

SECTION 27 41 16 INTEGRATED AUDIO-VIDEO SYSTEMS AND EQUIPMENT

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PART 1 GENERAL

PART 2 PRODUCTS

2.01 Digital Signal Matrix Switching And Transmission System

- A. Basis-of-Design Manufacturer: Subject to compliance with requirements, provide products of **Crestron Electronics, Inc., Rockleigh, NJ 07647**, Phone (800)237-2041, Fax: (201)767-1903, www.crestron.com

Specifier: The following paragraphs include related AV system components specified in other sections. Paragraph "A" and sub-paragraphs may be edited or deleted to suite actual project needs.

- B. The system shall be composed of the following components:
1. Automation and control system.
 - a. Hardware control processor.
 - b. Hardware and software user interfaces.
 2. Digital Signal matrix switcher unit with card cage architecture to house digital signal input and output cards.
 - a. Digital signal input and output cards.
 3. Long distance transmission devices for:
 - a. UTP and STP cable.
 - b. Multi-mode fiber cable.
 - c. Single mode fiber cable.
 4. Software for:
 - a. System configuration
 - b. System Management

2.02 Digital Signal Matrix Switcher

Specifier: The following information related to the DM-MD64X64 is based on preliminary information. All information is subject to change.

- A. Basis of design product: Crestron DM-MD64X64 DigitalMedia Switcher.

- B. The switcher shall integrate with external control systems by same manufacturer.
 - 1. All control capabilities shall be accessible by compatible networked control systems.
 - 2. External control shall not be limited to a single controller.
- C. The system shall be capable of stand-alone switching operation through use of a built-in front panel control interface.
- D. The switcher shall incorporate card cage architecture with slots for modular input cards, output cards and power supplies.
 - 1. Cards and modules
 - a. Input cards shall be cold swappable.
 - b. Input cards shall contain 8 signal inputs.
 - c. Output cards shall be cold swappable.
 - d. Output cards shall contain 8 signal outputs.
 - e. Power supplies shall be hot swappable.
 - 2. The switcher shall have capacity for:
 - a. Inputs Modules:
 - 1) Minimum of 1 input card for 8 signal inputs.
 - 2) Maximum of 8 input cards for 64 signal inputs.
 - b. Output Modules:
 - 1) Minimum of 1 output card for 8 signal outputs.
 - 2) Maximum of 8 output cards for 64 signal outputs.
 - c. Power Supply Modules:
 - 1) Minimum of 1 power supply module.
 - 2) Maximum of 2 power supply modules.
 - 3) Standard factory configuration shall include 2 power supplies.
 - a) Each power supply shall be capable of powering the switcher.
 - d. Hot-swappable fan tray.
 - 3. The Switcher shall support the following input and output signal cards:
 - a. Input blade:
 - 1) 8 UTP or STP input connections.
 - 2) 8 multi-mode fiber input connections.
 - 3) 8 single-mode fiber input connections.
 - 4) 8 HDMI input connections.
 - b. Output blade:
 - 1) 8 UTP or STP output connections.
 - 2) 8 multi-mode fiber output connections.

- 3) 8 single-mode fiber output connections.
 - 4) 8 HDMI output connections.
- E. Switcher Signal Routing
1. Any input shall be routable to a single output or multiple outputs.
 2. The Switcher shall support HDBaseT signal specifications.
- F. Ethernet Network
1. The Switcher shall include 2 Gigabit Ethernet ports.
 2. The Switcher shall contain an Integrated gigabit managed Ethernet switch.
- G. Software
1. The Switcher shall be equipped with software for setup, configuration and diagnostics.
 2. The Switcher shall be equipped with signal management software for:
 - a. Resolution management via EDID.
 - b. HDCP key management.
 - c. CEC signal management.
- H. Front panel user interface
1. The switcher shall include an integrated front panel touch screen user interface.
 2. The Switcher touch screen user interface shall be capable of the following:
 - a. Switcher setup.
 - b. Switcher configuration.
 - c. Switcher system diagnostics.
 - d. Switcher control.
 - e. Switcher status.
 - f. Fault monitoring.

PART 3 EXECUTION

END OF SECTION 27 41 16