

# Videoconferencing

The videoconferencing facility at Auburn University is located in 357 Aerospace Engineering Building. This classroom will seat 24 students.

## Hardware Configuration

### Codec

In January, 2003, Auburn University purchased and installed the Tandberg Director video-conferencing system. The Tandberg Director System is a combination of two technologies – Tandberg 6000 codec system and the SmartBoard 3000i touch screen system. The system was the first such videoconferencing system to be installed in a University and only the third system of its kind to be installed in the world.

The Codec is the heart of the system. The main task for the Codec is the compression of outgoing video, audio, and data transmitted to the far end and the decompression of the incoming information. Hence, the name *Codec* is short for *compression/decompression*.

### Audio

#### Ceiling Mics

Table mics are no longer in use in the Aerospace videoconference facility. With the Tandberg Director system, two ceiling mics are located in the front of the room. The mics are surrounded by a reflective plastic shield to capture the sound from participants in the room. One mic is located in front of the room, primarily to capture voice audio from the participants facing the Tandberg videoconference large screen. The other mic faces the podium in the front of the room where the document camera is located, primarily to capture the instructor's voice. Each mic is activated by sound and requires no special volume control. Each person in the room may talk in their normal voice and be heard at the far site without any problems. Sound from the far site is digitally cancelled resulting in no sound feedback by the ceiling mics to the far site. The mics can be muted with the remote control by the near site participants or by touching the mic mute button on the touch screen. An icon located in the top right of the screen indicates when all the mics are muted.

#### Lavaliere Mic

A lavaliere mic is not normally needed, but in the event the person teaching has a soft voice, a lavaliere mic can be provided. The transmitter for the mic is located in the cabinet under the screen and must be switched on to transmit sound from the lavaliere to the codec.

## **Speakers**

The NaturalAudio module, which is a part of the Tandberg Director System, is designed to improve audio quality during a videoconference. It is mounted in the cabinet below the video screen. The NaturalAudio module uses a frequency-compensated speaker system optimized for voice response and is designed specifically for videoconferencing requirements.

The NaturalAudio module provides natural sounding audio – as if the person is in the same room – by delivering a flat response across the vocal range.

## **Screen**

The near site viewing screen is actually a SmartBoard 3000i, 67 inch screen using a NEC rear projector. Commands may be entered via the touch screen. Four different color stylus pens are available to markup information displayed both far and near site on the screen. When presenting a PowerPoint presentation, the use of the pens becomes a nice feature.

## **Computer**

Provided is a Pentium 4 Windows computer with DVD, zip drive, and floppy drive storage media. The output screen of the computer is the 67 inch SmartBoard. The computer is connected to the internet, allowing both the near and far site participants to display any internet website that the presenter would like to discuss or refer to.

Cables connections are available for a presenter to connect his/her own laptop to the videoconference system for displaying information stored on their computer to the near and far site. Again, the color stylus pens can be used to accentuate the information presented on the 67 inch SmartBoard screen.

## **Video Cassette Recording**

A Video Cassette Recorder is available for recording either the near site or far site information being presented. The recorder is in the cabinet beneath the screen. The recorder uses standard VHS tapes.

## **Cameras**

There are three cameras at this videoconferencing site: Main, Auxiliary, and DOC/VCR.

The Main Camera is a wide angle camera located at the top right of the Tandberg Director Screen in the front of the room. It sends the video of the near

site participants in the videoconference seated in the class room. The Main Camera is controlled by the system's infra-red remote control and operates pan/tilt, focus, and zoom.

One can pre-store up to ten camera positions using the remote control.

The Auxiliary Camera is located on the back wall and faces the front of the room. This is the camera that the speaker normally faces because he can see the remote site TV monitor near the camera. The Auxiliary Camera viewing position is controlled by the system's infra-red remote control and operates the pan/tilt, focus, and zoom as one points the remote toward the Main Camera.

The VCR/Document Camera provides input video from the Elmo or the VCR.

### **Connections**

The Tandberg Director System is restricted to Internet Protocol (IP) connections only. In the event that the far end requires ISDN connections for the videoconferencing at their end, the gateway located at the IITS Hub at the University of Alabama – Birmingham can be used to accommodate this far end user. This requires coordination with IITS at UAB by the technical coordinator at Auburn University.

### **Portable Video Conferencing Unit**

The Instructional Multimedia Group (IMG) will provide an alternate videoconference facility for those conferences that have 1-5 participants in the event the Tandberg Director system has been previously scheduled.

### **Far Site Scheduling**

When scheduling a videoconference, please contact Mr. Terry Daughtrey, [daughtw@auburn.edu](mailto:daughtw@auburn.edu), 844-9939. Mr. Daughtrey will need email and phone contact information of the technical coordinator at the far site to confirm the scheduled time and possibly test the connection prior to the videoconference. The 357 Aerospace Engineering Building videoconference facility schedule is maintained on a Groupwise calendar and viewable by those who have access to the Auburn University Groupwise email system. One may contact the Help Desk at 844-4944 to locate this calendar.