

Enabling and Configuring an RS-232 Serial Connection to the Unifi™ 35 Projector



Applies to: SMART Board™ 660i and 680i interactive whiteboard systems and Unifi™ 35 projectors

Overview

You can connect a computer to the Unifi 35 projector's serial (RS-232) interface. If you connect the resident computer to the Unifi 35 projector's RS-232 interface, you can also connect a guest computer to the USB interface, and you can switch between the computers using the Unifi on-screen menus.

This article describes how to configure your Unifi 35 projector for serial communication, including serial interface settings. It also describes how to connect a guest computer to the extended connection panel (ECP).

NOTE: Your Unifi 35 projector must be running firmware version 1.2.13 or later to enable its RS-232 interface.

Details

Connecting a Resident Serial Computer

To serially connect a computer to the SMART Board 600i interactive whiteboard system you must:

- configure the Unifi 35 projector's serial, video and audio inputs for the resident computer connections using the Unifi software on-screen menus.
- disable Room Control mode using the Unifi software on-screen menus.
- connect your computer's serial, video and audio outputs to the Unifi 35 projector.

To configure the Unifi projector's serial, video and audio inputs for the resident computer

NOTE: You must use either the DVI-A or the DVI-D video input with the Unifi 35 projector's serial connection.

1. Turn on the SMART Board 600i interactive whiteboard system.
The Unifi software splash screen appears.
2. Select any input, or select **ScratchPad**.
The Unifi software menu appears in the lower-left of the touch screen.
3. Press **Settings**.
4. Press **Configure inputs**.
The *Configure Inputs* dialog box appears, displaying the current configuration of the projector's inputs.
5. Select the check box on the left of the DVI-A or the DVI-D input to enable the input.
6. Select the **Serial** option on the same row. You can select the **Serial** option for one input only.
The Properties column displays the input names as they appear in the Unifi software on-screen menus. Typically, the USB computer input is labeled **Computer 1** and the serial computer input is labeled **Computer 2**.
7. Press **Computer 2** in the Properties column.
The *Audio Properties* dialog box appears.
8. Select the audio input that you want to use with the serial computer connection.
NOTE: If you select an audio input that is used with another input, you can use a "Y" adapter cable to connect both inputs.
9. Press **Close** in all dialog boxes to save your changes.

To disable Room Control mode using the Unifi software on-screen menus

You must disable the Unifi 35 projector's Room Control mode to use its RS-232 interface to communicate with your computer.

1. Turn on the SMART Board 600i interactive whiteboard system.
The Unifi software splash screen appears.
2. Select any input source from the Unifi on-screen menu.
3. Press **Settings**.
4. Press **Advanced Settings**.
5. Press the wrench icon.
The *Setup* window appears.
6. Press **Room Control Mode**.
7. Use the on-screen navigation buttons to select **Disable**, and then press **Enter**.
8. Press **Close** in all dialog boxes to save your changes.

To connect the resident computer

You must install SMART Board software on the resident computer to communicate serially with the Unifi 35 projector. SMART Board software is available at www.smarttech.com/support/software/index.asp.

NOTE: You only have to perform this procedure the first time you connect your resident computer. Unifi software and SMART Board software save the settings so that you can simply start SMART Board software the next time you work with the system, and then select the computer input from the Unifi software menu.

1. Connect the female connector of a straight-through DB9M-to-DB9F RS-232 cable to your computer's serial connector.
If your computer doesn't have a serial (RS-232) interface, you can use a USB-to-serial adapter to connect the computer's USB port to the Unifi 35 projector's serial connector. See *Serial Interface Settings* on the next page.
2. Connect the male connector of the cable to the Unifi 35 projector's DB9 connector.
NOTE: Unifi 35 projectors manufactured before February 2007 have a male DB9 connector. Therefore, you need a straight-through DB9F-to-DB9F RS-232 cable to connect these projectors to a computer.
3. Connect video and audio cables from the computer to the Unifi 35 projector base connection panel connectors.
 - If your computer has a VGA (DB15-HD) analog video output, use the 10' (3 m) DVI-A to VGA adapter cable included in the Unifi 35 projector's accessory kit.
 - If your computer has a DVI-D output, use as short a cable as possible (not included) to reduce interference.

NOTE: We recommend that you make all resident computer connections to the projector base connection panel. This leaves the ECP connectors available for a guest computer connection.

4. Turn on the SMART Board 600i interactive whiteboard system, but don't select an input yet.
The Unifi software splash screen appears.
5. Turn on your computer, if it's not already on.
6. Click the **SMART Board** icon in the Windows notification area or Mac Dock, and then select **Control Panel**.
The SMART Board Control Panel appears.
7. Click the **SMART Board Connection Wizard** button.
8. When the *SMART Interactive Product Connection Wizard* finds the SMART Board 600i system, click **Finish**.
9. Select the **Computer 2** serial input from the Unifi on-screen menu.
The computer's video output appears on the interactive whiteboard screen. If necessary, perform an orientation procedure to align the pointer with your pen tray pen or finger movements. For more information, see SMART Board software on-line Help.

Serial Interface Settings

You can't configure the Unifi 35 projector's serial interface settings. When configured for serial computer connection, the serial interface has the following settings:

Data rate	19,200 bps
Data bits	8
Parity	None
Stop bits	1
Flow control	None

If you're connecting a computer that doesn't have a serial (RS-232) interface, you can use a USB-to-serial adapter that operates at these settings, such as the SMART USB-to-serial adaptor (Part No. 93-00481) included in USB-FRU.

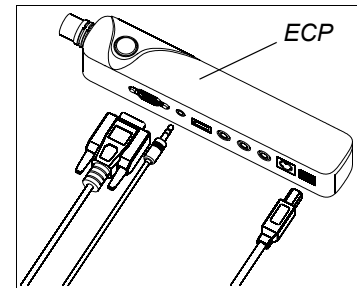
Connecting a Guest Computer

The VGA, Composite and S-video inputs are enabled when you first receive your SMART Board 600i system. These inputs, labeled Computer 1, Video 1 and Video 2 respectively, in the *Configure Inputs* dialog box Properties column, are available on the extended connection panel (ECP).

The Computer 1 input uses the ECP's VGA INPUT DB15-HD receptacle, the AUDIO INPUT 3.5 mm phone jack and the USB B receptacle. Verify that these settings haven't changed.

To connect a guest computer to the ECP

1. Connect the 6' (1.8 m) USB cable (included) to the USB B receptacle on the ECP.
2. Connect the other end of the USB cable to a USB receptacle on your computer.



IMPORTANT



Do not use USB cables longer than 6' 5" (2 m) to connect your computer to the ECP. If you use a longer cable, its length, when combined with the length of the ECP cable, exceeds USB specifications and your connection won't work.

3. Connect the 6' (1.8 m) VGA-HD cable (included) to the ECP's DB15 VGA connector.
4. Connect the other end of the VGA-HD cable to a DB15 VGA receptacle on your computer.
5. If you use the audio output from your computer, connect the 6' (1.8 m) 3.5 mm stereo phone cable (included) to the ECP's 3.5 mm phone jack.
6. Connect the other end of the audio cable to the 3.5 mm audio output phone jack on your computer.

NOTES

- You can connect the SMART Board 600i interactive whiteboard system to the computer in HID (Mouse) mode without installing SMART Board software if you have a Mac or a Windows computer with an installed USB driver.
- USB drivers are not currently available for Linux computers. You must install SMART Board software before you can connect the SMART Board 600i interactive whiteboard system.

Refer to the [SMART Board 600i Series Interactive Whiteboard System Installation and Configuration Guide](#) for more information about configuring and connecting input devices.

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