

TEKVOX offers innovative low cost solutions for projector management along with simple room combining systems. With the new TEK CMC-1 5DT package along with TEK VGA0404-A 4x4 VGA Switcher an energy savings projector management system with room combining can easily be implemented. The TEK CMC-1 5DT includes the TEK 1, TekSecurity, TEK 1301 Presentation Switcher/Scaler and a Small Room Occupancy Sensor.



TEKVOX TEK 1



TEKVOX TEK 1301



Small Room Occupancy Sensor

Room combining systems with video projectors are typically complex systems requiring a control system to operate video projectors, screens and a video matrix. These systems can get very complex and expensive. To simplify these systems several audio manufacturers offer DSP audio systems to mix and control the audio. One such system is the RANE RPM 44, Remote Programmable Multiprocessors with its Smart Remotes, the SR 3 and SR 4.



Rane RPM 44



RANE SR 3



RANE SR 4

The RPM 44 provides room combining and control for up to four rooms. With the SR 3 user logos and graphic images are displayed on a 98 x 64 pixel LCD display representing up to 16 selectable programmable presets. For lower cost system the SR 4 has eight status LEDs representing selectable programmable presets.

Included on the RPM are eight programmable logic inputs and outputs, called Versatile Output (VOP) and Input (VIP) Ports. With these logic ports other devices can be controlled by a preset selection from the SR 3 or SR 4. By connecting the VOP and VIP logic connections of the RPM 44 to the logic inputs and outputs on a TEK 1 a system can be configured to turn on and off a projector, raise and lower screens and control a video matrix without the expense of a control system.

Operation

The system diagram illustrates a complete room combining system with four rooms using the RANE RPM 44 and the TEKVOX TEK 1s at each projector. The RPM 44 controls the rooms using the RANE SR 3 or SR 4 smart remotes. The room configuration is selected from the smart remote in Room A. Once a room configuration is selected, the RPM 44 mixes the audio for each combined room or separates the audio. The smart remotes track in rooms that are combined. Another function of the room configuration is for the RPM to instruct the TEK 1 at the TEK VGA0404-A switcher to select a preset stored in the switcher. This preset is used to route the VGA wall plate signals to their proper projector. When the rooms are separated each wall plate is routed to the projector in their room. As rooms are combined a wall plate is selected to go to multiple projectors.

Room Combining Presets	
1	A/B/C/D Separate
2	AB/CD
3	ABC/D
4	ABCD All Combined

To turn on and off a projector the knob on the smart remote is pressed in and turned to a preset selection. Releasing the knob selects the preset. This selects a logic output on the RPM to instruct a TEK 1 located at a video projector to turn on or off. A screen control can be used to raise and lower a screen when the projector goes on and off.

To save energy and increase the lamp life of the video projector an occupancy sensor connected the TEK 1. When the occupancy sensor no longer detects people, it instructs the TEK 1 to turn off the room by sending a room off signal to the RPM.

The best features of this system are its remote monitoring, control and projector management. An administrator is able to remotely view and control the room including its audio levels. With projector management the administrator is able to schedule projector maintenance and extend the life of the projector.

