

# 9 Hockey/Lacrosse/Handball Operation

**Sport Inserts:** LL-2436 – Hockey/Lacrosse/Handball  
 0G-1084219 – Custom Lacrosse

The Sport and Team Name Insert drawings are located in **Appendix B**. The Block Diagram drawings are located in **Appendix A**. The Quick Reference is located in **Appendix D**.

### Reference Drawings:

Insert; LL-2436, Hockey/Handball/Lacrosse .....	<b>DWG-124218</b>
Block Diagram, A/S 3000 or 5000 Hockey .....	<b>DWG-124689</b>
Insert; LL-2441 A/S 5000, Team Name .....	<b>DWG-125290</b>
Insert; Custom Lacrosse .....	<b>DWG-1084219</b>

Refer to the information in **Section 2: Basic Operation (p.5)** to start up the console and how to use the sport insert.

If an insert is lost/damaged, use a copy of the insert drawing until a replacement arrives.

Use the label sheet provided with the console (Daktronics part # LL-2458) to attach the correct code number label to the sport insert in the designated location. Write the code number in the space below. If viewing a digital copy of this manual, print this page and fill in the code number.

**Write the correct code number here:**

If the code number for a scoreboard is unknown, refer to **Appendix C**. If the scoreboard model number is unknown, refer to the documentation provided with the scoreboard.

## Shots on Goal Console Operation

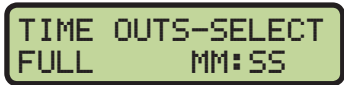
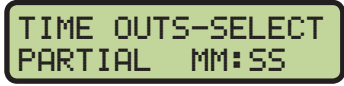
Enter code 4000 to use the console as a shots-on-goal console. All keys other than **<SHOTS ON GOAL +1>** and **<SHOTS ON GOAL -1>** will be disabled.

## Hockey/Lacrosse/Handball Keys

### 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.

**Note:** Only the time outs configured in the **EDIT SETTINGS** menu are displayed on the LCD and available for selection.

Display	Action
 <p>MM:SS = minutes, seconds</p>	<p>Press <b>&lt;TIME OUT ON/OFF&gt;</b> to display the configured time for full time out length. To start the full time out, press <b>&lt;ENTER&gt;</b>.</p> <p>To cancel the full time out, press <b>&lt;CLEAR&gt;</b>.</p>
 <p>MM:SS = minutes, seconds</p>	<p>Press <b>&lt;TIME OUT ON/OFF&gt;</b> two times to display the configured time for partial time out length. To start the partial time out, press <b>&lt;ENTER&gt;</b>.</p> <p>To cancel the partial time out, press <b>&lt;CLEAR&gt;</b>.</p>

## Enable Penalty Clocks

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

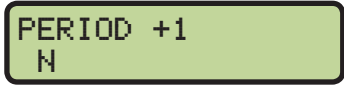
## Disable Penalty Clocks

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

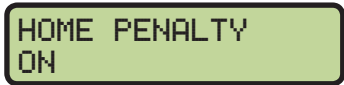

## Minor Penalty, Major Penalty

The **<MINOR PENALTY>** and **<MAJOR PENALTY>** keys are used to enter the penalty time when **<PLAYER PENALTY>** is selected. Refer to **Player Penalty (p.74)**.

## Period +1

Display	Action
 <p>PERIOD +1 N</p> <p>N = current setting</p>	<p>Press <b>&lt;PERIOD +1&gt;</b> to increment the period number.</p> <p>The current period number displays briefly.</p>

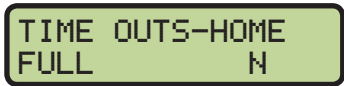
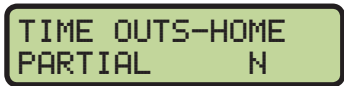
## Penalty

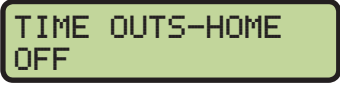
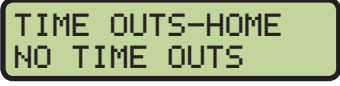
Display	Action
 <p>HOME PENALTY ON</p>	<p>Press the home or guest <b>&lt;PENALTY&gt;</b> key to turn on the penalty indicator for that team.</p>
 <p>HOME PENALTY OFF</p>	<p>To turn off the penalty indicator, press the same <b>&lt;PENALTY&gt;</b> key a second time.</p>

## Time Out

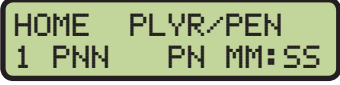
The home and guest **<TIME OUT>** keys are used to decrement the number of time outs remaining and start the time out clock. The scoreboard indicator is turned on when the type of time out is selected (full or partial). The scoreboard indicator is turned off when the time out clock expires or is stopped.

**Note:** Only the time outs configured in the **EDIT SETTINGS** menu are displayed on the LCD and available for selection.



Display	Action
 <p>TIME OUTS-HOME FULL N</p> <p>N = current setting</p>	<p>Press <b>&lt;TIME OUT&gt;</b> to display the number of full time outs remaining. To accept the full time out and start the time out clock, press <b>&lt;ENTER&gt;</b>.</p> <p>To cancel the full time out, press <b>&lt;CLEAR&gt;</b>.</p>
 <p>TIME OUTS-HOME PARTIAL N</p> <p>N = current setting</p>	<p>Press <b>&lt;TIME OUT&gt;</b> two times to display the number of partial time outs remaining. To start the partial time out, press <b>&lt;ENTER&gt;</b>.</p> <p>To cancel the partial time out, press <b>&lt;CLEAR&gt;</b>.</p>

Display	Action
	To exit the running time out clock, press <b>&lt;TIME OUT&gt;</b> . This will turn the time out OFF.
	This message appears when there are no full time outs or partial time outs remaining.


## Player Penalty

Display	Action
 <p>NN = player number MM:SS = minutes, seconds</p>	<p>Press <b>&lt;PLAYER PENALTY •&gt;</b> 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 select the desired penalty, and then press <b>&lt;ENTER&gt;</b>.</p> <p>Enter the jersey number of the player with the penalty using the number pad, and then press <b>&lt;ENTER&gt;</b>.</p> <p>Press <b>&lt;CLEAR&gt;</b> twice to cancel and return to the game.</p>
	<p>The default penalty time initially displayed is the minor penalty value as defined in the <b>Settings</b>.</p> <p>Enter the penalty time by pressing the <b>&lt;MINOR PENALTY&gt;</b> or <b>&lt;MAJOR PENALTY&gt;</b> keys, or use the number pad to enter the correct penalty time, and then press <b>&lt;ENTER&gt;</b>. Pressing <b>&lt;MINOR PENALTY&gt;</b> or <b>&lt;MAJOR PENALTY&gt;</b> additional times will add the configured time for that penalty with each press.</p> <p><b>Note:</b> Press <b>&lt;CLEAR&gt;</b> if <b>&lt;MINOR PENALTY&gt;</b> or <b>&lt;MAJOR PENALTY&gt;</b> have been pressed too many times.</p>




## Set Main Clock

Display	Action
 <p>MM:SS.T = minutes, seconds, tenths of a second</p>	<p>After the main clock has been stopped, press <b>&lt;SET MAIN CLOCK&gt;</b> to display the current time of the main clock.</p> <p>To change the time, enter the desired time using the number pad, and then press <b>&lt;ENTER&gt;</b>.</p> <p>Press <b>&lt;CLEAR&gt;</b> twice to cancel and return to the game.</p>
	<p>This message appears if there are penalty times and <b>&lt;START&gt;</b> has been pressed at least once after setting the period time.</p> <p>Press <b>&lt;YES&gt;</b> to adjust all penalty timers to the correct time based on the time entered for the main clock, or press <b>&lt;NO&gt;</b> to not change the penalty timers.</p>

## Recall Shot Time

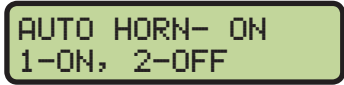


Display	Action
	<p>Press <b>&lt;RECALL SHOT TIME&gt;</b> followed by <b>&lt;YES&gt;</b> to recall the shot time that was remaining before the last shot clock reset was pressed.</p> <p>To cancel the recall, press <b>&lt;NO&gt;</b>.</p>

## Set Shot Time

Display	Action
 <p>MM:SS = minutes, seconds</p>	<p>Press <b>&lt;SET SHOT TIME&gt;</b> to display the current shot clock time.</p> <p>To accept the current shot clock time and return to the game, press <b>&lt;YES&gt;</b>.</p> <p>To edit the shot time, use the number pad to enter the new shot time in minutes and seconds, and then press <b>&lt;ENTER&gt;</b>.</p> <p>To discard the edited time, press <b>&lt;CLEAR&gt;</b> twice to clear the changes and return to the game.</p>
 <p>MM:SS = minutes, seconds</p>	<p>Press <b>&lt;SET SHOT TIME&gt;</b> two times to display the configured shot clock <b>Reset 1</b> time.</p> <p>To accept the shot clock <b>Reset 1</b> time and return to the game, press <b>&lt;YES&gt;</b>.</p> <p>To edit the shot clock <b>Reset 1</b> time, use the number pad to enter the new time in minutes and seconds, and then press <b>&lt;ENTER&gt;</b>.</p> <p>To discard the edited time, press <b>&lt;CLEAR&gt;</b> twice to clear the changes and return to the game.</p> <p><b>Note:</b> The <b>Reset 1</b> value is set in the <b>EDIT SETTINGS</b> menu.</p>
 <p>MM:SS = minutes, seconds</p>	<p>Press <b>&lt;SET SHOT TIME&gt;</b> three times to display the configured shot clock <b>Reset 2</b> time.</p> <p>To accept the shot clock <b>Reset 2</b> time and return to the game, press <b>&lt;YES&gt;</b>.</p> <p>To edit the shot clock <b>Reset 2</b> time, use the number pad to enter the new time in minutes and seconds, and then press <b>&lt;ENTER&gt;</b>.</p> <p>To discard the edited time, press <b>&lt;CLEAR&gt;</b> twice to clear the changes and return to the game.</p> <p><b>Note:</b> The <b>Reset 2</b> value is set in the <b>EDIT SETTINGS</b> menu.</p>

## Auto Horn Interval Timer


The Auto Horn Interval Timer function can be used to automatically sound the horn at regular intervals, for instance, to indicate player substitutions.

Display	Action
	Press <b>&lt;AUTO HORN •&gt;</b> followed by <b>&lt;1&gt;</b> to ensure the auto horn is enabled. With the auto horn disabled, it will not be possible to enable the interval timer.
	Press <b>&lt;1&gt;</b> again to enable the interval timer.
 M = minutes	Enter a number <b>&lt;1&gt;</b> through <b>&lt;5&gt;</b> to set the time in minutes that the horn will sound.  When the interval timer is active, a lowercase "i" will appear on the main LCD display next to the clock direction arrow.

## Score, Shots on Goal, Saves, Ground Balls, Face Offs

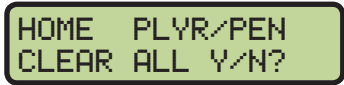
The home and guest **+1 <SCORE>**, **<SHOTS ON GOAL>**, **<SAVES>**, **<GROUND BALLS>\***, and **<FACE OFFS DRAW CTRL>\*** keys are all used to increment and decrement their respective totals. **<SCORE +1>** is used as an example.

\* Only available with codes shown on insert 0G-1084219

Display	Action
 NNN = current setting	Press the appropriate key to increment or decrement the total for the home or guest team.  Enter the correct value using the number pad, and then press <b>&lt;ENTER&gt;</b> .  The LCD shows which key was pressed and the new value for the corresponding team.


## Clear All Penalties

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

Display	Action
	Press <b>&lt;YES&gt;</b> to clear the penalties for all players in the roster.  Press <b>&lt;NO&gt;</b> to cancel and return to the game.

## Delete Penalty

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

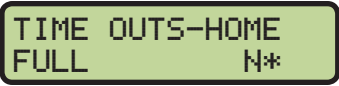
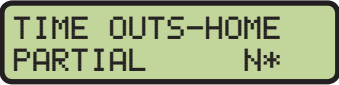
Display	Action
 NN = current setting MM:SS = minutes, seconds	Use the up and down arrow keys to select the correct penalty, and then press <b>&lt;ENTER&gt;</b> .  Press <b>&lt;CLEAR&gt;</b> to cancel and return to the game.

## Edit

Press **<EDIT>** followed by one of the keys below to quickly edit the value.

### Time Out


**Note:** Only the time outs configured in the **EDIT SETTINGS** menu are displayed on the LCD and available for selection.

Display	Action
 N = current setting	Press <b>&lt;EDIT&gt;</b> followed by <b>&lt;TIME OUT&gt;</b> for the home or guest team to display the current setting of full time outs.  Enter the correct full time outs value using the number pad, and then press <b>&lt;ENTER&gt;</b> .
 N = current setting	After accepting or rejecting the number of full time outs, the number of partial time outs is displayed.  Enter the correct partial time outs value using the number pad, and then press <b>&lt;ENTER&gt;</b> .

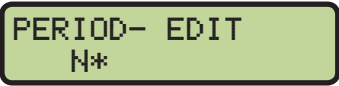
### Score, Shots on Goal, Saves, Ground Balls, Face Offs

The home and guest **<SCORE +1, -1>**, **<SHOTS ON GOAL +1, -1>**, **<SAVES +1, -1>**, **<GROUND BALLS +1, -1>\***, and **<FACE OFFS DRAW CTRL +1, -1>\*** keys are all edited in the same way. **<SCORE +1>** is used as an example below.


\* Only available with codes shown on insert 0G-1084219

Display	Action
 NNN = current setting	Press <b>&lt;EDIT&gt;</b> and the appropriate statistic key for the home or guest team to display the current setting.  Enter the correct value using the number pad, and then press <b>&lt;ENTER&gt;</b> .

### Period +1

Display	Action
 N = current setting	Press <b>&lt;EDIT&gt;</b> followed by <b>&lt;PERIOD +1&gt;</b> to display the current period setting.  Enter the correct period value using the number pad, and then press <b>&lt;ENTER&gt;</b> .

### Time Out On/Off

Display	Action
 MM:SS = minutes, seconds	Press <b>&lt;EDIT&gt;</b> followed by <b>&lt;TIME OUT ON/OFF&gt;</b> to display the current time setting for full time outs.  Enter the correct full time out time value using the number pad, and then press <b>&lt;ENTER&gt;</b> .

Display	Action
<p>TIME OUTS-EDIT PARTIAL MM:SS*</p> <p>MM:SS = minutes, seconds</p>	<p>After accepting or rejecting the full time outs time setting, the partial time outs time setting is displayed.</p> <p>Enter the correct partial time out time value using the number pad, and then press <b>&lt;ENTER&gt;</b>.</p>

## Menu

Press **<MENU>** to access general and sport-specific options. Use the up and down arrow keys to scroll through the menu list. Press **<MENU>** again at any time to return to the game in progress.

## New Game

Display	Action
<p>MENU- MAIN NEW GAME?</p>	<p>Press <b>&lt;ENTER&gt;</b> to clear all data for the current game in progress and begin a new game.</p>

## New Code

Display	Action
<p>MENU- MAIN NEW CODE?</p>	<p>Press <b>&lt;ENTER&gt;</b> to switch to a different sport code through the <b>SELECT CODE</b> prompt. Refer to <b>Start Up (p.7)</b> for more information on sport codes.</p>

## Dimming Menu

Refer to **Dimming Menu (p.16)**.

## Home Roster, Guest Roster

Use the **Home Roster** and **Guest Roster** menus to set up team names. **Home Roster** is used as an example below.

Display	Action
<p>MENU- ROSTER SELECT HOME</p>	<p>Press <b>&lt;ENTER&gt;</b> to select the Roster submenu.</p>
<p>HOME- TEAM NAME _OME *</p>	<p><b>Use the TEAM NAME (LL-2441) insert to change the Team Name Message Center (TNMC) settings.</b></p> <p>Use the <b>&lt;COLUMNS&gt;</b>, <b>&lt;ROWS&gt;</b>, and <b>&lt;STROKE&gt;</b> keys to select the <b>WIDTH</b>, <b>HEIGHT</b>, and <b>FONT</b> of the TNMC. The TNMC is updated after each selection is completed. Refer to <b>Team Name Entry (p.19)</b> for more information.</p> <p>Type in a team name of up to 15 characters and press <b>&lt;ENTER&gt;</b>.</p>
<p>HOME- TEAM ABBR _OME *</p>	<p>Type in a team abbreviation of up to 10 characters and press <b>&lt;ENTER&gt;</b>.</p> <p>Reinsert the <b>HOCKEY (LL-2436)</b> insert to continue.</p>

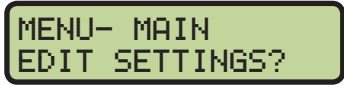
## Display Menu

Refer to **Display Menu (p.16)** for more information.

## Time of Day

Refer to **Time of Day (p.17)** for more information.



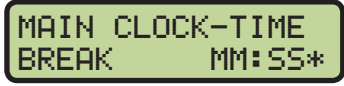

## Edit Settings

Display	Action
	From the Main Menu, select the <b>EDIT SETTINGS</b> submenu to modify the settings below.

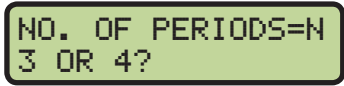
## Main Clock

The settings for the 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.

Display	Action
	<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 <b>&lt;YES&gt;</b> to set the main clock to display tenths of a second. Press <b>&lt;NO&gt;</b> to display whole seconds.</p>
 <p>MM:SS = minutes, seconds</p>	<p>Enter the correct amount of time per period in minutes and seconds using the number pad, and then press <b>&lt;ENTER&gt;</b>.</p> <p><b>Note:</b> Pressing <b>&lt;ENTER&gt;</b> to select the period time as the main clock setting will increment the current period number if the clock value was previously zero.</p>
 <p>MM:SS = minutes, seconds</p>	<p>Set the amount of time between periods.</p> <p>Enter the correct amount of time for break length in minutes and seconds using the number pad, and then press <b>&lt;ENTER&gt;</b>.</p>
 <p>MM:SS = minutes, seconds</p>	<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 using the number pad, and then press <b>&lt;ENTER&gt;</b>.</p>

## Number of Periods

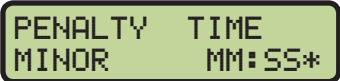
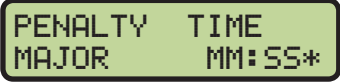
Display	Action
 <p>N = current setting</p>	<p>The Number of Periods setting indicates whether the game consists of three or four periods.</p> <p>Press <b>&lt;3&gt;</b> or <b>&lt;4&gt;</b> on the number pad to select the desired number of periods.</p>

## Shot Clock

Display	Action
  MM:SS = minutes, seconds	<p>This setting is used for the <b>&lt;RESET&gt;</b> button on the remote shot clock control console.</p> <p><b>Note:</b> The current setting for the <b>&lt;RESET&gt;</b> time displays on the LCD until the first number key is pressed.</p> <p>Enter the correct amount of reset time in minutes and seconds using the number pad, and then press <b>&lt;ENTER&gt;</b>.</p>
	<p>Press <b>&lt;YES&gt;</b> to synchronize the shot clock with the main clock. If <b>&lt;STOP&gt;</b> for the main clock is pressed while the main and shot clocks are running, the shot clock also stops. The shot clock restarts when <b>&lt;START&gt;</b> is pressed for the main clock.</p> <p>Press <b>&lt;NO&gt;</b> to allow the shot clock to run independently of the main clock. The shot clock starts and stops only with the switch on the remote shot clock control console.</p>
	<p>Press <b>&lt;YES&gt;</b> to blank the shot clock time when the shot clock time is greater than or equal to the main clock time. The shot clock is reset and stopped when the display is blanked to eliminate inadvertent sounding of shot clock horn.</p> <p>Press <b>&lt;NO&gt;</b> to display the shot clock time at all times.</p>

## 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.

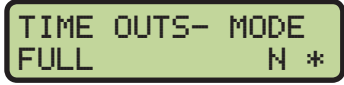
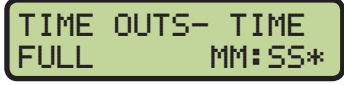
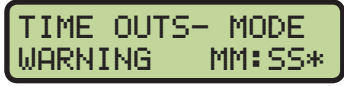
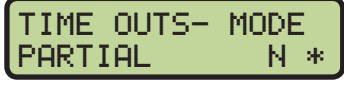
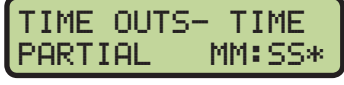
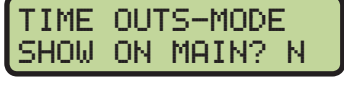

Display	Action
 MM:SS = minutes, seconds	<p>Enter the correct default time for a minor penalty in minutes and seconds using the number pad, and then press <b>&lt;ENTER&gt;</b>.</p> <p>The minor penalty time is used as the default when first entering the player penalty function.</p>
 MM:SS = minutes, seconds	<p>Enter the correct default time for a major penalty in minutes and seconds on the number pad and press <b>&lt;ENTER&gt;</b>.</p>

## Time Outs


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.

Display	Action
 <p>N = current setting</p>	Enter the number of full time outs using the number pad, and then press <b>&lt;ENTER&gt;</b> .
 <p>MM:SS = minutes, seconds</p>	Enter the amount of time for a full time out in minutes and seconds using the number pad, and then press <b>&lt;ENTER&gt;</b> .
 <p>MM:SS = minutes, seconds</p>	<p>A warning horn can be configured to signal the end of a full time out. While the 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 using the number pad, and then press <b>&lt;ENTER&gt;</b>.</p>
 <p>N = current setting</p>	Enter the number of partial time outs using the number pad, and then press <b>&lt;ENTER&gt;</b> .
 <p>MM:SS = minutes, seconds</p>	Enter the amount of time for a partial time out in minutes and seconds using the number pad, and then press <b>&lt;ENTER&gt;</b> .
	Press <b>&lt;YES&gt;</b> to display the time out time on the LCD and the clock digits of the scoreboard while the time out clock is active, or press <b>&lt;NO&gt;</b> to display the time out time on the LCD only.
	<p>Press <b>&lt;YES&gt;</b> to enable FIBA mode (international rules). This will display number of time outs taken on the scoreboard. At the beginning of a new game, time outs will start at 0 and increment as they are taken, up to the max configured value.</p> <p>Press <b>&lt;NO&gt;</b> to show the time outs remaining on the scoreboard.</p>

## Select Captions

Display	Action
	<p>This menu option allows for the controlled backlit captions to be turned ON/OFF.</p> <p>Press the <b>&lt;1&gt;</b> key to select ON and OFF for captions controlled by control #1.</p> <p>Press the <b>&lt;2&gt;</b> key to select ON and OFF for captions controlled by control #2.</p>

## Switch Output

Refer to **Switch Output (p.18)** for more information.

## Default Settings

Print this page if necessary, and record any custom settings for this installation:

Setting	Default	Custom 1	Custom 2	Custom 3	Custom 4
Tenth of a Second	Yes				
No. of Periods	3				
Period Length	15:00				
Break Length	10:00				
Overtime Length	5:00				
Pre-Game Length	20:00				
Post-Game Length	30:00				
Shot Reset 1	0:45				
Shot Reset 2	0:30				
Sync Shot with Main	Yes				
Auto Blank Shot Clock	Yes				
Minor Penalty	2:00				
Major Penalty	5:00				
Full Time Outs	1				
Full Time Out	1:00				
Time Out Warning	0:00				
Partial Time Outs	0				
Partial Time Out	0:00				
Show on Main	No				
Select Captions	1-ON				
Switch Output	1-Clock = 0				