

Section 11 66 43 – Indoor Scoreboards

All American Scoreboards HK9104 LED Hockey Scoreboard

Part 1 - General

1.01 Summary

1.01.1 Section includes a single-sided, indoor, 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

1.05 Site Conditions

1.05.1 Ambient Conditions

- A. Do not install scoring equipment until spaces are secure from moisture and completely dry.
- B. Verify mounting locations with customer and/or facility. Verify measurements prior to installation.
- C. Verify weight and mounting method to the intended structure, ensuring it is capable of supporting the weight of the scoreboard and all accessories.

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: HK9104 Electronic Scoreboard

2.02.1 Description: All American Scoreboards HK9104, single sided Hockey 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. 5' high x 10' wide x 5" deep (1.52 m x 3.01 m x 127 mm)
5. Approximate Net Weight of 155 lbs (70.30 kg)

B. LED Panels

1. All digits are Red and Amber, 7-segment
2. Game Time: 14" High Red Digits, Shall register 00:00 to 99:59
3. Scores: 12" High Amber Digits, Shall register 0-99
4. Period: 10" High Amber Digits, Shall register 0-9
5. Player Number: 10" High Amber Digits, Shall Register 00-99
6. Penalty: 10" High Red Digits, Shall Register 0:00-9:59
7. Goal Light Indicators: 2" Red LED Indicators

C. Captions

1. All captions are white vinyl
2. Home and Guest Captions: 5" high
3. Period, Player, Penalty, and Goal Captions: 3" 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 or White LEDs

F. Optional Features

1. Protective Lens Kits (PLKHK9104)

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" (26.3525 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

Part 3 - Execution

3.01 Examination

- 3.01.1 Verify that the mounting structure is ready to receive the scoreboard. Verify that the location of conduit, outlets and junction boxed are as specified in plans. Verify that concrete has properly cured.

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 wall 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 required to mount to wall to be provided by the installer. Pressure mount and clamping systems also available from manufacturer.
- 3.02.4 6' power cable provided, exiting the top left of the scoreboard cabinet with standard 3 prong connector. 20 Amp dedicated circuit recommended.

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 66 43