

ROBOTS IN THE ROOM: WHAT IS CONFERENCE ROOM AUTOMATION?

To properly define classroom automation, we must first describe classroom *control*. A control system is an interface that includes a finite number of options for controlling the devices in the room. Think of a universal remote: It's where you press buttons to make your system take specific actions like show content from a laptop on a certain display, or dial a number for a video conference. Classroom control is valuable because it provides a simple way for a participant to take command of all the room's technology.



An effective classroom control system centers around the user interface (UI). In most cases this is a touch panel or keypad on which a user presses buttons to execute certain commands. For example, a typical classroom UI might consist of a touch panel that includes buttons for turning on the projector, switching between a laptop computer and room PC, and a button (or sequence of buttons) for activating and controlling the video conference system. By providing an intuitive interface for controlling the room, you're reducing the number of support calls and dramatically improving user satisfaction.

WHAT IS CLASSROOM AUTOMATION?



Classroom *automation* is the next logical step that wraps a layer of intelligence around the control system. It's a smart system that combines multiple tasks into a single automated action. It's also where you add the valuable concepts of *scheduling* and *macros* to your control system. With automated scheduling, you can book a room and integrate its overall schedule with campus-wide scheduling or that particular building scheduling. You can also pre-configure a room so that the system is ready to use when the professor arrives so that there's no time wasted on waiting for a device to warm up.

With macros, you can combine several tasks into a single push of a button or scheduled command, as seen in the table below.

Desired Action	Series of Commands	Automated System
Prepare the room's lighting for a typical presentation	<ol style="list-style-type: none"> 1. Dim lights to medium 2. Close window shades 3. Turn on table lighting 	<ol style="list-style-type: none"> 1. Prepare lighting (Single action that encompasses steps 1-3)
Start a Video Conference with a remote professor	<ol style="list-style-type: none"> 1. Raise light level to all on 2. Turn off table lighting 3. Power on VTC system 4. Power on LCD display 5. VTC audio volume to loud 6. Move camera view to center of table 7. Display phone keypad 8. Dial 1-800-555-5555. 	<ol style="list-style-type: none"> 1. Video Conference: West Region (Single action that encompasses steps 1 – 8)
Shut Down the Room	<ol style="list-style-type: none"> 1. Power off display 2. Power off projector 3. Reduce VTC audio volume to low 4. Power off VTC system 5. Power off DVD player 6. Turn off lights 7. Raise blinds 8. Display "Room Available" on panel outside door 	<ol style="list-style-type: none"> 1. Perform Room Shutdown (Single action that encompasses steps 1 – 8)

An automated classroom gives users the absolute best experience, and eliminates most of the problems that result in support calls.

From the AMX White Paper "Ending the AV Tech Support Nightmare: All About AV Control and Room Automation" (www.amx.com)