

Section 11 68 43 – Exterior Scoreboards

8420 LED Football Scoreboard

Part 1 - General

1.01 Summary

1.01.1 Section includes a single-sided, outdoor, electronic, multisport scoreboard

1.02 References

1.02.1 UL 48 – Standard for Safety for Electric Signs, 15th Edition

1.02.2 National Electrical Code

1.02.3 Federal Communication Commission (FCC) Rules, Part 15

1.03 Submittals

1.03.1 Product Data: Manufacturer's illustrations, diagrams, pictures, and documentation for scoreboard(s) and accessories

1.03.2 Documentation: Wiring diagram, installation manual, and operation manuals

1.04 Delivery, Storage, and Handling

1.04.1 Product to be delivered to customer specified location

1.04.2 Product to be stored in a clean, dry, environment prior to installation

1.05 Site Conditions

1.05.1 Ambient Conditions

- A. Concrete footings must be complete and had ample time to cure
- B. Mounting structure must be complete and fully secured
- C. Verify mounting structure can handle the scoreboard's weight with accessories and any options
- D. Verify mounting structure can handle the scoreboard's wind load
- E. Confirm installation can be performed within safe and acceptable weather conditions

1.06 Warranty

1.06.1 Manufacturer Warranty

- A. Scoreboard is covered under a five (5) year general manufacturer defect part warranty
- B. Radios (optional) are covered under a two (2) year manufacturer defect part warranty
- C. Console AC adapter and internal battery pack are covered under a one (1) year manufacturer defect part warranty
- D. Provide Technical Phone support Monday through Friday 8:00am to 5:00pm Central Standard Time. Limited phone support available until 9:00pm on weekdays, and from 8:00am to 12:00pm on Saturdays

Part 2 - Products

2.01 Manufacturers

2.01.1 All American Scoreboards. 401 S. Main Street, Pardeeville, WI 53954

2.01.2 _____

2.01.3 _____

2.02 Equipment: 8420 Electronic Scoreboard

2.02.1 Description: All American Scoreboards 8420, single sided Football scoreboard. Multi-sport functionality for football, soccer, field hockey, baseball, track, and a segment timer.

2.02.2 Scoreboard Design Criteria

A. Cabinet Construction

1. 4" extruded aluminum case, .093" thick
2. 22GA Galvaneal face panels with a Kynar or powder-coat finish
3. Nine (9) standard colors, with custom color matching available
4. 8' high x 20' wide x 4.75" deep (2.44m x 6.1m x .12m)
5. Net Weight of 616lbs (279.41kg)

B. LED Panels

1. Scoreboard displays Game Time, Home Score, Guest Score, Time Outs Left (T.O.L.), Down, To Go, Ball On, Possession, and Quarter.
2. All digits are bright red, 7-segment
3. Clock Digits: 24" high, displaying 0:00-99:59 with user configurable last minute tenths
4. Score Digits: 21" high, displaying 0-99
5. Quarter Digit: 21" high, displaying 1-4, 0 (Overtime)
6. Down Digit: 21" high, displaying 1-4
7. To Go Digits: 21" high, displaying 1-99
8. Ball On Digits: 21" high, displaying 1-99
9. T.O.L. Digits: 14" high, displaying 0-9

C. Captions:

1. All Captions are White Vinyl

D. Standard Equipment

1. Built-in shatterproof clear polycarbonate protective covers over all LEDs, requiring no additional protective screen or netting
2. Twisted pair hardwire control
3. Time of Day Clock when not connected to a console

E. Optional Equipment

1. 2.4GHz Wireless Radio Control (Hardwire backup is available)
2. Ad-panels
3. Green, White, or Amber colored LEDs available
4. 120dB external horn
5. Track Timer
6. Electronic Team Names

2.02.3 Console Design Criteria

A. 8000 Series Multi-Sport Console

B. Console Construction: Extruded aluminum with raised molded sides

C. Console Dimensions: 13.25" (33.66cm) wide x 5" (12.7cm) high x 9" (22.86cm) deep

D. Net weight: 6lbs (2.72kg)

E. Microprocessor control with membrane keyboard

F. Standard Console Features:

1. Internal battery pack
2. Capability to control any single or multiple scoreboard(s), timer(s), Electronic Message Center(s) and/or stat panels
3. Easy to read large 2x20 character LCD screen

4. Multi-sport functionality with slip sheets for membrane keypad layout
 5. AC power adapter, 12V, 2.0A for AC power operation and internal battery charging
 6. Basic setup instructions on the underside of the console
 7. Advanced console configuration options are available via a USB connected PC
 8. USB updatable firmware, when attached to an internet connected PC
 9. Full sport configuration setup through the console, including period time, number of periods, two (2) delay of game timers, time out length, time outs allowed, automatic horn, and last minute tenths.
 10. Visual indicators for radio operation, running clock, battery, and horn
 11. Hand-held timer pendant switch for clock stop/start
 12. Dimming control for 8 levels of Scoreboard LED brightness
- G. Optional Console Features
1. Hand-held remote functionality with console add-on
 2. Hard-cover carrying case
 3. 2.4 GHz radio for wireless control

Part 3 - Execution

3.01 Examination

- 3.01.1 Verify that the mounting structure is ready to receive the scoreboard. The I-Beams must be level and plumb, and the concrete had ample time to cure.

3.02 Installation – Scoreboard

- 3.02.1 All power wires and any control wires will be routed in conduit. Power to the scoreboard(s)/display(s) as well as any cable race-ways shall be installed as shown on the electrical plans by the Electrical contractor or architect's specifications
- 3.02.2 Mount and install the scoreboard(s) and ad-panel displays to the I-Beams in the manner described in the supplied manufacture's instructions. Verify that the scoreboard is mounted plumb, level, and all fasteners are secure.

3.03 Installation – Hardwire Control

- 3.03.1 Install any ports, jacks, and/or electrical boxes in the specified locations per the project plans.
- 3.03.2 Confirm all control wiring is performed in accordance with manufacturer's specifications.
- 3.03.3 Test the operation of the scoreboard and control console. Confirm the console is able to control all scoreboard functions, digits, and indicators.
- 3.03.4 Leave the console, and any accessories with the scoreboard owner, or owner's designated representative.

End of Section 11 68 43