

**SPECTRUM SCOREBOARDS**  
**Product Specifications for**  
**Model [52504-C4](#)**  
**Basketball, Volleyball or Wrestling**  
**Scoreboard**

MAY 2011

**PART 1 GENERAL**

**1.01 SECTION INCLUDES:**

- A. Indoor four-sided LED Basketball, Volleyball or Wrestling scoreboard with control center.

**1.02 REFERENCES**

- A. Standard for Electric Signs, UL-48
- B. Standard for Control Centers for Changing Message Type Signs, UL-1433, 1<sup>st</sup> Edition
- C. Federal Communications Commission Regulation Part 15
- D. National Electric Code

**1.03 SUBMITTALS**

- A. Product Details: Submit literature for manufacturer scoreboard, control and accessories as specified.
- B. Specification Drawings: Submit face layout, dimensions, electrical wiring diagrams, structural support and mounting.
- C. Resources: Submit manufacturer installation instructions and operation manual.

**1.04 PROVISIONS**

**\*\* NOTE TO SPECIFIER \*\* Following conditions shall be reviewed with customer**

- A. Shall verify mounting structure is secured and cured.
- B. Shall verify location of scoreboard equipment and structure is prepared for installation, as specified.
- C. Shall verify mounting structure is able to support the scoreboard and accessories weight. Mounting structure is the responsibility of the Architect, unless otherwise specified.
- D. Shall confirm conduit locations, number of conduit run and termination of conduit.

**1.05 QUALITY ASSURANCE**

- A. For indoor use only.
- B. Source Limitations: Provide scoreboard and components through one source from a single manufacturer.
- C. Scoreboard designed for indoor use.
- D. Shall be ETL listed for UL Standards 48 and 1433
- E. Shall be FCC compliant
- F. Shall be NEC compliant

**1.06 WARRANTY AND SERVICE PLAN**

- A. Spectrum Solid State Scoreboards are guaranteed for a period of five (5) years against any defects in materials.

- B. Warranty does not cover unauthorized repairs or modifications, abuse, neglect, acts of God, exceptionally high or low voltage, and/or improper grounding, installation, operation or shipment to the factory.

## **PART 2 PRODUCT:**

### **2.01 MANUFACTURER**

- A. Spectrum Corporation, 10048 Easthaven Blvd., Houston, TX 77075  
Phone: 713-944-6200, 800-392-5050, Fax: 713-944-1290  
Website: [spectrumscoreboards.com](http://spectrumscoreboards.com)

### **2.02 PRODUCT OVERVIEW**

- A. Basketball Scoreboard Model 52504-C4 with MSX control scoring console for basketball, volleyball and wrestling.

Each Scoreboard shall have the following displays:

- 99:59 Minute Clock/timer with lighted colon/decimal point
- Home and Visitor scores
- FOULS for Home and Visitor
- PLAYER FOULS
- PERIOD
- Possession Indicators
- Double Bonus Indicators
- Team Name in place of HOME (optional)

### **2.03 SCOREBOARD**

#### **A. General Information**

1. Dimensions: 14'10" x 14'10" x 70"  
(4.5 m x 4.5 m x 1.8 cm)
2. Hanging weight: 1200 lbs. (544 kg)
3. Power requirements: 2471 VA, 120 Vac, 60 Hz
4. Shall have a Premium Polyurethane Finish
5. Select from stock colors or match to a PMS color (number \_\_\_\_\_)
6. Shall have a deluxe game horn rated at 100 dB @ 10'0"
7. Shall have Border Trim and Clock Striping
8. Each scoreboard functionality shall include:
  - 99:59 Minute Clock counts down
  - Segment Timer capable
  - Celebration "Flash" feature
  - Home and Visitor scores 0-199
  - Period 1-4
  - Preprogrammable Double Bonus Indicators
  - Possession indicators
  - Team fouls 0-99
  - Time-Out Time displays time remaining
  - User selectable 1/10 or 1/1/00 second displays in last minute of a period
  - Automatic clock reset and period advance
  - Automatic Quarter Reset
  - Automatic Substitution Feature
  - Programmable Celebration Flash Feature

- Instant reset and posting for all digits

## **B. Construction**

1. Cabinet: .050 Aluminum
2. Scoreboard face: 18g galvanized steel
3. Digit face plate: 0.125 acrylic lexan

## **C. Digits**

1. All LEDs shall be covered with 1/8" Lexan SpectraShields™ to protect and absorb impacts
2. Shall be a combination of red and amber LED digits
3. Shall be rated 100,000 hours of use
4. Shall be 8 segment solid stroke design
5. All pixels shall be conformal coated front and back to protect the electronics from environmental conditions.
6. All pixels shall be individually serviceable from the front of the scoreboard cabinet
7. Each Scoreboard assembly shall include eighteen (18) numeric LED digits, four (4) double-bonus "B" indicators, and two (2) arrows for possession
8. Digit sets shall have:
  - Ultra-Bold LED digit technology  
18" (46 cm) high – Clock and team scores  
Shall include 432 LEDs per digit  
14" (36 cm) high – Each team fouls, each player number, each player fouls and Period  
Shall include 320 LEDs per digit

## **D. Captions**

1. HOME and VISITOR shall be 10" high (25 cm)
2. Each team fouls, each player number and each player fouls and Period shall be 5" high (13 cm)
3. Captions shall be 3M brand 220 High Performance Vinyl applied directly to scoreboard face

## **2.04 CONTROL SCORING CONSOLE**

1. Control shall be an MSX controller.
2. Controller functionality shall include:
  - Easy set up for 15 different sports
  - Changeable key pad inserts for other sports
  - Memory backup to retain configurations and eliminate data loss
  - Durable, lockable rugged waterproof carry case
  - A ten (10) foot (3 m) low voltage data cable cord that connects to control receptacle junction box and shall unplug and store inside the carrying case
  - Does NOT require hazardous 120 VAC electrical power
3. Easy Programming:
  - Celebrate a home score with flashing numbers
  - Option to use as a Practice Segment Timer or Time of Day Clock

- Tenth of a second timing to allow more accurate timing during last minute of play. Track-timing interface displays track-timing information from automatic-timing systems on football scoreboard
4. Connection Options:
- Direct wire, powered through control cable
  - Radio
  - Battery operation with radio - fully autonomous

## 2.05 AVAILABLE SCOREBOARD OPTIONS

**\*\* NOTE TO SPECIFIER \*\*** *Select scoreboard options*

1. Team Name caption in place of HOME caption
2. Digit Style: Pro-Style, Ultra-Bold, SpectraBrite™
3. Digit Color: All Red, All Amber, Combination Red and Amber
4. Color Options: Add a custom two-tone color to the scoreboard
5. Finish: Perma-Coat adds protection to finish and vinyl
6. Border Trim Striping Style: Curve, Oval, Octagon, Square
7. Clock Striping Style: Curve, Oval, Octagon, Square
8. Lettering: Standard, Outlined, Shadow
9. Mascot: Standard to extra-large size in 1-color, 2-colors, 3-colors, or full-color
10. Caption Option: Backlit Captions
11. Additional scoreboard functions per purchase order

## 2.06 AVAILABLE UPGRADES AND ACCESSORIES

**\*\* NOTE TO SPECIFIER \*\*** *Select scoreboard upgrades and accessories*

1. Multi-Sport Captions Plates
2. Controller Clock Handswitch for second operator
3. Radio Controller
4. Electronic Team Names
5. Electronic Message / Animations Displays
6. Video Display (custom designed to fit scoreboard)
7. School and/or Sponsor Signs
8. Scoreboard Accents (truss, arches, lettering, pole wraps, flags)
9. Clocks and Timers
10. Interior finish
11. Bottom enclosure

## **PART 2 EXECUTION**

### **3.01 EXAMINATION**

#### **A. Verification**

1. Confirm the mounting structure is completely cured and prepared for scoreboard. Verify plans and specification drawings are in accordance with manufacture's instructions and approved drawings.

#### **B. Installation**

1. Confirm scoreboard location. Verify electrical requirements have proper power source.
2. Confirm conduit and wiring are in place to be routed to scoreboard and accessories as shown on electrical plans by the Electrical Contractor. The contractor assigned the scoreboard equipment shall be responsible for all routing of conduit and wiring.
3. Secure scoreboard and confirm accessories are level and plumb with brackets and fasteners.
4. Test scoreboards and accessories to ensure all operations performing accurately.
5. Clean and touch-up any exposed areas.

Specifications are subject to change without notice.

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