NAUCON-1000
User manual

Learn about the NAUCON-1000
with this complete User manual

NAUTRONIC
SCOREBOARD SYSTEM

Danmarksvej 1
DK-8660 Skanderborg
www.nautronic.com

Tel.: +45 8651 1166
scoreboards@nautronic.com

NAUCON-1000 USER MANUAL

SETTING UP THE NAUCON-1000

SETTING UP SPORT

EXTRA SCOREBOARD FEATURES

TROUBLE SHOOTING

Getting to know your NAUCON-1000

Subtract Home Score   *Touch screen*   Subtract Guest Score

Add Home Score   Add Guest Score

❶ *On/off*
Turn the NAUCON-1000 on and off. When turning off the control panel you must confirm by pressing **ACCEPT** on the touch screen.

❷ *Game reset*
Reset display, you must confirm by pressing **ACCEPT** on the touch screen.

❸ *Menu*
A menu on the touch screen will show *(Fig. 1, page 6)*.

❹ *Setup*
A menu on the touch screen will show.

❺ *Manual horn*
Press to blow the horn.

❻ *Time reset*
Resets time and sets next period time. You must confirm by pressing **ACCEPT** on the touch screen.

❼ *Start*
Game clock starts.

❽ *Stop*
Game clock stops.

❾ *Undo*
Undo the latest change.

❿ *OK*
Confirm any changes made to the setup.

Ⓐ Ⓑ Ⓒ
You can also use the click buttons referring to the buttons on the touch screen.

⦲ *Wireless communication*

H *Home*

G *Guests*

Indicator icons

THE INDICATOR ICONS will show in the top right corner of the touch screen.
Except in the setup menus.

⏻	Automatic horn on	
✖	Automatic horn off	
🔋	Battery fully charged	
🔋	Battery working	
🔋	Battery charging	
🔋	Battery low	
🔋	Battery really low – **charge now!**	
BATTERY LOW!	Battery critically low – **charge now!**	
ALL	All zones active	
Z1+	Multiple zones active	
OFF	All zones disabled	
Z1 **Z2** **Z3** **Z4**	Zone 1-4	
COLLISION!	COLLISION – another NAUCON-1000 is transmitting in the same zone. *Change or disable zones. See more on page 7.*	

*COLLISION – another NAUCON-1000 is transmitting in the same zone.
Change or disable zones. See more on page 7.

*Note you might see the flashing collision warning even when all zones are turned off.

Start setting up your NAUCON-1000

When starting your NAUCON-1000 it will start up in a default sport. If setting up for the first time the NAUCON-1000 will start in basketball. To exit the sport press the **MENU** click button on the console and then press **EXIT SPORT.**


Fig. 1 – Select sport

Fig. 1 – Select sport:

❶ *Select sport*
The choices of sports are listed in a menu – to scroll the menu press **PAGE 1/3 MORE**. Choose a sport and you are ready to start/setting up.

❷ *Version …*
Shows the latest version of software installed on the NAUCON-1000 unit.

Fig. 1 – Bottom buttons:
Ⓐ *General setup*
Enter GENERAL SETUP menu. For details see the section, starting below.

Ⓑ *Page 1/3 more*
Press **PAGE 1/3 MORE** to scroll the pages in the menu.

General setup

In this part of the manual you can learn more about the general setup of your NAUCON-1000. You can enter the **GENERAL SETUP** menu from the **SELECT SPORT** menu.

Fig. 2 – General setup menu, page 1/2. The bottom buttons are elaborated on the next page.

Fig. 2 – General setup "Page 1/2":

❶ *Date, year and time of day*
You can change the day, month, year and time of day. Once set, the NAUCON-1000 unit will transmit the changes to the Scoreboard. It will now receive time, date and year information from the main scoreboard. The NAUCON-1000 does not have a built-in timer.

❷ *Language*
Scroll through the various languages.

❸ *Start-up sport*
Set the default START-UP SPORT.

④ *Text flow direction*
Adjust the direction of the rolling text line. LEFT or RIGHT.

⑤ *Board zone selection menu*
Turns the zones ON and OFF. As default, all zones are on. If another NAUCON-1000 are transmitting in the same zone, they might interfere.

⑥ *Board info*
The NAUCON-1000 starts searching for scoreboards in the activated zones.
→ If a scoreboard is turned on and connected to the NAUCON-1000, the addresse*[1] from the scoreboard, sideboard, sideboard or shot clocks are displayed on the touch screen.

*[1]*An address is a reference number (10-69) in the BOARD ZONES SETUP menu, see page 14.*

Fig. 3 – General setup "Page 2/2":

Fig. 3 – General setup menu, page 2/2

⑦ *Board watch – on and off time*
By default the clock on the board will start up at 07:00 and turn off again at midnight. You can change both settings.

Set the clock to be on or off at all time:

00:00-24:00: The clock is always on.
00:00-00:00: The clock is always off.

⑧ *Key click*
Turn ON or OFF a sound for the buttons on the touch screen or/and the physical click buttons on the console.

⑨ *Backlight level*
Adjusts the light intensity of the touch screen. 1 is lowest and 5 is highest intensity. Lower level will extend the battery performance.

⑩ *Dimming timeout after keypress*
Time before dimming the backlight on the touch screen *(0-99 min.).*

⑪ *Dim backlight during game*
Adjusts the light intensity of the touch screen during the game *(0-99% of the backlight level).*

Fig. 3 and 4 – Bottom buttons:

Ⓐ *Cancel changes*
Exists the setup menu without saving any changes made. A warning will appear before existing to the previous screen.

Ⓑ *Service menu*
Enter the **SERVICE MENU**.
→ Please ask your local sales partner for a password to enter this menu.

Ⓒ *Page (1/2) 2/2 more*
Press **PAGE** (1/2) **2/2 MORE** to scroll the pages in the menu.

Ⓓ *Default settings*
Press **DEFAULT SETTINGS** if you want to return to the NAUCON-1000's default settings.

Ⓔ *Accept changes*
Press **ACCEPT** changes if you want to save your changes. You will then return to the **SELECT SPORT** menu.

Advanced setup

When you have selected a sport, you can press the **MENU** click button on the console which will bring you to the **EXTRA MENU** where you can change the advertising or export the game log to a USB stick. *(Fig. 4)*
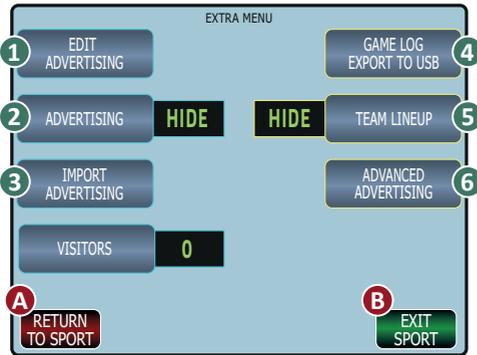
Fig. 4 – Extra menu

Fig. 4 – Screen called Extra menu:

❶ *Edit advertising*
Editing the advertising string (max. 1.000 characters). When pressed, you will get a new screen with a keyboard (as in Fig. 36, page 40). The advertising text will show in the HOME/GUEST team text display.

❷ *Advertising*
Toggles between HIDE and SHOW advertising on the scoreboard. Default is HIDE.

❸ *Import advertising*
Insert a USB stick with a CSV file*¹ containing your text and press **IMPORT ADVERTISING**.

❹ *Game log export to USB*
Insert a USB stick to export a CSV file.*² and press **GAME LOG EXPORT TO USB**. The file contains log from when the console was turned on.

*¹⁺²A CSV file is a Comma Separated Values file.

❺ *Team lineup*
Toggles between HIDE and SHOW lineups on the scoreboard. Default is HIDE.

❻ *Advanced advertising*
You can edit 4 strings and set them as still text *(max. 32 characters)* or rolling text *(max. 1.000 characters)*.

Fig. 4 – Bottom buttons:

Ⓐ *Return to sport*
You will return to the sport you have already chosen. Changes made will take effect.

Ⓑ *Exit sport*
You will return to the menu (Fig. 2) where you can select sport or enter GENERAL SETUP MENU.

Service menu

From the **GENERAL SETUP MENU** (see page 6) you can access the **SERVICE MENU**. Insert 1166 as password on the onscreen keyboard to get access to the **SERVICE MENU**.
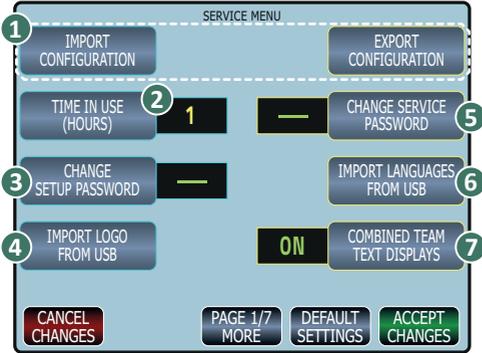

Fig. 5 – Service menu "Page 1/7"

Fig. 5 – "Page 1/7":

❶ *Import/export configuration*
Choose either to import or export configurations from/to a USB stick.

To import a saved configuration-file, (**config.csv**): Insert a USB stick and press **IMPORT CONFIGURATION**.*¹

To export the configuration from the NAUCON-1000 to a USB stick: Insert a USB stick and press **EXPORT CONFIGURATION**.*²

*¹⁺² A screen will show with the following text: "PLEASE WAIT!! IMPORTING/ EXPORTING CONFIGURATION TO USB DRIVE." The import/export is done when the NAUCON-1000 returns to the SERVICE MENU.

❷ *Time in use (hours)*
This displays the hours the NAUCON-1000 unit has been in use since last charge.

❸ *Change setup password*
Enter a new four digit code for the **SETUP MENU.**

Default password is 0000 (No password).

❹ *Import logo from USB*
To import a new start-up logo and mini-logo: Insert a USB stick with the logos*³ and press **IMPORT LOGO FROM USB**. A screen will show with the following text: "PLEASE WAIT!! IMPORTING LOGO FROM USB DRIVE." The import is done when the NAUCON-1000 returns to the SERVICE MENU.

*³ **LOGO REQUIREMENTS:**

→ **Start-up logo – must be:**
320 x 240 pixels, 24 bit bmp-file.
Filename must be: **logo.bmp**

→ **Mini logo – must be:**
100 x 40 pixels, 24 bit bmp-file.
Filename must be: **minilogo.bmp**

❺ *Change service password*
Enter a new four digit code for the **SERVICE MENU**.

Default password is 1166.

❻ *Import languages*
To import new languages to the NAUCON-1000 unit: Insert a USB stick with a supported language file supplied by Nautronic a/s and press **IMPORT LANGUAGE**.

A screen will show with the following text: PLEASE WAIT!! IMPORTING LANGUAGES FROM USB DRIVE.

The import is done when the NAU-CON-1000 returns to the service menu.

❼ *Combined team text displays*
ON: The home and guest team's text shares the same display.

OFF: Each team text has its own text display.

Fig. 6 – Service menu "Page 2/7"

Default is ON.

Fig. 6 – "Page 2/7":

❽ *Team text display length*
You can edit the length of the team text displayed on the scoreboard. Default is 20 characters. (Depends on your score-Board type)

❾ *Show score by*
The rolling text in the text line writes "SCORED BY <NAME>". Default is ON.

❿ *Show previous sets in …*
Choose between four possible places, where previous sets can be shown. Default is SCORE.

SCORE: The previous set scores are shown in the upper player scores in the side scoreboards.

NO.: The previous set scores are shown in the upper player numbers on the side scoreboards.

MAIN: The previous set scores are shown in the main scoreboard.

SEP.: The previous set scores are shown in seperate section.

⓫ *Merge player no. in player text display*
ON: Both player name and number will be shown in the text display.

OFF: Only the player name will be shown in the text display.

Default is OFF.

⓬ *Left align guest team text*
Align the text in GUEST display to the left. Default is OFF and therefore aligned to the right.

⓭ *Use game horn for shot clock*
Enable or disable the use of the main scoreboard's horn for shot clocks. Default is OFF.

⓮ *Merge 2^x minor penalty (2+2=4)*
Enable or disable the adding of penalties. When enabled, the penalties are added instead of being shown separately.**[4]** Default is OFF.

[4] Example: If enabled and two 2 minutes penalties are given, the digit will show 4 *(2+2=4)*, instead of 2 minutes followed up by another 2 minutes.

⓯ *Show player foul middle section*
ON: When a player foul is given, it shows in the middle section of the scoreboard for 15 seconds and then only team fouls will show.

OFF: Only team fouls will show.

Default is ON.

Fig. 7 – Service menu "Page 3/7"

Fig. 7 – "Page 3/7":

❶ *Time-out horn signal time*
Changes the length of the automatic horn blowing when pressing time-out in an ongoing game. Default is 2 sec.

❷ *Game horn signal time*
Changes the length of the automatic horn blowing at the end of a game. Default is 2 seconds.

❸ *Wireless power*
Choose between four settings regarding wireless power: OFF, LOW, HIGH and BOOST. The wireless range of the NAU-CON-1000 will then be adjusted.

OFF: Radio power off, wired only.

LOW: Minimum power.

HIGH: Maximum power.

BOOST: Used for test-purpose only.

Default is HIGH.

❹ *Basketball shot clock led*
ON: The shot clock led stripe turns on when the shot clock runs out.

OFF: The shot clock led stripe is disabled.

Default is ON.

❺ *Shot clock horn signal time*
Change the length of the automatic horn blowing when the shot clocks countdown runs out. Default is 2 sec.

❻ *Board zones setup*
This is where you enter the board zone setup. See a more detailed description on page 14.

❼ *Basketball shot clock blank at reset*
ON: The shot clocks will show as blank/black until the game starts.

OFF: The shot clocks will show 24, *if set according to the 24 second rule*.

Default is OFF.

❽ *Default time-out time for:*
Basketball: 1 min.
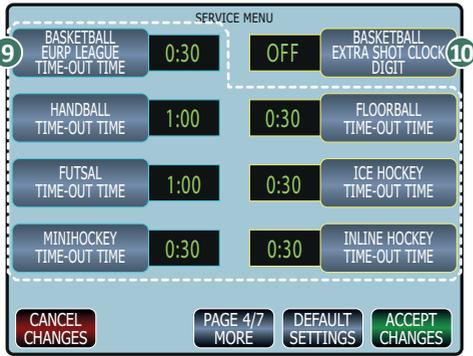
Fig. 8 – Service menu "Page 4/7"

Fig. 9 – Service menu "Page 5/7"

Fig. 8 – "Page 4/7":

❾ *Default time-out time for:*

Basketball Euroleague:	30 sec.
Handball:	1 min.
Futsal:	1 min.
Minihockey:	30 sec.
Floorball:	30 sec.
Ice hockey:	30 sec.
Inline hockey:	30 sec.

❿ *Basketball extra shot clock digit*
You can set the shot clocks to count down for the last 5 sec. Default is OFF.

Fig. 9 – "Page 5/7":

⓫ *Default time-out time for:*

Bandy:	30 sec.
Volleyball tech:	1 min.
Am. football:	1:30 min.
Basketball 3x3:	30 sec.
Volleyball:	30 sec.
Water polo:	1 min.
Netball:	1 min.

⓫ *Am. football invert timeout*
You can choose how the timeouts should be shown.

ON: The timeouts will be shown when used.

OFF: All timeouts will be shown but removed when used.

Default is ON.

Fig. 10 – "Page 6/7":

❶ *Test menu*
Testing the function of the characters on the scoreboard.

How to test it:
Press **TEST MENU** and note the red number showing in the small display and the characters on the scoreboard.

The numbers are referring to the board:
1 – All the diodes on the scoreboard should light up.
2 – All numbers on the scoreboard are counting up.
3 – Checking if all addresses referring to the digits are working.
4 – Text displays turn fully ON, one line at a time.
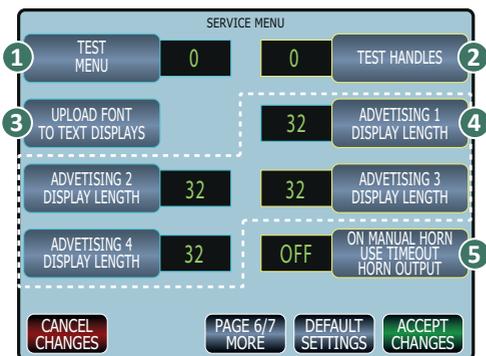
Fig. 10 – Service menu "Page 6/7"
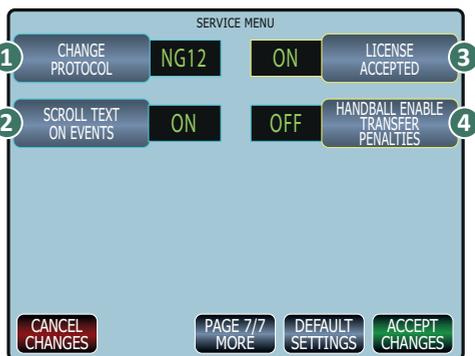
Fig. 11 – Service menu "Page 7/7"

❷ *Test handles*
Press a button on the handle connected to the NAUCON-1000. *There are several kinds of handles.* Note the number showing in the small display on the touch screen.
The numbers should be:
1 – Start game time
2 – Stop game time
3 – Start/stop shot clock time
4 – Reset shot clock time
34 – Time 2

❸ *Upload font to text displays – i.e. language*
Insert a USB stick with a CSV file containing the language that appears in the advertisement/text display and press the button. *Note: You can not change the actual font.*

❹ *Advertising (1-4) display length*
Set the length of the advertising text showing on the scoreboard. Default *(and maximum)* are 32 characters.

❺ *On manual horn use timeout horn output*
It is possible to use the timeout horn output when pressing the manual horn button. Default is OFF.

Fig. 11 – "Page 7/7":

❶ *Change protocol*
Changes the communication protocol for scoreboards. Default is NG12.

NG12: For NA/NHA/NC/NE scoreboards from 2012 and forward.

NG08: For NT/NS/NB/NQA/NW scoreboards from 1998 and forward.

If set to NG08:
→ It can only communicate with wired scoreboards.
→ Some features in the NAUCON-1000 are disabled.
→ The wireless power will automatically be set to OFF.

❷ *Scroll text on events*
ON: The scroll text will be shown on the text lines.

OFF: No scroll text will be shown on the text lines.

Default is ON.

❸ *License accepted*
ON: indicates that the license has been accepted.

OFF: If set to off the license will be shown the next time the NAUCON-1000 will be turned on.

❹ *Handball enable transfer penalties*
Enable or disable the possibility to transfer the penalty to the team from a player that already have a active penalty.

Default is OFF.

Board zones setup

HOW TO CONFIGURE one or more NAUCON-1000. Go to the BOARD ZONES SETUP menu from the SERVICE MENU. *See how to get there on page 9.*

ZONES DESCRIPTION
A zone is a group of scoreboards that are controlled by the same NAUCON-1000. Each zone has a color:
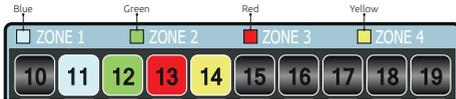
The addresses shown on the touch screen are used as identification of the scoreboard in a chosen zone. It is the zone selection that determines which scoreboards are receiving communication.

BOARD ZONE SELECTION: Please contact Nautronic at service@nautronic.com and include serial number and scoreboard model type. Type "Zone config" in subject.

CONFIGURING THE ZONES IN THE NAUCON-1000
If multiple wireless or wired scoreboard systems are installed in the same arena, you must configure BOARD ZONE SETUP and BOARD ZONE SELECTION.

It is possible to have up to four independent scoreboard systems each with a NAUCON-1000 control panel in the same arena.

If using more than 4 the scoreboards must be wired.

If more than one scoreboard is placed in the same arena each must have a unique address – learn more on page 15.

WHEN CONFIGURING THE BOARD ZONES SETUP → the scoreboard must be turned on, as the NAUCON-1000 transmits the information to the scoreboard.

BOARD ZONE SELECTION MENU:
→ you toggle between ON and OFF for each zone. The NAUCON-1000 will only control scoreboard systems in zones set to ON. All zones are ON as default. Enter the BOARD ZONE SELECTION MENU from GENERAL SETUP MENU.

STANDARD SCOREBOARD ADDRESSES/ REFERENCE NUMBERS
Default is 51.

LOCATE THE SCOREBOARD'S ADDRESS:
→ In the bottom of the board – *beside the power-connector* – the address number is written on a silver-colored label.

→ The address of the scoreboard is also displayed in the HOME score, when the scoreboard is powered on.

→ The address of the scoreboard can also be displayed through the NAU-CON-1000 BOARD DIAGNOSTICS MENU, this requires that the scoreboard address is set to a zone in the BOARD ZONES SETUP menu.

ASSIGN AN ADDRESS TO A ZONE
Each scoreboard address is assigned to a zone. Press the address number until it has the color of the desired zone. When pressing **ACCEPT***² the new board zone information is transmitted to the highlighted scoreboard addresses.

*²*The scoreboard must be turned on and within range of the NAUCON-1000 when pressing **ACCEPT**.*

CONFIGURING ZONE(S)
To set up four scoreboards each with their own NAUCON-1000, *as Fig. 14*, follow the description on page 14.

USE THE SAME PROCEDURE WHEN SETTING UP ONE, TWO OR THREE NAU-CON-1000 CONTROL PANELS.
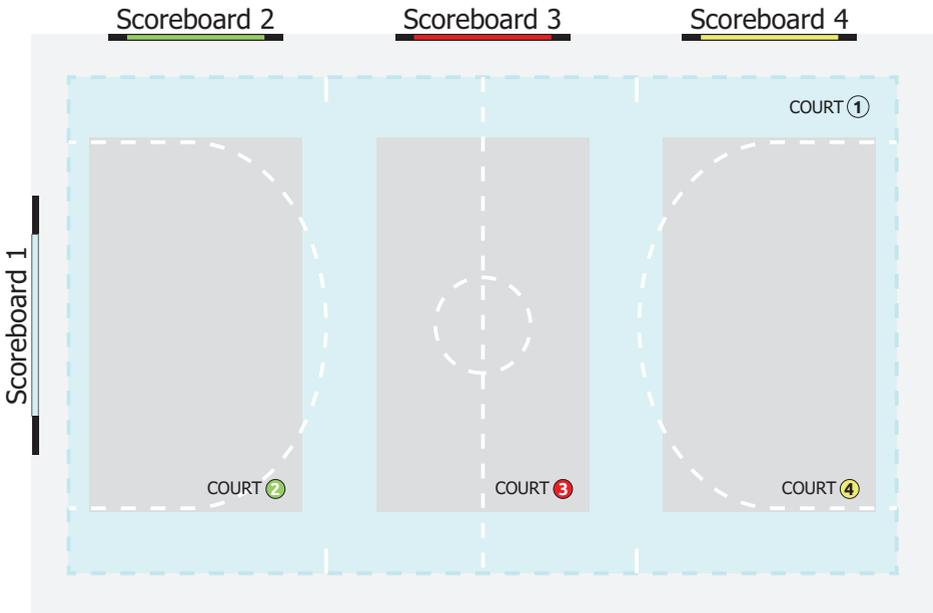

Fig. 12 – Arena with four independent main scoreboard setups, each with its own NAUCON-1000. Described on the following page.

Fig. 13 – Zones setup for four individual NAUCON-1000. Scoreboards with three sideboards and two shot clocks. Referring to the drawing, Fig. 12 on the previous page.

Scoreboard 1 – blue, zone 1
Address 11 is configured to function in Zone 1 on court 1.
IE. ADDRESS NO. IS REFERRING TO:
11: Main scoreboard
21: Home sideboard
31: Guest sideboard
41 & 42: Shot clocks

Scoreboard 2 – green, zone 2
Address 12 is configured to function in Zone 2 on court 2.
IE. ADDRESS NO. IS REFERRING TO:
12: Main scoreboard
22: Home sideboard
32: Guest sideboard
43 & 44: Shot clocks

Scoreboard 3 - red, zone 3
Address 13 is configured to function in Zone 3 on court 3.
IE. ADDRESS NO. IS REFERRING TO:
13: Main scoreboard
23: Home sideboard
33: Guest sideboard
45 & 46: Shot clocks

Scoreboard 4 – yellow, zone 4
Address 14 is configured to function in Zone 4 on court 4.
IE. ADDRESS NO. IS REFERRING TO:
14: Main scoreboard
24: Home sideboard
34: Guest sideboard
47 & 48: Shot clocks

If only one NAUCON-1000 is set up for four individual scoreboards, all of the above zones will highlight at the same time.

SETTING
UP SPORT

Basketball setup

Choose BASKETBALL from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 14a.*
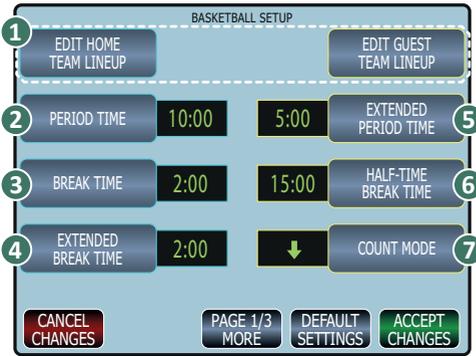
Fig. 14a – Setup basketball menu "Page 1/3"
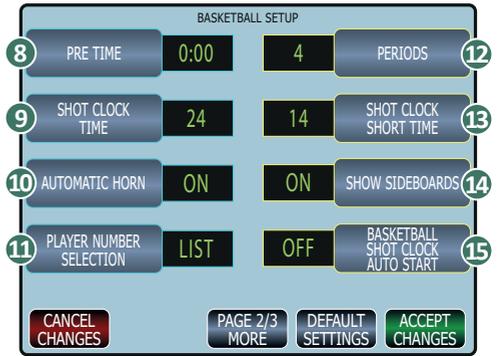
Fig. 14b – Setup basketball menu "Page 2/3"

Fig. 14a – "Page 1/3":

❶ *Edit lineups*
Choose either to edit HOME or GUEST team lineup. You will enter a screen where you can change the name and number of the players, *see page 40.*

❷ *Period time*
Set the length of a period. Default: 10 min.

❸ *Break time*
Set the length of the breaks between periods. Default is 2 minutes.

❹ *Extended break time*
Set the length of an extended break. Default is 2 minutes.

❺ *Extended period time*
Set the length of an extended period. Default is 5 minutes.

❻ *Half-time break time*
Set the length of the half-time break. Default is 15 minutes.

❼ *Count mode*
You can change between whether the game clock is counting up or down by pressing **COUNT MODE**.

Default is DOWN.

Fig. 14b – "Page 2/3":

❽ *Pre time*
Set the length of the pre time / the time counting down before the match. Default is 0 minutes

❾ *Shot clock time*
Set the count down of seconds for the shot clocks. Default is 24 seconds.

❿ *Automatic horn*
You can change between turning the automatic horn ON or OFF. Default is ON.

Basketball setup

⑪ *Player number selection*
Choose whether scores and penalties are given to a specific player or to the whole team. Default is LIST.

LIST: Choose player number from a list.
TYPE: Type player number.
OFF: Scores and penalties are given to the whole team.

⑫ *Periods*
Sets the number of periods in the match. Default is 4.

⑬ *Shot clock short time*
Set the counting length of the shot clock's "Time 2". Default is 14 seconds.

⑭ *Show sideboards*
Turning the sideboards ON or OFF. Default is ON.

⑮ *Basketball shot clock auto start*
ON: Autostarts the shot clock when the game time is started

OFF: Shot clock time is started manually with a remote control.

Default is ON
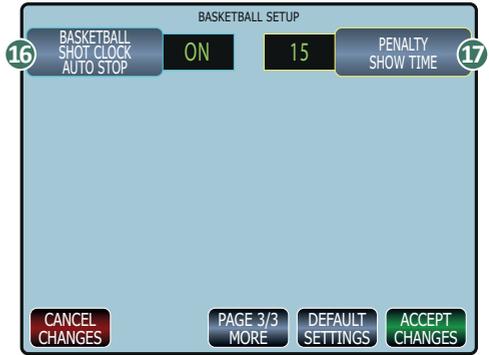
Fig. 14c – Setup basketball menu "Page 3/3"

Fig. 14c – "Page 3/3":

⑯ *Basketball shot clock auto stop*
ON: Stops the shot clock when the game time is stopped.

OFF: Shot clock time will continiue running when the game time is stopped.

Default is ON

⑰ *Penalty show time*
Sets the time that a player number foul is shown on the scoreboard.

Default is 15 sec.

Handball setup

Choose HANDBALL from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 15a.*
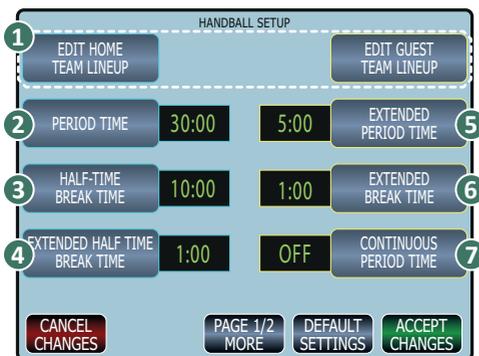
Fig. 15a – Setup Handball "Page 1/2"

Fig. 15b – Setup Handball "Page 2/2"

Fig. 15a – "Page 1/2":

❶ *Edit lineups*
Choose either to edit HOME or GUEST team lineup. You can change the names and numbers of the players, *see page 40.*

❷ *Period time*
Set the length of a period. Default is 30 minutes.

❸ *Half-time break time*
Sets the length of the half-time break. Default is 10 minutes.

❹ *Extended half time break time*
Sets the break time between the 2 extended periods. Default is 1 minute.

❺ *Extended period time*
Sets the length of an extended period. Default is 5 minutes.

❻ *Extended break time*
Sets the break time between ordinary game time and extended game time. Default is 1 minute.

❼ *Continuous period time*
Choose whether the timer should start over or continue counting from the previous period. Default is OFF.
Example: If set to ON and a period, 30 minutes, has ended the next period will start counting from 30 and up to 60 minutes.

Fig. 15b – "Page 2/2":

❽ *Count mode*
Toggle between wheather the game clock is counting up or down by pressing COUNT MODE. Default is UP.

❾ *Automatic horn*
Turns the automatic horn ON or OFF. Default is ON.

❿ *Show sideboards*
Turns the sideboards ON or OFF. Default is ON.

⓫ *Always show cards*
ON: shows yellow and red card buttons when player number selection is set to OFF. **OFF**: Hides yellow and red card buttons when player number selection is set to OFF. **DEFAULT** is off.

⑫ Pre time
Sets the length of the pre time / the time counting down before the match. Default is 0 minutes.

⑬ Player number selection
Choose whether scores and penalties are given to a specific player or to the whole team. Default is OFF.
LIST: Choose player number from a list.
TYPE: Type player number.
OFF: Scores and penalties are
       given to the whole team

⑭ Periods
Sets the number of periods in the match. Default is 2.

Volleyball setup

Choose VOLLEYBALL from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 16a.*


Fig. 16a – Setup Volleyball "Page 1/2"
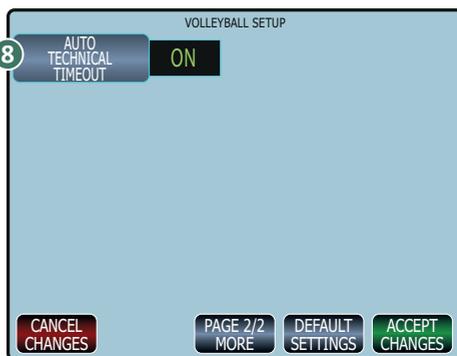
Fig. 16b – Setup Volleyball "Page 2/2"

Fig. 16a – "Page 1/2":

❶ *Edit lineups*
Choose either to edit HOME or GUEST team lineup. You will enter a screen where you can change the names and numbers of the players, *see page 40.*

❷ *Break time*
Sets the length of a break.
Default is 10 minutes

❸ *Show sideboards*
Turns the sideboard ON or OFF. Default is ON.

❹ *Technical timeout horn*
Enables or disables the technical time-out horn. Default is ON.

❺ *Player number selection*
Choose whether scores and penalties are given to a specific player or to the whole team. Default is OFF.

    LIST: Choose player number from a list.
    TYPE: Type player number.
    OFF: Scores and penalties are
   given to the whole team

❻ *Automatic horn*
Turns the automatic horn ON or OFF. Default is OFF

❼ *Automatic next set*
ON: When a team reaches 25 points the next set will automatically begin.
Default is OFF.

Fig. 16b – "Page 2/2":

❽ *Auto technical timeout*
ON: The technical timeout will auto-matically be activated at 8 and 16 points.

OFF: The technical timeout is controlled manually.

Default is ON.

Ice hockey setup

Choose ICE HOCKEY from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 17a.*
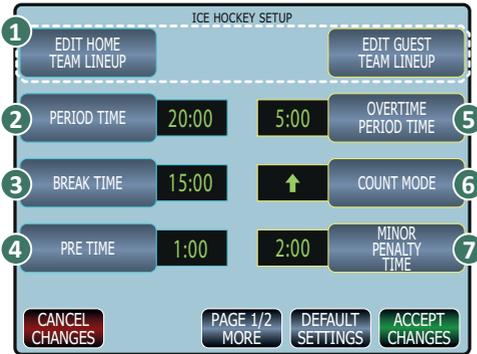
Fig. 17a – Setup Ice hockey "Page 1/2"

Fig. 17b – Setup Ice hockey "Page 2/2"

Fig. 17a – "Page 1/2":

❶ *Edit lineups*
Choose either to edit HOME or GUEST team lineup. You will enter a screen where you can change the names and numbers of the players, see page 40.

❷ *Period time*
Sets the length of a period. Default: 20 min.

❸ *Break time*
Sets the length of the breaks between periods. Default is 15 minutes.

❹ *Pre time*
Sets the length of the pre time / the time counting down before the match. Default is 1 minute.

❺ *Overtime period time*
Sets the length of overtime period(s). Default is 5 minutes.

❻ *Count mode*
Sets game clock to count DOWN or count UP. Default is UP.

❼ *Minor penalty time*
Sets the length of the minor penalty. Default is 2 minutes.

Fig. 17b – "Page 2/2":

❽ *Automatic horn*
Turns the automatic horn ON or OFF. Default is ON

❾ *Show sideboards*
Turns the sideboards ON or OFF. Default is ON.

❿ *Periods*
Sets the number of periods in the match. Default is 3.

⓫ *Player number selection*
Choose whether scores and penalties are given to a specific player or to the whole team. Default is TYPE.

LIST: Choose player number from a list.
TYPE: Type player number.
OFF: Scores and penalties are given to the whole team

⓬ *Tenths activated*
ON: Shows tenth of a second when game time is counting down from 1 minute. **OFF**: Game time counts down normally. **DEFAULT** is OFF.

⓭ *Enable Ringette rules*
ON: Enables the ringette rules.
OFF: Disables the ringette rules.
DEFAULT is OFF.

Tennis setup

Choose TENNIS from the SELECT SPORT MENU. You will get a screen like shown below, *Fig. 18.* The **SETUP** click button on the console has no function when setting up tennis.

Fig. 18 – Tennis, control and setup screen

Fig. 18:

❶ *Edit names*
You can edit the player names on the screen, even when the match is started. You will enter a screen where you can change the name of the player, *Fig. 36, page 40.*

❷ *Automatic horn icon*
The automatic horn is turned off.

❸ *Correct menu*
If a correction must be made to the on-going game, you must enter **CORRECT MENU**. *See more on page 40.*

Floorball setup

Choose FLOORBALL from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 19a.*
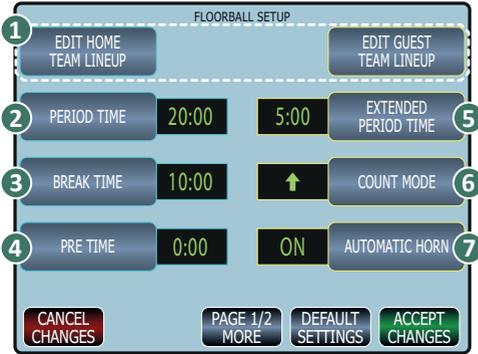
Fig. 19a – Setup Floorball "Page 1/2"
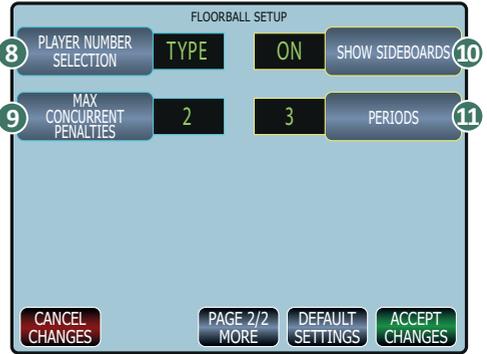
Fig. 19b – Setup Floorball "Page 2/2"

Fig. 19a – "Page 1/2":

❶ Edit lineups
Choose either to edit HOME or GUEST team lineup. You will enter a screen where you can change the names and numbers of the players, *see page 40.*

❷ Period time
Sets the length of a period. Default is 20 minutes.

❸ Break time
Sets the length of the breaks between periods. Default is 10 minutes.

❹ Pre time
Sets the length of the pre time / the time counting down before the match. Default is 0 minutes

❺ Extended period time
Sets the length of an extended period. Default is 5 minutes.

❻ Count mode
Sets game clock to count DOWN or count UP. Default is UP.

❼ Automatic horn
Turns the automatic horn ON or OFF. Default is ON.

Fig. 19b – "Page 2/2":

❽ Player number selection
Choose whether scores and penalties are given to a specific player or to the whole team. Default is TYPE.

LIST: Choose player number from a list.
TYPE: Type player number.
OFF: Scores and penalties are
         given to the whole team

❾ Max concurrent penalties
Sets the max of penalties *(1-5)*. Default: 2.

❿ Show sideboards
Turns the sideboards ON or OFF. Default is ON.

⓫ Periods
Sets the number of periods in the match. Default is 3.

Futsal setup

Choose FUTSAL from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 20a.*
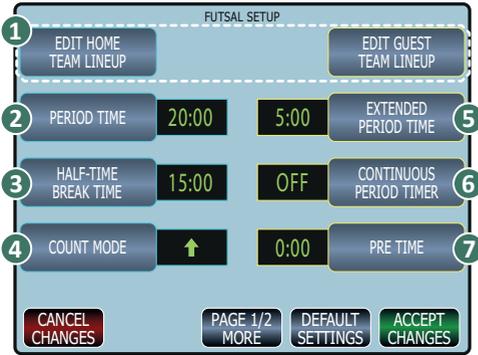
Fig. 20a – Setup Futsal "Page 1/2"

Fig. 20b – Setup Futsal "Page 2/2"

❼ *Pre time*
Sets the length of the pre time / the time counting down before the match. Default is 0 minutes.

Fig. 20a – "Page 1/2":

❶ *Edit lineups*
Choose either to edit HOME or GUEST team lineup. You will enter a screen where you can change the names and numbers of the players, *see page 40.*

❷ *Period time*
Set sthe length of a period. Default is 20 min.

❸ *Half-time break time*
Sets the length of the half-time break. Default is 15 minutes.

❹ *Count mode*
Sets game clock to count DOWN or count UP. Default is UP.

❺ *Extended period time*
Sets the length of an extended period. Default is 5 minutes.

❻ *Continuous period timer*
Choose whether the timer should start over or continue counting from the previous period. Default is OFF.
Example: If set to ON and a period, *20 min.*, has ended the next period will start counting from 20 and up to 40 min.

Fig. 20b – "Page 2/2":

❽ *Automatic horn*
Turns the automatic horn ON or OFF. Default is ON.

❾ *Show sideboards*
Turns the sideboards ON or OFF. Default is ON.

❿ *Periods*
Sets the number of periods in the match. Default is 2.

⓫ *Player number selection*
Choose whether scores and penalties are given to a specific player or to the whole team. Default is OFF.

LIST: Choose player number from a list.
TYPE: Type player number.
OFF: Scores and penalties are given to the whole team

⓬ *Max concurrent penalties*
Sets the max numbers of penalties (1-5). Default is 5.

⓭ *Max team fouls*
Sets the number of team fouls that a team can get. Default is 4.

Bandy setup

Choose BANDY from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 21a.*


Fig. 21a – Setup Bandy "Page 1/2"

Fig. 21b – Setup Bandy "Page 2/2"

Fig. 21a – "Page 1/2":

❶ *Edit lineups*
Choose either to edit HOME or GUEST team lineup. You will enter a screen where you can change the names and numbers of the players, *see page 40.*

❷ *Period time*
Sets the length of a period. Default is 15 minutes.

❸ *Break time*
Sets the length of the breaks between periods. Default is 2 minutes.

❹ *Pre time*
Sets the length of the pre time / the time counting down before the match. Default is 0 minutes

❺ *Extended period time*
Sets the length of an extended period. Default is 15 minutes.

❻ *Count mode*
Sets game clock to count DOWN or count UP. Default is DOWN.

❼ *Automatic horn*
Turns the automatic horn ON or OFF. Default is ON.

Fig. 21b – "Page 2/2":

❽ *White card penalty time*
Sets the length of the white card penalty. Default is 2 minutes.

❾ *Show sideboards*
Turns the sideboards ON or OFF. Default is ON.

❿ *Blue card penalty time*
Sets the length of the blue card penalty. Default is 4 minutes.

⓫ *Set periods*
Sets the number of periods in the Match. Default is 2.

Soccer setup

Choose SOCCER from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 22a.*
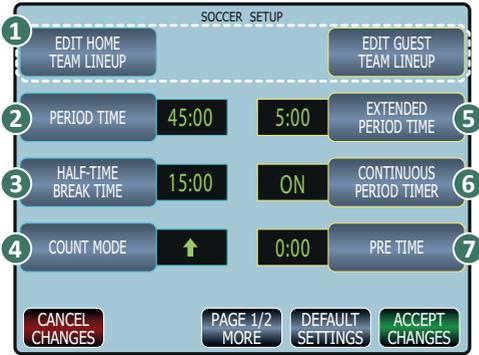
Fig. 22a – Setup Soccer "Page 1/2"

Fig. 22b – Setup Soccer "Page 2/2"

Fig. 22a – "Page 1/2":

❶ *Edit lineups*
Choose either to edit HOME or GUEST team lineup. You will enter a screen where you can change the names and numbers of the players, *see page 40.*

❷ *Period time*
Sets the length of a period. Default: 45 min.

❸ *Half-time break time*
Sets the length of the half-time break. Default is 10 minutes.

❹ *Count mode*
Sets game clock to count DOWN or count UP. Default is UP.

❺ *Extended period time*
Sets the length of an extended period. Default is 5 minutes.

❻ *Continuous period timer*
Choose whether the timer should start over or continue counting from the previous period. Default is ON.

Example: If set to ON and a period, *45 minutes*, has ended the next period will count from 45 and up to 90 minutes.

❼ *Pre time*
Sets the length of the pre time / the time counting down before the match. Default is 0 minutes.

Fig. 22b – "Page 2/2":

❽ *Automatic horn*
Turns the automatic horn ON or OFF. Default is ON.

❾ *Show sideboards*
Turns the sideboards ON or OFF. Default is ON.

❿ *Periods*
Sets the number of periods in the match. Default is 2.

⓫ *Player number selection*
Choose whether scores and penalties are given to a specific player or to the whole team. Default is LIST.

LIST: Choose player number from a list.
TYPE: Type player number.
OFF: Scores and penalties are given to the whole team

⓬ *Injury time*
Time continue counting when a player is injured on the field. Default is ON.

Mini hockey setup

Choose MINI HOCKEY from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 23a.*
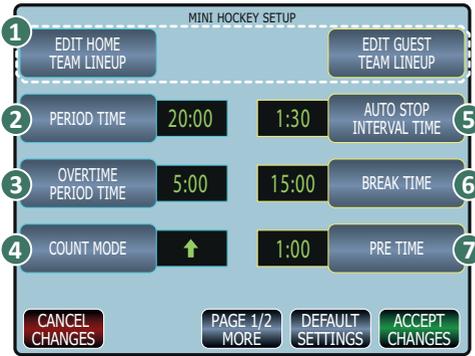
Fig. 23a – Setup Mini hockey "Page 1/2"
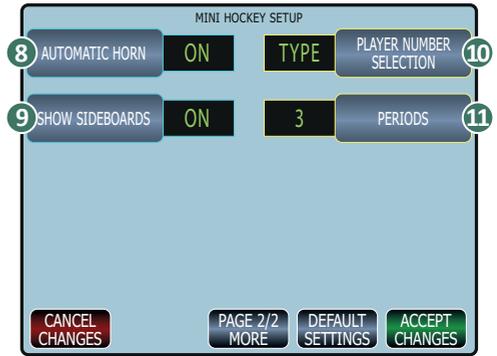
Fig. 23b – Setup Mini hockey "Page 2/2"

Fig. 23a – "Page 1/2":

❶ *Edit lineups*
Choose either to edit HOME or GUEST team lineup. You will enter a screen where you can change the names and numbers of the players, *see page 40.*

❷ *Period time*
Sets the length of a period.
Default is 20 minutes.

❸ *Overtime period time*
Sets the length of the overtime period time. Default is 5 minutes.

❹ *Count mode*
Sets game clock to count DOWN or count UP. Default is UP.

❺ *Auto stop interval time*
Sets the length of Auto stop. Default is 1:30 minutes.

❻ *Break time*
Sets the length of the breaks between periods. Default is 15 minutes.

❼ *Pre time*
Sets the length of the pre time / the time counting down before the match. Default is 1 minute.

Fig. 23b – "Page 2/2":

❽ *Automatic horn*
Turns the automatic horn ON or OFF. Default is ON.

❾ *Show sideboards*
Turns the sideboards ON or OFF. Default is ON.

❿ *Player number selection*
Choose whether scores and penalties are given to a specific player or to the whole team. De fault is TYPE.

LIST: Choose player number from a list.
TYPE: Type player number.
OFF: Scores and penalties are
         given to the whole team

⓫ *Periods*
Sets the number of periods in the match. Default is 3.

Boxing setup

Choose BOXING from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 24.*
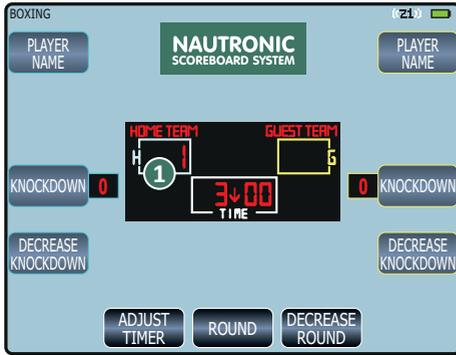
Fig. 24 – Boxing screen, scoreboard controls

Fig. 25 – The setup boxing menu

Fig. 24 – Boxing:

❶ *Round – "H" box*
The number of rounds will show in the "H" box.

Fig. 25 – Boxing setup:

❷ *Period time*
Sets the length of a round. Default is 3 minutes.

❸ *Count mode*
Sets game clock to count DOWN or count UP. Default is DOWN.

❹ *Automatic horn*
Turns the automatic horn ON or OFF. Default is ON.

❺ *Half-time break time*
Sets the rest time between rounds. Default is 1 minute.

❻ *Pre time*
Sets the length of the pre time / the time counting down before the match. Default is 0 minutes (OFF).

❼ *Show sideboards*
Turns the sideboards ON or OFF. Default is ON.

Water polo setup

Choose WATER POLO from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 26a.*

Fig. 26a – Setup Water polo "Page 1/2"

Fig. 26b – Setup Water polo "Page 2/2"

Fig. 26a – "Page 1/2":

❶ *Edit lineups*
Choose either to edit HOME or GUEST team lineup. You will enter a screen where you can change the names and numbers of the players, *see page 40.*

❷ *Period time*
Sets the length of a period.
Default: 8 min.

❸ *Break time*
Sets the length of the breaks between periods. Default is 2 minutes.

❹ *Count mode*
Sets game clock to count DOWN or count UP. Default is DOWN.

❺ *Extended period time*
Sets the length of an extended period. Default is 3 minutes.

❻ *Half-time break time*
Sets the length of half-time break time. Default is 5 minutes.

❼ *Pre time*
Sets the length of the pre time / the time counting down before the match. Default is 0 minutes

Fig. 26b – "Page 2/2":

❽ *Shot clock time*
Set the number of seconds for the shot clocks to count down. Default is 30 seconds.

❾ *Automatic horn*
Turns the automatic horn ON or OFF. Default is ON.

❿ *Show sideboards*
Turns the sideboards ON or OFF. Default is ON.

⑪ *shot clock short time*
Sets the number of seconds for the short shot clock time to count down. Default is 15 seconds.

⑫ *Player number selection*
Choose whether scores and penalties are given to a specific player or to the whole team. Default is LIST.

LIST: Choose player number from a list.
TYPE: Type player number.
OFF: Scores and penalties are given to the whole team.

⑬ *Periods*
Sets the number og periods in the match. Default is 4

American football setup

Choose AM. FOOTBALL from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 27a.*

Fig. 27a – Setup American football "Page 1/2"

Fig. 27b – Setup American football "Page 2/2"

Fig. 27a – "Page 1/2":

❶ *Edit lineups*
Choose either to edit HOME or GUEST team lineup. You will enter a screen where you can change the names and numbers of the players, *see page 40.*

❷ *Period time*
Sets the length of a period. Default is 15 minutes.

❸ *Break time*
Sets the length of the breaks between periods. Default is 2 minutes.

❹ *Count mode*
Sets game clock to count DOWN or count UP. Default is DOWN.

❺ *Extended period time*
Sets the length of an extended period. Default is 15 minutes.

❻ *Half-time break time*
Sets the length of the half-time break. Default is 12 minutes.

❼ *Pre time*

Sets the length of the pre time / the time counting down before the match. Default is 0 minutes (OFF).

Fig. 27b – "Page 2/2":

❽ *Shot clock time*
Sets the number of seconds for the shot clocks to count down. Default is 25 seconds.

❾ *Automatic horn*
Turns the automatic horn ON or OFF. Default is ON.

❿ *Periods*
Sets the number of periods in the match. Default is 4

⑪ *Shot clock short time*
Sets the counting length of the shot clock's short time. Default is 0 seconds.

⑫ *Show sideboards*
Turns the sideboards ON or OFF. Default is ON.

Basket 3X3 setup

Choose BASKET 3X3 from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 28a.*
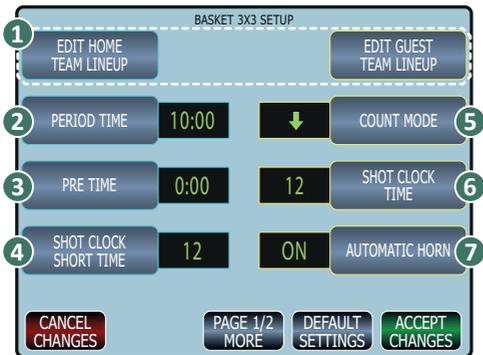
Fig. 28a – Setup Basket 3X3 menu "Page 1/2"

Fig. 28b – Setup Basket 3X3 menu "Page 2/2"

Fig. 28a – "Page 1/2":

❶ *Edit lineups*
Choose either to edit HOME or GUEST team lineup. You will enter a screen where you can change the names and numbers of the players, *see page 9.*

❷ *Period time*
Sets the length of a period. Default is 10 minutes.

❸ *Pre time*
Sets the length of the pre time / the time counting down before the match. Default is 0 minutes

❹ *Shot clock short time*
Sets the counting length of the shot clock's "Time 2". Default is 12 seconds.

❺ *Count mode*
Sets game clock to count DOWN or UP. Default is DOWN.

❻ *Shot clock time*
Sets the number of seconds for the shot clocks to count down. Default: 12 sec.

❼ *Automatic horn*
Turns the automatic horn ON or OFF. Default is ON.

Fig. 28b – "Page 2/2":

❽ *Show sideboards*
Turns the sideboards ON or OFF. Default is ON.

❾ *Periods*
Sets the number og periods in the match. Default is 1

❿ *Player number selection*
Choose whether scores and penalties are given to a specific player or to the whole team. Default is LIST.

LIST: Choose player number from a list.
OFF: Scores and penalties are given to the whole team.

⑪ *Penalty show time*
Sets the time that a player number foul is shown on the scoreboard. Default is 15 sec.

Netball setup

Choose NETBALL from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 29a.*
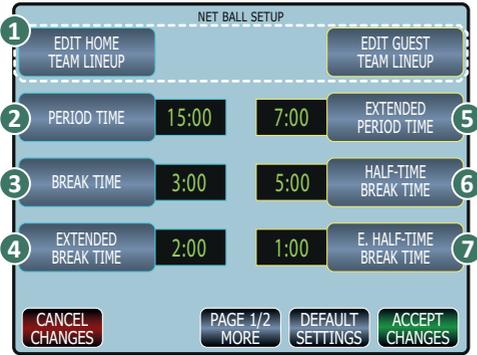
Fig. 29a – Setup Netball "Page 1/2"

Fig. 29b – Setup Netball "Page 2/2"

Fig. 29a – "Page 1/2":

❶ *Edit lineups*
Choose either to edit HOME or GUEST team lineup. You will enter a screen where you can change the names and numbers of the players, *see page 40.*

❷ *Period time*
Sets the length of a period.
Default: 15 min.

❸ *Break time*
Sets the length of the breaks between periods. Default is 3 minutes.

❹ *Extended break time*
Sets the length of an extended break. Default is 2 minutes.

❺ *Extended period time*
Sets the length of an extended period. Default is 7 minutes.

❻ *Half-time break time*
Sets the length of the half-time break. Default is 5 minutes.

❼ *Extended half time break time*
Sets the length of an extended half-time break. Default is 1 minute.

Fig. 29b – "Page 2/2":

❽ *Count mode*
Sets game clock to count DOWN or UP. Default is DOWN.

❾ *Automatic horn*
Turns the automatic horn ON or OFF. Default is ON.

❿ *Player number selection*
Choose whether scores and penalties are given to a specific player or to the whole team. Default is LIST.

LIST: Choose player number from a list.
TYPE: Type player number.
OFF: Scores and penalties are given to the whole team

⓫ *Pre time*
Sets the length of the pre time / the time counting down before the match. Default is 0 minutes

⓬ *Show sideboards*
Turns the sideboards ON or OFF. Default is ON.

⓭ *Periods*
Sets the number of periods in the match. Default is 4.

Inline hockey setup

Choose INLINE HOCKEY from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 30a.*
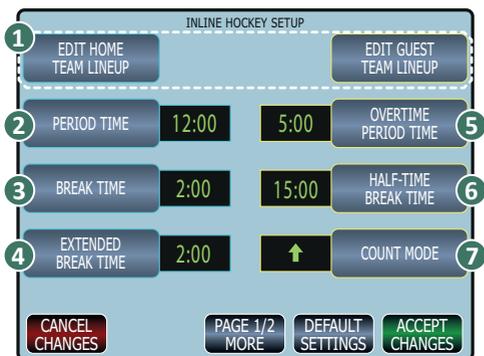
Fig. 30a – Setup Inline hockey "Page 1/2"
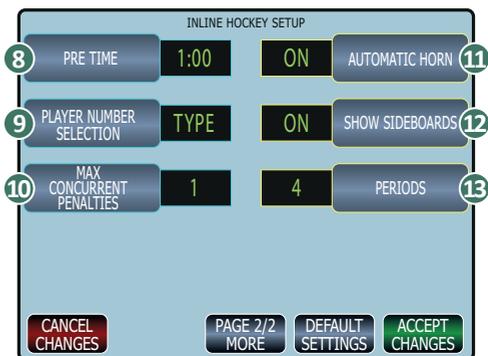
Fig. 30b – Setup Inline hockey "Page 2/2"

Fig. 30a – "Page 1/2":

❶ *Edit lineups*
Choose either to edit HOME or GUEST team lineup. You will enter a screen where you can change the names and numbers of the players, *see page 40.*

❷ *Period time*
Sets the length of a period. Default: 12 min.

❸ *Break time*
Sets the length of the breaks between periods. Default is 2 minutes.

❹ *Extended break time*
Sets the length of an extended break. Default is 2 minutes.

❺ *Overtime period timer*
Sets the length for overtime. Default: 5 min.

❻ *Half-time break time*
Sets the length of the half-time break. Default is 15 minutes.

❼ *Count mode*
Sets game clock to count DOWN or UP. Default is UP.

Fig. 30b – "Page 2/2":

❽ *Pre time*
Sets the length of the pre time / the time counting down before the match. Default is 1 minute.

❾ *Player number selection*
Choose whether scores and penalties are given to a specific player or to the whole team. Default is TYPE.

LIST: Choose player number from a list.
TYPE: Type player number.
OFF: Scores and penalties are given to the whole team

❿ *Max concurrent penalties*
Sets the max of penalties given *(1-5)*. Default is 1.

⓫ *Automatic horn*
Turns the automatic horn ON or OFF. Default is ON.

⓬ *Show sideboards*
Turns the sideboards ON or OFF. Default is ON.

⓭ *Periods*
Sets the number of periods in the match. Default is 4.

Wrestling setup

Choose WRESTLING from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 31.*

*Fig. 31 – Wrestling screen, scoreboard controls*
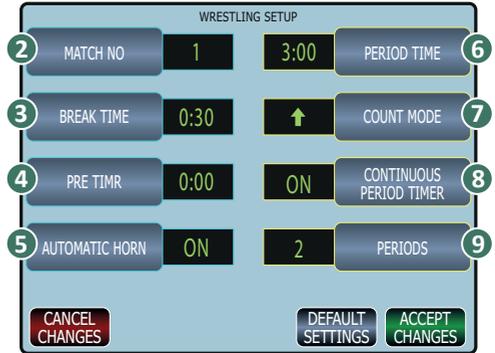
Fig. 32 – Setup Wrestling

Fig. 31 – Wrestling:

❶ *Correct menu*
If a correction must be made to the on-going game, you must enter CORRECT MENU. *See more on page 40.*

Fig. 32 – Wrestling Setup:

❷ *Match no*
Enter the match number, between 0 and 999, if set to 0 the match number will be blank. Default is 1.

❸ *Break time*
Sets the length of a break.
Default is 30 seconds.

❹ *Pre time*
Sets the length of the pre time / the time counting down before the match. Default is 0 minutes

❺ *Automatic horn*
Turns the automatic horn ON or OFF.
Default is ON.

❻ *Period time*
Sets the length of a period.
Default is 3 minutes.

❼ *Count mode*
Sets game clock to count DOWN or UP.
Default is UP.

❽ *Continuous period timer*
Choose whether the timer should start over or continue counting from the previous period. Default is ON.

Example: If set to ON and a period, *3 minutes*, has ended the next period will continue counting from 3 minutes.

❾ *Periods*
Sets the number of periods in the match. Default is 2.

Interval training setup

Choose I. TRAINING from the SELECT SPORT MENU. Then press the **SETUP** click button on the console and you will see a menu like shown below, *Fig. 33.*
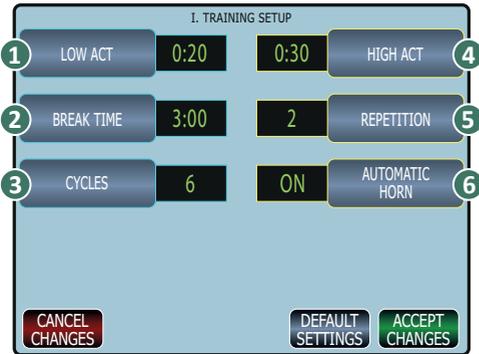
Fig. 33 – Setup Interval training

Fig. 33:

❶ *Low act*
Sets the low intensity time.
Default is 20 seconds.

❷ *Half-time break time*
Sets the length of the break between the countings. Default is 3 minutes.

❸ *Cycles*
Sets the number of cycles. Default is 6.

❹ *High act*
Sets the high intensity time.
Default is 30 seconds.

❺ *Repetition*
Sets the repetition of low or high act.
Default is 2.

❻ *Automatic horn*
Turns the automatic horn ON or OFF.
Default is ON.

Squash/Badminton setup
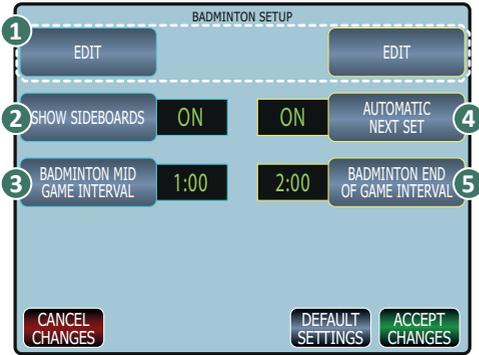
Fig. 34 — Setup Badminton

Fig. 34:

❶ *Edit lineups*
Choose either to edit HOME or GUEST team lineup. You will enter a screen where you can change the names and numbers of the players, *see page 40.*

❷ *Show sideboards*
Turns the automatic horn ON or OFF. Default is ON.

❸ *Badminton mid game interval*
Sets the length of the midgame interval. Default is 1 minute.

Set to 0 if squash is played.

❹ *Automatic next set*
Automatic change to next set. Default is ON.

Set to OFF if squash is played.

❺ *Badminton end of game interval*
Sets the length of the endgame interval. Default is 2 minutes.

Set to 0 if squash is played.

Baseball setup

Fig. 33 — Setup Interval training

❶ *Edit lineups*
Choose either to edit HOME or GUEST team lineup. You will enter a screen where you can change the names and numbers of the players *see page 40.*

EXTRA SCOREBOARD FEATURES

Edit team lineups

When you have selected a sport, you can press the **SETUP** click button on the console. Change the lineups by pressing **EDIT HOME** or **GUEST TEAM LINEUP**, you will enter a screen like shown below *(Fig. 35).*
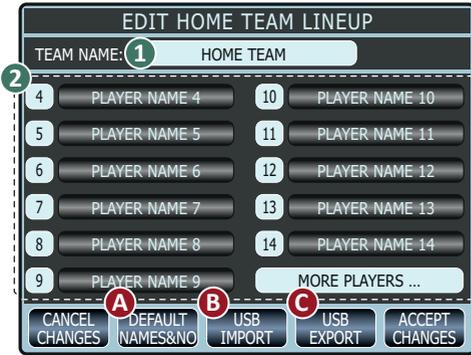
Fig. 35 – Edit home/guest team lineup

Fig. 36 – The text will show in red while editing

Fig. 35 – The editable boxes:

❶ *Edit Home/Guest Team lineup*
Click on the "TEAM NAME"-box on the touch screen. You will enter a screen with a keyboard *(Fig. 36)* which allows you to change the text line.

❷ *Player name & number*
Click on a **PLAYER NAME** on the touch screen. You will enter a screen with a keyboard *(Fig. 36)* which allows you to change the name. When pressing a player number you will get a numeric keyboard for changing the numbers *(00-99 or blank).*
The **MORE PLAYERS …**-button toggles pages if more players than shown are available for a specific sport.

Fig. 36 – The interactive graphics:

❸ *Editable text field*
When entering the keyboard you can start to type or you can clear text . Remember to save your changes by pressing **ACCEPT**.

❹ *Keyboard*
Use the keyboard***** to type names of the players. *******Default keyboard is set to Western. Press the button marked with a D to change keyboard.*

Fig. 35 & 36 – Bottom buttons

Ⓐ *Default names & no*
When you press **DEFAULT NAMES & NO**, you reset the lineup and team name to the default text. You will have to confirm resetting before it takes effect.

Ⓑ *USB import*
You can import a list with player and team names from a USB stick. Insert the USB stick with a CSV file *(Comma Separated Values file)* and press **USB IMPORT**. Your lineups will be imported from the file. C*ontact your dealer for more information.*

Ⓒ *USB export*
You can export a list with players and team names to a USB stick. Insert a USB stick and press USB export. Your lineup will be exported to a CSV file (Comma separated values file).

Ⓓ *Keyboard*
Choose between Western, Russian and Hebrew keyboard. For Arabic language please contact Nautronic.

Ⓔ *Clear text*
Clears the text field.

Correct menu

CORRECT MENU is available in allmost all sports. From the menu on the touch screen it is possible to correct the ongoing game. You can subtract, adjust and decrease various input given. E.g. scores, fouls, sets and timer.


Basketball, control screen

Basketball, Correct menu activated

Handball, control screen
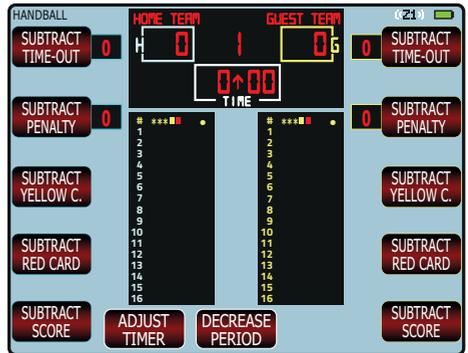
Handball, Correct menu activated

Tennis, control screen
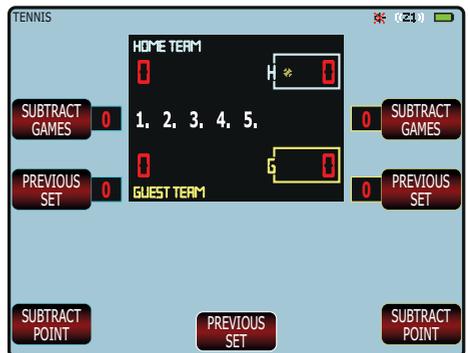
Tennis, Correct menu activated

Results showing on an A-H board
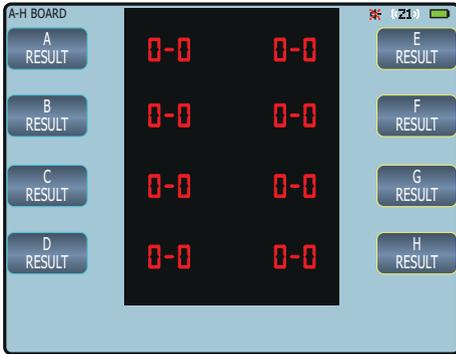
Fig. 37 – A-H Board, control screen

Choose A-H BOARD from the SELECT SPORT MENU. If you have an A-H board, the NAUCON-1000 unit allows you to display different match scores.

When you press one of the **RESULT** buttons *(A-H RESULT)* you will enter a numeric keyboard which allows you to change the given result *(00-99).*

The **SETUP** click button on the console has no function for A-H BOARD.

Side console setup

Choose SIDE CONSOLE from the SELECT SPORT MENU. The side console function turns the NAUCON-1000 unit into a secondary console. This function is used in basketball, where the score is controlled by a secondary referee.

SIDE CONSOLE REQUIREMENTS:

→ Primary the NAUCON-1000 with BASKETBALL selected.

→ Secondary the NAUCON-1000 with SIDE CONSOLE selected.

The **SETUP** click button on the NAUCON-1000 has no function for SIDE CONSOLE.

Fig. 38 – Side console, control screen

❶ *Correct menu*
If a correction must be made to the ongoing game, enter CORRECT MENU from where you can subtract points and fouls.

❷ *Fouls*
Assign a foul to a specific player, or the team.

❸ *3-Point*
Assign 3 points to a specific player, or the team.

❹ *2-Point*
Assign 2 points to a specific player, or the team.

❺ *1-Point*
Assign 1 point to a specific player, or the team.

Total reset

To perform a TOTAL RESET, follow the steps below:

WARNING: **WHEN A TOTAL RESET IS PERFORMED, ALL SAVED CONFIGURATIONS WILL BE LOST AND SET TO DEFAULT!**

→ You can export the current configuration as a back up before proceeding, *see* EXPORT CONFIGURATION *on page 9*.

1 – The NAUCON-1000 must be turned OFF.

2 – Press and hold the **GAME RESET** and **TIME RESET** click buttons at the same time.

3 – Turn ON the NAUCON-1000 unit. *Do not release the buttons yet!*

4 – **Text on the touch screen should be:**

5 – Release the **GAME RESET** and **TIME RESET** click buttons.

6 – After approximately 1 minute, the NAUCON-1000 unit will start up, with all settings set to default.

→ **TOTAL RESET DONE**

> **NAUTRONIC – NAUCON-1000**
> **VERSION X.XX**
> **IO-PORT TEST PASSED**
> **NAUNET TEST PASSED**
> ⓘ **TOTAL RESET!!!**
> **TESTING BACKUP MEMORY**
> **INITIATING RAM**
> **INITIATING FLASH**

How to check the software version

There are two methods to check the software version of the NAUCON-1000 unit.

METHOD 1:
1 – Enter the SELECT SPORT menu. Press the **MENU** click button on the console and then **EXIT SPORT** on the touch screen.

→ At the bottom left side of the SELECT SPORT menu, the software version is displayed.

   E.g. VERSION 2.50

METHOD 2:
1 – Start or restart the NAUCON-1000.

→ **Upon startup;**
   the version installed displays:
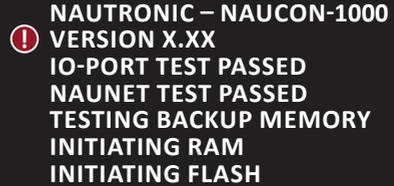
> **NAUTRONIC – NAUCON-1000**
> ⚠ **VERSION X.XX**
> **IO-PORT TEST PASSED**
> **NAUNET TEST PASSED**
> **TESTING BACKUP MEMORY**
> **INITIATING RAM**
> **INITIATING FLASH**

Updating the NAUCON-1000 software

WARNING: **WHEN SOFTWARE UPDATE IS PERFORMED, ALL SAVED CONFIGURATIONS WILL BE LOST AND SET TO DEFAULT!**

To update to the latest version of software to the NAUCON-1000, follow the steps below:

1 – Turn the NAUCON-1000 off.

2 – Plug in the power supply.

3 – Press and hold the **SETUP** button.

While still holding the SETUP botton:

4 – Turn the NAUCON-1000 on.

5 – Release the **SETUP** button.

6 – The touch screen will display the following text: "BOOTLOADER STARTED, INSERT USB DRIVE."

7 – Insert a USB stick with software supplied by Nautronic A/S

8 – The touch screen will display the following text: "DISK FOUND."

After 10-15 seconds:

9 – The touch screen will display the following text: "PLEASE REMOVE DRIVE."

10 – Remove the USB stick.

11 – The NAUCON-1000 unit turns off.

→ Software update is done.

WHEN THE NAUCON-1000 IS TURNED ON FOR THE FIRST TIME AFTER A SOFTWARE UPDATE, IT WILL TAKE APPROXIMATELY 1 MINUTE LONGER THAN A NORMAL START UP.

Fig. 39 – NAUCON-1000, where do the plugs go

Connect to scoreboard

Shot clock handle

Power

Insert USB stick here

Import/Export settings

IMPORT CONFIGURATION
Import your saved configuration to the NAUCON-1000 from the service menu.

To enter the service menu
follow the steps below:

1 – Press the menu click button
2 – Press "Exit sport" button to exit the sport
3 – Press "General Setup"
4 – Press "Service menu"
5 – Service password must be entered:
1166
6 – Press "import configuration" A screen will show the following text:
INSERT A FLASH DISK IN USB!!!
7 – Insert your USB stick into the NAU-CON-1000. A new text will be shown on the screen.

PLEASE WAIT!!! IMPORTING CONFIGURA-TION FROM USB DRIVE

When the import is complete the NAU-CON-1000 returns to the service menu.

EXPORT CONFIGURATION
Export your current configuration of the NAUCON-1000 from the service menu.

To enter the service menu
follow the steps below:

1 – Press the menu click button
2 – Press "Exit sport" button to exit the sport
3 – Press "General Setup"
4 – Press "Service menu"
5 – Service password must be entered:
1166
6 – Press "Export configuration" A screen will show the following text:
INSERT A FLASH DISK IN USB!!!
7 – Insert your USB stick into the NAU-CON-1000. A new text will be shown on the screen.

PLEASE WAIT!!! EXPORTING CONFIGURA-TION TO USB DRIVE

When the export is complete the NAU-CON-1000 returns to the service menu.

TROUBLE
SHOOTING

Trouble shooting

HARDWARE PROBLEMS: Locate the problem with a little help from the service led's and the illustration below, *Fig. 40*.
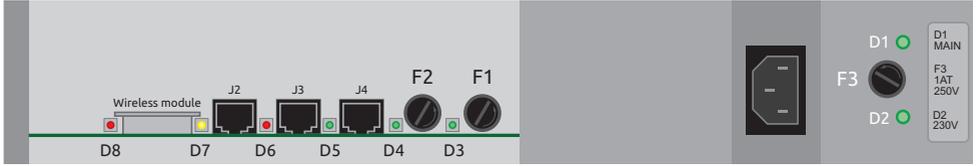

Fig. 40 – The bottom of a scoreboard

THE LEDS INDICATE THE FOLLOWING, WHEN A SCOREBOARD IS WORKING PROPERLY:

→ D1, D2, D3, D4 and D5 constantly light green.
→ D6 flashes red rapidly.
→ D7 flashes yellow once per second.
→ D8 flashes red rapidly – **but only if a radio module is present.**

D1 – MAIN
If D1 light is off:
Check main power connection.

D2 – 230V/AC LED
If D2 light is off:
Check fuse F3. *Press and turn F3 at the same time to check if the fuse is blown and must be replaced.*

D3 – 12V/DC HORN
If D3 light is off:
Check fuse F1. *Press and turn F1 at the same time to check if the fuse is blown and must be replaced.*

D4 – 24V/DC DIGIT
If D4 light is off:
Check fuse F2. *Press and turn F2 at the same time to check if the fuse is blown and must be replaced.*

D5 – 24V/DC FOR THE NAUCON-1000
If D5 light is off:
Remove all plugs connected to J2, J3 and J4. If D5 light turns on, there might be a short circuit in the cables or in the NAUCON-1000.

D6 – DATA COMMUNICATION
If D6 light is off:
There is no data reception.
→ Check the cable connected to the control panel.
→ Check the wall connector.
→ Turn the power to the scoreboard off, wait for 5 seconds and turn it back on. If still without function, contact the local scoreboard supplier for instructions.

D7 – INTERNAL OPERATION
If D7 light is either off or constantly on:
Internal units in the scoreboard might be damaged.

D8 – WIRELESS COMMUNICATION
If D8 light is off:

There is no radio signal reception.
→ Wireless module must be installed for D8 to function.
→ Make sure the NAUCON-1000 is turned on.

FUSES:

F1 → 5AF

F2 → 5AF

F3 → 1AT

Diagnostics menu

The DIAGNOSTICS MENU can be entered by pressing the desired address button, *e.g. 11*, in the BOARD INFO MENU. The NAUCON-1000 will enter a diagnostic menu where all information of the scoreboard is available.

To enter the diagnostic menu follow the steps below:
1 – Press the menu click button
2 – Press "Exit sport" button to exit the sport
3 – Press "General Setup"
4 – Press "BOARD INFO" Let the NAUCON-1000 search for available scoreboards.

When the diagnostic menu is opened, the scoreboard will display its address in the HOME score, the board zone in GUEST score and the software version in the game time/day time clock digits.

Fig. 41 – Description of each line:

12V in – 12V/AC supply for the NGMCB.

12V fuse – 12V/DC Fuse F1 for the horn.

24V in – 24V/AC supply for the NGMCB.

24V fuse – 24V/DC fuse F2.

Naunet 24V – 24V/DC for the digits.

Naunet GND – Ground/GND for the NGMCB.

Extra 24V – EXTRA 24V/DC NGP 24V/DC supply. *NGP-85 are not mounted in all scoreboards.*

Extra relay – Relay mounted in the NGP-85. *NGP-85 are not mounted in all scoreboards.*

DCF77 – NG-DCF receiver *DCF77 receivers are not mounted in all scoreboards.*

Fig. 41 – Diagnostic test screen

Dip1 – Dip setting of DIP1 in the NGI-85

Dip2 – Dip setting of DIP2 in the NGI-85

Dip3 – Dip setting of DIP3 in the NGI-85

Diagnostic – Shows checksum of diagnostics information

Wireless Power – Wireless power, which can be adjusted from 0 to 17 for test purpose only.

Total retry count – Total retries of sent packets to the Scoreboard.

Send packets – Number of packets sent from the NAUCON-1000.

Receive packets – Number of packets the NAUCON-1000 has received from the scoreboard.

Board receives – Number of packets the NGMCB has received from the NAUCON-1000.

Packet loss – Lost packets.

Diagnostic troubleshooting guide

What is the reason why errors occur and testing.

RELAY 1 – *fault:*
→ Cable or horn incorrectly connected to **J7**.

RELAY 2 – *fault:*
→ Cable or horn incorrectly connected to **J8**.

RELAY 3 – *fault:*
→ NG out or LED strip incorrectly connected to **J9**.

12V IN – *fault:*
→ No 12V/AC supply.

12V FUSE – *fault:*
→ Fuse F1 is blown.

24V IN – *fault:*
→ No 24V/AC supply.

24V FUSE – *fault:*
→ Fuse F2 is blown.

NAUNET 24V – *fault:*
→ Fuse F2 is blown.

NAUNET GND – *fault:*
→ Possible short circuit on equipment connected to the NGMCB.

EXTRA 24V – *fault:*
→ Fuse F12 is blown.*[1]

EXTRA RELAY – *fault:*
→ N/A, not used.*[1]

DCF77 – *fault:*
→ NG-DCF has a bad reception or it is not installed correctly.*[2]

DIP1 – *default:*
→ 0 – 00000000

DIP2 – *default:*
→ 0 – 00000000

DIP3 – *default:*
→ 11 – 00001011

DIAGNOSTIC FOR WIRELESS POWER SHOWS CHECKSUM:
→ 0-17 and can only be edited when a test is started.

Start the wireless test: Press **START TEST** and thereafter **RESET TEST**:

TOTAL RETRY COUNT
0 → OK **/** Counting → ERROR
Error: Fault in the communication.

SEND PACKETS
Counting*[3] → OK
0 → Error: The radio in the NAUCON-1000 might be damaged.

RECEIVE PACKETS
Counting*[3] → OK
0 → Error: The radio on the NGMCB might be damaged.

BOARD RECEIVES
Counting*[3] → OK
0 → Error: The radio in the NAUCON-1000 might be damaged.

PACKETS LOSS
0 → OK
Counting → Error: Lost packets.

---

[1] Only displayed on scoreboards with NGP-85 mounted.

[2] Only displayed on scoreboards with NG-DCF module mounted.

[3] Should show almost the same value.