

# User Manual – Waterpolo

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Document history							
Version	Date	Details	Prepared by	Reviewed by	Approved by	Gen. Doc	Issued for
<b>UP473</b>							
UP1480	30.04.2025	New styles applied	M. S. Jovanović				



CKN Console

Key functions			
Home		Guest	
F1	Brightness level 1 - 9	F3	Players names and numbers menu
F2	Score per quarter/sets	F4	Correction of shoot time
BONUS	Toggle bonus indicator – home	BONUS	Toggle bonus indicator -guest
POSS	Ball possession - home	POSS	Ball possession – guest
TIME OUT	Home time out +1	TIME OUT	Guest time out +1
+3	Home score +3	+3	Guest score +3
+2	Home score +2	+2	Guest score +2
Arrows up/down	Guest score +1 (up) or -1 (down)	Arrows up/down	Guest score +1 (up) or -1 (down)
General purpose			
Time	Enter the time menu	Arrow up	Menu scroll up
Period	Period +1	Arrow down	Menu scroll down
Horn	Activate the horn	ENTER	Confirm changes
START	Start game time	ESC	Back without change
STOP	Stop game time		



PC keyboard

Keyboard functions:			
ESC	Press 3 times to enter the main menu	Page Up	Enter the message menu
F1	Home score +1	Page Down	Enter the player numbers and names menu
F2	Home score +2	Q	Display lists menu
F3	Home score +3	W	Display effects
F4	Enter the home fouls menu	CTRL + Left	Start game time
F5	Guest score +1	SHIFT	Hold for activation of the opposite function
F6	Guest score +2	[	Timeout +1 home
F7	Guest score +3	]	Timeout +1 guest
F8	Enter the guest fouls menu	Enter	Confirm changes
F9	Enter the time menu	CTRL + Right	Stop game time
F10	Period +1	Left arrow	Ball possession home

<b>F11</b>	Activate the horn	<b>Right arrow</b>	Ball possession guest
<b>F12</b>	Enter the team names menu	<b>Point</b>	Home fouls menu
<b>INSERT</b>	Enter quarter/set score	<b>Comma</b>	Guest fouls menu
<b>DELETE</b>	To delete current character		

## 1 GENERAL-PURPOSE BUTTONS

General purpose	
<b>Esc</b>	Returns to the previous menu
<b>Enter</b>	Goes to the next menu
<b>Yellow arrows</b>	Scroll the menu up or down
If you are changing parameters, general-purpose buttons have the following meaning:	
<b>Esc</b>	Returns to the previous menu without saving the parameter's value
<b>Enter</b>	Returns to the previous menu with saving the parameter's value
<b>Yellow arrows</b>	Scroll the menu up or down

## 2 GAME DATA RESET AND SETTING THE PARAMETERS AND LANGUAGE

Press **ESC** three times while the main time is stopped to activate the next menu:

Menu	
<b>Game in progres</b>	
<b>Continue match</b>	Resumes the match
<b>Start new match</b>	Starts a new match by resetting the time, score, and other game parameters. It also opens the settings menu for match parameters. The options are as follows: <ul style="list-style-type: none"> <li>Match type – Starts the match with 8-minute periods. Breaks between the 1st/2nd and 3rd/4th periods can be controlled by the Break parameter. The halftime break is defined by the Break 2/3 parameter (please check the predefined value after programming).</li> <li>Match type 1 – 8/2 – Starts the match with 8-minute periods. Breaks between the 1st/2nd and 3rd/4th periods are always 2 minutes. The halftime break is always 5 minutes.</li> <li>Match type 1 – 7/2 – Starts the match with 7-minute periods. All breaks are 2 minutes.</li> <li>Match type 1 – 5/2 – Starts the match with 5-minute periods. All breaks are 2 minutes.</li> </ul> Choose the match type and press <b>ENTER</b> .
<b>Configuration</b>	Enter the parameters menu for configuring the parameters. Parameters are explained in detail in the parameters Chapter.
<b>Language</b>	Changing the used language: <ul style="list-style-type: none"> <li>English</li> <li>German</li> <li>Czech</li> <li>Finish</li> <li>Italian</li> </ul>
<b>Keyboard Type</b>	Choosing a keyboard with specific character set: <ul style="list-style-type: none"> <li>English</li> <li>German</li> <li>Czech</li> <li>Finish</li> </ul>
<b>Scorer console</b>	Option for defining the function of the scorer console. <ul style="list-style-type: none"> <li>0 – OFF, so this console works as both timer and scorer.</li> </ul>

	<ul style="list-style-type: none"> <li>1 – ON, connect it to the communication line, and this console can be used to change the score, but time changes are not allowed. .</li> </ul> <p>The default value is 0 (OFF).</p>
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### 3 PARAMETERS MENU

Parameter	Description
<b>Period</b>	Refers to parameters that determine the game time (usually it's a quarter time, 8:00)
<b>Break</b>	Break time between periods 1 <sup>st</sup> /2 <sup>nd</sup> and 3 <sup>rd</sup> /4 <sup>th</sup> period (usually 2:00)
<b>Break 2/3</b>	Break time in halftime between periods (usually 5:00)
<b>Overtime</b>	Extra period duration (usually 3:00)
<b>Time way</b>	Time counting – up or down
<b>No of Period</b>	Number of game periods (1-9)
<b>Timeout period</b>	Timeout duration (0-99 sec)
<b>No of Timeouts</b>	Number of timeouts per period(1-9)
<b>Horn time</b>	Horn sound duration (0-9 sec)
<b>Sound interrupt</b>	If the scoreboard has this option and the parameter is set to 1 (ON), the horn will sound with an interrupted tone after the shot clock expires. Otherwise, the horn will sound continuously.
<b>Shot Console</b>	Must be turned on for water-polo game
<b>Shot period</b>	Defines the duration of the action time
<b>Shot start</b>	The parameter defines the condition for starting the action time counting. The action can be started separately by pressing the 'START' button on the shot console during game time counting, or it can start simultaneously (immediately) with the game start button on the main keyboard.
<b>SC stops time</b>	If set to 'ON', it allows the game time to stop after the action time expires (default is 'OFF').
<b>Penalty 1</b>	Defines the penalty time
<b>Penalty 2</b>	Defines the penalty time (second option)
<b>Penalty 3</b>	Defines the penalty time (third option)
<b>Goal=Penalty CLR</b>	If the parameter's value is 1, penalty time will be cleared if opponents score
<b>Score + Player</b>	If the parameter's value is 1, incrementing the score will demand to enter a player number and will calculate points for every player. This option is useful for scoreboard models with player point indicators.

### 4 GAME PARAMETERS

#### 4.1 Game score

Score can be set in the domain of 0-199, no matter if the game time is going on or not. The score changing buttons are:

CKN Console	PC keyboard	Description
<b>Home Arrow Up</b>	<b>F1</b>	Score Home +1

<b>Home Arrow Down</b>	<b>Shift+F1</b>	Score Home -1
<b>Guest Arrow Up</b>	<b>F5</b>	Score Guest +1
<b>Guest Arrow Down</b>	<b>Shift+F5</b>	Score Guest -1
<b>NOTE:</b> Pressing the ' <b>GRAY ARROW UP</b> ' button on the foil will increase the appropriate score. Pressing the ' <b>GRAY ARROW DOWN</b> ' button on the foil will decrease the appropriate score.		

## 4.2 Period

<b>CKN Console</b>	<b>PC keyboard</b>	<b>Description</b>
<b>Period</b>	<b>F10</b>	Press the button to increase the number of periods
<b>Yellow arrow Down + PERIOD</b>	<b>Shift+F10</b>	Press the button to decrease the number of periods

## 4.3 Time

The main time has three parts:

- **Warm-up,**
- **Period and**
- **Break time (while shot times are stopped).**

The countdown for **Warm-up** and **Break Time** always runs down. The Period can count either up or down, depending on the value of the '**Time way**' parameter.

If the countdown mode is selected, the initial time for the period and break is the value entered in the corresponding parameters. For count-up mode, the start time is always 0:00, and the counting stops when the set parameter value is reached.

The offered values for **Period/Break Time** can be manually adjusted. Pressing Enter returns to the main menu with the new times saved, while **ESC** discards the changes. Time adjustments are not allowed while the game clock is running (as long as the game time is active).

Pressing the **TIME** button opens a scroll menu with the following options:

<b>Parameter</b>	<b>Decription</b>
<b>Warm-up</b>	Defines the warm-up time, always counts down, after the expiration of the warm-up time the console automatically sets parameters for the start of a new match. The horn doesn't sound after the warm-up time expires.
<b>Period</b>	8:00 (predefined value – explained in the parameters Chapter)
<b>Break</b>	02:00 (predefined value)
<b>Break 2/3</b>	02:00 (predefined value is 0:00)
<b>Enter break manually</b>	Defines or corrects the break period if not predefined
<b>Overtime</b>	03:00 (predefined value)
<b>Correct game time</b>	Allows the change of a few seconds up/down of game time
<b>Enter current time</b>	Allows the change or to define the current game time
<b>Enter end time</b>	Allows the change or to define the end of the game
<b>Correct Shot Time</b>	Allows the change or to define action time
<b>Adjust RT Clock</b>	Allow the change or to define the current real time clock
<b>Show real time</b>	Allows real time to be displayed in place of the game time
<b>Auto Start</b>	If the value is set to 1 – it will automatically start the break time after each period

### 4.3.1 Correction of Shot Time

By pressing the 'F4' button on the CKN keyboard (or **HOME** on the PC keyboard), you enter the shot time correction menu. Enter the correct remaining shot time and confirm by pressing the **ENTER** button. If the shot time is not entered or not confirmed with **ENTER**, the action will have no effect.

## 4.4 Penalty

CKN Console	PC keyboard	Description
<b>FOULS</b>	<b>F4/F8</b>	Pressing the button enters the 20 second penalty menu, when the <b>Enter player number</b> appears on the screen it is needed to enter the player numbers to start the time.
<b>Deleting the penalty:</b>		
CKN Console	PC keyboard	Description
<b>Yellow Arrow Down +FOULS</b>	<b>Shift+F4/F8</b>	Pressing the button will start a 3 second timer. During this period, pressing on the <b>FOULS</b> button will enter the fouls menu. Select the appropriate penalty and confirm by pressing the enter to cancel the penalty time. NOTE: This actions will not decrease number of personal fouls for player. It is needed to press the +2 button to enter the menu for the players penalty
<b>Adding 3 penalty</b>		
CKN Console	PC keyboard	Description
<b>+3</b>	<b>Foul +3</b>	Pressing the button you also enter the penalty menu, but this time +3 fouls will be added automatically to the player

By pressing the **BONUS** button, you enter the **penalty menu**. Here, you can choose between three predefined penalty duration (set in the parameter menu), or select **No time penalty**, which will register a foul without starting the penalty timer.

### 4.4.1 Erasing of penalty times when changing the ball possession

Pressing the appropriate **POSS** (Left/Right Arrow on PC keyboard) button will erase penalty times when ball possession changes.

## 4.5 Timeout

CKN Console	PC keyboard	Description
<b>TIMEOUT (Home/Guest)</b>	<b>Timeout (Home/Guest)</b>	Pressing the button will activate the timeout. Another option to start a timeout is through the wireless water polo timeout system connected to the command console. The shot clocks start counting immediately, and the horn sounds at the start of the timeout. The number of used timeouts is automatically increased, and the CKN console's LCD display shows a small star (*) next to the team that requested the timeout
<b>Yellow Arrow Down</b>	<b>Shift+ Timeout</b>	Pressing the button will start 3 second timer. During this period, pressing on appropriate <b>FOULS</b> button will decrease number of used time outs.

Pressing the button for 30 sec., the timeout time will stop and the number of the used timeouts will automatically increase

### 4.5.1 Match with a breakdown of timeouts used by quarter

After each period, state of markers for timeouts stay saved in memory. If some of teams did not use a time out in one of periods, a marker for time out in this period stays turned off.

If CKN console loose power supply for some reason, state of markers will be lost.

#### 4.5.2 Match with a display of the number of timeouts used per match

The command console always remembers the number of timeouts used during the match.

#### 4.6 Horn

Foil button	PC keyboard	Description
HORN	F11	Manually activate the main Horn. Horn will automatically sound after expiring of each period, break or shot time.

#### 4.7 Team names

Foil button	PC Keyboard	Description
Teams	F12	Pressing the button will activate two options: <ul style="list-style-type: none"> <li>• Home team</li> <li>• Guest team</li> </ul> Choose the team and enter the name with the PC keyboard. The names can also be seen on the CKN display, but can't be changed from it. The maximum length of a team name is 12 characters.

#### 4.8 Brightness settings

Foil button	PC Keyboard	Description
F1	B	Set the brightness on the scoreboard digits in domains 1-9. The default value is 9.

### 5 CKA3W COMMAND CONSOLE

The CKA3W is a control console used with action light systems and is designed to manage the countdown of the action time. The console has three buttons: black, white, and green. Pressing the black button at any time will set the action time to a predefined value of 30 seconds (**Shoot period**) on the action light and start the countdown.

Pressing the white button at any time will set the action time to a predefined value of 20 seconds (**Shoot period1**).

Stopping the game will also stop the action time countdown.

Depending on the setting of the 'Shot start' parameter: In **Together** mode, pressing the black or white button after the action time expires will set and immediately start the new action time.

In **Separately** mode, pressing the black or white button after the action time expires will set the new action time, but the countdown will not start until the green button is pressed.



### 6 DISPLAY COMMANDS:

Using the PC keyboard, it's possible to send several commands to the ID or RTNM displays.

Press the **DispList** button ('Q') to enter the display list menu. The selected list becomes active (visible on the display).

Press the **EffectList** button ('W') to enter to the effects menu. The selected effect will appear on the display (the effect will be displayed only once, then the display will continue with displaying the active list).

Buttons **Effect1 – Effect8** ('1' – '8') are shortcuts for the effects menu. Pressing any of these buttons will start the appropriate effect animation on the display immediately.

\*More information about ID and RTNM displays, as well as list and effect possibilities, find in the 'Display studio manual'.

## 7 BATTERY STATE BUILT IN CKN CONSOLE

When the CKN has a built-in battery and the state of the battery is low, on the lower line of the CKN a message "**BATTERY LOW**" will be shown, and the CKN will mark this message with a beeping sound every 10 seconds. As the battery state is lower, the CKN will sound more often.