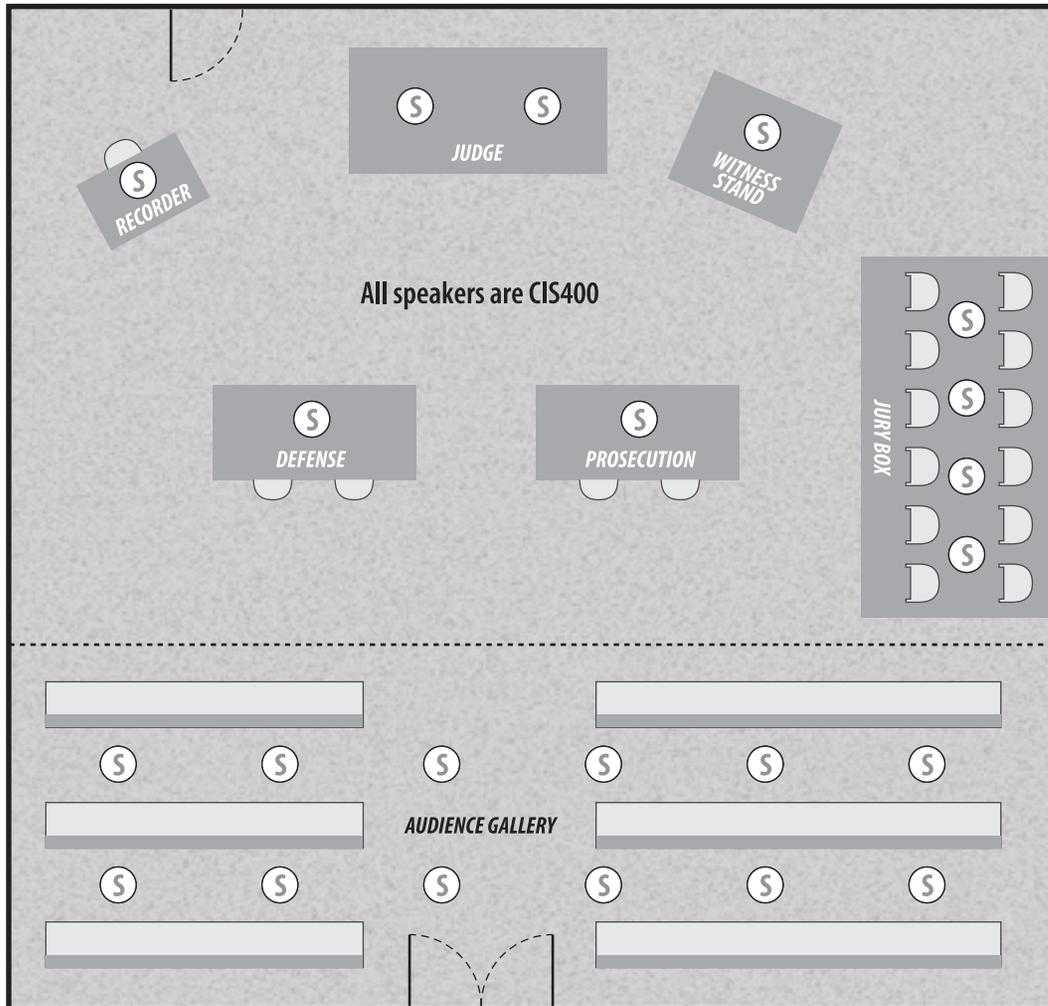


APPLICATION NOTE

Courtroom / Council Chamber



Life-changing decisions are frequently based on what is said – and heard – within the walls of the courtroom or government council chamber. Intelligible speech is therefore essential to the function of these spaces. However, they are often quite small, putting microphones and loudspeakers in close proximity and creating feedback problems. It takes both smart system design and “intelligent” programmable DSP to empower everyone in the courtroom or council chamber to participate fully in the process.

To eliminate annoying feedback while providing adequate and intelligible sound reinforcement, we need to separate each microphone and isolate it from the output of the sound system. Only microphones that are in use at any moment should be “on.” Using the DX810, we can program a “mix-minus” system, grouping microphones and loudspeakers in such a way that the person speaking is never amplified by the nearest loudspeaker. The DX810’s powerful gating functions allow us to create a

sophisticated mixing function so that microphones are on only when the user is actually talking into them.

The DX810 feeds 5 CAZ800 amplifiers, with each channel considered as a separate output zone within the room. CIS400 ceiling speakers are used: because this device is rated at 16 Ohms, we can power from one to four CIS400’s on each CAZ800 channel, allowing us to make each zone as large or small as required. The chairman or judge would probably have a single-speaker zone. Gallery or jury seating areas might require as many as four speakers.

To allow for different seating configurations the system would have pre-programmed configurations and volume levels, selectable via the DX-SW4.

