

**SPECTRUM ARCHITECTURAL SPECIFICATION**  
**Model 8016-PL2**  
**August 1, 2005**

**PART 1 GENERAL**

1.1 GENERAL

- 1.1.1 Scoreboard(s) shall be UL Listed and be remotely operated via three-wire shielded grounded cable from control point(s). Scoreboard(s) shall display the following information: Minutes, Seconds, Home and Visitor Score and Half. Equipment to be solid-state electronic technology.

**PART 2 PRODUCT**

2.1 SCOREBOARD

- 2.1.1 Shall be Spectrum Model 8016-PL2 or approved equal to this specification by the architect. Provide \_\_\_\_\_ units of this model.
- 2.1.2 Overall cabinet shall be 4 feet in height by 16 feet in length by 5 inches in depth including mounting brackets, cabinet face constructed of 18 gauge steel and cabinet shell constructed of .050 aluminum. Cabinet color shall be as selected from the manufacturers standard colors with appropriate trim colors. Two vertical cabinets to be shipped and constructed for three-column mounting with two top steel mounting brackets built into the cabinet by the factory and one bottom steel mounting bracket supplied by manufacturer. Approximate weight is \_\_\_ pounds.
- 2.1.3 Display digits and indicator spots shall be made of 2 inch by 2 inch circuit card mounted pixels. Each pixel shall be individually replaceable and contain four (4) LEDs each. LEDs shall be red or amber in color. Digit height shall be 21 inches for Clock and Team Scores; and 15 inches for Half. Game Clock shall have a display capacity up to "99:59", team score to "99" and Half to "9".
- 2.1.4 Each pixel in conformal coated front and back to protect the electronics from outside elements and are individually serviceable from the front of the scoreboard cabinet.
- 2.1.5 All pixels are interchangeable throughout the scoreboard and are rated at least 100,000 hours of use.
- 2.1.6 Display configuration shall be 4 x 7 for 21 inches; 3 x 5 for 15 inches.
- 2.1.7 Digits shall consist of the following number of pixels: 21 inches, 20 pixels; 15 inches, 13 pixels (4 LEDs per pixel).
- 2.1.8 LED Digit Brightness: 40,000 MCD (millicandela).
- 2.1.9 Cabinet 18 gauge steel face shall be finished with three 'fire-fused' coats of permanent porcelain.
- 2.1.10 Captions shall be adhesive backed vinyl permanently attached to the cabinet and Home and Visitor shall be 12 inches in height; and Half shall be 10 inches in height.
- 2.1.11 Electronics to be packed in a high voltage plug-in processor accessible from the cabinet back.
- 2.1.12 Power to be 396 watts maximum, 120 VAC, 60 Hz.
- 2.1.13 Provide an electronic standard horn rated at 100 dB @ 10'0".

2.2 CONTROL

- 2.2.1 Shall be model MS-250 housed in a protective, weather resistant carrying case.
- 2.2.2 Construction shall be a plastic case 8 ¾ inches long by 3 ½ inches high by 8 inches deep.
- 2.2.3 Controls shall be 100% solid state. The microprocessor (MPU) computer chip shall be located inside the control console. Low voltage control signal shall be sent from the control console over a 3-wire control cable to the scoreboard.
- 2.2.4 Furnished with a 10' low voltage data cable cord to connect to control receptacle junction box and shall unplug and store inside the carrying case. Does NOT require hazardous 120 VAC electrical power.
- 2.2.5 Electronic features shall include a program mode allowing change in sport controlled or accommodation of a sport rules change and a memory circuit to retain information if power is interrupted.

2.3 REMOTE CONTROL CABLE

- 2.3.1 Furnish one length of three wire-shielded, grounded cable to connect receptacle junction box to the scoreboard cabinet.

2.4 LIMITED WARRANTY

- 2.4.1 Spectrum Solid State Scoreboards are guaranteed for a period of five (5) years (LEDs are guaranteed for a period of ten (10) years) against any defects in materials. Porcelain Finish is guaranteed for a period of twenty-five (25) years against any defects in materials. First year service includes cost of labor and parts when returned prepaid to Spectrum Corporation. Remaining four (4) years cover parts only, when returned insured, prepaid to Spectrum Corporation. 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.

2.5 OPTIONAL EQUIPMENT

- 2.5.1 Provide MSX Controller upgrade control console for above equipment.
- 2.5.2 Provide one MSX Clock Handswitch for second operator.
- 2.5.3 Provide wireless radio control operation for above equipment.
- 2.5.4 Provide Spirit/Sponsor sign panels for above equipment.