

SMART Board® 6065

interactive flat panel

SETUP AND MAINTENANCE GUIDE

SMART®

Product registration

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

Register online at smarttech.com/registration.

Keep the following information available in case you need to contact SMART Support.

Serial number:

Date of purchase:

Licenses

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Trademark notice

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This product and/or use thereof covered by one or more of the following U.S. patents.

www.smarttech.com/patents.

06/2014

Important information



WARNING

- Failure to follow the installation instructions shipped with your SMART product could result in personal injury and product damage which may not be covered by your warranty.
- Do not open or disassemble the SMART product. You risk electrical shock from the high voltage inside the casing. Opening the casing also voids your warranty.
- Do not stand (or allow children to stand) on a chair to touch the surface of your SMART product. Rather, mount the product at the appropriate height.
- To reduce the risk of fire or electric shock, do not expose the SMART product to rain or moisture.
- If your SMART product requires replacement parts, make sure the service technician uses replacement parts specified by SMART Technologies or parts with the same characteristics as the original.
- Ensure that any cables extending across the floor to your SMART product are properly bundled and marked to avoid a trip hazard.
- Do not insert objects inside the cabinet ventilation holes, because they could touch dangerous voltage points and cause electric shock, fire or product damage which may not be covered by your warranty.
- Do not place any heavy objects on the power cable. Damage to the cable could cause shock, fire or product damage which may not be covered by your warranty.
- Use only extension cords and outlets into which this product's polarized plug can be fully inserted.
- Use the power cable provided with this product. If a power cable is not supplied with this product, please contact your supplier. Use only power cables that match the AC voltage of the power outlet and that comply with your country's safety standards.
- If the glass is broken, do not touch the liquid crystal. To prevent injury, handle glass fragments with care when disposing of them.
- Do not move or mount the interactive flat panel by connecting rope or wire to its handles. Because the interactive flat panel is heavy, rope, wire or handle failure could lead to personal injury.

IMPORTANT INFORMATION

- Use only VESA®-approved mounting hardware.
- Disconnect all power cables for your interactive flat panel from the wall outlet and seek assistance from qualified service personnel when any of the following occurs:
 - The power cable or plug is damaged
 - Liquid is spilled into the interactive flat panel
 - Objects fall into the interactive flat panel
 - The interactive flat panel is dropped
 - Structural damage such as cracking occurs
 - The interactive flat panel behaves unexpectedly when you follow operating instructions

CAUTION

- Before you clean your SMART product, shut down or disconnect the computer. Otherwise, you may scramble the desktop icons or inadvertently activate applications when you wipe the screen.
- Avoid setting up and using the SMART product in an area with excessive levels of dust, humidity and smoke.
- Make sure an electrical socket is near your SMART product and remains easily accessible during use.
- The external power supply needs to meet the Limited Power Source (LPS) requirements of CSA/UL/IEC/EN 60950-1, when required.
- This SMART product should be used only with European TN and TT power distribution systems.

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

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

- You must connect the USB cable that came with your interactive flat panel to a computer that has a USB compliant interface and that bears the USB logo. In addition, the USB source computer must be compliant with CSA/UL/EN 60950 and bear the CE mark and CSA and/or UL Mark(s) for CSA/UL 60950. This is for operating safety and to avoid damage to the interactive flat panel.



IMPORTANT

- The following are the power requirements for your interactive flat panel:

Model	Power requirements
SPNL-6065	100V to 240V AC, 50 Hz to 60 Hz, 190 W

- For additional requirements and other information, refer to your interactive flat panel's specifications (see *Specifications* on page 7).

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Chapter 1

Welcome

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This chapter introduces you to your SMART Board interactive flat panel and this guide.

About your interactive flat panel

Your SMART Board® interactive flat panel features SMART's proprietary DVIT® (Digital Vision Touch) technology on an LCD screen with e-LED backlight which enables you to select, write and erase on the interactive surface. You can do everything on the interactive flat panel that you can do at your computer by touching the surface, and you can use an array of gestures within applications.

Features

Your interactive flat panel includes several features:

- Touch-enabled interactivity and object awareness
- Multitouch capabilities
- Gesture support
- Pen ID
- Pens
- Multiuser support
- Audio
- SMART software

Touch-enabled interactivity

You can do everything on your interactive flat panel that you can do at your computer—open and close applications, meet with others, create new documents or edit existing ones, visit websites, play and manipulate videos and so on—by touching the interactive surface.

You can also write over any application in digital ink using one of the supplied pens or your finger, and then erase the digital ink using the eraser on the pen or your palm.

Object awareness enables you to pick up a pen, and then write, select or erase without replacing the pen.

Multitouch capabilities

Support for a minimum of four simultaneous touches enables multiple users to interact with the interactive flat panel by using the included pens or other objects, or by using their fingers to write and to perform gestures.

Gesture support

You can use an array of gestures within applications, including panning, scaling, rotating and zooming in and out.

Pen ID

The Pen ID feature enables you to assign different ink appearances to each pen.

Pens

The interactive flat panel includes two pens with attached erasers.

Multiuser support

Two users can each pick up pens and draw on the screen at the same time, enabling greater collaboration.

Audio

Your interactive flat panel includes two 10 W integrated side-firing speakers for presenting audio from connected input sources.

SMART software

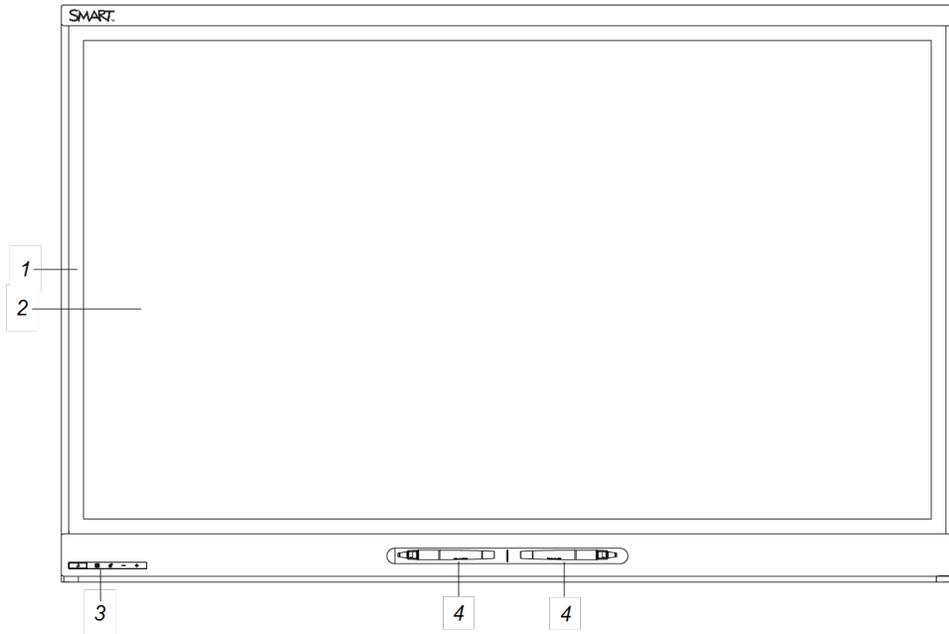
You can install the following SMART software on the computers connected to your interactive flat panel to take full advantage of the interactive flat panel's features:

Software	Description
SMART Product Drivers	SMART Product Drivers enables connected computers to detect input from your interactive flat panel.
SMART Ink®	SMART Ink enables you to write and draw in digital ink over open applications, files, folders, websites and any other open window on your computer. When you write outside the open windows on your computer, a SMART Ink Note appears and you can write inside the note. When you open an application that has its own ink tools, you can turn off SMART Ink, and then use the application's ink tools to write in the content.
SMART Notebook® collaborative learning software	SMART Notebook software enables you to use your interactive flat panel in a classroom.

Components

Front view

Your interactive flat panel consists of the following components:



No.	Name
1	Cameras and reflective tape channel
2	Screen
3	Front control panel
4	Pen

NOTE

Components not pictured include the connector panels (see *Connector panels* on page 13) and the menu control panel (see *Menu control panel* on page 21).

Screen

Models	Diagonal	Width	Height	Aspect ratio
SPNL-6065	64 1/2" (163.9 cm)	56 1/4" (142.8 cm)	31 5/8" (80.4 cm)	16:9

For information on cleaning the screen, see *Cleaning the screen* on page 26.

Cameras and reflective tape channel

In the corners of the screen, there are cameras that track finger and pen positions across the screen. The screen is bordered by a channel that contains reflective tape.

For information on cleaning the camera windows and reflective tape, see *Cleaning the screen* on page 26.



CAUTION

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



IMPORTANT

- Do not attach items such as adhesive notes to the screen because they will interfere with the cameras.
- Do not place anything in the channel because it will interfere with the cameras.

Speakers

Your interactive flat panel includes two 10 W integrated front firing speakers. You can connect external speakers if desired (see *Connecting external speakers* on page 15).

Pens and erasers

Your interactive flat panel comes with two pens with an eraser attached.

The bottom bezel of the interactive flat panel includes magnetic holders for the pens. Removing a pen from the holders activates it and enables you to either draw or erase digital ink.

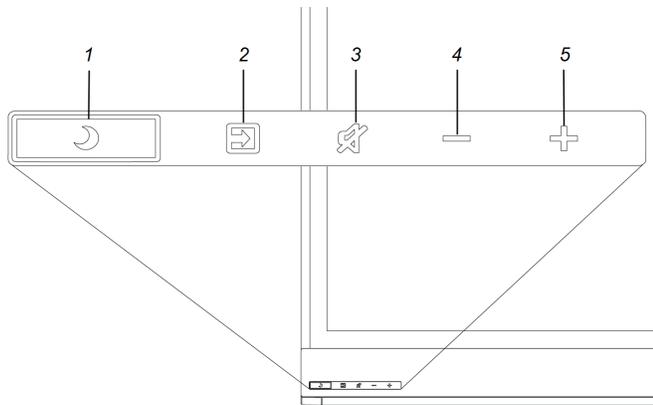


CAUTION

When returning the pen to the magnetic holder, ensure that it is centered in its holder to prevent it from falling and potentially being damaged.

Front control panel

The front control panel contains the Standby, Input Select, Mute and volume control buttons.



No.	Name
1	Standby button
2	Input Select button
3	Mute button
4	Volume decrease
5	Volume increase



IMPORTANT

- If there is a film over the front control panel, remove the film before using the front control panel.

In normal use:

- The volume control, Mute and input buttons are white.
- The Standby button is white when the interactive flat panel is on
- The Standby button is amber when the interactive flat panel is in standby

About this guide

This guide explains how to set up and maintain your interactive flat panel. It includes the following information:

- How to mount your interactive flat panel
- How to connect your computer
- What users can do with your interactive flat panel
- How to maintain your interactive flat panel for years of use
- How to troubleshoot issues with your interactive flat panel

In addition, this guide includes information on your interactive flat panel's on-screen display menu.

This guide is intended for individuals who are responsible for installing and maintaining interactive flat panels in their organizations. Other documentation and resources are available for individuals who use interactive flat panels.

Other documentation and resources

In addition to this guide, there are resources for individuals who install, maintain and use interactive flat panels.

Specifications

Your interactive flat panel's specifications define the product's dimensions, weight, recommended operating and storage temperatures, power requirements and consumption and other important information for installation and maintenance.

Model	Specifications
SPNL-6065	smarttech.com/kb/170640

Installation instructions

Your interactive flat panel comes with installation instructions. These installation instructions explain how to unpack, assemble and mount your interactive flat panel and how to connect it to computers and other devices. If you misplaced these installation instructions, you can download a PDF version from smarttech.com/kb/170641.

To use your interactive flat panel with a connected computer, you need to install SMART software on the computer (see *SMART software* on page 3).

Training

The SMART training website (smarttech.com/training) includes an extensive library of training resources you can refer to when first learning to set up or use your interactive flat panel.

Knowledge base

The Support center (smarttech.com/support) includes a knowledge base that you can refer to when performing maintenance on your interactive flat panel or troubleshooting issues with your interactive flat panel.

Chapter 2

Mounting your interactive flat panel

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To mount your interactive flat panel on a wall, you require a team of professional installers.

This chapter is intended for installers. Installers should read this chapter along with the installation instructions included with the interactive flat panel before they mount the interactive flat panel.



WARNING

Improper mounting of your interactive flat panel can result in personal injury and product damage.

Before mounting your interactive flat panel

Do the following before mounting your interactive flat panel:

- Review the environmental requirements in the interactive flat panel's specifications (see *Specifications* on page 7).
- Save all product packaging so that it's available if you need to transport the interactive flat panel. If the original packaging isn't available, you can purchase new product packaging from your authorized SMART reseller (smarttech.com/where).
- Refer to local building codes to ensure the wall can support the weight of the interactive flat panel and mounting equipment.

Model	Weight (lb.)	Weight (kg)
SPNL-6065	136	61.4

- Use a standard VESA mounting plate (not included) to mount the interactive flat panel on a wall.

Model	Mounting plate
SPNL-6065	400 mm × 400 mm

- Use M8 screws to fasten the wall bracket.

Model	Screw length ¹	Fasten force
SPNL-6065	20 mm + x mm < M8 < 50 mm + x mm	97.36–177.01 in-lb. (11–20 N·m)

 **CAUTION**
Do not over-tighten the screws.

 **NOTE**

SMART recommends M8 × 30 mm mounting screws for standard installations where the total wall mount bracket and washer thickness is less than 7 mm.

- Because the receptacles might not be easily accessible after the installers mount the interactive flat panel, consider connecting cables for power, computers and other devices while the interactive flat panel is still in its packaging (see *Connecting power and devices* on page 13).
- Before turning on the interactive flat panel for the first time, clean the camera windows and reflective tape following the instructions in *Cleaning the camera windows and reflective tape* on page 27.

Choosing a location

Do the following when choosing a location for the interactive flat panel:

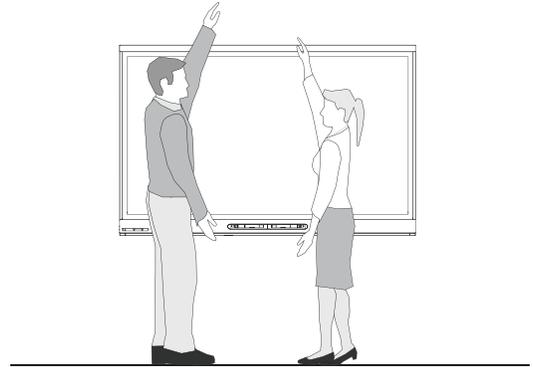
- Do not install the interactive flat panel in a location where a door or gate could hit it.
- Do not install the interactive flat panel in an area where it will be subjected to strong vibrations or dust.
- Do not install the interactive flat panel near where the main power supply enters the building.

¹Where x is the total thickness of the wall bracket and washer.

- Ensure adequate ventilation or provide air conditioning around the interactive flat panel so that heat can flow away from the unit and the mounting equipment.
- If you mount the interactive flat panel in a recessed area, leave at least 4" (10 cm) of space between the interactive flat panel and the recessed walls to enable ventilation and cooling.

Choosing a height

Consider the general height of the user community when you choose the height for the interactive flat panel.



Chapter 3

Connecting power and devices

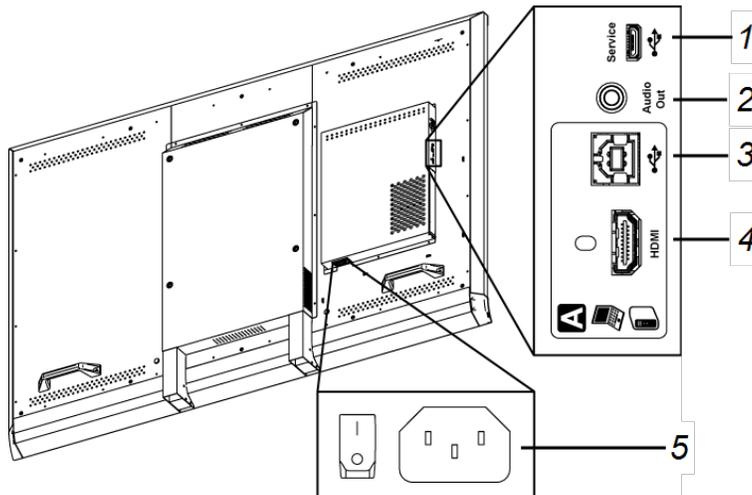
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This chapter includes information on connecting your interactive flat panel to power, computers and other devices.

Connector panels

There are connector panels on the left of your interactive flat panel.

The following diagram and table present the connectors on SMART Board 6065 interactive flat panels:



No.	Type	Details	Identifier
Left connector panel			
1	Service port	For SMART use	

No.	Type	Details	Identifier
Left connector panel			
2	Audio out	Stereo 3.5 mm connector	
3	USB	USB 2.0 Type-B receptacle	
4	Video in	HDMI connector	HDMI
Back of the interactive flat panel			
5	AC power	AC power inlet and switch	

 **NOTE**

The HDMI cable should be HDMI 1.4 compliant and no longer than 16' 5" (5 m).

Connecting power

Connect the supplied power cable from the AC power inlet on the bottom of the interactive flat panel to a power outlet. Turn on the main power switch.

 **NOTE**

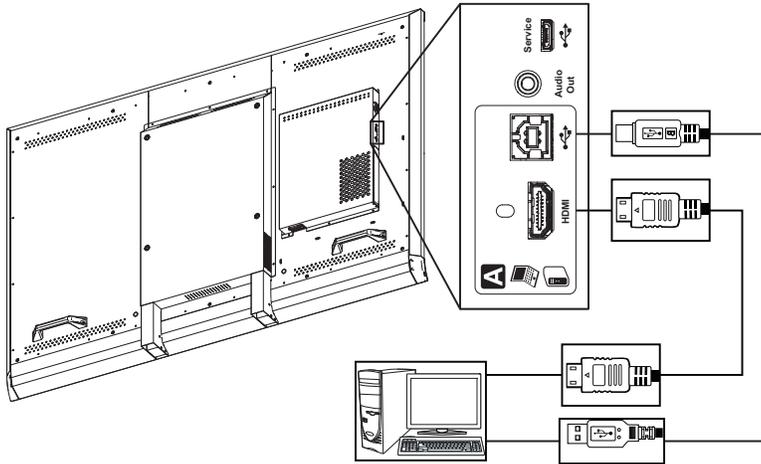
Refer to your interactive flat panel's specifications for power requirements and power consumption information (see *Specifications* on page 7).

Connecting the computer

 **NOTES**

- The interactive flat panel can be used with a maximum of two USB-XT extenders.
- If using a CAT 5 USB extender, the maximum length of Cat 5 cable is 52' (16 m).

Using the USB and HDMI cables, connect the computer to the USB receptacle and the HDMI connector on the left connector panel, which is located on the back of your interactive flat panel.



Connecting external speakers

Your interactive flat panel has two 10 W speakers on the left and right sides. You can connect external speakers using the stereo 3.5 mm connector on the left connector panel.

Chapter 4

Setting up your interactive flat panel and computer

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This chapter explains how to set up your interactive flat panel and computer after mounting your interactive flat panel and connecting power and devices.

Turning on your interactive flat panel and computer for the first time

After connecting your computer to the interactive flat panel (see *Connecting the computer* on page 14) and mounting the interactive flat panel (see *Mounting your interactive flat panel* on page 9), you can turn on both devices.

To turn on your interactive flat panel and computer for the first time

1. Turn on your computer.
2. Turn on your interactive flat panel by flicking the power switch beside the AC power inlet.
3. Press the **Standby** button  on the front control panel.

Installing SMART software

To take full advantage of your interactive flat panel's features, you must download and install SMART software on your computer.

With the purchase of your interactive flat panel, you get a license for SMART Notebook software and a one-year subscription to the SMART Notebook Advantage software maintenance plan. See smarttech.com/notebook for more information.

Downloading and installing SMART software

TIP

You can also install SMART Notebook software from the DVD included with your interactive flat panel.

To download and install SMART software

1. Go to smarttech.com/downloads.
2. Scroll to the *SMART Notebook software* section.
3. Click **Choose a version**, and then select the most recent version.
4. Click **Download**.
5. Follow the on-screen instructions to save the installer to a temporary location.
6. Double-click the installer.
7. Follow the on-screen instructions to install SMART software.

Running the connection wizard

After turning on your interactive flat panel and computer for the first time and installing SMART software, run the connection wizard to orient the interactive flat panel.

To run the connection wizard

1. Access the SMART Connection Wizard by opening SMART Settings (see *Opening SMART Settings* on page 23).
2. Press **Connection Wizard**.
The *SMART Connection Wizard* appears.
3. Select the interactive flat panel from the list of connected SMART interactive products, and then press **Next**.
4. Select **Product is being set up for the first time**, and then press **Next**.
5. Follow the on-screen instructions to orient the interactive flat panel for the first time.

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Using your interactive flat panel

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This chapter explains how to use the key features of your interactive flat panel.

Turning on and turning off your interactive flat panel

You can turn on and turn off your interactive flat panel using the front control panel.

To turn on your interactive flat panel

1. Turn on your computer.
2. Press the **Standby** button  on the front control panel.

Your computer's logon screen or desktop appears on your interactive flat panel.



IMPORTANT

If the **Standby** button  is not amber, either the interactive flat panel is not plugged in or the main power switch on the bottom connector panel is turned off. To find the main power switch, see *Connector panels* on page 13.

To turn off your interactive flat panel

1. Turn off your computer.
2. Press the **Standby** button  on the front control panel twice.

Resetting your interactive flat panel

You can reset your interactive flat panel using the front control panel.

To reset your interactive flat panel

1. Press the **Standby** button  on the front control panel.
2. Press and hold the **Standby** button  until the screen turns black.

The interactive flat panel resets and then your computer's logon screen or desktop appears on your interactive flat panel.

Using your interactive flat panel with the computer

Users will most often use the interactive flat panel with the computer you set up in the previous chapter (see *Setting up your interactive flat panel and computer* on page 17).

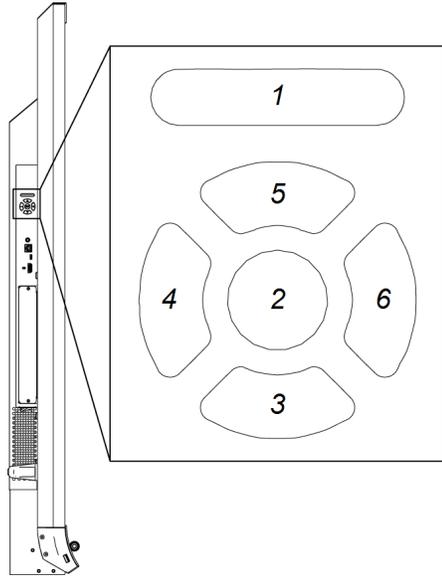
Using SMART software

The SMART software installed on the computer allows users to do the following:

- Interact with objects on the screen by touching them
- Write, draw and erase digital ink
- Use multitouch gestures to browse pages, zoom in and out, and resize, rotate, group, ungroup and flick objects

Menu control panel

You can navigate the on-screen display menu with the menu control panel located on the left of your interactive flat panel. For more information on the on-screen display menu, see *SMART Board 6065 interactive flat panel on-screen display menu* on page 40.

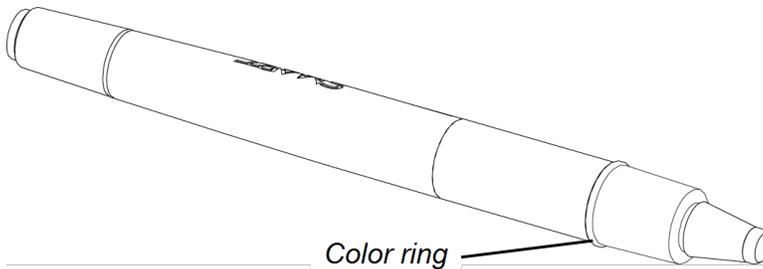


No.	Name
1	MENU
2	SET
3	[Down]
4	[Left]
5	[Up]
6	[Right]

Using Pen ID

The SMART Board 6065 interactive flat panel has Pen ID. Pen ID allows you to change the settings for each pen independently. The black pen defaults to black ink and the red pen defaults to red ink.

The color ring on the pen identifies the color of the default ink.



Changing the pen settings

You can change your pen settings, including line size and fill effects.

To change the pen settings

1. Open the SMART Ink toolbar or the SMART Notebook Pens toolbar.
2. Using your pen, change the pen settings.

Restoring pen to default settings

You can restore the pens to their default settings by returning them to the pen tray.

Erasing on the interactive flat panel

To erase content on the interactive flat panel

- use the erasers on the back of the pens
- use the erasing gesture (the palm or fist)
- use the software's Eraser tool

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Maintaining your interactive flat panel

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If you properly maintain your interactive flat panel, it will provide years of use.

Opening SMART Settings

Several maintenance and troubleshooting procedures in this guide require you to open SMART Settings.

To open SMART Settings on Windows 7 operating systems

Select **Start > All Programs > SMART Technologies > SMART Tools > SMART Settings**.

SMART Settings appears.

To open SMART Settings on Windows 8 operating systems

1. Open the *Apps* screen.
2. Press **SMART Settings**.
SMART Settings appears.

To open SMART Settings on Mac OS operating system software

1. Press the **SMART Board** icon  in the Dock.
2. Press **SMART Settings**.
SMART Settings appears.

Updating firmware

Your interactive flat panel uses firmware on its processor. You can update the firmware. For more information, see [Upgrading the firmware on your SMART Board 6065 interactive flat panel](#).

Updating software

SMART Product Update (SPU) is included in the SMART software you installed to use your interactive flat panel (see *Installing SMART software* on page 17). SPU periodically checks for updates to the SMART software posted on the SMART website. You can configure SPU to prompt users to install updates or to install updates automatically.

NOTE

If you didn't install SPU, you can download updates to SMART software from smarttech.com/downloads.

Orienting your interactive flat panel

If the location of your touch is misinterpreted (the pointer appears a distance from the actual contact), orient your interactive flat panel.

NOTE

You can use your finger or an interactive flat panel pen to orient your interactive flat panel.

To orient the interactive flat panel

1. Open SMART Settings (see *Opening SMART Settings* on page 23).
2. Press **Orient**.
3. Press the red targets as they appear. Hold your finger or the tip of the pen at the center of each target, and then lift the pen or finger. When you lift the pen or finger, the target moves to the next orientation point.



IMPORTANT

Hold the pen perpendicular to the screen.

4. Continue until you've pressed all the targets.
The orientation window closes.
5. If this doesn't correct inaccurate touch, calibrate your interactive flat panel (see *Calibrating your interactive flat panel* below).

Calibrating your interactive flat panel

Digital cameras in the corners of the interactive flat panel track the position of the pens, eraser and your finger on the interactive surface, and then send the information to the SMART software, which interprets this information as mouse clicks, digital ink or ink removal in the appropriate location. Calibration determines the position and angles of the cameras to accurately identify the location of touches on your interactive flat panel.



IMPORTANT

If an error message appears while you are calibrating your interactive flat panel, contact SMART Support (smarttech.com/contactsupport).

To calibrate your interactive flat panel

1. Open SMART Settings (see *Opening SMART Settings* on page 23).
2. Press **SMART Hardware Settings**.
3. If you have more than one SMART product connected, select the interactive flat panel.
4. Select **Advanced Settings** from the drop-down list.
5. Press **Calibrate**.

The calibration screen appears. This can take a few moments.

6. Press the red target with the tip of an interactive flat panel pen. Hold the tip at the center of the target until the target turns green, and then lift the pen.

The target moves to the next location.



NOTE

You can calibrate a target again by pressing the LEFT ARROW key on your keyboard.

7. Continue pressing targets until the second calibration screen and a grid appears.

An example appears briefly to demonstrate how to draw across the screen to calibrate the interactive surface.

8. Use a pen to draw a spiral horizontally across the grid. As you draw, the ink is blue. As you complete each square, the square becomes green.

9. When all the squares are green, a progress bar appears.

When the progress bar is full, the interactive flat panel displays the message **Calibration successful**.

10. Orient your interactive flat panel (see *Orienting your interactive flat panel* on page 24).

Replacing a pen nib

To prevent damage to your interactive flat panel's anti-glare coating, replace your pen nib if it becomes worn. You can purchase replacements from your authorized SMART reseller (smarttech.com/where).

To replace a pen nib

1. Grasp the worn nib on your pen with a pair of pliers, and then pull and twist the nib loose.
2. Press the replacement nib into the pen.

Cleaning the screen

Follow these instructions to clean the interactive flat panel screen without damaging its anti-glare coating or other product components.



CAUTION

- 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 dense or rough material.

- Do not apply pressure to the screen.
- Do not use cleaning solution or glass cleaner on the interactive flat panel screen, because they can deteriorate or discolor the screen.
- Avoid touching the reflective tape between the screen and the bezel, and ensure that this strip stays dry. Damage to this strip affects touch interactivity.

To clean the screen

1. Shut off your computer, and then disconnect the power sources for your computer and your interactive flat panel.
2. Wipe the screen with a lint-free, non-abrasive cloth.

Cleaning the camera windows and reflective tape

The DVIT technology in your interactive flat panel uses four cameras in the corners of the frame and the reflective material between the screen and the bezels. Excessive dust buildup on the camera windows or reflective tape can impair touch performance.

These areas should be inspected regularly for dust and should be cleaned if any obvious dust buildup has occurred.

CAUTION

- Do not use compressed air to clean the camera windows or borders.
- Do not use water, chemicals or cleaning agents.
- Applying too much pressure when cleaning the tape or cameras can damage the tape and cause performance issues or errors.

To clean the camera windows and reflective tape

1. With a clean lint-free cloth, gently wipe the camera windows in the top corners and the reflective tape along the top of your interactive flat panel screen using the cloth.
2. Gently wipe the reflective tape along the sides of your interactive flat panel screen.
3. Gently wipe the camera windows in the bottom corners and the reflective strip across the bottom of your interactive flat panel screen.

Maintaining ventilation

Your interactive flat panel requires ventilation to enable the cooling fans to function. Dust buildup in the ventilation holes compromises cooling and leads to product failure.

- Clean accessible ventilation holes monthly with a dry cloth.
- Use a vacuum cleaner with a narrow hose end fitting to clear the back ventilation holes regularly. You might have to remove the interactive flat panel from your wall. For more information on removing your interactive flat panel see *Removing your interactive flat panel* on the next page.

CAUTION

Avoid setting up or using your interactive flat panel in an area with excessive levels of dust, humidity or smoke.

Preventing condensation

Your interactive flat panel screen contains layers of glass that can collect condensation, especially in the following conditions:

- Temperature extremes with high humidity
- Rapid changes in humidity, which can occur when you operate the product near water, such as a sink, pool, kettle or air conditioner ventilator
- Direct exposure to sunlight

To evaporate condensation from your interactive flat panel

1. Remove the humidity source from the interactive flat panel, if possible.
2. Adjust the room temperature to normal operating ranges. See the *SMART Board 6065 interactive flat panel specifications* (smarttech.com/kb/170640) for more information on normal operating ranges .
3. Turn on the interactive flat panel and leave it on for 2–3 hours.
4. If the screen condensation doesn't evaporate, contact SMART Support (smarttech.com/contactsupport).

Checking the interactive flat panel installation

Inspect your interactive flat panel installation frequently to ensure that it remains securely installed.

- Check the mounting location for signs of damage or weakness that can occur over time.
- Check for loose screws, gaps, distortions or other issues that could occur with the mounting apparatus.

If you find an issue, contact a professional installer.

Removing your interactive flat panel

To safely remove your interactive flat panel, use two or more professional installers.

WARNING

- Do not attempt to move the interactive flat panel using your own strength. The interactive flat panel is very heavy.
- Do not move the interactive flat panel by connecting a rope or wire to the handles on the back. The interactive flat panel can fall and cause personal injury and product damage.

IMPORTANT

Follow the instructions included with the floor stand or mounting apparatus.

To remove your interactive flat panel

1. Turn off your interactive flat panel and disconnect the power cable from the wall outlet.
2. Remove all accessible cables and connectors.
3. Lift your interactive flat panel from its mounting location.

WARNING

Do not place the interactive flat panel on a sloping or unstable cart, stand or table, because the interactive flat panel could fall, resulting in injury and severe product damage.

CAUTION

Do not leave the interactive flat panel face up, face down or upside down for an extended period of time, because it could cause permanent damage to the screen.

Transporting your interactive flat panel

Save your original packaging so that you can repack your interactive flat panel 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 (smarttech.com/where).

 **CAUTION**

Transport your interactive flat panel only in original or replaced packaging. Transporting your interactive flat panel without correct packaging voids your warranty and could lead to product damage.

Chapter 7

Troubleshooting your interactive flat panel

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This chapter provides you with the information necessary to solve simple issues that can occur with your interactive flat panel. If issues persist, or aren't covered in this chapter, contact SMART Support (smarttech.com/contactsupport).

Locating the interactive flat panel serial number

When you contact SMART Support, you might be asked to provide the interactive flat panel serial number. The easiest way to locate this serial number is using the on-screen display menu (see page 42).

Resolving image issues

Complete the following steps if your interactive flat panel doesn't display an image correctly or doesn't display any image at all.

Resolving blank screen issues

Use the following troubleshooting table when your computer is turned on but you don't see an image on the interactive flat panel screen.

Begin by looking at the front control panel light.

Front control panel light	Causes	Solution
Off	The interactive flat panel isn't connected to a power source.	Connect your interactive flat panel's power cable to a power outlet (see page 14).
	The main power is off.	Flick the power switch to turn the main power on (see page 13).
Amber	The interactive flat panel is in Standby mode.	Press the Standby button  on the front control panel.

Resolving image quality issues

Symptom	Causes	Solution
The image is too large, too small or doesn't completely fill the screen.	The computer's video resolution settings don't match your interactive flat panel's native resolution.	<ul style="list-style-type: none">• The native resolution is 3840 × 2160 at 30 Hz.• If your computer can't support the above resolution, consider 1920 × 1080 at 60 Hz as an alternative.

Symptom	Causes	Solution
The screen resolution is correct, but the image is surrounded by black bars.	The computer's video card is underscanning the image.	<ul style="list-style-type: none"> • Turn off or adjust the overscan/underscan feature in the video card driver software until the image fits the screen resolution. Refer to your computer's video card Help for more information. • Select the 4K UHD option from your video card driver's advanced menu (if available). This should provide a pixel-perfect image for your interactive flat panel.
	You have a poor quality video cable.	Replace your video cable with a better quality video cable.
	You connected two video cables together.	Replace your two cables with one longer cable. OR Move your computer so that it's within a single cable length of your interactive flat panel.
	The interactive flat panel's native resolution doesn't match the resolution on your computer's display adapter.	Check the resolution on your computer's display adapter and change the interactive flat panel's resolution to match.

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TROUBLESHOOTING YOUR INTERACTIVE FLAT PANEL

Symptom	Causes	Solution
The image is unstable or unfocused.	The video connection is loose.	Secure the video cable to both your computer and your interactive flat panel.
	You have a poor quality video cable.	Replace your video cable with a better quality video cable.
	You connected two video cables together.	Replace your two cables with one longer cable. OR Move your computer so that it's within a single cable length of your interactive flat panel.
	Your computer's video display card is defective.	Connect a different computer to your interactive flat panel. If this improves the image quality, consider replacing the video card in the original computer.
The image is too light, too dark or has poor image quality.	You might have incorrect video settings.	Adjust the Picture options (see <i>Picture</i> on page 40).
There is a persistent image on the screen.	An image was displayed for too long.	<ul style="list-style-type: none"> • Turn off your interactive flat panel and leave it turned off for as long as the image was on the screen. • Use a screen saver to prevent persistent images.
Other display quality issues		Return all on-screen display menu settings to their default values (see page 42).

Resolving touch control and digital ink issues

Use the following troubleshooting table if you can see your computer desktop on your interactive flat panel, but you don't have touch control over the desktop.

Symptom	Causes	Solution
When you touch the screen, no pointer appears and you're unable to move icons.	SMART Product Drivers isn't current.	Update SMART Product Drivers (see page 24).
	There's no USB connection from the computer to the interactive flat panel.	Verify your connections (see page 14).
The SMART Board icon  doesn't appear.	SMART Product Drivers isn't installed.	Download and install SMART Product Drivers from smarttech.com/downloads .
	SMART Product Drivers isn't running.	Start SMART Board Tools following the steps in the Help (see page 7).
Touch interactivity is slow.	Your computer is running too many applications.	Close some open applications.
	Your computer doesn't meet system requirements.	Upgrade your computer or replace it with another computer that meets system requirements.
	You haven't used a USB 2.0 cable to connect your interactive flat panel to your computer.	Use a USB 2.0 cable and ensure it's connected to the USB receptacle.
When you touch the screen, the pointer appears in the wrong location.	You aren't touching the screen at a right angle.	For more information, see <i>Touching and drawing on your SMART Board interactive whiteboard is inaccurate</i> (http://knowledgebase.force.com/articles/TROUBLESHOOTING/Touching-and-drawing-on-your-SMART-Board-interactive-whiteboard-is-inaccurate-1378705217746).
	Your interactive flat panel isn't oriented.	Orient your interactive flat panel (see page 24.)

Symptom	Causes	Solution
An area of the screen doesn't respond to your touch or when you draw digital ink, the lines are broken.	Something is blocking the cameras.	Ensure nothing is taped to the screen.
	Something is on the reflective tape channel.	Remove items from the reflective tape channel.
	Your finger or pen is skipping as you draw. This is most common on the upstroke.	Use consistent pressure while drawing digital ink.
	Bright lights are interfering with the cameras.	Close blinds or shades or dim all halogen lights and LEDs.
	Your cameras require calibration, possibly because of a temperature change in the room.	Calibrate your interactive flat panel (see page 25).

Resolving audio issues



IMPORTANT

Ensure that you can see your computer's desktop and that you have touch control and digital ink before using this table. If not, resolve those issues before completing the steps in the table below.

Symptom	Causes	Solution
Sound doesn't play when you play a sound file.	Your computer is muted.	Turn off the mute setting.
	Your computer's volume is too low.	Turn up the volume on your computer.
	Your interactive flat panel is muted.	Turn off the mute setting using the front control panel.
	Your interactive flat panel's volume is too low.	Turn the volume up using the front control panel.

Resolving issues using the SMART Connection Wizard

You can resolve a variety of issues using the SMART Connection Wizard found in SMART Settings.

To resolve issues using the SMART Connection Wizard

1. Access the SMART Connection Wizard by opening SMART Settings (see *Opening SMART Settings* on page 23).
2. Press **Connection Wizard**.
The *SMART Connection Wizard* appears.
3. Select **SMART Board 6065 series interactive flat panel**, and then press **Next**.
4. Select the option that best describes the issue you're encountering, and follow the on-screen instructions to troubleshoot your interactive flat panel.

Resolving issues using SMART Board Diagnostics

If you touch the interactive flat panel's surface and nothing happens, or if there is no digital ink or the ink appears in some locations and not in others, use SMART Board Diagnostics to help identify and resolve these issues.



IMPORTANT

Do not change diagnostic settings unless asked to do so by SMART Support.

Checking the camera view

If nothing happens when you touch the interactive flat panel's surface, check to make sure that nothing is blocking one of the cameras.

To check camera views

1. Open SMART Settings (see *Opening SMART Settings* on page 23).
2. Select **About Software and Product Support > Tools > Diagnostics**.
SMART Board Diagnostics opens.
3. Select **View > SMART Board 6065 Bar**.
The group box appears.

4. Press **View**.

The camera view screen appears.

5. Click **Get image** to display the four camera views. This could take a few moments.

If one of the camera views doesn't appear, the camera is blocked or can't locate the reflective tape on the interactive flat panel's inner frame.



NOTE

You can compare the camera view to examples of normal camera views.

6. Check the camera lens and ensure that nothing is blocking its view and that nothing is affixed to the interactive surface.

Appendix A

Using the on-screen display menu

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You can access the on-screen display menu using the menu control panel (see *Menu control panel* on page 21).

Changing settings in the on-screen display menu

To change settings in the on-screen display menu

1. Press the **MENU** button on the menu control panel.
The on-screen display menu appears.
2. Press the up and down arrows to select a menu, and then press **SET**.
3. Press the up and down arrows to select a menu option.
4. Press the left and right arrows to change the menu option's setting.

OR

Press the right arrow to open the menu option's submenu. (Repeat steps 3 and 4 to change settings in the submenu.)

5. Press **MENU** until the on-screen menu closes.

SMART Board 6065 interactive flat panel on-screen display menu

Option	Values	Function	Notes (If any)
Picture			
▶ Picture Mode	Standard User Dynamic	Sets the picture mode	Select User to customize brightness, contrast, sharpness and other <i>Picture</i> options. Select one of this option's other values to set brightness, contrast, sharpness and other <i>Picture</i> options to default values.
• Brightness	0–100	Sets the overall brightness of the image and background	You can modify this option only if you select User in <i>Picture Mode</i> .
• Contrast	0–100	Sets the brightness of the image in relation to the background	You can modify this option only if you select User in <i>Picture Mode</i> .
• Black Level	0–100	Sets the level of brightness in the darkest parts of the image	You can modify this option only if you select User in <i>Picture Mode</i> .
• Color	0–100	Sets the image color depth	You can modify this option only if you select User in <i>Picture Mode</i> .
• Sharpness	0–100	Sets the image sharpness	You can modify this option only if you select User in <i>Picture Mode</i> .
▶ Color temperature	Normal Warm User Cool	Sets the color temperature	Select User to customize the amount of red, green and blue in the image. Select one of this option's other values to set the amount of red, green and blue in the image to default values.
• Red	0–100	Sets the amount of red in the image	You can modify this option only if you select User in <i>Color Temperature</i> .
• Green	0–100	Sets the amount of green in the image	You can modify this option only if you select User in <i>Color Temperature</i> .
• Blue	0–100	Sets the amount of blue in the image	You can modify this option only if you select User in <i>Color Temperature</i> .
• Movie Mode	Off Low Middle High	Sets the brightness, contrast, black level, color and sharpness for movie watching	
• Picture Reset	[N/A]	Resets all options in the <i>Picture</i> menu to their default values	

APPENDIX A
USING THE ON-SCREEN DISPLAY MENU

Option	Values	Function	Notes (If any)
Sound			
▶ Sound Mode			
• Treble	L50–R50	Sets the high frequency sound	
• Bass	L50–R50	Sets the low frequency sound	
▶ EQ			
• 120 Hz	0–100	Sets the sound equalization at 120 Hz	
• 500 Hz	0–100	Sets the sound equalization at 500 Hz	
• 1.2 kHz	0–100	Sets the sound equalization at 1.5 kHz	
• 7.5 kHz	0–100	Sets the sound equalization at 5 kHz	
• 12 kHz	0–100	Sets the sound equalization at 10 kHz	
• Balance	L50–R50	Balances the left and right volume	
• Audio Input	USB HDMI	Sets the audio input source	
• Sound Reset	[N/A]	Resets all options in the <i>Sound</i> menu to their default values	
OSD			
• Language	[Languages]	Sets the on-screen display menu's language	
• OSD Turn Off	Off 5 seconds 10 seconds 15 seconds	Sets the time of inactivity before the on-screen display menu turns off (in seconds)	
• OSD Reset	[N/A]	Resets all options in the <i>OSD</i> menu to their default values	
Setup			
• Power Save	On Off	Enables or disables Power Save mode	When Power Save mode is enabled and there isn't video input, the interactive flat panel displays <i>No Signal</i> for 25 seconds before turning off. Don't change this option from its default value.
• Setup Reset		Restores the setup settings to their default value	

APPENDIX A
USING THE ON-SCREEN DISPLAY MENU

Option	Values	Function	Notes (if any)
<ul style="list-style-type: none"> • Factory Reset 		Resets options in all menus to their default values	
About			
<ul style="list-style-type: none"> • Model Number 		Displays the interactive flat panel's model number	
<ul style="list-style-type: none"> • Serial Number 		Displays the interactive flat panel's serial number	
<ul style="list-style-type: none"> • Scalar firmware version 		Displays the interactive flat panel's scalar firmware version	
<ul style="list-style-type: none"> • Touch firmware version 		Displays the interactive flat panel's touch firmware version	
<ul style="list-style-type: none"> • OPS Information 		Displays whether the OPS is installed	

Appendix B

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 (WEEE)

Electrical and electronic equipment contain substances that can be harmful to the environment and to human health. The crossed-out wheeled bin symbol indicates that products should be disposed of in the appropriate recycling stream and not as regular waste.



More information

See [smarttech.com/compliance](https://www.smarttech.com/compliance) for more information.

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