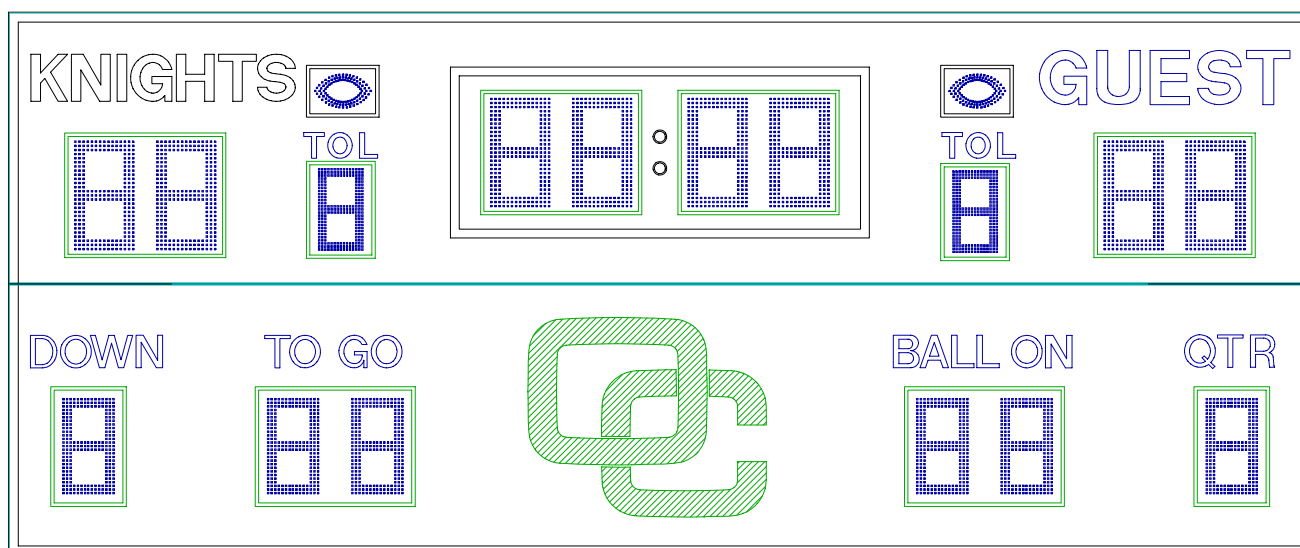




OPERATING INSTRUCTIONS AND SERVICE MANUAL
 FOOTBALL SCOREBOARD
 MODEL MP-7425R WITH MP-5000R CONTROL



EFFECTIVE S.N. 18725, April , 2003

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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 LLC
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 LLC
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 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 numbers 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
- (C) 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:

- 1 ea Football Display (4 Pieces)
- 1 ea Control Console
- 1 ea Service Manual
- 1 ea Mounting Hardware Package
- 1 ea AC Adaptor
- 1 ea Horn (if ordered)

2.2 Installation

Select the location best suited for visibility by the majority of spectators. Preferred position is facing east or north to avoid direct sunlight on the face of the scoreboard, if day games are played.

For permanent mounting to uprights, see the enclosed installation drawing in Section 6.

2.3 Electrical connections

The MP-7425R scoreboard requires a 120 VAC. 20 AMP AC circuit. This can be accomplished by a 120 volt single phase 2 wire with ground 20 amp service.

IMPORTANT !!!

To protect the MP-3000R control from damage, it is advisable to disconnect the control and store in a dry secure area when not in use.

NOTE

This equipment is **UL 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 Scoreboard Power

Turn on the branch circuits to the scoreboard. The Home and Guest scores will show "0".

3.2 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 continuously: Time, Home and Guest scores, Yards To Go, Ball On, Down, Quarter, Time Outs Left, and Auto Horn Enable.

3.3 Console Power

Plug the AC Adaptor into a wall outlet and into the control console.

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:

**MULTI-SPORT CONTROL
MP-7000 v 2.00.A 2003**

3.4 Initializing Scoreboard

Enter the two digit code (61) shown in the lower left corner of the keyboard as in the following

example:

Push **CODE** **6** **1** **ENTER** .

When the proper code has been entered, the console display will show as follows.

0	Q	0:00	0
&	0	on	0 H

The scoreboard display will now show **:00** in the time section.

3.5 Setup

The **SETUP** key will step through a list of operational settings.

Press **YES/NO** or make Numeric Entries to make changes.

Pushing **ENTER** without any other input skips to the next item.

Pushing **CLEAR** exits setup and all changes are kept.

Select brightness level for the scoreboard digits by pushing 1-8 and **ENTER** .

Select game time period. Example, 800 and press **ENTER** for 8 minutes.

Select time out length. Example, 100 and press **ENTER** for 1 minute.

Select time outs allowed. Example, 3 and press **ENTER** for 3 time outs.

Select automatic horn for end of period. Example, Yes/No and press **ENTER** .

Select set time of day clock. Example: Press **2** **1** **5** **ENTER** for 2:15.

The scoreboard will display the time of day after game time use, if desired.

Accurate time will be kept without power to the scoreboard for up to 2 months.

3.6 Timing

The main game time period is set in the "SETUP" Program, however this time period may be changed or edited using the **EDIT TIME** key.

To change the period time; Push **EDIT TIME** , the desired time period, then **ENTER** .

To reset the period time to the original setting; Push **TIME RESET** . To change the time

period directional mode for counting up or down; Push **UP/DOWN**

When in the Up mode, an arrow up symbol is displayed next to the time on the LCD display. If in the Down mode, there is no arrow displayed.

3.7 Team Scores

The Home and Guest Scores can be changed in five different ways.

- (A) To add 1 to the existing score: Push **+1**.
- (B) To add 6 to the existing score: Push **+6**.
- (C) To add 3 to the existing score: Push **+3**.
- (D) To directly enter or correct a score: Push Home or Guest **SCORE**, followed by the desired number, then **ENTER**.

Example: Present Home Score is 15. Change the score from 15 to 23.

Push: Home **SCORE** **2** **3** **ENTER**.

- (E) To clear the score: Push **SCORE** **CLEAR**.

3.8 Horn (Optional)

The horn will blow for 1/2 second each time **HORN** is pressed.

The horn will blow automatically at the end of each period for 2 seconds.

An 'H' is displayed on the LCD when this function is enabled.

3.9 Yards To Go, Ball On, Down, Quarter, and Time Outs Left

Entries to the above function, is made in the same manner as direct entry for Team Scores.

3.10 Track Operation

For track operation, use code 82. The timer will now count up from zero.

When in the track mode, the console LCD will display two timers. If you want to know the split times push **SPLIT**. The bottom timer will stop so that you can read the time. Now if you push **RESUME**, the timer will show what the top timer shows, and resume timing.

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.

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) 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, the console works, but there is no control of the scoreboard.
 - (a) Check the voltage between the black and red wires from the transceiver on the controller Assembly 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, or 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.

IMPORTANT !!!

In this scoreboard the 120 volt line is on the lamp socket all the time, and the common is switched to turn the lamps on and off. For this reason, to avoid damage to the equipment or personal injury, it is important to turn the main power off when changing the lamps.

- (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

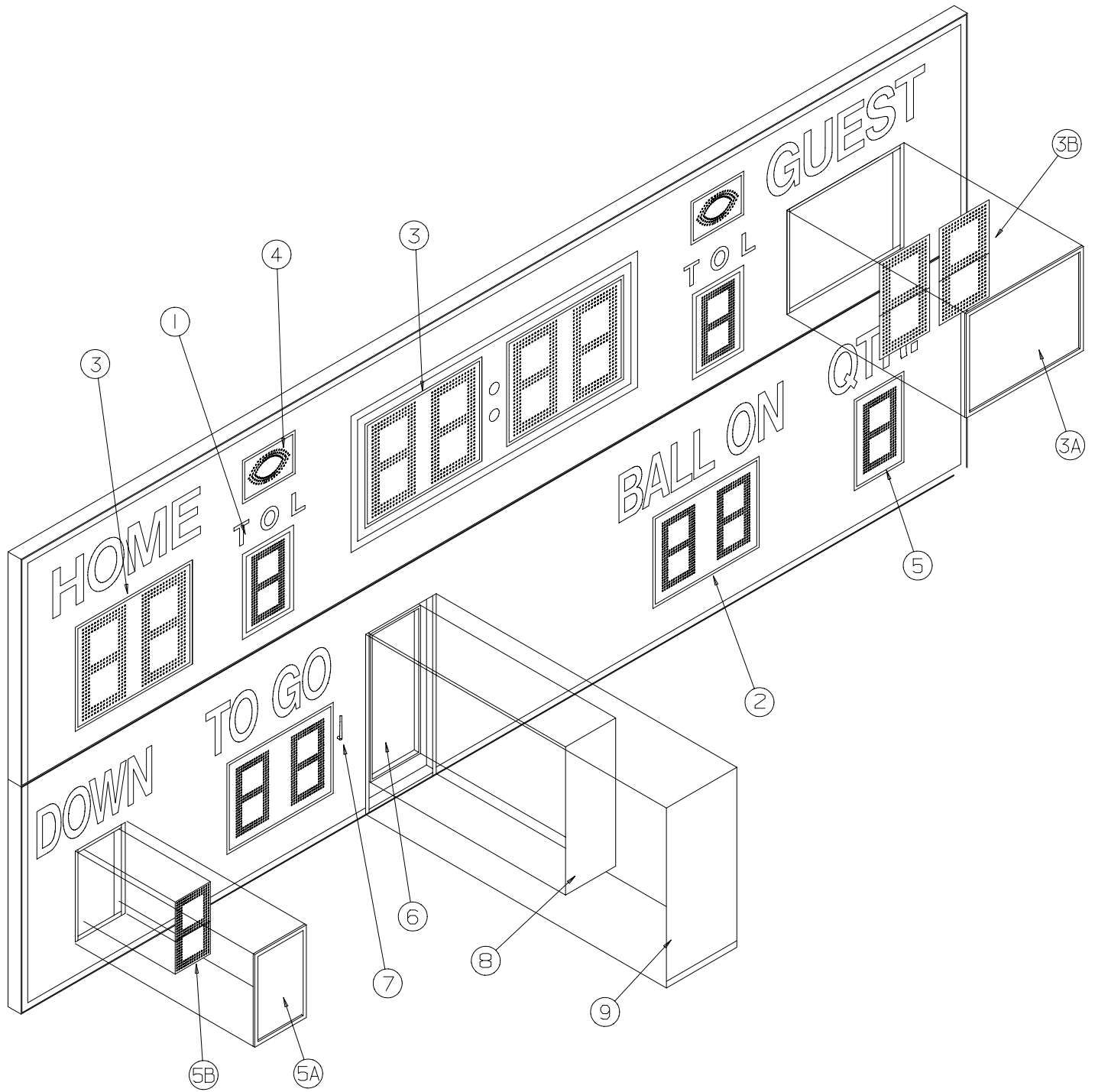


figure 1

DISPLAY ASSEMBLY

REPLACEMENT PARTS LIST (MP-7425R)

fig.& index	MFG PART NUMBER	DESCRIPTION	REF DES	VENDOR PART #	
1-	151090	Display Set			151090
1-1	000000	Digit Assy, single digit 18"			000000
1-1A	152010	Window Assy, single digit 18"			152010
1-1B	000000	Digit, 18" Red			000000
1-2	000000	Digit Assy, double digit 21"			000000
1-2A	152011	Window Assy, double digit 21"			152011
1-2B	000000	Digit, 21" Red			000000
1-2BA	EL00737P	Digit part A, 21" Red			EL00737P
1-2BB	EL00738P	Digit part B, 21" Red			EL00738P
1-3	000000	Digit Assy, double digit 24"			000000
1-3A	152027	Window Assy, double digit 24"			152027
1-3B	000000	Digit, 24" Red			000000
1-3B	EL00739P	Digit Section A, 24" Red			EL00739P
1-3B	EL00740P	Digit Section B, 24" Red			EL00740P
1-3B	EL00741P	Digit Section C, 24" Red			EL00741P
1-4	000000	Digit Assy, Possession Football			000000
1-4A	000000	Window Assy, Possession Football			000000
1-4B	151973	Digit, Possession Football Red			151973
1-5	000000	Digit Assy, single digit 21"			000000
1-5A	152011	Window Assy, single digit 21"			152011
1-5B	000000	Digit, 21" Red			000000
1-6	000000	Controller Assembly, W/ 5 Drivers *****SEE DETAIL FIGURE 2*****		A2	000000
1-7	EL0770P	Antenna, 2.4 GHZ 5Db			EL0770P
1-7B	WI00062P	Antenna Cable, 3'			WI00062P
1-8	000000	Rain Shield			000000
1-9	000000	Service Door			000000
	151742	Control Console, 5000R		A1	151742
	119771	Slipsheet Pair			119771
	151788	Transmitter PCB Assembly ***** PROGRAM MP3.V38W *****			151788
	500042	Membrane Keypad			500042
	EL00769P	Antenna,			EL00769P
	EL00771P	Radio Transceiver, 2.4 GHZ 200mW			EL00771P
	EL057700	LCD Assembly, 2 X 20			EL057700
	SW005100	Toggle Switch,		S1	SW005100
	151967	Adaptor PCB Assy, AeroComm			151967
	HB002400	Keyboard Assembly,			HB002400
	EL00478P	AC Adaptor, 9 VDC 300mA			EL00478P

5.2 Scoreboard Controller Assembly Parts

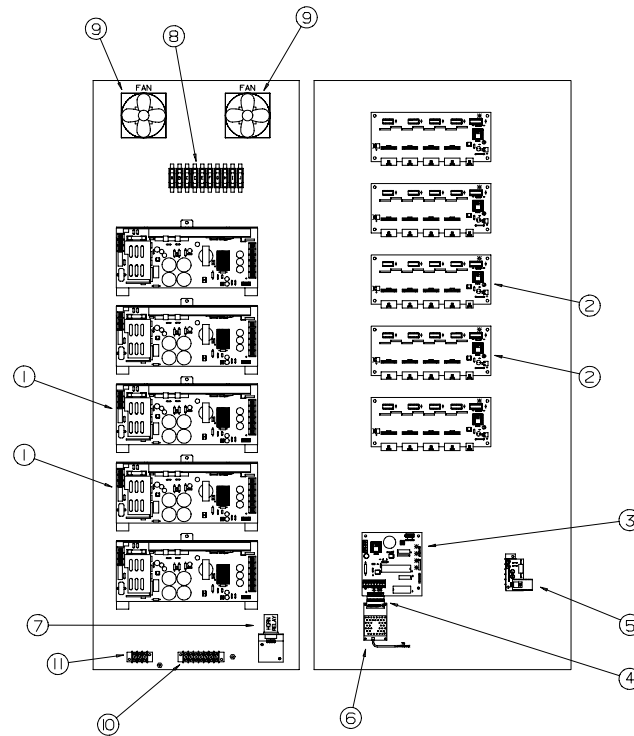


figure 2

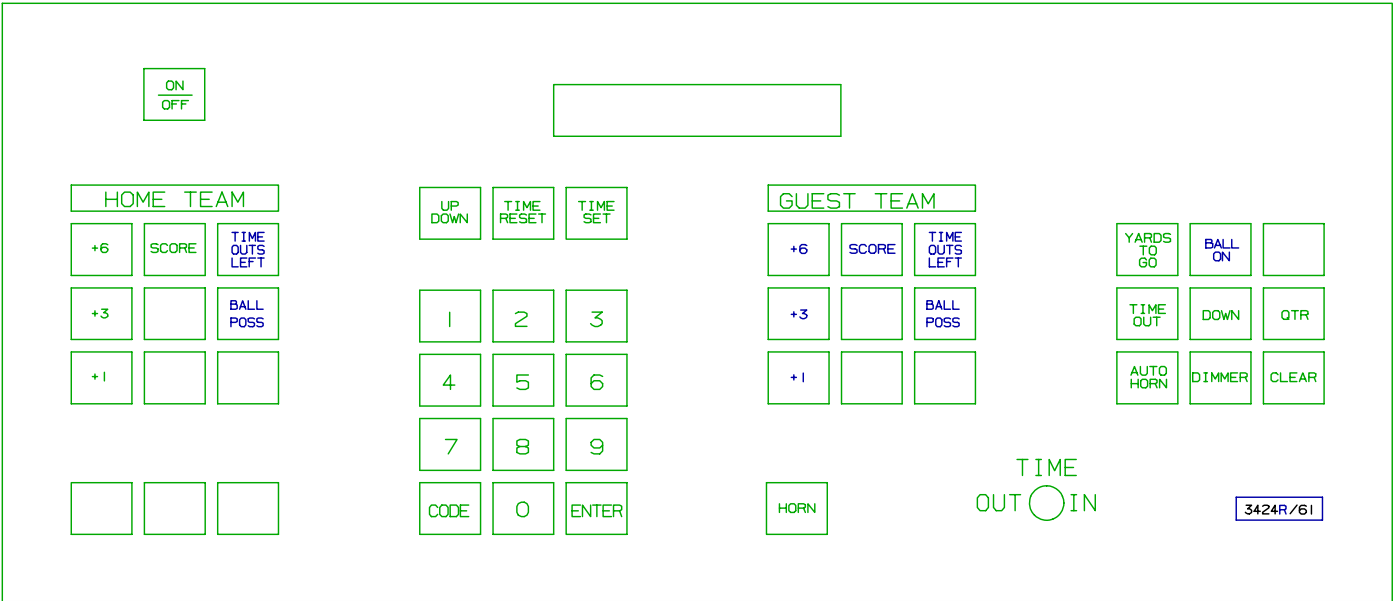
CONTROLLER ASSEMBLY

REPLACEMENT PARTS LIST (MP-7425R) Controller Assembly

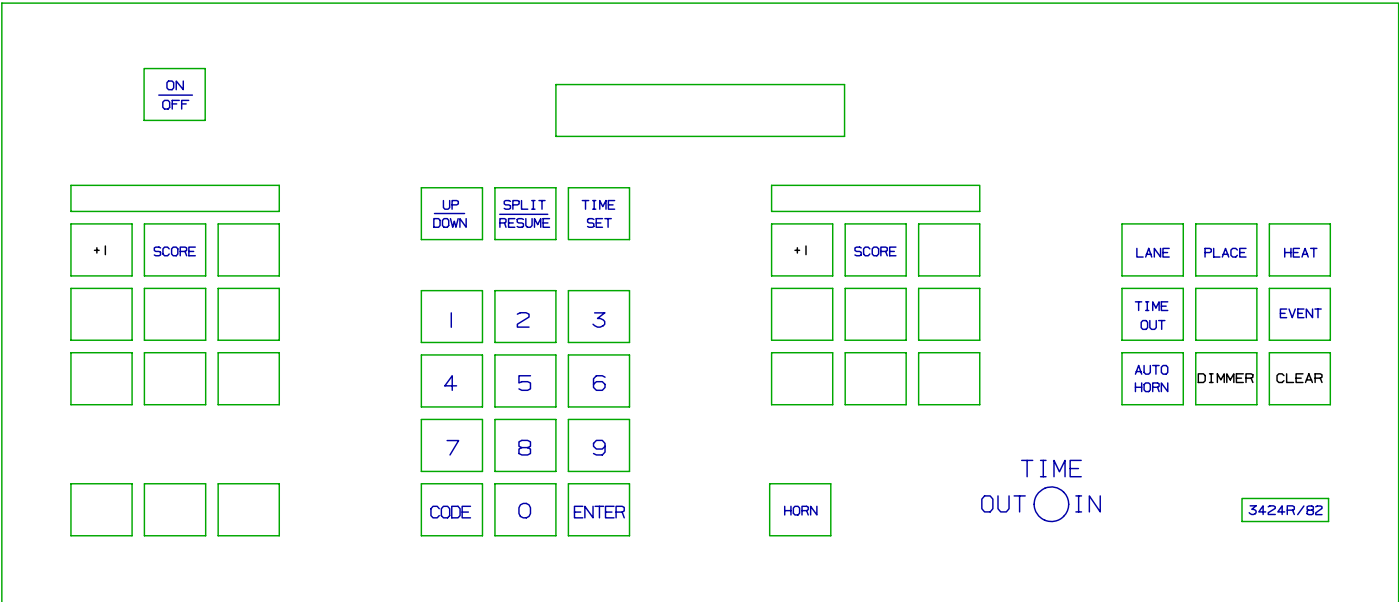
fig.& index	MFG PART NUMBER	DESCRIPTION	REF DES	VENDOR PART #
2-	151213	Controller Assembly	A2	151213
2-1	150040	Receiver PCB Assy, 11.0592 MHZ crystal *** PROGRAM 3PCNT.20W ***	A3	150040
2-2	118922	Driver PCB Assembly, 3 Position	A4-A10	118922
2-3	EL00771P	Transceiver, 2.4 GHZ AeroComm	A16	EL00771P
2-4	701137	Terminal Block, 7C	TB1&2	670-7
2-5	703719	Transformer, 8V/18V	T1/T2	CS-697
2-6	151967	Adaptor PCB Assy, AeroComm		151967
2-7	705723	Spacer, P.C.Board		LCBS-6-01

6. DIAGRAMS

6.1 Control Console Keyboard and Slipsheet Layout



FOOTBALL



TRACK

figure 3

CONSOLE KEYBOARD

6.2 Scoreboard System Layout

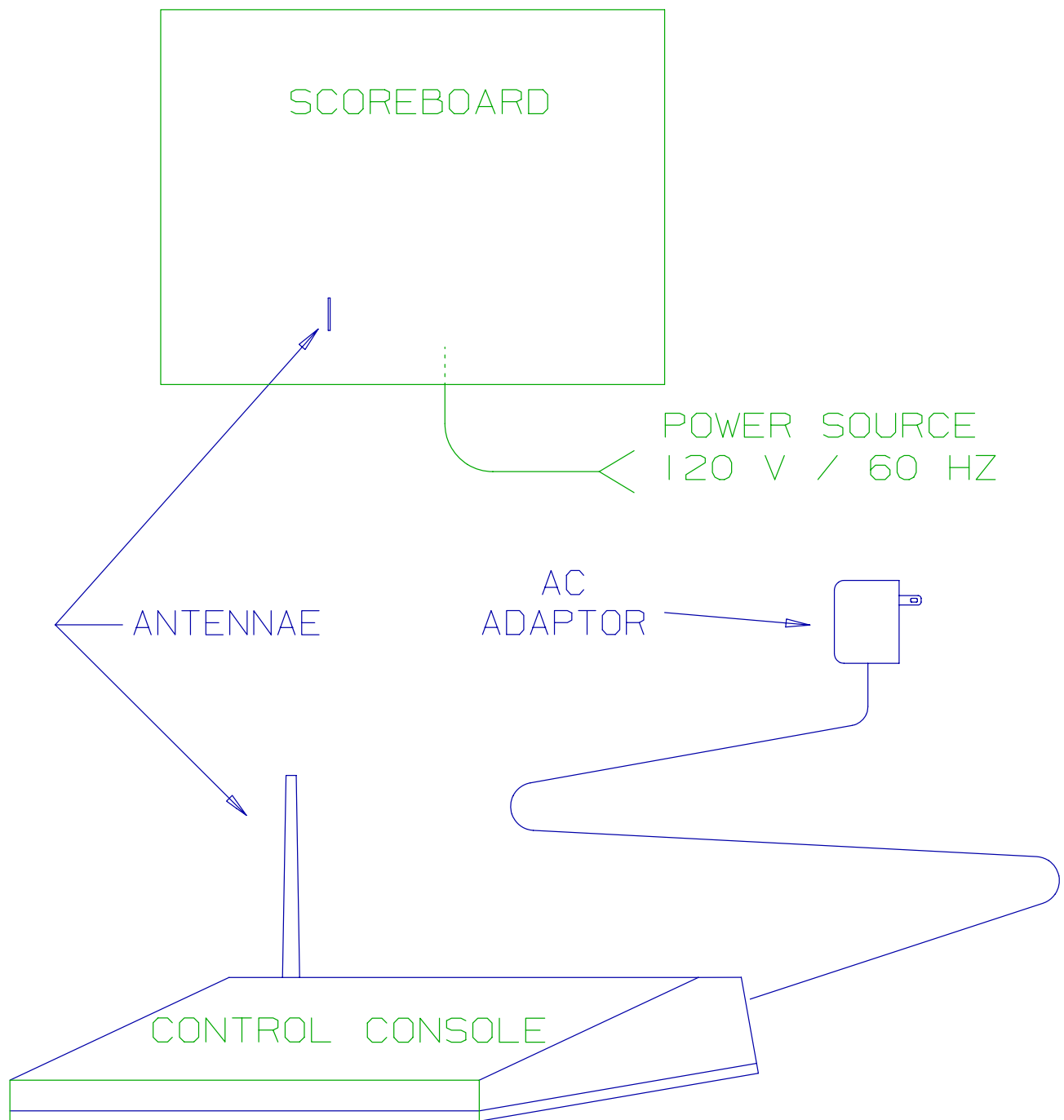
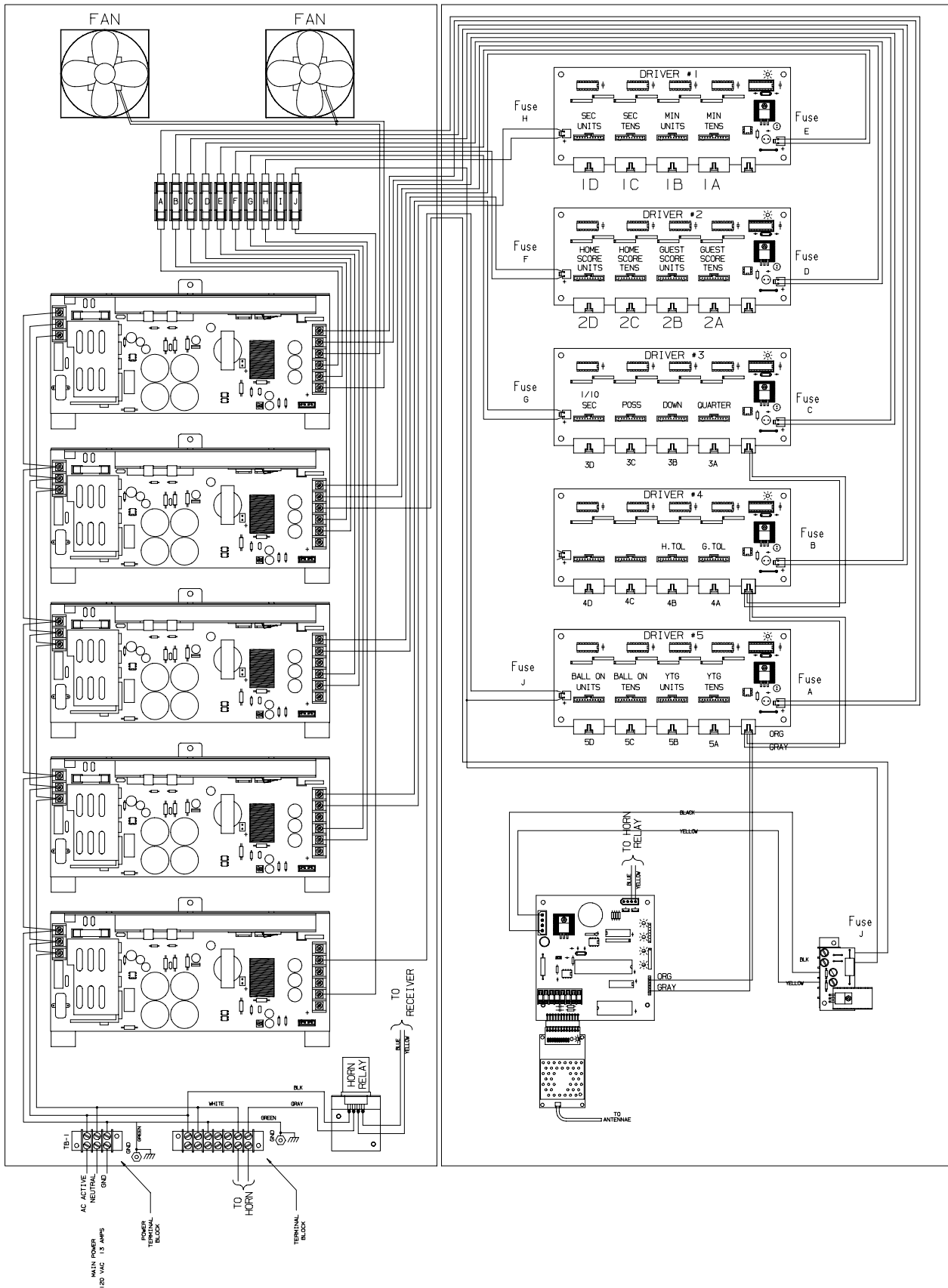


figure 4

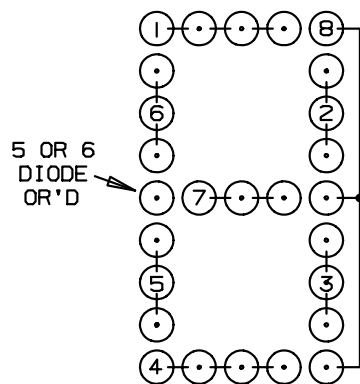
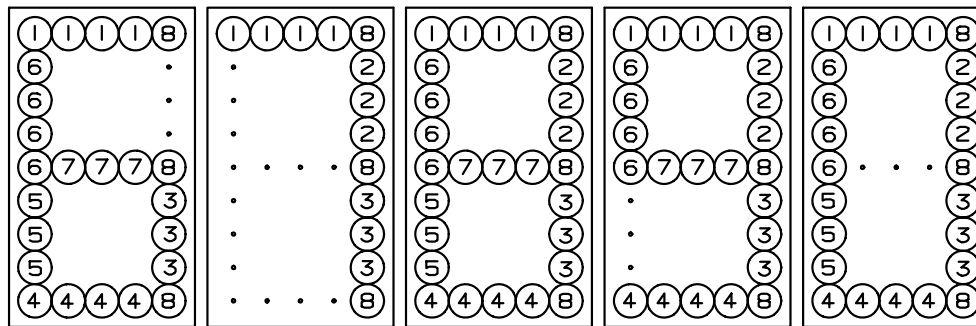
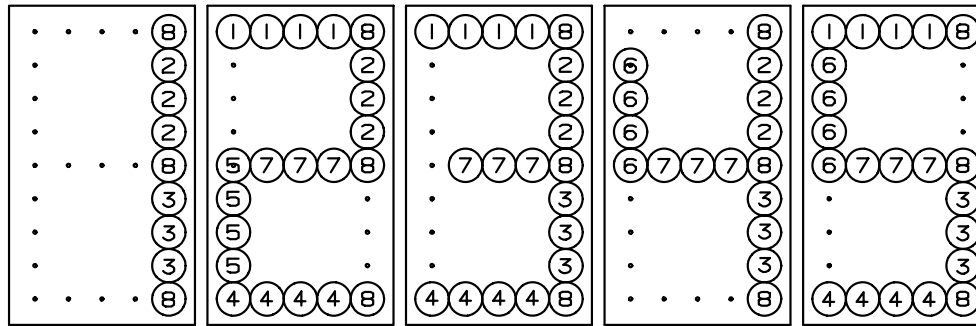
SYSTEM LAYOUT

6.3 Controller Assembly Wiring



CONTROLLER ASSEMBLY

6.4 Microprocessor 4 X 7 Lamp Pattern (8 Bit)



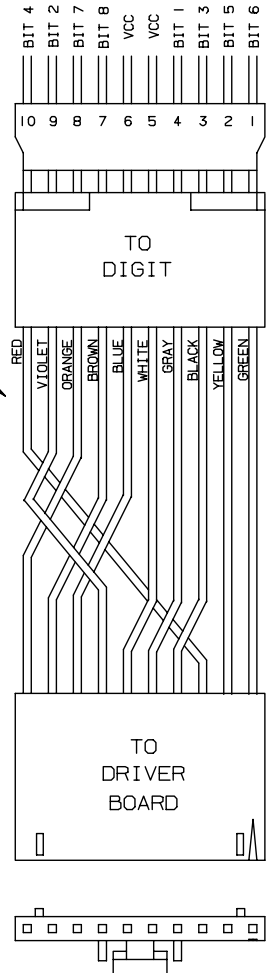
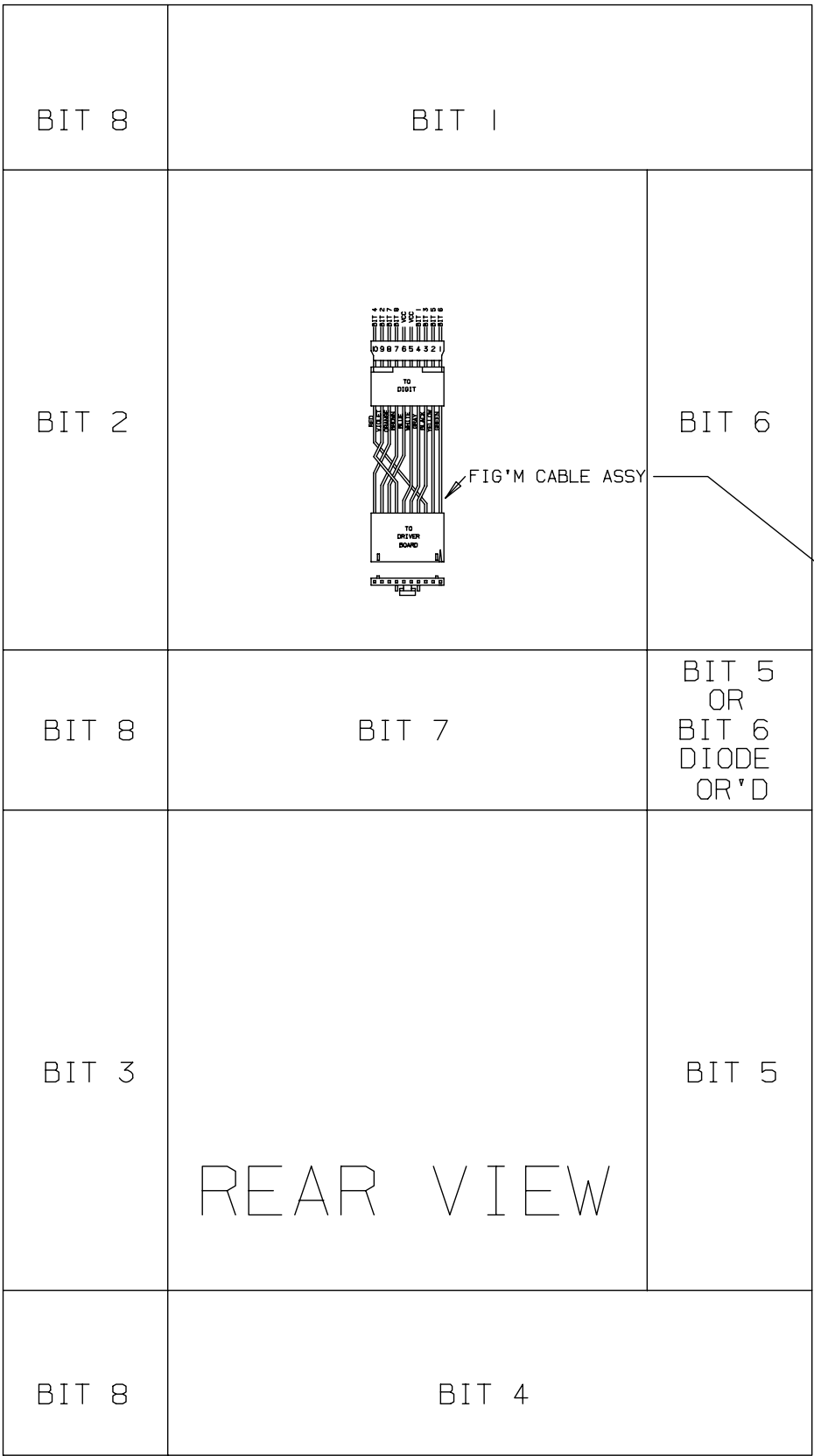
NUMERALS

	0	1	2	3	4	5	6	7	8	9
1	0	.	2	3	.	5	6	7	8	9
2	0	1	2	3	4	.	.	7	8	9
3	0	1	.	3	4	5	6	7	8	9
4	0	.	2	3	.	5	6	.	8	9
5	0	.	2	.	.	.	6	.	8	.
6	0	.	.	.	4	5	6	.	8	9
7	.	.	2	3	4	5	6	.	8	9
8	0	1	2	3	4	5	6	7	8	9

5 X 9 PATTERN
8 BIT MP

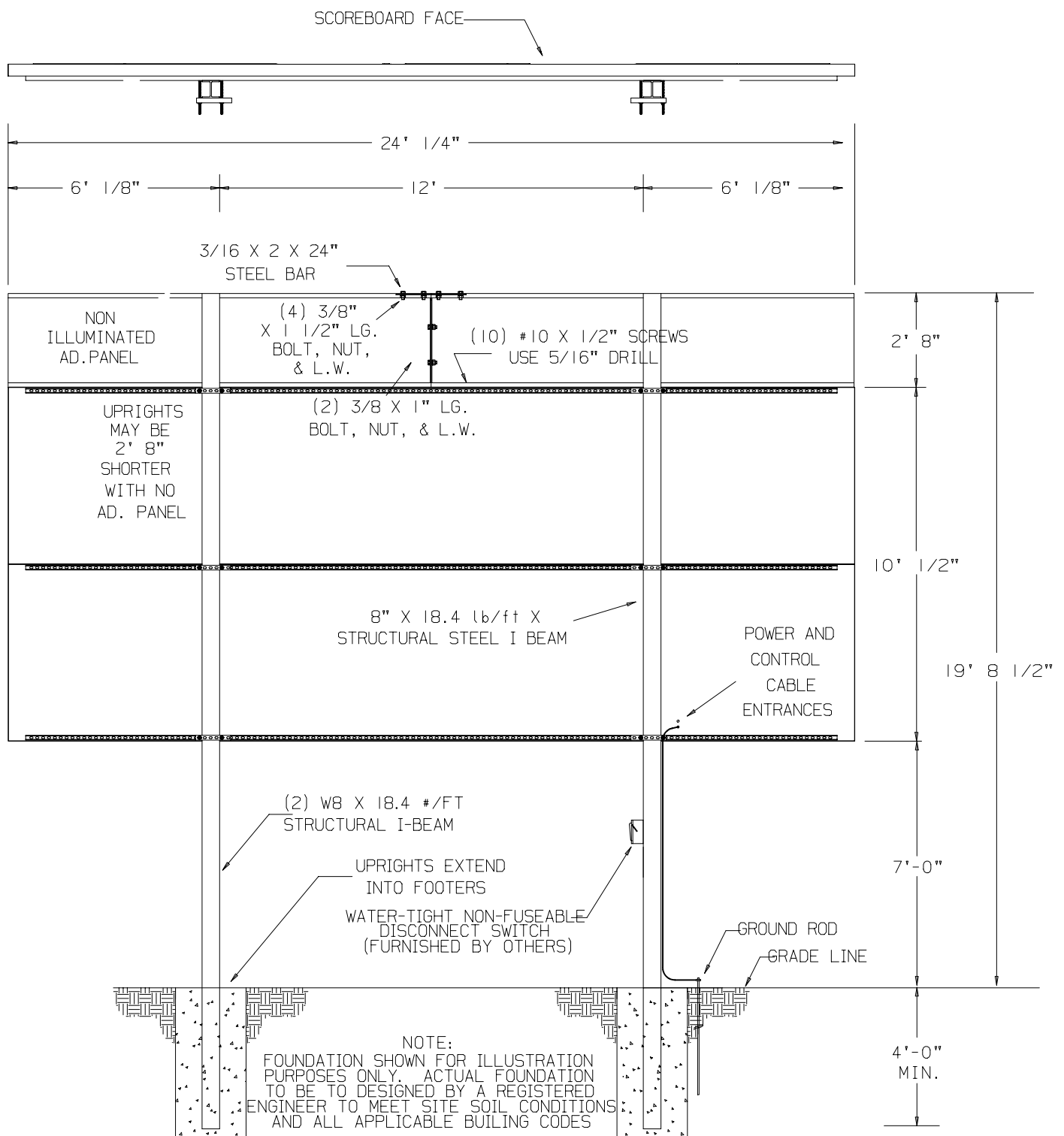
MICROPROCESSOR 4 X 7 (8 BIT) LAMP PATTERN

6.5 Figuregram Wiring

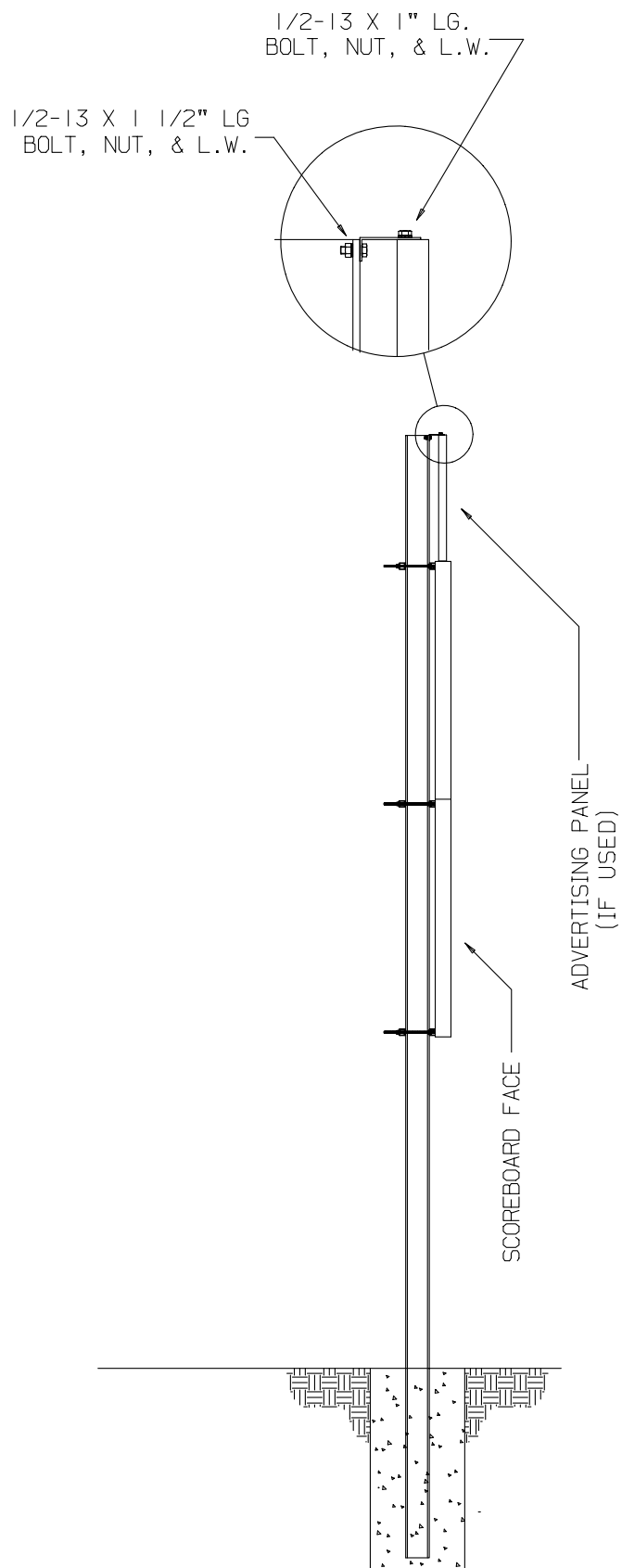


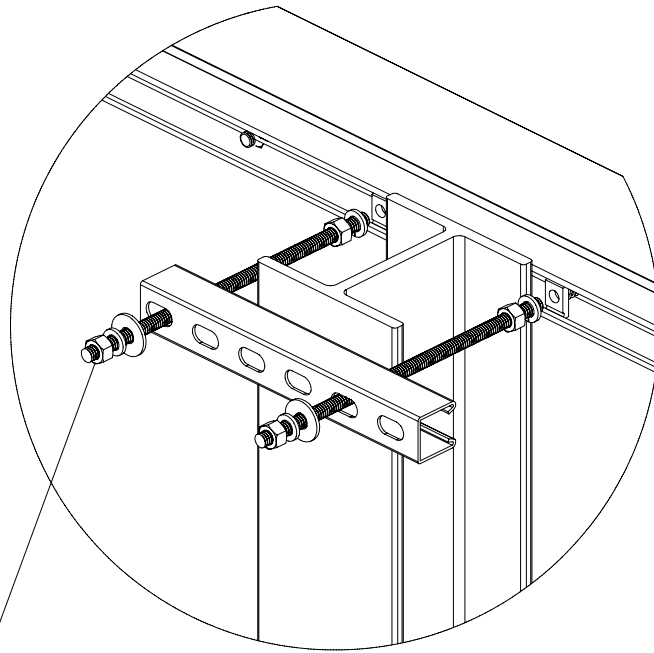
FIGUREGRAM WIRING

6.6 Installation Drawing



6.7 Installation Drawing Cont.





- (1) 1/2-13 X 12" THREADED ROD
- (2) 1/2-13 HEX NUT
- (2) 1/2 LOCK WASHER
- (2) 1/2 FLAT WASHER
- (1) SPRING UNISTRUT NUT
- (16) SETS OF HARDWARE REQUIRED
- STAINLESS STEEL