



AV35 – Collaborative Laboratory AV Standard

User Requirements

- Fixed teaching position at end of one student benches, feeding large displays at each end of student benches.
- One AV source to all display capability with full video and audio processing.
- Wireless microphone system for in-room speech reinforcement and software video conferencing.
- Ceiling pan-tilt-zoom camera for software video conferencing.
- Ceiling speakers for content playback.
- IR hearing augmentation.

Teaching Location

- AVPC in AV Rack with local Monitor, Wired keyboard, and mouse.
- BYOD connectivity via included HDMI cable in retractor or wall plate.
- Document camera with USB feed to AVPC and HDMI to AV system.
- Full control of AV system via touch screen control panel.

Bench Locations

- Large LCD display at each end of bench, mounted on bench joinery or from ceiling.
- Optional Optical Instruments (Microscope, Spectroscope, etc.) with USB and/or HDMI connectivity.

Options

(PRJ) – Front of Room Projection System.

- Adds a 100" projection system at the front of room for didactic teaching.



Technical Requirements

Displays

Bench displays

- **LCD display – Non-touch**
 - Quantities determined by space requirements.
 - 55-65" Displays.
 - Mounted at end of benches from ceiling.
- **LCD mount – Fixed**
 - Ceiling mounted.

PRJ Option – Front of room projection

- **Projector – Medium**
- **Projector Ceiling Mount**
- **Projector Screen – Manual**

Sources

AVPC

- **AVPC**
 - All in One form factor mounted at teaching location.
 - Micro form factor mounted behind each breakout display or in each table.
 - Wired keyboard & mouse.

Document Camera/Instrument

- **Document Camera – Flatbed**
- **OR Document Camera – Ceiling**
- **AND/OR Scientific Instrument**

BYOD

- **BYOD – Retractor**
 - Mounted at teaching location.
- **OR BYOD – Wall plate**
 - Mounted at teaching location.

Video

Video Transport

- **Video Distribution – AV over IP**
 - Encoder for teaching location.
 - Encoder for PTZ camera.
 - Decoder for each display location.
- **Switcher – HDMI**
 - 4 HDMI inputs.
 - LAN Connectivity.

Ceiling PTZ Camera

- **Camera – Video PTZ**
 - HDMI AV Output.



Audio

Audio DSP

- **Audio DSP – Small**

Microphones

- **Microphone – Wireless System**
 - 2x channels – 1x Handheld & 1x Lapel.

Hearing Augmentation

- **Hearing Augmentation – IR Transmitter**

Speakers

- **Speakers – Ceiling mounted passive**
- **Audio Amplifier**

Control

Control Processor

- **Control Processor**

UI Control

- **Touch Control Panel**
- **ORControl Pad – Small**

Architectural / Security

Network Switch

- **Network Switch**
 - Sufficient ports for all AV and AV over IP endpoints.
 - Multicast segregation from UniSA Network.
 - Supplied by UniSA ISTS Network Services.

AV Rack

- **Rack – Joinery**
- **ORRack – Small**

Power Distribution Unit

- **Power Distribution Unit**

Signage

- **Signage**

Additional Information

More information pertaining to equipment specs and installation, cabling and infrastructure requirements can be found in sections 3.0.0 to 5.2.0 of the complete AV Standards & Specifications document.