>
<td>Switches the power on/standby</td>
</tr>
<tr>
<td>Input buttons (8)</td>
<td>Selects input signal for the display. Choose from DVI, DISPLAY PORT, VGAM, RGB/RV, HDMI, DVD, VIDEO or S-VIDEO</td>
</tr>
<tr>
<td>PICTURE MODE</td>
<td>Selects picture mode</td>
</tr>
<tr>
<td>ASPECT</td>
<td>Selects picture aspect</td>
</tr>
<tr>
<td>SOUND</td>
<td>Selects artificial surround sound</td>
</tr>
<tr>
<td>Number pad</td>
<td>Press buttons to set and change passwords, change channel and make settings</td>
</tr>
<tr>
<td>DISPLAY</td>
<td>Turns the on-screen display menu on and off</td>
</tr>
<tr>
<td>MENU</td>
<td>Turns the menu mode on and off</td>
</tr>
<tr>
<td>AUTO SET UP</td>
<td>Enters auto setup menu</td>
</tr>
<tr>
<td>UP/DOWN</td>
<td>Acts as button to move the highlighted area up or down to select adjustment items within the on-screen display menu</td>
</tr>
<tr>
<td>+/-</td>
<td>Increases or decreases the adjustment level within the on-screen display menu</td>
</tr>
<tr>
<td>SET</td>
<td>Makes selection</td>
</tr>
<tr>
<td>VOL +/-</td>
<td>Increases or decreases audio output level</td>
</tr>
<tr>
<td>CH +/-</td>
<td>Changes the channel for the interactive display</td>
</tr>
</tbody>
</table>

**IMPORTANT**
You must add speakers to the interactive display to have audio output.

For other buttons, see the NEC MultiSync® S521 User’s Manual (document 145185).

---

To use the wireless remote control
Point the top of the remote control toward the wireless remote control sensor when you press the buttons.

Use the remote control within approximately 23’ (7 m) of the remote control sensor or at a horizontal and vertical angle of 30° within a distance of about 10’ (3.5 m).
Selecting a Video Source
You can change the video source of the LCD monitor.

To change a video source
Press the INPUT button on the LCD monitor's control panel until the LCD monitor displays the video source you want.

OR
Press the INPUT button on the remote control until the LCD monitor displays the video source you want.

NOTE
Your interactive display includes a VGA cable to connect your computer to your interactive display. You can use other connection types.

Displaying LCD Monitor Information
You can view on-screen information about the LCD monitor, such as the monitor's current input source or current aspect ratio.

To display monitor information
Press the DISPLAY button on the remote control.

Adjusting Audio Volume
You can change the volume of connected speakers (the interactive display doesn’t have internal speakers) using the control panel or the remote control.

To adjust the volume using the control panel
1. If the on-screen menu is currently displayed, press the Menu button to close the on-screen menu.
2. Press the + or - button to increase or decrease the volume.

To adjust the volume using the remote control
Press the VOL + or - button to increase or decrease the volume.
Changing Settings in the On-Screen Menu

You can adjust many of the LCD monitor’s settings using the on-screen menu, including the brightness, contrast, and many more.

To change settings in the on-screen menu

1. Press the **MENU** button.
   
The on-screen menu appears.

2. Press the up or down arrows to select the settings you want to change.

3. Press **SET**.

4. Press the up or down arrows to select the setting you want from the sub-menu.

   OR

   Press the + or - buttons to increase or decrease the value.

5. If you want to change another setting, press the **EXIT** button to return to the main menu, and then repeat steps 2 through 4.

6. When you finish changing settings, press the **MENU** button to close the on-screen menu.

Locking the Control Panel

You can lock the current control panel settings using control Key Lock mode. When this mode is active, the panel ignores any input on the control panel.

To lock or unlock the control panel

Press the control panel’s up and down arrows simultaneously for more than three seconds to either lock or unlock the control panel.
Chapter 5
Troubleshooting

This chapter helps you identify and resolve various issues in the field. If issues persist, contact SMART technical support. For SMART contact information, see Technical Support on page 49.

Topics in this chapter include the following:

- Troubleshooting Quick Reference Table on page 30
- Troubleshooting Power Issues on page 31
- Troubleshooting Picture Issues on page 32
- Troubleshooting Audio Issues on page 35
- Troubleshooting with the Wireless Remote Control Sensor LED on page 35
- Troubleshooting Interactivity Issues on page 37
- Troubleshooting Wireless Remote Control Issues on page 36

For additional troubleshooting suggestions, see the NEC MultiSync S521 User’s Manual (document 145185).
## Troubleshooting Quick Reference Table

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is no image on your screen.</td>
<td>Your computer is in Standby mode.</td>
<td>Touch the panel to activate your computer.</td>
</tr>
<tr>
<td>OR</td>
<td>There is no power to your computer, interactive display or touch connection panel.</td>
<td>See <em>Making Power and Computer Connections</em> on page 12.</td>
</tr>
<tr>
<td>OR</td>
<td>Your computer isn’t connected to the interactive display.</td>
<td></td>
</tr>
<tr>
<td>There is a persistent image on your screen.</td>
<td>An image displayed for too long.</td>
<td>See <em>Troubleshooting Persistent Image Issues</em> on page 33</td>
</tr>
<tr>
<td>There are unstable images on the screen.</td>
<td>Connection issues OR Display card issues</td>
<td>See <em>Troubleshooting Unstable or Unfocused Images</em> on page 34.</td>
</tr>
<tr>
<td>There is an unfocused or blurry image on the screen.</td>
<td>Conflicting display and computer image settings.</td>
<td>See <em>Troubleshooting Resolution Issues</em> on page 34.</td>
</tr>
<tr>
<td>There is no sound from your display.</td>
<td>Speakers aren’t included with the interactive display, and none have been added. OR Audio settings are incorrect.</td>
<td>Install speakers and connect them to either the computer or the LCD display side terminal panel. See <em>Connecting External Equipment with the Terminal Panels</em> on page 18. See <em>Troubleshooting Audio Issues</em> on page 35.</td>
</tr>
<tr>
<td>The interactive display doesn’t respond to your touch.</td>
<td>You don’t have a USB 2.0 cable connecting the touch connection panel to the computer.</td>
<td>See <em>Making Power and Computer Connections</em> on page 12. OR If your interactive display is mounted on a stand, see <em>To troubleshoot using LED status and diagnostic lights</em> on page 38.</td>
</tr>
<tr>
<td>The screen pointer doesn’t appear where you touch.</td>
<td>The interactive display cameras aren’t calibrated.</td>
<td>See <em>Troubleshooting Calibration Issues</em> on page 39.</td>
</tr>
</tbody>
</table>
Troubleshooting Power Issues

Complete the following steps if you can’t turn on the interactive display.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your pencil doesn’t draw digital ink.</td>
<td>The pencil battery is dead. OR The pencil nib is worn. OR The pencil isn’t responding or is behaving unexpectedly.</td>
<td>To install a battery in the pencil on page 15. See To replace the pencil nib on page 45. See To test your pencil on page 41.</td>
</tr>
</tbody>
</table>

To troubleshoot power issues

1. Turn off the interactive display.
2. Disconnect the interactive display’s power cord from the power outlet.

   The interactive display resets.
3. Connect the power cord to the power outlet.
4. Turn on the interactive display.
Troubleshooting Picture Issues

Complete the following steps if your interactive display doesn’t display an image correctly or any image at all. You can resolve these issues with the computer display settings, the control panel settings or the wireless remote control (see page 23).

For additional troubleshooting suggestions, see the *NEC MultiSync S521 User’s Manual* (document 145185).

Adjusting the Screen with the Control Panel

The control panel enables you to turn the LCD monitor on and off, change the input source, change the volume and more.

The control panel is on the right-hand underside of your interactive display.

For more information on these buttons, see the *NEC MultiSync S521 User’s Manual* (document 145185).
Troubleshooting No Picture on the Screen

To troubleshoot no picture issues:

1. Turn off the LCD monitor, turn off the interactive display, and then turn off the computer.
2. Disconnect the video cable (Usually VGA) that connects the interactive display’s bottom terminal panel to the computer.
3. Check the video cable for bent or pushed-in pins. If the cable is damaged, replace it.
4. Install the video cable between the interactive display’s bottom terminal panel and the computer.
5. Turn on the computer, turn on the interactive display, and then turn on the LCD monitor.
6. If the screen still doesn’t display an image, there could be an issue with the computer’s display card. Ask someone with knowledge of display cards to confirm the following:
   - Is the display card correctly installed in its slot?
   - Is a supported mode selected on the display card or system? For more information on changing Graphics modes, consult the documentation supplied with the display card or system.
   - Is the display card compatible with the interactive display?

For additional troubleshooting suggestions, see the NEC MultiSync S521 User’s Manual (document 145185).

Troubleshooting Persistent Image Issues

LCD technology can experience a phenomenon known as image persistence. Image persistence occurs when a residual or ghost image of a previous image remains visible on the screen. Although image persistence on an LCD monitor isn’t permanent (unlike CRT monitors), you should avoid displaying images on the screen for a long period of time.

TIPS

To reduce the risk of image persistence:

- Display moving images at regular intervals whenever the screen is idle.
- Turn off the interactive display when it isn’t in use.
- Activate a screen saver for your operating system.
To remove a persistent image

1. Turn off the interactive display and the computer.
2. Leave the interactive display and the computer off for the same length of time as the persistent image was on-screen. For example, if the interactive display displayed an image for one hour and a residual image remains, don’t turn on the computer and the interactive display until after a minimum of one hour.

Troubleshooting Unstable or Unfocused Images

Complete the following steps if your LCD screen displays an unstable or unfocused image.

1. Turn off the interactive display, and then turn off the computer.
2. Disconnect the video cable that connects the interactive display’s bottom terminal panel to the computer.
3. Connect the video cable from the interactive display’s bottom terminal panel to the computer.
4. Turn on the interactive display, and then turn on the LCD monitor.
5. If the LCD monitor still displays an unstable or unfocused image, open the on-screen menu, and then change the image settings in the Adjust sub-menu. If this resolves the issue, you could need to change the image settings again the next time you change display modes.

Troubleshooting Resolution Issues

Open the on-screen menu, and adjust the resolution. For more information, see Wireless Remote Control Buttons on page 25.

For additional troubleshooting suggestions, see the NEC MultiSync S521 User’s Manual (document 145185).
Troubleshooting Audio Issues

Complete the following steps to resolve issues with the audio output.

NOTE
Speakers aren’t included with the interactive display. You must add external speakers for audio output.

To troubleshoot audio issues

1. Confirm that the audio cable is connected correctly.
2. Confirm that mute isn’t activated.
3. Confirm that the volume isn’t set to its minimum setting.

For additional troubleshooting suggestions, see the NEC MultiSync S521 User’s Manual (document 145185).

Troubleshooting with the Wireless Remote Control Sensor LED

Complete the following steps if the power indicator in the wireless remote control sensor (located in the lower-right corner of your interactive display) doesn’t glow.

To troubleshoot issues using the LED

1. Confirm that the computer isn’t in power-saving by touching the screen or touching a connected keyboard or mouse. If this doesn’t resolve the issue, continue with the following steps.
2. Turn off the interactive display, and then turn off the computer.
3. Disconnect the interactive display’s power cord from the power outlet.
4. Connect the interactive display’s power cord to the power outlet.
5. Turn on the computer, and then turn on the interactive display.
6. If this doesn’t resolve the issue, the LCD monitor’s Power Indicator setting could be set incorrectly. Open the on-screen menu, using either the control panel or the wireless remote control, and then select the Multi Display > Power Indicator sub-menu.
7. Ensure the Power Indicator option is set to ON.
To interpret a flashing red LED

If the LED flashes red six times, and then the LCD monitor turns off, the internal temperature of the LCD monitor is higher than its normal operating temperature. Do not turn on the monitor again until the internal temperature has reduced to its normal operating temperature.

OR

If the LED flashes red more than six times, the LCD monitor could have detected a component failure. Please contact SMART technical support. For contact information, see Technical Support on page 49.

Troubleshooting Wireless Remote Control Issues

To troubleshoot issues with the remote control

1. Confirm that the wireless remote control is pointing at the wireless remote control sensor.

2. Confirm that there are no objects between the remote control and the sensor. For more information on the optimum angle for the wireless remote control, see Using the Wireless Remote Control on page 23.

3. Confirm that there is no direct sunlight or strong illumination reaching the remote control sensor of the LCD monitor, or when there is an object in the path.

4. Confirm that the remote control’s batteries are inserted correctly.

5. Replace the batteries.

6. For additional troubleshooting suggestions, see the NEC MultiSync S521 User’s Manual (document 145185).
Troubleshooting Interactivity Issues

Follow these steps if you can see your computer’s desktop on your interactive display, but you are unable to interact well (or at all) with the desktop.

These are commonly one of the following issues:

- Touch connection panel issues where your touch on the interactive display has no effect.
- Orientation issues where your touch on the interactive display makes a mouse appear in a location other than where you touched.
- Pencil issues where your pencil doesn’t respond or doesn’t respond well.

Troubleshooting Touch Connection Panel Issues

The touch connection panel gathers information from the interactive display and passes that information to the computer.

A basic reset resolves most touch connection panel issues. You can also use the LED status lights to interpret other touch connection panel issues.

\[ \text{NOTE} \]

If your interactive display is mounted on the wall, you could require a ladder and a mirror to observe the LED status lights.

To reset the touch connection panel:

1. Disconnect the touch connection panel power source.
2. Connect the touch connection panel power source.

   The touch connection panel resets, but retains control and screen calibration data.
To troubleshoot using LED status and diagnostic lights

1. Observe the status lights on the touch connection panel.

2. Use the following table

<table>
<thead>
<tr>
<th>Diagnostic LED</th>
<th>Status LED</th>
<th>Touch Connection Panel Condition</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Off</td>
<td>Touch connection panel is turned off or power cable is disconnected.</td>
<td>Connect the power cable to the touch connection panel.</td>
</tr>
<tr>
<td>Off</td>
<td>Flashing green</td>
<td>Software is starting or touch connection panel is initializing.</td>
<td>Don’t touch your panel until initializing is complete.</td>
</tr>
<tr>
<td>Green OR Alternating green and orange</td>
<td>Green</td>
<td>Touch connection panel is functioning within normal parameters.</td>
<td>None.</td>
</tr>
<tr>
<td>Flashing green</td>
<td>Green</td>
<td>No SMART software detected.</td>
<td>Start SMART software.</td>
</tr>
<tr>
<td>Green OR Alternating green and orange</td>
<td>Red</td>
<td>Error detected.</td>
<td>Run the SMART Connection Wizard’s troubleshooting procedures to determine the cause.</td>
</tr>
<tr>
<td>Flashing red</td>
<td>Red</td>
<td>No USB connection.</td>
<td>Check the cable between the touch connection panel and computer.</td>
</tr>
<tr>
<td>Flashing green</td>
<td>Red</td>
<td>No SMART software detected.</td>
<td>Start SMART software, and then run the SMART Connection Wizard’s troubleshooting procedures.</td>
</tr>
<tr>
<td>Flashing orange</td>
<td>Red</td>
<td>SMART software isn’t responding.</td>
<td>Restart your computer.</td>
</tr>
</tbody>
</table>
Troubleshooting Calibration Issues
When the location of your touch is misinterpreted (a pointer appears a distance from the actual contact), calibrate your interactive display.

To calibrate the interactive display

1. Press the **SMART Board icon** in the notification area (Windows computers) or the Dock (Mac computers), and then select **Control Panel**.

   The **SMART Control Panel** opens

2. Press **Connection Wizard**.

   The **SMART Connection Wizard** appears and scans for SMART products.

   Your interactive display appears as **SMART Board (0x3) - on USB** in the list with a check mark beside it.

3. Select your interactive display, and then press **Next** (Windows computers) or **Continue** (Mac computers).

   If your cameras are working correctly, they appear in a list with a check mark beside each camera.

<table>
<thead>
<tr>
<th>Diagnostic LED</th>
<th>Status LED</th>
<th>Touch Connection Panel Condition</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green OR</td>
<td>Flashing green</td>
<td>Touch connection panel is updating firmware.</td>
<td>Wait for the update to finish.</td>
</tr>
<tr>
<td>Alternating green and orange</td>
<td>Flashing orange</td>
<td>No USB connection.</td>
<td>Check the cable between the touch connection panel and the computer.</td>
</tr>
<tr>
<td>Flashing green</td>
<td>Flashing orange</td>
<td>Corrupted firmware.</td>
<td>Run the <strong>SMART Firmware Upgrade Wizard</strong>.</td>
</tr>
<tr>
<td>Red</td>
<td>Flashing orange</td>
<td>Computer is in Standby mode.</td>
<td>Turn on the computer.</td>
</tr>
<tr>
<td>Off</td>
<td>Flashing orange</td>
<td>No USB connection.</td>
<td>Check the cable between the touch connection panel and the computer.</td>
</tr>
</tbody>
</table>

**CAUTION**
Do not disconnect the cable. Dis disconnecting the cable could cause computer memory loss.
4. Press **Next** (Windows computers) or **Continue** (Mac computers).

   The pencil test window opens. If you want to test the pencil, see *To test your pencil* on page 41.

5. Press **Next** (Windows computers) or **Continue** (Mac computers).

   The *Eraser Test* window appears.

6. Press **Next** (Windows computers) or **Continue** (Mac computers).

   The *Calibration* window opens.

   ![Image of Calibration window]

   **IMPORTANT**

   The *Calibration* window can take a minute or more to open. Do not touch the screen surface until you see the image above.

7. Use the pencil nib to press the 15 red targets as they appear on the screen. Move the nib to the center of each target, and then wait until the target turns green before you lift the pencil. When you lift the pencil, the target moves to the next calibration point. Continue until you've pressed all the targets. At the end of the procedure, you hear a beep.

   The *Calibration* window disappears.

   **IMPORTANT**

   - When you calibrate your interactive display, keep your pencil at a right angle to the screen.

   - You can re-calibrate a target by pressing the left arrow key on the keyboard.
Troubleshooting Pencil Issues
If your interactive display responds to your touch, but not to your pencil, follow the steps below.

To troubleshoot pencil issues
1. Examine the pencil nib. If the nib is worn, replace it. See Replacing the Pencil Nib on page 45.
2. Change the battery in the pencil. See Replacing the Pencil Battery on page 44.
3. Perform a pencil test.

To test your pencil
1. Press the SMART Board icon in the notification area (Windows computers) or the Dock (Mac computers), and then select Control Panel.

   The SMART Control Panel opens

2. Press Connection Wizard.

   The SMART Connection Wizard appears and scans for SMART products.

   Your interactive display appears as SMART Board (0x3) - on USB in the list with a check mark beside it.

3. Select your interactive display, and then press Next (Windows computers) or Continue (Mac computers).

4. Press Next (Windows computers) or Continue (Mac computers).

5. The pencil test window opens.

6. Tap the pencil nib on the picture of the target.

   A message appears, indicating that your pencil is working correctly.

7. Tap the eraser on the picture of the target to ensure the eraser doesn’t work in the pencil test, and then press Next (Windows computers) or Continue (Mac computers).

   The Eraser Test window appears.

8. Press the pencil’s eraser on the picture of the target.

   A message appears, indicating that your eraser is working correctly.

9. Tap the pencil nib on the picture of the target to ensure that the pencil doesn’t work in the eraser test, and then press Next (Windows computers) or Continue (Mac computers).

Your pencil test is complete.
Chapter 6
Maintaining Your Interactive Display

Properly maintained, your interactive display will provide years of use.

Topics in this chapter include the following:

• Cleaning the LCD Screen on page 43
• Maintaining Interactive Display Ventilation on page 44
• Maintaining the Pencil on page 44
• Checking the Interactive Display Installation on page 45
• Removing Your Interactive Display on page 46
• Transporting Your Interactive Display on page 46

Cleaning the LCD Screen

Follow these instructions to clean the LCD screen and to prevent damage to the anti-glare coating and other product components.

⚠️ CAUTIONS
• Do not touch the screen with sharp or pointed objects.
• Write with light pressure on the screen surface.
• Do not scratch the screen surface with your fingernails, keys or jewelry.
• Do not use permanent or dry-erase markers on the screen. If dry-erase markers are used on the screen, remove the ink as soon as possible with a lint-free, non-abrasive cloth.
• Do not rub the screen with a hard material.
• Do not apply pressure to the screen.
• Do not use a cleaning solution or glass cleaner, as they can deteriorate or discolor the screen.
• Avoid touching the silver reflective tape on the border between the screen and the bezel and ensure it stays dry. Damage to this strip affects touch interactivity.

To clean the LCD screen
1. Shut off the computer, and then disconnect the power sources.
2. Wipe the LCD screen with a lint-free, non-abrasive cloth.

Maintaining Interactive Display Ventilation
Your interactive display requires ventilation to allow the fans to cool the interactive display.

⚠️ CAUTIONS
• Avoid setting up or using your interactive display in an area with excessive levels of dust, humidity or smoke.
• Wipe and clean accessible ventilation holes monthly.
• Remove the interactive display from the wall annually to clean the ventilation holes in the back of the interactive display. See Removing Your Interactive Display on page 46

Maintaining the Pencil
For trouble shooting steps, see Troubleshooting Pencil Issues on page 41

Replacing the Pencil Battery
Replace the pencil’s AAA battery when the Low Battery warning appears on your screen or when your pencil no longer draws digital ink.

⚠️ CAUTION
Rechargeable batteries are not recommended.

To replace the battery
See Installing a Battery in the Pencil on page 15.
Replacing the Pencil Nib

**CAUTION**
Replace the pencil nib when it wears down. If a pencil nib wears down too far, you could scratch or damage the screen’s anti-glare coating.

**To replace the pencil nib**

1. Carefully unscrew the cap surrounding the pencil nib.
2. Pull gently on the nib to remove it from the pencil.
3. Insert the new nib, and then replace the cap.

Checking the Interactive Display Installation

Regularly check the mounting location for signs of damage or weakness that can occur over time.

Periodically check for loose screws, gaps, distortions, or other issues that could occur with the mounting apparatus. If you find an issue, please refer to a trained, professional installer.
Removing Your Interactive Display

To safely remove your interactive display, use three or more trained, professional installers.

Removing the Interactive Display

- Follow the instructions included with the stand or mounting apparatus.
- Avoid pinching fingers.
- Do not place the interactive display on a sloping or unstable cart, stand or table, because the interactive display can fall resulting in serious damage.
- Do not mount the interactive display face up, face down or upside down for an extended period of time as it could cause permanent damage to the screen.
- Do not move the interactive display by hanging a rope or wire to the backside handle. It can fall and cause personal injury.

Transporting Your Interactive Display

Save your original packaging so that you can repack your interactive display with as much of the original packaging as possible. This packaging was designed with optimal shock and vibration protection. If your original packaging isn’t available, you can purchase the same packaging directly from your authorized SMART reseller.
Appendix A

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.

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.
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 www.smarttech.com/where.

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

<table>
<thead>
<tr>
<th>Online</th>
<th><a href="http://www.smarttech.com/contactsupport">www.smarttech.com/contactsupport</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone</td>
<td>+1.403.228.5940 or</td>
</tr>
<tr>
<td></td>
<td>Toll Free 1.866.518.6791 (U.S./Canada)</td>
</tr>
<tr>
<td></td>
<td>(Monday to Friday, 5 a.m. – 6 p.m. Mountain Time)</td>
</tr>
<tr>
<td>Fax</td>
<td>+1.403.806.1256</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:support@smarttech.com">support@smarttech.com</a></td>
</tr>
</tbody>
</table>

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  +1.403.228.5940 or
            Toll Free 1.866.518.6791 (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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