

1.01 DIGITAL INTERFACE STATIONS

A. DMX Playback Controllers

1. General

- a. The DMX playback controller be the Echo DMX Scene Controller by ETC, Inc., or equal.
- b. The scene controller shall allow for control of DMX lighting through:
 - 1) DMX input for snapshot capture of lighting presets
 - 2) Live control of intensity, hue and saturation of patch DMX Zones from connected stations and mobile apps
- c. The scene controller shall support 32 Presets of 512 DMX Addresses
- d. The scene controller supports control of 16 patched DMX zones

2. Mechanical

- a. The DMX scene controllers shall be DIN-Rail Mounted on DIN 43880 (35/7.5) rail
- b. The DMX scene controllers shall be constructed of injection-molded black ABS plastic that fully encloses all electrical components
- c. The DMX scene controllers shall support onboard mode and termination configuration using toggle switches
- d. The DMX scene controllers shall have LED indicators for status of
 - 1) Blue colored indicator for power
 - 2) Bi-color DMX activity indicator

3. Electrical

- a. Control station wiring shall be EchoConnect control wiring utilizing low-voltage, Class II unshielded twisted pair, type Belden 8471 or equivalent, and one #14 ESD drain wire (when not installed in grounded metal conduit).
- b. The station shall use (2) #16 AWG stranded wires for 24vDC operating power.
- c. Station wiring shall be topology free. It may be point-to-point, bus, loop, home run or any combination of these. Stations that require daisy-chain wiring shall not be acceptable.
- d. DMX Port shall comply with the requirements of ANSI E1.11 USITT DMX512-A standards.
- e. DMX input shall be optically-isolated from the gateway electronics.
- f. DMX output shall be earth-ground referenced.
- g. DMX Port shall be capable of withstanding fault voltages of up to 250vAC without damage.
- h. DMX Ports shall be eight-position removable connectors supporting Belden 9729 (or equivalent) or Category 5 Ethernet wiring
- i. Stations shall support a MicroSD card slot for firmware maintenance

j. Stations shall be UL/ cUL LISTED and CE marked

4. Functional

- a. The scene controller shall support recall of prerecorded scenes for playback using DMX
- b. There shall be support for 32 presets
- c. The scene controller shall support preset playback as activated by any connected control station
- d. The scene controller shall support DMX pass-through for real-time output of incoming DMX levels.
- e. The scene controller shall support live control and recording for multiple DMX fixture profiles.