

Section 11 68 43 – Exterior Scoreboards

All American Scoreboards FB9181 LED Football Scoreboard

Part 1 - General

1.01 Summary

1.01.1 Section includes a single-sided, outdoor, electronic 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 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: FB9181 Electronic Scoreboard

2.02.1 Description: All American Scoreboards FB9181, single sided Football scoreboard.

2.02.2 Scoreboard Design Criteria

A. Cabinet Construction

1. Fabricated 20 and 22 GA Powder Coated Galvanneal.
2. Exposed digit pans with optional protective lens kits
3. Nine (9) standard colors, with custom color matching available
4. 4' high x 18' wide x 5" deep (1.22 m x 5.48 m x .127 m)
5. Approximate Net Weight of 298lbs (135.17 kg)

B. LED Panels

1. All digits are bright red, 7-segment
2. Game Time: 24" High Red Digits, Shall register 00:00-99:59
3. Scores: 21" High Red Digits, Shall register 0-99
4. Possession: 4" Red Indicators

C. Captions

1. All captions are white vinyl
2. Home and Guest Captions: 9.5" high
3. 1,2,3,4 Captions: 4.5" high

D. Standard Equipment

1. 2.4GHz Radio Control
2. Auto Dim features adjust brightness of LEDs depending on ambient lighting conditions

E. Optional Equipment

1. Hardwire Junction Box
2. Ad Panels
3. Green, White, or Amber LEDs

F. Optional Features

1. Protective Lens Kits (PLK+Model Number)
2. Time Outs Left (TOL) 14" High Red Digits
3. 3" Red Possession Indicators (POS)

2.02.3 Console Design Criteria

A. 9000 Series Multi-Sport Console (MSC9000)

1. Console Construction: Extruded aluminum with raised molded sides
2. Console Dimensions: 5" (12.7 cm) high x 10.375" (26.352 cm) wide x 9" (22.86 cm) deep
3. Net weight: 4.4 lbs (1.996 kg)
4. Microprocessor control with membrane keyboard
5. Standard Console Features:
 - a. Internal Rechargeable Lithium-Ion Battery

- b. Capability to control any single or multiple 9000 Series scoreboard(s), timer(s), LED Team Names and Captions, Everbrite Message Center(s) and stat panels
 - c. 2.4GHz Radio, external antenna
 - d. Hardwire Output
 - e. Serial Data IO
 - f.. Easy to read large 8 Line character OLED display
 - g. Multi-sport functionality with slip sheets for membrane keypad layout
 - h. Internal battery charges using standard USB-C cable
 - i. USB updatable firmware when connected to a PC and the internet
 - j.. Full sport configuration setup through the console
 - k. LED indicators for radio operation, running clock and battery
 - l. Manually override the AutoDim features
 - m. Set Time of Day capabilities when scoreboard is Idle
 - 6. Optional Console Features
 - a. Hand-held timer pendant switch for clock stop/start
 - b. Hard-Cover Protective Carrying Case
- B. 9000 Series Football Handheld Console (HRBA9000)
 - 1. Console Construction: Injected molded ABS housing with rubber silicone case
 - 2. Console Dimensions: 6.5" (16.51 cm) high x 3.5" (8.89 cm) wide x 1.125" (2.875 cm) deep
 - 3. Net Weight: .6 lbs (.272 kg)
 - 4. Microprocessor control with membrane keyboard
 - 5. Standard Console Features:
 - a. Internal Rechargeable Lithium-Ion Battery
 - b. Capability to control any single or multiple 9000 Series scoreboard(s), timer(s), LED Team Names and Captions, Everbrite Message Center(s) and stat panels
 - c. 2.4GHz Radio, internal antenna
 - d.. Easy to read large 8 Line character OLED display
 - e. Internal battery charges using standard USB-C cable
 - f.. Full sport configuration setup through the console
 - g. LED indicators for radio operation, running clock and battery
 - h. Manually override the AutoDim features
 - i. Set Time of Day capabilities when scoreboard is Idle

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 instructions. Verify that the scoreboard is mounted plumb, level, and all fasteners are secure.
 - 3.02.3 Hardware supplied to mount be drilling through the scoreboard flange and I-Beam. Pressure mount and clamping systems also available from manufacturer.
 - 3.02.4 Installer to provide connection point or junction box to connect AC power.
- 3.03 Installation – Control
- 3.03.1 Install any ports, jacks, and/or electrical boxes in the specified locations per the project plans (Hardwire).
 - 3.03.2 Confirm all control wiring is performed in accordance with manufacturer's specifications (Hardwire).
 - 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. Test sign from desired control room.
 - 3.03.4 Leave the console(s), and any accessories with the scoreboard owner, or owner's designated representative.

End of Section 11 68 43