

All Sport CG

Operation Manual

ED-15365

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Section 1: Introduction

This manual explains the operation of the All Sport® CG (Character Generator). For additional information regarding the safety, installation, operation, or service of this system, refer to the telephone numbers listed in Section 5.

IMPORTANT SAFEGUARDS

- Read and understand all instructions, both general and for specific sports.
- Do not drop the control console or allow it to get wet.
- Do not disassemble control equipment or electronic controls of the display; failure to follow this safeguard will make the warranty null and void.
- Always unplug the control equipment when it is not in use. Never yank the power cord to pull the plug from the outlet. Grasp the plug and pull to disconnect.
- Do not let any power cord touch hot surfaces or hang over the edge of a table that would damage or cut the cord.
- If an extension cord is necessary, a three-pronged, polarized cord should be used. Arrange the cord with care so that it will not be tripped over or pulled out.
- Inspect console for shipping damage such as rattles and dents, and verify that all equipment is included as itemized on the packing slip. Immediately report any problems to Daktronics; save all packing materials if exchange is necessary.

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:

DAKTRONICS, INC. BROOKINGS, SD 57006 DO NOT SCALE DRAWING		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2010 DAKTRONICS, INC.	
PROJ: DAKTRONICS			
TITLE: SYSTEM RISER DIAGRAM			
DESIGN:		DRAWN: APAGE	DATE: 11 MAY 10
SCALE: NONE			
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
200	02	C17581	F-01CD 1007804

Drawing Number

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 **ED-15365**.

1.2 Control Consoles

The All Sport CG may be used with an All Sport® controller. These consoles use keyboard overlays (sports inserts) to control numerous sports/events and scoreboard models. Refer to the following manuals for operating instructions:

- All Sport 5000 Series Control Console Operation Manual (ED-11976)
- All Sport 5500 Series Control Console Operation Manual (ED-16809)

These manuals are provided on a CD with the control console and they are also available online at www.daktronics.com/manuals.

1.3 System Overview

The All Sport CG is an interface that receives footage from a video camera and overlays game-in-progress (GIP) data from an All Sport controller onto the video footage. The result is game video with scoring and timing information always visible, whether the footage is sent to a recording device, broadcasted over closed circuit TV, or streamed live over the Internet.

The connection between the All Sport controller and the All Sport CG can be either wire or radio. The radio option allows for more flexibility and fewer physical connections (an All Sport CG with the radio option can still use a wire connection as a backup if desired).

System Requirements

The All Sport CG system requires the following additional components (sold separately):

- Video camera (standard definition)
- Recording device, such as a VCR, DVD recorder, or video capture card
- All Sport 5000 or 5500 control console (optional, but recommended)

Section 2: Setup

Use the tables and figures below to identify the various jacks that are used to connect components to the All Sport CG:

Jack	Description
VIDEO IN (Composite)	Receives the video feed from camera or other source (<i>analog NTSC Only</i>)
VIDEO OUT (Composite)	Sends the video feed with overlaid game-in-progress information to recording device (<i>analog NTSC Only</i>)



Figure 2: All Sport CG, Bottom View

Jack	Description
Antenna	Radio Unit Only. Receives game-in-progress information from the All Sport controller via wireless radio signal (both All Sport CG and control console must be equipped with optional radio kits)
DATA (DB9-M)	Receives the game-in-progress information from the All Sport controller via a direct wire connection
CONTROL (DB9-F)	Receives firmware upgrade information; also used to output TV data feeds and upload custom graphics (see Appendix B)
POWER	Receives power via power adapter

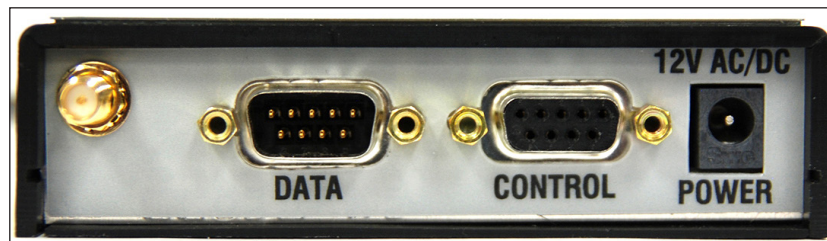
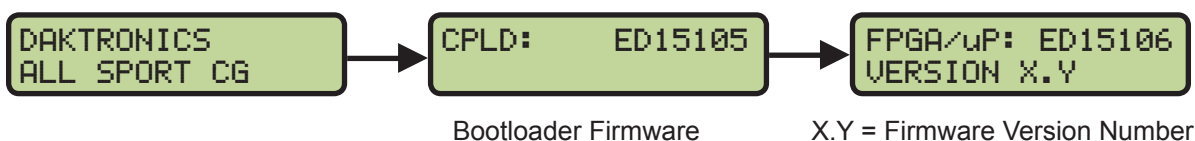


Figure 3: All Sport CG, Top View

2.1 Power Connection

The All Sport CG receives power from a standard 120 VAC outlet via a power adapter plugged into the **POWER** jack on top of the All Sport CG. Plugging in and disconnecting the power adapter will power the unit on and off.

When first powered on, the unit will go through a standard boot-up sequence as shown below:



2.2 Video Camera Connection

The connection between the camera or video source and the All Sport CG is always via wire. The analog NTSC video signal is carried via an RCA cable connection from the **VIDEO OUT** jack on the video camera to the **VIDEO IN** jack on the bottom panel of the All Sport CG.

2.3 Recording Device Connection

The connection between the recording device and All Sport CG is always via wire. An RCA cable sends the combined data via a connection from the **VIDEO OUT** jack on the bottom of the All Sport CG to the **VIDEO IN** jack on the VCR or other recording device.

2.4 All Sport Controller Connection

There are three ways to get scoring information into the All Sport CG (each method is also detailed in **Drawing B-240848** located in **Appendix A**):

- Wire connection between the All Sport CG and the All Sport controller
- Wireless radio signal between the All Sport CG and the All Sport controller
- All Sport CG used manually (no All Sport controller required)

Wire Connection

For a wire connection, game-in-progress data is sent through a cable from the 1/4" phone jack (J1, J2, or J3) on the back of the All Sport 5000 or 5500 controller to the 9-pin **DATA** port on top of the All Sport CG.

Wireless Radio Connection

When the wireless radio option is used, game-in-progress data is sent via radio signal from the All Sport 5000 or 5500 controller equipped with a radio transmitter to the All Sport CG with a radio receiver. The radio signal has a communication distance of up to 500' (152 m) indoor or 1500' (457 m) outdoor with a clear line of sight.

If an internal radio is detected when the All Sport CG is turned on, the operator will be prompted for a Broadcast Group. Enter the corresponding Broadcast Group setting from the All Sport controller, and then press **<ENTER */EDIT>**.

A rectangular LCD display with a black border. The text is in green on a black background. It reads "BROADCAST GROUP" on the first line and "FOR RADIO 0*" on the second line.

Next, a prompt will appear to enter the Channel Number. Enter the corresponding Channel Number setting from the All Sport controller, and then press **<ENTER */EDIT>**.

A rectangular LCD display with a black border. The text is in green on a black background. It reads "CHANNEL NUMBER" on the first line and "FOR RADIO 0*" on the second line.

Refer to the appropriate All Sport controller operation manual (listed in **Section 1.2**) for detailed instructions on selecting the proper Broadcast Group and Channel Number being used to control the scoreboard.

Radio Connection Status

When a wireless All Sport CG is successfully connected to a console via radio, an "R" displays in the upper-right corner of the LCD. If a wireless All Sport CG cannot find a radio with the specified Broadcast Group and Channel numbers, a "?" is shown instead.

A rectangular LCD display with a black border. The text is in green on a black background. It shows "B=0 S=0 O=0" on the first line, "*G= 0 H= 0 I= 1" on the second line, and a circled "R" in the top right corner.

A rectangular LCD display with a black border. The text is in green on a black background. It shows "B=0 S=0 O=0" on the first line, "*G= 0 H= 0 I= 1" on the second line, and a circled "?" in the top right corner.

No All Sport Connection

If no All Sport controller is available for use with the All Sport CG, such as for a road game, it's possible to operate in Manual Mode. Refer to **Section 3.3** for more information.

Section 3: Operation

There are two primary modes in which the All Sport CG can operate:

- **Automatic Mode:** Game data is received from the All Sport controller using a wire connection or wireless radio signal (refer to Section 2.4).
- **Manual Mode:** Game data is generated using the keypad, without using an All Sport controller.


Some of the menu options can be adjusted in both modes, while others are for Manual mode only.

3.1 Menu Options

- Press <MENU> to access the setup options.
- Use <↑> and <↓> to move between menu items.
- Press <MENU> again at any time to exit.

New Game

Press <ENTER */EDIT> to clear all of the current game information.



NEW GAME
ENTER TO MODIFY

Note: This action is only available in Manual mode and cannot be undone!

Guest & Home Team Name

To enter team names, use the Alpha-Numeric insert printed on the back of the sport insert. Press <ENTER */EDIT> to modify the team name. The currently selected letter will flash. Use the keypad to type in a name or abbreviation for the team (up to 10 characters). After entering a team name, press <ENTER */EDIT> to save.



These menu items can be set in both Automatic and Manual modes.

Note: Team names must be configured on the All Sport CG when it is used in Manual mode. The All Sport 5000 and 5500 controllers can output team names as part of the data transferred to the All Sport CG.

Alpha-Numeric Keypad Insert

The All Sport CG has an alpha-numeric keypad insert used for entering team names.

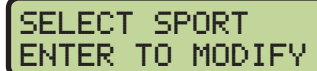
Entering words is identical to that of a touchtone phone, with no letters on key 1, and the rest of the letters assigned in groups on keys 2-9. Press 0 to insert a space. When prompted to enter text, the LCD will display a flashing cursor. Type in the name and press <ENTER */EDIT> to save the changes.

Other helpful hints:

- If a key is pressed too many times and a character is missed, simply keep pressing the key until it appears again.
- If an error is made when entering a character, press <CLEAR> or use <↑> to go back to the previous character.
- Pressing a different key for one of the other characters will immediately start entry at the next location.
- To avoid waiting for the character to quit flashing to enter another from the same key, press <↓> to immediately move to the next location.
- To edit a specific character, use <↑> and <↓> to move back and forth.

Select Sport

When using the All Sport CG in Manual mode, the current sport needs to be selected. Press <ENTER */EDIT> and press <↑> and <↓> to toggle between the available sports. Press <ENTER */EDIT> again to select a sport.

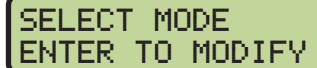


SELECT SPORT
ENTER TO MODIFY

Note: The sport can only be selected in Manual mode. When connected to an All Sport controller, the sport is selected automatically (if it can be detected).

Select Mode

Press <ENTER */EDIT> and then press <↑> and <↓> to toggle between MANUAL and AUTOMATIC modes. Press <ENTER */EDIT> again to select a mode.



SELECT MODE
ENTER TO MODIFY

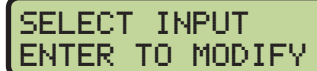
On power up, the All Sport CG will set the mode to Automatic if an All Sport controller is detected and the sport can be determined.

If the setup contains an All Sport controller, the mode needs to be set to Automatic in order to receive game data from the control console. When the All Sport CG is set to Automatic, the output data cannot be changed by using the keypad.

The mode needs to be set to Manual in order to operate the All Sport CG when a control console is not available. Also, the mode can be switched to Manual at any time to override and ignore the data from a connected controller.

Select Input

Press <ENTER */EDIT> and then press <↑> and <↓> to toggle between WIRE and RADIO inputs. Press <ENTER */EDIT> again to select an input type.



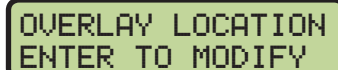
SELECT INPUT
ENTER TO MODIFY

On power up, the All Sport CG will set the Input to the source that first detects an All Sport.

Note: This menu item is only available for editing when the All Sport CG is in Automatic mode and an internal radio is detected.

Overlay Location

By default, scoring information from the All Sport CG is displayed across the top of the video output. To change this location, press <ENTER */EDIT> and press <↑> and <↓> to toggle between **Very Top**, **Top** (default), **Bottom**, and **Very Bottom**. Press <ENTER */EDIT> again to save.

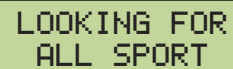


OVERLAY LOCATION
ENTER TO MODIFY

3.2 Automatic Mode

Operation of the All Sport CG is simple when connected to an All Sport controller. The All Sport CG receives game data via wire or wireless radio from the control console and overlays it onto the video feed in real time. The All Sport CG is automatically set to the same sport as the control console and all information is received directly from it.

When the All Sport CG is set to Automatic mode, it will search for a signal from the All Sport controller. If the controller is not connected, the LCD displays the message:



LOOKING FOR
ALL SPORT

The only direct operation required is configuring the Broadcast Group and Channel Number for use with a radio control console. Refer to **Section 2.4** and the appropriate All Sport controller operation manual for more information.

3.3 Manual Mode

When using Manual mode, the All Sport CG does not have an external source for game data, so all information must be entered by hand with the keypad. The All Sport CG uses removable inserts to denote which button has what function for the particular sport mode. The buttons that apply to all sports include <MENU> and <↑> and <↓> navigation. Each sport also has buttons with specific functions as described in the following sections.

Scoring

Each sport has two to six buttons on the keypad insert used for keeping score. Press these buttons to increment, or add to, the score by the value printed on the insert.

```
TEAM SCORE: +1
HOME       7
```

To decrement, or subtract, points from the home team, press <CLEAR/ALT> then <HOME SCORE +1/-1>. To decrement points from the guest team, press <CLEAR/ALT> then <GUEST SCORE +1/-1>. Only one point can be subtracted from either team at a time.

```
TIME 8:00
SELECT ALT ITEM → TEAM SCORE: -1
HOME 6
```

Scores can be quickly set to any value by pressing <ENTER*/EDIT> followed by any of the scoring buttons. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

```
TIME 8:00
SELECT EDIT ITEM → TEAM SCORE: EDIT
HOME ..6*
```

Timing

Every sport but baseball and tennis has a timing function. Press <SET TIME*> and use the keypad to type in the value. Press <ENTER*/EDIT> again to save.

```
TIME EDIT SET
CURR .8:00*
```

The clock can also be set to count up or count down (default). Press <CLEAR/ALT> followed by <SET TIME*>, and then press <1> to count up or <2> to count down.

```
TIME 8:00
SELECT ALT ITEM → MAIN CLOCK-DOWN
1-UP 2-DOWN
```

- To start the clock, press <START/↑>.
- To stop the clock, press <STOP/↓>.

Baseball

The following buttons and functions are unique to the baseball sport mode.

```
B=0 S=0 O=0
*G= 0 H= 0 I= 1
```

Baseball Scoring Output:

```
ALL SPORT G GUEST 2
HOME 4 3RD B-2 S-2 O-1
```

Ball

- Press <BALL +1/-1> to increment the ball number.
- Press <CLEAR/ALT> followed by <BALL +1/-1> to decrement the ball number.
- Press <ENTER*/EDIT> followed by <BALL +1/-1> to edit the ball number. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.
- Press <CLEAR BALL & STRIKE> to remove all ball (and strike) information.

Strike

- Press <STRIKE +1/-1> to increment the strike number.
- Press <CLEAR/ALT> followed by <STRIKE +1/-1> to decrement the strike number.
- Press <ENTER*/EDIT> followed by <STRIKE +1/-1> to edit the strike number. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.
- Press <CLEAR BALL & STRIKE> to remove all strike (and ball) information.

Out

- Press <OUT +1/-1> to increment the out number.
- Press <CLEAR/ALT> followed by <OUT +1/-1> to decrement the out number.
- Press <ENTER*/EDIT> followed by <OUT +1/-1> to edit the number of outs. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

Runs

- Press <GUEST RUNS +1/-1> or <HOME RUNS +1/-1> to increment the number of runs for the respective team.
- Press <CLEAR/ALT> followed by <GUEST RUNS +1/-1> or <HOME RUNS +1/-1> to decrement the number of runs for the respective team.
- Press <ENTER*/EDIT> followed by <GUEST RUNS +1/-1> or <HOME RUNS +1/-1> to edit the number of runs for the respective team. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

Inning

- Press <INNING +1/-1> to increment the inning number.
- Press <CLEAR/ALT> followed by <INNING +1/-1> to decrement the inning number.
- Press <ENTER*/EDIT> followed by <INNING +1/-1> to edit the inning number. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

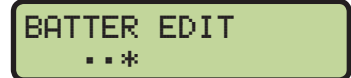
At Bat

- Press <AT BAT> to toggle between GUEST AT BAT and HOME AT BAT. The current team up to bat will have an asterisk (*).



Batter Number

- Press <BATTER NUMBER> to edit the current batter. Use the keypad to type in the player's jersey number, and then press <ENTER*/EDIT> to save.

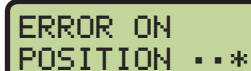


Hit

- Press <HIT> to toggle between HIT ON and HIT OFF.
- Press <CLEAR HIT & ERROR> to remove all hit (and error) information.

Error

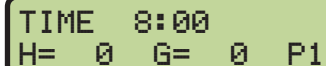
- Press <ERROR> to indicate an error. Use the keypad to type in the player's position number, and then press <ENTER*/EDIT> to save.
- Press <ERROR> again to toggle errors OFF.
- Press <CLEAR HIT & ERROR> to remove all error (and hit) information.



ERROR ON
POSITION ***

Basketball

The following buttons and functions are unique to the basketball sport mode.



TIME 8:00
H= 0 G= 0 P1

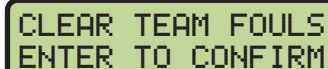
Basketball Scoring Output:



ALL SPORT G GUEST 32 07:17
HOME 36 4TH FLS 7 30
5

Team Fouls

- Press <HOME FOULS +1/-1> or <GUEST FOULS +1/-1> to increment the number of team fouls for the respective team.
- Press <CLEAR/ALT> followed by <HOME FOULS +1/-1> or <GUEST FOULS +1/-1> to decrement the number of team fouls for the respective team.
- Press <ENTER*/EDIT> followed by <HOME FOULS +1/-1> or <GUEST FOULS +1/-1> to edit the number of team fouls for the respective team. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.
- Press <CLEAR TEAM FOULS> followed by <ENTER*/EDIT> to remove all team foul information for both the home and guest teams.



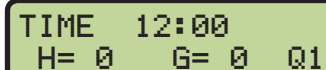
CLEAR TEAM FOULS
ENTER TO CONFIRM

Period

- Press <PERIOD +1/-1> to increment the period number.
- Press <CLEAR/ALT> followed by <PERIOD +1/-1> to decrement the period number.
- Press <ENTER*/EDIT> followed by <PERIOD +1/-1> to edit the period number. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

Football

The following buttons and functions are unique to the football sport mode.



TIME 12:00
H= 0 G= 0 Q1

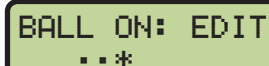
Football Scoring Output:



ALL SPORT G GUEST 6 3:18 2ND & 07
HOME 14 1ST ON THE 34 25

Ball On

- Press <BALL ON*> to set the current yard line of the ball. Use the keypad to type in the value, and then press <ENTER*/EDIT> to save.



BALL ON: EDIT

Down

- Press <DOWN +1/-1> to increment the down number.
- Press <CLEAR/ALT> followed by <DOWN +1/-1> to decrement the down number.
- Press <ENTER*/EDIT> followed by <DOWN +1/-1> to edit the down number. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

Yards To Go

- Press <YARDS TO GO*> to edit the number of yards for a first down. Use the keypad to type in the value, and then press <ENTER*/EDIT> to save.



TO GO: EDIT

Possession

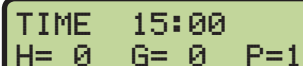
- Press <CLEAR/ALT> followed by <HOME SCORE +6/POSS> or <GUEST SCORE +6/POSS> to set the possession for the respective team. Press the same button again to remove the possession.

Quarter

- Press <QUARTER +1/-1> to increment the quarter number.
- Press <CLEAR/ALT> followed by <QUARTER +1/-1> to decrement the quarter number.
- Press <ENTER*/EDIT> followed by <QUARTER +1/-1> to edit the quarter number. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

Hockey/Lacrosse/Field Hockey

The following buttons and functions are unique to the hockey sport mode. This mode may also be used for scoring lacrosse and field hockey.



TIME 15:00
H= 0 G= 0 P=1

Hockey Scoring Output:



ALL SPORT G	GUEST	1	14:38	S.O.G.	3
	HOME	2	2ND		5

Shots on Goal

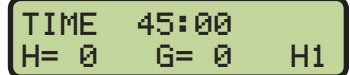
- Press either home or guest <SHOTS ON GOAL +1/-1> to increment the number of shots on goal for the respective team.
- Press <CLEAR/ALT> followed by either home or guest <SHOTS ON GOAL +1/-1> to decrement the number of shots on goal for the respective team.
- Press <ENTER*/EDIT> followed by either home or guest <SHOTS ON GOAL +1/-1> to edit the number of shots on goal for the respective team. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

Period

- Press <PERIOD +1/-1> to increment the period number.
- Press <CLEAR/ALT> followed by <PERIOD +1/-1> to decrement the period number.
- Press <ENTER*/EDIT> followed by <PERIOD +1/-1> to edit the period number. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

Soccer

The following buttons and functions are unique to the soccer sport mode.



TIME 45:00
H= 0 G= 0 H1

Soccer Scoring Output:



ALL SPORT G GUEST HOME 1 2 14:38 2ND S.O.G. 3 5

Shots on Goal

- Press either home or guest <SHOTS ON GOAL +1/-1> to increment the number of shots on goal for the respective team.
- Press <CLEAR/ALT> followed by either home or guest <SHOTS ON GOAL +1/-1> to decrement the number of shots on goal for the respective team.
- Press <ENTER*/EDIT> followed by either home or guest <SHOTS ON GOAL +1/-1> to edit the number of shots on goal for the respective team. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

Half

- Press <HALF +1/-1> to increment the half number.
- Press <CLEAR/ALT> followed by <HALF +1/-1> to decrement the half number.
- Press <ENTER*/EDIT> followed by <HALF +1/-1> to edit the half number. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

Tennis

The following buttons and functions are unique to the tennis sport mode.



TOP= 0 0
BOT= 0 0 C1

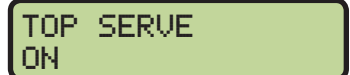
Tennis Scoring Output:



ALL SPORT G TOP BOT 30 15 SETS 6 4 0 2 6 1

Serve

- Press <SERVE> in the appropriate TOP or BOTTOM key group to turn the serve on or off.



TOP SERVE
ON

Point

- Press <POINT/DEC> in the appropriate TOP or BOTTOM key group to increment the number of points for the top or bottom.
- Press <CLEAR/ALT> followed by <POINT/DEC> in the appropriate TOP or BOTTOM key group to decrement the number of points for the top or bottom.
- Press <ENTER*/EDIT> followed by <POINT/DEC> in the appropriate TOP or BOTTOM key group to edit the number of points for the top or bottom. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

Games Won

- Press <GAMES WON +1/-1> in the appropriate TOP or BOTTOM key group to increment the number of games won for the top or bottom.
- Press <CLEAR/ALT> followed by <GAMES WON +1/-1> in the appropriate TOP or BOTTOM key group to decrement the number of games won for the top or bottom.
- Press <ENTER*/EDIT> followed by <GAMES WON +1/-1> in the appropriate TOP or BOTTOM key group to edit the number of games won for the top or bottom. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

```
GAMES WON- +1
SET 1 TOP 1
```

Reset Game

- Press <RESET GAME/MATCH> followed by <ENTER*/EDIT> to reset the scores for both sides in the current set.

```
RESET GAME
ENTER TO CONFIRM
```

Reset Match

- Press <CLEAR/ALT> followed by <RESET GAME/MATCH> followed by <ENTER*/EDIT> to reset the scores and sets for both sides in the current match.

```
TOP=15 2
SELECT ALT ITEM
```



```
RESET MATCH
ENTER TO CONFIRM
```

Tie Break

- Press <TIE BREAK> to enter the tie break mode. This mode allows for entering individual points one at a time.
- Use the **Reset Game** function to return to normal operation.

Deuce

- Press <DUECE> to quickly set both top and bottom point values to 40.

Set

- Press <SET +1/-1> to increment the set number.
- Press <CLEAR/ALT> followed by <SET +1/-1> to decrement the set number.
- Press <ENTER*/EDIT> followed by <SET +1/-1> to edit the set number. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

Note: The LCD shows the games won for up to 3 sets, but the All Sport CG is capable of scoring 5 sets in a match. After 3 sets, the current set number is visible only when adjusting the games won.

Select Court

When connected to DakTennis software, press <MENU> to access the Select Court setting. Use the keypad to type in the desired court number from 1 to 12, and then press <ENTER*/EDIT> to save. The court number is displayed in the lower-right corner of the LCD.

```
SELECT COURT
ENTER TO MODIFY
```


Volleyball

The following buttons and functions are unique to the volleyball sport mode.

```
TIME 1:00
H= 0 G= 0 S1
```

Volleyball Scoring Output:

```
ALL SPORT G GUEST 10 0:53 SETS WON 2
HOME 14 4TH 1
```

Home/Guest Serve

- Press <SERVE> under the appropriate team to turn the serve on or off.

```
HOME SERVE
ON
```

Sets Won

- Press <SETS WON +1/-1> under the appropriate team to increment the number of sets won.
- Press <CLEAR/ALT> followed by <SETS WON +1/-1> under the appropriate team to decrement the number of sets won.
- Press <ENTER*/EDIT> followed by <SETS WON +1/-1> under the appropriate team to edit the number of sets won. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

```
SETS WON: +1
HOME 1
```

Set

- Press <SET +1/-1> to increment the set number.
- Press <CLEAR/ALT> followed by <SET +1/-1> to decrement the set number.
- Press <ENTER*/EDIT> followed by <SET +1/-1> to edit the set number. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

Wrestling

The following buttons and functions are unique to the wrestling sport mode.

```
TIME 2:00
H= 0 G= 0 P1
```

Wrestling Scoring Output:

```
ALL SPORT G GUEST 6 2:47 MATCH 4
HOME 12 3RD 10
```

Team Score

- Press <HOME TEAM +1/-1> or <GUEST TEAM +1/-1> to increment the team score for the respective team.
- Press <CLEAR/ALT> followed by <HOME TEAM +1/-1> or <GUEST TEAM +1/-1> to decrement the team score for the respective team.
- Press <ENTER*/EDIT> followed by <HOME TEAM +1/-1> or <GUEST TEAM +1/-1> to edit the team score for the respective team. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

Match Score

- Press <HOME MATCH +1/-1> or <GUEST MATCH +1/-1> to increment the match score for the respective team by 1.
- Press <HOME MATCH +2/+3> or <GUEST MATCH +2/+3> to increment the match score for the respective team by 2.
- Press <CLEAR/ALT> followed by <HOME MATCH +2/+3> or <GUEST MATCH +2/ +3> to increment the match score for the respective team by 3.
- Press <CLEAR/ALT> followed by <HOME MATCH +1/-1> or <GUEST MATCH +1/-1> to decrement the match score for the respective team.
- Press <ENTER*/EDIT> followed by any <MATCH> key to edit the match score for the respective team. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

Period

- Press <PERIOD +1/-1> to increment the period number.
- Press <CLEAR/ALT> followed by <PERIOD +1/-1> to decrement the period number.
- Press <ENTER*/EDIT> followed by <PERIOD +1/-1> to edit the period number. Use the keypad to type in the value, and then press <ENTER*/EDIT> again to save.

Section 4: Troubleshooting

The Daktronics All Sport CG connects a control console and video equipment with a device used to record and display the information. To do this properly, the devices must be connected correctly.

A combination TV/VCR allows the operator to view the final output as it is recorded. By seeing the output on screen, the operator knows instantly if there is not a proper connection and what part of the system is not working.

Use the following suggestions to troubleshoot some of the more common problems that may occur with the All Sport CG system.

4.1 Troubleshooting Table

Problem	Possible Solution
All Sport CG does not turn on	<ul style="list-style-type: none">• Ensure the power adapter is plugged into the wall outlet and connected to the All Sport CG• Ensure the wall outlet has power (breaker not off)
Video feed does not show on the output	<ul style="list-style-type: none">• Check the connection between the video source and the All Sport CG• Check the connection between the All Sport CG and the recording device• Ensure the video equipment is ON and working. Refer to the video equipment user's manual for further troubleshooting.
Video does not record	<ul style="list-style-type: none">• Ensure the recording device is ON and working. Refer to the recording device user's manual for further troubleshooting.• Ensure that the video media is not copy protected.
Game-in-progress information does not show on the output	<ul style="list-style-type: none">• Check the wired or wireless connection between the All Sport controller and the All Sport CG is in Automatic mode.• Ensure All Sport CG is set to a sport whether in Manual or Automatic mode.• Ensure the All Sport controller is ON and a code number has been entered.

4.2 Replacement Parts

Part Description	Part Number
All Sport CG Inserts	LL-2612
Cable; 20', 9 pin-D-Female to 1/4" Phone	0A-1196-0146
Cable; 6' RCA Male-to-Male	W-1219
Power Supply; 18 VDC Wallpack, 6' Cord	A-3430138

Section 5: Daktronics Exchange and Repair & Return Programs

5.1 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:

Assembly 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.

5.2 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

5.3 Daktronics Warranty & Limitation of Liability

The Daktronics Warranty & Limitation of Liability is located in **Appendix C**. 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.

<i>Drawing Title</i>	<i>Drawing Number</i>
Quick Install Guide: All Sport CG	B-240848

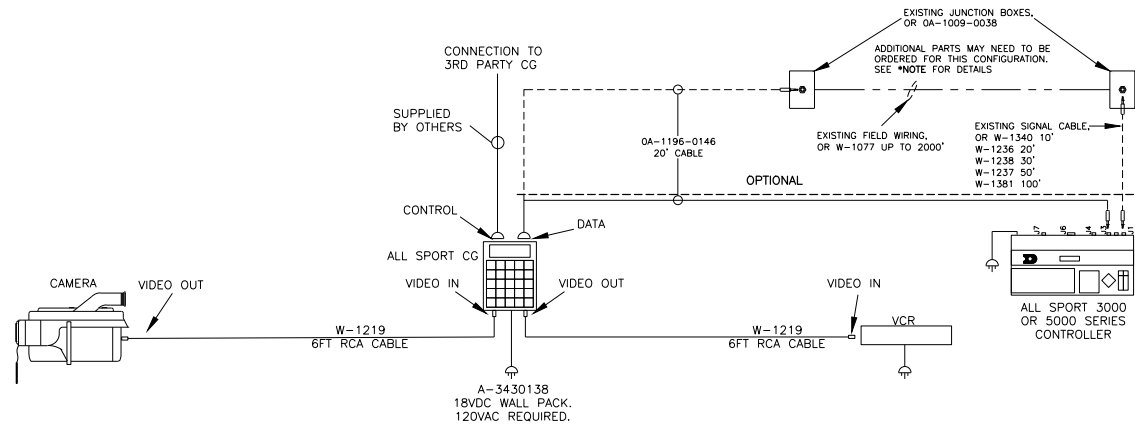
WIRED CONFIGURATION:

0A-1314-0003 WIRE INSTALLATION KIT
 0A-1314-0004 GEN V RADIO INSTALLATION KIT
 0A-1314-0007 GEN VI RADIO INSTALLATION KIT

- ALL SPORT CG SETUP SHOWN MUST BE WITHIN 20FT OF GAME IN PROGRESS ALL SPORT CONSOLE OR REMOTE SIGNAL JUNCTION BOX.

- CONNECT CAMERA, ALL SPORT CG, VCR, AND ALL SPORT 3000 OR 5000 AS SHOWN BELOW.

*NOTE: IF OPTIONAL VERSION OF WIRED CONFIGURATION IS USED 0A-1009-0038, W-1077, AND ADDITIONAL SIGNAL CABLE MAY NEED TO BE ORDERED.

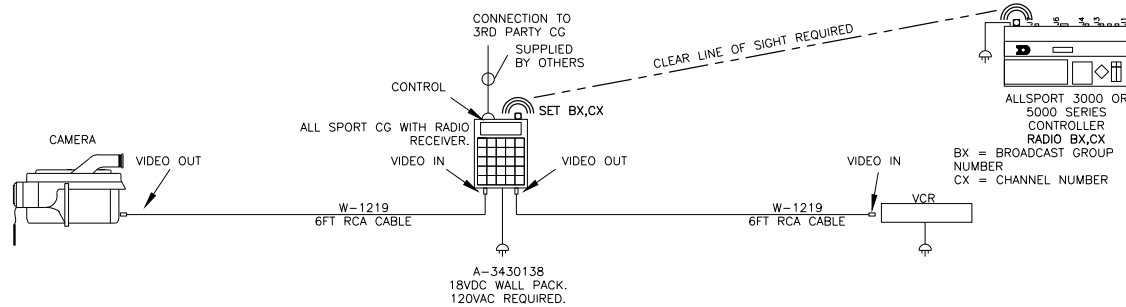


RADIO CONFIGURATION:

0A-1314-0004 GEN V RADIO INSTALLATION KIT.
 0A-1314-0007 GEN VI RADIO INSTALLATION KIT.

- LONG DISTANCE COMMUNICATION. (500' INDOOR, 1500' OUTDOOR) LINE OF SIGHT COMMUNICATION AVAILABLE.

- CONNECT CAMERA, ALL SPORT CG, AND VCR, AS SHOWN BELOW. SET ALL SPORT CG RADIO VALUES, BX AND CX, TO MATCH THE ALL SPORT 3000/5000 RADIO SETTINGS.

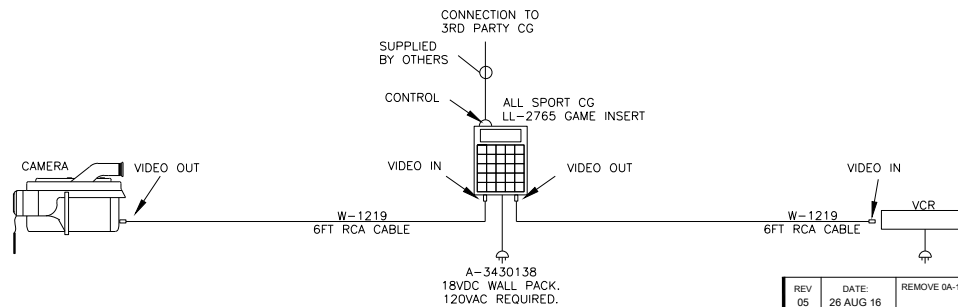


MANUAL CONFIGURATION:

0A-1314-0003 WIRE INSTALLATION KIT
 0A-1314-0004 GEN V RADIO INSTALLATION KIT
 0A-1314-0007 GEN VI RADIO INSTALLATION KIT

- RUN ALL SPORT CG WITH BASIC GAME INFORMATION USING QUICK PRESS BUTTONS FOR GENERAL CLOCK/SCORE AND STATS INFO AS REQUIRED.

- CONNECT CAMERA, ALL SPORT CG, AND VCR AS SHOWN BELOW.



NOTE: NEED v2.0 TO SUPPORT FEED ON CONTROL PORT

REV 05	DATE: 26 AUG 16	REMOVE 0A-1611-0508 AND ADD A-3430138	BY: SJC
REV 04	DATE: 14 JUN 16	CHANGED WALL PACK TO 0A-1611-0508 PER EC-21669	BY: AHH
REV 03	DATE: 05 NOV 12	ADDED INFO PER THE NEW GEN VI DESIGN	BY: MWM
REV 02	DATE: 23 NOV 10	MADE CORRECTIONS AS PER SUGGESTION	BY: JJD
REV 01	DATE: 01 FEB 07	ADDED A SECOND WAY TO USE THE WIRED CONFIGURATION ALSO ADDED PART NUMBERS FOR CLARITY	BY: AFL

		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESS WRITTEN CONSENT OF DAKTRONICS, INC. OR ITS WHOLLY OWNED SUBSIDIARIES. COPYRIGHT 2016 DAKTRONICS, INC. (USA)		
PROJECT: ALL SPORT CG				
TITLE: QUICK INSTALL GUIDE: ALL SPORT CG				
DATE: 04 APR 05	DIM UNITS: INCHES [MILLIMETERS]	DO NOT SCALE DRAWING		SHEET 05
SCALE: NONE	DESIGN: MMILLER	JOB NO. P1314	FUNC - TYPE - SIZE R-01 - B	REV 05
DRAWN: MMILLER				240848

Appendix B: Uploading Bitmaps to the All Sport CG

Requirements

- All Sport CG and power adapter
- Computer loaded with HyperTerminal, TeraTerm, or similar application
- One open serial (COM) port (or USB-to-Serial adaptor and one open USB port)
- Serial cable with DB9 female to DB9 male (modem or straight-through cable)
- Bitmap File (.bmp) created using the parameters shown in **Figure 4**
 - Go to **Start > All Programs > Accessories > Paint**.
 - Go to **Image > Attributes** (or click the **Paint** button and select **Properties** in Windows 7).
 - Save the file as **24-bit Bitmap**.

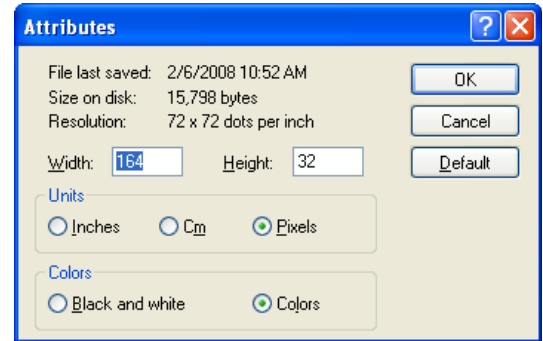


Figure 4: Bitmap Properties

HyperTerminal Procedure (Windows XP)

1. Connect the serial cable between a COM port on the computer (or USB-to-Serial adaptor) and the **CONTROL** port on the All Sport CG.
2. Apply power to the All Sport CG using the supplied adapter and wait for "LOOKING FOR ALL SPORT" to appear on the LCD.
3. Go to **Start > All Programs > Accessories > Communications > HyperTerminal**.
4. Enter a *Name* in the *Connection Description* window and then click **OK**.
5. On the *Connect To* window, select the COM port connected to the All Sport CG and then click **OK**.
6. On the *Port Settings* tab in the *COM# Properties* window, enter the settings as shown in **Figure 5** and then click **OK**.
7. Press **[Enter]** on the keyboard to confirm that the COM port has been configured properly and that the serial cable is correctly connected. The message "AllSportCG>" will appear in the HyperTerminal application if proper communication has been established.
8. Type in "BD" and press **[Enter]**. The message "Transfer file now" will appear.
9. Go to **Transfer > Send File**.
10. In the *Send File* window, click **Browse** and navigate to the bitmap image file created with the parameters shown in **Figure 4**, select **Xmodem** as the *Protocol*, and click **Send** to initiate the file transfer.
11. After a few seconds, the *Transfer* window will close and the All Sport CG will be loaded with the new bitmap file.
12. Disconnect the serial cable from the All Sport CG and ***CYCLE POWER*** to return the device to normal operation and begin displaying the new graphic.

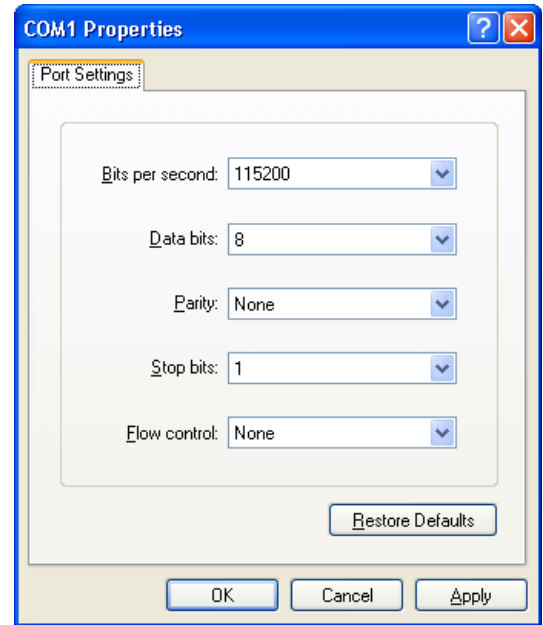


Figure 5: HyperTerminal COM Port Properties

TeraTerm Procedure (Windows 7)

1. Connect the serial cable between a COM port on the computer (or USB-to-Serial adaptor) and the **CONTROL** port on the All Sport CG.
2. Apply power to the All Sport CG using the supplied adapter and wait for "LOOKING FOR ALL SPORT" to appear on the LCD.
3. Open TeraTerm, and go to **Setup > Serial Port Setup**.
4. Set up the port as shown below and **Figure 6**:
 - a. *Port:* the serial (COM) port that the All Sport CG is connected to
 - b. *Baud rate:* **115200**
 - c. *Data:* **8 bit**
 - d. *Parity:* **none**
 - e. *Stop:* **1 bit**
 - f. *Flow control:* **none**
 - g. *Transmit delay:* **0, 0**
 - h. Click **OK** when finished.

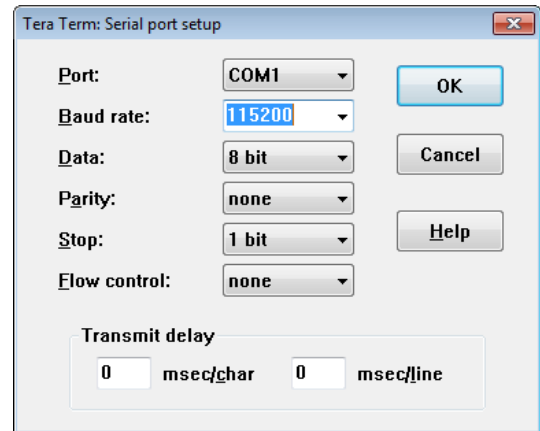


Figure 6: TeraTerm Serial Port Setup

5. Press **[Enter]** on the keyboard. "Unknown command" appears with "AllSportCG>" underneath to indicate proper connection of the computer and All Sport CG.
6. Type in "BD" and press **[Enter]** on the keyboard. The message "Transfer file now" will appear.
7. Go to **File > Transfer > XModem > Send**.
8. Navigate to the bitmap image file created with the parameters shown in **Figure 4** and click **Open**.
9. Once the progress bar is complete, press **[Enter]** on the keyboard. "AllSportCG>" appears again to indicate the file transfer is complete.
10. Disconnect the serial cable from the All Sport CG and ***CYCLE POWER*** to return the device to normal operation and begin displaying the new graphic.

Appendix C: 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 WARRANTY & LIMITATION OF LIABILITY

D. damage caused by fire, flood, earthquake, water, wind, lightning or other natural disaster, strike, inability to obtain materials or utilities, war, terrorism, civil disturbance, or any other cause beyond Daktronics' reasonable control;

E. failure to adjust, repair or replace any item of Equipment if it would be impractical for Daktronics personnel to do so because of connection of the Equipment by mechanical or electrical means to another device not supplied by Daktronics, or the existence of general environmental conditions at the site that pose a danger to Daktronics personnel;

F. statements made about the product by any salesperson, dealer, distributor or agent, unless such statements are in a written document signed by an officer of Daktronics. Such statements as are not included in a signed writing do not constitute warranties, shall not be relied upon by End User and are not part of the contract of sale;

G. damage arising from the use of Daktronics products in any application other than the commercial and industrial applications for which they are intended, unless, upon request, such use is specifically approved in writing by Daktronics;

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

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

J. performance of preventive maintenance;

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

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

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

3. **Limitation of Liability**

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

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

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

4. **Assignment of Rights**

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

5. **Governing Law**

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

6. **Availability of Extended Service Agreement**

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