

201 Daktronics Drive Brookings, SD 57006-5128 www.daktronics.com/support 800.325.8766



FCC Statement

Supplier Declaration of Conformity (SDoC)

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

Warning: The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

Industry Canada Regulatory Information

This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Inquiries

Contact Daktronics with any questions regarding our product compliance.

Mail:

Daktronics 201 Daktronics Dr. Brookings, SD 57006 USA

Phone:

800-325-8766

Website:

www.daktronics.com



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1 Introduction

This manual explains the installation, maintenance, and troubleshooting of Daktronics backlit scorer's tables. 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.18)**. This manual is not specific to a particular installation. Contract-specific information takes precedence over any other general information found in this manual.

Important Safeguards

- Read and understand all instructions before beginning the installation process.
- Disconnect the display power when not in use or when servicing.
- Disconnect the display power 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 modify the structure or attach any panels or coverings to the display without the express written consent of Daktronics.
- Do not disassemble control equipment or electronic controls of the display; 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

Power specifications as well as serial and model number information can be found on an ID label (**Figure 1**), located on the inside of the right rear access door. Refer to the table below for brief descriptions of the models in this manual:

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CONFORMS TO UL STD 48 Intertek 17800 STD (22.2 NO. 207	
DAKTRONICS 201 DAKTRONICS DR. BROOKINGS, SD P	HONE 800-325-8766

Figure 1: Spec Label (FCC)

Model #	Description	Dimensions	Weight	Power (120 VAC)
ST-2373-4	Backlit Ad Panel, seats 2 scorers	3'-0.75" H x 4'-7" W x 3'-2" D (933 mm, 1.40 m, 965 mm)	115 lb (52 kg)	1320 Watts, 12 Amps
ST-2373-8	Backlit Ad Panel, seats 4 scorers	3'-0.75" H x 8'-9" W x 3'-2" D (933 mm, 2.67 m, 965 mm)	235 lb (107 kg)	1368 Watts, 12 Amps

Notes:

- Widths shown include end padding. Subtract 5" (127 mm) for width without end padding.
- Depths shown are for upright tabletop. Tables are 2'-6" (762 mm) with tabletop lowered for transport.
- Power shown includes max load placed on table including convenience outlets.

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.

Introduction

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

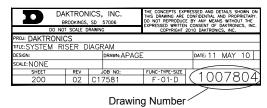


Figure 2: Drawing Label

Reference Drawing:

System Riser Diagram......DWG-1007804

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

Listed below are drawing types commonly used by Daktronics, along with the information each is likely to provide. All drawings referenced in this manual are found in **Appendix A**.

- Schematic Drawings: describe internal power and signal wiring as well as interconnections between display sections; may also include driver addressing information
- **Shop Drawings:** describe mounting methods to structural elements, access method (front or rear), and power and signal entrance points
- **System Riser Diagrams:** describe power/signal connections between components and the control location; may also include control room layout and schematic
- **Final Assembly Drawings:** describe internal display component locations and detailed product appearance with part numbers and quantities

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 display component is not found in the **Replacement Parts (p.17)**, use the label to order a replacement. Refer to **Section 5: Daktronics Exchange and Repair & Return Programs (p.18)** if replacing or repairing any display component.



Figure 3: Part Label

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

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

Light Strip Controllers

Daktronics scorer's tables equipped with optional End-of-Period (EOP) light strips require an All Sport[®] 5000 console to control them. Refer to **End-of-Period Light Strip Kits (p.9)** for more information about installing optional light strips. For operating instructions, refer to the **All Sport 5000 Series Control Console Operation Manual (ED-11976)**, available online at <u>www.daktronics.com/manuals</u>.

2 Mechanical Installation

All decisions regarding display setup must conform to the specifications and guidelines in this section. Read both the mechanical and electrical installation sections before beginning any installation procedures.

Table Setup

Reference Drawings:

Mechanical Specs; ST-2363/2373 DWG-3462318

Move the table(s) to the desired location. This will typically be within 10' (3 m) of a power outlet.

- If there is only one table, skip ahead to Tabletop Setup (p.7).
- If there is more than one table, first refer to Multiple Table Connection (p.4).

Multiple Table Connection

If more than one scorer's table is to be used as part of a single display face, they must be lined up in the appropriate arrangement and attached to each other. One table attaches to another using three latches on the right-hand side of the table (as viewed from the rear). There is one latch in the cable tray (1), one latch on the rear of the caster base (2), and one latch on the lower-front corner of the caster base (3). Refer to **Figure 4** for the location and detail of these latches.

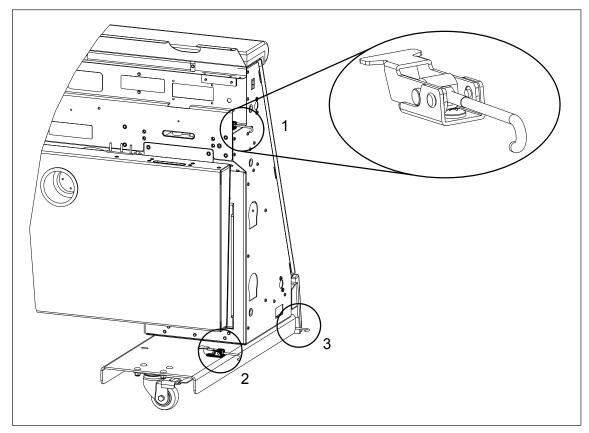


Figure 4: Latch Locations & Detail

To attach the tables together, follow the steps below:

 Look at the back side of the tables to determine the section numbering. Section numbers are applied to the back of each table at the locations shown in Figure 5. The farthest right table (when viewed from the rear) will typically be labeled "101", then the next table to its left will be "102", and so on.

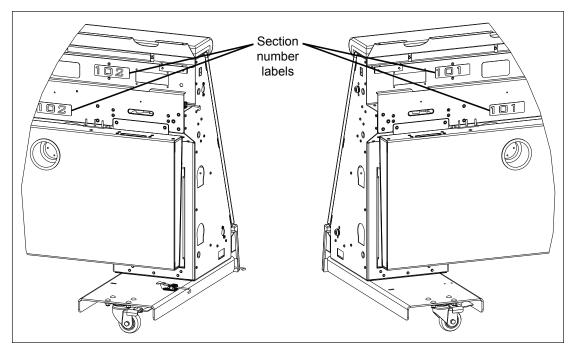


Figure 5: Section Number Label Locations

2. Position the two sections close together as shown in Figure 6.

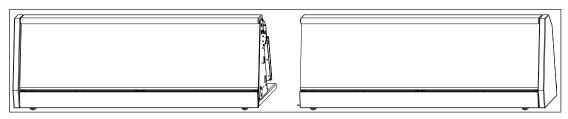
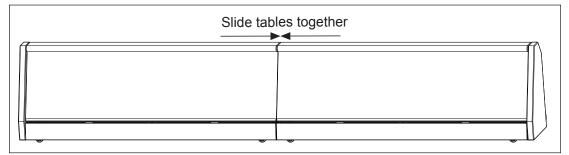
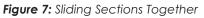


Figure 6: Positioning Sections Together

Note: At this point, ensure the flip latches are not sticking out the side of the tables prior to sliding the tables together, as this may damage the latches.

3. Slide the sections together as shown in Figure 7.





Mechanical Installation

4. Latch all three latches on the left table to the right table (as viewed from the rear). Refer to **Figure 8** for illustrations of each latch properly connected.

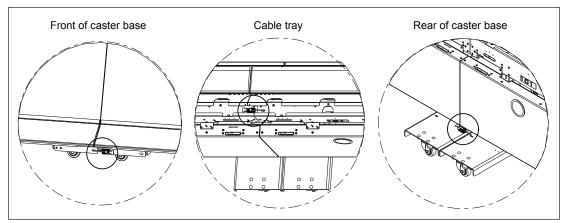


Figure 8: Latching Sections Together

Flip the hook end of the latch into the receiving slot on the adjacent table. Ensure the tables are seated completely together to avoid over-pulling the latch and flip the latch down into the locked position.

5. Repeat Steps 1-4 for all remaining tables.

Adjusting Latch Tension

The tension of the latches is pre-set at the factory. When engaged, the latches should create a snug fit. If there is a noticeable gap between the tables or if it is difficult to clasp the latches shut, adjust the tension by following the steps below and referring to **Figure 9**.

- 1. Use a 5/16" wrench to loosen the nut holding the metal hook in place.
- 2. Turn the metal hook clockwise to tighten the latch or counterclockwise to loosen the latch.
- 3. Ensure the metal hook is pointing straight downward and then tighten the nut.

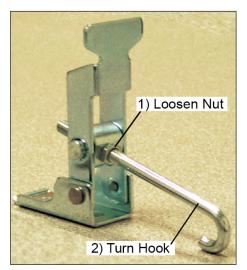


Figure 9: Adjusting Latch Tension

Mechanical Installation

Tabletop Setup

The tabletop should be upright only during games and events, and it should be in the dropped position when moving and storing the table. The following steps can be performed with one person but are easiest with two people. The tabletop capacity is rated at a maximum of **150 lb (68 kg)**.

To set up the tabletop:

1. With the table(s) in their desired location (and latched together), move to the rear and depress both rear caster locking brakes for each table.

Note: Before moving the table(s), always ensure the rear caster brakes are in the unlocked position.

2. Starting with the tabletop in the dropped position as shown in Figure 10, stand in the middle of one table and lift the tabletop upward as shown in Figure 11.



Figure 10: Tabletop Dropped



Figure 11: Lifting Up & Holding Tabletop

- 3. While holding the tabletop in the upright position, insert a 5/16" T-handle wrench (Daktronics part # TH-1088) into the nearest of the four tabletop latch holes located in the bottom of the cable tray as shown in Figure 12.
- 4. Rotate the wrench clockwise to engage the latch. Refer to Figure 12. Move on to the next latch location until all four latches are engaged.

Note: The wrench must be rotated 285° or a little over a 3/4 turn to fully engage the latch. All four latches must be used and fully engaged to support the rated load listed.



Figure 12: Rotating Wrench

5. Repeat Steps 2-4 for all remaining tables.

End Pad Attachment

End pads protect the ends of the table displays and also provide a finished look. To keep the players safe, these pads **must be attached** any time the table is in use during games and events.

The left- and right-side end pads are identical in shape and attach in the same manner but mirror each other. The example shown in **Figure 13** is specific to left-side pads (as viewed from the front), but right-side pads will attach the same way. Note that the table face panel is removed for clarity.

To attach the end pads:

- 1. Position the end pad at the end of the section. Four hook mounts attached to each end pad align with cutouts in the table frame.
- 2. Lift the pad up so all four hook mounts may be inserted into the cutouts. It is critical that all four hook mounts are positioned properly so they hold the pad securely onto the end of the table.
- **3.** Slide the pad downward in the angle of the frame after all four hook mounts are properly positioned in the cutouts. This hooks the end pad onto the table.
- 4. Verify all four brackets are hooked securely into the end of the table to prevent damage to the end pad or possible injury to a player.
- 5. Repeat Steps 1-4 for the end pad at the opposite end of the table(s).

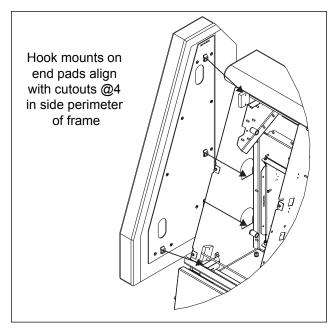


Figure 13: Aligning Brackets with Cutouts

Electrical Installation

3 Electrical Installation

This scorer's table system is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign. This display is suitable for dry locations only.

Only qualified individuals should terminate power and signal cable and access the electrical components of this display and its associated equipment.

Power Connection

- 1. Open the access door on the lower-right section of the table rear by twisting the knob one-quarter turn clockwise.
- Behind the access door, locate the NEMA[®] L5-20P flanged inlet (Hubbell[®] HBL2315). Refer to Figure 14.
- 3. Daktronics provides a 16 AWG 10' (3 m) power cable. Connect the NEMA® L5-20R connector (Hubbell® HBL2313) to the receptacle in the table, and then connect the 3-prong plug end to a wall/ floor box. The socket outlet must be installed near the equipment and easily accessible.

Convenience & USB Outlets Scorer's tables are equipped with 4 or 8 convenience outlets, depending on the table's width, for plugging in control equipment and other small electronic devices. A 10 Amp resettable breaker limits the total convenience outlet power draw. Tables also feature 8 USB outlets (2 outlets with 4 ports each) to power cellphones, tablets, and other equipment with USB chargers.

Refer to the Mechanical Specs drawing in **Appendix A** for outlet and breaker locations.

Note: USB outlets are not available on international 240 V models.

End-of-Period Light Strip Kits

Daktronics scorer's tables may have optional End-of-Period (EOP) light strips running along the bottom front of the table that illuminate at the end of the period. EOP light strips are typically factory installed. Ensure the All Sport controller is connected and powered on as described below.

- 1. Set the All Sport control console on the tabletop and plug the power cord into one of the convenience outlets.
- Connect the 10' (3 m) 1/4" phone signal cable (part # W-1340) from J1, J2, or J3 on the control console to the SIGNAL IN jack located behind the lower-right rear access door of the primary table.

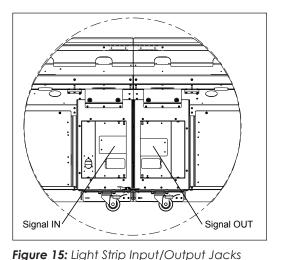




Figure 14: Right Rear Access Door Open

3. Power on the control console and enter the appropriate sport code found on the keyboard overlay and in the All Sport manual listed in Light Strip Controllers (p.3) to test the light strips.

For multiple tables with light strips, connect 5' (1.5 m) 3-pin XLR cables (part # W-1627) between the tables. The XLR input and output jacks are located behind the left and right rear access doors. Refer to **Figure 15**.

Radio Control

Instead of running a wired connection from an All Sport console, an optional radio receiver may be installed inside the table. A control console equipped with an optional radio transmitter is required.

The All Sport radio receiver is typically held in place with adhesive-backed, hook-andloop fastener strips, and when ordered as original equipment may already be installed. The only installation required is attachment of the radio antenna, which may have been shipped separately to prevent damage. If the radio receiver is not already installed:

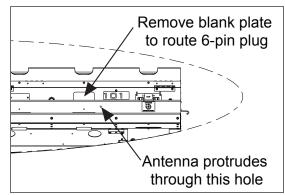


Figure 16: Radio Receiver Mounting, Rear View

- 1. Position the radio receiver unit so the antenna connector can extend through the hole in the front of the cable tray as shown in Figure 16.
- 2. Remove the backing from the fastener strips on the unit, and then firmly press it against the interior, sticking the adhesive to the sheet metal.
- **3.** Remove the blank plate in the rear of the cable tray to route the receiver unit's cable with 6-pin plug down to the light strip driver location.
- 4. Open the lower-right access panel. Connect the 6-pin plug from the receiver unit into the 6-pin to 5-pin adapter (part # W-1913), and then connect the adapter to the mating 5-pin jack on the light strip driver harness labeled **J45**.
- 5. Note that the antenna connector now protrudes through the front of the cable tray.
 - a. Install and tighten the lock washer and nut on the antenna connector.
 - **b.** Mount the external antenna on the connector, turning the nut on the antenna until it is snug.
 - c. Rotate the antenna so that it is pointing straight upward (it should look like a capital "L" when viewed from the side).

The radio receiver is preset to Channel 1. If there are other displays in the facility operating with radio signal that should NOT be synchronized to the light strips, the receiver must be set to a different channel number. The values set on the receiver must then match the settings in the controller; refer to **Light Strip Controllers (p.3)**. If the radio receiver channel and broadcast settings do match those set in the console but the console does not control the light strips, there may be radio interference. In this case, change the settings of the radio receiver unit inside the table as well as the settings in the console, as described in the radio control manuals.

For more information, refer to the **Gen VI Radio Installation Manual (DD2362277)**, provided with the radio receiver and available online at <u>www.daktronics.com/manuals</u>.

Electrical Installation 10

Possession Indicator

Reference Drawings:

Poss Ind Attachment, Manual DWG; ST A3 DWG-3547653

Daktronics scorer's tables may have an optional possession indicator that sits atop the table padding (**Figure 17**). These are designed so they can be positioned approximately every 6.25" (159 mm) to best align with the center of the table(s). **DWG-3547653** illustrates mounting and connection. Possession indicators mount to the rear of the top of the table using included #10-24 x 0.625" machine screws. Plug the power cord into the dedicated convenience outlet labeled **POSS. INDICATOR OUTLET ONLY**. To operate, simply flip the switch on the back of the unit toward the side of the court that has possession, and the LED indicators will illuminate on both the front and back of the unit.

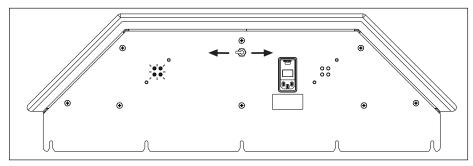


Figure 17: Possession Indicator, Rear View

4 Maintenance & Troubleshooting

Turn off power before performing any repair or maintenance work. Only qualified service personnel may access internal electronics. Disconnect power when not using the display.

Problem	Possible Cause	Solution/Items to Check	
Diaplay, door not light	No power to the display	Check that the main circuit breaker for the display is on.	
Display does not light	No power to the display	Check that the display is receiving 120 VAC power.	
	No power to the control	Ensure the console is plugged into a convenience outlet or 120 V power supply.	
	No power to the control console	Exchange the console with a working console and enter the correct sport code to test. Replace console if necessary.	
	No wired signal from the console	Ensure a 1/4" phone signal cable is connected between J1 , J2 , or J3 on the control console and the signal jack located behind the right rear access door.	
Light strips do not light	Improper connection between tables	Ensure 3-pin XLR cables are connected between all tables with light strips. The XLR input and output jacks are located behind the right and left rear access doors, respectively.	
	Incorrect sport code	Ensure the correct sport code is being used. Refer to the console operation manual in Light Strip Controllers (p.3) .	
	No signal to driver	Check that the red DS1 LED on the light strip driver lights up when sending commands from the control console. See LED Drivers (p.14).	
	No power to driver	Check that the green DS2 LED on the light strip driver remains lit up when the display is powered on. See LED Drivers (p.14) .	
	Incorrect driver address or function	Check that the light strip driver is set to the correct address or function. See LED Drive (p.14).	
	Under- or overloaded	Adjust loads on power supplies to be within recommended limits.	
Backlit LEDs flicker	Malfunctioning power supply	Replace power supply. See Replacing a Power Supply (p.17) .	
	Bad wire connections	Restore connection.	
Entiro backlit disalawia	Malfunctioning power supply	Check power supply and replace as needed. See Replacing a Power Supply (p.17).	
Entire backlit display is not lighting	Short	Search wiring for a short circuit between the red and blue wires. Replace bad wiring or use electrical tape to insulate the wires.	
	Overloaded	Adjust loads on power supplies to be within recommended limits.	
One backlit LED module is not lighting	Malfunctioning module	Replace the module. See Replacing an LED Module in a String (p.16)	

Maintenance & Troubleshooting

Recommended Tools

When performing maintenance work on the display, Daktronics recommends using the following tools and placing them in a convenient, easy-to-use location.

Tool	Part Number	Use
#2 Phillips screwdriver	TH-1061	Removes rear doors and components on verticals
5/16" T-handle wrench	TH-1088	Engages tabletop latches
5/16" nutdriver	TH-1156	Removes components
11/32" nutdriver	TH-1201	Removes power supplies

These tools are found in the toolkit (0A-1892-0002). The toolkit includes items in addition to those on the list above, and additional replacement tools may be ordered directly from Daktronics. Refer to **Daktronics Exchange and Repair & Return Programs (p.18)**.

Component Location & Access

Scorer's tables are designed for either front or rear access, depending on site requirements and customer preference.

While components in front-access displays are simply removed from the front, access doors in rear-access displays must be removed to reach the internal display components.

Front Access

To access components through the front, refer to the instructions below and **Figure 18**.

- 1. Disconnect the power to the display.
- 2. Lift up the top pad, remove the Phillips head screws along the top of the protective plex face panel, and tilt the face panel outward.

Note: If a possession indicator is attached, it must be removed before the top pad can be lifted up. Alternately, an end pad may be removed to allow the front face panel to slide out sideways.

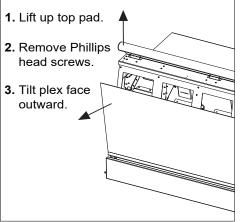


Figure 18: Front Access

Rear Access

To access components through the rear, refer to the instructions below and Figure 19.

- 1. Disconnect the power to the display.
- 2. Lift the tabletop upward and secure in place as described in Table Setup (p.4).
- 3. Use a #2 Phillips screw-driver (part # TH-1061) to remove the two screws securing the access door.
- 4. Carefully allow the access door to rotate downward into the open position.

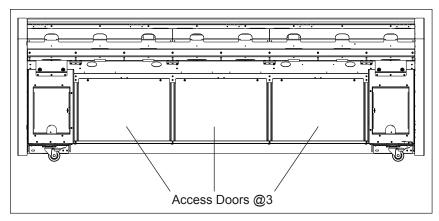


Figure 19: Rear Access

LED Drivers

Scorer's tables with optional light strips will include an LED driver to control when the light strips turn on and off. Refer to **Figure 20** to view the location of a light strip driver tray in the scorer's table.

Refer to **Figure 21** for the components of an optional light strip driver tray.

The light strip output terminal block determines when the light strips will illuminate. By default, end-of-period light strips are triggered when the game clock equals 0, and clock stopped light strips are triggered when the clock equals stopped. Either type of light strip may instead be set to illuminate when the shot clock horn or

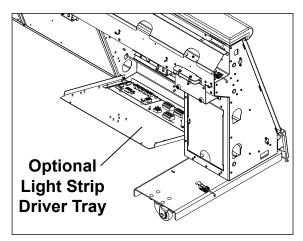


Figure 20: Driver Tray Location

the game clock horn sounds. Move the gray wire to the appropriate terminal for the desired function.

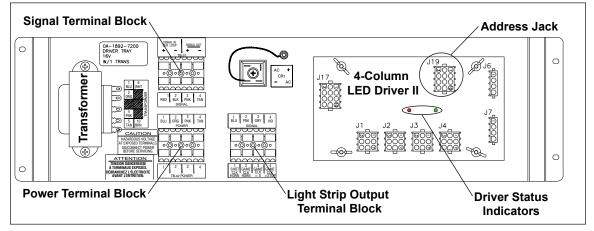


Figure 21: Light Strip Driver Tray Components

When troubleshooting 4-column driver problems, two diagnostic LED indicators labeled **DS1** and **DS2** provide the following driver status information:

LED	Color	Function	Operation	Summary
DS1	Red	Signal RX		On or blinking when driver is receiving signal Off when there is no signal
DS2	Green	Power	Steady on	On and steady when driver is receiving power

Note: While it is necessary to have the display powered on to check the LED status indicators, always disconnect power before servicing.

Replacing a Driver

If the driver status indicators do not appear to be working correctly, it may be necessary to replace the driver.

- 1. Open the table from the rear as described in **Rear Access (p.13)**.
- 2. Disconnect all plugs from the driver by squeezing together the locking tabs and pulling the connectors free. It may be helpful to label the cables to know which cable goes to which connector when attaching the new driver.
- 3. Remove the wing nuts securing the driver to the driver tray.
- 4. Carefully lift the driver from the display and place it on a clean, flat surface.
- 5. Position a new driver over the screws and tighten the nuts.
- 6. Reconnect all plugs to the driver. These are keyed connectors 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.15)**.
- 8. Close and secure the access panel, then power up and test the display to verify the issue has been resolved.

Setting the Driver Address

For the light strip driver to receive signal and function properly, the driver must be set to the correct address.

Optional light strip drivers use Address 1.

This address is set with jumper wires in a 12-pin plug which mates with jack **J19**, located in the upper-right corner of the driver (**Figure 21**). It may be possible to reuse the same address plug from the driver that was replaced. If not, order an **Address 1** plug (Daktronics part # 0A-1150-0122).

Replacing an LED Module in a String

- 1. Access the table from the front as described in Front Access (p.13).
- 2. Remove the malfunctioning module by cutting the red and blue wires connecting it to the rest of the light string. Refer to **Figure 22 (1)**. Cut the wires as close to the old module as possible to ensure there is enough leftover wire for reconnection. Each module is held in place by double-sided tape on the back. Use a flathead screwdriver underneath the module to pry it free.
- 3. Remove any adhesive residue left by the double-sided tape, remove backing from double-sided tape on new module, and apply it where the old module was just removed. Press firmly on the top of the module to ensure proper adhesion.
- 4. Connect the new module to the rest of the light string using wire nuts (red to red and blue to blue). Refer to Figure 22 (2).

Note: Instead of using wire nuts to splice the red and blue wires together, a set of jumper wires (part # 0A-1778-7007) may be connected between the positive (red) and negative (blue) terminals of the replacement module and another module above or below it. If there is an additional module in the string after the replaced module, it must also be reconnected with another set of jumper wires.

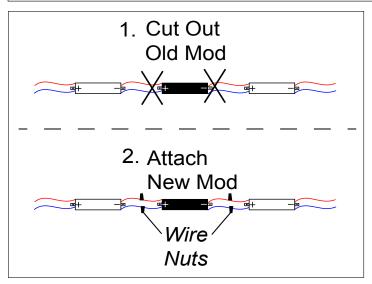


Figure 22: LED Light String Module Replacement

5. Close and secure the access panel, then power up and test the display to verify the issue has been resolved.

Replacing a Power Supply

Caution! Disconnect display power before servicing the power supplies to avoid electrical shock. Power supplies run on high voltage and may cause injury if touched.

- 1. Access the table from the front as described in Front Access (p.13).
- 2. Use an 11/32" nut driver (part # TH-1201) to loosen the screws holding the power supply to the mounting bracket and the grounding ring for the power supply. Remove the power supply from the mounting bracket.
- **3.** Disconnect all the wires connected to the power supply and gently remove it from the display.

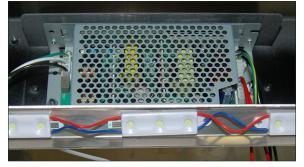


Figure 23: Power Supply Inside Display

- 4. Attach the new power supply to the mounting bracket inside the display and reconnect all wires. Refer to **Figure 23**.
- 5. Power up and test the display to verify the issue has been resolved.

Tabletop Possession Indicators

To replace an optional tabletop possession indicator arrow/colon:

- 1. Unplug the possession indicator from the designated convenience outlet.
- 2. Remove the screws securing the possession indicator cover.
- 3. Disconnect the power/signal cable from the malfunctioning indicator.
- **4.** Use a 11/32" nut driver to remove the nuts securing the indicator, and then lift it off the stud inserts.
- 5. Position a new indicator over the studs (making sure the small plastic spacers are still in place), and then tighten the nuts.
- 6. Reconnect the power/signal cable, and replace all screws for the indicator cover.
- 7. Plug the possession indicator back into the designated convenience outlet, then power up and test the display to verify the issue has been resolved.

Replacement Parts

Part Description	Daktronics Part #
Quick Connect Light String Jumpers	0A-1778-7007
Toolkit	0A-1892-0001
LED Driver II, 4-Column [Light Strips]	0P-1150-0130
Red Arrow, 3" [Possession Indicator]	0P-1150-0185
Red Colon, 1" [Possession Indicator]	0P-1230-0070
Power Supply; 12V, 85-264VAC, 150W	A-2855
LED Strip Lighting, White	DS-1784
Table Latch	HS-1669
Transformer, 115/230V; 6.25A [Light Strips, Possession Indicator]	T-1066
XLR Cable, M to F; 5' [Light Strips]	W-1627

Maintenance & Troubleshooting

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.

- **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 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. This page intentionally left blank.

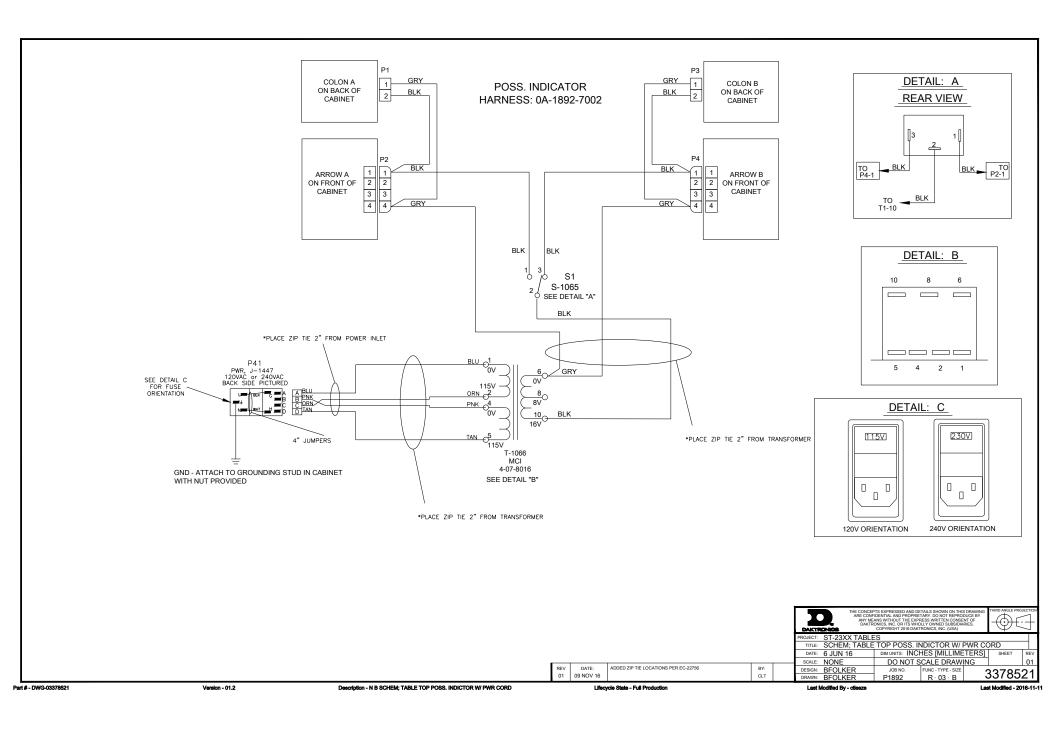
A Reference Drawings

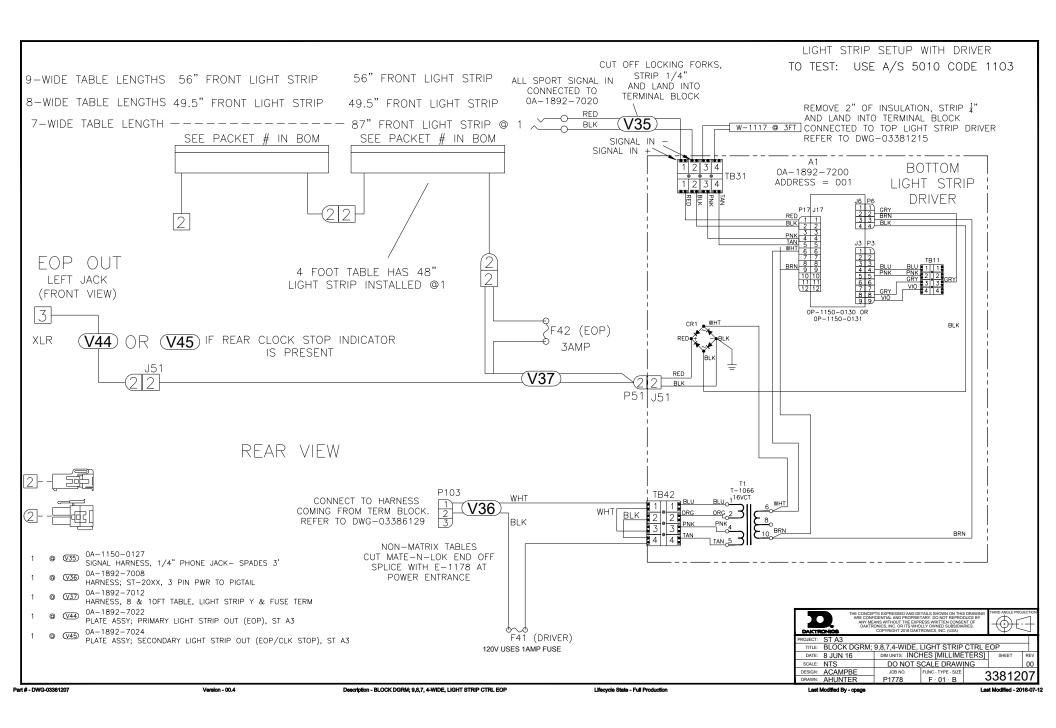
Refer to **Resources (p.2)** for information regarding how to read the drawing number. Any contract-specific drawings take precedence over the general drawings.

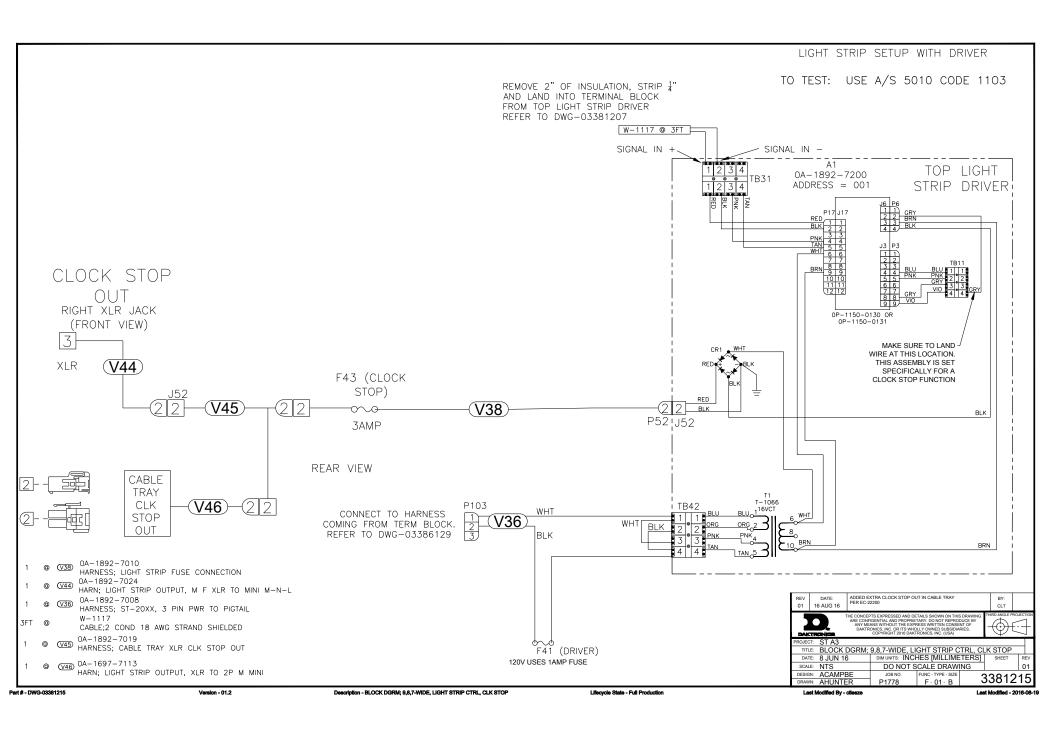
Reference Drawings:

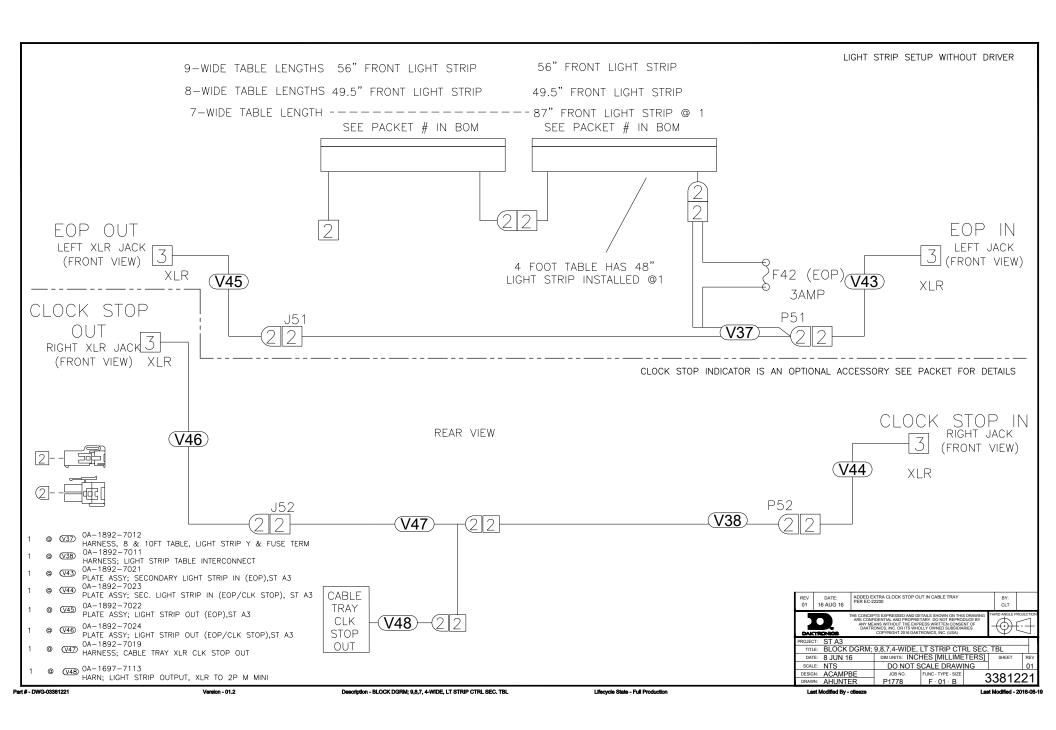
Block Dgrm; 9,8,7,4-Wide,Light Strip Ctrl EOP IntlDWG-3408332Block Diagram; ST-23XY Backlit, IntlDWG-3416936Mechanical Specs; ST-2363/2373DWG-3462318Poss Ind Attachment, Manual DWG; ST A3DWG-3547653Block Diagram; ST-23XY BacklitDWG-3776556Block Diagram; ST-23XY Backlit, IntlDWG-37783114ST A3 Light Strip AssemblyDWG-4625313
ST A3 Light Strip Assembly

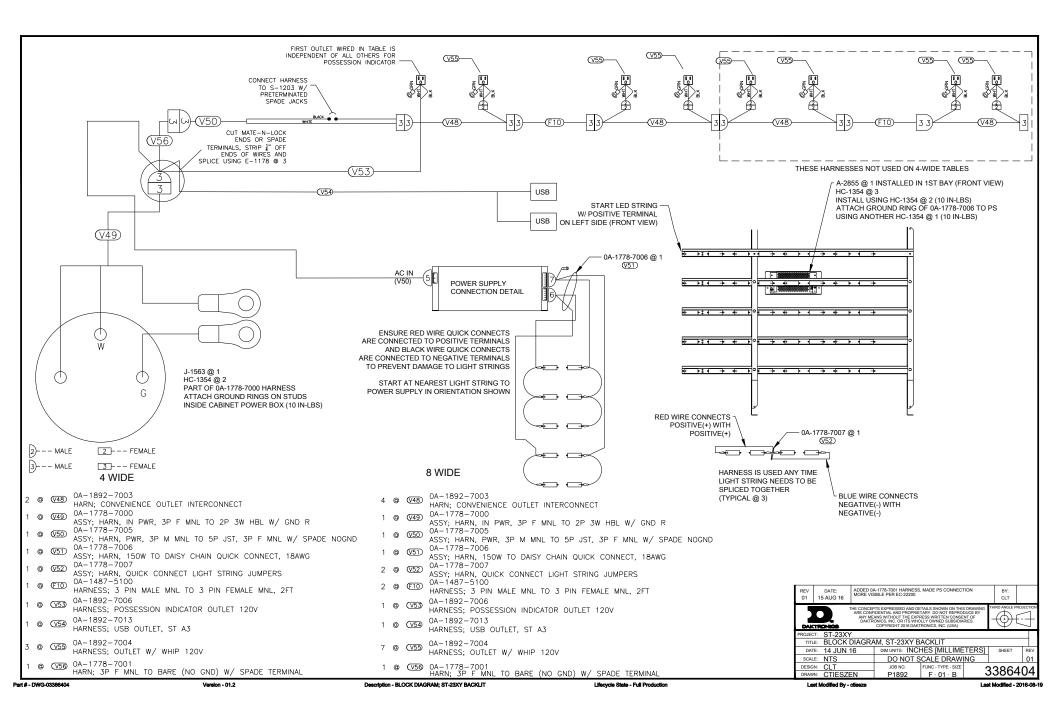
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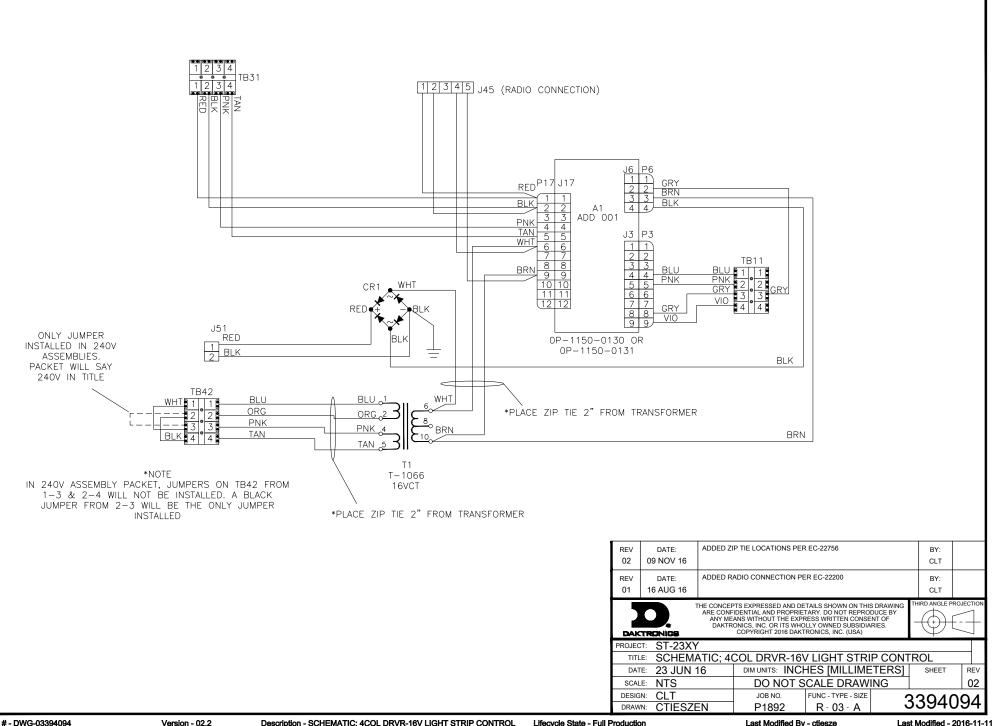




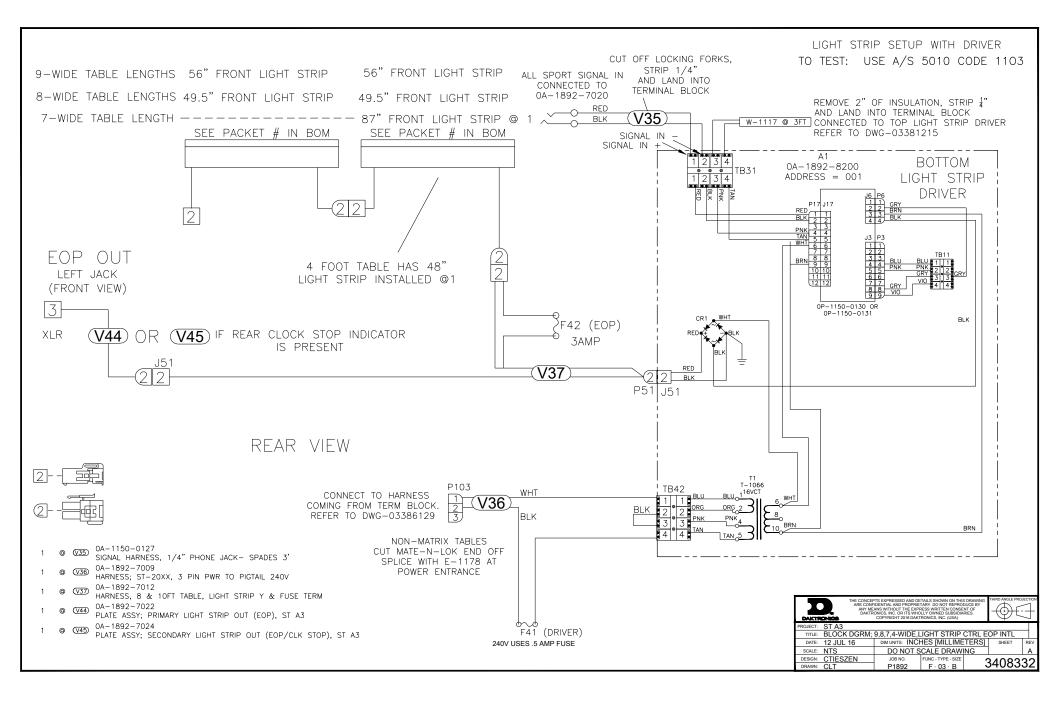


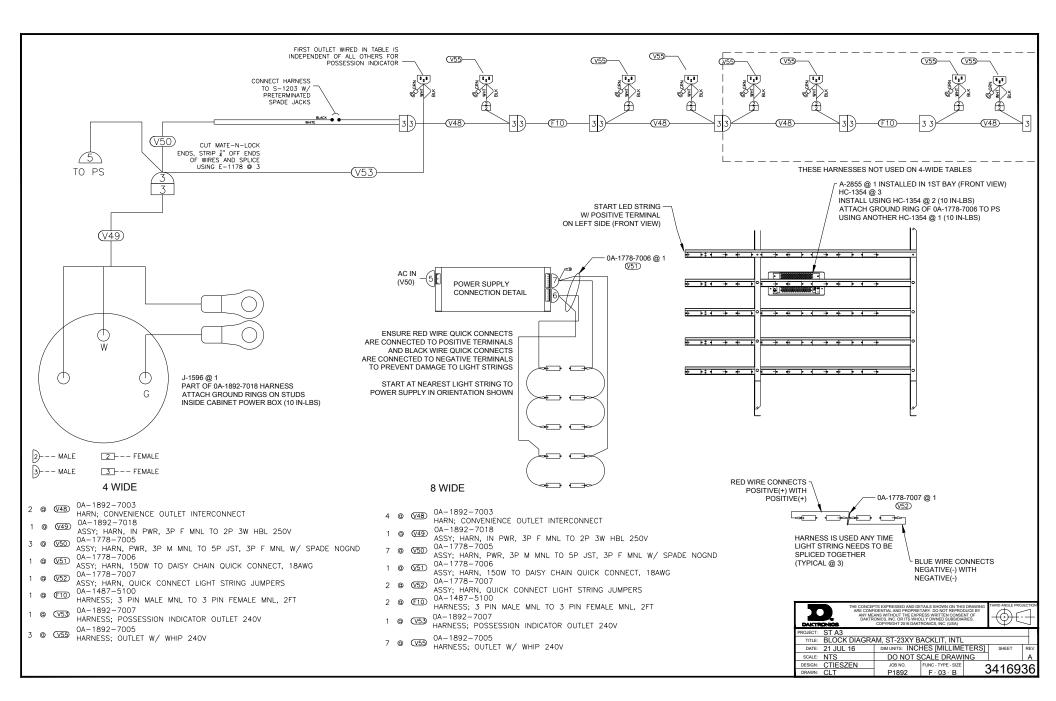


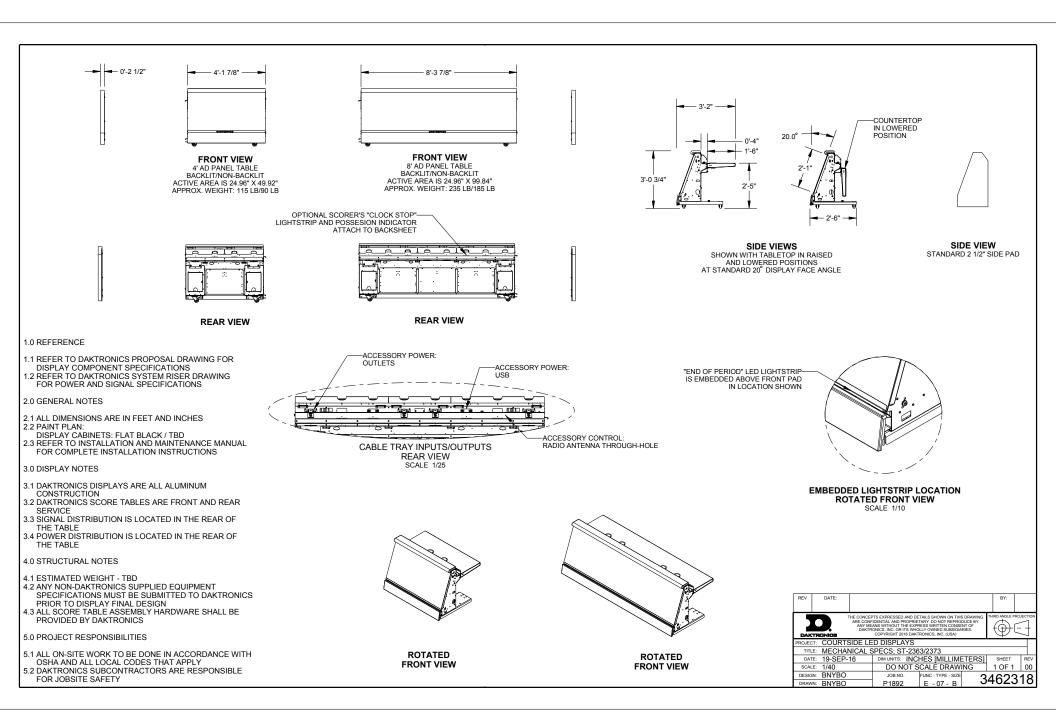


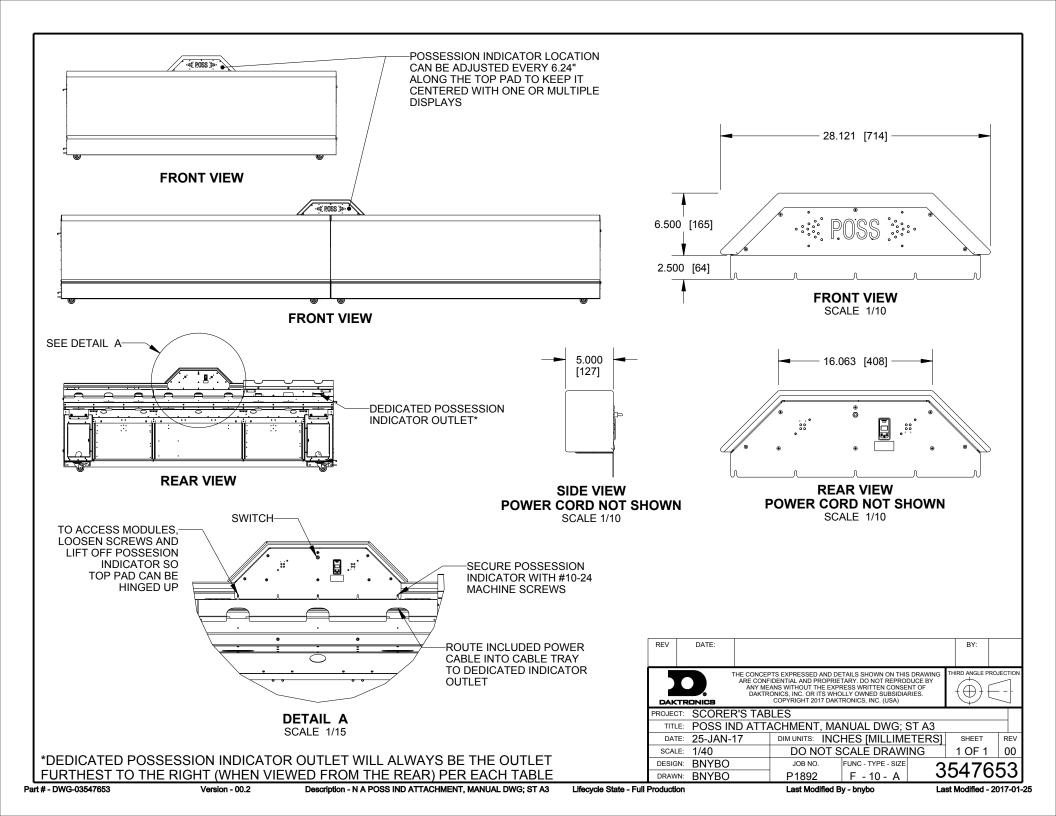


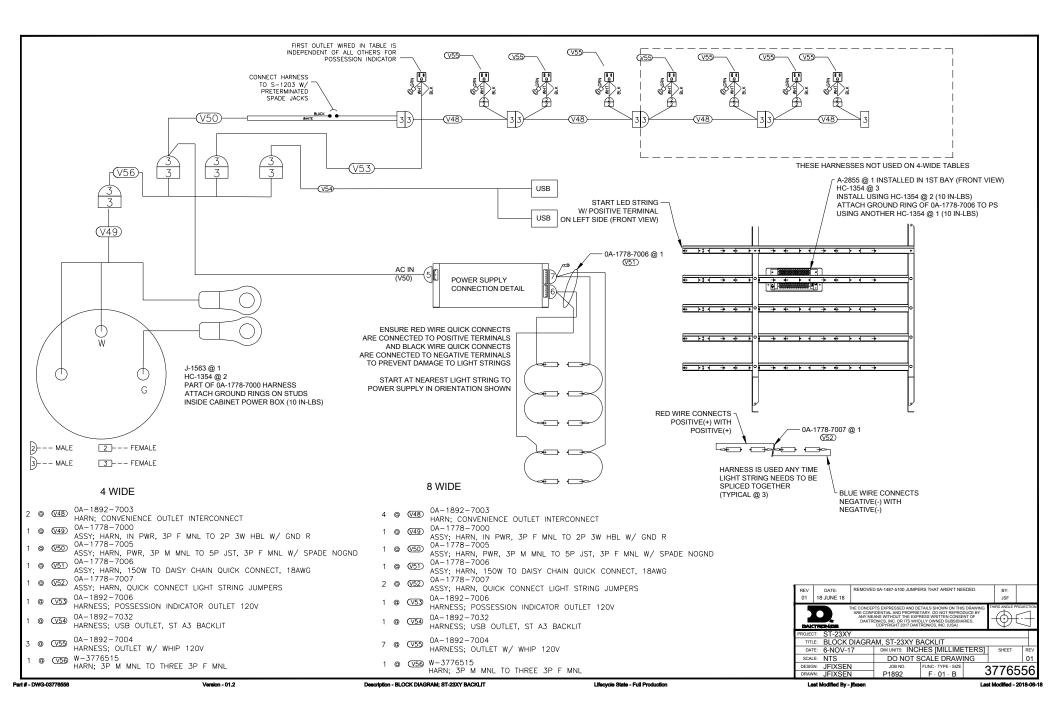
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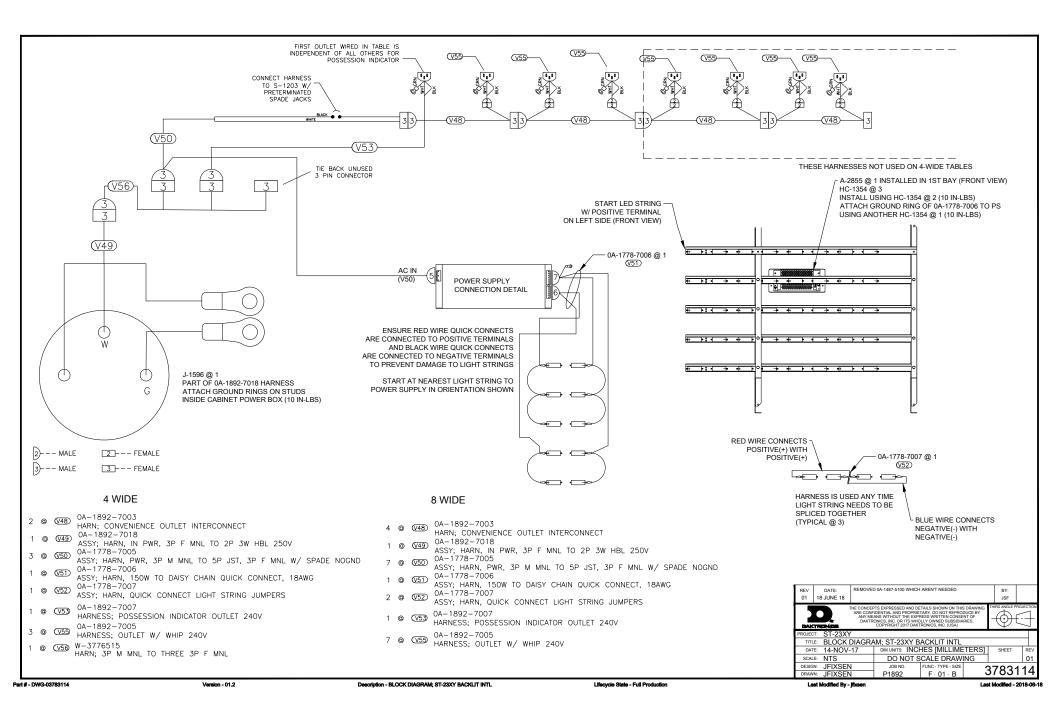


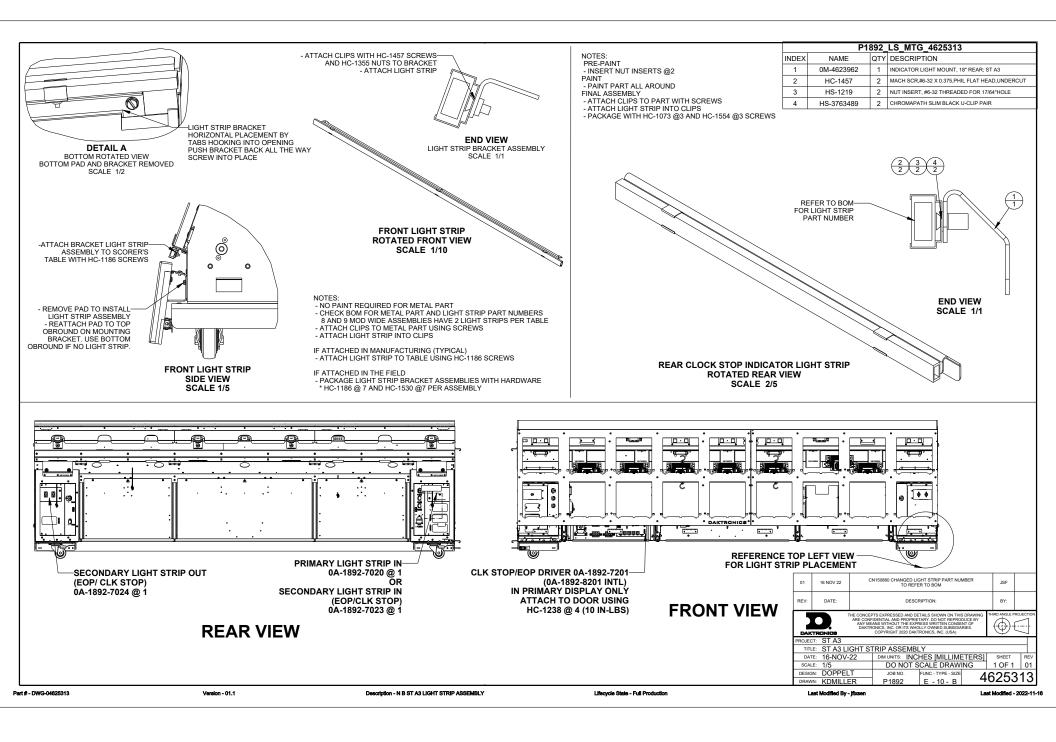












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B Daktronics Warranty and Limitation of Liability

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", 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.

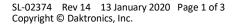
EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS WARRANTY, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, DAKTRONICS DISCLAIMS ANY AND ALL OTHER PROMISES, REPRESENTATIONS AND WARRANTIES APPLICABLE TO THE EQUIPMENT AND REPLACES ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT 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;





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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

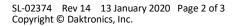
- A. Daktronics shall be under no obligation to furnish continued service under this Warranty if alterations are made to the Equipment without the prior written approval of Daktronics.
- B. It is specifically agreed that the price of the Equipment is based upon the following limitation of liability. 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





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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	Column 2	Column 3
(Selling Entity)	(Governing Law)	(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	Kruibeke, Belgium
Daktronics Ireland Co. Ltd.	Ireland	Dublin, Ireland



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