



SMART Board® MX (V5) Plus

series interactive displays

Installation and maintenance guide

IDQR65-A | IDQR75-A | IDQR86-A



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SMART®

Important information

Before installing or using a SMART Board® MX (V5) Plus series interactive display, review the important information included with the display. If you cannot find this information, it is available online.

See > docs.smarttech.com/kb/171931

Learn more

This guide and other resources for SMART Board MX (V5) Plus 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.



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July 23, 2026

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Chapter 1 **Welcome**

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The SMART Board MX (V5) Plus series interactive display is the hub of your classroom.

About this guide

This guide explains how to install and maintain a SMART Board MX (V5) Plus series interactive display. It includes the following information:

- How to install the display and maintain it for years of use
- How to connect devices
- How to update the display
- Where to find troubleshooting information

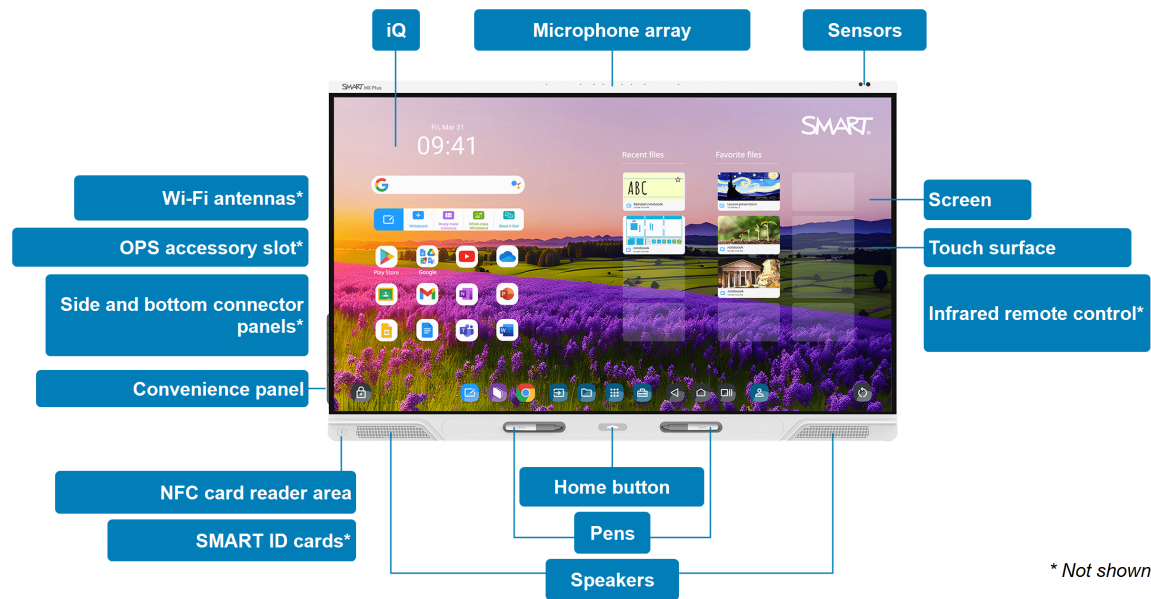
In addition, this guide includes information about the display’s support for RS-232 management and SMART Remote Management.

This guide is intended for those who install and maintain displays in their organizations. Other documentation and resources are available for those who use displays.

See > *More information* on page 8

About the display

If you need to install or maintain the display, take this tour to familiarize yourself with its components:



Component	Description	In this guide
iQ	iQ is the SMART Board MX (V5) Plus series interactive display's embedded Android operating system. iQ runs on Android 13 (or later) and is EDLA-licensed by Google™. When you turn on the display for the first time, you're prompted to configure iQ. By default, the display downloads and installs iQ updates automatically. You can also download and install updates manually.	See > Page 12 See > Page 13
Screen	The display comes in the following screen sizes: • 65" • 75" • 86"	
Touch surface	The display's HyPr Touch™ with Advanced IR technology supports up to 50 touch points (depending on the connected device's operating system).	

Component	Description	In this guide
Pens	The display comes with two pens, which users can use to write or draw on the screen. Replace a pen if its nib becomes worn to prevent damage to the screen or impairment of pen and finger detection.	
Sensors	The display includes the following sensors: • Proximity, which can detect people up to approximately 16' (5 m) away when the display is in an energy saving mode and turn on the display • Ambient light, which can detect the brightness of the room and adjust the screen's brightness • Infrared, which works with the infrared remote control You can enable or disable the proximity and ambient light sensors.	
Infrared remote control	When you first install and configure the display, you can use the infrared remote control to turn the display on or off, switch inputs, and view and change settings. After installation and configuration, you can give the remote to users for use with the display.	
Home button	Users press the Home button to return to the iQ home screen.	
Convenience panel	The convenience panel provides buttons for turning the display on and off, controlling the volume, freezing and unfreezing the screen, and muting and unmuting the microphone. It also includes connectors for USB peripherals and a computer or other input.	
Side and bottom connector panels	The side and bottom connector panels include connectors for multiple computers, peripherals, and other devices. They are typically used for room computers, peripherals, and other devices that are connected to the display all the time.	See > Page 27
OPS accessory slot	You can install a SMART OPS appliance, such as a SMART OPS PC module, in the OPS accessory slot.	See > Page 11

Component	Description	In this guide
Wi-Fi antennas	The display comes with Wi-Fi antennas. You can use Wi-Fi or Ethernet to connect the display to your organization's network. The display requires internet access (for downloading updates to iQ), as do Google services and some apps.	See > Page 11
Speakers	The display includes two integrated speakers and a subwoofer, designed to provide sound at the front of a room. As an alternative to using the integrated speakers and subwoofer, you can connect an external audio system.	See > Page 24
Microphone array	The display's built-in microphone array can be used with a conferencing app or in place of a connected computer's microphone.	
SMART ID cards	The display comes with two SMART ID cards, which users can use with the NFC card reader area to sign in to their SMART Accounts on the display.	
NFC card reader area	Users can sign in to their SMART Accounts by holding the provided SMART ID cards to the NFC card reader area.	

More information

In addition to this guide, SMART provides other documents for the display in the Support section of the SMART website (smarttech.com/support).

Scan the QR code on page 2 to view links to SMART Board MX (V5) Plus series interactive display documents and other support resources.

Chapter 2 Installing and maintaining the display

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Is this the first time you've installed or maintained a SMART Board interactive display?

If you haven't installed or maintained a SMART Board interactive display before, refer to the SMART Board interactive display installation and maintenance hub for general instructions and best practices for installing and maintaining a display, including:

- Moving the display to the installation site
- Mounting the display on a wall, floor stand, or mobile stand
- Configuring the display after installation
- Regularly cleaning and maintaining the display to keep it in the best possible condition

! Important

Before you clean the SMART product's screen, shut down or disconnect the computer. Otherwise, you may scramble the desktop icons or inadvertently activate applications when you wipe the screen.



See also > *SMART Board interactive display installation and maintenance best practices*
(docs.smarttech.com/kb/171035)

Installing the display

SMART recommends that only trained installers install SMART Board interactive displays.

Warning

Improper installation of a display can result in injury and product damage.

Caution

- Avoid setting up and using the SMART product in an area with excessive levels of dust, humidity, or smoke.
- Make sure an electrical socket is near the SMART product and remains easily accessible during use.
- 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.

Important

- There are critical software updates for the display that you need to install to ensure the display is fully functional and provides the best experience. Connect the display to a network with internet access to automatically download and apply these updates as well as future updates.
- Refer to the display's specifications for its normal operating power requirements, additional requirements, and other information.

Refer to the illustrated installation instructions included with the display for specific information about installing it. If you've misplaced these instructions, they're also available online.

See > *SMART Board MX (V5) Plus series illustrated installation instructions*
(docs.smarttech.com/kb/172022)

Installing SMART OPS appliances

The display includes an OPS accessory slot in which your organization can install a SMART OPS PC module.

See > support.smarttech.com/accessories/computing-modules-and-appliances

Caution

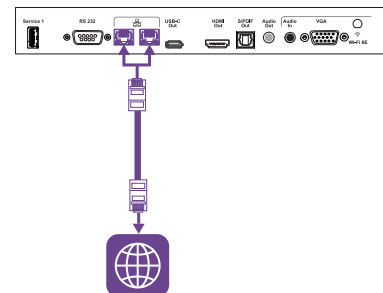
- Only SMART-provided OPS appliances are supported in SMART Board interactive displays. Third-party OPS appliances are not supported, and their use can lead to poor performance or damage to the display.
- Do not install or remove the OPS appliance while the display is turned on. First make sure the power switch on the back of the 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.)

Connecting to a network

Before connecting the display, your organization's network administrators need to configure the network to allow users to update the display's firmware automatically and to use all the iQ features.

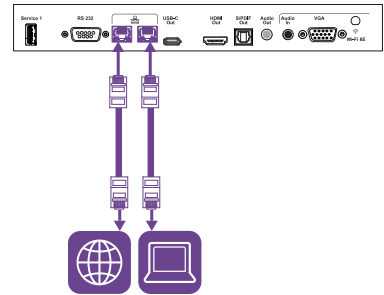
See > support.smarttech.com/docs/iq4networksetup

The display requires an internet connection for downloading software and firmware updates, and a number of the iQ apps require a network connection as well. You can connect to the network with Wi-Fi or with an Ethernet cable attached to one of the RJ45 jacks.



Tip

If you're using one of the display's RJ45 jacks to connect to a network, you can connect a computer to the other RJ45 jack to provide network access for the computer. This is particularly useful if only one wired network connection is available in the room. Network access is available when Networked Standby (sleep) is enabled in Settings but not when Standby (shutdown) is enabled.

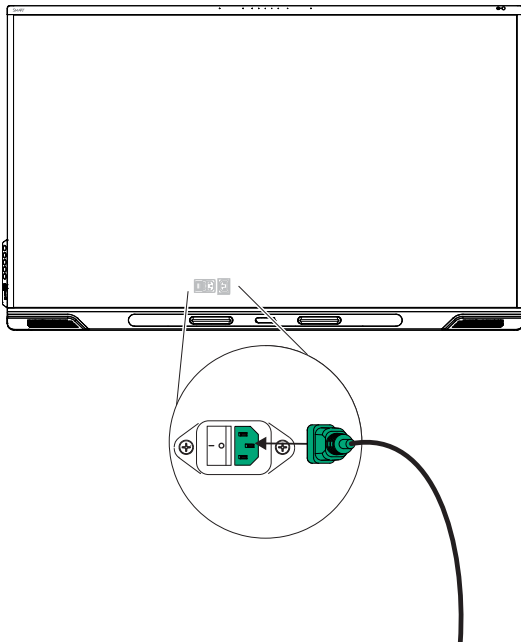


Connecting power and turning on the display for the first time

The final step in installing and configuring the display is to connect power, turn the display on, and configure iQ following the steps in the wizard.

To connect the display to power

Connect the supplied power cable 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.

To turn on the display for the first time and configure iQ

Important

The display needs an internet connection for downloading and installing important updates. Ask the network administrator to confirm that the network has been correctly configured for iQ.

See > *Connecting to a network* on page 11

1. Flick the switch beside the AC power inlet to the ON (I) position.
2. Follow the steps in the wizard to configure iQ.

See > support.smarttech.com/docs/iq4setup

Adjusting the display's settings

You might need to adjust the display's settings when you initially install it or while maintaining it.

See > support.smarttech.com/docs/iq4settings

Updating iQ system software

SMART periodically releases updates to iQ system software. Depending on how you configure iQ, these updates download and install automatically or need to be downloaded and installed manually.

See > support.smarttech.com/docs/iq4updates

Increasing the display's storage capacity

You can use a microSD card to increase the display's internal storage capacity. The microSD card's storage is combined with the display's internal storage so you can save additional files, media, and apps on the display.

SMART recommends a name brand microSD card with the following specifications:

- SDHC or SDXC flash memory
- Up to 80 MBps transfer speed
- U1 or higher UHS speed class
- C10 or higher video speed class
- Single partition

To increase the display's storage capacity

1. Remove the security cover over the display's microSD card slot (located on the side connector panel).
2. Insert an unformatted microSD card in the slot.

The display detects the inserted microSD card, formats it automatically, and makes it available as part of the display's internal storage capacity.

3. Verify that the microSD card was added successfully by reviewing the available internal storage in settings. The internal storage should include the amount from the microSD card.

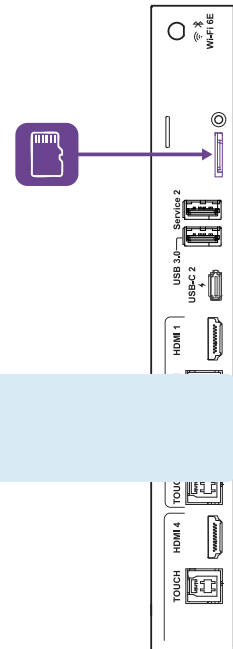
Example

128 GB (64 GB internal + 64 GB microSD card)

4. Keep the microSD card inserted in the slot and replace the security cover.

! Important

If the SD card is removed, the display might not turn on or data might be lost, including files and apps. To recover, reinsert the SD card or perform a factory reset.



Chapter 3 **Connecting computers and other devices**

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Warning

Ensure that any cables that cross the floor to the SMART product 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 or access online. Other SMART software is optional.

Included



SMART Notebook



SMART Product Drivers
and Ink

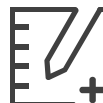
SMART Remote Management

SMART Remote
Management¹

Optional



Lumio



SMART Notebook Plus

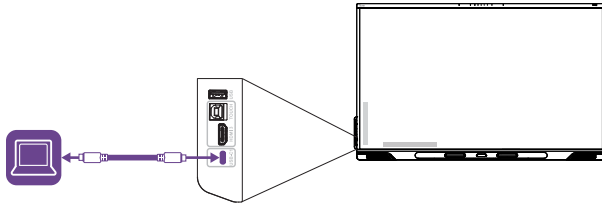
See > smarttech.com/downloads

Connecting room computers and guest laptops

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

¹Subscription for the length of the warranty

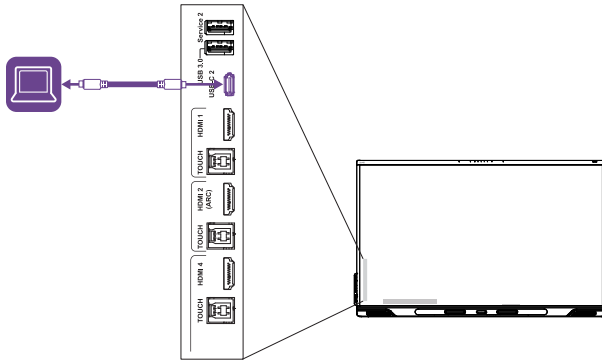
• **USB-C 1**



Video/audio/touch/network

Connector	USB-C 1
Standard	USB 3.2 Gen 1x1 (as DFP) Display Port 1.2.4-lane (as UFP)

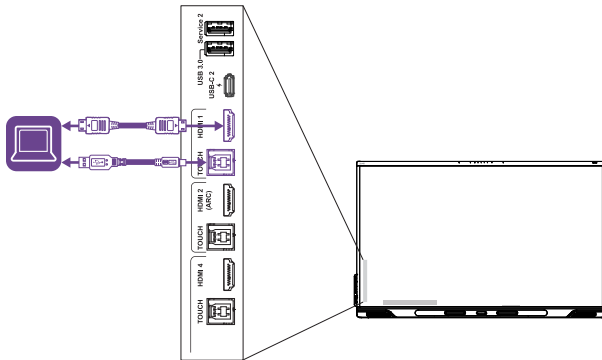
• **USB-C 2**



Video/audio/touch/network

Connector	USB-C 2
Standard	USB 3.2 Gen 1x1 (as DFP) Display Port 1.2.4-lane (as UFP)

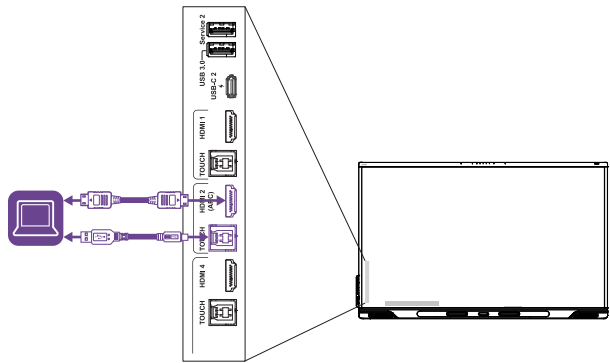
• **HDMI 1**



Video/audio

Connector	HDMI 1
Standard	HDMI 2.1
Touch	
Connector	Touch (USB Type-B)
Standard	USB 3.2 Gen 1

• **HDMI 2**



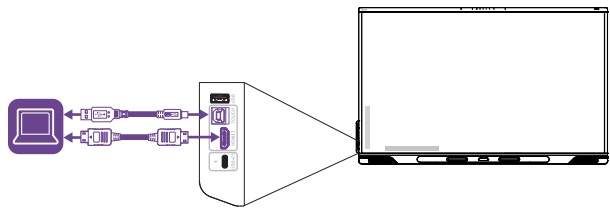
Video/audio

Connector	HDMI 2
Standard	HDMI 2.1

Touch

Connector	Touch (USB Type-B)
Standard	USB 3.2 Gen 1

• **HDMI 3**



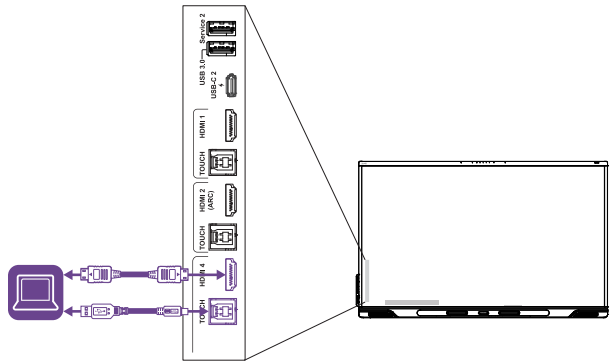
Video/audio

Connector	HDMI 3
Standard	HDMI 2.1

Touch

Connector	Touch (USB Type-B)
Standard	USB 3.2 Gen 1

• **HDMI 4**



Video/audio

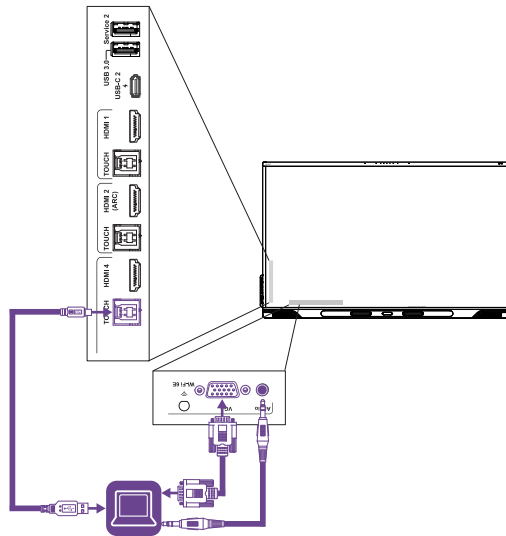
Connector	HDMI 4
Standard	HDMI 2.1

Touch

Connector	Touch (USB Type-B) ²
Standard	USB 3.2 Gen 1

²The HDMI 4 and VGA inputs share a USB Type-B receptacle.

- **VGA**

**Video****Connector** VGA**Standard** VGA**Audio****Connector** Audio In (Stereo 3.5 mm)**Standard** Stereo 3.5 mm**Touch****Connector** Touch (USB Type-B)¹**Standard** USB 3.2 Gen 1

Caution

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 SMART product.

Notes

- A room computer or guest laptop connected to the display through a USB Type-B or Type-C receptacle has access to any networks connected to the display by Ethernet while the computer is the currently selected input on the display.

See > *Connecting to a network* on page 11

- Install SMART software on any computers you connect to the display.

See > *Installing SMART software* on page 16

- If a connected computer reports “Too many USB hubs” or “cannot start (code 10),” see the knowledge base article, [SMART Board interactive displays and USB tier structure use](#).

Viewing a connected computer's input

1. Connect the computer to the display.

2. Tap **Input**  on the Home screen.

OR

Press **Input**  on the remote control.

The input selection menu appears.

3. Tap the computer's input menu option.

Setting a connected computer's resolution and refresh rate

This table presents the recommended resolutions and refresh rates for the display's USB-C and HDMI inputs:

Resolution	Input aspect ratio	Mode	Refresh rate
3840 × 2160	16:9	UHD/2160p	59.94 Hz/60 Hz 50 Hz 29.97 Hz/30 Hz 25 Hz 23.98 Hz/24 Hz
1920 × 1080	16:9	FHD/1080p	59.94 Hz/60 Hz 50 Hz 29.97 Hz/30 Hz 25 Hz 23.98 Hz/24 Hz
1360 × 768	16:9	HD	60.015 Hz
1366 × 768	16:9	HD	60.015 Hz
1280 × 720	16:9	HD/720p	59.94 Hz/60 Hz 50 Hz 29.97 Hz/30 Hz 25 Hz 23.98 Hz/24 Hz
720 × 480	16:9	480p (DVD player)	60 Hz

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

Resolution	Input aspect ratio	Mode	Refresh rate
1920 × 1080	16:9	N/A	60.000 Hz
1600 × 1200	4:3	N/A	60.000 Hz
1360 × 768	16:9	N/A	60.015 Hz
1280 × 1024	5:4	SXGA 60	60.020 Hz
1024 × 768	4:3	XGA 60	60.004 Hz
		XGA 70	70.069 Hz
		XGA 75	75.029 Hz
800 × 600	4:3	SVGA 60	60.317 Hz
		SVGA 72	72.188 Hz
		SVGA 75	75.000 Hz
640 × 480	4:3	VGA 60	59.940 Hz

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

See also > support.smarttech.com/docs/resandrefreshrates

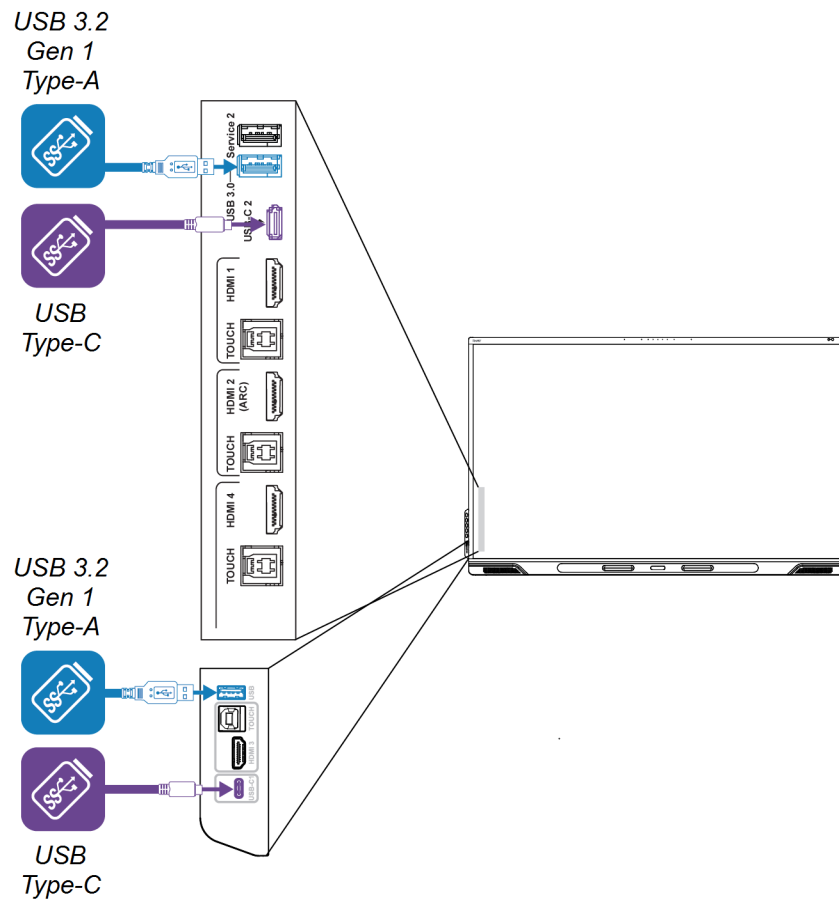
Connecting other devices

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

- USB drives, peripherals, and other devices
- A second SMART Board interactive display
- External displays
- External video sources
- External audio systems
- A SMART Ultra HD Camera
- Room control systems

Connecting USB drives, peripherals, and other devices

The display includes the following USB receptacles. You can connect USB drives, peripherals (such as keyboards), and other devices to these receptacles and use the devices with iQ, connected computers, and OPS modules installed in the OPS accessory slot.

**Note**

Not pictured is the USB Type-C receptacle at the top of the display used to connect a SMART Ultra HD Camera.

See > *Connecting a SMART Ultra HD Camera* on page 26

This table shows the supported USB speeds for each input:

Input	USB 2.0 Type-A	USB 3.2 Gen 1 Type-A	USB Type-C
iQ	Hi-Speed	SuperSpeed	SuperSpeed
USB-C 1	Hi-Speed	Hi-Speed	Hi-Speed
USB-C 2	Hi-Speed	Hi-Speed	Hi-Speed
HDMI 1	Hi-Speed	SuperSpeed	SuperSpeed
HDMI 2	Hi-Speed	SuperSpeed	SuperSpeed

Input	USB 2.0 Type-A	USB 3.2 Gen 1 Type-A	USB Type-C
HDMI 3	Hi-Speed	SuperSpeed	SuperSpeed
HDMI 4	Hi-Speed	SuperSpeed	SuperSpeed
VGA	Hi-Speed	SuperSpeed	SuperSpeed
OPS accessory slot	Hi-Speed	SuperSpeed	SuperSpeed

Notes

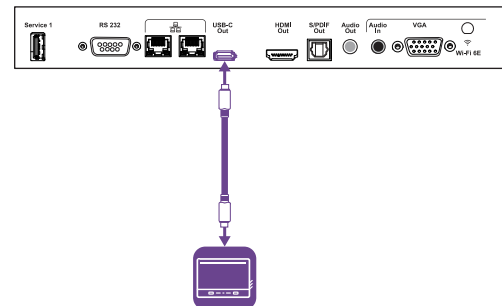
- Hi-Speed = 480 Mbps
- SuperSpeed = 5 Gbps
- You can charge devices using the display's USB Type-C receptacles:

Receptacle	Location	Maximum charging capacity
USB-C In 1	Convenience panel	65 W
USB-C In 2	Side connector panel	65 W
USB-C Out	Bottom connector panel	4.5 W

Connecting a second SMART Board interactive display

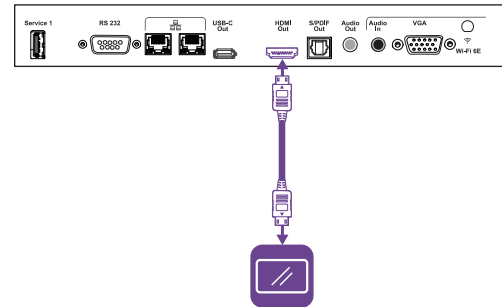
You can connect the SMART Board interactive display to a second display by connecting a USB cable from the first display's USB Type-C Out receptacle to one of the second display's USB Type-C In receptacles.

The same input appears on both displays, and users can interact with the input by touching, writing, drawing, or erasing on either display.



Connecting an external display

You can connect an external display using the HDMI Out connector on the connector panel. The external display will show the same image. This is useful when you're using the display in an auditorium or other large space where it would be beneficial to have a second display.

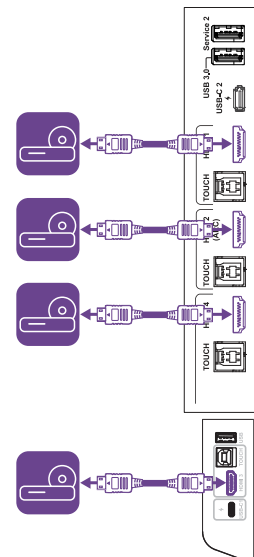


! Important

If the connected external display doesn't support HDCP, the image on the external display is limited to 480p resolution. For full resolution output, connect a display that supports HDCP.

Connecting an external video source

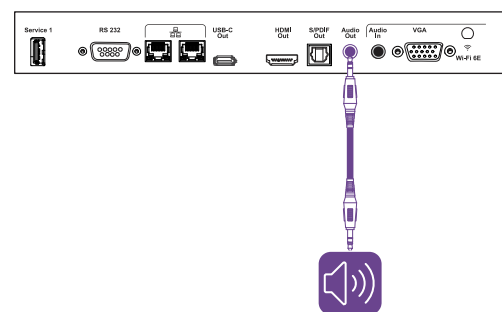
You can connect an external video source, such as a DVD player, media box, or cable box, to your display using an HDMI cable and any of the HDMI connectors on the display's connector panels. To view the source, switch to the connected HDMI input.



Connecting an external audio system

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

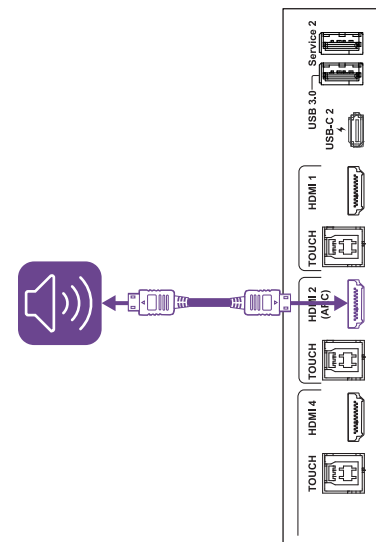
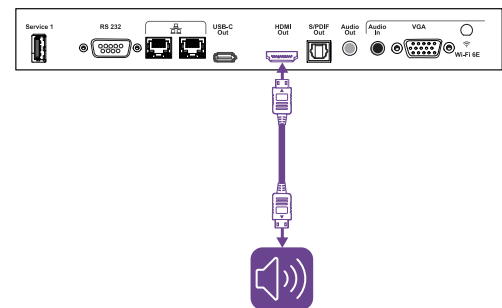
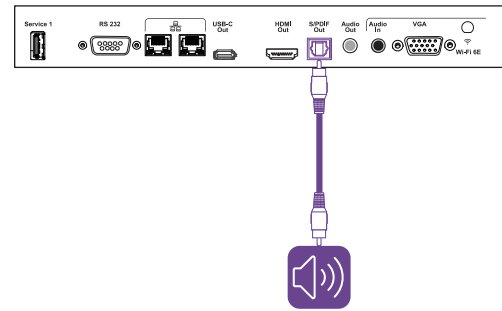
You can connect the display to an external audio system using the Stereo 3.5 mm Out connector. This disables the display's internal speakers. Alternatively, you can connect an external audio system directly to a room computer.



In addition to the Stereo 3.5 mm Out connector, the display provides a Sony/Philips Digital Interface (S/PDIF) Out connector. S/PDIF is a digital audio transmission medium. You need an audio system that has an S/PDIF input to decode this connection to analog. Most external sound bars include an S/PDIF connector.

You can also connect an external audio system to the display using the HDMI 2.0 Out connector on the bottom connector panel.

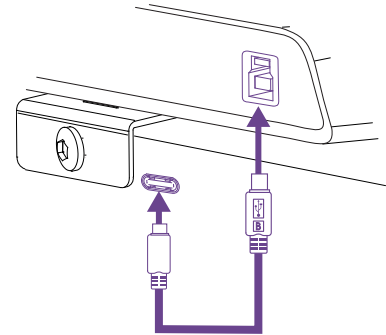
If you have an external audio system with HDMI ARC (Audio Return Channel) or eARC (Enhanced Audio Return Channel), you can output the display's audio to the audio system by connecting the display's HDMI In connector on the side connector panel to the HDMI Out connector on the audio system's receiver.



Connecting a SMART Ultra HD Camera

You can mount a SMART Ultra HD Camera on the top of the display and connect it to the USB Type-C receptacle located there.

See > *SMART Ultra HD Camera illustrated installation instructions* (docs.smarttech.com/kb/171858)



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 A Managing the display using RS-232* on page 32

Note

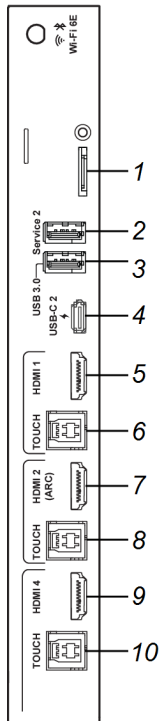
SMART Board interactive displays are not compatible with centralized remote control systems, such as a universal remote control.

Connector diagrams

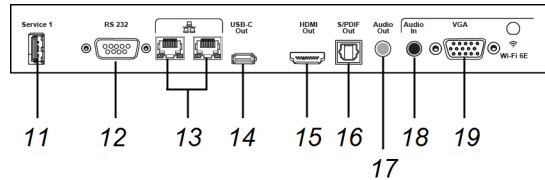
Side and bottom connector panels

This diagram and table present the connectors on the display's side and bottom connector panels:

Side



Bottom



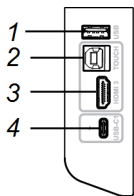
No.	Connector	Connects to	Notes
1	microSD	microSD card	This connector features a security cover to prevent theft of an installed microSD card. See > Page 13
2	USB 3.2 Gen 1 Type-A	N/A	This connector is a service port.
3	USB 3.2 Gen 1 Type-A	Supported USB drives, peripherals, and other devices	See > Page 21

No.	Connector	Connects to	Notes
4	USB Type-C	USB Type-C 2 input OR Supported USB drives, peripherals, and other devices	See > Page 16 See > Page 21
5	HDMI 2.1 In	HDMI 1 input (video and audio) OR External video source	See > Page 16 See > Page 24
6	USB 3.2 Gen 1 Type-B	HDMI 1 input (touch)	See > Page 16
7	HDMI 2.1 In	HDMI 2 input (video and audio) OR External video source OR External audio system	This connector supports HDMI ARC (Audio Return Channel) and eARC (Enhanced Audio Return Channel), which allow audio signals to travel between the display and the connected device and improve audio quality as a result. See > Page 16 See > Page 24 See > Page 24
8	USB 3.2 Gen 1 Type-B	HDMI 2 input (touch)	See > Page 16
9	HDMI 2.1 In	HDMI 4 input (video and audio) OR External video source	See > Page 16 See > Page 24
10	USB 3.2 Gen 1 Type-B	HDMI 4 input (touch) OR VGA input (touch)	If you have devices connected to both the HDMI 4 and VGA inputs' connectors, you will need to share a USB cable connection between the devices (assuming you want touch on both devices). See > Page 16
11	USB 2.0 Type-A	N/A	This connector is a service port.
12	RS-232	Room control system	See > Page 32
13	RJ45 (×2)	Network	See > Page 11

No.	Connector	Connects to	Notes
14	USB Type-C	Second SMART Board interactive display	See > Page 23
15	HDMI 2.1 Out	External display OR External audio system	See > Page 23
16	S/PDIF out	Digital audio output	See > Page 24
17	Stereo 3.5 mm Out	External audio system	See > Page 24
18	Stereo 3.5 mm In	VGA input (audio)	See > Page 16
19	VGA In	VGA input (video)	See > Page 16

Convenience panel

This diagram and table present the connectors on the display's convenience panel:



No.	Connector	Connects to	Notes
1	USB 3.0 Type-A	Supported USB drives, peripherals, and other devices	See > Page 21
2	USB 2.0 Type-B	HDMI 3 input (touch, microphone, camera, and other USB peripherals)	See > Page 16
3	HDMI 2.0 in	HDMI 3 input (video and audio) OR External video source	See > Page 16 See > Page 24
4	USB Type-C	USB Type-C 1 input OR Supported USB drives, peripherals, and other devices	See > Page 16 See > Page 21

Other connectors

This table presents the display's other connectors:

Location	Connector	Connects to	Notes
Top of the display	USB Type-C	SMART Ultra HD Camera	See > Page 26

Chapter 4 **Troubleshooting**

Troubleshooting the display and related SMART products

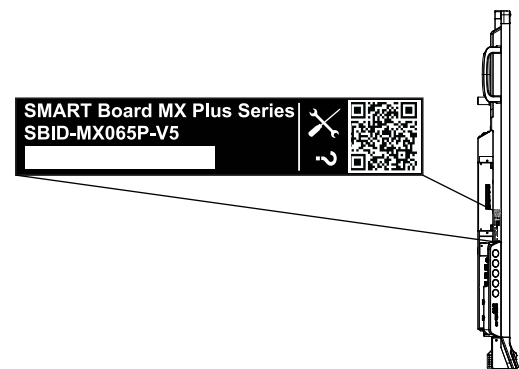
The Support section of the SMART website includes information about resolving a variety of common problems with the display and related SMART products.

See > support.smarttech.com/docs/mxplustroubleshooting

Contacting your reseller for additional support

If an issue you're experiencing with the display persists or isn't covered in the support section of the SMART website, 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 located on the left side of the display (pictured).



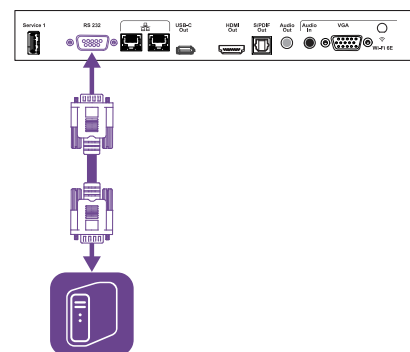
Tip

Scan the QR code on the label to view the SMART Board MX (V5) Plus series interactive display support pages on the SMART website.

Appendix A Managing the display using RS-232

Configuring the serial interface settings	33
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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.

Configuring the serial interface settings

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

To configure the computer or control system's serial interface

1. Turn on the display.
2. If you're using a terminal application on a computer, activate local echo to see what you're typing and sending to the display.
3. Configure the serial interface settings with the following values.

Baud rate	19200
Data length	8
Parity bit	None
Stop bit	1

4. Send a carriage return character (<CR>) to the display.

The display will show a command prompt (>) to indicate that the display can now accept commands.

Notes

- If you're using a terminal application on a computer, pressing ENTER should send a carriage return character (<CR>) but may also send a line feed character (<LF>), depending on your terminal application configuration.
- When you use a control system program instead of terminal application, all lines output from the display are preceded by a carriage return character (<CR>) and line feed character (<LF>) and then followed by a carriage return character (<CR>) and line feed character (<LF>).

Example

```
>set volume=0<CR>
<CR><LF>
volume=0<CR><LF>
>
```

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

See also > wikipedia.org/wiki/ASCII

Commands and responses

To access display information or to adjust display settings using the room control system, send a command after the command prompt (>), send a carriage return character or press ENTER, and then wait for the response from the display. Responses are preceded by a carriage return character (<CR>) and line feed character (<LF>) and then followed by a carriage return character (<CR>) and line feed character (<LF>). If no command prompt is present, send a carriage return character to the display. If the display is ready to receive commands, it will show a command prompt (>) when the carriage return is received.

Correct

```
>get volume  
volume=55  
>
```

In this example, the user used =-50 instead of -50.

Incorrect

```
>set volume=-50  
invalid cmd: setvolume=-50  
>
```

Notes

- Use ASCII formatted commands.
- Commands aren't case-sensitive and extra spacing is ignored.
- Review each entry carefully before sending a command to the display.
- Don't send another command until you receive the response and the next command prompt (>). If no command prompt is present, send a carriage return character (<CR>) to the display. If the display is ready to receive commands, it will show a command prompt after receiving the carriage return.

To retrieve a setting's current value

Use a `get` command.

This example shows how to get the volume:

```
>get volume  
volume=55  
>
```

To assign a value to a setting

Use a `set` command.

This example sets the volume to 65:

```
>set volume=65  
volume=65  
>
```

To increase or decrease the value of a setting

Use the `set` command to increase or decrease the value by a designated number.

This example increases the volume by 5:

```
>set volume+5  
volume=70  
>
```

This example decreases the volume by 15:

```
>set volume-15  
volume=55  
>
```

Power state commands

Get command	Set command	Response
get powerstate	set powerstate[Value] Where [Value] is one of the following: • =on • =standby • =off	powerstate=[Value] Where [Value] is one of the following: • on

See also > support.smarttech.com/docs/energysavingmodes

Input commands

Get command	Set command	Response
get input	set input[Value] Where [Value] is one of the following: • =hdmi1 • =hdmi2 • =hdmi3 • =hdmi4 • =vga1 • =ops1 • =usbc1 • =usbc2 • =android	input=[Value] Where [Value] is one of the following: • hdmi1 • hdmi2 • hdmi3 • hdmi4 • vga1 • ops1 • usbc1 • usbc2 • android

Brightness commands

Get command	Set command	Response
get brightness	set brightness[Value] Where [Value] is one of the following: • +[Value] • -[Value] • =[0-100]	brightness=[Value] Where [Value] is a number between 0 and 100

Room commands

Get command	Set command	Response
get micmute	set micmute[Value] Where [Value] is one of the following: • =on • =off	micmute=[Value] Where [Value] is the following: • on
get statereporting	set statereporting[Value] Where [Value] is one of the following: • =on • =off	statereporting=[Value] Where [Value] is the following: • on
get help	N/A	N/A
factoryreset	set factoryreset[Value] Where [Value] is the panel serial number	factoryreset=[Value] Where [Value] is the panel serial number

Freeze commands

Get command	Set command	Response
get videofreeze	set videofreeze[Value] Where [Value] is one of the following: • =on • =off	videofreeze=[Value] Where [Value] is one of the following: • on • off

Screen shade commands

Get command	Set command	Response
get screenshade	set screenshade[Value] Where [Value] is one of the following: • =on • =off	screenshade=[Value] Where [Value] is one of the following: • on • off

Speaker commands

Get command	Set command	Response
get volume	set volume[Value] Where [Value] is one of the following: • +[Value] • -[Value] • =[0-100]	volume=[Value] Where [Value] is a number between 0 and 100
get mute	set mute[Value] Where [Value] is one of the following: • =on • =off	mute=[Value] Where [Value] is one of the following: • on • off

Microphone array commands

Get command	Set command	Response
get micmute	set micmute[Value] Where [Value] is one of the following: • =on • =off	micmute=[Value] Where [Value] is one of the following: • on • off

Firmware version commands

Get command	Response
get fwversion	fwversion=[Value] Where [Value] is the firmware or iQ system software version, in the format #.#.#.###.

Model number commands

Get command	Response
get modelnum	modelnum=[Value] Where [Value] is one of the following: • SBID-MX065P-V5 • SBID-MX075P-V5 • SBID-MX086P-V5

Serial number commands

Get command	Response
get serialnum	serialnum=[Value] Where [Value] is the serial number.

Part number commands

Get command	Response
get partnum	partnum=[Value] Where [Value] is the part number, including the revision.

Asynchronous messages

The display sends an asynchronous message when the convenience panel, Settings app, or remote control are used to change a display's setting that can be controlled by RS-232. The display will also send an asynchronous message if the display's power state changes. Asynchronous messages are identified by a pound sign (#) before the message and aren't followed by a command prompt (>).

Change	Asynchronous message
Display power state	#powerstate=[Value] Where [Value] is one of the following: • on • standby • powersave
Input selection	#input=[Value] Where [Value] is one of the following: • hdmi1 • hdmi2 • hdmi3 • hdmi4 • usbc1 • usbc2 • vga1 • ops1 • android
Brightness	#brightness=[Value] Where [Value] is a number between 0 and 100

Change	Asynchronous message
Freeze frame	#videofreeze=[Value] Where [Value] is one of the following: • on • off
Screen shade	#screenshade=[Value] Where [Value] is one of the following: • on • off
Volume increase or decrease	#volume=[Value] Where [Value] is a number between 0 and 100
Volume mute	#mute=[Value] Where [Value] is one of the following: • on • off

Appendix B Enrolling the display in SMART Remote Management

The SMART Board MX (V5) Plus 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
- certificates
- lock screen
- available apps

See > support.smarttech.com/docs/enrollingsrm

Certification and compliance

Federal Communication Commission interference statement

FCC

Suppliers Declaration of Conformity

47 CFR § 2.1077 Compliance Information

Unique Identifier: IDQR65-A, IDQR75-A, IDQR86-A

Responsible Party – U.S. Contact Information

SMART Technologies (Seattle) Inc.

11100 NE 8th St., Suite 210

Bellvue, WA 98004

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 5150–5250 MHz and 5925–6425 MHz bands 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 11.

⚠ 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.

Operation in the 5925–7125 MHz band shall be limited to indoor use only.

Operation on oil platforms, automobiles, trains, maritime vessels, and aircraft shall be prohibited except for on large aircraft flying above 3048 m (10,000 ft).

Devices shall not be used for control of or communications with unmanned aircraft systems.

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 and RSS-248 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.

Certification and compliance

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.

Innovation, Science et Développement économique Déclaration du Canada

Cet appareil est conforme à la norme ISED CN4-247 et CNR-248 pour les appareils radio agréés. Son fonctionnement est soumis aux deux conditions suivantes:

1. le dispositif ne doit pas produire de brouillage préjudiciable, et
2. ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

⚠ Advertissement

- i. les dispositifs fonctionnant dans la bande 5 150-5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- ii. le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5 250-5 350 MHz et 5 470-5 725 MHz doit se conformer à la limite de p.i.r.e.;
- iii. le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5 725-5 825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.
- iv. De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 250-5 350 MHz et 5 650-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Les opérations dans la bande 5925-7125 MHz doivent être limitées à une utilisation en intérieur.

L'utilisation sur les plates-formes énergétiques, les autos, les trains, les vaisseaux navigateurs et les avions sera interdite, sauf sur les gros appareils volant au-dessus de 3 048 m (10 000 pieds).

Ces appareils ne doivent pas être utilisés pour contrôler des systèmes de navigation sans pilote ou pour communiquer avec eux.

Déclaration d'exposition aux radiations

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps. Cet émetteur ne doit pas être co-implantés ou exploités conjointement avec une autre antenne ou émetteur.

EU declaration of conformity

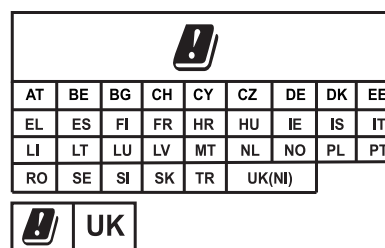
Hereby SMART Technologies ULC declares that the radio equipment type Interactive displays model IDQR65-A, IDQR75-A, and IDQR86-A, and the OPS PCM11 are in compliance with Directive 2014/53/EU.

⚠ Warning

Operation of this equipment in a residential environment this equipment may could cause radio interference.

The full text of the EU declaration of conformity is available at the following internet address: smarttech.com/compliance
The frequency band and the maximum transmitted power in EU are listed below:

Transmitting Band (MHz)	Maximum Transmit Power
13.56	0.0007μW (ERP)
2400-2483.5	19.5dBm (EIRP)
5150-5350	19.7dBm (EIRP)
5470-5725	19.3dBm (EIRP)
5725-5825	13.3dBm (EIRP)
5925-6425	18.9dBm (EIRP)



Restrictions: 5150 MHz – 5350 MHz and 5925 MHz – 6425 MHz are for indoor use only.

⚠ Caution: Exposure to Radio Frequency Radiation

This equipment complies with EU radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

Hardware environmental compliance

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

Waste Electrical and Electronic Equipment and Battery regulations (WEEE and Battery Directives)

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



Batteries

Caution

There is a risk of fire or explosion if a battery is replaced by an incorrect type. Dispose of used batteries promptly. Follow handling instructions on coin cell packaging. Recycle or dispose of used batteries according to local guidelines.

The display contains a CR1220 coin cell battery. The remote control contains alkaline batteries. Recycle or dispose of batteries properly.

Perchlorate material

The coin cell battery contains perchlorate material. Special handling may apply.

See > dtsc.ca.gov/hazardouswaste/perchlorate

SMART Technologies

smarttech.com/support

smarttech.com/contactsupport