SECTION 116643

MODEL 2057 INDOOR SCOREBOARD SET

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Two single-face electronic scoreboards and two control consoles for indoor use.

1.02 REFERENCES

- A. Standard for Electric Signs, UL-48, 14th Edition.
- B. Standard for Control Centers for Changing Message Type Signs, UL-1433, 4th Edition.
- C. Federal Communications Commission Regulation Part 15.
- D. National Electric Code.

1.03 SUBMITTALS

A. Scoreboard owner's handbook provides drawings and other information needed for installation, operation, and maintenance of the scoreboards and accessories.

1.04 QUALITY ASSURANCE

- A. Source limitation: Obtain all components including scoreboards, control consoles, data cable, mounting hardware, and other accessories from a single manufacturer.
- B. Manufacturer qualifications: Require company specializing in manufacturing electronic scoreboards with a minimum of ten years experience.
- C. Adherence to nationally recognized standards.
 - 1. ETL listed to UL Standards 48 and 1433.
 - 2. NEC compliant.
 - 3. FCC compliant.
- D. For indoor use only.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Product delivered to installation site unless otherwise specified.
- B. Scoreboards and accessories to be stored in a clean, dry environment.
- C. Special precautions for the scoreboard faces.
 - 1. Each scoreboard face will be protected during shipment by a layer of cardboard or other sheet material. Avoid removing this protective sheet until the installation begins.
 - 2. Never lay the scoreboard face down or stack other objects on a scoreboard lying on its back.
 - 3. Avoid sliding objects (like another scoreboard) along the plane of the scoreboard face even if the protective sheet is in place. This can result in LEDs being sheared.

1.06 PROJECT CONDITIONS

- A. Scoreboards and accessories should not be installed until the area has been made weatherproof.
- B. The customer determines location of scoreboards, control consoles, and other accessories.
- C. The customer is responsible for verifying that the mounting structure is capable of supporting the weight of the scoreboards, additional panel, and other accessories.
- D. Each scoreboard location requires one standard grounded 120 VAC electrical outlet.
- E. The control consoles' location requires two standard grounded 120 VAC electrical outlet.

1.07 WARRANTY

- A. Five year limited warranty includes factory labor and material costs for repairing or replacing defective parts. Refer to the warranty document included in the scoreboard owner's handbook for specific information.
- B. Warranty coverage based on the date of manufacture.

1.08 MAINTENANCE

- A. Replacement parts and factory repair options available from manufacturer.
- B. Product support provided by experienced technicians and online documentation available via phone, web, and email at no cost to customer.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Electro-Mech Scoreboard Co., 120 Industrial Parkway, Wrightsville, GA 31096.
 - 1. Phone 800-445-7846.
 - 2. Fax 478-864-0212.
 - 3. Email score@electro-mech.com
 - 4. Click www.electro-mech.com

2.02 SCOREBOARD

- A. General.
 - 1. Functions and Features: Model 2057 Indoor Scoreboard Set is designed to present information pertinent to basketball and other indoor sports. Presentation consists of five lines of statistical information on each cabinet. Each line shows Player Number (red), the number of Fouls committed by that Player (green), and the number of Points scored by that Player (amber). All digits are 6 inches tall.
 - 2. Each Cabinet Size: 48 inches (1224 mm) wide, 60 inches (1530 mm) tall, 6 inches (152 mm) deep.
 - 3. Each Cabinet Weight: 50 pounds (23 kg).

2.03 ACCESSORIES

- A. Standard accessories.
 - 1. Control Consoles.
 - a. Each of the two panels is controlled by its own console. The two consoles are interchangeable and do not require entering codes or other special configuration techniques to make them operate correctly.
 - b. Constructed of heavy-duty ABS plastic housings holding a 0.1-inch thick keypad panels with stainless steel metal dome switches that provide tactile feedback and are rated for one million actuations.
 - c. Each one requires one standard grounded 120 VAC electrical outlet.
 - 2. Extension Cable: 10-foot long shielded data cable (one per display) with male stereo connectors at each end allows control console to be connected to junction boxes (or ScoreLink transmitters) at the point of operation and later unplugged for storage.
 - 3. Junction Boxes: Provide a point of termination for the data cables with a stereo sockets for quick connection to the control console.
 - 4. Stereo Plugs With Pigtail: Provide connectors to be spliced onto the data cables at the scoreboard end.
 - 5. Mounting hardware: Each scoreboard cabinet is shipped with two keyhole plates attached to the top rear frame designed to allow the scoreboard to be suspended from lag bolts mounted in the wall. Two eyebolt mounted in the top of the frame may be used to lift the scoreboard cabinet and may also provide a permanent attachment points for suspension cables.
- B. Optional accessories.
 - 1. Data Cable: A shielded two-conductor cable with a drain line is the typical means of providing a path for data from the control console to the scoreboard. The Model 2057 is a set of two stat displays, and will therefore require two runs of data cable.
 - 2. ScoreLink Wireless RF Modem System: This RF communications system may be substituted for the data cable at the time of installation or as a replacement for the cable at any time after the installation. ScoreLink requires a standard electrical outlet for the transmitter at the point of operation and another for the receiver at the scoreboard. The Model 2057 uses two control consoles and will therefore require two ScoreLink sets for complete elimination of data cables.
 - 3. Carrying Case For Control Console: Included with the ScoreLink system, this option is also available for scoreboards with hard-wired data cables.

2.04 FINISH

- A. Standard scoreboard faces are coated with low gloss black polyester resin paint for maximum contrast and resistance to scratches.
 - 1. Baked on automotive grade low gloss paint in a selection of standard colors is available from the manufacturer for the scoreboard faces.
 - 2. Non-standard colors and finishes may be applied to the scoreboard faces at the customer's request.
- B. Scoreboard framing and back are mill-finished aluminum.

2.05 SOURCE QUALITY CONTROL

- A. Tests and inspection.
 - 1. Manufacturer requires sub-contracted printed circuit board subassemblies to undergo functional testing at the point of manufacture.
 - 2. Manufacturer inspects incoming components prior to installation in scoreboard and accessories.
 - 3. Manufacturer functionally tests major electrical subcomponents prior to installation in scoreboard and accessories.
 - 4. Manufacturer inspects and tests scoreboards and accessories at full power prior to shipment.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify 120 VAC outlets at scoreboard and control console locations are properly grounded.
- B. If data cable is used, verify continuity from scoreboards to control consoles' location.
- C. Verify data cable and AC power cable are not run in the same conduit or wire tray.
- D. Verify data cable and AC power cable are secure and run in conduit where they might be exposed to abuse or where local, state, or national codes require.
- E. Verify location of scoreboards, junction box (or boxes), and accessories with customer.
- F. Test scoreboards and control consoles by attaching units to power and plugging console outputs into scoreboard data inputs prior to hanging cabinets.

3.02 INSTALLATION

A. Refer to scoreboard owner's handbook for installation instructions.

3.03 PROTECTION

- A. The most common sources of damage to scoreboards and accessories are electrical surges running through power or data connections. The usual causes are lightning, power equipment problems (floating neutrals, bad transformers, etc.), and improper connections. To minimize these problems:
 - 1. Ensure electrical wiring is properly grounded.
 - 2. Unplug control console from power outlet and from data cable when not in use.
 - 3. Turn off the breaker to disconnect scoreboards from power when not in use.
 - 4. Label scoreboard data cable junction boxes and all connectors near junction boxes, scoreboards, and accessories so that public address systems and other devices with similar connections are not accidentally plugged into the scoreboards.
- B. Avoid loss or damage of control console, extension cable, and other accessories by storing when not in use.

END OF SECTION