Active Learning Classrooms are designed to foster an interactive, student-centered learning experience. Active learning strategies often involve complex interactions between professors and students, as well as local and global communities. The physical space of an ALC promotes and encourages these interactions through flexible classroom design. By promoting not only whole-class, but also group and one-to-one interactions, students work in a collaborative, supportive, and enriched environment that engages them with the materials and each other to foster effective learning.

### EQUIPMENT LIST

<table>
<thead>
<tr>
<th>Product</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>TesiraFORTE AVB VT</td>
<td>Provides dedicated DSP to the classroom, and the ability to use USB Audio via a computer, allowing soft codec integration.</td>
</tr>
<tr>
<td>TesiraLUX IDH-1</td>
<td>Acts as an AVB talker. Processes video signals from cameras, laptops, and media players.</td>
</tr>
<tr>
<td>TesiraLUX OH-1</td>
<td>Acts as an AVB listener. Outputs network video to displays.</td>
</tr>
<tr>
<td>Tesira AMP-8175R</td>
<td>Provides amplification to all ceiling loudspeakers.</td>
</tr>
</tbody>
</table>

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**SYSTEM DESIGN GUIDE**

**ACTIVE LEARNING CLASSROOM**

Tesira®
Technology plays a key role in the effectiveness of an ALC. In this scenario, Tesira provides both the audio and video processing for the entire classroom. TesiraLUX facilitates bi-directional screen sharing between the instructor’s station and the student “pods,” while TesiraFORTÉ provides sound reinforcement and mix-minus for the microphones located in each pod. The instructor can connect their laptop to the TesiraFORTÉ via USB and use a soft codec like Skype™ or GoToMeeting® to broadcast the lesson to remote students.

**TESIRA FEATURES**

- Audio and video processing and routing throughout the classroom
- Mix-minus control for dynamically adjusting the sound distribution to student pods
- DSP support for “collaboration mode” (independent audio and video at each pod) and “presentation mode” (the same audio and video at every pod)
- Sessions can be broadcast to remote students simultaneously via soft codec and USB connectivity

**SYSTEM DESIGN GUIDE**

**ACTIVE LEARNING CLASSROOM**

[Diagram of active learning classroom setup with components labeled: INSTRUCTOR, AVB SWITCH, TesiraLUX IDH-1, TesiraLUX OH-1, TesiraFORTÉ AVB VT, multiple loudspeakers, multiple microphones, WEB SIMULCAST, LEGEND (Tesira/AVB/TSN), Analog Audio I/O, Network/Control, Digital Video.]

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**WEB SIMULCAST**

[Diagram of web simulcast setup with components labeled: Tesira AMP-8175R, TesiraLUX IDH-1, TesiraLUX OH-1, multiple loudspeakers, multiple microphones, AVB SWITCH, TesiraFORTÉ AVB VT.]