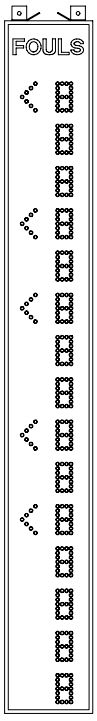
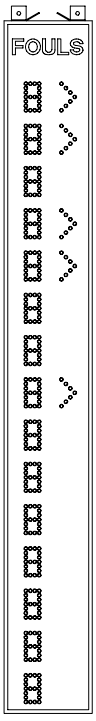
ALL AMERICAN SCOREBOARDS
A Product of Everbrite 401 S. Main St. Pardeeville, WI 53901 (608)429-2121 / (800)356-8146

OPERATING INSTRUCTIONS AND SERVICE MANUAL

BASKETBALL PLAYER FOULS PANELS

MODEL MP-2215





EFFECTIVE S.N.XXXX, APRIL 1,1987

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1. GENERAL INFORMATION

1.1 DESCRIPTION

Your All-American scoreboard has been carefully inspected and tested before leaving the factory. It is possible, however, that components may be loosened or forced out of adjustment in transit. If this occurs, follow the troubleshooting guide (section 4). If equipment then fails to operate, contact immediately:

ALL-AMERICAN Service Department
EVERBRITE Corporation
P.O. Box 97
Pardeeville, WI 53954
Telephone: (608) 429-2121
Toll Free: 800-356-8146

Parts being returned for repair are to be sent to:

ALL-AMERICAN Service Department
EVERBRITE Corporation
401 S. Main Street
Pardeeville, WI 53954

NOTE

If you need to send parts in for repair, please call the ALL AMERICAN service department for a returned goods authorization (RGA) number.

1.2 Identification

ALL-AMERICAN uses a 5 digit serial number for scoreboard identification. The serial number tags are located on the back of the control console and on the top of the display. When contacting the factory for assistance it is important that the model number and serial number are known.

1.3 Damage

Upon receipt, check for visible damage. If this occurs, or if damage is found after shipment has been accepted, follow the damage claim procedure.

1.4 Damage Claim Procedure

An instruction sheet is enclosed advising the consignee in case of damage in transit. If damage is noted at the time of delivery, consignee must obtain an 'Inspection of Bad Order' from the delivering carrier. In order to process your claim, this must be properly filled out with a complete statement of all damage and it must be signed by the carrier.

If damage is discovered after delivery, you should call the delivery company. Have them make out a Concealed Damage Report. Fifteen days after delivery are allowed, so this should be done promptly or it is impossible to process this claim.

Advise EVERBRITE corporation of necessary replacement parts, or repairs.

Consignee will be invoiced and then should file a claim with the carrier to recover charges. To file your claim follow this procedure:

(A) Cost of replacement parts or repair charges are invoiced to the carrier by the consignee.
(B) The following documents, properly filled out, plus invoice, are forwarded to the trucking company in support of your claim:

(a) Original bill of lading
(b) Original paid freight bill
(c) Certified copy of original invoice
(d) Standard form for presentation of loss and damage claim

2. INSTALLATION

2.1 General Information

Shipping papers accompany each scoreboard. Check carefully to see that you receive the following:

2 ea Fouls Displays
1 ea Control Console
1 ea Service Manual
1 ea Mounting Hardware Package
1 ea Wall Junction Box
1 ea Splitter Box
? ft Control Cable (if ordered)

IMPORTANT!
The MP-41 cable supplied by ALL AMERICAN SCOREBOARDS for use on the Microprocessor based scoreboards is specifically designed for this system. Use of a substitute cable may void the warranty on the scoreboard!

2.2 Inspection

Inspect each unit and tighten all screws, lamps, and fittings that may have loosened in shipment.

2.3 Pre-Test

Before installing the displays, pre-test all functions.

(A) Connect the displays to a 20 AMP, 120 Volt AC circuit.

(B) Plug the control console into the top of the displays.

(C) Test operate all functions on each display according to the operating instructions in section 3 of this manual.

(D) When all the functions test out, disconnect the power and the control console before hanging the fouls panels.

2.4 Data Cable Installation

The MP-41 data cable carries only low voltage signals and therefore can be installed with or without conduit. consult section 6 for junction box and display wiring.

2.5 Electrical connections

The fouls panel set requires a 120 V. 20 AMP AC circuit for the exclusive use of the set.

NOTE

To protect the MP-2001 control from damage, it is advisable that you disconnect the control and store in a dry secure area when not in use.

NOTE

This equipment is **ETL** (Electronics Testing Laboratories) approved and complies with the requirements in part 15 of the FCC rules for a class A computing device. Operation of this equipment in a residential area may cause unacceptable interference to radio and television reception, requiring the operator to take whatever steps are necessary to correct the interference.

3. CONTROL CONSOLE OPERATION

3.1 Fouls Panel Display Power

Turn on the branch circuit to the displays. The displays will be blank.

3.2 Console Power

Plug the control console cable into the wall junction box.

Push **ON/OFF** once to turn the console on.

Push **ON/OFF** a second time to shut the console off.

The console display should show **CODE** when first turned on.

Enter the four digit code (47) as in the following example:

Push **CODE** **4** **7** **ENTER**.

When the proper code has been entered, the console display will show "**GO**".

3.3 Console Display

The 4 digit Liquid Crystal Display module displays the information entered from the keyboard.

3.4 Player Numbers

To enter the player numbers for the corresponding foul positions enter the following:

PANEL **PLAYER NO.** . Display will show "**1**", indicating the first row.

Proceed with the player number entries.

If the players numbers were 12, 15, 28, etc. you would:

Push: **1** **2** **ENTER** . Display shows "**2**".

Push: **1** **5** **ENTER** . Display shows "**3**".

Push: **2** **8** **ENTER** . Display shows "**4**".

Keep putting the players numbers in until you get to the 15th player. For the 15th row player number, after you put in the player number and push enter the display shows: "**GO**".

Repeat the procedure for the guest foul panel.

To clear the entire panel, push: **PANEL** **CLEAR** .

3.5 Player Foul Entry

Once the player numbers have been entered it is very simple to enter the foul information.

Example: Player number 14 receives his/her first foul.

Push: **PLAYER NO.** **1** **4** **ENTER** **1** **ENTER** .

3.6 Player In Game Entry/Substitution

An arrow indicates the players that are currently in the game. To turn an arrow on:

Push **SUB** followed by the players number, then **ENTER** .

To turn an arrow off: Push **SUB** **PLAYER NO.** **CLEAR** .

4. MAINTENANCE AND TROUBLESHOOTING

4.1 Introduction

This section gives maintenance and troubleshooting information. Included are troubleshooting guides for typical scoreboard malfunctions. If the cause of a problem cannot be determined, please contact the customer service department.

> WARNING !!!
>
> 120 VAC wires are exposed whenever the cover over the controller assembly is removed from the scoreboard. Use extreme caution during troubleshooting or repair. To avoid possible damage to equipment or personal injury, always turn off the main power before removing the cover or replacing assemblies, or replacing lamps.

4.2 Test Equipment

A simple analog or digital voltmeter will be sufficient for all user repairable problems. Printed circuit boards requiring troubleshooting should be returned to the factory.

4.3 Troubleshooting

Whenever possible, follow the troubleshooting guides prior to contacting the customer service department. If a problem not described in the guides exists, contact the customer service department immediately. Refer to the diagrams provided for assistance in troubleshooting scoreboard malfunctions.

4.4 Troubleshooting Guides

(A) Scoreboard doesn't light and console doesn't work

(a) Check that the main power switch is turned on.
(b) Replace any defective or blown fuses.
(c) Check the power connections and voltages at the scoreboard.
(d) Contact the customer service department.

(B) Scoreboard digits don't light, but the console works

(a) With the main power switch "off"; remove the cover over the controller assembly.
(b) Check all connections.
(c) Turn the main power on.
(d) If the scoreboard still doesn't light, check the transformer voltage going to the receiver PCB (printed circuit board) assembly (blue wires) using a voltmeter set on the 12 VAC or higher scale.

If the voltage is less than 8 VAC contact the customer service department.

If the voltage is between 8-12 VAC see the replacement parts list for a receiver PCB assembly, and contact the customer service department.

(C) The scoreboard digits light but the console doesn't work

(a) Check for continuity between the scoreboard and the junction box.
(b) If an open circuit is found, the problem is either the cable or a cable connection.
(c) If the continuity test checks good, check the voltage between the green wire and the white wire in the junction box, using a voltmeter set on the 12 VAC or higher scale.

If the voltage is 0 VAC see the controller parts list for a transformer assembly.

If the voltage is less than 8 VAC consult the controller wiring diagram for

instructions on long cable compensation.

If the voltage is between 8 VAC and 12 VAC contact the customer service department.

(D) The scoreboard digits light, the console works, but there is no control of the scoreboard.

(a) Check the voltage between the black and red wires in the junction box with a voltmeter set on the 3 VDC or higher scale. The voltage should read somewhere between 2-3 VDC when the console is working properly.
(b) If the voltage is 0 VDC contact the customer service department for assistance.
(c) If the voltage is correct, (2-3 VDC) check that this reading also appears at the scoreboard.
(d) If the correct voltage also appears at the scoreboard, see the replacement parts list for a receiver PCB assembly.

(E) The scoreboard works, but some lights stay on all the time

(a) With the main power "OFF", switch the plug from the bad digit with the plug for a known good digit.

EXAMPLE: Plug "C" into "D" and "D" into "C" locations.

(b) Turn the power back on. If the same lamps remain lit all the time, the problem is a shorted lamp socket. If the lamps on a different digit now stay lit all the time, the problem is on the driver PCB assembly. See the replacement parts list for the proper replacement part.

(F) The scoreboard works, but some lights do not come on.

(a) Check for burned out lamps.
(b) Check for a broken wire or bad connection on the 12 pin connector.
(c) See the replacement parts list for the proper replacement driver board.

5. REPLACEMENT PARTS LIST

5.1 Scoreboard Display Parts

1

figure 1

DISPLAY ASSEMBLY

REPLACEMENT PARTS LIST (MP-2215)				

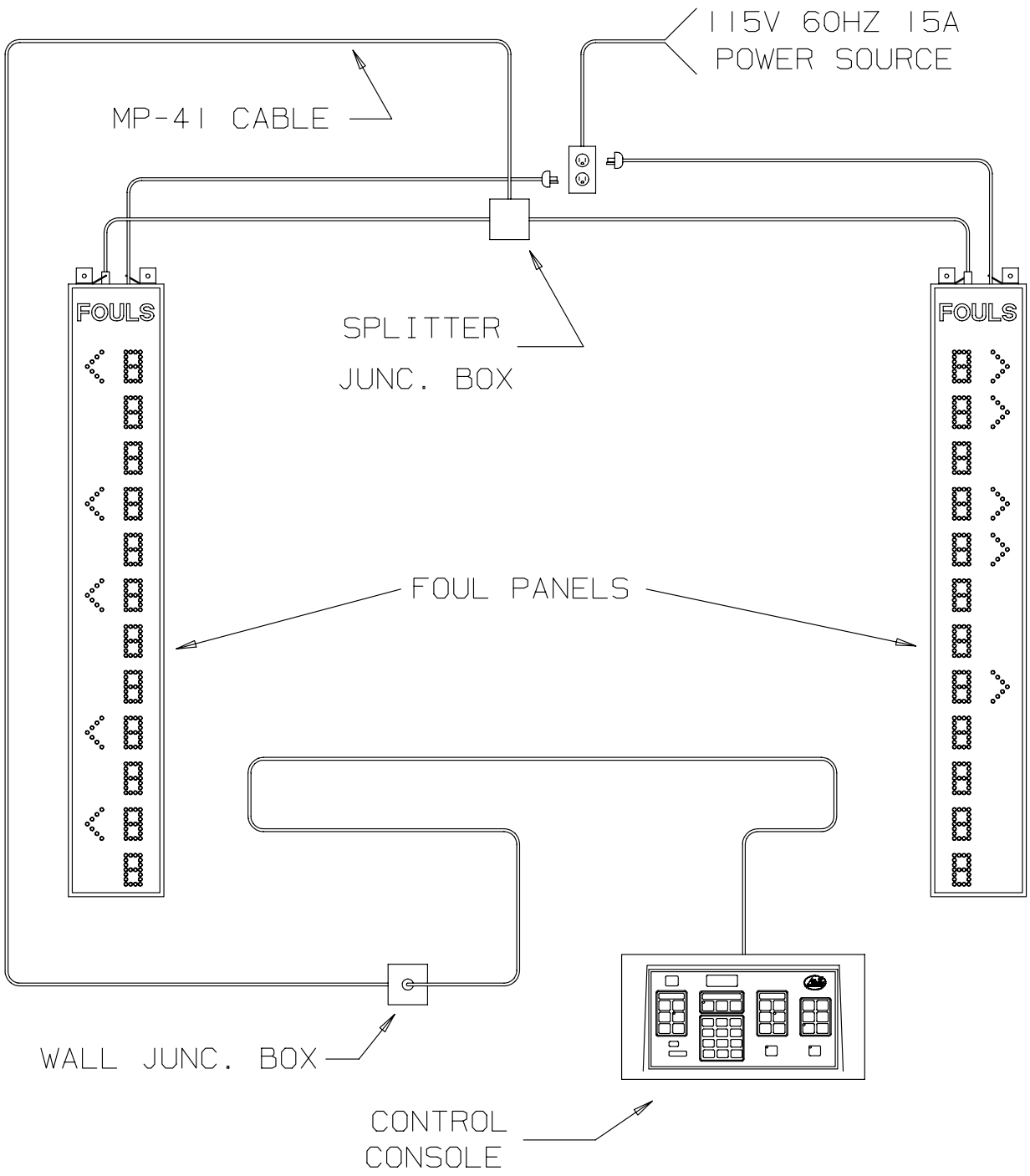
fig.& index	MFG PART NUMBER	DESCRIPTION	REF DES	VENDOR PART #
1-	153006	Display Assembly		153006
1-1	151283	Face, Red Plex.		151283
1-2	150366	Receiver PCB Assembly	A2	150366
		*** PROGRAM ***		
1-3	151485	Driver Assy, 3 Digit Display	A3-A6	151485
1-4	703719	Transformer, MP 12V/18V	T1	C-1106
1-5	350050	Transformer, 12V/8A	T2	C-1082
1-6	705075	Ribbon Cable Assy, W/2 Fem.Connectors		AS-1053
1-7	701137	Terminal Block, 7C	TB-1	670-7
1-8	701036	Fuseholder		342001A
1-9	701049	Fuse, 3A 250V 1/4 X 1 1/4	F1	MDX-3 Slo Blo
1-10	702786	Connector, 5 Pin Female	J1	RM12BRD5S
1-11	150365	Control Console		150365
	150208	Slipsheet		150208
	180157	Transmitter PCB Assembly	A1	180157
	702785	Connector, 5 Pin Male Cable	P1	RM12BPG5P
1-12	150204	Wall Junction Box, Single		150204
	702786	Connector, 5 Pin Female	J1	RM12BRD5S
	150500	Cable, MP-41 Control		8723
1-13	118513	Splitter Junction Box		118513
	702785	Connector, 5 Pin Male CCT	P1/P2	RM12BPG5P
	150500	Cable, MP-41 Control		8723

6. DIAGRAMS

6.1 Control Console Keyboard and Slipsheet Layout

CONSOLE KEYBOARD

6.2 Scoreboard System Layout



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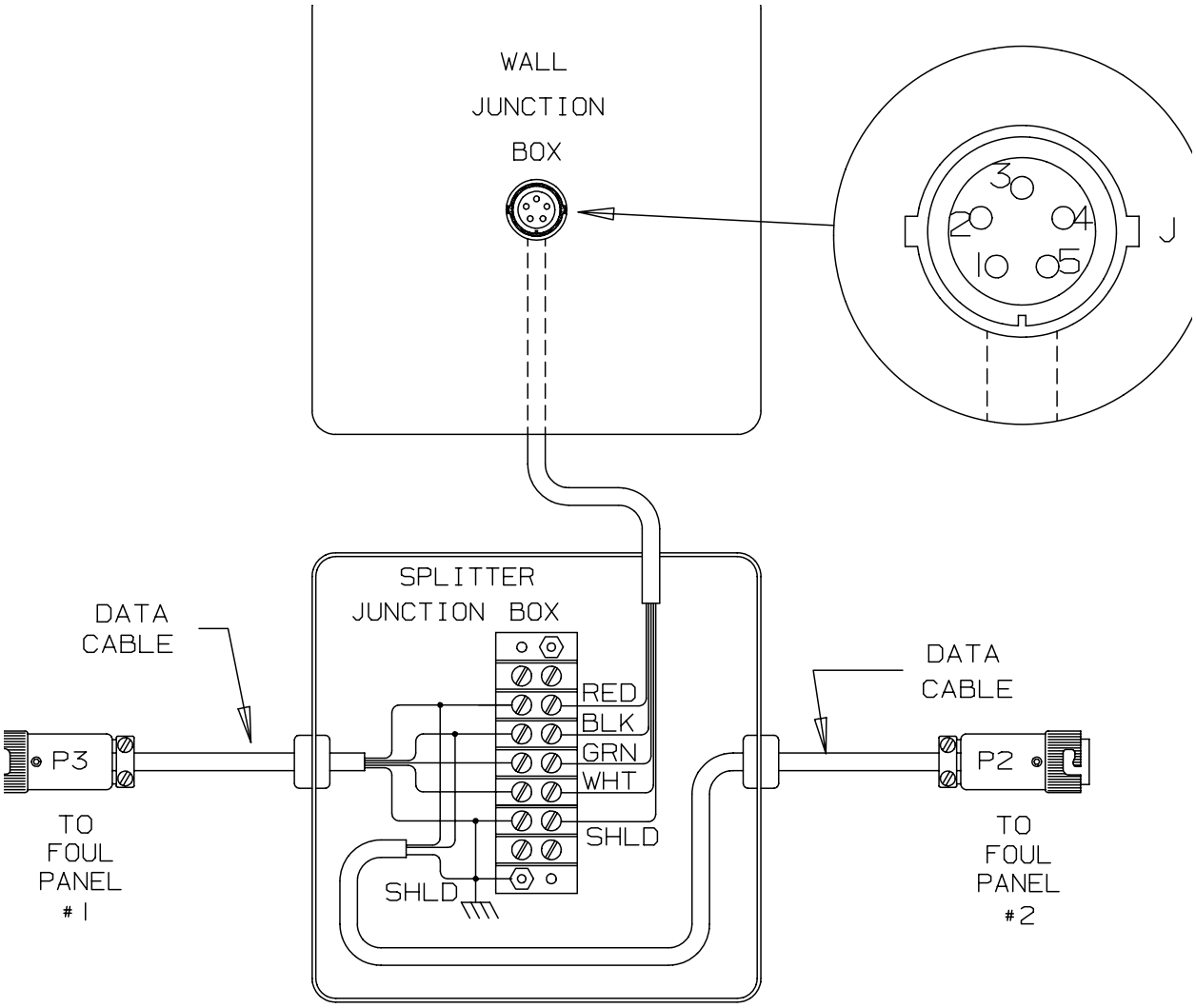
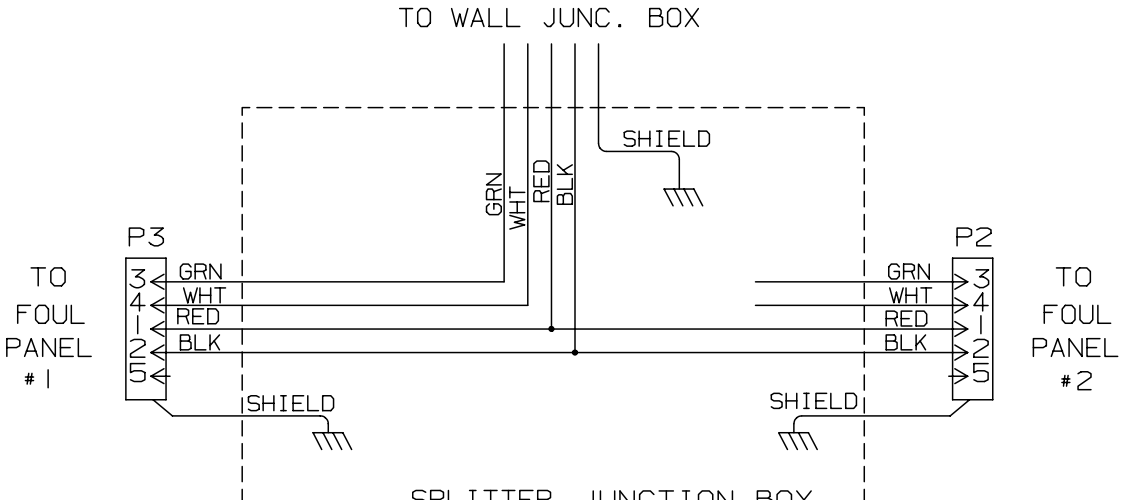
SYSTEM LAYOUT

6.3 Junction Box Wiring





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JUNCTION BOX WIRING

6.4 Fouls Panel Wiring

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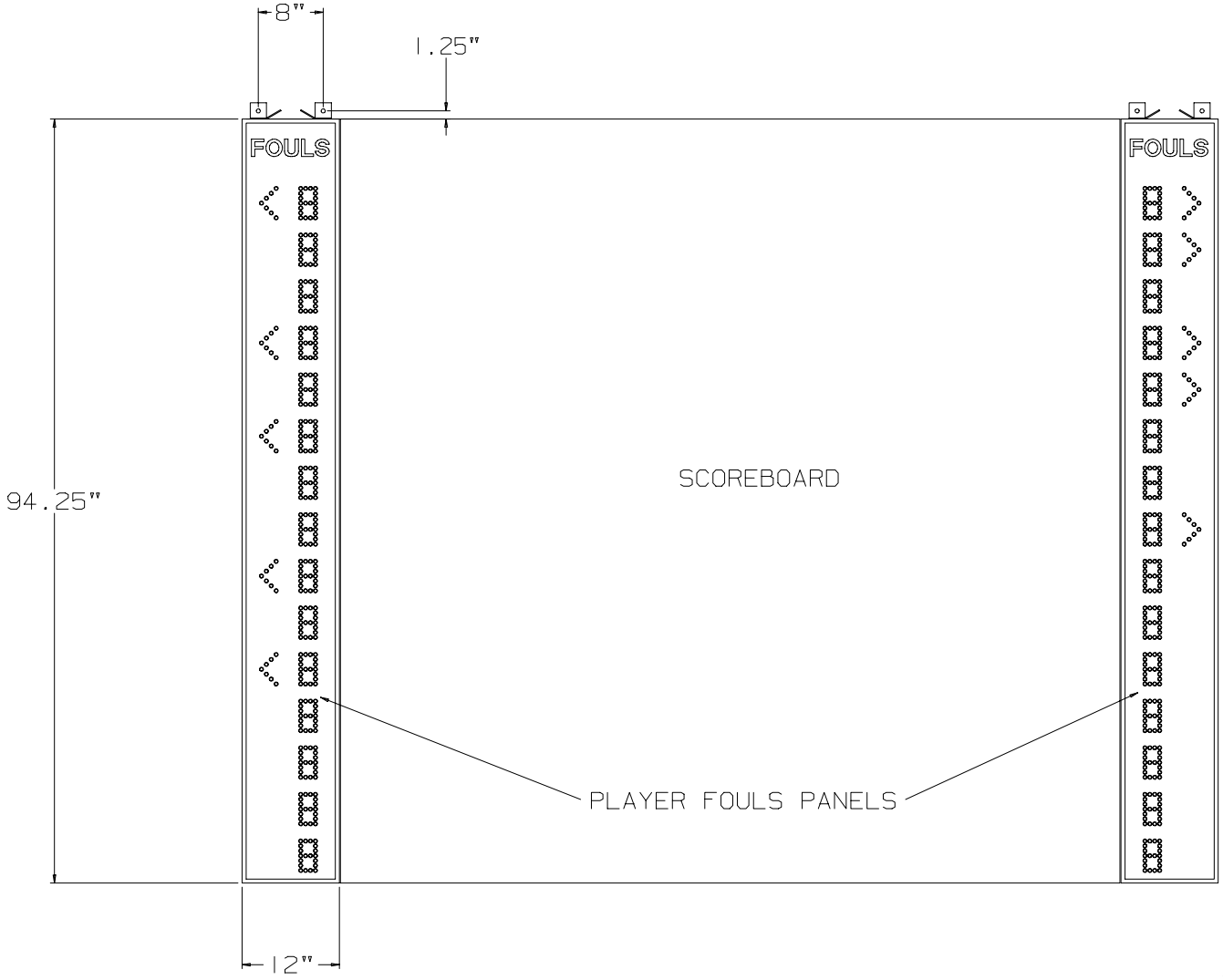
6.5 Installation Drawing



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INSTALLATION DRAWING