

**END-OF-PERIOD (EOP)
BASKETBALL LIGHTING**

DISPLAY MANUAL

P1237

ED-13652
Rev 07
29 June 2018



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1 Introduction

This manual explains the installation and maintenance of Daktronics LED End-of-Period (EOP) Basketball Lighting systems, which includes the BB-2134 backboard kit and scorer's table kit. For additional information regarding safety, installation, operation, or service, refer to the telephone numbers listed in **Section 5: Daktronics Exchange and Repair & Return Programs (p.8)**. This manual is not specific to a particular installation.

Important Safeguards

- Read and understand all instructions before beginning the installation process.
- Do not let the power cord touch hot surfaces or hang over the edge of a table, which could damage or cut the cord.
- If an extension cord is necessary, use a three-pronged polarized cord. Arrange the cord with care so that no one will trip over or pull it out.
- Before using an extension cord, inspect the cable thoroughly and verify its compliance with the local electric codes.
- Never yank the power cord to pull the plug from the outlet. Grasp the plug and pull to disconnect.
- Disconnect power to the device when not in use or when servicing.
- Disconnect power to the device before servicing power supplies to avoid electrical shock. Power supplies run on high voltage and may cause physical injury if touched while powered.
- Do not disassemble control equipment or electronic controls of the device; failure to follow this safeguard will make the warranty null and void.
- Do not drop the control equipment or allow it to get wet.

Specifications Label

Power specifications as well as serial and model number information can be found on an ID label affixed to the display, similar to the one shown in **Figure 1**.



Figure 1: Specifications Label

Please have the assembly number, model number, and the date manufactured on hand when calling Daktronics customer service to ensure the request is serviced as quickly as possible. Knowing the facility name and/or job number will also be helpful.

Resources

Figure 2 illustrates a Daktronics drawing label. This manual refers to drawings by listing the last set of digits. In the example, the drawing would be referred to as **DWG-1007804**. All references to drawing numbers, appendices, figures, or other manuals are presented in bold typeface.

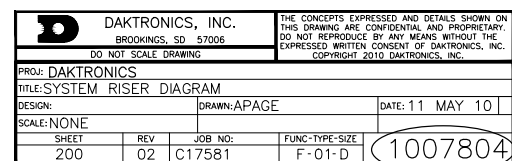


Figure 2: Drawing Label

Any drawings referenced in a section are listed at the beginning of it as shown below:

Reference Drawing:

System Riser Diagram **DWG-1007804**

Daktronics identifies manuals by the DD or ED number located on the cover page.

Ensure all applicable materials have been gathered before beginning the installation.
Contact a Daktronics sales coordinator or project manager.

Daktronics Nomenclature

Most display components have a white label that lists the part number (**Figure 3**). Part numbers will also appear on certain drawings. If a component is not found in the **Replacement Parts (p.7)**, use the label to order a replacement. Refer to **Section 5: Daktronics Exchange and Repair & Return Programs (p.8)** if replacing or repairing any display component.

0P-1127-0024
SN: 2465
02/19/12 Rev. 1

Figure 3: Part Label

Main Component Labels	
Part Type	Part Number
Individual circuit board	0P-XXXX-XXXX
Assembly; a collection of circuit boards	0A-XXXX-XXXX
Wire or cable	W-XXXX
Fuse	F-XXXX
Transformer	T-XXXX
Metal part	0M-XXXXXXX
Fabricated metal assembly	0S-XXXXXX
Specially ordered part	PR-XXXXX-X

Accessory Labels	
Component	Label
Termination block for power or signal cable	TBXX
Grounding point	EXX
Power or signal jack	JXX
Power or signal plug for the opposite jack	PXX

2 Backboard Lighting Kit

Mechanical Installation

Reference Drawings:

Mechanical/Electrical Specs- Light Strip Controller	DWG-176435
NBA Light Strips Back Board Installation	DWG-580363
NBA 24 Second Violation Light Strip Installation.....	DWG-892536

Install the backboard LED lighting by following these steps:

1. Lay out all the LED strips on the floor and arrange them in the shape of the backboard. The longest strip should be to the top, and the power cord should come out the bottom left light strip, as viewed from the front of the display.
2. The top LED strip will be attached to the backboard first, and the rest of the light strips will hang down off the ends of the top light strip.
 - a. Attach the six mounting clips to the top LED strip using the provided #6 screws.
 - b. Secure the LED strip to the backboard tubing with the provided #10 self-drilling screws. The LEDs should be flush with the glass. Refer to **DWG-580363** "Detail A".
3. Mount the side and bottom LED strips into place in a similar fashion to the top strip.
4. If an LED strip controller box is used to run the backboard light strips, attach mounting brackets to the controller and attach it to the backstop. Refer to **DWG-176435** for mounting details.

Note: DWG-892536 details the installation of the 24-second shot clock violation backboard light strip, which requires an extended mounting clip for the top strips.

Electrical Installation

Reference Drawings:

Mechanical/Electrical Specs- Light Strip Controller	DWG-176435
System Riser; EOP LED Lights w/ 4-Sided S.C.....	DWG-176737

The LED backboard lighting will receive power/signal from one of three places:

1. A shot clock equipped with an LED lighting XLR jack
2. An LED light strip controller box
3. A transparent shot clock controller box with an LED lighting XLR jack

Use the 30' (9.1 m) jumper cable provided with the kit to connect the XLR plug protruding from the bottom of the LED light strip to one of the above sources. If the jumper cable is too long, cut it and reattach the XLR plug to the end.

DWG-176737 illustrates a typical setup using both controller and shot clocks for light strip power. The mating XLR jacks on the light strip controller are shown in the rear views on **DWG-176435**. For shot clock XLR jack locations, refer to the specific component location drawings included in the shot clock's manual.

3 Scorer's Table Lighting Kit

Mechanical Installation

Reference Drawings:

Mechanical/Electrical Specs- Light Strip Controller	DWG-176435
Mechanical Spec, 5' Sectional Light Strips	DWG-197074

The LED light strip comes with a number of 1" (25 mm) adhesive-backed, hook-and-loop fastener pieces. Each of these pieces is to be applied to the back or bottom of the LED light strip and connected to a mating strip that is attached to the scorer's table frame. Two extended mounting clips come attached to the light strip; these may be removed if desired. **DWG-197074** illustrates several variations for the attachment.

A controller box – required to run the light strip – can either be set on the table (resting on rubber pads) or mounted under the table using mounting brackets provided with the unit. **DWG-176435** shows the attachment of a control box with the mounting brackets.

Electrical Installation

Reference Drawings:

Installation Details; LED Light Strip Controller	DWG-176174
Mechanical/Electrical Specs- Light Strip Controller	DWG-176435
System Riser; EOP LED Lights w/ 4-Sided S.C.....	DWG-176737
Mechanical Spec, 5' Sectional Light Strips	DWG-197074

The LED light strip is equipped with a 6'-6" (1.98 m) power cord with an XLR plug. This can be plugged directly into the controller, or the provided 30' (9.1 m) jumper cable can be used to reach the controller location. As scorer's table light strips are often installed in pairs, the controller includes two power output jacks (**J21** and **J22**). The light strip controller is equipped with a three-prong plug and requires a 120 VAC outlet. Refer to **DWG-176435** for details on the light strip controller power and signal connections.

Up to five separate 5' (1.52 m) light strips may be connected from single output on the controller. **DWG-197074** illustrates the connections between light strip sections. The light strip sections may be disconnected and removed from the scorer's tables for storage.

DWG-176174 provides power and signal installation details for various light strip controller systems, and **DWG-176737** provides an overall view of electrical connections for a typical lighting system.

4 Maintenance & Troubleshooting

Disconnect power before doing any repair or maintenance work on the display.
Permit only qualified service personnel to access internal display electronics.
Disconnect power when not using the display.

Troubleshooting Table

The table below lists potential problems with the lighting systems and indicates possible causes and corrective actions. This list does not include every symptom that may be encountered, but it does present several of the most common situations that may occur.

If a problem occurs that is not listed or that cannot be resolved using the solutions in the following table, contact Daktronics using the information provided in **Section 5: Daktronics Exchange and Repair & Return Programs (p.8)**.

For additional troubleshooting of a shot clock, scoreboard controller, or other system component, refer to the product manuals located online at www.daktronics.com/manuals.

Problem	Solution/Items to Check
Display does not light at all.	Check all cable connections: <ul style="list-style-type: none">• Power to the light strip controller (or shot clock/scoreboard)• Signal to the light strip controller (or shot clock/scoreboard) from the control console• Signal from the light strip controller (or shot clock/scoreboard) to the light strip itself
	When using an All Sport 5000 series controller, ensure there is an address plug on the light strip control driver set to Address 1. Refer to LED Driver (p.6) . Note: Setups using an All Sport 4000 or ProSport 6000 controller do not require this address plug.
	Replace controller driver. Refer to LED Driver (p.6) .
Light strip comes on at wrong time.	Make sure gray wire from J6 is connected to appropriate position on terminal block inside controller. Refer to DWG-176435 .
Individual LED, or section of LEDs, is not working.	Swap section of light strip with one known to work correctly to verify it is defective.
	Replace defective portion of light strip.

Component Locations & Access

LED end-of-period lighting system components should be located at each backboard (or at the scorer's table). Light strips are mounted directly to each backboard with mounting clips, and to the scorer's table with hook-and-loop fasteners. The individual parts of the light strips are directly accessible.

The light strip controller will typically be located on or under the scorer's table or, for backboard lighting without a shot clock, on the backboard backstop. Power and signal connections are external, and if necessary, internal components can be accessed by removing the device's cover.

LED Driver

Reference Drawings:

4 Column LED Driver II Specifications	DWG-123783
Mechanical/Electrical Specs- Light Strip Controller	DWG-176435

Daktronics LED light strip controllers use 4-column LED drivers to switch LEDs on and off. Refer to **DWG-123783** for detailed driver pin out/switch specifications.

Note: The control box used to interface with non-Daktronics equipment does not include an LED driver.

Replacing a Driver

1. Open the LED light strip controller enclosure by removing the two screws on the bottom and lifting off the top. Refer to **DWG-176435**.
2. Disconnect all connectors from the driver by squeezing together the locking tabs and pulling the connectors free. It may be helpful to label the cables or take a picture to know which cable goes to which connector when reattaching the driver.
3. Remove the four #6 screws securing the driver to the inside of the controller enclosure.
4. Carefully lift the driver from the controller enclosure and place it on a clean, flat surface.
5. Position a new driver inside the controller enclosure and tighten the screws.
6. Reconnect all plugs to their mating jacks on the new driver. The connectors are keyed and will attach in one way only. Do not force the connections.
7. Ensure the new driver is set to the correct address. This will be the same address of the old driver being replaced. Refer to **Setting the Driver Address (p.6)**.
8. Close and secure the controller enclosure, then power up and test the light strips to verify the issue has been resolved.

Setting the Driver Address

Since the same LED drivers can be used for many display models, each driver must be set to receive the correct signal input, or address, for the model in which they are used. This address is set with jumper wires in a 12-pin plug which mates with jack **J19** on the driver (**Figure 4**).

It may be possible to reuse the same address plug from the driver that was replaced. If not, contact Daktronics to order an Address 1 plug (part # 0A-1150-0122).

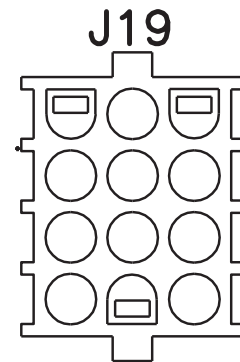


Figure 4: Address Jack J19

Schematics

Reference Drawings:

Schem: LED Light Strip Controller	DWG-176075
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For advanced troubleshooting and repair, it may be necessary to consult a schematic drawing. **DWG-176075** represents the schematic diagrams for the LED light strip controller. The schematic includes power and signal inputs and all internal wiring for the lighting system.

Replacement Parts

Refer to the following table for standard and optional replacement parts.

Description	Part Number
Address 1 plug	0A-1150-0122
Cable; 3-pin XLR male to female, 30'	0A-1230-0090
Light strip, full mod, amber (24 sec violation)	0A-1230-0135
Light strip, half mod, amber (24 sec violation)	0A-1230-0136
Light strip, full mod, red (standard backboard)	0A-1230-0141
Light strip, half mod, red (standard backboard)	0A-1230-0142
48" light strip (scorer's table clock stopped indicator)	0A-1237-1313
14.375" Red LED light strip (scorer's table)	0P-1230-0137
Transformer, 115/230V; 6.25A	T-1066

Routine/Preventative Maintenance

Perform an annual visual inspection of each display and check the following:

- Check and tighten fasteners or replace them as required.
- Check the electrical components for proper connection and any signs of corrosion.

5 Daktronics Exchange and Repair & Return Programs

Exchange Program

The Daktronics Exchange Program is a service for quickly replacing key components in need of repair. If a component fails, Daktronics sends a replacement part to the customer who, in turn, returns the failed component to Daktronics. This decreases equipment downtime. Customers who follow the program guidelines explained below will receive this service.

Before contacting Daktronics, identify these important numbers:

Display Serial Number: _____

Display Model Number: _____

Job/Contract Number: _____

Date Manufactured/Installed: _____

Daktronics Customer ID Number: _____

To participate in the Exchange Program, follow these steps:

1. Call Daktronics Customer Service.

Market Description	Customer Service Number
Schools (including community/junior colleges), religious organizations, municipal clubs, and community centers	877-605-1115 Fax: 605-697-4444
Universities and professional sporting events, live events for auditoriums, and arenas	866-343-6018 Fax: 605-697-4444

2. When the new exchange part is received, mail the old part to Daktronics.

If the replacement part fixes the problem, send in the problem part being replaced.

- Package the old part in the same shipping materials in which the replacement part arrived.
- Fill out and attach the enclosed UPS shipping document.
- Ship the part to Daktronics.

3. The defective or unused parts must be returned to Daktronics within 5 weeks of initial order shipment.

If any part is not returned within five (5) weeks, a non-refundable invoice will be presented to the customer for the costs of replenishing the exchange parts inventory with a new part. Daktronics reserves the right to refuse parts that have been damaged due to acts of nature or causes other than normal wear and tear.

Repair & Return Program

For items not subject to exchange, Daktronics offers a Repair & Return Program. To send a part for repair, follow these steps:

1. Call or fax Daktronics Customer Service.

Refer to the appropriate number in the chart on the previous page.

2. Receive a case number before shipping.

This expedites repair of the part.

3. Package and pad the item carefully to prevent damage during shipment.

Electronic components, such as printed circuit boards, should be placed in an antistatic bag before boxing. Daktronics does not recommend using packing peanuts when shipping.

4. Enclose:

- name
- address
- phone number
- the case number
- a clear description of symptoms

5. Ship to:

Daktronics Customer Service

[Case #]

201 Daktronics Drive, Dock E

Brookings, SD 57006

Daktronics Warranty & Limitation of Liability

The Daktronics Warranty & Limitation of Liability is located at the end of this manual. The Warranty is independent of Extended Service agreements and is the authority in matters of service, repair, and display operation.

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A Reference Drawings

Refer to **Resources (p.1)** for information regarding how to read the drawing number.
Any contract-specific drawings take precedence over these general drawings.

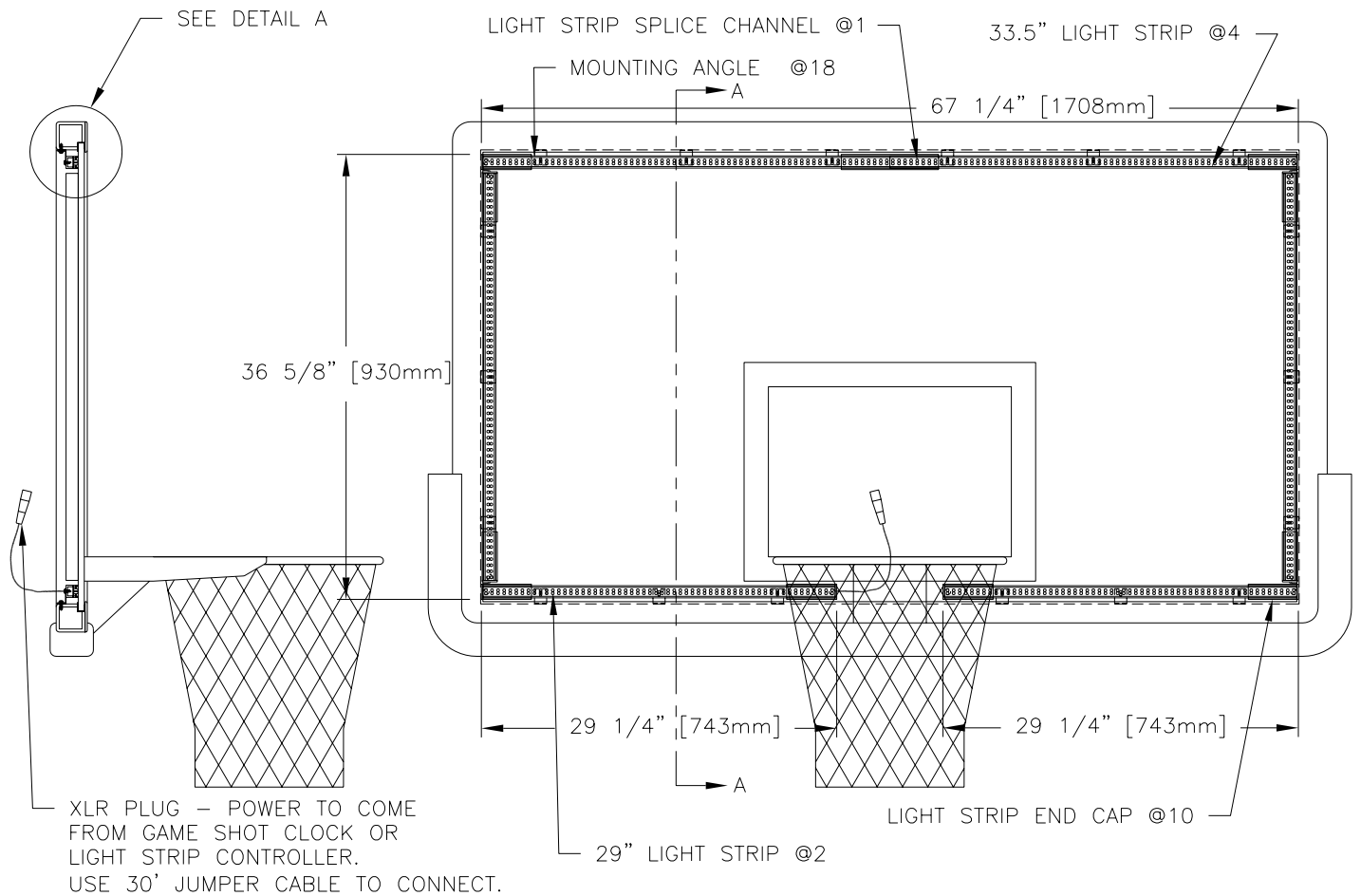
Reference Drawings:

4 Column LED Driver II; Specifications	DWG-123783
Mechanical Spec, Backboard LED Lighting.....	DWG-175504
Schem: LED Light Strip Controller	DWG-176075
Installation Details; LED Light Strip Controller	DWG-176174
Mechanical/Electrical Specs- Light Strip Controller	DWG-176435
System Riser; EOP LED Lights w/ 4-Sided S.C.....	DWG-176737
Mechanical Spec, 5' Sectional Light Strips	DWG-197074
Connection Details, NBA, LED Light Strip Controller	DWG-497258
NBA Light Strips Back Board Installation	DWG-580363
NBA 24 Second Violation Light Strip Installation.....	DWG-892536

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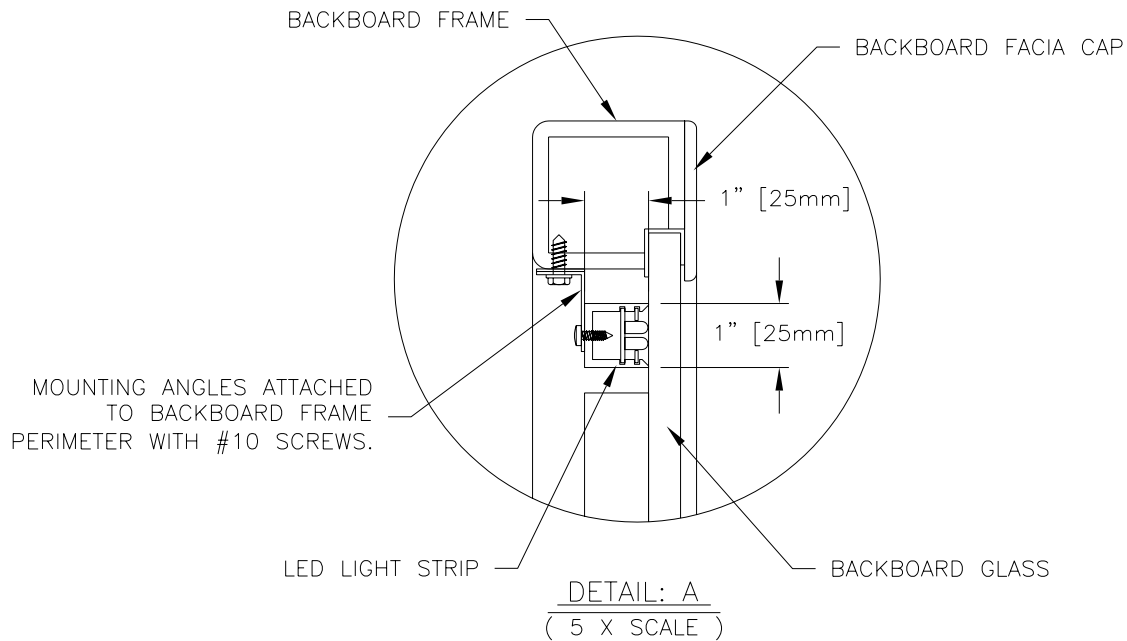
J19 ADDRESS AND COLUMN SELECT JACK

3	21 DEC 00	ADDED HORN SEGMENT INFORMATION	EB		DAKTRONICS, INC. BROOKINGS, SD 57006		
2	2 OCT 00	CHANGED TIME OF DAY ENABLE TO DISABLE (0) AND ENABLE (1)	NSW		PROJ:		
1	29 SEP 00	REMOVED "STAND ALONE" FROM WORDING FOR TIME OF DAY ENABLE.	AVB		TITLE: 4 COLUMN LED DRIVER II; SPECIFICATIONS		
REV.	DATE	DESCRIPTION	BY	APPR.	DES. BY: EB DRAWN BY: E BRAVEK DATE: 08 NOV 99		
					REVISION 03	APPR. BY:	1150-R04A-123783
						SCALE: NONE	



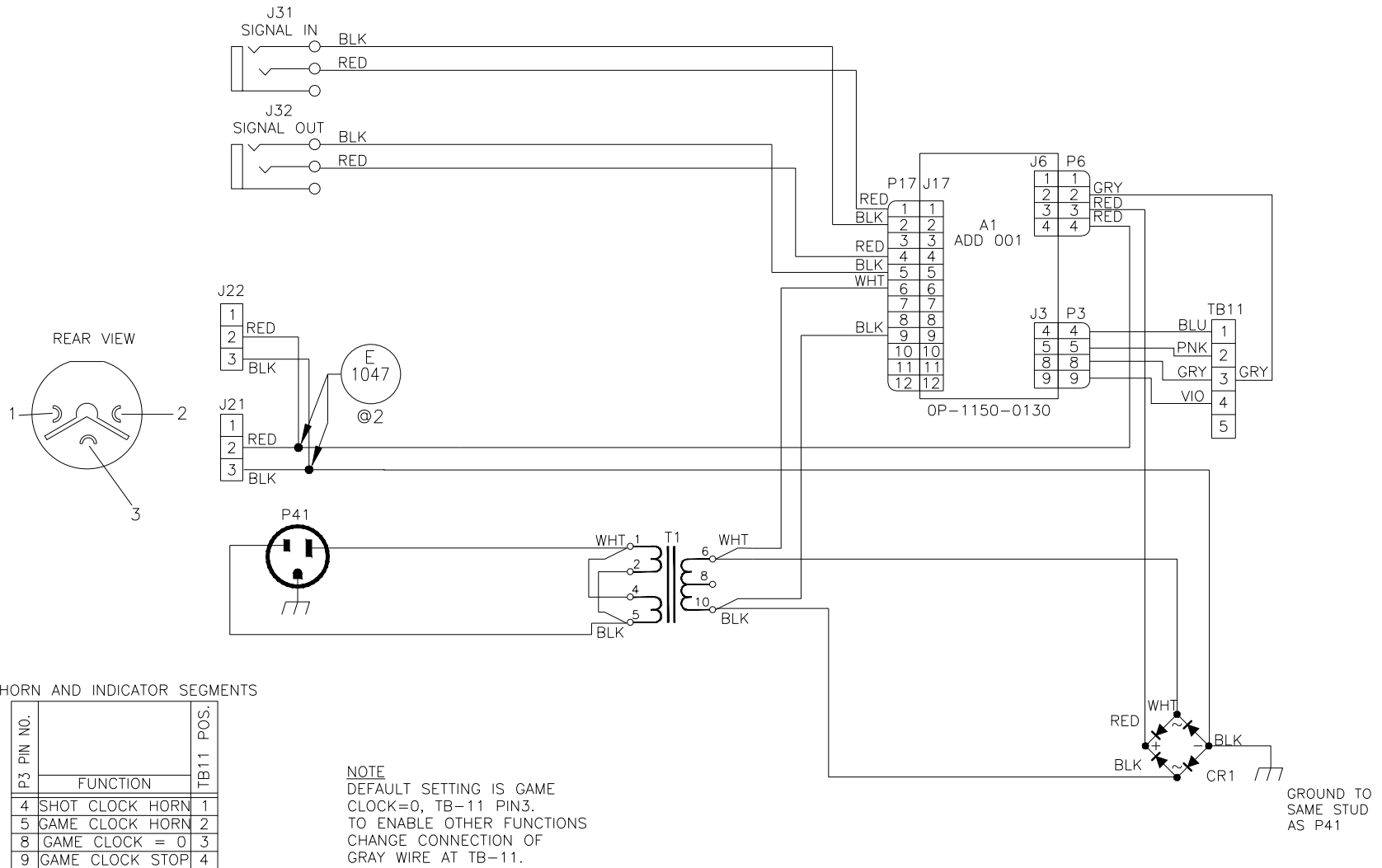
SECTION: A-A



FRONT VIEW



DETAIL: A
(5 X SCALE)

<p>THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS, INCLUDING ELECTRONICALLY WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2002 DAKTRONICS, INC.</p>				<p>DAKTRONICS, INC. BROOKINGS, SD 57006</p>	
<p>PROJ: TUFF SPORT SCOREBOARDS</p>				<p>TITLE: MECHANICAL SPEC, BACKBOARD LED LIGHTING</p>	
<p>DES. BY: BPETERSON DRAWN BY: BPETERSON DATE: 20SEP02</p>				<p>1237-E10A-175504</p>	
<p>REVISION</p>		<p>APPR. BY:</p>		<p>SCALE: 1=15</p>	
<p>01</p>		<p>01</p>		<p>1237-E10A-175504</p>	
REV.	DATE	DESCRIPTION	BY	APPR.	
03	09 APR 03	ADDED DIMENSIONS	BDP		
02	06 NOV 02	REVISED DETAIL A TO SHOW MOUNTING WITH SCREWS.	BDP		
01	30 SEP 02	CHANGED TO MOUNT ANGLE WITH TAPE	BDP		



08	06 MAR 10	ADDED XLR PIN OUT DETAIL TO ASSIST WITH SOLDERING. PER ECO 68605	MWM		REV 09	DATE: 29 NOV 21	CN130852 UPDATED DWG TO CALL OUT CLOCK STOP WIRING OPTION	BY: JSF		
07	19 JAN 09	UPDATED WIRING ON P6 PINS 3 & 4	MRH		<div><div></div><div>THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESS WRITTEN CONSENT OF DAKTRONICS, INC. OR ITS WHOLLY OWNED SUBSIDIARIES. COPYRIGHT 2021 DAKTRONICS, INC. (USA)</div></div>				<div></div> THIRD ANGLE PROJECTION	
06	5 MAR 08	ADDED GROUND TO HARNESS TO CONNECT TO CR1.	AMG							
05	29 JAN 07	UPDATED WIRING ON J-31 & J-32 ADDED E-1047 @2 FOR INTERCONNECTION	DMD		PROJECT:					
04	15 OCT 03	UPDATED J22 TO J21 CONNECTION ADDED E-1047 @2 FOR INTERCONNECTION	DJU		TITLE: SCHEM: LED LIGHT STRIP CONTROLLER					
					DATE: 01 OC 02	DIM UNITS: INCHES [MILLIMETERS]		SHEET	REV	
					SCALE: NTS	DO NOT SCALE DRAWING			09	
					DESIGN: CBRECZI	JOB NO.	FUNC - TYPE - SIZE	176075		
03	20 JUN 03	ADDED CR1.	CJB		DRAWN: JFIXSEN	P1237	R - 06 - A			

ALLSPORT 4100 OR PROSPORT 6000 WITH SMART CLOCK CONSOLE CONNECTION TO SCORER'S TABLE LED LIGHT STRIP

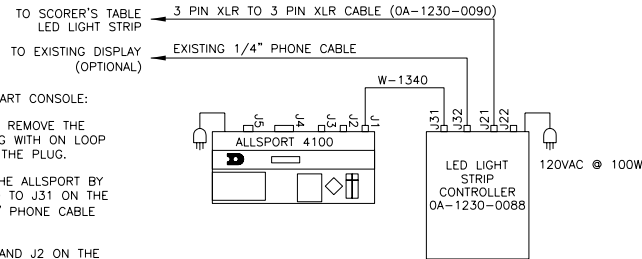
ALLSPORT 4100 AND PROSPORT 6000 WITH SMART CONSOLE:

—OPEN THE LED LIGHT STRIP CONTROLLER AND REMOVE THE ADDRESS PLUG (P19). THIS IS A 12 PIN PLUG WITH ON LOOP OF BROWN WIRE GOING FROM PIN 1 TO 2 ON THE PLUG.

—CONNECT LED LIGHT STRIP CONTROLLER TO THE ALLSPORT BY CONNECTING FROM J1 OR J2 ON THE A/S4100 TO J31 ON THE LED LIGHT STRIP CONTROLLER WITH THE 10' ¼" PHONE CABLE (W-1340).

—IF A DISPLAY IS ALREADY CONNECTED TO J1 AND J2 ON THE ALLSPORT MOVE THE CABLE ALREADY CONNECTED TO THE ALLSPORT FROM J1 ON THE ALLSPORT TO J32 ON THE LED LIGHT STRIP CONTROLLER. CONNECT THE LED LIGHT STRIP CONTROLLER TO THE ALLSPORT AS DENOTED ABOVE.

—CONNECT TO THE LED LIGHT STRIP BY CONNECTING THE 3 PIN XLR TO 3 PIN XLR CABLE INCLUDED IN THE KIT TO J21 ON THE LED LIGHT STRIP CONTROLLER. CONNECT THE OTHER END TO THE 3 PIN XLR ON THE LED LIGHT STRIP.



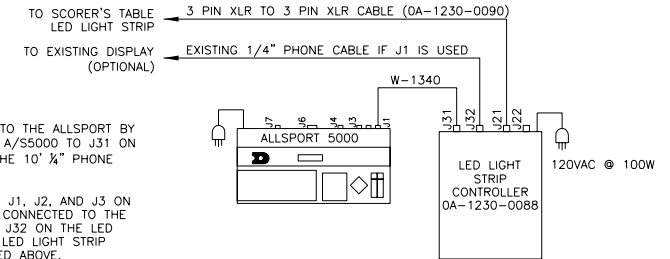
ALLSPORT 5000 SERIES CONSOLE CONNECTION TO SCORER'S TABLE LED LIGHT STRIP

ALLSPORT 5000 SERIES CONSOLES:

—CONNECT LED LIGHT STRIP CONTROLLER TO THE ALLSPORT BY CONNECTING FROM J1, J2 OR J3 ON THE A/S5000 TO J31 ON THE LED LIGHT STRIP CONTROLLER WITH THE 10' ¼" PHONE CABLE (W-1340).

—IF A DISPLAY IS ALREADY CONNECTED TO J1, J2, AND J3 ON THE ALLSPORT MOVE THE CABLE ALREADY CONNECTED TO THE ALLSPORT FROM J1 ON THE ALLSPORT TO J32 ON THE LED LIGHT STRIP CONTROLLER. CONNECT THE LED LIGHT STRIP CONTROLLER TO THE ALLSPORT AS DENOTED ABOVE.

—CONNECT TO THE LED LIGHT STRIP BY CONNECTING THE 3 PIN XLR TO 3 PIN XLR CABLE INCLUDED IN THE KIT TO J21 ON THE LED LIGHT STRIP CONTROLLER. CONNECT THE OTHER END TO THE 3 PIN XLR ON THE LED LIGHT STRIP.



ALLSPORT 4100 OR PROSPORT 6000 WITH SMART CLOCK CONSOLE CONNECTION TO BACKBOARD LED LIGHT STRIP

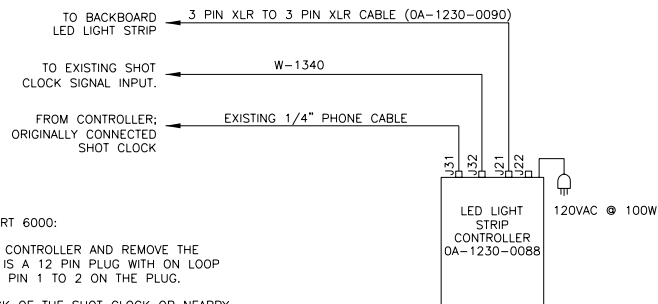
ALLSPORT 4100 AND PROSPORT 6000:

—OPEN THE LED LIGHT STRIP CONTROLLER AND REMOVE THE ADDRESS PLUG (P19). THIS IS A 12 PIN PLUG WITH ON LOOP OF BROWN WIRE GOING FROM PIN 1 TO 2 ON THE PLUG.

—MOUNT CONTROLLER TO BACK OF THE SHOT CLOCK OR NEARBY ON THE BACKBOARD STRUCTURE USING THE BRACKETS AND HARDWARE SUPPLIED.

—MOVE SIGNAL CONNECTION ORIGINALLY GOING TO THE SHOT CLOCK TO J31 ON THE LED LIGHT STRIP CONTROLLER. USE THE 10' ¼" PHONE CABLE (W-1340) SUPPLIED WITH THE KIT TO CONNECT FROM J32 ON THE LED LIGHT STRIP CONTROLLER TO THE SHOT CLOCK SIGNAL INPUT.

—CONNECT TO THE LED LIGHT STRIP BY CONNECTING THE 3 PIN XLR TO 3 PIN XLR CABLE INCLUDED IN THE KIT TO J21 ON THE LED LIGHT STRIP CONTROLLER. CONNECT THE OTHER END TO THE 3 PIN XLR ON THE LED LIGHT STRIP.



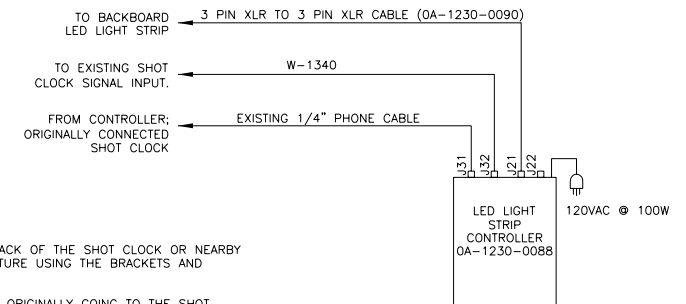
ALLSPORT 5000 SERIES CONSOLE CONNECTION TO BACKBOARD LED LIGHT STRIP

ALLSPORT 5000 SERIES:

—MOUNT CONTROLLER TO BACK OF THE SHOT CLOCK OR NEARBY ON THE BACKBOARD STRUCTURE USING THE BRACKETS AND HARDWARE SUPPLIED.

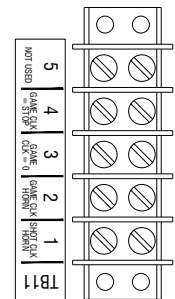
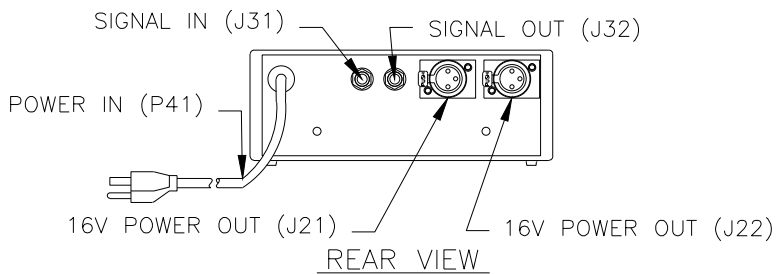
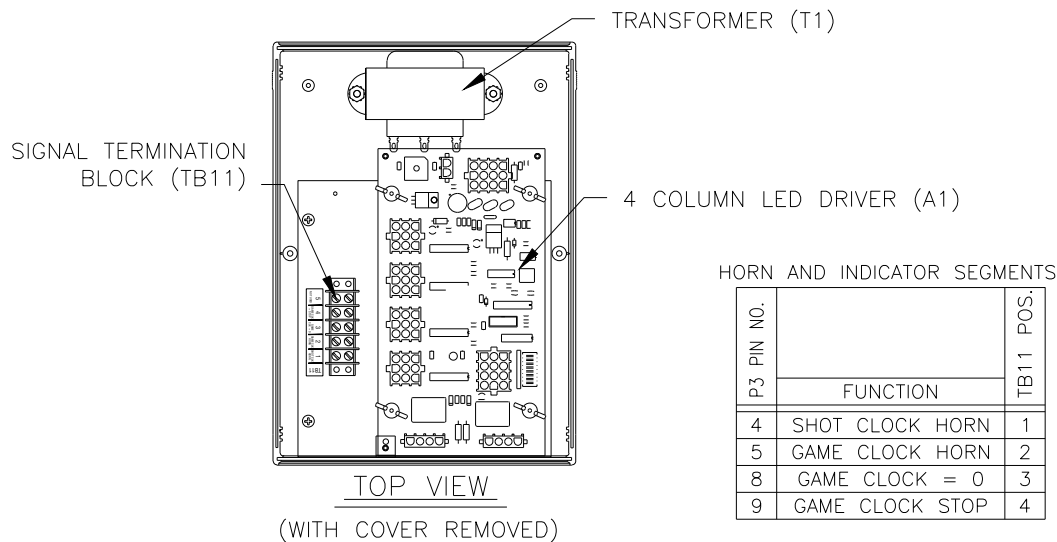
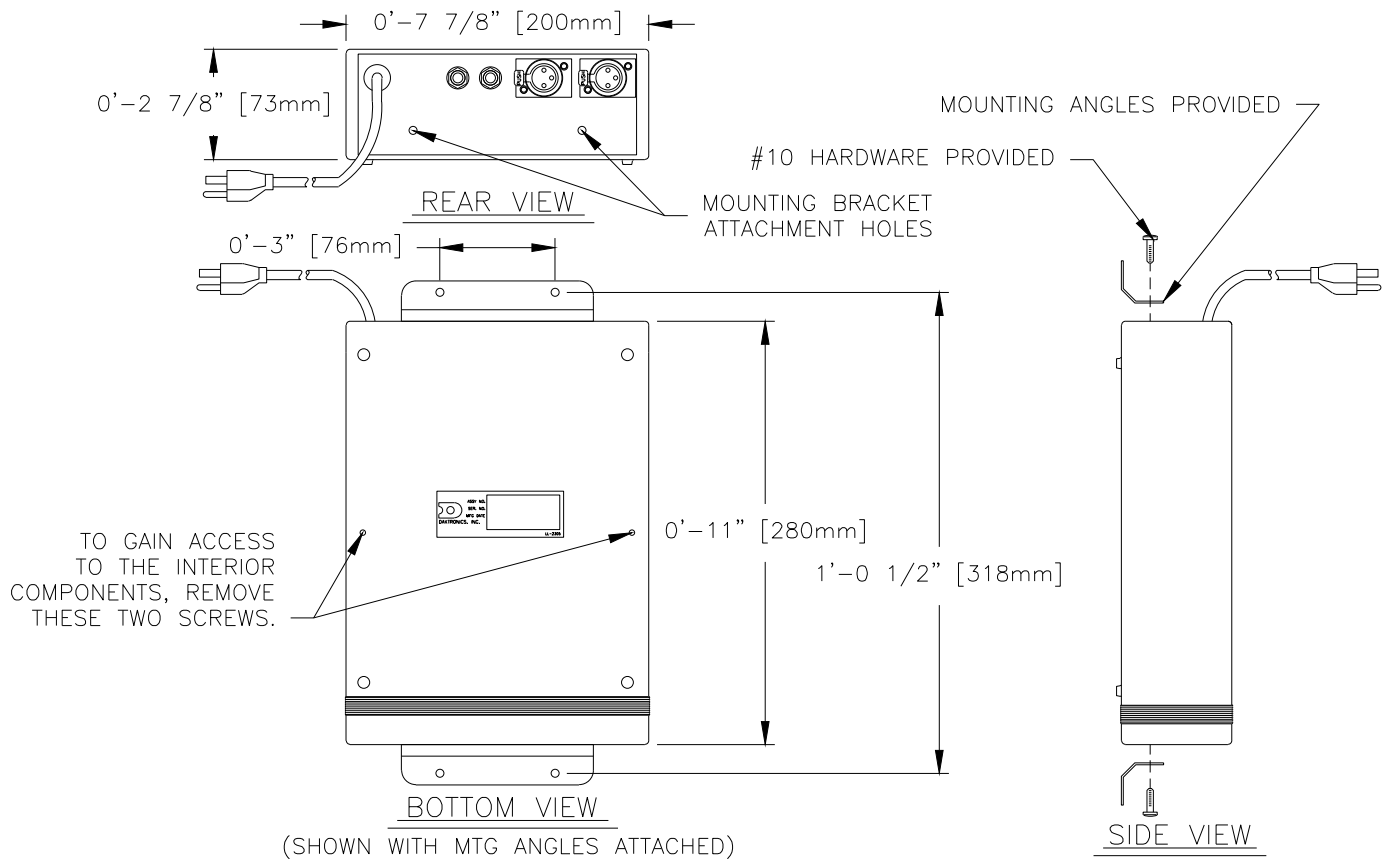
—MOVE SIGNAL CONNECTION ORIGINALLY GOING TO THE SHOT CLOCK TO J31 ON THE LED LIGHT STRIP CONTROLLER. USE THE 10' ¼" PHONE CABLE (W-1340) SUPPLIED WITH THE KIT TO CONNECT FROM J32 ON THE LED LIGHT STRIP CONTROLLER TO THE SHOT CLOCK SIGNAL INPUT.

—CONNECT TO THE LED LIGHT STRIP BY CONNECTING THE 3 PIN XLR TO 3 PIN XLR CABLE INCLUDED IN THE KIT TO J21 ON THE LED LIGHT STRIP CONTROLLER. CONNECT THE OTHER END TO THE 3 PIN XLR ON THE LED LIGHT STRIP.



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DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ:			
TITLE: INSTALLATION DETAILS; LED LIGHT STRIP CONTROLLER			
DES. BY: CBRECZI		DATE: 01 OCT 02	
REVISION	APPR. BY:	DRAWN BY: CBRECZI	
	SCALE: 1=1	1230-R01B-176174	

01	10 OCT 02	REVISED SPELLING OF ALLSPORT IN HEADINGS.	CJB	
REV.	DATE	DESCRIPTION	BY	APPR.



HORN AND INDICATOR SEGMENTS

P3 PIN NO.	FUNCTION	TB11 POS.
4	SHOT CLOCK HORN	1
5	GAME CLOCK HORN	2
8	GAME CLOCK = 0	3
9	GAME CLOCK STOP	4

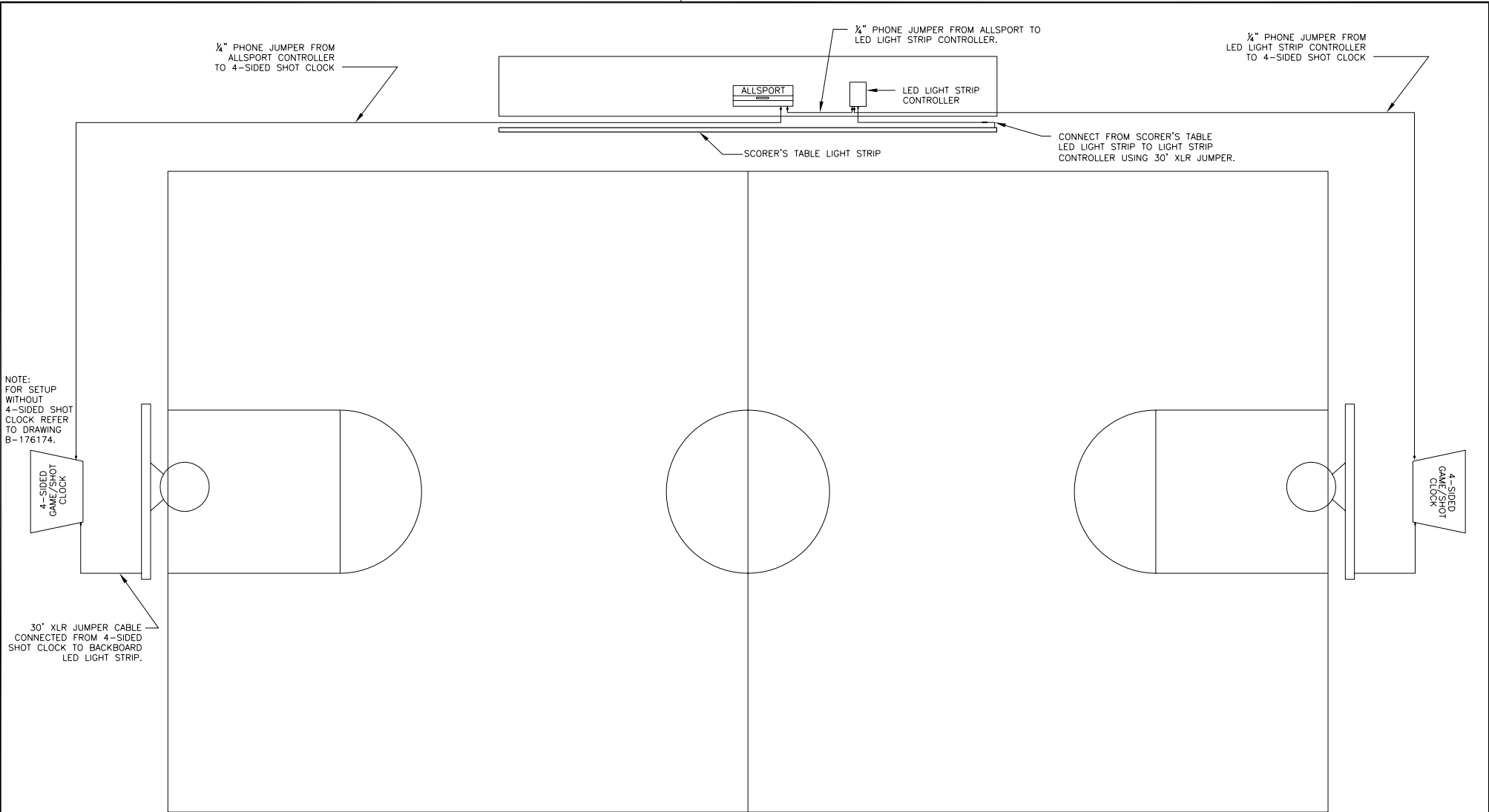
TERM BLOCK DETAIL
(3 X SCALE)

NOTES:

1. DEFAULT SETTING IS GAME CLOCK=0, TB-11 PIN3. TO ENABLE OTHER FUNCTIONS CHANGE CONNECTION OF GRAY WIRE AT TB-11.
2. DO NOT WORK ON ENERGIZED COMPONENTS.

<p>DAKTRONICS, INC. BROOKINGS, SD 57006</p>		<p>THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2010 DAKTRONICS, INC.</p>	
<p>PROJ: INDOOR UNIFORM LED DIGIT</p>			
<p>TITLE: MECHANICAL/ELECTRICAL SPECS- LIGHT STRIP CONTROLLER</p>			
<p>DESIGN: BPETERSON</p>		<p>DRAWN: BPETERSON</p>	
<p>SCALE: 1=5</p>		<p>DATE: 07OCT02</p>	
<p>SHEET</p>	<p>REV</p>	<p>JOB NO:</p>	<p>FUNC-TYPE-SIZE</p>
<p>01</p>	<p>01</p>	<p>P1230</p>	<p>E-10-A</p>
			<p>176435</p>

REV	DATE:	UPDATED HORN AND INDICATOR SEGMENT TABLE AND NOTE	BY:
01	28 SEP 10		JJD



NOTE:
FOR SETUP
WITHOUT
4-SIDED SHOT
CLOCK REFER
TO DRAWING
B-176174.

4-SIDED
GAME/SHOT
CLOCK

30' XLR JUMPER CABLE
CONNECTED FROM 4-SIDED
SHOT CLOCK TO BACKBOARD
LED LIGHT STRIP.

ALLSPORT

LED LIGHT STRIP
CONTROLLER

SCORER'S TABLE LIGHT STRIP

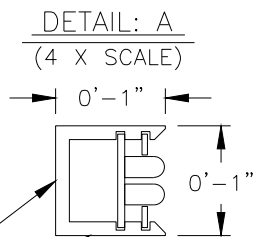
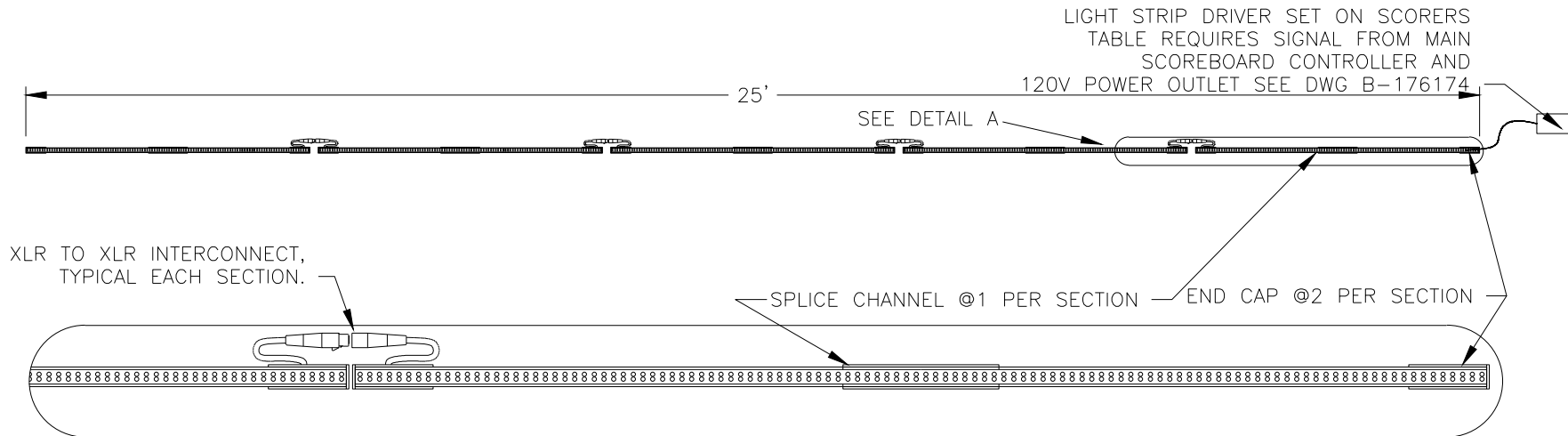
CONNECT FROM SCORER'S TABLE
LED LIGHT STRIP TO LIGHT STRIP
CONTROLLER USING 30' XLR JUMPER.

4-SIDED
GAME/SHOT
CLOCK

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DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ:			
TITLE: SYSTEM RISER; EOP LED LIGHTS W/ 4-SIDED S.C.			
DES. BY: CBRECZI		DRAWN BY: CBRECZI	
		DATE: 18 OCT 02	
REVISION	APPR. BY:		1237-R01B-176737
	SCALE: 1 = 1		

REV.	DATE	DESCRIPTION	BY	APPR.
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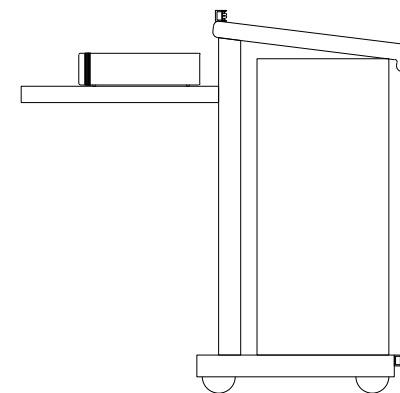
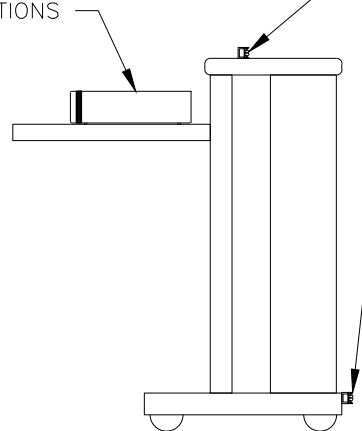
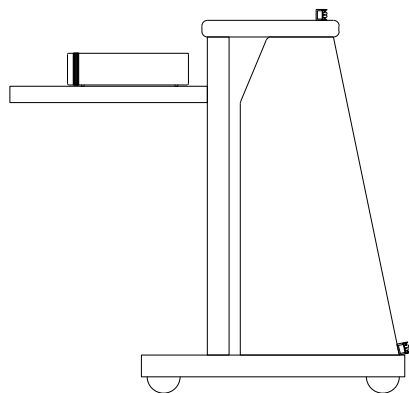
REV	DATE:	INCREASED SEPERATION SPACE OF THE LIGHT STRIP DRIVER SET AND PUT IN CONNECTORS	BY:
01	5 NOV 10		JPR



SECTION: A-A
(20 X SCALE)

CONTROLLER MOUNTED ON SCORER'S TABLE
SEE DRAWING A-176435 FOR MECHANICAL
AND ELECTRICAL SPECIFICATIONS

LIGHT STRIPS COULD BE MOUNTED ON THE TOP
OR THE FACE OF THE SCORER'S TABLES
DEPENDING ON ROOM ON SPECIFIC SCORERS
TABLES AND LEAGUE REQUIREMENTS.



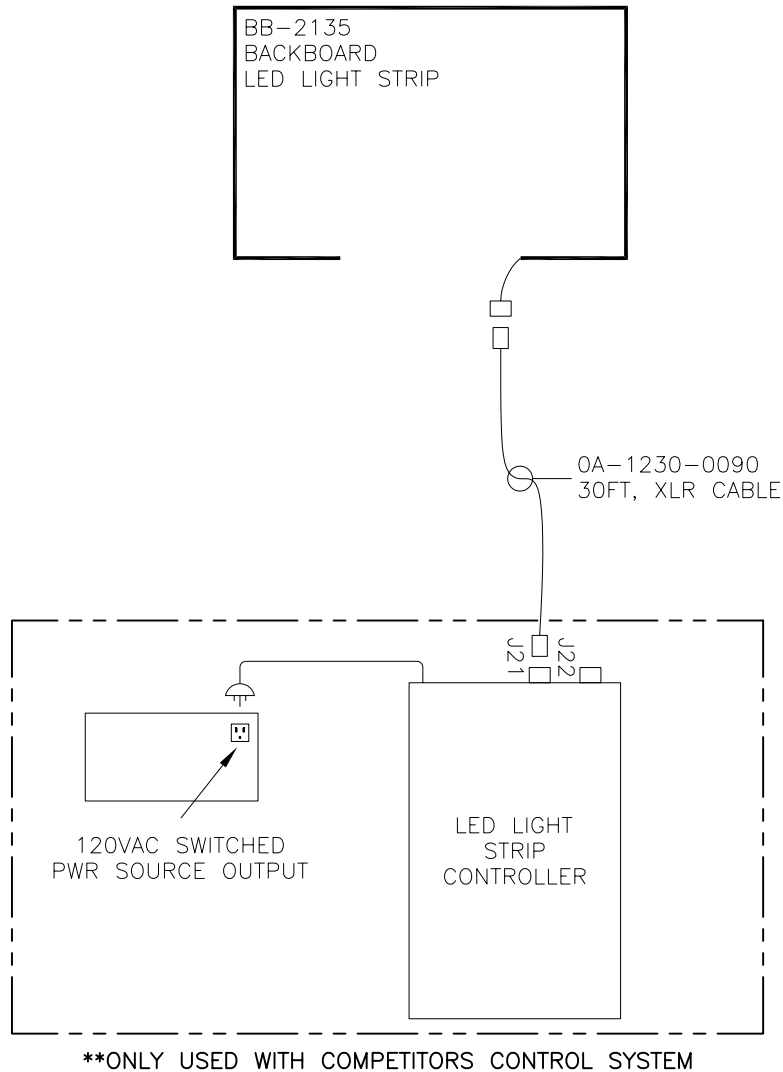
TYPICAL SCORERS TABLES
(2X SCALE)

DAKTRONICS, INC.
BROOKINGS, SD 57006

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PROJ: TITLE: MECHANICAL SPEC. 5' SECTIONAL LIGHT STRIPS
DESIGN: CBRECZI DRAWN: CBRECZI DATE: 18 SEP 03 X
SCALE: 1"=35'

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	197074
01	P1237		E-10-A	



- MOUNT CONTROLLER TO BACK OF THE SHOT CLOCK OR NEARBY ON THE BACKBOARD STRUCTURE USING SUPPLIED BRACKETS AND HARDWARE.
- CONNECT POWER CORD ON LIGHT STRIP CONTROLLER TO A 120VAC SWITCHED OUTPUT.
- CONNECT THE XLR CABLE FROM J21 ON THE CONTROLLER TO THE XLR JACK ON THE LED LIGHT STRIP.

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DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ:

TITLE: CONNECTION DETAILS, NBA, LED LIGHT STRIP CONTROLLER

DES. BY: KBIERBA

DRAWN BY: KBIERBA

DATE: 16 JUN 08

REVISION

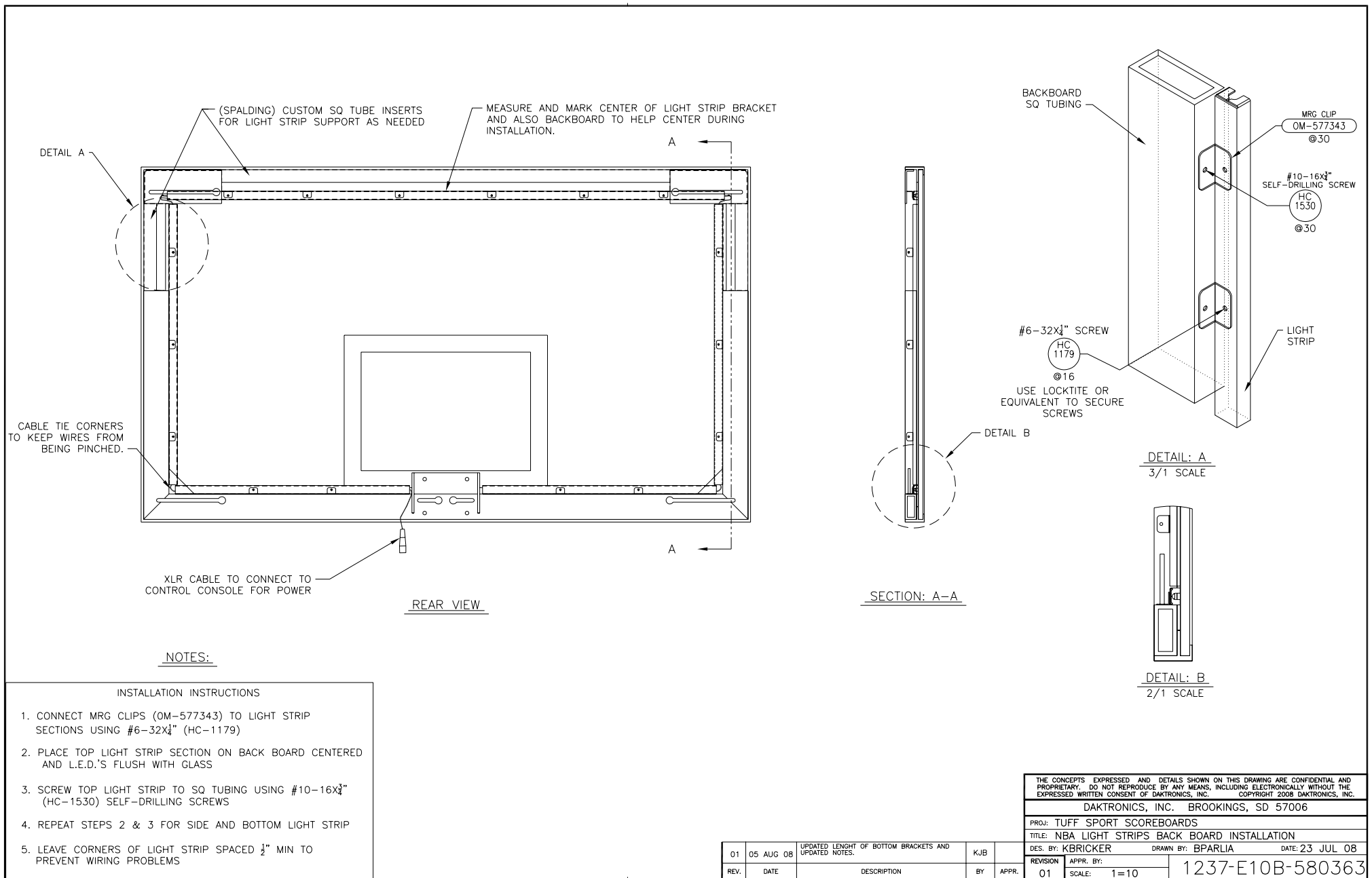
APPR. BY: CWESTER

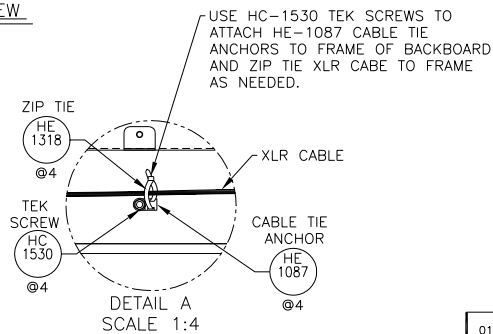
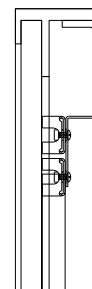
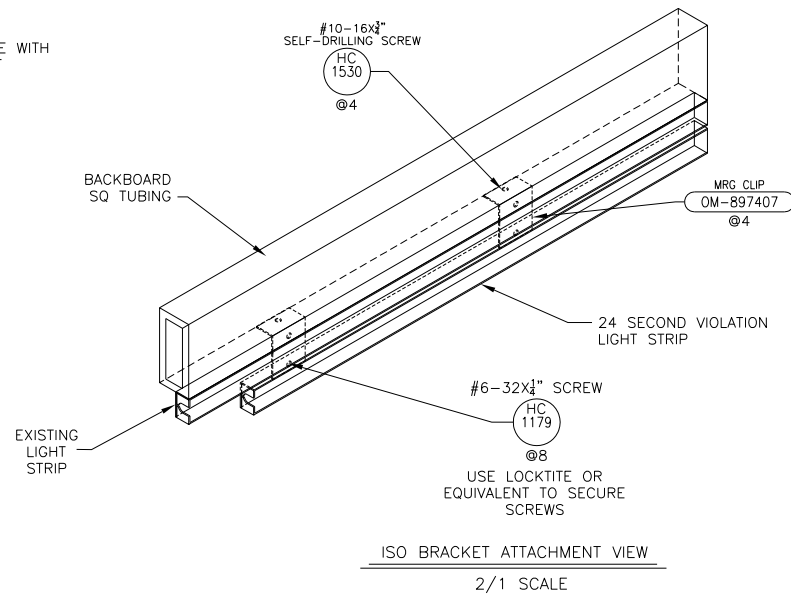
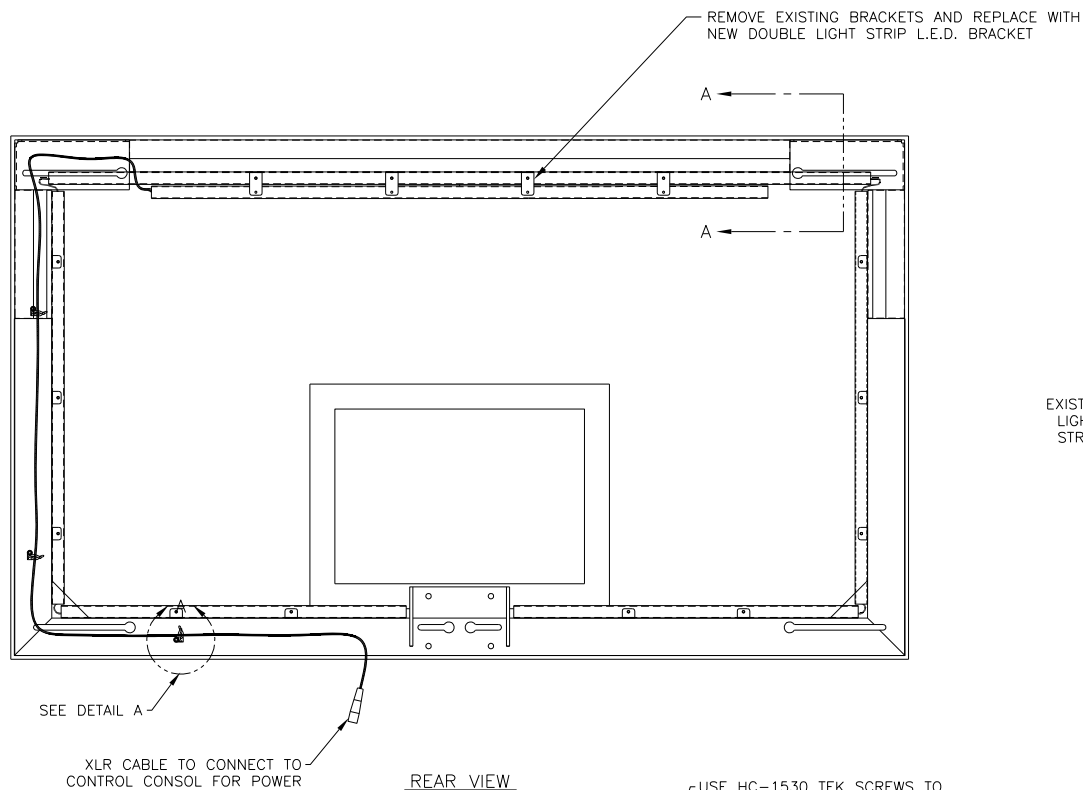
SCALE:

00

1237-R01A-497258

REV.	DATE	DESCRIPTION	BY	APPR.
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NOTES:

INSTALLATION INSTRUCTIONS

1. CONNECT MRG CLIPS (OM-897407) TO LIGHT STRIP SECTIONS USING #6-32x $\frac{1}{4}$ " (HC-1179)
2. PLACE 24 SECOND VIOLATION L.E.D. STRIP ON BACK BOARD CENTERED AND L.E.D.'S FLUSH WITH GLASS
3. SCREW TOP LIGHT STRIP TO SQ TUBING USING #10-16x $\frac{3}{4}$ " (HC-1530) SELF-DRILLING SCREWS

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DAKTRONICS, INC. BROOKINGS, SD 57006

PROJ: TUFF SPORT SCOREBOARDS

TITLE: NBA 24 SECOND VIOLATION LIGHT STRIP INSTALLATION

DES. BY: BPARLIA

DRAWN BY: BPARLIA

DATE: 28 JUL 09

REVISION

APPR. BY:

SCALE: 1:10

1237-E10B-892536

REV.	DATE	DESCRIPTION	BY	APPR.
01	18 AUG 09	REDUCED SIZE OF LIGHT STRIP, CHANGED QTY OF OM-897407 TO 4, HC-1179 TO 8, AND HC-1530 TO 4	SJN	

B Daktronics Warranty & Limitation of Liability

This section includes the Daktronics Warranty & Limitation of Liability statement (SL-02374).

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DAKTRONICS WARRANTY & 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 and End User agree to be bound by and accept these terms and conditions. Unless otherwise defined herein, all 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 (the "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 End User 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. This Warranty does not include on-site labor charges to remove or install these components. 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 Daktronics.

C. Daktronics shall pay ground transportation charges for the return of any defective component of the Equipment. All such items shall be shipped by End User DDP Daktronics designated facility. If returned Equipment is repaired or replaced under the terms of this Warranty, Daktronics will prepay ground transportation charges back to End User and shall ship such items DDP End User's designated facility; otherwise, End User shall pay transportation charges to return the Equipment back to the End User and such Equipment shall be shipped Ex Works Daktronics designated facility. All returns must be pre-approved by Daktronics before shipment. Daktronics shall not be obligated to pay freight for any unapproved return. End User 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 the 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. Unless otherwise expressly provided, this Warranty does not impose any duty or liability upon Daktronics for partial LED pixel degradation. Notwithstanding the foregoing, in no event does this Warranty include LED pixel degradation caused by UV light. This Warranty does not 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.

EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS WARRANTY, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, DAKTRONICS DISCLAIMS ANY AND ALL OTHER PROMISES, REPRESENTATIONS AND WARRANTIES APPLICABLE TO THE EQUIPMENT AND REPLACES ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ACCURACY OR QUALITY OF DATA. OTHER ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY DAKTRONICS, ITS AGENTS OR EMPLOYEES, SHALL NOT 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

This Warranty does not impose any duty or liability upon Daktronics for any:

A. 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, End User assumes all risk of loss or damage, agrees to use any shipping containers that might be provided by Daktronics, and to ship the Equipment in the manner prescribed by Daktronics;

B. damage caused by: (i) the improper handling, installation, adjustment, use, repair, or service of the Equipment, or (ii) any physical damage which includes, but is not limited to, missing, broken, or cracked components resulting from non-electrical causes; altered, scratched, or fractured electronic traces; missing or gauged solder pads; cuts or clipped wires; crushed, cracked, punctured, or bent circuit boards; or tampering with any electronic connections, provided that such damage is not caused by 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) improper power including, without limitation, a failure or sudden surge of electrical power; (iii) improper air conditioning, humidity control, or other environmental conditions outside of the Equipment's technical specifications such as extreme temperatures, corrosives and metallic pollutants; or (iv) any other cause other than ordinary use;

DAKTRONICS WARRANTY & LIMITATION OF LIABILITY

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. statements made about the product by any salesperson, dealer, distributor or agent, 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 End User and are not part of the contract of sale;

G. 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;

H. replenishment of spare parts. In the event the Equipment was purchased with a spare parts package, the parties acknowledge and agree that the spare parts package is designed to exhaust over the life of the Equipment, and as such, the replenishment of the spare parts package is not included in the scope of this Warranty;

I. security or functionality of the End User's network or systems, or anti-virus software updates;

J. performance of preventive maintenance;

K. third-party systems and other ancillary equipment, including without limitation front-end video control systems, audio systems, video processors and players, HVAC equipment, batteries and LCD screens;

L. incorporation of accessories, attachments, software or other devices not furnished by Daktronics; or

M. paint or refinishing the Equipment or furnishing material for this purpose.

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 claims asserting or based on (a) loss of use of the facility or equipment; lost business, revenues, or profits; loss of goodwill; failure or increased cost of operations; loss, damage or corruption of data; loss resulting from system or service failure, malfunction, incompatibility, or breaches in system security; or (b) 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, injury to property or any damages or sums paid 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 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. The End User'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 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. **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. The parties consent to the application of the laws of the State of South Dakota to govern, interpret, and enforce each of the parties' 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.

6. **Availability of Extended Service Agreement**

For End User's protection, in addition to that afforded by the warranties set forth herein, End User 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 1-800-DAKTRONICS (1-800-325-8766).