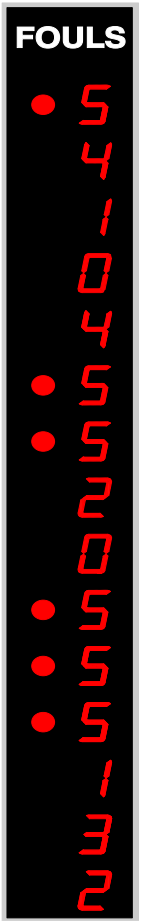
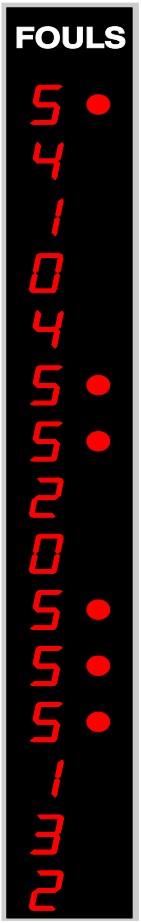
Operating Instructions & Service Manual



SCOREBOARD

PLAYER FOULS PANELS



Basketball Player Fouls Panels Model MP-5215R

EFFECTIVE S.N. 17,100, June 18, 2001

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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 100
Pardeeville, WI 53954
Telephone: (608) 429-2121
Toll Free: 800-356-8146
E-mail score@everbrite.com

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 the lower right-hand corner on the face of the scoreboard 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

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 Radio Control Console
1 ea AC Adaptor
1 ea Service Manual
1 ea Mounting Hardware Package

2.2 Inspection

Tighten all screws and fittings that may have loosened in shipment.

2.3 Pre-Test

Before installing the scoreboard, pre-test all functions.

(A) Connect the scoreboard 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 the each display according to 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 scoreboard wiring.

2.5 Electrical Connections

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

NOTE

To protect the MP-2002 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 not yet **ETL** (Electronics Testing Laboratories) approved, but 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 AC adaptor into the control console and into a 120 VAC wall outlet.

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

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

When first turned on; the console display should show as follows:

PLAY STAT CONTROL
MP5000 VER 1.10 2001

Enter the two digit code (15) as in the following example:

Push **CODE** **1** **5** **ENTER**.

When the proper code has been entered, the LED displays will blank, and the console LCD will show as follows:

0	SCORE	0
0	FOULS	0

3.3 Console Display

The 2 line by 20 character Liquid Crystal Display module displays the scoreboard information entered from the keyboard. The following information is displayed during normal operation: Player Numbers and Player Fouls for 15 Players, for both Home and Guest team.

3.4 Player Numbers

To enter the player numbers for the corresponding foul positions, under either Home or Guest, enter the following:

PLAYER NO. **ENTER** . Display will show "**PLAYER NUMBER** =". Proceed with the player number entries. If the players numbers were 12, 15, 28, etc. you would:

Push: **1** **2** **ENTER** . Display shows "**PLAYER NUMBER** = **12**".

Push: **1** **5** **ENTER** . Display shows "**PLAYER NUMBER** = **15**".

Push: **2** **8** **ENTER** . Display shows "**PLAYER NUMBER** = **28**".

Keep putting the players numbers in until you get all the players entered.

Repeat the procedure for both teams.

To clear the entire panel turn the control console off.

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.** **ENTER** **1** **4** **ENTER** **FOUL + 1** .

3.6 Player In Game Entry/Substitution

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

Push **PLAYER No.** followed by the players number, then **ENTER** , and then **IN/OUT** **ENTER** .

The clear button stops the current entry and clears the control for a new entry.

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 power supply 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:

(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) Check to see that the Green LED on the power supply is lit.
(e) Check for 12 VDC at the power supply terminal.
(f) Contact the customer service department.

(B) Control console doesn't turn on

(a) Check that the AC power to the AC adaptor is turned on.
(b) Replace any defective or blown fuses.
(c) Check the power connections and voltages in the control.
(d) Contact the customer service department.

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

(a) With the main power switch “OFF”; remove the cover over the power supply and receiver.
(b) Check all connections.
(c) Turn the main power on.
(d) Turn the control console on and enter the code.

If LED D1 on the receiver board is flashing rapidly call the customer service department.

(D) Scoreboard digits don’t light but the console works:

(a) With the main power switch “OFF”; remove the cover over the power supply and receiver.
(b) Check all connections.
(c) Turn the main power on.
(d) If the scoreboard still doesn’t light, check the voltage between the positive and negative terminal strips on the power supply for 12 VDC with a voltmeter set on the 12 VDC or higher scale.

If the voltage is 12 VDC or greater, go to (e).

If the voltage is less than 12 VDC check the power supply input voltage for 120 VAC and contact the customer service department.

(e) Check LED D4 on the receiver board.It should be medium brightness. Change the Dim level on the control console. D4 brightness should change.
(f) Check if LED D5 on the receiver board is on.

If D5 is on, check if D2 and D6 are flashing and call customer service department. The flash will be very fast. The LED’s may appear to be on at half brightness.

If D5 is not on, check that the receiver board is plugged into the power supply and call the customer service department.

(E) The scoreboard works but some digits do not change:

(a) Find the driver board that controls the first digit in the shift order that is not working.
(b) Check for 12 VDC at the driver board.
(c) Reset the data in ribbon cable connectors.
(d) Swap the driver board with a driver further down the shift order.
(e) If the digit still doesn’t work call the customer service department.

5. REPLACEMENT PARTS

5.1 Scoreboard Display Parts

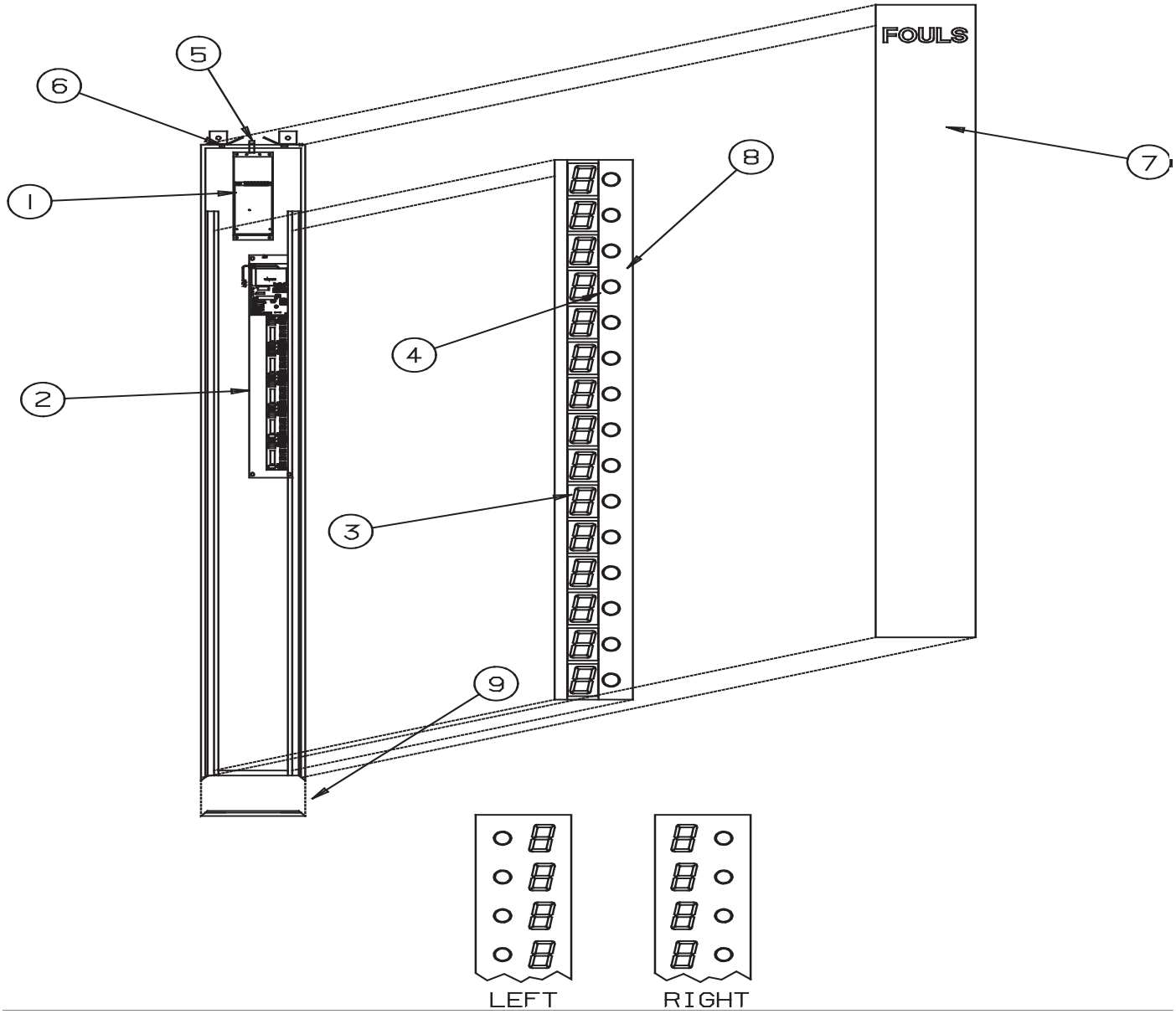


figure 1

DISPLAY ASSEMBLY

REPLACEMENT PARTS LIST (MP-5215R)

fig.& index	MFG PART NUMBER	DESCRIPTION	REF DES	VENDOR PART #
1-	153006	Display Assembly		153006
1-1	000000	Power Supply Plate Assy		000000
1-2	151808	Controller Assembly *** See Section 5.2 ***	A2	151808
1-3	000000	Digit, 4" LED 7 segment		000000
1-4	150820	Cluster, Red LED		150820
1-5	701036	Fuseholder		342001A
1-5A	701049	Fuse, 3A 250V 1/4 X 1 1/4	F1	MDX-3 Slo Blo
1-6	702786	Connector, 5 Pin Female	J1	RM12BRD5S
1-7	151283	Face, Red Plex.		151283
1-8	000000	Digit Panel,		000000
1-9	000000	Enclosure End cap		
1-10	EL00474P	Antenna, 2.4 GHZ External		
1-11	W100018P	Antenna Cable, 8' Coaxial		RFX-C8
1-12	151742	Control Console, 5000R		151742
	151684	Slipsheet Pair		151684
	151692	Transmitter PCB Assembly *** PROGRAM MP5. 104 ***	A1	151692
	SW005100	Toggle Switch,	S1	SW005100
	EL00479P	Transceiver, 2.4 GHZ Radio OEM	A17	
	EL00473P	Antenna, 2.4 GHZ Internal		RFX-A5 Maxrad
	EL057700	LCD Display, 2 Line 20 Character		
	151682	Keyboard Assembly,		151682
	WH009100	Ribbon Cable Assembly, 14C 8"		WH009100
	122763	Enclosure,		
1-13	000000	Slave Cable,		000000
	702785	Connector, 5 Pin Male CCT	P1/P2	RM12BPG5P
	150500	Cable, MP-41 Control		8723

5.2 Controller Assembly Parts

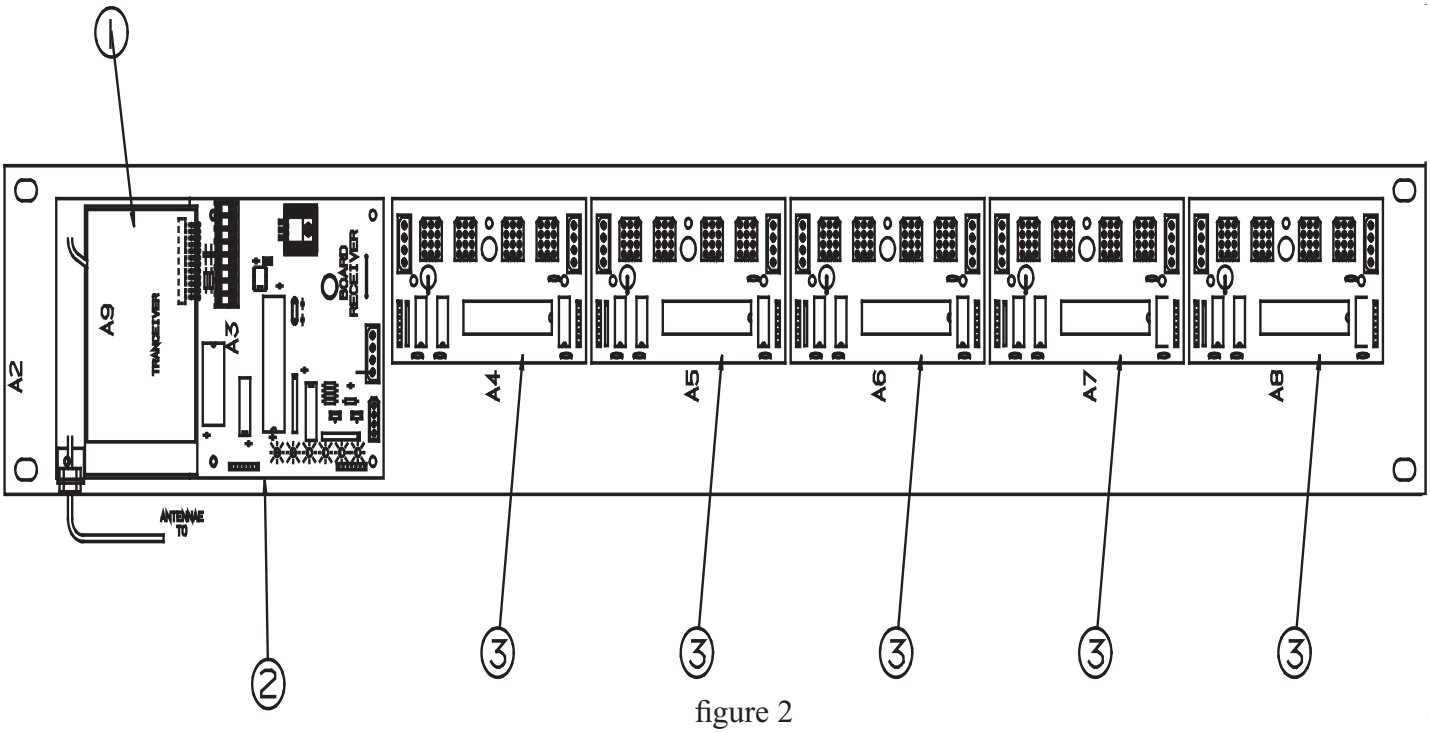
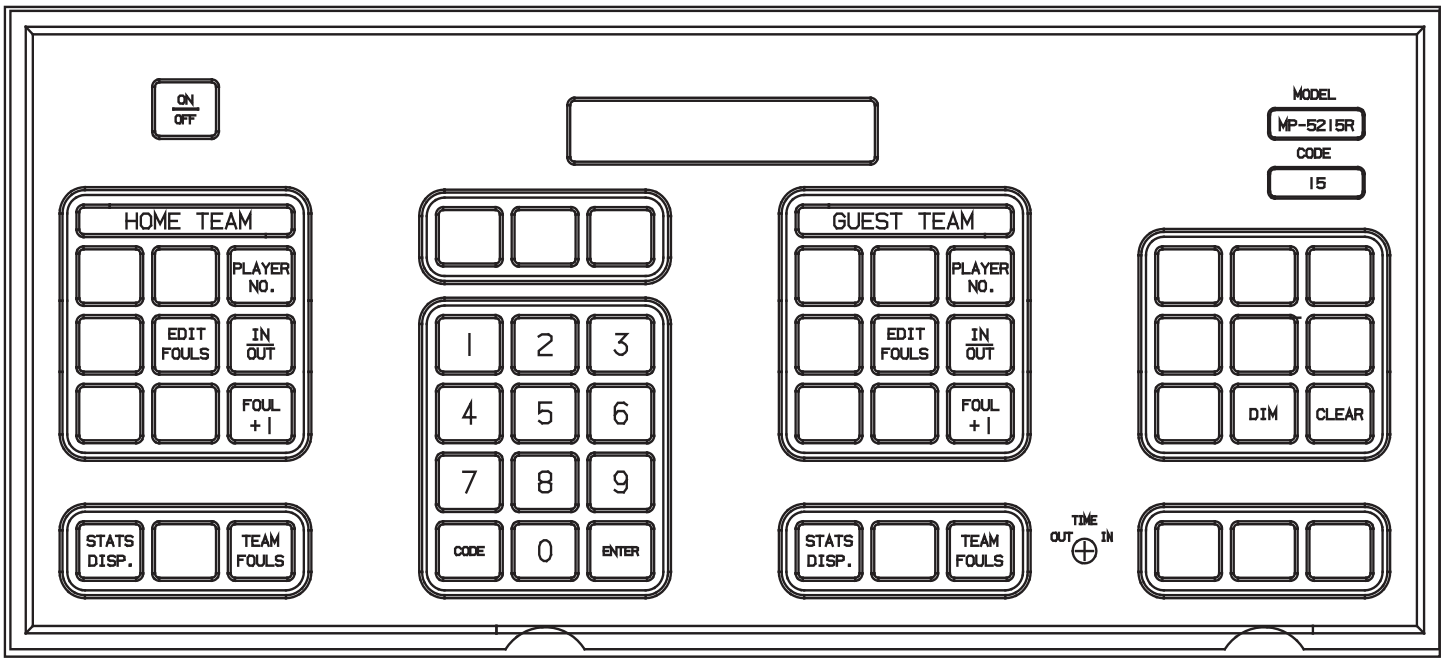


figure 2
CONTROLLER ASSEMBLY

REPLACEMENT PARTS LIST (MP-5215R) Controller Assembly				
fig.& index	MFG PART NUMBER	DESCRIPTION	REF DES	VENDOR PART #
2-	151808	Controller Assembly	A2	151808
2-1	150635	PC Board Assy, 5000 Series Receiver *** PROGRAM RX5.V102 ***	A3	150635
2-2	150634	PC Board Assy, 4 Pos. Driver	A4-A6	150634
2-3	EL00479P	Transceiver, 2.4 GHZ Radio	A17	OEM
2-4	151718	Cable Set, DC Power 4”		151718
2-5	705723	Spacer, Amerlock		SPC#PCS-6
2-6	930674	Cable Assy, 3” Ribbon 7C Fem.		CE 100F22-7 Pand

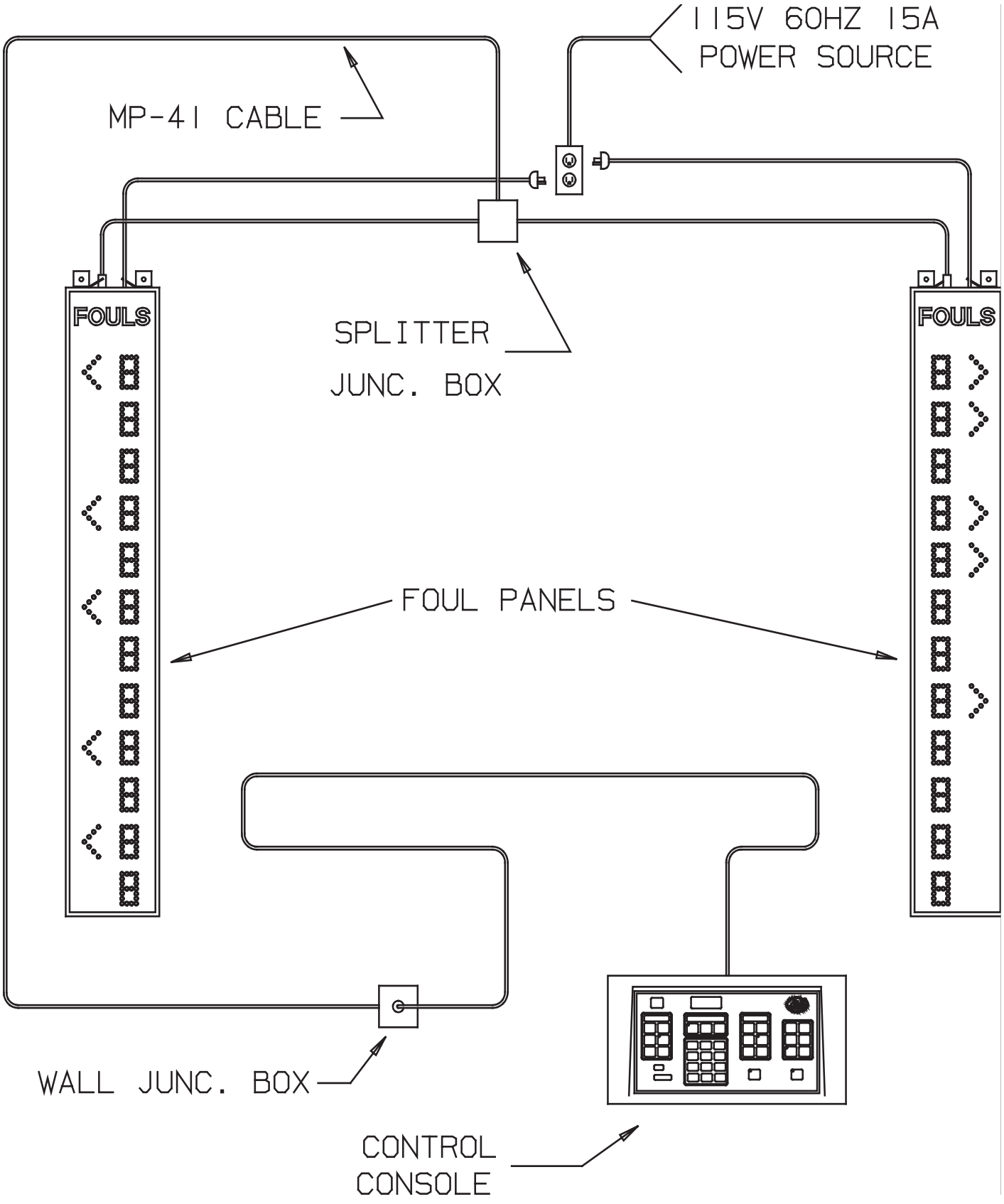
6. DIAGRAMS

6.1 Control Console Keyboard and Slipsheet Layout



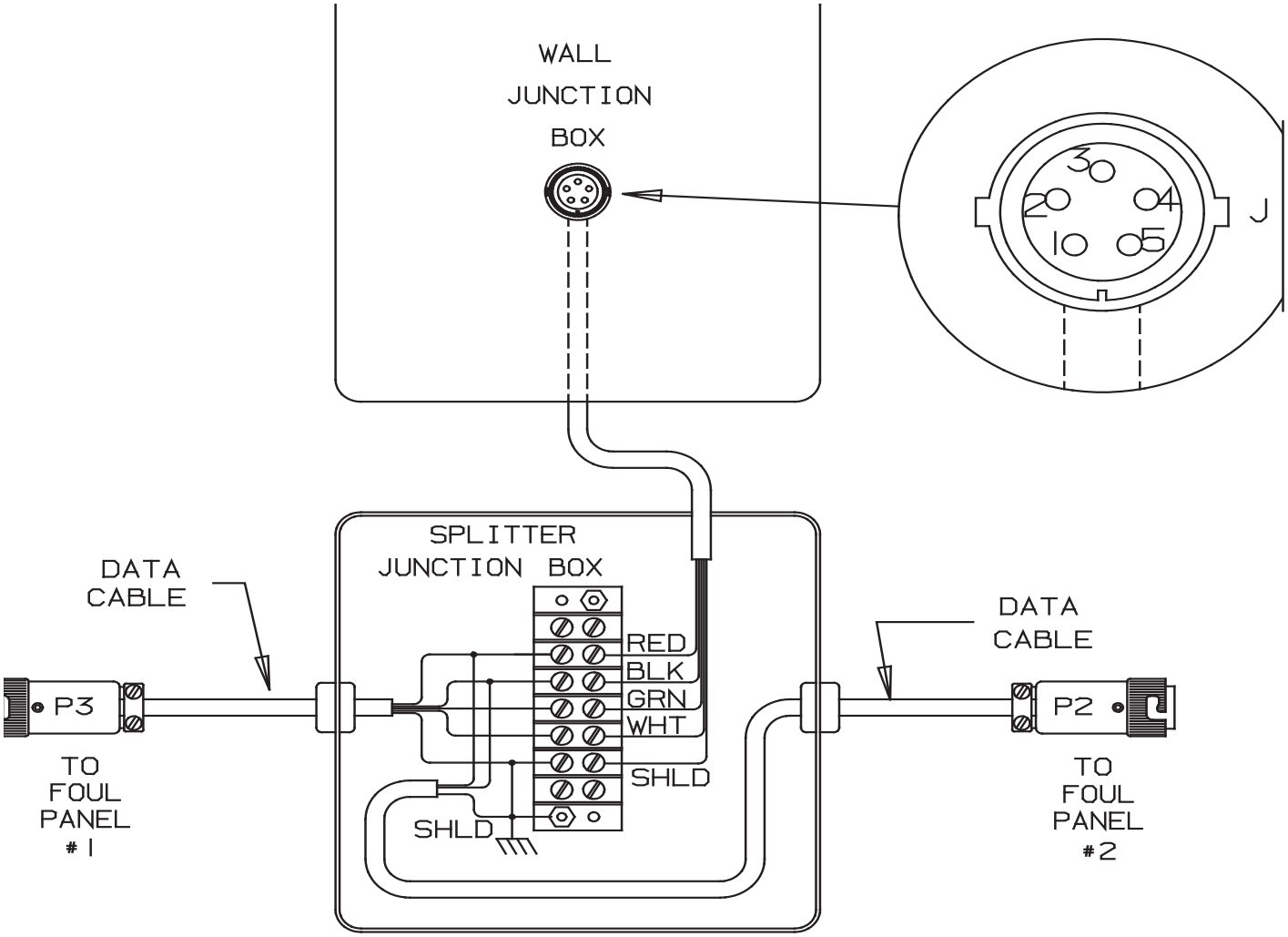
CONSOLE KEYBOARD

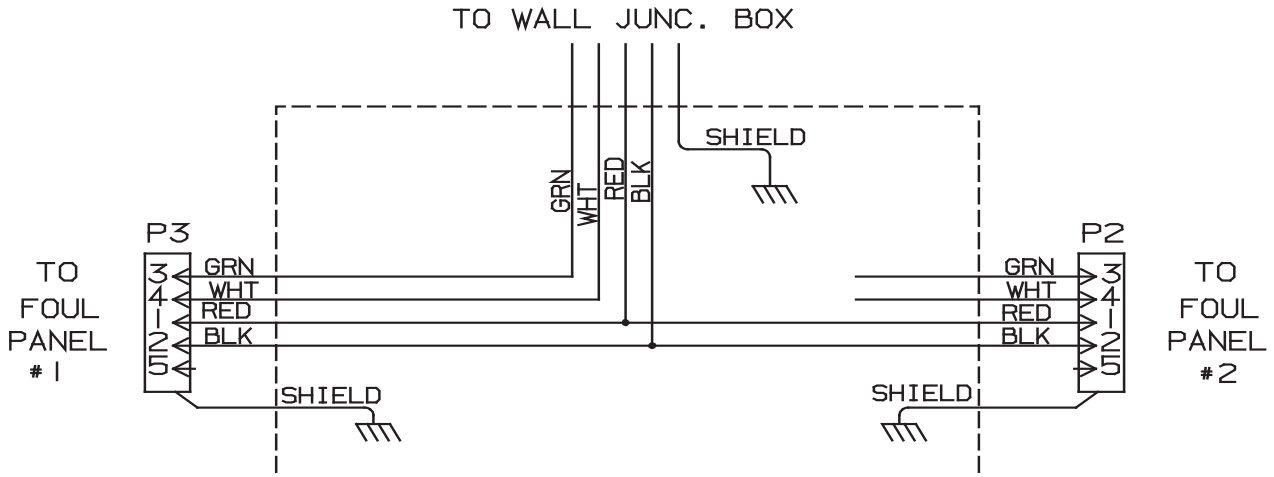
6.2 Scoreboard System Layout



SYSTEM LAYOUT

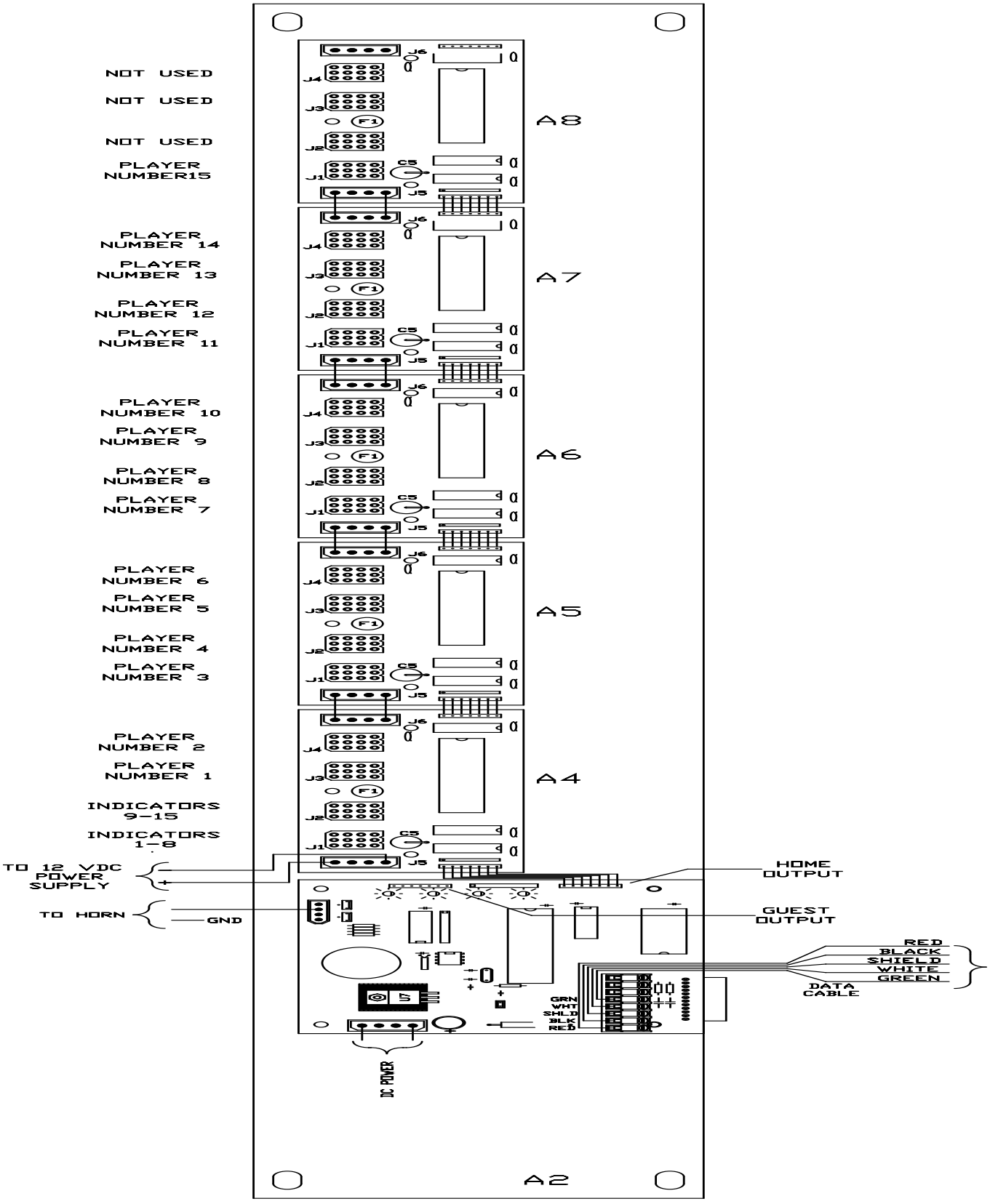
6.3 Junction Box Wiring



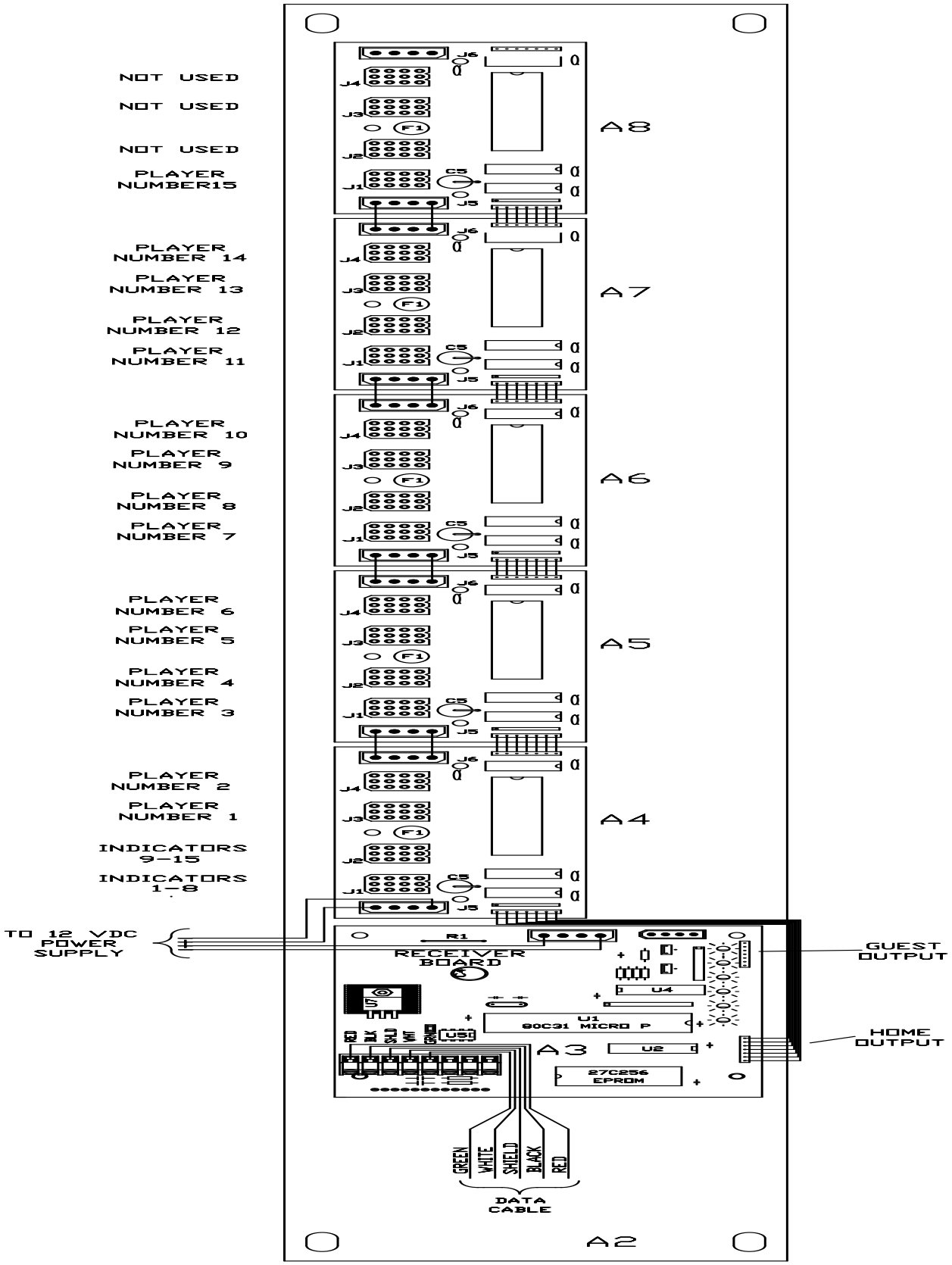


JUNCTION BOX WIRING

6.4 Fouls Panel Wiring

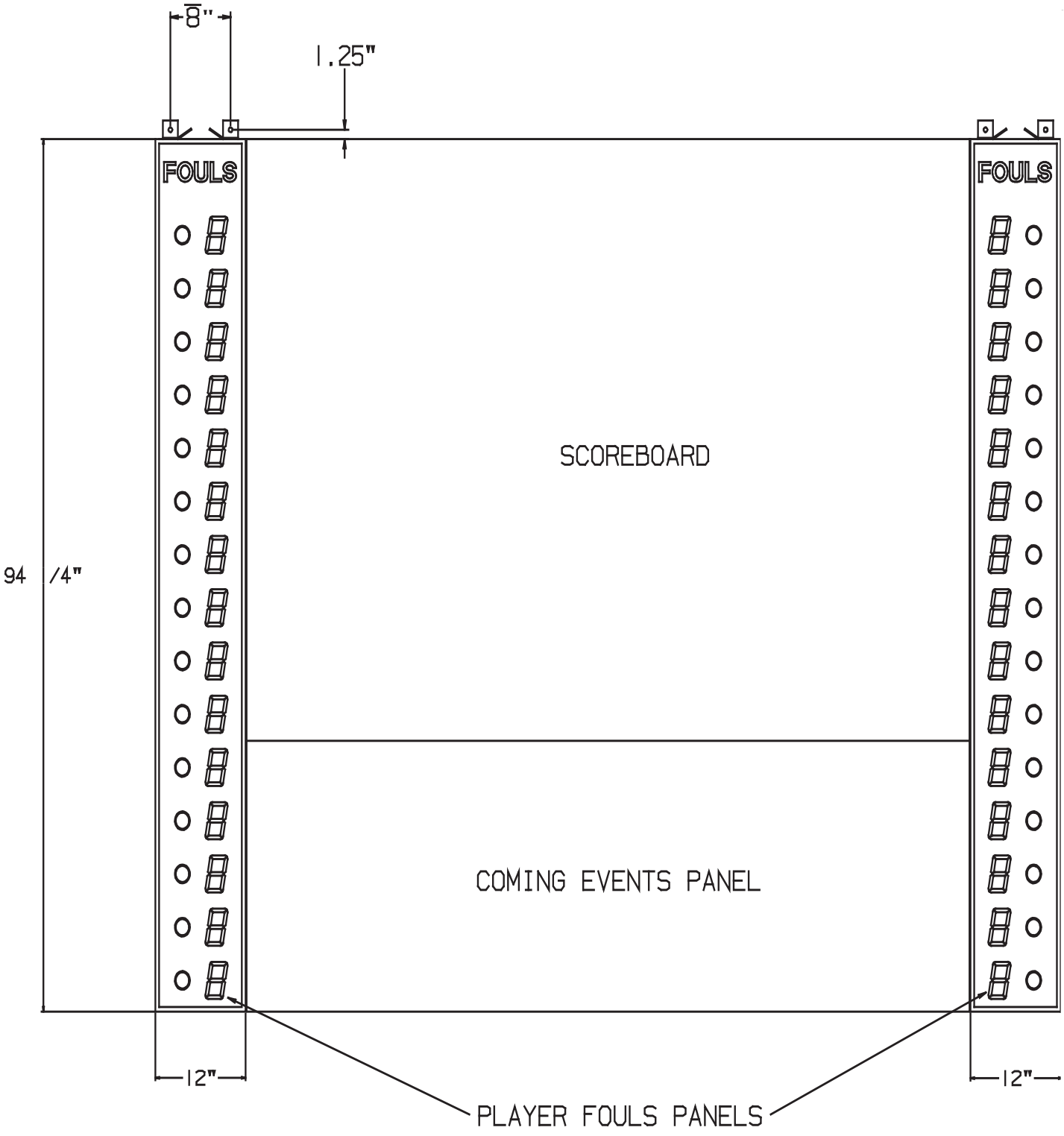


FOULS PANEL WIRING



FOULS PANEL WIRING

6.5 Installation Drawing



INSTALLATION DRAWING