

**LTS-BB BACKBOARD
LED LIGHT STRIPS**
DISPLAY MANUAL

P1237

DD4692853
Rev 02
13 February 2024



DAKTRONICS

Copyright © 2020-2024

All rights reserved. While every precaution has been taken in the preparation of this manual, the publisher assumes no responsibility for errors or omissions. No part of this book covered by the copyrights hereon may be reproduced or copied in any form or by any means—graphic, electronic, or mechanical, including photocopying, taping, or information storage and retrieval systems—without written permission of the publisher.

Daktronics trademarks are property of Daktronics, Inc. All other trademarks are property of their respective companies.

Table of Contents

1	Introduction	1
	Important Safeguards.....	1
	Specifications Label.....	1
	Resources.....	1
	Daktronics Nomenclature.....	2
2	Backboard Lighting Kit	3
	Mechanical Overview.....	3
	Electrical Overview.....	3
	Installation Overview.....	4
	Visual Horn Indicator Light Strip Kit (High School Only).....	4
3	Maintenance & Troubleshooting	5
	Troubleshooting Table.....	5
	Component Locations & Access.....	5
	LED Driver.....	6
	Replacing a Driver	6
	Setting the Driver Address	6
	Schematics.....	6
	Replacement Parts.....	7
	Routine/Preventative Maintenance.....	7
4	Daktronics Exchange and Repair & Return Programs	8
	Exchange Program.....	8
	Repair & Return Program.....	9
	Daktronics Warranty & Limitation of Liability.....	9
A	Reference Drawings	11
B	Daktronics Warranty & Limitation of Liability	25

This page intentionally left blank.

1 Introduction

This manual explains the installation and maintenance of Daktronics LTS-BB End-of-Period (EOP) backboard LED light strips. For additional information regarding the safety, installation, operation, or service of these displays, refer to the telephone numbers listed in **Section 4: 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, similar to the one shown in **Figure 1**.

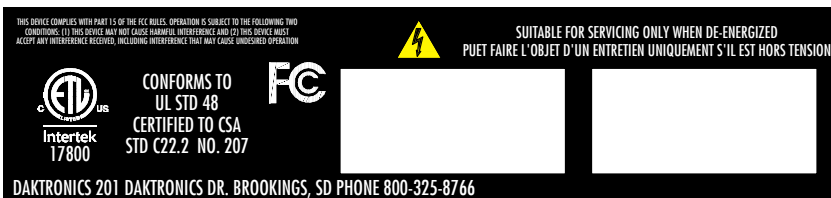


Figure 1: Specifications Label

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.

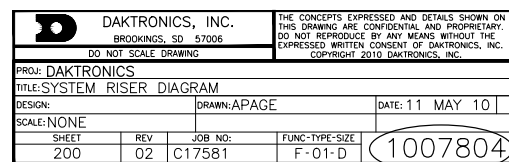


Figure 2: Drawing Label

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.

Project-specific information takes precedence over any other general information found in this manual. 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 4: Daktronics Exchange and Repair & Return Programs (p.8)** if replacing or repairing any display component.

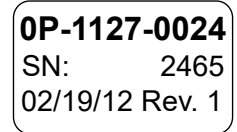


Figure 3: Part Label

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 Overview

Reference Drawings:

Assembly; 48" Amber Light Strip	DWG-4638145
Specs; Universal Backboard Lights Strips	DWG-4662008
Field Assembly; Universal Light Strips	DWG-4662021
Mounting; Universal Backboard Light Strips.....	DWG-4662022
Mech/Elec Specs-Light Strip Controller.....	DWG-4662522

DWG-4662008 provides a general overview of what the final product will look like attached to a backboard.

Daktronics provides mounting brackets that can adjust to fit different sizes and manufacturers of backboards. **DWG-4662021** shows the various mounting bracket orientations and how to assemble the light strip frame; select the best mounting bracket orientation for the backboards in use.

DWG-4662022 shows how to install the light strip frame assembly to the backboard.

Note: If there is a 48" amber light strip, refer to **DWG-4638145** for installation instructions.

If using a controller box to run the backboard light strips, attach mounting brackets to the controller box and attach it to the backstop. Refer to **DWG-4662522** for mounting details.

Electrical Overview

Reference Drawings:

Electrical Install Details, LED Light Strips.....	DWG-191771
Connection Details: LED Light Strip Controller.....	DWG-191995
Connection Detail, LED Light Strip Controller	DWG-3285852
Mech/Elec Specs-Light Strip Controller.....	DWG-4662522

The LED backboard lighting typically receives power/signal from one of three places:

- A shot clock equipped with an LED lighting XLR jack
- An LED light strip controller box
- A transparent shot clock controller box with an LED lighting XLR jack

DWG-191771 explains how to connect the light strips together. 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 per the instructions in "Detail B" on **DWG-3285852**.

DWG-191995 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 view on **DWG-4662522**. For shot clock XLR jack locations, refer to the specific component location drawings included in the shot clock's manual.

Installation Overview

1. Unpack the light strip kit, and inspect all equipment for damage. Immediately report any problems to Daktronics.
2. Assemble the light strip frame on the ground, face side down. The vertical side light strips will have the top and bottom light strips above and below them. Refer to **DWG-4662021**.

Note: Do not make the electrical connections between light strips at this time.

3. Loosely attach four mounting brackets to the light strip frame using two screws per bracket. As illustrated on **DWG-4662021**, the mounting brackets have four different orientations that may be used to fit the various styles of backboard perimeters.
4. Lift the light strip assembly up against the rear of the backboard. Slide the mounting brackets out to make contact with the frame of the backboard.

Note: This step can be performed by one person but is made easier with assistance.

5. The steps to secure the frame to the backboard differ depending on the style of backboard perimeter:
 - **For Tube perimeter:** secure with self-tapping screws.
 - **For Angle perimeter:** mark the holes for drilling, temporarily remove the light strip frame assembly, and drill 0.203" holes. Lift the light strip frame assembly back against the rear of the backboard, align the mounting brackets with the holes, and secure with #10 screws and nuts.
 - **For Gared backboard:** secure using existing holes and hardware.
6. Make the electrical connections between each light strip segment, and secure the extra wiring out of the way using the provided zip ties.
7. Make the electrical connection to either a shot clock or a standalone control enclosure. If there is a separate control enclosure, install it onto the backboard structure, and then run wiring to the light strip.
 - Be sure to mount the driver enclosure in a location that is appropriate for when the hoop is in either its game or storage position.
 - Be sure to leave enough slack in the wiring to allow the hoop to move between game and storage positions.
8. Test the light strips. By default, the light strips will illuminate when the game time equals zero.

Visual Horn Indicator Light Strip Kit (High School Only)

Reference Drawings:

Riser Diagram: HS Light Strip Cntrl Installation..... **DWG-304654**

Daktronics offers a kit (part # 0A-1230-0188) that allows the light strips to run directly from the scoreboard. This is typically only for high school facilities where there are no shot clocks and the light strips only need to function as a visual horn indicator (VHI). Refer to **DWG-304654** for installation instructions.

Note: The light strips will only activate when the scoreboard horn sounds. To change when the light strips activate, a separate control box or shot clock is required.

3 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 4: 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 or 5500 series controller, ensure there is an address plug on the light strip control driver. Refer to LED Driver (p.6) .
	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-4662522 .
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. Light strips are mounted directly to each backboard with #10 hardware and mounting brackets. The individual parts of the light strips are directly accessible.

The light strip controller will typically be located on the backboard back stop but may be mounted elsewhere. 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
Mech/Elec Specs-Light Strip Controller.....	DWG-4662522

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.

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-4662522**.
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) for All Sport 5000 controlled light strips. For All Sport 5500 controlled light strips (ColorSmart scoreboards), use a fully-loaded address plug (part # 0A-1150-0064) set to Address 2, meaning all wires except red should be cut.

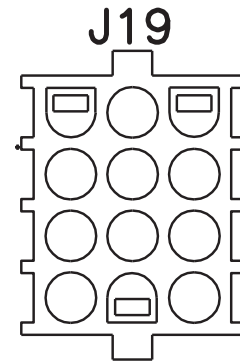


Figure 4: Address Jack J19

Schematics

Reference Drawings:

Schematic; Light Strip Controller.....	DWG-4551814
--	--------------------

For advanced troubleshooting and repair, it may be necessary to consult a schematic drawing. **DWG-4551814** represents the schematic diagram 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
12-pin address plug (use for MCAST/ColorSmart)	0A-1150-0064
Address 1 plug	0A-1150-0122
Cable; 3-pin XLR male to female, 30'	0A-1230-0090
Cable; 3-pin XLR male to female, 100'	0A-1230-0113
Cable; 3-pin XLR male to female, 6'	0A-1230-0148
Cable; 3-pin XLR male to female, 50'	0A-1230-0168
18" Red Light Strip (bottom)	DS-4263049
18" Red Light Strip (bottom, IN ONLY)	DS-4263053
29" Red Light Strip (side)	DS-4263050
62" Red Light Strip (top)	DS-4263046
35" Red Light Strip (side)	DS-4263051
48" Amber Light Strip	DS-4263054
LED driver, 4-column	OP-1150-0130
LED driver, 4-column (MCAST/ColorSmart)	OP-1388-0101
Power Supply, 24V, 96W, 120 or 277VAC	A-4545137
Power Supply, 24V 96W, 240V	A-4556831

Routine/Preventative Maintenance

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

- Check and tighten all fasteners that secure the light strips to the frame and the frame to the backboard; replace defective hardware as required.
- Check the electrical components for proper connection and any signs of corrosion.

4 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.

United States & Canada: 1-800-DAK-TRON (325-8766)

Outside the U.S. & Canada: +1-605-275-1040

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.

- a. Package the old part in the same shipping materials in which the replacement part arrived.
- b. Fill out and attach the enclosed UPS shipping document.
- c. 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 Daktronics Customer Service.

United States & Canada: 1-800-DAK-TRON (325-8766)

Outside the U.S. & Canada: +1-605-275-1040

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.

This page intentionally left blank.

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
Electrical Install Details, LED Light Strips.....	DWG-191771
Connection Details: LED Light Strip Controller.....	DWG-191995
Riser Diagram: HS Light Strip Cntrl Installation.....	DWG-304654
Connection Detail, LED Light Strip Controller	DWG-3285852
Schematic; Light Strip Controller.....	DWG-4551814
Assembly; 48" Amber Light Strip	DWG-4638145
Specs; Universal Backboard Lights Strips	DWG-4662008
Field Assembly; Universal Light Strips	DWG-4662021
Mounting; Universal Backboard Light Strips.....	DWG-4662022
Mech/Elec Specs-Light Strip Controller.....	DWG-4662522

This page intentionally left blank.

KEY: 0 = WIRE NOT CONNECTED 1 = WIRE IS CONNECTED TO ANY GROUND PIN (1,4,7,10)
J19 ADDRESS AND COLUMN SELECT JACK

	PIN 8	PIN 6	PIN 5	PIN 3	PIN 2
1	0	0	0	0	1
2	0	0	0	1	0
3	0	0	0	1	1
4	0	0	1	0	0
5	0	0	1	0	1
6	0	0	1	1	0
7	0	0	1	1	1
8	0	1	0	0	0
9	0	1	0	0	1
10	0	1	0	1	0
11	0	1	0	1	1
12	0	1	1	0	0
13	0	1	1	0	1
14	0	1	1	1	0
15	0	1	1	1	1
16	1	0	0	0	0

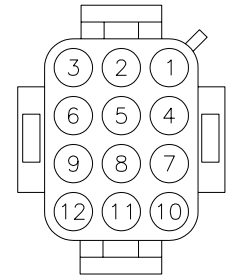
	PIN 8	PIN 6	PIN 5	PIN 3	PIN 2
17	1	0	0	0	1
18	1	0	0	1	0
19	1	0	0	1	1
20	1	0	1	0	0
21	1	0	1	0	1
22	1	0	1	1	0
23	1	0	1	1	1
24	1	1	0	0	0
25	1	1	0	0	1
26	1	1	0	1	0
27	1	1	0	1	1
28	1	1	1	0	0
29	1	1	1	0	1
30	1	1	1	1	0
31	1	1	1	1	1

TIME OF DAY SELECT

DISABLE	PIN 9
ENABLE	0

COLUMN SELECT

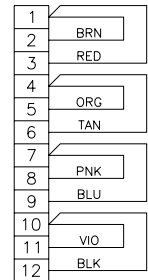
COLUMNS 5-8	PIN 12	PIN 11
COLUMNS 1-4	0	0
COLUMNS 9-12	0	1
COLUMNS 13-16	1	0
	1	1



ADDRESS PLUG
WIRE SIDE

WIRING DIAGRAM

ADDRESS PLUG
WITH ALL WIRES
CONNECTED



J17 MAIN	
PIN	FUNCTION
1	SIG-P
2	SIG-N
3	GND-N
4	CLOUT-P
5	CLOUT-N
6	16VAC-N
7	GND-N
8	EARTH-N
9	16VAC-P
10	GND-N
11	SWIN-P
12	SWIN-N

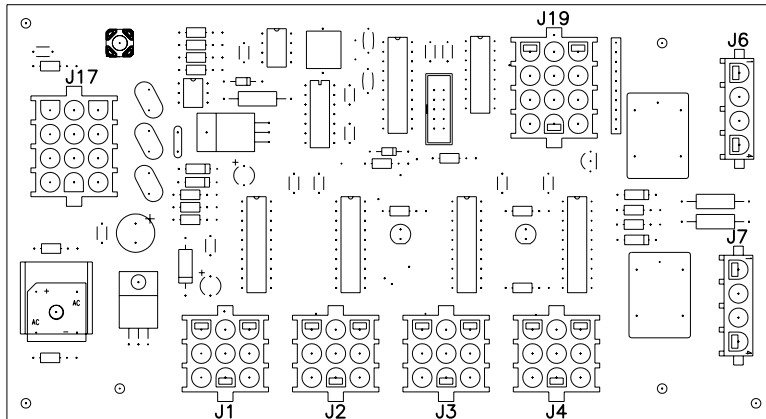
J1-4 DIGIT	
PIN	FUNCTION
1	SEGC-N
2	SEGB-N
3	SEGA-N
4	SEGF-N
5	SEGE-N
6	SEGD-N
7	+VCC-P
8	SEGH-N
9	SEGG-N

J19 ADDRESS	
PIN	FUNCTION
1	GND-N
2	ADD0-N
3	ADD1-N
4	GND-N
5	ADD2-N
6	ADD3-N
7	GND-N
8	ADD4-N
9	ADD5-N
10	GND-N
11	COLS1-N
12	COLS2-N

J6 RELAY	
PIN	FUNCTION
1	HORNOUT-N
2	AUXOUT-N
3	120SW-P
4	120SW-N

J7 RELAY	
PIN	FUNCTION
1	N/C
2	AUXOUT-N
3	120SW-P
4	120SW-N

OP-1150-0130 UNCOATED OR OP-1150-0131
COATED 4 COLUMN LED DRIVER II



NOTE

-WITH NO ADDRESS PINS SELECTED THE DRIVER WILL DEFAULT TO A/S 4000 PROTOCOL

-COLUMN SELECT PINS WORK FOR EITHER A/S 4000 OR A/S 5000 PROTOCOL

-DRIVER WILL DEFAULT TO COLUMNS 5-8

-GREEN LED INDICATES THE DRIVER HAS POWER

-RED LED WILL BE ON OR BLINKING WHEN THE DRIVER IS RECEIVING SIGNAL

-REDRIVE CIRCUIT IS PROCESSOR REFRESHED (REFER TO DWG A-128429 FOR FURTHER INFORMATION ON THE CURRENT LOOP REDRIVE CIRCUIT SPECIFICATIONS)

ALSO, COLUMN SELECT #1 MAKES THESE CHANGES:

INPUT DATA DIGIT 5, SEGMENT H IS SENT TO DIGIT OUTPUT NO. 1, SEGMENT H.
 INPUT DATA DIGIT 9, SEGMENT H IS SENT TO DIGIT OUTPUT NO. 2, SEGMENT H.

	COLUMN SELECT 0 NO JUMPER CONNECTIONS				COLUMN SELECT 1 CONNECT J19 PIN 10 TO 11				COLUMN SELECT 2 CONNECT J19 PIN 10 TO 12				COLUMN SELECT 3 CONNECT J19 PIN 10 TO 11&12			
	5	6	7	8	1	2	3	4	9	10	11	12	13	14	15	16
DATA INPUT DIGIT NUMBER																
DIGIT OUTPUT CONNECTOR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

REV.	DATE	DESCRIPTION	BY	APPR.
3	21 DEC 00	ADDED HORN SEGMENT INFORMATION	EB	
2	2 OCT 00	CHANGED TIME OF DAY ENABLE TO DISABLE (0) AND ENABLE (1)	NSW	
1	29 SEP 00	REMOVED "STAND ALONE" FROM WORDING FOR TIME OF DAY ENABLE.	AVB	

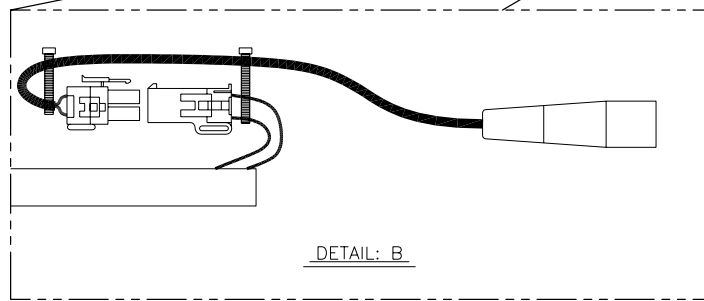
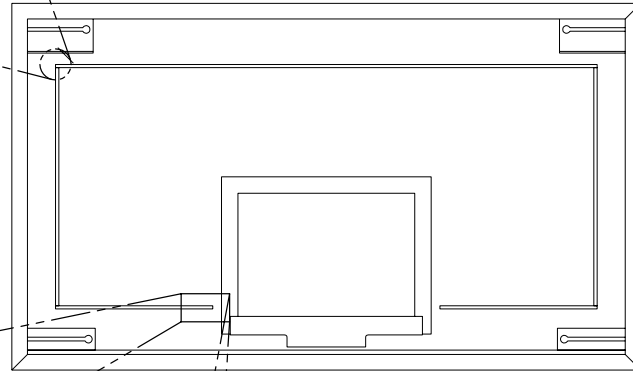
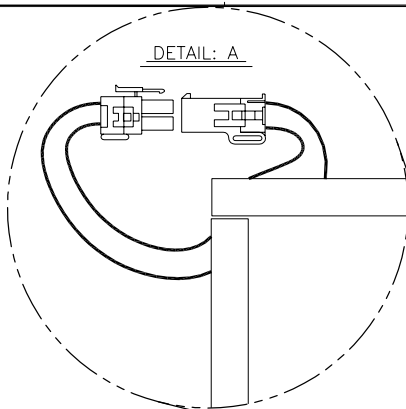
DAKTRONICS, INC. BROOKINGS, SD 57006	
PROJ:	
TITLE:	4 COLUMN LED DRIVER II; SPECIFICATIONS
DES. BY:	EB
DRAWN BY:	E BRAVEK
DATE:	08 NOV 99
REVISION	APPR. BY:
03	NONE
1150-R04A-123783	

NOTES:

THIS DRAWING IS FOR ELECTRICAL CONNECTIONS BETWEEN THE LIGHT STRIPS. THESE STEPS ARE DONE AFTER THE LIGHT STRIPS ARE MOUNTED TO THE BACKBOARD. FOR MOUNTING OF LIGHT STRIPS TO BACKBOARD REFER TO MECHANICAL DRAWING INCLUDED WITH MOUNTING HARDWARE.

INSTALLATION STEPS:

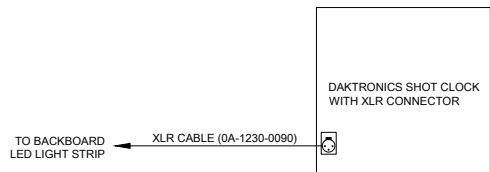
1. CONNECT THE PLUG AND JACK IN ALL FOUR CORNERS OF THE BACKBOARD LED LIGHT STRIP PER DETAIL "A". USE CABLE TIES INCLUDED TO NEATLY COIL AND SECURE WIRES. TRIM CABLE TIES.
2. CONNECT THE XLR CABLE TO THE LIGHT STRIPS PER DETAIL "B". THE CABLE CAN BE CONNECTED TO EITHER OF THE BOTTOM, INSIDE ENDS OF THE LIGHT STRIPS. USE CABLE TIES INCLUDED TO SECURE WIRES AS SHOWN.
3. CONNECT TO LIGHT STRIP CONTROLLER BOX OR SHOT CLOCK (IF SHOT CLOCK IS EQUIPPED WITH 3 PIN XLR) USING XLR TO XLR CABLE.



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 2003 DAKTRONICS, INC.			
DAKTRONICS, INC. BROOKINGS, SD 57006			
PROJ:			
TITLE: ELECTRICAL INSTALL DETAILS; LED LIGHT STRIPS			
DES. BY: CBRECZI		DRAWN BY: CBRECZI	
REVISION		DATE: 07 JUL 03	
00	APPR. BY:	SCALE: 1=1	1237-R01B-191771

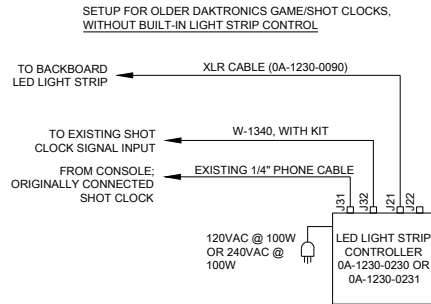
REV.	DATE	DESCRIPTION	BY	APPR.

DAKTRONICS SHOT CLOCKS WITH 3 PIN XLR CONNECTOR
 ORDER STANDARD CABLE BELOW WITH LIGHT STRIP CHOICE.



-CONNECT TO THE LED LIGHT STRIP BY CONNECTING THE 3 PIN XLR TO 3 PIN XLR CABLE TO THE XLR JACK ON THE SHOT CLOCK. CONNECT THE OTHER END TO THE 3 PIN XLR ON THE LED LIGHT STRIP.

ALLSPORT 5000 SERIES CONSOLE CONNECTION TO BACKBOARD LED LIGHT STRIP
 0A-1230-0233 KIT (120VAC) OR 0A-1230-0234 (240VAC), INCLUDES ONE (1) CONTROLLER AND CABLES.

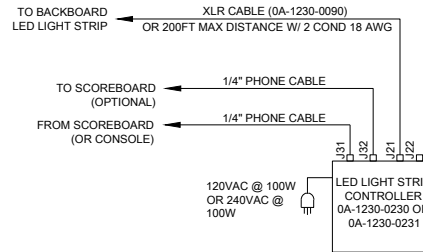


-MOUNT CONTROLLER TO BACK OF THE SHOT CLOCK OR CLOSE NEARBY ON THE BACKBOARD STRUCTURE USING THE BRACKETS AND HARDWARE SUPPLIED.

-MOVE SIGNAL CONNECTION ORIGINALLY GOING TO THE SHOT CLOCK TO J31 ON THE LED LIGHT STRIP CONTROLLER. USE THE 10' 1/2\"/>

-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.

SETUP FOR DIRECT CONNECTION FROM LOCAL SCOREBOARD OR ALLSPORT CONSOLE.



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

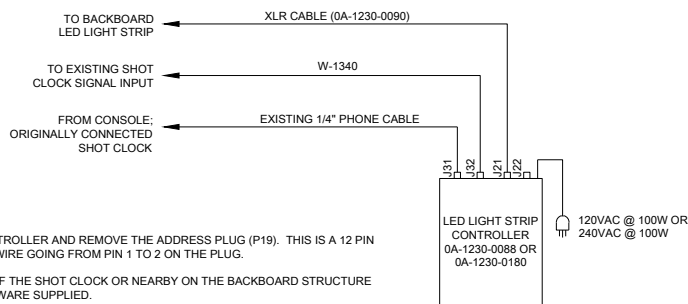
-INSTALL WIRING FROM ALLSPORT CONSOLE OUTPUT (OR SCOREBOARD), AND WIRING TO LOCAL SCOREBOARD (OPTIONAL).

-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 5500 MCP/ COLOR SMART LIGHT STRIP
 0A-1389-0106 KIT (120VAC) INCLUDES ONE (1) CONTROLLER AND CABLES.

SAME SETUP CHOICES AS ALLSPORT 5000 DETAIL. ONLY DIFFERENCE IS THE 0A-1389-0081 CONTROLLER PART NUMBER. (120VAC ONLY)

ALLSPORT 4000 SERIES OR PROSPORT 6000 WITH SMART CLOCK CONSOLE CONNECTION TO BACKBOARD LED LIGHT STRIP
 0A-1230-0091 KIT (120VAC) OR 0A-1230-0181 (240VAC), INCLUDES ONE (1) CONTROLLER AND CABLES.



-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.

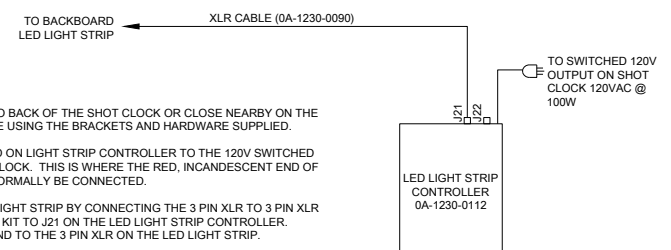
-MOUNT CONTROLLER TO BACK OF THE SHOT CLOCK OR NEARBY ON THE BACKBOARD STRUCTURE USING THE BRACKETS AND HARDWARE SUPPLIED.

-MOVE SIGNAL CONNECTION ORIGINALLY GOING TO THE SHOT CLOCK TO J31 ON THE LED LIGHT STRIP CONTROLLER. USE THE 10' 1/2\"/>

-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.

OTHER DAKTRONICS CONTROL SYSTEMS, AND NON-DAKTRONICS SYSTEMS.

0A-1230-0115 SWITCHED 120VAC KIT, INCLUDES ONE (1) CONTROLLER AND CABLES.

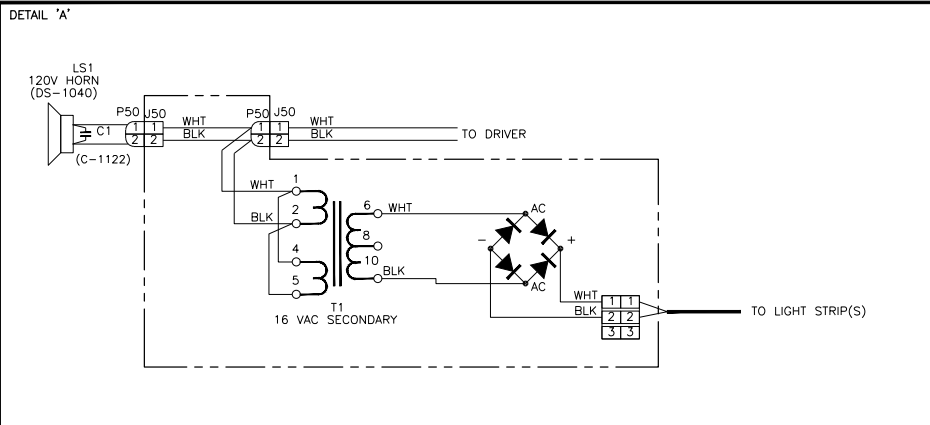


-MOUNT CONTROLLER TO BACK OF THE SHOT CLOCK OR CLOSE NEARBY ON THE BACKBOARD STRUCTURE USING THE BRACKETS AND HARDWARE SUPPLIED.

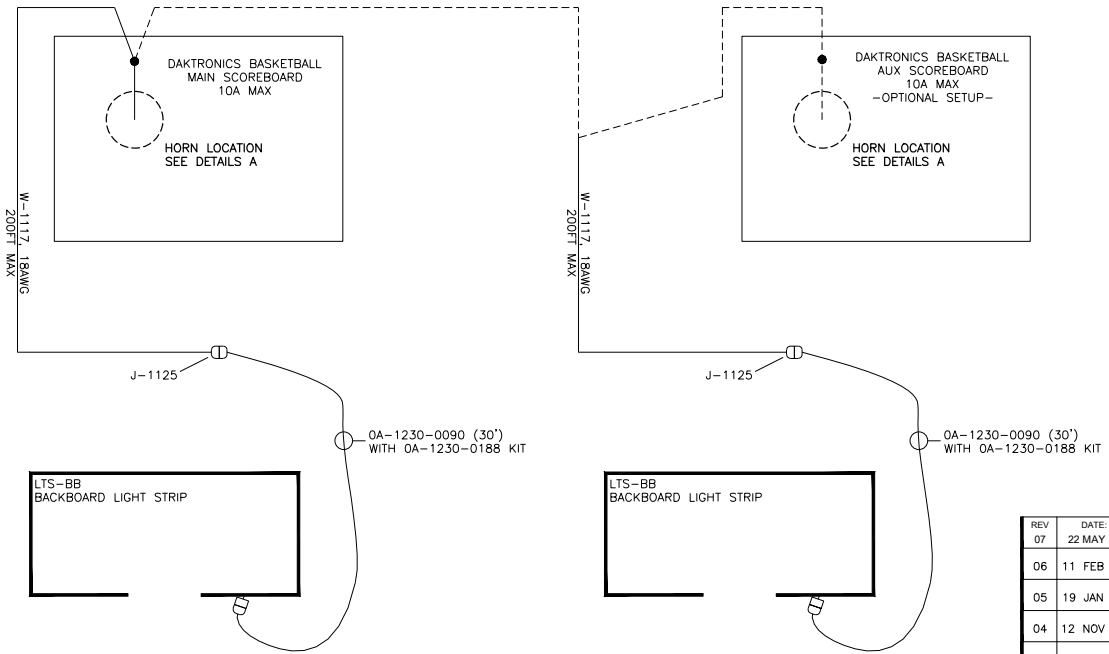
-CONNECT POWER CORD ON LIGHT STRIP CONTROLLER TO THE 120V SWITCHED OUTPUT ON THE SHOT CLOCK. THIS IS WHERE THE RED, INCANDESCENT END OF PERIOD LIGHT WOULD NORMALLY BE CONNECTED.

-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.

		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.	
BROOKINGS, SD 57006 DO NOT SCALE DRAWING		PROJ: TITLE: CONNECTION DETAILS: LED LIGHT STRIP CONTROLLER	
REV 03 DATE: 22 JUL 20 BY: JSF	UPDATED LIGHT STRIP KIT PART NUMBERS FOR NEW LIGHT STRIPS.	DESIGN: CBRECZI SCALE: 1=1	DRAWN: CBRECZI DATE: 09 JUL 03
REV 02 DATE: 31 MAY 12 BY: KZB	UPDATED LAYOUT, BORDER, AND SETUP FOR DIRECT CONNECTION FROM LOCAL SCOREBOARD OR ALLSPORT	SHEET 03 REV P1237	JOB NO: R-01-B FUNC-TYPE-SIZE: 191995
REV 01 DATE: 26 FEB 10 BY: MWM	UPDATE TOP LEFT DETAIL TO SHOW CONTROL DIRECT FROM ALLSPORT OR SCBD		



PARTS	
0A-1230-0188	HS VHI LIGHTSTRIP KIT
ED-17823	INSTALLATION GUIDE



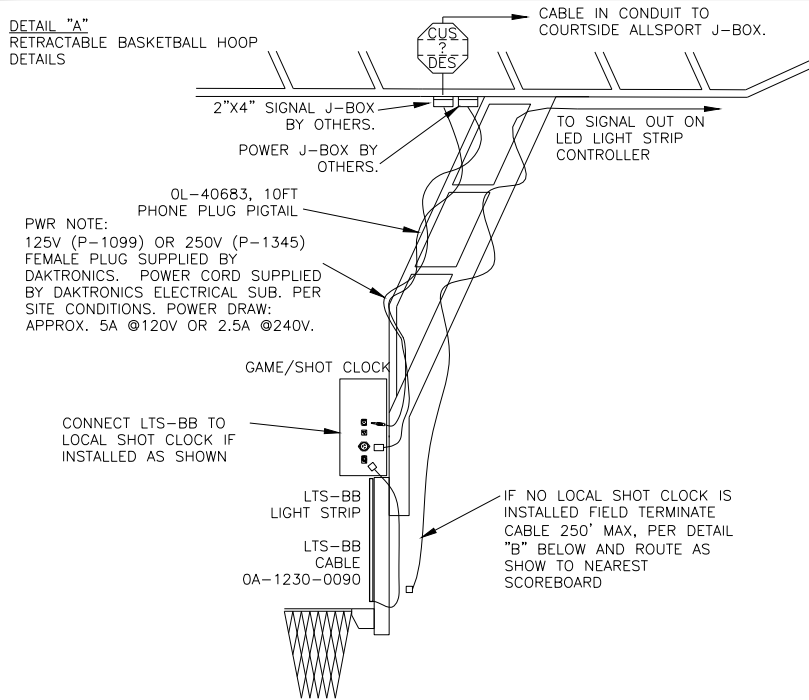
INSTALLATION DETAILS

1. TURN OFF POWER TO SCOREBOARD(S)
2. RUN WIRE TO BOTH LIGHT STRIPS FROM SCBD(S)
3. MOUNT KIT IN SCOREBOARD WITH RIVETS, NEAR HORN LOCATION
4. CONNECT J50 AND P50 AT HORN LOCATION
5. ATTACH WIRE TO WHITE TERMINAL BLOCK ON KIT TRAY BLACK TO 2 (-), RED TO 1 (+)
6. DRILL OR KNOCKOUT 7/8" POWER OUT HOLE ON TOP OF SCBD
7. TERMINATE OTHER END OF W-1117 WIRES TO J-1125
PIN 3: BLACK (-)
PIN 2: RED (+)
8. PLUG J-1125 INTO LIGHT STRIP CABLE AS NEEDED
9. TURN ON POWER TO SCBD AND TEST LIGHT STRIPS BY SOUNDING THE HORN. LIGHT STRIPS WILL ONLY ACTIVATE WHEN HORN SOUNDS.

REV	DATE	CHANGED	BY:
07	22 MAY 12	CHANGED W-1560 TO 0A-1230-0090 @30' ADDED TO INSTALLATION DETAILS B UPDATED TITLE BLOCK AND BORDER	GUM
06	11 FEB 09	FIXED PART NUMBER TYPO	KZB
05	19 JAN 09	UPDATED DESIGN	KZB
04	12 NOV 08	RMV E-1141	KZB
03	06 NOV 08	ADDED MORE DETAILS	KZB
02	29 JAN 08	ADDED 24VAC TRANSFORMER	KZB
01	13 JUL 07	FIXED PART NUMBER TO 0A-1230-0175	KZB

REV 08	DATE 22 JUL 20	UPDATED BACKBOARD LIGHT STRIPS FROM BB-2135 TO LTS-BB	BY: JSF
		<small>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 2012 DAKTRONICS, INC.</small>	
PROJ: TUFF SPORT SCOREBOARDS			
TITLE: RISER DIAGRAM: HS LIGHT STRIP CNTLR INSTALLATION			
DESIGN:	DRAWN: KBIERBA	DATE: 16 MAY 07	
SCALE: NONE			
SHEET	REV 08	JOB NO: P1237	FUNC-TYPE-SIZE R-01-B
			304654

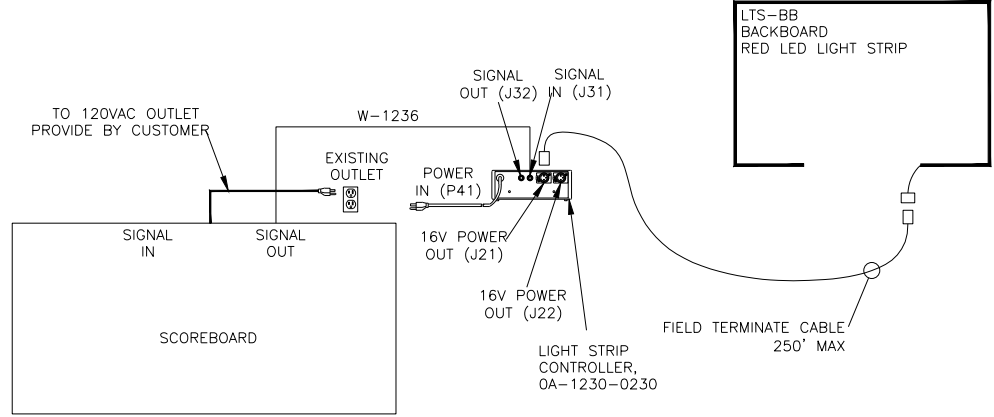
DETAIL "A"
RETRACTABLE BASKETBALL HOOP
DETAILS



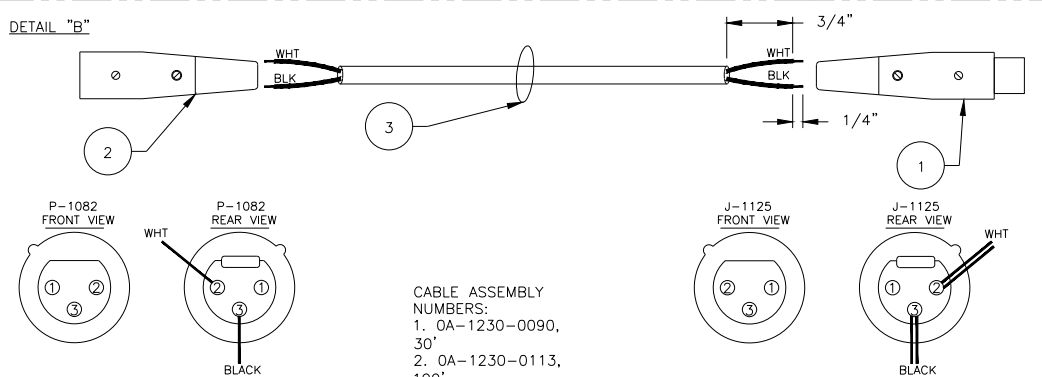
PWR NOTE:
125V (P-1099) OR 250V (P-1345)
FEMALE PLUG SUPPLIED BY
DAKTRONICS. POWER CORD SUPPLIED
BY DAKTRONICS ELECTRICAL SUB. PER
SITE CONDITIONS. POWER DRAW:
APPROX. 5A @120V OR 2.5A @240V.

CONNECT LTS-BB TO
LOCAL SHOT CLOCK IF
INSTALLED AS SHOWN

IF NO LOCAL SHOT CLOCK IS
INSTALLED FIELD TERMINATE
CABLE 250' MAX, PER DETAIL
"B" BELOW AND ROUTE AS
SHOW TO NEAREST
SCOREBOARD



DETAIL "B"



**CABLE ASSEMBLY
NUMBERS:**
1. OA-1230-0090,
30'
2. OA-1230-0113,
100'

INSTRUCTIONS

1. STRIP 3/4" OF JACKET OFF EACH END OF W-1351.
2. STRIP 1/4" OF WHITE AND BLACK WIRES ON BOTH ENDS.
3. SLIDE THE JACKET FOR J-1125 OVER ONE END. SOLDER WHT WIRE TO PIN 2 OF J-1125. SOLDER BLK WIRE TO PIN 3 OF J-1125.
4. SLIDE JACKET UP TO THE JACK AND SECURE.
5. TAKE THE JACKET FROM P-1082 AND SLIDE OVER OTHER END OF CABLE SOLDER WHT WIRE TO PIN 2 OF P-1082. SOLDER BLK WIRE TO PIN 3 OF P-1082.
6. SLIDE THE JACKET UP TO THE PLUG AND SECURE.

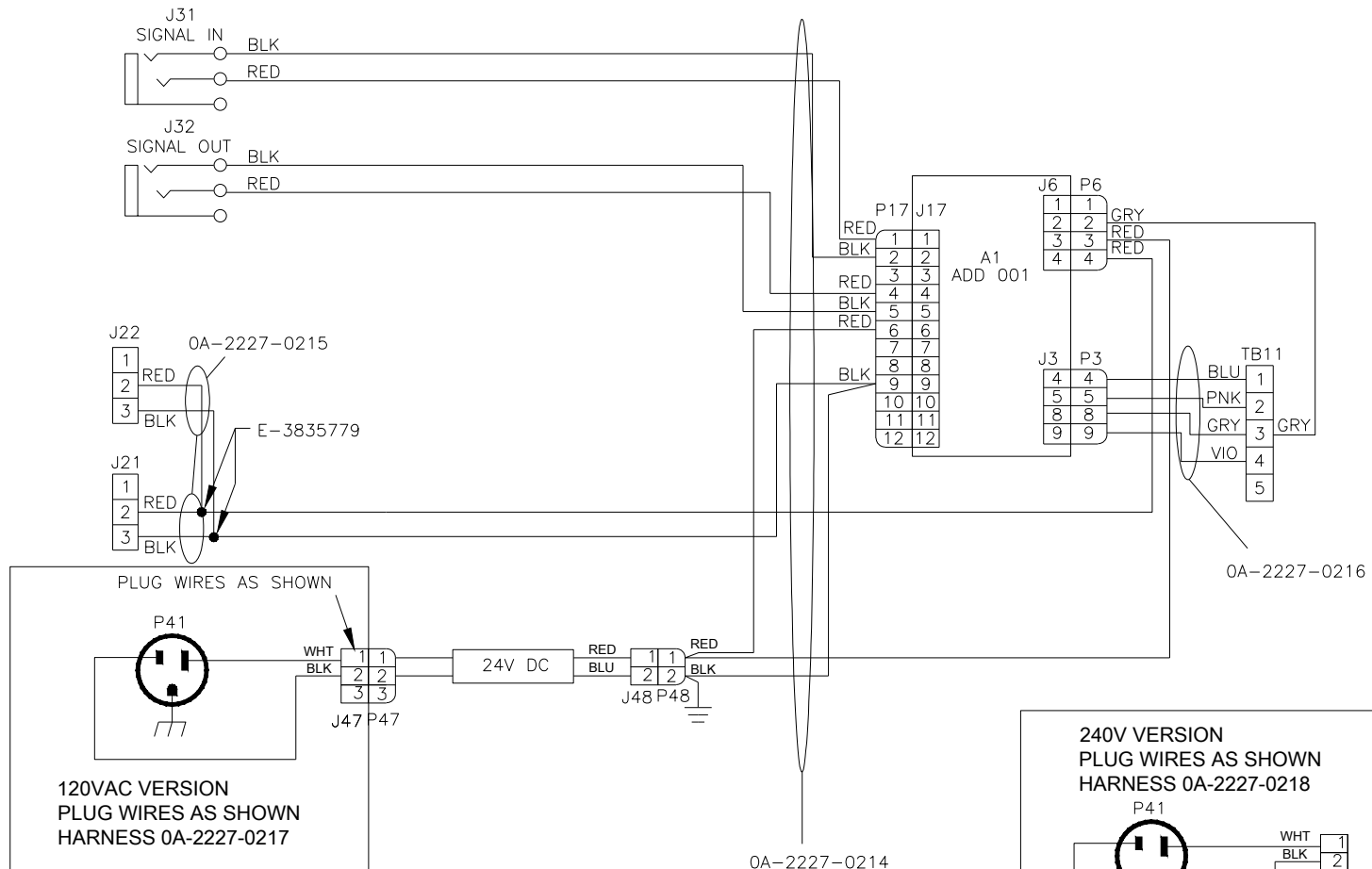
OA-1230-0090 BOM - ALL PARTS ROHS COMPLIANT					
ITEM	QTY*	UNITS	DESCRIPTION	DAK PART #	PREFERRED MFR
1	1	EA	JACK; 3 PIN FEM, XLR, SLDR	J-1125	NEUTRIK NC3FX-B
2	1	EA	PLUG; 3 PIN MAL, XLR, SLDR	P-1082	NEUTRIK NC3MX-B
3	BOM	IN	CABLE, 2 COND 18AWG SO TYPE CABLE	W-1351	ANY ANY

- CONTROLLER NEEDS TO BE FASTENED TO WALL OR SHELF LOCAL TO THE SCOREBOARD
- 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.
- REFERENCE ED-17825 FOR INSTALLATION
- LTS-BB LIGHT STRIP CONTROLLER;
OA-1230-0230
OA-1230-0233 KIT
- 230VOLT,
OA-1230-0231
- COLORSMART CONTROLLER,
OA-1389-0081
OA-1389-0106 KIT

REV	DATE	DESCRIPTION	BY
03	22 JUL 20	UPDATED BB-2135 TO LTS-BB AND IN DETAIL B CORRECTED THE BOM TABLE FOR THE W- TO W-1351	JSF
02	20 JUN 17	UPDATED LIGHT STRAP CONTROLLER PART NUMBER	NCB
01	18 NOV 16	CREATED TEXT FOR LIGHT STRAP CONTROLLER	NCB

DAKTRONICS
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 2016 DAKTRONICS, INC. (USA)

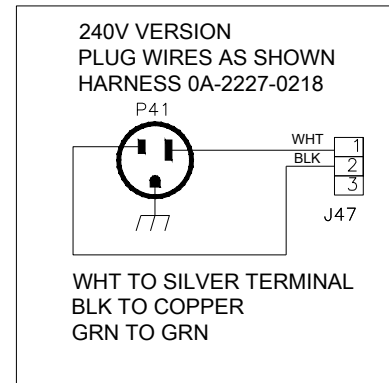
PROJECT: CONNECTION DETAIL BB-2135 TO REMOTE CONTROLLER
TITLE: CONNECTION DETAIL, LED LIGHT STRIP CONTROLLER
DATE: 8 FEB 16 DIM UNITS: INCHES [MILLIMETERS] SHEET 03
SCALE: NONE DO NOT SCALE DRAWING
DESIGN: HBONER JOB NO. P1237 FUNC - TYPE - SIZE R-01-B
DRAWN: MRUFER 3285852



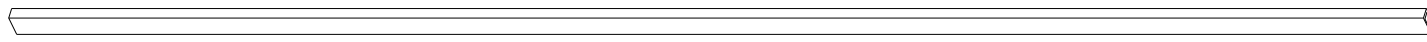
HORN AND INDICATOR SEGMENTS

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

NOTE
 DEFAULT SETTING IS GAME
 CLOCK=0, TB-11 PIN3.
 TO ENABLE OTHER FUNCTIONS
 CHANGE CONNECTION OF
 GRAY WIRE AT TB-11.

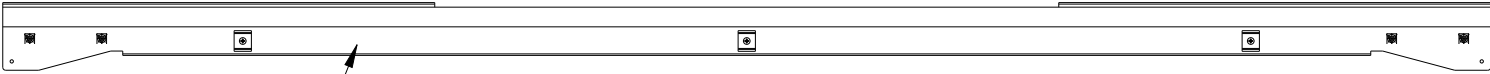


		<small>THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESS WRITTEN CONSENT OF DAKTRONICS, INC. OR ITS WHOLLY OWNED SUBSIDIARIES. COPYRIGHT 2019 DAKTRONICS, INC. (USA)</small>			
PROJECT: TUFF SPORT SCOREBOARDS					
TITLE: SCHEMATIC; LIGHT STRIP CONTROLLER					
DATE: 1 NOV 19		DIM UNITS: INCHES [MILLIMETERS]		SHEET REV	
SCALE: NTS		DO NOT SCALE DRAWING		00	
DESIGN: JFIXSEN		JOB NO. P1237		FUNC - TYPE - SIZE R - 03 - A	
DRAWN: JFIXSEN		4551814			



ROTATED VIEW
DS-4263054
SCALE 1/6

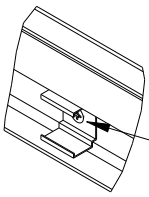
- MANUFACTURING:**
 - GATHER THE FOLLOWING AND PACKAGE FOR SHIPMENT
 * DS-4263054 @1
 * HS-3763489 @2
 (2 BAGS OF 2 CLIPS, 4 CLIPS TOTAL)
 * HC-1457 @4
 * HC-1238 @4
 * HE-1318 @10
 * 0A-1166-0012 @1
 * 0A-1237-2032 @1



STEP 1
FIELD ASSEMBLY
SCALE 1/8



SIDE VIEW

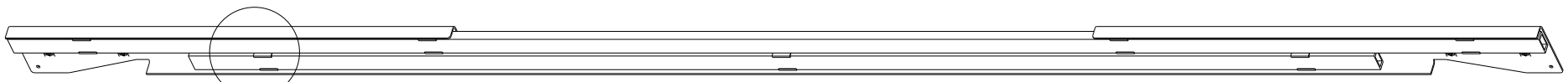


- 4 3 2
- 3 3 3

DETAIL A
ROTATED VIEW
CLIP ATTACHMENT
SCALE 1/3

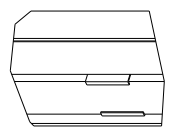
NOTES:
 - ATTACH 3 CLIPS TO TOP LIGHT STRIP HORIZONTAL USING #6 SCREWS AND NUTS

0A-1237-2098			
INDEX	NAME	QTY	DESCRIPTION
1	OS-4606198	1	TOP HORIZ; EOP BACKBOARD LIGHT STRIPS
2	HC-1238	3	NUT, #6-32 HEX KEPS, ZN PLTD
3	HC-1457	3	MACH SCR,#6-32 X 0.375,PHIL FLAT HEAD,UNDERCUT
4	HS-3763489	3	CHROMAPATH SLIM BLACK U-CLIP PAIR

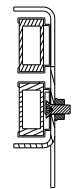


STEP 2
FIELD ASSEMBLY
ROTATED VIEW
SCALE 1/6

SEE DETAIL A



DETAIL A
SCALE 1/3



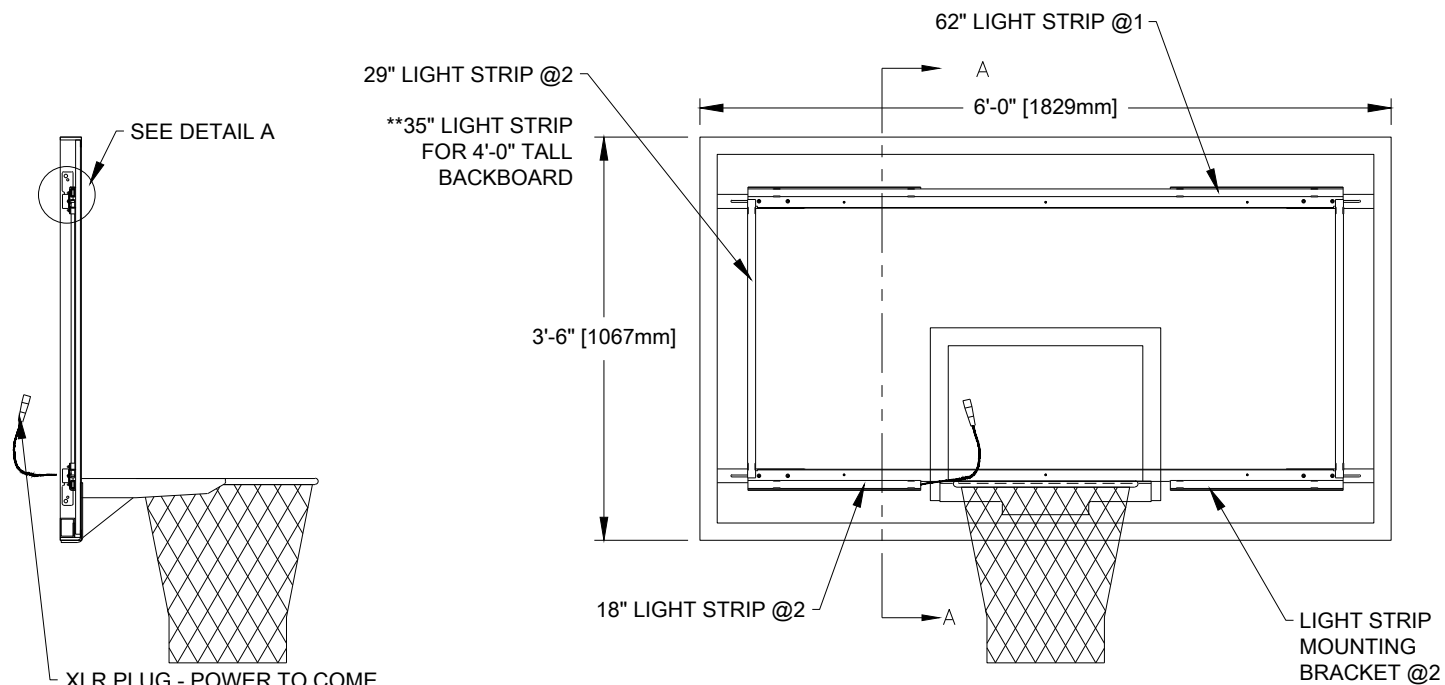
SECTION A-A
END VIEW
SCALE 1/3

NOTES:
 - ATTACH 48" LIGHT STRIP INTO 3 CLIPS
 - MOUNT LIGHT STRIP ASSEMBLY TO BACKBOARD

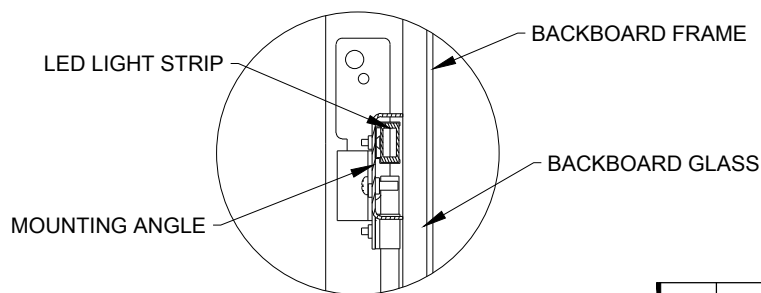
01	30 JUN 23	PER CN-162460, ADDED NUT FOR MOUNTING	KDM 12059
REV:	DATE:	DESCRIPTION:	BY:

DAKTRONICS
 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 2023 DAKTRONICS, INC. (USA)

PROJECT: TUFFSPORT SCOREBOARDS			
TITLE: ASSEMBLY; 48" AMBER LIGHT STRIP			
DATE: 30-JUN-23	DIM UNITS: INCHES [MILLIMETERS]	SHEET	REV
SCALE: 1/8	DO NOT SCALE DRAWING		01
DESIGN: DOPPELT	JOB NO. P1237	FUNC - TYPE - SIZE E - 10 - A	4638145
DRAWN: DOPPELT			



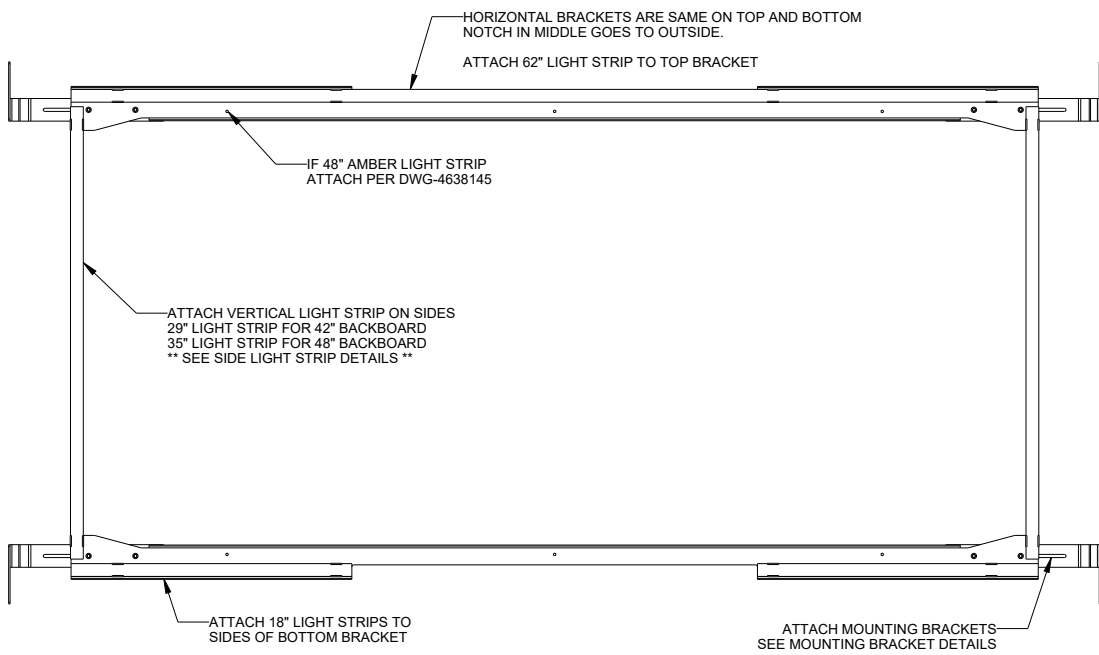
SECTION: A-A



DETAIL: A

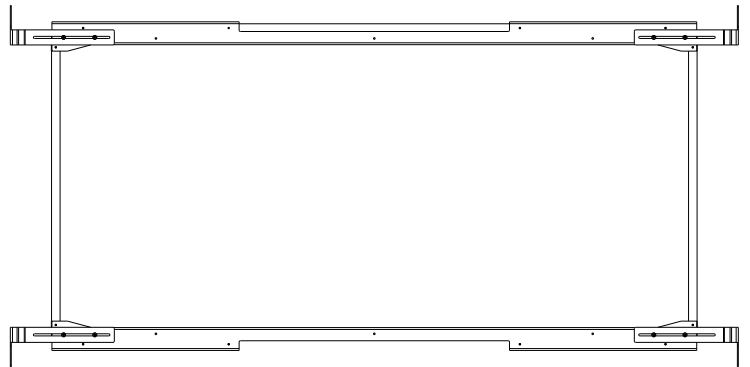
- | |
|--|
| <p>ELECTRICAL SPECS FOR LED LIGHT STRIP</p> <ul style="list-style-type: none"> - PRIMARY VOLTAGE = 120VAC - SECONDARY VOLTAGE = 16VDC - POWER = 100W |
|--|

REV 01	DATE: 27 JUL 23	UPDATED LIGHT STRIPE MOUNTING BRACKET	BY: KDM
		<p>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 2020 DAKTRONICS, INC. (USA)</p>	
PROJECT: INDOOR SCOREBOARDS			
TITLE: SPECS; UNIVERSAL BACKBOARD LIGHTS STRIPS			
DATE: 07 APR 20	DIM UNITS: INCHES [MILLIMETERS]	SHEET	REV 01
SCALE: 1/20	DO NOT SCALE DRAWING		
DESIGN: DOPPELT	JOB NO. P1237	FUNC - TYPE - SIZE F - 10 - A	4662008
DRAWN: DOPPELT			



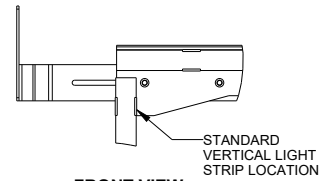
**FRONT VIEW
LIGHT STRIP ASSEMBLY**
SCALE 1/8

- NOTES:**
 ASSEMBLE BACKBOARD LIGHT STRIP ASSEMBLY AS SHOWN.
 - ATTACH LIGHT STRIPS TO BRACKETS.
 * ATTACH 48" AMBER LIGHT STRIP PER DWG-4638145.
 - ATTACH MOUNTING BRACKETS.
 - SEE NOTES FOR OPTIONS.

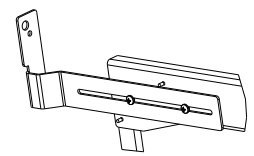


REAR VIEW
SCALE 1/12

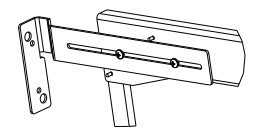
SIDE LIGHT STRIP DETAILS
 VERTICAL LIGHT STRIPS ARE ATTACHED TO END CLIP AS SHOWN



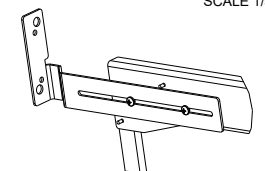
FRONT VIEW
SCALE 1/5



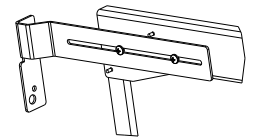
REAR ROTATED VIEW
USE THIS FOR GARED BACKBOARDS
 OPTIONAL BRACKET ORIENTATION
 SCALE 1/5



REAR ROTATED VIEW
 OPTIONAL BRACKET ORIENTATION
 SCALE 1/5



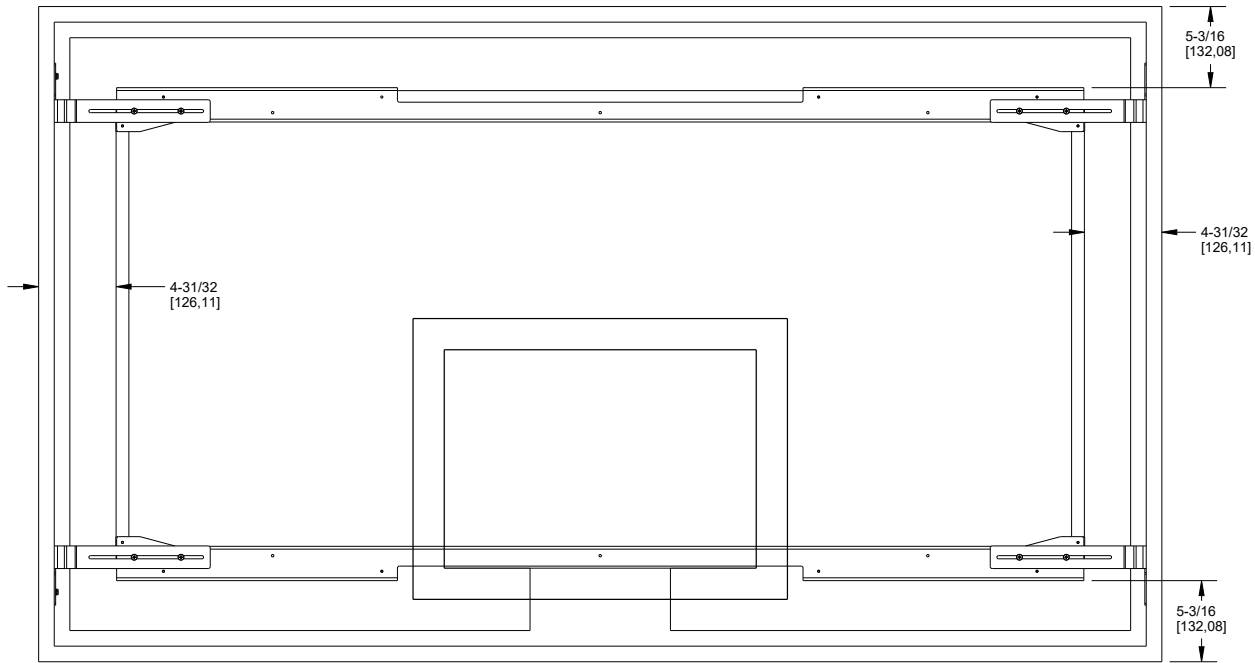
REAR ROTATED VIEW
 OPTIONAL BRACKET ORIENTATION
 SCALE 1/5



REAR ROTATED VIEW
 OPTIONAL BRACKET ORIENTATION
 SCALE 1/5

- MOUNTING BRACKET DETAILS:**
 - ATTACH CLIP ANGLES TO ENDS OF HORIZONTALS USING @10 SCREWS
 - TOP ORIENTATION SHOULD BE USED FOR GARED BACKBOARDS.
 - USE BRACKET ORIENTATION THAT WORKS BEST FOR MOUNTING TO BACKBOARD.

01	18 JUL 23	PER CN-162450, REMOVED OPTIONAL VERTICAL LOCATION OPTION UPDATED BRACKETS ON ROTATED DETAILS	KDM 12059
REV:	DATE:	DESCRIPTION:	BY:
<small>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 2023 DAKTRONICS, INC. (USA)</small>			
PROJECT: INDOOR SCOREBOARDS			
TITLE: FIELD ASSEMBLY; UNIVERSAL LIGHT STRIPS			
DATE: 17-JUL-23	DIM UNITS: INCHES (MILLIMETERS)	SHEET	REV
SCALE: 1/8	DO NOT SCALE DRAWING		01
DESIGN: DOPPELT	JOB NO. P1237	FUNC - TYPE - SIZE	
DRAWN: DOPPELT		E - 10 - B	4662021



REAR VIEW
SCALE 1/8

LIGHT STRIP ATTACHMENT:

- CENTER THE LIGHT STRIP ASSEMBLY VERTICALLY AND HORIZONTALLY.
- SPACING FROM PERIMETER MAY VARY FROM ABOVE BASED ON VERTICAL LIGHT STRIP PLACEMENT ON DRAWING 4662021.
- ANY BRACKET ORIENTATION CAN BE USED AS SHOWN IN DRAWING 4662021. ONLY CERTAIN ORIENTATION MAY WORK TO LINE UP WITH EXISTING HOLES.
- ATTACH LIGHT STRIPS AGAINST BACKBOARD GLASS WHEN POSSIBLE.
- TYPICAL ATTACHMENT IS PER DETAIL A.
- GARED BACKBOARD ATTACHMENT IS PER DETAIL B.
- IF BACKBOARD PERIMETER IS A TUBE, ATTACH BRACKETS TO PERIMETER USING TEK SCREWS.
- IF BACKBOARD PERIMETER IS ANGLE LIKE 1/4" METAL, ATTACH BRACKETS TO PERIMETER USING SCREWS AND NUTS IF POSSIBLE, DRILLING 0.203" TO LINE UP WITH MOUNTING BRACKETS AND ATTACH WITH #10 SCREWS AND NUTS.
- IF UNABLE TO ATTACH LIGHT STRIPS AGAINST OR NEAR GLASS DUE TO INTERFERENCE ATTACHMENT IS PER DETAIL C.

DETAIL A

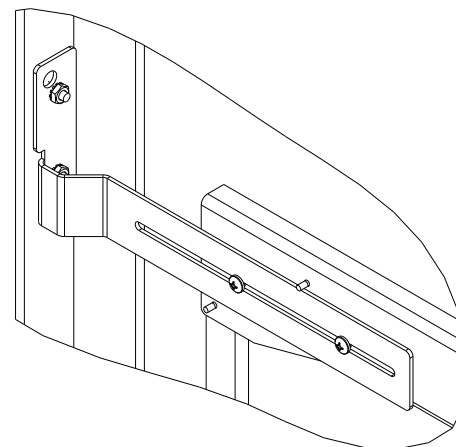
- ATTACH LIGHT STRIP ASSEMBLY TO BACKBOARD PERIMETER WITH APPROPRIATE HARDWARE:
 - * TEK SCREWS FOR TUBE PERIMETER
 - * #10 SCREWS AND NUTS FOR ANGLE PERIMETER

DETAIL B

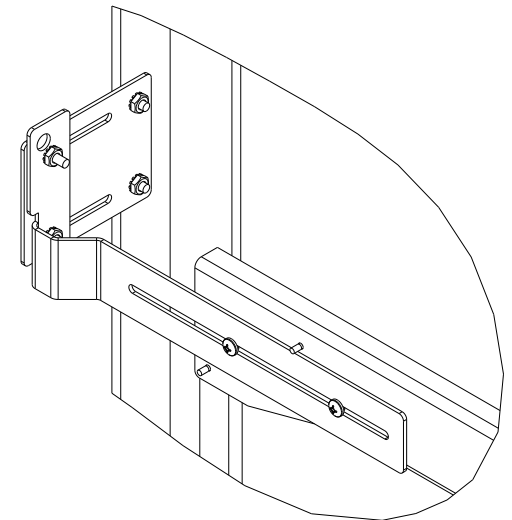
- ATTACH LIGHT STRIP ASSEMBLY TO PERIMETER USING EXISTING HOLES AND HARDWARE ON GARED BACKBOARD
- LARGER HOLES MAY BE USED FOR OTHER BACKBOARD BRANDS, HOLES MAY NEED TO BE DRILLED.

DETAIL C

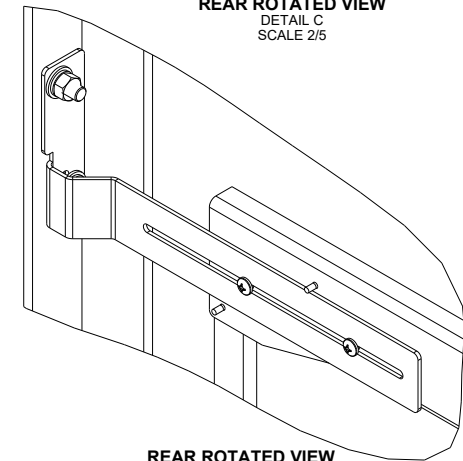
- ADJUSTABLE MOUNTING BRACKET IS ATTACHED TO MOUNTING BRACKETS TO SPACE LIGHT STRIPS BACK AWAY FROM GLASS BEHIND INTERFERENCE.
- ATTACH ADJUSTABLE MOUNTING BRACKET TO MOUNTING BRACKETS USING #10 SCREWS AND NUTS
- ATTACH ASSEMBLY TO BACKBOARD PERIMETER WITH APPROPRIATE HARDWARE:
 - * TEK SCREWS FOR TUBE PERIMETER
 - * #10 SCREWS AND NUTS FOR ANGLE PERIMETER




REAR ROTATED VIEW
DETAIL A
SCALE 2/5



REAR ROTATED VIEW
DETAIL C
SCALE 2/5



REAR ROTATED VIEW
GARED BACKBOARD ATTACHMENT
DETAIL B
SCALE 2/5

01	18 JUL 23	PER CN-162460, UPDATED MTG BRKT	KDM 12059
REV:	DATE:	DESCRIPTION:	BY:
 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 2023 DAKTRONICS, INC. (USA)			
PROJECT: INDOOR SCOREBOARDS			
TITLE: MOUNTING; UNIVERSAL BACKBOARD LIGHT STRIPS			
DATE: 17-JUL-23	DIM UNITS: INCHES [MILLIMETERS]	SHEET	REV
SCALE: 157/3600	DO NOT SCALE DRAWING		01
DESIGN: DOPPELT	JOB NO. P1237	FUNC - TYPE - SIZE	
DRAWN: DOPPELT		E - 10 - B	4662022

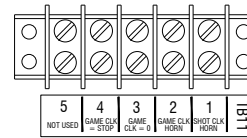
NOTES:

1. DEFAULT SETTING IS GAME CLOCK=0, TB-11 PIN3. TO ENABLE OTHER FUNCTIONS CHANGE CONNECTION OF GRAY WIRE AT TB-11.

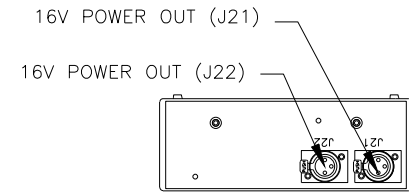
2. DO NOT WORK ON ENERGIZED COMPONENTS.

HORN AND INDICATOR SEGMENTS

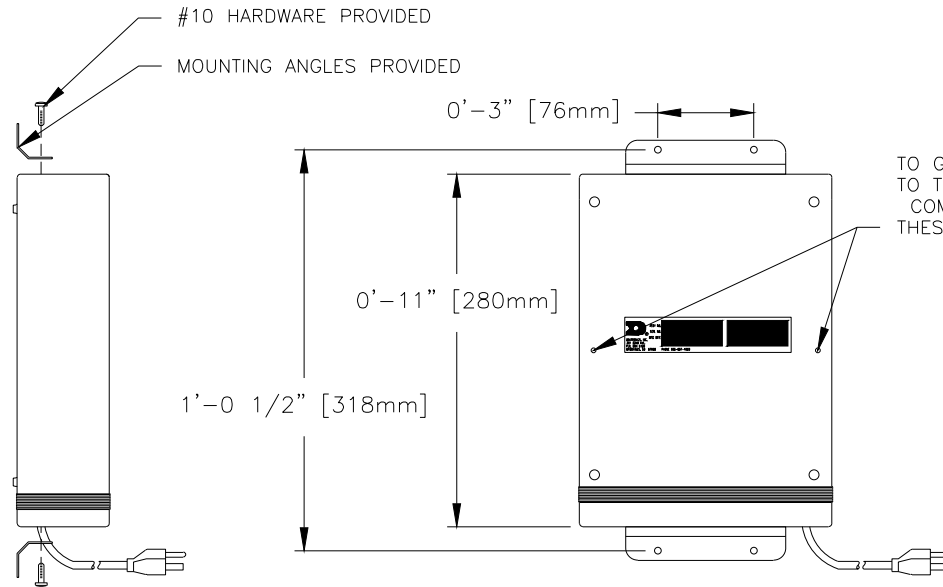
P3 PIN NO.	FUNCTION	TB11 POS.
4	SHOT CLOCK HORN	1
5	GAME CLOCK HORN	2
8	GAME CLOCK = 0	3
9	GAME CLOCK STOP	4



TERM BLOCK DETAIL
(3 X SCALE)



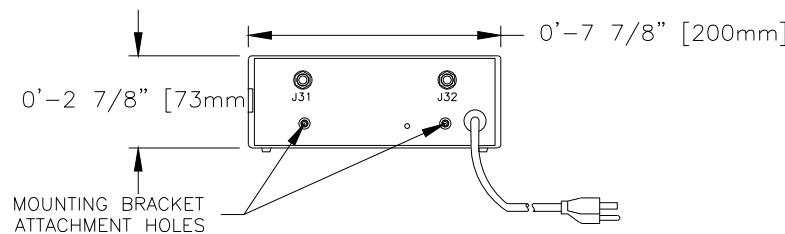
REAR VIEW



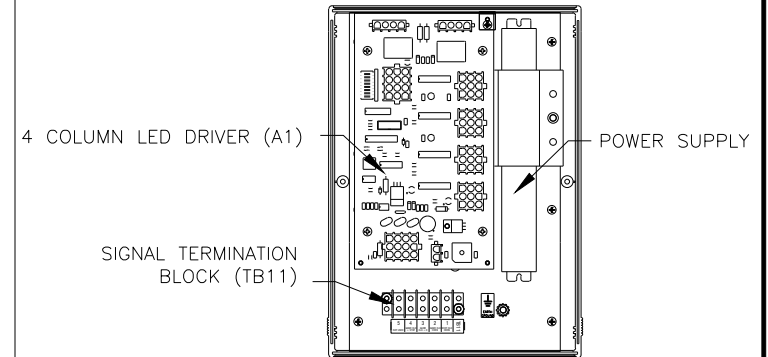
TOP VIEW

(SHOWN WITH MTG ANGLES ATTACHED)

SIDE VIEW

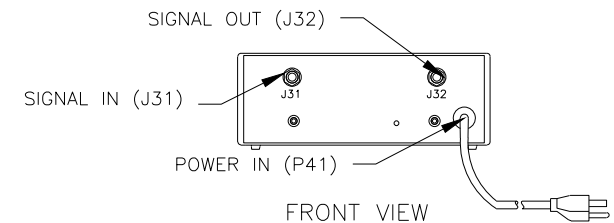


FRONT VIEW



TOP VIEW

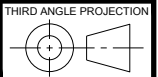
(WITH COVER REMOVED)



FRONT VIEW



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 2020 DAKTRONICS, INC. (USA)



PROJECT: INDOOR UNIFORM LED DIGITS			
TITLE: MECH/ELEC SPECS-LIGHT STRIP CONTROLLER			
DATE: 8 APR 20	DIM UNITS: INCHES [MILLIMETERS]	SHEET	REV
SCALE: 1=6	DO NOT SCALE DRAWING		00
DESIGN: CDOLSON	JOB NO. P1230	FUNC - TYPE - SIZE E - 10 - A	4662522
DRAWN: CDOLSON			

This page intentionally left blank.

B Daktronics Warranty & Limitation of Liability

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

This page intentionally left blank.

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", which may also be the Purchaser) 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 per Incoterms® 2020. 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 per Incoterms® 2020; 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 per Incoterms® 2020. 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;



DAKTRONICS WARRANTY & LIMITATION OF LIABILITY

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;
- 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

- A. 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.
- B. 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
- C. 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

- A. 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; Election of Remedies

- A. 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.
- B. Any dispute, controversy or claim arising from or related to this Warranty, the parties shall first attempt to settle through negotiations. In the event that no resolution is reached, then such dispute, controversy, or claim shall be resolved by final and binding arbitration under the Rules of Arbitration of the International Chamber of Commerce. The language of the arbitration

DAKTRONICS WARRANTY & LIMITATION OF LIABILITY

shall be English. The place of the arbitration shall be Sioux Falls, SD. A single arbitrator selected by the parties shall preside over the proceeding. If a single arbitrator cannot be agreed upon by the parties, each party shall select an arbitrator, and those arbitrators shall confer and agree on the appointed arbitrator to adjudicate the arbitration. The arbitrator shall have the power to grant any provisional or final remedy or relief that it deems appropriate, including conservatory measures and an award of attorneys' fees. The arbitrator shall make its decisions in accordance with applicable law. By agreeing to arbitration, the Parties do not intend to deprive any court of its jurisdiction to issue a pre-arbitral injunction, pre-arbitral attachment, or other order in aid of arbitration proceedings and the enforcement of any award. Without prejudice to such provisional remedies as may be available under the jurisdiction of a court, the arbitrator shall have full authority to grant provisional remedies and to direct the Parties to request that any court modify or vacate any temporary or preliminary relief issued by such court, and to award damages for the failure of any Party to respect the arbitrator's orders to that effect.

6. Availability of Extended Service Agreement

- A. 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).

Additional Terms applicable to sales outside of the United States

The following additional terms apply **only** where the installation site of the Equipment is located outside of the United States of America.

1. In the event that the installation site of the Equipment is in a country other than the U.S.A., then, notwithstanding Section 5 of the Warranty, where the selling entity is the entity listed in Column 1, then the governing law of this Warranty is the law of the jurisdiction listed in the corresponding row in Column 2 without regard to its conflict of law principles. Furthermore, if the selling entity is an entity listed in Column 1, then the place of arbitration is listed in the corresponding row in Column 3.

Column 1 (Selling Entity)	Column 2 (Governing Law)	Column 3 (Location of Arbitration)
Daktronics, Inc.	The state of Illinois	Chicago, IL, U.S.A.
Daktronics Canada, Inc.	The Province of Ontario, Canada	Toronto, Ontario, Canada
Daktronics UK Ltd.	England and Wales	Bristol, UK
Daktronics GmbH	The Federal Republic of Germany	Wiesbaden, Germany
Daktronics Hong Kong Limited	Hong Kong, Special Administrative Region of the P.R.C.	Hong Kong SAR
Daktronics Shanghai Co., Ltd.	The Peoples Republic of China	Shanghai, P.R.C.
Daktronics France, SARL	France	Paris, France
Daktronics Japan, Inc.	Japan	Tokyo, Japan
Daktronics International Limited	Macau, Special Administrative Region of the P.R.C.	Macau SAR
Daktronics Australia Pad Ltd	Australia	Sydney, Australia
Daktronics Singapore Pte. Ltd	Singapore	Singapore
Daktronics Brazil LTDA	Brazil	São Paulo, Brazil
Daktronics Spain S.L.U.	Spain	Madrid, Spain
Daktronics Belgium N. V	Belgium	Kruikeke, Belgium
Daktronics Ireland Co. Ltd.	Ireland	Dublin, Ireland

This page intentionally left blank.