ST-3170 BACKLIT SCORERS TABLES

DISPLAY MANUAL P2307

> DD4980007 Rev 04 14 June 2023



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.

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1 Introduction

This manual explains the installation, maintenance, and troubleshooting of Daktronics backlit scorers tables. For additional information regarding safety, installation, operation, or service, refer to the telephone numbers listed in **Section 6: Daktronics Exchange and Repair & Return Programs (p.32)**. 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 power to the display when not in use or when servicing.
- Disconnect power to the display 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 display; failure to follow this safeguard will make the warranty null and void.
- Do not modify the structure or attach any panels or coverings to the display without the express written consent of Daktronics.
- 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 similar to **Figure 1**, located inside the right rear access door. Refer to the table below for brief descriptions of the models in this manual:



Figure 1: Specifications Label

| Model # | Description | Dimensions | Weight | Power (120 VAC) |
|------------|--------------------------------------|--|--------------------|-----------------------|
| ST-3170-5 | Backlit Ad Panel, seats 2 scorers | 3.00' H x 5.33' W x 2.70' D (914 mm, 1.63 m, 823 mm) | 160 lb (73 kg) | 1260 Watts, 10.5 Amps |
| ST-3170-10 | Backlit Ad Panel, seats 4 scorers | 3.00' H x 10.26' W x 2.70' D (914 mm, 3.13 m, 823 mm) | 260 lb (118 kg) | 1308 Watts, 10.9 Amps |

Notes:

- Widths shown include side padding. Subtract 5" (127 mm) for width without the padding.
- Height and depth shown is for table in stationary mode. Tables are 3.45' (1.05 m) tall and 2.40' (732 mm) deep in transport mode.
- 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. Also provide the facility name and/or job number if known.

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:

| DAKTRONICS, INC. BROOKINGS, SD 57006 | | | THIS DRAWING AR | XPRESSED AND DETAILS SHOWN ON E CONFIDENTIAL AND PROPRIETARY, ICE BY ANY MEANS WITHOUT THE |
|--------------------------------------|------------------|-----------|-----------------|--|
| DO NOT SCALE DRAWING | | | | EN CONSENT OF DAKTRONICS, INC. 7 2010 DAKTRONICS, INC. |
| PROJ: DAKTRONIO | PROJ: DAKTRONICS | | | |
| TITLE: SYSTEM RISER DIAGRAM | | | | |
| DESIGN: | | DRAWN: AP | AGE | DATE: 11 MAY 10 |
| SCALE: NONE | | | | |
| SHEET | REV | JOB NO: | FUNC-TYPE-SIZE | 1007001 |
| 200 | 02 | C17581 | F-01-D | 7(100/804) |
| | | | | |
| Drawing Number | | | | r / |

Figure 2: Drawing Label

Reference Drawing:

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

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

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

Daktronics Nomenclature

Part numbers will appear on certain drawings and illustrations. Most display components have a white label that lists the part number (Figure 3). Use this label to order a replacement. Refer to Section 6: Daktronics Exchange and Repair & Return Programs (p.32) if replacing or repairing any display component.

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

Figure 3: Part Label

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

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

Light Strip Controllers

Daktronics scorers tables equipped with optional End-of-Period (EOP) and/or Clock Stop light strips require an All Sport® 5000 console to control them. For operating instructions, refer to the All Sport 5000 Series Control Console Operation Manual (ED-11976), available online at www.daktronics.com/manuals. Refer to End-of-Period and Clock Stop Light Strip Kits (p.24) for more information about installing optional light strips.

2 Uncrating

Use a pry bar to carefully remove the side panels of the crate, and then remove the top of the crate. Each crate may contain one, two, or three tables.

Attach Caster Bases

- 1. Locate a caster base assembly under the table. Each table has two caster base assemblies regardless of width.
- 2. Use a utility knife to cut through the plastic wrap around the caster base assembly. Refer to Figure 4.



Figure 4: Remove Plastic Wrap from Caster Base

3. Lift the Caster Base Tool (attached by lanyard) off of the caster base assembly and set aside. Refer to **Figure 5**.



Figure 5: Remove Caster Base Tool

4. Holding the caster base steady with one hand, slip a couple fingers of your other hand under the caster base pivot arm and lift up until it is fully extended. Refer to **Figure 6**.



Figure 6: Lift Pivot Arm

5. Use a T30 Torx bit to remove the two 1/4" Torx screws toward the front of the caster base. Refer to **Figure 7**. Be careful to not lose these screws; they will be reinstalled after the caster base is attached to the table.



Figure 7: Remove Torx Screws

6. Use the provided 5/16" Allen wrench to remove the bolts securing the two red wheels. Refer to **Figure 8**. Set these bolts and wheels aside; they will be reinstalled after the caster base is attached to the table.



Figure 8: Remove Front Red Wheels

7. Locate a caster base vert underneath the table, and line up the caster base with the holes. Refer to **Figure 9**.

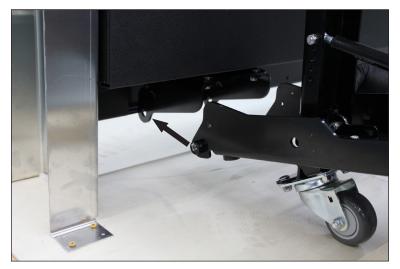


Figure 9: Line up Caster Base Assembly with Caster Base Vert

8. Use the 5/16" Allen wrench to reinstall the red wheels from *inside* the caster base to attach it to the bottom of the table. Refer to **Figure 10**. Do not overtighten the bolts; the wheels should be able to spin freely.



Figure 10: Reinstall Front Red Wheels Inside Caster Base

9. Use a T30 Torx bit to reinstall both 1/4" Torx screws. Refer to **Figure 11**. These bolts act as stops to prevent the front face of the table from tilting forward more than 90°.

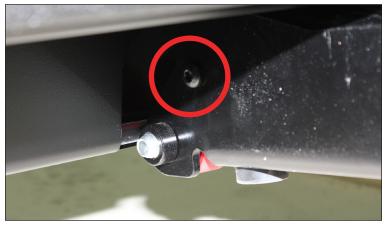


Figure 11: Reinstall Torx Screws

10. Place the Caster Base Tool diagonally from upper-left to bottom-right in the caster base. Refer to **Figure 12**. Store the tool in this location whenever the table is not in use.



Figure 12: Caster Base Tool in Storage Position (Tool Highlighted Orange for Clarity)

11. Repeat Steps 1–10 for the other caster base.

Remove Table from Shipping Brackets

1. Once both caster bases are fully installed, stand on one side near the shipping bracket and use a utility knife to cut through the plastic wrap. Refer to **Figure 13**. Cutting the plastic wrap anywhere else has the potential to damage the table.

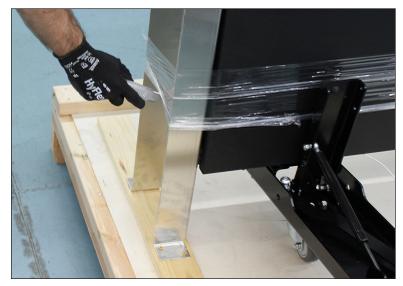


Figure 13: Remove Wrap from Table

2. Use a 3/4" socket to loosen the four shipping bracket bolts. Refer to Figure 14.



Figure 14: Loosen Four Shipping Brackets

- 3. With one person standing on either end of the table to support it, use a 3/4" socket to remove both top shipping bracket bolts.
- **4.** Tilt the table backward so that the caster base/wheels are resting on the crate. Refer to **Figure 15**.



Figure 15: Tilt Table Backward

- 5. Use a 3/4" socket to remove the bottom two shipping bracket bolts.
- **6.** Carefully roll the table back off the crate, lifting the front caster base wheels as needed to clear the bottom horizontal brace, and rest the table on the floor.

3 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.

Reference Drawings:

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 tabletop capacity is rated at a maximum of 150 lb (68 kg).

Depending on the length of the power cords, the table(s) should be within 25' (7.6 m), 50' (15.2 m), or 75' (22.9 m) of a power outlet.

Caster Base Tool

Each table comes with one Caster Base Tool (Daktronics part # HS-4939703) located in the bottom channel of each caster base (two per table). Refer to **Figure 16**. These tools serve a dual purpose of helping to pull down the caster base pivot arms when setting up the table as well as setting the display face to the desired angle. The tools are attached to the caster base by a steel lanyard to prevent being lost or stolen.

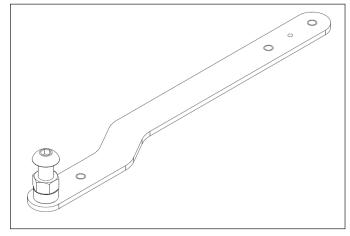


Figure 16: Caster Base Tool

Note: The bolt head on the end of the Caster Base Tool sets the display face angle to 5° and in most cases will not need to be adjusted. However, if adjustment is needed, refer to **Adjust Display Face Angle (p.21)**.

Table Setup – Transport to Stationary Mode

1. With the table in its desired location, move to the rear and roll it backwards slightly so the front caster on each caster base is rotated fully forward. Note the orientation of the front caster as shown in **Figure 17**.

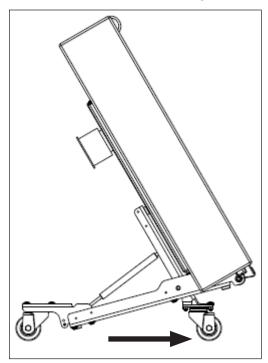


Figure 17: Transport Mode - Side View

2. Locate the Caster Base Tool in the bottom channel of the right caster base. Line up and insert the studs on the Caster Base Tool with the mating holes in the side of the pivot arm on the caster base. Refer to **Figure 18**.

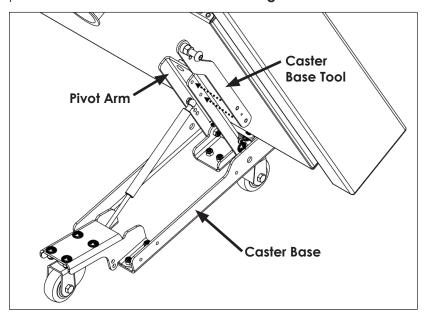


Figure 18: Insert Caster Base Tool into Pivot Arm

3. Use the offset end of the Caster Base Tool as leverage to pull down the pivot arm and lower the right side of the table to the floor. Refer to **Figure 19**.

Note: Do not push on the top of the table during this process as that may cause the front caster to rotate and make the table difficult to move/reposition as described in **Step 5**.

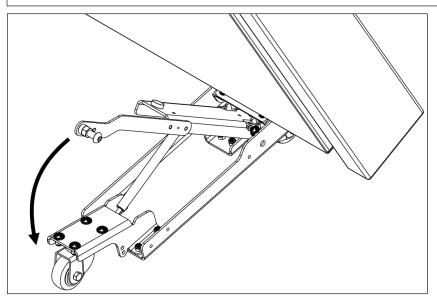


Figure 19: Pull Down Pivot Arm

4. Move to the left side caster base and repeat **Steps 2–3**. The table should now be resting on the floor. Refer to **Figure 20**.

Note: The rear casters may need to be rotated fully rearward to ensure both caster bases are firmly resting on the floor.

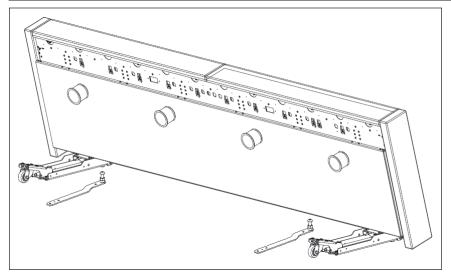


Figure 20: Both Caster Bases Resting on Floor

5. After both pivot arms are lowered, adjust the position of the table as necessary. Refer to Figure 21. Lift up slightly on the rear of one caster base so the table is supported by the rollers on the front of the caster base, and push/pull the table forward/backward. Repeat for the other caster base on the other end of the table as needed.

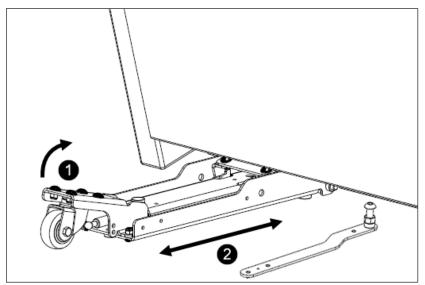


Figure 21: Fine-Tune Table Position

6. Carefully tilt the display face forward enough to insert the studs of the Caster Base Tool with the mating holes on the top of each caster base pivot arm. Refer to **Figure 22**.

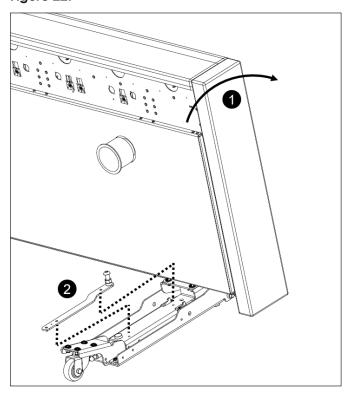


Figure 22: Caster Base Tool Location for Setting Face Angle

Note: The bolt head on the end of the Caster Base Tool sets the display face angle to 5° and in most cases will not need to be adjusted. However, if adjustment is needed, refer to **Adjust Display Face Angle (p.21)**.

- 7. Move to the rear of the table and stand at the center of the tabletop.
- **8.** Grab the bottom edge of the tabletop with both hands spread slightly wider than shoulder width apart and lift up the tabletop. Refer to **Figure 23**.

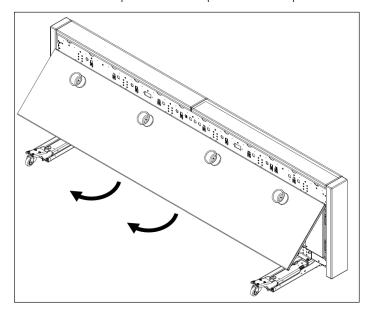


Figure 23: Lift up Tabletop

9. Lift up the tabletop until the latches underneath spring into position. **Figure 24** shows tabletop locked in position.

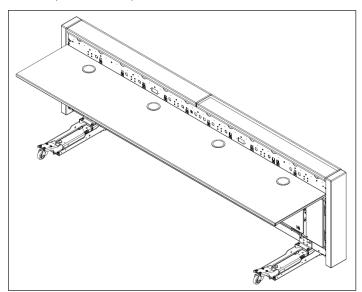


Figure 24: Tabletop Locked in Position

Note: Pull the handle on the right side underneath the tabletop to help ensure latches are fully engaged. Listen for an audible click to indicate that the latches are engaged.

10. Visually inspect each latch underneath the tabletop to ensure it is fully engaged. Refer to **Figure 25**. Apply firm pressure to the tabletop at each support location for additional verification that it is locked in place.

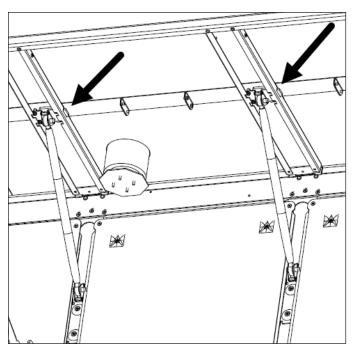


Figure 25: Ensure All Latches Engaged

11. Locate the lockout lanyard hanging off the far-right support underneath the tabletop (Figure 26), and clip it through the hole just in front of the sliding latch (Figure 27).



Figure 26: Lockout Lanyard

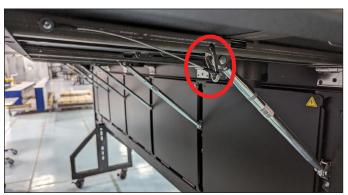


Figure 27: Lockout Lanyard Engaged

- 12. Move to the left side, and repeat **Step 11** to engage the second lockout lanyard.
- 13. Repeat Steps 1–12 for all scorers tables.

Table Teardown – Stationary to Transport Mode

- 1. Unclip both lockout lanyards and allow them to hang freely. Refer to Figure 26.
- 2. While supporting the tabletop with your right hand, use your left hand to feel underneath the left edge to find the tabletop release handle.
- **3.** Pull the tabletop release handle toward the outer edge, and gently lower the tabletop into the dropped position. Refer to **Figure 28**.

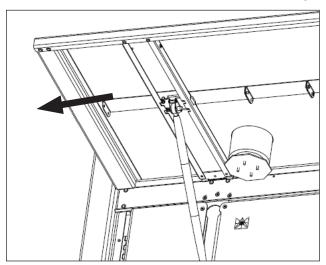


Figure 28: Tabletop Release Handle

- **4.** Tilt the display face forward just far enough to **remove the Caster Base Tool** from the top of each caster base pivot arm. Set the Caster Base Tools aside, and carefully let the display face tilt all the way backward. Adjust cup holders as needed to ensure the tabletop can be pushed flush against the display cabinet. Refer to **Figure 20**.
- **5.** Grab and lift up on the rear of the left caster base pivot arm to raise that side of the table off the floor. Refer to **Figure 29**. Again, the tabletop should be pushed up flush against the rear of the display cabinet to be secured in place by the pivot arms.

CAUTION! Keep fingers/thumb clear between the top of the pivot arms and tabletop surface to avoid being pinched.

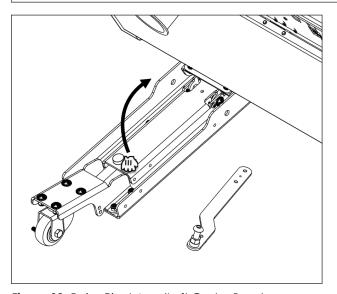


Figure 29: Raise Pivot Arm (Left Caster Base)

6. Move to the right side caster base pivot arm and repeat **Step 5** to fully lift the table off the floor. Refer to **Figure 30**.

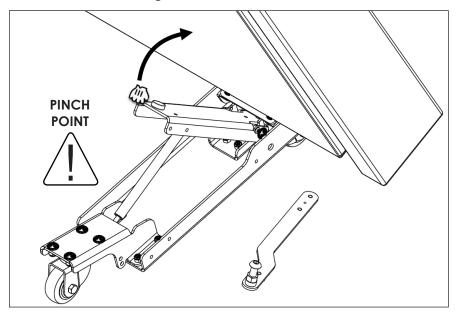


Figure 30: Raise Pivot Arm (Right Caster Base)

- 7. Place the Caster Base Tools back in the bottom channel of each caster base. Refer to Figure 12.
- **8.** At this point, the table is back in transport mode and can be moved to storage or an alternate location. Refer to **Figure 31**.

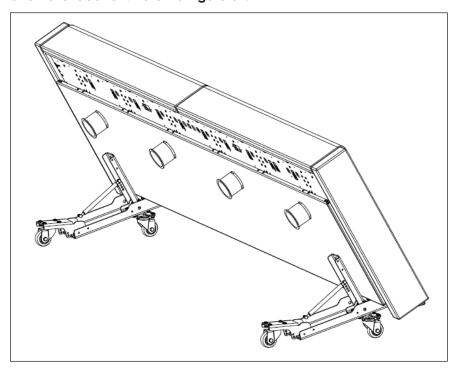


Figure 31: Transport Mode

Adjust Tabletop Level

The tabletop supports are turnbuckle-style connecting rods that will allow for fine tuning of the tabletop to be level across its width and in relation to the floor. Refer to **Figure 32**.

- To **raise** the tabletop, rotate the turnbuckles **counterclockwise** by hand until the desired height is achieved. Maximum adjustment is 16" pin to pin, or +1" from factory.
- To **lower** the tabletop, rotate the turnbuckles **clockwise** by hand until the desired height is achieved.

Verify that all turnbuckles are the same overall length from pin to pin by measuring with a tape measure. This ensures proper tabletop operation when raising/lowering.

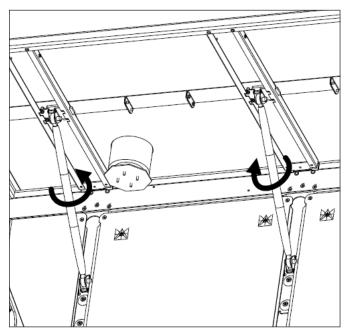


Figure 32: Turnbuckle Adjustment

Troubleshooting Inconsistent Latches:

All latches should function together. From continued use, it is possible one or more latches may not engage. With the tabletop in intended latched position, verify all cabinet-side turnbuckle positions are all the way down against the stops. Adjust the disengaged latch's turnbuckle to return proper function. The factory length is 15" pin-pin on the turnbuckle assembly.

Multiple Table Connection

If more than one scorers table is to be used as part of a single display face, they must be lined up in the appropriate arrangement and connected together. One table attaches to another using two latches on the right side of the table (as viewed from the rear) and the provided 5/16" T-handle hex wrench (part # TH-1088).

To attach the tables together, follow the steps below:

1. Locate the section number on either side of the table. Refer to **Figure 33**. 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.

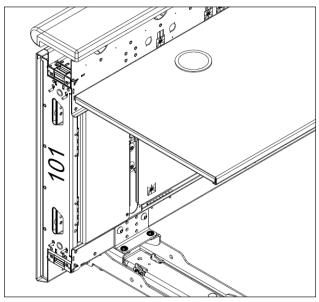


Figure 33: Section Number Label Location

- 2. Move the table labeled "101" into position, set the Caster Base Tool in place, and lift up the tabletop as described in **Table Setup Transport to Stationary Mode (p.10)**.
- 3. Position the tables together as described below and shown in Figure 34:
 - a. Move the table labeled "102" into position as close as possible to the right side of table "101" (as viewed from the front).
 - **b.** Lower the end of table "102" farthest from table "101".
 - **c.** Lower the end of table "102" closest to table "101".

Note: If the tables are overly difficult to reposition, try adjusting the front and rear caster wheels as shown in Figure 17 and Figure 21.

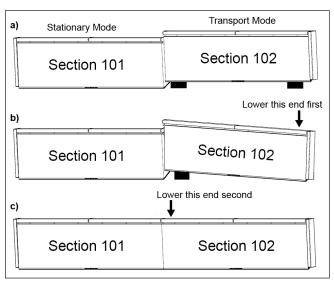


Figure 34: Multiple Table Positioning

4. With the table labeled "102" in position, set the Caster Base Tool in place, and lift up the tabletop as described in **Table Setup – Transport to Stationary Mode (p.10)**.

5. Using the provided 5/16" T-handle hex wrench, latch both latches on the left table to the right table (as viewed from the rear). The wrench must be rotated 285° or a little over a 3/4 turn to fully engage the latch. Refer to Figure 35 for the location of these latches and proper T-handle wrench rotation. If it is difficult to turn the T-handle wrench, verify tables are pushed tightly together and aligned front-back.

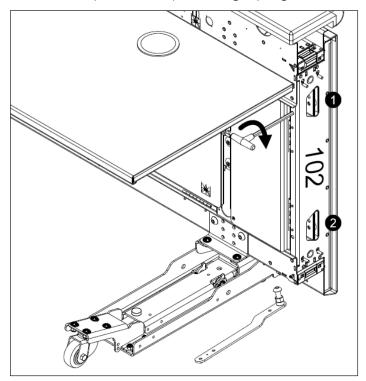


Figure 35: Latch Locations and T-Handle Wrench

6. Repeat **Steps 2–5** for all remaining tables. Store the T-handle hex wrench in a convenient location, such as inside the cable tray.

Note: Be sure to unlatch all tables from each other before performing the steps in Table Teardown – Stationary to Transport Mode (p.15).

Attach End Pads

To keep players safe and protect the table from damage, end 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. Each pad is marked with an "L" or an "R" to indicate which side of the table it will attach to (as viewed from the front). The example shown in **Figure 36** is a right-side pad, but left-side pads will attach the same way.

To attach the end pads, follow these steps:

- 1. Position the end pad at the end of the section. Four bolts attached to each end pad align with keyhole cutouts in the table frame.
- 2. Lift the pad up so all four bolts may be inserted into the keyhole cutouts. It is critical that all four bolts are positioned properly so they hold the pad securely onto the end of the table.
- 3. Slide the pad downward in the side of the frame after all four bolts are properly positioned in the keyhole cutouts. This secures the end pad onto the table.

4. Verify all four bolts are hooked securely into the end of the table to prevent damage to the end pad or possible injury to a player.

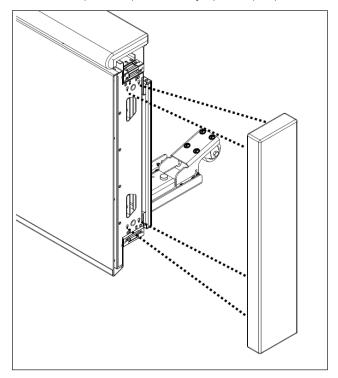


Figure 36: Align End Pad Bolts with Keyhole Cutouts

5. Repeat Steps 1-4 for the end pad at the opposite end of the table.

To remove an end pad, lift it up and pull it away from the table.

Attach Top Pads

- 1. Locate one of the top pads. Each table may have one or two top pads depending on the width.
- 2. Line up the hinges on the pads with the mating hinges on top of the table.
- **3.** Use a small pick or screwdriver to engage both spring pins on each hinge and connect the pad to the table. Refer to **Figure 37**.

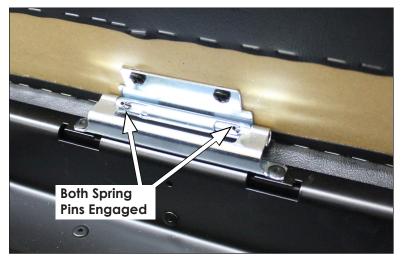


Figure 37: Top Pad Hinge

4. Repeat Steps 1-3 for the other top pad.

Adjust Display Face Angle

All display face angles are pre-set at the factory to 5°. Adjustment of this angle is typically only needed if the protective face panel causes unwanted glare for TV cameras. If a different face angle is desired, the Caster Base Tools and the tabletop surface must be adjusted.

- 1. Locate one Caster Base Tool in the bottom channel of one caster base.
- 2. Use the provided 5/16" T-handle hex wrench (part # TH-1088) to turn the adjustment bolt clockwise to increase the display face angle (tilt the face farther back), or counterclockwise to decrease the display face angle (tilt the display farther forward). Refer to Figure 38.

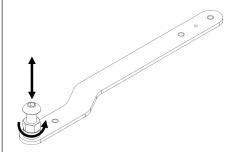


Figure 38: Adjustment Bolt and Jam Nut

Face angle is adjustable from a minimum of 0° to angled back 15°. Use a measuring device to set the adjustment bolt at the correct height to correspond with the typical face angles as shown below and in **Figure 40**:

- 1) 0° 1-5/8" (fully vertical, perpendicular with floor)
- **2)** $5^{\circ} 1 1/4''$ (as set from factory)
- 3) 10° 13/16" (bolt head will be flush with jam nut)
- 4) 15° 3/8" (completely remove jam nut)
- **3.** Once the desired face angle is achieved, set the jam nut and use the 5/16" T-handle wrench to lock the adjustment bolt in place.
- Repeat Steps 1-3 for every Caster Base Tool for every table that is to be connected together as a single display.

After adjusting the Caster Base Tools to change the face angle, the tabletop must also be adjusted accordingly by moving the slide stops. Refer to **Figure 39**.

Note: If possible, have someone assist by lifting up slightly on the tabletop to support it while the slide stops are being adjusted.

Alternately, depress the latch on the latch slider corresponding to the slide stop being adjusted. This will allow the latch slider to freely slide back in the tabletop support.

- 1. Use a T25 Torx bit to remove the two M5 flathead screws.
- 2. Move the slide stop up as the face angle increases or down as the face angle decreases as shown below and in Figure 40:

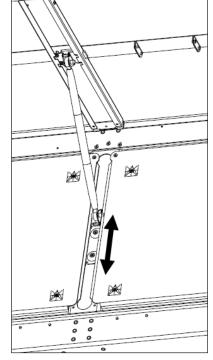


Figure 39: Slide Stop

- 1) Lowest Position, 0° (fully vertical)
- 2) \leq 5° (as set from factory)
- **3)** ≤ 10°
- **4)** Highest Position, ≤ 15°

Note: The farther back the face is tilted, the higher the slide stops should be set.

- 3. Re-install the two M5 flathead screws.
- **4.** Repeat **Steps 1–3** for **every** slide stop for **every** table that is to be connected together as a single display.

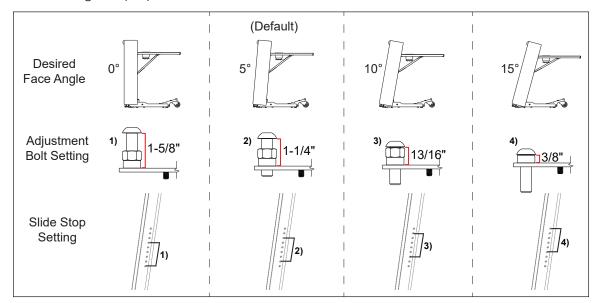


Figure 40: Face Angle Adjustment

Notice that as the face angle increases – i.e. tilts farther back – the adjustment bolt position lowers, and the slide stop position rises.

4 Electrical Installation

This scorers 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.

Warnings and Disclaimers

- Ensure that all electrical work meets or exceeds all local or national electrical codes.
- Provide the required power to the display as listed on the product labels, specifications, or site-specific riser drawings. The conductor size may vary based on the length of the power run.
- Consider implementing a separate circuit for the display using an isolation transformer or dedicated transformer.
- Daktronics assumes no liability for any issues caused by line voltage fluctuations or other improper power conditions.

Power Connection

The power cable is available in 25' (7.6 m), 50' (15.2 m), or 75' (22.9 m) lengths. Use a T25 Torx bit to remove the screws securing the lower-right access panel under the tabletop. Connect one end of the power cable to the **120V AC IN** jack and the other end to a standard 15 Amp receptacle in the wall/floor box. Refer to **Figure 41**.



Figure 41: Power IN

Convenience & USB Outlets

Scorers 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.

End-of-Period and Clock Stop Light Strip Kits

Reference Drawings:

Daktronics scorers 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. Tables may also feature Clock Stop light strips along the rear cable tray. EOP light strips are typically factory installed, while rear Clock Stop light strips must be installed on site using clips and screws as described in **DWG-4889870**.

- 1. Set the All Sport® control console on the tabletop and plug the power cord into one of the rear convenience outlets.
- 2. 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 right rear access door of the primary table. Refer to Figure 42.

Note: For the Clock Stop light strip, plug the 3-pin XLR cable into the rear CLK STOP OUT jack just above the tabletop. Refer to Figure 43. Store excess cable in the cable tray beneath the top pad.

- 3. For multiple tables with light strips, connect 3' (0.9 m) 3-pin XLR cables (part # 0A-1313-0114) from the XLR outputs to the XLR inputs between the tables.
 - The EOP OUT and CLK STOP OUT jacks are located behind the left rear access doors as shown in Figure 44.
 - The EOP IN and CLK STOP IN jacks are located behind the right rear access doors as shown in Figure 42.

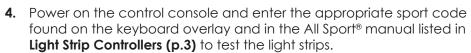




Figure 42: Light Strip Inputs



Figure 43: Rear Clock Stop Jack



Figure 44: Light Strip Outputs

Possession Indicator

Daktronics scorers tables may have an optional possession indicator that sits atop the table padding. Refer to **Figure 45**. Possession indicators are designed so they can be positioned anywhere along the length of the top pad to best align with the center of a single table or a row of tables.

Possession indicators mount to the top pad by sliding on from the rear and then using a #2 Phillips screwdriver or 5/16" socket to tighten the set screws on the bottom flange. Plug the power cord into the dedicated convenience outlet labeled **POSS. INDICATOR OUTLET ONLY**. Refer to **Figure 46**. 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.

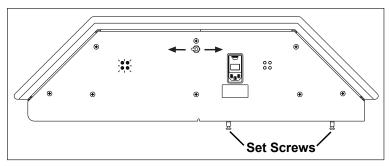




Figure 45: Possession Indicator, Rear View

Figure 46: Possession Indicator Outlet ONLY

5 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 |
|--|--------------------------------------|---|
| Display 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. |
| | 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 IN 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. |
| Light strips do not light | 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 D\$1 LED on the light strip driver lights up when sending commands from the control console. Refer to Light Strip Driver (p.29) . |
| | No power to driver | Check that the green DS2 LED on the light strip driver remains lit up when the display is powered on. Refer to Light Strip Driver (p.29). |
| | Incorrect driver address or function | Check that the light strip driver is set to the correct address or function. Refer to Light Strip Driver (p.29) . |
| Backlit LEDs flicker | Under- or overloaded | Adjust loads on power supplies to be within recommended limits. |
| BUCKIII LEDS IIICKEI | Malfunctioning power supply | Replace power supply. Refer to Replacing a Power Supply (p.29) . |
| | Bad wire connections | Restore connection. |
| Entire backlit display is | Malfunctioning power supply | Check power supply and replace as needed. Refer to Replacing a Power Supply (p.29) . |
| 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. Refer to Replacing an LED Edge Light Strip (p.28) |

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 |
|-----------------------|-------------|---|
| T25 Torx Bit | T-1118 | Opens rear access panels and removes front face |
| 5/16" T-handle Wrench | TH-1200 | Engages table interconnect latches |
| 5/16" Nut Driver | TH-1156 | Removes power supplies |
| 3/8" Nut Driver | TH-1068 | Removes LED edge light strips |

The only tool provided with the table is the T-handle wrench. Additional replacement tools may be ordered directly from Daktronics. Refer to **Daktronics Exchange and Repair & Return Programs (p.32)**.

Component Location & Access

Scorers 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

- 1. Disconnect the power to the display.
- 2. To access the face panel screws, lift up one top pad and use a small pick or screwdriver to depress both spring pins on each hinge connecting the pad to the table. Pull the spring pins inward and down. Refer to **Figure 47**.
- 3. Remove the pad and set it aside; repeat for all top pads.
- **4.** Remove all T25 Torx screws along the top plex retainer as shown in **Figure 48**. Set the top plex retainer aside.





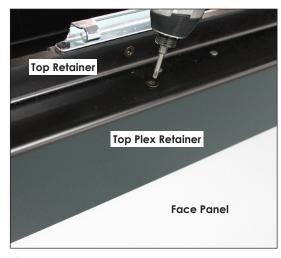


Figure 48: Remove Torx Screws

5. Tilt the face panel forward and lift up to remove.

Rear Access

- 1. Disconnect the power to the display.
- 2. Lift the tabletop upward and secure in place as described in Table Setup Transport to Stationary Mode (p.10).
- 3. Use a T25 Torx bit to remove the two screws securing the appropriate access door.
- 4. Carefully allow the access door to lower downward into the open position.

Replacing an LED Edge Light Strip

- 1. Access the table from the front as described in Front Access (p.27).
- 2. For easier access to the LED edge light strip, it may be necessary to remove all T25 Torx screws along the top retainer as shown in **Figure 48**.
- **3.** Use a 3/8" nut driver to remove the nuts securing the LED edge light strip to the top retainer. Refer to **Figure 49**.



Figure 49: LED Edge Light Strip (as Viewed with Side Pads Removed)

- **4.** Remove the malfunctioning edge light strip by disconnecting the mini Mate-N-Lok connectors from the adjacent light strip(s).
- **5.** Connect the new edge light strip to the rest of the string using the mini Mate-N-Lok connectors and use a 3/8" nut driver to replace the nuts.
- **6.** Replace the top retainer, face panel, and top plex retainer, 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. The power supplies run on high voltage and may cause physical injury if touched.

- 1. Access the table from the rear as described in Rear Access (p.28).
- 2. Use a 5/16" nut driver 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 50: Power Supply

- **4.** Attach the new power supply to the mounting bracket inside the display and reconnect all wires. Refer to **Figure 50**.
- 5. Power up and test the display to verify the issue has been resolved.

Light Strip Driver

Scorers tables with optional light strips will include an LED driver to control when the light strips turn on and off. Refer to **Figure 51** to view the location of light strip driver tray in the scorers table.

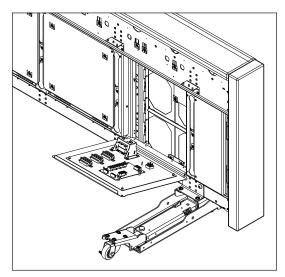


Figure 51: Driver Tray Location

Refer to Figure 52 for the components of an optional light strip driver tray.

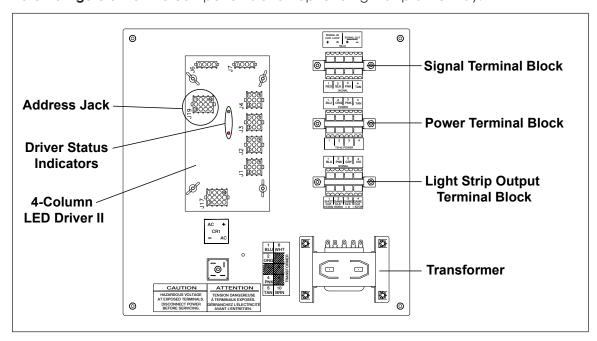


Figure 52: Light Strip Driver Tray Components

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

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.28)**.
- 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 or take a picture 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 as the old driver being replaced. Refer to **Setting the Driver Address (p.31)**.
- **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 as shown in **Figure 52**. It may be possible to reuse the same address plug from the driver that was replaced. If not, order an **Address 1** plug (part # 0A-1150-0122).

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.

6 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.

Display Model Number: _____

Job/Contract Number: _____

Date Manufactured/Installed:

To participate in the Exchange Program, follow these steps:

1. Call Daktronics Customer Service.

Daktronics Customer ID Number: _____

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.



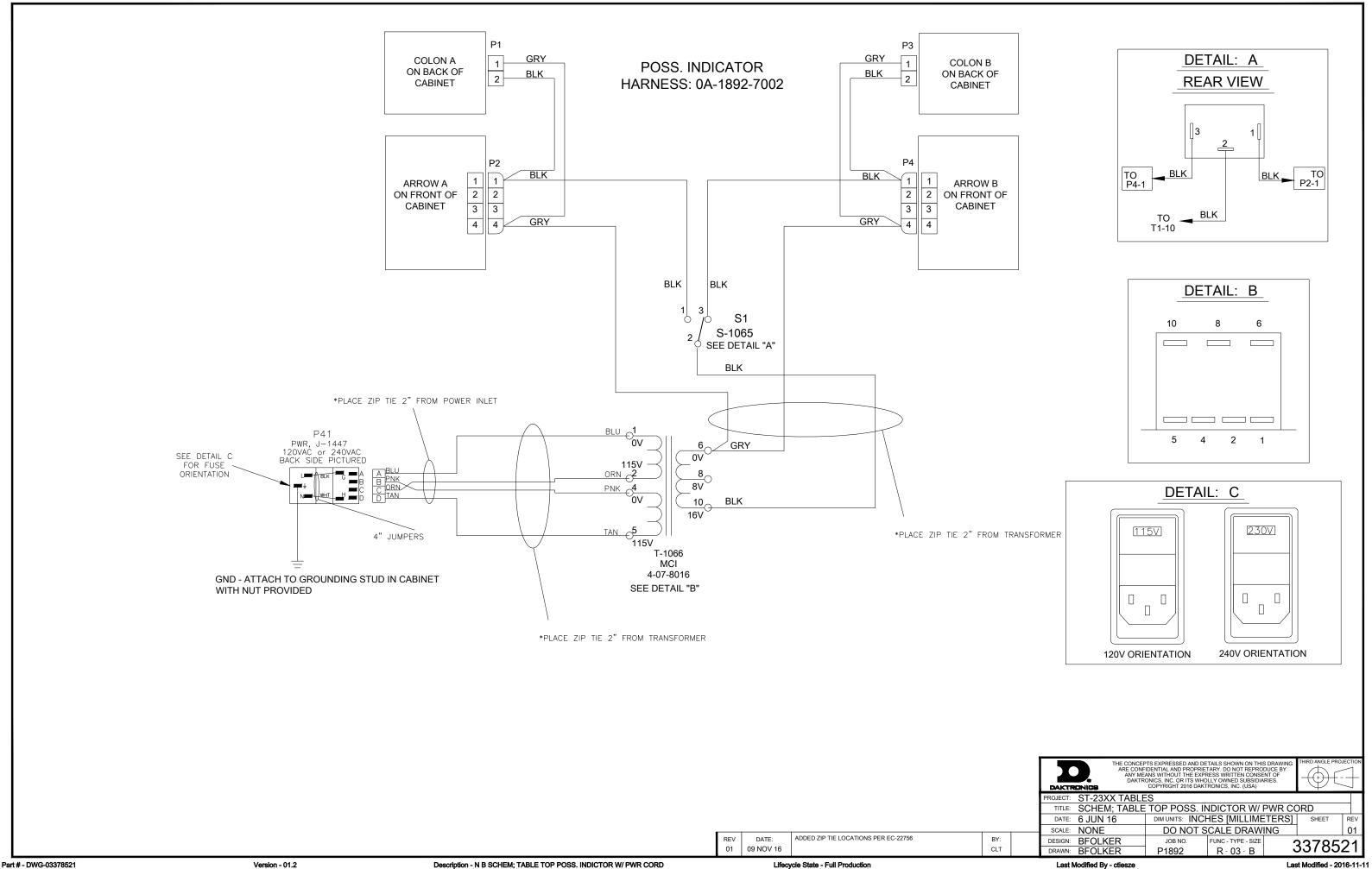
A Reference Drawings

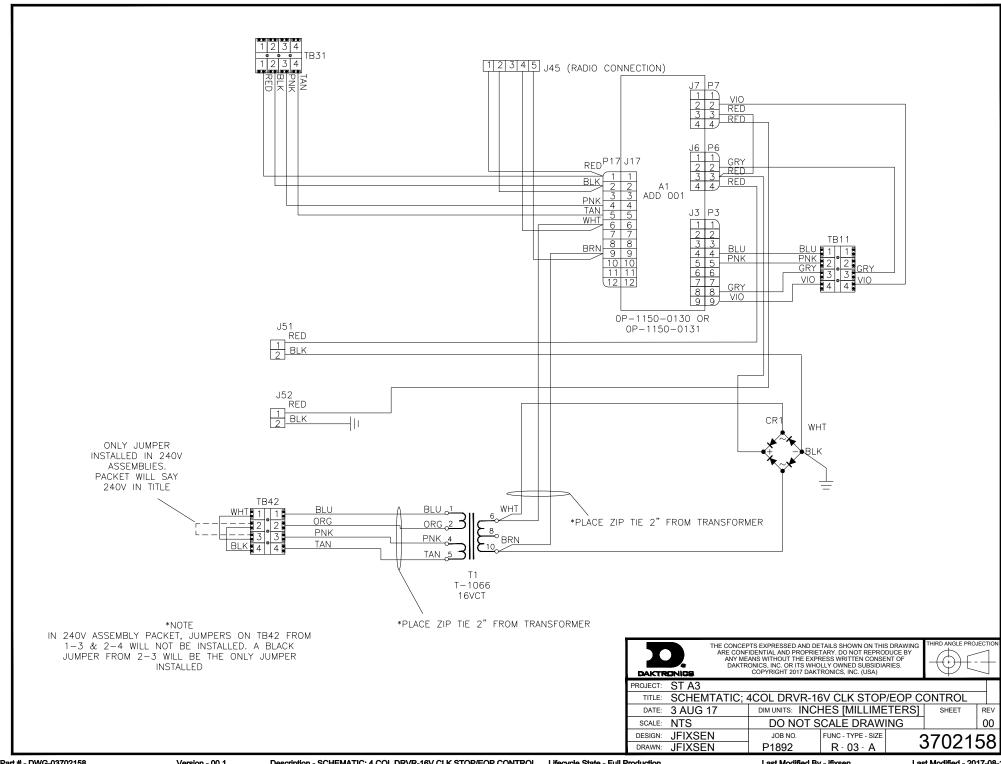
Refer to **Resources (p.2)** for information regarding how to read the drawing number. Any contract-specific drawings take precedence over the general drawings.

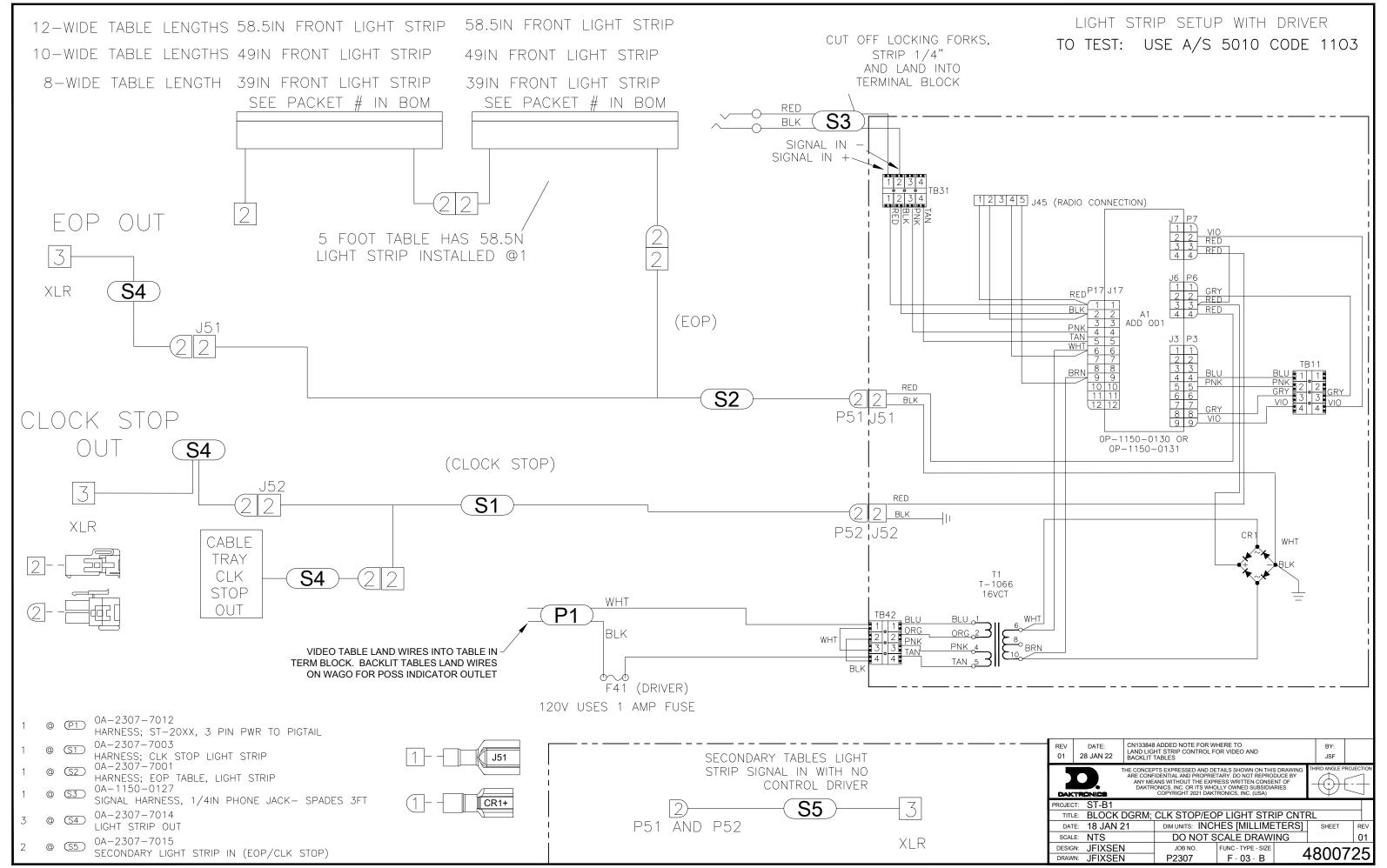
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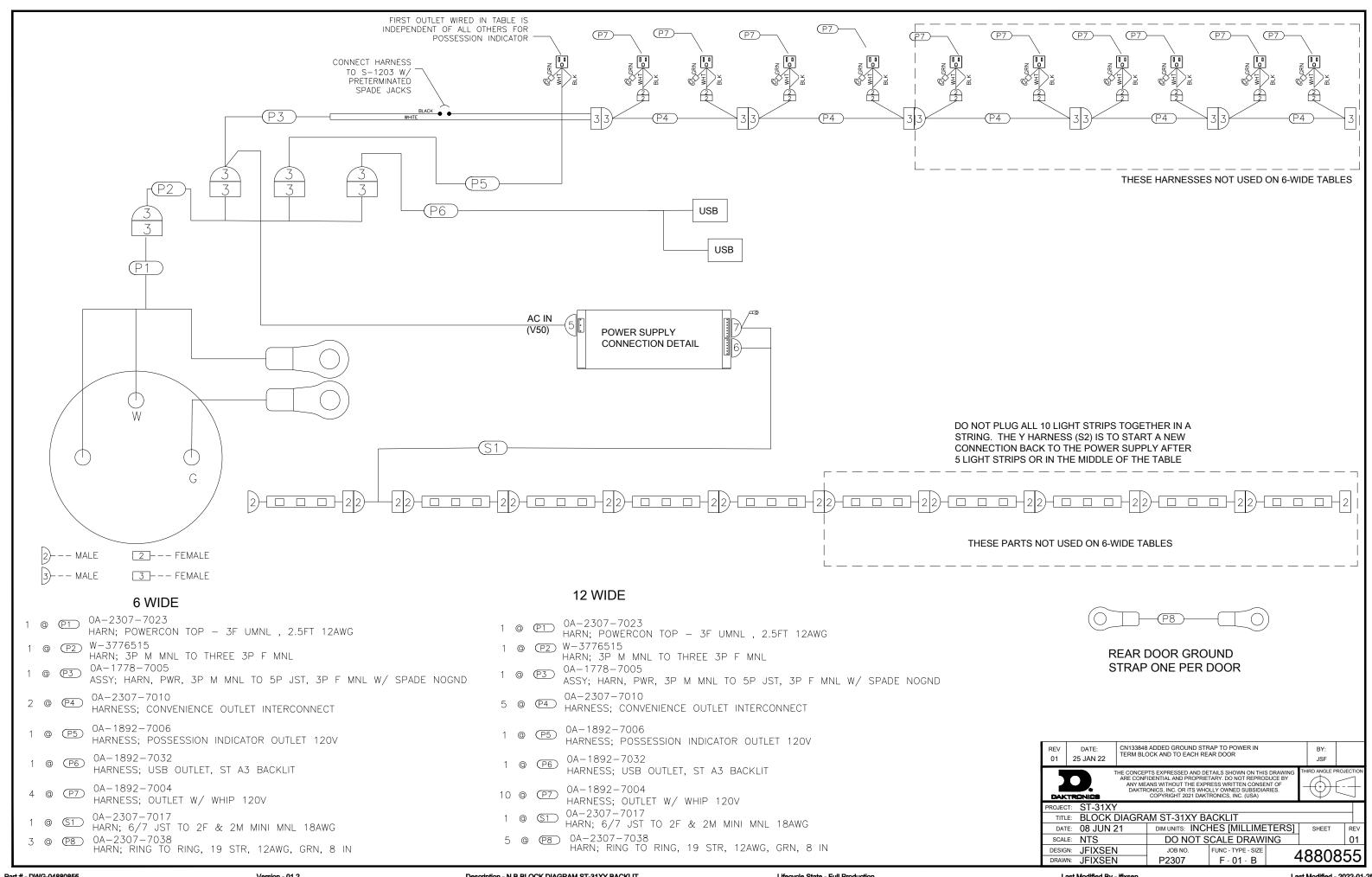
| Schem; Table Top Poss. Indicator w/ Pwr Cord | DWG-3378521 |
|---|-------------|
| Schematic; 4Col Drvr-16V Clk Stop/EOP Control | DWG-3702158 |
| Block Dgrm; Clk Stop/EOP Light Strip Cntrl | DWG-4800725 |
| Block Diagram ST-31XY Backlit | |
| Light Strip Attachment | |
| Mechanical Spec; ST-3170 | |

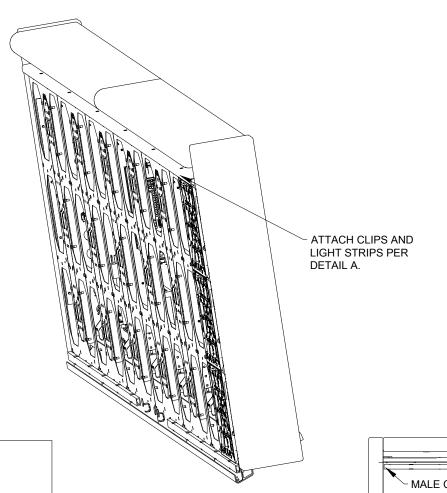




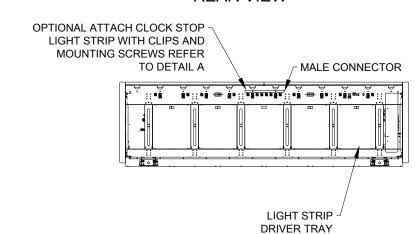


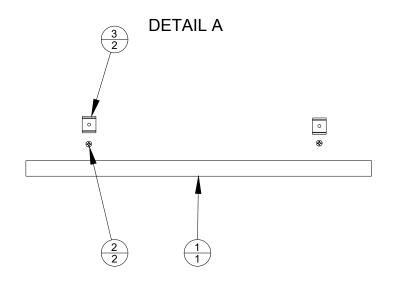






REAR VIEW





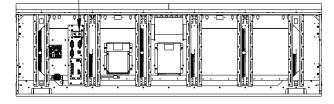
| P2307_LIGHT_STRIP_ATT | | | |
|-----------------------|--------------|--|-------------|
| INDE X | NAME | QT Y | DESCRIPTION |
| 1 | REFER TO BOM | GEN 2, STRIP LIGHTING, LED, BLAZE X, 18IN, RED | |
| 2 | HC-1302 | TAP SCR, #6-20 X 0.750, PHIL FLAT HEADM BLK | |
| 3 | HS-3763489 | CHROMAPATH SLIM BLACK U-CLIP PAIR | |

MALE CONNECTOR

MALE CONNECTOR

REMOVE KNOCKOUTS AT MIDDLE OF TABLE
TO ALLOW FOR LIGHT STRIP TO HOOK
TOGETHER. KNOCKOUTS MUST BE REMOVED
AT EACH END OF THE LIGHT STRIPS.

LIGHT STRIP CNTRL MOUNT TO TABLE USING HC-1554 @4 AND HC-1243 @4 (5 IN-LBS)



FRONT VIEW

| REV 03 | DATE: 16 MAR 23 | CN156041 CHANGED LIGHT STRIP PART NUMBER TO REFER TO BOM ADDED TOP LOCATION AS OPTION LOCATION TO INSTALL LIGHT STRIPS | BY: JSF | |
|-----------|--------------------|--|------------|--|
| REV | DATE: | CN-133848 UPDATED LIGHT STRIP MOUNTING | BY: | |
| 02 | 28 JAN 22 | SCREW | JSF | |
| REV | DATE: | CN126606 ADDED NOTE FOR WHICH SIDE OF LIGHT STRIP | BY: | |
| 01 | AUG 30 21 | HAS MALE AND FEMALE ENDS | JSF | |

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ROJECT: ST-31XY

TITLE: LIGHT STRIP ATTACHMENT

DATE: 23 JUN 21 DIM UNITS: INC

RIP ATTACHMENT

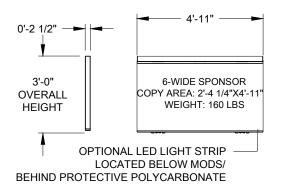
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 DATE:
 23 JUN 21
 DIM UNITS:
 INCHES [MILLIMETERS]
 SHEET
 REV

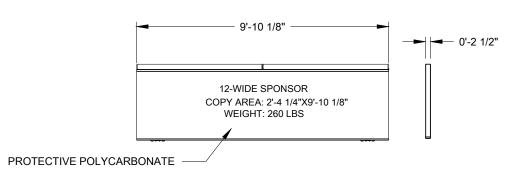
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 NTS
 DO NOT SCALE DRAWING
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 JOB NO.
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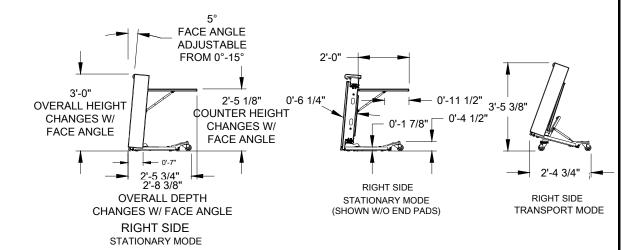
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 P2307
 R - 01 - B
 4889870

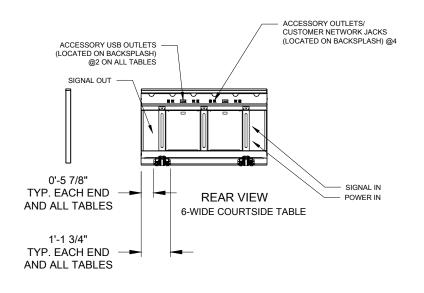


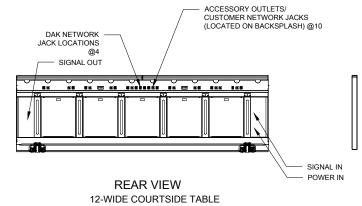


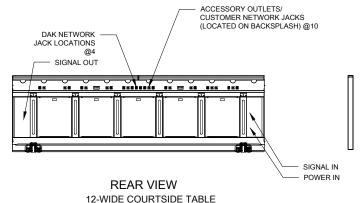


FRONT VIEW 12-WIDE COURTSIDE TABLE



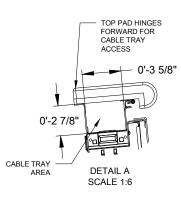


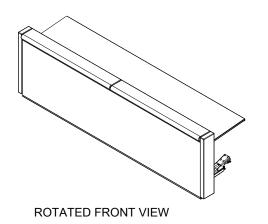


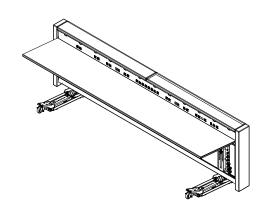












- .O REFERENCE
- 1 REFER TO DAKTRONICS PROPOSAL DRAWING FOR DISPLAY COMPONENT SPECIFICATIONS.
- .2 REFER TO DAKTRONICS SYSTEM RISER DRAWING FOR POWER AND SIGNAL SPECIFICATIONS.
- .O GENERAL NOTES
- .1 ALL DIMENSIONS IN FEET AND INCHES.
- .2 PAINT PLAN:
- DISPLAY CABINETS: SATIN BLACK .3 REFER TO INSTALLATION AND MAINTENANCE MANUAL FOR COMPLETE INSTALLATION INSTRUCTIONS.
- 3.0 DISPLAY NOTES
- .1 DAKTRONICS DISPLAYS ARE ALUMINUM/STEEL CONSTRUCTION.
- .2 DAKTRONICS SCORE TABLES ARE FRONT AND REAR SERVICE.
- 3.3 SIGNAL DISTRIBUTION IS LOCATED IN THE REAR OF THE TABLE.
- 3.4 POWER DISTRIBUTION IS LOCATED IN THE REAR OF THE TABLE.

- 4.0 STRUCTURAL NOTES
- 4.1 ESTIMATED WEIGHT- 260 LBS EACH FOR 12-WIDE SECTIONS 160 LBS EACH FOR 6-WIDE SECTIONS
- AN ADDITIONAL 15 LBS FOR EACH SET OF 2 END PADS 4.2 ANY NON-DAKTRONICS SUPPLIED EQUIPMENT SPECIFICATIONS MUST BE
- SUBMITTED TO DAKTRONICS PRIOR TO DISPLAY FINAL DESIGN. 4.3 ALL SCORETABLE ASSEMBLY HARDWARE SHALL BE PROVIDED BY
- 5.0 PROJECT RESPONSIBILITIES

DAKTRONICS.

- 5.1 ALL ON-SITE WORK TO BE DONE IN ACCORDANCE WITH OSHA AND ALL LOCAL CODES THAT APPLY.
- 5.2 DAKTRONICS SUBCONTRACTORS RESPONSIBLE FOR JOBSITE SAFETY.

ROTATED REAR VIEW

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| В | Daktronics Warranty and Limitation of Liability This section includes the Daktronics Warranty & Limitation of Liability (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 onsite 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;
- 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 (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 | Kruibeke, Belgium |
| Daktronics Ireland Co. Ltd. | Ireland | Dublin, Ireland |



