4-Inch LED Bar-Digit Locker Room Clock

Display Manual

DD1732287 *Rev 5 – 1 December 2015*

Models	
	TI-2031
	TI-3031

201 Daktronics Drive PO Box 5128 Brookings, SD 57006-5128
Tel: 1-800-DAKTRONICS (1-800-325-8766) Fax: 605-697-4746
www.daktronics.com/support

DAKTRONICS

DD1732287
Product 1237
Rev 5 – 1 December 2015

DAKTRONICS, INC.

Table of Contents

Section 1: Introduction

This manual explains the installation and maintenance of Daktronics locker room clocks. For additional information regarding the safety, installation, operation, or service of this system, refer to the Daktronics Customer Service contact information in Section 4.

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.

This manual is not specific to a particular installation. Project-specific information takes precedence over any other general information found in this manual.

1.1 Resources

Figure 1 illustrates a Daktronics drawing label. This manual refers to drawings by listing the last set of digits and the letter preceding them. In the example, the drawing would be referred to as **Drawing D-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:

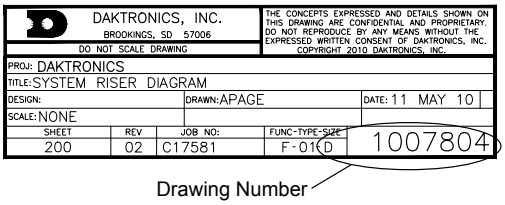


***Figure 1:** Drawing Label*

Reference Drawings:
System Riser Diagram ..... **Drawing D-1007804**

Daktronics identifies manuals by the DD or ED number located on the cover page. For example, this manual would be referred to as **DD1732287**.

1.2 Specifications Label

Power specifications as well as serial and model number information can be found on an ID label on the display, similar to the one shown in **Figure 2**.

***Figure 2:** Specifications Label*

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

1.3 Daktronics Nomenclature

Most display components have a white label that lists the part number (**Figure 3**). Part numbers will also appear on certain drawings. If a component is not found in the Replacement Parts List in **Section 3.4**, use the label to order a replacement. **Section 4** describes the Daktronics Exchange Policy and the Repair & Return Program. Refer to these instructions if replacing or repairing any display component.

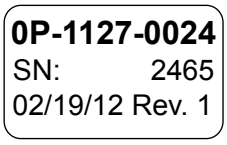


***Figure 3:** Part Label*

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

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

1.4 Control Console

Daktronics locker room clocks are typically controlled by the same control console as the scoreboard(s) in the facility. Refer to **Drawing A-102198** in **Appendix A** for an example of how all the equipment works together. The locker room clocks are designed for use with All Sport® 1600, 4000, 5000 or 5500 series consoles. Refer to the following manuals for operating instructions:

Model	Control Console
TI-2031	All Sport 5000 Series Control Console Operation Manual (ED-11976) All Sport 4000 Series Control Console Operation Manual (ED-9999) All Sport 1600 Series Control Console Operation Manual (ED-12462)
TI-3031	All Sport 5500 Series Control Console Operations Manual (ED-16809)

All of the above manuals are available online at www.daktronics.com/manuals.

1.5 Specifications

This section shows all of the mechanical specifications and power requirements for each display in this manual. Models are listed in alphanumeric order.

Note: All displays require a 120 VAC, 15 A circuit. Displays with a 240 VAC power requirement are also available.

Model	Dimensions: Height, Width, Depth	Weight	Watts	Amps 120 / 240 V AC
TI-2031 TI-3031	8" H, 15" W, 3.25" D* (203 mm, 381 mm, 83 mm)	4 lb (1.8 kg)	40 W	0.3 A / 0.2 A

* Flush mount depth is 1.375" (35 mm).

Section 2: Mechanical & Electrical Installation

The TI-2031 and TI-3031 locker room clocks are connected to the signal from the main scoreboard in the facility and will display the same time that is shown on the scoreboard.

There are two primary methods of installing these locker room clocks: 1) surface mounted on the wall with mounting screws or anchors, or 2) flush mounted in the wall between standard spaced 16" (406 mm) studs.

2.1 Surface Mount Method

Reference Drawings:

System Riser- Remote Radio Receiver ..... **Drawing B-260394**
Installation DWG; TI-2031/3031 Locker Room Clock ..... **Drawing B-1064515**

The surface mount cabinet mounts centered over an electrical outlet and uses the deep rear mounting panel.

1. Drill holes in the wall and install anchors or screws at the locations shown in **Drawing B-1064515**. The customer is responsible for providing mounting anchors or screws.
2. Install a 120 VAC, 15 Amp electrical outlet or use an existing outlet that is located where the display will be installed. The outlet should be positioned behind the clock cabinet so that the wall pack transformer fits in the recessed area of the rear mounting panel.
3. Mount the rear panel on anchor screws and tighten.
4. Route the signal cable to the clock mounting location and allow it to extend at least 12" (305 mm) beyond the wall.
5. Connect the signal wire to plug P-1388 signal terminal on the left side of the display (when viewed from the rear). Connect the red signal wire to the positive (+) jack labeled “CL-IN” and the white signal wire to the negative (-) jack labeled “CL-IN”.

   Note: For installations with radio control from the All Sport console, refer to **Drawing B-260934**.
6. Plug the wall pack transformer into the power jack located below the signal terminal, and plug the wall pack into the electrical outlet.
7. Line up and mate the rear and front cabinet pieces. Attach the pieces together with included screws.

2.2 Flush Mount Method

Reference Drawings:

System Riser- Remote Radio Receiver ..... **Drawing B-260394**
Installation DWG; TI-2031/3031 Locker Room Clock ..... **Drawing B-1064515**

The flush mount cabinet mounts between two 2x4 studs and uses the flush mount rear panel.

1. Drill holes in the wall and install anchors or screws at the locations shown in **Drawing B-1064515**. The customer is responsible for providing mounting anchors or screws.
2. Rough out the power supply and signal recess behind cabinet mounting location as depicted in **Drawing B-1064515**.
3. Install a 120 VAC, 15 Amp electrical outlet on the stud behind the drywall behind the opening for the clock. This will allow the wall pack transformer to be plugged in and be out of the way of the clock when the clock is installed in the wall.
4. Route the signal cable to the clock mounting location and allow it to extend at least 12" (305 mm) beyond the wall.
5. Plug the wall pack transformer into the outlet.
6. Mount the flush-style rear cabinet panel and tighten the anchor screws as needed.
7. Connect the signal wire to plug P-1388 signal terminal on the left side of the display (when viewed from the rear). Connect the red signal wire to the positive (+) jack labeled “CL-IN” and the white signal wire to the negative (-) jack labeled “CL-IN”.

   Note: For installations with radio control from the All Sport console, refer to **Drawing B-260934**.
8. Plug the wall pack transformer into the power jack located below the signal terminal.
9. Line up and mate the rear and front cabinet pieces. Attach the pieces together with included screws.

Section 3: Maintenance & Troubleshooting

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

3.1 Troubleshooting Table

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

Symptom/Condition	Possible Cause
Display will not light	• Console not connected or poor connection • No power to the control console • No power to the display • Loose incoming signal terminal at the display
Garbled display	• Control console malfunction • Driver malfunction
Digit will not light	• Driver malfunction
Segment will not light or stays lit	• Driver malfunction

3.2 Component Access

To gain access to the internal components of the display (surface mount):

1. Remove top and bottom screws connecting front and rear cabinet.
2. Separate the front and rear cabinet pieces.
3. Unplug both the signal and power wires from the rear of the display.
4. Remove screws holding circuit board to front of the cabinet.

3.3 LED Drivers

The LED driver performs the task of switching digits on and off. Locker room clock drivers contain all four LED digits together in one assembly. Locker room clock drivers have two connectors that provide power and signal to and from the driver:

Connector #	Function
J2	Power Input
TB1	Signal in and out

3.4 Replacement Parts

The following table contains display components that may require replacement. Many of the other display components will have attached part number labels.

Part Description	Daktronics Part #
AS5K 4 Col Clock w/ Driver	0P-1150-0259
Transformer (240 V models)	T-1106
Transformer (120 V models)	T-1118

See **Section 4** for information on Daktronics Exchange and Repair and Return program.

Section 4: Daktronics Exchange and Repair & Return Programs

4.1 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
Universities and professional sporting events, live events for auditoriums, and arenas	866-343-6018

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 which is 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.

4.2 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 market phone number in the chart on the previous page.
   Fax: 605-697-4444

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 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

Shipping Address

Daktronics Customer Service
[Case #]
201 Daktronics Drive, Dock E
Brookings, SD 57006

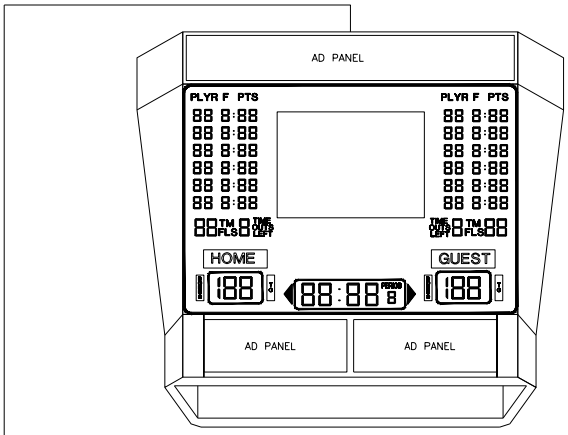
4.3 Daktronics Warranty & Limitation of Liability

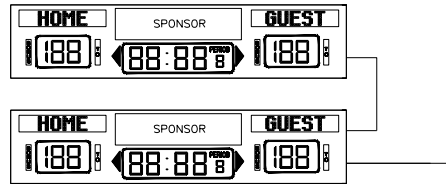
The Daktronics Warranty & Limitation of Liability is located in **Appendix B**. The Warranty is independent of Extended Service agreements and is the authority in matters of service, repair, and display operation.

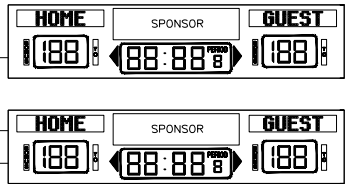
Appendix A: Reference Drawings

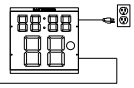
Refer to Section 1.1 for information regarding how to read the drawing number. These drawings are listed in alphanumeric order. Any contract-specific drawings take precedence over the general drawings.

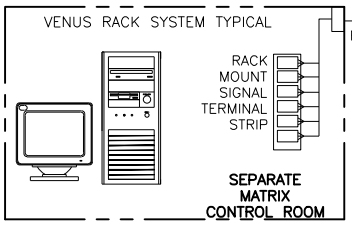
Drawing Title	*Drawing Number*
Riser Diagram: A/S 5000 Series High End System	**A-102198**
System Riser- Remote Radio Receiver	**B-260934**
Installation DWG; TI-2031/3031 Locker Room Clock	**B-1064515**

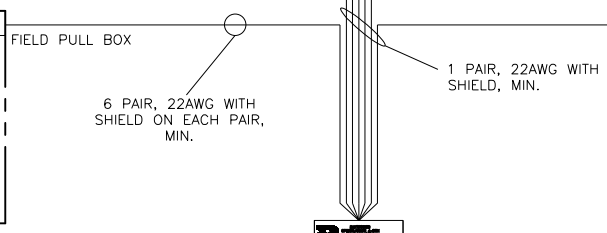


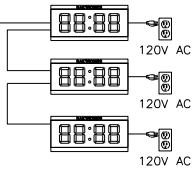


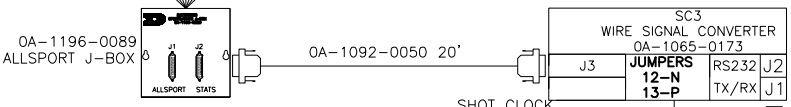












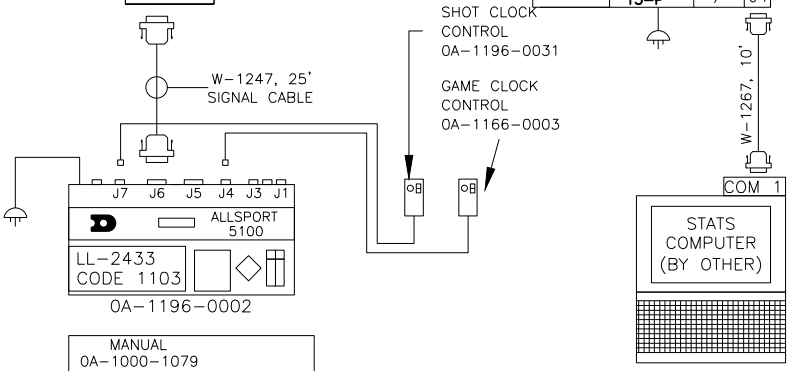
ALLSPORT J-BOX

ALLSPORT J1 OUTPUT TABLE

PIN#	OUTPUT #	SIGNAL
14	1+	MAIN SCBD OUTPUT
15	1−	
16	2+	AUX. SCBD OUTPUT
17	2−	
18	3+	GAME/SHOT AND LOCKER CLOCKS
19	3−	
22	4+	V7000 RTD
7	4−	
9	CL IN+	STATS RX FROM DSTI
10	CL IN−	

STATS J2 OUTPUT TABLE

SC PIN#	J2 PIN #	SIGNAL
11	1	STATS TX
12	2	
9	3	STATS RX
10	4	
4	5	NOT USED
5	6	
6	7	GND



MANUAL
0A-1000-1079

LL-2434,
VOLLEYBALL
CODE 2103

LL-2441, BEFORE 2006 ONLY
TNMC
NO CODE
NECESSARY

DAKTRONICS, INC.
BROOKINGS, SD 57006

DO NOT SCALE DRAWING

PROJ: ALL SPORT 5000

TITLE: RISER DIAGRAM: A/S 5000 SERIES HIGH END SYSTEM

DESIGN:	DRAWN: E BRAVEK	DATE: 01 DEC 99
SCALE: NONE		

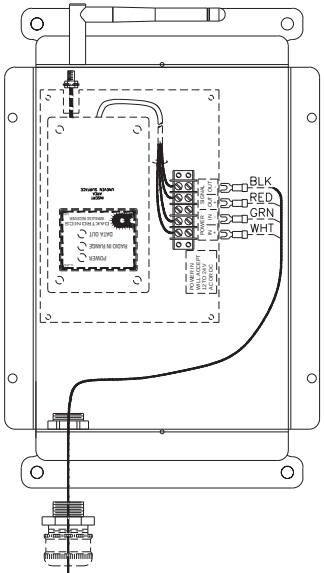
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	
	02	P1196	R-01-A	102198

REV	DATE:		BY:
02	18 AUG 11	UPDATED TITLE BLOCK, BOARDED AND SOME TEXT.	MWM
01	27 FEB 08	UPDATED CONTROL EQUIPMENT	DKD

RADIO RECEIVER LOCATION

BEFORE AUG. 2012 – 0A–1110–0029, GEN V

CURRENT 0A–1110–0054 REMOTE RADIO ENCLOSURE, GEN VI, W REMOTE POWER. **REQUIRES A GEN 6 ALLSPORT.

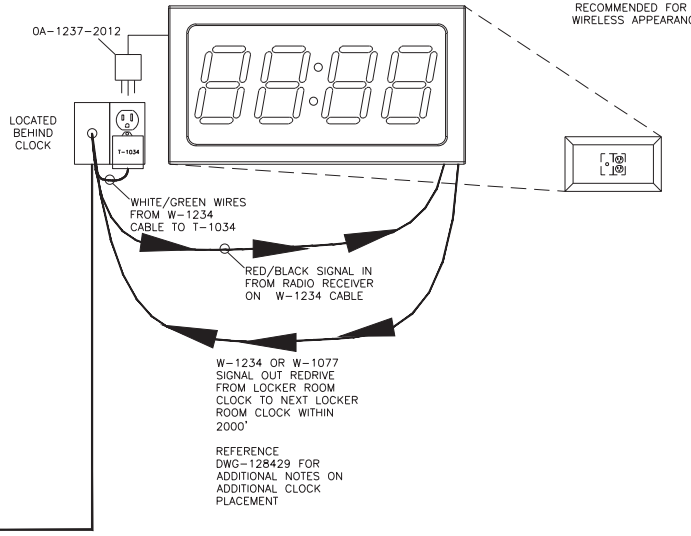


NOTE:
MUST BE INSIDE THE GYMNASIUM WITH LINE OF SIGHT OF CONTROLLER

FIRST LOCKER ROOM CLOCK LOCATION

FRONT VIEW

LOCKER ROOM CLOCK



A TWO–GANG JUNCTION BOX WITH POWER ON ONE SIDE, SIGNAL ON THE OTHER IN THE DESIRED MOUNTING LOCATION IS RECOMMENDED FOR A WIRELESS APPEARANCE.

NOTES:

THIS IS NOT A SCALED DRAWING AND SHOULD BE USED FOR POWER AND SIGNAL REQUIREMENTS ONLY.

IT IS THE RESPONSIBILITY OF THE ELECTRICAL INSTALLATION CONTRACTOR TO ENSURE THAT ALL ELECTRICAL WORK PERFORMED ON SITE MEETS OR EXCEEDS ALL LOCAL AND NATIONAL ELECTRICAL CODES.

ALL SIGNAL CABLE RUNS SHOULD BE LABELED AS TO ORIGIN AND DESTINATION.

IF SHIELD SIGNAL CABLE IS UTILIZED IN YOUR SYSTEM, ENSURE THAT THE SHIELD WIRE IS GROUNDED TO THE SHIELD TERMINAL AT THE SIGNAL CABLE SURGE ARRESTER CARD ONLY.

ALL DISPLAYS MUST BE GROUNDED PER ARTICLE 250 AND 600 OF THE NATIONAL ELECTRICAL CODE WITH NO MORE THAN 10 OHMS GROUND RESISTANCE. LIGHTING PROTECTION SYSTEMS ON DAKTRONICS PROVIDED EQUIPMENT IS NOT A DAKTRONICS REQUIREMENT.

POWER CONTROL FOR DAKTRONICS SUPPLIED EQUIPMENT NOT PROVIDED BY DAKTRONICS.

DAKTRONICS IS NOT RESPONSIBLE FOR THE QUALITY OF THE POWER DELIVERY SYSTEM TO THE DISPLAY SYSTEM.

BECAUSE EACH INSTALLATION IS UNIQUE, DAKTRONICS OFFERS THESE INSTRUCTIONS AS GUIDELINES ONLY. DAKTRONICS, INC. ASSUMES NO LIABILITY IF INSTALLATION STEPS HAVE BEEN OMITTED OR OTHER NECESSARY PROCEDURES ARE NOT INCLUDED IN THIS SYSTEM RISER DIAGRAM.

POWER AND SIGNAL REQUIREMENTS ARE SPECIFIED TO THE EQUIPMENT AND SETUP SHOWN. ANY CHANGES MADE TO EQUIPMENT OR THEIR SETUP SHOULD BE DISCUSSED WITH DAKTRONICS DESIGN PERSONNEL AND WILL REQUIRE AN UPDATED RISER DIAGRAM DRAWING.

THE CONTRACTUAL AGREEMENT WILL DETERMINE THE PARTY OR PARTIES RESPONSIBLE FOR ITEMS LISTED AS FIELD INSTALLED. THIS DRAWING IS NOT INTENDED TO DETERMINE RESPONSIBILITIES AND SHOULD BE USED FOR REFERENCES ONLY.

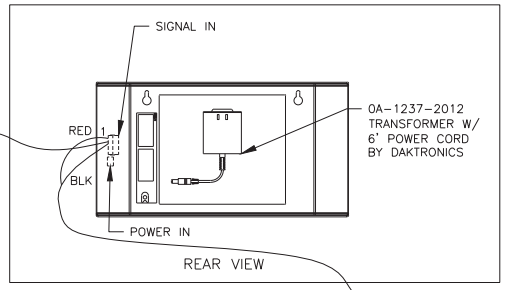
ACTUAL PLACEMENT OF ELECTRICAL COMPONENTS, SUCH AS PANEL BOARDS, A/C'S, AND SPLICE PANELS, MAY VARY. THIS DRAWING REPRESENTS A GENERAL MOUNTING LOCATION OF THIS EQUIPMENT.

DO NOT REFERENCE THIS DRAWING FOR ACTUAL DISPLAY PLACEMENT DETAILS. PLEASE REFERENCE THE SYSTEM SHOP DRAWING FOR THIS DETAIL.

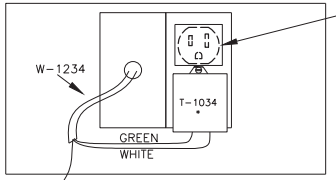
——— EXTERNALLY MOUNTED HARDWARE
– – – – INTERNALLY MOUNTED HARDWARE

WIRING VIEW

REAR VIEW



WALL OUTLET VIEW



PLACE 0A–1237–2012 LOCKER ROOM TRANSFORMER AT THIS LOCATION

* IF MORE THAN ONE LOCKER ROOM CLOCK IS INSTALLED, THE T–1034 TRANSFORMER TO POWER TO THE RADIO RECEIVER IS LOCATED AT CLOCK NEAREST THE RADIO RECEIVER

P–1388 TABLE

PIN	FUNCTION
1	CL IN–P
2	CL IN–N
3	CL OUT–P
4	CL OUT–N
5	SW IN–P
6	GND/SW IN–N
7	BUZZER–P
8	BUZZER–N

REV	DATE:	
07	9 NOV 15	UPDATED FRONT VIEW DETAIL, ADDED LOCATED BEHIND CLOCK NOTE. UPDATED REAR VIEW DETAIL.
06	12 JUN 15	UPDATED VIEW OF ANTENNA
05	30 JAN 13	ALSO, IN THE WIRING VIEW WAS HIDDEN. DID A CLEAN AND PURGE OF THE DRAWING TO FIX IT
04	26 JUL 12	UPDATED TEXT PER THE GEN 6 RADIO DEVELOPMENT
03	17 AUG 09	CHANGED THE WIRE COLORS ON THE TB OF THE NINTH RECEIVER ENCLOSURE
02	11 JAN 07	ENHANCED WALL OUTLET ON FRONT VIEW
01	3 JAN 07	ADDED T-1034 TO FRONT VIEW

REV	DATE:		BY:
08	19 MAY 17	ADDED DETAILS TO SHOW MULTIPLE CLOCK CONFIGURATION	NCB

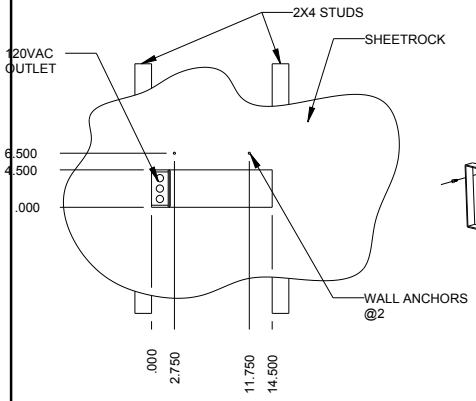
DAKTRONICS, INC.
BROOKINGS, SD 57006
DO NOT SCALE DRAWING

PROJ: ALLSPORT RADIO
TITLE: SYSTEM RISER- REMOTE RADIO RECIEVER
DESIGN: | DRAWN: DDINING | DATE: 13 APR 06
SCALE: NONE

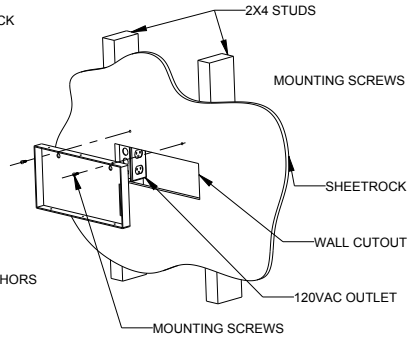
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	
	08	P1110	R - 01 - B	260934

STEP 1: ATTACH REAR COVER TO WALL

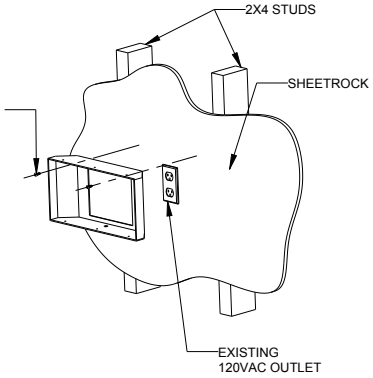
-THE CLOCK SHIPS WITH TWO DIFFERENT REAR COVERS (FLUSH MOUNT AND SURFACE MOUNT)
-THE FLUSH MOUNT OPTION REQUIRES CUTTING A HOLE IN THE WALL AND INSTALLING A 120VAC OUTLET INTERNAL TO THE WALL. OVERALL DEPTH OF CLOCK PROTRUDING FROM THE WALL IS 1.375". SEE SUGGESTED CUTOUT AND OUTLET LOCATION IF THIS OPTION IS CHOSEN.
-THE SURFACE MOUNT OPTION INSTALLS OVER ANY EXISTING 120VAC OUTLET. THE WALL PACK TRANSFORMER IS CONCEALED BEHIND THE REAR COVER. OVERALL DEPTH OF CLOCK IS 3.25"
-CHOOSE DESIRED REAR COVER AND USE AS A JIG TO MARK THE MOUNTING HOLE LOCATIONS AT CHOSEN CLOCK LOCATION.
-DRILL HOLES IN WALL AT MARKED LOCATIONS AND INSTALL APPROPRIATE WALL ANCHORS (CUSTOMER SUPPLIED)
-PLACE REAR COVER OVER ANCHORS AND SECURE TO WALL WITH APPROPRIATE SCREWS (CUSTOMER SUPPLIED) THROUGH KEYHOLES IN REAR COVER.



FRONT VIEW
(SUGGESTED CUTOUT AND OUTLET LOCATION FOR FLUSH MOUNT REAR COVER)



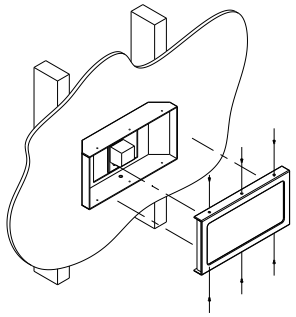
FRONT ROTATED VIEW
(FLUSH MOUNT REAR COVER)



FRONT ROTATED VIEW
(SURFACE MOUNT REAR COVER)

STEP 3: ATTACH FRONT CLOCK ASSEMBLY TO REAR COVER

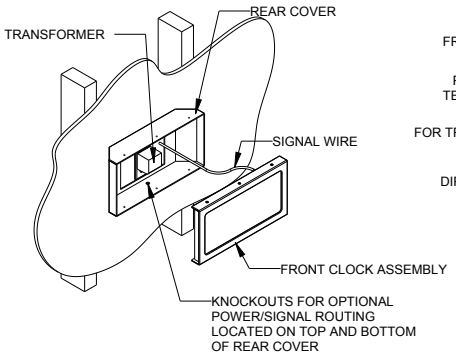
-COIL UP ANY EXTRA SIGNAL/POWER WIRES IN REAR COVER OR WALL DEPENDING ON MOUNTING METHOD CHOSEN
-SLIDE FRONT CLOCK ASSEMBLY ONTO REAR COVER
-ATTACH FRONT CLOCK ASSEMBLY TO REAR COVER WITH INCLUDED SCREWS (THREE ON TOP AND THREE ON BOTTOM)



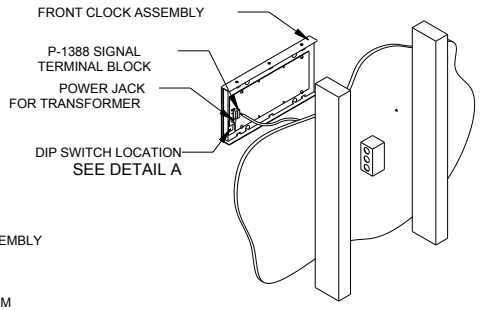
FRONT ROTATED VIEW

STEP 2: ROUTE/TERMINATE SIGNAL AND POWER

-ROUTE SIGNAL CABLE TO THE REAR LEFT SIDE OF CLOCK LOCATION AND ALLOW IT TO EXTEND AT LEAST 12" BEYOND THE WALL
-CONNECT SIGNAL WIRE TO PLUG P-1388 SIGNAL TERMINAL. CONNECT THE RED SIGNAL WIRE TO THE POSITIVE (+) JACK LABELED "CL-IN" AND THE WHITE SIGNAL WIRE TO THE NEGATIVE (-) JACK LABELED "CL-IN"
-SET DIP SWITCHES AS SHOWN IN THE CHART AT RIGHT BASED ON CONTROLLER TYPE. SWITCH POSITION UP IS ON, SWITCH POSITION DOWN IS OFF
-PLUG THE WALL PACK TRANSFORMER INTO THE POWER JACK LOCATED BELOW THE SIGNAL TERMINAL, AND PLUG THE WALL PACK INTO THE ELECTRICAL OUTLET.



FRONT ROTATED VIEW



REAR ROTATED VIEW

DIP SWITCH SETTING:

TI-2031

ALL SPORT 1600/3000/5000
SWITCH 1: ON
SWITCH 6: ON
SWITCH 7: ON

ALL SPORT 4000
SWITCH 7: ON

PROSPORT 6000
SWITCH 6: ON

TI-3031

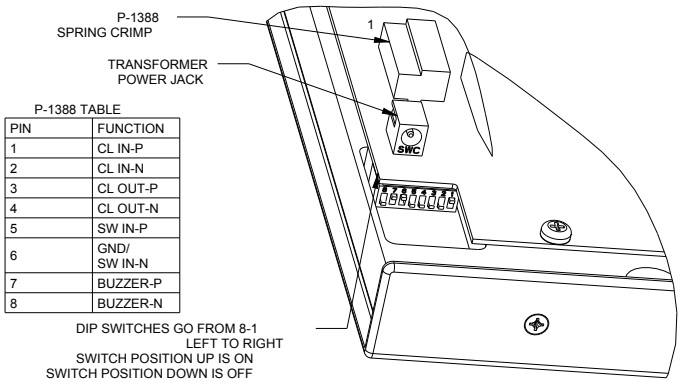
ALL SPORT 5500
SWITCH 1: ON
SWITCH 6: ON

TIME OF DAY (T.O.D)

ALLSPORT 5000
SWITCH 6: ON

P-1388 TABLE

PIN	FUNCTION
1	CL IN-P
2	CL IN-N
3	CL OUT-P
4	CL OUT-N
5	SW IN-P
6	GND/ SW IN-N
7	BUZZER-P
8	BUZZER-N



DETAIL A
SCALE 2/3

REV	DATE:		BY:
03	9 NOV 15	ADDED TIME OF DAY NOTE UNDER DIP SWITCH SETTING ADDED P-1388 TABLE	MTR
02	23 MAR 15	ADDED '3000' TO DIP SWITCH SETTING NOTES	KDD
01	07 NOV 11	ADDED TI-2031 AND TI-3031 TO DIP SWITCH SETTING	MBC

DAKTRONICS, INC.
BROOKINGS, SD 57006
DO NOT SCALE DRAWING

PROJ: INDOOR SCOREBOARDS
TITLE: INSTALLATION DWG; TI-2031/3031 LOCKER ROOM CLOCK
DESIGN: MCARSRU | DRAWN: MCARSRU | DATE: 09-NOV-15
SCALE: 1/15

SHEET:	REV	JOB NO:	FUNC-TYPE-SIZE	
1 OF 1	03	P 1237	E - 10 - B	1064515

Appendix B: Daktronics Warranty & Limitation of Liability

DAKTRONICS WARRANTY & LIMITATION OF LIABILITY

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

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

1. **Warranty Coverage**

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

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

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

C. Daktronics shall pay ground transportation charges for the return of any defective component of the Equipment. All such items shall be shipped by End User DDP Daktronics designated facility. If returned Equipment is repaired or replaced under the terms of this Warranty, Daktronics will prepay ground transportation charges back to End USer and shall ship such items DDP End User's designated facility; otherwise, End User shall pay transportation charges to return the Equipment back to the End User and such Equipment shall be shipped Ex Works Daktronics designated facility. All returns must be pre-approved by Daktronics before shipment. Daktronics shall not be obligated to pay freight for any unapproved return. End User shall pay any upgraded or expedited transportation charges.

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

E. Defects shall be defined as follows. With regard to the Equipment (excepting LEDs), a "Defect" shall refer to a material variance from the design specifications that prohibit the Equipment from operating for its intended use. With respect to LEDs, "Defects" are defined as LED pixels that cease to emit light. Unless otherwise expressly provided, this Warranty does not impose any duty or liability upon Daktronics for partial LED pixel degradation. Notwithstanding the foregoing, in no event does this Warranty include LED pixel degradation caused by UV light. This Warranty does not provide for the replacement or installation of communication methods including but not limited to, wire, fiber optic cable, conduit, trenching, or for the purpose of overcoming local site interference radio equipment substitutions.

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

THIS LIMITED WARRANTY IS NOT TRANSFERABLE.

2. Exclusion from Warranty Coverage

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

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

B. damage caused by: (i)the improper handling, installation, adjustment, use, repair, or service of the Equipment,or (ii) any physical damage which includes, but is not limited to, missing, broken, or cracked components resulting from non-electrical causes; altered, scratched, or fractured electronic traces; missing or gauged solder pads; cuts or clipped wires; crushed, cracked, punctured, or bent circuit boards; or tampering with any electronic connections, provided that such damage is not caused by personnel of Daktronics or its authorized repair agents;

C. damage caused by the failure to provide a continuously suitable environment, including, but not limited to: (i) neglect or misuse; (ii) improper power including, without limitation, a failure or sudden surge of electrical power; (iii) improper air conditioning, humidity control, or other environmental conditions outside of the Equipment's technical specifications such as extreme temperatures, corrosives and metallic pollutants; or (iv) any other cause other than ordinary use;

DAKTRONICS

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

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

J. performance of preventive maintenance;

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

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

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

3. Limitation of Liability

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

It is specifically agreed that the price of the Equipment is based upon the following limitation of liability. In no event shall Daktronics (including its subsidiaries, affiliates, officers, directors, employees, or agents) be liable for any claims asserting or based on (a) loss of use of the facility or equipment; lost business, revenues, or profits; loss of goodwill; failure or increased cost of operations; loss, damage or corruption of data; loss resulting from system or service failure, malfunction, incompatibility, or breaches in system security; or (b) any special, consequential, incidental or exemplary damages arising out of or in any way connected with the Equipment or otherwise, including but not limited to damages for lost profits, cost of substitute or replacement equipment, down time, injury to property or any damages or sums paid to third parties, even if Daktronics has been advised of the possibility of such damages. The foregoing limitation of liability shall apply whether any claim is based upon principles of contract, tort or statutory duty, principles of indemnity or contribution, or otherwise.

In no event shall Daktronics be liable for loss, damage, or injury of any kind or nature arising out of or in connection with this Warranty in excess of the Purchase Price of the Equipment. The End User's remedy in any dispute under this Warranty shall be ultimately limited to the Purchase Price of the Equipment to the extent the Purchase Price has been paid.

4. Assignment of Rights

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

5. Governing Law

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

6. Availability of Extended Service Agreement

For End User's protection, in addition to that afforded by the warranties set forth herein, End User may purchase extended warranty services to cover the Equipment. The Extended Service Agreement, available from Daktronics, provides for electronic parts repair and/or on-site labor for an extended period from the date of expiration of this warranty. Alternatively, an Extended Service Agreement may be purchased in conjunction with this Warranty for extended additional services. For further information, contact Daktronics Customer Service at 1-800-DAKTRONics (1-800-325-8766).

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