SMART Board®
GX
series interactive displays

Installation and maintenance guide

SBID–GX165 | SBID–GX175 | SBID–GX186
IDGX65–1 | IDGX75–1 | IDGX86–1

SMART®

Learn more

This guide and other resources for SMART Board series interactive displays are available in the Support section of the SMART website (smarttech.com/support). Scan this QR code to view these resources on your mobile device.

ENERGY STAR is the government-backed symbol for energy efficiency, providing simple, credible, and unbiased information that consumers and businesses rely on to make well-informed decisions. ENERGY STAR-certified products are the simple choice for energy efficiency, making it easy for consumers and businesses to make purchases that save them money and protect the environment. The U.S. EPA ensures that each product that earns the label is independently certified to deliver the quality, performance, and savings that users have come to expect.

As shipped, your display delivers ENERGY STAR performance and savings. However, changing some settings may increase energy consumption beyond the limits required for ENERGY STAR certification. For example, increased brightness and contrast will increase power consumption.

Please consider the environment when you choose non-ENERGY STAR settings.

Important information

⚠ **Warning**

- Failure to follow the installation instructions included with the display could result in injury and product damage which may not be covered by the warranty.

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

- Do not stand (or allow children to stand) on a chair to touch the surface of the display. Rather, mount the product at the appropriate height.

- To reduce the risk of fire or electric shock, do not expose the display to rain or moisture.

- If the display 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 that cross the floor to the display 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 the warranty.

- Do not place heavy objects on the power cable. Damage to the cable could cause shock, fire, or product damage which may not be covered by the warranty.

- Use only extension cords and outlets that can fully accommodate the display's polarized plug.

- Use the power cable provided with the display. If a power cable is not supplied, 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 display by connecting rope or wire to its handles. The display is heavy, and failure of the rope, wire, or handle could lead to injury.

- Stability Hazard: The display may fall, causing serious personal injury or death. To prevent injury, the display must be securely mounted to the wall in accordance with the installation instructions and using the mounting hardware provided by SMART (if supplied). If your display does not include mounting hardware, be sure to select mounting hardware that is rated or certified for the display's size and weight and is compatible with the surface to which you're mounting the display.

- Use only VESA®-compliant mounts.

- Disconnect the display's power cable from the wall outlet and seek assistance from qualified service personnel if any of the following occur:
    - The power cable or plug is damaged
    - Liquid is spilled into the display
    - Objects fall into the display
    - The display is dropped
    - Structural damage, such as cracking, occurs
    - The display behaves unexpectedly when you follow operating instructions

- This product may contain substances that are candidate SVHCs under the EU REACH Regulation (EC) 1907/2006.

    See ⟩ echa.europa.eu/scip-database

⚠ **Caution**

- Turn off the display before cleaning its screen. Otherwise, you may scramble the desktop icons or inadvertently activate applications when you wipe the screen.

- Avoid setting up and using the display in an area with excessive levels of dust, humidity, and smoke.

- Make sure an electrical socket is near the display and remains easily accessible during use.

- In Europe, the display 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."

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

- The accessory slot's maximum available power is 60 W. The slot is not a limited power source. To reduce the risk of fire, make sure that accessories connecting to the slot satisfy the fire enclosure requirements of IEC 60950-1 and IEC 62368-1.

- When connecting a USB cable to a computer, make sure the computer has a USB compliant interface and bears the USB logo. In addition, the USB source computer must be compliant with IEC 60950-1 and/or IEC 62368-1. The source computer must be CE marked and carry safety certification marks for Canada and USA. This is for operating safety and to avoid damage to the display.

- Prolonged focus on a fixed object, such as a display's screen, can contribute to eye strain and headaches. To protect eye health, follow the 20-20-20 rule: after 20 minutes of screen time, spend 20 seconds looking at something 20 feet (6 meters) away. Relaxing the eyes, looking around frequently, and blinking will also help prevent eye strain and fatigue.

- Only SMART-provided OPS appliances are supported in SMART Board interactive displays. Third-party OPS appliances are not supported, and their use can lead to poor performance or damage to the display.

- Do not install or remove the OPS appliance while the display is turned on. First make sure the power switch on the back of the display beside the AC power inlet is in the OFF (O) position. If you can't reach the power switch, use the front control panel's power button ⏻ to put the display in Standby mode, and then unplug the display's power cable from the power outlet.

- After you have turned the display's power switch off or unplugged it, wait at least 30 seconds before removing the appliance to allow its internal power supplies to discharge completely. You might also wait five minutes to give the appliance the opportunity to cool, if necessary.

- Make sure the OPS appliance is secured to the display with screws through the two anchor points. Inadequately secured appliances can damage the display. (An OPS appliance's anchoring screws are typically captive, although some simply include separate anchoring screws.)

ⓘ **Important**

The following table includes the normal operating power requirements for the display:

Models	Regulatory Models	Power requirements
SBID-GX165	IDGX65-1	100V to 240V AC, 50 Hz to 60 Hz, 117 W
SBID-GX175	IDGX75-1	100V to 240V AC, 50 Hz to 60 Hz, 157 W
SBID-GX186	IDGX86-1	100V to 240V AC, 50 Hz to 60 Hz, 175 W

For additional requirements and other information, refer to the display's specifications (see *More information* on page 15).

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Chapter 1 **Welcome**

The SMART Board® series interactive display gives you everything you need to get started with interactivity. This chapter introduces the features of your GX series display.

About this guide

This guide explains how to install and maintain SMART Board GX series interactive displays. It includes the following information:

- How to install the display

- How to connect power and devices

- How to turn on the display for the first time

- How to maintain the display for years of use

- How to troubleshoot issues with the display

This guide also includes information about the display's settings and support for remote management.

This guide is intended for those who install and maintain displays in their organizations. Additional documentation and resources are available for users of the display (see *More information* on page 15).

About the display

The SMART Board GX series gives you everything you need to get started with interactivity.

The display includes a comprehensive set of features and components.
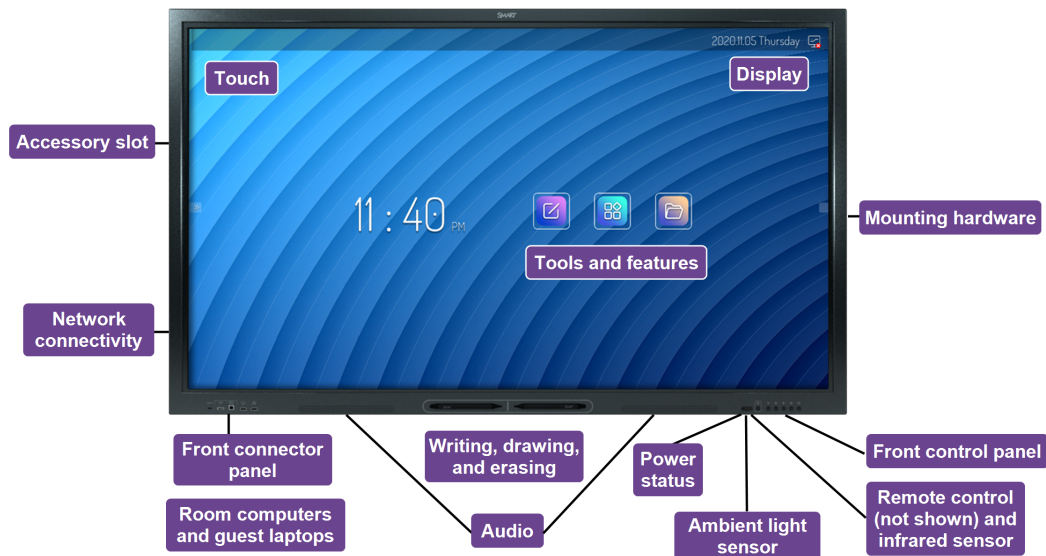
Touch

You can do everything on the display 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 display's surface.

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

Display

The 4K ultra-high-definition LED display provides optimal image clarity and wide viewing angles.

The display size varies by model:

Models	Size (diagonal)
SBID-GX165	65"
SBID-GX175	75"
SBID-GX186	86"

Mounting hardware

You can use VESA compliant wall mounts, such as SMART's WM-SBID-200 wall mount (not included), to mount the display on a wall (see *Installing the display on a wall* on page 18).

You can also mount the display on a mobile stand (see *Accessories* on page 14).

Front control panel

The front control panel provides buttons for turning the display on and off, controlling the volume, accessing the display's settings or freezing the screen, going back in the screen's navigation history, and displaying the Home screen.

Remote control and infrared sensor

The display's infrared sensor is located in the control panel in the bottom-right corner of the display's frame.

You can use the remote control to turn the display on and off, adjust display settings, and quickly open applications.

Ambient light sensor

The ambient light sensor is located in the bottom-right corner of the display's frame. The sensor detects the brightness of the room and adjusts the screen's brightness accordingly.

Power status

The indicator light's color indicates the display's status:

Power button	Display status
Off	Not receiving power
Red (solid)	Standby mode
Red (flashing)	Firmware update in progress
Green	Normal operating mode

Writing, drawing, and erasing

The display comes with two pens you can use to write or draw on the screen. Each end of a pen can be assigned to write or draw in a different color. You can erase digital ink by moving your fist or palm over the digital ink.

With Object Awareness[1], the display responds automatically to the tool or object you're using, whether it's a pen, finger, or palm.

Audio

The display includes two 15 W integrated speakers.

Network connectivity

The display requires a network and internet connection for downloading software and firmware updates.

The display requires a network and internet connection for downloading software and firmware updates.

You can connect the display to a network using Wi-Fi or an Ethernet cable.

- The Wi-Fi module supports both 2.4 and 5 GHz bands.
- The two RJ45 jacks allow you to connect the display and an external device, such as a computer, to an Ethernet network.

Front connector panel

The front connector panel includes connectors for USB peripherals and a computer or other input.

Room computers and guest laptops

You can connect room computers and guest laptops to the display and view and interact with them.

The display comes with SMART software that you can install on connected computers to take full advantage of the display's features.

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[1]When connected to a computer with SMART Product Drivers

Tools and features

The display's built-in Android™ computing provides apps that enable you to browse the web, use a whiteboard, share your screen, and more without using a connected device.

Accessory slot

You can install an OPS-compatible device, such as a SMART OPS PC module, in the accessory slot. SMART OPS PC modules provide a complete Windows® Pro installation.

> ⚠ **Caution**
>
> - The accessory slot's maximum available power is 60 W. The slot is not a limited power source. To reduce the risk of fire, make sure that accessories connecting to the slot satisfy the fire enclosure requirements of IEC 62368-1.
>
> - Do not remove the OPS PC or other devices from the accessory slot while they are turned on.
>
> - Only SMART-provided OPS appliances are supported in SMART Board interactive displays. Third-party OPS appliances are not supported, and their use can lead to poor performance or damage to the display.
>
> - Do not install or remove the OPS appliance while the display is turned on. First make sure the power switch on the back of the display beside the AC power inlet is in the OFF (O) position. If you can't reach the power switch, use the front control panel's power button ⏻ to put the display in Standby mode, and then unplug the display's power cable from the power outlet.
>
> - After you have turned the display's power switch off or unplugged it, wait at least 30 seconds before removing the appliance to allow its internal power supplies to discharge completely. You might also wait five minutes to give the appliance the opportunity to cool, if necessary.
>
> - Make sure the OPS appliance is secured to the display with screws through the two anchor points. Inadequately secured appliances can damage the display. (An OPS appliance's anchoring screws are typically captive, although some simply include separate anchoring screws.)

Identifying your specific model

SMART offers several models of the SMART Board GX series interactive displays.

For help identifying your model, see the labels on the back or left side of the display.
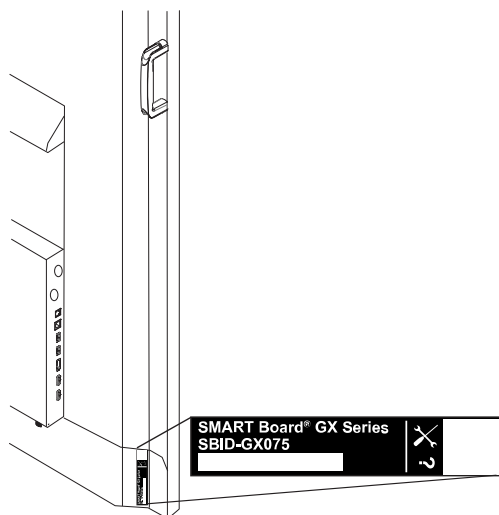
Model	Screen size (approximate)
SBID-GX165	65" (165 cm)
SBID-GX175	75" (190 cm)
SBID-GX186	86" (218 cm)

Accessories

Accessories for the display include:

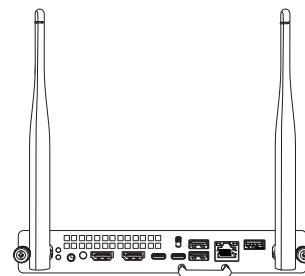- SMART OPS PC module

- SMART wall mount (WM-SBID-200) for SMART Board displays

- Stands

- USB extenders

See also > smarttech.com/accessories

SMART OPS PC module

SMART Open Pluggable Specification (OPS) PC modules provide a hassle-free Windows Pro installation based on Intel® Core™ processors and are designed specifically to work with a SMART Board interactive display. All OPS PC modules are fully licensed with Windows Pro. Install the OPS PC module in a display's accessory slot to provide a complete 4K UHD Windows installation at your fingertips, without the need for an external PC or additional cables.

Install familiar Windows applications, such as SMART Notebook®, SMART TeamWorks™, and SMART Meeting Pro® software, and access the internet directly through your display's network connection. Upgrades and service for the OPS PC module are easy to perform without removing the display from its mounting.

Stands

If you want to move the display from place to place, you can install it on a SMART mobile stand. If you are installing the display on a wall that cannot support the display's full weight, you can install the display on a SMART floor stand.

USB extenders

As noted in the display's specifications, the USB connection between the display and computer should be no longer than 16' (5 m). If you need to connect a computer that is more than 16' (5 m) from the display, use the following USB extender:

Extender	Specifications
USB-XT	docs.smarttech.com/kb/119318

See also > Extending USB cables

More information

SMART provides a variety of other documents for this display in the Support section of the SMART website (smarttech.com/support). Scan the QR code on this guide's cover for links to SMART Board GX series interactive display documents and other support resources.

Chapter 2 **Installing the display**

SMART recommends that only trained installers install the display.

This chapter is for installers. Installers should read this information and the installation instructions included with the display before they begin the installation.

> ⚠ **Warning**
>
> Improper installation of the display can result in injury and product damage.

Moving the display to the installation site

After your organization receives the display, you need to move it to the place where you plan to install it.

On occasion, you might also need to move the display to another location after installing it initially.

> ⓘ **Important**
>
> - Move the display at your own risk. SMART cannot accept liability for damages or injury that occur during the display's transportation.
>
> - When moving the display:
>
>   ◦ Follow local safety regulations and standards.
>
>   ◦ Pack the display in its original packaging, including the pallet.
>
>   ◦ Move the display so that its top frame faces up.
>
>   ◦ Do not place an unpacked display on its side.
>
>   ◦ Have at least two people move the display.

> **Tip**
>
> display packaging may be labeled to indicate which side is the front. Look for "FRONT" on the packaging to help orient the box during transportation.

Using transportation aides

You can use the following aides to move the display:

- Cart

- Furniture dolly

- Mechanical lift

Accommodating doorways, hallways, and elevators

In some situations, you might need to remove the display from its packaging to move it through narrow doorways or hallways or onto an elevator. In these situations, keep the foam pieces on the bottom corners of the display. These foam pieces protect the display if you need to set it down during transportation.

You might also need to rotate the display so that its top frame faces to the side. You can do this during transportation, but when you install the display, it must be in landscape orientation (with the top frame facing up). Do not place an unpacked display on its side.

Dealing with cracked, chipped, or shattered glass

The display contains safety-tempered glass. Although this glass is heat-strengthened to help withstand impacts, the glass can crack, chip, or shatter if struck with enough force. (Safety glass is designed to break into small pieces rather than sharp shards if it is broken.) Temperature changes can cause a minor crack or chip to become worse, possibly causing the glass to shatter.

See › Shattered glass on an interactive display

If the display's glass is cracked or chipped, have it professionally inspected and repaired at a SMART authorized repair center. If the display's glass shatters, carefully clean up the area and have the display repaired or replaced.

> **Warning**
>
> For safety and to prevent further damage, do not continue to install or use the display if its glass is cracked, chipped or shattered.

Saving the original packaging

Save the original packaging, including the display's pallet, and repack the display with as much of it as possible if you ever need to move the display after installation. This packaging was designed to provide the best possible protection against shock and vibration.

> **Note**
>
> If the original packaging isn't available, you can purchase the same packaging directly from your authorized SMART reseller (smarttech.com/where).

> **Caution**
>
> Move the display only in the original packaging or replacement packaging purchased from your authorized SMART reseller. Moving the display without correct packaging can lead to product damage and voids the warranty.
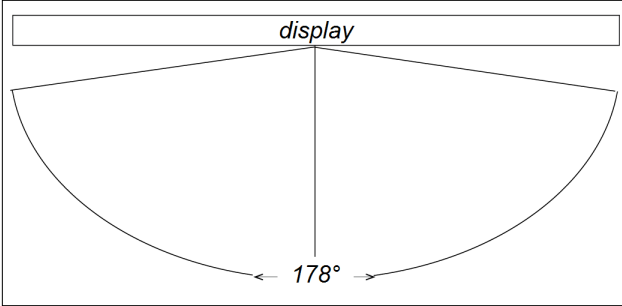
Installing the display on a wall

Typically, you install the display on a wall in a classroom or meeting space.

Choosing a location

A display is typically installed at the room's focal point, such as at the front of a classroom or meeting space.

Selecting an appropriate location is crucial for ensuring the best possible experience with the display. Consider the following factors as you choose a location:

Factor	Considerations
Room setup	- The location allows users, including those in wheelchairs, access to the display. Refer to local regulations regarding accessibility. - The location allows for multiple users to access the display at the same time. - The location accommodates room traffic patterns, and there are no tripping hazards. - The display is not installed where it could be hit by a door or gate. - There are no nearby heating or cooling sources directed at the display, such as a radiator, heat vent, or air conditioner. - There are no nearby shelving units, desks, or other furniture that has doors or drawers that could hit the display. - Furniture, wall decor, and other room features, such as light switches and thermostats, do not block the display and are not blocked by it. (You might be able to move some of these room features to accommodate the display.)
Power and other connections	- The location is close to: - A power outlet - A network outlet (if you plan to use a wired network connection) - A room computer (if you plan to connect a room computer) - External audio systems and other devices that you want to connect to the display **Notes** - If the location is not near a power outlet, consult an electrician for the power setup you need. - Determine if you'll need additional equipment, such as power bars, additional cables, or cable extenders. - The location is not where the mains power supply enters the building.

Factor	Considerations
Visibility	The display's screen is clearly visible to all users in the room. SMART recommends users sit within a 178° viewing area: **Note** The viewing area depends on the display's resolution and a variety of other factors. See › Recommended viewing distances and viewing angles for SMART Board interactive displays
Lighting	The location is not near bright light sources, such as windows or strong overhead lighting. Risks of light interference include: ○ **Reduced visibility:** Light sources can cause glare on the display's screen, reducing its visibility. ○ **Touch system interference:** Many displays use infrared (IR) light as a key component of the touch system. Strong light that hits the display's screen directly can cause interference with the touch system and prevent the display from working properly. **Tip** To reduce light interference, install blinds or shades on windows or skylights and install switches to dim or turn off any lights that shinedirectly on the display's screen. Keep in mind that sunlight can come through windows at different angles at different times of the year.
Acoustics	The room has good acoustics. See › The room has good acoustics.

Factor	Considerations
Environment and ventilation	• The location meets the environmental requirements in the display's specifications. • The display isn't subjected to strong vibrations or dust. • Ventilation systems don't blow air directly on the display. • There is adequate ventilation or air conditioning around the display so that heat can flow away from it and the mounting equipment. SMART recommends at least 2" (5 cm) of space on all sides of the display for proper airflow. • If you plan to install the display in a recessed area, there is at least 4" (10 cm) of space between the display 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 display.
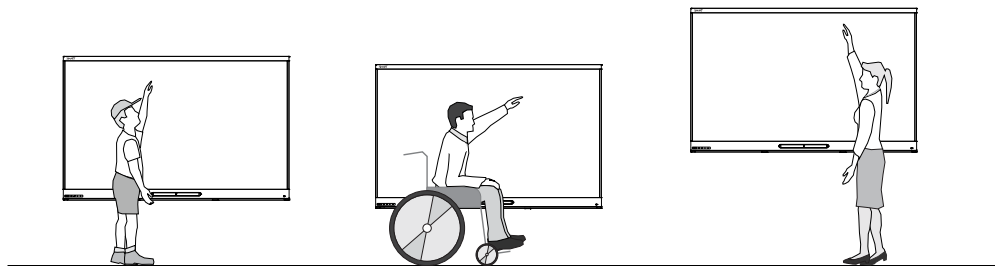
SMART recommends that you mount the display so that its top is 6' 5" (1.9 m) from the floor.

> **Note**
>
> If participants will be sitting at a steep angle (such as in a lecture hall), you may have to adjust the installation height or angle.
>
> See › *Mounting the display* on the next page

Assessing the wall

Be sure the wall you're installing the display on can support the weight of the display and mounting equipment. If it can't, consider using a SMART wall stand to transfer some of the weight from the wall to the floor.

See › smarttech.com/accessories

> **Note**
>
> Refer to the display's specifications for its weight.

In some situations, you may need to request an engineering analysis to determine if the wall can support the display.

Selecting mounting hardware

The mounting hardware required for installation varies according to the type of wall onto which the display is being mounted.

If you're using the SMART wall mount (WM-SBID-200), see the wall mount's illustrated installation instructions for information about the required mounting hardware (docs.smarttech.com/kb/171373).

Selecting a wall mount

It is always best to mount the display on a wall. If the wall can't support the display's weight, you can use additional hardware to transfer some of the weight to the floor.

SMART offers the WM-SBID-200 wall mount for mounting the display on a wall. SMART recommends using this wall mount to install the display on a wall.

See the *SBID-GX165, SBID-GX175, and SBID-GX186 installation instructions* (docs.smarttech.com/kb/171725).

Contact your authorized SMART reseller (smarttech.com/where) for information about SMART's mounting options.

If you choose a third-party option rather than one of SMART's mounting options, be sure the wall mount can accommodate the display's dimensions and support the display's weight as well as the weight of any attached accessories.

Mounting the display

The electrical and mechanical components of a display are designed to work properly when the display is mounted in the orientation described in its installation instructions. Mounting the display in a different orientation can cause malfunctions and will void the display's warranty.

Displays are designed for vertical mounting only: 90° relative to the floor, plus or minus 5°–15° for tolerance, depending on the display (consult the display's documentation). SMART doesn't support mounting displays at other angles or in a horizontal orientation (like a tabletop).

There are a number of potential hazards of mounting a display in a non-standard orientation or angle:

- Mounting a display horizontally (like a table) can cause the glass to sag, damaging the display or interfering with the display's touch system.

- Non-standard orientation can affect ventilation, creating hotpots in equipment, premature failures.

Installing the display on a stand

You can install the display on a stand if you want to move the display from place to place or if it's not possible to install the display on a wall.

Using SMART mobile stands

SMART mobile stands are designed for SMART Board interactive displays. Some are height-adjustable. Some models include a locking cabinet to secure equipment and casters that swivel and lock for easy movement.

See also ⟩ smarttech.com/accessories

Using a third-party stand

For information about selecting and using a third-party stand, see Installing your SMART Board GX on a stand.

Connecting to a network

The display requires a network and internet connection for downloading software and firmware updates.

Configuring network settings

Network administrators need to configure the display's network connection to enable over-the-air system firmware updates for a number of the embedded apps.

> **Note**
>
> A 5 GHz wireless or Ethernet network connection may provide a better experience with the EShare app.

To configure the network

1. Open the required TCP/UDP ports:

Protocol	Port range	Feature
TCP	80	System software update
TCP	56789	EShare app
TCP	25123	EShare app
TCP	8121	EShare app
TCP	8000	EShare app
TCP	8001	EShare app
TCP	48689	EShare app
TCP	25123	EShare app

2. Add the following URLs to the to the network allowlist:

URL	Feature
h1.ee-share.com	EShare app
worldota.syrjb.com:9900	System software update
sw.syrjb.com:8081	Whiteboard sharing

3. Configure the network to enable broadcast service.

4. Configure the network to allow mDNS (multicast).

Connecting to a network

The display requires a network and internet connection for downloading software and firmware updates. You can connect to a network using Wi-Fi or one of the RJ45 Ethernet jacks.
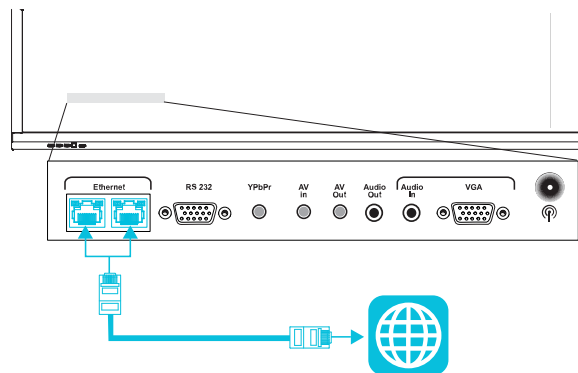
> **Important**
>
> Do not use the RJ45 jack on an OPS PC to connect to a network.

> **Note**
>
> The network display's connection is shared internally with an OPS PC.

> **Tip**
>
> If you're using one of the display's RJ45 jacks to connect to an Ethernet network, you can connect the other jack to a computer to provide network access for the computer. This is particularly useful if there is only one wired network connection in the room. (Network access is available when the display is on or in Standby mode but not when it's in Power Save mode).
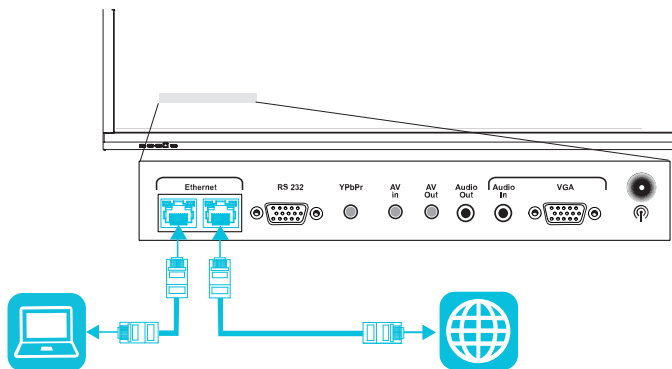
Connecting power and turning on the display for the first time

To connect the display to power

Connect the supplied <u>power cable</u> from the AC power inlet on the back of the display to a power outlet.
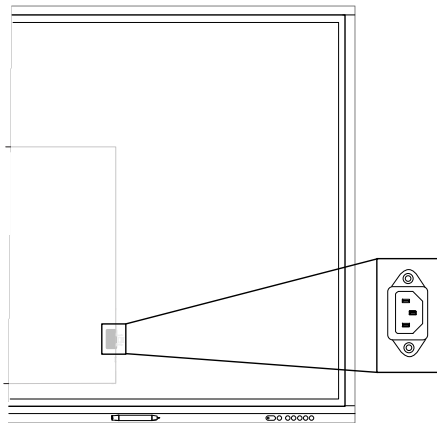

| **Note**

Refer to the display's specifications for power requirements and power consumption information (see *More information* on page 15).

To turn on and set up the display for the first time

⚠ **Caution**

- Install the OPS appliance before you turn on the display. If you can't reach the power switch, use the front control panel's power button ⏻ to put the display in Standby mode, and then unplug the display's power cable from the power outlet.

- Make sure the OPS appliance is secured to the display with screws through the two anchor points. Inadequately secured appliances can damage the display. (An OPS appliance's anchoring screws are typically captive, although some simply include separate anchoring screws. Third-party OPS appliances are not supported, and their use can lead to poor performance or damage to the display.

1. Flick the power switch beside the AC power inlet on the rear of the display to the ON (I) position.

SBID-GX165   *SBID-GX175* and *SBID-GX186*
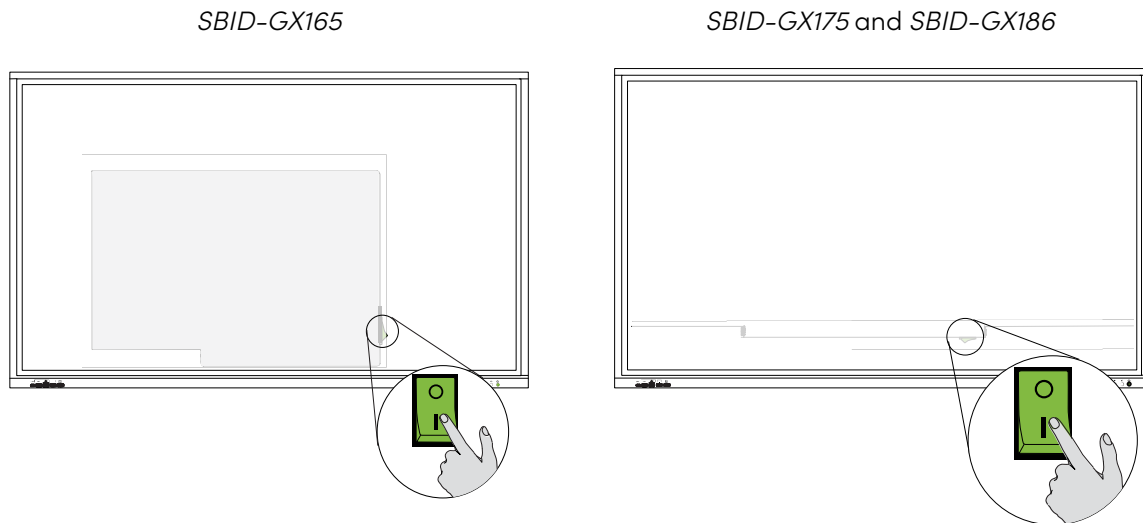
2. Select your preferred language, and then tap the **Next** icon ➡.

3. Select the country location where you're installing the display. This helps to ensure the proper Wi-Fi frequencies for wireless networks are available. Tap the **Next** icon ➡.

4. Select an Ethernet connection or wireless network. To add a hidden Wi-Fi network manually, select **Add Network**.

   ⓘ **Important**

   The display needs an internet connection for downloading and installing important updates. Ask the network administrator to verify that the display can access the network by making sure the display's built-in browser can access the internet.

5. Add a network certificate (optional).

   See ❯ *Connecting to a network* on page 23

6. Tap the **Next** icon ➡.

7. Set the date, time and timezone, and then tap the **Next** icon ➡.

   You can also enable the display's date and time to be set automatically.

   See ❯ *Date, time, location, and language settings* on page 67

8. Set a password for the screen lock feature, and then tap **Enter**.

> **(!) Important**
>
> Ensure the screen lock passcode is made available to authorized users of the display. Users must enter the passcode to unlock the display's screen when the Lock screen feature is enabled.

The Done screen indicates setup is finished.

Configuring the display's network settings

Use the procedures in this chapter to update network settings after turning on the display. The chapter describes:

- Connecting to a Wi-Fi network

- Configuring network proxy settings for a Wi-Fi network

- Installing a digital network certificate for a Wi-Fi network

- Connecting to an Ethernet network

- Configuring a wireless hotspot

- Connecting the display to a wireless hotspot

To connect to a Wi-Fi network

1. Press the **Settings** button ⚙ on the front control panel.

2. Tap the **Network** icon 📶 > **WLAN**.

3. Turn the **Wifi Switch** on.

4. Select a wireless network.

   If the Wi-Fi network is not password protected, the display connects to the network.

   OR

   If the network requires a password, enter the Wi-Fi password and tap **Connect**.

To configure network proxy settings for a Wi-Fi network

To improve security and privacy, or to meet company policy, you can configure a network proxy for your Wi-Fi network. The process differs if you have an unsecured network or a secured network.

Set up on an unsecured network:

1. Press the **Settings** button ⚙ on the front control panel.

2. Tap the **Network** icon 📶 to open the Wi-Fi Guest screen.

3. Ensure **Advanced setup** is selected.

4. In the Proxy Settings list, select **Manual**.

5. Fill out the three proxy server fields as necessary.

6. Select **Connect** to save the settings.

Set up on a secured network:

1. Press the **Settings** button ⚙ on the front control panel.

2. Tap the **Network** icon 📶 to open the Wi-Fi screen.

3. In the Proxy Settings list, select **Manual**.

4. Fill out the three proxy server fields as necessary.

5. Select **Connect** to save the settings.

To install a digital network certificate for a Wi-Fi network

To improve security and ensure network authentication, you can install a Secure Sockets Layer (SSL) certificate on the display.

1. Press the **Settings** button ⚙ on the front control panel.

2. Tap the **Network** icon 📶 > **Wi-Fi** > **Install certificates**.

3. Tap the menu icon ☰ and browse to the certificate (for example, a folder on the display or a connected USB drive).

4. Tap the certificate.

   The certificate installs.

5. If Wi-Fi is off, turn the **Wi-Fi Switch** on.

6. Select a security enabled wireless network.

7. Tap **CA certificate** > **Use system certificates**.

To connect to an Ethernet network

1. Connect an Ethernet cable to either of the RJ45 jacks on the display.

2. Press the **Settings** button ⚙ on the front control panel.

3. Tap the **Network** icon 🛜 > **Ethernet**.

4. Turn on the **Connect** switch.

5. To obtain an IP address automatically, select the **DHCP** checkbox.

   OR

   To configure an IP address manually, select the **Static** checkbox, input the IP address, gateway, network prefix length (netmask bit count), and DNS address, and tap **Save**.

To configure a wireless hotspot

Notes

- The wireless hotspot feature is available when the display is connected to the network with an Ethernet connection.

- When the wireless hotspot is enabled, the display's Wi-Fi connection is disabled.

1. Press the **Settings** button ⚙ on the front control panel.

2. Tap the **Network** icon 🛜 > **Hotspot**.

3. Enable the **Hotspot Switch** option.

4. Type a hotspot name in the *Hotspot Name* text box (or use the default name).

5. In the *Security* field, tap the drop-down list and select a method of encryption.

6. Click **Show Password** and record the system generated (default) password or type your own password. This password is required when users connect their devices to the wireless hotspot.

7. Select a bandwidth frequency (2.4 GHz or 5 GHz).

   Note

   The default setting is 2.4 GHz. Select **5g** to choose a 5 GHz bandwidth frequency. This also enables the channel selection drop-down list from which you can choose from a range of Wi-Fi channels.

8. Tap **Enter**.

To connect to the display's wireless hotspot

1. On a computer or mobile device, view the list of available Wi-Fi networks and select the display's wireless hotspot.

2. Type the password for the display's wireless hotspot.

3. Connect to the display's wireless hotspot.

Chapter 3 **Connecting computers and other devices**

⚠ **Warning**

Ensure that any cables that cross the floor to the display are properly bundled and marked to avoid a trip hazard.

Installing SMART software

The display comes with SMART software that you can install on connected room computers and guest laptops. Other SMART software is optional.

Included

SMART Notebook

SMART Product Drivers and Ink

Optional

Lumio by SMART

SMART Meeting Pro

SMART Notebook Plus

SMART TeamWorks Room

SMART
Remote
Management

SMART Remote Management

See ⟩ smarttech.com/downloads

Connecting room computers and guest laptops

If you install cables for room computers and guest laptops in advance, you can make use of connectors that might not be accessible after the display is mounted on the wall. You can then run the cables across floors or behind walls as needed.

Notes

- Install SMART software on computers you connect to the display (see *Installing SMART software* on the previous page).

- As shown below, HDMI 1, HDMI 2, VGA, and Display Port share the Touch USB Type-B receptacle on the side connector panel, and HDMI uses the Touch USB Type-B receptacle on the front connector panel (see *Sharing USB Type-B receptacles* on page 41).

- The USB Type-C connector provides 15 W of power for charging connected devices.

The following are the locations of the connectors and the connector and cable information for the display's input sources.

- **USB Type–C**
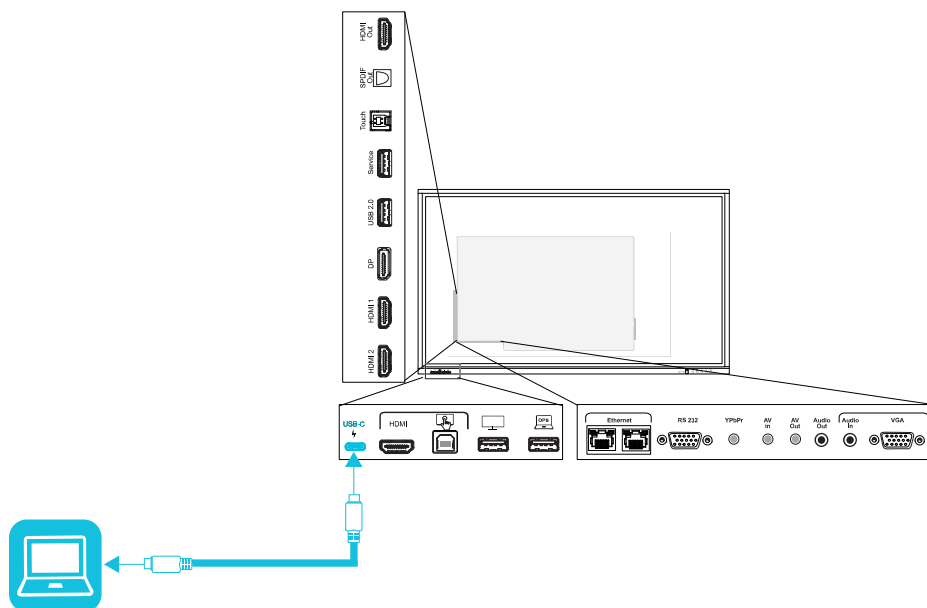
Connector	Standard	Connection type	Cable
USB Type–C	USB 3.2 Gen 1 (SuperSpeed, 5 Gbps)	Video/audio/touch	SuperSpeed USB Type–C

- **HDMI**
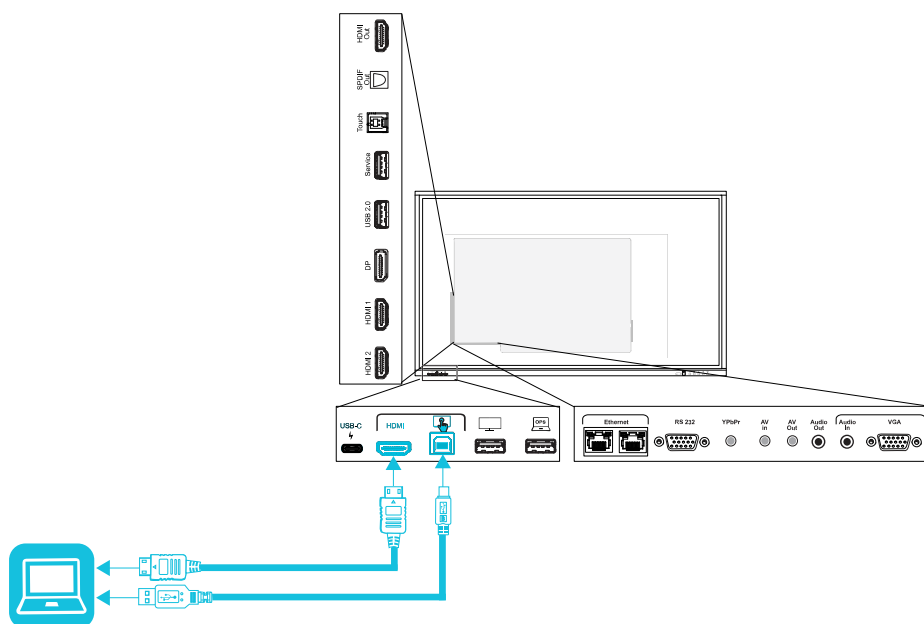
Connector	Standard	Connection type	Cable
HDMI	HDMI 2.0	Video/audio	Premium High Speed HDMI (18 Gbps)
Touch input	USB 2.0 Type–B	Touch	High Speed USB 2.0

- **HDMI 1**
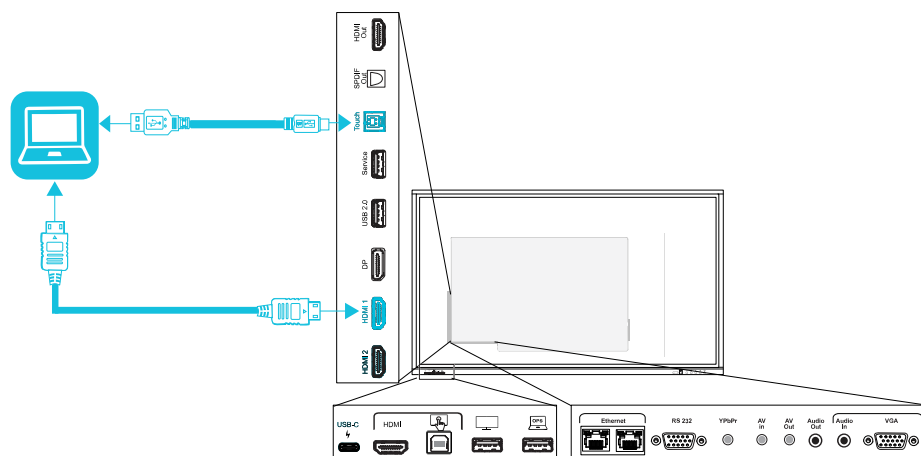
Connector	Standard	Connection type	Cable
HDMI 1	HDMI 2.0	Video/audio	Premium High Speed HDMI (18 Gbps)
Touch	USB 2.0 Type–B	Touch	High Speed USB 2.0

- **HDMI 2**
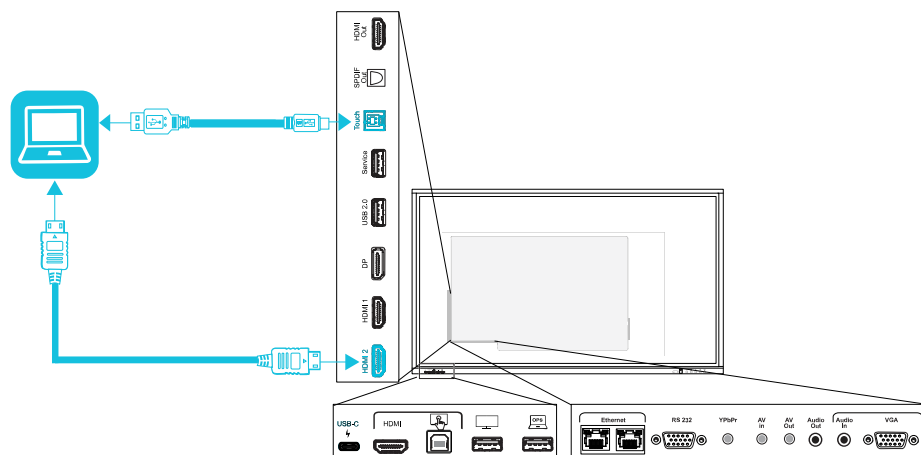
Connector	Standard	Connection type	Cable
HDMI 2	HDMI 2.0	Video/audio	Premium High Speed HDMI (18 Gbps)
Touch	USB 2.0 Type–B	Touch	High Speed USB 2.0

- **Display Port**
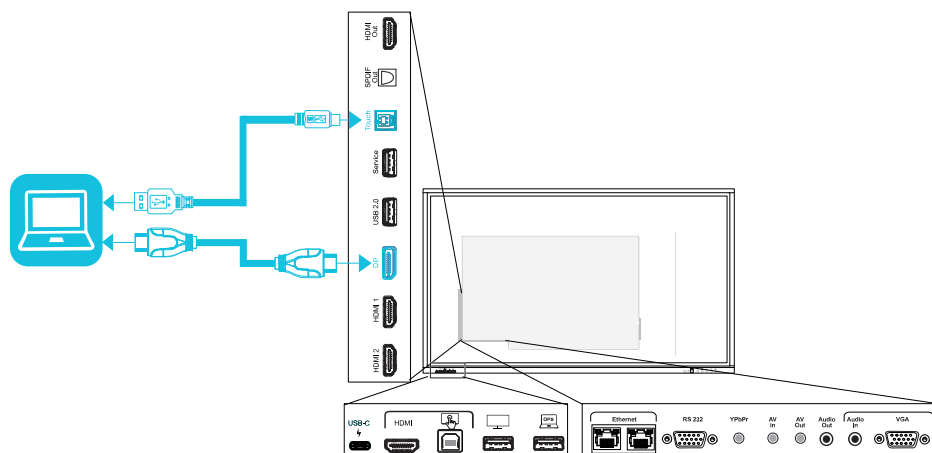
Connector	Standard	Connection type	Cable
Display Port	Display Port 1.2	Video/audio	Display Port
Touch	USB 2.0 Type–B	Touch	High Speed USB 2.0

- **VGA**
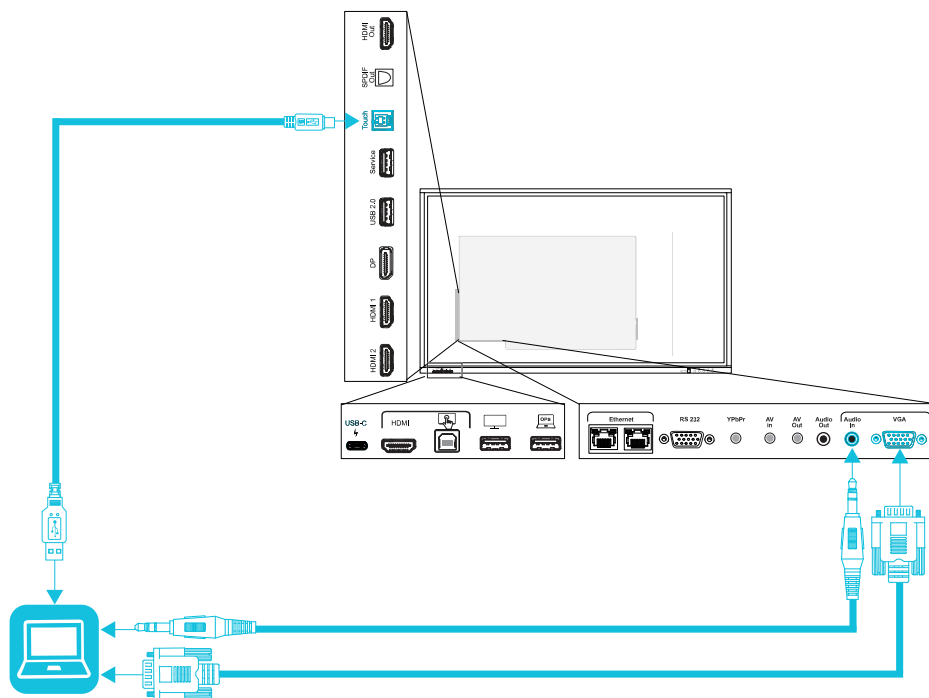
Connector	Standard	Connection type	Cable
VGA	VGA	Video	VGA
Audio In	Stereo 3.5 mm	Audio	Stereo 3.5 mm
Touch	USB 2.0 type–B	Touch	High Speed USB 2.0

Viewing a connected computer or other device's input

1. Connect a device to the display's USB Type-C, HDMI, HDMI 1, HDMI 2, Display Port, or VGA connectors.

   Note

   To enable touch control of the device, connect a USB cable to the associated USB connector. Devices connected to the USB Type-C connector don't require an additional USB connection to enable touch.

2. Select the source using one of the following methods:

Using the Side Toolbar menu	Using the remote control
a. Open the **Side Toolbar** menu by sliding either of the Side Toolbar menu handles ≫ (located on either side of the screen) toward the center of the screen. b. Tap the **Input Select** icon 🖥.	Press the **Input Select** 🔘 button on the remote control.

The Input Selection dialog box appears.

> **Note**
>
> Three dots ••• appear below inputs (USB Type-C, HDMI, HDMI 1, HDMI 2, OPS and DP) with a connected device.

3. Tap the computer's input source or use the navigation keys on the remote control to select the input source and then press the **OK** button.

The device's output appears on the display's screen.

> **Tip**
>
> You can configure the display to automatically switch to the newest input, lock the current source, or choose other priorities or input options.
>
> For more information, see *Source settings* on page 74.

Setting a connected computer's resolution and refresh rate

This table presents the recommend resolutions and refresh rates for the display's inputs:

Input source	Maximum resolution	Refresh rate
USB Type-C, Display Port Alternate Mode	3840 × 2160	60 Hz
HDMI[1]	3840 × 2160	60 Hz
HDMI 1	3840 × 2160	60 Hz
HDMI 2	3840 × 2160	60 Hz
VGA	1920 × 1080	60 Hz
Display Port	3840 × 2160	60 Hz

---

[1]Located on the display's front connector panel.

Input source	Maximum resolution	Refresh rate
AV	1920 × 1080	60 Hz
YPbPr	1920 × 1080	60 Hz

If possible, set connected computers to these resolutions and refresh rates. See the computers' operating system documentation for instructions.

Using recommended cables

SMART recommends the following varieties of cable:

Cable type	Maximum length	Recommendation
Display Port	23' (7 m)2	Use only certified Display Port 1.4 cables that have been tested to support the performance standard you require.
HDMI	23' (7 m)	Use only certified Premium High-Speed HDMI (18 Gpbs) cables that have been tested to support the performance standard you require.
VGA	23' (7 m)	Use VGA cables with all pins in their connectors fully populated and wired.
Stereo 3.5 mm	20' (6 m)	Use only shielded 3.5 mm cables ⓘ **Important** Use only a 3.5 mm stereo jack (15 mm long barrel) to connect to the display.
USB 2.0	16' (5 m)	Use a Hi-Speed USB 2.0 USB extender if the distance between the computer and the display is greater than 16' (5 m). See ❯ *USB extenders* on page 15
USB 3.0	9' (3 m)	SMART supports only installations that use directly connected video and USB cables, or AC-powered extenders. You might be able to use higher-grade cables that exceed the recommended length. If you have problems with such a cable or an extender of any type, test the connection with a shorter cable before contacting SMART Support.

2The performance of cables longer than 23' (7 m) is highly dependent on the cable's quality.

Cable type	Maximum length	Recommendation
USB Type-C	6' 6" (2 m) for SuperSpeed 5Gbps cables	USB-IF certified USB 3.2 Gen 1 Type-C cable, SuperSpeed (5 Gbps) support To use a USB Type-C cable for video, you need: • A full-featured cable that supports SuperSpeed 5Gbps (or faster) data rates. • A computer that supports Display Port Alternate Mode via USB Type-C **Note** The USB Type-C connector on the display can supply up to 15 W of power to connected devices.

Using cables that exceed these maximum lengths may produce unexpected results, intermittent loss of picture, or degraded picture quality and USB connectivity.

Sharing USB Type-B receptacles

The HDMI, VGA, and Display Port connectors on the side connector panel (back of the display) all share a single USB Type-B receptacle on this panel. This means the touch system can be used with only one device connected to these video inputs.

USB Type-B receptacle	Video connectors
Touch	• HDMI 1 • HDMI 2 • VGA • Display Port

Connecting a SMART OPS PC module

If your organization has purchased a SMART OPS PC module, you or your organization's installers can install the module in the display's accessory slot following the OPS PC module's installation instructions (docs.smarttech.com/kb/171775 or docs.smarttech.com/kb/171544). You can then view the OPS PC module's input on the display.
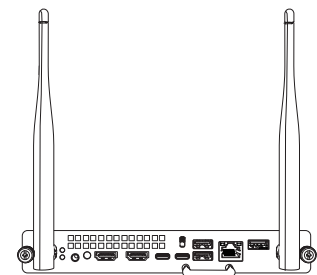
See ⟩ *SMART OPS PC modules user guide* (docs.smarttech.com/kb/171747)

> ⚠ **Caution**
>
> - Only SMART-provided OPS appliances are supported in SMART Board interactive displays. Third-party OPS appliances are not supported, and their use can lead to poor performance or damage to the display.
>
> - Do not install or remove the OPS appliance while the display is turned on. First make sure the power switch on the back of the di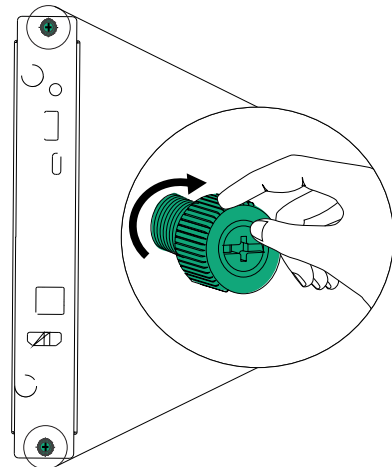splay beside the AC power inlet is in the OFF (O) position. If you can't reach the power switch, use the front control panel's power button ⏻ to put the display in Standby mode, and then unplug the display's power cable from the power outlet.
>
> - After you have turned the display's power switch off or unplugged it, wait at least 30 seconds before removing the appliance to allow its internal power supplies to discharge completely. You might also wait five minutes to give the appliance the opportunity to cool, if necessary.
>
>   Make sure the OPS appliance is secured to the display with screws through the two anchor points. Inadequately secured appliances can damage the display. (An OPS appliance's anchoring screws are typically captive, although some simply include separate anchoring screws.)
>
> -

Connecting other devices

In addition to computers, you can connect a variety of other devices to the display:

- USB drives and other peripherals

- External displays

- External audio systems (wired or Bluetooth® enabled)

- Room control systems

External displays

Connecting USB drives and other peripherals

The display includes one USB 2.0 Type-A receptacle on the front connector panel and one USB 2.0 Type-A receptacle on the side connector panel. You can connect USB drives, peripherals (such as keyboards), and other devices to the USB 2.0 Type-A receptacle on the side connector panel and use these devices with the display's Android system. The front USB 2.0 Type-A receptacle will switch to the active input, including the display's Android system, the OPS slot computer, or an externally connected computer.
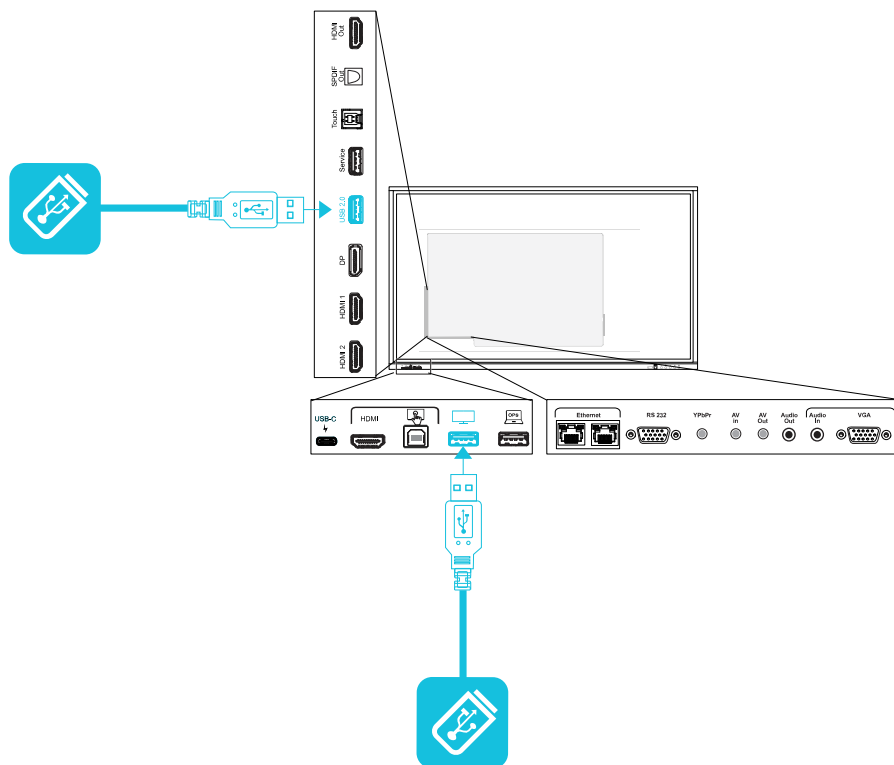
Connecting an external display

On some SMART Board GX displays, you can connect an external display using the HDMI 2.0 out connector on the connector panel (pictured).

> **Note**
>
> Some displays do not include this connector.

The external display will show the same image as the display. This is useful when you're using the display in an auditorium or other large space where a second display would be beneficial.
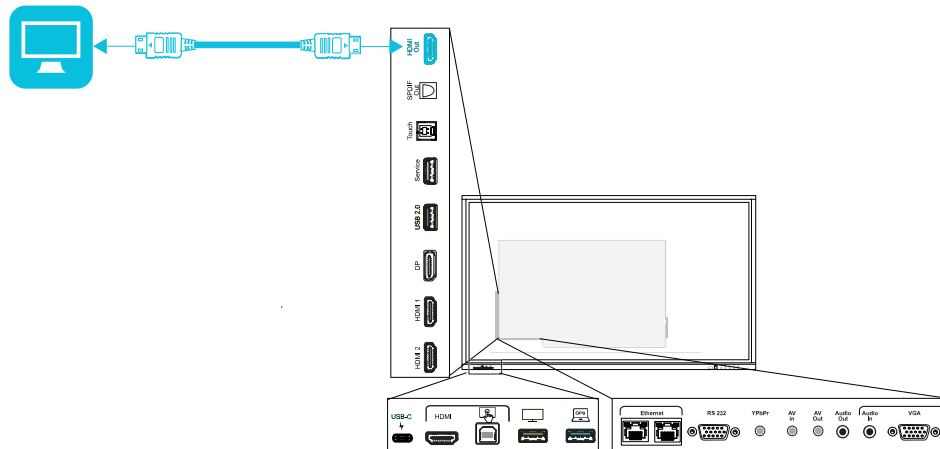
> ⊙ **Important**
>
> If the connected external display doesn't support High-bandwidth Digital Content Protection (HDCP), no image will appear on the external display. For full resolution output, connect a display that supports HDCP.

> **Note**
>
> The display's default output resolution is 4K (3840 × 2160). The output resolution can also be set to FHD (1920 × 1080).
>
> See ⟩ *Image, audio, and menu setting* on page 75

Connecting an external audio system

The display includes two 15 W speakers, which are designed to provide sound at the front of a room. You might want to connect a third-party external audio system if you're providing sound in a larger space.

You can connect an external audio system to the display using the stereo 3.5 mm out connector (pictured). Alternatively, you can connect an external audio system directly to a room computer.
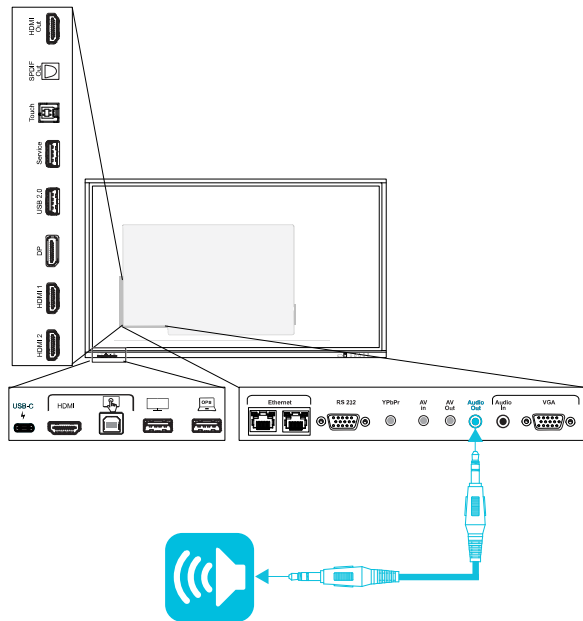
You must enable use of an external audio system in display settings (see *Image, audio, and menu setting on page 75*).

> ⊙ **Important**
>
> Use a 3.5 mm stereo jack (15 mm long barrel only) to connect to the display's stereo 3.5 mm out connector.

> **Notes**
>
> - You can use the display's volume controls to adjust volume of an audio system connected to the display's stereo 3.5 mm out connector.
>
> - If there's an echo when the display is connected to an external audio system, try disabling the display's built-in speakers.
>
>   See > *Image, audio, and menu setting* on page 75

In addition to the stereo 3.5 mm out connector, the display also provides a Sony/Philips Digital Interface (S/PDIF) out connector (pictured). S/PDIF is a digital audio transmission medium. You need an audio receiver that supports S/PDIF to use this connection with an external sound bar or other audio system.
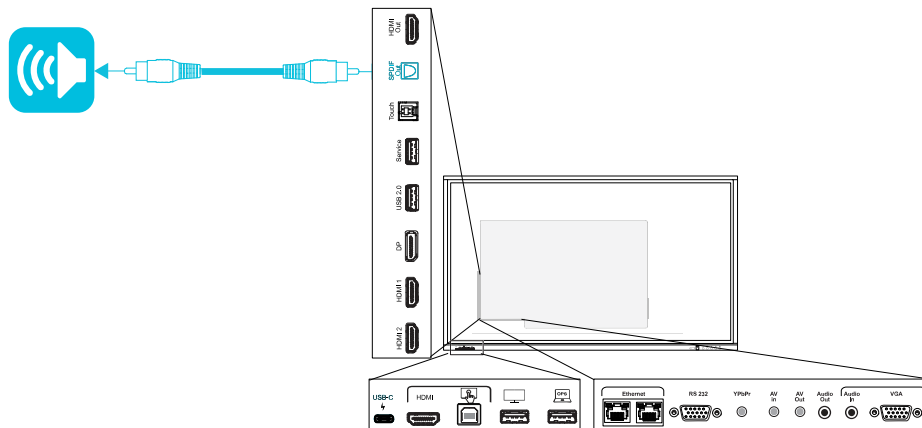
Note

When you connect an audio system to the display's S/PDIF out connector, the audio system's volume controls, rather than the display's, adjust the volume.

Connecting analog video inputs and outputs

You can connect an external analog video and audio source to the SMART Board GX display using the (AV in) connector.
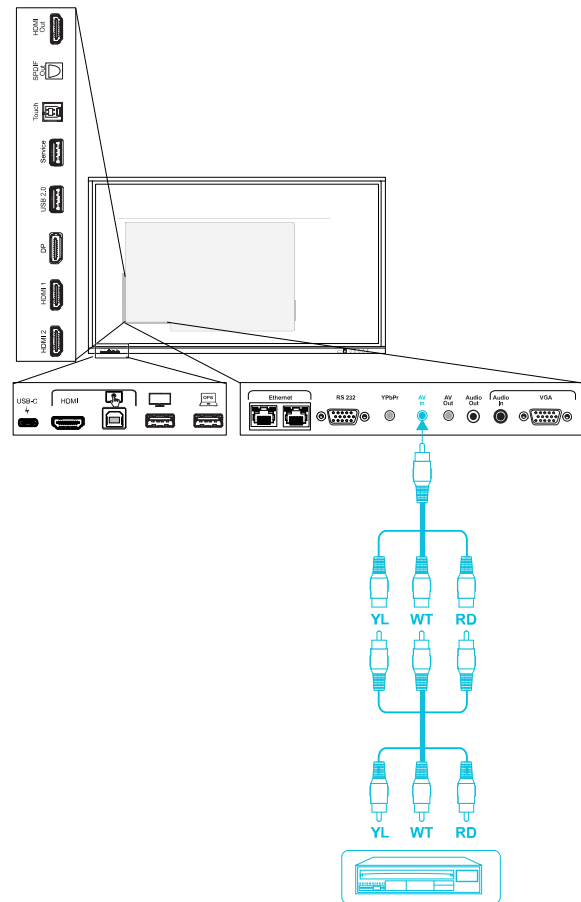
ⓘ **Important**

Use a composite-to-AV adapter with a 4-conductor 3.5 mm plug. Make sure the adapter cable is no longer than 12" (0.3 m) in length.

The SMART Board GX display also includes a yPbPr
analog video connector. When using this connector,
audio is supplied with the Audio in connector
(pictured).
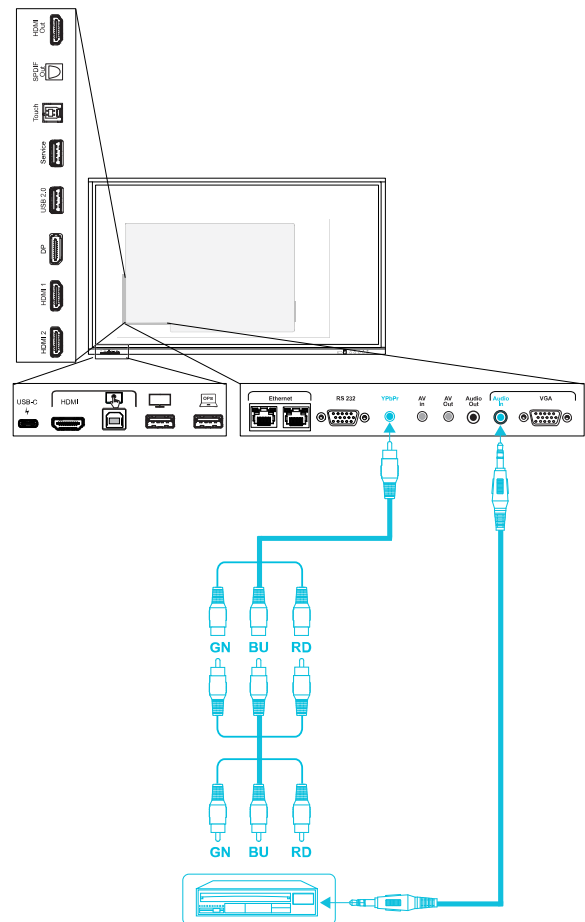
> **Important**
>
> Use a component to AV adapter with a 4-conductor 3.5mm plug which is no longer than 12" (0.3 m) in
> length.

You can connect an external display using the SMART Board GX display's analog video (AV out) connector. The external display will show the same image as shown on the display.
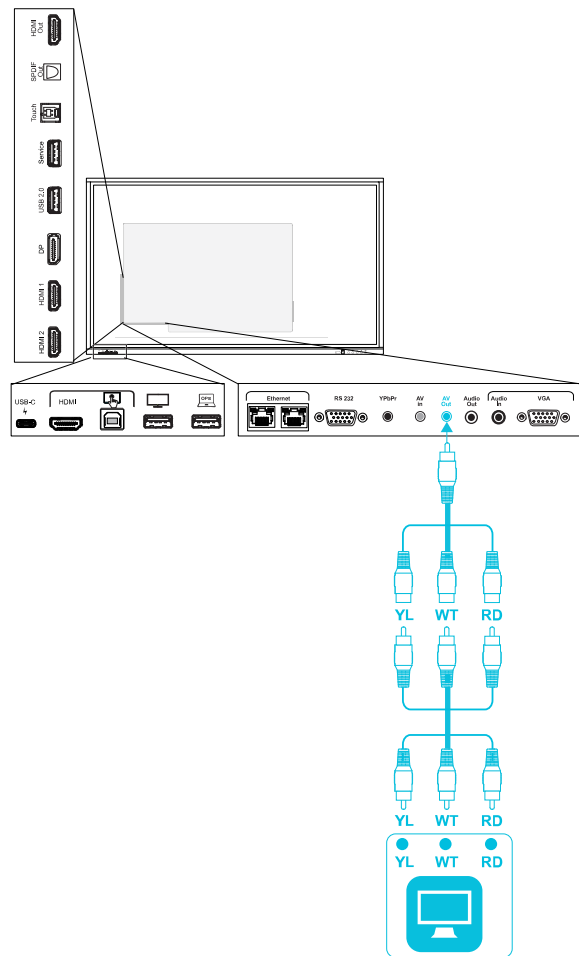
⚠ **Important**

Use an AV to composite adapter with a 4-conductor 3.5 mm plug which is no longer than 12" (0.3 m) in length.

Connecting room control systems

A room control system enables users to control a room's lighting, audio system, and possibly, the display. Some installations may require you to integrate the display with a room control system.

You can use the display's RS–232 connector to connect a third-party external control system to the display (see *Appendix C Managing the display using RS–232* on page 78).

Note

displays are not compatible with centralized remote control systems, such as a universal remote control.

Connector diagrams

Side and bottom connector panels

This diagram and table present the connectors on the display's connector panel:
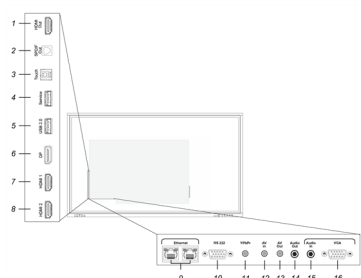
No.	Connector	Connects to	Notes
1	HDMI 2.0 out3	External display	See › *Connecting an external display* on page 43
2	S/PDIF out	Digital audio output	See › *Connecting an external audio system* on page 44
			See › Digital audio cables and connectors
3	USB 2.0 Type–B	Touch	See › *Connecting room computers and guest laptops* on page 32
			See › USB cables and connectors
4	USB 2.0 Type–A	N/A	This connector is a service port.

3Some displays do not include this connector.

No.	Connector	Connects to	Notes
5	USB 2.0 Type–A	Supported USB drives and other peripherals	See › *Connecting other devices* on page 42
			See › USB cables and connectors This connector is always connected only to the display's internal Android system; it can be used to connect peripherals such as a USB mouse, keyboard, or USB drive for use with the display's integrated Android system.
			Note Connect a USB mouse to navigate the display's on–screen menu during troubleshooting.
6	Display Port 1.2	Display Port 1.2 input (video and audio)	See › *Connecting room computers and guest laptops* on page 32
			See › Display Port cables and connectors
7	HDMI 2.0	HDMI 1 input (video and audio)	See › page 51
8	HDMI 2.0	HDMI 2 input (video and audio)	See › page 51
9	RJ45 (×2)	Network	See › *Connecting to a network* on page 23
			See › Ethernet (network) cables and connectors
10	RS–232	Room control system	See › *Appendix C Managing the display using RS–232* on page 78
			See › RS–232 cables and connectors
11	yPbPr	yPbPr 3.5 mm input (video)	See › *Connecting analog video inputs and outputs* on page 47
12	AV in	AV 3.5 mm input (video and audio)	See › *Connecting analog video inputs and outputs* on page 47
13	AV out	AV 3.5 mm output (video)	See › *Connecting analog video inputs and outputs* on page 47

No.	Connector	Connects to	Notes
14	Audio out	External audio system	See › *Connecting an external audio system* on page 44
			See › Analog audio cables and connectors
15	Audio in (stereo 3.5 mm)	VGA input (audio)	Use this audio input with all analog video sources (VGA, YPbPr, and AV).
			See › *Connecting room computers and guest laptops* on page 32
			See › Analog audio cables and connectors
16	VGA in	VGA input (analog video)	Use this video input with Stereo 3.5 mm in.
			See › *Connecting room computers and guest laptops* on page 32
			See › Analog audio cables and connectors
			Use this video input with Touch (USB) connector for touch control.

Front connector panel

This diagram and table present the connectors on the display's front connector panel:
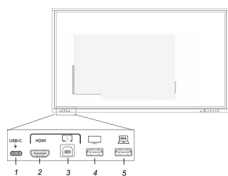
No.	Connector	Connects to	Notes
1	USB 3.1 Type–C	USB Type-C input (video, audio, and touch)	See › *Connecting room computers and guest laptops* on page 32
			See › USB cables and connectors
			Note
			The USB 3.1 Type–C connector can also provide 15 W of power to connected devices.

No.	Connector	Connects to	Notes
2	HDMI 2.0 in	HDMI 1 input (video and audio)	See › *Connecting room computers and guest laptops* on page 32

See › HDMI cables and connectors |
| 3 | USB 2.0 Type–B | Touch input | Use this touch input with the HDMI video and audio input on the front of the display.

See › *Connecting room computers and guest laptops* on page 32

See › USB cables and connectors |
| 4 | USB 2.0 Type–A | Supported USB drives, peripherals, embedded OS, and other devices | See › *Connecting USB drives and other peripherals* on page 43

See › USB cables and connectors
This connector can be used to connect peripherals such as a USB mouse, keyboard, or a USB drive for use with the currently selected input (such as the internal Android system, a PC in the OPS slot, or an external computer). |
| 5 | USB 3.2 Gen 1 | Supported SuperSpeed (SS) and USB 2.0 drives, peripherals, and other devices to OPS (if installed) | See › *Connecting USB drives and other peripherals* on page 43

See › USB cables and connectors
This connector is always connected to the display's OPS slot. It can connect peripherals (such as a USB mouse, keyboard, or USB drive) only to a PC installed in the display's OPS slot. |

Chapter 4 **Maintaining the display**

With proper maintenance, the display will provide years of use.

Turning the display on or off

In most situations, you can put the display in Standby mode when not using it by following the instructions in *SMART Board GX series interactive displays user guide* (docs.smarttech.com/kb/171745).

In some situations, such as when you move the display or clean its screen, you need to turn the display off. You can turn it back on after.
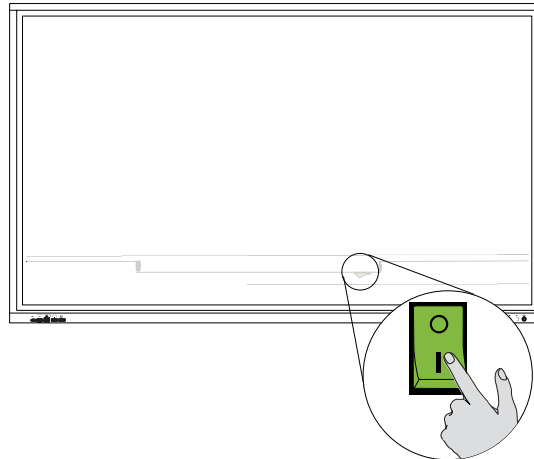
To turn the display off

1. Press the Power button ⏻ on the front control panel or the remote control for five seconds and wait for the status light to stop blinking.

2. Flick the power switch (beside the AC power inlet) on the bottom of the display's rear surface to the OFF (O) position.
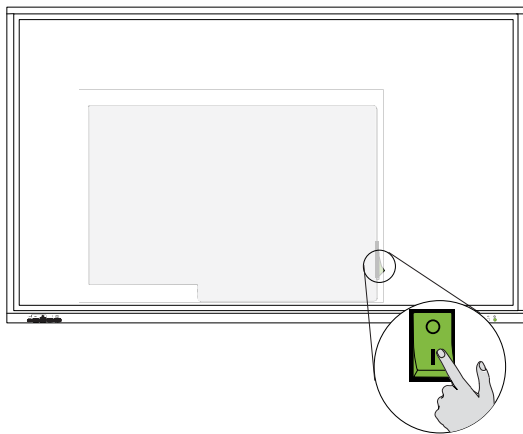
SBID-GX165   *SBID-GX175* and *SBID-GX186*

To turn the display on

1. Flick the power switch (beside the AC power inlet) on the bottom of the display's rear surface to the ON (I) position.

2. Press the **Power** button ⏻ on the front control panel or the remote control for five seconds.

To turn the display on or off (with an OPS module installed)

- If OPS is currently set as the *Boot input Source* input (see *Source settings* on page 74), the OPS module will start automatically when the display is turned on.

- Before turning off the display, turn off the OPS module using the power controls on the OPS module (such as the *Shut down* command in the Windows 10 start menu on the OPS).

- When the OPS module is turned off, it is then safe to turn off the display using the steps listed above in *To turn the display off*.

Cleaning and maintaining the display

Checking the display installation

Inspect the display installation frequently to ensure that the display 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 hardware.

If you find an issue, contact a trained installer.

Cleaning the screen

Follow these instructions to clean the 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 dense or rough material.
>
> - Do not apply pressure to the screen.
>
> - Do not use strong cleaning solutions or glass cleaners on the screen. They can damage or discolor the screen.

To clean the screen

1. Turn off any connected computers.

2. Turn off the display.

3. Wipe the screen with a lint-free, non-abrasive cloth.

   > **Note**
   >
   > You can also use a damp cloth with a drop of dish soap, or follow the instructions in the knowledge base article, How to clean SMART Board surfaces and accessories.

Cleaning the touch sensors

The display uses infrared (IR) transmitters and sensors around the display's perimeter between the screen and the frame. Dust buildup on the protective plastic can impair touch performance. Inspect these areas for dust, and clean them every week.

> ⚠️ **Caution**
>
> - Do not use compressed air to clean the sensors or borders.
>
> - Do not use water or cleaning agents to clean the touch sensors.
>
> - Do not apply too much pressure when cleaning the display because you can damage the plastic.

To clean the IR transmitters and sensors

1. With a clean lint-free, non-abrasive cloth, gently wipe the plastic between the screen and the frame around the perimeter of the display's screen.

2. If dirt still remains, use 50% isopropyl alcohol to clean the protective plastic between the screen and the frame.

Maintaining ventilation

The display requires proper ventilation. Dust buildup in the ventilation holes compromises cooling and can lead 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 display from the wall.

  For more information about removing the display, see *Removing and transporting the display* on the next page.

> ⚠️ **Caution**
>
> Avoid setting up or using the display in an area with excessive levels of dust, humidity, smoke, or chemical fumes.

Preventing condensation

If the display has been moved from a cold environment to a warmer one (for example, from storage to the installation site), let the display sit for a few hours to allow it to acclimate to the new temperature. Failing to do so can cause humidity to build up in the space between the front glass and the LCD.

If condensation appears under the screen after you turn on the display, select an active video source and leave the display on for 48 hours. If the condensation doesn't dissipate, contact SMART support if the display is still under warranty.

If there is enough moisture between the layers to cause the moisture to drip and run, remove power immediately and contact SMART Support if the display is still under warranty.

Replacing the pens

To prevent damage to the display's anti-glare coating, replace a pen if its nibs become worn. You can purchase replacement pens from the Store for SMART Parts (see smarttech.com/support/parts-store).

> ⓘ **Important**
>
> Use only pens designed for SMART Board GX series interactive displays. Pens for other SMART products aren't compatible with SMART Board GX series interactive displays (see Comparing SMART product pens).

> **Note**
>
> For pen part numbers, refer to the service parts diagrams.

Removing and transporting the display

On occasion, you might need to remove the display from its current wall mount and move it to another location.

To remove the display safely, use two or more trained installers.

> ⚠ **Warning**
>
> - Do not attempt to move the display by yourself. The display is very heavy.
>
> - Do not move the display by connecting a rope or wire to the handles on the back. The display can fall and cause injury and product damage.

> ⓘ **Important**
>
> Follow the documentation included with any SMART or third-party mounting hardware.

To remove the display

1. Turn off any connected computers.

2. Turn off the display (see *Turning the display on or off* on page 55).

3. Flick the switch beside the AC power inlet to the OFF (O) position.

4. Remove all accessible cables and connectors.

5. Remove any modules from the OPS slot.

6. Lift the display from its mounting location.

⊘ **Warning**

Do not place the display on a sloping or unstable cart, stand, or table. The display could fall, resulting in injury and severe product damage.

⚠ **Caution**

Do not leave the display face up, face down or upside down for an extended period. This could cause permanent damage to the screen.

7. Remove the mounting brackets.

To transport the display

See *Moving the display to the installation site* on page 16.

Updating system firmware

The display checks for firmware updates automatically when its turned on, provided the display is connected to the internet and the *Check for updates automatically* setting is enabled (see *System settings and Apps* on page 67). The display notifies you when a firmware update is available.

To make sure the network is configured properly for firmware updates, see *Configuring network settings* on page 23.

Applying a firmware update

To apply a firmware update

1. After turning on the display, a dialog box appears on the screen asking if you want to update the display's firmware.

2. Tap **OK** to update the display's firmware.

    Note

    The display may restart a number of times when a firmware update is applied.

    OR

    Tap **Cancel** to update the firmware later.

To apply a firmware update from settings

1. Press the **Settings** button ⚙ on the front control panel.

2. Tap the **System Settings** icon 🔧 and tap **Check for updates**. A message lets you know whether an update is available.

   > **Note**
   >
   > The display may restart a number of times when a firmware update is applied.

3. If an update is available and you'd like to apply it, tap **OK**. The display applies the firmware update automatically after a short time.

Updating system firmware manually

You can download system firmware updates at smarttech.com/downloads and update the display's firmware manually using a USB drive.

> **Note**
>
> Instructions for downloading and installing system firmware updates are provided on the firmware downloads page.

Chapter 5 **Troubleshooting**

Troubleshooting the display and related SMART products

See Troubleshooting for information on how to resolve a variety of common problems with the display and related SMART products.

Contacting your reseller for additional support

If an issue you're experiencing with the display persists or isn't addressed in this chapter or the knowledge base, contact your authorized SMART reseller (smarttech.com/where) for support.

Your reseller might ask you for the display's serial number. The serial number is on a label on the left side of the display.
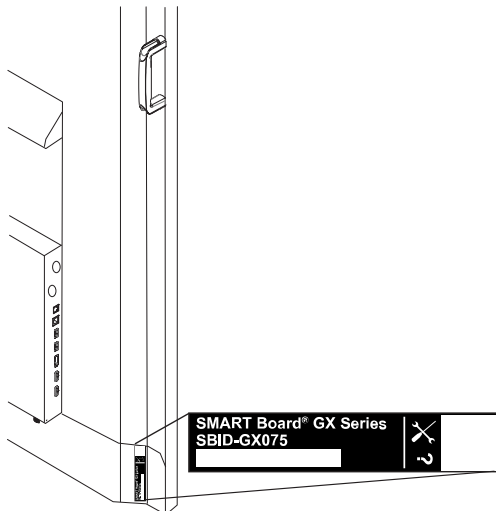
> **Tip**
>
> Scan the QR code on the label to view the SMART Board GX series interactive display support pages on the SMART website.

Appendix A **Adjusting display settings**

Accessing the display's settings

You can access the display's settings by pressing the **Settings** button ⚙ on the front control panel, the remote control, or the floating toolbar.

On the front control panel and the remote control, the Settings button is context-sensitive. Depending on the currently selected input, it opens either the main system settings, or the video input source settings. See *Source settings* on page 74. The Settings button on the floating toolbar always opens the main system settings menu.

The Settings dialog box includes the following menu options:

Option	Setting	Function	Notes
	Network	Configure network and Wi-Fi settings.	See › *Network settings* below.
	Date, time, and language settings	Change the date and time format or language setting.	See › *Date, time, location, and language settings* on page 67.
	System settings and Apps	Configure system settings, app permissions, and access to remote file storage.	See › *System settings and Apps* on page 67. If settings lock is enabled, only admins who have the settings passcode can access the system settings. See › *Lock control* on page 70.
	Lock controls	Disable or Enable various controls.	See › *Lock control* on page 70.
	Power settings	Configure when the display turns on or off.	See › *Power settings* on page 71.
	About	Information about the display.	See › *About* on page 71.

Exiting the display's settings

Press the **Home** 🏠 button on the front control panel.

Network settings

Option	Values	Function	Notes
▸ **Wi-Fi**			
• Wi-Fi switch	Enable Disable	Enables or disables connecting to a network wirelessly.	Turn on Wi-Fi to discover networks.
• Network list	N/A	Shows information about available Wi-Fi networks.	The display will automatically reconnect to a previously connected network unless removed using *Forget*.
• Install certificates	N/A	Installs an SSL certificate for wireless network access.	N/A

Option	Values	Function	Notes
• Add network	SSID Security Password	Manually connect to a hidden wireless network.	For the network you're connecting to: • Add the SSID • Select a security protocol • Enter the password
▸ **Ethernet**			
• Connect	Enable Disable	Enables or disables connecting to a network.	N/A
• IP settings	N/A	Enables configuration of the display's IP settings.	Displays the IP address DHCP (automatic) or manual (static).
• DHCP	Enable Disable	Enables the display to obtain an IP address automatically	N/A
• Static	Enable Disable	Enables the display to be assigned a static IP address	Use the display's pop-up keyboard to type the IP address, Gateway address, Network prefix length, and DNS server address.
• MAC address	N/A	Shows information about the network the display is connected to.	N/A
• IP address	N/A	Displays the unique address of the Ethernet adapter.	N/A
• Proxy Settings	None Manual	N/A	When *Proxy Settings* is set to *Manual*, additional settings appear for entering the *Host name* of the proxy server, *Port of proxy server*, and *Do not apply proxy to the following websites:*.
▸ **Hotspot**			
• Hotspot switch	Enable Disable	Enables or disables the display's Wi-Fi hotspot.	The display must be connected to an Ethernet network to provide a Wi-Fi hotspot. **Note** The display's Wi-Fi connection will be disabled when providing a Wi-Fi hotspot.
• Hotspot name	N/A	Sets the hotspot name.	Keep the default hotspot name or use the display's on-screen keyboard to type a new one.
• Security	None WPA2 PSK	Set an encryption method for the display's Wi-Fi hotspot.	WPA2-PSK is the preferred security option.
• Password	N/A	Set a password for the display's Wi-Fi hotspot.	Use the display's pop-up keyboard to type a password.
• Show password	N/A	N/A	Select to view password.

Option	Values	Function	Notes
• 5G	5 GHz	Set a frequency band for the display's Wi-Fi hotspot. If *5 GHz* is not selected, a default frequency band of *2.4 GHz* is used.	The display's *5 GHz* and *2.4 GHz* Wi-Fi hotspot frequency bands are not available simultaneously.
• Proxy Settings	None Manual	Leave as None unless your organization uses a proxy server – which requires manual configuration – to access the internet.	When *proxy* is set to *manual*, additional settings are displayed to enter the *Host name* of the proxy server, *Port of proxy server*, and *Do not apply proxy to the following websites:*

Date, time, location, and language settings

Option	Values	Function	Notes
▶ **Date settings**			
• Set date and time automatically	Enable Disable	Sets the display's date and time automatically.	This is based on your region and time zone settings. The display synchronizes with network time servers on the internet.
• 24-hour	Enable Disable	Shows the display's time using the 24-hour clock.	Default setting is *Disable* and shows a 12-hour clock with AM/PM indicators.
• Date settings	N/A	Sets the display's date.	Disable **Set date and time automatically** to set the date manually.
• Time settings	N/A	Sets the display's time.	Disable **Set date and time automatically** to set the time manually.
• Time zone settings	N/A	Sets the display's time zone.	N/A
▶ **Language**			
• Keyboard and input method	N/A	Enables you to choose which of the installed keyboards and input methods are active. The Android AOSP keyboard is the default keyboard and the only pre-installed keyboard.	N/A
• Current input method	Android Keyboard (AOSP)	Sets the on-screen keyboard option. **Note** Android Keyboard (AOSP) is currently the only input method available.	Tap the current input method to access further settings.
• Android Keyboard (AOSP)	N/A	Additional options for the Android keyboard.	N/A
• Language	[Languages]	Sets the language for the display	N/A

System settings and Apps

Option	Values	Function	Notes
▶ **System Settings**			

Option	Values	Function	Notes
• Wallpaper	N/A	Sets the background image on the display.	• Only .png files are supported. • Save the wallpaper file to a USB drive and insert it into the USB port. See › *Front connector panel* on page 53.
• Lock screen background	N/A	Sets the background image on the display's Lock screen.	• Only .png files are supported. • Save the image file to a USB drive and insert it into the USB port. See › *Connecting USB drives and other peripherals* on page 43.
• No Signal Background	N/A	Select a new image to replace the default that appears on the screen when no video signal is present.	• Only .png files are supported. • Save the background image file to a USB drive and insert it into the USB port. See › *Connecting USB drives and other peripherals* on page 43.
• Days remaining	Enable Disable	Enable a daily countdown timer to appear in the top-left corner the display's screen.	N/A
• switch	Enable Disable	Enable or disable the countdown timer	N/A
• title	N/A	Give the countdown timer a title.	N/A
• deadline	N/A	The date to which the timer is counting down.	N/A
• save	N/A	Save the timer settings.	N/A
• Lock Passcode	N/A	Set a six-digit passcode to unlock the lock screen.	The passcode is set during the display's initial setup. ⓘ **Important** The display's Lock screen feature is enabled only when a passcode is set.
• Bluetooth	Enable Disable	Enables Bluetooth enabled devices to connect to the display.	When enabled, the display searches for available Bluetooth devices.
• Boot lock screen	Enable Disable	Enables or disables display functions on startup.	When Boot lock screen is enabled, a password must be entered after startup to enable display functions.

Option	Values	Function	Notes
Touch sounds	Enable Disable	Enables or disables the display touch interaction sounds.	When touch sounds are disabled, the Android system does not produce audible clicks during interaction, such as selecting apps and changing settings. This option doesn't disable sounds from installed applications, such as using an on-screen keyboard in a web browser.
• Restore factory settings	N/A	Resets all options to their default values.	Only administrators should reset the display's to factory settings.
• Check for updates automatically	Enable Disable	Enables or disables checking for and downloading updates for the display's firmware.	Enabled by default. The display will check for updates at startup. If this option is disabled, check for updates manually. See › *Appendix A Adjusting display settings* on page 63.
• Check for updates	N/A	Checks for updates to the display's firmware.	If an update is available, a message appears on screen asking whether the user wishes to install it. **Note** The display must be connected to the internet to check for system software updates. Check the display's network settings. See › *Network settings* on page 64.
▸ **Apps**			
• App permissions	N/A	Change permissions for the apps installed on the display, such as what an app is permitted to do and access.	N/A
• Disable all app notifications	Enable Disable	Prevent all apps from providing a pop-up message on the screen.	N/A
• Disable 3rd party apps from connecting to the internet	Enable Disable	Prevent the WPS office, E-Share, and iMirror apps from connecting to the internet.	If this option is enabled, some features of third-party apps might not work correctly.
• Disable SMART apps from connecting to the internet	Enable Disable	Prevent the Whiteboard, Overlay, and Vote apps from connecting to the internet.	If this option is enabled, some features of SMART apps might not work correctly.
• Downloaded apps	N/A	Provides information about the apps that have been downloaded and installed on the display.	Clicking each app provides additional information and options, including an option to allow or prevent pop-up notifications from the app. (allowed by default).

Option	Values	Function	Notes
• System apps	N/A	Provides information about the apps supplied as part of the display's operating system.	Clicking each app provides additional information and options, including an option to allow or prevent pop-up notifications from the app. (allowed by default).
▶ **Accounts**			
• Google Drive	Add Delete	Configure the display to save or retrieve items from a Google Drive account. Requires a Google account.	N/A
• OneDrive	Add Delete	Configure the display to save or retrieve items from OneDrive account. Requires a OneDrive account.	N/A

Lock control

Option	Values	Function	Notes
▶ **Lock control**			
• Remote lock	Enable Disable	Enables or disables the buttons on the display's remote control. (The power button is always enabled.)	An on-screen message appears if a user tries to use the remote control when the *Remote Lock* option is enabled.
• Touch lock	Enable Disable	Enables or disables the display's touch recognition.	A Lock icon appears on the display when touch recognition is disabled.
• Keypad lock	Enable Disable	Enables or disables all buttons on the display's front control panel.	An on-screen message appears if the user tries to use the front control panel buttons when the *Keypad Lock* option is enabled.
• Intelligent screen saver	Enable Disable	Sets a timer to enable a dynamic screen saver designed to reduce the risk of image burn-in.	N/A
• Toolbar Controls	N/A	Drop-down menu.	N/A
• Side Toolbar	Enable Disable	Enables or disables the gesture commands for accessing the side bar menu.	N/A
• Bottom Toolbar	Enable Disable	Enables or disables the gesture commands for accessing the bottom toolbar menus and floating menus.	N/A
• Floating Toolbar	Enable Disable	Enables or disables the gesture commands for accessing the side bar menu, bottom bar menus and float menus.	N/A

Option	Values	Function	Notes
• Room Control Lock	Enable Disable	When enabled, the display can not be controlled remotely using an RS–232 connection.	N/A
• Settings Lock	Enable Disable	Create an admin passcode users must enter to change the settings.	This admin passcode is also required for using the front panel and remote control settings buttons. The admin passcode is not the same as the user's lock passcode.

Power settings

Option	Values	Function	Notes
• Wake On LAN	Enable Disable	Enables or disables waking the display when it receives a Magic Packet via the network. **Note** The display's power consumption may increase when *Wake On Lan* is enabled.	N/A
• Wake from Source	Enable Disable	Enables or disables automatic waking of the display when a connected computer wakes or an active analog video signal (for example, VGA) is detected.	N/A
• Timer for shutdown	Enable Disable	Enable or disable an automatic standby timer.	N/A
• Shutdown time	Time of day Day(s) of week	Set a time of day, and specific days of the week the display will shut down. A 30-second countdown appears before the display shuts down.	Only available when the *Timer for shutdown* option is enabled.

About

Option	Values	Function	Notes
• Device name	N/A	Displays the device name.	N/A
• Serial number	N/A	Shows the display's serial number.	N/A

Option	Values	Function	Notes
• Running memory	N/A	Shows how much RAM is installed in the display and how much is currently in use.	Close or uninstall third-party applications if available RAM gets too close to zero.
• Storage space	N/A	Shows how much storage memory is available and how much is currently in use.	Delete saved documents, image, or video files, or uninstall third party applications if available storage memory is low.
• Screen resolution	N/A	Shows the display's current screen resolution.	N/A
• Android version	N/A	Shows the current version of the display's Android operating system.	N/A
• System version	N/A	Shows the current version of the display's firmware.	N/A
• Touch frame version	N/A	Shows the current version of the touch system firmware.	N/A

Appendix B **Adjusting source, image mode, audio mode, and menu settings**

Opening the display's source, image mode, audio mode and menu settings

1. Open the **Side Toolbar** menu by sliding either of the Side Toolbar menu handles ⨠ (located either side of the screen) toward the center of the screen.

   The Side Toolbar menu opens.

2. Tap the **Input Select** icon 🖥.

   The Source Settings dialog box appears.

Note

If setting lock is enabled, only admins can access the source settings.

See › *Appendix B Adjusting source, image mode, audio mode, and menu settings* above

Exiting the display's source, image mode, audio mode, and menu settings

Press the **Home** 🏠 button on the front control panel.

Source settings

Option	Values	Function	Notes
▸ **All Source**			
• Select an input source	VGA AV YPBPR OPS DP HDMI HDMI1 HDMI2 ANDROID USB-C	Select a connected computer or other device's input source to view on the display.	Three dots ••• appear below inputs (USB Type-C, HDMI, HDMI 1, HDMI 2, OPS and DP) with a connected device. If the display's input source is set to HDMI2 and a computer is connected to the HDMI2 input, the display wakes automatically whenever the computer wakes. **Note** Input sources that are locked and prevented from being selected will be disabled.
▸ **Source setting**			
• Automatic source switch	Enable Disable	Enables or disables automatic connection to an active source or switching automatically when a new source is connected.	N/A
• Source Priority	1, 2, 3, 4, 5, or 6	Sets the priority of input sources. A new input source will only become the primary source if it has a priority higher or equal to the current input source.	This option is only available when *Automatic Source Switch* is enabled.
• Source Lock	Locked Unlocked	Prevent selection of an input source.	When Android is locked out, the following functionality is greyed out and disabled: Floating Menu • All options except back, settings, and input selection are disabled. Remote Control • Home button is disabled. Front Control Panel • Home button is disabled. See › *Appendix B Adjusting source, image mode, audio mode, and menu settings* on the previous page

Option	Values	Function	Notes
• Boot source	Last Source VGA AV YPBPR OPS DP HDMI HDMI 1 HDMI 2 TYPEC ANDROID USB-C	Select which video source will be used on startup. Any sources locked out will be greyed out.	The Android Home screen is the default input. You can lock out Android and have the panel boot directly to an external input. See › *To disable the embedded OS* on page 86
• Automatic no-signal shutdown	Disabled 5 minutes 15 minutes 30 minutes	Set how long the display waits before shutting down when there is no input signal.	This setting does not apply to a device installed in the display's OPS accessory slot. The display's EcoStar capability will turn the display off after one hour even when the "No Signal Automatic Shutdown" feature is disabled.

Image, audio, and menu setting

Access the *Image mode*, *Voice mode*, and *Menu* settings by tapping the ▤ icon in the lower right corner of the *All Source* or *Source Setting* menu screen.

Use the ◁ and ▷ icons to move through the menu pages.

Option	Values	Function	Notes
▸ **Image mode**			
• Image mode	ECO PC Eye Pro Standard Bright room Soft	Sets the color properties of the screen image for the currently active input source. Does not apply to the 'Android' input source (Home screen). **Note** ECO is the only value that enables further adjustment of color settings.	ECO is the default setting and is adjustable.
• Contrast ratio	1 to 50	Sets the difference in brightness between the lightest and darkest parts of the image.	Only adjustable if the Image mode is set to *ECO*.
• Brightness	1 to 50	Sets the overall brightness of the image.	Only adjustable if the Image mode is set to *ECO*.

Option	Values	Function	Notes
• Tone	1 to 50	Sets the color tone of the image.	Only adjustable if the Image mode is set to *ECO.*
• Sharpness	1 to 50	Sets the sharpness of the image.	Only adjustable if the Image mode is set to *ECO.*
• Saturation	1 to 50	Set the color saturation of the image.	N/A
• Color temperature	Standard Warm Cool	Sets the color temperature of the image.	Warm color temperatures will appear more reddish, while cool color temperatures appear more blueish.
• Zoom mode	16:9 4:3	Sets the image's aspect ratio.	The display's native aspect ratio is 16:9. Selecting a 4:3 aspect ratio will result in unused black areas on the left and right sides of the displayed image.
▶ **Audio mode**			
• Volume	N/A	Sets the display's volume	N/A
• Sound equalization	1 to 50	Sets the L/R balance of the display's built-in speakers.	N/A
• Bass	1 to 50	Sets the bass level.	N/A
• Treble	1 to 50	Sets the treble level.	N/A
• Audio output	Speakers External device	Sets the display's audio output source.	*Speakers* is the default setting and enables audio output from the display's built-in speakers. When *External device* is enabled, the display's built-in speakers are disabled and audio out from the display's *Audio Out* connector is enabled. Fixed digital audio out is also enabled on the S/PDIF out port.
▶ **Menu setting**			
• Backlight	1 to 100	Sets the backlight level.	N/A
• Auto backlight	Enable Disable	Enables or disables the display's automatic backlight feature.	The ambient light sensor can detect the room brightness and adjust the display's screen brightness. **Tip** If your display's brightness continues changing unexpectedly, disable the *Auto backlight* option.
• HDMI CEC	Enable Disable	Enables or disables the display's HDMI-CEC (HDMI Consumer Electronics Control) feature.	N/A

Option	Values	Function	Notes
• HDMI EDID	EDID 1.4 EDID 2.0	Sets the HDMI-EDID version of the display's active HDMI connector to EDID 1.4 or EDID 2.0. **Note** EDID 1.4 is the default.	When EDID 1.4 is selected, the display will present itself as an HDMI 1.4 compliant device. When EDID 2.0 is selected, the display will present itself as an HDMI 2.0 compliant device. **Note** This setting can be applied differently to each HDMI input source.
• HDR	Auto Low Middle High Reference mode	Enable or disable High Dynamic Range display information when connected to external display.	If the source device also supports HDR, changes to the HDR option can increase the variance between dark and bright images.
• HDMI OUT	1920 × 1080 3840 × 2160	Sets the HDMI out resolution.	Ensure the device that receives the display's HDMI out signal matches the selected output resolution. For best results, make sure the device that receives the display's HDMI out signal uses the same resolution settings as the display. **Tip** Use 1920 × 1080 if the screen resolution of the connected device isn't known.
• Eco Reset	N/A	Resets the display's settings to the most energy efficient modes.	N/A

Appendix C **Managing the display using RS-232**

You can connect an RS-232 cable from a computer or a control system's serial output to the display's RS-232 in connector to remotely select video inputs, turn the display on or off, and get information about the display's current settings, such as volume and power state.
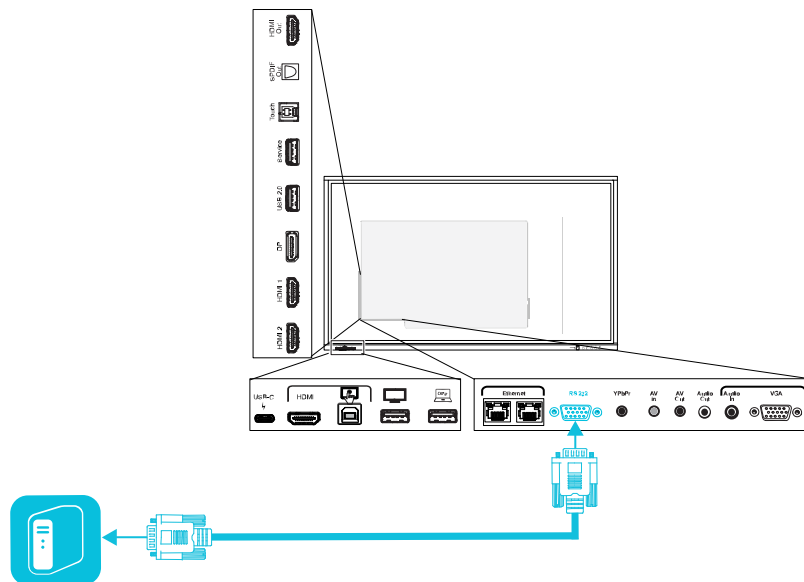
> ⚠ **Important**
>
> Use only a standard RS-232 cable. Do not use a null modem cable. Null modem cables typically have ends of the same type.

> **Tip**
>
> SMART also offers SMART Remote Management cloud-based device-management software, which you can use to manage SMART Board interactive displays with iQ and devices running Windows, Chrome™ OS, Android, and iOS operating systems. For more information, see <u>SMART Remote Management</u>.

Enabling room control on the display

You must enable room control on the display before sending commands to the display.

1. Turn on the display.

2. Press the **Settings** button on the front control panel.

    The settings menu appears.

3. Tap the **Lock control** icon and disable **Room Control Lock**.

4. To exit the settings menu, tap the screen.

Configuring the computer's serial interface settings

Configure the computer's serial interface before sending commands to the display.

To configure the computer's serial interface

1. Turn on the display.

2. Turn on the computer, and then start the serial communications program or terminal emulation program.

3. Activate local echo.

4. Configure the serial interface settings using the following values, and then press ENTER.

Baud rate	38400
Data length	8
Parity bit	None
Stop bit	1

5. Send a carriage return character (<CR>) to the display. An error message should appear.

    Note

    If no message appears, the serial interface isn't configured correctly. Repeat steps 3 and 4.

Commands and responses

To access display information or to adjust display settings using the room control system, type commands and send a carriage return (<CR>) character or press ENTER, and then wait for a response from the display.

A valid command will return **k01y<CR>** and an invalid command will return **k01n<CR>**.

If you type a command that the room control system doesn't recognize, you receive an invalid command response.

Correct

```
k01gi000<CR>

Now ON<CR>
k01y<CR>

>
```

If you type a command that the room control system doesn't recognize, you receive an invalid command response.

In the example below, the user typed **k01gi00<CR>** instead of **k01gi000<CR>**.

Incorrect

```
k01gi00<CR>

Now ON<CR>
k01n<CR>

>
```

Notes

- Use ASCII formatted commands.

- Commands aren't case-sensitive and extra spacing is ignored.

- In many terminal applications on a computer, you can use the BACKSPACE key when typing commands.

- Review each entry carefully before sending a command to the display.

- Don't send another command until you receive a response. If there is no response, send a carriage return character (<CR>) to the display. If the display is ready to receive commands, it will show a valid or invalid response after receiving the carriage return.

To retrieve a setting's current value

Use a query command such as the following example that gets the display's power state.

Response when the display is on:

```
k01gi000<CR>

Now ON

>
```

Response when the display is in Standby mode:

```
k01gi000<CR>

Now Standby

>
```

To increase or decrease the value of a setting

Use this command to increase the volume in steps.

This example increases the volume by 1 (repeat to increase further):

```
k01sP201<CR>

k01y<CR>

>
```

This example decreases the volume by 1 (repeat to decrease further):

```
k01sP200<CR>

k01y<CR>

>
```

Power states

The display has three power states:

Power state	Description
ON	The display is in normal operating mode.
READY	The screen is off, but the display is ready to turn on when: a user presses the **Power** button ⏻ on the front control panel or the remote control.
STANDBY	The screen is off, and the display is in a low power state. The display enters READY or ON state when: a user presses the **Power** button ⏻ on the front control panel or the remote control.

Commands

Function	Set command	Get command	Response
Power state	k01sA00[Value]<CR> Where [Value] is one of the following: • 0 (standby) • 1 (on)	k01gi000<CR>	Now [Value]<CR> Where [Value] is one of the following: • ON • Standby
Input	k01sB0[Value]<CR> Where [Value] is one of the following: • 00 (ATV) • 01 (AV) • 03 (YPBPR) • 04 (HDMI) • 06 (VGA) • 07 (OPS1) • 09 (Display Port) • 10 (DTV) • 0A (Home) • 0C USB-C • 14 (HDMI1) • 24 (HDMI2)	k01gh000<CR>	k01rh[Value]<CR> Where [Value] is one of the following: • X01 (AV input) • X03 (YPBPR) • X04 (HDMI) • X14 (HDMI1) • X24 (HDMI2) • X07 (OPS1) • X09 (Display Port) • 10A (Home screen) • X1C (USB-C) The "X" in the response can be either "0" or "1". "0" indicates that the video input does NOT have a video signal. "1" indicates that the video input DOES have a video signal.
Picture size	k01sM004<CR>	N/A	N/A
Volume	k01sP[Value]<CR> Where [Value] is one of the following: • 0–100 > **Note** > Volume level is set by entering a number between 0 and 100 • 200 (–1 level) • 201 (+1 level)	k01gf000<CR>	k01rf[Value]<CR> Where Value is a number between 0 and 100.
Mute	k01sQ[Value]<CR> Where [Value] is one of the following: • 0 (off) • 1 (on)	k01gg000<CR>	k01rg[Value]<CR> Where [Value] is one of the following: • 000 (off) • 001 (on)

Function	Set command	Get command	Response
Number	k01sT[Value]<CR> Where [Value] is one of the following: • 0–009 > **Note** > Number value is set by entering a number between 0 and 009.	N/A	N/A
Key	k01sU[Value]<CR> Where [Value] is one of the following: • 000 (up) • 001 (down) • 002 (left) • 003 (right)	N/A	N/A
Freeze	k01s_[Value]<CR> Where [Value] is one of the following: • 000 (off) • 001 (on)	N/A	N/A
Device name	N/A	k01gr000<CR>	k01rr[Value]<CR> Where [Value] is one of the following with "XX" representing the separate characters for a device name: • 1XX • 2XX • 3XX
Mac address	N/A	k01gs000<CR>	k01rs[Value]<CR> Where [Value] is one of the following with "XX" representing the six separate hexadecimal bytes for a MAC address (e.g. "XX:XX:XX:XX:XX:XX"): • 1XX • 2XX • 3XX • 3XX • 3XX • 3XX

Appendix D **Enrolling the display in SMART Remote Management**

Your SMART Board GX series interactive display has a built-in feature that enables you to enroll the display with your organization's SMART Remote Management account. When you enroll the display, you can use SMART Remote Management to centrally control the display's features and settings, such as:

- blocklists and allowlists

- Wi-Fi

- wallpaper

- lock screen

- available apps

See > support.smarttech.com/docs/enrolllingsrm

Appendix E **Disabling and enabling the embedded OS and other inputs**

Admins can disable specific inputs, including the embedded Android OS. This is ideal for environments that use only connected devices. Admins can also reenable inputs that were previously disabled.

Note

Disabling and reenabling the embedded OS requires firmware version 4K2.0.0 or later.

Opening the display's source, image mode, audio mode, and menu settings

1. Open the **Side Toolbar** menu by sliding either of the Side Toolbar menu handles ⟫ (located either side of the screen) toward the center of the screen.

2. Tap the **Input Select** icon 🖥.

   The *Source Settings* dialog appears.

Note

If the Setting Lock option is enabled, only admins can access the source settings.

Disabling inputs

To disable the embedded OS

1. In **Source Settings** › **Source Lock**, select **Android** to disable the embedded OS.

2. In **Source Settings** › **Boot Source**, select a new video input source to open when the display starts.

3. Tap **Confirm**.

4. If the display has not already restarted, restart it now.

The new video input source will open when the display restarts. When Android is disabled, the following features are no longer available:

- **Floating Menu**: All options except back, settings, and input selection are disabled.

- **Remote Control**: Home button is disabled.

- **Front Control Panel**: Home button is disabled.

To disable other inputs

To disable other inputs, select a different input under **Source Lock** and follow the same process.

Reenabling inputs

To reenable the embedded OS

1. In **Source Settings** > **Source Lock**, select **Android** to reenable the embedded OS.

2. Tap **Back**.

3. Under **Boot Source**, select **Android**.

4. Restart the display.

To reenable other inputs

To reenable other inputs, select a different input under **Source Lock**. and follow the same process.

See ⟩ *Source settings* on page 74

Certification and compliance

Federal Communication Commission interference statement

FCC
Supplier's Declaration of Conformity
47 CFR § 2.1077 Compliance Information
Unique Identifier: IDGX65-1, IDGX75-1, IDGX86-1
Responsible Party – U.S. Contact Information
SMART Technologies Inc.
2401 4th Ave, 3rd Floor
Seattle, WA 98121
compliance@smarttech.com

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

Note

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 instruction manual, 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.

⚠ **Caution**

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Restriction

Operations in the 5.15-5.25 GHz band are restricted to indoor usage only.
IEEE 802.11b or 802.11g operation of this product in the USA is firmware limited to channels 1 through 13.

Radiation exposure statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the antenna of this device and all nearby persons. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

Innovation, Science and Economic Development Canada statement

This device complies with RSS-247 of the Innovation, Science and Economic Development Canada Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

⚠ **Caution**

(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and

(iii) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.

(iv) Users should also be advised that high-power radars are allocated as primary users (i.e., priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Radiation exposure statement

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the antenna of this device and all nearby persons. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.