

Section 9: Hockey

Sport Insert: LL-2436

The Sport Insert drawing is located at the end of this section.

The Team Name insert and Block Diagram drawings are located in **Appendix A**.

The **Quick Reference** and **Menu Flowchart** are located in **Appendix C**.

Reference Drawings: Insert, Hockey..... **Drawing A-124218**
 Insert, Team Name..... **Drawing A-125290**
 Block Diagrams, A/S5000/3000 Hockey..... **Drawing A-124689**

Refer to the information in **Section 2** of **ED-11976** to start up the console and use the sport insert.

Read **Section 2, Basic Operation** of **ED-11976** carefully to fully understand the following operation instructions.

If an insert is lost or damaged, a copy of the insert drawing located at the end of this section can be used until a replacement can be ordered.

Use the labels provided in **Appendix B** to attach the correct code number label to the sport insert in the appropriate location. Write the code number in the space provided below.

Write the correct code number here.

4 6 0 1

If you do not know the code number to enter for your scoreboard, refer to **Appendix B** in this manual.

If you do not know the model number of your scoreboard, refer to the **Installation and Maintenance** manual provided with the scoreboard.

9.1 Shots on Goal Console Operation

Enter code 4000 to use the All Sport 5000 console as a shots on goal console. All keys other than **Home and Guest Shots on Goal V1** will be disabled.

9.2 Hockey Keys

9.2.1 Time Out On/Off

<TIME OUT ON/OFF> stops and starts the time out clock. The length of both the full and partial time outs can also be changed when the time out clock is stopped.

- Notes**
- Only the time outs configured in the **EDIT SETTINGS** function are displayed on the LCD and available for selection.
 - The up and down arrow keys can also be used to select the full and partial time outs.

LCD Display	Action
<div>TIME OUT-SELECT</div> <div>FULL MM:SS</div> <p>MM:SS = minutes, seconds</p>	<p>Press <TIME OUT ON/OFF> to display the configured time for full time out length.</p> <p>To accept the full time out length, press <YES>.</p> <p>To decline the selection of the full time out length, press <NO>.</p> <p>To change the full time out length, enter the new length in minutes and seconds on the number pad and press <ENTER>.</p> <p>Press <CLEAR> twice to clear changes and return to the game.</p>
<div>TIME OUT-SELECT</div> <div>PARTIAL MM:SS</div> <p>MM:SS = minutes, seconds</p>	<p>Press <TIME OUT ON/OFF> a second time to display the configured time for partial time out length.</p> <p>To accept the partial time out length, press <YES>.</p> <p>To decline the selection of the partial time out length, press <NO>.</p> <p>To change the partial time out length, enter the new length in minutes and seconds on the number pad and press <ENTER>.</p> <p>Press <CLEAR> twice to clear changes and return to the game.</p>

9.2.2 Enable Penalty Clocks

Press <ENABLE PENALTY CLOCKS> to allow the penalty clocks to count when the main clock is on.

9.2.3 Disable Penalty Clocks

Press <DISABLE PENALTY CLOCKS> to disable the penalty clocks from counting when the main clock is on.

9.2.4 Minor/Major Penalty

The <MINOR PENALTY> and <MAJOR PENALTY> are used to enter the penalty time when <PLAYER PENALTY> is selected. Refer to Section 9.2.8 Player Penalty.

9.2.5 Period +1

LCD Display	Action
<div>PERIOD +1 N</div> <div>N = current setting</div>	<p>Press <PERIOD +1> to increment the period number.</p> <p>A prompt showing period number displays briefly.</p>

9.2.6 Penalty

LCD Display	Action
<div>HOME PENALTY ON</div>	<p>Press the home or guest <PENALTY>key, to turn on the penalty indicator for that team.</p>
<div>HOME PENALTY OFF</div>	<p>To turn off the penalty indicator, press the same <POSS> key a second time or press the opposite <PENALTY> key.</p>

9.2.7 Time Out

The home and guest <TIME OUT> keys are used to decrement the number of time outs remaining and start the time out clock. The scoreboard indicator is turned on when the type of time out is selected (full or partial). The scoreboard indicator is turned off when the time out clock expires or is stopped.

- Notes
- Only the types (full or partial) of time outs that were configured in the EDIT SETTINGS function are displayed on the LCD and available for selection.
 - The up and down arrow keys can also be used to select the full and partial time outs.

LCD Display	Action
<div>TIME OUT-HOME FULL? N</div> <div>N = current setting</div>	<p>Press <TIME OUT> to display the number of full time outs remaining.</p> <p>To accept the full time out and start the time out clock, press <YES>. Full time out decrements.</p> <p>To decline the selection of a full time out, press <NO>. Full time out does not decrement.</p> <p>Note The up and down arrow keys can also be used to select the full and partial time outs.</p>

LCD Display	Action
<div>TIME OUT-HOME PARTIALP N</div> <p>N = current setting</p>	<p>Press <TIME OUT> a second time to display the number of partial time outs remaining.</p> <p>To accept the partial time out and start the time out clock, press <YES>. Partial time out decrements.</p> <p>To decline the selection of a partial time out, press <NO>. Partial time out does not decrement.</p> <p>Note The up and down arrow keys can also be used to select the full and partial time outs.</p>
<div>TIME OUT-HOME NO TIME OUTS</div>	<p>This message appears when there are no time outs left.</p>

9.2.8 Player Penalty

LCD Display	Action
<div>HOME PLYR/PEN 1 PNN PN NN:NN</div> <p>NN = current setting</p>	<p>Press <PLAYER PENALTY> to add a new penalty or edit an existing penalty for the home or guest team.</p> <p>To edit an existing penalty, use the up and down arrow keys to scroll to the desired penalty and press <ENTER>.</p> <p>Enter the jersey number of the player with the penalty on the number pad and press <ENTER>.</p> <p>Press <CLEAR> twice to clear changes and return to the game.</p>
<div>HOME PLYR/PEN 1 PNN PN NN:SS</div> <p>NN = player number NN:SS = penalty time</p>	<p>The default penalty time initially displayed is the minor penalty value that was entered in Settings.</p> <p>Enter the penalty time by pressing the <MINOR PENALTY> or <MAJOR PENALTY> key or use the number pad to enter the correct penalty time and then press <ENTER>. Pressing <MINOR PENALTY> or <MAJOR PENALTY> additional times will add the configured time for that penalty with each press. Press the <CLEAR> to clear the penalty time if <MINOR PENALTY> or <MAJOR PENALTY> are pressed too many times.</p>

9.2.9 Set Main Clock

LCD Display	Action
<div>MAIN CLOCK -SET CURR MM:SS.T*</div> <p>MM:SS.T = minutes, seconds, tenths of a second</p>	<p>After the main clock has been stopped, press <SET MAIN CLOCK> to display the current time of the main clock.</p> <p>To change the time, enter the desired time on the number pad and press <ENTER>.</p> <p>Press <CLEAR> twice to clear changes and return to the game.</p>
<div>ADJUST PENALTY TIMERS Y/N*</div>	<p>If there are penalty times and the <START> has been pressed at least once after setting the period time, the Adjust Penalty timers question will be displayed. A <YES> response will adjust all penalty timers to the correct time based on the time entered for the main clock. A <NO> response will not change the penalty timers.</p>

9.2.10 Score, Shots on Goal and Saves

The home and guest <SCORE +1, -1>, <SHOTS ON GOAL +1, -1> and <SAVES +1, -1> keys are all used to increment and decrement their respective totals. **Score** is used as an example.

LCD Display	Action
<div>TEAM SCORE-EDIT HOME NNN</div> <p>NNN = current setting</p>	<p>Press the appropriate key to increment or decrement the total for the home or guest team. For example, <SCORE +1, -1>.</p> <p>Enter the correct number on the number pad and press <ENTER>.</p> <p>The LCD shows which key was pressed and the new value for the team score of the corresponding team</p>

9.2.11 Clear All Penalties

Press <CLEAR ALL PENALTIES> to delete all of the penalties for the home or guest team.

LCD Display	Action
<div>HOME PLYR/PEN CLEAR ALL Y/N?</div>	<p>Press <YES> to clear the penalties for all players in the roster.</p> <p>Press <NO> to decline the selection and return to the game.</p>

9.2.12 Delete Penalty

Press <DELETE PENALTY> to delete a single penalty for the home or guest team.

LCD Display	Action
<div>HOME DEL PEN?</div> <div>1 PNN PN NN:NN</div> <div>NN = current setting</div>	<p>Use the up and down arrow keys to scroll to the correct penalty and press <ENTER>.</p> <p>Press <CLEAR> to decline the selection and return to the game.</p>

9.3 Edit

The <EDIT> key allows the user to select and edit the following scoreboard fields. Press <EDIT> and the key for the home or guest field to be edited.

9.3.1 Time Out

- Notes**
- Only the time outs configured in the EDIT SETTINGS function are displayed on the LCD and available for selection.
 - The up and down arrow keys can also be used to select the full and partial time outs.

LCD Display	Action
<div>TIME OUT-HOME</div> <div>FULL N*</div> <div>N = current setting</div>	<p>Press <EDIT> <TIME OUT> for the home or guest team to display the current setting of full time outs remaining.</p> <p>Enter the correct number of full time outs on the number pad and press <ENTER>.</p>
<div>TIME OUT-HOME</div> <div>PARTIAL N*</div> <div>N = current setting</div>	<p>Press <EDIT> <TIME OUT> for the home or guest team a second time or the down arrow key to display the current setting of full time outs remaining.</p> <p>Enter the correct number of partial time outs on the number pad and press <ENTER>.</p>

9.3.2 Score, Shots on Goal and Saves

The home and guest <SCORE +1, -1>, <SHOTS ON GOAL +1, -1> and <SAVES +1, -1> keys are all edited in the same way. Score is used as an example.

LCD Display	Action
<div>TEAM SCORE-EDIT</div> <div>HOME NNN</div> <div>NNN = current setting</div>	<p>Press <EDIT> and the appropriate statistic key to display the current setting. For example, <SCORE +1, -1>.</p> <p>Enter the correct number on the number pad and press <ENTER>.</p>

9.3.3 Period +1

LCD Display	Action
<div>PERIOD-EDIT</div> <div>N*</div> <div>N = current setting</div>	<p>Press <EDIT> <PERIOD +1> to display the current quarter setting.</p> <p>Enter the correct quarter number on the number pad and press <ENTER>. The full time outs are reset.</p>

9.3.4 Time Out On/Off

LCD Display	Action
<div>TIME OUTS-EDIT</div> <div>FULL MM:SS</div> <div>MM:SS = minutes, seconds</div>	<p>Press <EDIT> <TIME OUT ON/OFF> to display the current time setting for full time outs.</p> <p>Enter the correct time on the number pad and press <ENTER>.</p>
<div>TIME OUT- EDIT</div> <div>PARTIAL MM:SS</div> <div>MM:SS = minutes, seconds</div>	<p>Press <TIME OUT ON/OFF> a second time or the down arrow key to display the configured time for partial time out length.</p> <p>Enter the correct time on the number pad and press <ENTER>.</p>

9.4 Menu

The <MENU> key allows the user to select from a list of options specific for each sport. The up and down arrow keys allow the user to scroll through the menu list. Pressing a key other than <YES>, <NO>, the arrow keys, and other allowed keys exits the Menu function.

The MENU function should be used at the beginning of each new game to edit the Home and Guest Rosters.

9.4.1 New Game

LCD Display	Action
<div>MENU-MAIN NEW GAME?</div>	<p>Press <YES> to clear all of the program data for the last game played or the game in progress and begin running the selected sport.</p> <p>Press <NO> to resume the game in progress using the current data and exit the Menu.</p> <p>Press the down arrow key to scroll to the next selection.</p>

9.4.2 New Code

LCD Display	Action
<div>MENU-MAIN NEW CODE?</div>	<p>Press <YES> to begin selection of a new code from the ENTER CODE prompt.</p> <p>Press <NO> to resume the game in progress using the current data and exit the Menu.</p> <p>Press the down arrow key to scroll to the next selection.</p>

9.4.3 Home Roster, Guest Roster

Home Roster and **Guest Roster** are entered in the same way. **Home Roster** is used as an example.

LCD Display	Action
<div>MENU-ROSTER SELECT HOME</div>	<p>Press <YES> or the right or left arrow key to select the Home or Guest Roster submenu and show the first prompt on the LCD.</p> <p>Press <NO> to resume the game in progress using the current data and exit the Menu.</p> <p>Press the down arrow key to scroll to the next selection.</p>

LCD Display	Action
<div>HOME-TEAM NAME AAAAAAAAAAAA*</div>	<p>The TEAM NAME (LL-2441) insert must be installed to enter the Team Name Message Center (TNMC) settings.</p> <p>The TNMC is updated after each selection is completed.</p> <p>Use the COLUMNS, ROWS and STROKE keys to select the WIDTH, HEIGHT and FONT of the TNMC. The defaults are 48 columns, 8 rows and single stroke.</p> <p>Enter up to fifteen (15) characters for the team name and press <ENTER>.</p> <p>Reinstall the HOCKEY (LL-2436) insert to continue.</p>

9.4.4 Display Menu

The **DISPLAY MENU** allows the user to start and edit the segment timer or to change the brightness of the scoreboard.

LCD Display	Action
<div>MENU-MAIN ENTER DISPLAY MENU?</div>	<p>Press <YES> to select the Display submenu and show the first prompt on the LCD.</p> <p>Press the down arrow key to scroll to the next selection.</p>
<div>MENU-DISPLAY RUN SEG TIMER Y/N</div>	<p>Note The segment timer function is disabled while the clock is running.</p> <p>Press <YES> to exit the sport code and run the segment timer program.</p> <p>Press <NO> or the down arrow key to scroll to the next selection.</p>
<div>EXIT GAME ARE YOU SURE Y/N</div>	<p>This prompt confirms that the user wants to exit the sport code and enter the segment timer</p> <p>The SEGMENT TIMER (LL-2475) insert must be installed to enter the Segment Timer settings.</p> <p>Refer to Section 3: Segment Timer.</p> <p>Press <YES> to exit the sport code and run the segment timer program.</p> <p>Press <NO> or the down arrow key to scroll to the next selection.</p>

LCD Display	Action
<div>MENU- DIMMING LEVEL (0-9): NN%</div> <p>NN = current level NONE = bright <0> 90% = <1> 80% = <2> 70% = <3> 60% = <4> 50% = <5> 40% = <6> 30% = <7> 20% = <8> 10% = <9></p>	<p>Press <0> through <9>, or use the arrow keys <←> <→>, to select the intensity for the digits on the scoreboard.</p> <p>Press <NO> to resume the game in progress using the current data, and exit the Menu.</p> <p>Press the down arrow key <↓> to scroll to the next selection.</p> <p>Note: Dim levels pertain to outdoor incandescent products. Indoor LED products only support one level of dimming at 50%.</p>

9.4.5 Edit Settings

LCD Display	Action
<div>MENU-MAIN EDIT SETTINGS?</div>	<p>Press <YES> or the right or left arrow key to select the Settings submenu and show the first prompt on the LCD. Refer to Section 9.5 Settings.</p> <p>Press <NO> to resume the game in progress using the current data and exit the Menu.</p> <p>Press the down arrow key to scroll to the next selection.</p>

9.4.6 Time of Day

LCD Display	Action
<div>MENU-MAIN SELECT TOD?</div>	<p>Press <YES> or the right arrow key to select the Time of Day submenu and show the first prompt on the LCD.</p> <p>Press <NO> to resume the game in progress using the current data and exit the Menu.</p>
<div>MENU-TIME OF DAY 1*12, 2-24 HOUR</div>	<p>Press <1> or <2> to display the time of day in 12 hour (default) or 24 hour format.</p> <p>Press <ENTER> or the down arrow key to scroll to the next selection.</p>

LCD Display	Action
<div>MENU-TIME OF DAY TOD HH:MM:SS*</div> <p>HH:MM:SS = current setting</p>	<p>Enter the time of day in hours, minutes, and seconds using the selected format on the number pad and press <ENTER>.</p> <p>Press <ENTER> or the down arrow key to scroll to the next selection.</p>
<div>MENU-TIME OF DAY 1*GAME 2-TOD</div> <p>* = current setting</p>	<p>Press <1> or <2> to display the game clock (default) or the time of day clock on the scoreboard.</p> <p>Press the down arrow key to exit the Menu and return to the game.</p>
<div>MENU-TIME OF DAY BLANK GAME DATA?</div>	<p>If 2-TOD is selected, this message will be displayed.</p> <p>Press <ENTER> to blank all game data on the scoreboard except for the Time of Day digits.</p>

9.5 Settings

The following settings can be edited by the user when **EDIT SETTINGS** has been selected from the Main Menu.

9.5.1 Main Clock

- Notes**
- The settings entered for Main Clock are used with the <SET MAIN CLOCK> key.
 - The period, break, and overtime lengths are used differently depending on the direction of the main clock. For count down, the main clock is set to the selected length, decrements towards zero, and stops at zero. For count up, the main clock is set to zero, increments towards the selected length, and stops when the selected length is reached.

LCD Display	Action
<div>MAIN CLOCK-MODE TENTH SECOND? N</div> <p>N = current setting</p>	<p>When the main clock is set to count down and tenths of a second is selected, the main clock displays in tenths of a second remaining when the time is below one minute.</p> <p>Press <YES> to set the main clock to display tenths of a second.</p> <p>Press <NO> to display whole seconds.</p>

<div>MAIN CLOCK-TIME PERIOD MM:SS</div> MM:SS = current setting	<p>Enter the correct amount of time per period in minutes and seconds on the number pad and press <ENTER>.</p> <p>For example, 20:00 per period.</p> <p>Note: Pressing <ENTER> to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.</p>
<div>MAIN CLOCK-TIME BREAK MM:SS</div> MM:SS = current setting	<p>Set the amount of time between periods.</p> <p>Enter the correct amount of time for break length in minutes and seconds on the number pad and press <ENTER>.</p> <p>For example, 1:00.</p>
<div>MAIN CLOCK-TIME OVERTIME MM:SS</div> MM:SS = current setting	<p>Set the amount of time for the overtime periods.</p> <p>Enter the correct amount of time for overtime periods in minutes and seconds on the number pad and press <ENTER>.</p> <p>For example, 5:00.</p>

9.5.2 Penalty Times

Default times can be set for the minor and major penalty keys. The minor penalty time is used as the default when first entering the player penalty function.

LCD Display	Action
<div>PENALTY TIME MINOR MM:SS</div> MM:SS = current setting	<p>Enter the correct default time for a minor penalty in minutes and seconds on the number pad and press the < ENTER > key.</p> <p>For example, 02:00.</p> <p>The minor penalty time is used as the default when first entering the player penalty function.</p>
<div>PENALTY TIME MAJOR MM:SS</div> MM:SS = current setting	<p>Enter the correct default time for a major penalty in minutes and seconds on the number pad and press the < ENTER > key.</p> <p>For example, 02:00.</p>

9.5.3 Time Outs

- Notes**
- If a full or partial time out is not needed for the HOME or GUEST <TIME OUT> keys, enter zero for the number of time outs.
 - If a full or partial time out is not needed for <TIME OUT ON/OFF>, enter zero for the time.
 - The number for each type of time out must be manually entered for an overtime period using the <EDIT> <TIME OUT> key sequence for each team.

LCD Display	Action
<div>TIME OUTS-MODE</div> <div>FULL N*</div> <div>N = current setting</div>	Enter the number of full time outs on the number pad and press <ENTER>.
<div>TIME OUTS-TIME</div> <div>FULL MM:SS*</div> <div>MM:SS = current setting</div>	<p>Enter the amount of time for a full time out in minutes and seconds on the number pad and press <ENTER>.</p> <p>For example, 1:00.</p>
<div>TIME OUTS-MODE</div> <div>WARNING MM:SS*</div> <div>MM:SS = current setting</div>	<p>A warning horn can be configured to signal the end of a full time out. While the full time out clock is counting down, the horn will sound for one second when the warning time is reached. Enter a zero for the time to disable the warning horn.</p> <p>Enter the time in minutes and seconds on the number pad and press <ENTER>.</p>
<div>TIME OUTS-MODE</div> <div>PARTIAL N*</div> <div>N = current setting</div>	Enter the number of partial time outs on the number pad and press <ENTER>.
<div>TIME OUTS-TIME</div> <div>PARTIAL MM:SS*</div> <div>MM:SS = current setting</div>	<p>Enter the amount of time for a partial time out in minutes and seconds on the number pad and press <ENTER>.</p> <p>For example, 00:20</p>
<div>TIME OUTS-MODE</div> <div>SHOW ON MAIN? N</div> <div>N = current setting</div>	<p>Press <YES> to display the time out time on the LCD and the main clock digits of the scoreboard while the time out clock is active.</p> <p>Press <NO> to display the time out time on the LCD only.</p>

9.5.4 Select Captions

LCD Display	Action
<div>SELECT CAPTIONS ON 1 ← → 2 OFF</div>	<p>This menu option allows for the controlled backlit captions to be turned ON/OFF.</p> <p>Press the <1> key to select ON and OFF for captions controlled by control #1.</p> <p>Press the <2> key to select ON and OFF for captions controlled by control #2.</p>

9.5.5 Switch Output

The All Sport 5000 series console has a switch that can be used to drive a number of different devices. The switch can be configured to operate under different settings. The default setting is 1-CLOCK=0.

To display the switch setting that you want to select:

Press the number (0,1,2,3) key as a shortcut or use the left and right arrow keys to scroll to the desired setting.

Press <YES> to select the new setting.

Press <NO> or the down arrow key to leave the switch setting and display the next prompt.

The possible settings for the switch output are as follows:

Setting	Result
<div>0-DISABLED SWITCH OUTPUT=N 0-DISABLED?</div> <div>N = current setting</div>	The switch remains open at all times and any external devices are disabled.
<div>1-CLOCK = 0 SWITCH OUTPUT=N 1-CLOCK =0?</div> <div>N = current setting</div>	<p>In count down mode, the switch closes when the main clock reaches zero and remains closed until a nonzero value is entered.</p> <p>In count up mode, the switch closes when the main clock reaches the proper period, break, or overtime length and opens when any other value is entered.</p>
<div>2-CLOCK STOP SWITCH OUTPUT=N 2-CLOCK STOP?</div> <div>N = current setting</div>	The switch closes when the main clock is stopped and opens when the main clock is running. External devices are disabled when the main clock is running.

Setting	Result
3-MAIN HORN <div> SWITCH OUTPUT=N 3-MAIN HORN? </div> N = current setting	The switch closes when the main horn sounds. This could be when Auto Horn is enabled and the main clock reaches zero or when <HORN> is pressed.

9.5.6 Default Settings

Write the settings for this installation in the space (Custom) provided.

Setting	Default	Custom 1	Custom 2	Custom 3
Tenth of a Second	Yes			
Period Length	20:00			
Break Length	15:00			
Overtime Length	5:00			
Minor Penalty	2:00			
Major Penalty	5:00			
Full Time Outs	1			
Full Time Out	1:00			
Partial Time Outs	0			
Partial Time Out	0:00			
Switch Output	1-Clock = 0			

