



Indoor Hockey LED Scoreboards

Installation, Maintenance & Troubleshooting Manual

ED 10915

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ED 10915
Product #1152
Rev. 3 – 05 May 1999

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Display Serial # _____

Display Model # _____

Date Installed _____

publisher.



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SOLUTIONS THROUGH
TECHNOLOGY

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Reproduction Reference [REDACTED]
ED10915 – P1152
Indoor Hockey LED Scoreboards

- 1) This page is for reproduction reference only and will not be included in the manual.
- 2) This manual is to be copied on FRONT AND BACK PAGES -8 ½ x 11 paper.
Note: The first page, Cover Page, uses the front of the page (blank on back). Section heading pages always start on a new page; they never start on the back of another page.
- 3) Drawings included in this manual:
Section 1: A-108832, A-104100
Section 2: A-28124, A-81347, A-88006, A-92112, A-103966, B-103420
Section 3: A-38532, A-87150, A-87407, A-91380, A-108831
Appendix A: A-53266, A-86972, A-88082, A-89417, A-108171
Appendix B: A-56420, A-56426, A-61882, A-61884, A-75887, A-76049, A-76050, A-81641, A-82032, A-85644, A-103419, A-103968, A-107563
Appendix C: A-108709
Appendix D: A-22927, A-53266
- 4) Use a blue window cover and a blue back.
- 5) Punch all pages, window cover and back cover along the left edge and bind with a binder.
- 6) Please direct questions and suggestions to Engineering Secretarial.

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Section 1 : Introduction

1.1 How To Use This Manual

This manual explains the installation and maintenance of Daktronics LED scoreboards. For questions regarding the safety, installation, operation or service of this system, please refer to the telephone numbers listed on the cover page of this manual.

Important Safeguards:

1. Read and understand these instructions before installing.
2. Do not drop the control console or allow it to get wet.
3. **Disconnect power when not using the scoreboard.**
4. **Disconnect power when servicing the scoreboard.**
5. Do not modify the scoreboard structure or attach any panels or coverings to the scoreboard without the express written consent of Daktronics, Inc.

Daktronics identifies manuals by an ED number located on the cover page of each manual. Any reference manuals called out in this manual will be identified by its ED number. For example, this manual is referred to as **ED-10915**.

The box below illustrates Daktronics drawing numbering system. Daktronics identifies individual drawing by drawing number (7087-P08A-69945, below), located in the lower right corner of the drawing. Drawings in this manual are identified by listing the last set of digits and the letter preceding them. In the example, the drawing would be referred to as **Drawing A-69945**. Reference drawings are inserted at the end of the first section that references them..

DAKTRONICS, INC. BROOKINGS, SD 57006		
PROJ:		
TITLE:		
DES. BY:	DRAWN BY: DOK	DATE: 04-20-95
APPR. BY:	7087-P08A-69945	
SCALE: 1=80		

This manual covers a wide range of models which are constructed using the same components. The sections covering installation and maintenance apply to all of the models in general. The appendices contain lists of reference drawings, which offer more specific installation and maintenance information for each individual model. Carefully read the installation and maintenance sections, and review the model-specific drawings, before proceeding with the installation or maintenance of any display.

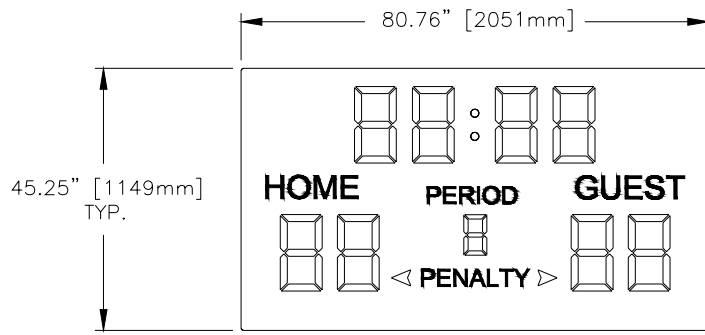
1.2 Scoreboard Overview

Reference Drawing: Models; H-2020, H-2021, & H-2022.....**Drawing A-108832**
Model ID.....**Drawing A-104100**

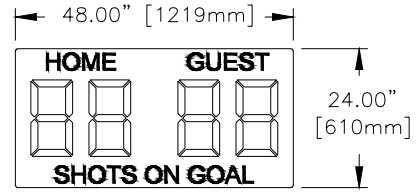
Your Daktronics scoreboard is one of a family of display systems designed to offer simple installation, easy readability, and reliability. Microprocessor control assures consistent operation and accuracy. Refer to **Drawing A-108832** and **Drawing A-104100** for the different models of scoreboards included in this manual. Specific model information is included in **Appendix B**.

This manual covers All Sport⁷ Indoor LED scoreboard models. These display configurations contain 7", 10", and 13" LED digits. The reference drawings list dimensions and weight of each display. Scoreboard model number and electrical requirements are found on a label on the front of the scoreboard.

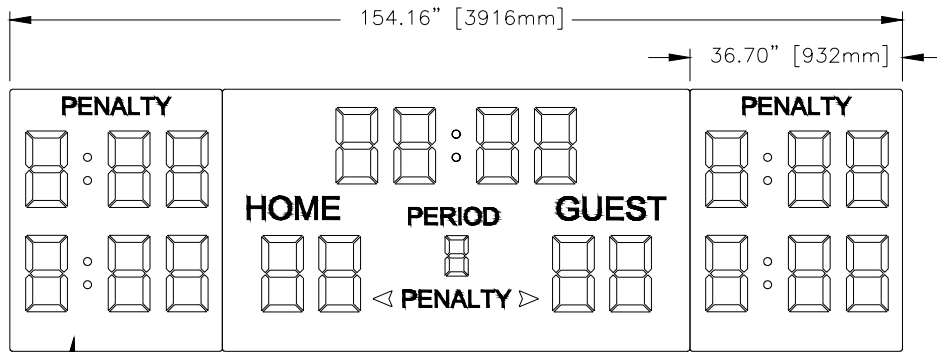
Please note the scoreboard model number, serial number, and installation date on the front page of this manual for future reference.



MODEL H-2020-9

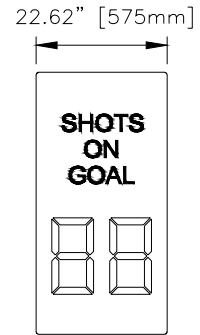


AUXILIARY SECTION
MODEL H-413-9
THIS 4-DIGIT SHOTS ON GOAL SECTION
CAN BE MOUNTED INDEPENDENT OF
THE MAIN SCOREBOARD.

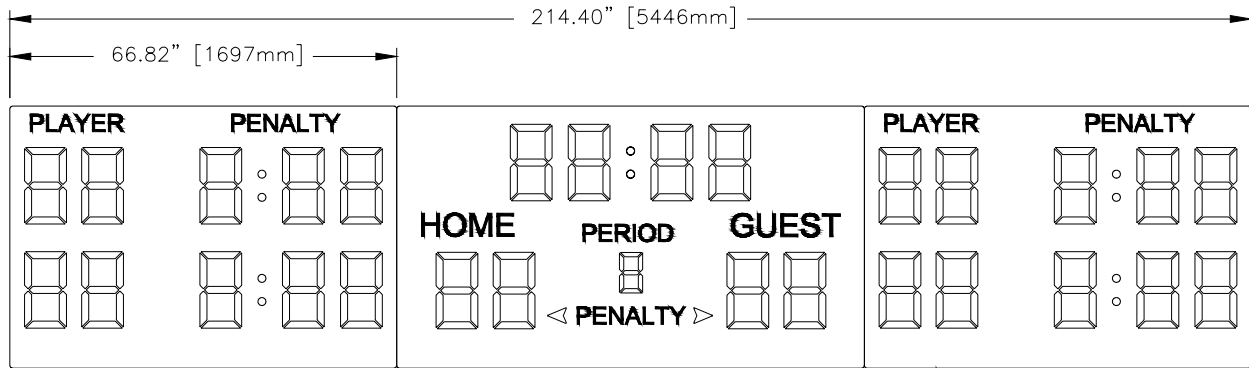


SECTION IS
MODEL NO.
H-613-9

MODEL H-2021-9



AUXILIARY SECTION
MODEL H-213-9
THIS 2-DIGIT SHOTS ON GOAL SECTION
CAN BE ADDED TO EACH END OF
MODEL H-2021-9 OR H-2022-9



MODEL H-2022-9

SECTION IS
MODEL NO.
H-1013-9

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: MODEL DESCRIPTIONS, H-2020, H-2021, H-2022

DES. BY: AVB

DRAWN BY: A VANBEMMEL

DATE: 26 OCT 98

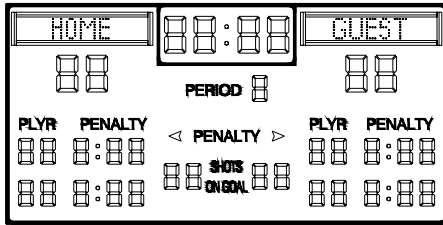
REVISION

APPR. BY:

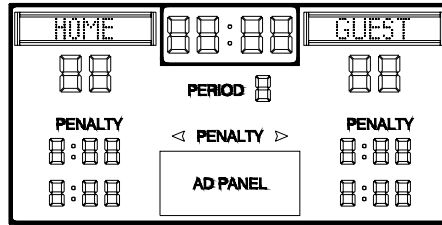
SCALE: 1 = 30

1152-R08A-108832

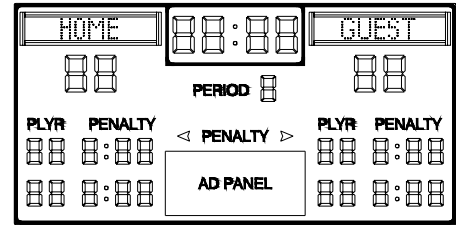
REV.	DATE	DESCRIPTION	BY	APPR.



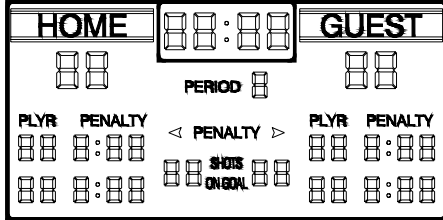
H-2023-9 W/ TNMC



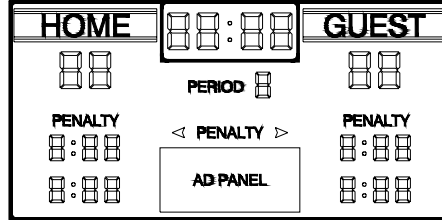
H-2025-9 W/ TNMC



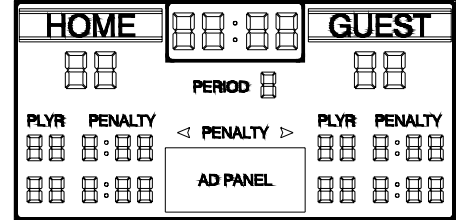
H-2030-9 W/ TNMC



H-2023-9



H-2025-9



H-2030-9

MODEL #	APPROX. WEIGHT	POWER		SIGNAL		DIMENSIONS	
		MAX POWER		# OF PAIRS		WIDTH	HEIGHT
H-2023-9	165 Lbs. (75 kg)	200 WATTS		1		120"(305cm)	60"(153cm)
H-2023-9 W/LED TNMC	165 Lbs. (75 kg)	300 WATTS		1		120"(305cm)	60"(153cm)
H-2025-9	165 Lbs. (75 kg)	150 WATTS		1		120"(305cm)	60"(153cm)
H-2025-9 W/LED TNMC	165 Lbs. (75 kg)	250 WATTS		1		120"(305cm)	60"(153cm)
H-2030-9	165 Lbs. (75 kg)	200 WATTS		1		120"(305cm)	60"(153cm)
H-2030-9 W/LED TNMC	165 Lbs. (75 kg)	300 WATTS		1		120"(305cm)	60"(153cm)

OPTIONS:

AD PANELS

DESCRIPTION	APPROX. WEIGHT	POWER		DIMENSIONS	
		MAX POWER		WIDTH	HEIGHT
18" x 10' BACKLIT AD	53 Lbs. (24 kg)	300 WATTS		120"(305cm)	18"(46cm)
24" x 10' BACKLIT AD	70 Lbs. (32 kg)	300 WATTS		120"(305cm)	24"(61cm)
18" x 10' PAINTED AD	19 Lbs. (9 kg)	--		120"(305cm)	18"(46cm)
24" x 10' PAINTED AD	22 Lbs. (10 kg)	--		120"(305cm)	24"(61cm)

GALAXY DISPLAYS

DESCRIPTION	APPROX. WEIGHT	POWER		SIGNAL		DIMENSIONS	
		MAX POWER		# OF PAIRS		WIDTH	HEIGHT
16 x 64	150 Lbs. (70 kg)	260 WATTS		2		120"(305cm)	24"(61cm)
16 x 80	150 Lbs. (70 kg)	325 WATTS		2		120"(305cm)	24"(61cm)
16 x 96	150 Lbs. (70 kg)	390 WATTS		2		120"(305cm)	24"(61cm)
16 x 112	150 Lbs. (70 kg)	455 WATTS		2		120"(305cm)	24"(61cm)

DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: STANDARD INDOOR LED SCOREBOARDS			
TITLE: MODEL IDENTIFICATION, H-2023-9, H-2025-9, H-2030-9			
DES. BY: AVB	DRAWN BY: MJORDAN		DATE: 29 SEP 98
REVISION	APPR. BY:	1152-E10A-104100	
	SCALE: 1=50		

01	08 OCT 01	UPDATED WEIGHTS AND NUMBER OF SIGNAL PAIRS.	JJS	
REV.	DATE	DESCRIPTION	BY	APPR.

Section 2 : Mechanical & Electrical Installation

2.1 Product Safety Approval

Daktronics Indoor LED Scoreboards are ETL listed, tested to CSA standards, and CE labeled for indoor use. Contact Daktronics with any questions regarding the testing procedures

2.2 Mounting Details

Reference Drawing: Suspended Installation Instructions..... **Drawing A-88006**
Shop Drawing; Wall Mounted Hockey **Drawing A-103966**

The scoreboard frame comes equipped with lift eyes for installing the scoreboard and holes for attaching the scoreboard to the wall. Do not use the lift eyes to suspend the scoreboard. See **Drawing A-88006** for suspension hardware recommendations.

Due to the variety of wall materials used in sports facilities, Daktronics cannot anticipate a users individual installation needs or provide mounting hardware suitable for every installation. The required mounting hardware may be purchased at a local hardware store. Bolts with expansion or toggle anchors are available for a variety of wall materials. Choose a method of installation adequate to safely support the weight of the scoreboard. The installer is responsible for safely installing the scoreboard in accordance to OSHA regulations. Refer to model-specific information in the appendices for mounting locations and model weights.

Use the lifting angles on the top of the frame to lift the scoreboard. Secure the scoreboard to the wall with the holes in the back. Use the holes at the bottom of the scoreboard to secure the bottom of the scoreboard to the wall in a similar manner. Refer to **Drawings A-88006** and **Drawing A-103966** for further mounting instructions.

CAUTION: Contact Daktronics about installations which involve suspending the scoreboard. Do not use scoreboard lift eyes as permanent installation support.

2.3 Electrical Installation

Electrical installation involves routing power and control signal wiring through separate conduit or wire ways. Control signal cable and some junction boxes, as listed in the reference drawings, are not provided as part of this system and can be purchased locally or from Daktronics.

2.3.1 Power

Reference Drawing: Schematic, LED **Drawing A-92112**
Schematic, H-202X-9 **Drawing B-103420**

Each scoreboard has a 120 VAC, 3-prong plug. Install a grounded receptacle near the equipment so that it is easily accessible to plug in the power cord.

The reference drawings located in the appendix list maximum power consumption for each scoreboard model.

The control console requires a 120 VAC receptacle and uses less than one amp of power. 230 VAC scoreboard are available. They come equipped with a universal power plug. 230 VAC should be routed to the scoreboard in a similar manner as 120 VAC. Refer to **Drawing A-92112** for more information.

2.3.2 Grounding

Connect the scoreboard to earth-ground. Proper grounding assures reliable equipment operation and protects the equipment ... against damaging electrical disturbances and lightning. The grounding connection on the three-prong plug power cord connects to the shell of the scoreboard.

ONote: The outlet must be properly ground to the 120VAC outlet. Failure to ground the 120VAC outlet connection voids the warranty for the scoreboard.

2.3.3 Signal

Reference Drawings: Signal Connection, Installation **Drawing A-28124**
Signal Connection, 16-pin **Drawing A-81347**

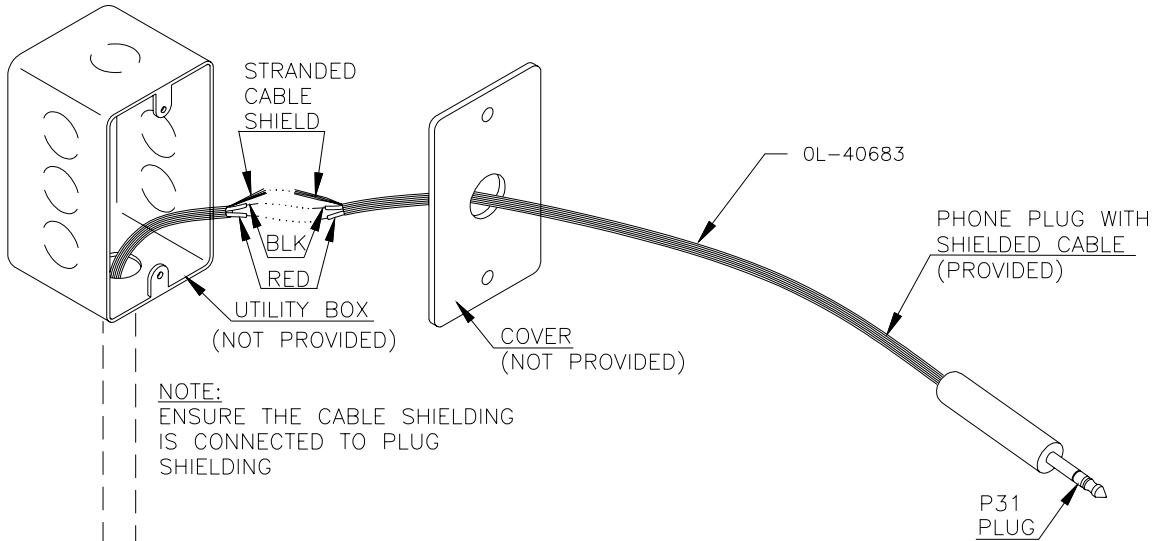
If running 4 or fewer scoreboards simultaneously route conduit and cable between scoreboard location(s) and the control location. Use paired cable, 24 AWG, minimum shielded, and connect the cable to the junction box at the control end. Install the phone plug provided to the scoreboard end of the cable. Insert plug (P31) into the jack, located on the top or side of the scoreboard. Some models require up to four pairs of wire, and use up to four plugs to connect to the scoreboard.

Refer to appropriate scoreboard appendix for wiring instructions. Also refer to **Drawings A-28124** and **Drawing A-81347** for more information.

2.4 Scoreboard Operating Codes

Refer to the scoreboard reference drawings in the appendix and the All Sport controller manual for display operating codes.

DISPLAY LOCATION



NOTE:
ENSURE THE CABLE SHIELDING
IS CONNECTED TO PLUG
SHIELDING

PROCEDURE

1. ROUTE CONDUIT BETWEEN CONTROL AND DISPLAY LOCATIONS.
2. MOUNT BOXES.
3. PULL CABLE THROUGH CONDUIT.
4. CONNECT CABLE TO J31 AND P31

J31: USE CONNECTORS PROVIDED.
INSERT WIRES INTO CONNECTOR
AND SQUEEZE CONTACT DOWN
WITH PLIERS. SNAP PLASTIC
COVER SHUT.

P31: CONNECT WIRES TO CABLE AS
FOLLOWS:
J31 RED TO P31 RED (+)
J31 BLK TO P31 BLK (-)
J31 SHIELD TO P31 SHIELD

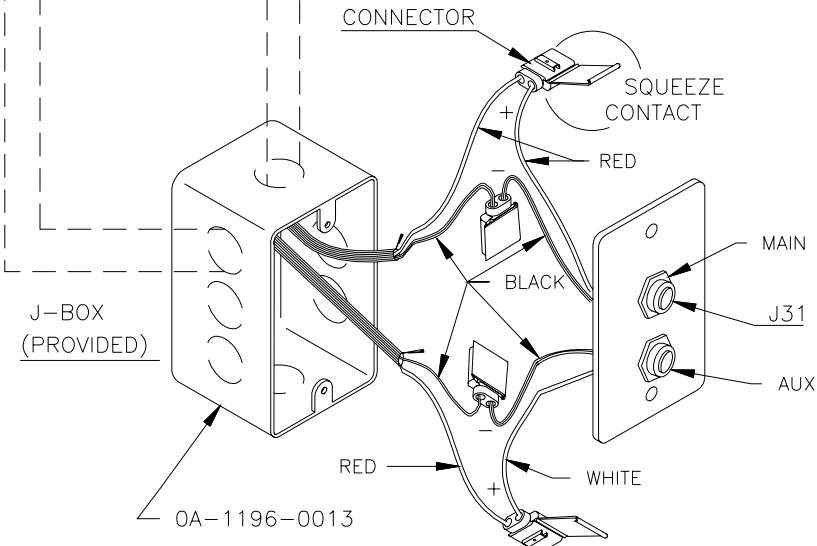
NOTE!!

DO NOT CONNECT
CABLE SHIELD AT
CONTROL CONSOLE END

SHIELDED CABLE
IN CONDUIT
(NOT PROVIDED)

TO MAIN BOARD

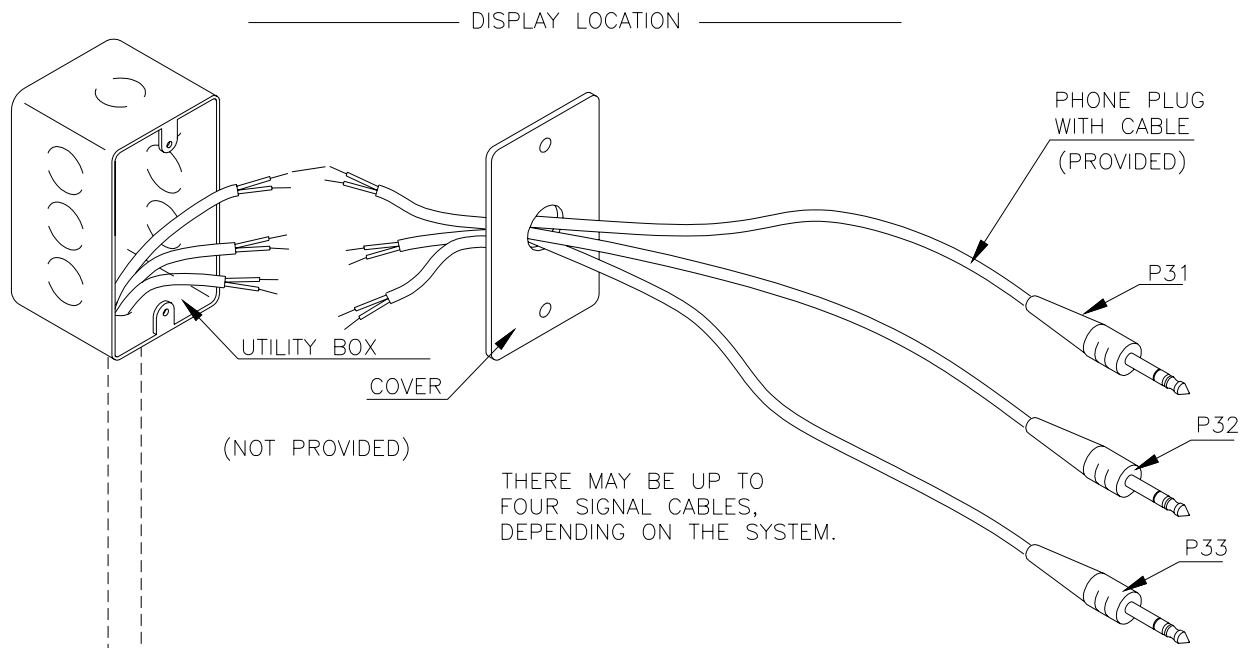
TO AUX BOARD



CONTROL LOCATION

REV.	DATE	DESCRIPTION	BY	APPR.
05	30 JUL 03	BOLD FACED GROUNDING NOTE	TLH	
04	17 JUN 03	CHANGED GROUING PROCEDURES	JJC	MWM
3	17 JAN 02	ADDED AUX TO J-BOX	JJS	
2	25 MAR 92	CHANGED WHITE TO RED	JTC	
1	05 NOV 91	REDREW ON A-SIZE ON ACAD.	JLH	

DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: BASKETBALL			
TITLE: SIGNAL CONNECTION; INSTALLATION			
DES. BY: AVB		DRAWN BY: MHART	
		DATE: 15SEP86	
REVISION	APPR. BY: AVB	1009-R10A-28124	
05	SCALE: NONE		



(NOT PROVIDED)

THERE MAY BE UP TO FOUR SIGNAL CABLES, DEPENDING ON THE SYSTEM.

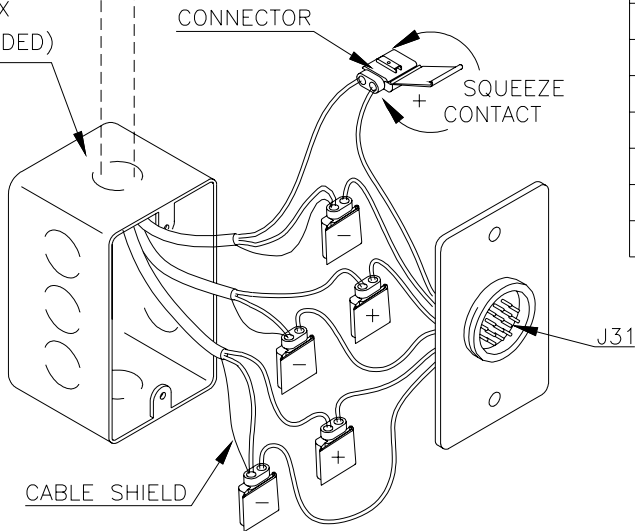
PROCEDURE

1. ROUTE CONDUIT BETWEEN CONTROL AND DISPLAY LOCATIONS.
2. MOUNT BOXES.
3. PULL CABLE THROUGH CONDUIT.
4. CONNECT CABLE TO J31, P31, P32, AND P33 AS FOLLOWS:

CABLE IN CONDUIT
(NOT PROVIDED)

CONTROL LOCATION

J-BOX (PROVIDED)



CONTROL LOCATION			DISPLAY LOCATION	
J31 PIN NO.	WIRE COLOR AT J31	FUNCTION	PLUG NO.	WIRE COLOR AT PLUG
1	RED	SIGNAL 1 +	P31	RED
2	BLACK	SIGNAL 1 -	P31	BLACK
3	WHITE	SIGNAL 2 +	P32	RED
4	GREEN	SIGNAL 2 -	P32	BLACK
5	ORANGE	SIGNAL 3 +	P33	RED
6	BLUE	SIGNAL 3 -	P33	BLACK
7	WHT/BLK	SIGNAL 4 +	P34	RED
8	RED/BLK	SIGNAL 4 -	P34	BLACK

NOTE:
CONNECT CABLE SHIELD TO NEG. WIRE AT CONTROL END ONLY.

DAKTRONICS, INC. BROOKINGS, SD 57006

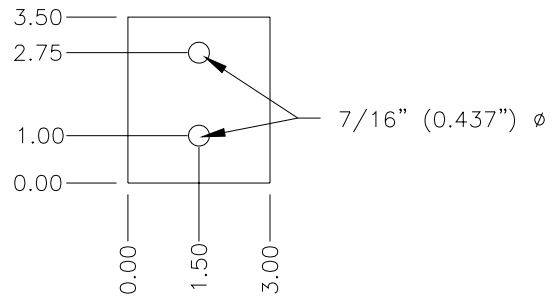
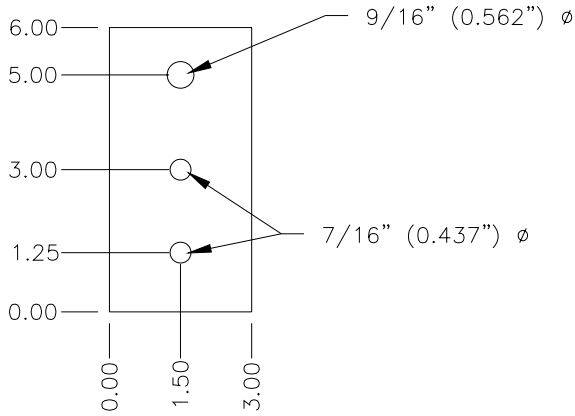
PROJ: STANDARD LED SCOREBOARDS

TITLE: SIGNAL CONNECTION, 16-PIN

DES. BY: _____ DRAWN BY: JMOEN DATE: 24 APR 96

REVISION APPR. BY: _____ SCALE: NONE 1152-R10A-81347

REV.	DATE	DESCRIPTION	BY	APPR.
1	11 NOV 98	ADDED WIRES FOR 4TH OUTPUT IN TABLE.	AVB	AVB



1/8" 6061-T6 ALUMINUM PLATE
OR A36 STEEL PLATE

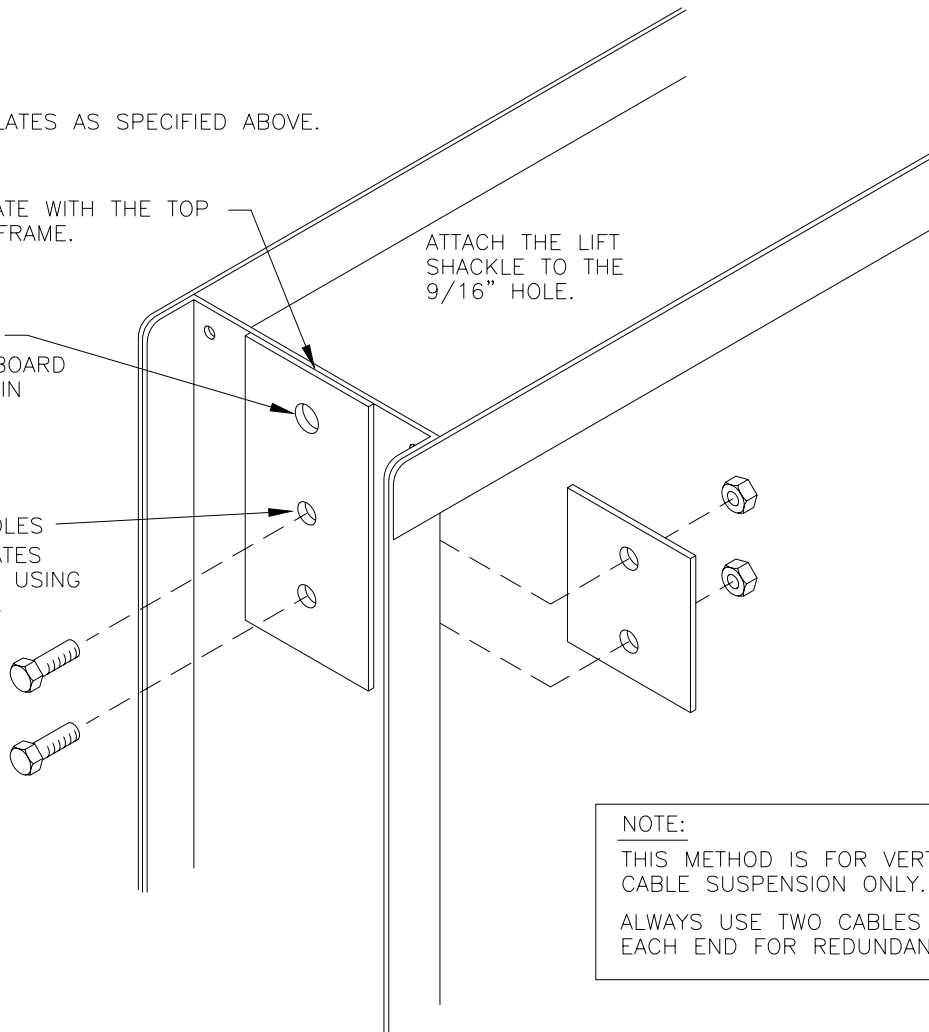
FABRICATE THE TWO PLATES AS SPECIFIED ABOVE.

ALIGN THE LARGER PLATE WITH THE TOP
OF THE SCOREBOARD FRAME.

ATTACH THE LIFT
SHACKLE TO THE
9/16" HOLE.

DRILL 9/16" ϕ HOLE
THROUGH THE SCOREBOARD
TO MATCH THE HOLE IN
THE PLATE.

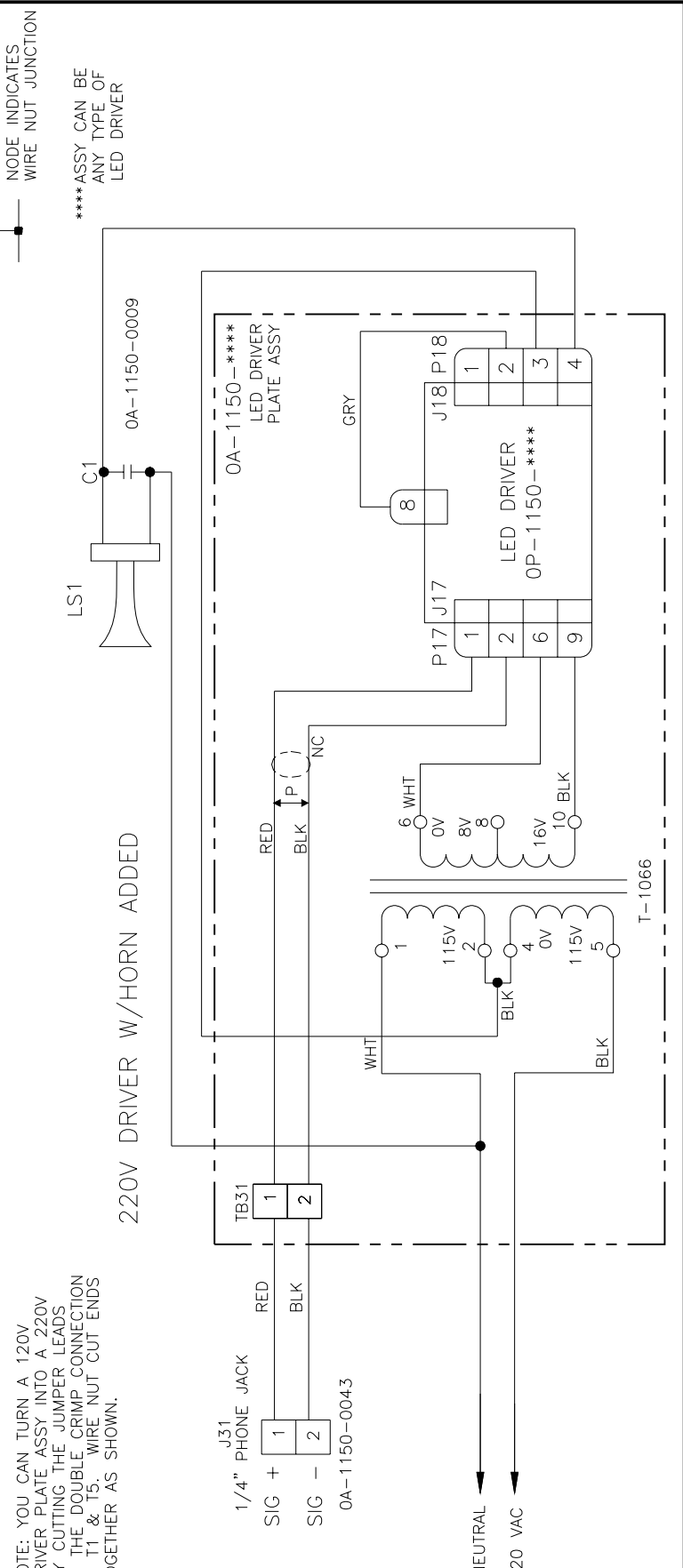
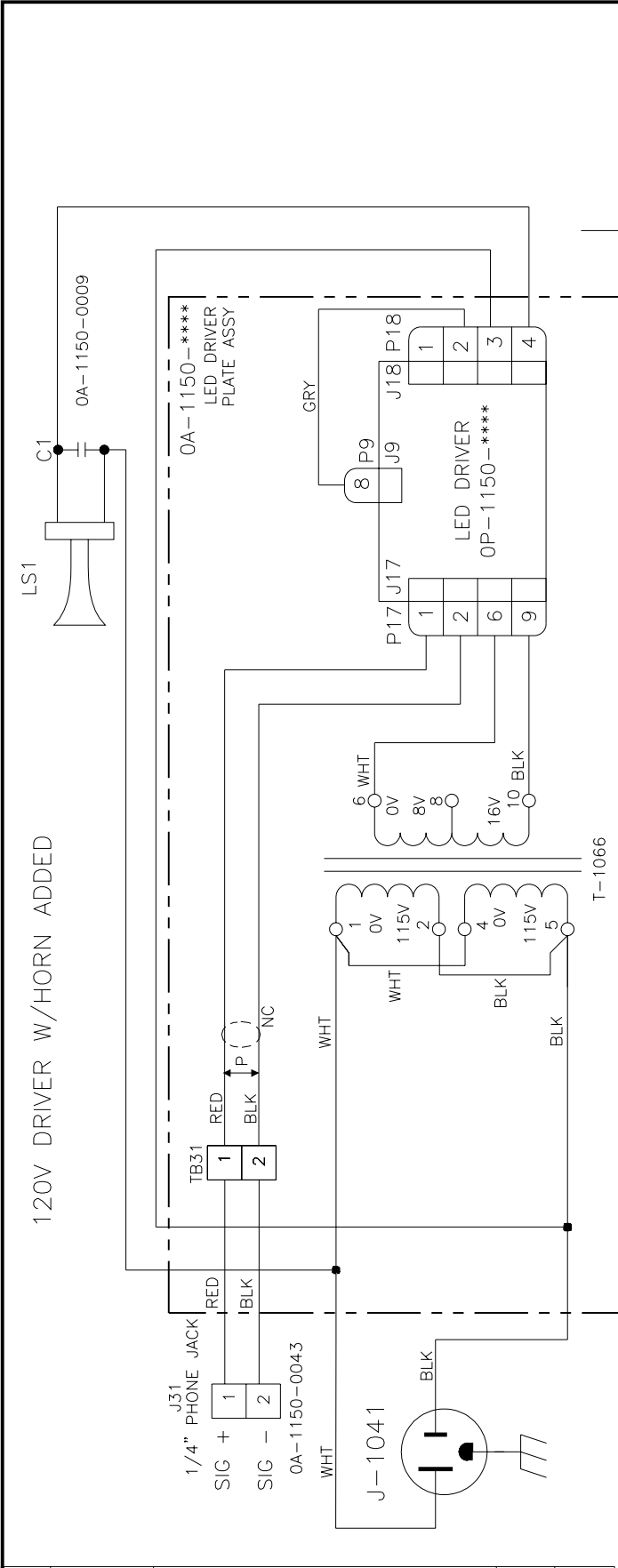
DRILL 7/16" HOLES
AND ATTACH PLATES
TO SCOREBOARD USING
3/8" HARDWARE.



NOTE:
THIS METHOD IS FOR VERTICAL
CABLE SUSPENSION ONLY.
ALWAYS USE TWO CABLES AT
EACH END FOR REDUNDANCY.

DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: STANDARD INDOOR SCOREBOARDS			
TITLE: SUSPENDED INSTALLATION INSTRUCTIONS			
DES. BY:	DRAWN BY: TERICK		DATE: 07 NOV 96
REVISION	APPR. BY:	1009-E10A-88006	
	SCALE: 1=4		

1	19 JUN 97	MOVED TOP HOLE IN LARGE PLATE UP 1/4". CHANGED 3/4" HOLE TO 9/16" ϕ . ADDED BOLTS TO FIGURE.	AVB	AVB
REV.	DATE	DESCRIPTION	BY	APPR.



NOTE: YOU CAN TURN A 120V DRIVER PLATE ASSY INTO A 220V BY CUTTING THE JUMPER LEADS AT THE DOUBLE CRIMP CONNECTION AT T1 & T5. WIRE NUT CUT ENDS TOGETHER AS SHOWN.

NODE INDICATES WIRE NUT JUNCTION
 *****ASSY CAN BE ANY TYPE OF LED DRIVER

REV.	DATE	DESCRIPTION	BY	APPR.
04	22 APR 04	UPDATED PER ECO# 040473	RT	MM
03	21 DEC 98	UPDATED 220V SCHEMATIC. REMOVED TERMINAL BLOCKS, AND GROUND LUG. CHANGED HOW HORN IS TERMINATED.	CJB	
2	13 NOV 97	ADDED HORN AND 220 VOLT WIRING.	HBB	
1	25 JUL 97	REMOVED FUSE AND 2 POSITION TERMINAL BLOCK	RDA	C.M.

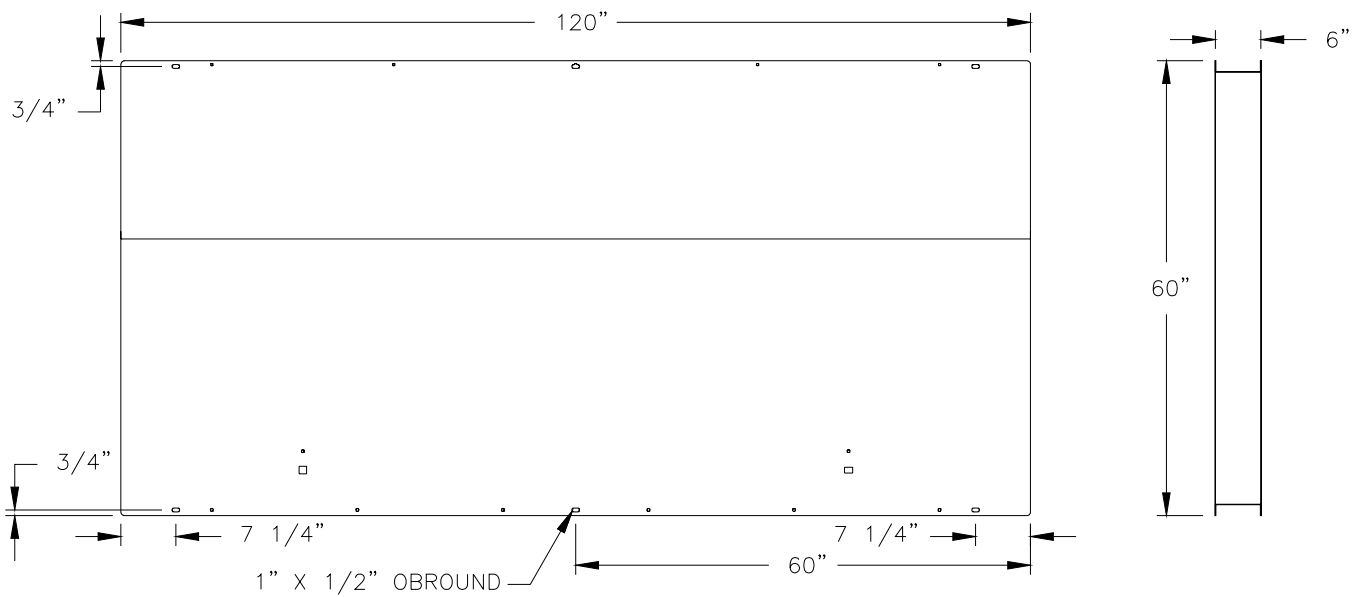
DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: _____

TITLE: **SCHEMATIC; LED DRIVER PLATE W/TRANSFORMER**

DES. BY: **EBRAVEK** DRAWN BY: **EBRAVEK** DATE: **11APR97**

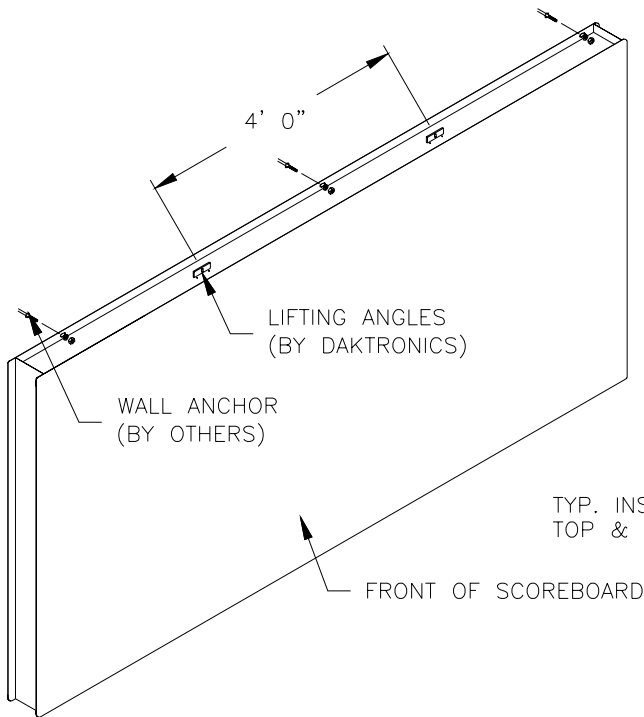
REVISION	APPR. BY:	1152-R01A-92112
04	SCALE: 1=1	



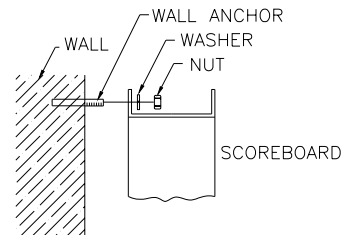
REAR VIEW

SIDE VIEW

MODELS:
 H-2023-9
 H-2025-9
 H-2030-9



ATTACH THE SCOREBOARD TO THE WALL AT ALL MOUNTING LOCATIONS INDICATED. USE THE APPROPRIATE ANCHORS FOR THE TYPE OF WALL.



NOTE: LIFTING ANGLES WERE DESIGNED ONLY FOR TEMPORARY USE WHILE LIFTING DISPLAY IN PLACE. DO NOT USE LIFTING ANGLES TO SECURE DISPLAY IN PLACE.

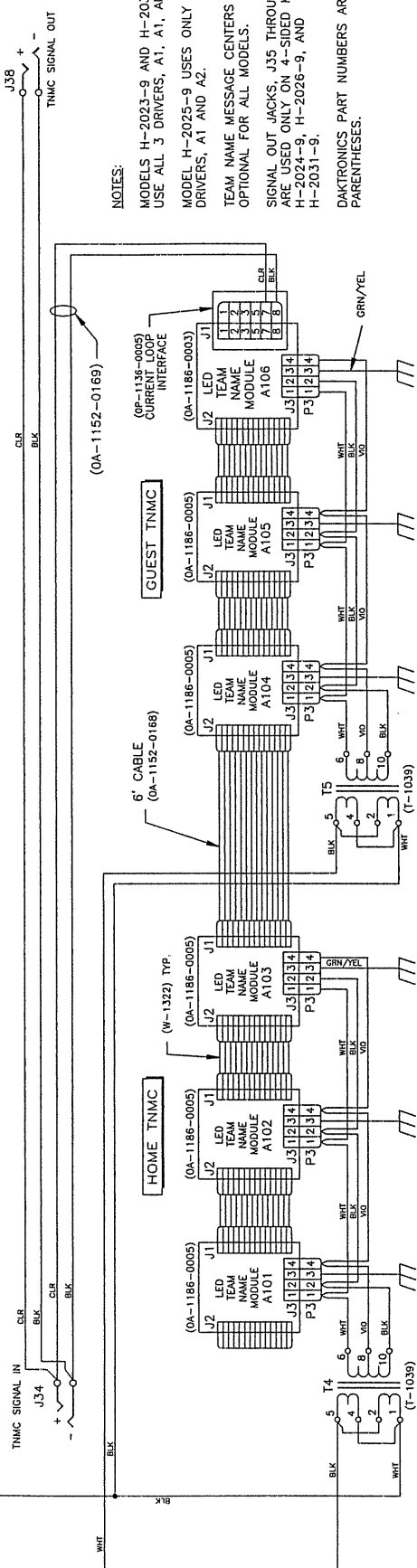
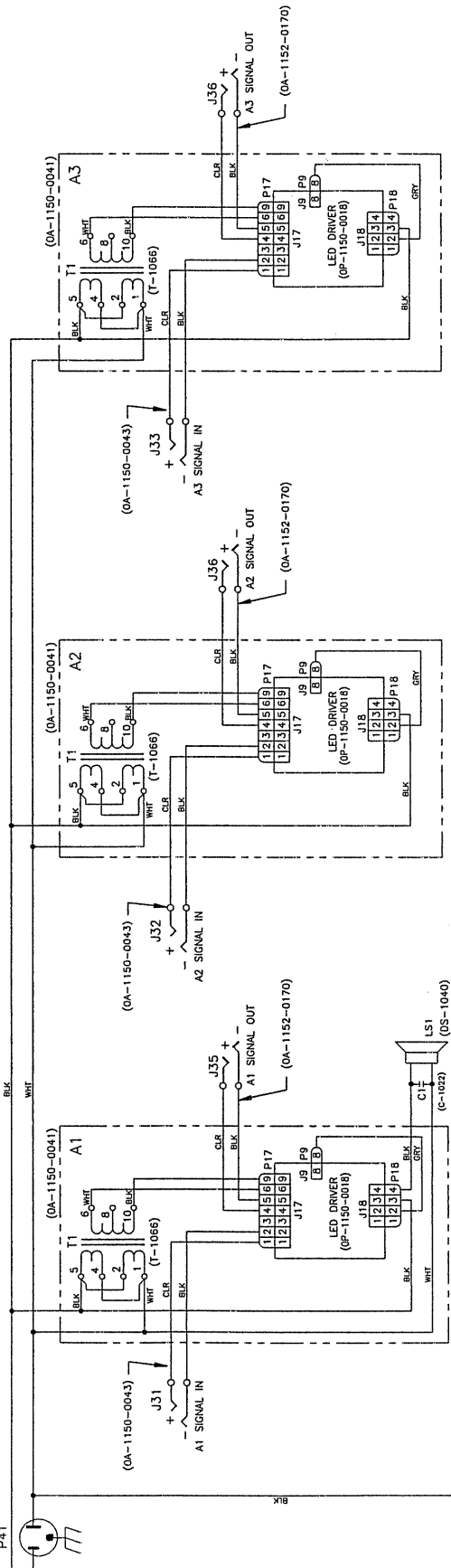
DISPLAY SPEC:

- SHIPPING WEIGHT: 225 Lbs.
- MOUNTING WEIGHT: 150 Lbs.
- DIMENSIONS: 120.00" x 60.00" x 6.00"

REV.	DATE	DESCRIPTION	BY	APPR.
03	06 NOV 00	CORRECTED HOLES IN REAR VIEW AND CHANGED WEIGHTS	CPS	
2	19 NOV 98	CHANGED DWG TITLE TO INCLUDE MODEL NUMBERS	DDL	
1	21 OCT 98	ADDED LIFTING ANGLES TO ISO DRAWING.	MWJ	

DAKTRONICS, INC. BROOKINGS, SD 57006	
PROJ: STANDARD INDOOR SCOREBOARDS	
TITLE: SHOP DWG; H-2023-9, H-2025-9, H-2030-9	
DES. BY: AVB	DRAWN BY: MJORDAN
DATE: 19 OCT 98	
REVISION	APPR. BY:
SCALE: 1=25	1152-R08A-103966

120V AC
P41



NOTES:
 MODELS H-2023-9 AND H-2030-9 USE ALL 3 DRIVERS, A1, A1, AND A3.
 MODEL H-2025-9 USES ONLY TWO DRIVERS, A1 AND A2.
 TEAM NAME MESSAGE CENTERS ARE OPTIONAL FOR ALL MODELS.
 SIGNAL OUT JACKS, J35 THROUGH J38, ARE USED ONLY ON 4-SIDED MODELS H-2024-9, H-2026-9, AND H-2031-9.
 DAKTRONICS PART NUMBERS ARE IN PARENTHESES.

REV.	DATE	DESCRIPTION	BY	APPR.
3	29 JUN 99	CORRECTED MODULE NUMBERING ON GUEST TNMC	AVB	AVB
2	10 NOV 98	REMOVED UNNECESSARY GUEST TNMC LOCATIONS. CORRECTED WIRING TO TNMC. SHOWED DRIVERS IN VERTICAL ORIENTATION.	AVB	AVB
1	14 JUL 98	ADDED SIGNAL INPUT ASST NO.	MWU	

REV.	DATE	DESCRIPTION	BY	APPR.
3	29 JUN 99	CORRECTED MODULE NUMBERING ON GUEST TNMC	AVB	AVB
2	10 NOV 98	REMOVED UNNECESSARY GUEST TNMC LOCATIONS. CORRECTED WIRING TO TNMC. SHOWED DRIVERS IN VERTICAL ORIENTATION.	AVB	AVB
1	14 JUL 98	ADDED SIGNAL INPUT ASST NO.	MWU	

DAKTRONICS, INC. BROOKINGS, SD 57006
 BRD: STANDARD LED SCOREBOARDS
 TITLE: SCHEMATIC, PWR/SIG, H-2023-9, H-2025-9, H-2030-9
 DES. BY: AVB
 DRAWN BY: MAJORDAN
 DATE: 05 JUN 98
 REV. NO.: NONE
 SCALE: 1152-R03B-103420

Section 3 :Maintenance & Troubleshooting



IMPORTANT NOTES:

1. Disconnect power before any repair or maintenance work is done on the scoreboard!
2. Any access to internal scoreboard electronics must be made by qualified service personnel.
3. Disconnect power when the scoreboard is not in use.

3.1 LED Driver

Reference Drawings: LED Driver **Drawing A-87407**

The LED driver (refer to **Drawing A-87407**) performs the task of switching LEDs on and off. Each driver has 19 connectors providing power and signal inputs/outputs to digits and indicators. The following table shows the function of these connectors.

Connector No.	Function
1 thru 16	Output to digits and indicators
17	Control signal and power input
18	Control for horn
19	Address (not used in these models)

Output connectors 1 through 16 each have 9 pins. Pin 7 provides power to the digit or indicators wired to that connector. The other 8 pins provide switching connections.

3.2 Component Location, Access and Schematic

Reference Drawings: Segmentation, 7 Segment Bar Digit **Drawing A-38532**
Rear View, All Sport 4000 **Drawing A-87150**
LED Driver; 16 column **Drawing A-87407**
Driver Reference; 4column **Drawing A-91380**
Cable, 25-Pin to 16-Pin, 16 Cond **Drawing A-108831**

The LED driver is located behind a panel, as indicated in the drawings. Release the fasteners securing the panel to gain access.

Refer to the drawings listed above for power and signal connection information and for component location.

⚠ **Disconnect Power Before Servicing Display.**

≡ Disconnect power when not using the scoreboard. Leaving the power on may shorten the life of some electronic components.

3.3 Troubleshooting

The following table provides a list of potential scoreboard problems and corrective actions to take. Refer to the scoreboard specification sheets to obtain the correct replacement part number for any damaged components. For assistance with any troubleshooting and to order replacement components, **first contact your service provider**. Your service provider may have spare equipment on hand and, in the event of an emergency, may provide same-day service. Your service provider may direct you to call Daktronics. In the event that no service provider is available to you, contact Daktronics. For faster service, please note the make of your scoreboard and any possible assembly numbers, as noted on the scoreboard spec sheet. If you need to order replacement components, it would be helpful to have a Purchase Order number or any other purchase information in hand when you call.

Symptom/Condition	Possible Cause	Corrective Action
Scoreboard will not light.	<ul style="list-style-type: none"> • Console not connected or poor connection. • No power to control console. • No power to the scoreboard. • Wrong code entered into All Sport/ 	<ul style="list-style-type: none"> • Check signal cable. • Check power to console • Check power to scoreboard • Verify code to console
Garbled display.	<ul style="list-style-type: none"> • Internal driver logic malfunction. • Control console malfunction. 	<ul style="list-style-type: none"> • Check power. • Verify code to console
Digit will not light.	<ul style="list-style-type: none"> • Black wire to digit broken/ Poor contact at driver connection. 	<ul style="list-style-type: none"> • Verify power harness in display.
Segment will not light.	<ul style="list-style-type: none"> • Broken LED or connection • Driver shift register failure. • Broken wire between LED driver and digit/ Poor contact at driver connector. 	<ul style="list-style-type: none"> • Replace digit. • Replace driver. • Secure pins tightly in plugs
Segment stays lit.	<ul style="list-style-type: none"> • Driver shift register failure/ Short circuit on digit. 	<ul style="list-style-type: none"> • Replace driver.

3.4 Replacement Parts List

The following parts list includes components for many different types of LED scoreboards. For the exact components needed for your scoreboard, refer to the reference drawings in the back of this manual.

Description	Part No.
-------------	----------

Main Clock; Start/Stop Switch	0A-1166-0003
Console; All Sport 4000	0A-1166-0001
Horn; 120VAC	DS-1040
Plug; ¼" phone	P-1041
Transformer; 120P/16S, 63A	T-1066
J-Box; Phone Jack	0A-1009-0038
J-Box; 16-pin Circular	0A-1010-0026
LED Driver; 16 Column Coated	0P-1150-0018
Digit; 7" Red, 7 Seg	0P-1150-0036
Digit; 7" Green, 7 Seg	0P-1150-0037
Digit; 7" Amber, 7 Seg	0P-1150-0038
Digit; 10" Red, 7 Seg	0P-1150-0042
Digit; 10"Grn, 7 Seg	0P-1150-0043
Digit; 10"Amber 7 Seg	0P-1150-0044
Digit; 10"Red, 2 Seg	0P-1150-0045
Digit; 10"Amb, 2 Seg	0P-1150-0047
Digit; 13" Red, 7 Seg	0P-1150-0048
Digit; 13"Green, 7 Seg	0P-1150-0049
Digit; 13" Amber, 7 Seg	0P-1150-0050
Arrow; 3" Red	0P-1150-0003
Cable; 10' 25 pin D to 16 pin Cir	0A-1065-0026
Cable; 20' 25 pin D to 16 pin Cir	0A-1065-0102
Cable; 30' 25 pin D to 16 pin Cir	0A-1066-0010
Cable; 50' 25 pin D to 16 pin Cir	0A-1066-0011
Cable; Y Adapter 16 pin Cir	0F-1065-0101
Cable; 20 Ft Phone	W-1236
Cable; 30 Ft Phone	W-1238
Cable; 50 Ft Phone	W-1237
Cable; 10 Ft Phone	W-1340

3.5 Unit Exchange/Replacement Procedure

3.5 Unit Exchange/Replacement Procedure

Daktronics unique exchange program offers our clients the quickest, most economical, service for returning products in need of repair. If a component fails, Daktronics sends the customer a replacement. The customer, in turn, sends the failed component to Daktronics. This not only saves money but decreases the product's down time. Daktronics offers repair and return on a timely basis. In urgent situations, Daktronics makes every attempt to ship by the fastest transit method available.

1. **Packaging for Return:** Package and pad the item well to prevent damage during shipment. Electronic components, such as printed circuit boards, should either be installed in an enclosure or placed in an anti-static bag before boxing.

Please enclose your name and address and list the specific symptoms of the failed product.

2. **Driver Packaging Instructions:** Place drivers in a static-free enclosure for return shipping. Daktronics has an anti-static convoluted foam packing available (part number PK-1135). Use the shipping box (Daktronics part number PK-1006) along with the foam.
3. **Where to Send:** Contact your local representative prior to shipment to acquire a Return Material Authorization Number (RMA#). Include this number with the returned item. This expedites the repair of your unit.

When returning defective items under the exchange program, please use the UPS Blue Return Tags found in the package containing the exchange unit sent from Daktronics. This speeds up the transaction and helps avoid confusion when Daktronics receives the part. **Return the defective item within 15 days of receiving a replacement part.** Using the UPS Blue Return Tag within the 15-day time frame eliminates the possibility of late charges being assessed against your account.

Mail: Daktronics, Inc., Customer Service
PO Box 5128
331 32nd Avenue
Brookings, SD 57006

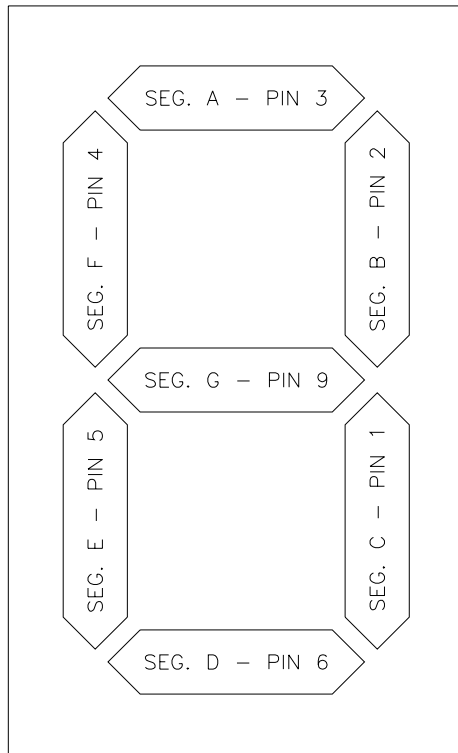
Phone: Toll Free: 1-800-843-9879
or 1-605-697-4400

Customer Service Fax: 1-605-697-4444

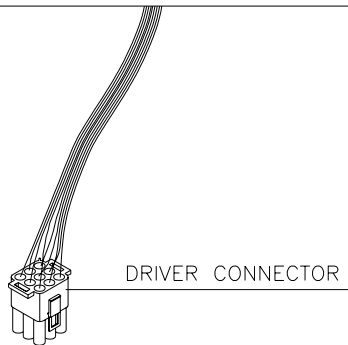
E-Mail: helpdesk@daktronics.com

Daktronics Warranty and Limitation of Liability

The Daktronics Warranty and Limitation of Liability is located in Appendix F. The Warranty is independent of Extended Service agreements and is the authority in matters of service, repair, and display operation.

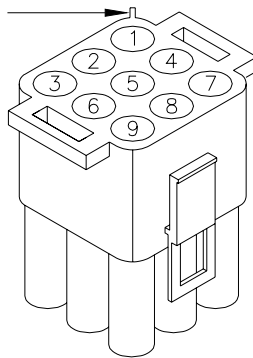


7 SEGMENT BAR DIGIT
FRONT VIEW



CONNECTOR PIN NUMBERING

NOTE SPLINE NEAR NO. 1



COLOR CODE		
PIN NO.	WIRE COLOR	DRIVER SEGMENT
1	ORN	C
2	RED	B
3	BRN	A
4	BLU	F
5	PNK	E
6	TAN	D
7	BLK	COM.
8	GRY	H
9	VIO	G

NOTE: "H" SEGMENT, GRAY WIRE IS NOT USED ON 7 SEGMENT BAR DIGIT.

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DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: BASKETBALL

TITLE: SEGMENTATION, 7 SEGMENT BAR DIGIT

DES. BY: DRAWN BY: HEIDERSCHIEDT DATE: 5 JUN 89

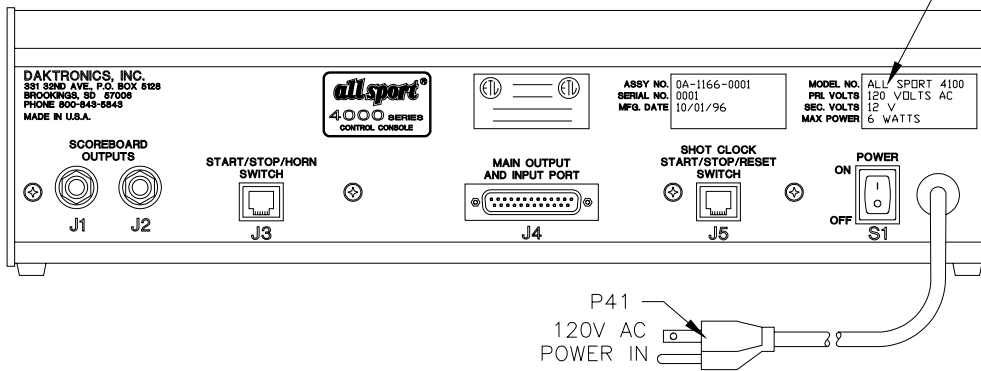
REVISION APPR. BY: AVB

02 SCALE: 1=4

1009-R04A-38532

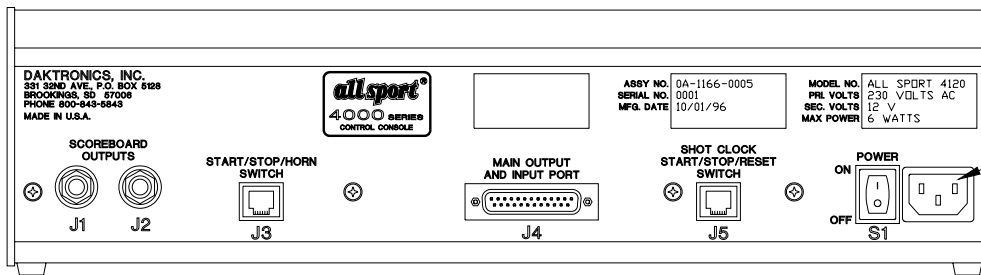
REV.	DATE	DESCRIPTION	BY	APPR.
2	30 APR 97	ADDED SEGMENT DESIGNATIONS TO DIGIT FIGURE.	AVB	AVB
1	2 JAN 92	CHANGED FROM B-SIZE TO A-SIZE DWG.	C FICK	

ALL SPORT 4100 & 4900:



LOOK HERE TO DETERMINE THE MODEL NUMBER AND POWER SPECIFICATIONS

ALL SPORT 4120 & 4920:



J41
230V AC
POWER IN

J1 & J2 - OUTPUT #1

CONTACT	FUNCTION
TIP	CURRENT LOOP OUTPUT 1 +
RING	CURRENT LOOP OUTPUT 1 -
SHAFT	GND

J3 - START/STOP/HORN

PIN #	FUNCTION
1	SWITCH INPUT 2 -
2	SWITCH INPUT 1 -
3	SWITCH OUTPUT -
4	SWITCH OUTPUT +
5	SWITCH INPUT 1 +
6	SWITCH INPUT 2 +

J5 - SHOT CLOCK

PIN #	FUNCTION
1	SWITCH INPUT 5 -
2	SWITCH INPUT 4 -
3	SWITCH INPUT 3 -
4	SWITCH INPUT 3 +
5	SWITCH INPUT 4 +
6	SWITCH INPUT 5 +

J4 - MAIN PORT

PIN #	FUNCTION
1	EARTH
2	RS232 RECEIVE +
3	RS232 TRANSMIT +
4	
5	
6	
7	CURRENT LOOP OUTPUT 4 -
8	SWITCH INPUT 1 +
9	CURRENT LOOP INPUT +
10	CURRENT LOOP INPUT -
11	SWITCH OUTPUT +
12	
13	
14	CURRENT LOOP OUTPUT 1 +
15	CURRENT LOOP OUTPUT 1 -
16	CURRENT LOOP OUTPUT 2 +
17	CURRENT LOOP OUTPUT 2 -
18	CURRENT LOOP OUTPUT 3 +
19	CURRENT LOOP OUTPUT 3 -
20	
21	SWITCH INPUT 1 -
22	CURRENT LOOP OUTPUT 4 +
23	SWITCH OUTPUT -
24	12V AC/DC INPUT
25	12V AC/DC INPUT

FOR STANDARD CODES, THESE FUNCTIONS ARE USUALLY ASSIGNED TO THE FOLLOWING TASKS:

FUNCTION	USUAL TASK
SW IN 1	MAIN CLOCK STOP/START
SW IN 2	MAIN CLOCK HORN
SW IN 3	NOT USED
SW IN 4	SHOT/DELAY CLOCK STOP
SW IN 5	SHOT/DELAY CLOCK RESET
SW OUT	CLOCK STOP OUT
CL OUT 1	MAIN SCOREBOARD
CL OUT 2	MAIN SCOREBOARD
CL OUT 3	SHOT/DELAY CLOCK
CL OUT 4	AUX. SCBD/TEAM NAME MC

ALL SPORT 4000 SERIES MODELS

MODEL #	FUNCTION
4100	120V, STANDARD PROGRAMMING
4120	230V, STANDARD PROGRAMMING
4900	120V, CUSTOM PROGRAMMING
4920	230V, CUSTOM PROGRAMMING

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: ALL SPORT 4000 SERIES CONSOLES

TITLE: REAR VIEW, CONNECTOR ASSIGNMENTS

DES. BY: _____ DRAWN BY: A VANBEMMEL DATE: 03 OCT 96

REVISION APPR. BY: _____ SCALE: 1=3

1166-R04A-87150

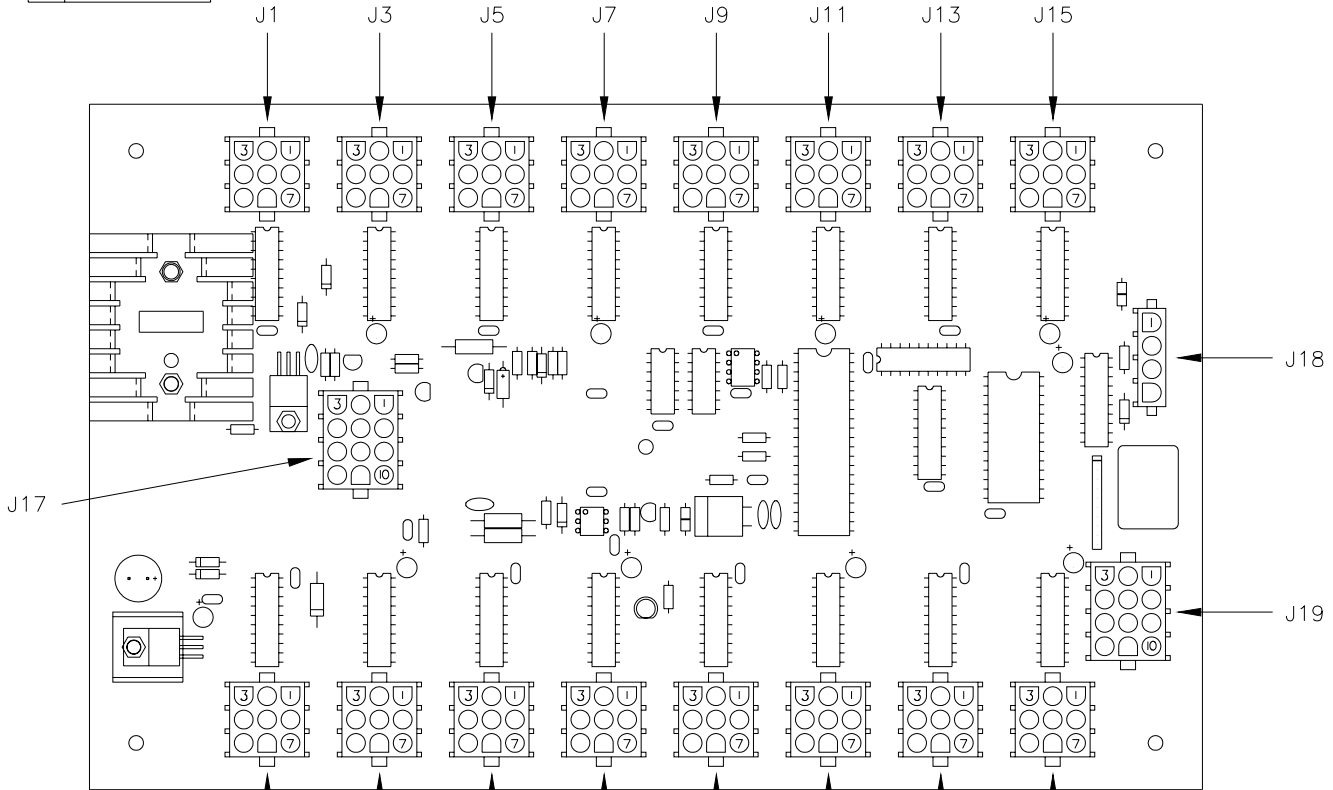
REV.	DATE	DESCRIPTION	BY	APPR.
1	20NOV96	CHANGED MODEL NUMBERS	AVB	AVB

J17

PIN	FUNCTION
1	SIGNAL IN +
2	SIGNAL IN -
3	GND
4	SIGNAL OUT +
5	SIGNAL OUT -
6	16V AC IN
7	GND
8	EARTH
9	16V AC IN
10	GND
11	+VCC +
12	+VBB +

J18

PIN	FUNCTION
2	K1 IN, 16V DC (-)
3	120V HOT IN
4	120V SWITCHED OUT



J1 THROUGH J16

PIN	FUNCTION
1	SEGMENT C (-)
2	SEGMENT B (-)
3	SEGMENT A (-)
4	SEGMENT F (-)
5	SEGMENT E (-)
6	SEGMENT D (-)
7	COMMON (+)
8	SEGMENT H (-)
9	SEGMENT G (-)

J19

PIN	FUNCTION
1	GND
2	SW0-N
3	SW1-N
4	GND
5	SW2-N
6	SW3-N
7	GND
8	SW4-N
9	SW5-N
10	GND
11	SW6-N
12	SW7-N

FRONT VIEW

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: LED SCOREBOARDS

TITLE: LED DRIVER 16 COLUMN

DES. BY:

DRAWN BY: JMOEN

DATE: 15 OCT 96

REVISION

APPR. BY:

SCALE: 1=2

1150-R04A-87407

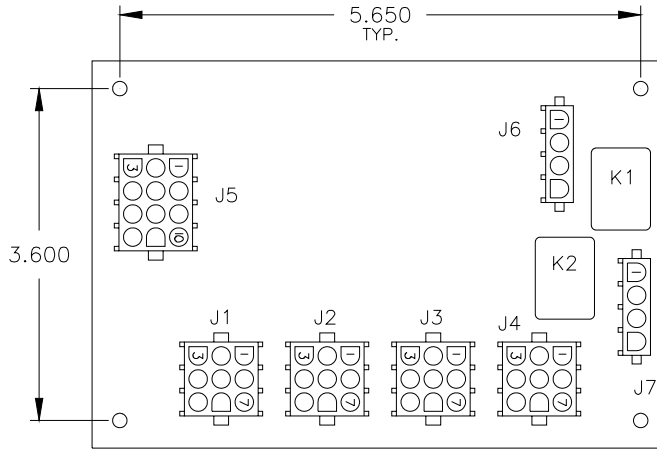
REV.	DATE	DESCRIPTION	BY	APPR.
1	27 MAR 97	ADDED TABLES TO DESCRIBE FUNCTIONS IN EACH JACK.	AVB	

J5

PIN	FUNCTION
1	SIGNAL IN +
2	SIGNAL IN -
4	SIGNAL OUT +
5	SIGNAL OUT -
6	16V AC IN
7	GND
9	16V AC IN
10	GND
11	ADDRESS 2
12	ADDRESS 1

J1 THROUGH J4

PIN	FUNCTION
1	SEGMENT C (-)
2	SEGMENT B (-)
3	SEGMENT A (-)
4	SEGMENT F (-)
5	SEGMENT E (-)
6	SEGMENT D (-)
7	COMMON (+)
8	SEGMENT H (-)
9	SEGMENT G (-)



J6

PIN	FUNCTION
2	K1 IN, 16V DC (-)
3	120V HOT IN
4	120V SWITCHED OUT

J7

PIN	FUNCTION
2	K2 IN, 16V DC (-)
3	120V HOT IN
4	120V SWITCHED OUT

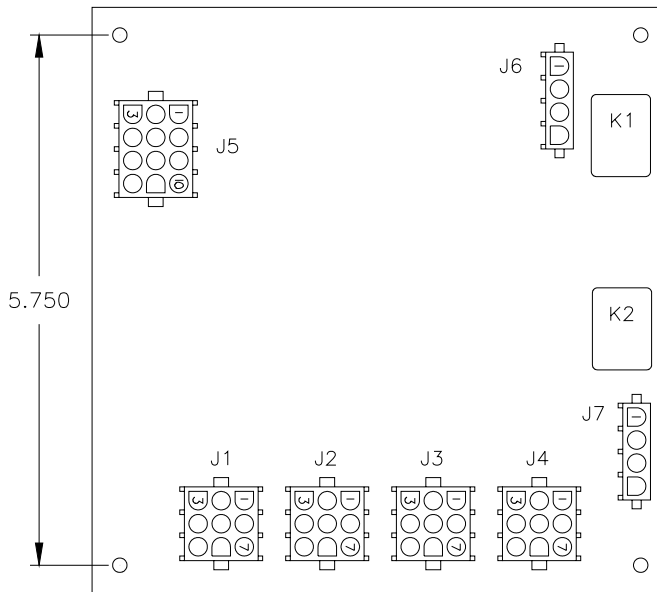
LED DIGIT DRIVER
 LOGIC AND DRIVE COMPONENTS ARE NOT SHOWN.
 DAKTRONICS PART NO. IS 0P-1150-0021.

J5

PIN	FUNCTION
1	SIGNAL IN +
2	SIGNAL IN -
4	SIGNAL OUT +
5	SIGNAL OUT -
6	28V AC IN
7	GND
8	14V AC IN
9	28V AC IN
10	GND
11	ADDRESS 2
12	ADDRESS 1

J1 THROUGH J4

PIN	FUNCTION
1	SEGMENT C
2	SEGMENT B
3	SEGMENT A
4	SEGMENT F
5	SEGMENT E
6	SEGMENT D
7	COMMON
8	SEGMENT H
9	SEGMENT G



J6

PIN	FUNCTION
2	K1 IN, 28V AC
3	120V HOT IN
4	120V SWITCHED OUT

J7

PIN	FUNCTION
2	K2 IN, 28V AC
3	120V HOT IN
4	120V SWITCHED OUT

INCANDESCENT DIGIT DRIVER
 LOGIC AND DRIVE COMPONENTS ARE NOT SHOWN.
 DAKTRONICS PART NO. IS 0P-1033-0109.

ADDRESS INFORMATION:

BOTH DRIVERS USE THE SAME SIGNAL. SIGNAL INCLUDES DATA FOR 16 INPUT "COLUMNS" ALTHOUGH THE DRIVER HAS ONLY FOUR OUTPUT COLUMNS. THE DRIVER ADDRESS SELECTS WHICH OUTPUT COLUMN IS OPERATED BY EACH INPUT COLUMN IN THE SIGNAL. THIS TABLE SHOWS WHICH INPUT COLUMN IS CONTROLLING EACH OUTPUT COLUMN, AS DETERMINED BY THE FOUR AVAILABLE ADDRESSES.

	ADDRESS 0 NO JUMPER CONNECTIONS				ADDRESS 1 CONNECT J5 PIN 10 TO 12				ADDRESS 2 CONNECT J5 PIN 10 TO 11				ADDRESS 3 CONNECT J5 10 TO 11&12			
DATA INPUT COLUMN	5	6	7	8	1	2	3	4	9	10	11	12	13	14	15	16
OUTPUT COLUMN	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

ALSO, ADDRESS 1 MAKES THESE CHANGES:
 INPUT DATA COLUMN 5, SEGMENT H IS SENT TO OUTPUT COLUMN 1, SEGMENT H.
 INPUT DATA COLUMN 9, SEGMENT H IS SENT TO OUTPUT COLUMN 2, SEGMENT H.

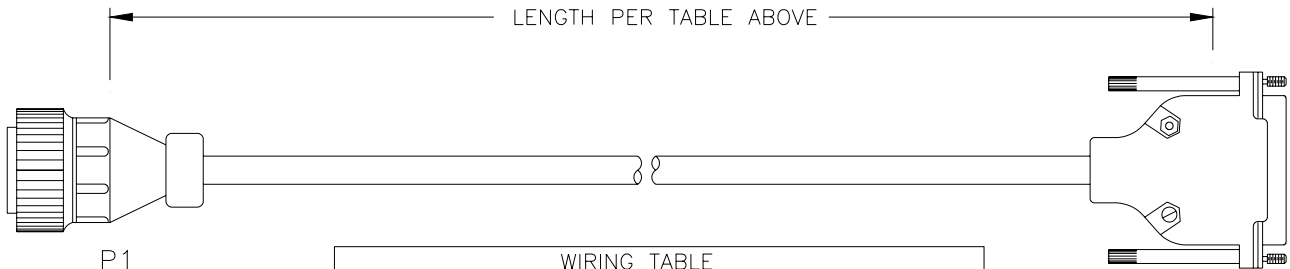
DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:
 TITLE: 4-COLUMN DRIVER REFERENCE
 DES. BY: DRAWN BY: A VANBEMMEL DATE: 19 MAR 97

REV.	DATE	DESCRIPTION	BY	APPR.
1	09 OCT 97	ADDED PART NUMBERS AND ADDRESS INFORMATION	AVB	AVB

REVISION APPR. BY:
 SCALE: 1=2 1009-R04A-91380

CABLE PART NUMBERS	
LENGTH	PART NUMBER
10' (3 M)	0A-1065-0026
20' (6 M)	0A-1065-0102
30' (9 M)	0A-1166-0010
50' (15 M)	0A-1166-0011

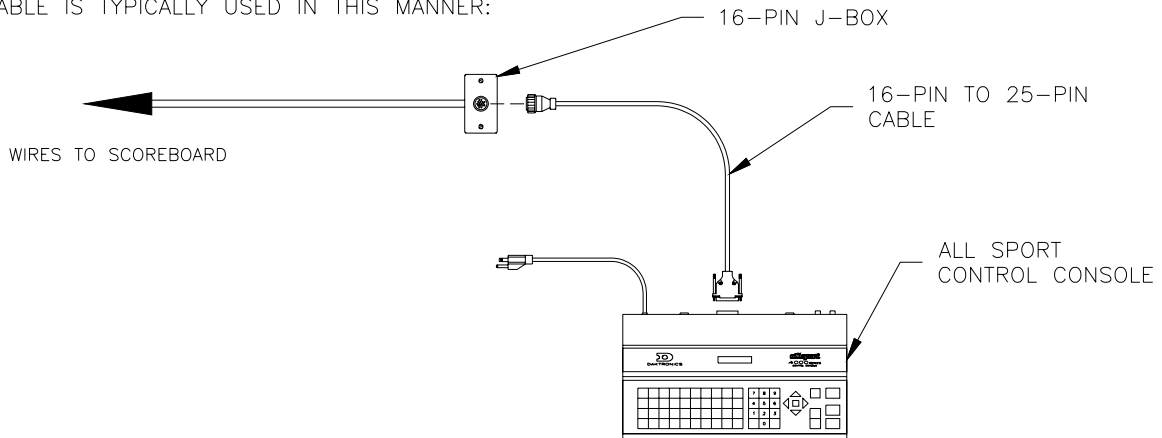


P1
16-PIN
CIRCULAR PLUG

P2
25-PIN PLUG
(DB-25)

WIRING TABLE			
FROM	WIRE COLOR	FUNCTION	TO
P1-1	BLACK	SIGNAL 1 +	P2-14
P1-2	WHITE	SIGNAL 1 -	P2-15
P1-3	RED	SIGNAL 2 +	P2-16
P1-4	GREEN	SIGNAL 2 -	P2-17
P1-5	ORANGE	SIGNAL 3 +	P2-18
P1-6	BLUE	SIGNAL 3 -	P2-19
P1-7	WHITE/BLACK	SIGNAL 4 +	P2-22
P1-8	RED/BLACK	SIGNAL 4 -	P2-7
P1-9	GREEN/BLACK	CLOCK RUN +	P2-8
P1-10	ORANGE/BLACK	CLOCK RUN -	P2-21
P1-11	BLUE/BLACK	STOP OUT +	P2-11
P1-12	BLACK/WHITE	STOP OUT -	P2-23
P1-13	RED/WHITE	SERIAL DATA IN +	P2-9
P1-14	GREEN/WHITE	SERIAL DATA IN -	P2-10
P1-15	BLUE/WHITE	12V AC/DC IN	P2-24
P1-16	BLACK/RED	12V AC/DC IN	P2-25

THIS CABLE IS TYPICALLY USED IN THIS MANNER:



DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: PIN ASSIGNMENTS, 16-PIN TO 25-PIN CABLE

DES. BY: AVB

DRAWN BY: A VANBEMMEL DATE: 26 OCT 98

REVISION

APPR. BY:

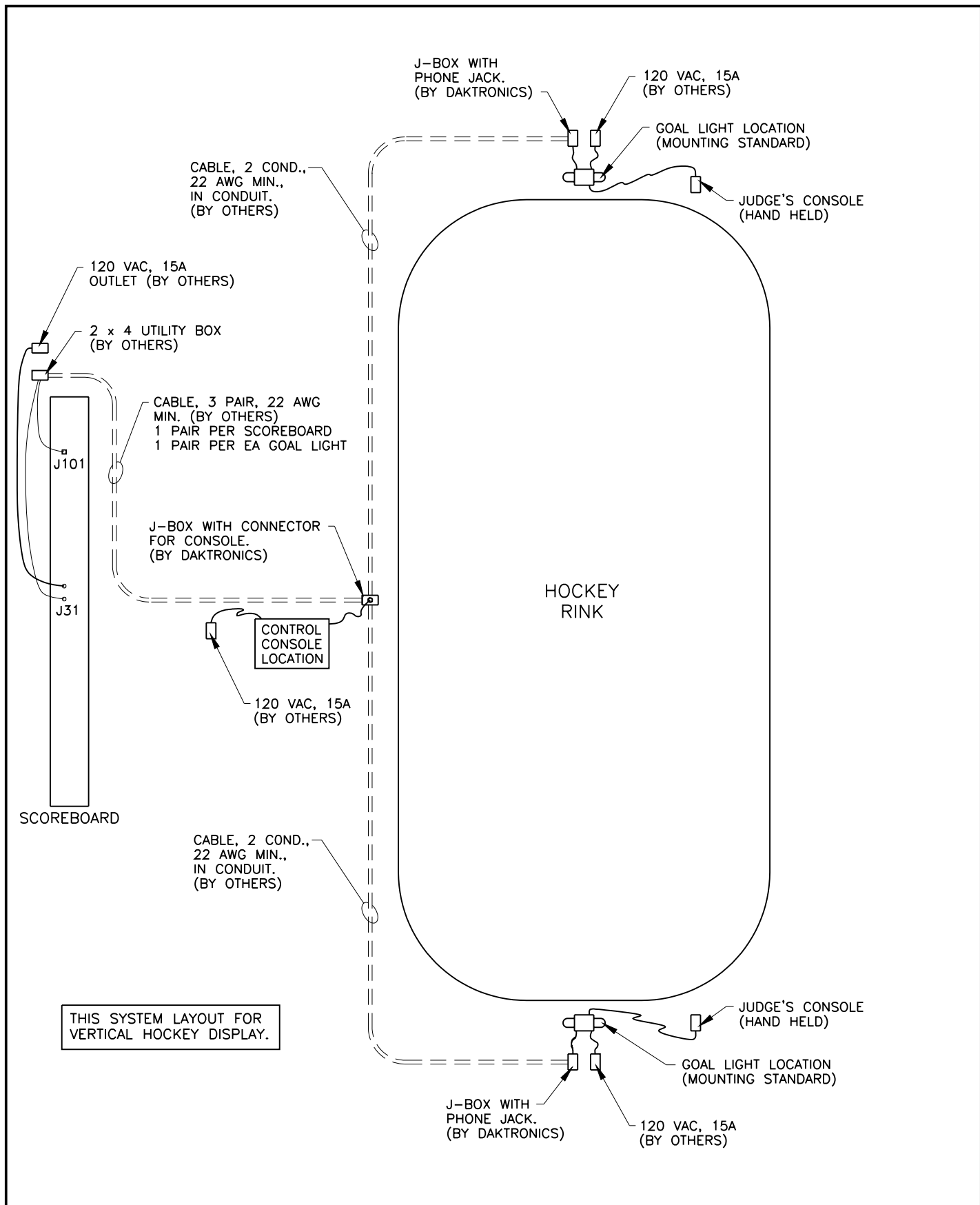
SCALE: 1=2

1166-R08A-108831

REV.	DATE	DESCRIPTION	BY	APPR.
1	27 SEP 99	CHANGED P2-12 TO P2-15.	AVB	AVB

Appendix A: Typical Signal Termination

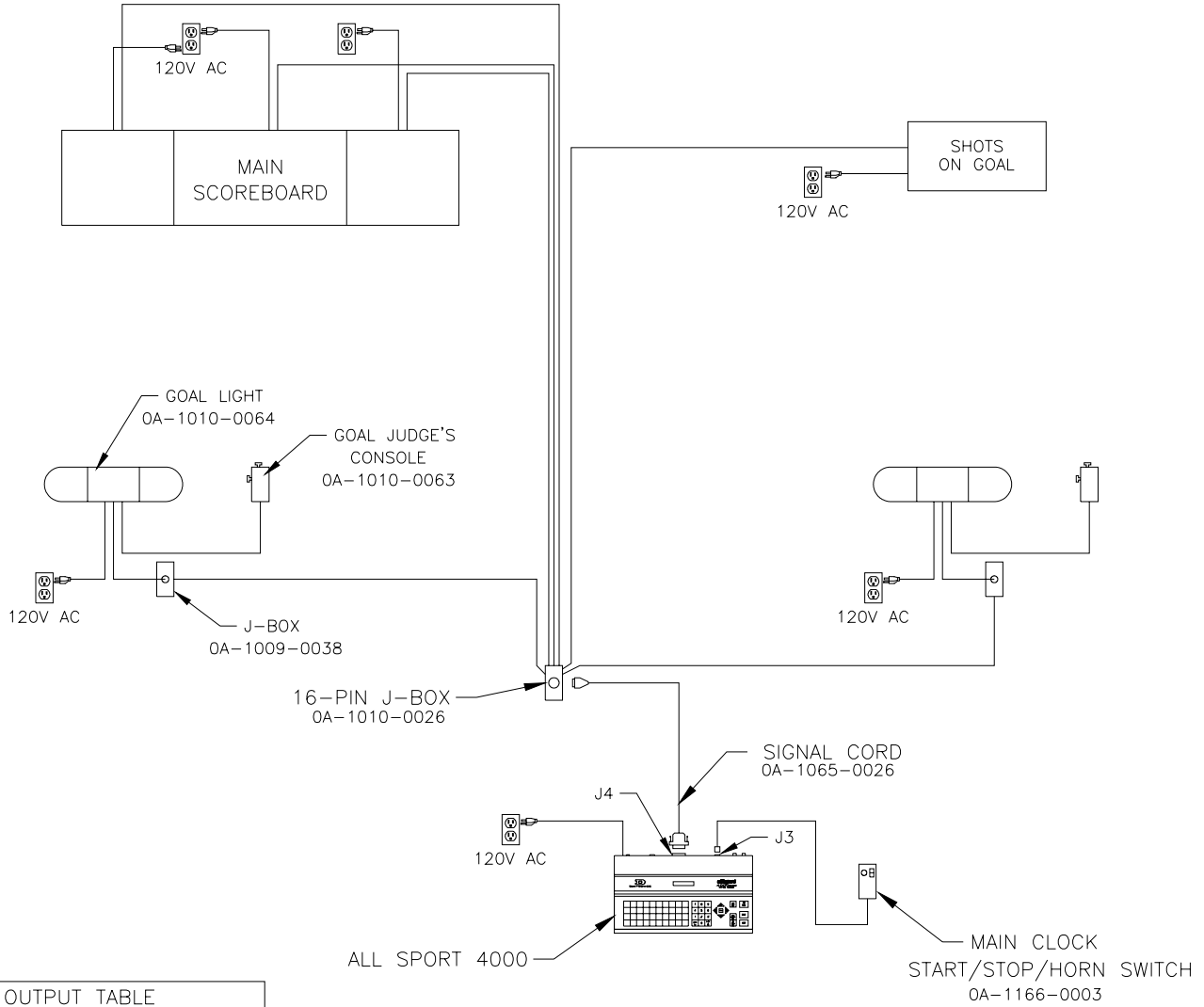
Reference Drawings:	Block Diagram, Hockey	Drawing A-86972
	12V Hookups, Scoreboard to Console	Drawing A-88082
	Block Diagram, SG & TI Displays	Drawing A-89417
	Block Diagram, Hockey System	Drawing A-108171



THIS SYSTEM LAYOUT FOR VERTICAL HOCKEY DISPLAY.

DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: HOCKEY			
TITLE: HOCKEY RINK LAYOUT, SCOREBOARD W/GOAL LIGHTS			
DES. BY:		DRAWN BY: C FICKBOHM	
		DATE: 25 SEPT 92	
REVISION	APPR. BY:	1010-R08A-53266	
	SCALE: NONE		

REV.	DATE	DESCRIPTION	BY	APPR.



OUTPUT TABLE

16-PIN J-BOX PIN#	WIRE COLOR	OUT- PUT #	SIGNAL TYPE
1	RED	1+	SCOREBOARD DRIVER 1
2	BLACK	1-	SCOREBOARD DRIVER 1
3	WHITE	2+	SCOREBOARD DRIVER 2
4	GREEN	2-	SCOREBOARD DRIVER 2
5	ORANGE	3+	SCOREBOARD DRIVER 3
6	BLUE	3-	SCOREBOARD DRIVER 3
7	WHT/BLK	4+	SHOTS ON GOAL
8	RED/BLK	4-	SHOTS ON GOAL

GOAL LIGHT CONNECTION

16-PIN J-BOX		
PIN#	WIRE COLOR	FUNCTION
11	BLU/BLK	GOAL LIGHT +
12	BLK/WHT	GOAL LIGHT -

CONNECTING GOAL LIGHTS TO THE CONSOLE PROVIDES A "CLOCK STOP" TRIGGER FOR THE GOAL LIGHT.

THAT IS, THE GREEN LIGHT TURNS ON, AND THE RED LIGHT IS INHIBITED WHENEVER THE CLOCK STOP.

TO TRIGGER THE GOAL LIGHT AT THE END OF THE PERIOD ONLY, CONNECT GOAL LIGHTS TO THE SCOREBOARD.

ALL SPORT 4000 SERIES CONSOLES
MODEL AND PART NUMBERS:

MODEL	PART NO.	DESCRIPTION
4100	0A-1166-0001	120V STANDARD
4120	0A-1166-0005	230V STANDARD
4900	0A-1166-0007	120V CUSTOM
4920	0A-1166-0008	230V CUSTOM

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: ALL SPORT 4000

TITLE: BLOCK DIAGRAM, HOCKEY

DES. BY:

DRAWN BY: A VANBEMMEL

DATE: 26SEP96

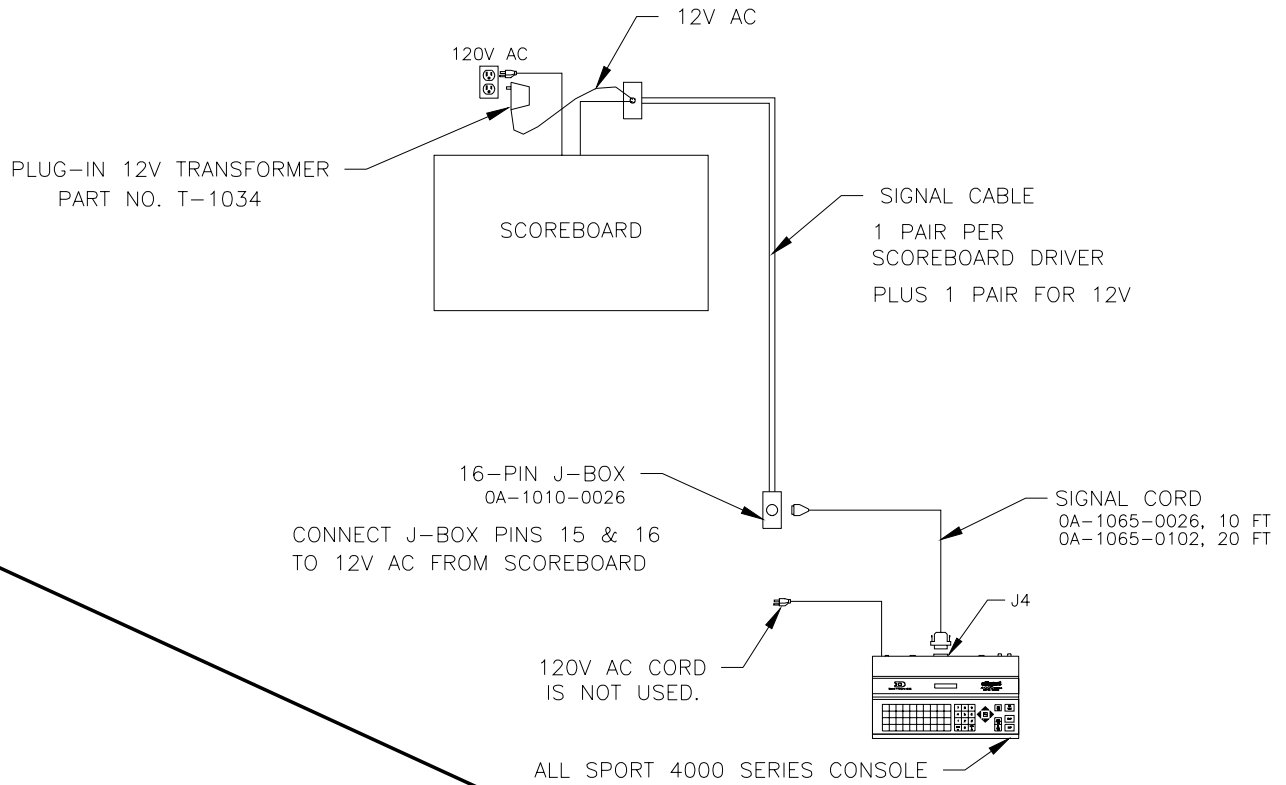
REV.	DATE	DESCRIPTION	BY	APPR.
1	20NOV96	CHANGED MODEL NUMBERS	AVB	AVB

REVISION

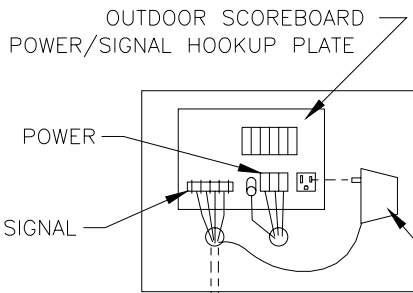
APPR. BY:

SCALE: NONE

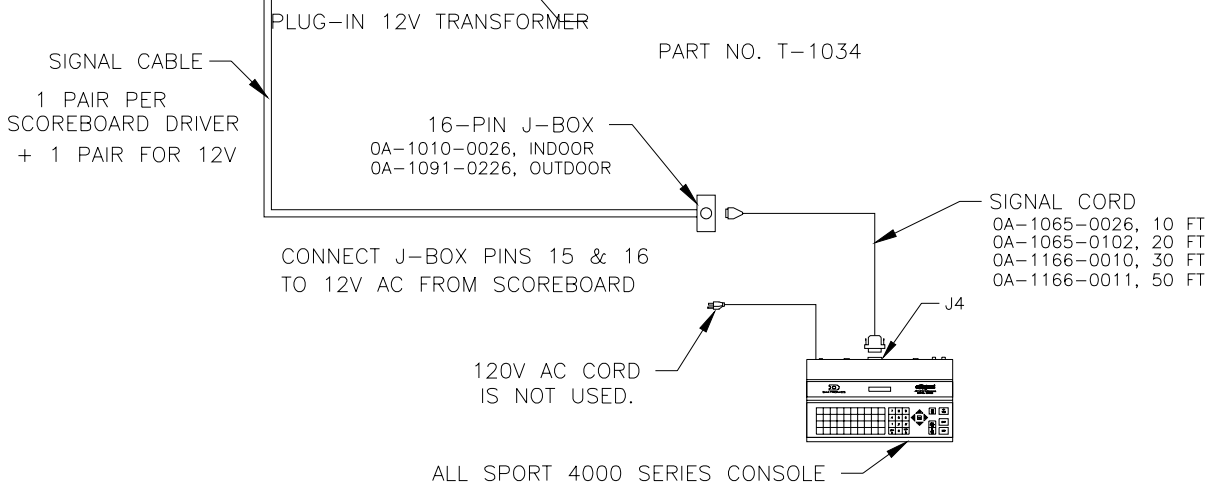
1166-R04A-86972



INDOOR SCOREBOARDS



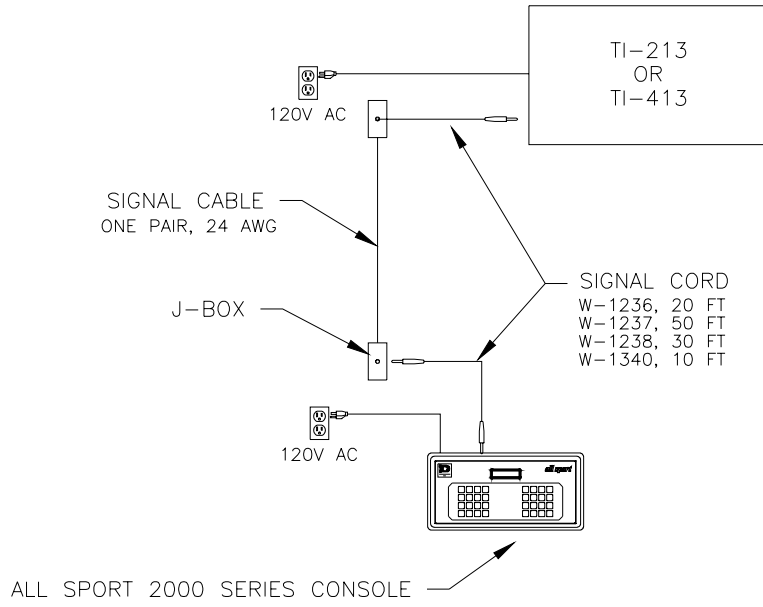
OUTDOOR SCOREBOARDS



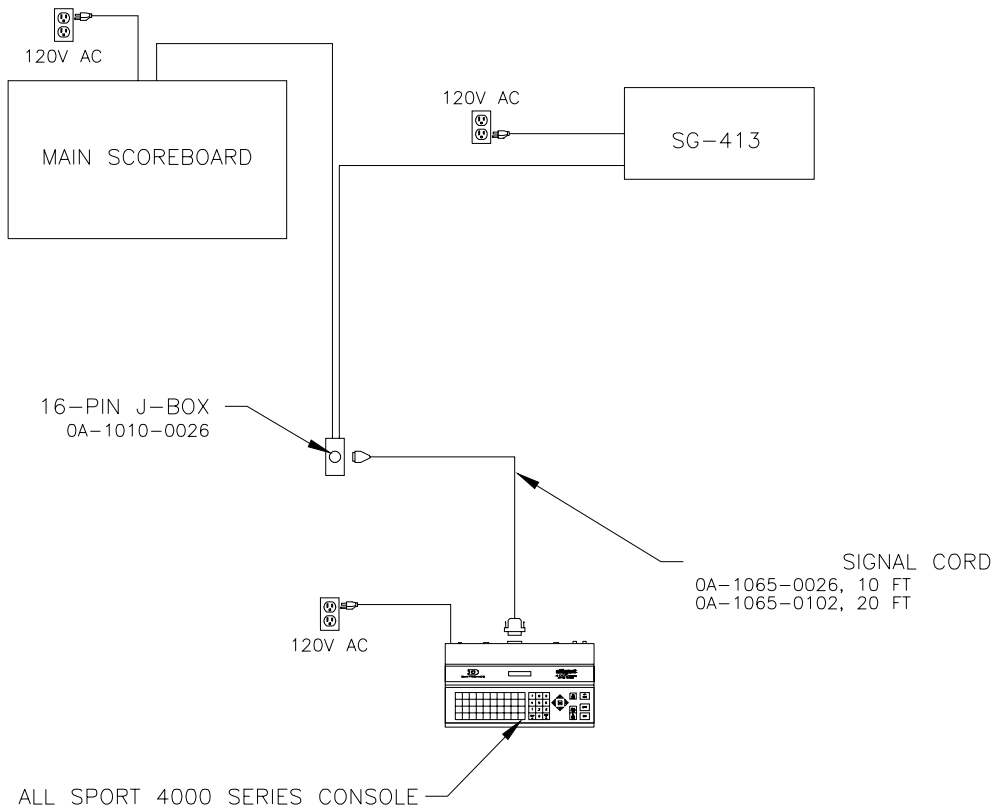
DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ: ALL SPORT 4000 SERIES CONSOLES				
TITLE: 12V HOOKUPS, SCOREBOARD TO CONSOLE				
DES. BY: AVB		DRAWN BY: A VANBEMMEL		DATE: 11 NOV 96
REVISION	APPR. BY:	1166-R10A-88082		
	SCALE: NONE			

REV.	DATE	DESCRIPTION	BY	APPR.
1	16 JUNE 98	ADDED PART NUMBERS	CJB	

TI- MODELS



SG- MODELS



DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: BLOCK DIAGRAMS, SG & TI DISPLAYS

DES. BY:

DRAWN BY: M.MCMASTERS

DATE: 7 JAN 97

REVISION

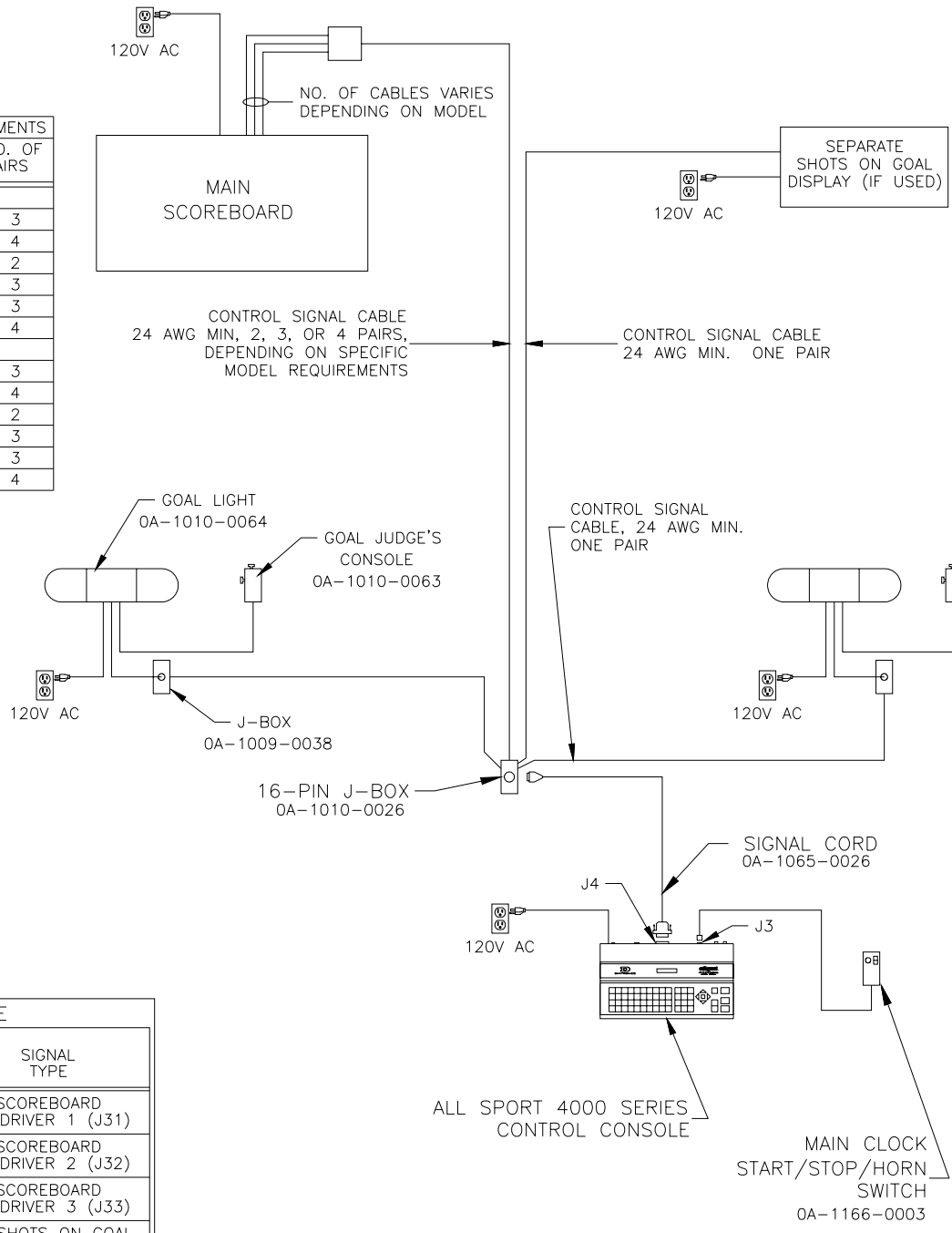
APPR. BY:

SCALE: NONE

1010-R04A-89417

REV.	DATE	DESCRIPTION	BY	APPR.

SIGNAL CABLE REQUIREMENTS	
MODEL NUMBER	NO. OF PAIRS
SINGLE-FACED:	
H-2023-9	3
H-2023-9 W/TNMC	4
H-2025-9	2
H-2025-9 W/TNMC	3
H-2030-9	3
H-2030-9 W/TNMC	4
4-SIDED:	
H-2024-9	3
H-2024-9 W/TNMC	4
H-2026-9	2
H-2026-9 W/TNMC	3
H-2031-9	3
H-2031-9 W/TNMC	4



16-PIN J-BOX PIN#	WIRE COLOR	OUT-PUT #	SIGNAL TYPE
1	RED	1+	SCOREBOARD DRIVER 1 (J31)
2	BLACK	1-	SCOREBOARD DRIVER 1 (J31)
3	WHITE	2+	SCOREBOARD DRIVER 2 (J32)
4	GREEN	2-	SCOREBOARD DRIVER 2 (J32)
5	ORANGE	3+	SCOREBOARD DRIVER 3 (J33)
6	BLUE	3-	SCOREBOARD DRIVER 3 (J33)
7	WHT/BLK	4+	SHOTS ON GOAL OR TNMC (J34)
8	RED/BLK	4-	SHOTS ON GOAL OR TNMC (J34)

16-PIN J-BOX		
PIN#	WIRE COLOR	FUNCTION
11	BLU/BLK	GOAL LIGHT +
12	BLK/WHT	GOAL LIGHT -

CONNECTING GOAL LIGHTS TO THE CONSOLE PROVIDES A LOW-VOLTAGE "CLOCK STOP" TRIGGER FOR THE GOAL LIGHT.

THAT IS, THE GREEN LIGHT TURNS ON, AND THE RED LIGHT IS INHIBITED WHENEVER THE CLOCK STOPS.

TO TRIGGER THE GOAL LIGHT AT THE END OF THE PERIOD ONLY, CONTACT DAKTRONICS FOR INFORMATION ON HOW TO CONNECT THE GOAL LIGHTS TO THE SCOREBOARD.

DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: ALL SPORT 4000			
TITLE: BLOCK DIAGRAM, HOCKEY			
DES. BY:		DRAWN BY: A VANBEMMEL	
		DATE: 02 OCT 98	
REVISION	APPR. BY:	1166-R04A-108171	
	SCALE: NONE		

REV.	DATE	DESCRIPTION	BY	APPR.

Appendix B: Hockey Scoreboards

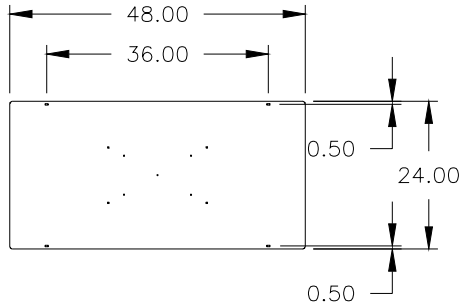
Reference Drawings:	Mechanical Spec, H-413-9	Drawing A-56420
	Electrical/Signal Spec, H-413-9	Drawing A-56426
	Mechanical Spec, H-213-9	Drawing A-61882
	Electrical/Signal Spec, H-213-9	Drawing A-61884
	Mechanical Spec, H-1013-9	Drawing A-75887
	Mechanical Spec, H-613-9	Drawing A-76049
	Mechanical Spec, H-2020-9	Drawing A-76050
	Electrical/Signal Spec, H-613-9	Drawing A-81641
	Electrical/Signal Spec, H-1013-9	Drawing A-82032
	Electrical/Signal Spec, H-2020-9	Drawing A-85644
	Component Location; H-2025-9.....	Drawing A-103419
	Component Location; H-2023-9.....	Drawing A-103968
	Component Location; H-2030-9.....	Drawing A-107563

H-413-9 SCOREBOARD

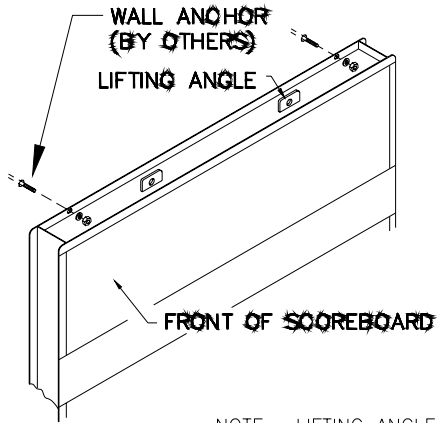
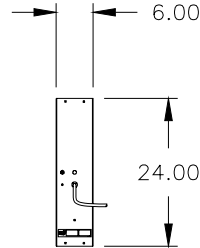
MECHANICAL SPEC

MOUNTING SPEC

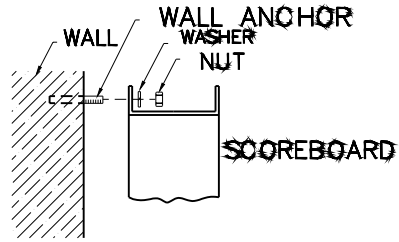
BACK VIEW



SIDE VIEW

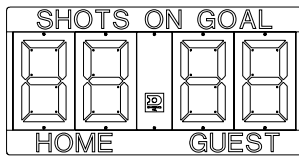


ATTACH THE SCOREBOARD TO THE WALL AT ALL MOUNTING LOCATIONS INDICATED. USE THE APPROPRIATE ANCHORS FOR THE TYPE OF WALL.



NOTE: LIFTING ANGLES WERE DESIGNED ONLY FOR TEMPORARY USE WHILE LIFTING DISPLAY IN PLACE. DO NOT USE LIFTING ANGLES TO SECURE DISPLAY IN PLACE.

FRONT VIEW



DISPLAY SPEC:

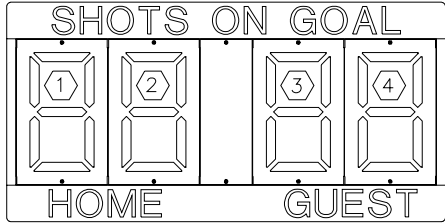
- SHIPPING WEIGHT: 50 lbs
- MOUNTING WEIGHT: 35 lbs
- DIMENSIONS: 48" X 24" X 6"

REV.	DATE	DESCRIPTION	BY	APPR.
01	27 MAR 01	CHANGED SHIPPING WEIGHT AND MOUNTING WEIGHT FROM 50 TO 35	CPS	

DAKTRONICS, INC. BROOKINGS, SD 57006	
PROJ: STANDARD LED SCOREBOARDS	
TITLE: MECHANICAL SPEC, H-413-9	
DES. BY:	DRAWN BY: JLEAR DATE: 19FEB98
REVISION	APPR. BY:
	SCALE: 1=30
1152-E10A-56420	

H-413-9 SCOREBOARD
ELECTRICAL/SIGNAL SPEC

DIGIT, SIGNAL AND POWER SPEC



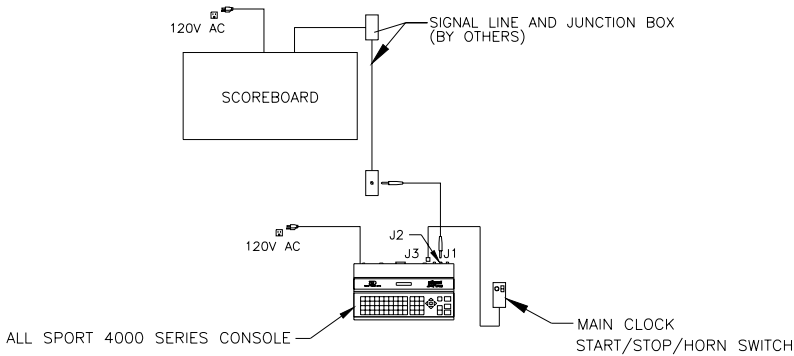
NOTE: THE NUMBER LISTED BY EACH DIGIT INDICATES THE DIGIT DESIGNATION IN RELATION TO THE LED DRIVER.

NOTE: REFER TO DRAWING BELOW OR ALLSPORT MANUAL FOR ADDITIONAL WIRING DIAGRAMS OF DISPLAY. USE MINIMUM OF 24AWG, SHIELDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

POWER SPEC:

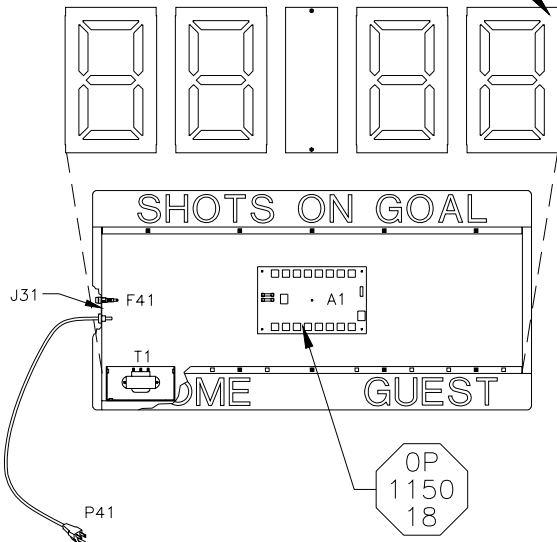
- 120V AC, 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL: ETL LISTED, TESTED TO CSA STANDARDS, AND CE LABELED FOR INDOOR USE.

TYPICAL, SINGLE DISPLAY SETUP:



PART SPEC

DIGIT; 13" RED 7 SEG LED



NOTE: REFER TO THE MANUAL FOR WARRANTY AND COMPONENT REPLACEMENT PROCEDURES.

NOTE: TO ACCESS LED DRIVER, REMOVE TWO SCREWS HOLDING THE DIGITS IN. THESE SCREWS ARE LOCATED ON BOTTOM & TOP OF THE DIGITS.

REPLACEMENT PART NUMBERS

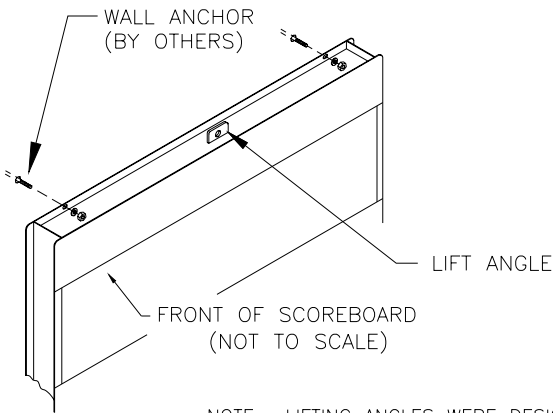
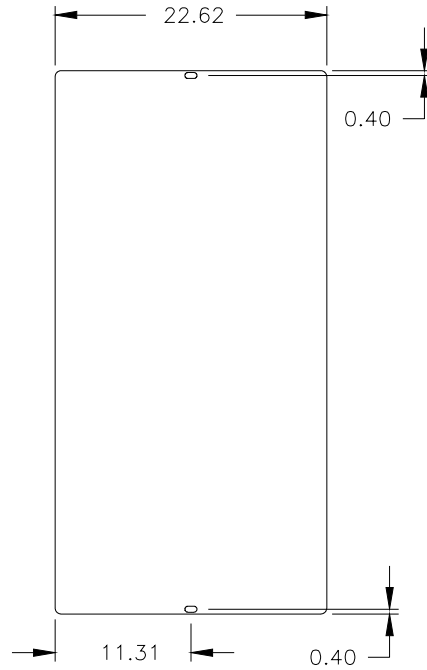
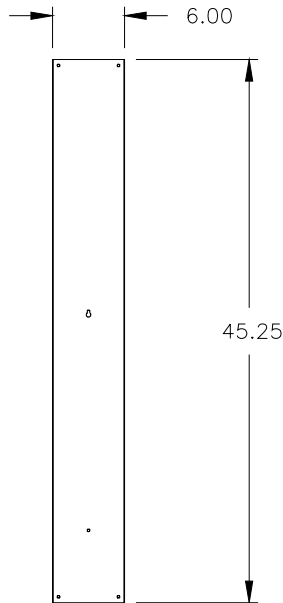
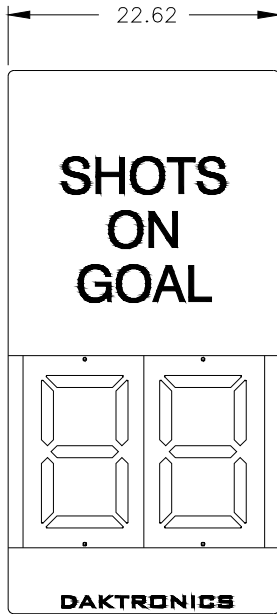
PART NO.	DESCRIPTION
0A-1150-0139	DIGIT; 13" RED 7SEG LED
0P-1150-0018	LED DRIVER
0A-1171-4003	CABLE; 9PIN-9PIN PLUG 4'
T-1066	TRANSFORMER, 16V SEC.
0A-1150-0043	HARNESS; SIGNAL INDR LED
ED-10718	MANUAL; LED SCOREBOARD
W-1236	CABLE, A/S TO J BOX
0A-1065-0026	CABLE, 25 PIN TO 16 PIN
0A-1166-0001	A/S 4100
0A-1010-0026	J BOX, 16 PIN
0A-1009-0038	J BOX, 1/4 PHONO
0A-1152-0134	H-413-9, SCOREBOARD

NOTE: DO NOT WORK ON ENERGIZED DISPLAY UNLESS YOU ARE A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

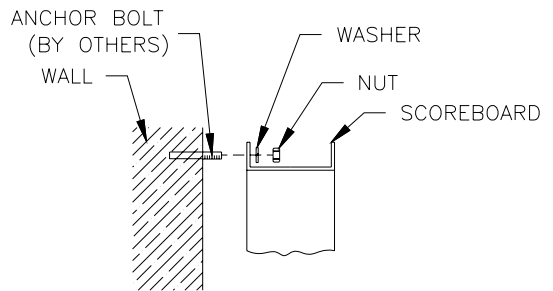
REV.	DATE	DESCRIPTION	BY	APPR.
03	19 SEP 01	CHANGED TITLE TO ELECTRICAL & SIGNAL SPEC, H-413-9	ALG	
02	24OCT00	CHANGED PART NUMBER 0A-1150-0032 TO 0A-1150-0139	CPS	
01	17JAN2000	CORRECTED SOME SPECS.	AVB	

DAKTRONICS, INC. BROOKINGS, SD 57006	
PROJ: STANDARD LED SCOREBOARDS	
TITLE: ELECTRICAL & SIGNAL SPEC, H-413-9	
DES. BY:	DATE: 19FEB98
REVISION	APPR. BY:
SCALE: 1=20	1152-E10A-56426

H-213-9 SCOREBOARD
MECHANICAL SPEC



ATTACH THE SCOREBOARD TO THE WALL AT ALL MOUNTING LOCATIONS INDICATED. USE THE APPROPRIATE ANCHORS FOR THE TYPE OF WALL.



NOTE: LIFTING ANGLES WERE DESIGNED ONLY FOR TEMPORARY USE WHILE LIFTING DISPLAY IN PLACE. DO NOT USE LIFTING ANGLES TO SECURE DISPLAY IN PLACE.

DISPLAY SPEC:

- SHIPPING WEIGHT: 60 lbs
- MOUNTING WEIGHT: 30 lbs
- DIMENSIONS: 22.62" x 45.25" x 6"

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: LED 2 STRING SCOREBOARD

TITLE: MECHANICAL SPEC, H-213-9

DES. BY:

DRAWN BY: DDELEEJW

DATE: 12FEB98

REVISION

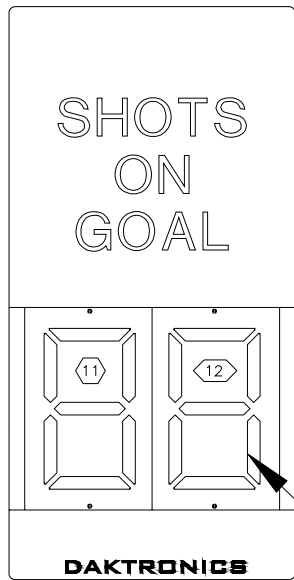
APPR. BY:

SCALE: 1=15

1152-E10A-61882

REV.	DATE	DESCRIPTION	BY	APPR.

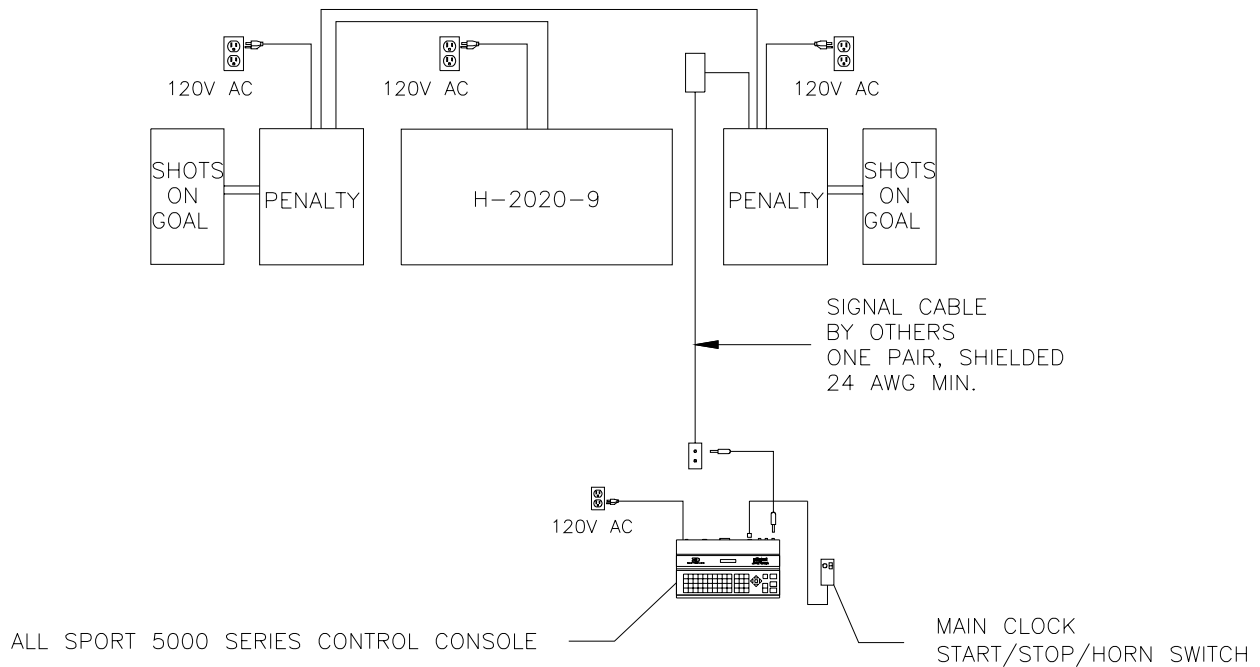
H-213-9 SCOREBOARD
ELECTRICAL/SIGNAL SPEC



NOTE: THE NUMBER LISTED BY EACH DIGIT INDICATES THE DIGIT DESIGNATION IN RELATION TO THE LED DRIVER.

AMB 13" DIGIT

TYPICAL DISPLAY SETUP



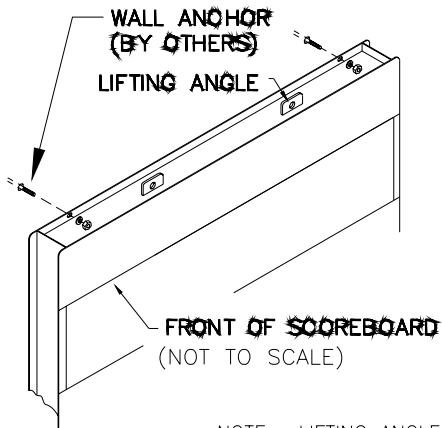
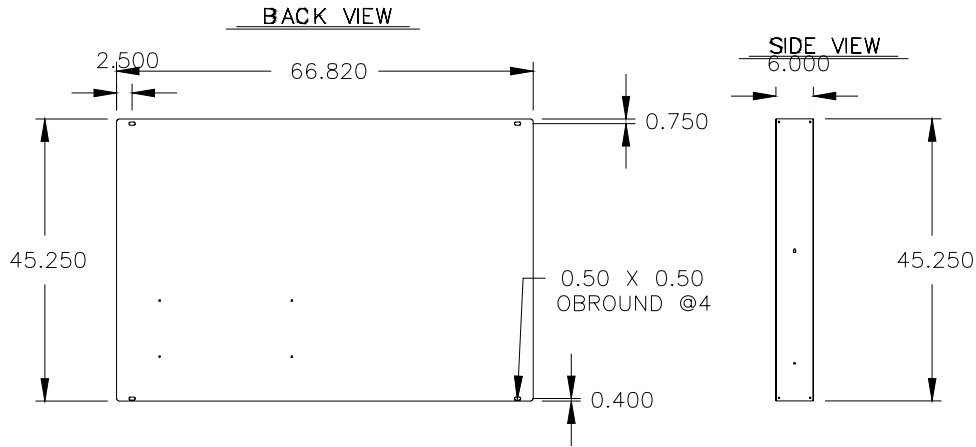
DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ: LED 2 STRING SCOREBOARD				
TITLE: ELECTRICAL AND SIGNAL SPEC, H-213-9				
DES. BY:		DRAWN BY: DDELEEUW		DATE: 12FEB98
REVISION	APPR. BY:	1152-E10A-61884		
	SCALE: 1=15			

02	25OCT00	CHANGED DIGIT FROM RED TO AMBER AND REMOVED PART NUMBER	CPS	
1	17JAN2000	UPDATED TO ALL SPORT 5000 SYSTEM	AVB	AVB
REV.	DATE	DESCRIPTION	BY	APPR.

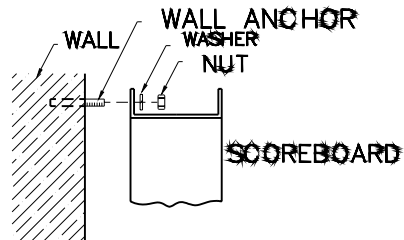
H-1013-9 SCOREBOARD

MECHANICAL SPEC

MOUNTING SPEC

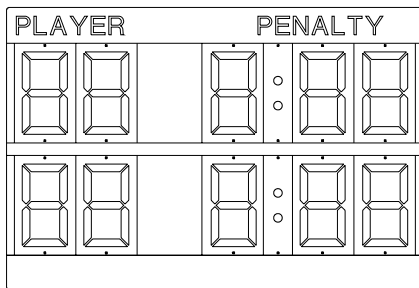


ATTACH THE SCOREBOARD TO THE WALL AT ALL MOUNTING LOCATIONS INDICATED. USE THE APPROPRIATE ANCHORS FOR THE TYPE OF WALL.



NOTE: LIFTING ANGLES WERE DESIGNED ONLY FOR TEMPORARY USE WHILE LIFTING DISPLAY IN PLACE. DO NOT USE LIFTING ANGLES TO SECURE DISPLAY IN PLACE.

FRONT VIEW



DISPLAY SPEC:

- SHIPPING WEIGHT: 80 lbs
- MOUNTING WEIGHT: 45 lbs
- DIMENSIONS: 66.82"x 45.25"x 6"

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: LED 2 STRING SCOREBOARD

TITLE: MECHANICAL SPEC, H-1013-9

DES. BY:

DRAWN BY: DDELEEUW

DATE: 10 FEB 98

REVISION

APPR. BY:

SCALE: 1=30

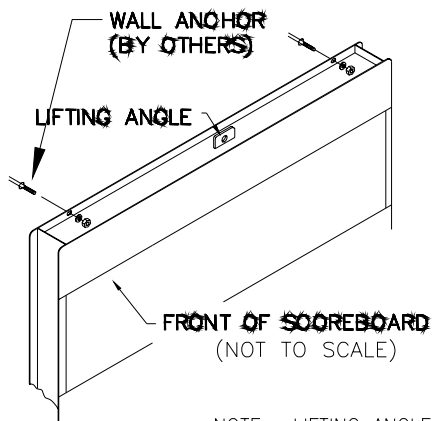
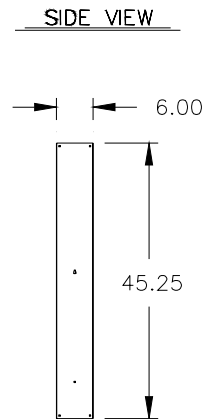
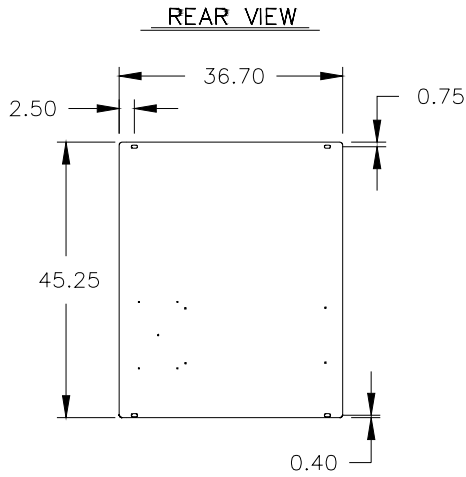
1152-E10A-75887

REV.	DATE	DESCRIPTION	BY	APPR.

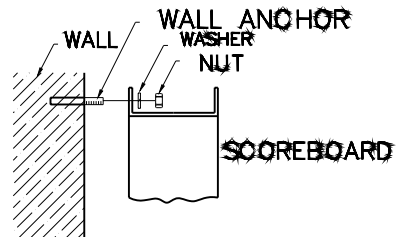
H-613-9 SCOREBOARD

MECHANICAL SPEC

MOUNTING SPEC

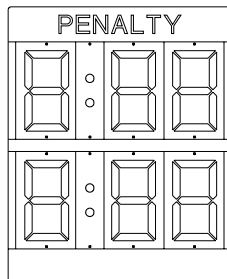


ATTACH THE SCOREBOARD TO THE WALL AT ALL MOUNTING LOCATIONS INDICATED. USE THE APPROPRIATE ANCHORS FOR THE TYPE OF WALL.



NOTE: LIFTING ANGLES WERE DESIGNED ONLY FOR TEMPORARY USE WHILE LIFTING DISPLAY IN PLACE. DO NOT USE LIFTING ANGLES TO SECURE DISPLAY IN PLACE.

FRONT VIEW



DISPLAY SPEC:

- SHIPPING WEIGHT: 70 lbs
- MOUNTING WEIGHT: 35 lbs
- DIMENSIONS: 36.70" x 45.25" x 6"

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: LED 2 STRING SCOREBOARD

TITLE: MECHANICAL SPEC, H-613-9

DES. BY: DRAWN BY: DDELEEUW DATE: 10FEB98

1	23NOV98	CHANGED BB-2021 TO H-613-9	RDA	RDA
REV.	DATE	DESCRIPTION	BY	APPR.

REVISION

APPR. BY:

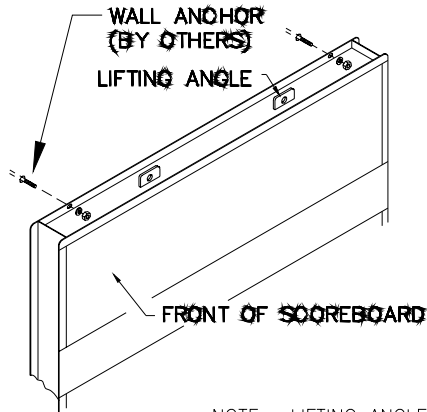
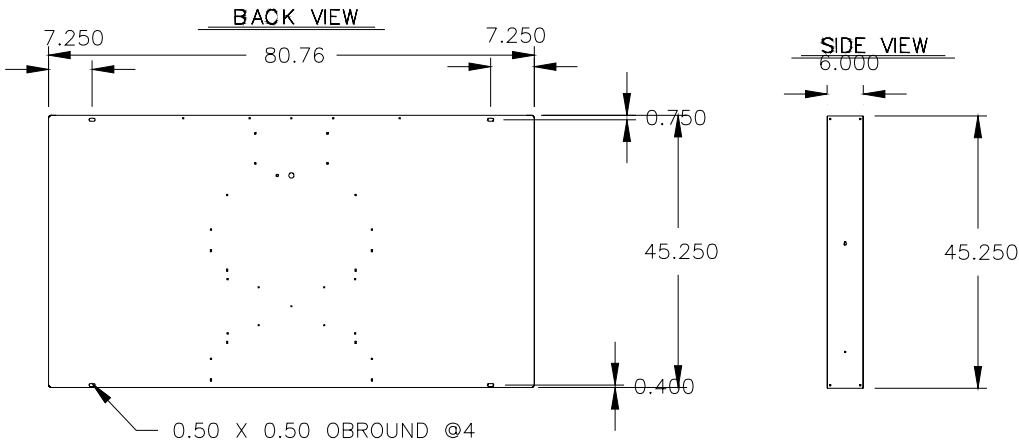
SCALE: 1=30

1152-E10A-76049

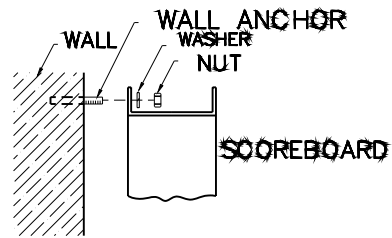
H-2020-9 SCOREBOARD

MECHANICAL SPEC

MOUNTING SPEC

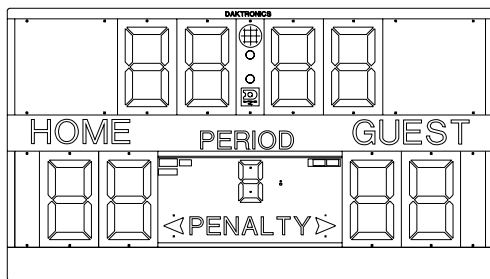


ATTACH THE SCOREBOARD TO THE WALL AT ALL MOUNTING LOCATIONS INDICATED. USE THE APPROPRIATE ANCHORS FOR THE TYPE OF WALL.



NOTE: LIFTING ANGLES WERE DESIGNED ONLY FOR TEMPORARY USE WHILE LIFTING DISPLAY IN PLACE. DO NOT USE LIFTING ANGLES TO SECURE DISPLAY IN PLACE.

FRONT VIEW



DISPLAY SPEC:

- SHIPPING WEIGHT: 120 lbs
- MOUNTING WEIGHT: 70 lbs
- DIMENSIONS: 80.76" x 45.25" x 6"

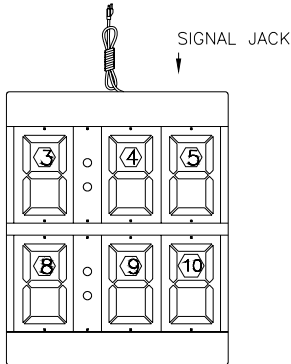
DAKTRONICS, INC. BROOKINGS, SD 57006	
PROJ: LED 2 STRING SCOREBOARD	
TITLE: MECHANICAL SPEC, H-2020-9	
DES. BY:	DRAWN BY: DDELEEUW DATE: 10 FEB 98
REVISION	APPR. BY:
	SCALE: 1=30
1152-E10A-76050	

REV.	DATE	DESCRIPTION	BY	APPR.

H-613-9 SCOREBOARD

ELECTRICAL/SIGNAL SPEC

DIGIT, SIGNAL AND POWER SPEC



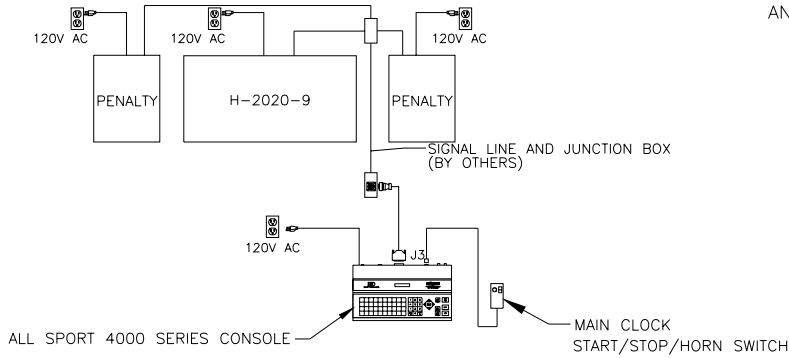
NOTE: THE NUMBER LISTED BY EACH DIGIT INDICATES THE DIGIT DESIGNATION IN RELATION TO THE LED DRIVER.

NOTE: ARROW INDICATES SIGNAL TERMINATION POINT ON DISPLAY. REFER TO DRAWING BELOW OR ALLSPORT MANUAL FOR ADDITIONAL WIRING DIAGRAMS OF DISPLAY. USE 24AWG MINIMUM, SHIELDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

POWER SPEC:

- 120VAC & 230VAC MODULES AVAILABLE.
- 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
ETL LISTED, TESTED TO CSA STANDARDS,
AND CE LABELED FOR INDOOR USE.

TYPICAL, SINGLE DISPLAY SETUP:

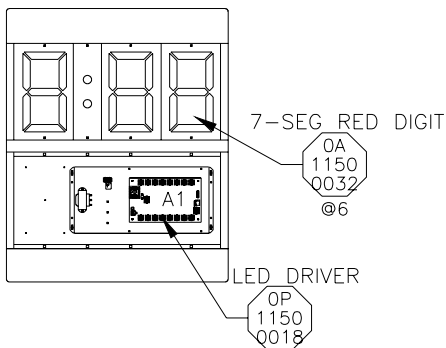


PART SPEC

NOTE: UNIT SHOWN WITH DIGITS AND COLON PANEL REMOVED.

NOTE: REFER TO THE MANUAL FOR WARRANTY AND COMPONENT REPLACEMENT PROCEDURES.

NOTE: TO ACCESS LED DRIVER, REMOVE ALL DIGITS ON THE BOTTOM HALF OF THE UNIT INCLUDING THE COLON PANEL.



REPLACEMENT PART NUMBERS

PART NO.	DESCRIPTION
0A-1152-0142	H-613-9, SCOREBOARD
0P-1150-0018	LED DRIVER
T-1066	TRANSFORMER, 16V SEC.
0A-1171-4003	HARNESS; 7 SEG DIGIT
0A-1150-0032	DIGIT; 13" RED 7-SEG
W-1236	CABLE, A/S TO J BOX
0A-1065-0026	CABLE, 25 PIN TO 16 PIN
0A-1166-0001	A/S 4100
0A-1010-0026	J BOX, 16 PIN
0A-1009-0038	J BOX, 1/4 PHONO

NOTE: DO NOT WORK ON ENERGIZED DISPLAY UNLESS YOU ARE A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: LED 2 STRING SCOREBOARD

TITLE: ELECTRICAL AND SIGNAL SPEC, H-613-9

DES. BY:

DRAWN BY: DDELEEUW

DATE: 05FEB98

REVISION

APPR. BY:

SCALE: 1=30

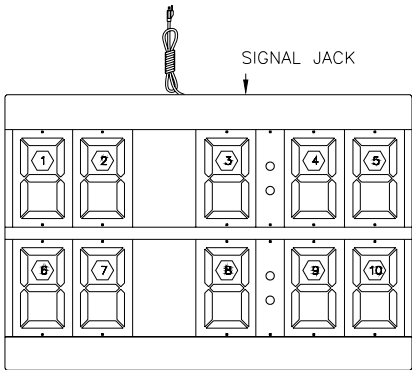
1152-E10A-81641

REV.	DATE	DESCRIPTION	BY	APPR.

H-1013-9 SCOREBOARD

ELECTRICAL/SIGNAL SPEC

DIGIT, SIGNAL AND POWER SPEC

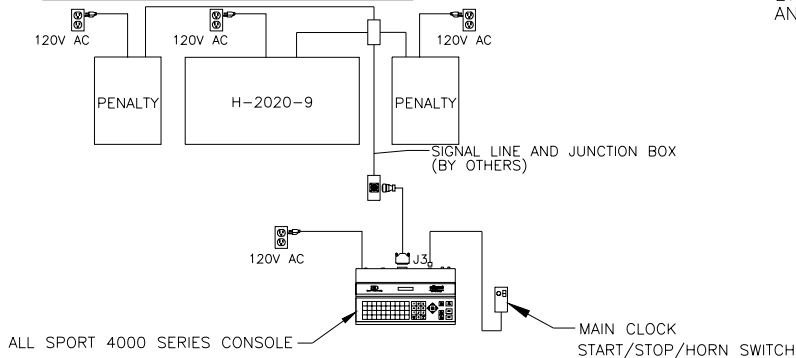


NOTE: THE NUMBER LISTED BY EACH DIGIT INDICATES THE DIGIT DESIGNATION IN RELATION TO THE LED DRIVER.
 ↓ NOTE: ARROW INDICATES SIGNAL TERMINATION POINT ON DISPLAY. REFER TO DRAWING BELOW OR ALLSPORT MANUAL FOR ADDITIONAL WIRING DIAGRAMS OF DISPLAY. USE 24AWG MINIMUM, SHIELDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

POWER SPEC:

- 120VAC & 230VAC MODULES AVAILABLE.
- 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL: ETL LISTED, TESTED TO CSA STANDARDS, AND CE LABELED FOR INDOOR USE.

TYPICAL, SINGLE DISPLAY SETUP:



PART SPEC

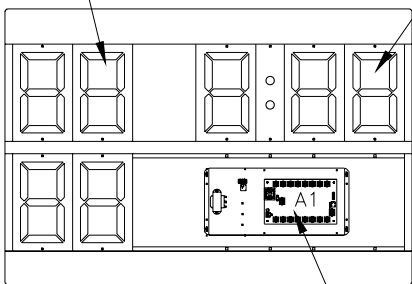
NOTE: REFER TO THE MANUAL FOR WARRANTY AND COMPONENT REPLACEMENT PROCEDURES.
 NOTE: TO ACCESS LED DRIVER, REMOVE THE RIGHT THREE DIGITS AND THE TWO PANELS.

7-SEG GRN DIGIT

OA
1150
Q033
@4

7-SEG RED DIGIT

OA
1150
Q032
@6



OP
1150
Q018
LED DRIVER

REPLACEMENT PART NUMBERS

PART NO.	DESCRIPTION
OA-1152-0144	H-1013-9, SCOREBOARD
OP-1150-0018	LED DRIVER
T-1066	TRANSFORMER, 16V SEC.
OA-1171-4004	HARNESS; 7-SEG DIGIT 6'
OA-1171-4003	HARNESS; 7-SEG DIGIT 4'
OA-1150-0032	DIGIT; 13" RED 7-SEG
OA-1150-0033	DIGIT; 13" GRN 7-SEG
W-1236	CABLE, A/S TO J BOX
OA-1065-0026	CABLE, 25 PIN TO 16 PIN
OA-1166-0001	A/S 4100
OA-1010-0026	J BOX, 16 PIN
OA-1009-0038	J BOX, 1/4 PHONO

NOTE: DO NOT WORK ON ENERGIZED DISPLAY UNLESS YOU ARE A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: LED 2 STRING SCOREBOARD

TITLE: ELECTRICAL AND SIGNAL SPEC, H-1013-9

DES. BY:

DRAWN BY: DDELEEUW

DATE: 05FEB98

REVISION

APPR. BY:

SCALE: 1=30

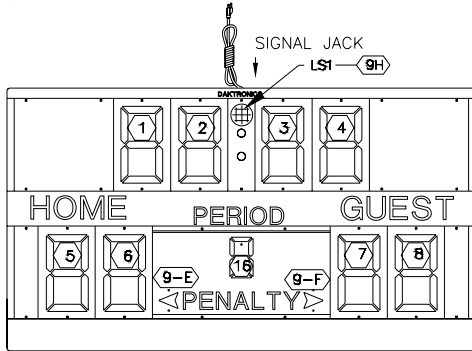
1152-E10A-82032

REV.	DATE	DESCRIPTION	BY	APPR.

H-2020-9 SCOREBOARD

ELECTRICAL/SIGNAL SPEC

DIGIT, SIGNAL AND POWER SPEC



NOTE: THE NUMBER LISTED BY EACH DIGIT INDICATES THE DIGIT DESIGNATION IN RELATION TO THE LED DRIVER.

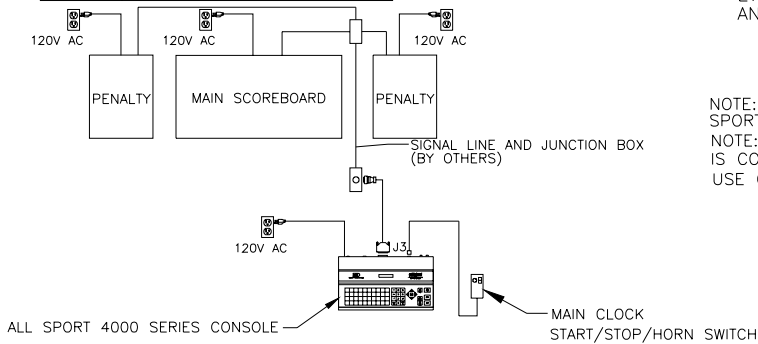
NOTE: ARROW INDICATES SIGNAL TERMINATION POINT ON DISPLAY. REFER TO DRAWING BELOW OR ALLSPORT MANUAL FOR ADDITIONAL WIRING DIAGRAMS OF DISPLAY. USE 24AWG MINIMUM, SHIELDED, TWO CONDUCTOR CABLE FOR SIGNAL TERMINATION.

H-2020-9 USED BY ITSELF REQUIRES A 2 CONDUCTOR (1PAIR)
 H-2020-9 USED WITH SIDE PENALTY SECTIONS REQUIRES 3 PAIRS.

POWER SPEC:

- 120VAC & 230VAC MODULES AVAILABLE.
- 15 AMP CIRCUIT REQUIRED.
- 100 WATTS MAXIMUM.
- PRODUCT SAFETY APPROVAL:
 ETL LISTED, TESTED TO CSA STANDARDS,
 AND CE LABELED FOR INDOOR USE.

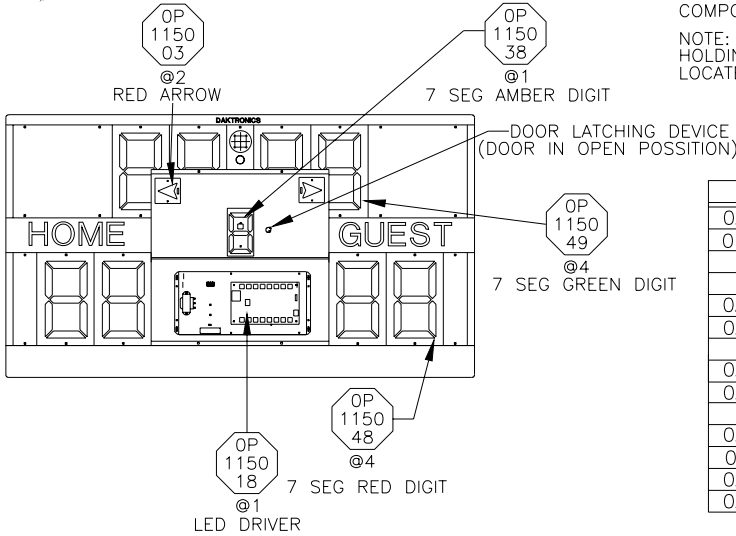
TYPICAL, SINGLE DISPLAY SETUP:



NOTE: FOR ADDITIONAL OPERATING CODES FOR OTHER SPORTS, REFER TO YOUR ALL SPORT MANUAL.

NOTE: OPERATING CODE FOR H-2020-9 HOCKEY DISPLAY IS CODE 62.
 USE CODE 63 IF USING SHOTS ON GOAL.

PART SPEC



NOTE: REFER TO THE MANUAL FOR WARRANTY AND COMPONENT REPLACEMENT PROCEDURES.

NOTE: TO ACCESS LED DRIVER, REMOVE TWO SCREWS HOLDING ACCESS DOOR CLOSED. THESE SCREWS ARE LOCATED ON BOTTOM OF ACCESS DOOR. SECURE OPEN.

REPLACEMENT PART NUMBERS

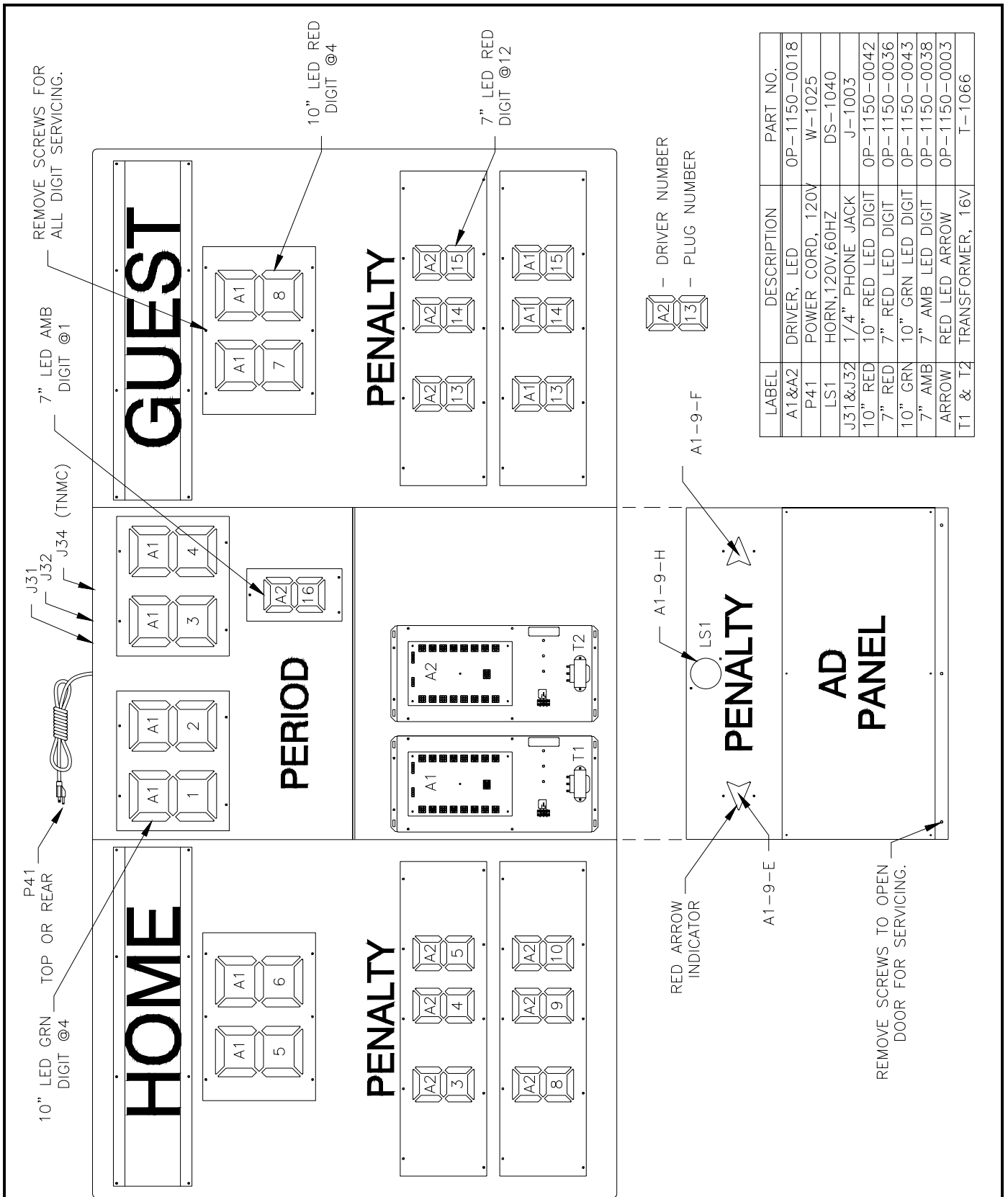
PART NO.	DESCRIPTION
OA-1152-0140	H-2020-9, SCOREBOARD
OP-1150-0018	LED DRIVER
T-1066	TRANSFORMER, 16V SEC.
DS-1040	HORN, 120VAC
OA-1171-4004	HARNESS; 7 SEG DIGIT
OA-1171-4033	HARNESS; ARROWS
ED-10718	MANUAL; LED SCOREBOARD
OA-1150-0032	DIGIT; 13" RED 7-SEG
OA-1150-0033	DIGIT; 13" GRN 7-SEG
W-1236	CABLE, A/S TO J BOX
OA-1065-0026	CABLE, 25 PIN TO 16 PIN
OA-1166-0001	A/S 4100
OA-1010-0026	J BOX, 16 PIN
OA-1009-0038	J BOX, 1/4 PHONO

NOTE: DO NOT WORK ON ENERGIZED DISPLAY UNLESS YOU ARE A CERTIFIED ELECTRICIAN OR DIRECTED BY DAKTRONICS.

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: LED 2 STRING SCOREBOARD	
TITLE: ELECTRICAL AND SIGNAL SPEC, H-2020-9	
DES. BY:	DRAWN BY: DDELEEUW DATE: 04FEB98
REVISION	APPR. BY: 1152-E10A-85644
SCALE: 1=30	

REV.	DATE	DESCRIPTION	BY	APPR.
1	02NOV98	CHANGED DRIVER DESIGNATION ON ARROWS	DDL	



DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ: STANDARD LED SCOREBOARDS				
TITLE: COMPONENT LOCATIONS, H-2025-9				
DES. BY: AVB		DRAWN BY: MJORDAN		DATE: 03 JUN 98
1	15 SEP 98	REVISED SIGNAL INPUTS TO READ LEFT TO RIGHT. CHANGED DIMENSION OF THE AD PANEL.	MWJ	
REV.	DATE	DESCRIPTION	BY	APPR.
REVISION		APPR. BY:	1152-E10A-103419	
		SCALE: 1=15		



REMOVE SCREWS FOR ALL DIGIT SERVICING.

7" LED AMB DIGIT @1

10" LED RED DIGIT @4

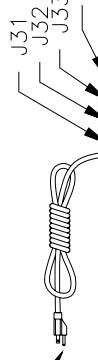
7" LED RED DIGIT @12

7" LED GRN DIGIT @8



LABEL	DESCRIPTION	PART NO.
A1-A3	DRVR, LED, COAT	OP-1150-0018
P41	PWR CRD, 120V	W-1025
LS1	HORN, 120V, 60HZ	DS-1040
J31-J34	SGNL, PHONO	J-1003
10" RED	10" RED LED	OP-1150-0042
7" RED	7" RED LED	OP-1150-0036
10" GRN	10" GRN LED	OP-1150-0043
7" GRN	7" GRN LED	OP-1150-0037
7" AMB	7" AMB LED	OP-1150-0038
ARROW	PEN. ARROW	OP-1150-0003
T1 - T3	TRANSFORMER	T-1066

10" LED GRN TOP OR REAR DIGIT @4



A1-9-H



LED PEN. ARROW

A1-9-E

7" LED AMB DIGIT @4

REMOVE SCREWS TO OPEN DOOR FOR SERVICING.

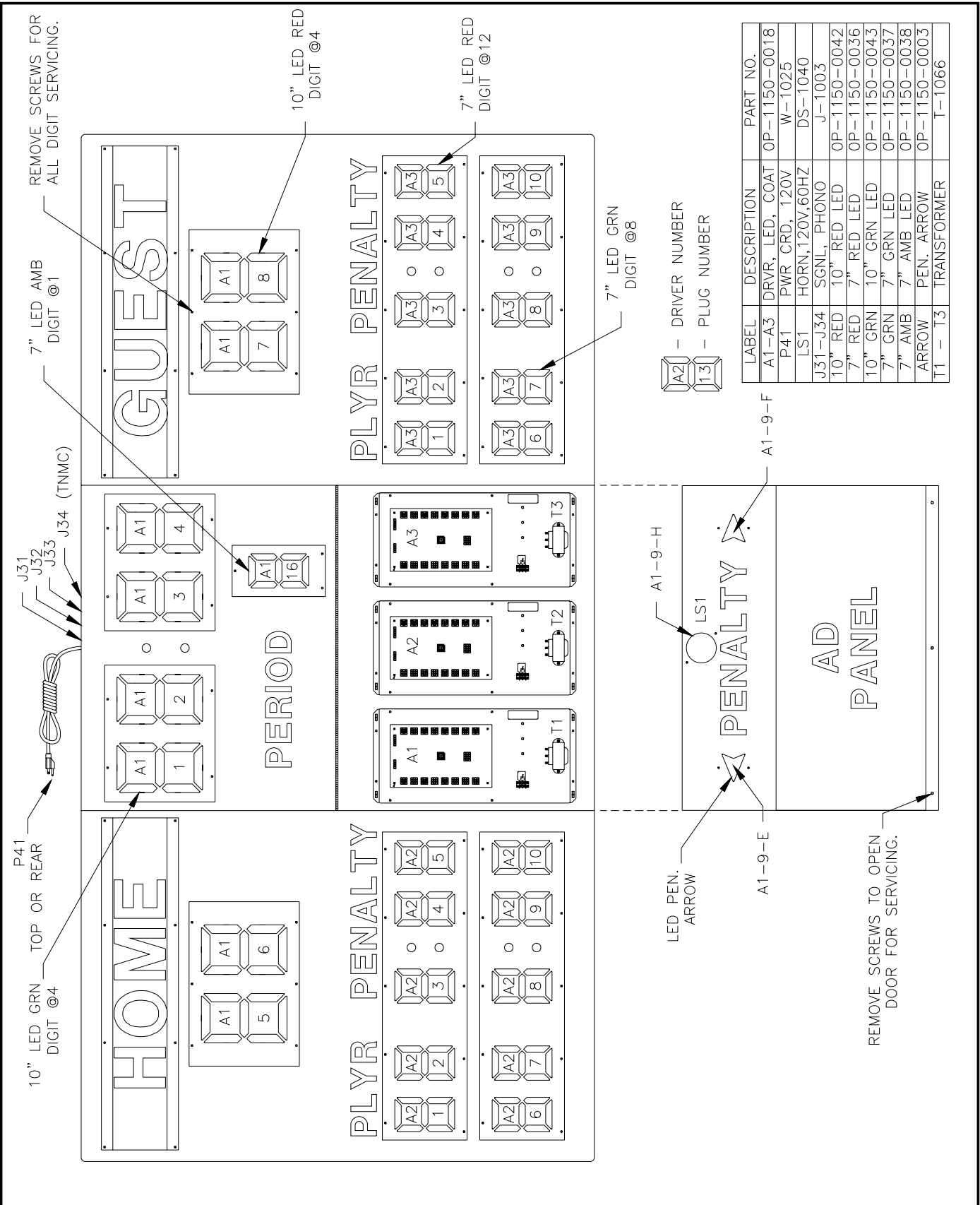
REV.	DATE	DESCRIPTION	BY	APPR.
1	20 JUL 98	ADDED J33 AND J34 TO SIGNAL INPUT.	MWJ	

DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: STANDARD LED SCOREBOARDS
 TITLE: COMPONENT LOCATIONS, H-2023-9
 DES. BY: AVB DRAWN BY: MJORDAN DATE: 18 JUN 98

REVISION APPR. BY:
 SCALE: 1=15

1152-E10A-103968



LABEL	DESCRIPTION	PART NO.
A1-A3	DRVR, LED, COAT	OP-1150-0018
P41	PWR, CRD, 120V	W-1025
LS1	HORN, 120V, 60HZ	DS-1040
J31-J34	SGNL, PHONO	J-1003
7" RED	7" RED LED	OP-1150-0042
10" RED	10" RED LED	OP-1150-0036
10" GRN	10" GRN LED	OP-1150-0043
7" GRN	7" GRN LED	OP-1150-0037
7" AMB	7" AMB LED	OP-1150-0038
ARROW	PEN. ARROW	OP-1150-0003
T1 - T3	TRANSFORMER	T-1066

DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ: STANDARD LED SCOREBOARDS			
TITLE: COMPONENT LOCATIONS; H-2030-9			
DES. BY: AVB		DRAWN BY: MJORDAN	
		DATE: 15 SEP 98	
REVISION	APPR. BY:	1152-E10A-107563	
SCALE: 1=15			

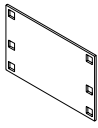
REV.	DATE	DESCRIPTION	BY	APPR.

Appendix C: Protective Screens

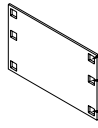
Reference Drawings: Screen Mounting..... **Drawing A-108709**

Refer to **Drawings A-108709** for details on mounting the screen to the display. Listed below is the Daktronics protective screen part number and the model it is used on.

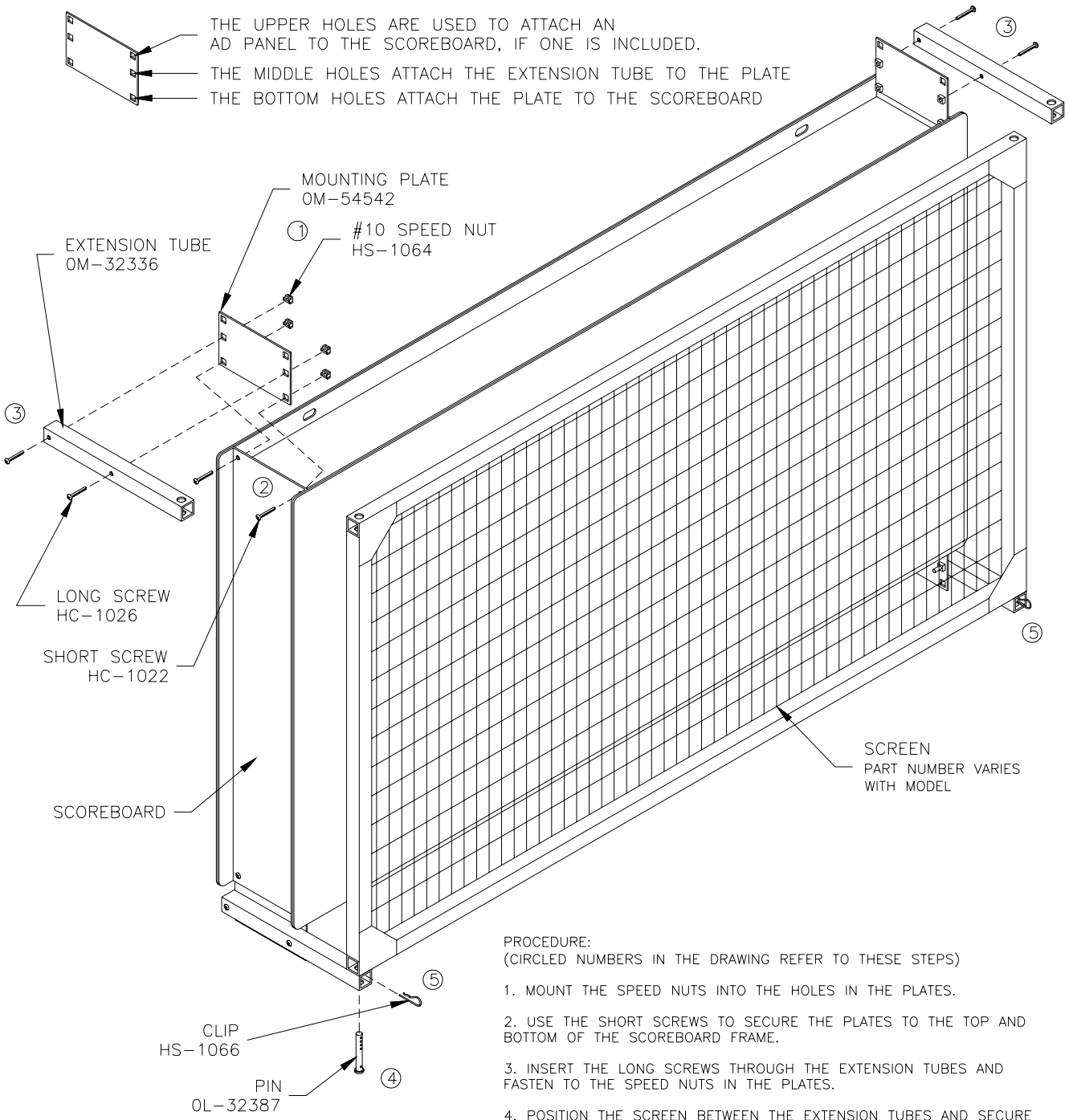
Display Model Number	Protective Screen Part Number
H-2023-9	0A-1152-0185
H-2025-9	0A-1152-0185
H-2030-9	0A-1152-0185
H-213-9	0A-1010-0223
H-613-9	0F-1010-0123
H-813-9	0F-1010-0110
H-1013-9	0F-1010-011



BEFORE INSERTING THE SPEED NUTS INTO THE PLATE, ORIENT THE PLATE SO THE MIDDLE HOLES PROVIDE THE BEST HEIGHT SPACING FOR THE HEIGHT OF THE SCREEN. THIS VARIES DEPENDING ON THE HEIGHT OF EACH MODEL SCOREBOARD.



THE UPPER HOLES ARE USED TO ATTACH AN AD PANEL TO THE SCOREBOARD, IF ONE IS INCLUDED.
 THE MIDDLE HOLES ATTACH THE EXTENSION TUBE TO THE PLATE
 THE BOTTOM HOLES ATTACH THE PLATE TO THE SCOREBOARD



MOUNTING PLATE
OM-54542
 #10 SPEED NUT
HS-1064

EXTENSION TUBE
OM-32336

LONG SCREW
HC-1026
 SHORT SCREW
HC-1022

SCOREBOARD

SCREEN
PART NUMBER VARIES
WITH MODEL

CLIP
HS-1066
 PIN
OL-32387

- PROCEDURE:
(CIRCLED NUMBERS IN THE DRAWING REFER TO THESE STEPS)
1. MOUNT THE SPEED NUTS INTO THE HOLES IN THE PLATES.
 2. USE THE SHORT SCREWS TO SECURE THE PLATES TO THE TOP AND BOTTOM OF THE SCOREBOARD FRAME.
 3. INSERT THE LONG SCREWS THROUGH THE EXTENSION TUBES AND FASTEN TO THE SPEED NUTS IN THE PLATES.
 4. POSITION THE SCREEN BETWEEN THE EXTENSION TUBES AND SECURE WITH THE PINS.
 5. INSERT THE CLIPS THROUGH THE FRONT OF THE EXTENSION TUBES INTO A HOLE IN THE PIN TO HOLD THE PINS IN PLACE.

DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ:			
TITLE: SCREEN MOUNTING			
DES. BY: AVB		DRAWN BY: A VANBEMMEL	
		DATE: 26 OCT 98	
REVISION	APPR. BY:	1152-R10A-108709	
	SCALE: NONE		

REV.	DATE	DESCRIPTION	BY	APPR.

Appendix D: Enhance Your Scoreboard Add - On Options

D-1 Non Backlit Ad-Panels

Description	Approx. Weight	Power	Dimensions	
			Width	Height
18" x 10' Painted AD	40 Lbs. (19 kg)	--	120"(305cm)	18"(46cm)
24" x 10' Painted AD	45"Lbs. (21 kg)	--	120"(305cm)	24"(61cm)

D-2 Backlit Ad-Panels

Description	Approx. Weight	Power	Dimensions	
			Width	Height
18" x 10' Backlit AD	90 Lbs. (41 kg)	300 Watts	120"(305cm)	60"(153cm)
24" x 10' Backlit AD	100 Lbs. (46 kg)	300 Watts	120"(305cm)	24"(61cm)

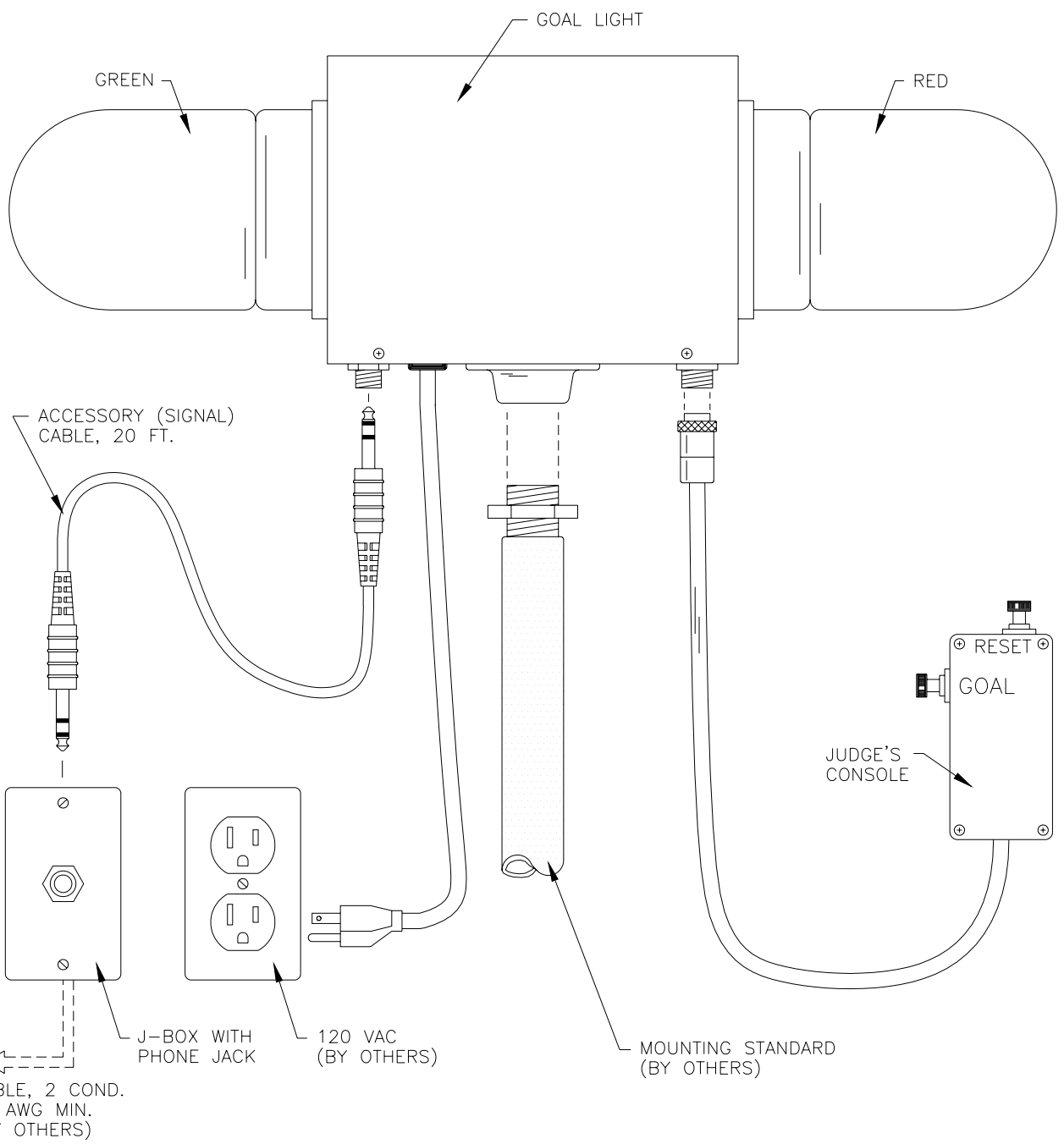
D-3 InfoSport Matrix Displays

Model #	Cabinet Option	Approx. Weight	Char's Per Line	Single Face Power Watts	Dimensions	
					Width	Height
BE-1000-1-864-9-1	2	100 Lbs.	12	100W	1'2" x 10 x 6"	
BE-1000-1-880-9-1	1	100 Lbs.	16	120W	1'2" x 10 x 6"	
BE-1000-1-896-9-1	1	100 Lbs.	19	140W	1'2" x 10 x 6"	

D-4 Galaxy Matrix Displays

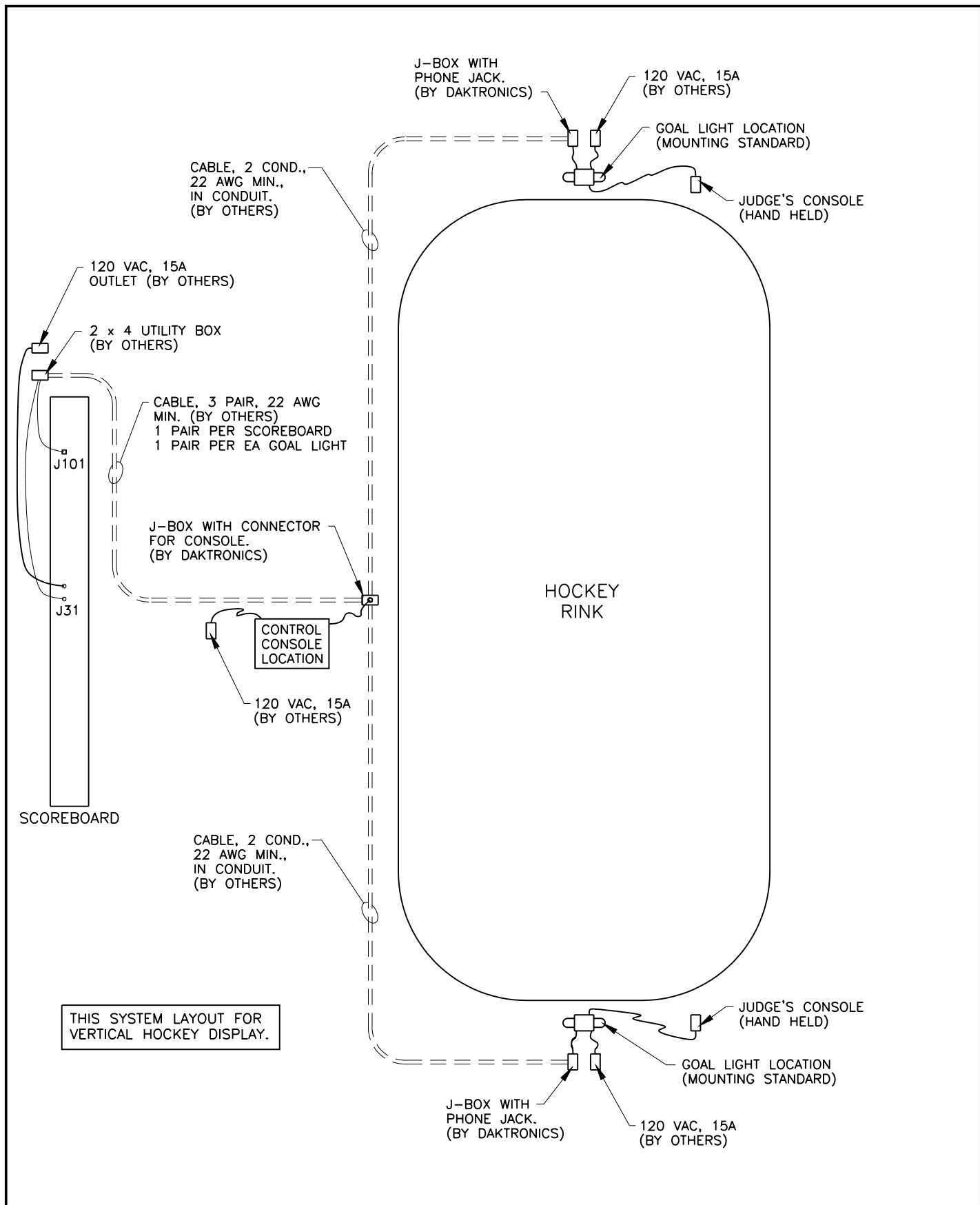
Model #	Approx. Weight	Power	Signal #of Pairs	Dimensions	
				Width	Height
AE-3020-1664-7-R-1	150 Lbs (70 kg).	260 Watts	2	120"(305cm)	24"(61cm)
AE-3020-1680-7-R-1	150 Lbs.(70 kg)	325 Watts	2	120"(305cm)	24"(61cm)
AE-3020-1696-7-R-1	150 Lbs. (70 kg)	390 Watts	2	120"(305cm)	24"(61cm)
AE-3020-16112-7-R-1	150 Lbs. (70 kg)	455 Watts	2	120"(305cm)	24"(61cm)

GOAL LIGHT MOUNTING:
 THE FITTING ON THE BASE OF THE GOAL LIGHT ACCEPTS ONE INCH STANDARD PIPE THREAD.



DAKTRONICS, INC. BROOKINGS, SD 57006	
PROJ: HOCKEY	
TITLE: GOAL LIGHT COMPONENTS	
DES. BY: AVB	DATE: 14 DEC 84
REVISION	APPR. BY: AVB
SCALE: 1=3	1010-R08A-22927

1	5 NOV 91	CHANGED FROM "B" TO "A" SIZE DWG. REDRAWN ON AUTO CAD, CHANGED "CONTROLLER" DESCRIP. IN DWG TO "GOAL LIGHT".	CFICK	
REV.	DATE	DESCRIPTION	BY	APPR.



THIS SYSTEM LAYOUT FOR VERTICAL HOCKEY DISPLAY.

DAKTRONICS, INC. BROOKINGS, SD 57006				
PROJ: HOCKEY				
TITLE: HOCKEY RINK LAYOUT, SCOREBOARD W/GOAL LIGHTS				
DES. BY:		DRAWN BY: C FICKBOHM		DATE: 25 SEPT 92
REVISION	APPR. BY:	1010-R08A-53266		
	SCALE: NONE			
REV.	DATE	DESCRIPTION	BY	APPR.

Appendix E: Goal Lights

Reference Drawings: Goal Light Components..... Drawing A-22927
Hockey Rink Layout, Scoreboard w/Goal Drawing A-53266

Appendix F: Daktronics Warranty and Limitations of Liability

**DAKTRONICS
WARRANTY AND LIMITATION OF LIABILITY**

This Warranty and Limitation of Liability (the "Warranty") sets forth the warranty provided by Daktronics with respect to the Equipment. By accepting delivery of the Equipment, Purchaser agrees to be bound by and accept these terms and conditions. All defined terms within the Warranty shall have the same meaning and definition as provided elsewhere in the Agreement.

DAKTRONICS WILL ONLY BE OBLIGATED TO HONOR THE WARRANTY SET FORTH IN THESE TERMS AND CONDITIONS UPON RECEIPT OF FULL PAYMENT FOR THE EQUIPMENT.

1. Warranty Coverage

A. Daktronics warrants to the original end-user that the Equipment will be free from Defects (as defined below) in materials and workmanship for a period of one (1) year (the "Warranty Period"). The warranty period shall commence on the earlier of: (i) four weeks from the date that the equipment leaves Daktronics' facility; or (ii) Substantial Completion as defined herein. The warranty period shall expire on the first anniversary of the commencement date.

"Substantial Completion" means the operational availability of the Equipment to the Purchaser in accordance with the Equipment's specifications, without regard to punch-list items, or other non-substantial items which do not affect the operation of the Equipment.

B. Daktronics' obligation under this Warranty is limited to, at Daktronics' option, replacing or repairing, any Equipment or part thereof that is found by Daktronics not to conform to the Equipment's specifications. Unless otherwise directed by Daktronics, any defective part or component shall be returned to Daktronics for repair or replacement. Daktronics may, at its option, provide on-site warranty service. Daktronics shall have a reasonable period of time to make such replacements or repairs and all labor associated therewith shall be performed during regular working hours. Regular working hours are Monday through Friday between 8:00 a.m. and 5:00 p.m. at the location where labor is performed, excluding any holidays observed by either Purchaser or Daktronics.

C. Daktronics shall pay ground transportation charges for the return of any defective component of the Equipment. If returned Equipment is repaired or replaced under the terms of this warranty, Daktronics will prepay ground transportation charges back to Purchaser; otherwise, Purchaser shall pay transportation charges to return the Equipment back to the Purchaser. All returns must be pre-approved by Daktronics before shipment. Daktronics shall not be obligated to pay freight for any unapproved return. Purchaser shall pay any upgraded or expedited transportation charges.

D. Any replacement parts or Equipment will be new or serviceably used, comparable in function and performance to the original part or Equipment, and warranted for the remainder of the Warranty Period. Purchasing additional parts or Equipment from the Seller does not extend this Warranty Period.

E. Defects shall be defined as follows. With regard to the Equipment (excepting LEDs), a "Defect" shall refer to a material variance from the design specifications that prohibit the Equipment from operating for its intended use. With respect to LEDs, "Defects" are defined as LED pixels that cease to emit light. The limited warranty provided by Daktronics does not impose any duty or liability upon Daktronics for partial LED pixel degradation. Nor does the limited warranty provide for the replacement or installation of communication methods including but not limited to, wire, fiber optic cable, conduit, trenching, or for the purpose of overcoming local site interference radio equipment substitutions.

THIS LIMITED WARRANTY IS THE ONLY WARRANTY APPLICABLE TO THE EQUIPMENT AND REPLACES ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SPECIFICALLY, EXCEPT AS PROVIDED HEREIN, THE SELLER UNDERTAKES NO RESPONSIBILITY FOR THE QUALITY OF THE EQUIPMENT OR THAT THE EQUIPMENT WILL BE FIT FOR ANY PARTICULAR PURPOSE FOR WHICH PURCHASER MAY BE BUYING THE EQUIPMENT. ANY IMPLIED WARRANTY IS LIMITED IN DURATION TO THE WARRANTY PERIOD. NO ORAL OR WRITTEN INFORMATION, OR ADVICE GIVEN BY THE COMPANY, ITS AGENTS OR EMPLOYEES, SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS LIMITED WARRANTY.

THIS LIMITED WARRANTY IS NOT TRANSFERABLE.

2. Exclusion from Warranty Coverage

The limited warranty provided by Daktronics does not impose any duty or liability upon Daktronics for:

A. Any damage occurring, at any time, during shipment of Equipment unless otherwise provided for in the Agreement. When returning Equipment to Daktronics for repair or replacement, Purchaser assumes all risk of loss or damage, and agrees to use any shipping containers that might be provided by Daktronics and to ship the Equipment in the manner prescribed by Daktronics;

B. Any damage caused by the unauthorized adjustment, repair or service of the Equipment by anyone other than personnel of Daktronics or its authorized repair agents;



C. Damage caused by the failure to provide a continuously suitable environment, including, but not limited to: (i) neglect or misuse, (ii) a failure or sudden surge of electrical power, (iii) improper air conditioning or humidity control, or (iv) any other cause other than ordinary use;

D. Damage caused by fire, flood, earthquake, water, wind, lightning or other natural disaster, strike, inability to obtain materials or utilities, war, terrorism, civil disturbance or any other cause beyond Daktronics' reasonable control;

E. Failure to adjust, repair or replace any item of Equipment if it would be impractical for Daktronics personnel to do so because of connection of the Equipment by mechanical or electrical means to another device not supplied by Daktronics, or the existence of general environmental conditions at the site that pose a danger to Daktronics personnel;

F. Any statements made about the product by salesmen, dealers, distributors or agents, unless such statements are in a written document signed by an officer of Daktronics. Such statements as are not included in a signed writing do not constitute warranties, shall not be relied upon by Purchaser and are not part of the contract of sale;

G. Any damage arising from the use of Daktronics products in any application other than the commercial and industrial applications for which they are intended, unless, upon request, such use is specifically approved in writing by Daktronics; or

H. Any performance of preventive maintenance.

3. **Limitation of Liability**

Daktronics shall be under no obligation to furnish continued service under this Warranty if alterations are made to the Equipment without the prior written approval of Daktronics.

It is specifically agreed that the price of the Equipment is based upon the following limitation of liability. In no event shall Daktronics (including its subsidiaries, affiliates, officers, directors, employees, or agents) be liable for any special, consequential, incidental or exemplary damages arising out of or in any way connected with the Equipment or otherwise, including but not limited to damages for lost profits, cost of substitute or replacement equipment, down time, lost data, injury to property or any damages or sums paid by Purchaser to third parties, even if Daktronics has been advised of the possibility of such damages. The foregoing limitation of liability shall apply whether any claim is based upon principles of contract, tort or statutory duty, principles of indemnity or contribution, or otherwise.

In no event shall Daktronics be liable to Purchaser or any other party for loss, damage, or injury of any kind or nature arising out of or in connection with this Warranty in excess of the purchase price of the Equipment actually delivered to and paid for by the Purchaser. The Purchaser's remedy in any dispute under this Warranty shall be ultimately limited to the Purchase Price of the Equipment to the extent the Purchase Price has been paid.

4. **Assignment of Rights**

The Warranty contained herein extends only to the original end-user (which may be the Purchaser) of the Equipment and no attempt to extend the Warranty to any subsequent user-transferee of the Equipment shall be valid or enforceable without the express written consent of Daktronics.

5. **Dispute Resolution**

Any dispute between the parties will be resolved exclusively and finally by arbitration administered by the American Arbitration Association ("AAA") and conducted under its rules, except as otherwise provided below. The arbitration will be conducted before a single arbitrator. The arbitration shall be held in Brookings, South Dakota. Any decision rendered in such arbitration proceedings will be final and binding on each of the parties, and judgment may be entered thereon in any court of competent jurisdiction. This arbitration agreement is made pursuant to a transaction involving interstate commerce, and shall be governed by the Federal Arbitration Act.

6. **Governing Law**

The rights and obligations of the parties under this warranty shall not be governed by the provisions of the United Nations Convention on Contracts for the International Sales of Goods of 1980. Both parties consent to the application of the laws of the State of South Dakota to govern, interpret, and enforce all of Purchaser and Daktronics rights, duties, and obligations arising from, or relating in any manner to, the subject matter of this Warranty, without regard to conflict of law principles.

7. **Availability of Extended Service Agreement**

For Purchaser's protection, in addition to that afforded by the warranties set forth herein, Purchaser may purchase extended warranty services to cover the Equipment. The Extended Service Agreement, available from Daktronics, provides for electronic parts repair and/or on-site labor for an extended period from the date of expiration of this warranty. Alternatively, an Extended Service Agreement may be purchased in conjunction with this warranty for extended additional services. For further information, contact Daktronics Customer Service at 1-877-605-1116.