

## LSU Health New Orleans (LSUHNO) A/V Standards

This standard promulgates the A/V equipment brands that will be used on the LSU Health New Orleans campus when specifying and implementing Audio/Visual systems. Equipment brands rather than models are being specified in order to allow the flexibility to customize an A/V solution that best fits each project. For example, both the size and shape of a room will affect the model of projector, the screen size, audio requirements, and other attributes of the planned system.

### 1) Brand Standards:

- a) Established using statewide contracts that were bid by the Office of State purchasing
- b) Driven by major A/V installations and multiple smaller installations in every major building on campus
- c) Assure that LSUHNO maximizes the consistency and interchangeability between installations
- d) Aid in providing the highest level of in-house expertise with a limited set of resources

### 2) “High-End” Installation:

- a) A system within a room, hall or auditorium that incorporates an image processor allowing for more flexibility in displaying content.
- b) An auditorium or space that is used by multiple departments and seats a large number of people.
- c) Only certain brands are allowed in “high-end” installations
  - i) These brands may also be used in other applications, but must be used in “high-end” projects in favor of any other brands listed.

### 3) Projectors:

- a) Installed Projectors:
  - i) Christie Digital projectors are specified for all installations.
- b) Portable Equipment:
  - i) Christie and NEC are specified.
- c) Mounting:
  - i) Use the Chief Universal Locking Mount unless it is impossible in the room configuration. In such a case, every effort must be made to secure the projector.
- d) All wall mounted monitors will be mounted on pull out mounts

### 4) Screens:

- a) Mounted Projection Screens:
  - i) Fixed screens are preferred in any room where they are possible

- ii) If a fixed screen cannot be used (i.e. due to room size or configuration) motorized or manual pull-down screens may be used
- iii) The fabric will be high-contrast grey or white
- iv) Manufacturers:
  - (1) Draper and Da-lite for standard size screens
  - (2) Stewart Filmscreens for large, seamless custom sizes
- b) Portable Projection Screens:
  - i) Da-Lite and Draper are preferred if the size and aspect ratio needed are available

**5) Microphones:**

- a) Shure, and Behringer
- b) USB microphones:
  - i) Blue, Shure, Vaddio
- c) Analog Audio to USB Interfaces:
  - i) Shure, Behinger, Vaddio
- d) “High-end” installations:
  - i) Wireless - Shure
  - ii) Wired - Shure and Audio-Technica

**6) Speakers:**

- a) JBL, Behringer, Crestron, Extron, or QSC
- b) “High-end” installations:
  - i) JBL

**7) Audio Processors/Mixers:**

- a) QSC, Crestron, Behringer, Shure, Kramer, or Extron
- b) “High-end” installations:
  - i) QSC

**8) Audio Amplifiers:**

- a) Crown, Behringer, Crestron, JBL, Extron, or QSC
- b) “High-end” installations:
  - i) Crown, Lea, QSC

**9) Document Cameras:**

- a) Vaddio, WolfVision, Samsung, or AverMedia
- b) “High-end” installations:
  - i) Vaddio, WolfVision, AverMedia

**10) Flat Panel Monitors and Televisions, Touch and Non-Touch:**

- a) Sharp, Samsung, Christie, and LG
- b) All monitors and televisions must be professional or commercial grade:

- i) This specification also applies to all touch screen, large format monitors, and televisions
- ii) Professional or commercial grade monitors and televisions are required due to their robust construction and design which allows them to operate in a less-forgiving environment
- iii) As a general rule, consumer monitors and televisions are not designed to be used in a public or commercial environment and their warranties are considered void if used in such a manner
- c) Monitors must have to ability to accept control from third party controllers via RS-232 or IP

**11) Direct LED Walls:**

- a) NanoLumens, Christie or Samsung

**12) Image Processor:**

- a) Crestron

**13) Interactive Whiteboards:**

- a) PC monitor based or flat panel based
  - i) Sharp, or Samsung
- b) Projection Interactive Whiteboard Systems:
  - i) SMART, Promethean, or Hitachi

**14) Control Systems:**

- a) Crestron

**15) A/V over IP:**

- a) Crestron DM-NVX series

**16) Classroom Capture:**

- a) SonicFoundry Mediasite

**17) A/V Furniture:**

- a) Lecterns, credenzas, etc.
  - i) Spectrum Industries, Middle Atlantic, or Marshall Furniture
- b) “High-End” installations:
  - i) Marshall custom lecterns or Middle Atlantic

**18) Racks, Mounts and Carts:**

- a) Middle Atlantic or Chief:
  - i) This does not apply to lecterns and credenzas (see A/V Furniture above).
- b) Ceiling or wall mounts for projectors or monitors:
  - i) Chief

- c) A/V carts, including their mounts:
  - i) Chief, Middle Atlantic, or Spectrum Industries

**19) PTZ Video Cameras:**

- a) Vaddio, AVer and Sony
- b) “High-End” installations:
  - i) Vaddio and AVer

**20) DVD, DVD/VHS Combo Units, Blu-ray decks:**

- a) Sony or LG

**21) Videoconferencing Endpoints:**

- i) LSUHSC no longer uses hardware endpoints; only Webconferencing is used
- ii) LSUHSC’s current standards for Webconferencing are Zoom and Microsoft Teams, but all Webconferencing equipment must be compatible with all Webconferencing software

**22) Power Conditioners/UPS Units:**

- a) Furman, APC, or Tripp-Lite

**23) Cables:**

- a) Any cables connected to any Crestron DM device must be certified by Crestron if such a cable exists; if Crestron does not certify a cable that must be connected to a Crestron device, the cable must be approved by LSUHNO.
- b) Cables for other purposes can be purchased from any manufacturer, although Crestron, Monoprice, Comprehensive, Extron, and Kramer are generally preferred

**24) Digital Signs:**

- a) LSUHNO uses FourWinds Interactive (FWi) for digital signs
- b) The hardware for these signs must be a professional display
  - i) Touch capability may be required and may be integrated into the monitor or effected by the use of an overlay
  - ii) The monitor must adhere to the guidelines for monitors listed in this document

**25) Accessories and Components:**

- a) If something is required that is not in the standards listed above, or if the manufacturer in the above standard does not produce a product with the specifications required for the project, the first vendors that should be used, in no particular order, are:
  - i) Crestron, Extron, Vaddio, JBL, Shure, Behringer, and Kramer.
  - ii) If these manufacturers do not produce the needed component, the selected component must be approved by the LSUHNO Enterprise A/V Group.