

SECTION 11480

HD-10MM-160X288 RGB LED Video Display

PART 1 GENERAL

- 1.1 SECTION INCLUDES
 - A. Single-sided LED Video Display
- 1.2 REFERENCES
 - A. Standards for Electric Signs, UL-48, 13th Edition
 - B. Standards for Control Centers for Changing Message Type Signs, UL-1433 1st Edition
 - C. Standards for CAN/CSA C22.2
 - D. Federal Communications Commission Regulation Part 15
 - E. National Electric Code
- 1.3 SUBMITTALS
 - A. Product data: Submit manufacturer's product illustrations, data and literature that full describe the scoreboards and accessories proposed for installation.
 - B. Shop Drawings: Submit mechanical and electrical drawings
 - C. Maintenance data: Submit manufacturer's installation, operation, and maintenance manuals.
- 1.4 DELIVERY, STORAGE, AND HANDLING
 - A. Product delivered on site.
 - B. Video Display and equipment to be housed in a clean dry environment.
- 1.5 PROJECT CONDITIONS
 - A. Environmental Limitations: Do not install video equipment until spaces are enclosed and weatherproof, wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for project when occupied for its intended use.
 - B. Field Measurements: Coordinate video display location and height with the customer. Verify dimensions by field measurements.
 - C. Supply weight and mounting method for owner to verify that building structure is capable of supporting the scoreboard's weight in addition to the auxiliary equipment.
- 1.6 QUALITY ASSURANCE
 - A. For indoor/outdoor use.
 - B. Source Limitations: Obtain each type of video equipment and scoring displays though one source.
 - C. ETL listed to UL Standards 48 and 1433.
 - D. NEC compliant
 - E. FCC compliant
 - F. ETLC listed to CAN/CSA 22.2

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- 1.7 WARRANTY/SERVICE PLAN
- A. Provide 1 year of coverage.
 - B. Provide an exchange program to supply replacement parts for components that fail during the coverage period. To minimize downtime, the exchange parts shall be shipped on the same day the order is received or the following day. The manufacturer will include an air bill for the return of the defective components.
 - C. Provide a help desk staffed by experienced technicians and coordinators who are thoroughly familiar the video display and available for technical support. The staff must be available at no extra cost to the customer.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Eversan, Inc., 34 Main Street, Whitesboro, NY 13492
- B. _____
- C. _____

2.02 PRODUCT

- A. Eversan, Inc. Model HD-10MM-160X288-RGB LED single sided LED Video Display has a pixel pitch of 10mm composed of 1 red, 1 blue, 1 green, LED RGB to provide up to 291 Trillion colors. The high brightness and wide viewing angles along with its seamless video integration allows the user to display AVI, MOV, MPG, DAT, and VOB files. The use of constant current and quiescent state scan technologies eliminates flicker and ensures the displays brightness and clarity under direct lighting.

2.03 Video Display

- A. General Information
 - 1. Dimensions: 5.2' (1585mm) High, 9.45' (2880mm) Long, 0-9" (229mm) deep
 - 2. Weight: 507 lbs (230kg)
 - 3. Maximum Power requirement: 4,032W (Type of LED will determine actual Power)
- B. Construction
 - 1. All aluminum modular construction
 - 2. Fully Serviceable from the front or back of the display
 - 3. Environmentally sound design with shockproof functions.
 - 4. Cabinets include ventilation fans to ensure operation in extreme temperature and humidity.

LED Panel

- 1. 10mm Pixel pitch
- 2. Physical pixel density of 10,000 pixel/m²
- 3. Each pixel composed of 1 red, 1 blue, 1 green LED
- 4. Display colors up to 291 trillion
- 5. Brightness levels up to and greater than 2000 cd/m²
- 6. LED lifetime 100,000 hours
- 7. Refresh frequencies from 400Hz up to 1800Hz
- 8. Video frame rate 60fps
- 9. Display mode 640i480 – 1024i768

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Control

1. Controlled by PC, synchronous display
2. Windows XP, Vista, 7 and 8 compatible
3. VGA mapped/ NTSC/PAL video inputs
4. Real time display and edit feature, ideal for Instant replay
5. Modes of display VGA + Video, Video, and VGA
6. Multiple files can be displayed at one time by dividing a single display into multiple windows AVI, MOV, MPG, DAT, VOB, are some of the files that can be played
7. Automatic or manual brightness control
8. Complete contrast control

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify surfaces that the video board is to be mounted to ready to receive the work. Verify that the conduit and junction boxes specified are as specified and indicated in the plans and shop drawings.

3.02 INSTALLATION

- A. Power conduit, cabling and outlet boxes to be provided and installed by the electrical contractor. Signal raceways conduit and boxes to be provided by the electrical contractor. Scoreboard contractor is responsible for pulling signal wires between each video board and computer location. Scoreboard vendor to terminate signal wire of control console and scoreboard.
- B. Mount video board and exterior displays to structure in location detailed and in accordance with manufacturer's instructions. Verify unit to be plumb and level.

3.03 INSTALLATION-CONTROL SYSTEM

- A. Provide boxes; cover plates and connectors as required to meet control specification requirements. Control cables from video display to computer junction box shall be concealed.
- B. Test the operation of the video board, install software and test computer and all cables and connections.
- C. Conduct operator training on the video board operation.

END OF SECTION