

# User manual – Multisport

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| UP493            |       | First edition |                 |           |         |                     |
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CKN Console

| Key functions on CKN console |                        |                |                                |
|------------------------------|------------------------|----------------|--------------------------------|
| Home                         |                        | Guest          |                                |
| F1                           | Brightness level 1 - 9 | F3             | Players names and numbers menu |
| F2                           | Score per quarter      | F4             | Correction of action time      |
| BONUS                        | Bonus – Home           | BONUS          | Bonus – Guest                  |
| POSS                         | Ball possession – Home | POSS           | Ball possession – Guest        |
| TIME OUT                     | Home time out +1       | TIME OUT       | Guest time out +1              |
| +3                           | +3 – Home              | +2             | +2 – Guest                     |
| +2                           | +2 – Home              | +3             | +3 – Guest                     |
| Arrows up/down               | +/-1 score – Home      | Arrows up/down | +/-1 score – Guest             |
| General purpose              |                        |                |                                |
| Time                         | Enter the time menu    | Arrow up       | Menu scroll up                 |
| Period                       | Period +1              | Arrow down     | Menu scroll down               |
| Horn                         | Horn Activation        | ENTER          | Confirm changes                |
| START                        | Start game time        | ESC            | Back without change            |
| STOP                         | Stop game time         |                |                                |



PC keyboard

| PC 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                       | Left square Bracket „[“  | Timeout +1 home                              |
| F7                     | Guest score +3                       | Right square Bracket „]“ | 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                         |
| F11                    | Activate the horn                    | Right arrow              | Ball possession guest                        |
| F12                    | Enter the team names menu            | Point „.“                | Bonus guest                                  |
| INSERT                 | Enter quarter/set score              | Comma „,“                | Bonus home                                   |
| DELETE                 | To delete current character          |                          |  |

## 1 GENERAL-PURPOSE BUTTONS

| General  |  |
|--|--|
| Button   | Function   |
| ESC  | Returns to the previous menu.                                      |
| Enter  | Goes to the next menu.   |
| Yellow arrows  | (UP or DOWN) scroll the menu.                                      |
| <b>NOTE:</b> If you are changing parameters, general-purpose buttons have the following meaning: |  |
| Esc  | Returns to the previous menu without saving the parameter's value. |
| Enter  | Returns to the previous menu with saving the parameter's value.    |
| Yellow arrows  | (UP / DOWN) scroll the menu.                                       |

## 1.1 Game data reset and setting the parameters and language

To open the main menu press the **ESC** button three times, while the main time is stopped:

| Menu                    |  |
|-------------------------|--|
| <b>Game in progress</b> |  |
| <b>Continue match</b>   | Match will resume and prepare to continue  |
| <b>Start new match</b>  | <p>Choosing the '<b>Start New Match</b>' option opens a menu that offers the following sports:</p> <ul style="list-style-type: none"> <li>• Basketball</li> <li>• Volleyball</li> <li>• Handball</li> <li>• Hockey (standard Game type)</li> <li>• Hockey1 (Game Type 1)</li> <li>• Hockey2 (Game Type 2)</li> </ul> <p>Confirm your choice of sport, and all parameters will be reset to their default values.</p>  |
| <b>Configuration</b>    | <p>Choosing the '<b>Configuration</b>' option opens the parameter menu, where you can select the sport whose parameters you want to change:</p> <ul style="list-style-type: none"> <li>• Basketball</li> <li>• Volleyball</li> <li>• Handball</li> <li>• Hockey</li> <li>• Soccer</li> </ul> <p>By confirming your choice, you enter the menu where you can adjust the parameter values for the selected sport. All sport parameters are thoroughly described in the manual.</p> |
| <b>Language</b>         | <p>Change the language used in the menu:</p> <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>    | <p>Choose a keyboard with a specific character set:</p> <ul style="list-style-type: none"> <li>• English</li> <li>• German</li> <li>• Czech</li> <li>• Finish</li> </ul>   |
| <b>Scorer console</b>   | <p>Define command console as scorer console:</p> <ul style="list-style-type: none"> <li>• 0 – OFF – console controls all the data (time, score, personal fouls, off ...)</li> <li>• 1 – ON – console controls only the score, personal fouls, ball possession....</li> </ul>   |
| <b>Backup console</b>   | <p>Define command console as backup console:</p> <ul style="list-style-type: none"> <li>• 0 – OFF – console controls all the data (time, score, personal fouls, off ...)</li> <li>• 1 – ON – console receives from master console time, score and cumulative fouls in match</li> </ul>   |
| <b>Protocol type</b>    | <p>Define protocol type of command console:</p> <ul style="list-style-type: none"> <li>• 0 – v1.0 – for old scoreboards produced until December 2006. (wired type of protocol)</li> <li>• 1 – v2.0 – for scoreboards produced from 2007, and newer (wireless type of protocol)</li> </ul>  |
| <b>Shot console</b>     | <p>Define the type of CKA3 console:</p> <ul style="list-style-type: none"> <li>• 0 – v2.0 – for CKN console produced from 2003. till October 2010.</li> <li>• 1 – v3.0 – for CKN console produced from October 2010 and newer</li> </ul>   |
| <b>Inputs type</b>      | <p>Define the type of inputs for CKA and Start/Stop console:</p> <ul style="list-style-type: none"> <li>• 0 – NI – for scoreboards produced to December 2004.</li> <li>• 1 – I – for scoreboards produced from 2005 and newer.</li> </ul>  |

## 2 BASKETBALL

### 2.1 Parameters menu

| Parameter       | Description   |
|-----------------|---|
| Period          | Determine the game duration time (usually it's a quarter time, 10:00))  |
| Break           | Break time between 1st/2nd and 3rd/4th quarter  |
| Break 2/3       | Break time of the half-time   |
| Overtime        | Extra period duration   |
| Time way        | Time counting – up or down  |
| No of Period    | Number of game periods (1-9)  |
| Timeout period  | Timeout duration (0-99 sec)   |
| No of Timeouts  | Number of timeouts per period(1-9)  |
| Horn time       | Horn sound duration (0-9 sec)   |
| Sound interrupt | If the scoreboard has this option and the parameter is set to 1 (ON), the horn will sound with an interrupted tone after the shoot time expires. Otherwise, the horn will sound continuously  |
| Shot Console    | The parameter allows turning the shot console on or off. If the parameter value is 0, the shot console is off, and pressing buttons on the CKA console will start and stop the game time.   |
| Shot period     | Shot time duration  |
| Shot period 1   | Second value for shot time duration   |
| Shot start      | The parameter defines the condition for starting the action time counting. The action can be started separately by pressing the ' <b>START</b> ' button (green button) on the shot console during the game time counting, or it can start simultaneously with the game start button on the main keyboard. Value 0 means separately, value 1 means together. |
| Bonus           | Limit of fouls per team   |
| Auto-Bonus      | If the parameter value is 1 (on), the number of fouls will be counted up to the bonus limit, and the bonus indicator will light up automatically. Otherwise, the bonus indicator can be turned on or off manually using the ' <b>BONUS</b> ' home or ' <b>BONUS</b> ' guest buttons on the main keyboard.   |
| Fouls/Player    | Maximum number of personal fouls per player   |
| Score+Player    | If the parameter value is 1, incrementing the score will require a player number and calculate points for each player. This option is useful for scoreboard models with player point indicators.  |
| Shot horn       | If the parameter value is 1 (on), the horn built into the shot clocks will sound together with the horn on the main scoreboard. Otherwise, if the parameter is 0, when the shot time expires, only the horn on the shot clocks will sound.  |

### 2.2 Score

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

| CKN Console     | PC Keyboard | Description   |
|-----------------|-------------|---------------|
| HOME Arrow up   | F1          | Score Home +1 |
| HOME Arrow Down | SHIFT+F1    | Score Home -1 |
| HOME +2'        | F2          | Score Home +2 |

|                          |                           |  |
|--------------------------|---------------------------|--|
| HOME +3                  | F3                        | Score Home +3  |
| GUEST Arrow up           | F5                        | Score Guest +1   |
| GUEST Arrow Down         | SHIFT+F5                  | Score Guest -1   |
| GUEST +2'                | F6                        | Score Guest +2   |
| GUEST +3                 | F7                        | Score Guest +3   |
| <b>To decrease score</b> |                           |  |
| <b>CKN Console</b>       | <b>PC Keyboard</b>        | <b>Description</b>   |
| Yellow Arrow Down        | Yellow Arrow Down + SCORE | Pressing the buton will start a 3-second timer. During this period, pressing any 'SCORE' button on the foil will decrease appropriate score. |

## 2.3 Team / Personal Fouls

|                                      |                               |   |
|--------------------------------------|-------------------------------|---|
| <b>CKN Console</b>                   | <b>PC Keyboard</b>            | <b>Description</b>  |
| Fouls Home/Guest<br>HOME Arrow Down  | F4 (Home)/F8 (Guest)          | Fouls can be added for a team by pressing the 'FOULS' button. A message "Enter player number" will appear on the screen. You can then enter one or two digits of the player's number, and a foul will be added to both the player and the team. If no player number is entered, only the team fouls will be increased |
| <b>Decrise the fouls</b>             |                               |   |
| <b>CKN Console</b>                   | <b>PC Keyboard</b>            | <b>Description</b>  |
| Yellow Arrow Down + Fouls Home/Guest | SHIFT + F4 (Home)/ F8 (Guest) | Pressing the 'Yellow Arrow Down' will start a 3-second timer. During this period, pressing any 'FOULS' button on the foil will clear the appropriate foul.<br><b>*PC keyboard:</b><br>It is possible to decrease team / player fouls, pressing (Shift+F4/F8) buttons  |

## 2.4 Bonus

Pressing the '**BONUS**' button (Home/Guest) will toggle the bonus indicator on or off on the scoreboard if the '**Auto-Bonus**' parameter is on. Otherwise, the bonus indicator will automatically light up when the team reaches the bonus limit.

## 2.5 Time Out

|  |                      |  |
|--|----------------------|--|
| <b>CKN Console</b>                     | <b>PC Keyboard</b>   | <b>Description</b>   |
| TIMEOUT (Home/Guest)                   | TIMEOUT (Home/Guest) | Timeout is activated by pressing the 'TIMEOUT' button (Home/Guest). The shot clocks start counting immediately. Pressing the action button on the CKA console or the main time stop button stops the timeout counting. The number of timeouts used will also be automatically incremented. |
| <b>Decreasing the number timeout</b>   |                      |  |
| <b>CKN Console</b>                     | <b>PC Keyboard</b>   | <b>Description</b>   |
| Yellow Arrow Down + Timeout Home/Guest | Shift+TIMEOUT        | Pressing the button allows you to cancel and decrease the number of timeouts.  |

## 2.6 Time

Main time consists of three parts: Warm-up, Period, and Break time (during which shot clocks are stopped). **Warm-up** and Break times always count down. After the warm-up time expires, the console automatically clears all data from the previous match. The horn does not sound when the warm-up time expires.

Period time can count up or down depending on the '**Time way**' parameter (described in the Basketball menu parameters). If down counting is selected, a starting time must be set to determine the duration of the game or break. Otherwise, the ending time and start time are automatically set to 0:00.

The offered game and break period durations can be manually preset to other desired values. Pressing '**ENTER**' returns to the main screen with the new time durations, while '**ESC**' discards any changes. Time modification is not possible while the clock is running.

| Parameter                    | Description   |
|------------------------------|---|
| <b>Warm-up</b>               | Define warm-up time, and always count down, after the expiration of warm-up time console automatically sets parameters for the start of a new match. The horn doesn't sound after the expiration of warm-up time. |
| <b>Period</b>                | 10:00 (predefined value – configuration menu for basketball)  |
| <b>Break</b>                 | 05:00 (predefined value)  |
| <b>Overtime</b>              | 02:00 (predefined value)  |
| <b>Correct game time</b>     | Allows changing of the current game time for a few seconds up or down   |
| <b>Enter current time</b>    | Allows to change or to define the current game time   |
| <b>Enter end time</b>        | Allows to change or to define the end of the game   |
| <b>Enter break manually</b>  | Correct or define the break period different from the predefined  |
| <b>Correct Shot Time</b>     | Allows to change or define the shot time, function button F4 has the same function  |
| <b>Adjust RT Clock</b>       | Allows change and adjustment of real-time   |
| <b>Show real time OFF/ON</b> | If 'ON' the scoreboard shows time from local RT Clock   |
| <b>Auto Start</b>            | If set – it will automatically start break time after each period   |

## 2.7 Period

| CKN Console                       | PC Keyboard        | Description  |
|-----------------------------------|--------------------|--|
| <b>PERIOD</b>                     | <b>F10</b>         | Pressing the button will increase the number of periods. |
| <b>Deleting Period</b>            |                    |  |
| CKN Console                       | PC Keyboard        | Description  |
| <b>Yellow Arrow Down + PERIOD</b> | <b>Shift + F10</b> | Pressing the button will decrease the number of periods. |

## 2.8 Possession

| CKN Console | PC Keyboard                      | Description  |
|-------------|----------------------------------|--|
| <b>POSS</b> | <b>Arrow Left or Arrow Right</b> | Pressing the button will switch the possession indicators. Pressing the same button twice will switch off the possession indicators. |

## 2.9 Horn

| CKN Console | PC Keyboard | Description  |
|-------------|-------------|--|
| <b>HORN</b> | <b>F11</b>  | Pressing the button will activate the main horn. The horn will be activated if the operator is not in some menu for entering the data. Pressing the ' <b>F11</b> ' button activates the horn at any time, it doesn't matter if the operator is using the Console |

## 2.10 Brightness settings

| CKN Console | PC Keyboard | Description   |
|-------------|-------------|---|
| F1          | B           | Allows setting the brightness of the scoreboard digits in levels from 1 to 9. The default value is 9. |

## 2.11 Team names

| CKN Console | 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. |

## 2.12 Player numbers and names

| CKN Console | PC Keyboard | Description   |
|-------------|-------------|---|
| F3          | Page Down   | Pressing the button will activate five options: <ul style="list-style-type: none"> <li>• Home players – home team players numbers and names menu</li> <li>• Guest players – guest team players and names menu</li> <li>• Default players - predefined player numbers</li> <li>• Clear guests – clears player numbers and names only of the guest team</li> <li>• Clear all – clears all player numbers and names</li> </ul> |

Choose a team and then select a player position from 1 to 18 for the chosen team.

Enter a player number from 0 to 99 and confirm with '**ENTER**'. Then a cursor will appear in the name field. Now you can enter a player name using the PC keyboard and then press the '**ENTER**' button to confirm. Otherwise, you can leave the player name field blank by pressing the '**ENTER**' button to skip this option. The maximum length for a player's name is 20 characters.

The option Default player sets player numbers on the predefined values (from 4 to 21). By choosing this option, the names of the players will be cleared.

The option **Clear guests** clears player numbers and names only for the guest team.

The option **Clear all** clears all players' numbers and names.

## 2.13 Score per quarter

| CKN Console | PC Keyboard | Description  |
|-------------|-------------|--|
| F2          | Insert      | Pressing the button activates the option for setting the score for each quarter: <ul style="list-style-type: none"> <li>• First quarter</li> <li>• Second quarter</li> <li>• Third quarter</li> <li>• Fourth quarter</li> </ul> Choose the appropriate quarter, enter the score, and confirm with the ' <b>ENTER</b> ' button. |

## 2.14 CKA3 command console

CKA is used as a command console in systems with shot clocks. The CKA3 console has three buttons: black, green, and white.

As long as the black button is held down, the shot clock digits on the SC scoreboard will remain blank (digits off). When the button is released, the shot clock will display the value of the shot period. Pressing the black button at any time sets the action time to the predefined “**Shot Period**” value.

The white button, when pressed at any time during the game, sets the action time to the value defined by the “**Shot Period 1**” parameter (e.g., 14 seconds).

Depending on the “**Shot Start**” parameter (described in Chapter 2), the shot clock can either start counting separately from the game clock—by pressing the green ‘**START**’ button on the CKA3 console—or start simultaneously with the game time, triggered by pressing the ‘**START**’ button on the CKN console or the PC keyboard.

Stopping the game clock will also stop the shot clock. However, stopping the shot clock does not affect the game clock.

After the action time expires, and if the game clock continues to run, you can press either the black or white button on the CKA3 console to reset the action time. This action does not immediately start the countdown—you must press the green ‘**START**’ button on the CKA3 console to begin the new countdown.



### 3 HOCKEY / HANDBALL / SOCCER

**NOTE:** All three sports (soccer, hockey and handball) use the same configuration parameters. Before starting a new game verify parameters for chosen sports.

Soccer / Hockey / Handball configuration menu parameters:

| Parameter              | Description   |
|------------------------|---|
| <b>Period</b>          | Determine the game time duration for a standard match type in Hockey or Handball (usually it's a half time, 30:00).   |
| <b>Period GT1</b>      | Parameters that determine the game time duration in Hockey for match type 1 (predefined time 15:00)   |
| <b>Period GT2</b>      | Parameters that determine the game time duration in Hockey for match type 2 (predefined time 10:00).  |
| <b>Break</b>           | Break time between periods in standard match type for Hockey or Handball (predefined time 15:00)  |
| <b>Break GT1</b>       | Break time between periods in match type 1 for Hockey (predefined time 10:00)   |
| <b>Break GT2</b>       | Break time between periods in match type 2 for Hockey (predefined time 05:00)   |
| <b>Overtime</b>        | Extra period duration (predefined time 05:00)   |
| <b>Time way</b>        | Time counting mode – up or down   |
| <b>No of Period</b>    | Number of game periods (1-9)  |
| <b>Add Period</b>      | If this parameter has a value of 1, the scoreboard will show cumulative match time (after a break between periods, the game time continues counting up from the value at the end of the previous period). If this parameter has a value of 0, the time will count only up to the predefined value during each period. |
| <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 value is 1 (ON), the horn will sound with an interrupted tone after the shot time expires. Otherwise, the horn will sound continuously.   |

|                             |   |
|-----------------------------|---|
| <b>Penalty 1</b>            | Defines penalty time  |
| <b>Penalty 2</b>            | Defines penalty time (second option)  |
| <b>Penalty 3</b>            | Defines penalty time (third option)   |
| <b>Misconduct1 (Hockey)</b> | Defines misconduct penalty time   |
| <b>Misconduct2 (Hockey)</b> | Defines misconduct penalty time (second option)   |
| <b>Goal=PenaltyCLR</b>      | If the parameter has the value 1, penalty time will be cleared if opponents score.  |
| <b>Score+Player</b>         | If the parameter has the value 1, incrementing the score will require entering a player number and will calculate points for each player. This option is useful for scoreboard models with player point indicators. |

### 3.1 Score

Score can be set in domain of 0-199 no matter if game time is going on or not. 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>HOME +2'</b>          | <b>F2</b>                      | Score Home +1 without erasing of opponents penalty time   |
| <b>GUEST +2</b>          | <b>F6</b>                      | Score Guest +1 without erasing of opponents penalty time  |
| <b>GUEST Arrow Up</b>    | <b>F5</b>                      | Score Guest +1  |
| <b>GUEST Arrow Down</b>  | <b>SHIFT+F5</b>                | Score Guest -1  |
| <b>To decrease score</b> |                                |   |
| CKN Console              | PC Keyboard                    | Description   |
| <b>Yellow Arrow Down</b> | <b>Yellow Arrow Down+SCORE</b> | <b>Foil buttons</b> – pressing the ' <b>YELLOW ARROW DOWN</b> ' button will start a 3 second timer. During this period, pressing on any ' <b>GRAY ARROW DOWN</b> ' button will decrease the appropriate score.<br><b>On the Keyboard</b> - Using ' <b>YELLOW ARROW DOWN</b> ' + ' <b>SCORE</b> ' (SHIFT + Fx) is possible to decrease appropriate score |

### 3.2 Penalty

| CKN Console                     | PC Keyboard                | Description   |
|---------------------------------|----------------------------|---|
| <b>Fouls</b>                    | <b>F4/F8</b>               | Pressing the 'FOULS' button opens the penalty menu. Here, you can choose between three penalty times, two misconduct penalties (adjusted in the parameter menu), or correct any of the current penalty times. After making a selection, the message 'Enter player number' will appear on the screen. You can then enter one or two digits (the player number), and the penalty time will start. If no player number is entered, the action will have no effect. |
| <b>Deleting the penalty</b>     |                            |   |
| CKN Console                     | PC Keyboard                | Description   |
| <b>Yellow Arrow Down +Fouls</b> | <b>SHIFT+ 'FOULS F4/F8</b> | <b>Foil buttons:</b> pressing the <b>Yellow Arrow Down</b> button will start a 3-second timer. During this period, pressing on the ' <b>FOULS</b> ' (Home/Guest) button will enter a penalty menu, and an appropriate foul can be selected and canceled.<br><b>On the PC keyboard:</b> Pressing the <b>Yellow Arrow Down + 'FOULS'</b> (Shift+F4/F8) button will cancel the penalty.  |

### 3.3 Numbers of the cumulative penalties in Soccer

| CKN konzola               | PC tastatura   | Opis                            |
|---------------------------|----------------|---------------------------------|
| F2/F4                     | SHIFT+F2/F4)   | Adding cumulative penalties     |
| Yellow Arrow Down + F2/F4 | – SHIFT +F2/F4 | Decreasing cumulative penalties |

### 3.4 Time Out

Timeout is activated by pressing the 'TIMEOUT' button (Home/Guest). The shot clocks start counting immediately, and the number of timeouts used is automatically incremented.

| CKN Console                              | PC Keyboard          | Description   |
|--|----------------------|---|
| TIMEOUT (Home/Guest)                     | TIMEOUT (Home/Guest) | Pressing the button the shot clocks start counting immediately, and the number of timeouts used is automatically incremented.   |
| <b>Cancel the timeout</b>                |                      |   |
| CKN Console                              | PC Keyboard          | Description   |
| Yellow Arrow Down + TIMEOUT (Home/Guest) | Shift + TIMEOUT      | Pressing the button will start a 3-second timer. During this period, pressing the 'TIMEOUT' button will cancel the timeout timer and decrease the number of timeouts. |

### 3.5 Time

The main time consists of three parts:

- **Warm-up,**
- **Period, and**
- **Break time (during which shot clocks are stopped).**

Warm-up and Break times always count down. After the warm-up time expires, the console automatically clears all data from the previous match. The horn does not sound when the warm-up time expires.

The Period time can count up or down depending on the parameter 'Time way' (described in the Hockey / Handball / Soccer menu parameters). If down counting is selected, you should set the starting time, which determines the duration of the game or break. Otherwise, the ending time is set, and the start time is automatically 0:00. The offered game/break period durations can be manually preset to other desired values. Pressing 'ENTER' returns to the main screen with the new time durations, while 'ESC' discards the changes. Time modification is not possible while the time is counting.

In Hockey, when the game time is counting down, pressing the 'ENTER' button on the foil keyboard will display the total elapsed time since the start of the match. Pressing 'ENTER' again will return the display to the current countdown time.

Pressing the 'TIME' button will open a scroll menu with the following options:

| Parameter            | Description   |
|----------------------|---|
| Correct game time    | Allows changing of current game time for a few seconds up or down                                     |
| Warm-up              | Define the warm-up time, always count down, and the horn doesn't sound after the warm-up time expires |
| Period               | Value depends on the selected sport (handball or hockey) and adjusted match type (for hockey)         |
| Break                | Value depends on the selected sport (handball or hockey) and adjusted match type (for hockey)         |
| Enter break manually | Define the break period if not predefined   |
| Overtime             | 02:00 (predefined value)  |
| Enter current time   | Allows to change or to define current game time   |

|                                |  |
|--------------------------------|--|
| <b>Adjust RT Clock</b>         | Allows change and adjustment of real-time clock  |
| <b>Enter end time</b>          | Allows to change or to define the end of the game time   |
| <b>Show real time off (on)</b> | If the value is 'on' the scoreboard shows time from the local RT Clock   |
| <b>AutoStart</b>               | If set – it will automatically start the break time after each period  |
| <b>Stop interval</b>           | If the value is set to 0:00, the game time can only be stopped manually or automatically after the game period expires. When the value is set (e.g., to 2:00), it enables automatic stopping of the game time every 2 minutes of play. |

### 3.6 Period

| CKN Console                       | PC Keyboard        | Description                     |
|-----------------------------------|--------------------|---------------------------------|
| <b>PERIOD</b>                     | <b>F10</b>         | Increase the number of periods. |
| <b>Yellow Arrow Down + Period</b> | <b>Shift + F10</b> | Decrease the number of periods. |

### 3.7 Horn

| CKN Console | PC Keyboard | Description  |
|-------------|-------------|--|
| <b>HORN</b> | <b>F11</b>  | <b>Foil buttons</b> – press the 'HORN' button to activate the main horn. The horn only activates if the operator is not in any of the menus for data entering.<br><b>ON Keyboard</b> – pressing the 'F11' button activates the horn at any of the menus for data entering. |

### 3.8 Brightness settings

| CKN Console | PC Keyboard | Description   |
|-------------|-------------|---|
| <b>F1</b>   | <b>B</b>    | Allows setting the brightness of the scoreboard digits in levels from 1 to 9. The default value is 9. |

### 3.9 Team names

| CKN Console  | PC Keyboard | Description   |
|--------------|-------------|---|
| <b>Teams</b> | <b>F12</b>  | Pressing 'Teams' (PC keyboard – <b>F12</b> ) 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. |

### 3.10 Player numbers and names

| CKN Console | PC Keyboard      | Description   |
|-------------|------------------|---|
| <b>F3</b>   | <b>PAGE DOWN</b> | Pressing the 'Player numbers' (CKN 'F3' and PC keyboard 'PAGE DOWN') button will activate five options: <ul style="list-style-type: none"> <li>• Home players – home team players numbers and names menu</li> <li>• Guest players – guest team players and names menu</li> <li>• Default players - predefined player numbers</li> <li>• Clear guests – clears player numbers and names only of the guest team</li> <li>• Clear all – clears all player numbers and names</li> </ul> |

Choose a team and then select a player position from 1 to 18 for the chosen team.

Enter a player number from 0 to 99 and confirm with '**ENTER**'. Then a cursor will appear in the name field. Now you can enter a player name using the PC keyboard and then press the '**ENTER**' button to confirm. Otherwise, you can leave the player name field blank by pressing the '**ENTER**' button to skip this option. The maximum length for a player's name is 20 characters.

The option Default player sets player numbers on the predefined values (from 4 to 21). By choosing this option, the names of the players will be cleared.

### 3.11 HGL (Hockey Goal Lights)

When the game clock is running, pressing the pushbutton on the HGL system will turn on the red signal light behind the goal. If the time is not stopped, pressing the same button again will turn off the red signal light. If the game clock is stopped on the CKN system or if break time is active, the HGL system will turn on the green signal light.

## 4 VOLLEYBALL

Volleyball menu configuration parameters:

| Parameter       | Description                   |
|-----------------|-------------------------------|
| Timeout period  | Timeout duration (0-99 sec)   |
| No. of Timeouts | Number of timeouts (1-9)      |
| Horn time       | Horn sound duration (0-9 sec) |

### 4.1 Game score

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

| CKN Console              | PC Keyboard               | Description   |
|--------------------------|---------------------------|---|
| HOME Arrow up            | F1                        | Score Home +1   |
| HOME Arrow Down          | SHIFT+F1                  | Score Home -1   |
| GUEST Arrow up           | F5                        | Score Guest +1  |
| GUEST Arrow Down         | SHIFT+F5                  | Score Guest -1  |
| <b>To decrease score</b> |                           |   |
| CKN Console              | PC Keyboard               | Description   |
| Yellow Arrow Down        | Yellow Arrow Down + SCORE | Pressing the button is possible to decrease appropriate score |

### 4.2 Match score

The match score can be set in the domain of 0-9 no matter if game time is going on or not. Match score changing buttons are:

| CKN Console                 | PC Keyboard | Description   |
|-----------------------------|-------------|---|
| HOME 'FOULS'                | F4          | Match Score Home +1   |
| GUEST 'FOULS'               | F8          | Match Score Guest +1  |
| <b>To decrease score</b>    |             |   |
| CKN Console                 | PC Keyboard | Description   |
| Yellow Arrow Down + 'FOULS' | SHIFT+F4/F8 | Using the 'YELLOW ARROW DOWN' + 'FOULS' (SHIFT+F4/F8) buttons it is possible to decrease the appropriate match score. |

### 4.3 Set score

| CKN konzola | PC tastatura | Pult   |
|-------------|--------------|--|
| F2          | F2           | Pressing the button will activate Set score first quarter <ul style="list-style-type: none"> <li>• First quarter</li> <li>• Second quarter</li> <li>• Third quarter</li> <li>• Fourth quarter</li> </ul> Choose the adequate quarter and confirm pressing the enter. |

### 4.4 Timeout and Technical Timeout

A timeout is activated by pressing the 'TIMEOUT' button (Home/Guest). The clock starts counting immediately, and the number of used timeouts is automatically increased.

A technical timeout will automatically start when one of the teams first reaches 8 or 16 points. The end of the technical timeout is signaled by the horn.

To initiate an additional technical timeout, press foil buttons **F3** or **F4** to enter the menu for timeout duration. Enter the desired duration and confirm by pressing 'ENTER'. Technical timeouts are not assigned to any team.

| CKN Console                 | PC Keyboard                 | Description   |
|-----------------------------|-----------------------------|---|
| TIMEOUT (Home/Guest)        | TIMEOUT (Home/Guest)        | Starting timeout +1   |
| Yellow arrow down + TIMEOUT | Yellow arrow down + TIMEOUT | Cancel the timeout timer and decrease the number of timeouts. |

### 4.5 Main time

The main time always goes up.

### 4.6 Period

| CKN Console                | PC Keyboard | Description  |
|----------------------------|-------------|--|
| PERIOD                     | F10         | Press the button to increase the number of periods. At the same time, you enter the score for the previous set.  |
| Yellow arrow down + PERIOD | Shift + F10 | Press teh button to decrease the number of periods. At the same time, you erase the score for the previous set and restore the previous set's score to the score position. |

### 4.7 Service possession

| CKN Console | PC Keyboard            | Description   |
|-------------|------------------------|---|
| POSS        | ARROW LEFT/ARROW RIGHT | <b>ON CKN</b> – pressing the 'POSS' button will switch the possession indicators.<br><b>ON Keyboard</b> – pressing the 'ARROW LEFT' or 'ARROW RIGHT' buttons will switch the possession indicators. Writing a point will change the possession indicator. |

### 4.8 Horn

| CKN Console | PC Keyboard | Description  |
|-------------|-------------|--|
| HORN        | F11         | Press the 'HORN' (PC keyboard - F11) button to activate the main Horn. |

## 4.9 Brightness settings

| CKN Console | PC Keyboard | Description   |
|-------------|-------------|---|
| F1          | B           | Allows setting the brightness of the scoreboard digits in levels from 1 to 9. The default value is 9. |

## 4.10 Team names

| Foil button | PC Keyboard | Description   |
|-------------|-------------|---|
| Teams       | F12         | Pressing 'Teams' (PC keyboard – F12) 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. |

## 5 DISPLAY COMMANDS

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

| PC Keyboard   | Description  |
|---|--|
| DispList button ('Q')   | Enter the list menu, then select a list to be active   |
| EffectList button ('W')   | Enter to the effects menu. Selected effect will appear on the display (will be inserted into the current display list)               |
| Effect1 – Effect8 ('1' – '8')   | Shortcuts for the effects menu. Pressing any of these buttons will start the appropriate effect animation on the display immediately |
| <b>NOTE:</b> More information about ID and RTNM displays, as well as list and effect possibilities, find in the 'Display studio manual' |  |

## 6 SCORER CONSOLE

The configuration with two consoles (timer + scorer console) can be used only for basketball games. This setup requires two operators: a timer operator and a scorer operator. The timer operator works on the timer console and controls game time, shot clock, timeouts, and periods. At the same time, the scorer operator manages the score, fouls, player numbers, player points, and ball/service possession.

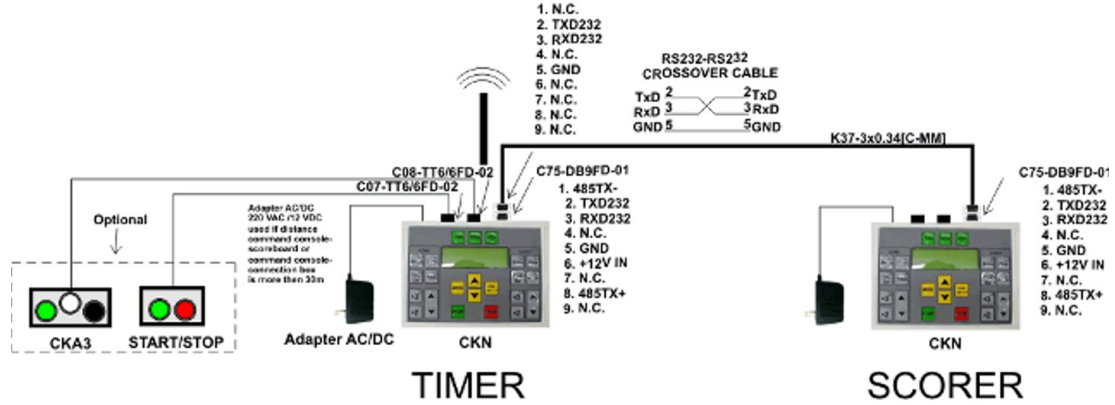
In scorer console mode, all time control buttons have no effect. Each console listens to and displays data sent by the other console. Thanks to this feature, both the timer and scorer have all game data visible on their LCD screens — the timer can follow the game score, and the scorer can follow game time, shot clock, and period. In this configuration, the timer console is the master; it collects score data and sends both time and score data to the scoreboard.

If the scorer console is turned off, the timer console continues to send time and score data, but player number and player points data will be lost. The game can continue normally using default player information.

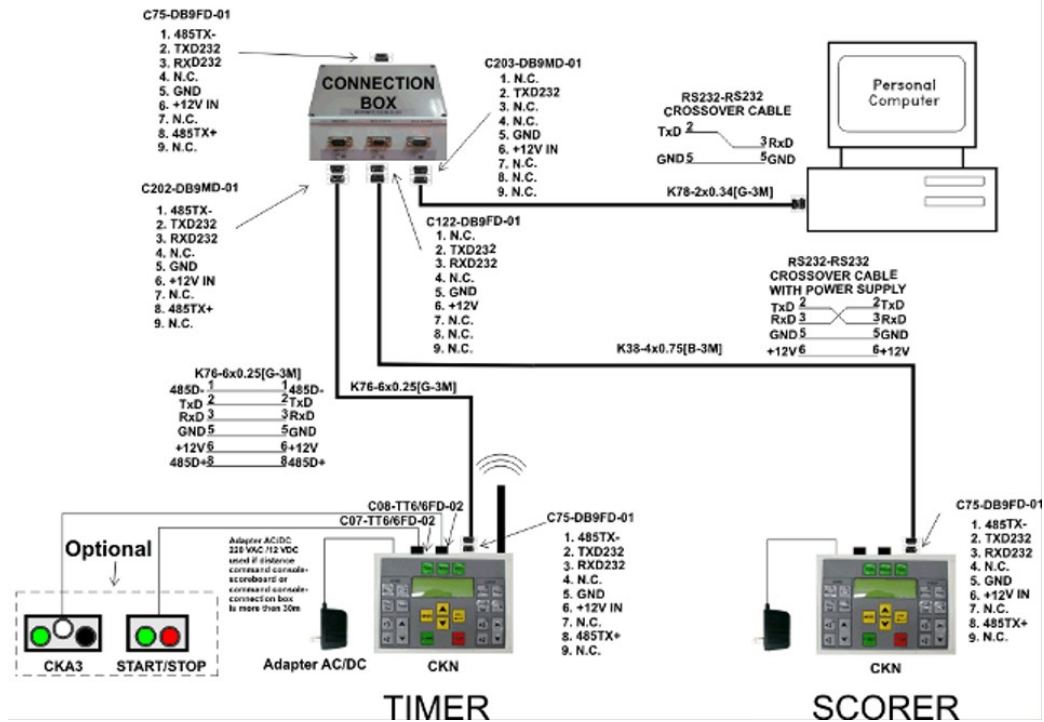
If the timer console is turned off, the 'Scorer console' parameter on the scorer console must be turned off. The scorer console then contains all game data, including time and shot clock, and can continue the game as the master.

The following connection diagrams show different ways to connect the system.

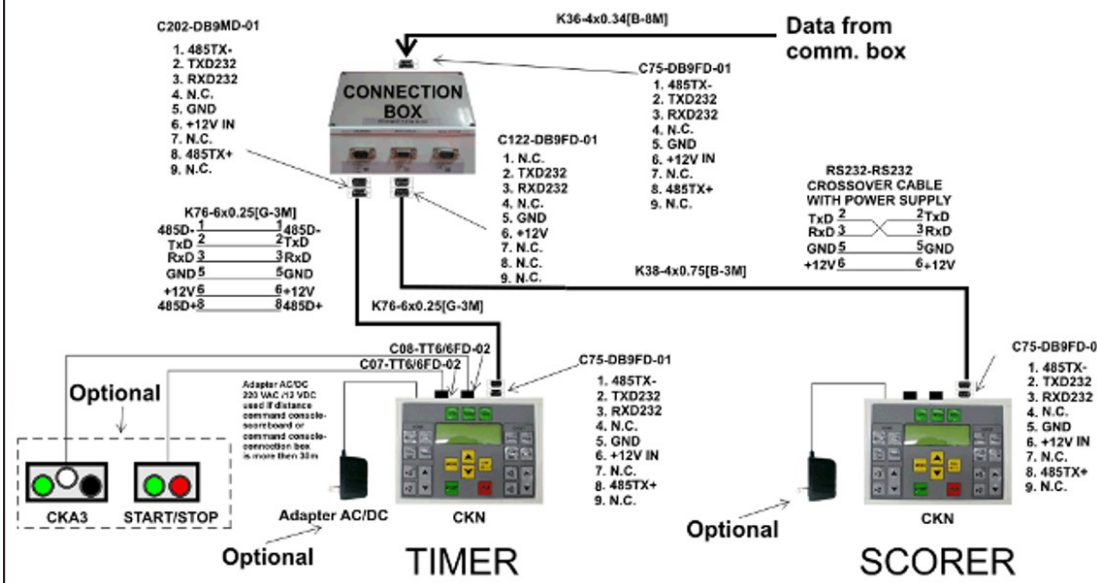
## TIMER with wireless + SCORER CONNECTION DIAGRAM



## TIMER with wireless + SCORER + PC CONNECTION DIAGRAM



## TIMER with wire + SCORER CONNECTION DIAGRAM



## TIMER with wire + SCORER + PC CONNECTION DIAGRAM

