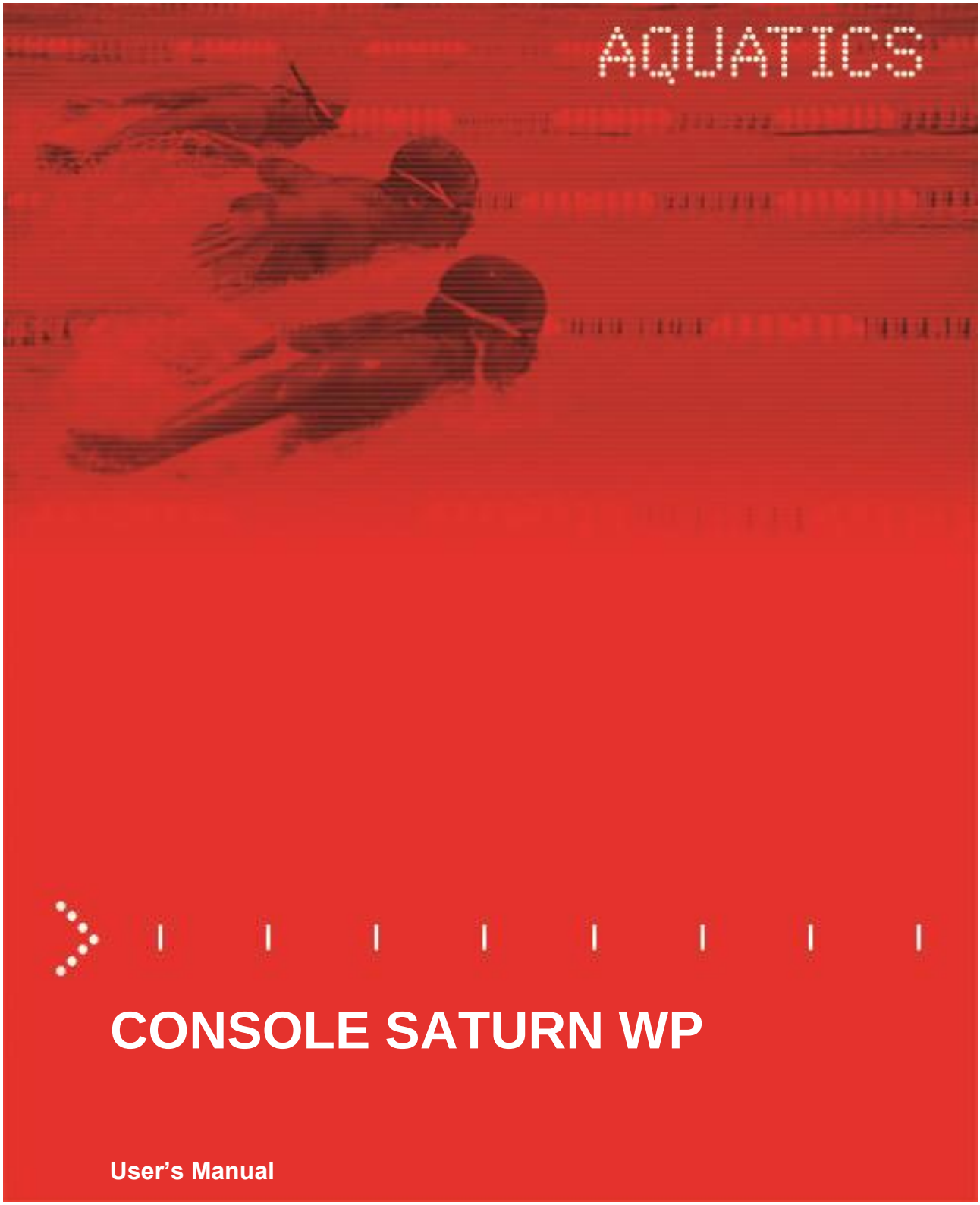
SWISS TIMING



CONSOLE SATURN WP

User's Manual

3403.504.02

Version 2.6

Edition February 2020

Caution and safety precautions

- Never use any other charger than the supplied or a type approved by Swiss Timing. This could destroy the battery, cause damage to unit, and possible cause personal injury due to fire or/and electrical shock.
- Never bypass a power cord ground lead by breaking off the ground pin, or by using inappropriate extension cords or adapters.
- Never plug a power cord into the AC power source until you have made sure that all installation, cabling and power levels, are proper, and that the applicable procedures in this manual have been followed.
- Protect the equipment against splashing, rain and excessive sun rays.
- Never use the device if it is damaged or insecure.
- Verify the selection of the power distribution.
- Verify that the voltage quoted on the rating plate is the same as your voltage. Connect the appliance only to power sockets with protective earth. The use of incorrect connection voids warranty.
- This program may be modified at any time without prior notification.
- Do not open the case; there is nothing that needs servicing inside it. Nevertheless, if the case must be opened, you must call for some qualified personnel. The power supply cable must be disconnected before opening the case.
- During the transport of all Swiss Timing equipment delivered with a reusable carry case, the said case should be used at all times. This is imperative to limit the damage, such as shocks or vibration that can be caused to the units during transport.
- The same cases should also be used when returning equipment to Swiss Timing for repair. Swiss Timing reserves the right to refuse all guarantees if this condition is not fulfilled.
- If the installation includes a horn, be sure to maintain a sufficient security distance from the public.

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Environment

This symbol indicates that this product should not be disposed with household waste. It has to be returned to a local authorized collection system. By following this procedure you will contribute to the protection of the environment and human health. The recycling of the materials will help to conserve natural resources.

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1 INTRODUCTION

Swiss Timing offers a selection of Calypso scoreboards which are especially suitable for Waterpolo. The selection of the Calypso scoreboards can be done from one ergonomic console. The keyboard of the console has partially alphanumeric and functional keys. This makes the use for the operator comfortable.

This manual is valid for the version of the software mentioned on the title page. When you switch on, you will see the version on the display.

Some peripheral devices complete the equipment of the *SATURN* scoreboard, for example:

- Counter for the ball possession time (Shot Clock) for Waterpolo.
- External Start / Stop for all sports with game time.
- Horn.

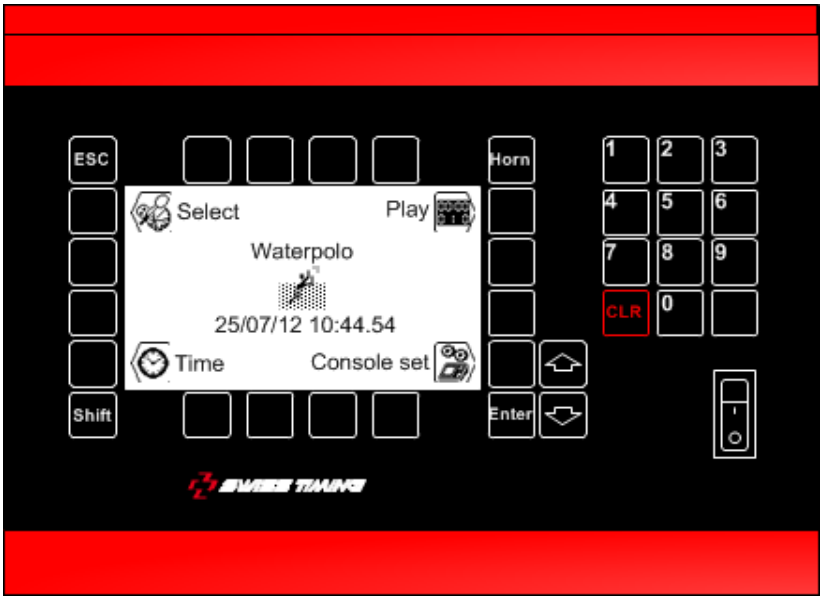
1.1 Set-up

Before you connect the scoreboard and the console to the power supply, please ensure the power and the information cables are installed as per installation manual. Switch on the console at the rear back.

1.2 General view

The keyboard consists of three types of keys :

- The alphanumeric keys.
- The keys with one function.
- The keys with more functions.

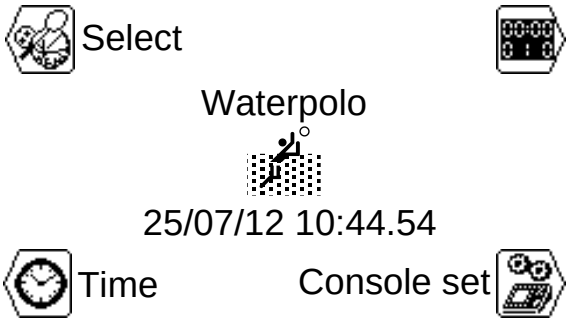


ESC	Escapes the function or the menu without validating the possible modifications (ESCAPE)
Shift	Chooses the second function on the key (Shift + key)
⇧	Moves the cursor up
⇩	Moves the cursor down
0 YZ - 9 VWX	Alphanumeric keyboard
Horn	Manual horn
Enter	Confirms the application or the action
	Function key relating to the image shown on its side on the screen
CLR	Clears the current operation or clears the whole scoreboard when in the main menu
I 0	Switch Start/Stop 0 = Stop I = Start

2 MAIN MENU

When you switch on, the main menu appears. It shows the selected sport, the time and date, as well as the main menus:

Console set	refer to chapter: 3
Time	refer to chapter: 4
Select	refer to chapter: 5
Play	refer to chapter: 6



To choose one of the menus, press one of the keys with the function image.

[Console set] Parameterization of the console

In this menu you can introduce the different settings of the console.

[Time] Day Time

In this menu you can set date and day time.

[Select] Games parameters

In this menu you can select and save the different sport settings.

[Play] Match

In this menu you can start a game.

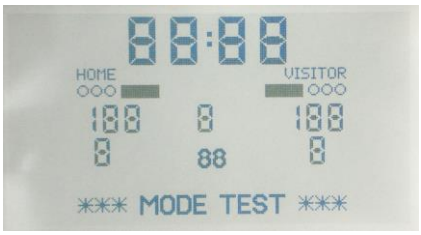
3 [CONSOLE SET] PARAMETERIZATION OF THE CONSOLE

In this menu you can configure the different settings of the console. The top of the screen shows the console's software version.

3.1 Test

This function sends a test program to the scoreboard and appears on the display of the console. Press the ESC key to exit the program.

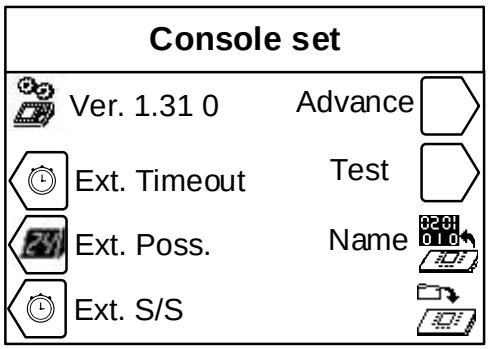
THIS FUNCTION DOESN'T WORK ON ALL TYPES OF SCOREBOARD

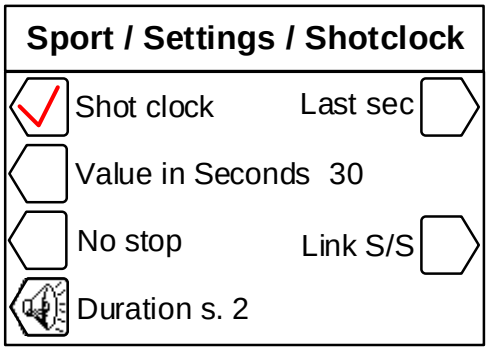


3.2 Ext Start/Stop – External Start/Stop with 3 point socket

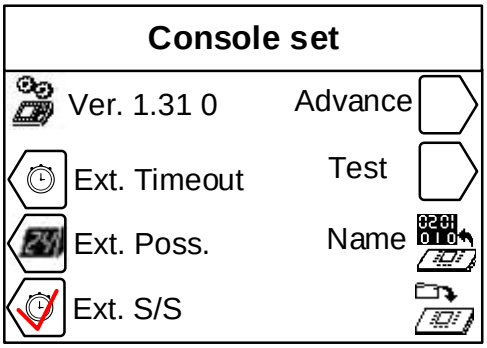
These ports allow releasing the start of the match time and the shot clock with an external trigger.

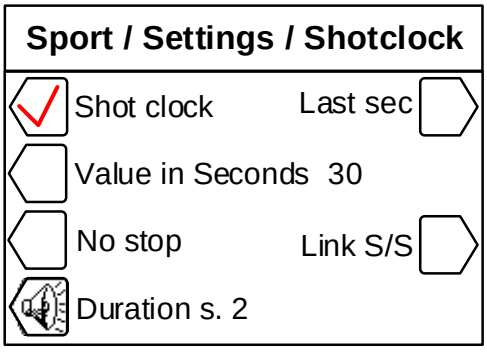
3.2.1 Start/Stop of play time with Saturn console

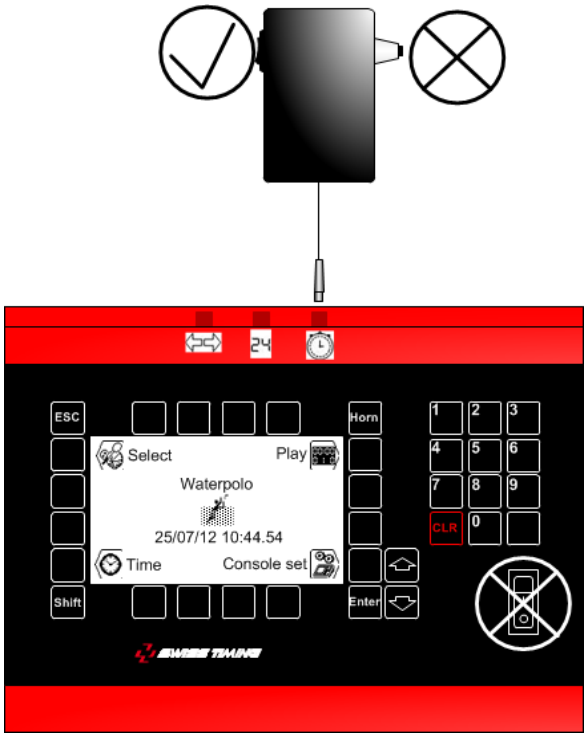




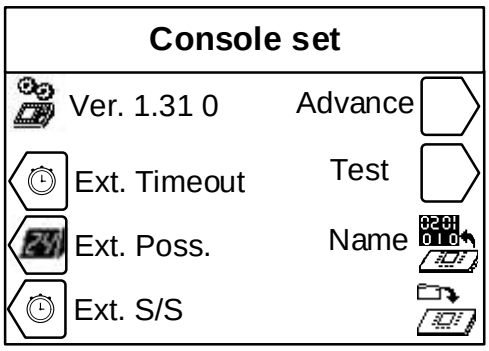
3.2.2 Start/Stop of play time with external Start/Stop command

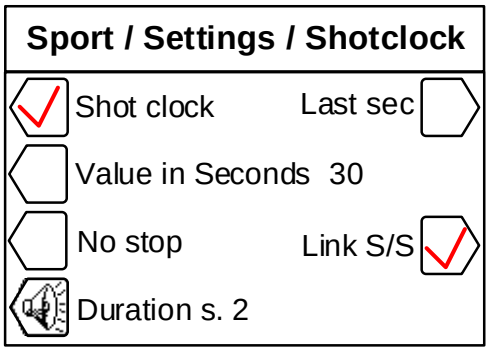


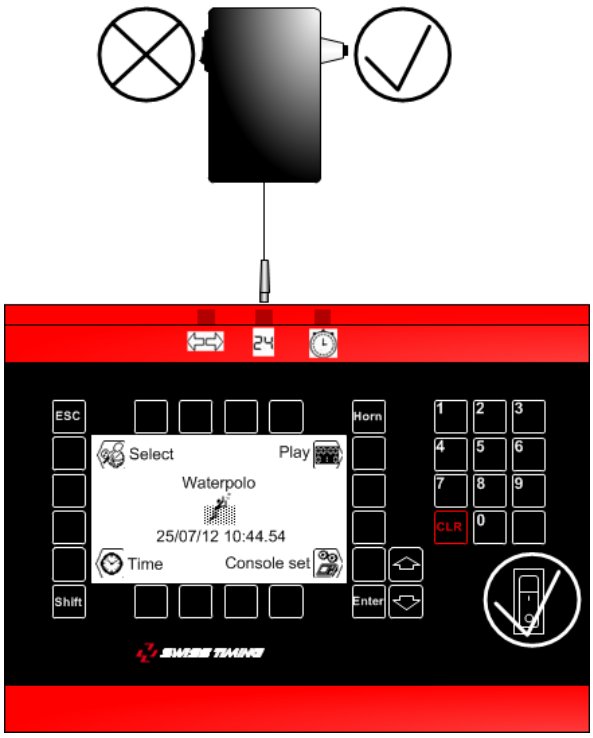




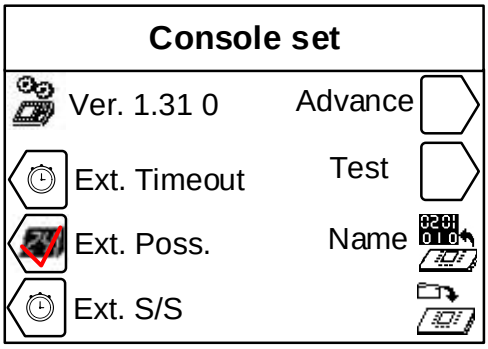
3.2.3 Start/Stop of play time with Saturn console and Shot clock 30s/20s reset with external Start/Stop command

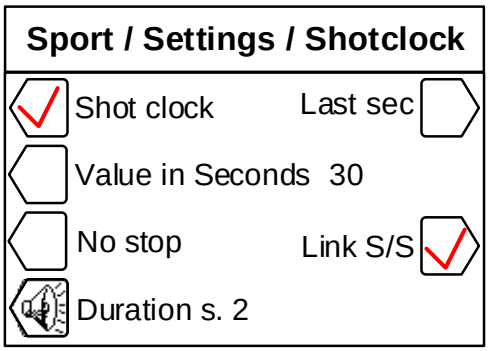


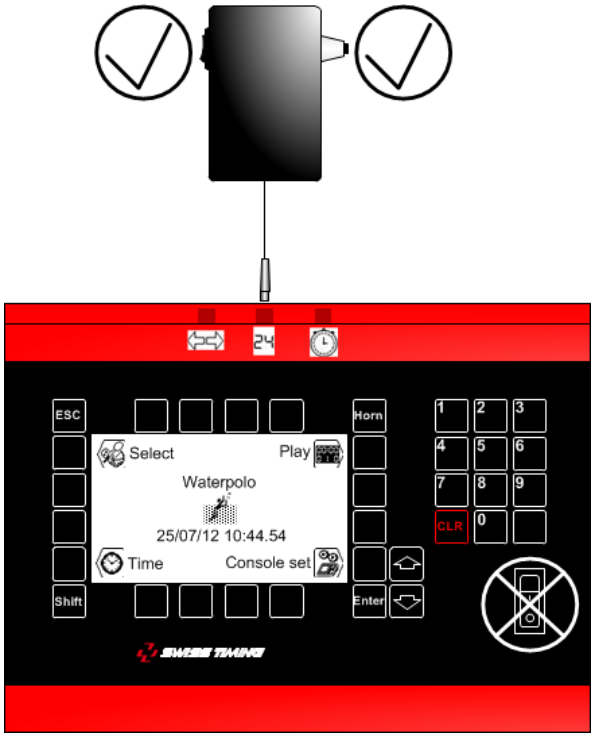




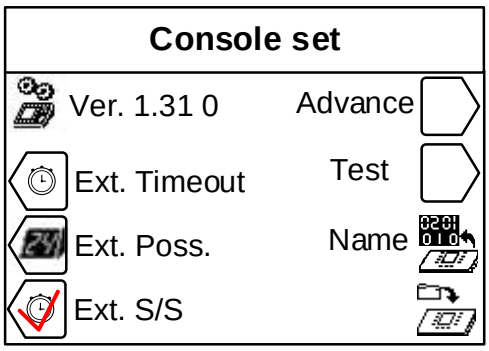
3.2.4 Start/Stop of play time and Shot clock 30s/20s reset with external Start/Stop command

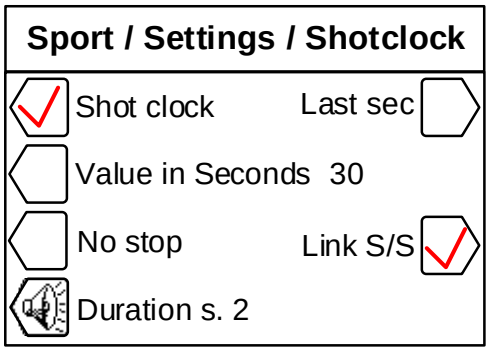


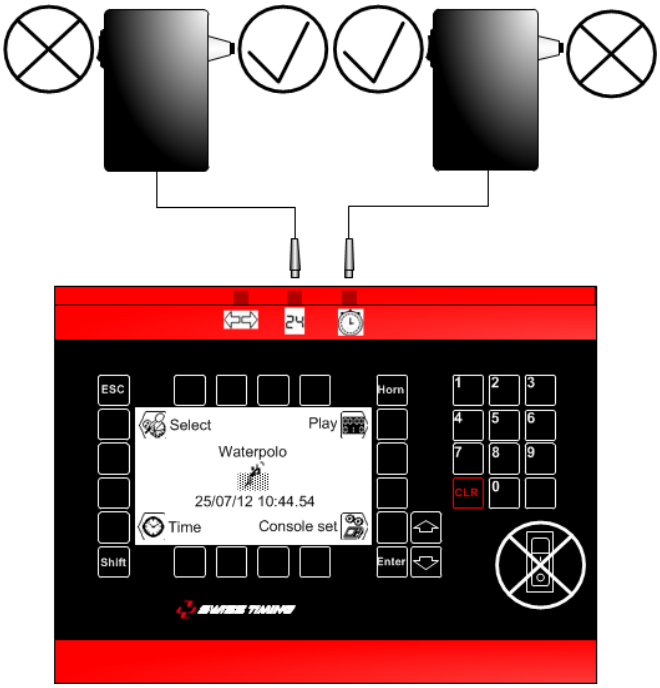




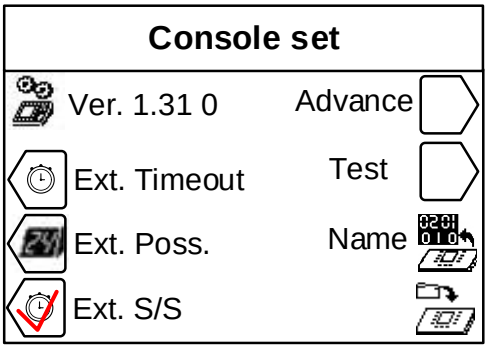
3.2.5 Start/Stop of play time with external Start/Stop command and Shot clock 30s/20s reset with a second external Start/Stop command

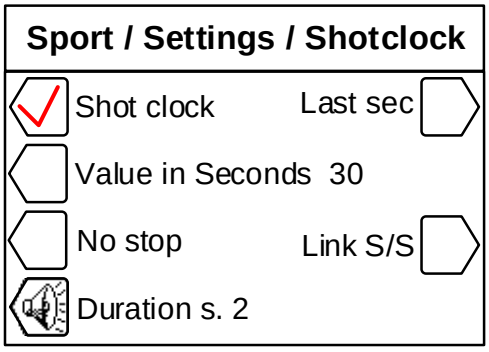


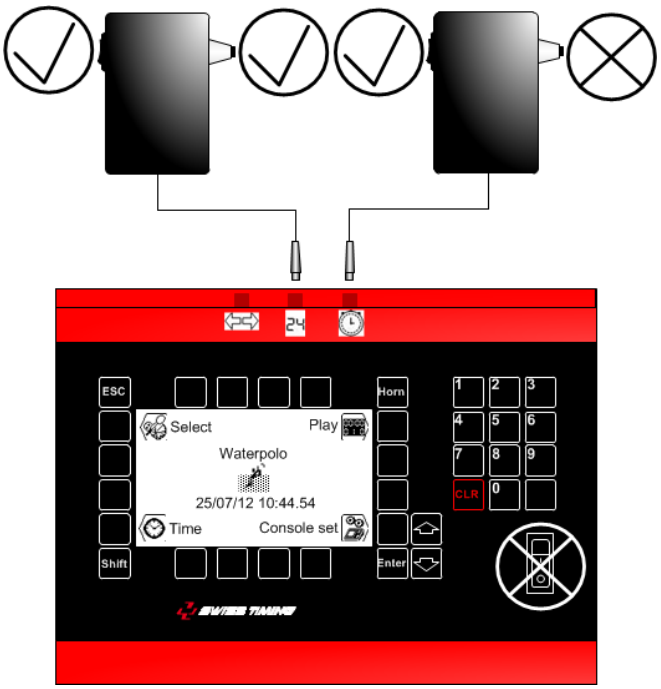




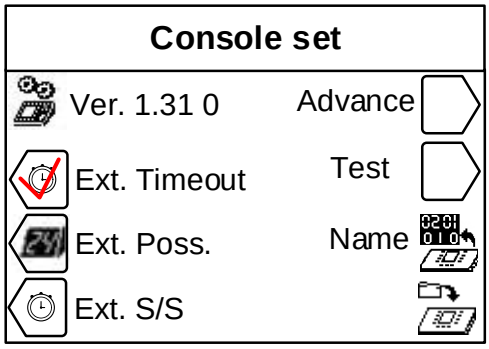
3.2.6 Start/Stop of play time with external Start/Stop command and Start/Stop and Shot clock 30s/20s reset with a second external Start/Stop command

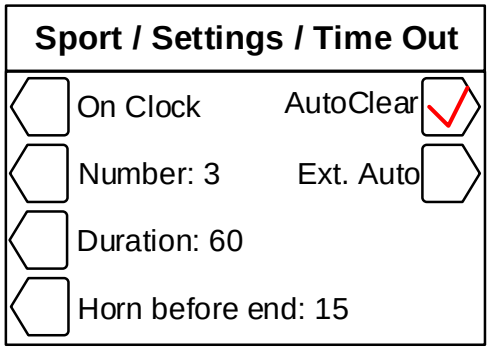


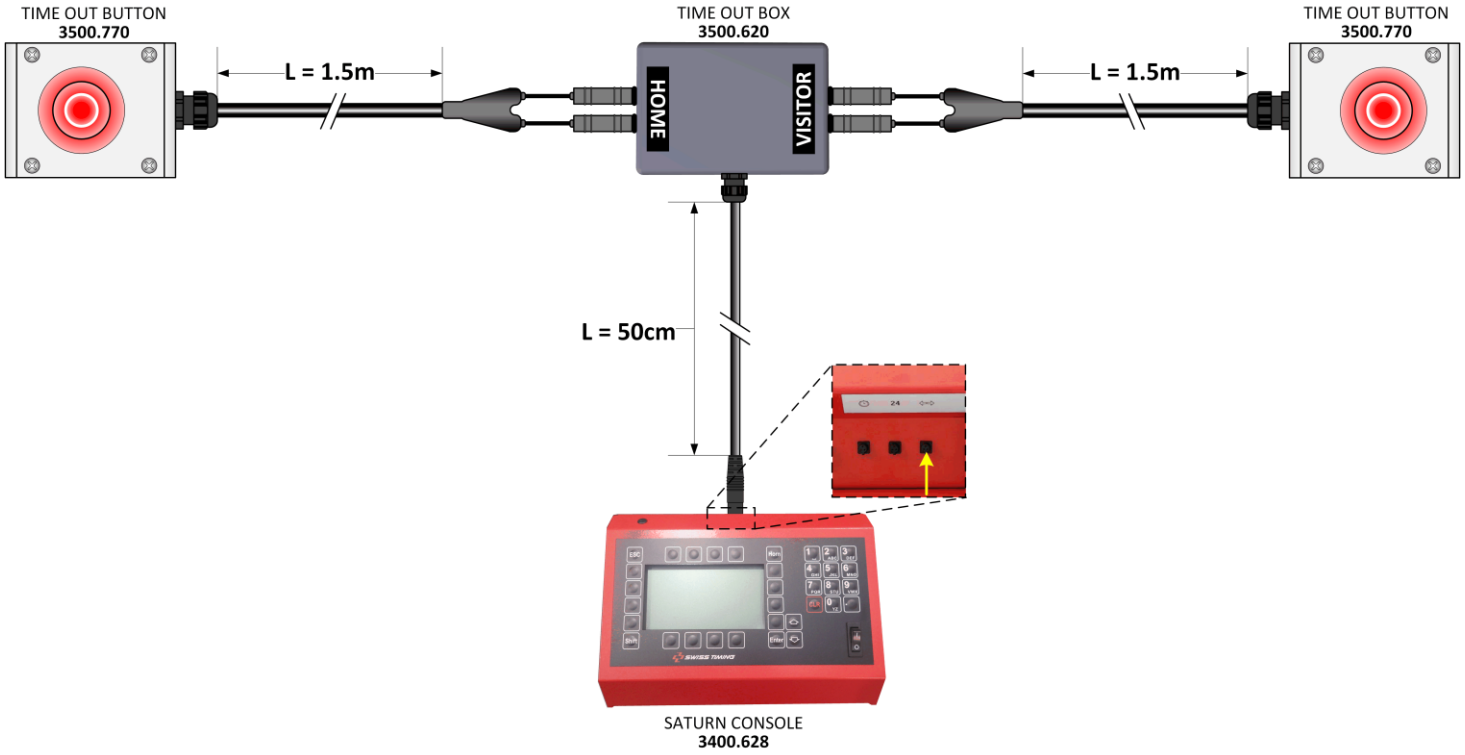




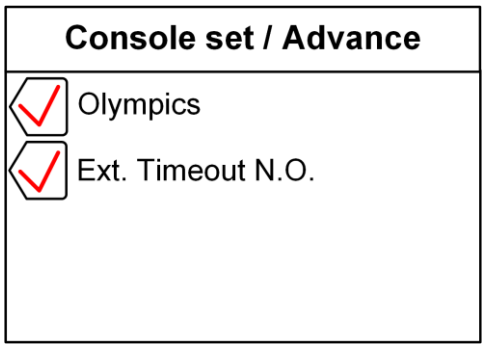
3.2.7 External time out set by trainer







By default, the contact on external Timeout is N.O. (normally open).



3.3 Advance - Board configuration

This menu allows configuring the message sent to the board according to the model and use.

3.3.1 Bluetooth configuration

The "BT" key allows you to select the Bluetooth scoreboards which have to be wireless connected to this console.

DON'T USE THIS FUNCTION IF THE CONSOLE IS NOT PROVIDED WITH INTERNAL BI-DIRECTIONAL BLUETOOTH

If you want to change the Bluetooth scoreboards connected to this console:

- Power ON all the requested scoreboards.
- On the console, press the "Yes" key.

NEVER SWITCH OFF THE CONSOLE DURING THE CONFIGURATION !

- Wait until a question is displayed.
- The name of the scoreboard is displayed. Answer "Yes" if this scoreboard has to be connected to the console; answer "No" to disconnect this scoreboard or "V" to not change the configuration of this scoreboard.
- Repeat the previous points for all the scoreboards.
- Then the software automatically goes back to the "Advance" menu. Press the "ESC" key twice to go back in the main menu.
- The day time must be displayed on the scoreboard (if not, wait about a minute for Bluetooth connection).

Note: only Bluetooth scoreboards with the **same password** can be configured.

3.4 Name - Teams names, Players numbers, Players names

This menu allows the management of the teams names as well as the players names and numbers.

3.4.1 Sending the team names

If the "Send Team" box is ticked (☑), the teams names will be sent when entering the match (the message "Wait for data transmission" will appear on the screen during a few seconds).
Tick this box only if you have the optional module "Team Name" [3400.740].

3.4.2 Sending the players names

If the "Send Player" box is ticked (☑), the players names will be sent when entering the match (the message "Wait for data transmission" will appear on the screen during a few seconds).
Tick this box only if you have the optional modules "Players Names" (not available in Calypso Waterpolo version).

3.4.3 Instant sending of the names

Press key to instantly send the teams and players names to the board. During the sending, the text "Sending…" is displayed on the bottom of the screen. Press the ESC key to Stop the transmission (not available in Calypso Waterpolo version).

3.4.4 Introduction of players names and numbers

Using the "Modify Visitors" and "Modify Home" keys, you can introduce the team name as well as players names and numbers, for the visitors and local team.

In this screen:

- The "Team" key allows the edition of the team's name*.
- The ⇧ and ⇩ keys allow to choose one of the players to be modified (N = 1 to 16).
- When you first press on the "N Num Name" key, you can modify the player's number.
- After confirmation of the player's number, if you press a second time on the "N Num Name" key, you will be able to edit the player's name. After validation, the key automatically goes to the next player (N = 1 to 16).

***** : The ⇧ and ⇩ keys allow to move the cursor.
The CLR key allows to erase the letter preceding the cursor.
The 0 YZ and 9 VWX keys allow to introduce a letter or a number, the same way as for a mobile phone (by pressing successively on the same key).
The Enter key allows to validate the modifications.
The ESC key allows to cancel the modifications.

3.5 Update the software

The *SATURN* line allows the download of a new software version in case there are rule changes in the different sports. Follow the procedure displayed on the screen:

Operating of the console:

- Connect the console to the serial port RS232 of the computer (Cable Sub-D 9 poles male-female pin to pin [Swiss Timing article No. 9051.1307]) or to USB - RS232 converter.
- Switch on the console.
- Select menu [Console set].
- Press function key . The screen shows the Swiss Timing logo, as well as the actual software version installed.
- Press function key and follow the instructions:

Firmware upload
Actual version : x.xx
1)Connect serial cable
2)Press Program Flash on PC
3)When completed, turn power OFF and ON

Operating of the computer:

- Load the FlashSimple program (available on our internet site) and start.
- Press on the "*Flash*" menu then "*Setting*" and introduce following values (only for the first use):
  - *H8S/2134F* for Device name
  - *Direct Connection* for Interface name
  - Port com: X (according to your computer's serial port)
  - Baud rate 9600
  - USER mode

  Press OK to confirm the parameters**.**

- Press on the "*Browse*" button and download the software (Ex. 2054.xxx.fpr or.mot).
- Press on the "*FLASH program*" button and wait for the loading of the software to be finished; **the message "The device was successfully programmed" must appear**. This operation lasts for about 4 minutes.
- When loading is finished, switch the console off, then turn it on again, and check the update version (Ex. Ver 1.03).
- Press the Select button.
- Press on "All def. & Save" button and validate by pressing Yes in order to initialize the console with the factory values.

This last operation will erase your specific parameters, but it is essential to keep the new software version in correct working order.

4 [TIME] DAY TIME

This menu allows you to introduce the date and day time. Only the day time can be transmitted to a *SATURN* scoreboard. Select the needed function key:

For the selection of the date

For the selection of the hours

For the selection of the month

For the selection of the minutes

For the selection of the year

To modify the value, use the alphanumeric keyboard or the keys ⌂ (plus 1) and ⌄ (minus 1), then press the Enter key to confirm the entry. To go back to the initial value, press on the ESC key instead of the Enter key. Repeat this procedure until all the values match your requirements.

The synchronization of the clock must be done at 0 second by pressing the Enter key in the selection menu.

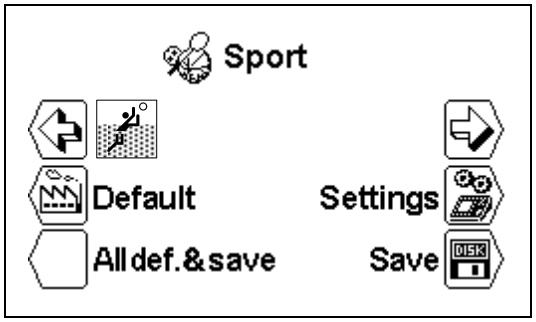
The display of the day time is automatically done when in the main menu of the console.

- An internal battery allows to keep the exact time and date during 30 days after the last switch off.
- The parameters of the console and sports always remain in the memory (not limited in time).

5 [SELECT] GAMES PARAMETERS

The selection and back up of the various games parameters (Duration of the period, horn, direction of clock counting) are done in this menu.

Choose the required sport with the ◁ and ▷ keys. The scrolling is bigger than the size of the display. Therefore, if you press on the ◁ key from the position Waterpolo, other sports will also be displayed.



5.1 [Settings] Choose the settings for a sport

When you have selected the desired sport, press on the key [Settings] to change the parameters. Use the △ and ▽ keys to see all the parameters.

- According to the selected sport, some parameters cannot be programmed.
- Each sport memorizes its specific parameters.

[Number period]
Number of match periods. The actual number of periods is displayed on the right followed by the number of extra periods [EP for Extra Period].

[Setting period & pause]
Modification of the game times of the several periods, the number of extra periods and duration of times out.
[Period]
Use the keys △ (plus 1) and ▽ (minus 1) to read the values of the several periods.
[Min. xx] Value of the several periods in minutes.
[Sec. xx] Value of the several periods in seconds.
[Extra Period x] Selection of the number of extra periods.
[Pause] Introduction of the value of the two possible times out, following the same procedure as for the duration of the periods.
- [Select pause x] Selection of the time outs
- [Min. xx] Setting in minutes of the break duration
- [Sec. xx] Setting in seconds of the break duration

[Count down]
Changes the way of counting from ascending [Count up] into descending [Count down].

[Display 1/10]
The tenth of a second is displayed during the last minute of the descending mode.

[Shot clock]
Selection menu of the ball possession timers' parameters.

☐ [Shot clock]
- ☑ Possession timers connected.
- ☐ Possession timers not connected.

☐ [Value in Seconds] Duration of the possession in seconds.

☐ [No stop]
- ☑ Does not stop the playtime when the possession time reaches 0.
- ☐ Automatically stops the game time when the possession time reaches 0.

☐ [Duration] Horn duration for the possession timers (introduce 0 if you do not wish a horn at the end of possession time).

☐ [Link S/S] Links the start of the shot clock with the start of the match time.

☐ [Last sec]
- ☑ The shot clock time can be set to 30s in the last 30s.
- ☐ The shot clock time cannot be set in the last 30s (cleared).

[Setup Time out]
Selection menu of the time out parameters.

☐ [On Clock]
- ☑ The time out is displayed instead of the game time.
- ☐ The time out is displayed on the extra module.

☐ [Number] Number of authorized time outs (per period or per match).

☐ [Duration] Duration of the time out in seconds.

☐ [Horn before end:] The time of horn before the end of time out

☐ [Ext. Auto]
- ☑ The time out requested by trainer start automatically.
- ☐ The time out requested by trainer has to be confirmed by operator

[Ad. Fouls/Score]
Activates the function of the personal fouls, penalties and goals scored by player.

☐ [Fouls Score]

☐ [Fouls] If the box is ticked (☑), the player's number is requested at the introduction of a foul. Depending on the sport, you must activate this box if you have either a 909, 919 or 929 board.

☐ [Score] If the box is ticked (☑), the player's number is requested at the introduction of a goal. Depending on the sport, you must activate this box if you have either a 919 or 929 board.

☐ [Fouls time] If the box is ticked (☑), it is possible to give the expulsion times. Depending on the sport, tick this box if you have a 908 board (or number above).

☐ [Clear All] Clears [Fouls Score] and [Fouls time].

[Setting Horn]
Selection and duration of the horn at the end of a period, pause and timeout.

☐ [Period: x]	Duration in seconds of the horn (on the board) at the end of each period (introduce 0 if no horn is wished at the end of each period).
☐ [10 Sec]	If the box is ticked (☑),the horn will be activated for one second, 10 seconds before the end of each timeout.
☐ [Pause & Timeout: x]	Duration in seconds of the horn (on the board) at the end of each pause and each timeout.
☐ [Pause]	If the box is ticked (☑), the horn will be activated at the end of each pause.
☐ [Timeout]	If the box is ticked (☑),the horn will be activated at the end of each timeout.

[Scoreboard type]
Selection of the number of the lines, the orientation and the type of scoreboard.

☐ [Lines: x]	Number of lines on the scoreboard.
☐ [Vertical]	If the box is ticked (☑), the scoreboard is installed in vertical orientation. If the box is not ticked (☐), the scoreboard is installed in horizontal orientation.
☐ [Calypso SW]	If the box is ticked (☑), the Calypso SW scoreboard is selected. If the box is not ticked (☐), other type of scoreboard is selected.

5.2 [Save] Save the sports settings

The last modifications of parameters in the several sports are saved in the console. A confirmation message is displayed before the backup.

5.3 [Standard] Change the standard settings for a sport

Downloads the standard settings for the selected sport. This operation does not save those values in the memory. If you wish to use these parameters for the next competitions, you must save the values as described in the above chapter.

5.4 [All Def & Save] Reset the standard settings for all sports

Downloads all the parameters of each sport and saves them in the memory. This function downloads the standard settings of Swiss Timing (See chapter Standard Settings).
This function must be done after a firmware upload.

6 [PLAY] MATCH

This menu allows you to start a game. You must first select the sport you want in the menu [Select]. Arrange the keys and on the sport you want and press Enter. The Saturn software is now activated in the main menu and the image of the selected sport is displayed in the middle of the screen.
Press on key [Play] to start the game. The software first asks you if you wish to continue the previous game or start a new one:

Download previous game ?

Answers NO to start a new game
Yes to carry on the previous game

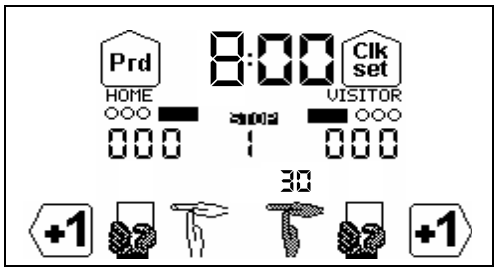
When the switch start/stop is on start:

Move switch in off position !

To continue put the switch start/stop on STOP.

Put the switch on Stop to carry on. By selecting waterpolo and depending on the chosen settings, the console shows the values of the first period.

See chapter: 6.1Sports with game time



6.1 Sports with game time

The display is split in three parts:

A. The general display with regulation of Game Time:

Display	*Description*
0:00	Game Time
stop	Game Time is stopped
1	Current period
30	Time of ball possession (Shot Clock)

Modify the period

Modify the Game Time during the game

B. Display of the home team (HOME or a name introduced in the console's settings).
C. Display of the visitors team (VISITOR or a name introduced in the console's settings).

Home	*Visitor*	*Description*	*Home*	*Visitor*	*Description*
○○○		Display Time outs			Score –1
000		Game results			Score +1
		Personal penalty			
		Time Outs			Temporary exclusion

Depending on the sport and configuration, only some keys appear.

6.1.1 Start the period

To start the period, put the START/STOP switch on START. The current time starts to count up or down depending on the game settings.

- In START position, the display shows GO

  Turn the switch to STOP, to stop the game time.
- In STOP position, the display shows ▬ STOP ▬.

6.1.2 Modification of the scores

With the help of the function keys you can change the scores.

- Press one of the keys +1 +2 +3 to increase the score. The keys +2 and +3 appear not only when the function 2 is active.
- Press the key Shift then -1 (it is the key +1 with functionality changed by Shift), to reduce the score.

If

[Ad. Fouls/Score] [Score] is ticked in [Settings] Choose the settings for a sport, the number of the player who scored is requested. The players on the field are indicated by a black shirt and the other players are indicated by a white one. If a goal should not be given to a specific player, validate with the CLR key.

6.1.3 Introduction of a fault

As soon as a player receives a penalty, it is possible to introduce all the team penalties, as well as the amount of personal penalties (depending on the settings selection).

- Press the key (Home or Visitor), to increase the team penalties.
- Press the key Shift then the function key , to deduct one penalty.

Depending on the settings selection, the player's number is requested:

- Press on the corresponding player's number in order to give it to a player.
- Press the key CLR to give it to the whole team without giving it to a specific player (for example if the penalty is committed by the coach).
- Press the key ESC to cancel the attribution of the penalty.

Note: when a player reaches the maximum authorized amount of penalties, he is automatically removed from the list of the players on the field.

6.1.4 Introduction of a penalty

In certain sports, when a player commits a fault, it is possible to exclude him for a certain time.

- Press the function key (Home or Visitor) to give a temporary expulsion to a player.
- Press the key «F1» to choose the duration of the temporary expulsion.
    - If the expulsion should not be given to a specific player (as per board's settings), or if we wish to start immediately the penalty whilst the player's number is still unknown, validate by pressing the key Enter
      or,
    - Press the key «Player» to choose the number of the player to whom the exclusion is given
      or,
    - Press the key ESC to cancel the attribution of the exclusion.

Note: the player is automatically removed from the list of the players on the field.

- Press the key Shift then the function key (Home or Visitor) to cancel an exclusion. In the next screen, press on the key(s) of the expulsion(s) to cancel, then validate with Enter or cancel the cancellation with the ESC key. In that screen, it is also possible to modify the number of a player that has got a penalty: press the nT key ("nT" appears on a black background) then press the key corresponding to the penalty to which the player's number must be modified ("T1" to "T5"), finally press on the key corresponding to the number of the player that has a penalty.

6.1.5 Introduction of a Time Out

In the time out settings [Time out] of [Settings] Choose the settings for a sport, you can choose your parameters.

- To display a time out during a game, the START/STOP switch must be on STOP; then press the function key (Home) or (Visitor). If there are separate panels for the display of the time outs, the game time will appear in the external zone.
- To cancel a wrong introduced time out, press the key Shift then the key function (Home) or (Visitor).
- To display a technical time out during a game, press the function key T. The duration of the technical time out is displayed on the board instead of the game time.

If the external time out is selected in the Console Set, the trainer can request a time out by pressing external pushbutton (see chapter 3.2.7).

If the time out is not count down till the end and the teams restart the game, the time out will be deleted, as soon as the switch START/STOP is back on START and the game time continues.

At the beginning of the third period, a message on the console request to invert the external timeout Team buttons :

- If the teams swap their position on the field, press **Yes** to invert the external timeout
- If the teams stay in the original position, press **No.**

6.1.6 Management of Shot clock

With the help of an external switch START/STOP & RESET, you can operate the ball possession panels (Shot clock).

- Connect external switch to the back of the console.
- One click on the RESET button allows to initialize the possession time to 30s. Double-click on the RESET button allows to initialize the possession time to 20s.
  As long as the RESET button is pressed, the shot clocks are erased.
- The function of the START/STOP switch changes according to the settings in [Consol set].

6.1.7 Modification of players on the field

- Press Shift then ⌂ to modify the composition of the local team.
- Press Shift then ⌄ to modify the composition of the visitors team.

The players on the field are indicated with black shirts, the other players with white shirts. Press the corresponding keys to modify the players on the field. In the middle of the screen, the numbers and amount of players on the field are indicated. From this screen, it is possible to:

- Go to the composition of the local team by pressing key ⌂.
- Go to the composition of the visitors team by pressing key ⌄.

Validate the changes by pressing key Enter or ESC.

Note: when a player reaches the maximum authorized amount of faults, he is automatically removed from the list of the players on the field.

6.1.8 Modification of the period

The period is not automatically increased at the end of a game in order to have the possibility to modify the score or any other setting before starting the next period. To go to the next period or to modify its value:

- Press Prd to increase the period by 1.
- Press the key Shift then Prd to reduce the period by 1.

See also chapter 6.1.10 End of period

6.1.9 Modification of game time during a game

When the game time has stopped, the key function Clk set becomes active. Now you can modify the current period and introduce a new time. This function does not allow you to change the chosen settings for the period. Regarding to the sport, some of the following functions are not available:

- When you press the key Clk set, the correction menu appears for the game time.
- Choose the key [Minutes], to modify the minutes:
  - Introduce the new values and validate with the key Enter.
  - Press ESC to quit without saving.
- Press the key [Seconds], to modify the seconds:
  - Introduce the new values and validate with the key Enter .
  - Press ESC, to quit without validating.
- Choose the key [1/10] to modify the tenth of a second:
  - Introduce the new values and validate with the key Enter .
  - Press ESC to quit without saving the new value.
- Press the key [Sec. 30] to modify the possession time:
  - Introduce the new values and validate with the key Enter .
  - Press ESC to quit without saving the new value.
- Press the key [HOME] to modify the expulsion time for the local team.
- Press the key [VISITORS] to modify the expulsion time for the visitors team.
- Press the key [Pause] to introduce a pause at any time of the match (see 6.1.11 Pause for more details).

To go back to the menu [Play]:

- Press the key Enter, to save modifications.
- Press the key ESC, to quit without validating and saving.

If the game time has been modified, a question

Apply the difference to all the timers ?

will ask if all the expulsions must be modified accordingly.

By pressing YES, all expulsion times and game time will be modified.

By pressing NO, the game time will be modified.

6.1.10 End of period

When the period finished, the following display appears:

Move switch in off position !

Turn the switch on to Stop.

If necessary, adjust score or other events that could have occurred.

Press the key Prd to go to the next period.

If some counters need to be reset to zero, choose:

[Reset Team Fouls only]	Sets the amount of team fouls back to 0.
[Reset Fouls & Time Out]	Sets the amount of team fouls and amount of Time Outs used back to 0.
[Reset Time Out only]	Sets the amount of Time Outs used back to 0 for each team.
[No reset]	Nothing is reset to 0.

You can then choose the following data:

NP = No Pause, by pressing this key, there will be no pause time displayed on the board, the next game period will be displayed automatically.
P1, P2, P3, by pressing one of these keys, the pre-programmed pause time will be displayed on the board. When the pause time is over, it automatically goes onto the next game time. By pressing the ESC key, the pause time is stopped and the change on the next game time is done automatically.

6.1.11 Pause

When the game is stopped and at any time, it is possible to introduce a count down (or pause or time out) of a certain duration. This is very useful, for example, to indicate the beginning of the match or the remaining warm-up time.

- Press the key Clk set then [Pause].
- Select the duration of the pause using [Minutes] and [Seconds].
- Validate the duration of the pause by pressing the key Enter. The duration of the pause is now displayed on the screen and on the board.
- At the end of the pause the display and the board show the game time again.
- Press ESC to cancel a pause in progress.

6.1.12 End of game

When the last period is finished, press on the key Prd ; a screen will ask you if you wish an extra period:

Extra period ?

Answers NO to end the play. The console will show GAME OVER and it will not be possible to start the game time again.
Yes to enter the first extra time.

When the console shows GAME OVER or at any other moment, press the ESC key to exit the game :

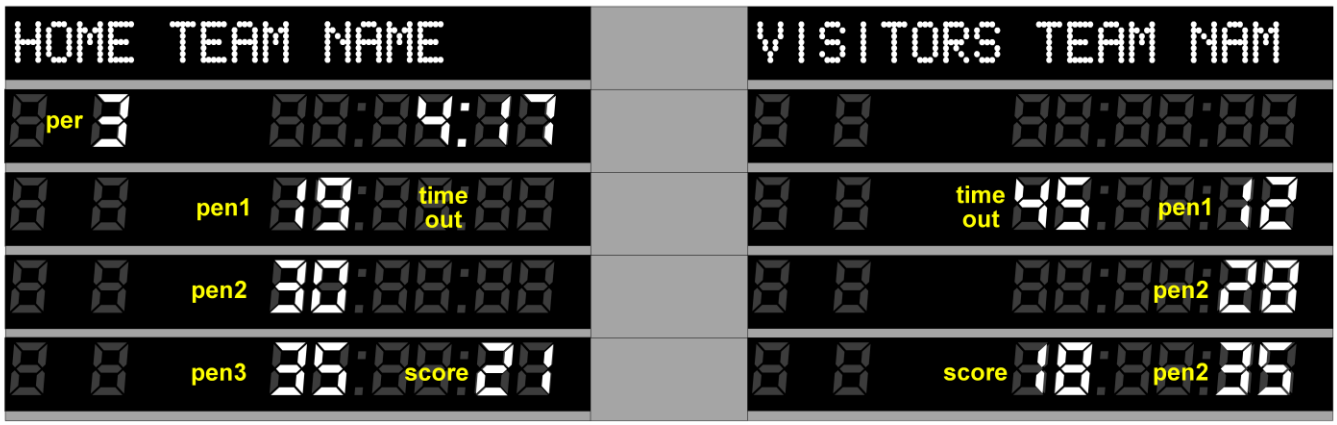
Would you exit the game ?

Answers NO to stay in the game
Yes to leave the game

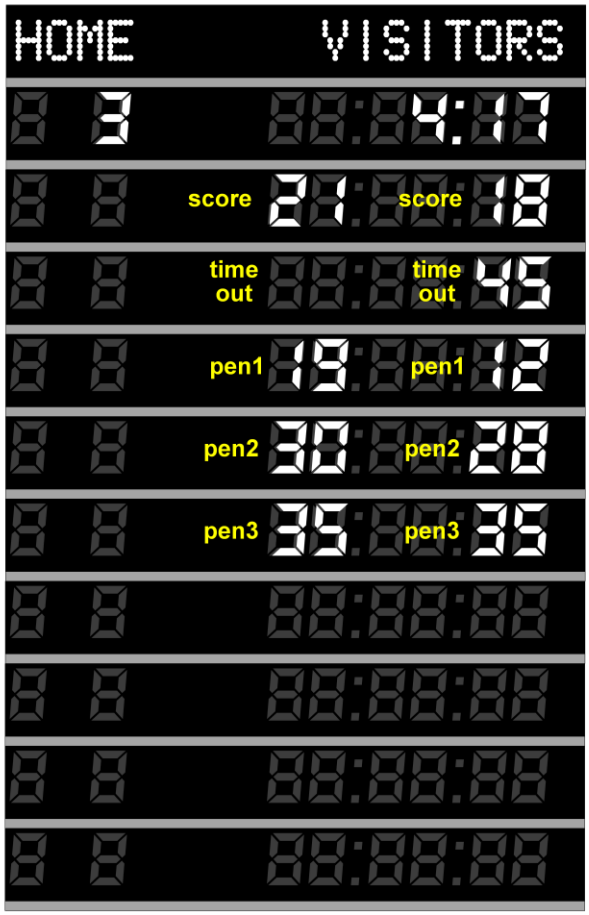
To start a new game, it is essential to leave the current game first.

7 SCOREBOARD APPLICATIONS

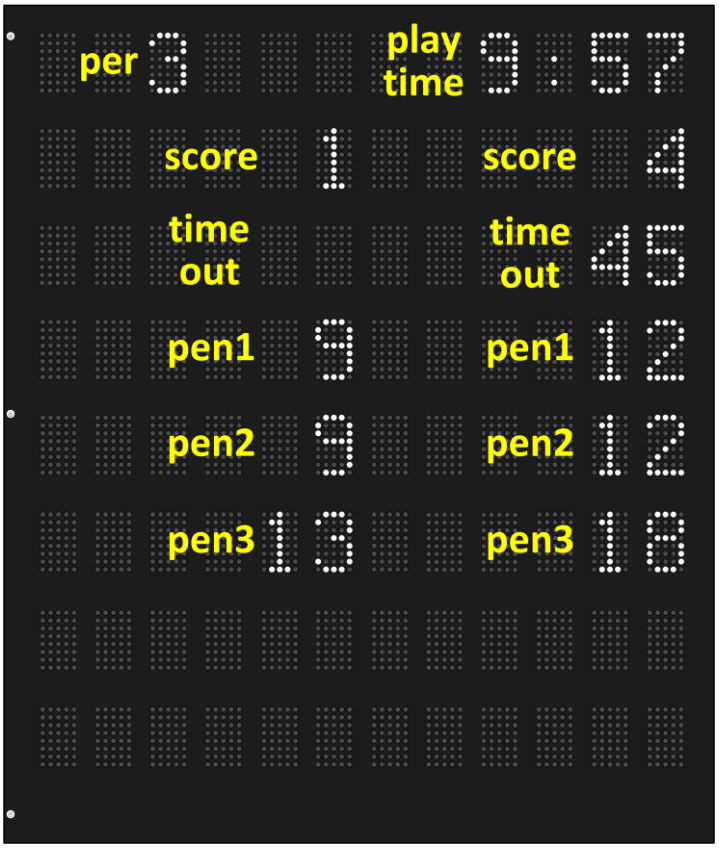
7.1 CALYPSO HORIZONTAL



7.2 CALYPSO VERTICAL



7.3 PICCOLO



8 PROPERTIES

8.1 Dimensions and weight

Dimension of the console WP : Hx90/Wx285/Dx205

Case weight: 1.2 kg

8.2 Maintenance

-

8.3 Storage

The console Saturn must be kept in a clean and dry place.
The storage temperature is -10°C to +60°C whereas the working temperature is 0°C to +45°C.

9 DEFAULT VALUES

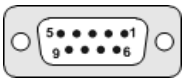
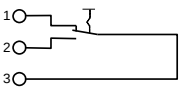
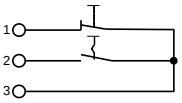
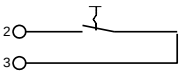
Console Set – Ext. Start/Stop		*Autorised values*	*Default values*
	Ext. Timeout		☐
	Ext. Poss.		☐
	Ext. S/S		☐

Select / Settings		*Autorised values*	*Default values*
Number period		1 - 9	4 + 2EP
Setting period & pause	Setting period	1 – 9/0 - 59	1/8
			2/8
			3/8
			4/8
	Setting extra period	0 – (10Period)/0 - 59	EP1/3
			EP2/3
	Setting pause	1/0 - 30	P1/2
		2/0 - 50	P2/5
Count Up/Down		Up/Down	Down
Display 1/10			☑
Shot Clock	Shot Clock		☑
	Value in seconds	0 – 99	30
	No stop		☐
	Duration	0 – 20	s.2
	Link S/S		☑
Setup Time Out	On Clock		☑
	Number Time Out	0 – 3	3
	Sec. Time Out	0 – 99	60
	Horn before end of time out	0 – 59	15
	Ext. Auto		☐
Advance Fouls/Score	Fouls Score		☑
	Fouls Time		☑
	Clear all		☐
Horn Duration	Period	0 – 20	3s
	1 min left in Period	0 – 20	1s
	Pause & Time Out	0 – 20	3
	Pause		☑
	Time Out		☑
	Horn before end of time out		1s
Scoreboard type	Lines	6 – 8 – 10	8
	Vertical		☐
	Calypso SW		☑

10 ELECTRICAL PROPERTIES

ATTENTION :

- When the console is equipped with the internal BlueTooth option, TX_1 (pin 1 and 2 of Scoreboard connector) IS NOT AVAILABLE.
- It is so recommended to always connect the scoreboards on pin 3 and 4 of the Scoreboard connector.

Connector	*Pinning*		
		Bluetooth	
SCB **RS422** 7PF Tuchel	1 : +12V 2 : NC 3 : TX1- 4 : TX1+ 5 : TX2- 6 : TX2+ 7 : GND	1 : +12V 2 : NC 3 : TX- 4 : TX+ 5 : RX- 6 : RX+ 7 : GND	
PC **RS232** Sub-D 9PF	2 : TX 3 : RX 5 : GND		
POSSESSION 3PF	1 : Home 2 : Visitors 3 : Common		
Start/Stop + Reset 3PF	1 : Reset 2 : Start/Stop 3 : Common		
Start/Stop 3PF	1 : Not Used 2 : Start/Stop 3 : Common		
POWER DC **9-18 VDC** 4PM DIN	1 : +9-18V 2 : GND 3 : Not Used 4 : Not Used		
HORN Banana terminals			

11 APPENDIX

11.1 Version history

Version	Modifications since last version
1.0	Initial version
2.0	Second version (Waterpolo version)
2.1	Connector pinning table corrected
2.2	Pictures console WP updated
2.3	Reset 30s/20s Shotclock
2.4	Examples of scoreboard applications
2.5	External Time out set by trainer chapter added
2.6	External Time out configuration added in chapter 3.2.7 & 6.1.5

NOTES